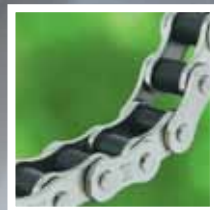
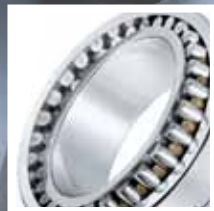
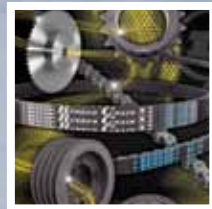
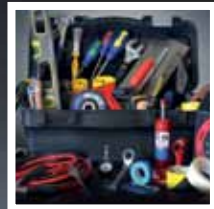
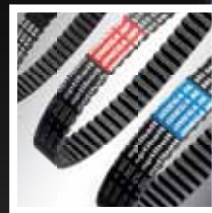
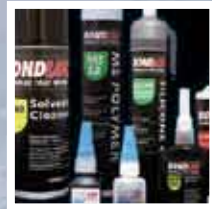


The Engineer's Tool Kit



J&M Belts & Bearings Ltd



J&M Belts & Bearings Ltd

J&M Belts are suppliers of quality engineering components from a large stock holding with two branches in Essex. We pride ourselves in being able to source high quality parts from the worlds leading manufacturers. Call us for friendly professional and honest advice.

We have the experience and knowledge to support our customers even in the most demanding situations. An understanding of what is required and the ability to deliver on time with product that meets the highest standards.

Having built a large stock over many years we can often deliver direct from our own warehouse, often same day on our own transport. Whilst we work the usual business hours we also offer a 24 hour breakdown support service.

Bearings

Ball & Roller, Bearing Sleeves, Self Lube, Cam Followers, Linear Bearings & Shafting, Steel Balls, Spherical Roller, Taper Roller, Precision, Roll Ends, Glacier & Oilite, Bushes, Wheel Bearing Kits....

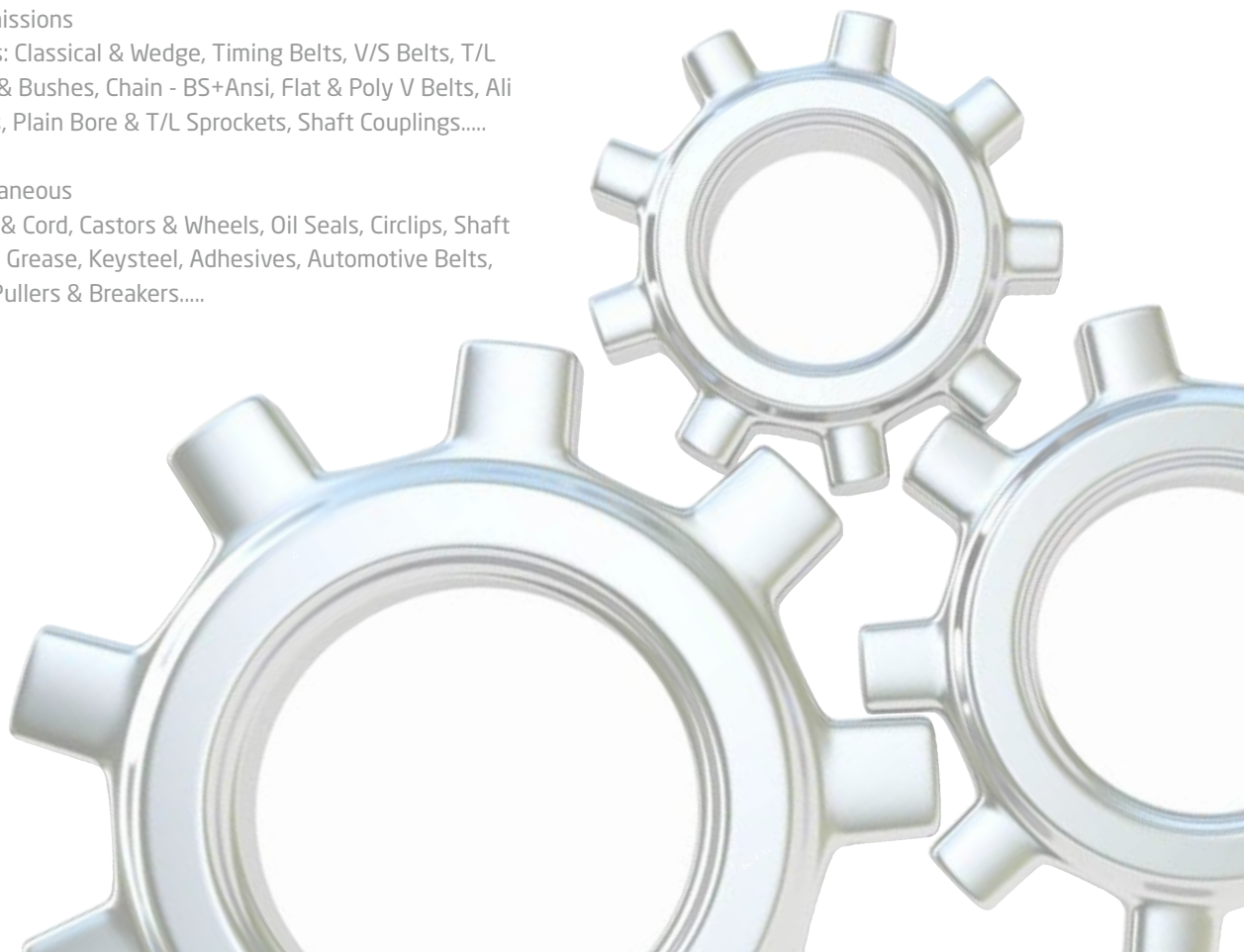
Transmissions

V-Belts: Classical & Wedge, Timing Belts, V/S Belts, T/L Pulley & Bushes, Chain - BS+Ansi, Flat & Poly V Belts, Ali Pulleys, Plain Bore & T/L Sprockets, Shaft Couplings.....

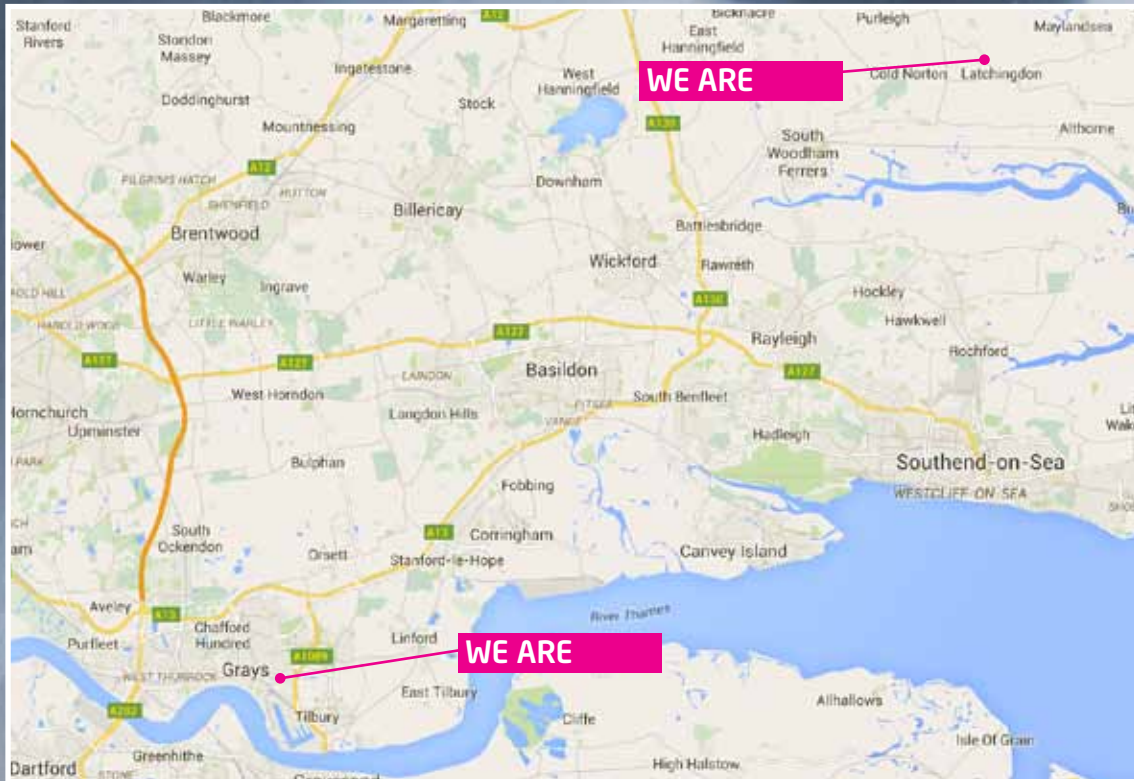
Miscellaneous

o-Ring & Cord, Castors & Wheels, Oil Seals, Circlips, Shaft Collars, Grease, Keysteel, Adhesives, Automotive Belts, Chain Pullers & Breakers.....

WORLD LEADING BRANDS OF ENGINEERING SUPPLIES



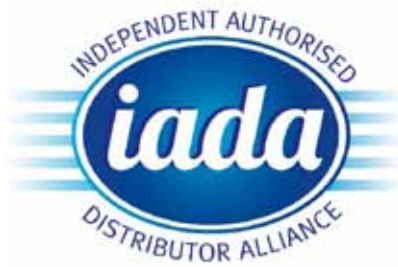
Based in Essex we have two branches to serve you
across the South East and beyond:



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E: sales@jmbelts.com W: www.jmbelts.com

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Latchingdon, Essex, CM3 6LF
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J&M Belts & Bearings Ltd



Success Through Co-operation

IADA was started in 1998 by a group of independent distributors, offering MRO supply solutions, looking for a way to improve the level of service and coverage for their customers. We now have 19 members and 54 branches across the UK.

Put to the test...

Many companies can offer what looks like great prices.... but saving 10% on goods is not always the saving it seems. At IADA we will look at the reason why you are replacing parts, and using our unrivalled in house expertise we can offer MRO supply solutions from which you will see much greater savings. IADA are an authorised distributor, so you can be assured of getting high quality products from industry leading manufacturers.

Why IADA... Simple

That's it, we make our customers life simple. Our branches carry large stocks which can be tailored to our customers need. Our branches have in house expertise which means you get to speak to someone who can help with any technical requests. Because of our unique structure you can expect fast responses to any request as that decision can be made locally, not at a far removed head office. We provide all this at market leading manufacturers.

Come and see us

All our customers have an open invitation to come and visit their local branch, our members are proud of the way their businesses are run. You can see for yourself the large stock holding and meet the staff who will always be at the end of the phone to help.

IADA Limited - 23-25 Stevenson Road, Sheffield S9 3XG
Email: admin@iadaltd.co.uk

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BEARINX Bearing Calculation Software



Our BEARINX software is one of the leading programs for performing rolling bearing calculations. It enables rolling bearing supports to be analysed in detail – from single bearings to complex gear systems and linear guide systems. All calculations are performed in a consistent calculation model.

BEARINX version 10 now includes an expanded range of calculation tools for rolling bearings, including the option of taking gearing into detailed consideration. Input dialogs have also been reorganised for ease of use, and extensive developments have been made in terms of bearing selection.

The recently launched TORB range of toroidal roller bearings has also been integrated. These bearings combine the angular adjustment capabilities of a spherical roller bearing with the axial displacement of a cylindrical or needle roller bearing.

BEARINX is a high performance bearing design calculation tool, which Schaeffler also provides to its engineers worldwide for designing and configuring bearings for complex machines and systems. Since many customers wish to design their own applications, customer versions of BEARINX are also available. These comprise individual calculation modules taken from the full version of the software, which are made available to customers to allow them to have in-depth involvement in the early stages of the product development process.

The BEARINX range includes the BEARINX-online Easy modules, the BEARINX-online calculations for Schaeffler customers, sales partners and universities, and BEARINX-VIP as a local version for development partners.

The BEARINX customer versions utilise a bearing database in which all of the catalogue bearings from Schaeffler are stored. The bearings' internal component data are stored invisibly and taken into consideration during the rating life calculation. Calculation results are therefore significantly better than those of a bearing approximation, since the profile data of both the raceways and the rolling elements are taken into consideration.

Low cost BEARINX modules

The issue of cost also makes the customer versions very interesting. With more than 12,000 registered users, the BEARINX-online Easy series, which is currently available on the Internet, has the largest customer group.

The BEARINX-online modules that are subject to a user agreement have also been well received – Schaeffler customers only pay a one-off fee during their introduction to the program. However, universities can also use BEARINX-online free of charge in their teaching programmes.

BEARINX-online Easy for everybody

The calculation modules in the Easy series have the same structure as the assistants in the full version of the program and, after initial registration, are available free on the Internet. The increasing number of users is proof of their popularity. The BEARINX-online Easy series currently includes the following modules: BEARINX-online Easy Linear; BEARINX-online Easy Friction; BEARINX-online Easy Linear System; BEARINX-online Easy Ballscrew; BEARINX-online Easy RopeSheave; and BEARINX-online Easy EMachine.

BEARINX-online for customers, sales partners and universities

The BEARINX-online calculations are taken from the system level of the full version and provide selected customers with an additional range of calculation and analysis options: BEARINX-online Shaft Calculation; BEARINX-online Spindle Calculation; and BEARINX-online Linear Calculation. The use of these modules is contractually regulated and the introduction includes a training course and a one-off fee. There are no license or maintenance fees.

The calculations are carried out online. Customers receive their access data (login name and password) once the user agreement has been concluded, and can then develop their own calculation models for their shaft systems and analyse the different bearing supports that are possible.



medias® product catalogue

Using our product selection tool medias®, you can access product information and download CAD drawings from our range of rolling and plain bearings, and linear guidance systems.

medias® interchange

With medias® interchange, you can find the FAG designations corresponding to various rolling bearing designations from other manufacturers. A traffic light system will show you immediately whether and to what extent the FAG type is interchangeable. Green indicates fully interchangeable, yellow indicates interchangeable under certain conditions and red indicates not interchangeable.



X-Life Quality Spherical Roller Bearings



More Cost-Effectiveness and Operational Reliability:



Advantages of the E1 design

Higher performance bearing arrangements:

- **Longer rating life**
Due to basic dynamic load ratings that are considerably higher than before
- **Higher static load safety factor**
due to higher basic static load ratings.

This is made achievable by improved roller quality and optimised roller geometry. Under identical operating conditions, the lifetime of the bearing arrangements is significantly longer. Alternatively, the existing rating life can be achieved even with a considerable increase in load. In new designs, smaller bearings can achieve the performance of the previous larger bearings.

Through downsizing (smaller design envelope, reduced friction, lower lubricant requirement, higher speeds), more economical bearing arrangements can be realised.

Lower operating costs

Improved bearing kinematics and higher quality of the rollers and raceways give reduced friction and lower bearing temperatures. As a result, less strain is placed on the lubricant.

The range

The range of FAG spherical roller bearings E1 comprises eight series. The smallest bore diameter is 20 mm, the largest outside diameter is 1220 mm.

Narrow bearings with a low cross-section, for example of series 230, allow high speeds and require little mounting space.

In contrast, wide bearings with a high cross-section, for example of series 223, have a very high load carrying capacity.

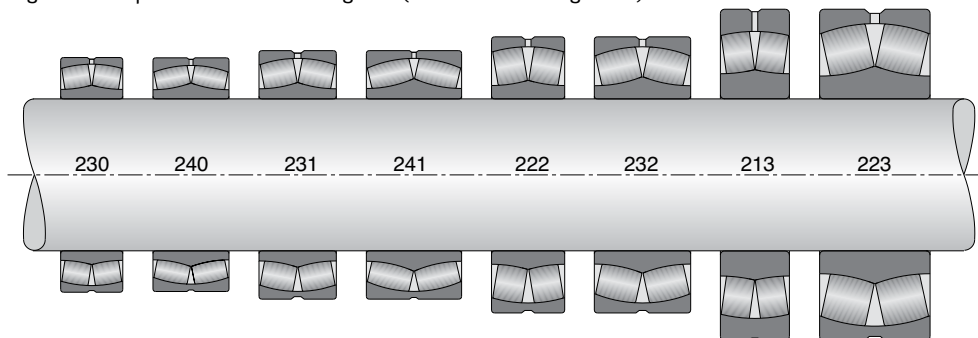
We supply spherical roller bearings E1 both with a cylindrical and with a tapered bore. As a result, there are several options for locating the bearings on the shaft.

For special operating conditions, we supply special designs of spherical roller bearings E1.

For oscillating loads, special spherical roller bearings of series 223.-E1 with restricted dimensional tolerances and increased radial internal clearance are used.

These bearings are indicated by the suffix T41A or T41D.

The range of FAG spherical roller bearings E1 (Available bearing sizes)



Bore diameter

d
mm

min.	110	120	100	110	25	90	20	40
max.	600	750	560	560	360	670	110	400



Cylindrical Roller Bearings



BEARINGS

Bearings with higher load capacity, longer operating life and higher static safety factor



FAG X-life cylindrical roller bearing, single row Cage guided with plastic, brass or steel cages

- Bearings with higher load capacity, longer operating life and higher static safety factor
- Reduced friction and lower temperatures due to higher quality rollers and raceways

- Available in other dimension series
- Available in reduced or enlarged radial internal clearance classes
- Bearings with O/D over 120mm heat stabilised to +200°C
- FAG cylindrical roller bearings are also available in NJ, NUP & NJ+HJ
- Special bearings are made for traction motor and wind turbine applications along with many other specialist applications
- Electrically insulated bearings are available in most sizes

Cylindrical Roller Bearings – N200 Series			
Product	Shaft	Outside Dia	Width
N202	15	35	11
N203	17	40	12
N204	20	47	14
N205	25	52	15
N206	30	62	16
N207	35	72	17
N208	40	80	18
N209	45	85	19
N210	50	90	20
N211	55	100	21
N212	60	110	22
N215	75	130	25
N217	85	150	28
N218	90	160	30
N219	95	170	32
N220	100	180	34
N222	110	200	38
N224	120	215	40
N226	130	230	40
N228	140	250	42
N230	150	270	45
N236	180	320	52

Cylindrical Roller Bearings – NU200 Series			
Product	Shaft	Outside Dia	Width
NU202	15	35	11
NU203	17	40	12
NU204	20	47	14
NU205	25	52	15
NU206	30	62	16
NU207	35	72	17
NU208	40	80	18
NU209	45	85	19
NU210	50	90	20
NU211	55	100	21
NU212	60	110	22
NU215	75	130	25
NU217	85	150	28
NU218	90	160	30
NU219	95	170	32
NU220	100	180	34
NU222	110	200	38
NU224	120	215	40
NU226	130	230	40
NU228	140	250	42
NU230	150	270	45
NU236	180	320	52



Cylindrical Roller Bearings



Cylindrical Roller Bearings – N300 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
N303	17	47	14
N304	20	52	15
N305	25	62	17
N306	30	72	19
N307	35	80	21
N308	40	90	23
N309	45	100	25
N310	50	110	27
N311	55	120	29
N312	60	130	31
N313	65	140	33
N314	70	150	35
N315	75	160	37
N316	80	170	39
N317	85	180	41
N318	90	190	43
N319	95	200	45
N320	100	215	47
N322	110	240	50
N324	120	260	55
N326	130	280	58
N328	140	300	62

Cylindrical Roller Bearings – NU300 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
NU303	17	47	14
NU304	20	52	15
NU305	25	62	17
NU306	30	72	19
NU307	35	80	21
NU308	40	90	23
NU309	45	100	25
NU310	50	110	27
NU311	55	120	29
NU312	60	130	31
NU313	65	140	33
NU314	70	150	35
NU315	75	160	37
NU316	80	170	39
NU317	85	180	41
NU318	90	190	43
NU319	95	200	45
NU320	100	215	47
NU322	110	240	50
NU324	120	260	55
NU326	130	280	58
NU328	140	300	62



Tapered Roller Bearings



Reliable – energy efficient – suitable for high loads



Tapered roller bearings are characterized by high radial and axial load carrying capacity and by a large usable speed range. They are efficient at supporting forces and ensure a precise and rigid shaft guidance system due to the large effective distance between the bearings. They are adjustable, can be dismantled, and are easy to fit. However, the increasing productivity in industry means that rising demands are being made of tapered roller bearings as well. They should operate for longer, generate as little friction as possible, and of course be easy to maintain.

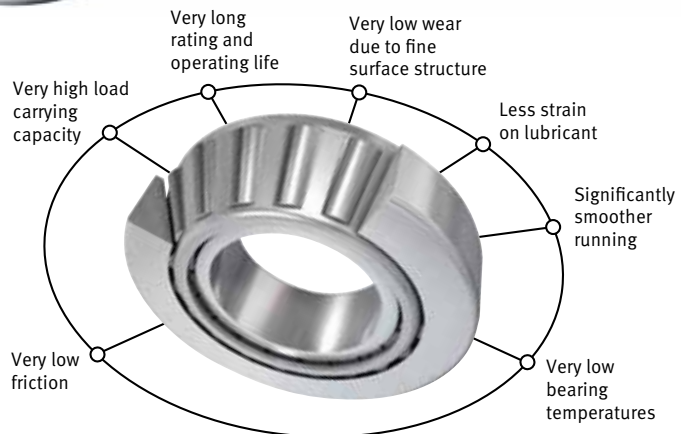
Schaeffler's response:
Tapered roller bearings in X-life quality.

X-life. Proven to be better

X-life is the seal of quality for high-performance products from the INA and FAG brands. X-life products are characterized by a high rating and operating life – the result of higher dynamic load ratings than those of current standard products. This increase in performance is down to the state-of-the-art manufacturing technologies and improved internal construction. This produces better and more even surfaces and contact surfaces, and thus optimized load distribution in the bearing.

X-life. What have we improved?

Higher dimensional and running accuracy
Significantly reduced dimensional and running tolerances compared with DIN 620 / ISO 492 tolerance class PN ensure optimum load distribution.



Stress peaks are prevented even more effectively and material loading is thus reduced even further. In operation, X-life bearings are therefore characterized by significantly smoother running and lower levels of noise generation.

Through hardened premium material

The specially heat treated material makes the surfaces of the inner and outer rings more resistant to solid particles and under mixed friction conditions.

This means a further considerable increase in the life of the tapered roller bearings. Bearings with an outside diameter of 220 mm and above are dimensionally stable up to operating temperatures of 200 °C.

Optimized surfaces

An elasto-hydrodynamic lubricant film is formed even at very low speeds due to the low surface roughness of the rings and the rollers. The bearings can be placed under very high loads directly after initial operation. Together with the increased geometrical and running accuracy of the X-life design, the improved surface topography reduces the generation of friction and heat to a large extent.

Improved geometry

The logarithmic profile for the raceways and the outside surfaces of the rollers was further optimized so that stress peaks under even higher loads and any possible skewing are compensated. The match between the contact geometry of the inner ring ribs and the roller end faces was improved again to further minimize friction.

Product Range - Bore Code 02 – 17																	
①	320			42	47	55	62	68	75	77	90	95	100	110	115	125	130
	322			52	62	72	80	85	90	100	110	120	125	130	140	150	
	302	35	40	47	52	62	72	80	85	90	100	110	120	125	130	140	17
		02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
		②															

Product Range - Bore Code 18 – 48																	
①	320	140	145	150	160	170	180	200	210	225	240	260	280	290	310	340	360
	322	160	170	180	190	200	215	230	250	270	290	310	320	340	360	400	440
	302	160	170	180	190	200	215	230	250	270	290	310	320	340	360	400	440
		18	19	20	21	22	24	26	28	30	32	34	36	38	40	44	48
		②															

1. Bearing series 2. Bore code



Generation C. Discover the Change.



BEARINGS

Setting a New Standard for Deep Groove Ball Bearings

Single row deep groove ball bearings are versatile, self-retaining bearings with solid outer rings, inner rings and ball and cage assemblies. They are of a simple design, robust in operation and easy to maintain. They are available in open and sealed designs. Due to the raceway geometry and the use of balls, deep groove ball bearings can support axial forces in both directions as well as radial forces.



Deep groove ball bearings of Generation C were specially developed with a focus on low noise levels and low frictional torque. They are particularly suitable, for example, for use in electrical machinery, ventilators, washing machines and power tools.

Advantages

Thanks to design modifications such as improved bearing kinematics, new seals and cages as well as refined manufacturing processes, deep groove ball bearings of Generation C have numerous advantages.

Lower noise levels

The bearing is quieter in operation due to the better quality of the balls, the optimised surfaces, the higher stability of the cage and the modified internal construction.

Improved sealing

Efficient protection against the escape of grease or the ingress of dust is provided by the innovative gap seal design (suffix Z).

Even better sealing is achieved in the bearings with a lip seal running under axial contact, this is due to the seal design and the labyrinth function as a result of the matched undercuts in the outer ring and inner ring.

Lower friction

The friction in the bearing is reduced by modified osculation and optimisation of surfaces, waviness and roundness.

Higher cost-effectiveness

Due to the lower friction, energy costs for operation are reduced. The reduced grease loss, better protection against contamination and reduced strain on the lubricant extend the grease operating life and thus the rating life of the bearing.

Sealing

Open bearings are suitable for high to very high speeds. Due to the manufacturing process, they have turned recesses for sealing washers and sealing shields,

Bearings with the suffix 2Z have gap seals on both sides. These bearings are greased using a high quality grease, lubricated for life and suitable for high speeds.

In comparison with conventional gap seals, the inverted sealing shield design gives improved sealing action.

Bearings with the suffix 2HRS or 2ELS have lip seals on both sides made from nitrile butadiene rubber. They are greased using a high quality grease, lubricated for life and suitable for moderate speeds. In comparison with lip seals running under radial contact, higher speeds can be achieved. At the same time, the frictional torque and heat generation are lower.

Bearings with the suffix 2BRS have non-contact seals on both sides made from nitrile butadiene rubber. The operating temperature is restricted by the seal material, see section Operating temperature,

Their friction level is as low as with the gap seals. In addition, they offer better protection against the ingress of dust and the escape of lubricant. As lip seals, deep groove ball bearings of Generation C are supplied as standard with the seal HRS. The seal ELS is available by agreement.

Axial Deep Groove Ball Bearings

Axial deep groove ball bearings comprise shaft locating washers, housing locating washers and ball and cage assemblies.

The bearings are not self-retaining; the ball and cage assembly and bearing washers can therefore be fitted separately.

In addition to the series with flat washers, series are also available with spherical housing locating washers for the compensation of static angular misalignment.

These designs are normally used in conjunction with seating washers.

Axial deep groove ball bearings are available in single and double direction designs.

Both designs can support high axial forces but cannot be subjected to radial loads.

51100 Series			
Product	Shaft	Outside Dia	Width
51100	10	24	9
51101	12	26	9
51102	15	28	9
51103	17	30	9
51104	20	35	10
51105	25	42	11
51106	30	47	11
51107	35	52	12
51108	40	60	13
51109	45	65	14
51110	50	70	14
51111	55	78	16
51112	60	85	17

51200 Series			
Product	Shaft	Outside Dia	Width
51200	10	26	11
51201	12	28	11
51202	15	32	12
51203	17	35	12
51204	20	40	14
51205	25	47	15
51206	30	52	16
51207	35	62	18
51208	40	68	19
51209	45	73	20
51210	50	78	22
51211	55	90	25
51212	60	95	26



Generation C

Setting a New Standard for Deep Groove Ball Bearings



'Generation C' deep groove ball bearings from Schaeffler offer 35 per cent less friction and 50 per cent less noise than the existing designs. The novel HRS seal and a riveted steel cage deliver smoother running and less dust ingress.

Improved Energy Efficiency

35% less friction means less heat, so higher running speeds are possible along with greater stability provided by the new steel cage.

'Generation C' is ideal for applications in which low noise and smooth running are critical - such as ventilators, washing machines, electric motors and power tools.



Direct benefits include a reduction in operating costs, extended maintenance intervals, longer grease life and increased protection against dust contamination.

The dimensions of the new bearings correspond to the previous bearing types, enabling easy replacement.

BENEFITS

- 50% NOISE REDUCTION
- 35% LESS FRICTION
- HIGHER SPEEDS
- REDUCED ENERGY CONSUMPTION
- LONGER OPERATING LIFE
- LOWER OPERATING COSTS

DESIGN IMPROVEMENTS

- OPTIMISED OSCULATION
- IMPROVED RACEWAY SURFACES
- NEW HRS SEAL
- OPTIMISED DUST SHIELD
- LABYRINTH-TYPE SEAL FUNCTION
- NEW RIVETED STEEL CAGE
- -30°C to +50°C OPERATING RANGE

Schaeffler (UK) Ltd
 Email: info.uk@schaeffler.com Web: www.schaeffler.co.uk

SCHAEFFLER



Deep Groove Ball Bearings



Deep groove design for radial and radial / axial loads

- Available with metal shields (2Z) or rubber seals (2HRS)
- Available with radial internal clearance CN, C3, C2 (etc)
- Available in corrosion resistant material (prefi x S...)
- Available in bore size 3mm up to 2000mm
- Available with steel, brass (M/Y) or plastic (TV) cages



6000 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
6000	10	26	8
6001	12	28	8
6002	15	32	9
6003	17	35	10
6004	20	42	12
6005	25	47	12
6006	30	55	13
6007	35	62	14
6008	40	68	15
6009	45	75	16
6010	50	80	16
6011	55	90	18
6012	60	95	18
6013	65	100	18
6014	70	110	18
6015	75	115	20
6016	80	125	22
6017	85	130	22
6018	90	140	24
6019	95	145	24
6020	100	150	24
6021	105	160	26
6022	110	170	28
6024	120	180	28
6026	130	200	33
6028	140	210	33
6030	150	225	35
6032	160	240	38
6034	170	260	38
6036	180	280	46
6038	190	290	46

6200 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
6200	10	30	9
6201	12	32	10
6202	15	35	11
6203	17	40	12
6204	20	47	14
6205	25	52	15
6206	30	62	16
6207	35	72	17
6208	40	80	18
6209	45	85	19
6210	50	90	20
6211	55	100	21
6212	60	110	22
6213	65	120	23
6214	70	125	24
6215	75	130	25
6216	80	140	26
6217	85	150	28
6218	90	160	30
6219	95	170	32
6220	100	180	34
6222	110	200	38
6224	120	215	40
6226	130	230	40
6228	140	250	42
6230	150	270	45
6232	160	290	48
6234	170	310	52
6236	180	320	52
6238	190	340	55

Schaeffler UK Training Courses

Schaeffler UK has developed comprehensive training programs that reflect the latest developments in rolling bearing technology and condition monitoring. From maintenance fitters to designers of complex rotating equipment, we have an effective training program to suit your needs.

What We Offer

Training is delivered by highly skilled engineers with many years' experience in the design, application and operation of rolling element bearings. We have specialists in vibration analysis and condition monitoring who can provide ongoing support.

Courses include:

- Introduction to Rolling Bearings
- Rolling Bearing Technology
- Rolling Bearing Lubrication
- Rolling Bearing Failure Analysis
- Rolling Bearing Mounting
- Bearings for Electric Motors
- Introduction to Condition Monitoring
- Detector III
- Vibration Analysis Levels 1 and 2



Heavy Series Deep Groove Ball Bearings



Heavy series deep groove design for radial & radial / axial loads
Available with radial internal clearance CN, C3,



6400 Series			
Product	Shaft	Outside Dia	Width
6403	17	62	17
6404	20	72	19
6405	25	80	21
6406	30	90	23
6407	35	100	25
6408	40	110	27
6409	45	120	29
6410	50	130	31
6411	55	140	33
6412	60	150	35
6413	65	160	37
6414	70	180	42
6415	75	190	45
6416	80	200	48
6417	85	210	52
6418	90	225	54

Self-aligning Ball Bearings

Self-aligning ball bearings are double row, self-retaining units comprising outer rings with a concave raceway, inner rings with a cylindrical or tapered bore and ball and cage assemblies. The bearings are available in open and sealed designs.

6300 Series			
Product	Shaft	Outside Dia	Width
6300	10	35	11
6301	12	37	12
6302	15	42	13
6303	17	47	14
6304	20	52	15
6305	25	62	17
6306	30	72	19
6307	35	80	21
6308	40	90	23
6309	45	100	25
6310	50	110	27
6311	55	120	29
6312	60	130	31
6313	65	140	33
6314	70	150	35
6315	75	160	37
6316	80	170	39
6317	85	180	41
6318	90	190	43
6319	95	200	45
6320	100	215	47
6322	110	240	50
6324	120	260	55
6326	13	280	58
6328	140	300	62
6330	150	320	65
6332	160	340	68
6334	170	360	72
6336	180	380	75
6338	190	400	78

1200 Series			
Product	Shaft	Outside Dia	Width
1200	10	30	9
1201	12	32	10
1202	15	35	11
1203	17	40	12
1204	20	47	14
1205	25	52	15
1206	30	62	16
1207	35	72	17
1208	40	80	18
1209	45	85	19
1210	50	90	20
1211	55	100	21
1212	60	110	22
2200 Series			
Product	Shaft	Outside Dia	Width
2200	10	30	14
2201	12	32	14
2202	15	35	14
2203	17	40	16
2204	20	47	18
2205	25	52	18
2206	30	62	20
2207	35	72	23
2208	40	80	23
2209	45	85	23
2210	50	90	23
2211	55	100	25
2212	60	110	28



Narrow Series Deep Groove Ball Bearings



- Narrow series deep groove design for radial & radial / axial loads
- Available with metal shields (2Z) or rubber seals (2HRS)
- Available in corrosion resistant material (prefi x S...)



BEARINGS

61800 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
61800	10	19	5
61801	12	21	5
61802	15	24	5
61803	17	26	5
61804	20	32	7
61805	25	37	7
61806	30	42	7
61807	35	47	7
61808	40	52	7
61809	45	58	7
61810	50	65	7
61811	55	72	9
61812	60	78	10

61900 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
61900	10	22	6
61901	12	24	6
61902	15	28	7
61903	17	30	7
61904	20	37	9
61905	25	42	9
61906	30	47	9
61907	35	55	10
61908	40	62	12
61909	45	68	12
61910	50	72	12
61911	55	80	13
61912	60	85	13

Wide Series Deep Groove Ball Bearings



- Wide series deep groove design for radial & radial / axial loads
- Available with rubber seals (2RSR)

62200 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
62200-A-2RSR	10	30	14
62201-A-2RSR	12	32	14
62202-A-2RSR	15	35	14
62203-A-2RSR	17	40	16
62204-A-2RSR	20	47	18
62205-A-2RSR	25	52	18
62206-A-2RSR	30	62	20
62207-A-2RSR	35	72	23
62208-A-2RSR	40	80	23
62210-A-2RSR	50	90	23
62211-A-2RSR	55	100	25
62212-A-2RSR	60	110	28

62300 Series			
Product	Shaft	Outside Dia	Width
		(mm)	
62301-A-2RSR	12	37	17
62302-A-2RSR	15	42	17
62303-A-2RSR	17	47	19
62304-A-2RSR	20	52	21
62305-A-2RSR	25	62	24
62306-A-2RSR	30	72	27
62307-A-2RSR	35	80	31
62308-A-2RSR	40	90	33
62309-A-2RSR	45	100	36
62310-A-2RSR	50	110	40



Angular Contact Ball Bearings



Single Row Angular Contact Ball Bearings



Single row angular contact ball bearings are self-retaining units with solid inner and outer rings and ball and cage assemblies with polyamide, sheet steel or brass cages.

The raceways of the inner and outer rings are offset in relation to each other in the direction of the bearing axis. The bearings are available in open and sealed versions. Their self-alignment capacity is very small.

7200 Series			
Product	Shaft	Outside Dia	Width
7200	10	30	9
7201	12	32	10
7202	15	35	11
7203	17	40	12
7204	20	47	14
7205	25	52	15
7206	30	62	16
7207	35	72	17
7208	40	80	18
7209	45	85	19
7210	50	90	20
7211	55	100	21
7212	60	110	22

7300 Series			
Product	Shaft	Outside Dia	Width
7301	12	37	12
7302	15	42	13
7303	17	47	14
7304	20	52	15
7305	25	62	17
7306	30	72	19
7307	35	80	21
7308	40	90	23
7309	45	100	25
7310	50	110	27
7311	55	120	29
7312	60	130	31

Double Row Angular Contact Ball Bearings



Double row angular contact ball bearings are units with solid inner and outer rings and ball and cage assemblies with polyamide, sheet steel or brass cages. They correspond in design to single row angular contact ball bearings in pairs in an O arrangement but give a narrower design than these. They differ in the size of their contact angle and the design of the bearing rings.

The bearings are available in open and sealed versions. Due to the production technology used, open bearings can still have turned recesses on the outer ring for seals or shields. Sealed bearings are maintenance-free and, as a result, allow particularly economical bearing arrangements. The self-alignment capacity of angular contact ball bearings is very small.

3200 Series			
Product	Shaft	Outside Dia	Width
3200	10	30	14
3201	12	32	15.9
3202	15	35	15.9
3203	17	40	17.5
3204	20	47	20.6
3205	25	52	20.6
3206	30	62	23.8
3207	35	72	27
3208	40	80	30.2
3209	45	85	30.2
3210	50	90	30.2
3211	55	100	33.3
3212	60	110	36.5

3300 Series			
Product	Shaft	Outside Dia	Width
3302	15	42	19
3303	17	47	22.2
3304	20	52	22.2
3305	25	62	25.4
3306	30	72	30.2
3307	35	80	34.9
3308	40	90	36.5
3309	45	100	39.7
3310	50	110	44.4
3311	55	120	49.2
3312	60	130	54



Black Series Housed Units



The FAG Black Series has been created in response to increasing demand for Japanese Industrial Standard (JIS) radial insert ball bearings and housing units.

The Black Series complements Schaeffler's ISO-compliant INA X-life premium products.

FAG Black Series | Features

- Japanese Industry Standard JIS B 1559 dimensions
- Durotect® B coating on inner and outer rings, as well as flinger shields

- Cast iron housing with black 2-pack paint
- Radial insert ball bearings based on series 62.. deep groove ball bearings
- Metric or inch size dimensions
- Location by means of grub screws in inner ring or tapered adaptor sleeve
- Housing tolerances J7 and H7

Why offer extra JIS products, isn't it sufficient to have ISO housing units?

No, it's not as simple as that because:

The lubrication holes of radial insert ball bearings and housings are in different positions

Housing fixing holes are in different positions and have different diameters

The housing shapes and dimensions differ

Conclusion: In the aftermarket business it's not possible to directly replace JIS with ISO products and vice-versa.



Black Series Housed Units				
Bore Size	Pillow Block Unit	4 Bolt Flanged Unit	2 Bolt Flanged Unit	Bearing Insert
20mm	UCP204	UCF204	UCFL204	UC204
3/4"	UCP204-12	UCF204-12	UCFL204-12	UC204-12
25mm	UCP205	UCF205	UCFL205	UC205
1"	UCP205-16	UCF205-16	UCFL205-16	UC205-16
30mm	UCP206	UCF206	UCFL206	UC206
1 1/8"	UCP206-18	UCF206-18	UCFL206-18	UC206-18
35mm	UCP207	UCF207	UCFL207	UC207
1 1/4"	UCP207-20	UCF207-20	UCFL207-20	UC207-20
40mm	UCP208	UCF208	UCFL208	UC208
1 1/2"	UCP208-24	UCF208-24	UCFL208-24	UC208-24
45mm	UCP209	UCF209	UCFL209	UC209
1 3/4"	UCP209-28	UCF209-28	UCFL209-28	UC209-28
50mm	UCP210	UCF210	UCFL210	UC210
1 7/8"	UCP210-30	UCF210-30	UCFL210-30	UC210-30
55mm	UCP211	UCF211	UCFL211	UC211
2"	UCP211-32	UCF211-32	UCFL211-32	UC211-32
60mm	UCP212	UCF212	UCFL212	UC212
2 1/4"	UCP212-36	UCF212-36	UCFL212-36	UC212-36

SNS Plummer Block Housings



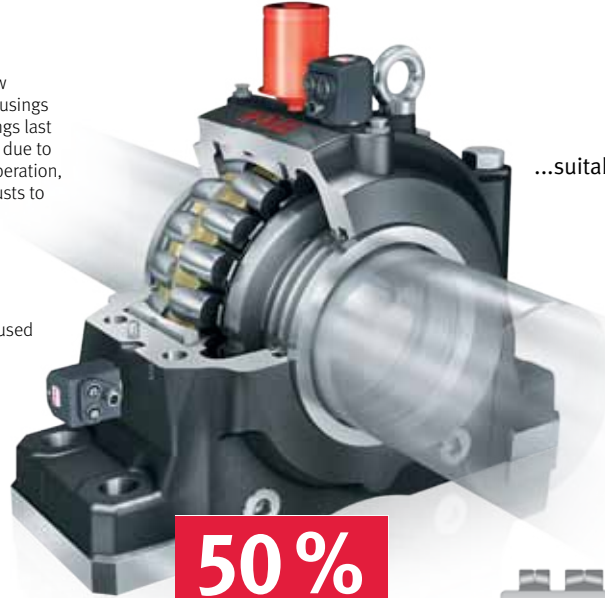
For shaft diameters of 115 to 530 mm and 4 7/16 to 19 1/2 inch.

New: A proactive Housing...

This is the life! Product life in this new generation of SNS plummer block housings is so good that spherical roller bearings last up to 50 % longer than usual. This is due to a unique housing design: When in operation, the SNS housing proactively self-adjusts to the bearing.

Using this FAG housing generation will pay off for you in many respects

- Longer life of the rolling bearings used
- Easy to interchange due to dimensions in accordance with the market standard
- Reduced maintenance requirements and fewer downtimes
- Lower mounting costs
- Reduced use of materials
- Lower disposal costs



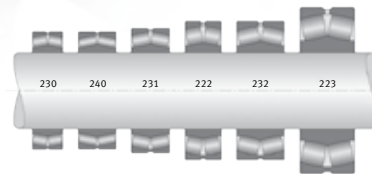
1-to-1
replacement for
conventional solutions

...suitable for a range of bearing types

- For spherical roller bearings from series 222..., 223..., 230..., 231..., 232..., and 240..
- For split spherical roller bearings
- For toroidal roller bearings (TORB)

SNS housings are suitable for shaft diameters of 115 to 530 mm and 4 7/16 to 19 1/2 inch.

50 %
increase
in bearing life



Product Overview: Split plummer block housings SNS

Plummer block housings
Split
For Labyrinth
and Taconite seals



For Bolt-on seals



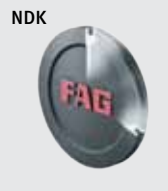
Accessories
Labyrinth seals
Taconite seals



Split Labyrinth seals
Bolt-on seals



Covers



Locating rings



SNV Split Plummer Block Housings



For shaft diameters 20 mm to 160 mm and ¾ inches to 5½ inches – Quick to mount – easy to lubricate.



A technician requires approximately 8 to 20 minutes in order to drill just one of the center-punched lubrication holes. And he carries out the same procedure 10 or 100 times, depending on the application ...You can quickly calculate how much working time can be saved by using the new SNV housings from FAG. Because they are predrilled!

New: Overgreasing is prevented by grease outlet hole New generation split plummer block housings SNV have a total of three holes that are sealed with screw plugs during manufacture. The new grease outlet hole provided as standard on the bottom edge of the housing is an inconspicuous design change that can quickly secure a competitive advantage. Excess grease can escape from the bottom of the housing if excess pressure occurs and the bearing cannot be overgreased.

Furthermore, there is an additional lubrication hole that allows easier relubrication of, for example, ball bearings.

FAG has been replacing the old series SNV since the beginning of 2011

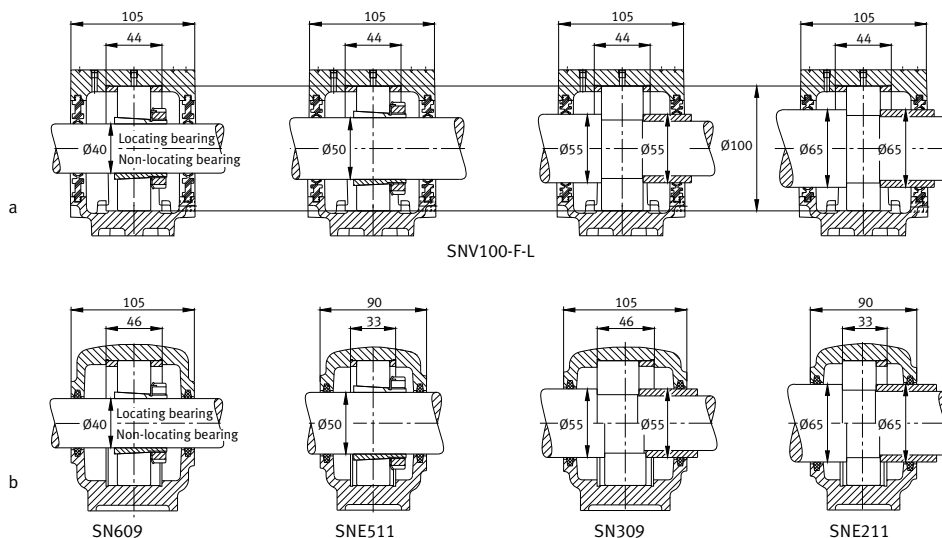
Old series SNV without additional lubrication holes is being replaced by the new housings SNV052-F to SNV340-F. As they are particularly easy to mount and maintain, special housing designs are no longer required for many standard applications.

For more information see Schaeffler publications TPI 175 "Split plummer block housings SNV" and product data sheet PDB 1 "New generation of SNV housings".

SNV benefits at a glance

- Overgreasing is prevented by grease outlet hole
- Simplified relubrication due to additional lubrication hole
- Minimized fitting work due to lubrication holes provided as standard
- Simplified stockholding as a result of modular concept
- The bearing housing units can support very high loads
- Optimized for fitting condition monitoring and relubrication systems
- Double lip seals, labyrinth seals, felt seals, V ring seals, combined seals or special seals can be used for additional protection

SNV housings are suitable for bearings of various diameter and width series, that have the same outside diameter, for example 100 mm for SNV100-F-L (a). Previously, the indicated shaft diameters required four different housing sizes (b).



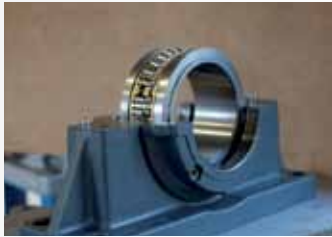
COOPER[®]

THE

ORIGINAL

SPLIT ROLLER BEARING

The inventor of the split to the shaft roller bearing, Cooper has unrivalled expertise gained in over 100 years manufacturing both the bearing and the housing at their site in King's Lynn (UK)

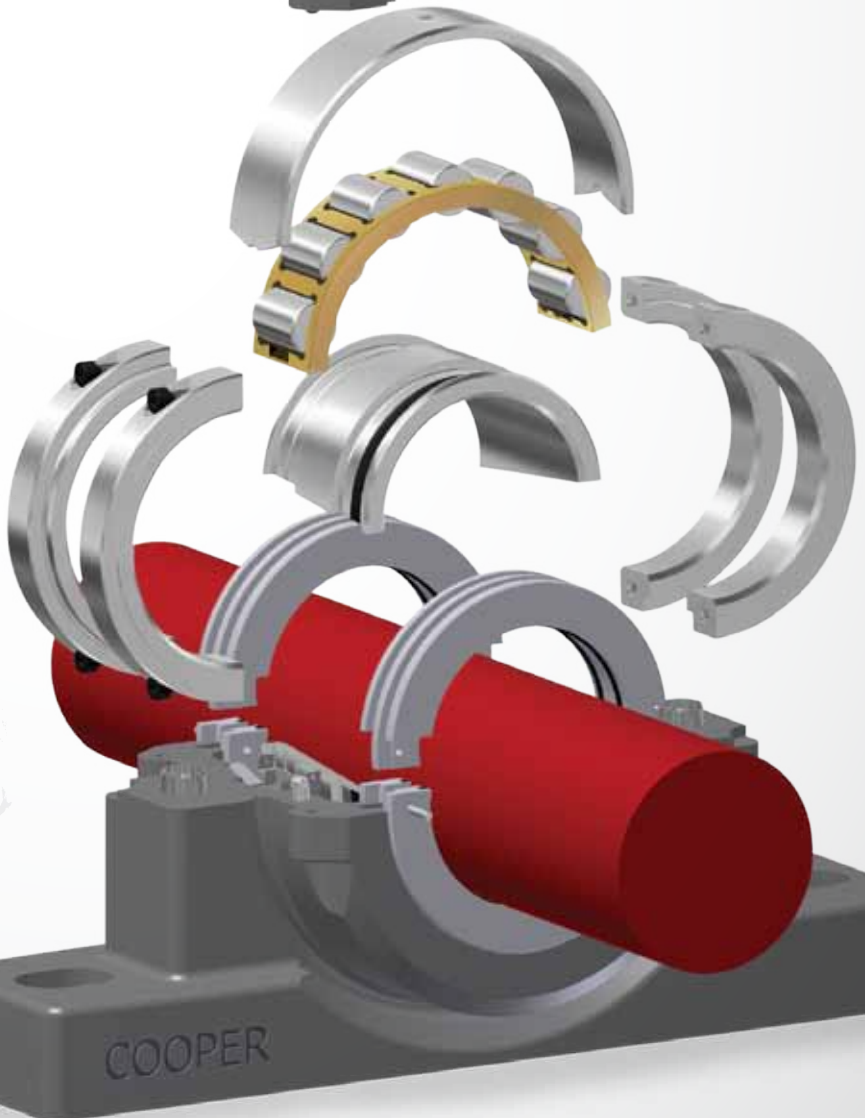


HIGHEST CAPACITY

Cooper's position as a leader in the field has been recently re-affirmed with the introduction of the 01E/02E series. Equipped with a robust brass cage and larger rollers the new series ensures significant improvements in radial and axial capacity confirming Cooper as the highest capacity split bearing on the market.

WIDEST RANGE

With 4 series of split cylindrical roller bearings: 100 (light), 01 (medium), 02 (heavy) and 03 (extra heavy) as well as a range of split taper roller bearings, Cooper has a range unmatched by any manufacturer.



For all information please visit...

www.CooperBearings.com



THE EXPERTISE OF A MANUFACTURER, THE SCALE OF A LEADER



With You

NTN-SNR ROULEMENTS, part of the 3rd largest bearing manufacturing group in the world, is a major force as a designer, developer and manufacturer.

Thanks to its strong brands, NTN-SNR is highly active in the automobile, industrial and aeronautics sectors. Each division meets the expectations of a global market and focuses on the business segments of its customers.



NTN-SNR offers top quality technical products and can provide specialist solutions.

With the widest range on the market, our teams work towards other requirements. Innovation is a decisive factor in our development: anticipating new solutions, enriching bearing functionalities, etc. More compact, lighter, more economical, more reliable, more effective, better for the environment... we are constantly innovating for and with our customers.



NTN-SNR is clearly focused on ecological solutions and is recognised as the partner and by developer of the companies of the future, ready to take up all market opportunities.



TAPERED ROLLER BEARINGS

These accept high radial loads and axial loads in one direction. They are generally fitted opposite a bearing of the same type. Load capacity depends on contact angle.

1 ROW OF TAPERED BEARINGS



Metric dimensions: ISO 355 and JIS B 1512 standards

Available with contact angles, spread from 10° to 30° and a large contact angle 40° (suffix D by NTN)

Inch dimensions: ABMA standard (including J metric series)

Can be equipped with flanges

2 ROWS OF TAPERED BEARINGS



Appears in the same form as two single-row bearings

Fitted face-to-face or back-to-back, with metric or inch dimensions

One-piece outer or inner rings

Single-row assemblies with spacers also exist

4 ROWS OF TAPERED BEARINGS



Composed of two double cones, two single flanges and one double flange

Extended life cycle thanks to the use of case hardened steel, hollow rollers and pin-type cages

Very high load capacities, adapted to rolling type applications

Available in sealed version (-LL)

ECO-TOP RANGE

Series meeting the need to protect the environment

Optimised design, enhanced life cycle, more compact bearing and reduced energy consumption



NTN BOWER RANGE

Wide range of tapered roller bearings with inner diameters up to 16 inches

Steel

Through hardened bearing steel (ECO-H)

Vacuum degassed case hardened steel (4T, ET) and special heat treatment for a longer life cycle (ETA / ECO)

Cage

Generally equipped with a cage in pressed sheets

Solid or steel pin-type cages for large bearings

Fibre glass reinforced polyamide cage possible depending on the application for smaller bearings

Contact torque



Bearing identified with the suffix -ST:

- Reduced drag torque
- Reduced heating
- Improved seizure resistance
- Simplified adjustments at assembly

Sealing

Possible variant: sealing at the large shoulder (suffix -LX)





METRIC

Part n°	Inside Diameter (mm)	Outside Diameter(mm)	Width (mm)	Part n°	Inside Diameter (mm)	Outside Diameter(mm)	Width (mm)	Part n°	Inside Diameter (mm)	Outside Diameter(mm)	Width (mm)
30202	15	35	11,75	30218	90	160	32,5	32004	20	42	15
30203	17	40	13,25	30302	15	42	14,25	32005	25	47	15
30204	20	47	15,25	30303	17	47	15,25	32006	30	55	17
30205	25	52	16,25	30304	20	52	16,25	32007	35	62	18
30206	30	62	17,25	30305	25	62	18,25	32008	40	68	19
30207	35	72	18,25	30306	30	72	20,75	32009	45	75	20
30208	40	80	19,75	30307	35	80	22,75	32010	50	80	20
30209	45	85	20,75	30308	40	90	25,25	32011	55	90	23
30210	50	90	21,75	31305	25	62	18,25	32012	60	95	23
30211	55	100	22,75	31308	40	90	25,25	32013	65	100	23
30212	60	110	23,75	31310	50	110	29,25	32014	70	110	25
30213	65	120	24,75	31311	55	120	31,5	32024	120	180	38
30214	70	125	26,25	31313	65	140	36				

IMPERIAL

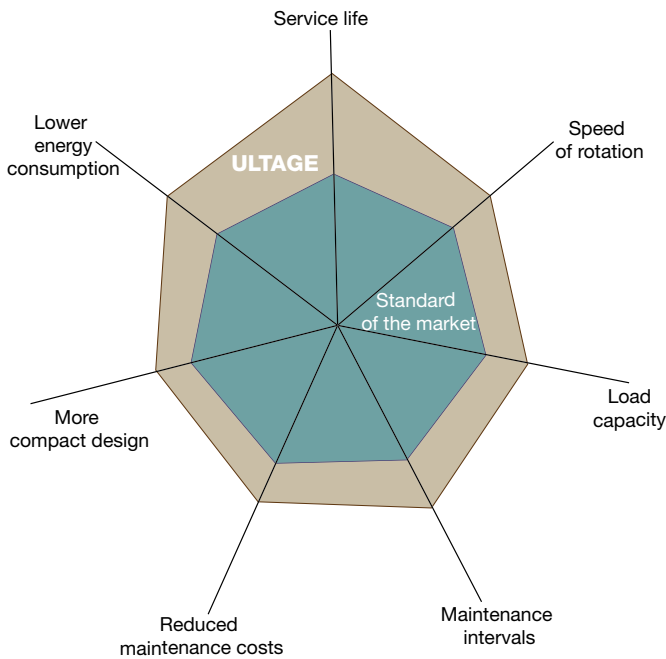
Part n°	Part n°	Part n°	Part n°	Part n°
4T-03062/03162	4T-3578/3525	4T-29585/29520	4T-559/552A	4T-JM205149/JM205110
4T-05079/05185S	4T-368A/362A	4T-29675/29620	4T-56418/56650	4T-JH211749/JH211710
4T-07087X/07210X	4T-3780/3720	4T-29685/29620	4T-M12648/M12610	4T-HM212047/HM212011
4T-07100S/07205	4T-387/382	4T-LM29749/LM29710	4T-M12649/M12610	4T-42690/42620
4T-07100S/07210X	4T-3877/3820	4T-JH307748/JH307710	4T-15123/15245	4T-44150/44348
4T-09067/09195	4T-387A/382	4T-3490/3420	4T-15590/15520	4T-L44643/L44610
4T-09074/09196	4T-387A/382A	4T-529/522	4T-16150/16283	4T-L44649/L44610
4T-LM102949/LM102910	4T-39590/39520	4T-529X/522	4T-18590/18520	4T-L45449/L45410
4T-JLM104948/JLM104948	4T-395A/394A	4T-535/532A	4T-18690/18620	4T-462/453X
4T-11590/11520	4T-3982/3920	4T-55175C/55437	4T-18790/18720	4T-46780/46720
4T-LM11749/LM11710	4T-3984/3920	4T-55200/55437	4T-19150/19268	4T-46790/46720
4T-LM11949/LM11910	4T-JH415647/JH415610	4T-5584/5535	4T-1986/1931	4T-47487/47420

Part n°	Part n°	Part n°	Part n°
4T-47686/47620	4T-LM603049/LM603011	4T-25590/25520	4T-64450/64700
4T-47896/47820	4T-A6075/A6162	4T-25877/25821	4T-645/632
4T-LM48548/LM48510	4T-L610549/L610510	4T-27687/27620	4T-65237/65500
4T-495/493	4T-JM612949/JM612910	4T-2788/2720	4T-LM67048/LM67010
4T-495A/493	4T-623/612	4T-28980/28921	4T-67388/67322
4T-56425/46650	4T-6379/6320	4T-LM501349/LM501310	4T-67390/67322
4T-566/563	4T-H212749/H212710	4T-JLM506849/JLM506810	4T-67790/67720
4T-567/563	4T-HM218248/HM218210	4T-JLM508748/JLM508710	4T-L68149/L68111
4T-575/572	4T-L225849/L225810	4T-JM511946/JM511910	4T-683/672
4T-593/592A	4T-M231649/M231610	4T-JM515649/JM515610	4T-JLM710949/JLM710910
4T-594/592A	4T-24780/24720	4T-JHM522649/JHM522610	
4T-594A/592A	4T-25580/25520	4T-52400/52618	

NTN-SNR ULTAGE : better performance for your applications

The ULTAGE name comes from a combination of the terms "ULTIMATE" and "STAGE". It is a name that provides you with optimised performance as standard, with respect to several technical criteria

PERFORMANCE COMPARISON

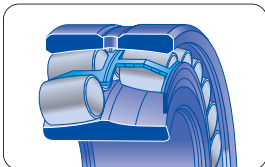


FROM 25 MM BORE UP TO 2180 MM EXTERNAL DIAMETER

NTN-SNR offers the widest range of spherical roller bearings on the market. They are available in a range of cage versions.

PRESSED STEEL CAGE (EA)

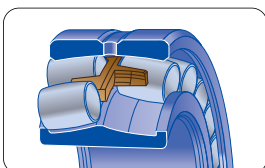
In two parts, centred on the inner ring



- > Reduced wear and friction
- > Optimum lubrication and high speeds

MACHINED SOLID BRASS CAGE (EM, L1)

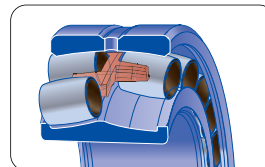
Single-piece cage, centred on the bearing housing or the inner ring



- > Extrem robustness for longer life in the most demanding environments.

SPECIAL CAGE FOR «VIBRATION APPLICATIONS» (EF800)

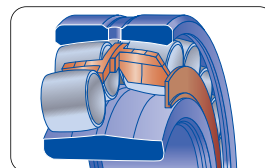
Single-piece cage with reduced bore, external diameter and radial clearance tolerances



- > Extremely accurate roller guides for longer service life.

POLYAMIDE CAGE (EG15)

Two-part, centred on the inner ring.



- > Performance and economy : elasticity and wrap-around profile for perfect guiding and reduced friction. (Max. running temperature 150°C)

Overall dimensions mm			Ultage	Part n°
d	D	B		
40	80	23	*	22208EAW33
40	80	23	*	22208EG15W33
40	80	23	*	22208EMW33
40	90	23		21308V
40	90	33	*	22308EAW33
40	90	33	*	22308EG15W33
40	90	33	*	22308EMW33
40	90	33	*	22308EF800
45	85	23	*	22209EAW33
45	85	23	*	22209EG15W33
45	85	23	*	22209EMW33
45	100	25		21309V
45	100	36	*	22309EAW33
45	100	36	*	22309EG15W33
45	100	36	*	22309EMW33
45	100	36	*	22309EF800
50	90	23	*	22210EAW33
50	90	23	*	22210EG15W33
50	90	23	*	22210EMW33
50	110	27		21310V
50	110	40	*	22310EAW33
50	110	40	*	22310EG15W33
50	110	40	*	22310EMW33
50	110	40	*	22310EF800
55	100	25	*	22211EAW33
55	100	25	*	22211EG15W33
55	100	25	*	22211EMW33
55	120	29		21311V
55	120	43	*	22311EAW33
55	120	43	*	22311EG15W33
55	120	43	*	22311EMW33
55	120	43	*	22311EF800
60	110	28	*	22212EAW33
60	110	28	*	22212EG15W33
60	110	28	*	22212EMW33
60	130	31		21312V
60	130	46	*	22312EAW33
60	130	46	*	22312EG15W33
60	130	46	*	22312EMW33
60	130	46	*	22312EF800
240	320	60	*	23948EMD1
240	360	92	*	23024EMW33
240	360	118	*	24048EMW33
240	400	128	*	23148EMW33
240	400	160		24148VMW33
240	440	120	*	22248EMW33
240	440	160	*	23248EMW33
240	500	155		22348VMW33
260	360	75	*	23952EMD1
260	400	104	*	23052EMW33
260	400	140		24052VMW33
260	440	144	*	23152EMW33
260	440	180		24152VMW33
260	480	130		22252VMW33
260	480	174		23252VMW33
260	540	164		22352VMW33
300	420	90		23960
300	420	90		23960L1
300	460	118	*	23060EMW33
300	460	160	*	24060EMW33
300	500	160	*	23160EMW33
300	500	200		24160VMW33
300	540	140		22260B
300	540	140		22260BL1
300	540	192		23260VMW33
300	620	185		22360B



Bearings available with cylindrical or tapered bore (EAK,EMK,EG15K,BK and K30 for 240xx and 241xx series). Bearing with tapered bore are generally fitted with adaptor or withdrawal sleeves. All types of clearances are available on stock or on request. Special clearances and special precisions are available on request.

*NTN-SNR ULTAGE Bearing.

NEEDLE BEARINGS

These bearings are mainly selected for constructions requiring reduced radial dimensions and maximum rigidity and load capacity. They have little resistance for axial forces (except thrusts and combined bearings).

NEEDLE ROLLER AND CAGE ASSEMBLIES



A needle cage comprises an inseparable cage and needles and can be used to design very compact, light, constructions with maximum capacity. The shaft and housing act as a raceway and must be machined in compliance with hardness, geometry and roughness characteristics. The needles are guided precisely, therefore the needle cage can absorb much higher speeds of rotation than contact needles.

Depending on the application, different types of materials and cages are available:

Types	Characteristics	Suffixes
K	Fibre glass reinforced polyamide	-T2
K or KJ	Welded pressed steel cage	-S
GK / GPK	In two parts	
K	Two rows	-ZW
KBK	For piston pins application	
KV	For piston pins application	-S
PK / GPK	For crank pins application	
KMJ	For crank pins application	-S

Inch solutions are also available (PCJ).

DRAWN CUP NEEDLE ROLLER BEARINGS



Compact and light, mainly used in applications with low loads, needle sockets represent a low-cost bearing solution; the outer ring is not machined, but is obtained using precision pressing processes. It must be noted that the geometry of the raceway depends on the geometry of the housing (the low thickness of the outer ring only provides the hardness and roughness necessary for the raceway).

Standard (HK) and heavy (HMK) series, available with or without sealing, with open or closed ends (BK, BMK)

Some dimensions are delivered with 2 rows of needles (-ZW)

Inches versions with cage (DCL, SCE) and contact needle versions (HCK).

NTN drawn cup needle roller bearing offer:

- simplified adapting thanks to an ideal geometry
- an improved life cycle: specific treatment of the cage and needles

NEEDLE ROLLER BEARINGS WITH SOLID RINGS



Needle roller bearings with solid rings are mainly used in applications with high loads.

- Inseparable versions:** with or without an inner ring
 - Series 48, 49, 59 and 69. (Series 49 is also available with simple or double sealing)
 - NK series: also deliverable with the inner ring (NK+IR designation)
- If the bearing is used without an inner ring, the shaft will act as a raceway and must be machined appropriately



Separable versions: RNAO and NAO

With these versions, the inner and outer rings and the cage can be separated, opening up more assembly options.

The inner rings are delivered separately.

Versions with plunge grinding for seal support surfaces are also available.

These solid rings and needle bearings are also available in inch dimensions. (MR,MI)

NEEDLE AND ROLLER THRUST BEARINGS



Needle or roller thrust bearings are designed to absorb axial forces in one direction only. Support surfaces used as raceways must be ground and hardened.

- Needle thrust bearings: type AXK11
- Roller thrust bearings: series 811, 812, 874 and 893
Available with Polyamide cage (-T2), Aluminium alloy cage (-: lightness and enhanced performance when lack of lubricant) or pressed steel cage.

Washers:

- type **AS11** washers are thin (1 mm), therefore their support surfaces must be flat and rigid enough
- types **WS** (centered on the shaft) and **GS** (centered on the housing) are more rigid

COMBINED BEARINGS



When the application requires resistance to forces combined with substantial rigidity or minimum room, the use of combined bearings can lead to benefits. Depending on the type of bearings, axial forces may be absorbed in one or two directions.

● Uni-directional axial forces

The thrust part may comprise, either:

- a radial contact (NKX) or angular contact (NKIA) ball bearing
- rollers for high axial loads (NKXR)

If the unit must be inseparable, a flange (-Z) is proposed

Two-way axial forces

Depending on the intensity of the forces, the thrust part will consist of needles (AXN) or rollers (ARN)

CAM FOLLOWERS



Cam followers are used for applications requiring guidance with minimum contact with cam and the linear guidance systems.

Cam followers applications are very different to bearing applications. The cam followers is not fitted in a housing and its thicker outer ring rolls directly over a surface to provide guidance.

With or without a seal, with an outer ring with a convex or cylindrical profile, all cam followers are proposed:

- contact needle version (KRV-NATV) to accept significant loads
- cage version (KR-NATR) to accept higher speeds

Versions with two 2 rows of contact bearings also exist to increase capacity (NUTR, NUTW et NUKR)

- Stud Type: threaded shaft has a slot head or hex head screwdriver tightening system to simplify the attachment of the roller on the support surface. These rollers may be regreased by the shaft.
- Yoke Type: with or without lateral guidance



NEEDLE ROLLER CAGE ASSEMBLIES

K8X11X8T2	K9X12X10T2	K10X14X13	K12X15X20
K8X11X10T2	K9X12X13T2	K10X16X12	K12X16X13
K8X11X13	K10X13X10T2	K11X14X10	K12X17X13
K8X12X10T2	K10X13X13	K12X15X9	K12X18X12
K8X12X12	K10X14X8	K12X15X10	
K8X12X13	K10X14X10	K12X15X13	

DRAWN CUP NEEDLE ROLLER BEARINGS

Shaft Diameter	Part n° open end design	Part n° closed end design	Shaft Diameter	Part n° open end design	Part n° closed end design
8	HK0810C		9	HMK0916	
8		BK0810C	10	HK1010	
8	HMK0810		10		BK1010
8	HMK0815		10	HK1012	
8	HMK0820T2		10		BK1012
9	HK0910		10	HK1015	
9		BK0910	10		BK1015
9	HK0912		10	HMK1010	
9		BK0912	10	HMK1012	
9	HMK0912		10	HMK1015	
			10	HMK1020	

MACHINED RING NEEDLE ROLLER BEARINGS (WITHOUT INNER RING).

Shaft mm	Part n°	Shaft mm	Part n°	Shaft mm	Part n°
10	NK10/12T2	16	RNA4901R	20	NK20/16R
10	NK10/16	16	NK16/16R	20	RNA5902
10	RNA498	16	NK16/20R	20	NK20/20R
12	NK12/12	16	RNA4901R	20	RNA6902R
12	NK12/16	17	NK17/16R	21	NK21/16R
12	RNA499	17	NK17/20R	21	NK21/20R
14	RNA4900R	18	NK18/16R	22	NK22/16R
14	NK14/16R	18	NK18/20R	22	NK22/20R
14	NK14/20R	19	NK19/16R	22	RNA4903R
15	NK15/16R	19	NK19/20R	22	RNA5903
15	NK15/20R	20	RNA4902R	22	RNA6903R

THRUST NEEDLE ROLLER BEARINGS

Shaft mm	Thrust needle roller and cage assembly	washer	inner ring	outer ring
10	AXK1100	AS1100	WS81100	GS81100
12	AXK1101	AS1101	WS81101	GS81101
15	AXK1102	AS1102	WS81102	GS81102
17	AXK1103	AS1103	WS81103	GS81103
20	AXK1104	AS1104	WS81104	GS81104
25	AXK1105	AS1105	WS81105	GS81105
30	AXK1106	AS1106	WS81106	GS81106
35	AXK1107	AS1107	WS81107	GS81107
40	AXK1108	AS1108	WS81108	GS81108
45	AXK1109	AS1109	WS81109	GS81109
50	AXK1110	AS1110	WS81110	GS81110

CAM FOLLOWERS STUD TYPE TRUCK ROLLERS

with cage	sealed type with cage	cylindrical outer	sealed type with cylindrical outer	full compliment type	full compliment with seal	outside diameter
KR16	KR16LL	KR16X	KR16XLL	KRV16	KRV16LL	16mm
KR19	KR19LL	KR19X	KR19XLL	KRV19	KRV19LL	19mm
KR22	KR22LL	KR22X	KR22XLL	KRV22	KRV22LL	22mm
KR26	KR26LL	KR26X	KR26XLL	KRV26	KRV26LL	26mm
KR30	KR30LL	KR30X	KR30XLL	KRV30	KRV30LL	30mm
KR32	KR32LL	KR32X	KR32XLL	KRV32	KRV32LL	32mm
KR35	KR35LL	KR35X	KR35XLL	KRV35	KRV35LL	35mm
KR40	KR40LL	KR40X	KR40XLL	KRV40	KRV40LL	40mm

SELF-ALIGNING BEARING UNITS



Standard range with more than 25 000 solutions



- The most extensive range on the market
- Materials: grey cast iron, sheet steel, stainless steel and thermoplastic
- Forged inner and outer rings, steel cages
- Efficient protection against corrosion by chemical passivation (grey cast housings)
- Efficient dust protection by stainless steel covers (stainless steel / grey cast range) or in plastic (thermoplastic range)
- Compact and efficient bearing systems
- Different bearing inserts for high and low temperature applications
- Bearing inserts available with cylindrical outer diameter
- Bearing inserts available with common inch bore diameter

Bearings with solid grease (Spot Pack)



- Reduce lubricant leakage because the base oil is retained in a solid mixture
- Prevents contamination of the surrounding environment
- Ensures a constant flow of lubricant at the bearing / raceway contact point
- Low running torque characteristics
- Solid grease protects a bearing against ingress of foreign matters

Bearing units with EN-GJS grey cast housings (ductile)



- More economical, energy saving through weight reduction
- 40% lighter and more compact than standard grey cast units
- Approximately 30% stronger in comparison with standard grey cast housings
- Shock resistant material even at low temperature
- Available as relubricatable or non-relubricatable
- Flange and pillow block versions available
- Interchangeable with standard self-aligning bearing units

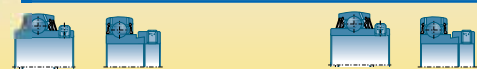
Bearing units with rolled steel housings



- Superior housing strength: more resistant than cast iron or steel sheets
- Reducing the risk of housing fracture, including under severe conditions
- Housing load 5 times higher than bearing insert dynamic capacity
- Suited for extreme applications: impact, high loads, vibrations
- Suited for steel and iron applications, extraction machines and equipment in contaminated environments

BEARINGS


• Paliers auto-aligneurs en acier inoxydable • Stainless steel self-aligning bearing units • Nichtrostende Gehäuselager • Soportes auto-alineantes en acero inoxidable • Supporti autoallineanti in acciaio inox • Mancais auto-alinháveis em aço inoxidável



NTN	F-UCPM../LP03	-
SNR	SUCP	SESP
ASAHI	MUCP	-
DODGE	P2B-SCEZ	-
NTN	F-UCFM../LP03	-
SNR	SUCFL	SESFL
ASAHI	MUCFL	-
DODGE	F2B-SCEZ	-
SNR	SUCPA	SESPA
ASAHI	MUCPA	-

SNR	SUCF	SESF
ASAHI	MUCF	-
DODGE	F4B-SCEZ	-
SNR	SUCT	SEST
ASAHI	MUCT	-

• Paliers auto-aligneurs thermoplastique • Thermoplastic self-aligning bearing units • Thermoplastik Gehäuselager • Soportes auto-alineantes de chapa • Supporti autoallineanti in lamiera d'acciaio • Mancais auto-alinháveis em chapa de aço




NTN	F-UCPR2../LP03**	-
SNR	GNP	-
SKF	SYK..TH/GFA	-
INA	RASEV..TN VA	-
NSK - RHP	PNR..CR	-
NTN	F-UCFR2../LP03*	-
SNR	GSF	-
SKF	FYK..TH/GFA	-
INA	RCJY..TN VA	-
NSK - RHP	PSF..CR	-

NTN	F-UCFLR2../LP03**	-
SNR	GSFT	-
SKF	FYTBK..TH/GFA	-
INA	RCJTY..TN VA	-
NSK - RHP	PSFT..CR	-

*: noir / black - **: blanc ou noir / white or black

• Paliers auto-aligneurs en tôle d'acier • Stamped steel self-aligning bearing units • Stahlblech Gehäuselager • Soportes auto-alineantes de chapa • Supporti autoallineanti in lamiera d'acciaio • Mancais auto-alinháveis em chapa de aço



NTN	ASPP	AELPP..W3
SNR	USPP	ESPP
INA	PBY	PB
SKF	P..RM	P..FM
RHP	-	LPB..EC
ASAHI	BPP..Z2	KHPP..Z2
KOYO/JTEKT	SBPP	SAPP..FM
NTN	USPFT	ESPFT
INA	RATRY	RATR
SKF	PFD..RM	PFD..FM
RHP	SLFT..A	SLFT..EC
ASAHI	BPFT	-

NTN	ASPFL	AELPFL
SNR	USPFL	ESPFL
INA	RATY	RAT
SKF	PFT..RM	PFT..FM
RHP	SLFL..A	SLFL..EC
NSK	UBPFL	ENPFL
ASAHI	BPFL	KHPFL
KOYO/JTEKT	SBPFL	SAPFL..FM
SNR	USPFE	ESPFE
INA	-	MSTU
NTN	ASPF	AELPF..W3
SNR	USPF	ESPF
INA	RAY	RA
SKF	PF..RM	PF..FM
RHP	SLFE..A	SLFE..EC
NSK	UBPFL	ENPFL
ASAHI	PBF	KHPFL
KOYO/JTEKT	SBPF	SAPF..FM

• Couvertres / Covers

Cover material	NTN	SNR	KOYO/JTEKT	ASAHI	RHP	INA	SKF
Couvercle acier (inox) / Stainless steel cover	SM- ouvert/open	SDC../SCDE.. ouvert/open	D..	E	-	-	-
Couvercle fonte / Cast iron cover	S- ouvert/open	SDO../SCDE.. ouvert/open	C	C	-	-	-
Couvercle tôle / Protector cover (sheet metal)	CM- ouvert/open	-	FD	C	-	-	-
Couvercle thermoplastique / Thermoplastic cover	C- ouvert/open	-	FC	CE	-	-	-
Couvercle tôle / Protector cover (sheet metal)	-	PCC..	-	-	.P	KASK	ECY..
Couvercle thermoplastique / Thermoplastic cover	-	PCO..	-	-	-	-	-
Couvercle tôle / Protector cover (sheet metal)	-	CF..	-	-	-	-	ECL..
Couvercle thermoplastique / Thermoplastic cover	-	CV..	-	-	-	-	ECYB..

Couvertres à utiliser pour palier en : / Covers suitable for units from:
A : fonte / cast iron B : fonte / cast iron C : fonte / cast iron D : thermoplastique / thermoplastic

• Roulements-inserts • Bearing inserts • Lagereinsätze • Rodamientos insertos • Cuscinetti "inserti" • Rolamentos insertos

	Series 200	Series 300	X-Series
NTN	UC2..D1	UC3..D1	UCX..D1
SNR	UC2..G2	UC3..G2	-
INA	GYE..KRBB / GYE..KRBB-FA107	-	-
SKF	YAR2..2F	-	-
RHP	10..G	-	10...G
NSK	UC2	UC3	UCX
ASAHI	UC2	UC3	UCX
KOYO/JTEKT	UC2	UC3	UCX
NTN	UEL2..D1W3	UEL3..D1W3	-
SNR	EX2..G2	EX3..G2	-
INA	GE..KRBB	-	-
SKF	YEL2..2F	-	-
RHP	10..DECG	-	-
NSK	EW2	-	-
ASAHI	UG2..+ER	-	-
KOYO/JTEKT	NA2	-	-
NTN	UK2..D1, H23..X	UK3..D1, H23..X	UKX.., H23..X
SNR	UK2..G2H	UK3..G2H	-
SKF	YSA2..2FK, H23	-	-
RHP	10..KG, H3	-	-
NSK	UK2..+H23	UK3...H23	UKX...H23
ASAHI	UK2..+H23	UK3	UKX
KOYO/JTEKT	UK2... H23..X	UK3... H23..X	UKX... H23X
NTN	AS2	-	-
SNR	US2..G2	-	-
INA	GAY..NPPB	-	-
SKF	YAT2	-	-
RHP	12..G	-	-
NSK	UB2	-	-
ASAHI	B	-	-
KOYO/JTEKT	SB2	-	-
NTN	AEL2..W3D1	-	-
SNR	ES2..G2	-	-
INA	GRAE..NPPB	-	-
SKF	YET2	-	-
RHP	12..ECG	-	-
NSK	EN2	-	-
ASAHI	KH2..AE	-	-
KOYO/JTEKT	SA2	-	-
NTN	F-UC2..D1/LP03	-	-
SNR	SUC2	-	-
DODGE	SCEZ	-	-
ASAHI	MUC2	-	-
KOYO/JTEKT	UC2..S6	-	-
NTN	-	-	-
SNR	SES2	-	-
ASAHI	-	-	-
DODGE	-	-	-
NTN	F-UC2..D1/LP03	-	-
SNR	MUC2..FD	-	-
SKF	YAR2..2RF/HVGFA	-	-
INA	GYE..KRBB VA	-	-
NSK-RHP	J10...GCR	-	-
NTN	CS2..LLU	-	-
SNR	62..SEE	-	-
INA	2..NPPB	-	-
SKF	17262..2RS1	-	-
RHP	17262..2RS1	-	-
NSK	CS2..DDU	-	-
KOYO/JTEKT	CB2	-	-
FAG	762...ZRSR	-	-

	Roulement insert bague caoutchouc / insert bearing with rubber liner	Roulement insert / Bearing insert	Bague caoutchouc / Rubber ring
SNR	ESR2..B	ES2..SRS	SRBB2
INA	RABR-B	RAE..NPPB	RABR
SKF	-	YET	FIS
NSK	-	AEL	T2066
SNR	CESR2..A	CE2..SRS	SRCA2..
INA	RCSM-B	RAE..NPP	RCSM

Adapté au corps en acier inoxydable / Suitable for stainless steel housings
Adapté au corps en fonte / Suitable for grey cast housings
Adapté au corps en tôle / Suitable for sheet metal housings
Adapté au corps en thermoplastique / Suitable for thermoplastic housings

Le tableau donne des informations sur des formes comparables. Il ne garantit pas l'interchangeabilité exacte sur le plan dimensionnel. / The tables give only information on comparable designs, review the critical dimensions for more precise interchanging or contact SNR customer service. / Die Tabelle gibt lediglich Auskunft über vergleichbare Bauformen, nicht jedoch über die exakte metrische Austauschbarkeit. / La tabla de información únicamente sobre formas comparables, no garantiza una intercambiabilidad exacta en el aspecto dimensional. / La tabella fornisce unicamente informazioni sulle forme costruttive paragonabili, non sull'eventuale intercambiabilità dimensionale. / A tabela dá informações exclusivamente sobre desenhos funcionalmente equivalentes e não dimensionalmente idênticos.





SNC PLUMMER BLOCK

Efficient, flexible and user friendly



With You

More than Standard!

Extend the life duration with the SNC plummer block housing range!

The optimized design provides excellent rigidity and stability, a vibration dampening and improves strength and heat dissipation characteristics in order to provide reduced stress levels in the bearing and a cooler running temperature of its lubricant and thereby extending operating and service life.

The solution for higher loads

Large SNC plummer block housings (from the size 520) are now also available in ductile iron EN-GJS-400-18. This SNCD designated housing features additional a factor 1.8 higher breaking loads.

The SNC plummer block housings are designed for installation of spherical roller bearings.

We recommend the use of our ULTAGE spherical roller bearings with higher increased load capacities and extended service life, to take advantage of the optimal characteristics of the SNC-Housings. We complete our range with the tools and solutions of Experts & Tools.



Your benefits:

Circular reinforcement:

- excellent stability + rigidity
- optimal vibration behavior
- effective heat dissipation



Connection options:

- delivered with 2 lubrication holes
- 2 grease nipples (1x tapered, 1x flat headed nipple) added
- all bores sealed with screws
- drain hole



X-support:

- reinforced bearing seat
- uniform load distribution
- extended life in service



Larger diameter bolts:

- higher radial loads to be supported by the housing cap



Optional grease regulation disc:

- achieves the normal operating temperature more quickly
- at high rotational speeds: reduces the operating temperature
- extends the operating and service life of the bearing

Sealing options

A variety of sealing options is available, adapted to your application



SC..DS
Double lip seal
allround use

SC..FS
Felt strip seal
high rotation speed

SC..SV
V-Ring seal
low friction

SC..LA
Labyrinth seal
high temperatures

SC..TA
Taconite seal
large dust pollution



With our ULTAGE spherical roller bearings you will have a perfect combination for your application, like for ex.:

- Industrial ventilators
- Mining and quarry
- etc.
- Conveyor systems
- Steel industry





SNC PLUMMER BLOCK



Efficient, flexible and user friendly



With You

SNR ↔ SKF
Interchange list
Split plummer block units

Shaft outlet-Ø	Typ	SNR ↔ SKF Interchange list		SNR		SKF	
		SNC	SNL	DS	G	FS	C
20	505	SNC505	SNL505	SC505DS	TSN505G	SC505FS	TSN505C
20	605	SNC506-605	SNL506-605	SC605DS	TSN605G	SC605FS	TSN605C
25	506	SNC506-605	SNL506-605	SC506DS	TSN506G	SC506FS	TSN506C
25	606	SNC507-606	SNL507-606	SC606DS	TSN606G	SC606FS	TSN606C
30	205	SNC205	SNL205	SC205DS	TSN205G	SC205FS	-
30	305	SNC206-305	SNL206-305	SC507DS	TSN305G	SC305FS	-
30	507	SNC507-606	SNL507-606	SC507DS	TSN507G	SC507FS	TSN507C
30	607	SNC508-607	SNL508-607	SC607DS	TSN607G	SC607FS	TSN607C
35	206	SNC206-305	SNL206-305	SC206DS	TSN206G	SC206FS	-
35	306	SNC507-606	SNL507-606	SC206DS	TSN206G/306G	SC206FS	-
35	508	SNC508-607	SNL508-607	SC508DS	TSN508G	SC508FS	TSN508C
35	608	SNC510-608	SNL510-608	SC608DS	TSN608G	SC608FS	TSN608C
45	207	SNC207-306	SNL207	SC207DS	TSN207G	SC207FS	-
45	307	SNC208-307	SNL208-307	SC510DS	TSN307G	SC307FS	-
40	509	SNC509	SNL509	SC509DS	TSN509G	SC509FS	TSN509C
40	609	SNC511-609	SNL511-609	SC609DS	TSN609G	SC609FS	TSN609C
50	208	SNC208-307	SNL208-307	SC208DS	TSN208G	SC208FS	-
50	308	SNC510-608	SNL510-608	SC208DS	TSN208G/308G	SC208FS	-
45	510	SNC510-608	SNL510-608	SC510DS	TSN510G	SC510FS	TSN510C
45	610	SNC512-610	SNL512-610	SC610DS	TSN610G	SC610FS	TSN610C
55	209	SNC209	SNL209	SC209DS	TSN209G	SC209FS	-
55	309	SNC511-609	SNL511-609	SC209DS	TSN209G/309G	SC209FS	-
50	511	SNC511-609	SNL511-609	SC511DS	TSN511G	SC511FS	TSN511C
50	611	SNC513-611	SNL513-611	SC611DS	TSN611G	SC611FS	TSN611C
60	210	SNC210-308	SNL210	SC210DS	TSN210G	SC210FS	-
60	310	SNC512-610	SNL512-610	SC210DS	TSN210G/310G	SC210FS	-
55	512	SNC512-610	SNL512-610	SC512DS	TSN512G	SC512FS	TSN512C
55	612	SNC515-612	SNL515-612	SC612DS	TSN612G	SC612FS	TSN612C
65	211	SNC211-309	SNL211	SC211DS	TSN211G	SC211FS	-
65	311	SNC513-611	SNL513-611	TSN211G/311G	SC211FS	-	SC211SV
60	513	SNC513-611	SNL513-611	SC513DS	TSN513G	SC513FS	TSN513C
60	613	SNC516-613	SNL516-613	SC613DS	TSN613G	SC613FS	TSN613C
70	212	SNC212-310	SNL212	SC212DS	TSN212G	SC212FS	-
70	312	SNC515-612	SNL515-612	SC212DS	TSN212G/312G	SC212FS	-
65	515	SNC515-612	SNL515-612	SC515DS	TSN515G	SC515FS	TSN515C
65	615	SNC518-615	SNL518-615	SC615DS	TSN615G	SC615FS	TSN615C
75	213	SNC213-311	SNL213	SC213DS	TSN213G	SC213FS	-
75	313	SNC516-613	SNL516-613	SC213DS	TSN213G/313G	SC213FS	-
70	516	SNC516-613	SNL516-613	SC516DS	TSN516G	SC516FS	TSN516C
70	616	SNC519-616	SNL519-616	SC616DS	TSN616G	SC616FS	TSN616C
80	214	SNC214	-	SC214DS	-	SC214FS	-
80	314	SNC517	SNL517	SC214DS	TSN314G	SC214FS	-
75	517	SNC517	SNL517	SC517DS	TSN517G	SC517FS	TSN517C
75	617	SNC520-617	SNL520-617	SC617DS	TSN617G	SC617FS	TSN617C
85	215	SNC215-312	SNL215	SC215DS	TSN215G	SC215FS	-
85	315	SNC518-615	SNL518-615	SC215DS	TSN215G/315G	SC215FS	-
80	518	SNC518-615	SNL518-615	SC518DS	TSN518G	SC518FS	TSN518C
80	618	SNC318-618	-	SC618DS	-	SC618FS	-
90	216	SNC216-313	SNL216	SC216DS	TSN216G	SC216FS	-
90	316	SNC219-316	SNL519-616	SC316DS	TSN316G	SC316FS	-
85	519	SNC519-616	SNL519-616	SC519DS	TSN519G	SC519FS	TSN519C
85	619	SNC522-619	SNL522-619	SC619DS	TSN619G	SC619FS	TSN619C
95	217	SNC217-314	SNL217	SC217DS	TSN217G	SC217FS	-
95	317	SNC220-317	SNL520-617	SC317DS	TSN317G	SC317FS	-
90	520	SNC520-617	SNL520-617	SC520DS	TSN520G	SC520FS	TSN520C
90	620	SNC524-620	SNL524-620	SC620DS	TSN620G	SC620FS	TSN620C
100	218	SNC218-315	SNL218	SC218DS	TSN218G	SC218FS	-
100	318	SNC318-618	-	SC318DS	-	SC318FS	-
110	319	SNC222-319	SNL522-619	SC319DS	-	SC319FS	-
110	219	SNC519-616	-	SC219DS	-	SC219FS	-
100	522	SNC522-619	SNL522-619	SC522DS	TSN522G	SC522FS	TSN522C
115	220	SNC520-617	SNL520-617	SC220DS	TSN220G	SC220FS	-
115	320	SNC224-320	SNL524-620	SC320DS	-	SC320FS	-
110	524	SNC524-620	SNL524-620	SC524DS	TSN524G	SC524FS	TSN524C
125	222	SNC522-619	SNL522-619	SC222DS	TSN222G	SC222FS	-
115	526	SNC226-526	SNL526	SC526DS	TSN526G	SC526FS	TSN526C
135	224	SNC524-620	SNL524-620	SC224DS	TSN224G	SC224FS	-
125	528	SNC228-528	SNL528	SC528DS	TSN528G	SC528FS	TSN528C
145	226	SNC226-526	SNL526	SC226DS	TSN226G	SC226FS	-
135	530	SNC230-530	SNL530	SC530DS	TSN530G	SC530FS	TSN530C
140	532	SNC232-532	SNL532	SC532DS	TSN532G	SC532FS	TSN532C
155	228	SNC228-528	SNL528	SC228DS	TSN228G	SC228FS	-
165	230	SNC230-530	SNL530	SC230DS	TSN230G	SC230FS	-
175	232	SNC232-532	SNL532	SC232DS	TSN232G	SC232FS	-







SNC PLUMMER BLOCK

Efficient, flexible and user friendly



With You

							
SNR SV	SKF A	SNR LA	SKF S	SNR TA	SKF ND	SNR EC	SKF ANSH
SC505SV	TSN505A	SC505LA	TSN505S	SC505TA	TSN505ND	SC505EC	ASNH505
SC605SV	TSN605A	SC605LA	TSN605S	SC605TA	TSN605ND	SC506-605EC	ASNH506-605
SC506SV	TSN506A	SC506LA	TSN506S	SC506TA	TSN506ND	SC506-605EC	ASNH506-605
SC606SV	TSN606A	SC606LA	TSN606S	SC606TA	TSN606ND	SC507-606EC	ASNH507-606
-	-	SC205LA	TSN205S	SC205TA	TSN205ND	SC506-605EC	ASNH506-605
SC305SV	TSN305A	SC305LA	TSN305S	SC305TA	TSN305ND	SC507-606EC	ASNH507-606
SC507SV	TSN507A	SC507LA	TSN507S	SC507TA	TSN507ND	SC507-606EC	ASNH507-606
SC607SV	TSN607A	SC607LA	TSN607S	SC607TA	TSN607ND	SC508-607EC	ASNH508-607
SC206SV	TSN206A	SC206LA	TSN206S	SC206TA	TSN206ND	SC507-606EC	ASNH507-606
SC206SV	TSN206A/306A	SC206LA	TSN206S/306S	SC206TA	TSN206ND/306ND	SC507-606EC	ASNH507-607
SC508SV	TSN508A	SC508LA	TSN508S	SC508TA	TSN508ND	SC508-607EC	ASNH508-607
SC608SV	TSN608A	SC608LA	TSN608S	SC608TA	TSN608ND	SC510-608EC	ASNH510-608
SC207SV	TSN207A	SC207LA	TSN207S	SC207TA	TSN207ND	SC509EC	ASNH509
SC307SV	TSN307A	SC307LA	TSN307S	SC307TA	TSN307ND	SC510-608EC	ASNH510-608
SC509SV	TSN509A	SC509LA	TSN509S	SC509TA	TSN509ND	SC509EC	ASNH509
SC609SV	TSN609A	SC609LA	TSN609S	SC609TA	TSN609ND	SC511-609EC	ASNH511-609
SC208SV	TSN208A	SC208LA	TSN208S	SC208TA	TSN208ND	SC510-608EC	ASNH510-608
SC208SV	TSN208A/308A	SC208LA	TSN208S/308S	SC208TA	TSN208ND/308ND	SC510-608EC	ASNH510-609
SC510SV	TSN510A	SC510LA	TSN510S	SC510TA	TSN510ND	SC510-608EC	ASNH510-608
SC610SV	TSN610A	SC610LA	TSN610S	SC610TA	TSN610ND	SC512-610EC	ASNH512-610
SC209SV	TSN209A	SC209LA	TSN209S	SC209TA	TSN209ND	SC511-609EC	ASNH511-609
SC209SV	TSN209A/309A	SC209LA	TSN209S/309S	SC209TA	TSN209ND/309ND	SC511-609EC	ASNH511-610
SC511SV	TSN511A	SC511LA	TSN511S	SC511TA	TSN511ND	SC511-609EC	ASNH511-609
SC611SV	TSN611A	SC611LA	TSN611S	SC611TA	TSN611ND	SC513-611EC	ASNH513-611
SC210SV	TSN210A	SC210LA	TSN210S	SC210TA	TSN210ND	SC512-610EC	ASNH512-610
SC210SV	TSN210A/310A	SC310LA	TSN210S/310S	SC210TA	TSN210ND/310ND	SC512-610EC	ASNH512-611
SC512SV	TSN512A	SC512LA	TSN512S	SC512TA	TSN512ND	SC512-610EC	ASNH512-610
SC612SV	TSN612A	SC612LA	TSN612S	SC612TA	TSN612ND	SC515-612EC	ASNH515-612
SC211SV	TSN211A	SC211LA	TSN211S	SC211TA	TSN211ND	SC513-611EC	ASNH513-611
TSN211A/311A	SC211LA	TSN211S/311S	SC211TA	TSN211ND/311ND	SC513-611EC	ASNH513-612	ASNH513-611
SC513SV	TSN513A	SC513LA	TSN513S	SC513TA	TSN513ND	SC513-611EC	ASNH513-611
SC613SV	TSN613A	SC613LA	TSN613S	SC613TA	TSN613ND	SC516-613EC	ASNH516-613
SC212SV	TSN212A	SC212LA	TSN212S	SC212TA	TSN212ND	SC515-612EC	ASNH515-612
SC212SV	TSN212A/312A	SC212LA	TSN212S/312S	SC212TA	TSN212ND/312ND	SC515-612EC	ASNH515-613
SC515SV	TSN515A	SC515LA	TSN515S	SC515TA	TSN515ND	SC515-612EC	ASNH515-612
SC615SV	TSN615A	SC615LA	TSN615S	SC615TA	TSN615ND	SC518-615EC	ASNH518-615
SC213SV	TSN213A	SC213LA	TSN213S	SC213TA	TSN213ND	SC516-613EC	ASNH516-613
SC213SV	TSN213A/313A	SC213LA	TSN213S/313S	SC213TA	TSN213ND/313ND	SC516-613EC	ASNH516-614
SC516SV	TSN516A	SC516LA	TSN516S	SC516TA	TSN516ND	SC516-613EC	ASNH516-613
SC616SV	TSN616A	SC616LA	TSN616S	SC616TA	TSN616ND	SC519-616EC	ASNH519-616
SC214SV	-	SC214LA	-	SC214TA	-	SC517EC	-
SC214SV	TSN314A	SC214LA	TSN314A	SC214TA	TSN314ND	SC517EC	ASNH516
SC517SV	TSN517A	SC517LA	TSN517S	SC517TA	TSN517ND	SC517EC	ASNH517
SC617SV	TSN617A	SC617LA	TSN617S	SC617TA	TSN617ND	SC520-617EC	ASNH520-617
SC215SV	TSN215A	SC215LA	TSN215S	SC215TA	TSN215ND	SC518-615EC	ASNH518-615
SC215SV	TSN215A/315A	SC215LA	TSN215S/315S	SC215TA	TSN215ND/315ND	SC518-615EC	ASNH518-614
SC518SV	TSN518A	SC518LA	TSN518S	SC518TA	TSN518ND	SC518-615EC	ASNH518-615
SC618SV	-	SC618LA	-	SC618TA	-	SC318-618EC	-
SC216SV	TSN216A	SC216LA	TSN216S	SC216TA	TSN216ND	SC216-613EC	ASNH216
SC316SV	TSN316A	SC316LA	TSN316S	SC316TA	TSN316ND	SC519-616EC	ASNH519-616
SC519SV	TSN519A	SC519LA	TSN519S	SC519TA	TSN519ND	SC519-616EC	ASNH519-616
SC619SV	TSN619A	SC619LA	TSN619S	SC619TA	TSN619ND	SC522-619EC	ASNH522-619
SC217SV	TSN217A	SC217LA	TSN217S	SC217TA	TSN217ND	SC217-314EC	ASNH217
SC317SV	TSN317A	SC317LA	TSN317S	SC317TA	TSN317ND	SC520-617EC	ASNH520-617
SC520SV	TSN520A	SC520LA	TSN520S	SC520TA	TSN520ND	SC520-617EC	ASNH520-617
SC620SV	TSN620A	SC620LA	TSN620S	SC620TA	TSN620ND	SC524-620EC	ASNH524-620
SC218SV	TSN218A	SC218LA	TSN218S	SC218TA	TSN218ND	SC218-315EC	ASNH218
SC318SV	-	SC318LA	-	SC318TA	-	SC318-618EC	-
SC319SV	TSN319A	SC319LA	TSN319S	SC319TA	TSN319ND	SC522-619EC	ASNH522-619
SC219SV	-	SC219LA	-	SC219TA	-	SC519-616EC	-
SC522SV	TSN522A	SC522LA	TSN522S	SC522TA	TSN522ND	SC522-619EC	ASNH522-619
SC220SV	TSN220A	SC220LA	TSN220S	SC220TA	TSN220ND	SC520-617EC	ASNH520-617
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SC524SV	TSN524A	SC524LA	TSN524S	SC524TA	TSN524ND	SC524-620EC	ASNH524-620
SC222SV	TSN222A	SC222LA	TSN222S	SC222TA	TSN222ND	SC522-619EC	ASNH522-619
SC526SV	TSN526A	SC526LA	TSN526S	SC526TA	TSN526ND	SC226-526EC	ASNH526
SC224SV	TSN224A	SC224LA	TSN224S	SC224TA	TSN224ND	SC524-620EC	ASNH524-620
SC528SV	TSN528A	SC528LA	TSN528S	SC528TA	TSN528ND	SC228-528EC	ASNH528
SC226SV	TSN226A	SC226LA	TSN226S	SC226TA	TSN226ND	SC226-526EC	ASNH526
SC530SV	TSN530A	SC530LA	TSN530S	SC530TA	TSN530ND	SC230-530EC	ASNH530
SC532SV	TSN532A	SC532LA	TSN532S	SC532TA	TSN532ND	SC232-532EC	ASNH532
SC228SV	TSN228A	SC228LA	TSN228S	SC228TA	TSN228ND	SC228-528EC	ASNH528
SC230SV	TSN230A	SC230LA	TSN230S	SC230TA	TSN230ND	SC230-530EC	ASNH530
SC232SV	TSN232A	SC232LA	TSN232S	SC232TA	TSN232ND	SC232-532EC	ASNH532

BEARING BOX

BE MORE EFFICIENT, IMPROVE YOUR MAINTENANCE

Together with our Experts, improve the efficiency of your plant maintenance:

- Reduce your maintenance costs
- Improve the quality of your maintenance
- Optimize the life of your machines & equipment





1 Practical training for maintenance

- Cold bearing assembly/disassembly (mechanical & hydraulic)
- Hot bearing assembly/disassembly
- Lubrication & Re-lubrication
- Basics of bearing maintenance : storage, handling, clearance, failures & solutions
- Assembly of bearing units

2 Technical assistance

Supervision of bearing mounting and dismounting

- Bearing diagnosis
- Lubricant analysis

3 Tools & Maintenance products

Reserve the Bearing Box straight away and train your technicians!

Contact your NTN-SNR distributor or our Experts & Tools service to talk to an adviser who:

- Will propose you training tailored to your requirements
- Will arrange a date for the training with you

With You



National Power Local Strength

Supplying industrial products, services and solutions since 1998



BARDEN

Aerospace and Super Precision



Barden UK is a world leader in the design and manufacture of super precision ball and roller bearings for a wide range of industries. Our success has been built on a solid foundation of manufacturing and engineering design expertise.

Our bearings are produced using advanced technology to the highest standard available. Our bearings are used in virtually every sector of industry where there is a need to meet critical tolerances, high speeds and reliable performance under the most demanding conditions

Our product range covers thousands of bearing variations ranging in size from 5mm to over 700mm outside diameter. Our bearings can meet and will usually exceed ISO P2 (ABEC 9) standards.

Products available include:

Angular Contact Ball Bearings –

Available in P4, P4S and P2 precision grade with 15° and 25° contact angles. Steel balls as standard.

Universally ground for interchangeable mounting arrangements or in dedicated matched bearing sets.



Series available: **7000, 71800, 71900, 7200, 7300**

Also available in optional versions as detailed below :

a) Sealed Bearings –

Sealed and grease using non-contact seals these bearings offer optimum performance in challenging applications. Eliminating contamination and cost effective due to pre-greasing, leading to time saved in preparation.

b) Direct Lubrication Version –

Designed for maximum speed where radial oil lubrication systems are featured. As a rule the use of DLR (Direct Lube) bearings results in a reduction of running costs and proves more reliable than systems using axial oil supply.

c) Ceramic Ball (Hybrid) Bearings -

Designed for high-speed, high rigidity applications. As ceramic balls are considerably lighter and harder than steel balls, they can run at higher speeds and lower temperatures. This leads to less heat generation, less energy and longer lubricant life.

Ceramic Ball Features

60% lighter than steel balls

- Centrifugal forces reduced
- Lower vibration levels
- Less heat generation
- Reduced ball skidding

50% higher modulus of elasticity

- Improved bearing rigidity
- Naturally fracture resistant

Tribochemically inert

- Low adhesive wear
- Improved Lubricant life
- Superior corrosion resistance

Which gives the following benefits of Ceramic Hybrid Bearings

- Depending on application service life can be 5 years longer
- Running speeds up to 50% higher
- Overall accuracy and quality improves
- Lower operating costs
- High temperature capability
- Electrically non-conductive

d) X-Life Ultra -

These are Hybrid bearings using ceramic balls and Cronidur (High Nitrogen Steel) rings designed for maximum demands on speed and load. Because of the finer structure of the Cronidur steel the bearings ensure cooler running, higher contact pressures and superior corrosion resistance. This increases the material fatigue life and gives extended service life.

Single and Double Row Cylindrical Roller Bearings –

Available in 3 designs -

- N10 series, single row
- NN30 series, double row
- NNU49 series, double row



Manufactured to SP and UP precision class, with brass and PEEK cages in tapered and parallel bore versions.

This range of bearings are particularly suitable for high load, high rigidity and high speed applications. For efficient lubrication these bearings are available with an annular groove and lubrication holes in the outer ring. Ceramic rollers are available for ultra high speed applications.



Ballscrew Support Bearings –

Manufactured to P4 precision grade and suitable for all screw drive and screw drive support applications.

a) Metric and Imperial Support Bearings –

Available as single direction, universally matchable design as standard. Dedicated matched bearing sets and narrow series BSB designs are also available.

Metric series available, BSB, 7602 and 7603.

Also available in sealed versions - Sealed and grease using non-contact seals these bearings offer optimum performance in challenging applications. Eliminating contamination and cost effective due to pre-greasing, leading to time saved in preparation.

Double Directional Angular Contact Thrust Ball Bearings –

Designed to axially locate spindles in both directions

and typically used in conjunction with cylindrical roller bearings (N and NN series) particularly suitable for heavy axial load applications.

Manufactured to SP and UP precision class with Brass cage.



2344 and 2347 series -

Available with 60° contact angle and large number of balls provides high axial stiffness for reasonably high speed applications.

Floating Displacement Bearings -

Series available FD10.

Designed for use in maximum speed and low load carrying capability applications. Using a combination of a ball bearing outer ring and a cylindrical roller bearing inner ring this ensures a free displacement of the outer ring relative to the inner ring during operation. Using ceramic balls and Cronidur (High Nitrogen Steel) inner rings as standard this enables high speed and adequate low carrying capacity.

Sealed and DLR (Direct Lube), Tapered and Parallel bore versions are also available.

Instrument and Miniature Bearings -

A wide range of very small metric and imperial ball bearings for use in a wide range of applications, from medical equipment, gyroscopes, measuring instruments and dental equipment.

Available with various cage materials, seals and shields and manufactured to P4 precision grade.



Typical Applications and Industries for Super Precision Bearings

- Machine Tools :
 - a) Grinding
 - b) Milling
 - c) Turning
 - d) Machining Centres
 - e) Ball Screw Supports
- Aerospace & Defence Industries
- Satellite Positioning Applications
- Automotive - Including Component Manufacture and Turbochargers
- Vacuum Pumps
- Textile Equipment
- Food Processing
- Robotics
- Medical & Dental Equipment
- High Speed Electric Motors
- Gas Turbines
- Spindle Repairers and Rebuilders
- Machine Tool Repairers and Rebuilders
- Specialist Applications

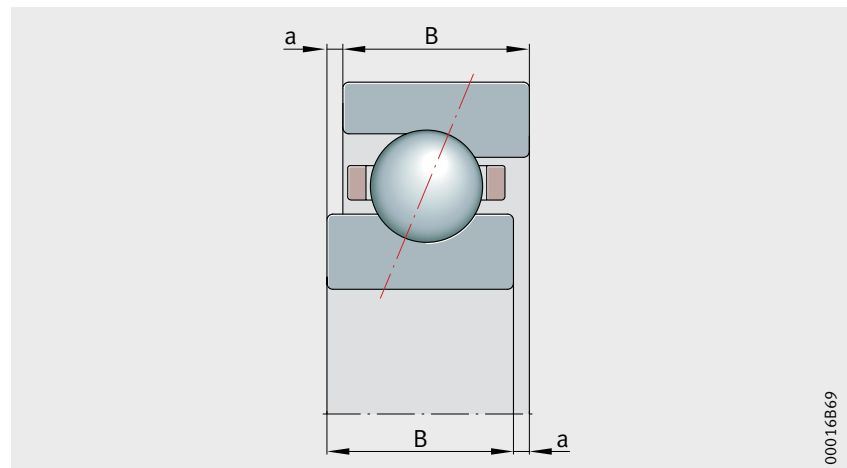


Spindle bearings

Universal bearings

FAG spindle bearings are always designed as universal bearings, which means that:

- the bearing rings are of the same width
- the projection on both sides of the bearing is of the same size, *Figure 2.*



B = bearing width
a = projection

Figure 2
Universal preload system

Advantages

Single bearings can be fitted in any arrangement required, such as a rigid X, O or tandem arrangement or with spring preloading, or can be combined in different sets.

In order to ensure uniform load-bearing in the tandem arrangement, the bearings used should have the same deviation in the inner ring bore and the outside diameter.

In an O arrangement and with rigid adjustment, sorting through checking of the interference between the shaft and bearing bore or the housing and bearing outside diameter can help to control the variations in the actual preload after mounting.

Arrangement of the bearings can be carried out in accordance with the arrow on the cylindrical surface of the outer ring. This provides logistical advantages for the customer, especially in spare parts procurement and stockholding of bearings.

Universal bearing sets

Bearing sets comprise universal bearings with the same deviation in the inner ring bore and the same deviation in the outside diameter. The deviation stands, starting from the actual value code, for the inner ring bore or the outside diameter on the bearing ring. The sets are of identical technical quality to single bearings with the same deviation in the inner ring bore and the outside diameter.

Marking of bearing sets

The first letter indicates the number of bearings in the set:

- D = 2 bearings (duplex)
- T = 3 bearings (triplex)
- Q = 4 bearings (quadruplex).

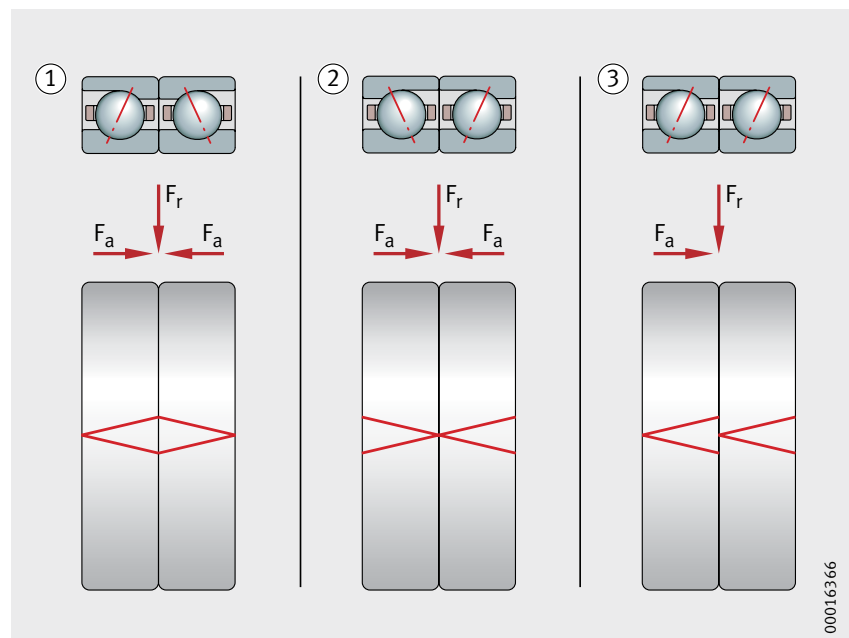
A “U” stands for “Universal”, for example in DU. After these letters, the preload class is then indicated, for example “L” for light preload, in this case DUL.

Universal bearing sets can be fitted in any arrangement required. Possible bearing arrangements are shown in *Figure 3*.

F_r = radial load
 F_a = axial load

- ① DU becomes DB, 2 bearing set in an O arrangement
- ② DU becomes DF, 2 bearing set in an X arrangement
- ③ DU becomes DT, 2 bearing set in a tandem arrangement

Figure 3
Bearing arrangements for a DU set



00016366

Ready-to-fit bearing sets

Ready-to-fit bearing sets are also available by agreement. In this case, the fitting sequence is indicated by a large arrow.

Ready-to-fit bearing sets correspond in technical terms to the universal bearing sets. However, the latter offer significant logistical advantages over the ready-to-fit sets, especially in spare parts procurement and stockholding.



Mounting and Handling of Super Precision bearings is essential for the full performance capacity to be achieved.

Common mistakes made when fitting any super precision bearings.

- Contamination of the bearing prior to fitting
- Assembling the bearing set in the wrong configuration
- Failing to correctly lubricate the bearings before mounting
- General fitting problems such as misalignment and incorrect pre-loading.

Mounting Procedure

- In preparation for mounting the bearing arrangement should be checked against a drawing or manual preferably, and the bearings must be arranged accordingly.
- The bearings are marked with the highest point of eccentricity and these marks should be aligned when mounting.
- Angular contact ball bearings may only be loaded in one axial direction, strict attention should

be paid to their direction while mounting.

- When mounting Tapered bore cylindrical roller bearings the clearance or preload fit depends how far the bearing is driven up the tapered seat. The best method is to use ring gauges to set the clearance/preload quickly and accurately.
- Induction heating is advisable for the mounting of precision bearings via the inner ring as this expands making mounting much easier. When fitting the bearing rings you should ensure that these are fitted tightly to the contact surface to avoid settling or misalignment. Premature failure could occur if this is not the case as the bearings would be operating without any preload.

Once mounted a correct running in procedure should always be used which ensures even distribution of lubricant and stabilises bearing temperature.

Barden Recommended Running-in Procedure is as follows:

Running-in process

Grease distribution is completed once a stable bearing temperature has been achieved.

Recommendations for the grease distribution cycle of super precision bearings, *Figure 4*.

The running-in process comprises several cycles of start/stop operation at different speeds and for different running times, while the stationary times after each cycle are very important. The number of cycles required may vary according to the bearing size, the number of bearings, the maximum speed and the bearing environment.

Further cycles should be carried out for an increased running time and with a shortened stationary time until the equilibrium temperature is achieved.



- ① Speed
- ② Running and stationary times
- ③ Running time
- ④ Stationary time
- ⑤ Time 11 min, 40 s
- ⑥ Time 56 min, 40 s

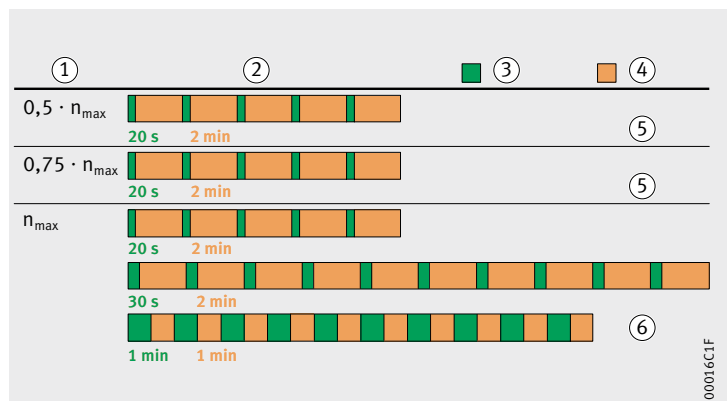


Figure 4
Grease distribution cycle for open and sealed spindle bearings

The industry standard

Oilite[®] has been acknowledged as the undisputed market leader in self-lubricating bearings for more than 80 years, and today sets the standard for other products with its quality and reliability.

The extensive technical knowledge and manufacturing resources behind Oilite[®] have resulted in a vast array of sophisticated, high quality components that are supplied to a wide range of industries, throughout the world.

Widest range in Europe

As well as being the UK's number one choice, Oilite[®] bearings are also produced for other EU markets and offer the widest choice of self-lubricating bearings anywhere in Europe. Standard stock ranges are available in metric and inch. To ensure that customers have the benefit of fast delivery, a large range of European sizes are always stocked.

- 1000 European standard sizes
- Stock holding for fast delivery

There are now five standard stock ranges, ISO Metric, Inch, DIN 1850, French Metric and Scandinavian Metric.

Bespoke products

Where customer requirements are not met by stock items, our bespoke service enables us to produce both bronze and iron bearings and customer specified structural parts that are specifically designed to meet individual requirements.

Manufacturing quality and efficiency

Our manufacturing facilities are highly automated for maximum efficiency and competitiveness. Rigorous quality control procedures are adopted at all stages of manufacture.

Custom Machining

We also specialise in machining Oilite[®] self-lubricating bearings and plates to meet individual specifications and tolerances. This service provides, for example, one-off requirements in machine maintenance or limited production runs in the OEM design field or for prototype testing before committing to tooling. Specialist tools and machining techniques are employed. This maintains the performance characteristics and physical properties which are the prerequisite of these components.

Certification

The company is certified to the Quality Management Systems requirement of ISO 9001:2008 by LRQA Certificate No. LRQ0960929 and is approved for use by:

- Augusta Westland
- Messier Dowty
- Hawker Beechcraft Corporation

Certificates of conformity & Certificates of material analysis are supplied by request.

Special Lubricants & Additives

The standard stock range of Oilite[®] bearings is impregnated with a mineral oil SAE 30 viscosity; all machined Oilite[®] bearings and plates are supplied fully impregnated after machining. A wide range of lubricants with varying temperature ranges are available to meet specific requirements. Lubricant additives are also available to impart anti-wear properties in marginal lubrication conditions such as stainless steel shaft applications.

Technical Advice

Extensive technical resources are available to resolve bearing problems. Engineers are always available to discuss projects in detail, without obligation.

Oilite[®] conforms to DIN 1850/ISO 2795

Oilite[®] metric bearings are manufactured to the tolerances set out in ISO 2795 - Plain Bearings from Sintered Material. The German stock range of bearings conform to DIN 1850.

Material Choice

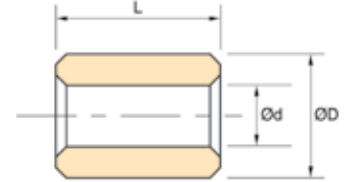
Standard Oilite[®] - oil retaining tin bronze is the generally specified material. It gives a good balance between strength, wear resistance, conformability and durability in operation. Ideal in a wide variety of applications where "self lubricating" properties are required over a long period of time.

Super Oilite[®] - an iron copper material suited to high static loads and slow oscillatory motion.

Iron Oilite[®] - 100% iron oil-retaining bearings provide an ideal solution in high stress low revolution applications.

Metric plain bearings to ISO 2795

Part Code	Inner Diameter			Outer Diameter			Basic L (js13)	Tolerances	
	Basic	Min.	Max.	Basic	Min.	Max.		ID	OD
AS 0204*	2	2.014	2.024	4	4.015	4.027	4	E7	r7
AM 0205	2	2.002	2.012	5	5.019	5.031	2 4 3	G7	s7
AM 0305	3	3.002	3.012	5	5.019	5.031	3 4 6	G7	s7
AM 0306	3	3.002	3.012	6	6.019	6.031	3 4 6	G7	s7
AS 0308*	3	3.014	3.024	8	8.019	8.034	4	E7	r7
AM 0407	4	4.004	4.016	7	7.023	7.038	3 4 6	G7	s7
AM 0408	4	4.004	4.016	8	8.023	8.038	4 6 8 12	G7	s7
AS 0410*	4	4.020	4.032	10	10.019	10.034	8	E7	r7
AM 0508	5	5.004	5.016	8	8.023	8.038	4 5 8 10 12 16	G7	s7
AM 0509	5	5.004	5.016	9	9.023	9.038	4 5 8	G7	s7
AS 0510*	5	5.020	5.032	10	10.019	10.034	6 8 10	E7	r7
AS 0512*	5	5.020	5.032	12	12.023	12.041	10	E7	r7
AM 0609	6	6.004	6.016	9	9.023	9.038	4 6 10 12 16	G7	s7
AM 0610	6	6.004	6.016	10	10.023	10.038	4 6 10 12 16	G7	s7
AS 0612*	6	6.020	6.032	12	12.023	12.041	6 8 12	E7	r7
AS 0614*	6	6.020	6.032	14	14.023	14.041	12	E7	r7
AM 0710	7	7.005	7.020	10	10.023	10.038	5 8 10	G7	s7
AM 0711	7	7.005	7.020	11	11.028	11.046	8 10	G7	s7
AM 0811	8	8.005	8.020	11	11.028	11.046	6 8 12	G7	s7
AM 0812	8	8.005	8.020	12	12.028	12.046	6 8 12 16 20	G7	s7
AM 0814	8	8.005	8.020	14	14.028	14.046	8 12 16 20	G7	s7
AS 0818*	8	8.025	8.040	18	18.023	18.041	16	E7	r7
AM 0912	9	9.005	9.020	12	12.028	12.046	6 10 14	G7	s7
AM 0914	9	9.005	9.020	14	14.028	14.046	6 10 14	G7	s7
AM 1013	10	10.005	10.020	13	13.028	13.046	10 16	G7	s7
AM 1014	10	10.005	10.020	14	14.028	14.046	8 10 16 20 25	G7	s7
AM 1015	10	10.005	10.020	15	15.028	15.046	10 16 20 25	G7	s7
AM 1016	10	10.005	10.020	16	16.028	16.046	8 10 16 20 25	G7	s7
AS 1022*	10	10.025	10.040	22	22.028	22.046	20	E7	r7
AM 1215	12	12.006	12.024	15	15.028	15.046	12 16 20 25	G7	s7
AM 1216	12	12.006	12.024	16	16.028	16.046	8 12 16 20 25	G7	s7
AM 1218	12	12.006	12.024	18	18.028	18.046	8 12 16 20 25	G7	s7
AS 1225*	12	12.032	12.050	25	25.028	25.049	25	E7	r7
AM 1418	14	14.006	14.024	18	18.028	18.046	10 14 20	G7	s7
AM 1420	14	14.006	14.024	20	20.035	20.056	10 14 20 30	G7	s7
AS 1428*	14	14.032	14.050	28	28.028	28.049	30	E7	r7
AM 1519	15	15.006	15.024	19	19.035	19.056	10 15 20 25 30	G7	s7
AS 1520*	15	15.032	15.050	20	20.028	20.049	10 15 20 25 30	E7	r7
AM 1521	15	15.006	15.024	21	21.035	21.056	10 15 20 25	G7	s7
AM 1522	15	15.006	15.024	22	22.035	22.056	16 20 30	G7	s7
AS 1530*	15	15.032	15.050	30	30.028	30.049	30	E7	r7
AM 1620	16	16.006	16.024	20	20.035	20.056	10 12 16 20 25 30	G7	s7
AM 1622	16	16.006	16.024	22	22.035	22.056	12 16 20 25 30	G7	s7
AS 1632*	16	16.032	16.050	32	32.034	32.059	30	E7	r7
AM 1822	18	18.006	18.024	22	22.035	22.056	12 18 20 30	G7	s7
AM 1824	18	18.006	18.024	24	24.035	24.056	12 18 30	G7	s7
AM 1825	18	18.006	18.024	25	25.035	25.056	12 16 20 22 30	G7	s7
AS 1835*	18	18.032	18.050	35	35.034	35.059	30	E7	r7
AM 2024	20	20.007	20.028	24	24.035	24.056	16 20 25 32	G7	s7
AM 2025	20	20.007	20.028	25	25.035	25.056	15 20 25 30	G7	s7
AM 2026	20	20.007	20.028	26	26.035	26.056	15 20 25 30	G7	s7
AM 2028	20	20.007	20.028	28	28.035	28.056	20 25 30 40 50	G7	s7
AS 2040*	20	20.040	20.061	40	40.034	40.059	40	E7	r7
AM 2227	22	22.007	22.028	27	27.035	27.056	15 20 25 35	G7	s7
AM 2228	22	22.007	22.028	28	28.035	28.056	15 20 25 28 30	G7	s7
AM 2232	22	22.007	22.028	32	32.043	32.068	20 30 50	G7	s7
AM 2530	25	25.007	25.028	30	30.035	30.056	20 25 30 50	G7	s7



Concentricity
≤ 50 = IT9
> 50 = IT10

Bearings marked * are not included in ISO 2795.

For ordering see following part code examples.

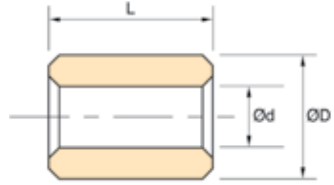
4 ID x 7 OD x 4 long = AM040704 or 12 ID x 15 OD x 25 long = AM121525.

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

Metric plain bearings to ISO 2795 – continued

Part Code	Inner Diameter			Outer Diameter			Basic L (js13)				Tolerances					
	Basic	Min.	Max.	Basic	Min.	Max.					ID	OD				
AM 2532	25	25.007	25.028	32	32.043	32.068	20	25	30	35	40	G7	s7			
AM 2535	25	25.007	25.028	35	35.043	35.068	25	35	50			G7	s7			
AM 2545*	25	25.040	25.061	45	45.034	45.059	35					E7	r7			
AM 2833	28	28.007	28.028	33	33.043	33.068	20	30				G7	s7			
AM 2836	28	28.007	28.028	36	36.043	36.068	20	25	30	40		G7	s7			
AM 3035	30	30.007	30.028	35	35.043	35.068	20	25	30			G7	s7			
AM 3038	30	30.007	30.028	38	38.043	38.068	20	25	30	40		G7	s7			
AM 3040	30	30.007	30.028	40	40.043	40.068	25	35	40	45	50	60	G7	s7		
AM 3050*	30	30.05	30.075	50	50.034	50.059	60					E7	r7			
AM 3238	32	32.009	32.034	38	38.043	38.068	20	25	30	40		G7	s7			
AM 3240	32	32.009	32.034	40	40.043	40.068	20	25	30	40	50		G7	s7		
AM 3541	35	35.009	35.034	41	41.043	41.068	25	35	40			G7	s7			
AM 3544	35	35.009	35.034	44	44.043	44.068	22	28	35			G7	s7			
AM 3545	35	35.009	35.034	45	45.043	45.068	25	35	40	50	70		G7	s7		
AM 3642	36	36.009	36.034	42	42.043	42.068	22	28	36	45		G7	s7			
AM 3645	36	36.009	36.034	45	45.043	45.068	22	28	36	45		G7	s7			
AM 3844	38	38.009	38.034	44	44.043	44.068	25	35	45			G7	s7			
AM 3848	38	38.009	38.034	48	48.043	48.068	35	45	55			G7	s7			
AM 4046	40	40.009	40.034	46	46.043	46.068	30	40	50			G7	s7			
AM 4050	40	40.009	40.034	50	50.043	50.068	25	30	32	35	40	50	60	80	G7	s7
AM 4248	42	42.009	42.034	48	48.043	48.068	40	50				G7	s7			
AM 4252	42	42.009	42.048	52	52.053	52.099	40	50	60			G8	s8			
AM 4551	45	45.009	45.048	51	51.053	51.099	35	45	55			G8	s8			
AM 4555	45	45.009	45.048	55	55.053	55.099	35	45	55	65	75	80		G8	s8	
AM 4556	45	45.009	45.048	56	56.053	56.099	28	36	45	56		G8	s8			
AM 4565*	45	45.050	45.075	65	65.041	65.071	80					E7	r7			
AM 4855	48	48.009	48.048	55	55.053	55.099	50					G8	s8			
AM 4858	48	48.009	48.048	58	58.053	58.099	50					G8	s8			
AM 5058	50	50.009	50.048	58	58.053	58.099	35	50				G8	s8			
AM 5060	50	50.009	50.048	60	60.053	60.099	30	35	40	50	63	70	75	100	G8	s8
AM 5070*	50	50.050	50.089	70	70.043	70.089	70					E8	r8			
AM 5563	55	55.010	55.056	63	63.053	63.099	40	55				G8	s8			
AM 5570*	55	55.060	55.106	70	70.043	70.089	70					E8	r8			
AM 5565	55	55.060	55.106	65	65.041	65.087	40	55	70			E8	r8			
AM 6068	60	60.010	60.056	68	68.059	68.105	50	60	70			G8	s8			
AM 6070	60	60.010	60.056	70	70.059	70.105	50	60	120			G8	s8			
AM 6072	60	60.010	60.056	72	72.059	72.105	50	60	70			G8	s8			
AM 6075*	60	60.060	60.106	75	75.043	75.089	60	90				E8	r8			
AM 6080*	60	60.060	60.106	80	80.043	80.089	120					E8	r8			
AM 6085*	60	60.060	60.106	85	85.051	85.105	90					E8	r8			
AM 6370	63	63.010	63.056	70	70.059	70.105	40	50				G8	s8			
AM 6575*	65	65.060	65.106	75	75.043	75.089	60	90				E8	r8			
AM 6580*	65	65.060	65.106	80	75.043	75.089	60	90				E8	r8			
AM 7080*	70	70.060	70.106	80	75.043	75.089	60	90	120			E8	r8			
AM 7085*	70	70.060	70.106	85	85.051	85.105	60	90				E8	r8			
AM 7585*	75	75.060	75.106	85	85.051	85.105	70	100				E8	r8			
AM 7590*	75	75.060	75.106	90	90.051	90.105	70	100				E8	r8			
AM 75100*	75	75.060	75.106	100	100.051	100.105	100					E8	r8			
AM 8090*	80	80.060	80.106	90	90.051	90.105	70	100				E8	r8			
AM 8095*	80	80.060	80.106	95	95.051	95.105	70	100				E8	r8			
AM 80100*	80	80.060	80.106	100	100.051	100.105	120					E8	r8			
AM 80105*	80	80.060	80.106	105	105.054	105.108	100					E8	r8			
AM 8595*	85	85.072	85.125	95	95.051	95.105	100					E8	r8			
AM 85100*	85	85.072	85.125	100	100.051	100.105	100					E8	r8			
AM 90105*	90	90.072	90.125	105	105.054	105.089	80					E8	r8			
AM 90110*	90	90.072	90.125	110	110.054	110.108	80					E8	r8			
AM 100120*	100	100.072	100.125	120	120.054	120.108	80	100	120			E8	r8			

Note
ISO Metric Bearing Standard is G7 s7



Concentricity
≤ 50 = IT9
> 50 = IT10

Bearings marked * are not included in ISO 2795.

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

Metric flanged bearings to ISO 2795

Part Code	Inner Diameter			Outer Diameter			ØD1	e	Basic L	Tolerances	
	Basic	Min.	Max.	Basic	Min.	Max.				ID	OD
AL 0205	2	2.002	2.012	5	5.019	5.031	8	1.5	3	G7	s7
AT 0305*	3	3.020	3.032	5	5.015	5.027	8	1.5	4	E7	r7
AL 0306	3	3.004	3.016	6	6.019	6.031	9	1.5	3 4	G7	s7
AL 0408	4	4.004	4.016	8	8.023	8.038	12	2	4 6 8 12	G7	s7
AT 0408	4	4.020	4.032	8	8.019	8.034	10	1.5	6	E7	r7
AL 0509	5	5.004	5.016	9	9.023	9.038	13	2	4 5 8	G7	s7
AT 0510*	5	5.020	5.032	10	10.019	10.034	12	2	6	E7	r7
AL 0610	6	6.004	6.016	10	10.023	10.038	14	2	4 6 8 10 16	G7	s7
AT 0612*	6	6.020	6.032	12	12.023	12.041	14	2	6	E7	r7
AL 0711	7	7.005	7.020	11	11.028	11.046	15	2	5 8	G7	s7
AL 0812	8	8.005	8.020	12	12.028	12.046	16	2	6 8 12 16	G7	s7
AT 0814*	8	8.025	8.040	14	14.023	14.041	18	3	8	E7	r7
AT 0914*	9	9.025	9.040	14	14.023	14.041	19	2.5	6 10 14	E7	r7
AL 1013	10	10.005	10.020	13	13.028	13.046	17	2.5	8 10 16 20	G7	s7
AT 1014*	10	10.025	10.040	14	14.023	14.041	18	2	12	E7	r7
AL 1015	10	10.005	10.020	15	15.028	15.046	21	3	8 10 16 20	G7	s7
AL 1016	10	10.005	10.020	16	16.028	16.046	22	3	8 10 12 16	G7	s7
AT 1016*	10	10.025	10.040	16	16.023	16.041	20	3	8 10	E7	r7
AL 1215	12	12.006	12.024	15	15.028	15.046	21	3	12 16 20	G7	s7
AL 1217	12	12.006	12.024	17	17.028	17.046	23	3	12 16 20 25	G7	s7
AL 1218	12	12.006	12.024	18	18.023	18.041	24	3	8 12 20	G7	s7
AT 1218*	12	12.032	12.050	18	18.023	18.041	22	3	10 12	E7	r7
AL 1420	14	14.006	14.024	20	20.035	20.056	26	3	10 14 20	G7	s7
AL 1519	15	15.006	15.024	19	19.035	19.056	25	3	16 20 25	G7	s7
AL 1521	15	15.006	15.024	21	21.035	21.056	27	3	10 15 20 25	G7	s7
AT 1522*	15	15.032	15.050	22	22.028	22.049	28	3	12 16	E7	r7
AL 1620	16	16.006	16.024	20	20.035	20.056	27	3	16 20 25	G7	s7
AT 1620*	16	16.032	16.050	20	20.028	20.049	24	2	12	E7	r7
AL 1622	16	16.006	16.024	22	22.035	22.056	28	3	12 16 20 25	G7	s7
AT 1622*	16	16.032	16.050	22	22.028	22.049	28	4	12 16	E7	r7
AL 1824	18	18.006	18.024	24	24.035	24.056	30	3	12 18 22 30	G7	s7
AT 1825*	18	18.032	18.050	25	25.028	25.049	32	4	12 16	E7	r7
AL 2024	20	20.007	20.028	24	24.035	24.056	30	3	16 20 25	G7	s7
AL 2026	20	20.007	20.028	26	26.035	26.056	32	3	15 20 25 30	G7	s7
AT 2028*	20	20.040	20.061	28	28.028	28.049	35	4	16 20	E7	r7
AL 2228	22	22.007	22.028	28	28.035	28.056	34	3	15 20 25 30	G7	s7
AL 2530	25	25.007	25.028	30	30.035	30.056	39	3.5	20 25 32	G7	s7
AL 2532	25	25.007	25.028	32	32.043	32.068	39	3.5	20 25 30	G7	s7
AT 2535*	25	25.040	25.061	35	35.034	35.059	45	5	16 25	E7	r7
AL 2836	28	28.007	28.028	36	36.043	36.068	44	4	20 25 30	G7	s7
AL 3038	30	30.007	30.028	38	38.043	38.068	46	4	20 25 30	G7	s7
AT 3040*	30	30.040	30.061	40	40.034	40.059	50	5	20 30	E7	r7
AL 3238	32	32.009	32.034	38	38.043	38.068	46	4	20 25 32	G7	s7
AL 3240	32	32.009	32.034	40	40.043	40.068	48	4	20 25 30	G7	s7
AL 3545	35	35.009	35.034	45	45.043	45.068	55	5	20 25 35 40	G7	s7
AL 3848	38	38.009	38.034	48	48.043	48.068	58	5	25 35	G7	s7
AL 4046	40	40.009	40.034	46	46.043	46.068	56	5	25 32 40	G7	s7
AL 4050	40	40.009	40.034	50	50.043	50.068	60	5	25 30 40 50	G7	s7
AT 4050*	40	40.050	40.075	50	50.034	50.059	60	6	25 40	E7	r7
AL 4252	42	42.009	42.048	52	52.053	52.099	62	5	40 50	G8	s8
AL 4555	45	45.009	45.048	55	55.053	55.099	65	5	35 45 55	G8	s8
AT 4555*	45	45.050	45.075	55	55.041	55.071	65	6	30 45	E7	r7
AL 5060	50	50.009	50.048	60	60.053	60.099	70	5	32 35 40 50	G8	s8
AT 5060*	50	50.050	50.075	60	60.041	60.071	70	6	30 50	E7	r7
AT 6072	60	60.060	60.106	72	72.043	72.089	84	6	50 60	E8	r8
AT 6075	60	60.060	60.106	75	75.043	75.089	85	8	60	E8	r8
AT 7085	70	70.060	70.106	85	85.051	85.105	95	8	60	E8	r8
AT 8095	80	80.060	80.106	95	95.051	95.105	105	8	70	E8	r8
AT 90110	90	90.072	90.125	110	110.054	110.108	120	8	50	E8	r8
AT 100120	100	100.072	100.125	120	120.054	120.108	130	8	80	E8	r8

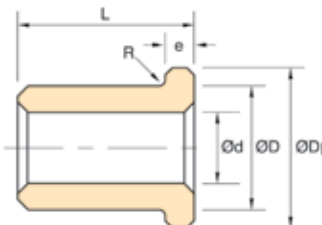
Bearings marked * are not included in ISO 2795.

For ordering see following part code examples. 4 ID x 8 OD x 6 long = AL040806 or 12 ID x 15 OD x 20 long = AL121520.

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

oilite®

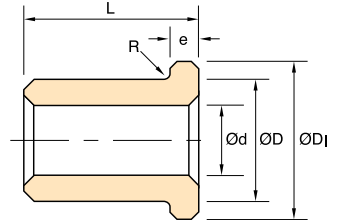
BEARINGS



Inch flanged bearings

Part Code	Inner Diameter Ød			Outer Diameter ØD			ØD1	e	Basic L					
	Basic	Min.	Max.	Basic	Min.	Max.								
AJ 0305	3/16	0.1880	0.1885	3/16	0.3137	0.3142	0.3750	0.062	3/16	1/4	3/8	1/2		
AJ 0406	1/4	0.2505	0.2510	3/8	0.3767	0.3772	0.5000	0.062	3/16	1/4	3/8	1/2	3/4	
UJ0406	1/4	0.2510	0.2520	3/8	0.3765	0.3775	0.4688	0.062	3/8					
AJ 0508	5/16	0.3130	0.3135	1/2	0.5020	0.5025	0.6250	0.062	1/4	3/8	1/2	3/4		
AJ 0509	5/16	0.3120	0.3125	5/16	0.5640	0.5650	0.6562	0.125	3/8	3/4				
AJ 0608	3/8	0.3755	0.3760	1/2	0.5015	0.5020	0.6250	0.062	1/4	5/16	1/2	3/4	3/8	7/8
UJ 0608	3/8	0.3755	0.3760	1/2	0.5020	0.5025	0.6250	0.140	1/2	3/4	7/8			
AJ 0609	3/8	0.3747	0.3752	5/8	0.5640	0.5650	0.7500	0.062	1/2					
UJ0609	3/8	0.3750	0.3760	5/8	0.5630	0.5640	0.7400	0.062	1/2					
AJ 0610	3/8	0.3757	0.3762	3/4	0.6265	0.6275	0.7500	0.125	3/8	1/2	5/8	3/4		
AJ 0709	7/16	0.4401	0.4406	5/8	0.5641	0.5651	0.7500	0.062	1/2	3/4	1			
AJ 0810	1/2	0.5000	0.5005	3/4	0.6265	0.6275	0.7500	0.098	1/2	5/8	1			
AJ 0812	1/2	0.5008	0.5013	3/4	0.7517	0.7527	1.0000	0.125	1/2	3/4	1	1 1/8		
AJ 1012	3/4	0.6275	0.6285	3/4	0.7525	0.7535	1.1250	0.094	1/2	1	1 1/8			
AJ 1014	3/4	0.6255	0.6265	7/8	0.8770	0.8780	1.2500	0.125	1/2	3/4	1	1 1/8	1 1/4	
AJ 1216	3/4	0.7508	0.7518	1	1.0020	1.0030	1.3750	0.125	3/4	1	1 1/4	1 1/2		
UJ1216	3/4	0.7495	0.7505	1	1.0010	1.0020	1.4375	0.125	1/2					
AJ 1416	7/8	0.8755	0.8765	1	1.0017	1.0027	1.2500	0.125	1					
AJ 1418	7/8	0.8757	0.8767	1 1/8	1.1270	1.1280	1.6250	0.125	3/4	1	1 1/4	1 1/2		
AJ 1620	1	1.0010	1.0020	1 1/4	1.2526	1.2536	1.7500	0.125	1	1 1/4	1 1/2	1 3/4	2	
UJ 1620	1	1.0010	1.0020	1 1/4	1.2520	1.2530	1.5000	0.125	3/4	1	1 1/8	1 1/2		
AJ 1822	1 1/8	1.1260	1.1270	1 3/8	1.3776	1.3786	1.8750	0.125	1	1 1/4	1 1/2	1 3/4	1 3/8	
AJ 2024	1 1/4	1.2510	1.2520	1 1/2	1.5030	1.5040	1.8750	0.125	3/4	1	1 1/4	1 1/2		
AJ 2026	1 1/4	1.2516	1.2526	1 3/4	1.6280	1.6295	2.0000	0.125	1	1 1/4	1 1/2	1 3/4		
AJ 2226	1 1/2	1.3745	1.3755	1 3/4	1.6270	1.6285	1.8750	0.125	3/4	1 1/4	2			
AJ 2428	1 1/2	1.5016	1.5026	1 3/4	1.7510	1.7525	1.8700	0.120	1 1/2	1 1/2				
UJ2428	1 1/2	1.5020	1.5030	1 3/4	1.7505	1.7520	2.0000	0.094	1/2					
AJ 2430	1 1/2	1.5016	1.5026	1 3/4	1.8780	1.8795	2.5000	0.188	1	1 1/4	1 1/2	1 3/4	2	
AJ3236	2	2.0015	2.0030	2 1/4	2.2535	2.2540	2.5000	0.125	3/4	1	1 1/4			
AJ3240	2	2.0005	2.0020	2 1/2	2.4995	2.5010	3.0000	0.375	2 3/8					
AJ4452	2 3/4	2.7500	2.7520	3 1/4	3.2480	3.2500	4.0000	0.188	1 1/2					
AJ4856	3	3.0000	3.0020	3 1/2	3.5000	3.5020	4.0000	0.375	2 3/8					

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.



Please use the following table for conversion of the fraction (length) to the two digit suffix of the part code. Example: AI030504 (1/4 length)

03 = 3/16	04 = 1/4	05 = 5/16
06 = 3/8	08 = 1/2	09 = 9/16
10 = 5/8	12 = 3/4	14 = 7/8
16 = 1	18 = 1 1/8	20 = 1 1/4
22 = 1 1/8	24 = 1 1/2	26 = 1 3/4
28 = 1 3/4	30 = 1 3/8	32 = 2
36 = 2 1/4	40 = 2 1/2	48 = 3

Inch thrust washers

Part Code	Inner Diameter Ød			Outer Diameter ØD			Basic	Length e	
	Basic	Min.	Max.	Basic	Min.	Max.		Min.	Max.
AW 061002	3/8	0.3750	0.3800	3/8	0.6230	0.6280	3/8	0.122	0.1280
AW 081402	1/2	0.5050	0.5100	7/8	0.8750	0.8800	1/8	0.122	0.1280
AW 091801	5/8	0.5312	0.5412	1 1/8	1.1200	1.1250	3/16	0.059	0.0655
AW 112002	7/8	0.6562	0.6662	1 1/4	1.2450	1.2500	1/4	0.090	0.0968
AW 132402	1	0.7812	0.7912	1 1/2	1.4950	1.5000	3/8	0.122	0.1280
AW 142402	1 1/8	0.8750	0.8800	1 3/4	1.4950	1.5000	1/2	0.122	0.1280
AW 143002	1 1/8	0.8780	0.8830	1 7/8	1.8660	1.8710	1/2	0.122	0.1280
AW 162802	1 1/2	1.0100	1.0150	1 3/4	1.7710	1.7810	3/4	0.122	0.1280
AW 163202	1 1/2	1.0320	1.0420	2	1.9950	2.0000	1/2	0.120	0.1300
AW 203002	1 3/4	1.2490	1.2540	2 1/8	1.8750	1.8800	3/8	0.120	0.1300
AW 204802	1 3/4	1.2490	1.2540	3	2.9980	3.0030	1/2	0.120	0.1300
AW 204804	1 3/4	1.2490	1.2540	3	2.9980	3.0030	3/4	0.245	0.2550
AW 234002	1 7/8	1.4062	1.4162	2 1/2	2.4950	2.5000	5/8	0.151	0.1613
AW 263802	1 3/4	1.6240	1.6260	2 3/4	2.3740	2.3790	1/2	0.120	0.1300
AW 365602	2 1/4	2.2480	2.2520	3 1/2	3.4980	3.5030	3/8	0.120	0.1300

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Applications:

Provides self-lubricating thrust surfaces especially in applications where assembly does not lend itself to the use of a flanged bearing. Alternatively can provide a second thrust surface at the non-flanged end of a bearing.

In thrust applications PV should not exceed 0.36 N/mm2 x m/s. Surface velocity (m/s) calculated on mean diameter of thrust face and pressure (N/mm2) on total thrust area.

We also offer specialised machining service for special sizes of bearings according to customers specific requirements.



WMU[®] and W/MLF Self Lubricated Bearings

WMX[®] Externally Lubricated Bearings



(Dimensions and tolerances to ISO 3547)

(Dimensions and tolerances to ISO 3547)

Stock range includes

- Metric plain
- Metric flanged
- Metric washers
- Metric strip
- Imperial plain
- Imperial washers
- Imperial strip*

Stock range includes

- Metric plain
- Metric washers
- Metric strip
- Imperial plain*
- Imperial washers*
- Imperial strip*

Structure	Steel support strip S.A.E 1010. Sintered Bronze layer. PTFE.
Static load	250 N/mm ²
Dynamic load	140 N/mm ²
Maximum sliding speed	2.5 m/s dry 5.0 m/s with oil
Operating temperature	-200°C to +280°C
Thermal conductivity	46 W/mK
Coefficient of friction	
W/MU Dry	0.02 to 0.20
W/MU Oiled	0.02 to 0.15
W/MLF Dry	0.04 to 0.30
W/MLF Oiled	0.02 to 0.10
Recommended housing tolerance	4.5mm/5.5mm H6 7.0mm/305mm H7
Recommended shaft tolerance	3.0mm/4.0mm h6 5.0mm/75mm f7 80mm/300mm h8
Recommended shaft finish	Ra ≤ 0.4um (N5)
Recommended shaft hardness	HB > 200

Structure	Steel support strip S.A.E 1010. Sintered Bronze layer. Co-Acetal polymer.
Static load	140 N/mm ²
Dynamic load	70 N/mm ²
Maximum sliding speed	2.5 m/s with grease
Operating temperature	-40°C to +110°C
Intermittent maximum temperature	130°C
Thermal conductivity	2W/mK
Coefficient of friction	0.05 to 0.12 with grease
Recommended housing tolerance	H7
Recommended shaft tolerance	h8
Recommended shaft finish	HB > 200
Recommended shaft hardness	HB > 200

W/MUB Bronze Support Strip instead of Steel

Has greater resistance to corrosion than standard W/MU product.
Range, dimensions and tolerances are as standard W/MU product.

Fitting Guidelines

1. Always use a fitting pin and fitting collar. See our fitting data sheet.
2. Lubricate back of bearing prior to assembly.
3. Chamfer lead in on housing to assist with assembly.



WMU® Wrapped Metric Flanged Bearings. PTFE U Type

Reference	I.D.	O.D.	Recommended Tolerances				Bearing Size when fitted		Flange		Standard Length Options (L)			
			Housing		Shaft		Bore		Diameter		Tolerance +/- 0.25mm			
	(mm)						(mm)		(mm)		(mm)			
TFF06 x L	6	8	0	+0.015	-0.010	-0.022	5.990	6.055	11.5	12.5	4	7	8	
TFF08 x L	8	10	0	+0.015	-0.013	-0.028	7.990	8.055	14.5	15.5	5.5	7.5	9.5	
TFF10 x L	10	12	0	+0.018	-0.013	-0.028	9.990	10.058	17.5	18.5	7	9	12	17
TFF12 x L	12	14	0	+0.018	-0.016	-0.034	11.990	12.058	19.5	20.5	7	9	12	17
TFF14 x L	14	16	0	+0.018	-0.016	-0.034	13.990	14.058	21.5	22.5	12	17		
TFF15 x L	15	17	0	+0.018	-0.016	-0.034	14.990	15.058	22.5	23.5	9	12	17	
TFF16 x L	16	18	0	+0.018	-0.016	-0.034	15.990	16.058	23.5	24.5	12	17		
TFF18 x L	18	20	0	+0.021	-0.016	-0.034	17.990	18.061	25.5	26.5	12	17	22	
TFF20 x L	20	23	0	+0.021	-0.020	-0.041	19.990	20.071	29.5	30.5	11.5	16.5	21.5	
TFF25 x L	25	28	0	+0.021	-0.020	-0.041	24.990	25.071	34.5	35.5	11.5	16.5	21.5	
TFF30 x L	30	34	0	+0.025	-0.020	-0.041	29.990	30.085	41.5	42.5	16	26		
TFF35 x L	35	39	0	+0.025	-0.025	-0.050	34.990	35.085	46.5	47.5	16	26		
TFF40 x L	40	44	0	+0.025	-0.025	-0.050	39.990	40.085	52.5	53.5	16	26		
TFF45 x L	45	50	0	+0.025	-0.025	-0.050	44.990	45.105	57.5	58.5	16	26		

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

WMU® Strip. PTFE U Type

Reference	Strip Sizes			
	Length	Width	Thickness	
	(mm)			
TFS07150	500	150	0.704	0.744
TFS10200	500	215	0.950	0.990
TFS15240	500	245	1.470	1.510
TFS20240	500	245	1.960	2.000
TFS25240	500	245	2.460	2.500
TFS30240	500	245	3.020	3.060



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WMU® Washers. Metric. PTFE U Type

Reference	I.D.	O.D.	Washer Sizes						Dowell hole		Dowell hole	
			Bore		O.D.		Thickness		Diameter		PCD	
	(mm)		(mm)		(mm)		(mm)		(mm)		(mm)	
TFW10	10	20	10.00	10.25	19.75	20.00	1.45	1.50	no hole	17.88	18.12	
TFW12	12	24	12.00	12.25	23.75	24.00	1.45	1.50	1.625	1.875	17.88	18.12
TFW14	14	26	14.00	14.25	25.75	26.00	1.45	1.50	2.125	2.375	19.88	20.12
TFW16	16	30	16.00	16.25	29.75	30.00	1.45	1.50	2.125	2.375	21.88	22.12
TFW18	18	32	18.00	18.25	31.75	32.00	1.45	1.50	2.125	2.375	24.88	25.12
TFW20	20	36	20.00	20.25	35.75	36.00	1.45	1.50	3.125	3.375	27.88	28.12
TFW22	22	38	22.00	22.25	37.75	38.00	1.45	1.50	3.125	3.375	29.88	30.12
TFW24	24	42	24.00	24.25	41.75	42.00	1.45	1.50	3.125	3.375	32.88	33.12
TFW26	26	44	26.00	26.25	43.75	44.00	1.45	1.50	3.125	3.375	34.88	35.12
TFW28	28	48	28.00	28.25	47.75	48.00	1.45	1.50	4.125	4.375	37.88	38.12
TFW32	32	54	32.00	32.25	53.75	54.00	1.45	1.50	4.125	4.375	42.88	43.12
TFW38	38	62	38.00	38.25	61.75	62.00	1.45	1.50	4.125	4.375	49.88	50.12
TFW42	42	66	42.00	42.25	65.75	66.00	1.45	1.50	4.125	4.375	53.88	54.12
TFW48	48	74	48.00	48.25	73.75	74.00	1.95	2.00	4.125	4.375	60.88	61.12
TFW52	52	78	52.00	52.25	77.75	78.00	1.95	2.00	4.125	4.375	64.88	65.12
TFW62	62	90	62.00	62.25	90.75	90.00	1.95	2.00	4.125	4.375	64.88	65.12
TFW95	95	115	95.00	95.25	115.00	114.75	1.95	2.00	4.125	4.375	105.87	106.12

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.



WMU® Wrapped Imperial Plain Bearings. PTFE U Type

Reference	Bore		Recommended Tolerances				Bearing Size when fitted		Standard Length Options (L)			
	O.D.		Housing		Shaft		Bore		Tolerance +/- 0.010"			
	(inch)		(inch)				(inch)		(inch)			
TFPI03TH x L	3/16	1/4	0.2497	0.2503	0.1858	0.1865	0.1867	0.1893	3/16	1/4	3/8	
TFPI04TH x L	1/4	5/16	0.3122	0.3128	0.2481	0.2490	0.2492	0.2518	1/4	3/8		
TFPI05TH x L	5/16	3/8	0.3747	0.3753	0.3106	0.3115	0.3117	0.3143	3/8	1/2		
TFPI06TH x L	3/8	15/32	0.4684	0.4691	0.3731	0.3740	0.3742	0.3769	3/8	1/2	5/8	3/4
TFPI07TH x L	7/16	17/32	0.5309	0.5316	0.4355	0.4365	0.4367	0.4394	1/2	3/4		
TFPI08TH x L	1/2	19/32	0.5934	0.5941	0.4980	0.4990	0.4992	0.5019	3/8	1/2	5/8	7/8
TFPI09TH x L	9/16	21/32	0.6559	0.6566	0.5605	0.5615	0.5617	0.5644	1/2	3/4		
TFPI10TH x L	5/8	23/32	0.7184	0.7192	0.6230	0.6240	0.6242	0.6270	1/2	3/4	5/8	7/8
TFPI11TH x L	11/16	25/32	0.7809	0.7817	0.6855	0.6865	0.6867	0.6895	7/8			
TFPI12TH x L	3/4	7/8	0.8747	0.8755	0.7479	0.7491	0.7493	0.7525	1/2	3/4	1	
TFPI14TH x L	7/8	1	0.9997	1.0005	0.8729	0.8741	0.8743	0.8775	3/4	7/8	1	
TFPI16TH x L	1	1 1/8	1.1246	1.1256	0.9979	0.9991	0.9992	1.0026	3/4	1	1 1/4	1 1/2
TFPI18TH x L	1 1/8	1 1/4	1.2808	1.2818	1.1226	1.1238	1.1240	1.1278	3/4	1		
TFPI20TH x L	1 1/4	1 1/2	1.4058	1.4068	1.2472	1.2488	1.2490	1.2528	3/4	1	1 1/4	1 3/4
TFPI22TH x L	1 3/8	1 5/8	1.5308	1.5318	1.3722	1.3738	1.3740	1.3778	1	1 1/8	1 3/4	
TFPI24TH x L	1 1/2	1 3/4	1.6558	1.6568	1.4972	1.4988	1.4990	1.5028	1	1 1/4	1 1/2	2
TFPI26TH x L	1 5/8	1 7/8	1.7808	1.7818	1.6222	1.6238	1.6240	1.6278	1	1 1/2		
TFPI28TH x L	1 3/4	1 7/4	1.9371	1.9381	1.7471	1.7487	1.7489	1.7535	1	1 1/2	1 3/4	2
TFPI30TH x L	1 7/8	2	2.0621	2.0633	1.8721	1.8737	1.8739	1.8787	1	1 5/8	2 1/4	
TFPI32TH x L	2	2 1/8	2.1871	2.1883	1.9969	1.9987	1.9989	2.0037	1	1 1/2	2	2 1/2
TFPI36TH x L	2 1/4	2 1/4	2.4365	2.4377	2.2489	2.2507	2.2509	2.2573	2	2 1/4	2 1/2	3
TFPI40TH x L	2 1/2	2 1/2	2.6869	2.6881	2.4993	2.5011	2.5013	2.5077	2	2 1/2	3	3 1/2
TFPI44TH x L	2 3/4	2 5/8	2.9358	2.9370	2.7482	2.7500	2.7502	2.7566	2	2 1/2	3	3 1/2
TFPI48TH x L	3	3 1/8	3.1858	3.1872	2.9982	3.0000	3.0002	3.0068	2	3	3 3/4	
TFPI56TH x L	3 1/2	3 1/2	3.6858	3.6872	3.4978	3.5000	3.5002	3.5068	2 1/2	3	3 3/4	
TFPI64TH x L	4	4 1/8	4.1858	4.1872	3.9978	4.0000	4.0002	4.0068	3	3 3/4	4 3/4	
TFPI80TH x L	5	5 1/4	5.1844	5.1860	4.9961	4.9986	4.9988	5.0056	3	3 3/4		
TFPI96TH x L	6	6 3/8	6.1858	6.1874	5.9975	6.0000	6.0002	6.0070	3	3 3/4		
TFPI112TH x L	7	7 1/4	7.1812	7.1830	6.9929	6.9954	6.9956	7.0026	3 3/4			

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WMU® Washers. Imperial. PTFE U Type

Reference	I.D.	O.D.	Washer Sizes						Dowell hole		Dowell hole	
			Bore		O.D.		Thickness		Diameter		PCD	
	(inch)		(inch)		(inch)		(inch)		(inch)		(inch)	
TFWTH06	0.500	0.875	0.500	0.510	0.865	0.875	0.061	0.063	0.067	0.077	0.682	0.692
TFWTH07	0.562	1.000	0.562	0.572	0.990	1.000	0.061	0.063	0.067	0.077	0.776	0.786
TFWTH08	0.625	1.125	0.625	0.635	1.115	1.125	0.061	0.063	0.099	0.109	0.870	0.880
TFWTH09	0.687	1.187	0.687	0.697	1.177	1.187	0.061	0.063	0.099	0.109	0.932	0.942
TFWTH10	0.750	1.250	0.750	0.760	1.240	1.250	0.061	0.063	0.099	0.109	0.995	1.005
TFWTH11	0.812	1.375	0.812	0.822	1.365	1.375	0.061	0.063	0.099	0.109	1.089	1.099
TFWTH12	0.875	1.500	0.875	0.885	1.490	1.500	0.061	0.063	0.130	0.140	1.182	1.192
TFWTH14	1.000	1.750	1.000	1.010	1.740	1.750	0.061	0.063	0.130	0.140	1.370	1.380
TFWTH16	1.125	2.000	1.125	1.135	1.990	2.000	0.061	0.063	0.161	0.171	1.557	1.567
TFWTH18	1.250	2.125	1.250	1.260	2.115	2.125	0.061	0.063	0.161	0.171	1.682	1.692
TFWTH20	1.375	2.250	1.375	1.385	2.240	2.250	0.061	0.063	0.161	0.171	1.807	1.817
TFWTH22	1.500	2.500	1.500	1.510	2.490	2.500	0.061	0.063	0.192	0.202	1.995	2.005
TFWTH24	1.625	2.625	1.625	1.635	2.615	2.625	0.061	0.063	0.192	0.202	2.120	2.130
TFWTH26	1.750	2.750	1.750	1.760	2.740	2.750	0.061	0.063	0.192	0.202	2.245	2.255
TFWTH28	2.000	3.000	2.000	2.010	2.990	3.000	0.091	0.093	0.192	0.202	2.495	2.505
TFWTH30	2.125	3.125	2.125	2.135	3.115	3.125	0.091	0.093	0.192	0.202	2.620	2.630
TFWTH32	2.250	3.250	2.250	2.260	3.240	3.250	0.091	0.093	0.192	0.202	2.745	2.755

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.



WMX[®] Wrapped Metric Plain Bearings. Acetal X Type

Reference	I.D.	O.D.	Recommended Tolerances				Bearing Size when fitted		Oil hole	Standard Length Options (L)					
	(mm)	(mm)	Housing		Shaft		Bore		Diameter	Tolerance +/- 0.25mm					
			(mm)		(mm)		(mm)		(mm)	(mm)					
TPX08 x L	8	10	0	+0.015	0	-0.022	8.040	8.107	no hole	8	10	12			
TPX10 x L	10	12	0	+0.018	0	-0.022	10.040	10.110	4	10	12	15	20		
TPX12 x L	12	14	0	+0.018	0	-0.027	12.040	12.110	4	10	12	15	20	25	
TPX14 x L	14	16	0	+0.018	0	-0.027	14.040	14.110	4	15	20	25			
TPX15 x L	15	17	0	+0.018	0	-0.027	15.040	15.108	4	10	12	15	25		
TPX16 x L	16	18	0	+0.018	0	-0.027	16.040	16.110	4	15	20	25			
TPX18 x L	18	20	0	+0.021	0	-0.027	18.040	18.111	4	15	20	25			
TPX20 x L	20	23	0	+0.021	0	-0.033	20.050	20.131	4	10	15	20	25	30	
TPX22 x L	22	25	0	+0.021	0	-0.033	22.050	22.131	6	15	20	25	30		
TPX24 x L	24	27	0	+0.021	0	-0.033	24.050	24.131	6	15	20	25	30		
TPX25 x L	25	28	0	+0.021	0	-0.033	25.050	25.131	6	15	20	25	30		
TPX28 x L	28	32	0	+0.025	0	-0.033	28.060	28.155	6	20	25	30			
TPX30 x L	30	34	0	+0.025	0	-0.033	30.060	30.155	6	20	30	40			
TPX32 x L	32	36	0	+0.025	0	-0.039	32.060	32.155	6	20	30	35	40		
TPX35 x L	35	39	0	+0.025	0	-0.039	35.060	35.155	6	20	30	35	50		
TPX40 x L	40	44	0	+0.025	0	-0.039	40.060	40.155	8	20	30	40	50		
TPX45 x L	45	50	0	+0.025	0	-0.039	45.080	45.195	8	20	30	40	45	50	
TPX50 x L	50	55	0	+0.030	0	-0.039	50.080	50.200	8	40	50	60			
TPX55 x L	55	60	0	+0.030	0	-0.046	55.080	55.200	8	20	25	30	40	50	60
TPX60 x L	60	65	0	+0.030	0	-0.046	60.080	60.200	8	30	40	60	70		
TPX65 x L	65	70	0	+0.030	0	-0.046	65.100	65.262	8	40	50	60	70		
TPX70 x L	70	75	0	+0.030	0	-0.046	70.100	70.262	8	25	40	50	65	70	80
TPX75 x L	75	80	0	+0.030	0	-0.046	75.100	75.262	9.5	40	60	80			
TPX80 x L	80	85	0	+0.035	0	-0.046	80.100	80.267	9.5	40	60	80	100		
TPX85 x L	85	90	0	+0.035	0	-0.054	85.100	85.267	9.5	30	40	60	80	100	
TPX90 x L	90	95	0	+0.035	0	-0.054	90.100	90.267	9.5	25	40	60	80	90	100
TPX95 x L	95	100	0	+0.035	0	-0.054	95.100	95.267	9.5	60	100				
TPX100 x L	100	105	0	+0.035	0	-0.054	100.100	100.267	9.5	50	60	80	95	115	
TPX105 x L	105	110	0	+0.035	0	-0.054	105.100	105.267	9.5	60	115				
TPX110 x L	110	115	0	+0.035	0	-0.054	110.100	110.267	9.5	60	110	115			
TPX115 x L	115	120	0	+0.035	0	-0.054	115.100	115.267	9.5	50	70				
TPX120 x L	120	125	0	+0.040	0	-0.054	120.100	120.272	9.5	60	100	110			
TPX125 x L	125	130	0	+0.040	0	-0.063	125.100	125.272	9.5	60	100	110			
TPX130 x L	130	135	0	+0.040	0	-0.063	130.130	130.280	no hole	50	60	80	100		
TPX135 x L	135	140	0	+0.040	0	-0.063	135.130	135.280	no hole	60	80				
TPX140 x L	140	145	0	+0.040	0	-0.063	140.130	140.280	no hole	50	60	80	100		
TPX145 x L	145	150	0	+0.040	0	-0.063	145.130	145.280	no hole	100					
TPX150 x L	150	155	0	+0.040	0	-0.063	150.130	150.280	no hole	50	60	80	100		
TPX160 x L	160	165	0	+0.040	0	-0.063	160.130	160.280	no hole	50	60	80	100		
TPX170 x L	170	175	0	+0.040	0	-0.063	170.130	170.280	no hole	50	60	80	100		
TPX180 x L	180	185	0	+0.046	0	-0.063	180.130	180.286	no hole	50	60	80	100		
TPX190 x L	190	195	0	+0.046	0	-0.072	190.130	190.286	no hole	50	60	80	100	120	
TPX200 x L	200	205	0	+0.046	0	-0.072	200.130	200.286	no hole	50	60	80	100	120	
TPX220 x L	220	225	0	+0.046	0	-0.072	220.130	220.286	no hole	50	60	80	100	120	
TPX240 x L	240	245	0	+0.046	0	-0.072	240.130	240.286	no hole	50	60	80	100	120	
TPX250 x L	250	255	0	+0.052	0	-0.072	250.130	250.292	no hole	50	60	80	100	120	
TPX260 x L	260	265	0	+0.052	0	-0.081	260.130	260.292	no hole	50	60	80	100	120	
TPX280 x L	280	285	0	+0.052	0	-0.081	280.130	280.292	no hole	50	60	80	100	120	
TPX300 x L	300	305	0	+0.052	0	-0.081	300.130	300.292	no hole	60	80	100	120		

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WMX® Wrapped Imperial Plain. Acetal X Type

Reference	I.D. O.D.		Recommended Tolerances				Bearing Size when fitted		Oil hole	Standard Length Options (L)			
	Nominal		Housing		Shaft		Bore		Diameter	Tolerance +/- 0.010"			
	(inch)		(inch)				(inch)		(inch)	(inch)			
TFPI06TX x L	3/8	15/32	0.4694	0.4687	0.3648	0.3639	0.3694	0.3667	5/32	3/8	1/2	3/4	
TFPI07TX x L	7/16	17/32	0.5319	0.5312	0.4273	0.4263	0.4319	0.4292	5/32	1/2	3/4		
TFPI08TX x L	1/2	19/32	0.5944	0.5937	0.4897	0.4887	0.4944	0.4917	5/32	3/8	1/2	5/8	7/8
TFPI09TX x L	9/16	21/32	0.6569	0.6562	0.5522	0.5512	0.5569	0.5542	5/32	1/2	3/4		
TFPI10TX x L	5/8	23/32	0.7195	0.7187	0.6146	0.6136	0.6195	0.6167	5/32	1/2	3/4	5/8	7/8
TFPI11TX x L	11/16	25/32	0.7820	0.7812	0.6770	0.6760	0.6820	0.6792	5/32	7/8			
TFPI12TX x L	3/4	7/8	0.8758	0.8750	0.7390	0.7378	0.7444	0.7412	5/32	1/2	3/4	1	
TFPI14TX x L	7/8	1	1.0008	1.0000	0.8639	0.8627	0.8694	0.8662	1/4	3/4	7/8	1	
TFPI16TX x L	1	1 1/8	1.1258	1.1250	0.9888	0.9876	0.9944	0.9912	1/4	3/4	1	1 1/2	
TFPI18TX x L	1 1/8	1 3/16	1.2822	1.2812	1.1138	1.1126	1.1202	1.1164	1/4	3/4	1		
TFPI20TX x L	1 1/4	1 1/2	1.4072	1.4062	1.2387	1.2371	1.2452	1.2414	1/4	3/4	1	1 1/4	1 3/4
TFPI22TX x L	1 3/8	1 17/32	1.5322	1.5312	1.3635	1.3619	1.3702	1.3664	1/4	1	1 3/8	1 3/4	
TFPI24TX x L	1 1/2	1 21/32	1.6572	1.6562	1.4884	1.4868	1.4952	1.4914	5/16	1	1 1/4	1 1/2	2
TFPI26TX x L	1 5/8	1 25/32	1.7822	1.7812	1.6133	1.6117	1.6202	1.6164	5/16	1	1 1/2		
TFPI28TX x L	1 3/4	1 15/16	1.9385	1.9375	1.7393	1.7367	1.7461	1.7415	5/16	1	1 1/2	1 3/4	2
TFPI30TX x L	1 7/8	2 1/16	2.0637	2.0625	1.8632	1.8616	1.8713	1.8665	5/16	1	1 7/8	2 1/4	
TFPI32TX x L	2	2 1/8	2.1887	2.1875	1.9881	1.9863	1.9963	1.9915	5/16	1	1 1/2	2	2 1/2
TFPI36TX x L	2 1/4	2 7/16	2.4387	2.4375	2.2378	2.2360	2.2463	2.2415	5/16	2	2 1/4	2 1/2	
TFPI40TX x L	2 1/2	2 11/16	2.6887	2.6875	2.4875	2.4857	2.4963	2.4915	5/16	2	2 1/2		
TFPI44TX x L	2 3/4	2 15/16	2.9387	2.9395	2.7351	2.7333	2.7457	2.7393	5/16	2	2 1/2	3	3 1/2
TFPI48TX x L	3	3 1/16	3.1889	3.1875	3.9849	3.9831	2.9959	2.9893	3/8	2	3	3 3/4	
TFPI56TX x L	3 1/2	3 11/16	3.6889	3.6875	3.4844	3.4822	3.4959	3.4893	3/8	2 1/2	3	3 3/4	
TFPI64TX x L	4	4 3/16	4.1889	4.1872	4.9839	4.9817	3.9959	3.9893	3/8	3	3 3/4	4 3/4	

Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

WMX®

Lubricated Sliding Bearings



Oil or grease lubricated bearings. Carbon steel shell with sintered bronze layer with a co- acetal polymer layer. Available in metric and imperial sizes from stock.

WMU®

Dry Sliding Bearings



Self lubricated plain & flanged bearings & strip. Carbon steel shell with sintered bronze layer filled with PTFE. Available in metric and imperial sizes from stock. Also bronze shell versions can be supplied to order.

White Metal Bearings



White metal bearings can be manufactured to order in various material grades.

Plastic Bearings Moulded & Machined



Available in metric sizes from stock. Can also be manufactured in many different types of plastic material to suit various applications. Machined for small quantities and moulded for large quantities.

Standard Wrapped Bearings



Oil or grease lubricated bearings. Carbon Steel shell with sintered bronze lining. Various metric and imperial sizes available from stock.

WM1® Ball Bearings



Ball bearings in chrome or stainless steel. ABEC 1, 3 or 5. With or without seals. Various ranges available from stock.

Machined Parts



Standard bearings modified. Custom shafts and bearings manufactured in cast bronze, plastic and other materials.

Cast Bronze Bearings with Solid Graphite Lubrication



Various material specifications are offered. Standard and special shapes are available.



Cast bronze bearings with solid graphite lubrication

PLAIN BEARINGS



All these bearings are made to order. Other shapes can be offered.

Graphite loaded bearings can withstand very high temperatures up to 425 °C (800 °F) as well as cryogenic temperatures down to -200°C (-400 °F) depending on the bronze material and graphite selected. This makes them ideal where conventional lubricants would carbonise. Please contact our technical department to ascertain which would be the most suitable combination to suit your application.

Typical applications are ovens, kilns, dryers, injection moulding machines, dust collectors, louvers and hot conveyors.

These bearings are also ideal in dry environments where contamination is undesirable. Typical applications would be printing, textile, and food machinery, as well as machines for making pills and cosmetic products.

They are also used extensively for wet applications where there is high humidity, or in submersed pumps, textile finishing machinery, lock gates, water turbines, chemical processing and plating applications.

This type of bearing is also useful where the bearings are in an inaccessible location, as they are lubricated for life.

Technical Data

Standard Material	Cu 65%, Zn 25%, Ai 6%, Mn 4%
Density	8 g/cm ³
Hardness	> 210 HB
Tensile Strength	750 N/mm ²
Elongation	> 12%
Linear Expansion	1.9 – 10 ⁻⁵ / °C
Max Temp	300 °C (570 °F)
Static Load	100 N/mm ²
Max Speed	15 m/s
PV	200 N/mm ² s m/s

Other cast bronze materials/specifications are available which can operate up to 425 °C.

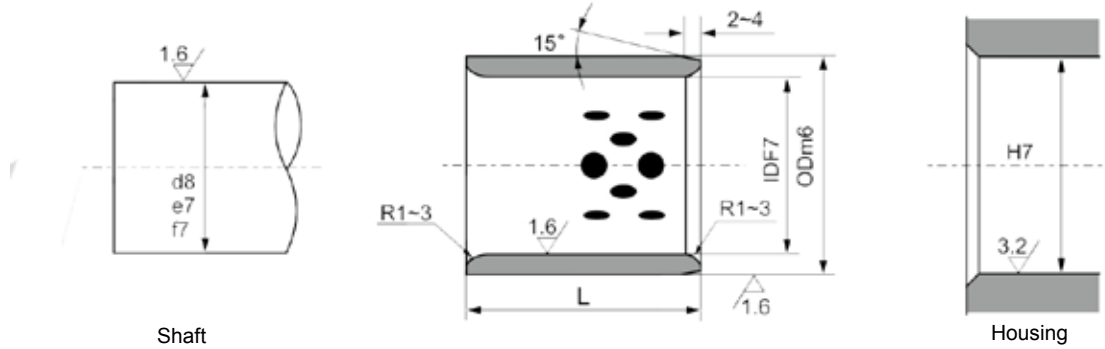
Different shapes can be manufactured to suit customer requirements.

WMOTM

Metric Plain cast bronze bearings with solid graphite lubrication



PLAIN BEARINGS



Outside Diameter m6	Inside Diameter F7	8	10	12	15	16	20	25	30	35	40	50	60	70	80		
		← Standard Lengths -0.10/-0.30mm →															
8	+0.028 +0.013	12	+0.018 +0.007	GRP 081208	GRP 081210	GRP 081212	GRP 081215										
10	+0.028 +0.013	14	+0.018 +0.007	GRP 101408	GRP 101410	GRP 101412	GRP 101415		GRP 101420								
12	+0.034 +0.016	18	+0.018 +0.007		GRP 121810	GRP 121812	GRP 121815	GRP 121816	GRP 121820	GRP 121825	GRP 121830						
13	+0.034 +0.016	19	+0.021 +0.008		GRP 131910		GRP 131915	GRP 131916									
14	+0.034 +0.016	20	+0.021 +0.008		GRP 142010	GRP 142012	GRP 142015		GRP 142020	GRP 142025	GRP 142030						
15	+0.034 +0.016	21	+0.021 +0.008		GRP 152110	GRP 152112	GRP 152115	GRP 152116	GRP 152120	GRP 152125	GRP 152130						
16	+0.034 +0.016	22	+0.021 +0.008		GRP 162210	GRP 162212	GRP 162215	GRP 162216	GRP 162220	GRP 162225	GRP 162230	GRP 162235	GRP 162240				
18	+0.034 +0.016	24	+0.021 +0.008			GRP 182412	GRP 182415	GRP 182416	GRP 182420	GRP 182425	GRP 182430	GRP 182435	GRP 182440				
20	+0.041 +0.020	28	+0.021 +0.008		GRP 202810	GRP 202812	GRP 202815	GRP 202816	GRP 202820	GRP 202825	GRP 202830	GRP 202835	GRP 202840	GRP 202850			
22	+0.041 +0.020	32	+0.025 +0.009			GRP 223212	GRP 223215		GRP 223220	GRP 223225							
25	+0.041 +0.020	33	+0.025 +0.009			GRP 253312	GRP 253315	GRP 253316	GRP 253320	GRP 253325	GRP 253330	GRP 253335	GRP 253340	GRP 253350	GRP 253360		
30	+0.041 +0.020	38	+0.025 +0.009			GRP 303812	GRP 303815		GRP 303820	GRP 303825	GRP 303830	GRP 303835	GRP 303840	GRP 303850	GRP 303860		
35	+0.050 +0.025	45	+0.025 +0.009						GRP 354520	GRP 354525	GRP 354530	GRP 354535	GRP 354540	GRP 354550	GRP 354560		
40	+0.050 +0.025	50	+0.025 +0.009						GRP 405020	GRP 405025	GRP 405030	GRP 405035	GRP 405040	GRP 405050	GRP 405060	GRP 405070	GRP 405080
45	+0.050 +0.025	55	+0.030 +0.011								GRP 455530	GRP 455535	GRP 455540	GRP 455550	GRP 455560		
50	+0.050 +0.025	60	+0.030 +0.011								GRP 506030	GRP 506035	GRP 506040	GRP 506050	GRP 506060	GRP 506070	GRP 506080
50	+0.050 +0.025	62	+0.030 +0.011								GRP 506230	GRP 506235	GRP 506240	GRP 506250	GRP 506260	GRP 506270	

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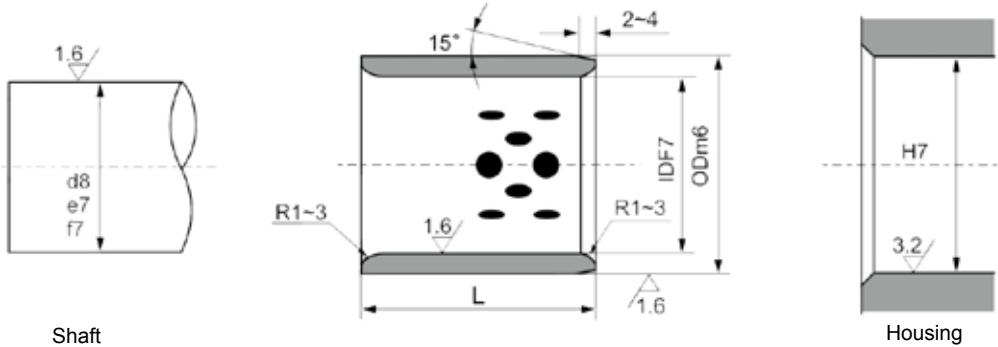
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WMO™

Metric Plain cast bronze bearings with solid graphite lubrication



PLAIN BEARINGS



Outside Diameter m6	Inside Diameter F7	30	35	40	50	60	70	80	100	120	130	140	150
		Standard Lengths -0.10/-0.30mm											
50	+0.050 +0.025	65	+0.030 +0.011	GRP 506530		GRP 506540	GRP 506550	GRP 506560	GRP 506570	GRP 506580			
55	+0.060 +0.030	70	+0.030 +0.011			GRP 557040	GRP 557050	GRP 557060	GRP 557070				
60	+0.060 +0.030	74	+0.030 +0.011	GRP 607430	GRP 607435	GRP 607440	GRP 607450	GRP 607460	GRP 607470	GRP 607480			
60	+0.060 +0.030	75	+0.030 +0.011	GRP 607530	GRP 607535	GRP 607540	GRP 607550	GRP 607560	GRP 607570	GRP 607580	GRP 6075100		
63	+0.060 +0.030	75	+0.030 +0.011					GRP 637560	GRP 637570	GRP 637580			
65	+0.060 +0.036	80	+0.030 +0.011				GRP 658050	GRP 658060	GRP 658070	GRP 658080			
70	+0.060 +0.030	85	+0.035 +0.013		GRP 708535	GRP 708540	GRP 708550	GRP 708560	GRP 708570	GRP 708580	GRP 7085100		
70	+0.060 +0.030	90	+0.035 +0.013				GRP 709050	GRP 709060	GRP 709070	GRP 709080			
75	+0.060 +0.030	90	+0.035 +0.013					GRP 759060	GRP 759070	GRP 759580	GRP 7590100		
75	+0.060 +0.030	95	+0.035 +0.013					GRP 759560	GRP 759570	GRP 759580	GRP 7595100		
80	+0.060 +0.030	96	+0.035 +0.013			GRP 809640	GRP 809650	GRP 809660	GRP 809670	GRP 809680	GRP 8096100	GRP 8096120	
80	+0.060 +0.030	100	+0.035 +0.013			GRP 8010040	GRP 8010050	GRP 8010060	GRP 8010070	GRP 8010080	GRP 80100100	GRP 80100120	GRP 80100140
90	+0.071 +0.036	110	+0.035 +0.013	GRP 9011030			GRP 9011050	GRP 9011060	GRP 9011070	GRP 9011080	GRP 90110100	GRP 90110120	
100	+0.071 +0.036	120	+0.035 +0.013					GRP 10012060	GRP 10012070	GRP 10012080	GRP 100120100	GRP 100120120	GRP 100120140
110	+0.071 +0.036	130	+0.040 +0.015							GRP 11013080	GRP 110130100	GRP 110130120	
120	+0.071 +0.036	140	+0.040 +0.015							GRP 12014080	GRP 120140100	GRP 120140120	GRP 120140140
125	+0.083 +0.043	145	+0.040 +0.015								GRP 125145100	GRP 125145120	
130	+0.083 +0.043	150	+0.040 +0.015								GRP 130150100		GRP 130150130
140	+0.083 +0.043	160	+0.040 +0.015								GRP 140160100		GRP 140160140
150	+0.083 +0.043	170	+0.040 +0.015								GRP 150170100		GRP 150170150
160	+0.083 +0.043	180	+0.040 +0.015								GRP 160180100		GRP 160180150

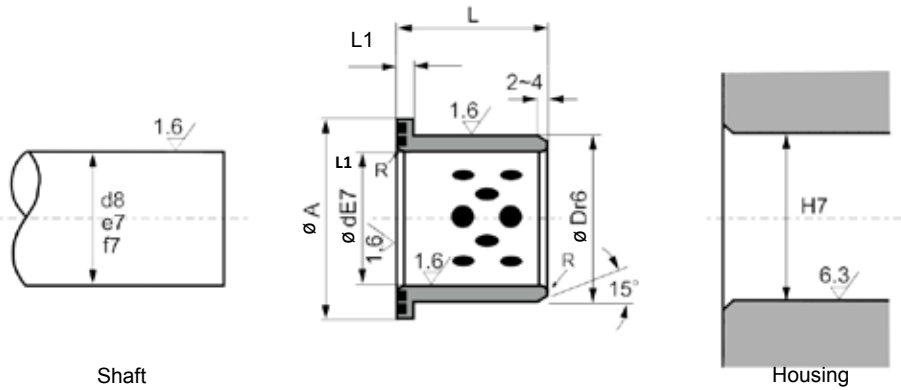
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Metric Flanged cast bronze - with solid graphite lubrication

PLAIN BEARINGS



Inside Diameter E7	Outside Diameter r6	ø A	L1 -0.10	Standard Lengths -0.10/-0.30mm													
				15	20	25	30	35	40	50	60	80	100				
10	+0.040 +0.025	14	+0.034 +0.023	22	2	GRF 101415	GRF 101420										
12	+0.050 +0.032	18	+0.034 +0.023	25	3	GRF 121815	GRF 121820										
13	+0.050 +0.032	19	+0.041 +0.028	26	3	GRF 131915	GRF 131920										
14	+0.050 +0.032	20	+0.041 +0.028	27	3	GRF 142015	GRF 142020										
15	+0.050 +0.032	21	+0.041 +0.028	28	3	GRF 152115	GRF 152120	GRF 152125	GRF 152130								
16	+0.050 +0.032	22	+0.041 +0.028	29	3	GRF 162215	GRF 162220	GRF 162225	GRF 162230								
20	+0.061 +0.040	30	+0.041 +0.028	40	5	GRF 203015	GRF 203020	GRF 203025	GRF 203030		GRF 203040						
25	+0.061 +0.040	35	+0.050 +0.034	45	5	GRF 253515	GRF 253520	GRF 253525	GRF 253530		GRF 253540						
30	+0.061 +0.040	40	+0.050 +0.034	50	5		GRF 304020	GRF 304025	GRF 304030	GRF 304035	GRF 304040	GRF 304050					
31.5	+0.075 +0.050	40	+0.050 +0.034	50	5		GRF 3154020			GRF 3154035							
35	+0.075 +0.050	45	+0.050 +0.034	60	5		GRF 354520		GRF 354530		GRF 354540	GRF 354550					
40	+0.075 +0.050	50	+0.050 +0.034	65	5		GRF 405020		GRF 405030		GRF 405040	GRF 405050					
45	+0.075 +0.050	55	+0.060 +0.041	70	5			GRF 455530			GRF 455040	GRF 455050	GRF 455060				
50	+0.075 +0.050	60	+0.060 +0.041	75	5			GRF 506030			GRF 506040	GRF 506050	GRF 506060				
55	+0.090 +0.060	65	+0.060 +0.041	80	5						GRF 556540		GRF 556560				
60	+0.090 +0.060	75	+0.062 +0.043	85	7.5						GRF 607540	GRF 607550			GRF 607580		
63	+0.090 +0.060	75	+0.062 +0.043	90	7.5										GRF 637580		
70	+0.090 +0.060	85	+0.073 +0.051	105	7.5							GRF 708550			GRF 708580		
80	+0.090 +0.060	100	+0.073 +0.051	120	10								GRF 8010060	GRF 8010080	GRF 80100100		
90	+0.107 +0.072	110	+0.076 +0.054	130	10								GRF 9011060	GRF 9011080			
100	+0.107 +0.072	120	+0.076 +0.054	150	10										GRF 10012080	GRF 100120100	
120	+0.107 +0.072	140	+0.088 +0.063	170	10										GRF 120814080	GRF 120140100	

Non-standard sizes can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

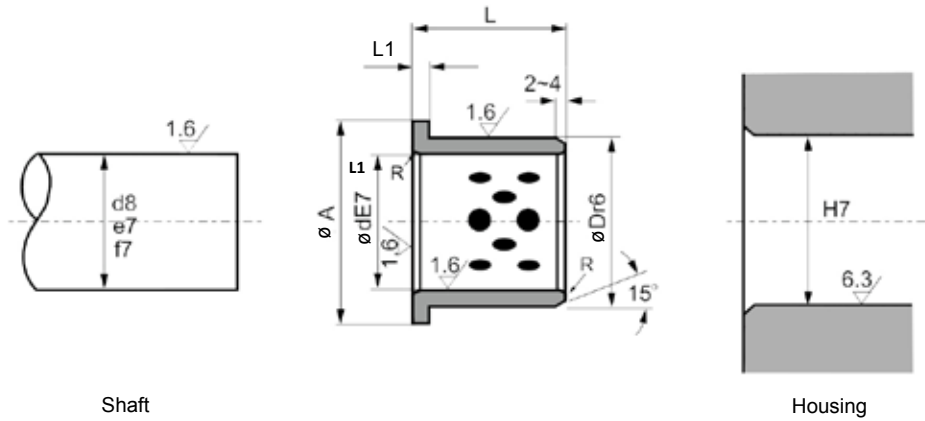
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Metric Flanged cast bronze with solid graphite lubrication

PLAIN BEARINGS



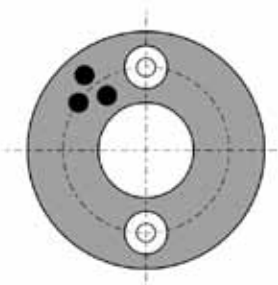
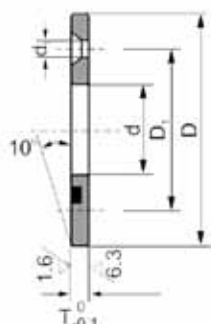
Inside Diameter E7	Outside Diameter r6	ø A	L1	15	20	25	30	35	45	55	65		
				Standard Lengths -0.10/-0.30mm									
12	+0.050 +0.032	18	+0.034 +0.023	25	4	GRFP 121815							
16	+0.050 +0.032	22	+0.041 +0.028	30	5		GRFP 162220						
20	+0.061 +0.040	28	+0.041 +0.028	36	5			GRFP 202825					
25	+0.061 +0.040	33	+0.050 +0.034	43	5				GRFP 253330				
30	+0.061 +0.040	38	+0.050 +0.034	48	5					GRFP 303835			
40	+0.075 +0.050	50	+0.050 +0.034	60	5						GRFP 405045		
50	+0.075 +0.050	62	+0.060 +0.041	75	6							GRFP 506255	
60	+0.090 +0.060	75	+0.062 +0.043	90	7								GRFP 607565

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WMOTM



Cast bronze thrust washers with solid graphite lubrication



Part Number	d	D	T	Bolt			
				D ₁	Q'ty	Size	d ₁
GRW 103003	10.2	30	3	-	-	-	-
GRW 124003	12.2	40	3	28	2	M3	3.5
GRW 134003	13.2	40	3	28	2	M3	3.5
GRW 144003	14.2	40	3	28	2	M3	3.5
GRW 155003	15.2	50	3	35	2	M3	3.5
GRW 165003	16.2	50	3	35	2	M3	3.5
GRW 165003N	16.2	50	3	-	-	-	-
GRW 185003	18.2	50	3	35	2	M3	3.5
GRW 205005	20.2	50	5	35	2	M5	6
GRW 205005N	20.2	50	5	-	-	-	-
GRW 255505	25.2	55	5	40	2	M5	6
GRW 255505N	25.2	55	5	-	-	-	-
GRW 306005	30.2	60	5	45	2	M5	6
GRW 357005	35.2	70	5	50	2	M5	6
GRW 408007	40.2	80	7	60	2	M6	7
GRW 459007	45.3	90	7	67.5	2	M6	7
GRW 5010008	50.3	100	8	75	4	M6	7
GRW 5511008	55.3	110	8	85	4	M6	7
GRW 6012008	60.3	120	8	90	4	M8	9
GRW 6512508	65.3	125	8	95	4	M8	9
GRW 7013010	70.3	130	10	100	4	M8	9
GRW 7514010	75.3	140	10	110	4	M8	9
GRW 8015010	80.3	150	10	120	4	M8	9
GRW 9017010	90.5	170	10	140	4	M10	11
GRW 10019010	100.5	190	10	160	4	M10	11
GRW 12020010	120.5	200	10	175	4	M10	11

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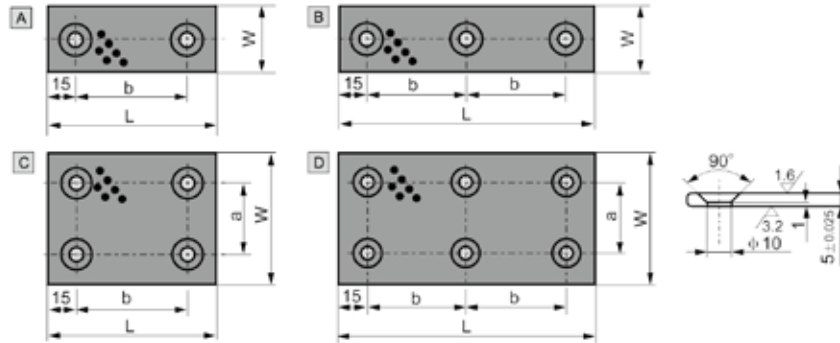
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Cast bronze wear strips with solid graphite lubrication

PLAIN BEARINGS



Part Number	W	L	a	b	Type
GRS 1850	18	50	-	20	A
GRS 1875	18	75	-	45	A
GRS 18100	18	100	-	70	A
GRS 18150	18	150	-	60	B
GRS 2850	28	50	-	20	A
GRS 2875	28	75	-	45	A
GRS 28100	28	100	-	70	A
GRS 28150	28	150	-	60	B
GRS 3850	38	50	-	20	A
GRS 3875	38	75	-	45	A
GRS 38100	38	100	-	70	A
GRS 38150	38	150	-	60	B
GRS 4875	48	75	-	45	A
GRS 48100	48	100	-	70	A
GRS 48125	48	125	-	95	A
GRS 48150	48	150	-	60	B
GRS 7575	75	75	45	45	C
GRS 75100	75	100	45	70	C
GRS 75125	75	125	45	95	C
GRS 75150	75	150	45	60	D
GRS 100100	100	100	70	70	C
GRS 100125	100	125	70	95	C
GRS 100150	100	150	70	60	D

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BEARINGS · TRANSMISSIONS · LINKAGES

BEARINGS CATALOGUE AVAILABLE!

- Wide product range available with shields & seals
- Metric and Imperial dimensions
- Lubricated and labour saving
- Reliability leads to increased productivity
- Increased life of associated equipment



Popular Metric



Ball and Roller



Taper Roller



Spherical Roller



Bearings Units



Plain Bearings

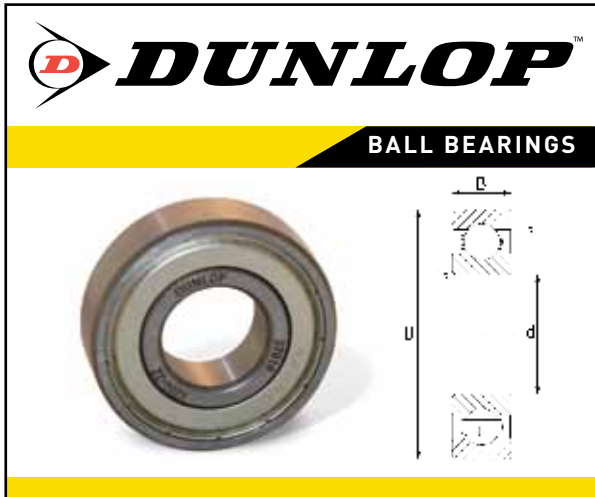


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MINIATURE SINGLE ROW DEEP GROOVE BALL BEARINGS

Description

Miniature single row deep groove ball bearings are available in a wide variety of basic designs as standard. They are rigid, non-separable radial bearings and are superior in speed ratings to any other type of rolling element bearings. They are by far the most popular rolling bearing type.

Variations of incorporating 2 seals -2RS, -2RSR and 2 shields -ZZ are supplied grease filled during manufacture with approved high quality rolling bearing grease.

The standard amount of grease applied is 25% to 50% of the free space within the bearings. Miniature single row deep groove ball bearings are produced with normal clearance (CN) as standard along with (C3) also as standard.

MINITURE SINGLE ROW DEEP GROOVE BALL BEARINGS

Dimensions				Designation	Basic Load		Fatigue load limit	Limiting speed for lubrication with		Mass
d	D	B	r _{smin}		dynamic	Static		grease	oil	
mm					C _r	C _{or}	C _u			min ⁻¹
3	10	4	0.2	623	0.64	0.22	0.01	42,000	50,000	0.002
	10	4	0.2	623-2RS	0.64	0.22	0.01	32,000		0.002
	10	4	0.2	623-2Z	0.64	0.22	0.01	42,000		0.002
4	12	4	0.2	604	0.97	0.36	0.016	43,000	51,000	0.002
	12	4	0.2	604-2RS	0.97	0.36	0.016	34,000		0.002
	12	4	0.2	604-2Z	0.97	0.36	0.016	43,000		0.002
	13	5	0.2	624	1.31	0.49	0.022	36,000	45,000	0.003
	13	5	0.2	624-2RS	1.31	0.49	0.022	27,000		0.003
	13	5	0.2	624-2Z	1.31	0.49	0.022	36,000		0.003
	16	5	0.3	634	1.34	0.52	0.023	36,000	43,000	0.005
	16	5	0.3	634-2RS	1.34	0.52	0.023	25,000		0.005
	16	5	0.3	634-2Z	1.34	0.52	0.023	36,000		0.005
5	16	5	0.3	625	1.76	0.68	0.031	34,000	43,000	0.005
	16	5	0.3	625-2RS	1.76	0.68	0.031	22,000		0.005
	16	5	0.3	625-2Z	1.76	0.68	0.031	34,000		0.005
	19	6	0.3	635	2.34	0.88	0.040	34,000	40,000	0.008
	19	6	0.3	635-2RS	2.34	0.88	0.040	22,000		0.008
	19	6	0.3	635-2Z	2.34	0.88	0.040	34,000		0.008
6	19	6	0.3	626	2.34	0.88	0.040	28,000	36,000	0.008
	19	6	0.3	626-2RS	2.34	0.88	0.040	19,000		0.008
	19	6	0.3	626-2Z	2.34	0.88	0.040	28,000		0.008
7	19	6	0.3	607	2.24	0.91	0.041	28,000	36,000	0.008
	19	6	0.3	607-2RS	2.24	0.91	0.041	19,000		0.008
	19	6	0.3	607-2Z	2.24	0.91	0.041	28,000		0.008
7	22	7	0.3	627	3.35	1.40	0.064	26,000	34,000	0.013
	22	7	0.3	627-2RS	3.35	1.40	0.064	18,000		0.013
	22	7	0.3	607-2Z	3.35	1.40	0.064	26,000		0.013
8	22	7	0.3	608	3.35	1.40	0.064	26,000	34,000	0.012
	22	7	0.3	608-2RS	3.35	1.40	0.064	18,000		0.012
	22	7	0.3	608-2Z	3.35	1.40	0.064	26,000		0.012
9	24	7	0.3	609	3.40	1.45	0.066	22,000	30,000	0.014
	24	7	0.3	609-2RS	3.40	1.45	0.066	15,000		0.014
	24	7	0.3	609-2Z	3.40	1.45	0.066	22,000		0.014

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SINGLE ROW BEARING



SINGLE ROW DEEP GROOVE BALL BEARING

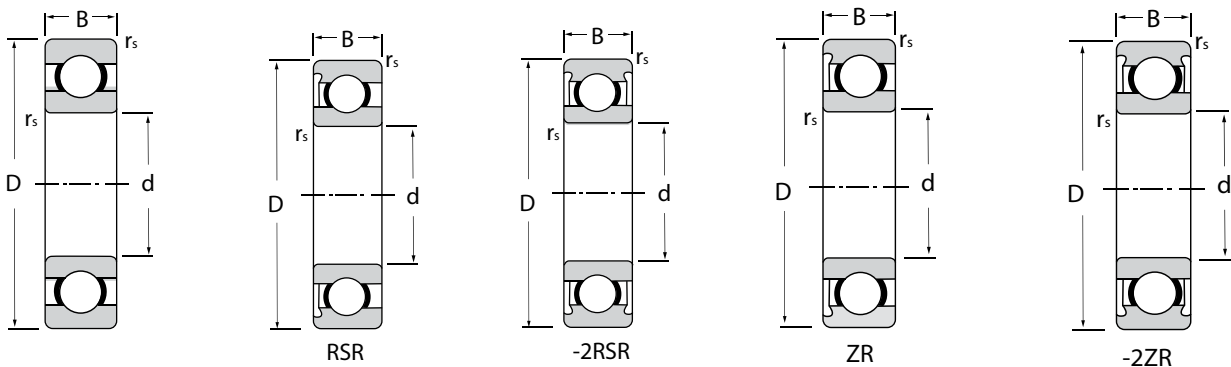
Description

Dunlop single row deep groove ball bearings have relatively deep raceways on both rings without a filling slot and they are non-separable. High load ratings are achieved by optimum sizes of balls and by their conformity to the raceways.

They can carry axial and radial loads in both directions and are suitable even for high rotational speeds. These bearings are manufactured in a broad assortment and are the most common rolling bearing type. Shields and seals are firmly fixed in the groove of the outer ring and these are not removable.

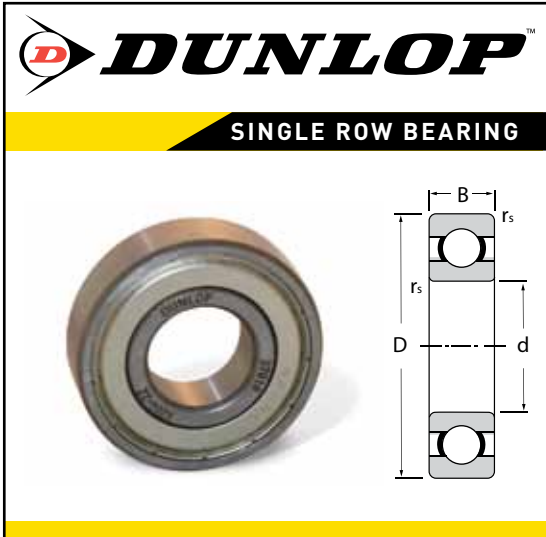
The limiting values of the dimensional and running accuracy deviation correspond to ISO 492. For arrangements with a higher operating temperature than 120 °C, special heat treated stabilised single row deep groove ball bearings are supplied of which the form stability at operating temperature 150 °C up to 400 °C

SINGLE ROW DEEP GROOVE BALL BEARINGS WITHOUT OR WITH SHIELDS OR SEALS



Dimensions				Bearing Designation	Basic Load		Fatigue load limit	Limiting speed for lubrication with		Weight
d	D	B	r _{smin}		Dynamic	Static		Grease	Oil	
mm					C _r	C _{or}	C _u	min ⁻¹		kg
					kN					
10	26	8	0.3	6000	4.58	1.98	0.090	31000	36000	0.019
	26	8	0.3	6000RSR	4.58	1.98	0.090	19000		0.019
	26	8	0.3	6000-2RSR	4.58	1.98	0.090	19000		0.019
	26	8	0.3	6000ZR	4.58	1.98	0.090	31000	36000	0.019
	26	8	0.3	6000-2ZR	4.58	1.98	0.090	31000		0.019
	30	9	0.6	6200	5.10	2.38	0.108	24000	29000	0.031
	30	9	0.6	6200RSR	5.10	2.38	0.108	17000		0.031
	30	9	0.6	6200-2RSR	5.10	2.38	0.108	17000		0.031
	30	9	0.6	6200ZR	5.10	2.38	0.108	24000	30000	0.031
	30	9	0.6	6200-2ZR	5.10	2.38	0.108	24000		0.031
	35	11	0.6	6300	7.65	3.48	0.158	22000	27000	0.054
	35	11	0.6	6300RSR	7.65	3.48	0.158	15000		0.054
	35	11	0.6	6300-2RSR	7.65	3.48	0.158	15000		0.054
	35	11	0.6	6300ZR	7.65	3.48	0.158	22000	27000	0.054
35	11	0.6	6300-2ZR	7.65	3.48	0.158	22000		0.054	
12	28	8	0.3	6001	5.10	2.38	0.108	27000	32000	0.022
	28	8	0.3	6001RSR	5.10	2.38	0.108	17000		0.022
	28	8	0.3	6001-2RSR	5.10	2.38	0.108	17000		0.022
	28	8	0.3	6001ZR	5.10	2.38	0.108	27000	32000	0.022
	28	8	0.3	6001-2ZR	5.10	2.38	0.108	27000		0.022

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SINGLE ROW DEEP GROOVE BALL BEARING

Description

Single row deep groove ball bearings are available in a wide variety of basic designs as standard.

They are rigid, non-separable radial bearings and are superior in speed ratings to any other type of rolling element bearings. They are by far the most popular rolling bearing type.

Variations of incorporating 2 seals -2RS, -2RSR and 2 shields -2Z are supplied grease filled during manufacture with approved high quality rolling bearing grease.

The standard amount of grease applied is 25% to 50% of the free space within the bearings.

Single row deep groove ball bearings are produced with normal clearance (CN) as standard along with (C3) also as standard.

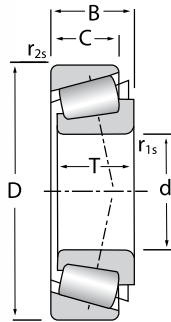
SINGLE ROW DEEP GROOVE BALL BEARINGS

Dimensions				Bearing Designation	Basic Load		Fatigue load limit	Limiting speed for lubrication with		Weight
d	D	B	r _{smin}		Dynamic	Static		Grease	Oil	
mm					C _r	C _{or}	C _u			min ⁻¹
				kN						
10	19	5	0.3	61800	1.40	0.75	0.034	36,000	42,000	0.005
	19	5	0.3	61800-2RSR	1.40	0.75	0.034	20,000		0.005
	19	5	0.3	61800-2ZR	1.40	0.75	0.034	36,000		0.005
	22	6	0.3	61900	3.30	1.40	0.064	34,000	40,000	0.009
	22	6	0.3	61900-2RSR	3.30	1.40	0.064	19,000		0.009
	22	6	0.3	61900-2ZR	3.30	1.40	0.064	34,000		0.009
12	21	5	0.3	61801	1.40	0.90	0.041	32,000	38,000	0.007
	21	5	0.3	61801-2RSR	1.40	0.90	0.041	19,000		0.007
	21	5	0.3	61801-2ZR	1.40	0.90	0.041	32,000		0.007
	24	6	0.3	61901	3.38	1.48	0.067	30,000	36,000	0.011
	24	6	0.3	61901-2RSR	3.38	1.48	0.067	18,000		0.011
	24	6	0.3	61901-2ZR	3.38	1.48	0.067	30,000		0.011
15	24	5	0.3	61802	1.92	1.18	0.054	28,000	34,000	0.008
	24	5	0.3	61802-2RSR	1.92	1.18	0.054	17,000		0.008
	24	5	0.3	61802-2ZR	1.92	1.18	0.054	28,000		0.008
	28	7	0.3	61902	4.00	2.02	0.092	24,000	30,000	0.016
	28	7	0.3	61902-2RSR	4.00	2.02	0.092	16,000		0.016
	28	7	0.3	61902-2ZR	4.00	2.02	0.092	24,000		0.016
17	26	5	0.3	61803	2.18	1.28	0.058	24,000	30,000	0.019
	26	5	0.3	61803-2RSR	2.18	1.28	0.058	16,000		0.019
	26	5	0.3	61803-2ZR	2.18	1.28	0.058	24,000		0.019
	30	7	0.3	61903	4.30	2.32	0.105	22,000	28,000	0.018
	30	7	0.3	61903-2RSR	4.30	2.32	0.105	14,000		0.018

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TAPERED ROLLER BEARINGS



TAPERED ROLLER BEARINGS

Description

Single row tapered roller bearings are separable radial bearings. They consist of an inner ring with a roller set and cage assembly, the (cone), and a loose outer ring the (cup).

This bearing type can only accept thrust in one direction so they must always be mounted in pairs where one bearing is adjusted against the other.

Tapered roller bearings are suitable for both radial and thrust forces but also accept combined loads and tilting moments.

The ability of tapered roller bearings to accommodate axial loads depends on their contact angle, the larger the angle the better the thrust load capability.

TAPERED ROLLER BEARINGS

Dimensions							Bearing Designation	Basic Load		Fatigue load limit	Limiting speed for lubrication with		Mass
d	D	B	C	T	r _{1s}	r _{2s}		Dynamic	Static		C _u	Grease	
mm								C _r	C _{or}	min ⁻¹		kg	
								kN					
15	35	11	10	11.75	0.6	0.6	30202	16.6	15-May	1.9	10,000	14,000	0.053
	42	13	11	14.25	0.6	0.6	30302	20.7	21.5	2.6	9 500	12 000	0.094
17	40	12	11	13.25	1.0	1.0	30203	20.7	21.9	2.7	10 000	14 000	0.079
	47	14	12	15.25	1.0	1.0	30303	28.3	27.2	3.3	9 200	12 000	0.133
20	42	15	12	15.00	0.6	0.6	32004X	25.0	28.2	3.4	9 400	13 000	0.095
	47	14	12	15.25	1.0	1.0	30204	28.2	30.6	3.7	8 700	12 000	0.127
	47	18	15	19.25	1.0	1.0	32204	32.5	34.8	4.2	8 700	12 000	0.156
	52	15	13	16.25	1.5	1.5	30304	33.1	33.2	4.0	8 300	11 000	0.179
	52	21	18	22.25	1.5	1.5	32304	42.8	44.2	5.3	7 500	9 500	0.230
25	47	15	11.5	15.00	0.6	0.6	32005X	28.0	34.0	4.1	8 000	11 000	0.110
	52	15	13	16.25	1.0	1.0	30205	32.2	37.0	4.5	7 500	10 000	0.153
	52	18	16	19.25	1.0	1.0	32205	39.8	44.8	5.5	7 900	11 000	0.188
	52	22	18	22.00	1.0	1.0	33205	47.1	55.8	6.8	7 300	9 800	0.217
	62	17	15	18.25	1.5	1.5	30305	46.9	48.1	5.9	6 700	9 000	0.263
	62	17	13	18.25	1.5	1.5	31305	40.7	46.1	5.7	5 600	7 500	0.260
	62	24	20	25.25	1.5	1.5	32305	62.0	69.0	8.4	6 000	8 000	0.365
30	55	17	13	17.00	1.0	1.0	32006X	35.8	46.8	5.7	6 700	9 000	0.173
	62	16	14	17.25	1.0	1.0	30206	43.3	50.5	6.1	6 300	8 500	0.231
	62	20	17	21.25	1.0	1.0	32206	51.8	63.7	7.8	6 300	8 400	0.286
	62	25	19.5	25.00	1.0	1.0	33206	63.8	75.4	9.1	5 600	7 500	0.347
	72	19	16	20.75	1.5	1.5	30306	59.0	63.1	7.7	5 600	7 500	0.387
	72	19	14	20.75	1.5	1.5	31306	52.5	60.4	7.4	5 000	6 700	0.389
	72	27	23	28.75	1.5	1.5	32306	81.0	96.0	11.2	5 300	7 000	0.562

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PILLOW BLOCK BEARINGS



PLUMBER BLOCK BEARING UNITS

Description

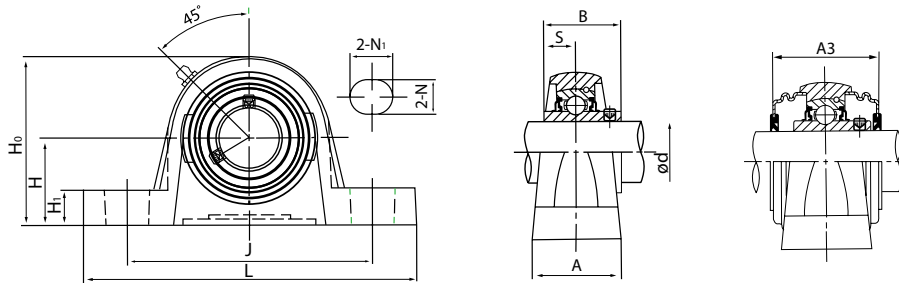
Plumber block bearing units offer simple effective and reliable solutions with the minimum design work requirements.

They consist of a housing which is made of cast iron or pressed steel and an insert bearing, they have self-aligning features due to their spherical outer diameter and the corresponding design in the bearing housing.

This feature allows for any static misalignment, which can occur in other parts of its applications.

Bearing inserts are produced in several different designs to meet various technical demands incorporating 2 seals -2RS and 2 shields -2Z and are supplied grease filled during manufacture.

PLUMBER BLOCK BEARING UNITS



Unit No.	Shaft Dia		Dimensions (mm)										Bolt Size		Weight (kg)	
	w		H	L	J	A	N	N ₁	H ₁	H ₀	B	S	A ₃	(in)		(mm)
	(in)	(mm)														
UCP201		12	30.2	124	95	31	11	15	14	57.1	26	10		M8	5/6	0.57
UCP201-8	1/2															
UCP202		15														
UCP202-9	9/6															
UCP203-10	5/8															
UCP203		17	33.3	127	95	38	13	16	15	65	31	12.7	46.4	M10	3/8	0.82
UCP203-11	11/16															
UCP204		20														
UCP204-12	3/4															
UCP205		25	36.5	140	105	38	13	16	16	70	34.1	14.3	48	M10	3/8	0.94
UCP205-14	7/8															
UCP205-15	15/16															
UCP205-16	1															
UCP206		30	42.9	160	121	48	17	21	18	83	38.1	15.6	52	M14	1/2	1.46
UCP206-17	1-1/16															
UCP206-18	1-1/8															
UCP206-19	1-3/16															
UCP206-20	1-1/4															
UCP207		35	47.6	167	127	48	17	21	19	94	42.9	17.5	59	M14	1/2	1.76
UCP207-20	1-1/4															
UCP207-21	1-5/6															
UCP207-22	1-3/8															
UCP207-23	1-7/16															
UCP208		40	49.2	180	137	54	17	25	19	101	49.2	19.0	68.2	M14	1/2	2.13
UCP208-24	1-1/2															
UCP208-25	1-9/16															

If you would like to view our full range, please refer to our Bearings Catalogue online at: www.iadaltd.co.uk



UCF BEARINGS



UCF PILLOW BLOCK BEARINGS

Description

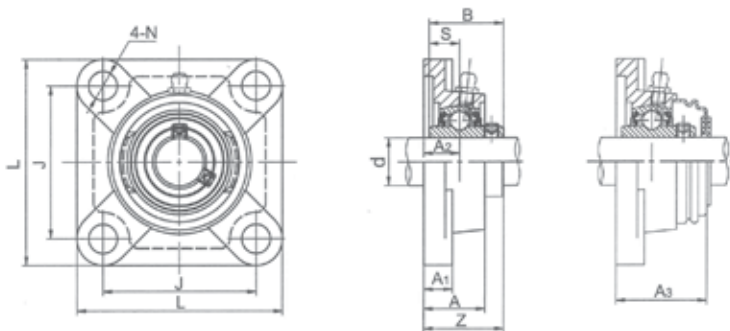
4-bolt flanged block bearing units offer simple effective and reliable solutions with the minimum design work requirements.

They consist of a housing which is made of cast iron or pressed steel and an insert bearing, they have self-aligning features due to their spherical outer diameter and the corresponding design in the bearing housing.

This feature allows for any static misalignment, which can occur in other parts of its applications.

Bearing inserts are produced in several different designs to meet various technical demands incorporating 2 seals -2RS and 2 shields -ZZ and are supplied grease filled during manufacture.

UCF PILLOW BLOCK BEARINGS



Unit No.	Shaft Dia		Dimensions (mm)										Bolt Size (mm)	Weight (kg)
	w		L	J	A ₂	A ₁	A	N	B	S	Z	A ₃		
	(in)	(mm)												
UCF201		12	86	64	15	12	25.5	12	31	12.7	33.3		M10	0.61
UCF201-8	1/2													
UCF202		15	86	64	15	12	25.5	12	31	12.7	33.3		M10	0.61
UCF202-9	9/16													
UCF202-10	5/8													
UCF203		17	86	64	15	12	25.5	12	31	12.7	33.3		M10	0.61
UCF203-11	11/16													
UCF204			86	64	15	12	25.5	12	31	12.7	33.3	38.2	M10	0.61
UCF204-12	3/4													
UCF205		25	95	70	16	14	27	12	34.1	14.3	35.8	40	M10	0.80
UCF205-14	7/8													
UCF205-15	15/16													
UCF205-16	1													
UCF206		30	108	83	18	14	31	12	38.1	15.9	40.2	44	M10	1.00
UCF206-17	1-1/16													
UCF206-18	1-1/8													
UCF206-19	1-3/16													
UCF206-20	1-1/4													
UCF207		35	117	92	19	16	34	14	42.9	17.5	44.4	48.5	M12	1.40
UCF207-20	1-1/4													
UCF207-21	1-5/16													
UCF207-22	1-3/8													
UCF207-23	1-7/16													
UCF208		40	130	102	21	16	36	16	49.2	19	51.2	55.1	M14	1.80
UCF208-24	1-1/2													

If you would like to view our full range, please refer to our Bearings Catalogue online at: www.iadalttd.co.uk



UCFL BEARINGS



UCFL PILLOW BLOCK BEARINGS

Description

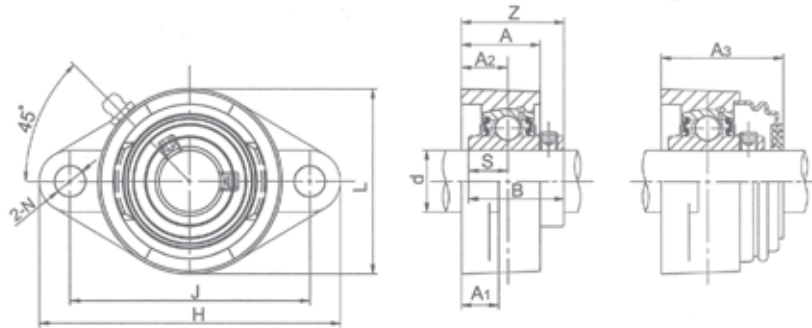
2-bolt flanged block bearing units offer simple effective and reliable solutions with the minimum design work requirements.

They consist of a housing which is made of cast iron or pressed steel and an insert bearing, they have self-aligning features due to their spherical outer diameter and the corresponding design in the bearing housing.

This feature allows for any static misalignment, which can occur in other parts of its applications.

Bearing inserts are produced in several different designs to meet various technical demands incorporating 2 seals -2RS and 2 shields -ZZ and are supplied grease filled during manufacture.

UCFL PILLOW BLOCK BEARINGS



Unit No.	Shaft Dia		Dimensions (mm)											Bolt Size (mm)	Weight (kg)
	w		H	J	A ₂	A ₁	A	N	L	B	S	Z	A ₃		
	(in)	(mm)													
UCFI201		12	113	90	15	11	25.5	12	60	31	12.7	33.3		M10	0.51
UCF201-8	1/2														
UCF202		15	113	90	15	11	25.5	12	60	31	12.7	33.3		M10	0.51
UCF202-9	9/16														
UCF202-10	5/8														
UCF203		17	113	90	15	11	25.5	12	60	31	12.7	33.3		M10	0.51
UCF203-11	11/16														
UCF204		20	113	90	15	11	25.5	12	60	31	12.7	33.3	38.2	M10	0.51
UCF204-12	3/4														
UCF205		25	130	99	16	13	27	16	68	34.1	14.3	35.8	40	M14	0.6
UCF205-14	7/8														
UCF205-15	15/16														
UCF205-16	1														
UCF206		30	148	117	18	13	31	16	80	38.1	15.9	40.2	44	M14	0.9
UCF206-17	1-1/16														
UCF206-18	1-1/8														
UCF206-19	1-3/16														
UCF206-20	1-1/4														
UCF207		35	160	130	19	15	34	16	90	42.9	17.5	44.4	48.5	M14	1.2
UCF207-20	1-1/4														
UCF207-21	1-5/16														
UCF207-22	1-3/8														
UCF207-23	1-7/16														
UCF208		40	175	144	21	15	36	16	100	49.2	19	51.2	55.1	M14	1.5
UCF208-24	1-1/2														

If you would like to view our full range, please refer to our Bearings Catalogue online at: www.iadaltd.co.uk



BEARINGS · TRANSMISSIONS · LINKAGES

LINKAGES CATALOGUE AVAILABLE!

- UK manufacturer of Rod Ends, Spherical Bearings, Ball Joints, Clevises and Motion Transfer Linkages
- Manufactured to international standards and tolerances
- UKAS approved ISO 9001 and ISO 14001
- Stainless steel & 68 corrosion protection options available
- Extreme temperature range - 200°C to 260°C
- Metric and imperial bore and thread sizes



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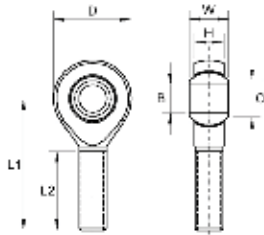


#WeLoveOurProducts





MALE ROD ENDS



MS SERIES: MS – MSS – MS SS

Description:

MS Series is our 3-piece steel on steel range of male rod ends incorporating a high strength PTFE bronze mesh between the ball and the liner material, suitable for high shock loads and medium to heavy mechanical load applications requiring low friction, available in both metric and imperial bore thread sizes, they do not require maintenance.

Material Specifications:

Housing: Steel 230M07Pb and forged 080M46, zinc plated and clear trivalent passivated and stainless steel 303L and forged 304. Inner Ring: Steel 070M20 zinc plated and clear trivalent passivated. Liner: High strength PTFE bronze mesh composite. Ball: Bearing steel 100Cr6, heat treated, polished & electroless nickel plated and stainless steel 440C

Features:

Metric & imperial thread & bore sizes, low friction, high shock loads. Extended wear life No maintenance Studded and stainless steel options.

Possible Applications:

Medium/heavy industrial/mechanical applications Construction equipment Agricultural equipment Motor sport and recreational vehicles requiring high precision motion control.

Temperature Range:

-200°C to + 260°C

Specification:

ELV & RoHS compliant



Interchange table

Dunlop	Rose	Aurora	Askubal
MS-M (metric)	MMC	MM-M-T and MB-M-T	KA-P
MS (imperial)	RMC	MM-T and MB-T	-

Dunlop	SKF	ASAHI	IKO	Fluro
MS-M (metric)	SAKB-F	JAM-EC	POS-EC	GASW
MS (imperial)	-		POSB-EC	

Note: Manufacturers part numbers are used for descriptive purposes only and may not be direct equivalent products.

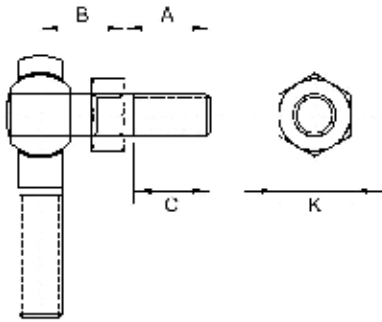
Part No. Right Hand	Part No. Left Hand	Bore Size	Thread	W	H	D	L1	L2	O	Static Load Rating (Newtons) Radial
MS-M05	MSL-M05	5	M5x0.80	8	6.00	18	33	20	7.70	4,300
MS-M06-5	MSL-M06-5	5	M6X1.00	9	6.75	20	36	22	8.90	6,000
MS-M06	MSL-M06	6	M6X1.00	9	6.75	20	36	22	8.90	6,000
MS-M08-6	MSL-M08-6	6	M8X1.25	12	9.00	24	42	25	10.40	11,100
MS-M08-6C	MSL-M08-6C	6	M8X1.00	12	9.00	24	42	25	10.40	11,100
MS-M08	MSL-M08	8	M8X1.25	12	9.00	24	42	25	10.40	11,100
MS-M08C	MSL-M08C	8	M8X1.00	12	9.00	24	42	25	10.40	11,100
MS-M10-8	MSL-M10-8	8	M10X1.50	14	10.50	28	48	29	12.90	17,500
MS-M10-8C	MSL-M10-8C	8	M10X1.25	14	10.50	28	48	29	12.90	17,500
MS-M10	MSL-M10	10	M10X1.50	14	10.50	28	48	29	12.90	17,500
MS-M10C	MSL-M10C	10	M10X1.25	14	10.50	28	48	29	12.90	17,500
MS-M12-10	MSL-M12-10	10	M12X1.75	16	12.00	32	54	33	15.40	23,600
MS-M12-10C	MSL-M12-10C	10	M12X1.25	16	12.00	32	54	33	15.40	23,600
MS-M12	MSL-M12	12	M12X1.75	16	12.00	32	54	33	15.40	23,600
MS-M12C	MSL-M12C	12	M12X1.25	16	12.00	32	54	33	15.40	23,600
MS-M14-12	MSL-M14-12	12	M14X2.00	19	13.50	36	60	38	16.80	29,200
MS-M14-12C	MSL-M14-12C	12	M14X1.50	19	13.50	36	60	38	16.80	29,200
MS-M14	MSL-M14	14	M14X2.00	19	13.50	36	60	38	16.80	29,200
MS-M14C	MSL-M14C	14	M14X1.50	19	13.50	36	60	38	16.80	29,200
MS-M16-14	MSL-M16-14	14	M16X2.00	21	15.00	42	66	40	19.30	32,100
MS-M16-14C	MSL-M16-14C	14	M16X1.50	21	15.00	42	66	40	19.30	32,100
MS-M16	MSL-M16	16	M16X2.00	21	15.00	42	66	40	19.30	32,100

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk

MALE ROD ENDS

BEARINGS

MSS SERIES: STUDED MALE ROD ENDS (METRIC)

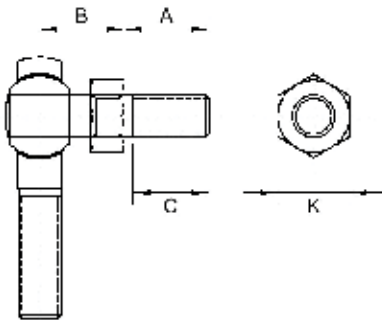


- Housing:** Steel 230M07Pb (Sizes M05 – M12)
Forged 080M46 (Sizes M14 – M16)
Zinc Plated and Clear Trivalent Passivate
- Inner Ring:** Steel 070M20, Zinc Plated and Clear Trivalent Passivate
- Ball:** Bearing Steel 100Cr6, Hardened and Electro-less Nickel Plated
- Stud:** Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivate
- Liner:** High Strength PTFE Composite
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Stud Size	Thread	A	B	C	K	Static Load Rating (Newtons) Radial
MS-M05S	MSL-M05S	M5X0.80	M5x0.80	10	10	8	9	1,200
MS-M06S	MSL-M06S	M6X1.00	M6X1.00	12	12	10	10	1,930
MS-M08S	MSL-M08S	M8X1.25	M8X1.25	16	16	14	13	3,190
MS-M10S	MSL-M10S	M10X1.50	M10X1.50	20	20	18	17	4,240
MS-M12S	MSL-M12S	M12X1.75	M12X1.75	24	24	21	19	5,720
MS-M14S	MSL-M14S	M14X2.00	M14X2.00	28	28	25	22	7,200
MS-M16S	MSL-M16S	M16X2.00	M16X2.00	29	29	24	24	9,000

MSS SERIES: STUDED MALE ROD ENDS (IMPERIAL)



- Housing:** Steel 230M07Pb (Sizes 04 - 07)
Forged 080M46 (Sizes 08 - 10)
Zinc Plated and Clear Trivalent Passivate
- Inner Ring:** Steel 070M20, Zinc Plated and Clear Trivalent Passivate
- Ball:** Bearing Steel 100Cr6, Hardened and Electro-less Nickel Plated
- Stud:** Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivate
- Liner:** High Strength PTFE Composite
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Stud Size	Thread	A	B	C	K	Static Load Rating (Newtons) Radial
MS-04S	MSL-04S	1/4 UNF	1/4 UNF	0.562	0.485	0.500	0.375	1,200
MS-05S	MSL-05S	5/16 UNF	5/16 UNF	0.687	0.547	0.594	0.437	3,190
MS-06S	MSL-06S	3/8 UNF	3/8 UNF	0.906	0.562	0.812	0.500	4,240
MS-07S	MSL-07S	7/16 UNF	7/16 UNF	1.125	0.843	1.000	0.625	5,720
MS-08S	MSL-08S	1/2 UNF	1/2 UNF	1.125	0.875	1.000	0.625	7,200
MS-10S	MSL-10S	5/8 UNF	5/8 UNF	1.125	1.000	1.000	0.750	9,000

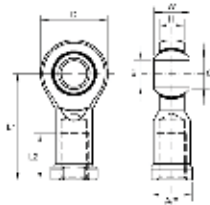
For stainless steel add 'SS' to part no. For example 'MS-M05S SS'

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk





FEMALE ROD ENDS



FS SERIES: FS – FSS – FS SS

Description:

FS Series is our 3-piece steel on steel range of male rod ends incorporating a high strength PTFE bronze mesh between the ball and the liner material, suitable for high shock loads and medium to heavy mechanical load applications requiring low friction, available in both metric and imperial bore thread sizes, they do not require maintenance.

Material Specifications:

Housing: Steel 230M07Pb and forged 080M46, zinc plated and clear trivalent passivated and stainless steel 303L and forged 304. Inner Ring: Steel 070M20 zinc plated and clear trivalent passivated. Liner: High strength PTFE bronze mesh composite. Ball: Bearing steel 100Cr6, heat treated, polished & electroless nickel plated and stainless steel 440C

Features:

Metric & imperial thread & bore sizes, low friction, high shock loads. Extended wear life No maintenance Studded and stainless steel options.

Possible Applications:

Medium/heavy industrial/mechanical applications Construction equipment Agricultural equipment Motor sport and recreational vehicles requiring high precision motion control.

Temperature Range:

-200°C to + 260°C

Specification:

ELV & RoHS compliant



Interchange table

Dunlop	Rose	Aurora	Askubal	
FS-M (metric)	MFC	MW-M-T and MG-M-T	KI-P	
FS (imperial)	RFC	MW-T and MG-T	-	
Dunlop	SKF	ASAHI	IKO	Fluro
FS-M (metric)	SIKB-F	JAF-EC	PHS-EC	GISW
FS (imperial)	-	PHSB-EC	-	

Note: Manufacturers part numbers are used for descriptive purposes only and may not be direct equivalent products.

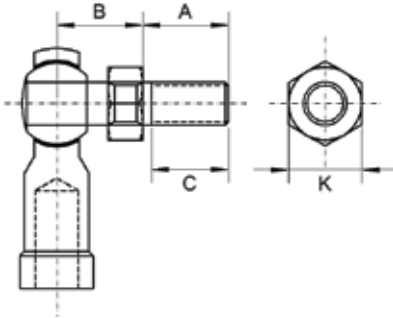
Part No. Right Hand	Part No. Left Hand	Bore Size	Thread	W	H	D	L1	L2	O	AF	Static Load Rating (Newtons) Radial
FS-M05	FSL-M05	5	M8X0.80	8	6.00	18	27	10	7.70	9	8000
FS-M06-5	FSL-M06-5	5	M6X1.00	9	6.75	20	30	12	8.90	11	8900
FS-M06	FSL-M06	6	M6X1.00	9	6.75	20	30	12	8.90	11	8900
FS-M08-6	FSL-M08-6	6	M8X1.25	12	9.00	24	36	16	10.40	13	14,100
FS-M08-6C	FSL-M08-6C	6	M8X1.00	12	9.00	24	36	16	10.40	13	14,100
FS-M08	FSL-M08	8	M8X1.25	12	9.00	24	36	16	10.40	13	14,100
FS-M08C	FSL-M08C	8	M8X1.00	12	9.00	24	36	16	10.40	13	14,100
FS-M10-8	FSL-M10-8	8	M10X1.50	14	10.50	28	43	20	12.90	17	19,300
FS-M10-8C	FSL-M10-8C	8	M10X1.25	14	10.50	28	43	20	12.90	17	19,300
FS-M10	FSL-M10	10	M10X1.50	14	10.50	28	43	20	12.90	17	19,300
FS-M10C	FSL-M10C	10	M10X1.25	14	10.50	28	43	20	12.90	17	19,300
FS-M12-10	FSL-M12-10	10	M12X1.75	16	12.00	32	50	22	15.40	19	23,600
FS-M12-10C	FSL-M12-10C	10	M12X1.25	16	12.00	32	50	22	15.40	19	23,600
FS-M12	FSL-M12	12	M12X1.75	16	12.00	32	50	22	15.40	19	23,600
FS-M12C	FSL-M12C	12	M12X1.25	16	12.00	32	50	22	15.40	19	23,600
FS-M14-12	FSL-M14-12	12	M14X2.00	19	13.50	36	57	25	16.80	22	29,200
FS-M14-12C	FSL-M14-12C	12	M14X1.50	19	13.50	36	57	25	16.80	22	29,200
FS-M14	FSL-M14	14	M14X2.00	19	13.50	36	57	25	16.80	22	29,200
FS-M14C	FSL-M14C	14	M14X1.50	19	13.50	36	57	25	16.80	22	29,200
FS-M16-14	FSL-M16-14	14	M16X2.00	21	15.00	42	64	28	19.30	22	32,100
FS-M16-14C	FSL-M16-14C	14	M16X1.50	21	15.00	42	64	28	19.30	22	32,100
FS-M16	FSL-M16	16	M16X2.00	21	15.00	42	64	28	19.30	22	32,100

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk

FEMALE ROD ENDS

FSS SERIES: STUDED FEMALE ROD ENDS (METRIC)

BEARINGS

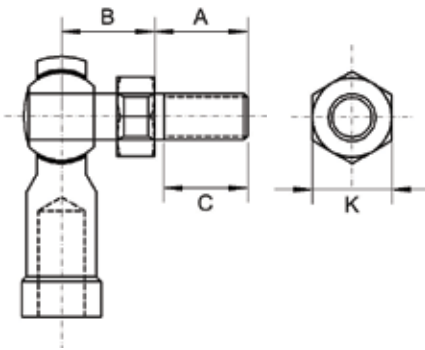


- Housing:** Steel 230M07Pb (Sizes M05 – M12)
Forged 080M46 (Sizes M14 – M16)
Zinc Plated and Clear Trivalent Passivate
- Inner Ring:** Steel 070M20, Zinc Plated and Clear Trivalent Passivate
- Ball:** Bearing Steel 100Cr6, Hardened and Electro-less Nickel Plated
- Stud:** Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivate
- Liner:** High Strength PTFE Composite
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Stud Size	Housing Thread	A	B	C	K	Static Load Rating (Newtons) Radial
FS-M05S	FSL-M05S	M5X0.80	M5x0.80	10	10	8	9	1,200
FS-M06S	FSL-M06S	M6X1.00	M6X1.00	12	12	10	10	1,930
FS-M08S	FSL-M08S	M8X1.25	M8X1.25	16	16	14	13	3,190
FS-M10S	FSL-M10S	M10X1.50	M10X1.50	20	20	18	17	4,240
FS-M12S	FSL-M12S	M12X1.75	M12X1.75	24	24	21	19	5,720
FS-M14S	FSL-M14S	M14X2.00	M14X2.00	28	28	25	22	7,200
FS-M16S	FSL-M16S	M16X2.00	M16X2.00	29	29	24	24	9,000

FSS SERIES: STUDED FEMALE ROD ENDS (IMPERIAL)



- Housing:** Steel 230M07Pb (Sizes 04 - 07)
Forged 080M46 (Sizes 08 - 10)
Zinc Plated and Clear Trivalent Passivate
- Inner Ring:** Steel 070M20, Zinc Plated and Clear Trivalent Passivate
- Ball:** Bearing Steel 100Cr6, Hardened and Electro-less Nickel Plated
- Stud:** Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivate
- Liner:** High Strength PTFE Composite
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Stud Size	Housing Thread	A	B	C	K	Static Load Rating (Newtons) Radial
FS-04S	FSL-04S	1/4 UNF	1/4 UNF	0.562	0.485	0.500	0.375	1,500
FS-05S	FSL-05S	5/16 UNF	5/16 UNF	0.687	0.547	0.594	0.437	3,190
FS-06S	FSL-06S	3/8 UNF	3/8 UNF	0.906	0.562	0.812	0.500	4,240
FS-07S	FSL-07S	7/16 UNF	7/16 UNF	1.125	0.843	1.000	0.625	5,720
FS-08S	FSL-08S	1/2 UNF	1/2 UNF	1.125	0.875	1.000	0.625	7,200
FS-10S	FSL-10S	5/8 UNF	5/8 UNF	1.125	1.000	1.000	0.750	9,000

For stainless steel add 'SS' to part no. For example 'FS-M05S SS'

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk





SPHERICAL BEARINGS



GXSW SERIES

Description:

GXSW Series is our 2-piece metric range of general purpose spherical plain bearings incorporating a thin PTFE fabric between the ball and the outer ring, suitable for high shock loads and medium to heavy industrial/mechanical load applications requiring low friction. They do not require maintenance.

Material Specifications:

Outer ring: Steel 070M20, zinc plated and clear trivalent passivated.
Ball: Bearing steel 100Cr6, hardened and electro-less nickel plated.
Liner: High temperature PTFE composite.

Features

Metric bore sizes
Low friction
High shock loads
Extended wear life
No maintenance

Possible Applications

Medium/heavy industrial/
mechanical
Construction equipment
Agricultural equipment
Recreational vehicles
High precision motion control

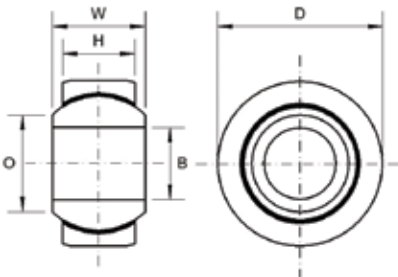
Temperature Range

-200°C to +260°C

Specification

ELV & RoHS compliant

GXSW SERIES: MAINTENANCE FREE SPHERICAL BEARING (METRIC)



Outer Ring:

Steel 070M20, Zinc Plated and Clear Trivalent Passivate

Ball:

Bearing Steel 100Cr6, Hardened, and Electro-less Nickel Plated

Liner:

High Temperature PTFE Composite

Specification:

ELV and RoHS Compliant



Part No.	Bore Size	W	H	D	C	Static Load Rating (Newtons) Radial
GXSW-M05	5	8	6.00	13	1x15°	12,500
GXSW-M06	6	9	6.75	15	1x15°	15,500
GXSW-M08	8	12	9	18	1.2x15°	27,800
GXSW-M10	10	14	10.5	21	1.2x15°	39,000
GXSW-M12	12	16	12	24.5	1.2x15°	53,500
GXSW-M14	14	19	13.5	28	1.5x15°	70,000
GXSW-M16	16	21	15	31.5	1.5x15°	88,000
GXSW-M18	18	23	16.5	34.5	1.5x15°	106,500
GXSW-M20	20	25	18	38	1.5x15°	130,000
GXSW-M22	22	28	20	41	1.5x15°	162,000
GXSW-M25	25	31	22	46	1.5x15°	204,000

GXSW SERIES: MAINTENANCE FREE SPHERICAL BEARING (IMPERIAL)

Part No.	Bore Size	W	H	D	C	Static Load Rating (Newtons) Radial
GXSW-04	1/4	0.375	0.281	0.6094	0.039x15°	15,500
GXSW-05	5/16	0.437	0.344	0.7500	0.047x15°	27,800
GXSW-06	3/8	0.500	0.406	0.8437	0.047x15°	39,000
GXSW-07	7/16	0.562	0.437	1.000	0.047x15°	44,000
GXSW-08	1/2	0.625	0.500	1.0937	0.059x15°	53,500
GXSW-10	5/8	0.750	0.562	1.3125	0.059x15°	88,000
GXSW-12	3/4	0.875	0.687	1.500	0.059x15°	130,000

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk



BALL JOINTS



BL SERIES

Description:

BL-Series is our 4-piece standard range of die cast zinc alloy ball joints suitable for medium industrial/mechanical load applications requiring smooth action and good wear resistance. The body is die cast around the ball giving an ultra smooth surface contact area, the ball stud is hardened and friction welded to the ball. The neoprene gaiter helps resist dirt contamination.

Material Specifications:

Body: Die cast zinc alloy. Ball: 100Cr6 bearing steel. Ball stud: Steel S35C hardened zinc plated and clear trivalent passivated. Gaiter: Neoprene.

Features

Metric thread sizes Ultra smooth action Strong & cost effective High pull out load axial & radial. Good wear resistance. Lubricated

Possible Applications

Industrial equipment Construction equipment Agricultural equipment Lawn & garden equipment

Temperature Range

-30°C to +120°C

Specification

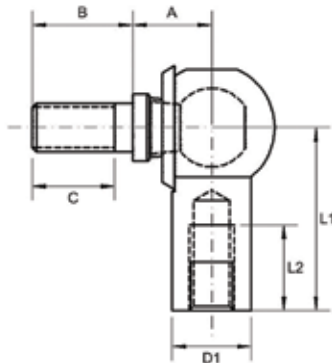
ELV & RoHS compliant

Interchange table

Dunlop	IKO	THK	Alinabal	SKF	Asahi	Rose
BL (metric)	LHSA	BL-D	-	-	-	-

Note: Manufacturers part numbers are used for descriptive purposes only and may not be direct equivalent products.

BL SERIES: DIE CAST BALL JOINTS (METRIC)



- Body:** Die Cast Zinc Alloy
- Ball:** Bearing Steel 100Cr6
- Ball Stud:** S35C, Hardened, Zinc Plated and Clear Trivalent Passivate
- Dust Seal:** Neoprene Rubber
- Specification:** ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Body Thread	Stud Thread	Ball Dia	L1	L2 Min	Stud A/F	A	B	C Min	D1
BL6D	BL6DL	M6X1.00	M10X1.25	8	30	16	10	11.0	15.0	11.0	11
BL8D	BL8DL	M8X1.25	M8X1.25	8	36	19	12	14.0	17.0	12.0	14
BL10BD	BL10BDL	M10X1.50	M10X1.50	10	43	23	14	17.0	26.0	21.0	17
BL10D	BL10DL	M10X1.25	M10X1.25	13	43	23	14	17.0	20.0	15.0	17
BL12BD	BL12BDL	M12X1.75	M12X1.75	13	50	26	17	19.0	30.0	24.0	19
BL12D	BL12DL	M12X1.25	M12X1.25	13	50	26	17	19.0	23.0	17.0	19
BL14BD	BL14BDL	M14X2.00	M14X2.00	13	57	30	19	21.5	40.5	28.0	22
BL14D	BL14DL	M14X1.50	M14X1.50	13	57	30	19	21.5	34.5	22.0	22
BL16BD	BL16BDL	M16X2.00	M16X2.00	13	64	34	22	23.5	42.5	29.0	24
BL16D	BL16DL	M16X1.50	M16X1.50	13	64	34	22	23.5	36.5	23.0	24

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk





BALL JOINTS



C SERIES: CMG

Description:

C-Series is our 5-piece range of spring retained and lockable ball joints suitable for medium industrial/mechanical load applications, inner ring retains the ball stud while the safety clip prevents the ball stud from being removed. CMG/1-Series ball joints are also available without the ball stud allowing for assembly on to a pre-positioned stud, please refer to compatible ball stud options in our miscellaneous product section.

Material Specifications:

Body: Steel 230M07PB zinc plated and clear trivalent passivated. Ball stud: Steel 212A42 hardened and zinc plated and clear trivalent passivated. Inner ring and safety clip: Spring steel to BS5216. Gaiter: Neoprene.

Features

- Metric thread sizes
- Lubricated
- Can be assembled in situ
- Good wear resistance
- Medium duty
- Safety features

Possible Applications

- Industrial equipment
- Construction equipment
- Agricultural equipment
- Lawn & garden equipment

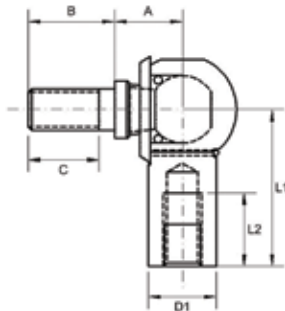
Temperature Range

-30°C to +90°C

Specification

ELV & RoHS compliant

CMG SERIES: DIN STANDARD BALL JOINTS (METRIC)



Body: Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivate

Ball Stud: Steel 212A42, Hardened, Zinc Plated and Clear Trivalent Passivate

Safety Clip: Spring Steel

Outer Clip: Spring Steel

Dust Seal: Neoprene Rubber

Specification: ELV and RoHS Compliant



Part No. Right Hand	Part No. Left Hand	Body Thread	Stud Thread	Ball Dia	Body Flats	L1	L2 Min	Stud A/F	A	B	C Min	D1
CM5/1	CM5/1LH	M5X0.80	M5X0.80	8	7	22	10	7	9.0	10.2	7.7	8.0
CMG5/1	CMG5/1LH	M5X0.80	M5X0.80	8	7	22	10	7	9.0	10.2	7.7	8.0
CM6/1	CM6/1LH	M6X1.00	M6X1.00	10	9	25	11.5	8	11.0	12.5	10.0	10.0
CMG6/1	CMG6/1LH	M6X1.00	M6X1.00	10	9	25	11.5	8	11.0	12.5	10.0	10.0
CM8/1	CM8/1LH	M8X1.25	M8X1.25	13	11	30	14	11	13.0	16.5	14.0	13.0
CMG8/1	CMG8/1LH	M8X1.25	M8X1.25	13	11	30	14	11	13.0	16.5	14.0	13.0
CM10/1	CM10/1LH	M10X1.50	M10X1.50	16	13	35	15	13	16.0	20.0	17.5	16.0
CMG10/1	CMG10/1LH	M10X1.50	M10X1.50	16	13	35	15	13	16.0	20.0	17.5	16.0
CM12/1	CM12/1LH	M12x1.75	M12x1.75	16	14	35	15	13	16.0	20.0	17.5	16.0
CMG12/1	CMG12/1LH	M12x1.75	M12x1.75	16	14	35	15	13	16.0	20.0	17.5	16.0
CM14/1	CM14/1LH	M14X2.00	M14X2.00	19	19	45	21	16	20.0	28.0	22.0	22.0
CMG14/1	CMG14/1LH	M14X2.00	M14X2.00	19	19	45	21	16	20.0	28.0	22.0	22.0
CM14C/1	CM14C/1LH	M14X1.50	M14X1.50	19	19	45	21	16	20.0	28.0	22.0	22.0
CMG14C/1	CMG14C/1LH	M14X1.50	M14X1.50	19	19	45	21	16	20.0	28.0	22.0	22.0
CM16/1	CM16/1LH	M16X2.00	M16X2.00	19	-	45	21	16	20.0	28.0	22.0	22.0
CMG16/1	CMG16/1LH	M16X2.00	M16X2.00	19	-	45	21	16	20.0	28.0	22.0	22.0

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk



LINKAGES



LINKAGES

Description:

We specialise in the supply of custom rod-based linkages, ready to fit and quality guaranteed, from end-to-end. Major manufacturers of construction, navigation and hospital equipment, through to farm tractors, food processing machinery and beer pumps depend on Dunlop resources for complete linkages, cost reductions and improved efficiency.

Rod Based Linkages:

Aluminium 6082 T 6, Brass CW 609 N (CZ 121), Carbon steel strip CS 70. Plastics Nylon 6, nylon 66 with molybdenum disulphide and nylon 66 30% glass-filled polyurethane. Steel: Rods 040 A 10 and 080 A 42, turned parts 230 M 07 pb, stainless 303 S 31.

Features

Reduced part numbers
Reduced suppliers
Eliminates stock imbalance
Cost savings
Bespoke designs available

Possible Applications

Light to heavy industrial/mechanical applications
Construction equipment
Agricultural equipment
Industrial equipment

Temperature Range

-200°C to +260°C

Specification

ELV & RoHS compliant



Custom rod-based linkages

In addition to our standard range of ball joints, rod ends, clevises and spring pins, we specialise in the supply of custom rod-based linkages, ready to fit and quality guaranteed, from end-to-end.

Besides the savings on your own in-house costs, there are invisible savings to be made from reduction in part numbers, suppliers and inventory variety, as well as stock imbalance elimination.

Cost reductions & improved efficiency

Major manufacturers of construction, navigation and hospital equipment, through to farm tractors, food processing machinery and beer pumps depend on Dunlop resources for complete linkages, cost reductions and improved efficiency.

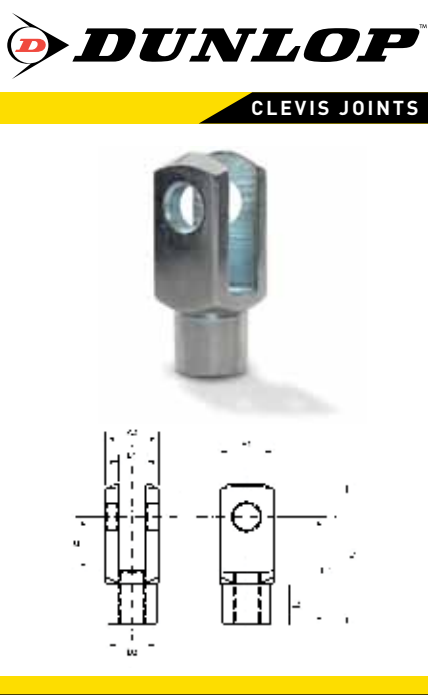
Why not join them?

Bespoke design service

Take advantage of our design co-operation service from initial application appraisal, through costings and prototypes to I.S.I.R approval and production supply.

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk





G SERIES: GM - GI - GM SS

Description:

G-Series is our standard range of metric and imperial clevises also known as 'yoke' and 'fork' ends. In addition to our catalogue range, we have produced over 2,000 special clevises to suit individual customer applications, therefore please enquire for any item not shown. Imperial sizes are easily identified by a groove on the tail. Stainless steel clevis assemblies are also available.

Metric sizes up to GML16 are used with ESM folding spring pins on page 97 or with NBM clevis pins on page 98. GM18 - GM30 are used with DEM clevis pins on page 99, size GM20 may also be used with ESM20 on page 97. Imperial sizes up to GIL625 are used with ESI folding spring pins on page 97 or with NBI clevis pins on page 98. GI750 - GI1000 are used with DEI clevis pins on page 99.

Material Specifications:

Clevis: Steel 230M07PB zinc plated white and blue passivated (silver/clear) and stainless steel 303L.

Features

Metric & imperial thread & bore sizes
Standard & long series
Course & fine threads
No maintenance

Possible Applications

Light to heavy industrial/mechanical applications
Construction equipment
Agricultural equipment
Industrial equipment

Temperature Range

-40°C to +170°C

Specification

ELV & RoHS compliant



Material: Steel 230M07Pb, Zinc Plated and Clear Trivalent Passivated

Specification: ELV and RoHS Compliant

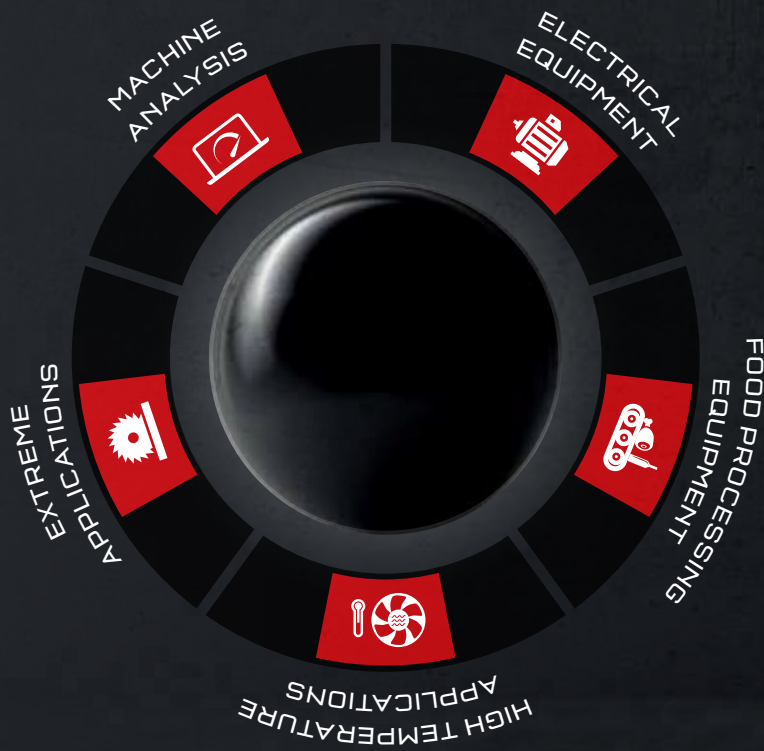
Part No. Right Hand	Part No. Left Hand	Bore Size*	Thread	G	A1	A2	B1	D3	L1	L2	L3
GM4	GM4LH	4	M4X0.70	8	8	8	4	8	21	16	6.0
GML4	GML4LH	4	M4X0.70	16	8	8	4	8	29	24	6.0
GM5	GM5LH	5	M5X0.80	10	10	10	5	9	26	20	7.5
GML5	GML5LH	5	M5X0.80	20	10	10	5	9	36	30	7.5
GM6	GM6LH	6	M6X1.00	12	12	12	6	10	31	24	9.0
GML6	GML6LH	6	M6X1.00	24	12	12	6	10	43	36	9.0
GM8	GM8LH	8	M8X1.25	16	16	16	8	14	42	32	12.0
GML8	GML8LH	8	M8X1.25	32	16	16	8	14	58	48	12.0
GM8C	GM8CLH	8	M8X1.00	16	16	16	8	14	42	32	12.0
GML8C	GML8CLH	8	M8X1.00	32	16	16	8	14	58	48	12.0
GM10	GM10LH	10	M10X1.50	20	20	20	10	18	52	40	15.0
GML10	GML10LH	10	M10X1.50	40	20	20	10	18	72	60	15.0
GM10C	GM10CLH	10	M10X1.25	20	20	20	10	18	52	40	15.0
GML10C	GML10CLH	10	M10X1.25	40	20	20	10	18	72	60	15.0
GM12	GM12LH	12	M12X1.75	24	24	24	12	20	62	48	18.0
GML12	GML12LH	12	M12X1.75	48	24	24	12	20	86	72	18.0
GM12C	GM12CLH	12	M12X1.25	24	24	24	12	20	62	48	18.0
GML12C	GML12CLH	12	M12X1.25	48	24	24	12	20	86	72	18.0
GM14	GM14LH	14	M14X2.00	28	27	27	14	24	72	56	22.5
GML14	GML14LH	14	M14X2.00	57	27	27	14	24	101	85	22.5
GM14C	GM14CLH	14	M14X1.50	28	27	27	14	24	72	56	22.5
GML14C	GML14CLH	14	M14X1.50	57	27	27	14	24	101	85	22.5
GM16	GM16LH	16	M16X2.00	32	32	32	16	26	83	64	24.0
GM16C	GM16LHC	16	M16X1.50	32	32	32	16	26	83	64	24.0

*Cross hole tolerance: +0.06 -0.00 mm

If you would like to view our full range, please refer to our Linkages Catalogue online at: www.iadaltd.co.uk



Saving operating costs by optimising with bearings



CERAMICSPEED

Bearings that last!



Simplified maintenance and improved competitiveness

**4 times
Longer
service life**

**Stable during the
entire operating
period**

Bearings with long service life provide the opportunity to systematically remove the bearings, which disrupt production and constrain the production capacity. Instead of regular bearing replacement, the CeramicSpeed Bearings allow you to carefully plan for few larger maintenance programmes. By using CeramicSpeed OptimiZe, a solution that monitors the machinery, it is possible to act in before the damage occurs. Hence, maintenance can be planned when it least interferes with the production, avoiding additional costs.

The uptime is crucial for the production economy and thus competitiveness. Bearings manufactured with a focus on the function of the machine contribute to a better and more precise use of the production equipment. This provides a stable operation for the entire bearing service life, and leads to a reduced need for adjustments and corrections in pace with the natural wear of the equipment.





LongLife Corrotec/CorroCoat

The CeramicSpeed LongLife Corrotec Bearing series is specially designed for humid environments. This type of bearings take over and continue to function, where the bearings made of clean stainless steel materials usually fail and break down.

The combination of stainless steel races, ceramic balls, ball cages from synthetic material and the right lubricant, provides a unique bearing in terms of resistance and thus service life. All LongLife Corrotec Bearings use food safety approved grease. If needed, besides ball bearings, the use of CorroCoat is possible, which provides extremely high corrosion resistant and friction-suppressant properties.

With the CeramicSpeed LongLife Corrotec Bearing series, it is possible to make use of bearings that are FDA/EC 1935 approved for use in the food industry. What makes these bearings unique is the fact that both the bearings' components and lubricant are food safety approved, meaning that they can come in direct contact with food. In addition to being FDA approved, several bearing components are also approved in accordance with EC 1935.

The lubricant used is NSF-H1 registered, in other words approved for use in contact with food and suitable for both sealed bearings and bearings that are continuously lubricated within the production process. A specification of the authorisations for CeramicSpeed Corrotec product series can be seen in the following table:

LongLife Corrotec product series								
Corrotec	Silicium Nitrid balls	Grease	Bracket	Inner and outer ring	Seals		Coatings	
					Stainless	Rubber	CorroCoat	WearCoat HardCoat
EC 1935	X	X	X	X	X	X	X	X
FDA+	X	X	X	X	X	X	X	X

Bearings that Last!

www.ceramicspeed.com/industry/en/

CERAMIC SPEED



LongLife Insulate

BEARINGS

The CeramicSpeed LongLife HighTemp Bearings feature ceramic balls and high-tech components that offer a unique HighTemp-program of up to 260 °C and 350 °C respectively. Amongst other things, the reason why this is possible is that the CeramicSpeed Balls expand 70 % less than steel balls.

- 4-8 times longer bearing life activated
- Typically earned back by the first saved replacement
- The operating temperature is 14-47 °C lower than the temperature in the steel bearings
- Up to 70 % less energy consumption in the bearing
- Higher insulating power
- Higher RPM
 - typically 50 % over steel bearings
- Can run under low lubrication conditions
- Extremely resistant to contamination
- Reduced operating costs thanks to the bearings' longer service life
- Better uptime of machinery which ensures higher competitiveness

Bearings that last!

www.ceramicspeed.com/industry/en/

CERAMICSPEED



LongLife HighTemp

The CeramicSpeed LongLife HighTemp Bearings feature ceramic balls and high-tech components that offer a unique HighTemp-program of up to 260 °C and 350 °C respectively. Amongst other things, the reason why this is possible is that the CeramicSpeed Balls expand 70 % less than steel balls.

- 4-8 times longer bearing life activated
- Lower energy consumption
- Extreme resistance to contamination
- Lower friction – the friction coefficient between the CeramicSpeed Balls and the races is reduced by 75 %
- Reduced wear and tear – fewer seizures on the bearing races
- Lower operating temperature – 10-20 °C lower than steel bearings
- Higher RPM (open bearings) – typically 50 % over steel bearings
- Reduced need for lubrication
- Grease type and quantity optimised for the specific application
- Reduced operating costs due to the bearings' longer service life
- Better machinery uptime that ensures higher competitiveness

Bearings that last!

www.ceramicspeed.com/industry/en/

CERAMICSPEED





LongLife Insulate

BEARINGS

The CeramicSpeed LongLife HighTemp Bearings feature ceramic balls and high-tech components that offer a unique HighTemp-program of up to 260 °C and 350 °C respectively. Amongst other things, the reason why this is possible is that the CeramicSpeed Balls expand 70 % less than steel balls.

- 4-8 times longer bearing life activated
- Typically earned back by the first saved replacement
- The operating temperature is 14-47 °C lower than the temperature in the steel bearings
- Up to 70 % less energy consumption in the bearing
- Higher insulating power
- Higher RPM
 - typically 50 % over steel bearings
- Can run under low lubrication conditions
- Extremely resistant to contamination
- Reduced operating costs thanks to the bearings' longer service life
- Better uptime of machinery which ensures higher competitiveness

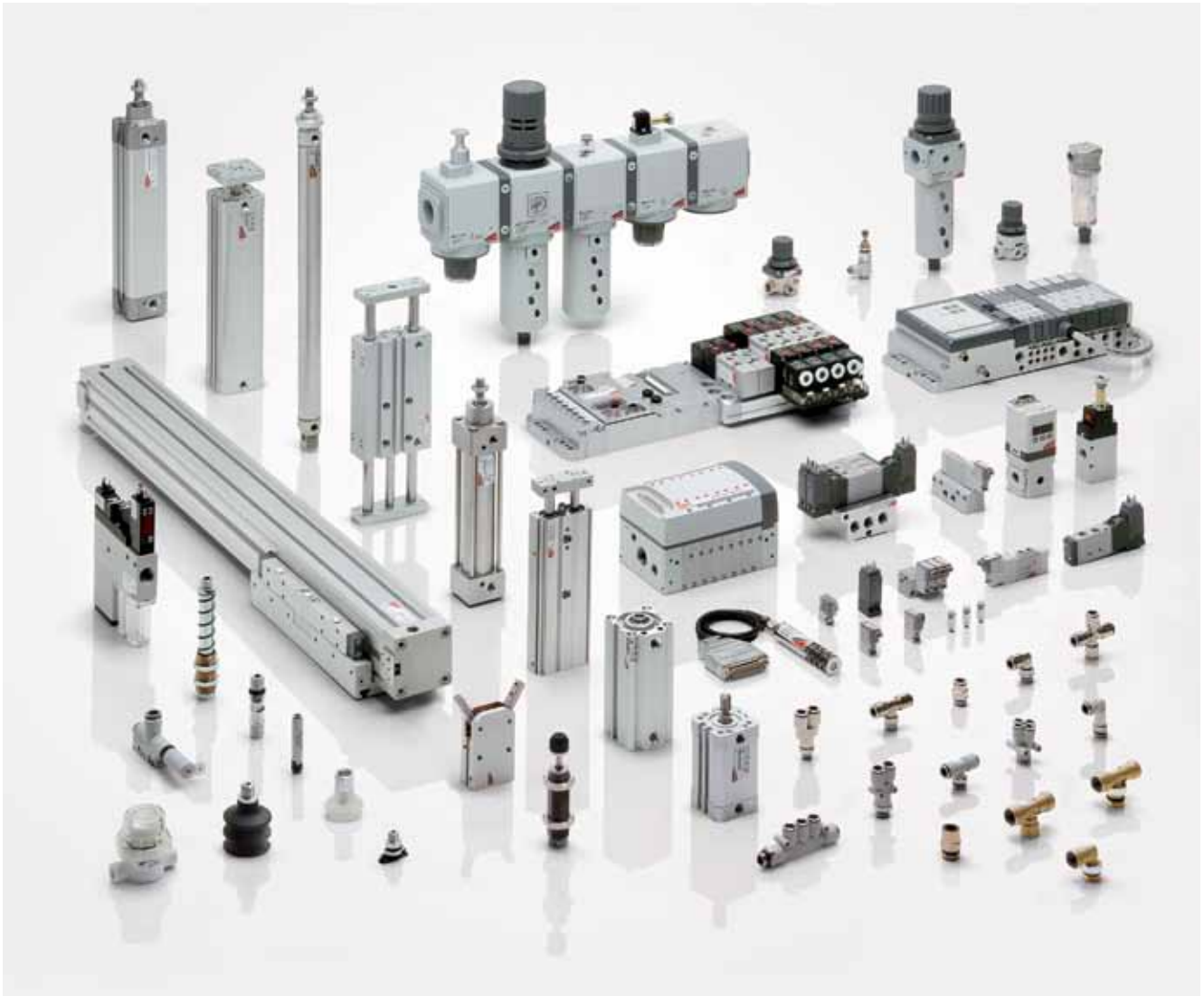
Bearings that last!

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CERAMICSPEED

FLUID
POWER





Welcome to the world of Camozzi

CAMOZZI IS ONE OF THE WORLD'S LEADING SUPPLIERS OF ADVANCED PNEUMATIC COMPONENTS AND SYSTEMS WITH REPRESENTATION IN OVER 70 COUNTRIES SPANNING ALL FOUR CONTINENTS. IN SUCH A COMPETITIVE MARKET WE RECOGNIZE THE NEED TO BE DIFFERENT, SO WE HAVE STOOD OUT FROM THE CROWD FOR IN EXCESS OF 50 YEARS BY OFFERING ONLY THE HIGHEST QUALITY PRODUCTS WHICH ARE SUPPORTED BY A FULL RANGE OF SERVICES.

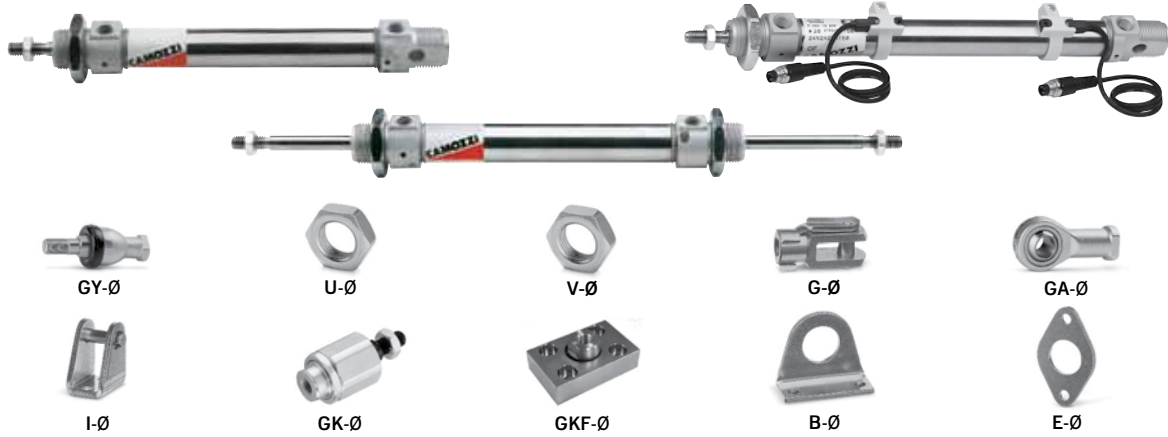
www.camozzi.co.uk



Series 16, 24 and 25 Mini-Cylinders

Single and double-acting (CETOP RP52-P DIN/ISO 6432)

Series 16: \varnothing 8 - 10 - 12 Series 24: \varnothing 16 - 20 - 25 - magnetic Series 25: \varnothing 16 - 20 - 25 - magnetic cushioned



CODING EXAMPLE

24 N 2 A 16 A 100

24 » SERIES
 16 = non-magnetic
 24 = magnetic
 25 = magnetic, adjustable cushioning

N » VERSION
 N = Standard

2 » OPERATION
 1 = single-acting, front spring, no cushion
 2 = double-acting
 3 = double-acting, through-rod
 7 = single-acting, through-rod

A » MATERIALS
 rod = rolled stainless steel AISI 303
 tube = stainless steel AISI 304
 end-blocks = anodized AL

16 » BORE
 08 = \varnothing 8 mm 12 = \varnothing 12 mm 20 = \varnothing 20 mm
 10 = \varnothing 10 mm 16 = \varnothing 16 mm 25 = \varnothing 25 mm

A » CONSTRUCTION
 A = screw with ring + lock nut for rod
 RL = cylinder with rod lock \varnothing 20 - \varnothing 25

100 » STROKE
 Series 16: \varnothing 8-10 = 10-250 mm / \varnothing 12 = 10-300 mm
 Series 24-25: \varnothing 16 = 10-600 mm / \varnothing 20-25 = 10-1000 mm

» = standard
 V = rod seals in FKM

STANDARD STROKES FOR MINICYLINDERS SERIES 16-24-25

■ Double-acting
 * Single-acting

standard strokes

series	\varnothing	10	25	40	50	80	100	125	160	200	250	300	320	400	500
16	8	■*	■*	■*	■*	■	■	■	■	■					
16	10	■*	■*	■*	■*	■	■	■	■	■					
16	12	■*	■*	■*	■*	■	■	■	■	■	■	■			
24	16	■*	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
24	20	■*	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
24	25	■*	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
25	16	■	■	■	■	■	■	■	■	■	■	■	■	■	■
25	20	■	■	■	■	■	■	■	■	■	■	■	■	■	■
25	25	■	■	■	■	■	■	■	■	■	■	■	■	■	■

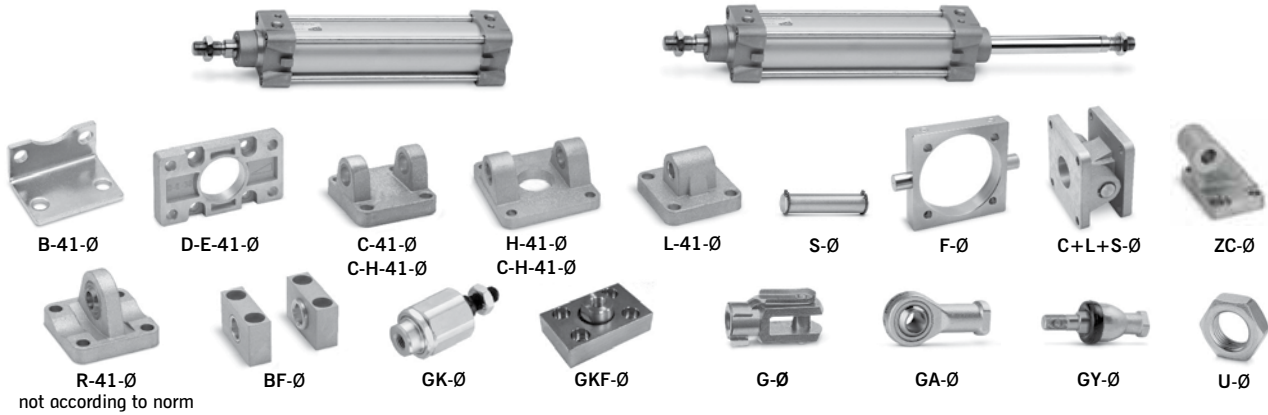




Series 60 Cylinders

Single and double-acting, magnetic, cushioned. Standard, low friction, low temperatures and tandem versions
 ø 32 - 40 - 50 - 63 - 80 - 100 - 125. ISO 15552 - DIN/ISO 6431 - VDMA 24562

FLUID
POWER



CODING EXAMPLE

60 M 2 L 050 A 0200

60 » SERIES

M » VERSION
 M = magnetic L = low friction
 N = non magnetic

2 » OPERATION
 1 = single-acting, front spring
 2 = double-acting*, front and rear cushioned
 3 = double-acting*, no cushion
 4 = double-acting*, rear cushioned
 5 = double-acting*, front cushioned
 6 = double-acting*, through-rod, front and rear cushioned
 7 = single-acting, through-rod
 * all double-acting cylinders are also available in the low friction version

L » MATERIALS
 L = rolled stainless steel rod AISI 420B - anodised aluminium round tube - NBR seals - nuts and tie-rods zinc-plated steel - rod seals polyurethane
 T = stainless steel AISI 420B tie-rods - stainless steel AISI 303 tie-rod nuts
 C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut
 U = rolled stainless steel AISI 303 piston rod, AISI 304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts
 W = rolled stainless steel AISI 304 piston rod, AISI304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts

050 » BORE
 032 = ø 32 mm 050 = ø 50 mm 080 = ø 80 mm 125 = ø 125 mm
 040 = ø 40 mm 063 = ø 63 mm 100 = ø 100 mm

A » CONSTRUCTION
 A = standard with lock nut for rod
 RL = cylinder with rod lock
 F = cylinder with centre trunnion

0200 » STROKE
 10-2500 mm

» = standard W = all FKM seals -130C°
 V = FKM rod seal L = low friction version without rod seal (rear supply only) **
 R = NBR rod seal (_ _ _) = extended piston rod _ _ _ mm
 ** The possibility to order the cylinder without piston rod seal, further reduces the friction force, (this configuration is possible in applications where the cylinder is pressurized in the rear chamber only)

STANDARD STROKES FOR CYLINDERS SERIES 60

- Double-acting (standard and low friction versions)
 Other strokes up to 2500 mm are available on request.
- * Single-acting (standard versions)

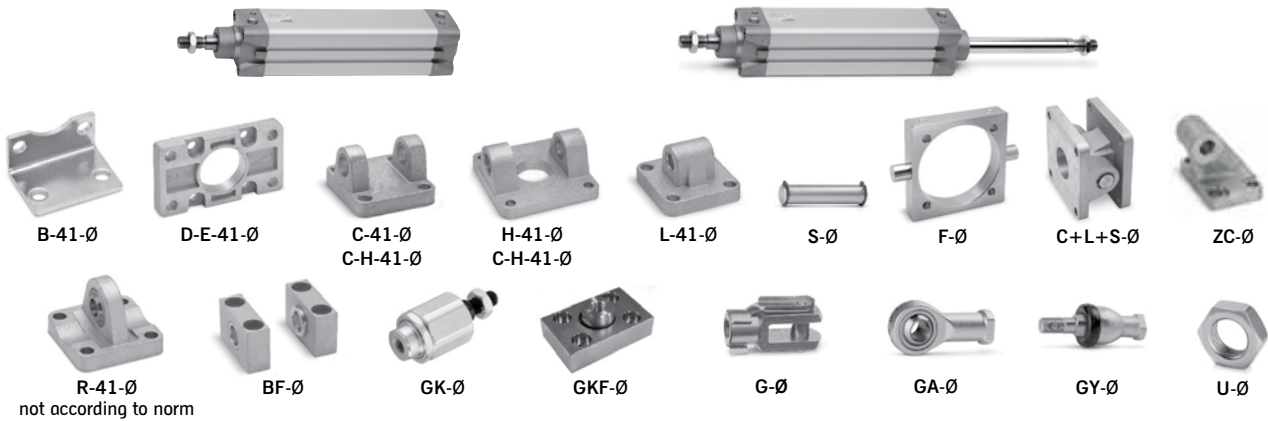
standard strokes

ø	25	50	75	100	125	150	160	200	250	300	320	400	500
32	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
40	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
50	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
63	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
80	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
100		■*	■*	■	■	■	■	■	■	■	■	■	■
125		■*	■*	■	■	■	■	■	■	■	■	■	■

Series 61 Cylinders - Aluminium Profile

Single and double-acting, magnetic, cushioned. Standard, low friction, low temperatures and tandem versions
 ø 32 - 40 - 50 - 63 - 80 - 100 - 125. ISO 15552 - DIN/ISO 6431 - VDMA 24562

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not according to norm

CODING EXAMPLE

61 M 2 P 050 A 0200

61 » SERIES

M » VERSION
 M = standard, magnetic L = low friction

2 » OPERATION
 1 = single-acting, front spring (ø 32 ± ø 100)
 2 = double-acting*, front and rear cushioned
 3 = double-acting*, no cushion
 4 = double-acting*, rear cushioned
 5 = double-acting*, front cushioned
 6 = double-acting*, through-rod, front and rear cushioned
 7 = single-acting, through-rod
 * all double-acting cylinders are also available in the low friction version

P » MATERIALS
 P = rolled stainless steel rod, AISI 420B anodised profile aluminium tube NBR seals - rod seals polyurethane, nuts and tie-rods zinc-plated steel
 R = stainless steel AISI 420B tie-rods - stainless steel AISI 303 tie-rod nuts
 C = rolled stainless steel AISI 303 piston rod, stainless steel AISI 304 piston rod nut
 U = rolled stainless steel AISI 303 piston rod, AISI 304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts
 W = rolled stainless steel AISI 304 piston rod, AISI304 piston-rod nut, AISI 420B tie-rods, AISI 303 tie-rod nuts

050 » BORE
 032 = ø 32 mm 050 = ø 50 mm 080 = ø 80 mm 125 = ø 125 mm
 040 = ø 40 mm 063 = ø 63 mm 100 = ø 100 mm

A » CONSTRUCTION
 A = standard with rod nut RL = cylinder with rod lock

0200 » STROKE
 10-2500 mm

» = standard
 V = FKM rod seal W = all FKM seals + 130 C°
 R = NBR rod seal L = low friction version without rod seal (rear supply only) **
 (_ _ _) = extended piston rod _ _ _ mm
 ** The possibility to order the cylinder without piston rod seal, further reduces the friction force, (this configuration is possible in applications where the cylinder is pressurized in the rear chamber only)

STANDARD STROKES FOR CYLINDERS SERIES 61

■ Double-acting (standard and low friction versions)
 Other strokes up to 2500 mm are available on request
 * Single-acting (standard versions)

standard strokes

ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■*	■*	■*	■	■	■	■	■	■	■	■	■	■	■
40	■*	■*	■*	■	■	■	■	■	■	■	■	■	■	■
50	■*	■*	■*	■	■	■	■	■	■	■	■	■	■	■
63	■*	■*	■*	■	■	■	■	■	■	■	■	■	■	■
80	■*	■*	■*	■	■	■	■	■	■	■	■	■	■	■
100		■*	■*	■	■	■	■	■	■	■	■	■	■	■
125		■*	■*	■	■	■	■	■	■	■	■	■	■	■



Cylinder Problem? The Solution Is Here. . .



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POWER

**The Fastest Cylinder Breakdown Service
Replacements made in as little as one hour!**



Standard and
Non-Standard Strokes

Includes Many
Cylinder Types

Totally Flexible Delivery
and Collection Options Available

Actuated Valve Assemblies



**SAME DAY DESPATCH
Try the service today!**



Pneumatic and Electric
Actuators

Single and Double
Acting

Comprehensive Range of
Valves (Ex-Stock)

Fully Assembled
and Tested

Series 4 Valves and Solenoid Valves

3/2, 5/2 and 5/3 way CC CO CP
Connections: 1/8, 1/4 and 1/2. Full range available.

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<p>438-015-22* *Coil sold separately</p>	<p>438-011-22* *Coil sold separately</p>	<p>458-015-22* *Coil sold separately</p>	<p>458-011-22* *Coil sold separately</p>
<p>434-015-22* *Coil sold separately</p>	<p>434-011-22* *Coil sold separately</p>	<p>454-015-22* *Coil sold separately</p>	<p>454-011-22* *Coil sold separately</p>
<p>438-35</p>	<p>458-35</p>	<p>438-33</p>	<p>458-33</p>
<p>434-35</p>	<p>454-35</p>	<p>434-33</p>	<p>454-33</p>

Full Range Available:

Valve Islands
- UK Assembly



Mechanical and
Manual Valves



Flow Control Valves



Automatic Valves



Series MX Filter-Regulators

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1. Modular Bowl with technopolymer cover and bayonet-type mounting



CODING EXAMPLE

MX2 - 3/8 - FR0004

MX	» SERIES	
2	» SIZE	2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1
3/4	» CONNECTIONS	3/8 = 3/8 3/4 = 3/4 1/2 = 1/2 1 = 1
FR	» FILTER-REGULATOR	
0	» FILTERING ELEMENT WITH DESIGN TYPE	0 = 25 µm with relieving (standard) 1 = 5 µm with relieving 2 = 25 µm without relieving (with semiautomatic-manual drain only) 3 = 5 µm without relieving (with semiautomatic-manual drain only)
0	» DRAINING OF CONDENSATE*	0 = manual semiautomatic drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = no drain with connections 1/8
0	» OPERATING PRESSURE (1 bar = 14.5 psi)	0 = 0.5 - 10 bar (standard) 7 = 0.5 - 7 bar (MX2 only) 4 = 0 - 4 bar
4	» PRESSURE GAUGE	0 = without pressure gauge (with threaded connection) 2 = with built-in pressure gauge 0-6 and working pressure 0 - 4 bar 3 = with built-in pressure gauge 0-10 and working pressure 0 - 7 bar (MX2 only) 4 = with built-in pressure gauge 0-12 and working pressure 0.5 - 10 bar (standard)

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Air Treatment Box Sets

Complete Filter-Regulator Set with Bracket and Gauge

Integrated Gauge Version

Size	Part No
3/8	MX2-FR-3/8-KIT-IG
1/2	MX2-FR-1/2-KIT-IG

External Gauge Version

Size	Part No
1/4	FR 1/4 KIT
3/8	MX2-FR-3/8-KIT-EG
1/2	MX2-FR-1/2-KIT-EG

High Performance

Reduced Installation and Maintenance Time

Compact and Light Weight

Series MX Filters

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1. Modular Bowl with technopolymer cover and bayonet-type mounting

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POWER



CODING EXAMPLE

MX 2 - 3/8 - F 0 0

MX	» SERIES
2	» SIZE 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1
3/8	» CONNECTIONS 3/8 = 3/8 3/4 = 3/4 1/2 = 1/2 1 = 1
F	» FILTER
0	» FILTERING ELEMENT 0 = 25 µm (standard) 1 = 5 µm
0	» DRAINING OF CONDENSATE* 0 = semiautomatic-manual drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = no drain with connection 1/8

Series MX Pressure Regulators

Connections: MX2=3/8, 1/2, 3/4 MX3=3/4, 1. Manifold Connections: 1/2 (MX2 only)
Modular - Available with built-in pressure gauges or with connection for gauges



CODING EXAMPLE

MX 2 - 3/4 - R 0 0 4

MX	» SERIES
2	» SIZE 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1
3/8	» CONNECTIONS 3/8 = 3/8 1/2 = 1/2 3/4 = 3/4 1 = 1
R	» TYPE OF REGULATOR R = pressure regulator M = Manifold pressure regulator (MX2 - 1/2 only)
0	» OPERATING PRESSURE (1 bar = 14.5 psi) 0 = 0.5 - 10 bar (standard) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (only MX2)
0	» DESIGN TYPE 0 = relieving (standard) 1 = without relieving
4	» PRESSURE GAUGE 0 = without pressure gauge (with threaded connection for gauges) 2 = with built-in pressure gauge 0-6 and working pressure 0 - 4 bar 3 = with built-in pressure gauge 0-10 and working pressure 0 - 7 bar (MX2 only) 4 = with built-in pressure gauge 0-12 and working pressure 0.5 - 10 bar (standard)

Series MX Lubricators

Connections: MX2=3/8, 1/2, 3/4 - MX3=3/4, 1. Modular Bowl with technopolymer cover and bayonet-type mounting



CODING EXAMPLE

MX 2 - 3/8 - L 0 0

MX	» SERIES
2	» SIZE 2 = 3/8 - 1/2 - 3/4 3 = 3/4 - 1
3/8	» CONNECTIONS 3/8 = 3/8 1/2 = 1/2 3/4 = 3/4 1 = 1
L	» LUBRICATOR
00	» DESIGN TYPE 00 = atomized oil



Series MD Filter/Regulators

Connections with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with Ø 6, 8 and 10mm.
Modular assembly. Bowl with technopolymer cover and bayonet-type mounting.



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POWER

CODING EXAMPLE

MD 1 - FR 0 0 0 0 - 1/8

MD » SERIES	0 » DRAINING OF CONDENSATE: 0 = semi-automatic manual drain (standard) 5 = depressuring drain, protected 8 = no drain with connection 1/8
1 » SIZE 1 = 42mm	
FR » FR = filter regulator	0 » OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 2 = 0 - 2 bar 4 = 0 - 4 bar 7 = 0.5 - 7 bar
0 » FILTERING ELEMENT WITH DESIGN TYPE: 0 = 25µm with relieving (standard) 1 = 5µm with relieving 2 = 25µm without relieving 3 = 5µm without relieving 4 = 25µm with relieving version VS 5 = 5µm with relieving version VS 6 = 25µm without relieving version VS (for semiautomatic-manual drain only) 7 = 5µm without relieving version VS (for semiautomatic-manual drain only)	0 » PRESSURE GAUGE: 0 = without pressure gauge (1/8 Connection)
	» CONNECTIONS (IN/OUT): = no connection 1/8, 1/4, 3/8, 6, 8, 10

Series MD Filters

Connections with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with Ø 6, 8 and 10mm. Modular assembly.
Bowl with technopolymer cover and bayonet-type mounting.



CODING EXAMPLE

MD 1 - F 0 0 0 - 1/8

MD » SERIES	
1 » SIZE 1 = 42mm	
F » F = filter	
0 » FILTERING ELEMENT: 0 = 25µm (standard) 1 = 5µm	
0 » DRAINING OF CONDENSATE: 0 = semi-automatic manual drain (standard) 5 = depressuring drain, protected 8 = no drain with connection 1/8	
0 » VISUAL INDICATOR: 0 = Without indicator 1 = With indicator	
1/8 » CONNECTIONS (IN/OUT): = no connection 1/8, 1/4, 3/8, 6, 8, 10	

Full range of accessories available

Series MD Pressure Regulators

Connections with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with Ø 6, 8 and 10mm.
Versions: single, combined with other functions, Manifold.



CODING EXAMPLE

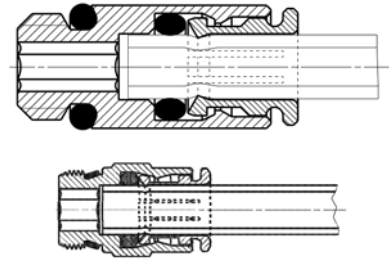
MD 1 - R 0 0 0 - 1/4

MD » SERIES	
1 » SIZE 1 = 42mm	
R » R = pressure regulator M = manifold pressure regulator	
0 » OPERATING PRESSURE: 0 = 0.5 - 10 bar (standard) 2 = 0 - 2 bar 4 = 0 - 4 bar 7 = 0.5 - 7 bar	
0 » DESIGN TYPE 0 = self-relieving 1 = non-relieving 2 = relieving high relief flow 3 = non-relieving high relief flow	
0 » PRESSURE GAUGE: 0 = without pressure gauge (1/8 Connection)	
1/4 » CONNECTIONS (IN/OUT): = no connection 1/8, 1/4, 3/8, 6, 8, 10	

Series 6000 Super-Rapid Fittings for Plastic Tubes

Tube external diameters: 3 (Micro only), 4, 5, 6, 8, 10, 12, 14, 16 mm
Threaded connections: M3 (Micro only), M5, M7, 1/8, 1/4 3/8, 1/2, R1/8, R1/4, R3/8, R1/2

Super-rapid fittings Series 6000 are available in 35 different models.
Super-rapid fittings Series 6000 Micro are available in 14 different models.
Connection and disconnection of the tube can be repeated several times and can be performed without the use of tools.
The extractable internal collet allows the sealing ring (O-ring) to be easily replaced if it is damaged or in case of wear of the rubber compound.



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Male Connector

S6510 4-1/8 S6510 10-1/4
S6510 4-1/4 S6510 10-3/8
S6510 5-1/8 S6510 10-1/2
S6510 5-1/4 S6510 12-1/4
S6510 6-1/8 S6510 12-3/8
S6510 6-1/4 S6510 12-1/2
S6510 6-3/8 S6510 14-3/8
S6510 8-1/8 S6510 14-1/2
S6510 8-1/4 S6510 16-1/2
S6510 8-3/8 S6510 16-3/4
S6510 8-1/2



With O-Ring Assembled

6512 3-M3°
6512 3-M5*
6512 4-M7-M*
6512 4-1/8-M*Y
6512 6-M7-M*
6512 6-1/8-M*Y
6512 8-1/8-M*Y
6512 10-1/4-M*

° = with 2661 Assembled
* = with O-Ring Assembled
*Y = with O-Ring Assembled
It can be connected also to valve islands Series Y

6512 4-M5 6512 10-1/4
6512 4-M6 6512 10-3/8
6512 4-1/8 6512 12-1/4
6512 4-1/4 6512 12-3/8
6512 5-M5
6512 6-M5
6512 6-1/8
6512 6-1/4
6512 8-1/8
6512 8-1/4
6512 8-3/8



Female Stud

6463 4-M5
6463 4-1/8
6463 5-1/8
6463 6-1/8
6463 6-1/4
6463 8-1/8
6463 8-1/4
6463 10-1/4

Sprint®



Swivel Elbow

S6520 4-1/8 S6520 8-1/2
S6520 4-1/4 S6520 10-1/4
S6520 5-1/8 S6520 10-3/8
S6520 5-1/4 S6520 10-1/2
S6520 6-1/8 S6520 12-1/4
S6520 6-1/4 S6520 12-3/8
S6520 6-3/8 S6520 12-1/2
S6520 8-1/8 S6520 14-3/8
S6520 8-1/4 S6520 14-1/2
S6520 8-3/8



Swivel Elbow
with O-Ring Assembled

6522 4-M5
6522 4-1/8
6522 4-1/4
6522 5-M5
6522 6-M5
6522 6-1/8
6522 6-1/4
6522 8-1/8
6522 8-1/4
6522 8-3/8
6522 10-1/4
6522 10-3/8
6522 12-1/4
6522 12-3/8

Sprint®



Fixed Male Elbow-Taper

S6500 4-1/8
S6500 4-1/4
S6500 5-1/8
S6500 5-1/4
S6500 6-1/8
S6500 6-1/4
S6500 8-1/8
S6500 8-1/4
S6500 8-3/8
S6500 10-1/4
S6500 10-3/8
S6500 12-1/4
S6500 12-3/8

Sprint®



Extended Swivel Elbow

6525 6-1/8
6525 6-1/4
6525 8-1/8
6525 8-1/4

6501 4-M5



With 2661 assembled

Full Range Available:

Super-Rapid Compact Fittings in Technopolymer
Series 7000



Compact

Pipe Fittings Series 2000 / BSPT Adaptors






Sprint®



S6430 4-1/8
S6430 5-1/8
S6430 5-1/4
S6430 6-1/8
S6430 6-1/4
S6430 8-1/8
S6430 8-1/4
S6430 8-3/8
S6430 10-1/4
S6430 10-3/8
S6430 10-1/2
S6430 12-1/4
S6430 12-3/8
S6430 12-1/2
S6430 14-1/2


Swivel branch tee



6432 4-M5
6432 4-1/8
6432 5-M5
6432 6-1/8
6432 6-1/4
6432 8-1/8
6432 8-1/4
6432 8-3/8
6432 10-1/4
6432 10-3/8
6432 12-1/4
6432 12-3/8

Swivel branch tee with O-Ring assembled

Sprint®



S6440 4-1/8
S6440 5-1/8
S6440 6-1/8
S6440 6-1/4
S6440 8-1/8
S6440 8-1/4
S6440 8-3/8
S6440 10-1/4
S6440 10-3/8
S6440 12-3/8
S6440 14-1/2


Swivel branch tee



6442 4-M5
6442 4-1/8
6442 5-M5
6442 6-1/8
6442 6-1/4
6442 8-1/8
6442 8-1/4
6442 8-3/8
6442 10-1/4
6442 10-3/8
6442 12-1/4
6442 12-3/8

Swivel branch tee with O-Ring assembled

Sprint®



6451 4-M5*
6451 6-M5*
S6450 4-1/8
S6450 6-1/8
S6450 8-1/8
S6450 8-1/4

Swivel Y connector
*non swivel Model, with 2661 assembled




6622 4-M5
6622 4-1/8
6622 6-1/8
6622 6-1/4
6622 8-1/8
6622 8-1/4
6622 10-1/4

Banjo with O-Ring assembled



6632 4-1/8
6632 6-1/8
6632 6-1/4
6632 8-1/8
6632 8-1/4
6632 10-1/4

Double Banjo with O-Ring assembled




6620 4-M5
6620 4-1/8
6620 6-1/8
6620 6-1/4
6620 8-1/8
6620 8-1/4

Double Banjo Ring Connector
Assembly with 1631, 1635



1631 01...
1631 02...
1631 03...


01... = Single Banjo Stem
02... = Double Banjo Stem
03... = Triple Banjo Stem



6610 4-M5 6610 6-1/8
6610 4-M6° 6610 6-1/4
6610 4-1/8 6610 8-1/8
6610 5-M5 6610 8-1/4
6610 5-M6° 6610 8-3/8
6610 5-1/8 6610 10- 1/4*
6610 6-M5 6610 10- 3/8*
6610 6-M6° 6610 12-1/2*

Models without reference can be always assembled with 1631-1635
°Assembly required with SCU, SVU, SCO...M5
*Assembly required with 1635

Sprint®



6811 4-M5*
6811 4-1/8
6811 5-1/8
6811 5-1/4
6811 6-1/8
6811 6-1/4
6811 8-1/8
6811 8-1/4
6811 10-1/4
6811 10-3/8
6811 12-3/8
6811 14-1/2



Metric Male Adaptor
*with O-Ring assembled



S6110 6 1/8
S6110 6 1/4
S6110 8 1/8
S6110 8 1/4
S6110 8 3/8
S6110 10 1/4
S6110 10 3/8
S6110 10 1/2
S6110 12 1/4
S6110 12 3/8
S6110 12 1/2

45° Male Elbow

Full Range Available:

<p>Tubing & Accessories</p> 	<p>QRC Series 5000</p> 
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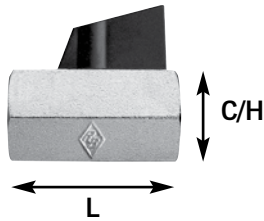
Ball Valves & Actuators

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Mini Ball Valves

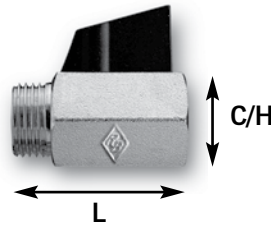
Suitable for most non-corrosive liquids and gases including air, water and fuels. Operating pressure 10 bar (147psi). Operating temperature -20°C to +90°C.

Female/Female



	L	C/H
3830 1/8	41	21
3830 1/4	41	21
3830 3/8	41	21
3830 1/2	46	25

Male/Female

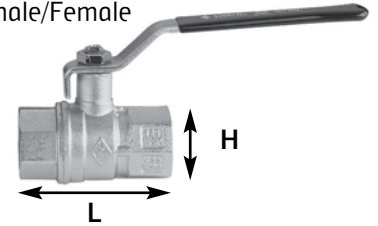


	L	C/H
3831 1/8	41	21
3831 1/4	41	21
3831 3/8	41	21
3831 1/2	46	25

Brass Ball Valves - Gas/WRAS Approved

Suitable for most non-corrosive liquids and gases including air, water, solvents and fuels. Operating temperature -20°C to +130°C

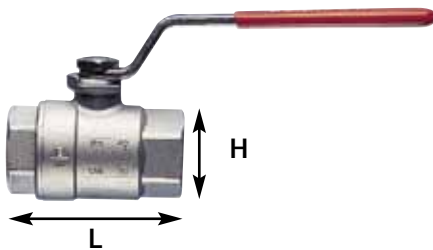
Female/Female



	L	H
6273 1/4	51.5	23
6273 3/8	51.5	23
6273 1/2	59	30
6273 3/4	67	36
6273 1	81.5	43.5
6273 1 1/4	94	53
6273 1 1/2	102.4	65
6273 2	123	80

Economy Stainless Steel Ball Valves Two-Piece Design

2-Piece stainless steel quarter turn ball valves with all wetted parts stainless steel AISI316. Other metal parts in stainless steel AISI304. Available with NPT threads. (Part No 700023)



	Thread	L	H
70400002	1/4	53.5	30
70400003	3/8	53.5	30
70400004	1/2	60	32.5
70400005	3/4	70	40
70400006	1	79	49
70400007	1 1/4	91	62
70400008	1 1/2	103	75
70400010	2	124	95

Pneumatically Actuated 2-Way Brass Ball Valves

Full bore, direct mounted actuator, nickel plated brass ball valves (low torque design). Also available in 1/4, 3/8, 2 1/2, 3, 4.



Double Acting

	Thread	Bar
8P007904	1/2	40
8P007905	3/4	40
8P007906	1	40
8P007907	1 1/4	40
8P007908	1 1/2	40
8P007910	2	40



Single Acting

	Thread	Bar
8P008104	1/2	40
8P008105	3/4	40
8P008106	1	40
8P008107	1 1/4	40
8P008108	1 1/2	40
8P008110	2	40

3-Way Option
Also Available
(L/T Port)

Full Range of Accessories Available:

Limit Switch Box



Namur 3/2 and 5/2
Solenoid Valves





PLASTIC PUSH-IN FITTINGS



One Touch Emergency Fittings Kits

Convenient, compact boxes containing a selection of popular KELM™ one touch plastic push-in fittings along with handy tube cutter. Available in three sizes: 6mm, 8mm and 10mm. Can be used with nylon 6, 11, 12, and polyurethane (ester and ether).

 **Temperature Range:**
Brass: 0°C to +60°C
Acetal: 0°C to +60°C
(dependent upon tubing specification)

 **Maximum Working Pressure:**
10 bar (150 psi)
Negative Pressure:
-750mm Hg (10 Torr)
(dependent upon tubing specification)

Media:
Air and vacuum only.

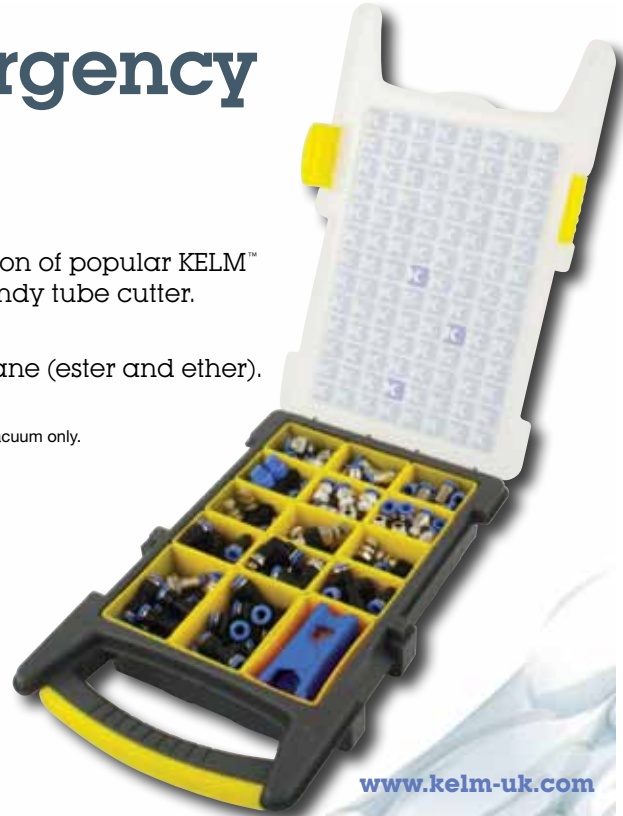
Plastic Push-in

1060



KELM-06MMBOX-P	6
KELM-08MMBOX-P	8
KELM-10MMBOX-P	10

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FLUID
POWER

6mm Plastic Push-in Fittings & Tube Cutter

CONTENTS:

Tube Cutter KTC-1 Qty: 1	Equal Tee 2019-8404 Qty: 10	Equal Connector 2019-8305 Qty: 10	Equal Bulkhead 2019-8503 Qty: 2
Equal Elbow 2019-8354 Qty: 8	1/8" BSPP Male Stud Elbow 2028-8247 Qty: 8	1/4" BSPP Male Stud Elbow 2028-8254 Qty: 5	
1/8" BSPT Flow Controller 2022-9852 Qty: 2	1/4" BSPT Flow Controller 2022-9878 Qty: 2	Flow Controller (Unidirectional) 2022-9746 Qty: 2	
1/8" BSPT Male Stud 2019-4965 Qty: 10	1/4" BSPT Male Stud 2019-4973 Qty: 10	Shut-off Valve (Tube x Tube) HVFF06-06 Qty: 2	
M5 BSPT Male Stud 2019-4957 Qty: 5	1/8" BSPP Male Stud 2028-7819 Qty: 10	1/4" BSPP Male Stud 2028-7843 Qty: 10	

8mm Plastic Push-in Fittings & Tube Cutter

CONTENTS:

Tube Cutter KTC-1 Qty: 1	Equal Tee 2019-8412 Qty: 8	Equal Connector 2019-8313 Qty: 10	Equal Bulkhead 2019-8511 Qty: 2
Equal Elbow 2019-8362 Qty: 6	1/8" BSPP Male Stud Elbow 2028-8270 Qty: 6	1/4" BSPP Male Stud Elbow 2028-8288 Qty: 5	
1/8" BSPT Flow Controller 2022-9866 Qty: 2	1/4" BSPT Flow Controller 2022-9894 Qty: 2	Flow Controller (Unidirectional) 2022-9753 Qty: 2	
1/8" BSPT Male Stud 2019-4999 Qty: 10	1/4" BSPT Male Stud 2019-5004 Qty: 10	Shut-off Valve (Tube x Valve) HVFF08-08 Qty: 2	
3/8" BSPT Male Stud 2019-5012 Qty: 5	1/8" BSPP Male Stud 2028-7876 Qty: 10	1/4" BSPP Male Stud 2028-7884 Qty: 10	

10mm Plastic Push-in Fittings & Tube Cutter

CONTENTS:

Tube Cutter KTC-1 Qty: 1	Flow Controller (Unidirectional) 2022-9761 Qty: 2	Equal Connector 2019-8321 Qty: 8
Equal Elbow 2019-8370 Qty: 3	1/8" BSPP Male Stud Elbow 2028-8312 Qty: 3	1/4" BSPP Male Stud Elbow 2028-8320 Qty: 3
1/4" BSPT Flow Controller 2022-9928 Qty: 2	3/8" BSPT Flow Controller 2022-9936 Qty: 1	Equal Tee 2019-8420 Qty: 2
1/8" BSPT Male Stud 2019-5038 Qty: 7	1/4" BSPT Male Stud 2019-5046 Qty: 7	Equal Bulkhead 2019-8529 Qty: 2
3/8" BSPT Male Stud 2019-5053 Qty: 5	1/8" BSPP Male Stud 2028-7926 Qty: 8	1/4" BSPP Male Stud 2028-7934 Qty: 6

Please refer to pages 584-589 of our main 2017/18 Fluid Power Catalogue

One Touch Plastic Push-in Fittings



Page Tech Sheet **1964**

Temperature Range:
 Brass: 0°C to +60°C
 Acetal: 0°C to +60°C

Working Pressure:
 10 bar (150 psi)

Media: Air & vacuum only.

Negative Pressure: -750mm Hg (10Torr)

Male Studs



Male Thread, Metric & BSPT

1060	OD mm	Thread
2019-4890	4	M5
2019-4932	4	1/8"
2046-7163	4	M6
2019-4940	4	1/4"
2046-7164	4	3/8"
2019-4957	6	M5
2019-4965	6	1/8"
2046-7165	6	M6
2019-4973	6	1/4"
2019-4981	6	3/8"
2046-7166	6	1/2"
2019-4999	8	1/8"
2019-5004	8	1/4"
2019-5012	8	3/8"
2019-5020	8	1/2"
2019-5038	10	1/8"
2019-5046	10	1/4"
2019-5053	10	3/8"
2019-5061	10	1/2"
2019-5076	12	1/4"
2019-5087	12	3/8"
2019-5095	12	1/2"

Female Studs



Female Thread, BSPP

1060	OD mm	Thread
2019-6325	4	1/8"
2046-7167	4	1/4"
2019-6366	6	1/8"
2019-6416	6	1/4"
2019-6432	6	3/8"
2019-6440	8	1/8"
2019-6465	8	1/4"
2019-6721	8	3/8"
2046-7168	8	1/2"
2019-6739	10	1/8"
2019-6754	10	1/4"
2019-6911	10	3/8"
2046-7169	10	1/2"
2019-6929	12	1/4"
2019-7018	12	3/8"
2019-7059	12	1/2"

Male Stud Swivel Elbows



Male Thread, Metric & BSPT

1060	OD mm	Thread
2019-5103	4	M5
2019-5111	4	1/8"
2046-7170	4	M6
2019-5129	4	1/4"
2019-5822	6	M5
2019-5145	6	1/8"
2046-7171	6	M6
2019-5152	6	1/4"
2019-5160	6	3/8"
2046-7172	6	1/2"
2019-5178	8	1/8"
2019-5186	8	1/4"
2019-5194	8	3/8"
2019-5202	8	1/2"
2019-5210	10	1/8"
2019-5228	10	1/4"
2019-5236	10	3/8"
2019-5244	10	1/2"
2019-5251	12	1/4"
2019-5269	12	3/8"
2019-5277	12	1/2"

Female Bulkhead Connectors



Female Thread, Metric & BSPP

1060	OD mm	Thread	Bulk Head
2046-7194	4	M5	M12 x 1
2019-7083	4	1/8"	M12 x 1
2046-7196	4	1/4"	M12 x 1
2046-7197	6	M5	M14 x 1
2019-7125	6	1/8"	M14 x 1
2046-7198	6	M6	M14 x 1
2019-7133	6	1/4"	M14 x 1
2046-7199	6	3/8"	M14 x 1
2046-7200	6	1/2"	M14 x 1
2046-7201	8	1/8"	M16 x 1
2019-7166	8	1/4"	M16 x 1
2019-7182	8	3/8"	M16 x 1
2046-7202	8	1/2"	M16 x 1
2046-7203	10	1/8"	M20 x 1
2019-7299	10	1/4"	M20 x 1
2019-7307	10	3/8"	M20 x 1
2046-7204	10	1/2"	M20 x 1
2019-7315	12	1/4"	M22 x 1
2019-7497	12	3/8"	M22 x 1
2046-7205	12	1/2"	M22 x 1



Male Thread, BSPP

1060	OD mm	Thread
2028-7736	4	1/8"
2028-7793	4	1/4"
2028-7819	6	1/8"
2028-7843	6	1/4"
2028-7868	6	3/8"
2028-7876	8	1/8"
2028-7884	8	1/4"
2028-7900	8	3/8"
2028-7918	8	1/2"
2028-7926	10	1/8"
2028-7934	10	1/4"
2028-7942	10	3/8"
2028-7959	10	1/2"
2028-7967	12	1/4"
2028-7975	12	3/8"
2028-7983	12	1/2"



Male Thread, BSPP

1060	OD mm	Thread
2028-8221	4	1/8"
2028-8239	4	1/4"
2028-8247	6	1/8"
2028-8254	6	1/4"
2028-8262	6	3/8"
2028-8270	8	1/8"
2028-8288	8	1/4"
2028-8296	8	3/8"
2028-8304	8	1/2"
2028-8312	10	1/8"
2028-8320	10	1/4"
2028-8338	10	3/8"
2028-8379	10	1/2"
2028-8403	12	1/4"
2028-8411	12	3/8"
2028-8429	12	1/2"

Please refer to pages 584-589 of our main 2017/18 Fluid Power Catalogue

Polyurethane Tube



Page Tech Sheet **3131**

Metric Polyurethane Ester Tube



Working Pressure:
3 to 1 safety factor



Temperature Range:
-20°C to +60°C

Ester based tube is not suitable for use with water or in high humidity environments.

- Ester based Polyurethane tubing has outstanding characteristics compared with other pneumatic tubing. This tube is extremely flexible and offers excellent bend capabilities making it ideal for pneumatic control or robotic systems. It is also resistant to many chemicals, gases and oils as well as having excellent abrasion resistance. Ideal for use with Push-in fittings, Compression fittings, Quick-Fit fittings & Hose Tail fittings.



Metric, 25 Metre Coils

5030	OD mm	ID mm	PSI	PSI
PU03/020B	3	2	Blue	150
PU04/025N	4	2.5	Black	190
PU04/025B	4	2.5	Blue	190
PU04/025R	4	2.5	Red	190
PU04/025Y	4	2.5	Yellow	190
PU04/025G	4	2.5	Green	190
PU04/025	4	2.5	Transparent	190
PU05/030N	5	3	Black	160
PU05/030B	5	3	Blue	160
PU06/040N	6	4	Black	155
PU06/040B	6	4	Blue	155
PU06/040R	6	4	Red	155
PU06/040Y	6	4	Yellow	155
PU06/040G	6	4	Green	155
PU06/040	6	4	Transparent	155
PU08/055N	8	5.5	Black	150
PU08/055B	8	5.5	Blue	150
PU08/055R	8	5.5	Red	150
PU08/055Y	8	5.5	Yellow	150
PU08/055G	8	5.5	Green	150
PU08/055	8	5.5	Transparent	150
PU08/060N	8	6	Black	120
PU08/060B	8	6	Blue	120
PU08/060R	8	6	Red	120
PU08/060Y	8	6	Yellow	120
PU08/060G	8	6	Green	120
PU08/060	8	6	Transparent	120
PU10/065N	10	6.5	Black	125
PU10/065B	10	6.5	Blue	125
PU10/065R	10	6.5	Red	125
PU10/065Y	10	6.5	Yellow	125
PU10/065G	10	6.5	Green	125
PU10/065	10	6.5	Transparent	125
PU10/080N	10	8	Black	120
PU10/080B	10	8	Blue	120
PU10/080	10	8	Transparent	120
PU12/080N	12	8	Black	120
PU12/080B	12	8	Blue	120
PU12/080R	12	8	Red	120
PU12/080Y	12	8	Yellow	120
PU12/080G	12	8	Green	120
PU12/080	12	8	Transparent	120
PU16/110	16	11	Blue	100

Metric, 30 Metre Coils

5030	OD mm	ID mm	PSI	PSI
PU04/025-30	4	2.5	Transparent	190
PU04/025B-30	4	2.5	Blue	190
PU06/040-30	6	4	Transparent	155
PU06/040B-30	6	4	Blue	155
PU08/055-30	8	5.5	Transparent	150
PU08/055B-30	8	5.5	Blue	150
PU08/060-30	8	6	Transparent	120
PU08/060B-30	8	6	Blue	120
PU10/065-30	10	6.5	Transparent	125
PU10/065B-30	10	6.5	Blue	125
PU10/080-30	10	8	Transparent	120
PU10/080B-30	10	8	Blue	120
PU12/080-30	12	8	Transparent	120
PU12/080B-30	12	8	Blue	120

Metric, 100 Metre Coils

5030	OD mm	ID mm	PSI	PSI
PU04/025N-100	4	2.5	Black	190
PU04/025B-100	4	2.5	Blue	190
PU04/025R-100	4	2.5	Red	190
PU04/025Y-100	4	2.5	Yellow	190
PU04/025G-100	4	2.5	Green	190
PU04/025-100	4	2.5	Transparent	190
PU06/040N-100	6	4	Black	155
PU06/040B-100	6	4	Blue	155
PU06/040R-100	6	4	Red	155
PU06/040Y-100	6	4	Yellow	155
PU06/040G-100	6	4	Green	155
PU06/040-100	6	4	Transparent	155
PU08/055N-100	8	5.5	Black	150
PU08/055B-100	8	5.5	Blue	150
PU08/055R-100	8	5.5	Red	150
PU08/055Y-100	8	5.5	Yellow	150
PU08/055G-100	8	5.5	Green	150
PU08/055-100	8	5.5	Transparent	150
PU08/060N-100	8	6	Black	120
PU08/060B-100	8	6	Blue	120
PU08/060R-100	8	6	Red	120
PU08/060Y-100	8	6	Yellow	120
PU08/060G-100	8	6	Green	120
PU08/060-100	8	6	Transparent	120
PU10/065N-100	10	6.5	Black	125
PU10/065B-100	10	6.5	Blue	125
PU10/065R-100	10	6.5	Red	125
PU10/065Y-100	10	6.5	Yellow	125
PU10/065G-100	10	6.5	Green	125
PU10/065-100	10	6.5	Transparent	125
PU10/080N-100	10	8	Black	120
PU10/080B-100	10	8	Blue	120
PU10/080-100	10	8	Transparent	120
PU12/080N-100	12	8	Black	120
PU12/080B-100	12	8	Blue	120
PU12/080R-100	12	8	Red	120
PU12/080Y-100	12	8	Yellow	120
PU12/080G-100	12	8	Green	120
PU12/080-100	12	8	Transparent	120

Please refer to page 638 of our main 2017/18 Fluid Power Catalogue

Superior Safety Compressed Air Hose Assemblies




DCH hose is manufactured with a special formula which will outperform PVC and rubber in all application requirements.

- Greater temperature range for all weather and environment applications
- Improved abrasion compared to both PVC and rubber
- Tensile strength 10% better than rubber up to 150kg
- Coupling retention tried and tested up to 200kg
- Excellent flexibility
- Full hose traceability



All assemblies are supplied complete with Jaymac safety claw couplings, rubber sealing ring and anti-vibration nuts.

 **Working Temperature:**
-30°C to +60°C

 **Maximum Working Pressure:**
20 bar
3:1 ratio



Condition: lab temperature @ 25C

Pressure test: Burst pressure 72Bar,

Hardness test:

Inside layer: 77A

Outside layer: 72A

Temperature test: tested to -30°C

NOTE: Optimize bend radius at 25°C

Peel strength: 4.45kgf

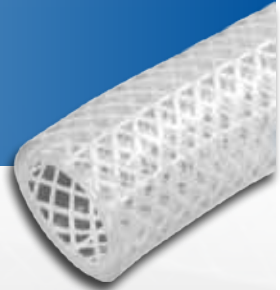
Expansion rate: 2.4%

Extension rate: -4.7%

SPECIFICATION	ID	OD	LENGTH	W.P.	B.P.	Bend Radius	Working Temperature
INCH	MM	MM	M	BAR	BAR	MM	
3/4	19	29	15	20	60	60	-30°C to +60°C

Please refer to pages 1272-1273 of our main 2017/18 Fluid Power Catalogue





Braided PVC Hose

Reinforced PVC Braided Hose, Type RPVC & HDPVC (to BS6066)

Manufactured from top quality crystal clear 'virgin' PVC compound, and ideal for factory airlines, fluid systems and many industrial applications. Reinforced with a high tensile quality polyester yarn, it offers high working pressures and extreme flexibility.

The hose is resistant to a wide range of chemicals (please consult our Business Development Team for further details).

Applications:

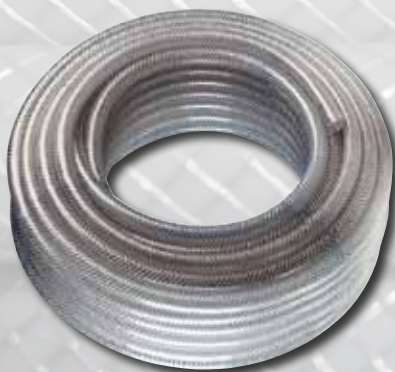
- Water supply and draining
- Transfer of various fluids and powder
- Supplying water, gas, oil, etc. in agriculture and industry
- Compressed air
- Other special purposes

Length*	15m	30m	100m
Size	From 3/16" ID to 2" ID		
Temperature	Min -20°C	Max +65°C	

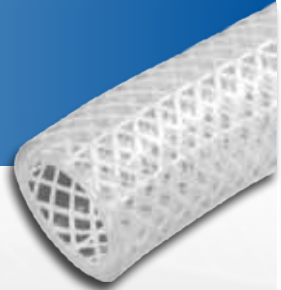
*Other lengths available on request.

Characteristics:

- Excellent abrasion resistance
- High resistance to alkalis and acids
- Silicone free
- Cadmium free
- Low toxicity
- Excellent transparency
- Manufactured to comply with BS6066 and ISO5774
- Produced from FDA approved materials
- Durable, anti-cold proof, non-inflated
- Highly flexible, lightweight and easy to handle
- No fissure phenomenon by ultraviolet rays and direct rays of the sun
- Little expansion or contraction



Please refer to pages 1228-1230 of our main 2017/18 Fluid Power Catalogue



Braided PVC Hose

Reinforced PVC Braided Hose,
Type RPVC & HDPVC (to BS6066)

Part Number	Nominal Dimension	ID x OD mm	Max. Working Pressure bar	Burst Pressure bar	Bend Radius mm	Weight kg/roll
RPVC18	1/8"	3 x 8	13	50	15	1.10
RPVC532	5/32"	4 x 9	13	50	17	1.80
RPVC316	3/16"	5 x 10	13	50	20	2.10
RPVC14	1/4"	6 x 11	15	65	25	2.30
RPVC516	5/16"	8 x 13	15	58	33	2.70
RPVC38	3/8"	10 x 15	12	45	40	3.20
RPVC12	1/2"	13 x 18	12	40	52	4.00
RPVC58	5/8"	16 x 21	10	35	64	5.00
RPVC34	3/4"	19 x 25	10	32	76	7.10
RPVC1	1"	25 x 31	9	28	100	8.90
RPVC114	1.1/4"	32 x 40	6	26	125	16.00
RPVC112	1.1/2"	38 x 46	5	20	152	19.00
RPVC2	2"	50 x 60	3	17	200	31.00
<hr/>						
HDPVC14	1/4"	6.5 x 11.5	16	65	30	2.50
HDPVC516	5/16"	8 x 13.5	16	58	35	3.30
HDPVC38	3/8"	10 x 16	15	45	45	3.50
HDPVC12	1/2"	12.5 x 18.5	12	40	52	5.00
HDPVC58	5/8"	16 x 23	10	35	74	7.80
HDPVC34	3/4"	20 x 26	10	32	80	7.30
HDPVC1	1"	25 x 33	10	28	110	12.80
HDPVC114	1.1/4"	32 x 41	6	26	130	18.90
HDPVC112	1.1/2"	40 x 49	6	20	165	23.00
HDPVC2	2"	50 x 62	3	17	220	38.00

Given working pressures are based on an ambient temperature of 20°C. Due to the natural properties of PVC, as the ambient temperature increases the pressures the hose will withstand decrease at an average rate of 15% per increase of 10°C and in similar increments thereafter.



Please refer to pages 1228-1230 of our main 2017/18 Fluid Power Catalogue





ANGLE SEAT VALVES

STAINLESS STEEL BODY

Construction:

Body: 316 stainless steel

Actuator: PA nylon or 316 stainless steel

Operation:

- Normally open
- Normally closed

Applications:

- Food and beverage plants
- Textile factories
- Pharmaceuticals manufacture
- Laundries
- Water and sewage plants
- Petrochemical plants
- Automotive sites

Features:

- Maintenance free actuator
- Long life piston rings
- Easy installation
- 360° positional actuator head
- Leak free after five million cycles
- Compact design
- Fast response
- Water hammer-free
- Cost effective against other materials



Working Pressure Range:
3-16 bar



Working Temperature:
Medium Temp: -10°C to +180°C
Environmental Temp:
PA nylon -10°C to +60°C
Stainless steel -10°C to +80°C



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Specification:

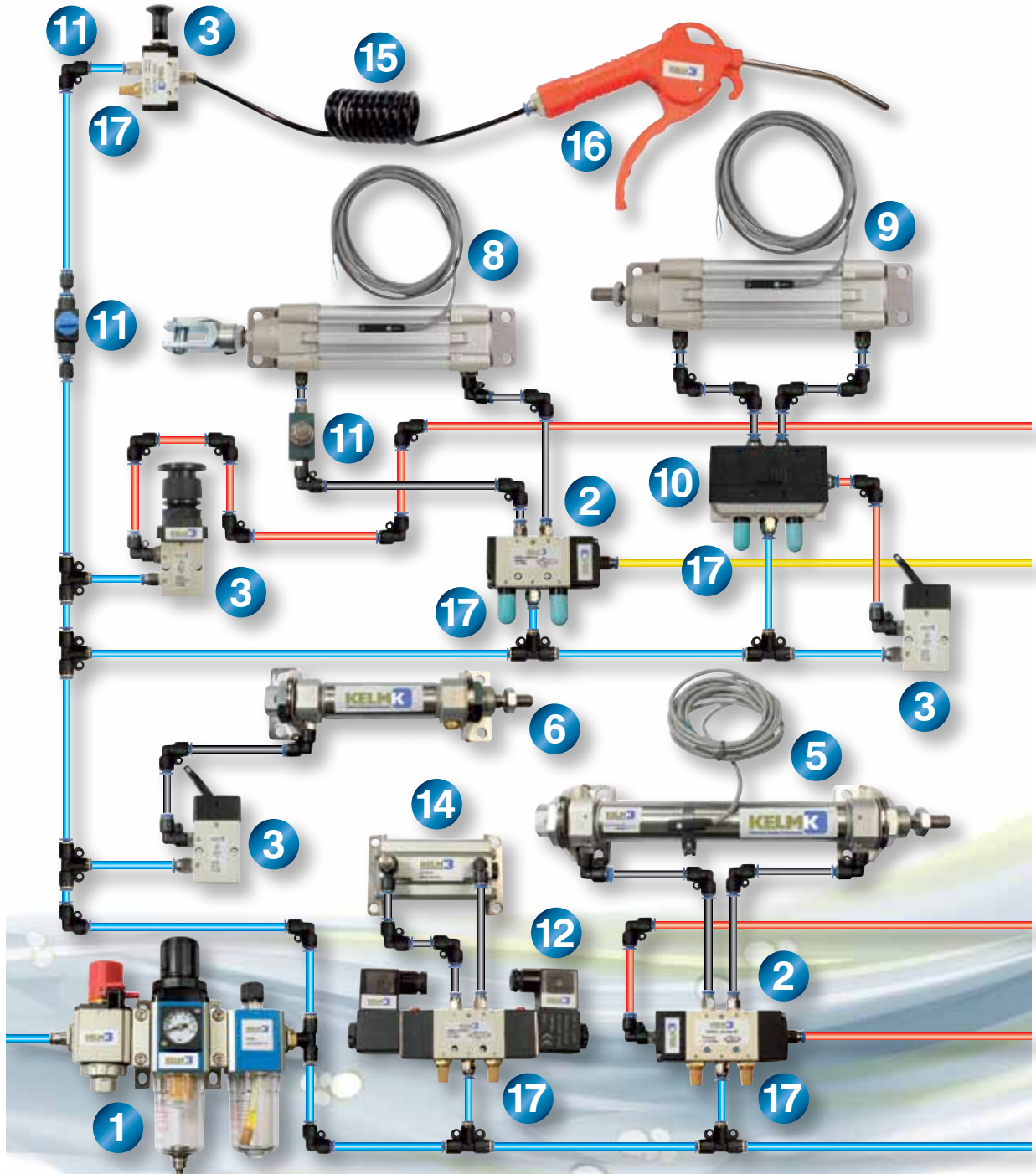
Model	KASV-SSP-38 KASV-SSSS-38	KASV-SSP-12 KASV-SSSS-12	KASV-SSP-34 KASV-SSSS-34	KASV-SSP-1 KASV-SSSS-1	KASV-SSP-114 KASV-SSSS-114	KASV-SSP-112 KASV-SSSS-112	KASV-SSP-2 KASV-SSSS-2	KASV-SSP-212 KASV-SSSS-212	KASV-SSP-3 KASV-SSSS-3
Fluid	Air, Water, Oil, Aggressive Media & Steam								
Kv Value	3.7	4.2	8	19	27.5	42	55	90	115
Port	G 3/8"	G 1/2"	G 3/4"	G 1"	G 1.1/4"	G 1.1/2"	G 2"	G 2.1/2"	G 3"
Nominal Diameter mm	13	13	20	25	32	40	50	65	80
Pressure Range	0-1.6Mpa (230psi)								
Minimum Pilot Pressure	0.3Mpa (45psi)	0.3Mpa (45psi)	0.35Mpa (50psi)	0.35Mpa (50psi)	0.35Mpa (50psi)	0.35Mpa (50psi)	0.35Mpa (50psi)	0.35Mpa (50psi)	0.35Mpa (50psi)
Medium Temperature	-10 to + 180°C								
Flow Direction	Flow A or Flow B								
Material of Valve Body	316L Stainless Steel								
Material of Valve Actuator	Option :SSP = PA				Option : SSSS = 316 Stainless Steel				
Seat Seal	PTFE								
Stem Seal	PTFE								
Piston Seal	PTFE								
Installation	Downstream / Upstream								
KASV-SSP Actuator Dimension mm	40/50	40/50	50	50/63	63	63	63/80	80	100
KASV-SSSS Actuator Dimension mm	50	50	50	50/63	63	63	63/90	90	90

Please refer to page 652 of our main 2017/18 Fluid Power Catalogue

Compressed Air System Guide



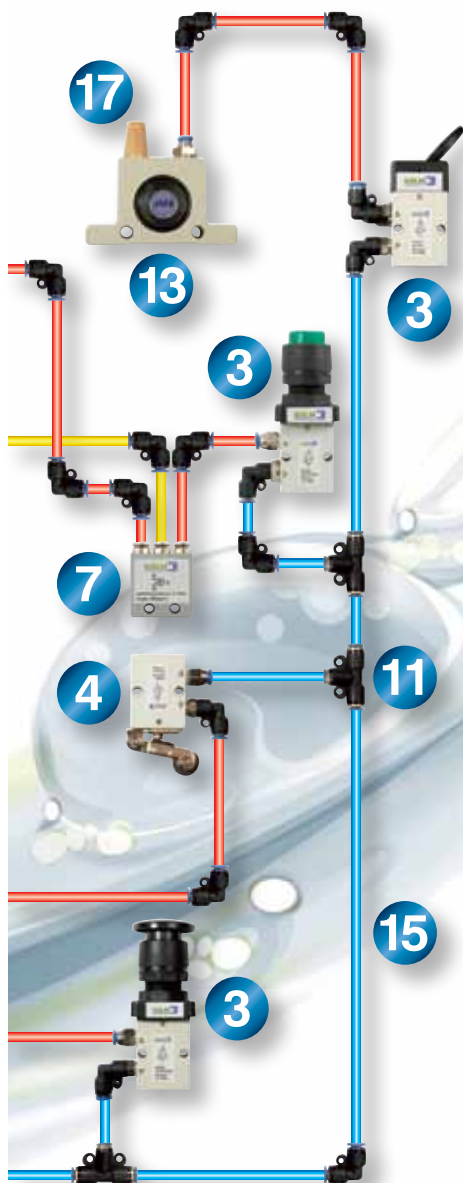
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POWER



Please refer to Section 5 of our main 2017/18 Fluid Power Catalogue



Compressed Air System Guide



1 Air Preparation	Pages
1/8" up to 1" – Filters, Regulators and Lubricators	524-534
2 Pilot Operated Valves	
1/8", 1/4", 3/8" and 1/2" - 3/2, 5/2 and 5/3 Valves	567-568
3 Manual Operated Valves	
M5, 1/8", 1/4", 3/8", 1/2" and 3/4" - 3/2, 4/2, 4/3, 5/2 and 5/3 Valves	562-566
4 Mechanical Operated Valves	
M5, 1/8" and 1/4" - 3/2	562-566
5 ISO 6432 Mini Cylinders	
Double Acting Magnetic, in Bore Sizes 8mm to 40mm	539-540
Mounting and Reed Switch to suit	540-541
6 ISO 6432 Mini Cylinders	
Single Acting Magnetic, in Bore Sizes 8mm to 40mm.	538
Mounting and Reed Switch to suit.	540-541
7 Logic and Specialist Valves	
Not, And, Yes, Oscillating, Impulse	579-581
8 Gen 1 ISO 15552 (Formerly ISO 6431/VDMA 24562) Double Acting Magnetic Cylinders, Chrome Plated Carbon Steel Piston Rod	
In Bore Sizes 32mm to 125mm	549-550
Profile barrel with concealed tie rods. Switches can be mounted flush with profile barrel. Mounting and Reed Switch to suit.	553-554
9 Gen 2 ISO 15552 (Formerly ISO 6431/VDMA 24562) Double Acting Magnetic Cylinders, Stainless Steel Piston Rod	
In Bore Sizes 32mm to 125mm	551-552
Profile barrel with concealed tie rods. Switches can be mounted flush with profile barrel. Mounting and Reed Switch to suit.	553-554
10 ISO Sub-based Mounted Valves, Solenoid & Pilot	
ISO 1, 2, 3 & 4	572-578
11 Plastic & Metal Push-in Fittings & Flow Restrictors	
4mm O.D. up to 12mm O.D.	583-617
12 Solenoid Operated Valves	
Single Solenoid and Double Solenoid Valves - M5, 1/8", 1/4", 3/8" and 1/2" - 3/2, 5/2 and 5/3 Valves	569-571
13 Pneumatic Vibrators	
1/4" and 3/8" - Ball and Turbine	582
14 Compact Magnetic Cylinder	
Double Acting Magnetic in Bore Sizes 12mm to 100mm	558-559
Mounting and Reed Switch to suit.	560
15 Spring Coils and Tubing	
Nylon and Polyurethane	637-646
16 Blow Guns	
Plastic	635
Metal	635
17 Silencers	
Plastic, Sintered Bronze and Stainless Steel	627-629

Please refer to Section 5 of our main 2017/18 Fluid Power Catalogue



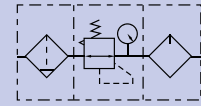
Air Preparation Filter/Regulator & Lubricator



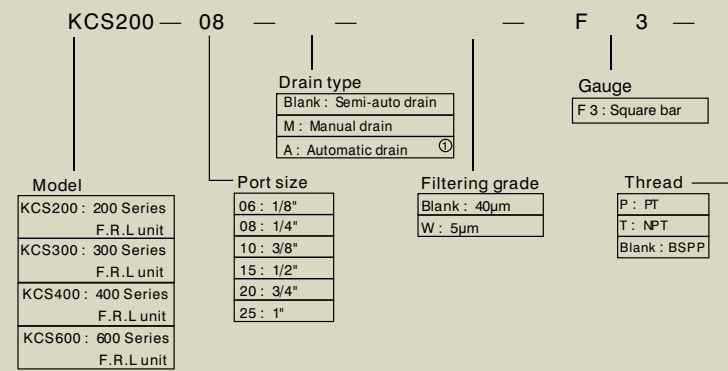
Specification

Model	KCS200-06	KCS200-08	KCS300-08	KCS300-10	KCS300-15	KCS400-10	KCS400-15	KCS600-20	KCS600-25	
Fluid	Air									
Port	1/8"	1/4"	1/4"	3/8"	1/2"	3/8"	1/2"	3/4"	1"	
Micron	40µm or 5µm									
Pressure Range	Semi-Auto & Automatic Drain: 0.15~0.9MPa (20~130psi)									
	Manual Drain: 0.05~0.9MPa (7~130psi)									
Proof Pressure	1.5 MPa (215psi)									
Temperature Range	-5 to +60°C									
Capacity of Drain Bowl	10CC			40CC			80CC		230CC	
Capacity of Oil Bowl	25CC		75CC			160CC		380CC		
Recommended Lubricant	ISO VG 32 or equivalent									
Weight	580g			1300g			2360g		5550g	
Constitute	Filter	KFS200-06	KFS200-08	KFS300-08	KFS300-10	KFS300-15	KFS400-10	KFS400-15	KFS600-20	KFS600-25
	Regulator	KRS200-06	KRS200-08	KRS300-08	KRS300-10	KRS300-15	KRS400-10	KRS400-15	KRS600-20	KRS600-25
	Lubricator	KLS200-06	KLS200-08	KLS300-08	KLS300-10	KLS300-15	KLS400-10	KLS400-15	KLS600-20	KLS600-25

Symbol



Ordering Code

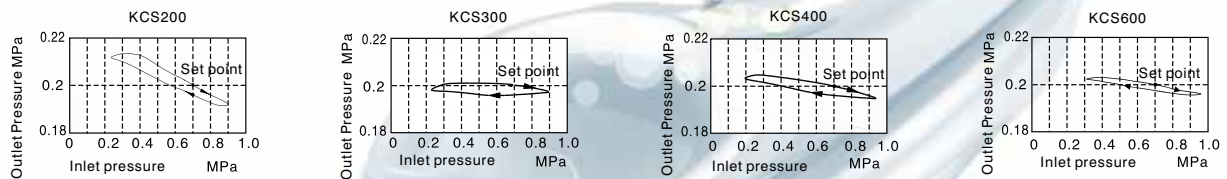


① The function of automatic drain is not available for KCS200 series

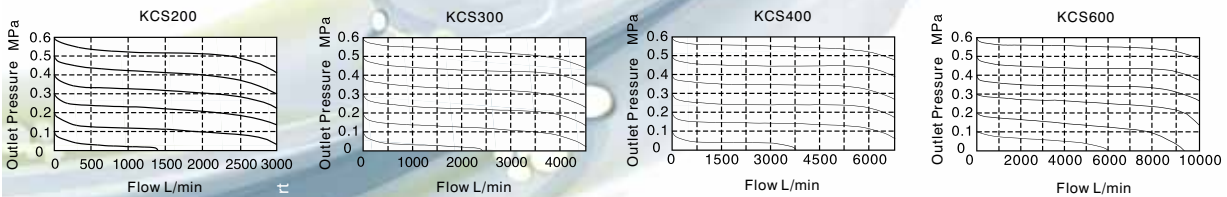
Product Features

- 1 Gap seal structure makes oil supply adjustment more reliable.
- 2 The adjustment ring for the oil supply will revolve once through 360° thus oil supply can be gauged by the position of the graduated ring.
- 3 Oil is fed into the system by venturi nozzle.
- 4 Installation is quick and reliable.
- 5 Pressure adjustment is precise.
- 6 Filtration 40 micron or 5 micron.
- 7 Three drain types are available manual drain, semi-auto drain and automatic drain.

Pressure Charts

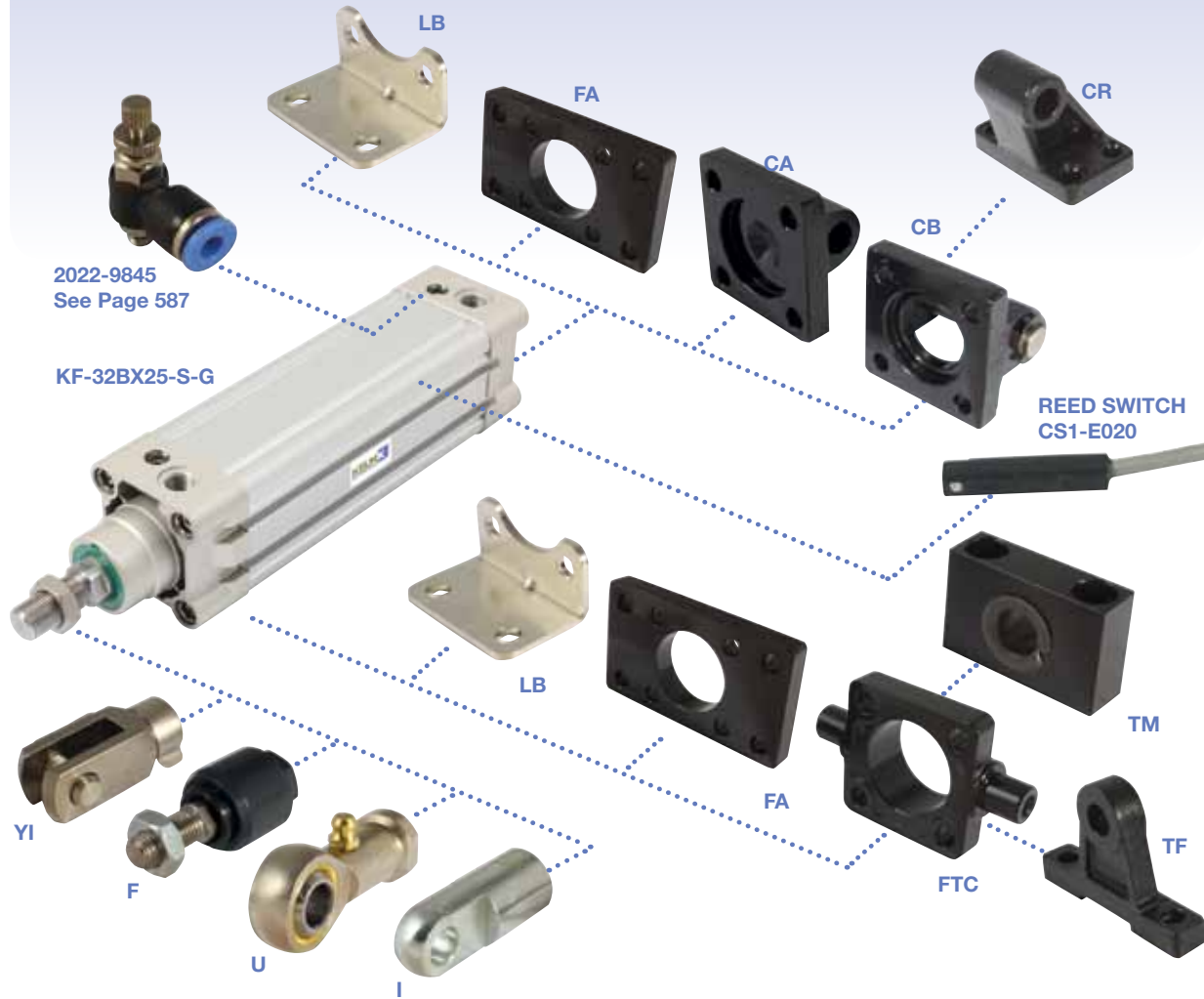


Flow Charts (Inlet Pressure 0.7MPa)



Please refer to pages 468-479 of our main 2017/18 Fluid Power Catalogue

Pneumatic Gen 1 & 2 ISO 15552 Cylinder Accessories & Mounting Selector



2022-9845
See Page 587

KF-32BX25-S-G

REED SWITCH
CS1-E020

Cylinders on pages 549-550
Mountings on pages 553-554
Reed Switches on page 554
Cylinder Guides on page 555

ISO 15552 Cylinders

FA - Front & Rear Flange Mounting	LB - Foot Mounting (Pair)
FTC - Front Trunnion Mounting	YI - Piston Rod Clevis
TF - Front Trunnion Clevis Mounting	I - Piston Rod Clevis
TM - Trunnion Support Mounting	F - Piston Rod Floating Joint
CA - Rear Eye Mounting	U - Piston Rod Universal Joint
CB - Rear Clevis Mounting	Reed Switches Two Wire N/O with LED
CR - Rear Bracket Mounting	

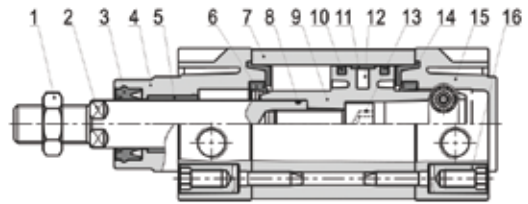
Please refer to pages 549-551 of our main 2017/18 Fluid Power Catalogue

Gen 1 & 2 ISO 15552 Cylinders

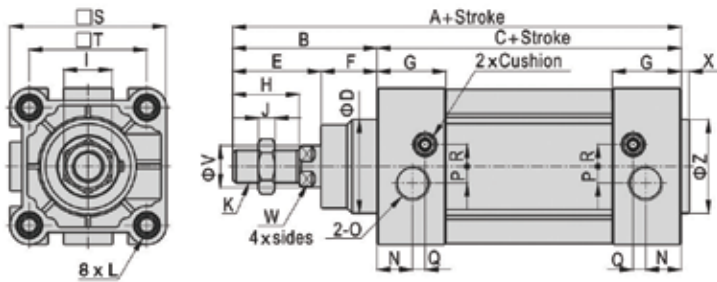
Technical Information

Inner structure and material of major parts

NO.	Item	Material
1	Rod nut	Stainless steel
2	Piston rod	Blank : Medium Carbon Steel B : 304 Stainless Steel
3	Front cover packing	TPU
4	Front cover	Aluminium alloy
5	Bushing	Wear resistant material
6	Cushiong o-ring	TPU
7	Barrel	Aluminium alloy
8	O-ring	NBR
9	Piston	Aluminium alloy
10	Piston seal	TPU
11	Wear ring	Wear resistant material
12	Magnet	Plastic / rubber (ø125)
13	Bolt	Carbon steel
14	Buffer gasket	TPU
15	Back cover	Aluminium alloy
16	Screw	Carbon steel / stainless steel



Dimensions



Bore size\Item	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Z
32	142	48	94	30	29	19	27.5	22	17	6	M10×1.25	M6	13.5	1/8"	5.8	6	6.3	46.5	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12×1.25	M6	17.5	1/4"	6	5.5	9	54	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16×1.5	M8	14	1/4"	8	5	10.5	64	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16×1.5	M8	17	3/8"	8	6	10.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20×1.5	M10	16.5	3/8"	8	8.5	12.5	93	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20×1.5	M10	19.5	1/2"	10	7	12	110	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27×2	M12	23	1/2"	11	12	11	134	110	32	27	4	60

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Please refer to pages 549-551 of our main 2017/18 Fluid Power Catalogue

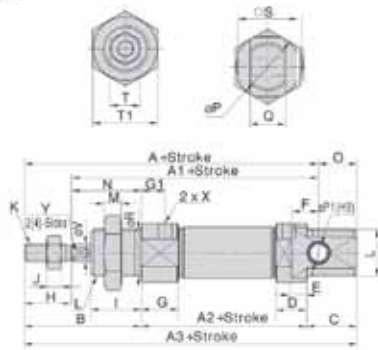


ISO 6432 Mini Cylinders

Technical Information

KA Series

CA type



Item Bore	A	A1	A2	A3	A4	A5	A6	B	C	C1	C2	D	E	F	G	G1	H	I
8	76	64	48	86	74	-	-	28	12	9.5	5	9.5	5	6	11.5	7	12	12
10	76	64	48	86	74	-	-	28	12	9.5	5	9.5	5	6	11.5	7	12	12
12	91	75	50	105	89	-	-	38	17	10.5	6	10.5	6	9	12.5	8	16	17
16	96	82	56	111	94	111	94	38	17	10.5	6	10.5	6	9	12.5	8	16	17
20	115	95	62	126	106	126	106	44	20	14.5	7.5	14.5	7.5	12	14.5	7.5	20	20
25	126	104	65	137	114.5	137	115	50	22	16	8	16	8	12	16	8	22	22
32	-	-	-	-	126	140	126	58	14	16.5	9	-	-	-	18.5	9	20	30
40	-	-	-	-	158	174	158	69	16	22	12	-	-	-	22	12	24	35

Item Bore	J	K	L	M	N	O	P	P1	Q	R	S	T	T1	X	V	W	Y
8	2.5	M6x07	M12x12.5	6	16	10	17	4	8	12	15	7	17	M5x0.8	4	-	-
10	2.5	M6x07	M12x12.5	6	16	10	17	4	8	12	15	7	17	M5x0.8	4	-	-
12	5	M6x10	M16x15	6	22	14	20	6	12	16	18	10	22	M5x0.8	6	-	5
16	5	M6x10	M16x15	6	22	13	22	6	12	16	20	10	22	M5x0.8	6	13.5	5
20	6	M8x12.5	M22x15	7	24	11	29	8	16	22	25	12	29	1/8"	8	18.5	6
25	6	M8x12.5	M22x15	7	26	11	33.5	8	16	22	30	17	29	1/8"	10	18.5	8
32	6	M10x12.5	M30x15	7	38	-	37.5	-	30	34.5	17	36	1/8"	12	10.5	10	-
40	7	M12x12.5	M38x15	8	45	-	46.5	-	38	42.5	17	46	1/4"	16	12.5	14	-

KB Series

ø16 - ø25

Bore/Item	A	A1	A2	A3	A4	A5	B	C	D
16	98	82	56	111	94	111	38	17	12.1
20	115	95	62	126	106	126	44	20	14.5
25	126	104	65	137	113.5	137	50	22	16

Bore/Item	D1	D2	D3	E	F	G	G1	G2
16	7	9	12.1	8	9	12.5	7.5	9.5
20	7.5	10.5	14.5	8	12	14.5	7.5	10.5
25	8	10.5	14.5	8	12	16	8	12

Bore/Item	H	I	J	K	L	M	O	N
16	16	17	5	M6x10	M16x15	6	13	20
20	20	20	6	M8x12.5	M22x15	7	11	24
25	22	22	6	M10x12.5	M22x15	7	11	26

Bore/Item	P	Q	R	S	T	T1	V	W	X
16	22	12	5	20	10	22	6	15.5	M5x0.8
20	29	16	6	25	12	29	8	16.5	1/8"
25	33.5	16	9	30	17	29	10	18.5	1/8"

ø32, ø40

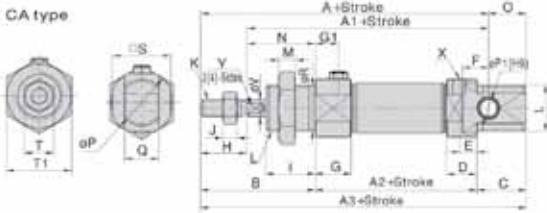
Bore/Item	A2	A4	A5	B	C	D	D1	D2	D3	D4
32	69	124	140	58	14	16.5	9	11.5	14.5	7.5
40	69	157.5	174	69	16	22	12	12	21.5	11.5

Bore/Item	D5	G	G1	G2	H	I	J	K
32	11	16.5	9	11.6	20	30	6	M10x12.5
40	14	22	12	12	24	35	7	M12x12.5

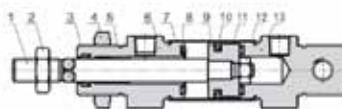
Bore/Item	L	M	N	P	S	T	T1	V	W	X
32	M30x15	7	38	37.5	34.5	17	36	12	10.5	1/8"
40	M38x15	8	45	46.5	42.5	17	46	16	12.5	1/4"

KC Series

CA type

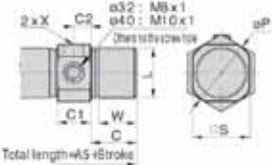


Inner Structure



No.	Item	Material
1	Ball	316
2	Ball Nut	Carbon Steel
3	Front Cover Facing	Alu
4	Front Cover Nut	Carbon Steel
5	Sealing	Wear Resistant Material
6	Front Cover	Aluminum Alloy
7	Spring	316
8	Spring	316
9	Pin	316
10	Pin	Aluminum Alloy
11	Pin	Alu
12	Wear Ring	Wear Resistant Material
13	Nut	Carbon Steel
14	Rear Cover	Aluminum Alloy

CM type



Bore/Item	A			A1		
	0-50	51-100	101-150	0-50	51-100	101-150
8	101	-	-	89	-	-
10	101	-	-	89	-	-
12	116	-	-	100	-	-
16	123	148	-	107	132	-
20	140	165	190	120	145	170
25	151	176	201	129	154	179
32	-	-	-	-	-	-
40	-	-	-	-	-	-

Bore/Item	A4			A5		
	0-50	51-100	101-150	0-50	51-100	101-150
8	99	-	-	-	-	-
10	99	-	-	-	-	-
12	113	-	-	-	-	-
16	119	144	-	136	161	-
20	131	158	181	151	176	201
25	138.5	164.5	189.5	162	187	212
32	150	175	200	166	190	216
40	163	208	233	199	224	249

Bore/Item	A2			A3		
	0-50	51-100	101-150	0-50	51-100	101-150
8	71	-	-	111	-	-
10	71	-	-	111	-	-
12	75	-	-	120	-	-
16	81	106	-	126	161	-
20	87	112	137	131	176	201
25	90	115	140	142	187	212
32	-	-	-	-	-	-
40	-	-	-	-	-	-

Bore/Item	A6			
	0-50	51-100	101-150	B C C1 C2
8	-	-	-	38 12 9.5 5
10	-	-	-	38 12 9.5 5
12	-	-	-	38 17 10.5 6
16	119	144	-	38 17 10.5 6
20	131	156	181	44 20 14.5 7.5
25	140	165	190	50 22 16 8
32	151	176	201	58 14 16.5 9
40	163	208	233	69 16 22 12

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Please refer to pages 538-540 of our main 2017/18 Fluid Power Catalogue

FLUID POWER

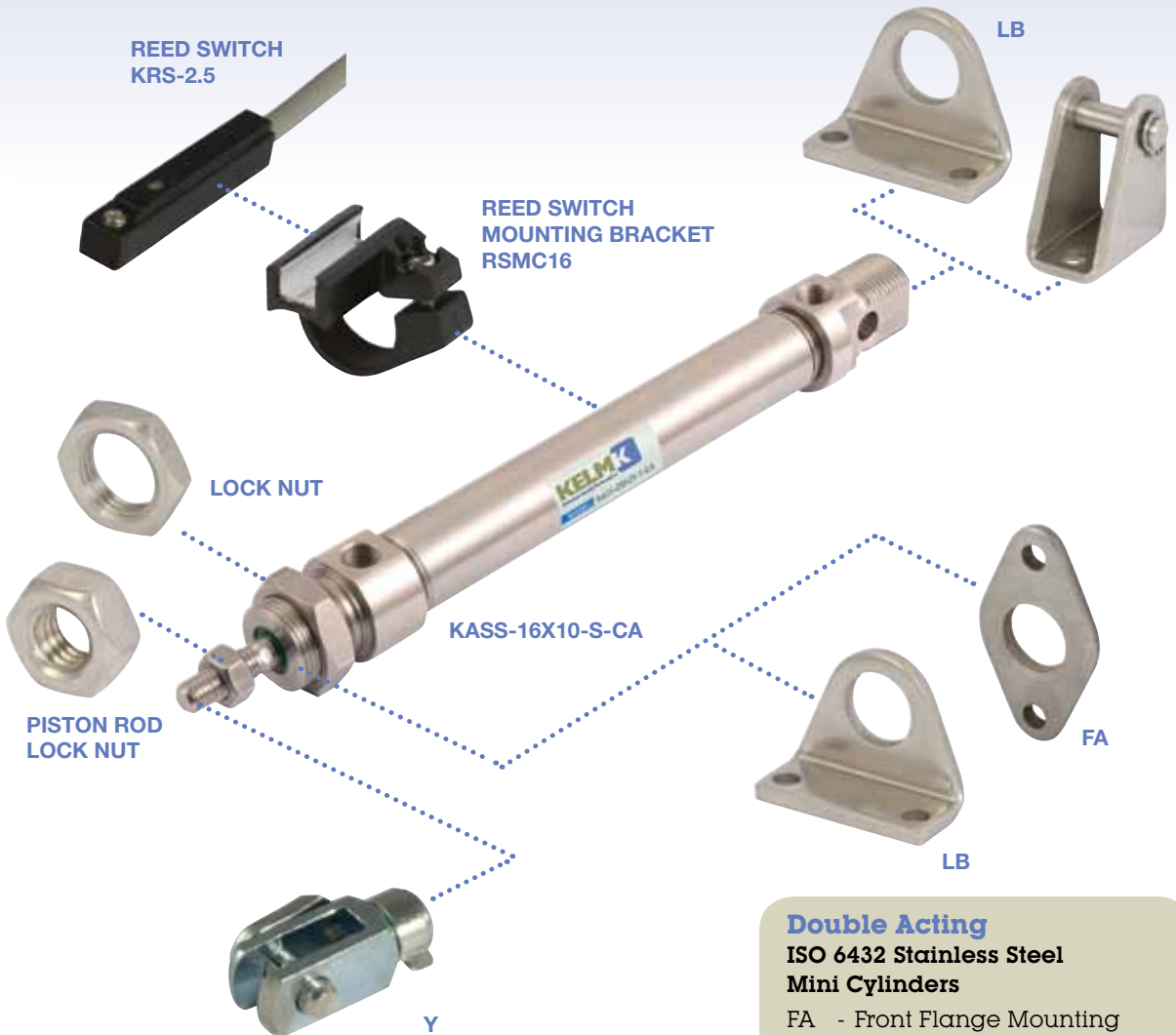


Pneumatic Stainless Steel ISO 6432 Cylinder

Accessories & Mounting Selector



FLUID
POWER



Double Acting ISO 6432 Stainless Steel Mini Cylinders

- FA - Front Flange Mounting
- SDB - Rear Hinge Mounting
- LB - Foot Mounting (Single)
- Y - Piston Rod Clevis
- Lock Nut
- Piston Rod Lock Nut
- Reed Switches Two Wire N/O with LED
- Reed Switch Bracket

- Cylinders** on page 545
- Mountings** on page 546
- Reed Switches** on page 546
- Cylinder Guides** on page 542

Please refer to page 545 of our main 2017/18 Fluid Power Catalogue

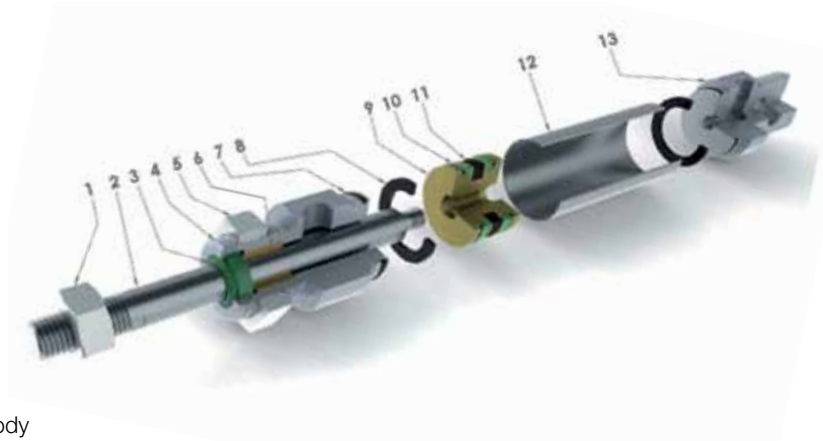


Stainless Steel ISO 6432 Mini Cylinders

Technical Information

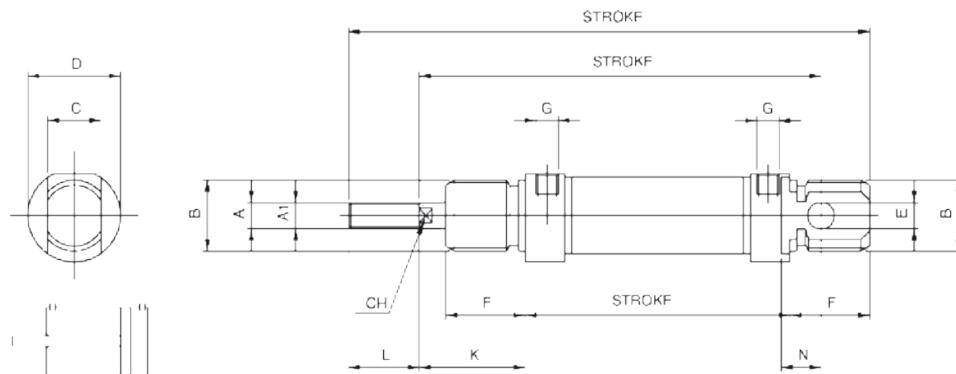
Component Parts & Materials

- 1 Steel AISI 304 Nut
- 2 Steel AISI 316 Piston Rod
- 3 Polyurethane Rod Seal
- 4 Steel AISI 304 Front Cover
- 5 Steel AISI 304 Nut
- 6 Sintered Bronze Bearing
- 7 NBR O-ring Seals
- 8 Neoprene Bumper
- 9 Brass Piston
- 10 Polyurethane Piston Seal
- 11 Plastroferrite Magnet
- 12 Steel AISI 304 Mini Cylinder Shape Body
- 13 Steel AISI 304 Back Cover



FLUID
POWER

Double Acting Magnetic



KASS...

Ø mm.	A	A'	B	C	D	E	F	G	K	L	M	N	P	R	CH
16	M6	6	M16x1.5	12	19	6	18	M5	22	16	109	9	53	82	5
20	M8	8	M22x1.5	16	27	8	20	1/8G	24	20	131	12	67	95	7
25	M10x1.25	10	M22x1.5	16	30	8	22	1/8G	28	22	140	12	68	104	9

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Please refer to page 545 of our main 2017/18 Fluid Power Catalogue



SOLENOID VALVES

New to the KELM™ range of pneumatics, the general purpose brass 2/2 solenoid valves again shows KELM's™ commitment to providing innovative and added value solutions to their customers.

Enhanced Quality Performance

Pilot Operated 2/2:

- Normally open
- Normally closed
- DIN connectors
- Valve timers
- DC and AC coils
- Available in sizes 3/8" to 2" BSPP
- Media: oil, air and water

Direct Acting 2/2:

- Normally closed
- DIN connectors
- DC and AC coils
- Available in sizes 1/8" to 3/8" BSPP
- Available in 0-10 bar and 0 to 35 bar
- High pressure option
- Media: oil, air and water



Pilot Operated 2/2 Solenoid Valve



Direct Acting 2/2 Solenoid Valve

Specification:

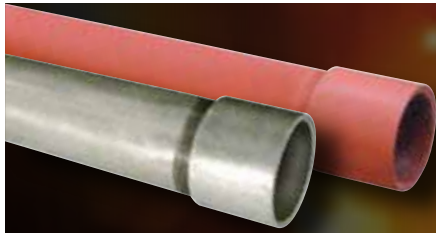
Model	K225-03	K225-04	K225-06	K225-08	K225-12	K225-14	K225-20
Fluid	Air, Water & Oil						
Operation	Pilot						
Type	Normally Open & Normally Closed						
Material of Seal	NBR						
Orifice mm	13	13	25	25	38	38	50
Flow Rate l/pm	55	63	100	160	370	400	540
Port Size	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
Fluid Viscosity	50 CST						
Working Pressure	0.05 to 0.98MPa (7-142psi)						
Max Pressure	0.15MPa						
Temperature	-5 to +80°C						



Valve Timer

Please refer to pages 648-650 of our main 2017/18 Fluid Power Catalogue





MASTERS OF MALLEABLE IRON

The most extensive choice of
MALLEABLE IRON to suit
any application and any budget

The choice of fittings is very much dependent on the application, the engineer's reference and budget. With a choice of five brands, large stocks and speedy delivery, there's no need to look any further.

Brand	Duty	Fitting Variations*	Beaded	Banded	Thread	BSI Kitemarked®	Up to 4"	Up to 5"	Up to 6"	WRAS approved	Max Temp	Max Working Pressure	Casting: ISO5922	Threads: ISO 7-1	Manufactured: according to EN 10142 and ISO 49	Design: ISO49, BS EN 10242w	Testing: BS 143 & 1256	Materials: ASTM A-197, ASTM A47
K-Line Connect	Heavy	19		Y	Male Taper, Female Taper	Y	Y			Y	300**	25**	Y	Y	Y	Y	Y	Y
FTM	Medium	31	Y		Male Taper, Female Parallel		Y				200	16	Y	Y				

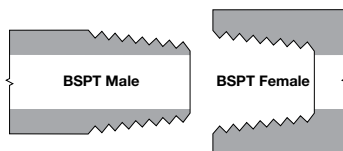
For full technical specification, please contact the manufacturer.

* Excludes brackets, nuts, flanges, plates and rings.

** Maximum temperature +120°C at maximum working pressure of 20 bar.

Banded Range

- BSPT Male, BSPT Female – EN10226-2
- British Kitemark
- Available in black or galvanised finish



Tapered Pipe Thread to EN10226-2 Standard

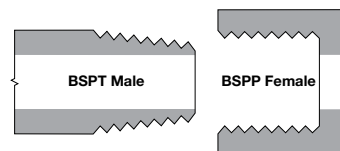
- 55° thread angle • Taper angle 1° 47'

Medium & Heavy Duty Barrel Nipples from FTM

- From 1/8" to 4" thread
- Lengths up to 300mm

Beaded Range

- Male Taper, Female Parallel – EN10226-1
- Available in black or galvanised finish
- Heavy duty ranges manufactured in accordance with EN 10142



Parallel Pipe Thread to EN10226-1 Standard

- 55° thread angle

BS EN 10241 from K-Line Connect

- From 1/8" to 4" thread
- Lengths up to 300mm


Please refer to pages 1160-1186 and 1218 of our main 2017/18 Fluid Power Catalogue

Industrial PU Ducting



This high performance ducting range is manufactured in Europe and is made from premium-grade ester polyurethane compound, reinforced with a copper coated spring steel helix.

Applications: transport hose for abrasive solids including: dust, powder, fibres, etc. Also suitable for extracting gaseous media such as oil vapours and welding fume.

 **Working Temperature:**
-40°C to +90°C
Intermittent to:
+125°C

- Excellent abrasion resistance
- Wire spiral reinforcement can be earthed
- Super flexible, low weight
- Small bend radius
- Resistant to oil, petrol and chemicals
- High tensile strength and tear resistance
- Good UV and ozone resistance

New Features:

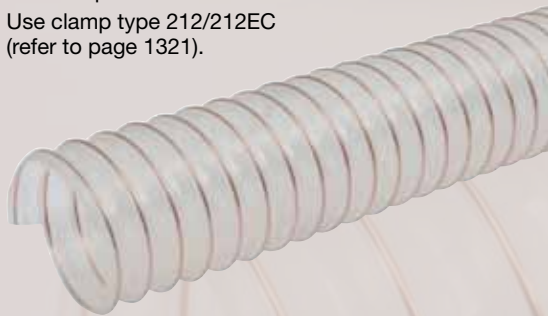
- New construction
- Higher vacuum rating
- Improved airflow

Lightweight High Performance Polyurethane

Wall Thickness: 0.4mm approx.

Supplied in compressed form (4:1) to save space and cost.

Use clamp type 212/212EC (refer to page 1321).



0.4mm Wall Thickness, 10 Metre

0391	ID mm	OD mm	bar	Vacuum	kg per 10m
PURLW-38	38	45	0.61	0.285	0.220
PURLW-50	50	58	0.49	0.259	0.280
PURLW-60	60	68	0.41	0.205	0.340
PURLW-65	65	73	0.38	0.183	0.360
PURLW-75	75	83	0.33	0.140	0.410
PURLW-80	80	88	0.31	0.130	0.440
PURLW-90	90	98	0.29	0.113	0.490
PURLW-100	100	108	0.25	0.085	0.510
PURLW-115	115	123	0.22	0.075	0.580
PURLW-120	120	128	0.21	0.075	0.610
PURLW-125	125	133	0.20	0.060	0.630
PURLW-130	130	138	0.19	0.060	0.660
PURLW-140	140	148	0.18	0.055	0.710
PURLW-150	150	158	0.17	0.055	0.760
PURLW-160	160	168	0.16	0.048	0.810
PURLW-180	180	188	0.14	0.038	0.900
PURLW-200	200	208	0.12	0.038	1.030
PURLW-225	225	233	0.11	0.027	1.160
PURLW-250	250	258	0.10	0.016	1.280

Medium Weight High Performance Polyurethane

Wall Thickness: 0.6mm approx.

Supplied in compressed form (4:1) to save space and cost.

Use clamp type 212/212EC (refer to page 1321).



0.6mm Wall Thickness, 10 Metre

0391	ID mm	OD mm	bar	Vacuum	kg per 10m
PURMW-38	38	45	1.060	0.320	0.250
PURMW-50	50	58	0.815	0.275	0.360
PURMW-60	60	68	0.680	0.258	0.430
PURMW-65	65	73	0.630	0.225	0.470
PURMW-75	75	83	0.545	0.156	0.530
PURMW-80	80	88	0.510	0.145	0.570
PURMW-90	90	98	0.455	0.135	0.630
PURMW-100	100	108	0.410	0.120	0.660
PURMW-115	115	123	0.355	0.085	0.760
PURMW-120	120	128	0.340	0.085	0.790
PURMW-125	125	133	0.330	0.078	0.820
PURMW-130	130	138	0.315	0.063	0.850
PURMW-140	140	148	0.295	0.063	0.920
PURMW-150	150	158	0.275	0.063	0.980
PURMW-160	160	168	0.255	0.058	1.040
PURMW-180	180	188	0.230	0.042	1.170
PURMW-200	200	208	0.205	0.042	1.540
PURMW-225	225	233	0.180	0.042	1.750
PURMW-250	250	258	0.165	0.032	1.900
PURMW-300	300	309	0.135	0.016	2.530
PURMW-350	350	359	0.115	0.015	2.950
PURMW-400	400	409	0.105	0.010	3.360

Available per metre, contact sales for more information.

Please refer to page 1307 of our main 2017/18 Fluid Power Catalogue

Wire Reinforced Suction Hose

Page Tech Sheet 20214

Wire Reinforced Suction Hose

Clear PVC reinforced with a tensile steel helix

Applications: Suitable for the suction and discharge of water, slurry, chemicals, sewage, granules and other waste materials; can also be used for suction and discharge of foodstuffs.

Pressures: Values given are based on the short term burst pressure of the hose at 20°C based on a 3:1 safety factor.

Note: Any increase in temperature above 20°C will result in a decline in working pressure values.

Chemical Resistance: Resistant to most oxidising and reducing agents and diluted acids and alkalis. For more detailed information please contact technical sales.

Approvals: Hose complies fully to EU No.10/201 on plastic materials and articles intended to come into contact with food.

Cold bend: -45°C

Vacuum: 711mm Hg = 94% at 20°C



FLUID
POWER



Temperature Range:
-5°C to +65°C



Clear with Blue Wire Spiral, 10 Metre Coils

5997	ID	mm	bar	mm
FX075-10	3/4"	3.4	6	80
FX100-10	1"	4	6	100
FX125-10	1.1/4"	4.8	5	130
FX150-10	1.1/2"	5.5	5	155
FX200-10	2"	7	5	200
FX250-10	2.1/2"	7	4	260
FX300-10	3"	8	4	320
FX400-10	4"	8	4	430

Clear with Blue Wire Spiral, 30 Metre Coils

5997	ID	mm	bar	mm
FX050-30	1/2"	3	6	50
FX075-30	3/4"	3.4	6	80
FX100-30	1"	4	6	100
FX125-30	1.1/4"	4.8	5	130
FX150-30	1.1/2"	5.5	5	155
FX200-30	2"	7	5	200
FX250-30	2.1/2"	7	4	260
FX300-30	3"	8	4	320
FX400-30	4"	8	4	430

Please refer to page 1284 of our main 2017/18 Fluid Power Catalogue



Nickel Plated Brass & Brass Hose Tails



Page Tech Sheet 20089

This technical data is applicable to the full range of hose tail fittings and air line fittings including tees, elbows, reducers and silencers, etc.

Threads:

Tapered in conformity with ISO 7.1, BS 21, DIN 2999.
Parallel in conformity with ISO 228 class A.
Metric in conformity with ISO R/262.

Media:

Compressed air, water, oils and fluids in general for the hydraulic and pneumatic fields.


NB:

Safe pressures and temperatures depend entirely on the tubes being used, for this reason the values must be determined in accordance with the tube features.




Male x Hose Tail, Brass

Male Thread, BSPT

1010		To Suit Hose I.D.
GT10/04K	1/8"	1/8"
GT10/05K	1/8"	3/16"
GT10/06K	1/8"	1/4"
GT10/08K	1/8"	5/16"
GT10/09K	1/8"	3/8"
GT13/04K	1/4"	1/8"
GT13/05K	1/4"	3/16"
GT13/06K	1/4"	1/4"
GT13/08K	1/4"	5/16"
GT13/09K	1/4"	3/8"
GT13/13K	1/4"	1/2"
GT17/06K	3/8"	1/4"
GT17/08K	3/8"	5/16"
GT17/09K	3/8"	3/8"
GT17/13K	3/8"	1/2"
GT17/16K	3/8"	5/8"
GT17/19K	3/8"	3/4"
GT21/06K	1/2"	1/4"
GT21/08K	1/2"	5/16"
GT21/09K	1/2"	3/8"
GT21/13K	1/2"	1/2"
GT21/16K	1/2"	5/8"
GT21/19K	1/2"	3/4"
GT21/25K	1/2"	1"
GT26/09K	3/4"	3/8"
GT26/13K	3/4"	1/2"
GT26/16K	3/4"	5/8"
GT26/19K	3/4"	3/4"
GT26/25K	3/4"	1"
GT33/13K	1"	1/2"
GT33/19K	1"	3/4"
GT33/25K	1"	1"
GT33/31K	1"	1.1/4"
GT42/25K	1.1/4"	1"
GT42/31K	1.1/4"	1.1/4"
GT48/38K	1.1/2"	1.1/2"
GT52/50K	2"	2"

Male x Hose Tail, Nickel Plated Brass

Male Thread, BSPT

1010		To Suit Hose I.D.
GT10/04KNP	1/8"	1/8"
GT10/05KNP	1/8"	3/16"
GT10/06KNP	1/8"	1/4"
GT10/08KNP	1/8"	5/16"
GT10/09KNP	1/8"	3/8"
GT13/04KNP	1/4"	1/8"
GT13/05KNP	1/4"	3/16"
GT13/06KNP	1/4"	1/4"
GT13/08KNP	1/4"	5/16"
GT13/09KNP	1/4"	3/8"
GT13/13KNP	1/4"	1/2"
GT17/06KNP	3/8"	1/4"
GT17/08KNP	3/8"	5/16"
GT17/09KNP	3/8"	3/8"
GT17/13KNP	3/8"	1/2"
GT17/16KNP	3/8"	5/8"
GT17/19KNP	3/8"	3/4"
GT21/06KNP	1/2"	1/4"
GT21/08KNP	1/2"	5/16"
GT21/09KNP	1/2"	3/8"
GT21/13KNP	1/2"	1/2"
GT21/16KNP	1/2"	5/8"
GT21/19KNP	1/2"	3/4"
GT21/25KNP	1/2"	1"
GT26/09KNP	3/4"	3/8"
GT26/13KNP	3/4"	1/2"
GT26/16KNP	3/4"	5/8"
GT26/19KNP	3/4"	3/4"
GT26/25KNP	3/4"	1"
GT33/13KNP	1"	1/2"
GT33/19KNP	1"	3/4"
GT33/25KNP	1"	1"
GT33/31KNP	1"	1.1/4"
GT42/25KNP	1.1/4"	1"
GT42/31KNP	1.1/4"	1.1/4"
GT48/38KNP	1.1/2"	1.1/2"
GT52/50KNP	2"	2"

Please refer to page 893 of our main 2017/18 Fluid Power Catalogue



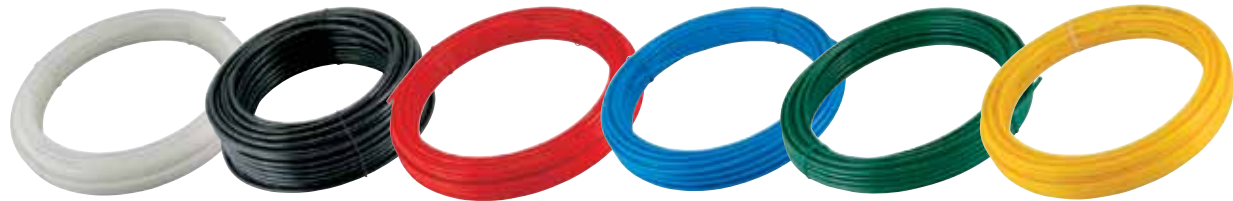
Nylon Tubing & Tube Cutters



Page Tech Sheet **3136**

Metric Flexible Nylon Tubing, Type NT (to BS5409)

Tube is not suitable for use with water or in high humidity environments.



FLUID POWER

Temperature Range:
-10°C to +80°C

- U.V. Stable
- Silicone Free

- Abrasion Resistant
- Manufactured from quality grade nylon granules.
Other colours and lengths available on request

The properties of this tube make it ideal for use in pneumatic control systems. (Ideally suited for use with push-in fittings).

30 Metre Coils

Part No.	OD (mm)	ID (mm)	Colour	PSI
NTM04/030	4	3	Natural	300
NTM04/025	4	2.5	Natural	400
NTM04/025N	4	2.5	Black	400
NTM04/025B	4	2.5	Blue	400
NTM04/025G	4	2.5	Green	400
NTM04/025R	4	2.5	Red	400
NTM04/025Y	4	2.5	Yellow	400
NTM05/030	5	3	Natural	400
NTM05/030N	5	3	Black	400
NTM05/030B	5	3	Blue	400
NTM05/030G	5	3	Green	400
NTM05/030R	5	3	Red	400
NTM05/030Y	5	3	Yellow	400
NTM05/033	5	3.3	Natural	300
NTM06/040	6	4	Natural	350
NTM06/040B	6	4	Black	350
NTM06/040G	6	4	Blue	350
NTM06/040R	6	4	Green	350
NTM06/040Y	6	4	Red	350
NTM06/040Y	6	4	Yellow	350
NTM06/045	6	4.5	Natural	300
NTM08/060	8	6	Natural	350
NTM08/060N	8	6	Black	350
NTM08/060B	8	6	Blue	350
NTM08/060G	8	6	Green	350
NTM08/060R	8	6	Red	350
NTM08/060Y	8	6	Yellow	350
NTM08/055	8	5.5	Natural	350

30 Metre Coils

Part No.	OD (mm)	ID (mm)	Colour	PSI
NTM08/055N	8	5.5	Black	350
NTM10/070	10	7	Natural	300
NTM10/070N	10	7	Black	300
NTM10/070B	10	7	Blue	300
NTM10/070G	10	7	Green	300
NTM10/070R	10	7	Red	300
NTM10/070Y	10	7	Yellow	300
NTM10/080	10	8	Natural	220
NTM10/080N	10	8	Black	220
NTM10/080B	10	8	Blue	220
NTM10/080G	10	8	Green	220
NTM10/080R	10	8	Red	220
NTM10/080Y	10	8	Yellow	220
NTM12/090	12	9	Natural	250
NTM12/090B	12	9	Black	250
NTM12/090G	12	9	Blue	250
NTM12/090R	12	9	Green	250
NTM12/090Y	12	9	Red	250
NTM12/100	12	10	Natural	200
NTM12/100N	12	10	Black	200
NTM12/100R	12	10	Red	200
NTM14/110	14	11	Natural	250
NTM14/110N	14	11	Black	250
NTM15/120	15	12	Natural	200
NTM16/130	16	13	Natural	200
NTM18/140	18	14	Natural	200
NTM22/170	22	17	Natural	180

100 Metre Coils

Part No.	OD (mm)	ID (mm)	Colour	PSI
NTM04/025-100	4	2.5	Natural	400
NTM05/030-100	5	3	Natural	400
NTM06/040-100	6	4	Natural	350
NTM06/040N-100	6	4	Black	350
NTM06/040B-100	6	4	Blue	350
NTM06/040G-100	6	4	Green	350
NTM06/040R-100	6	4	Red	350
NTM06/040Y-100	6	4	Yellow	350
NTM08/060-100	8	6	Natural	350
NTM08/060N-100	8	6	Black	350
NTM08/060B-100	8	6	Blue	350
NTM10/080-100	10	8	Natural	220
NTM10/080N-100	10	8	Black	220
NTM10/080B-100	10	8	Blue	220

500 Metre Drums

Part No.	OD (mm)	ID (mm)	Colour	PSI
NTM06/040-500	6	4	Natural	350
NTM06/040-500B	6	4	Blue	350
NTM08/060-500	8	6	Natural	350

Nylon & Polyurethane Tube Cutter

3mm-16mm

5010

KTC-1



Blue



Nylon Tubing

This range of nylon products is produced in a state-of-the-art manufacturing facility. All products undergo rigorous testing to ensure the optimum life can be achieved from the end product. Tube can be produced to your special requirements with optional length, size, colour and branding available (minimum quantities and lead times will apply). Please contact our Business Development Team for further information.

Please refer to page 642 of our main 2017/18 Fluid Power Catalogue



Combining precision technology with optimal efficiency...



Maximum Working Pressure: 8 bar



Working Temperature: -5°C to +35°C

Direct Drive Compressor

Tech Sheet 10438

This range of **SYNAIRGY Oil Lubricated Air Compressors** are built with performance and reliability in mind. They combine a robust, strong design with the advantages of a compact construction and lightweight design.

Its easy to use operation, along with excellent safety characteristics and low noise levels make it perfect for all typical applications including: paint spraying, inflating, blowing, nailing, air tools and other applications where compressed air is required.

All units are fitted with a safety valve and pressure regulator, with gauges for controlled outlet air pressure.

Belt Driven Compressor

Tech Sheet 10439

The **SYNAIRGY Belt Driven Air Compressor** is built with performance and reliability in mind, with the air capacity and power to drive many of the most commonly used air compressor tools. Its easy to use operation, along with excellent safety characteristics and low noise levels make it perfect for all typical applications and will satisfy the air requirements of most garages, small factories, workshops and farms where compressed air is required. All units are fitted with a safety valve and pressure regulator, with gauges for controlled outlet air pressure.



Lubricated

0393	CFM	LPM	bar	HP	Litres	⚡
SACDD-24	7	198	8	2	24	240/50
SACDD-50	7	198	8	2	50	240/50

Lubricated

0393	CFM	LPM	bar	HP	Litres	⚡
SACBD-100	7	198	8	3	100	240/50

www.synairgy-eu.com

Please refer to page 1597 of our main 2017/18 Fluid Power Catalogue



hyfitt 

Hydraulic Pressure Gauges

This quality range of hydraulic glycerine-filled pressure gauges have been manufactured to the highest specification using quality materials.

The range includes stainless steel cased to complete stainless steel units with 40mm, 63mm and 100mm dials. Pressures range from 0-1 bar to 0-600 bar, with rear and bottom connections of 1/4" and 1/2" in BSPP and BSPT.

Hy-fitt gauges are tried, tested and used extensively throughout the world's manufacturing facilities and in the mobile plant industry.

For your peace of mind all gauges can be supplied with a calibration certificate at a nominal charge.

Applications:

- Hydraulics
- Construction
- Agriculture
- Mining
- OEM machine building
- Offshore
- Marine
- High pressure water applications
- Service kits



Please refer to page 296 of our main 2017/18 Fluid Power Catalogue



Pressure Gauges

Air-Pro dry gauges are a market leading range offering a reliable solution for pressure monitoring within pneumatic systems.

Used extensively throughout the world's manufacturing facilities, all units have been 100% pressure tested and inspected, so quality can be guaranteed.

Applications:

- Construction • Chemical • Agriculture • Offshore • Mining
- Automotive • OEM machine • Rail building • Industrial

Please refer to page 499 of our main 2017/18 Fluid Power Catalogue





OPTIBELT
POWER TRANSMISSION

EXPECT MORE

...FROM YOUR BELT DRIVES



BELT DRIVES
(VALUE RANGE)

25,000 Hours

- Design life of our V-belts.
That's \approx 6 years! (14hr/6 day)

Maintenance-Free

- Our **optibelt RED POWER 3** belts

Optibelt (UK) • 01925 415777 • info@optibelt.co.uk • www.optibelt.com

Optibelt have been manufacturing transmission belts in Germany since 1948 and today are market leaders in belt technology. Our belts are made in our own European factories using in-house developed processes and advanced materials. The result is a range of belts which outperform other brands and deliver substantial cost savings and productivity improvements to our customers.



OPTIBELT V-BELT PRODUCT RANGE

25,000 hours design life – That's ≈ 3 years running 24/7 or over 6 years running 12h/6d/wk.

Optibelt V-belts are designed to outlast other brands. While 25,000 hours is a theoretical value assuming correct fitting and running conditions, it is a realistic and useful benchmark. Belt life significantly less than this indicates that improvements can be achieved.

Contact **Optibelt** via your local **IADA** branch for expert advice.



optibelt SK – Premium quality, standard wrapped construction

High quality materials and advanced production processes result in a high performance, low stretch belt with extremely consistent properties allowing predictable and extended maintenance schedules with outstanding reliability and efficiency.

- **S=C Plus** precise length tolerance exceeds ISO set requirements so belts can be combined in sets without matching.



optibelt RED POWER 3 – Maintenance-free, Extra High Power

Special polyester tension cords combined with layers of transversely aligned fibre filled rubber give our **optibelt Red Power 3** belts truly maintenance-free properties. No re-tensioning is required throughout the life of the belt.

- **S=C Plus** precise length tolerance as with **optibelt SK**
- Up to 50% more power than standard **optibelt SK** belts – higher power or fewer belts.
- Direct, drop-in replacement for standard belts – no disadvantages or limitations.



optibelt SUPER X-POWER – High performance Cogged Raw Edge belt

Our moulded cogged raw edge belts can transmit extremely high powers and are suitable for use with small pulley diameters on account of their flexible, cogged design making them particularly well suited for applications where space is limited.

- **M=S** process means that every belt is individually ground to precise length tolerance for use in sets without matching and smooth running.
- Extremely low stretch / Low maintenance



optibelt VB – Premium quality, wrapped classical section V-belt

Classical profile V-belts to ISO 4184 / DIN 2215

- **S=C Plus** precise length tolerance exceeds ISO set requirements so belts can be combined in sets without matching.

	Temperature Range °C	Static Conductive to ISO 1813	Oil Resistance	Max. Belt Speed m/s	Profiles
optibelt SK	-40 / +70	Yes	Good	≥ 42	SPZ, SPA, SPB, SPC
optibelt RED POWER 3	-30 / +100	Yes	Good	≥ 55	SPZ, SPA, SPB, SPC
optibelt SUPER X-POWER	-30 / +90	Yes	Good	≥ 55	XPZ, XPA, XPB, XPC
optibelt VB	-40 / +70	Yes	Limited	≥ 30	5, 6, 8, Z, A, B, 20, C, 25, D, E

Our standard range of V-belts listed above are generally available from UK stock.

Optibelt also manufacture a wide range of belts with special and high performance constructions for applications which require properties beyond those offered by standard belts.



V-BELT TECHNICAL DATA

Power ratings

SPZ / XPZ

	Speed (rpm)	Datum diameter of small pulley (mm)						
		56	63	85	100	125	160	200
SK	700	-	0.5	1	1.33	1.88	2.63	3.47
	950	-	0.63	1.29	1.74	2.46	3.45	4.54
	1450	-	0.87	1.84	2.49	3.54	4.96	6.51
	2850	-	1.38	3.13	4.27	6.07	8.34	10.55
RP3	700	-	0.72	1.37	1.8	2.5	3.47	4.56
	950	-	0.92	1.78	2.35	3.29	4.56	5.99
	1450	-	1.3	2.56	3.4	4.75	6.6	8.63
	2850	-	2.16	4.44	5.93	8.28	11.29	14.26
S X-P	700	0.72	0.92	1.53	2.26	2.61	3.51	4.53
	950	0.92	1.18	1.98	2.94	3.39	4.58	5.9
	1450	1.27	1.65	2.83	4.22	4.87	6.58	8.44
	2850	2.07	2.76	4.86	7.3	8.42	11.26	14.17

SPA / XPA

	Speed (rpm)	Datum diameter of small pulley (mm)						
		71	90	100	125	160	200	250
SK	700	-	1.17	1.55	2.47	3.73	5.14	6.85
	950	-	1.49	1.98	3.2	4.86	6.7	8.92
	1450	-	2.04	2.76	4.53	6.92	9.52	12.58
	2850	-	3.14	4.4	7.43	11.25	14.97	18.43
RP3	700	-	1.61	2.08	3.24	4.84	6.64	8.82
	950	-	2.06	2.69	4.22	6.34	8.69	11.56
	1450	-	2.88	3.79	6.05	9.13	12.52	16.57
	2850	-	4.69	6.35	10.36	15.6	21.02	26.82
S X-P	700	1.12	1.78	2.48	3.63	5.22	7	9.18
	950	1.43	2.31	3.24	4.77	6.87	9.22	12.08
	1450	2.01	3.31	4.68	6.93	10	13.39	17.46
	2850	3.31	5.7	8.2	12.21	17.49	22.98	28.88

SPB / XPB

	Speed (rpm)	Datum diameter of small pulley (mm)						
		112	140	180	224	280	315	400
SK	700	-	3.46	5.77	8.26	11.33	13.21	17.59
	950	-	4.42	7.46	10.69	14.66	17.04	22.5
	1450	-	6.09	10.44	14.96	20.3	23.36	29.83
	2850	-	9.07	15.71	21.57	26.4	27.68	
RP3	700	-	4.82	7.8	11.02	15.02	17.48	23.33
	950	-	6.23	10.18	14.41	19.66	22.86	30.38
	1450	-	8.8	14.54	20.65	28.09	32.54	42.65
	2850	-	14.53	24.35	34.12	44.76	50.24	
S X-P	700	3.32	5.36	8.26	11.4	15.34	17.77	23.56
	950	4.38	7.12	10.98	15.16	20.36	23.54	31.02
	1450	6.41	10.49	16.18	22.25	29.65	34.07	44.02
	2850	11.36	18.67	28.4	37.94	47.97	52.8	

SPC / XPC

	Speed (rpm)	Datum diameter of small pulley (mm)						
		112	140	180	224	280	315	400
SK	700	-	10.46	16.13	19.58	27.68	36.64	47.28
	950	-	13.27	20.58	24.97	35.05	45.7	57.27
	1450	-	17.79	27.64	33.3	45.25	55.51	61.37
	2850	-	20.63	29.58	31.96	Belt speed \geq 42m/s		
RP3	700	-	13.31	20.38	24.71	15.02	46.63	61.01
	950	-	17.08	26.33	31.97	19.66	59.86	77.33
	1450	-	23.68	36.76	44.57	28.09	80.51	99.23
	2850	-	34.84	53.33	62.76	Belt speed \geq 42m/s		
S X-P	700	10.79	15.29	20.94	24.43	32.74	42.18	53.82
	950	14.4	20.39	27.86	32.42	43.16	55.01	68.91
	1450	21.27	29.98	40.6	46.91	61.06	75.11	88.17
	2850	37.09	50.58	64.43	70.83	Belt speed \geq 42m/s		

BELT DRIVES
(VALUE RANGE)

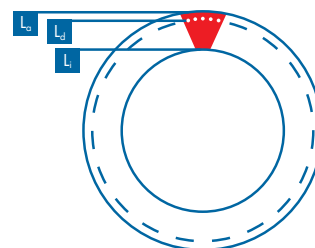
Note: Power ratings are for rough guidance only. Service and other design factors should be taken into consideration. Consult Optibelt technical catalogue or Drive design software for more info.

SERVICE FACTORS

Type of machine driver >	„Soft start“ motors with starting torque \leq 1.8* nominal. Engines with > 4 cylinders			Motors with hard / high torque start > 1.8* nominal torque. Engines with <4 cylinders.		
Type of Application	Daily Operating Hours			Daily Operating Hours		
	< 10	10-16	> 16	< 10	10-16	> 16
Light Duty	1.1	1.1	1.2	1.1	1.2	1.3
Medium Duty	1.1	1.2	1.3	1.2	1.3	1.4
Heavy Duty	1.2	1.3	1.4	1.4	1.5	1.6
Very Heavy Duty	1.3	1.4	1.5	1.5	1.6	1.8

BELT LENGTH CONVERSION FACTORS

Profile	$L_d \rightarrow L_i$	$L_i \rightarrow L_d$	Profile	$L_d \rightarrow L_i$	$L_i \rightarrow L_d$
SPZ / XPZ	- 38	+ 13	Z / ZX	- 22	+ 16
SPA / XPA	- 45	+ 18	A / AX	- 30	+ 20
SPB / XPB	- 60	+ 22	B / BX	- 40	+ 29
SPC / XPC	- 83	+ 30	C / CX	- 58	+ 30



OPTIBELT WEDGE BELTS

optibelt RED POWER 3

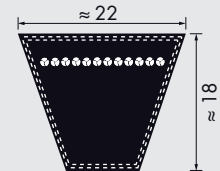
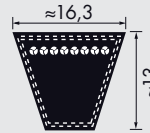
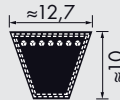
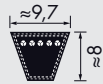


Maintenance Free
Up to 50% more power
Up to 97% efficient
Precision length tolerance
Available from
SPZ 1202 – SPC 10000

optibelt SK



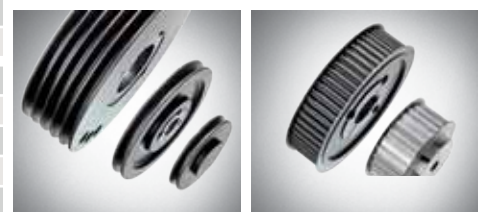
Premium quality as standard
Precise length tolerance
Up to 97% efficient



BELT
DRIVES

SPZ			SPA			SPB		SPC
Min. Rec. Pulley Ø = 63 mm			Min. Rec. Pulley Ø = 90 mm			Min. Rec. Pulley Ø = 140 mm		Min. Rec. Pulley Ø = 224 mm
487	1112	1837	732	1482	2360	1250	4250	2000
512	1120	1850	757	1500	2382	1320	4300	2120
562	1137	1862	782	1507	2432	1400	4500	2240
587	1162	1887	800	1532	2482	1450	4560	2360
612	1180	1900	807	1557	2500	1500	4750	2500
630	1187	1937	832	1582	2532	1600	4820	2650
637	1202	1987	850	1600	2582	1700	5000	2800
662	1212	2000	857	1607	2607	1750	5070	3000
670	1237	2037	882	1632	2632	1800	5300	3150
687	1250	2120	900	1657	2650	1850	5600	3350
710	1262	2137	907	1682	2682	1900	6000	3550
722	1287	2150	932	1700	2732	2000	6300	3750
737	1312	2187	950	1707	2782	2020	6700	4000
750	1320	2240	957	1732	2800	2060	7100	4250
762	1337	2287	982	1757	2832	2120	7500	4500
772	1347	2360	1000	1782	2847	2150	8000	4750
787	1362	2500	1007	1800	2882	2180		5000
800	1387	2540	1032	1807	2932	2240		5300
812	1400	2650	1060	1832	2982	2280		5600
825	1412	2690	1082	1857	3000	2360		6000
837	1437	2800	1107	1882	3032	2391		6300
850	1462	2840	1120	1900	3082	2400		6700
862	1487	3000	1132	1907	3150	2500		7100
875	1500	3150	1157	1932	3182	2650		7500
887	1512	3350	1180	1957	3282	2680		8000
900	1537	3550	1207	1982	3350	2800		8500
912	1562		1232	2000	3382	2840		9000
925	1587		1250	2032	3550	2850		9500
937	1600		1257	2057	3750	2900		10000
950	1612		1272	2082	4000	3000		10600
962	1637		1282	2120	4250	3150		11200
987	1650		1307	2132	4500	3250		12500
1000	1662		1320	2182		3350		
1012	1687		1332	2207		3450		
1024	1700		1357	2232		3550		
1037	1737		1382	2240		3650		
1047	1762		1400	2282		3750		
1060	1787		1407	2300		3800		
1077	1800		1432	2307		4000		
1087	1812		1457	2332		4050		

OPTIBELT PULLEYS AVAILABLE TO SUIT

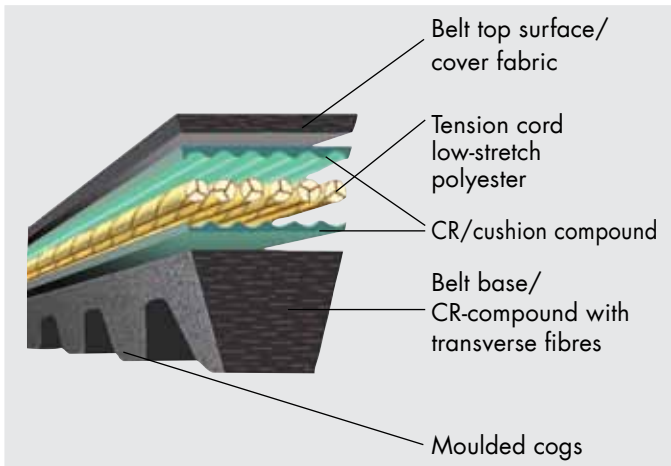


Intermediate and longer lengths available
Also available in American standard 3V/5V/8V

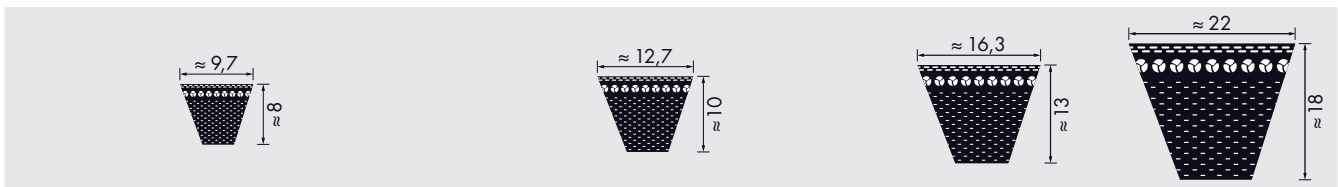


OPTIBELT RAW EDGE COGGED BELTS

optibelt SUPER X-POWER M=S



Ideal for very high power drives
 Cogging allows very small pulley diameters
 Individually ground flanks for precise length tolerance and smooth running.
 Very low stretch / low maintenance
 High temperature to 90°
 Specify SUPER E-POWER for extreme temperatures (-50°C to +120°C)



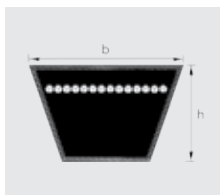
BELT DRIVES
(VALUE RANGE)

XPZ			XPA			XPB	XPC
Min. Rec. Pulley Ø = 56 mm			Min. Rec. Pulley Ø = 71 mm			Min. Rec. Pulley Ø = 112 mm	Min. Rec. Pulley Ø = 180 mm
587	1012	1562	707	1272	1882	1250	2000
612	1037	1587	732	1282	1900	1320	2120
630	1060	1600	757	1307	1932	1400	2240
637	1077	1612	782	1320	1950	1500	2360
662	1087	1662	800	1332	1982	1600	2500
670	1112	1700	807	1357	2000	1700	2650
687	1120	1750	832	1382	2120	1750	2800
710	1137	1762	850	1400	2240	1800	3000
730	1162	1800	857	1432	2360	1850	3150
737	1180	1850	882	1450	2500	1900	3350
750	1187	1900	900	1457	2650	2000	3550
762	1202	1950	907	1482	2800	2020	
772	1212	2000	932	1500	3000	2120	
787	1237	2120	950	1507	3150	2150	
800	1250	2150	957	1532	3350	2240	
812	1262	2240	982	1557	3550	2280	
825	1287	2360	1000	1582		2360	
837	1312	2500	1007	1600		2400	
850	1320	2540	1030	1607		2500	
862	1337	2650	1060	1632		2650	
875	1362	2690	1082	1650		2680	
887	1387	2800	1107	1682		2800	
900	1400	2840	1120	1700		2840	
912	1412	3000	1132	1732		3000	
925	1437	3150	1157	1750		3150	
937	1462	3350	1180	1757		3350	
950	1487	3550	1207	1782		3550	
962	1500		1232	1800			
987	1512		1250	1832			
1000	1537		1257	1850			

Also available in American standard 3VX, 5VX
 optibelt SUPER TX Classical profiles available ZX, AX, BX, CX

OPTIBELT CLASSICAL V-BELTS

optibelt **VB**



Profile	Z	A	B	C
b [mm]	10	13	17	22
h [mm]	6	8	11	14

Premium quality as standard for reliability and long life.

Precision length tolerance means no matching required – *within indicated S=C Plus range.

BELT DRIVES

Z/10									A/13								
Min. Rec. Pulley Ø = 50 mm									Min. Rec. Pulley Ø = 71 mm								
Belt No.	Datum length L _d	Inside length L _i	Belt No.	Datum length L _d	Inside length L _i	Belt No.	Datum length L _d	Inside length L _i	Belt No.	Datum length L _d	Inside length L _i	Belt No.	Datum length L _d	Inside length L _i	Belt No.	Datum length L _d	Inside length L _i
Z 11	312	290	Z 38½	997	975	Z 68	1747	1725	A 16	437	407	A 46½	1210	1180	A 87	2240	2210
Z 12½	337	315	Z 39	1022	1000	Z 69	1772	1750	A 18	487	457	A 47	1230	1200	A 88	2270	2240
Z 14	397	375	Z 40	1038	1016	Z 70	1797	1775	A 19	510	480	A 47½	1245	1215	A 89	2291	2261
Z 15	422	400	Z 40½	1052	1030	Z 71	1822	1800	A 20	538	508	A 48	1250	1220	A 90	2316	2286
Z 16	447	425	Z 41	1063	1041	Z 73	1872	1850	A 21	565	535	A 48½	1255	1225	A 91	2341	2311
Z 17	472	450	Z 41½	1072	1050	Z 75	1922	1900	A 22	590	560	A 49	1280	1250	A 92	2367	2337
Z 18	497	475	Z 42	1082	1060	Z 78	1997	1975	A 23	605	575	A 50	1300	1270	A 93	2390	2360
Z 19	502	480	Z 43	1102	1080	Z 79	2022	2000	A 23½	630	600	A 51	1330	1300	A 94	2418	2388
Z 19¾	522	500	Z 43¼	1122	1100	Z 83½	2142	2120	A 24	640	610	A 52	1350	1320	A 95	2443	2413
Z 20	537	515	Z 44	1142	1120	Z 88	2262	2240	A 25	660	630	A 53	1380	1350	A 96	2468	2438
Z 20½	547	525	Z 45	1172	1150	Z 93	2382	2360	A 26	680	650	A 54	1405	1375	A 97	2494	2464
Z 21	552	530	Z 46	1187	1165	Z 98	2522	2500	A 26½	700	670	A 55	1430	1400	A 98	2530	2500
Z 21¼	562	540	Z 46½	1202	1180				A 27	716	686	A 56	1452	1422	A 100	2570	2540
Z 22	582	560	Z 47	1216	1194				A 27½	730	700	A 57	1480	1450	A 102	2621	2591
Z 23	597	575	Z 48	1237	1215				A 28	740	710	A 58	1505	1475	A 104	2680	2650
Z 24	622	600	Z 48½	1247	1225				A 29	760	730	A 59	1530	1500	A 105	2697	2667
Z 25	652	630	Z 49	1272	1250				A 29½	780	750	A 60	1555	1525	A 107	2755	2725
Z 26	672	650	Z 50	1292	1270				A 30	797	767	A 61	1580	1550	A 108	2773	2743
Z 27	692	670	Z 51	1317	1295				A 31	805	775	A 62	1605	1575	A 110	2830	2800
Z 27½	722	700	Z 52	1342	1320				A 31½	830	800	A 63	1630	1600	A 112	2875	2845
Z 28	732	710	Z 53	1368	1346				A 32	843	813	A 64	1655	1625	A 114	2926	2896
Z 28½	747	725	Z 54	1393	1371				A 32½	855	825	A 65	1680	1650	A 116	2976	2946
Z 29	752	730	Z 55	1422	1400				A 33	871	841	A 66	1706	1676	A 118	3030	3000
Z 29½	772	750	Z 56	1444	1422				A 34	880	850	A 67	1730	1700	A 120	3078	3048
Z 30	787	765	Z 57	1472	1450				A 34½	905	875	A 68	1755	1725	A 124	3180	3150
Z 31	797	775	Z 58	1497	1475				A 35	919	889	A 69	1780	1750	A 128	3280	3250
Z 31½	822	800	Z 59	1522	1500				A 35½	930	900	A 70	1805	1775	A 132	3380	3350
Z 32	842	820	Z 60	1546	1524				A 36	944	914	A 71	1830	1800	A 136	3484	3454
Z 33	847	825	Z 61	1572	1550				A 37	955	925	A 72	1855	1825	A 140	3580	3550
Z 33½	872	850	Z 62	1597	1575				A 37½	980	950	A 73	1884	1854	A 144	3688	3658
Z 34	887	865	Z 63	1622	1600				A 38	995	965	A 74	1910	1880	A 148	3780	3750
Z 35	897	875	Z 64	1648	1626				A 38½	1005	975	A 75	1930	1900	A 158	4030	4000
Z 36	922	900	Z 65	1673	1651				A 39	1030	1000	A 76	1960	1930	A 167	4280	4250
Z 37	947	925	Z 66	1697	1675				A 40	1046	1016	A 77	1986	1956	A 187	4780	4750
Z 38	972	950	Z 67	1722	1700				A 40½	1060	1030	A 78	2010	1980	A 197	5030	5000
									A 41	1071	1041	A 79	2030	2000			
									A 41½	1080	1050	A 80	2062	2032			
									A 42	1090	1060	A 81	2090	2060			
									A 42½	1105	1075	A 82	2113	2083			
									A 43	1130	1100	A 83	2130	2100			
									A 43½	1135	1105	A 83½	2150	2120			
									A 44	1150	1120	A 84	2164	2134			
									A 45	1173	1143	A 84½	2180	2150			
									A 45½	1180	1150	A 85	2190	2160			
									A 46	1198	1168	A 86½	2230	2200			

Also available in sections 5/6/8/20/25/D/E – see Optibelt catalogue for details

OPTIBELT CLASSICAL V-BELTS

optibelt VB

B/17									C/22								
Min. Rec. Pulley Ø = 50 mm									Min. Rec. Pulley Ø = 71 mm								
Belt No.	Dotum length L_d	Inside length L_i	Belt No.	Dotum length L_d	Inside length L_i	Belt No.	Dotum length L_d	Inside length L_i	Belt No.	Dotum length L_d	Inside length L_i	Belt No.	Dotum length L_d	Inside length L_i	Belt No.	Dotum length L_d	Inside length L_i
B 23	610	570	B 60	1565	1525	B 107	2758	2718	C 43	1148	1090	C 98	2558	2500	C 240	6154	6096
B 24	655	615	B 61	1590	1550	B 108	2790	2750	C 47	1258	1200	C 99	2583	2525	C 248	6358	6300
B 25	670	630	B 62	1615	1575	B 110	2840	2800	C 48	1273	1215	C 100	2598	2540	C 264	6758	6700
B 26	690	650	B 63	1640	1600	B 112	2885	2845	C 49	1308	1250	C 101	2618	2560	C 270	6916	6858
B 26½	710	670	B 64	1665	1625	B 114	2940	2900	C 51	1353	1295	C 102	2649	2591	C 280	7158	7100
B 27	726	686	B 65	1690	1650	B 115	2961	2921	C 52	1378	1320	C 104	2700	2642	C 295	7558	7500
B 28	750	710	B 66	1716	1676	B 116	2990	2950	C 53	1408	1350	C 105	2725	2667	C 300	7678	7620
B 29	765	725	B 67	1740	1700	B 118	3040	3000	C 54	1433	1375	C 106	2750	2692	C 315	8058	8000
B 30	790	750	B 68	1765	1725	B 120	3088	3048	C 55	1458	1400	C 108	2808	2750			
B 31	815	775	B 69	1790	1750	B 122	3139	3099	C 56	1483	1425	C 110	2858	2800			
B 32	840	800	B 69½	1801	1761	B 124	3190	3150	C 57	1508	1450	C 112	2903	2845			
B 32½	865	825	B 70	1815	1775	B 126	3240	3200	C 58	1533	1475	C 114	2954	2896			
B 33	876	836	B 71	1840	1800	B 128	3290	3250	C 59	1558	1500	C 115	2979	2921			
B 34	890	850	B 72	1869	1829	B 130	3342	3302	C 60	1582	1524	C 116	3008	2950			
B 34½	915	875	B 73	1890	1850	B 132	3390	3350	C 61	1608	1550	C 117	3023	2965			
B 35	929	889	B 74	1920	1880	B 134	3444	3404	C 62	1632	1574	C 118	3058	3000			
B 36	940	900	B 75	1940	1900	B 136	3490	3450	C 63	1658	1600	C 120	3106	3048			
B 37	965	925	B 76	1970	1930	B 138	3545	3505	C 65	1708	1650	C 122	3157	3099			
B 37½	990	950	B 77	1990	1950	B 140	3590	3550	C 66	1734	1676	C 124	3208	3150			
B 38	1005	965	B 78	2021	1981	B 142	3640	3600	C 67	1758	1700	C 126	3258	3200			
B 38½	1015	975	B 79	2040	2000	B 144	3698	3658	C 68	1785	1727	C 128	3308	3250			
B 39	1040	1000	B 80	2072	2032	B 146	3740	3700	C 69	1808	1750	C 130	3360	3302			
B 40	1056	1016	B 81	2100	2060	B 148	3790	3750	C 70	1836	1778	C 132	3408	3350			
B 40½	1070	1030	B 82	2123	2083	B 150	3850	3810	C 71	1858	1800	C 134	3462	3404			
B 41	1080	1040	B 83	2140	2100	B 151	3890	3850	C 72	1887	1829	C 136	3508	3450			
B 41½	1090	1050	B 83½	2160	2120	B 152	3901	3861	C 73	1912	1854	C 138	3563	3505			
B 42	1100	1060	B 84	2174	2134	B 154	3952	3912	C 74	1938	1880	C 140	3608	3550			
B 42½	1115	1075	B 85	2200	2160	B 155	3990	3950	C 75	1958	1900	C 142	3665	3607			
B 43	1130	1090	B 86	2240	2200	B 156	4002	3962	C 76	1988	1930	C 144	3716	3658			
B 43¼	1140	1100	B 87	2250	2210	B 158	4040	4000	C 77	2014	1956	C 146	3758	3700			
B 44	1160	1120	B 88	2280	2240	B 160	4104	4064	C 78	2039	1981	C 148	3808	3750			
B 45	1190	1150	B 89	2301	2261	B 162	4155	4115	C 79	2058	2000	C 150	3868	3810			
B 45½	1203	1163	B 90	2326	2286	B 165	4240	4200	C 80	2090	2032	C 158	4058	4000			
B 46	1215	1175	B 91	2340	2300	B 167	4290	4250	C 81	2118	2060	C 162	4158	4100			
B 46½	1220	1180	B 92	2377	2337	B 173	4434	4394	C 82	2141	2083	C 166	4274	4216			
B 47	1240	1200	B 93	2400	2360	B 175	4490	4450	C 83	2166	2108	C 167	4308	4250			
B 48	1255	1215	B 94	2428	2388	B 177	4540	4500	C 83½	2178	2120	C 168	4325	4267			
B 48½	1265	1225	B 94½	2440	2400	B 180	4612	4572	C 84	2192	2134	C 170	4376	4318			
B 49	1290	1250	B 95	2453	2413	B 187	4790	4750	C 85	2217	2159	C 173	4452	4394			
B 50	1315	1275	B 96	2478	2438	B 195	4993	4953	C 86	2242	2184	C 175	4503	4445			
B 51	1340	1300	B 96½	2490	2450	B 197	5040	5000	C 87	2268	2210	C 177	4558	4500			
B 52	1360	1320	B 97	2505	2465	B 208	5340	5300	C 88	2298	2240	C 180	4630	4572			
B 52½	1375	1335	B 98	2540	2500	B 210	5374	5334	C 89	2319	2261	C 187	4808	4750			
B 53	1390	1350	B 99	2555	2515	B 220	5640	5600	C 90	2344	2286	C 190	4884	4826			
B 53½	1400	1360	B 100	2580	2540	B 236	6040	6000	C 92	2395	2337	C 195	5011	4953			
B 54	1412	1372	B 101	2605	2565	B 240	6136	6096	C 93	2418	2360	C 197	5058	5000			
B 55	1440	1400	B 102	2640	2600	B 248	6340	6300	C 94	2446	2388	C 208	5358	5300			
B 56	1462	1422	B 103	2656	2616	B 264	6740	6700	C 95	2471	2413	C 210	5392	5334			
B 57	1490	1450	B 104	2690	2650	B 276	7040	7000	C 96	2496	2438	C 220	5658	5600			
B 58	1513	1473	B 105	2707	2667	B 280	7140	7100	C 96½	2508	2450	C 225	5773	5715			
B 59	1540	1500	B 106	2740	2700				C 97	2522	2464	C 236	6058	6000			

BELT DRIVES
(VALUE RANGE)

OPTIBELT KRAFTBAND



Optibelt Kraftbands are precisely manufactured as complete units rather than by fabricating from loose belts making them highly flexible and resistant to delamination. Kraftbands are particularly well suited to drives with very long centre distances, high shock loading or vibration or where the shafts are vertically orientated.

Available in most of the afore mentioned constructions and sizes including:

Red Power 3 [SPB, SPC, 3V, 5V, 8V]

Standard wrapped Wedge [SPZ, SPA, SPB, SPC, 3V, 5V, 8V], Classical V [A,B,C,D,]

Raw Edge Cogged [3VX, 5VX]

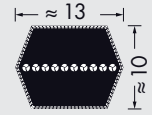
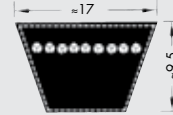
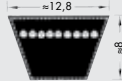
OPTIBELT LAWNMOWER BELTS

optibelt GREEN GARDEN



As one of Europe's leading suppliers of belts to mower original equipment manufacturers, Optibelt know what it takes to make a good mower belt. **optibelt GREEN GARDEN** belts are designed to give outstanding performance on the toughest mower applications.

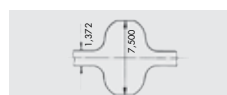
- Standard 3L, 4L, 5L sections with aramid tension cords for resistance to high shock loading with tough, semi-friction outer cover to cope with clutching applications.
- Double sided AA/HAA belts with aramid cords



BELT DRIVES

3L	4L		5L	AA / HAA
3L 160 / 406 La	4L 180 / 457 La	4L 620 / 1575 La	5L 350 / 889 La	HAA 71 / 1856 Lb
3L 170 / 432 La	4L 200 / 508 La	4L 630 / 1600 La	5L 490 / 1245 La	HAA 72 / 1882 Lb
3L 180 / 457 La	4L 210 / 533 La	4L 640 / 1626 La	5L 500 / 1270 La	HAA 73 / 1907 Lb
3L 190 / 483 La	4L 220 / 559 La	4L 650 / 1651 La	5L 510 / 1295 La	HAA 74 / 1933 Lb
3L 200 / 508 La	4L 230 / 584 La	4L 660 / 1676 La	5L 520 / 1321 La	HAA 75 / 1958 Lb
3L 210 / 533 La	4L 240 / 610 La	4L 670 / 1702 La	5L 530 / 1346 La	HAA 77 / 2007 Lb
3L 220 / 559 La	4L 250 / 635 La	4L 680 / 1727 La	5L 540 / 1372 La	HAA 78 / 2034 Lb
3L 230 / 584 La	4L 260 / 660 La	4L 690 / 1753 La	5L 550 / 1397 La	HAA 80 / 2085 Lb
3L 240 / 610 La	4L 270 / 686 La	4L 700 / 1778 La	5L 560 / 1422 La	HAA 81 / 2108 Lb
3L 250 / 635 La	4L 280 / 711 La	4L 710 / 1803 La	5L 570 / 1448 La	HAA 82 / 2136 Lb
3L 260 / 660 La	4L 290 / 737 La	4L 720 / 1829 La	5L 580 / 1473 La	HAA 83 / 2161 Lb
3L 270 / 686 La	4L 300 / 762 La	4L 730 / 1854 La	5L 590 / 1499 La	HAA 85 / 2212 Lb
3L 280 / 711 La	4L 310 / 787 La	4L 740 / 1880 La	5L 600 / 1524 La	HAA 86 / 2237 Lb
3L 290 / 737 La	4L 320 / 813 La	4L 750 / 1905 La	5L 610 / 1549 La	HAA 88 / 2288 Lb
3L 300 / 762 La	4L 330 / 838 La	4L 760 / 1930 La	5L 620 / 1575 La	HAA 89 / 2311 Lb
3L 310 / 787 La	4L 340 / 864 La	4L 770 / 1956 La	5L 630 / 1600 La	HAA 90 / 2339 Lb
3L 320 / 813 La	4L 350 / 889 La	4L 780 / 1981 La	5L 640 / 1626 La	HAA 91 / 2364 Lb
3L 330 / 813 La	4L 360 / 914 La	4L 790 / 2007 La	5L 650 / 1651 La	HAA 92 / 2390 Lb
3L 340 / 864 La	4L 370 / 940 La	4L 800 / 2032 La	5L 660 / 1676 La	HAA 93 / 2415 Lb
3L 350 / 889 La	4L 380 / 965 La	4L 810 / 2057 La	5L 670 / 1702 La	HAA 94 / 2441 Lb
3L 360 / 914 La	4L 390 / 991 La	4L 820 / 2083 La	5L 680 / 1727 La	HAA 95 / 2466 Lb
3L 370 / 940 La	4L 400 / 1016 La	4L 830 / 2108 La	5L 690 / 1753 La	HAA 96 / 2491 Lb
3L 380 / 965 La	4L 410 / 1041 La	4L 840 / 2134 La	5L 700 / 1778 La	HAA 98 / 2542 Lb
3L 390 / 991 La	4L 420 / 1067 La	4L 850 / 2159 La	5L 710 / 1803 La	HAA 99 / 2568 Lb
3L 400 / 1016 La	4L 430 / 1092 La	4L 860 / 2184 La	5L 720 / 1829 La	HAA 102 / 2644 Lb
3L 410 / 1041 La	4L 440 / 1118 La	4L 870 / 2210 La	5L 730 / 1854 La	HAA 105 / 2720 Lb
3L 420 / 1067 La	4L 450 / 1143 La	4L 880 / 2235 La	5L 740 / 1880 La	HAA 108 / 2796 Lb
3L 430 / 1092 La	4L 460 / 1168 La	4L 890 / 2261 La	5L 750 / 1905 La	HAA 110 / 2847 Lb
3L 440 / 1118 La	4L 470 / 1194 La	4L 900 / 2286 La	5L 760 / 1930 La	HAA 112 / 2898 Lb
3L 450 / 1143 La	4L 480 / 1219 La	4L 910 / 3211 La	5L 770 / 1956 La	HAA 116 / 2997 Lb
3L 460 / 1168 La	4L 490 / 1245 La	4L 920 / 2337 La	5L 780 / 1981 La	HAA 120 / 3101 Lb
3L 470 / 1194 La	4L 500 / 1270 La	4L 930 / 2362 La	5L 790 / 2007 La	HAA 121 / 3126 Lb
3L 480 / 1219 La	4L 510 / 1295 La	4L 940 / 2388 La	5L 800 / 2032 La	HAA 123 / 3175 Lb
3L 490 / 1245 La	4L 520 / 1321 La	4L 950 / 2413 La	5L 810 / 2057 La	HAA 126 / 3251 Lb
3L 500 / 1270 La	4L 530 / 1346 La	4L 960 / 2438 La	5L 820 / 2083 La	HAA 128 / 3304 Lb
3L 520 / 1321 La	4L 540 / 1372 La	4L 970 / 2464 La		HAA 129 / 3327 Lb
	4L 550 / 1397 La	4L 980 / 2489 La		HAA 134 / 3454 Lb
	4L 560 / 1422 La	4L 990 / 2515 La		HAA 136 / 3505 Lb
	4L 570 / 1448 La	4L 1000 / 2540 La		HAA 144 / 3708 Lb
	4L 580 / 1473 La	4L 1030 / 2616 La		HAA 150 / 3861 Lb
	4L 590 / 1499 La	4L 1100 / 2794 La		HAA 161 / 4140 Lb
	4L 600 / 1524 La	4L 1120 / 2845 La		HAA 178 / 4572 Lb
	4L 610 / 1549 La	4L 1170 / 2972 La		HAA 183 / 4699 Lb

In addition to the standard range of profiles listed above, Optibelt offer an extensive cross reference of OE equivalent mower belts of all types.

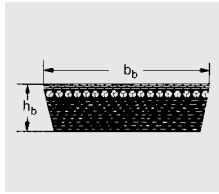


Double sided timing belts are also in the Green Garden range e.g. DS8M 1800 200



OPTIBELT VARIABLE SPEED BELTS

optibelt VARIO POWER



Ordering example :
 13x5 468 :
 13mm b_b x 5mm h_b x 468mm L_i (inside length)

optibelt VARIO POWER variable speed belts are manufactured in raw edge, cogged construction as standard. A wide range of sizes available from UK stock.

Additional constructions and profiles including wrapped, double sided and American standard available to order.

Description L_i	Description L_w	Description L_i	Description L_w	Description L_i	Description L_w	Description L_i	Description L_w
DIN/ISO		26X8 962	W 25 1000	32X10 950	W 31.5 1000	47X13 1060	-
13x5 468	-	26X8 1082	W 25 1120	32X10 1000	W 31.5 1050	47X13 1120	-
13x5 500	-	28X8 600	-	32X10 1073	W 31.5 1120	47X13 1180	-
17x5 426	W 16 450	28X8 650	-	32X10 1120	W 31.5 1170	47X13 1250	-
17x5 476	W 16 500	28X8 700	-	32X10 1180	W 31.5 1230	47X13 1320	-
17x5 536	W 16 560	28X8 750	-	32X10 1200	W 31.5 1250	47X13 1400	-
17x5 570	W 16 600	28X8 800	-	32X10 1353	W 31.5 1400	47X13 1500	-
17x5 606	W 16 630	28X8 850	-	37X10 660	-	47X13 1600	-
17x5 776	W 16 800	28X8 900	-	37X10 800	-	47X13 1700	-
21X6 530	W 20 560	28X8 950	-	37X10 850	-	47X13 1800	-
21X6 600	W 20 630	28X8 1000	-	37X10 900	-	52X16 1180	W 50 1250
21X6 610	W 20 640	28X8 1060	-	37X10 950	-	52X16 1250	W 50 1320
21X6 675	W 20 710	28X8 1120	-	37X10 1000	-	52X16 1325	W 50 1400
21X6 770	W 20 800	28X8 1180	-	37X10 1020	-	52X16 1400	W 50 1480
21X6 870	W 20 900	28X8 1250	-	37X10 1060	-	52X16 1525	W 50 1600
21X6 970	W 20 1000	28X8 1320	-	37X10 1120	-	52X16 1600	W 50 1680
21X6 1220	W 20 1250	28X8 1400	-	37X10 1180	-	52X16 1725	W 50 1800
22X8 485	-	28X8 1500	-	37X10 1250	-	52X16 1925	W 50 2000
22X8 525	-	30X10 650	-	37X10 1320	-	52X16 2165	W 50 2240
22X8 565	-	30X10 665	-	37X10 1400	-	52X16 2240	W 50 2320
22X8 610	-	30X10 700	-	37X10 1500	-	55X16 1400	-
22X8 650	-	30X10 800	-	37X10 1600	-	55X16 1500	-
22X8 700	-	30X10 850	-	37X10 1700	-	55X16 1600	-
22X8 750	-	30X10 875	-	37X10 1800	-	55X16 1700	-
22X8 800	-	30X10 900	-	41X13 925	W 40 990	55X16 1800	-
22X8 850	-	30X10 950	-	41X13 1000	W 40 1060	65X20 1706	W 63 1800
22X8 900	-	30X10 1000	-	41X13 1040	W 40 1100	65X20 1906	W 63 2000
22X8 950	-	30X10 1035	-	41X13 1060	W 40 1120	70X18 1600	-
22X8 1000	-	30X10 1120	-	41X13 1120	W 40 1180	70X18 1700	-
22X8 1060	-	30X10 1200	-	41X13 1180	W 40 1240	70X18 1800	-
22X8 1185	-	30X10 1340	-	41X13 1190	W 40 1250	70X18 1900	-
26X8 655	W 25 690	30X10 1500	-	41X13 1250	W 40 1310	70X18 2000	-
26X8 672	W 25 710	30X10 1600	-	41X13 1340	W 40 1400	70X18 2240	-
26X8 710	W 25 750	32X10 750	W 31.5 800	41X13 1440	W 40 1500	70X18 2500	-
26X8 750	W 25 762	32X10 790	W 31.5 840	41X13 1600	W 40 1660		
26X8 762	W 25 800	32X10 820	W 31.5 870	41X13 1740	W 40 1800		
26X8 800	W 25 840	32X10 850	W 31.5 900	41X13 1940	W 40 2000		
26X8 862	W 25 900	32X10 900	W 31.5 950	47X13 1000	-		

BELT DRIVES
(VALUE RANGE)

OPTIBELT TIMING BELT PRODUCT RANGE POWER TRANSMISSION



optibelt **OMEGA** – Premium quality, metric pitch timing belt for HTD / RPP pulleys

High quality chloroprene rubber with glass fibre tension cords. Ideal for general power transmission applications. Omega belts are quiet running and up to 98% efficient.

- Available in pitch 3M, 5M, 8M, 14M & Double Sided D5M, D8M, D14M

The Omega tooth profile is designed to run perfectly in both standard HTD and RPP pulleys. The small dent in the tip of the tooth allows air to escape easily resulting in a quieter running belt.



optibelt **OMEGA HP** – High Power

A special aramid fibre filled rubber compound and cover fabric gives the teeth far greater shear strength and dimensional stability allowing

optibelt OMEGA HP to transmit up to 2.5-3 X more power than standard HTD belts while using the same pulleys.

Available in pitch (2MHP MTO), 3MHP, 5MHP, 8MHP, 14MHP & Double sided D8MHP

COST ADVANTAGE

Due to its far higher power rating, **optibelt OMEGA HP** can significantly reduce the size and purchase cost of a drive. The table opposite compares three drives transmitting the same power with similar service factors. Width is reduced from 3 inches (76 mm) to 30mm and cost is reduced by 63% V's a classical H pitch and 52% V's a standard 8M belt.

	Classical	8M	8MHP
Belt	400-H-300	1040-8M-50	920-8MHP-30
Pulley 1	TB-21-H-300	TB 34-8M-50	TB-24-8M-30
Pulley 2	TB-30-H-300	TB-48-8M-50	TB-34-8M-30
Total Cost	100%	77%	37%
Saving		23%	63% / 52%



optibelt **ZR** – Classical timing belts

High quality chloroprene rubber compound with glass fibre reinforcing cords. Classical timing belts have mostly been superseded by modern, higher power belts such as **optibelt OMEGA** and **optibelt DELTA CHAIN Carbon** but are still widely used on older applications.

Available in classical tooth pitches MXL, XL, L, H, XH, XXH and double sided DXL, DL, DH



optibelt **DELTA CHAIN Carbon** – High Performance Timing Belts

Tough polyurethane teeth with Carbon fibre tension cords allow exceptionally high power and torque transmission with a relatively narrow belt. Up to 100% more power than even **optibelt OMEGA HP**. **optibelt DELTA CHAIN Carbon** is also particularly well suited to low speed, high torque applications making it a credible, clean and maintenance-free alternative to roller chain in many applications.

Our standard range of timing belts for transmission applications listed above are generally available from UK stock.

Optibelt also manufacture a wide range of other timing belts including belts with special and high performance constructions.



optibelt **STD / STD HP**

Constructions similar to Omega/Omega HP but with tooth profile to suit STD pulleys. Available in profiles: S5M, S8M, S14M, DS8M



optibelt **OMEGA FAN POWER**

High performance belt tailored to Fin-Fan applications common in the petrochemical industry. Anti-static to ISO 9563 Available profiles 8MFP, 14MFP



optibelt **OMEGA HL**

Extra heavy duty glass tension cords for improved resistance to shock loading. Available profiles :8MHL, 14MHL

Special properties – made to order

- High temp ≤ 140°C
- Low temp ≥ -40°C
- Extra abrasion resistance
- Extra oil resistance
- Aramid cord
- Directional tracking
- Special tolerances



OPTIBELT TIMING BELTS

optibelt OMEGA / optibelt OMEGA HP

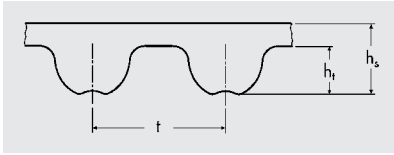


Exceptional reliability and consistency
 Runs perfectly in both standard HTD® & RPP® Pulleys
 Unique low noise tooth profile
 Up to 98% efficient

optibelt OMEGA HP – High Performance, allows up to 2.5X power on standard pulleys
 Also available in selected sizes 8M & 14M:

optibelt OMEGA HL – for high shock load applications

optibelt OMEGA FAN POWER – Ultra high performance for fan drives in the petro/Chem industry



Section	2M	3M	5M	8M	14M
Tooth height ht [mm]	0.70	1.10	1.90	3.20	5.60
Total belt thickness hs [mm]	1.30	2.30	3.40	5.40	9.50
Tooth pitch t [mm]	2.00	3.00	5.00	8.00	14.00

3M				5M			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
111	37	384	128	180	36	700	140
129	43	390	130	225	45	710	142
141	47	420	140	255	51	720	144
144	48	426	142	265	53	740	148
150	50	435	145	270	54	750	150
159	53	447	149	280	56	755	151
165	55	462	154	295	59	775	155
168	56	474	158	300	60	790	158
171	57	480	160	305	61	800	160
174	58	486	162	325	65	825	165
177	59	495	165	330	66	830	166
180	60	501	167	340	68	835	167
183	61	513	171	350	70	850	170
186	62	519	173	360	72	860	172
192	64	522	174	365	73	890	178
195	65	525	175	370	74	900	180
201	67	531	177	375	75	925	185
204	68	537	179	385	77	935	187
207	69	558	186	400	80	940	188
210	70	564	188	415	83	950	190
213	71	570	190	420	84	965	193
225	75	582	194	425	85	975	195
240	80	597	199	450	90	980	196
246	82	600	200	460	92	1000	200
249	83	606	202	475	95	1025	205
252	84	615	205	490	98	1035	207
255	85	633	211	500	100	1050	210
267	89	669	223	520	104	1100	220
276	92	675	225	525	105	1125	225
282	94	711	237	535	107	1135	227
285	95	738	246	540	108	1200	240
288	96	804	268	550	110	1270	254
291	97	816	272	560	112	1380	276
294	98	843	281	565	113	1400	280
300	100	882	294	575	115	1420	284
312	104	888	296	580	116	1425	285
315	105	1062	354	600	120	1500	300
318	106	1569	523	610	122	1595	319
330	110	1692	564	615	123	1690	338
333	111			630	126	1790	358
339	113			635	127	1870	374
345	115			640	128	1895	379
357	119			645	129	2000	400
363	121			650	130	2110	422
366	122			665	133	2350	470
				670	134	2525	505

BELT DRIVES
(VALUE RANGE)

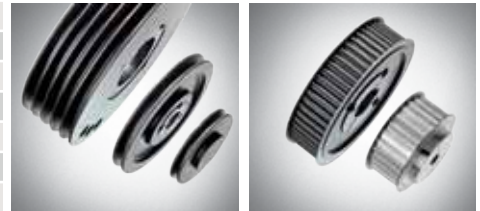
OPTIBELT TIMING BELTS

optibelt **OMEGA** / optibelt **OMEGA HP**

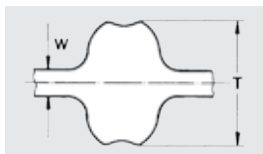
8M				14M			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
288	36	1224	153	966	69	2450	175
352	44	1248	156	1092	78	2590	185
376	47	1256	157	1190	85	2800	200
416	52	1264	158	1344	96	3150	225
424	53	1280	160	1400	100	3360	240
480	60	1304	163	1456	104	3500	250
512	64	1328	166	1512	108	3850	275
520	65	1344	168	1610	115	4326	309
560	70	1360	170	1680	120	4578	327
576	72	1400	175	1778	127		
600	75	1424	178	1890	135		
608	76	1440	180	2100	150		
624	78	1520	190	2310	165		
632	79	1552	194				
640	80	1584	198				
656	82	1600	200				
680	85	1680	210				
712	89	1696	212				
720	90	1728	216				
760	95	1760	220				
776	97	1800	225				
784	98	1904	238				
800	100	1936	242				
824	103	2000	250				
840	105	2080	260				
848	106	2104	263				
856	107	2240	280				
880	110	2248	281				
896	112	2272	284				
912	114	2400	300				
920	115	2504	313				
960	120	2600	325				
976	122	2800	350				
1000	125	3280	410				
1040	130						
1056	132						
1064	133						
1080	135						
1096	137						
1120	140						
1128	141						
1160	145						
1184	148						
1200	150						
1216	152						

BELT
DRIVES

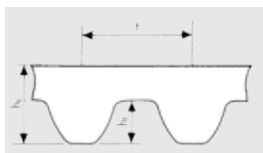
OPTIBELT PULLEYS AVAILABLE TO SUIT



OTHER PROFILES



Double Sided in pitches
D5M, D8M, D14M, DS8M



STD® Profile in pitches
S3M, S5M, S8M, S14M
Also in High Power
OMEGA HP
(S5MHP, S8MHP)

OPEN ENDED LENGTHS



Supplied in 30m rolls or cut to length.

Available in sizes:

3M in Widths 6, 9, 15, 20 mm

5M in Widths 6, 9, 10, 15, 20, 25, 30 mm

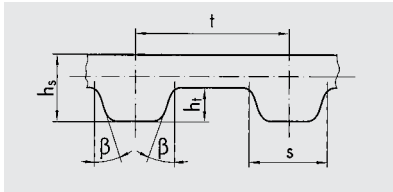
8M in Widths 10, 15, 20, 25, 30 mm

High Power Omega HP version
available on request



OPTIBELT CLASSICAL TIMING BELTS

optibelt **ZR**



Section	MXL	XL	L	H	XH	XXH
Total belt thickness h_s [mm]	1.14	2.30	3.60	4.30	11.20	15.70
Tooth pitch t [mm]	2.032	5.08	9.525	12.70	22.225	31.75
Tooth height h_t [mm]	0.51	1.27	1.91	2.29	6.35	9.53

MXL				XL			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
67.06	33	274.32	135	152,40	30	584,20	115
91.44	45	282.45	139	177,80	35	609,60	120
109.73	54	284.48	140	203,20	40	619,76	122
111.76	55	288.54	142	218,44	43	629,92	124
113.79	56	298.70	147	223,52	44	635,00	125
115.82	57	300.74	148	228,60	45	660,40	130
117.86	58	304.80	150	233,68	46	685,80	135
121.92	60	310.90	153	238,76	47	690,88	136
123.95	61	323.09	159	243,84	48	695,96	137
136.14	67	325.12	160	248,92	49	711,20	140
138.18	68	335.28	165	254,00	50	726,44	143
142.24	70	345.44	170	259,08	51	736,60	145
144.27	71	355.60	175	269,24	53	751,84	148
146.30	72	365.76	180	274,32	54	762,00	150
152.40	75	373.89	184	279,40	55	777,24	153
154.43	76	386.08	190	284,48	56	787,40	155
160.53	79	396.24	195	294,64	58	802,64	158
162.56	80	406.40	200	299,72	59	812,80	160
166.62	82	449.07	221	304,80	60	817,88	161
168.66	83	457.20	225	314,96	62	838,20	165
170.69	84	479.55	236	320,04	63	863,60	170
172.72	85	503.94	248	325,12	64	873,76	172
178.82	88	505.97	249	330,20	65	889,00	175
182.88	90	510.03	251	340,36	67	914,40	180
184.91	91	520.19	256	345,44	68	965,20	190
186.94	92	544.58	268	350,52	69	970,28	191
191.01	94	568.96	280	355,60	70	985,52	194
193.04	95	605.54	298	360,68	71	990,60	195
197.10	97	629.92	310	375,92	74	995,68	196
203.20	100	640.08	315	381,00	75	1046,48	206
205.23	101	680.72	335	396,24	78	1051,56	207
207.26	102	705.10	347	406,40	80	1097,28	216
209.30	103	731.52	360	411,48	81	1102,36	217
213.36	105	741.68	365	421,64	83	1112,52	219
215.39	106	812.80	400	426,72	84	1168,40	230
217.42	107	881.89	434	431,80	85	1264,92	249
219.46	108	920.50	453	441,96	87	1285,24	253
223.52	110	940.82	463	447,04	88	1305,56	257
227.58	112	1011.94	498	452,12	89	1473,20	290
229.62	113	1026.16	505	457,20	90	1600,20	315
231.65	114			462,28	91		
233.68	115			467,36	92		
243.84	120			477,52	94		
247.90	122			482,60	95		
249.94	123			487,68	96		
254.00	125			492,76	97		
256.03	126			497,84	98		
264.16	130			508,00	100		
268.22	132			533,40	105		
272.29	134			558,80	110		

BELT DRIVES
(VALUE RANGE)

OPTIBELT CLASSICAL TIMING BELTS

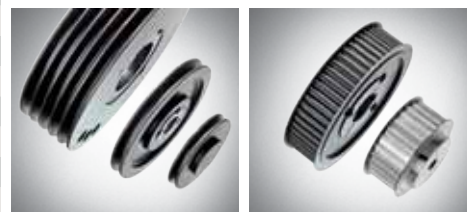
optibelt ZR

L		H				XH	
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
276.23	29	584.20	46	1727.20	136	1289.05	58
314.33	33	609.60	48	1778.00	140	1422.40	64
381.00	40	647.70	51	1828.80	144	1600.20	72
419.10	44	685.80	54	1854.20	146	1778.00	80
428.63	45	711.20	56	1905.00	150	1955.80	88
438.15	46	762.00	60	1955.80	154	2133.60	96
476.25	50	787.40	62	2032.00	160	2489.20	112
514.35	54	800.10	63	2057.40	162	2844.80	128
533.40	56	812.80	64	2082.80	164	3200.40	144
571.50	60	838.20	66	2159.00	170	3556.00	160
590.55	62	850.90	67	2184.40	172	3911.60	176
600.08	63	863.60	68	2286.00	180	4445.00	200
609.60	64	889.00	70	2413.00	190		
647.70	68	914.40	72	2540.00	200		
657.23	69	939.80	74	2794.00	220		
666.75	70	952.50	75	2844.80	224		
685.80	72	990.60	78	2895.60	228		
723.90	76	1016.00	80	2921.00	230		
762.00	80	1041.40	82	3175.00	250		
819.15	86	1066.80	84	3556.00	280		
876.30	92	1092.20	86	4318.00	340		
914.40	96	1143.00	90				
933.45	98	1181.10	93				
952.50	100	1219.20	96				
990.60	104	1244.60	98				
1028.70	108	1295.40	102				
1066.80	112	1320.80	104				
1076.33	113	1346.20	106				
1085.85	114	1371.60	108				
1104.90	116	1422.40	112				
1114.43	117	1447.80	114				
1143.00	120	1473.20	116				
1152.53	121	1524.00	120				
1219.20	128	1600.20	126				
1295.40	136	1651.00	130				
1333.50	140	1676.40	132				
1371.60	144	1701.80	134				
1524.00	160						
1600.20	168						
1676.40	176						
2075.18	218						

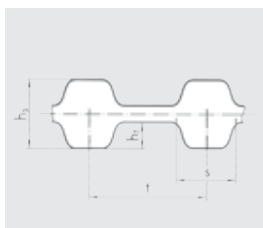
BELT DRIVES

XXH	
1778.00	56
2032.00	64
2286.00	72
2540.00	80
3048.00	96
3556.00	112
4064.00	128
4572.00	144

OPTIBELT PULLEYS AVAILABLE TO SUIT



OTHER PROFILES



Double Sided in pitches
DXL, DL, DH

OPEN ENDED LENGTHS



Supplied in 30m rolls or cut to length.

Available in sizes:

MXL in width 025 (0.25")

XL in Width 025,031, 037, 050

L in Width 037, 050, 075, 100

H in width 050, 075, 100, 150, 200



OPTIBELT HIGH PERFORMANCE TIMING BELTS

optibelt DELTA CHAIN Carbon



Carbon fibre reinforcing cords embedded in tough polyurethane deliver exceptionally high power and torque transmission with a relatively narrow belt. **optibelt DELTA CHAIN Carbon** is also particularly well suited to low speed, high torque applications making it a credible, clean and maintenance-free alternative to roller chain.

- Up to 100% more power than even **optibelt OMEGA HP**
- Good resistance to chemicals / oils
- Smooth back allows use with back-side idler
- Up to 98% efficient

Standard Widths*	12, 21, 36, 62
Minimum pulley Ø	22 teeth = 56.02 mm
Temperature Range	-30°C to 80°C

* Special widths available on request.

NEW POLYAMIDE FABRIC COATED TEETH FOR REDUCED WEAR, NOISE & FRICTION

TOUGH POLYURETHANE

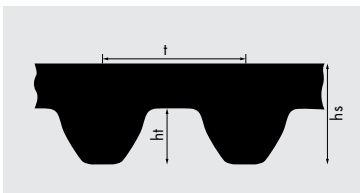
CARBON TENSION CORD FOR ULTIMATE TENSILE STRENGTH



SMOOTH BACK SURFACE

BELT DRIVES
(VALUE RANGE)

optibelt ZRS DC PULLEYS



Profile	8MDC
t [mm]	8
h _s [mm]	5.9
h _t [mm]	3.4



Profile, length	Pitch length L _w [mm]	Number of teeth
8MDC 640	640.00	80
8MDC 720	720.00	90
8MDC 800	800.00	100
8MDC 896	896.00	112
8MDC 960	960.00	120
8MDC 1000	1000.00	125
8MDC 1040	1040.00	130
8MDC 1120	1120.00	140
8MDC 1200	1200.00	150
8MDC 1224	1224.00	153
8MDC 1280	1280.00	160
8MDC 1440	1440.00	180
8MDC 1600	1600.00	200
8MDC 1760	1760.00	220
8MDC 1792	1792.00	224

optibelt DELTA CHAIN Carbon is designed to run in **optibelt ZRS DC** pulleys and is also compatible with alternative brands of timing pulley/"sprocket" including PC & CTD. It is not compatible with HTD pulleys.

Standard sizes are available to order from stock in 8MDC – Taperbore form. 14MDC and special versions are available to order.

Ordering Examples:

Belt: 720 8MDC 21

720mm Pitch length, 8MDC tooth pitch & profile, 21mm wide.

Taperbore Pulley: 8MDC 21 TB 34

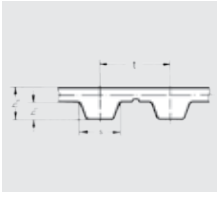
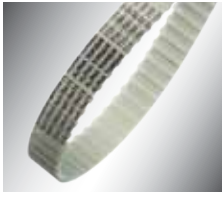
8MDC tooth pitch & profile, to suit belt 21mm wide, Taperbore, 34 tooth.

Pilot bore Pulley: 8MDC 21 22

8MDC tooth pitch & profile, to suit belt 21mm wide, 22 tooth.

OPTIBELT POLYURETHANE TIMING BELTS

optibelt ALPHA TORQUE



	t [mm]	h ₁ [mm]	h ₂ [mm]	s [mm]
T2.5	2.5	0.70	1.30	1.50
T5	5.0	1.20	2.20	2.65
T10	10.0	2.50	4.50	5.30

BELT DRIVES

T2.5		T5				T10			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
120	48	165	33	690	138	260	26	1460	146
145	58	185	37	700	140	320	32	1500	150
160	64	200	40	720	144	350	35	1560	156
177,5	71	215	43	725	145	370	37	1600	160
180†	72	220	44	750	150	400	40	1610	161
200	80	225	45	780	156	410	41	1700	170
210	84	245	49	800	160	440	44	1750	175
230	92	250	50	815	163	450	45	1780	178
245	98	255	51	840	168	500	50	1800	180
265	106	260	52	850	170	530	53	1880	188
277,5	111	270	54	860	172	550	55	1960	196
285	114	275	55	900	180	560	56	2250	225
290	116	280	56	940	188	600	60		
305	122	295	59	990	198	610	61		
317,5	127	300	60	1000	200	630	63		
330	132	305	61	1075	215	650	65		
342,5	137	320	64	1100	220	660	66		
380	152	325	65	1115	223	690	69		
420	168	330	66	1140	228	700	70		
480	192	340	68	1215	243	720	72		
500	200	350	70	1315	263	750	75		
540	216	355	71	1350	270	780	78		
600	240	360	72	1380	276	800	80		
620	248	365	73	1440	288	810	81		
650	260	375	75			840	84		
780	312	390	78			850	85		
915	366	400	80			880	88		
950	380	410	82			890	89		
		420	84			900	90		
		425	85			910	91		
		430	86			920	92		
		440	88			950	95		
		445	89			960	96		
		450	90			970	97		
		455	91			980	98		
		460	92			1000	100		
		475	95			1010	101		
		480	96			1050	105		
		500	100			1080	108		
		510	102			1100	110		
		525	105			1110	111		
		545	109			1140	114		
		550	110			1150	115		
		560	112			1200	120		
		575	115			1210	121		
		590	118			1240	124		
		600	120			1250	125		
		610	122			1300	130		
		620	124			1320	132		
		625	125			1350	135		
		630	126			1390	139		
		640	128			1400	140		
		650	130			1420	142		
		660	132			1440	144		
		675	135			1450	145		

OPTIBELT PULLEYS AVAILABLE TO SUIT



OPTIBELT POLYURETHANE TIMING BELTS

optibelt ALPHA TORQUE



	t [mm]	h _f [mm]	h _s [mm]	b [mm]
AT5	5.0	1.20	2.70	2.50
AT10	10.0	2.50	5.00	5.00

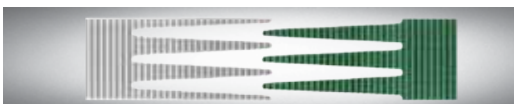
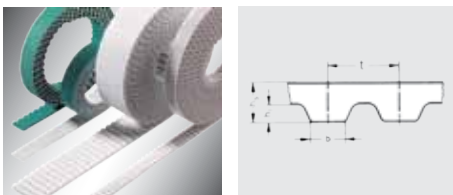
AT5				AT10			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
225	45	860	172	500	50	1150	115
255	51	975	195	530	53	1200	120
280	56	1050	210	560	56	1210	121
300	60	1125	225	600	60	1250	125
340	68	1500	300	610	61	1280	128
375	75			660	66	1300	130
390	78			700	70	1320	132
420	84			730	73	1350	135
450	90			780	78	1360	136
455	91			800	80	1400	140
500	100			840	84	1420	142
545	109			890	89	1480	148
600	120			920	92	1500	150
610	122			960	96	1600	160
660	132			980	98	1700	170
710	142			1000	100	1720	172
720	144			1010	101	1800	180
750	150			1050	105	1860	186
780	156			1080	108	1940	194
825	165			1100	110		

Other Profiles: Double Sided DT2.5, DT5, DT10 Classical MXL, XL, L

optibelt ALPHA LINEAR & V (JOINED)

Polyurethane Timing Belts supplied open ended or joined to any length (multiple of pitch).

Available with steel reinforcing cords as standard or Aramid cords for rust free applications.



Alpha V joined belts can be welded to any length (multiple of pitch). Typically used for conveying applications.

Joint strength = approx. 50% of belt

Profile	Standard Widths	Profile	Standard Widths
T5*	6, 8, 10, 12, 16, 20, 25, 32, 50	XL	6.35; 7.94; 9.53; 12.70; 19.05; 25.40
T10*	10, 12, 16, 20, 25, 32, 40, 50, 75, 100	L	9.53; 12.70; 19.05; 25.40; 38.10; 50.80
T20	25, 32, 40, 50, 75, 100	H	12.70; 19.05; 25.40; 38.10; 50.80; 76.20; 101.60
AT5*	6, 8, 10, 16, 25, 32, 50, 75, 100	XH	25.40; 50.80; 76.20; 101.60
AT10*	16, 25, 32, 50, 75, 100, 150	5M	10.00; 15.00; 20.00; 25.00; 50.00
AT20	25, 32, 50, 75, 100, 150	8M	20.00; 25.00; 30.00; 50.00; 85.00; 100.00
*Available with tracking guides K6/K13		14M	25.00; 40.00; 55.00; 85.00; 100.00; 150.00

optibelt ALPHA FLEX Truly Endless PU Timing Belts

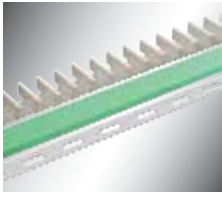


Polyurethane is moulded around continuously wound steel or aramid tension cords allowing the production of long, truly endless belts with no join. Typically used for heavy duty motion control, indexing and conveying applications.

- Length range 1,100mm-12,000mm depending on profile. (Lengths up to 24,000mm possible by request)
- Available in profiles: T5,T10, T20, AT5, AT10, AT20, 5M, 8M, 14M, H
- Special options include : High flex, Stainless cords, PAZ fabric on teeth...

OPTIBELT MODIFIED TIMING BELTS

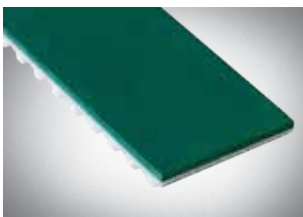
optibelt ALPHA SPECIAL



optibelt ALPHA SPECIAL belts are used wherever materials need to be conveyed, positioned or fed. An almost infinite number of solutions are possible including special backings, attachments and machining all produced at our dedicated factory.

COATED / BACKED BELTS

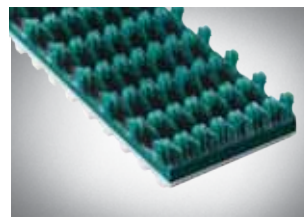
A huge variety of different backing materials can be added to the back of our Alpha timing belts (or other belts) to suit different material handling applications. Foam materials in PU or rubber can cushion and grip conveyed items while backings with profiled or textured surfaces can give additional purchase. Common backing materials include Rubber, Polyurethane and PVC all of which are available in various hardnesses, thicknesses and colours and with different chemical and mechanical properties. Due to space restrictions we are unable to list all varieties but some common types are shown below. Ask Optibelt via your IADA representative for further info.



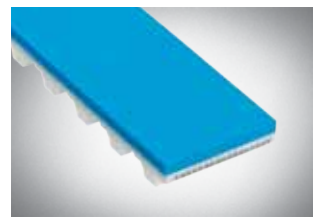
PAR Fabric – reduces wear and friction. Ideal for accumulation conveyors where belt needs to slide under product.



Linatex Rubber
Hard wearing high grip.
Thickness range 1.5-8.0mm



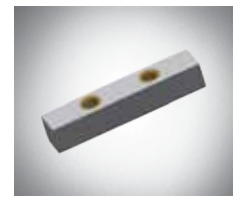
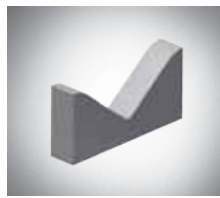
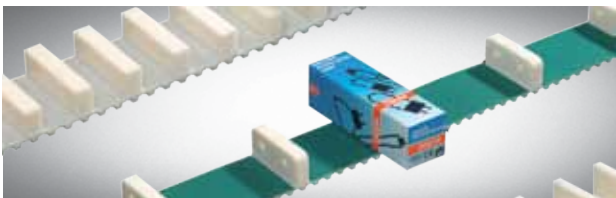
Super Grip-Top
High positive grip. PVC & Rubber options.



Blue PU FDA
Blue FDA approved Polyurethane. Ideal for food conveying applications.

CLEATED / ATTACHMENT BELTS

A wide range of attachments can be welded or mechanically fastened onto our belts. We have many standard stock cleats but are also able to machine or injection mould custom made profiles. Cleats are ideal where accurate positioning or positive drive of a conveyed item is required e.g. pushing items up an incline or holding an item in a jig during processing.



EXAMPLE OF COMMON CLEATS

MECHANICAL PROCESSING

Belts can be mechanically processed in a variety of ways including:

- Grinding (belt top surface or teeth)
- Milling (grooves in top surface or coatings)
- Waterjet cutting (cutting holes or slots in the belt)
- Punching (finger splicing)
- Drilling (longitudinal drilled hole in tooth)
- Cutting, carving (separating the coating)



MECHANICAL JOINTING

In addition to a permanent welded join in belts, Optibelt offer mechanical jointing methods:

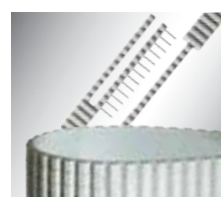
Pin Joint : Allows belts to be joined to length on site, avoiding the need to disassemble machines to fit the belts.

Available in profiles : T10 & AT10 in widths 25, 32 & 50mm

ZS/ZSI joint allows belts to be joined via stainless or brass plates and is ideal where it is necessary to regularly remove and then re-assemble the belts e.g. for cleaning or re-tooling.

Available in profiles : T10 & AT10 in widths 25,32 & 50mm and H pitch in widths 1, 1.5 & 2 inch.

PIN JOIN

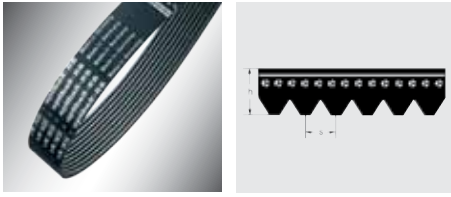


ZS/ZSI JOINT



OPTIBELT RIBBED BELTS

optibelt RB



Profile	PH	PJ	PK	PL	PM
s [mm]	1.60	2.34	3.56	4.70	9.40
h [mm]	2.50	3.50	4.60	7.00	13.00

PH		PJ				PK				PL				PM	
Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)	Effective Length (mm)	Effective Length (inch)
698	27.50	280	11.00	1301	51.20	630	24.80	1570	61.80	954	37.50	4051	159.50	2286	90.00
735	28.90	330	13.00	1309	51.50	648	25.50	1600	63.00	991	39.00	4191	165.00	2388	94.00
762	30.00	356	14.00	1316	51.80	698	27.50	1655	65.20	1075	42.30	4470	176.00	2515	99.00
813	32.00	362	14.30	1321	52.00	730	28.70	1690	66.50	1194	47.00	4622	182.00	2693	106.00
858	33.80	381	15.00	1333	52.50	775	30.50	1755	69.10	1270	50.00	5029	198.00	2832	111.50
864	34.00	406	16.00	1355	53.40	800	31.50	1854	73.00	1333	52.50	5385	212.00	2921	115.00
886	34.90	414	16.30	1371	54.00	812	32.00	1885	74.20	1371	54.00	6096	240.00	3010	118.50
955	37.60	432	17.00	1397	55.00	830	32.70	1930	76.00	1397	55.00			3124	123.00
965	38.00	457	18.00	1428	56.20	865	34.00	1956	77.00	1422	56.00			3327	131.00
975	38.40	483	19.00	1439	56.70	875	34.50	1980	78.00	1562	61.50			3531	139.00
990	39.00	508	20.00	1475	58.10	890	35.00	2030	79.90	1613	63.50			3734	147.00
1016	40.00	559	22.00	1549	61.00	913	36.00	2050	80.70	1664	65.50			4089	161.00
1080	42.50	584	23.00	1600	63.00	920	36.20	2080	82.00	1715	67.50			4191	165.00
1092	43.00	610	24.00	1651	65.00	940	37.00	2120	83.50	1764	69.50			4470	176.00
1096	43.10	660	26.00	1663	65.50	954	37.60	2145	84.40	1803	71.00			4648	183.00
1168	46.00	711	28.00	1752	69.00	962	37.80	2170	85.40	1841	72.50			5029	198.00
1194	47.00	723	28.50	1780	70.00	990	39.00	2235	88.00	1943	76.50			5410	213.00
1200	47.20	737	29.00	1854	73.00	1015	40.00	2255	88.80	1981	78.00			6121	241.00
1222	48.10	762	30.00	1895	74.60	1080	42.50	2362	93.00	2020	79.50			6883	271.00
1230	48.40	813	32.00	1910	75.20	1090	43.00	2460	96.90	2070	81.50			7646	301.00
1262	49.70	836	32.90	1915	75.40	1125	44.30	2515	99.00	2096	82.50			8408	331.00
1270	50.00	864	34.00	1930	76.00	1150	45.30	2845	112.00	2134	84.00			9169	361.00
1285	50.60	914	36.00	1956	77.00	1165	45.90			2197	86.50			9931	391.00
1290	50.80	955	37.60	1965	77.40	1190	46.80			2235	88.00			10693	421.00
1301	51.20	965	38.00	1981	78.00	1200	47.20			2324	91.50			12217	481.00
1309	51.50	1016	40.00	1992	78.40	1222	48.10			2362	93.00			13741	541.00
1316	51.80	1092	43.00	2083	82.00	1230	48.40			2476	97.50			15266	601.00
1321	52.00	1105	43.50	2155	84.80	1245	49.00			2515	99.00				
1333	52.50	1110	43.70	2210	87.00	1270	50.00			2705	106.50				
1371	54.00	1123	44.20	2337	92.00	1285	50.60			2743	108.00				
1397	55.00	1130	44.50	2489	98.00	1290	50.80			2845	112.00				
1439	56.70	1150	45.30			1321	52.00			2895	114.00				
1475	58.10	1168	46.00			1330	52.40			2921	115.00				
1600	63.00	1194	47.00			1345	53.00			2997	118.00				
1854	73.00	1200	47.30			1371	54.00			3086	121.50				
1895	74.60	1222	48.10			1397	55.00			3124	123.00				
1915	75.40	1244	49.00			1439	56.70			3289	129.50				
1930	76.00	1262	49.70			1460	57.50			3327	131.00				
1956	77.00	1270	50.00			1520	59.80			3492	137.50				
1992	78.40	1285	50.60			1560	61.40			3696	145.50				
2083	82.00														
2155	84.80														

BELT DRIVES
(VALUE RANGE)

OPTIBELT BELTS & KITS

AUTOMOTIVE TECHNOLOGY

Optibelt are an Original Equipment supplier to many of the world's leading car and truck manufacturers and stock a wide range of OE quality belts and tensioner kits for the automotive aftermarket. The range includes : AVX V-belts, PK Ribbed belts, Timing belts, Timing belt kits and tensioners.



optibelt ZRK



optibelt TRUCK POWER
MARATHON 2 M=S



optibelt RB



optibelt KIT

INSTALLATION & MAINTENANCE – TOOLS & ADVICE

HOW TO GET THE MOST OUT OF YOUR DRIVES

Optibelt only manufacture premium quality, high performance belts from which customers can expect to see lower running costs, reduced maintenance, increased productivity and reliability. But even Optibelt products can't perform to their best if they're not installed and, where necessary, maintained properly. Just a few simple steps which constitute maintenance good practice can ensure that your drives keep running efficiently and reliably for longer.

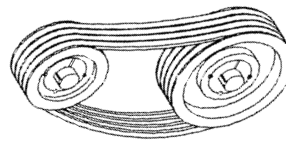
Safety First: Before starting any work, always check that machinery is turned off and secure to work on.

1. Check for pulley wear.

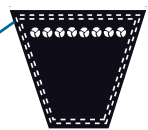
Worn V-pulleys place additional stresses on V-belts and result in premature wear. Optibelt pulley gauges help to show when pulleys are worn as shown



2. Always reduce centre distance before fitting belts and then extend to tension. Never roll on belts under tension as this is likely to damage the cords inside the belt which will result in premature and unpredictable failure



Tension cords likely to be damaged by rolling belts onto pulleys.



3. Check for pulley alignment. Misaligned pulleys rapidly wear out belts and significantly reduce a drive's efficiency. It can also lead to other problems such as increased noise, vibration and heat. Alignment can be roughly checked with a straight edge but Optibelt's laser alignment tool makes the job quicker and more accurate. The laser simply clips magnetically onto the face of the pulley and beams a line onto magnetic targets placed on the other pulley(s) allowing the fitter to check for alignment and make adjustments while viewing the result.



optibelt LASER POINTER II - alignment tool



Optibelt CAP 6.0 drive calculation software is available as a free download from www.optibelt.com

4. Fit belts at the correct tension: Correct belt tension is critical to the longevity and efficiency of a drive. Tensioning information is provided by some machine manufacturers but, where that's not the case, Optibelt are able to advise and provide free drive calculation software. Because the optimum tension varies significantly from drive to drive, it is not possible to accurately check the tension by feel. Optibelt tension gauges allow a belt's tension to be measured quickly and accurately.

5. Maintain correct running tension: After a short run-in period it is good practice to re-check the tension. With V-belts an initial drop of approx. 25% is expected and is planned for in the installation tension. Following this, tension should be checked periodically as part of routine maintenance. In particular, V-belts loose tension over time and will occasionally need to be re-tensioned in order to last and run efficiently. If this is not practical then we recommend the use of **optibelt RED POWER 3** – maintenance-free belts.



optibelt TT electronic tension measuring device



Improved performance example - Air Compressor

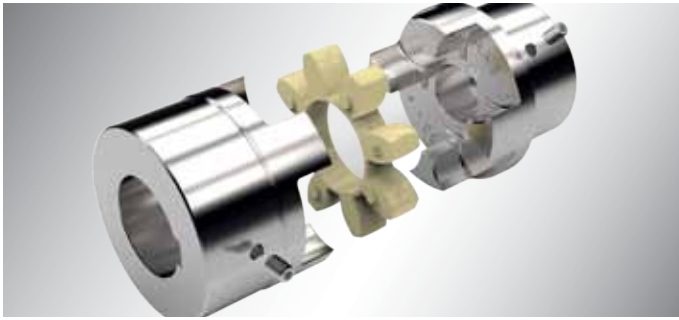
3x XPZ 1400 belts on critical medical air compressors were lasting less than 12 months and required regular maintenance to avoid failure.

A set of **optibelt RED POWER 3** belts were installed and correctly tensioned using an **optibelt TT** tension tester.

3 Years later the belts were still running and in good condition, having required no maintenance or re-tensioning during this time.



HABIX



Habix premium quality flexible jaw couplings are machined on all surfaces for precise running characteristics and increased durability.

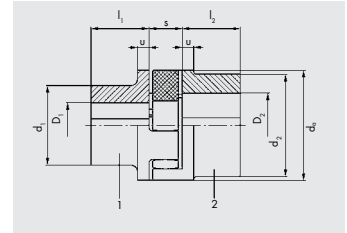
- Failsafe
- Wear resistant PU Inserts resistant to Oil, Ozone & ageing.
- Temperature Range : -20°C to +80°C
- Balanced to DIN ISO 1940 Q16
- Jaw material Cast Iron EN-GJL-250 (GG-25)

Size	Part 1		Part 2		Part 3		Part 4		All Parts	
	PB (mm)	Max. (mm)	PB (mm)	Max. (mm)	TL Bush	I ₃ (mm)	TL Bush	I ₄ (mm)	d _o (mm)	S (mm)
19	0	19	17	24	-	-	-	-	40	16
24	0	24	22	28	1008	22	1008	22	55	18
28	0	28	26	38	1108	22	1108	22	65	20
38	10	38	36	45	1108	22	1108	22	80	24
42	12	42	40	55	1610	25	1610	25	95	26
48	13	48	46	60	1615	38	1615	38	105	28
55	18	55	53	70	2012	32	2012	32	120	30
65	20	65	63	75	2012	32	2517	45	135	35
75	28	75	73	90	2517	45	3020	51	160	40
90	38	90	88	100	3020	51	3535	89	200	45

Size	Max. Speed RPM	Torque (Nm)				Max. Shaft Misalignment		
		White 92A Shore		Red 98A Shore		Radial (mm)	Axial (mm)	Angular (deg)
		Nominal	Changing	Nominal	Changing			
19	19000	10	2.6	17	4.4	0.2	1.2	1.2
24	14000	35	9	60	16	0.22	1.4	0.9
28	11800	95	25	160	42	0.25	1.5	0.9
38	9500	190	49	325	85	0.28	1.8	1.0
42	8000	265	69	450	117	0.32	2.0	1.0
48	7100	310	81	525	137	0.36	2.1	1.1
55	6300	410	105	685	178	0.38	2.2	1.1
65	5600	625	163	940	245	0.42	2.6	1.2
75	4750	1280	333	1920	499	0.48	3.0	1.2
90	3750	2400	624	3600	936	0.5	3.4	1.2

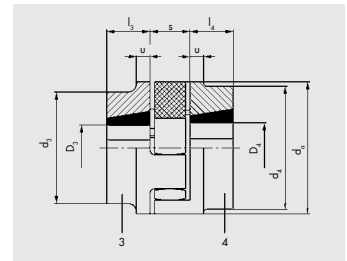
Type HWN

Pilot Bore



Type HWT

Taper Bore



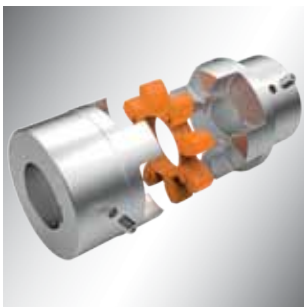
Parts 1, 2, 3 & 4 can be combined

Spider elements available in:

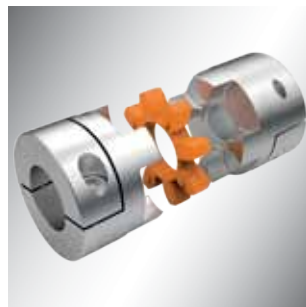
- 92A Shore White
- 98A Shore Red

Performance values are based on an ambient temperature of 30°C, 1500rpm and single plane misalignments. For higher speed, temperature and combined misalignments values should be reduced.

HABIX Plus – Backlash-free/Low inertia



Type HPN
Finished Bore



Type HPK
Clamping Type

- Precision press-fit of element ensures backlash-free operation.
- Aluminium construction (sizes 19-48) results in very low weight / inertia. (>48 = steel)
- Elements available in Green 65A & Orange 98A Shore
- Temperature Range -30°C to +100°C / 120°C

PEX

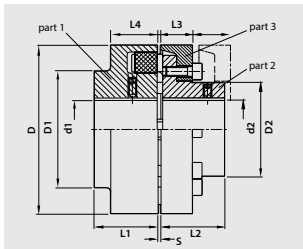


PEX Plug-in type jaw couplings are suitable for a wide range of applications where radial, axial and angular misalignments may be present.

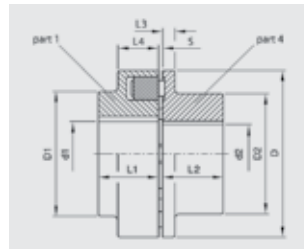
- Failsafe
- Temperature Range: -20°C to +80°C
- Balanced to DIN ISO 1940 Q16

Available in two piece (B) and three piece (A) arrangements. The Type A three piece arrangement enables replacement of flexible elements without the need to move the coupled parts.

Type A



Type B



Wear indicator sticker shows when elements need to be changed. Included with all PEX couplings.



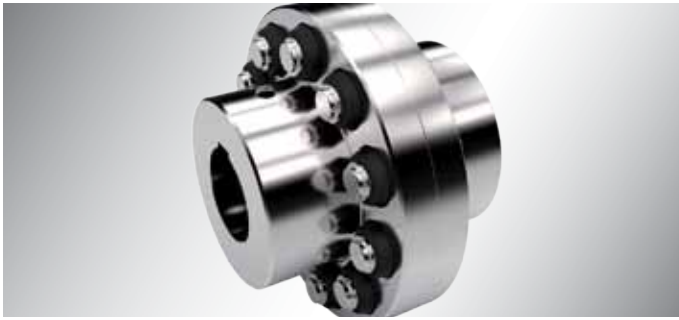
- Part 1 is common to both types and includes flexible elements
- Part 2 & 3 are supplied together

TECHNICAL DATA

Size	Nominal Torque Nm	Max. Speed RPM	Maximum Bore (mm)			D (mm)	L1 = L2 (mm)	S (mm)	Max. Misalignment		
			Part 1	Part 2+3	Part 4				Axial (mm)	Radial (mm)	Angular (deg)
58	19	7500	19	-	24	58	20	3	0.20	0.20	0.15
68	34	7000	24	-	28	68	20	3	0.20	0.20	0.15
80	60	6000	30	-	38	80	30	3	0.20	0.20	0.12
95	100	5500	42	-	42	95	35	3	0.20	0.20	0.12
110	160	5300	48	38	48	110	40	3	0.20	0.20	0.10
125	240	5100	55	45	55	125	50	3	0.25	0.25	0.10
140	360	4900	60	50	60	140	55	3	0.25	0.25	0.10
160	560	4250	65	58	65	160	60	4	0.30	0.30	0.10
180	880	3800	75	65	75	180	70	4	0.30	0.30	0.10
200	1340	3400	85	75	85	200	80	4	0.30	0.30	0.09
225	2000	3000	90	85	90	225	90	4	0.35	0.35	0.09
250	2800	2750	100	95	100	250	100	6	0.35	0.35	0.08

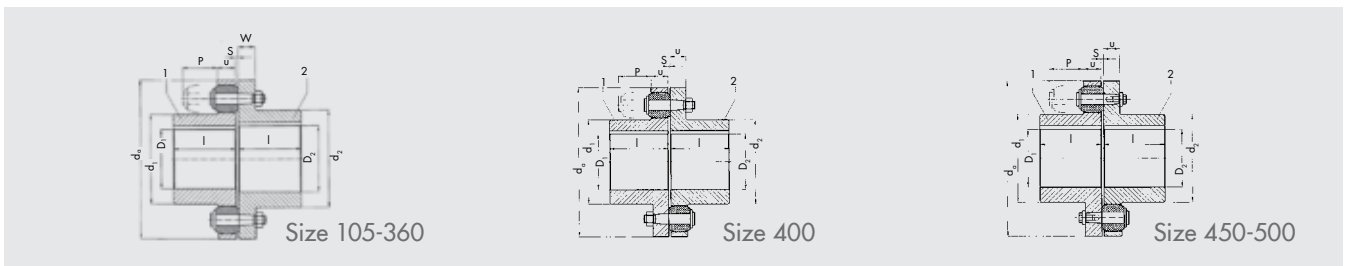
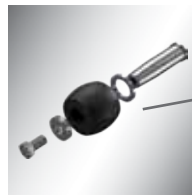


ORPEX



Orpex Pin & Buffer type couplings are ideal for heavy duty flexible coupling applications.

- High reliability / failsafe operation
- Temperature Range : -30°C to +80°C
- Balanced to minimum DIN ISO 1940 Q16. Finer balancing is possible and recommended for circumferential speeds >30m/s
- Available in Type WN cast iron as standard or Type WS steel optional for very high speed applications.
- Larger sizes up to size 2000 with bore up to 640mm and torque transmission capability up to 1,300,000 Nm are available on request.
- Replacement bolts & buffers available



TECHNICAL DATA

Size	D ₁ Max. (mm)	D ₂ Max. (mm)	d _a (mm)	l (mm)	S (mm)	No. Bolts & Buffers	ø Bolt & Buffer	Nominal	
								Torque Nm	Speed RPM
105	32	38	105	5	2...4	8	M6	200	5000
125	40	48	125	50	2...4	8	M8	350	5000
144	45	55	144	55	2...4	10	M8	500	4900
162	50	60	162	60	2...5	9	M10	750	4300
178	60	70	178	70	2...5	10	M10	950	3800
198	70	80	198	80	2...5	12	M110	1300	3400
228	80	90	228	90	2...5	11	M12	2200	3000
252	90	100	252	100	2...5	12	M12	2750	2700
285	100	110	285	110	3...6	11	M16	4300	2400
320	110	120	320	125	3...6	12	M16	5500	2100
360	120	130	360	140	3...6	10	M18	7800	1900
400	140	140	400	160	3...6	14	M18	12500	1700
450	160	160	450	180	4...7	12	M16	18500	1500
500	180	180	500	200	4...7	14	M16	25000	1350

OPTIBELT COUPLING RANGE

In addition to the couplings detailed on the preceding pages, Optibelt offer a wide range of flexible and rigid couplings for all applications.



FLEX

- Two Tyre options: Standard & FRAS
 - Taper or Pilot bore options
 - To suit shaft sizes 10mm-190mm
- Common Tyre type flexible coupling for reliable transmission of high levels of misalignment.



HRC

- Taper or Pilot bore options
 - To suit shaft sizes 10mm-115mm
- Popular, general-purpose flexible jaw coupling.



MINI

- One piece or two piece clamping hubs
 - To suit shaft sizes 3mm-40mm
 - Aluminium or steel / stainless options
- Beam type torsioally rigid / backlash-free flexible coupling. Ideal for servo and positioning drives.



GEAR

- Shaft \varnothing up to 1000mm
 - Torque up to 8,000,000Nm
 - Premium or Eco options available
- Torsioally rigid, with greased, crowned gearing to reliably accommodate misalignments on extremely heavy drives.



FERROFLEX-N

- Torque up to 10,000Nm
 - Temperature up to 280°C
 - Maintenance-free
- Torsioally rigid, backlash-free with spring steel discs allowing flexible compensation of misalignments.



FLANGE

- Shaft \varnothing up to 500mm
 - Torque up to 1,425,000Nm
 - Cast iron or steel options
- Robust and reliable rigid shaft connection, able to transmit radial and axial loads.



▶ **High Performance Link Belting**



A quick to install, longer-lasting replacement for conventional endless belts. PowerTwist Drive is suitable for power transmission applications as an alternative to rubber V-belts of classical and metric wedge cross-sections. PowerTwist Move is designed for conveying applications as an upgrade for polyurethane and rubber belting in round and V profiles.



▶ **Keyless Locking Devices**



The key to better machine design is no key at all! From gears to cams, propeller hubs to grinding wheels, timing pulleys to conveyor rolls, the B-LOC and Trantorque family of Keyless Locking Devices provides the ultimate solution to mount and position all kinds of components effortlessly.



▶ **Polyurethane Belting & O-Rings**



The most comprehensive range of polyurethane belting and O-Rings available, including Eagle® Orange 85 and Green 89. All standard V-, round and flat profiles are in stock, right here, right now, ready to go to you. Our belts are easily made endless in the field with Fenner Drives welding kits. Custom profiles, durometers and top surfaces are also our speciality.



▶ **Belt & Chain Tensioning Systems**



Automatically take up the slack with T-Max Belt and Chain Tensioners. Improve drive efficiency and extend component life with proper tension. A variety of design and size options suitable for a wide range of power transmission/motion transfer applications including RT3000 and RT4000 Series for single and multiple V-belt drives and other high-speed, heavy-duty applications.



▶ **Composite Idler Pulleys & Sprockets**



High strength, high performance glass-reinforced nylon makes our idler pulleys and chain sprockets extremely durable yet light weight and corrosion resistant. A cost effective alternative to conventional metal parts. Available in a wide range of stock sizes for V-, round, and flat belts and industry standard pitch chains. Use with a T-Max Tensioner for an off-the-shelf drive tensioning solution.



▶ **UHMW Belt & Chain Guides**



Fight friction and extend belt or chain life with Trackstar UHMW guides. A wide variety of standard profiles are available for all industry standard V-, round, and flat belts and single and double pitch chains. Manufactured to exacting tolerances and always in stock ready to ship to you today; whether one stick or a hundred, call us: we've got it!



BELT DRIVES
(VALUE RANGE)



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- High power rated options available
- Oil and heat resistant to ISO 1813
- Increased productivity
- Lower replacement costs



V BELTS & PULLEYS



TIMING BELTS & PULLEYS



ROLLER CHAIN & SPROCKETS



CHAIN & BELT TENSIONERS



COUPLINGS



TAPER BUSHES & LOCKING DEVICES



DUNLOP™ and the Flying D device™ are used under licence



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BELT DRIVES





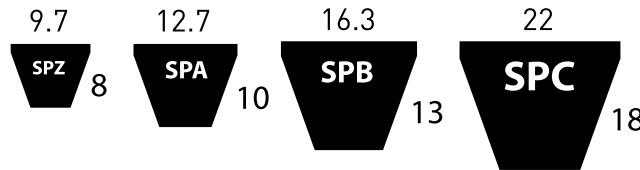
WEDGE BELTS WRAPPED

Description

Wrapped wedge belts are designated by letters standing for their cross-section, e.g. SPA followed by a number e.g. 1600 which specifies the belts pitch length Lp in mm.

Due to their high power ratings savings can be made over classical v-belts, smaller pulley diameters and reduced numbers of belts and be incorporated into more compact drives.

Wedge belts are produced to BS3790, DIN 7753 and AFOR T 47-117 standards. They are manufactured in the cross-sections SPZ, SPA, SPB and SPC in a range of over 400 lengths.



SPZ - WEDGE V-BELTS SECTION

Part No	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)
SPZ487	500	487	449
SPZ500	513	500	462
SPZ512	525	512	474
SPZ530	543	530	492
SPZ545	558	545	507
SPZ560	573	560	522
SPZ562	575	562	524
SPZ580	593	580	542
SPZ587	600	587	549
SPZ607	620	607	569
SPZ612	625	612	574
SPZ615	628	615	577
SPZ630	643	630	592
SPZ637	650	637	599
SPZ662	675	662	624
SPZ670	683	670	632
SPZ687	700	687	649
SPZ707	720	707	669
SPZ710	723	710	672
SPZ722	735	722	684
SPZ732	745	732	694
SPZ737	750	737	699
SPZ750	763	750	712
SPZ757	770	757	719
SPZ760	773	760	722

Part No	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)
SPZ762	775	762	724
SPZ772	785	772	734
SPZ775	788	775	737
SPZ787	800	787	749
SPZ800	813	800	762
SPZ812	825	812	774
SPZ825	838	825	787
SPZ837	850	837	799
SPZ850	863	850	812
SPZ862	875	862	824
SPZ875	888	875	837
SPZ887	900	887	849
SPZ900	913	900	862
SPZ912	925	912	874
SPZ922	935	922	884
SPZ925	938	925	887
SPZ937	950	937	899
SPZ940	953	940	902
SPZ950	963	950	912
SPZ962	975	962	924
SPZ975	988	975	937
SPZ987	1000	987	949
SPZ1000	1013	1000	962
SPZ1010	1023	1010	972
SPZ1012	1025	1012	974

Part No	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)
SPZ1020	1033	1020	982
SPZ1024	1037	1024	986
SPZ1030	1043	1030	992
SPZ1037	1050	1037	999
SPZ1040	1053	1040	1002
SPZ1047	1060	1047	1009
SPZ1060	1073	1060	1022
SPZ1062	1075	1062	1024
SPZ1077	1090	1077	1039
SPZ1080	1093	1080	1042
SPZ1087	1100	1087	1049
SPZ1090	1103	1090	1052
SPZ1100	1113	1100	1062
SPZ1112	1125	1112	1074
SPZ1120	1133	1120	1082
SPZ1125	1138	1125	1087
SPZ1137	1150	1137	1099
SPZ1140	1153	1140	1102
SPZ1147	1160	1147	1109
SPZ1150	1163	1150	1112
SPZ1160	1173	1160	1122
SPZ1162	1175	1162	1124
SPZ1180	1193	1180	1142
SPZ1187	1200	1187	1149
SPZ1200	1213	1200	1162

BELT DRIVES
(VALUE RANGE)

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadalttd.co.uk



V PULLEYS



V-PULLEYS TAPER BORE

Description

Dunlop V-pulleys are manufactured from cast iron EN-GJL-200 UNI EN1561 and are black phosphated according to ISO 4183 and DIN 2211-3 norms. All pulleys are statically balanced for peripheral speeds up to 35 m/sec.

V-Pulleys are available to suit all V & wedge belts cross sections Z, A, B, C, SPZ, SPA, SPB & SPC and are available from stock in both taper and pilot bore options.

Part numbers are identified by 3 letters (e.g. SPA) which represents the belt cross section, a 3 or 4 digit number (e.g. 250) the pulleys pitch diameter and a 1 or 2 digit number (e.g. 3) the number of grooves/belts to be run in the drive, for example SPA250/3.

SPZ - WEDGE V-BELTS SECTION

Part No.	Type	Bush No.	PD (mm)	OD (mm)	Dimensions (mm)			
					F	L	R	P
SPZ 50 X 1	3	1008	50	54	38	24	14	-
SPZ 50 X 2	3	1008	50	54	50	24	26	-
SPZ 56 X 1	3	1008	56	60	37	24	13	-
SPZ 56 X 2	3	1008	56	60	49	24	25	-
SPZ 56 X 3	3	1108	56	60	61	23	38	-
SPZ 60 X 1	2	1008	60	64	22	22	-	-
SPZ 60 X 2	3	1108	60	64	49	22	27	-
SPZ 60 X 3	3	1108	60	64	61	23	38	-
SPZ 63 X 1	4	1108	63	67	16	22	-	-
SPZ 63 X 2	5	1108	63	67	28	22	6	-
SPZ 63 X 3	5	1108	63	67	40	22	18	-
SPZ 63 X 4	5	1108	63	67	52	22	30	-
SPZ 67 X 1	4	1108	67	71	16	22	-	-
SPZ 67 X 2	5	1108	67	71	28	22	6	-
SPZ 67 X 3	5	1108	67	71	40	22	18	-
SPZ 67 X 4	5	1108	67	71	52	22	30	-
SPZ 71 X 1	4	1108	71	75	16	22	-	-
SPZ 71 X 2	5	1108	71	75	28	22	6	-
SPZ 71 X 3	5	1108	71	75	40	22	18	-
SPZ 71 X 4	5	1108	71	75	52	22	30	-
SPZ 71 X 5	5	1108	71	75	64	22	42	-
SPZ 75 X 1	4	1108	75	79	16	22	-	-
SPZ 75 X 2	5	1210	75	79	28	25	3	-
SPZ 75 X 3	5	1210	75	79	40	25	15	-
SPZ 75 X 4	5	1210	75	79	52	25	27	-
SPZ 80 X 1	4	1210	80	84	16	25	-	-
SPZ 80 X 2	5	1210	80	84	28	25	3	-
SPZ 80 X 3	5	1210	80	84	40	25	15	-
SPZ 80 X 4	5	1210	80	84	42	25	27	-
SPZ 85 X 1	5	1610	85	89	28	25	3	-
SPZ 85 X 2	5	1610	85	89	40	25	15	-

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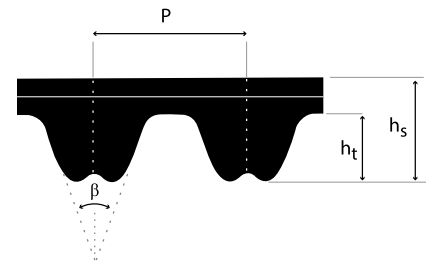
RPP TIMING BELTS RUBBER CHAIN

Description

The new RPP parabolic profile is deeper than the equivalent competitors standard tooth profile. The increased depth and sturdiness of the tooth results in an increased torque transmission capability and reduced interference during meshing.

The recess in the top of the tooth allows local deformation of the belt when meshing with the pulley, and this contributes to the ability to absorb shock loads and reduced interference during meshing. Other benefits include a reduction in transmission noise, an increase in tooth jump resistance, an increase in power transmitted and an increase resistance to tooth shear. Part numbers are identified by a 3 or 4 digit number (e.g. 960) which represents the pitch length in mm, a number and letter (e.g. 8M) the belts pitch and a 2 or 3 digit number (e.g. 30) the belts width. 960-8M-30 etc.

Belt type	Pitch	β	h_s	h_t
3M	3mm	32°	2.40	1.15
5M	5mm	32°	3.80	2.00
8M	8mm	32°	5.40	3.46
14M	14mm	32°	9.70	6.10



BELT DRIVES
(VALUE RANGE)

3M RUBBER CHAIN TIMING BELTS

3M - CROSS SECTION		BELT WIDTH			
Part Number	Effective Length (mm)	Number of teeth	6mm	9mm	15mm
90-3M-	90	30	06	09	15
105-3M-	105	35	06	09	15
129-3M-	129	43	06	09	15
141-3M-	141	47	06	09	15
144-3M-	144	48	06	09	15
147-3M-	147	49	06	09	15
150-3M-	150	50	06	09	15
159-3M-	159	53	06	09	15
168-3M-	168	56	06	09	15
174-3M-	174	58	06	09	15
177-3M-	177	59	06	09	15
180-3M-	180	60	06	09	15
186-3M-	186	62	06	09	15
195-3M-	195	65	06	09	15
201-3M-	201	67	06	09	15
204-3M-	204	68	06	09	15
210-3M-	210	70	06	09	15
213-3M-	213	71	06	09	15
225-3M-	225	75	06	09	15
231-3M-	231	77	06	09	15
240-3M-	240	80	06	09	15
243-3M-	243	81	06	09	15
246-3M-	246	82	06	09	15
249-3M-	249	83	06	09	15
252-3M-	252	84	06	09	15

3M - CROSS SECTION		BELT WIDTH			
Part Number	Effective Length (mm)	Number of teeth	6mm	9mm	15mm
255-3M-	255	85	06	09	15
261-3M-	261	87	06	09	15
264-3M-	264	88	06	09	15
267-3M-	267	89	06	09	15
270-3M-	270	90	06	09	15
276-3M-	276	92	06	09	15
285-3M-	285	95	06	09	15
288-3M-	288	96	06	09	15
291-3M-	291	97	06	09	15
297-3M-	297	99	06	09	15
300-3M-	300	100	06	09	15
312-3M-	312	104	06	09	15
318-3M-	318	106	06	09	15
327-3M-	327	109	06	09	15
330-3M-	330	110	06	09	15
333-3M-	333	111	06	09	15
336-3M-	336	112	06	09	15
339-3M-	339	113	06	09	15
345-3M-	345	115	06	09	15
357-3M-	357	119	06	09	15
363-3M-	363	121	06	09	15
375-3M-	375	125	06	09	15
384-3M-	384	128	06	09	15
390-3M-	390	130	06	09	15
393-3M-	393	131	06	09	15

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk



TIMING PULLEYS



HTD TIMING PULLEYS TAPER BORE

Description

Dunlop HTD Timing Belt Pulleys are manufactured from either C45 steel with black oxide surface treatment, cast iron EN-GJL-200 and black phosphate or aluminium 6082. Pulley flanges are produced from S235JR steel.

HTD Timing Belt Pulleys are available to suit all HTD pitch sizes, 3M, 5M, 8M & 14M and are available from stock in both taper and pilot bore options.

Part numbers are identified by a 2 or 3 digit number (e.g. 44) which represents the number of teeth, a number and a letter (e.g. 8M) the pulleys pitch and a 2 or 3 digit number (e.g. 30) the width of the appropriate corresponding timing belt, for example 44-8M-30F.

5M - SECTION 15MM WIDE TIMING PULLEYS

Part Number	Type	Bushing Type	Bushing Max Bore	R mm	S mm	Ø e mm	U mm	W mm	H mm	Y mm	Z mm	Flange	Material
34-5M-15F	8	1008	25	54.11	52.97	57	-	22	-	22	-	With Flanges	Steel
36-5M-15F	8	1108	28	57.30	56.16	62	-	22	-	22	-		
38-5M-15F	8	1108	28	60.48	59.34	67	-	22	-	22	-		
40-5M-15F	8	1108	28	63.66	62.52	73	-	22	-	22	-		
44-5M-15F	8	1108	28	70.03	68.89	73	-	22	-	22	-		
48-5M-15F	1	1210	32	76.39	75.25	84	-	20.5	64	22	4.5		
56-5M-15F	1	1210	32	89.13	87.99	94	-	20.5	70	22	4.5	Without Flanges	Cast Iron
64-5M-15	1	1210	32	101.86	100.72	108	-	20.5	78	22	4.5		
72-5M-15	1	1610	42	114.59	113.45	121	-	20.5	90	22	4.5		
80-5M-15	1	1610	42	127.32	126.18	131	-	20.5	92	22	4.5		
90-5M-15	15	1610	42	143.24	142.10	-	122	20.5	92	22	4.5		
112-5M-15	15	1610	42	178.25	177.11	-	157	20.5	92	22	4.5		
136-5M-15	15	2012	50	216.45	215.31	-	195	20.5	110	22	5.8		
150-5M-15	15	2012	50	238.73	237.59	-	217	20.5	110	22	5.8		

8M - SECTION 20MM WIDE TIMING PULLEYS

Part Number	Type	Bushing Type	Bushing Max Bore	R mm	S mm	Ø e mm	U mm	W mm	H mm	Y mm	Z mm	Flange	Material
22-8M-20F	4	1008	25	56.02	54.65	62	38	28	-	6	22	With Flanges	Cast Iron
24-8M-20F	4	1108	28	61.12	59.74	67	42	28	-	6	22		
26-8M-20F	4	1108	28	66.21	64.84	73	45	28	-	6	22		
28-8M-20F	4	1108	28	71.30	69.93	77	52	28	-	6	22		
30-8M-20F	4	1108	28	76.39	75.02	84	56	28	-	6	22		
32-8M-20F	4	1210	32	81.49	80.12	88	65	28	-	3	25		
34-8M-20F	4	1210	32	86.58	85.21	94	66	28	-	3	25		
36-8M-20F	4	1210	32	91.67	90.30	98	68	28	-	3	25		
38-8M-20F	4	1610	42	96.77	95.39	104	76	28	-	3	25		
40-8 M-20F	4	1610	42	101.86	100.49	108	80	28	-	3	25		
44-8M-20F	1	1610	42	112.05	110.67	121	-	28	99	4	32		
48-8M-20F	1	1610	42	122.23	120.86	129	-	28	105	4	32		
56-8M-20F	1	2012	50	142.60	141.23	149	-	28	105	4	32		
64-8M-20F	6	2012	50	162.97	161.60	168	140	28	110	4	32		
72-8M-20F	6	2012	50	183.35	181.97	191	158	28	110	4	32		

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MICRO V-BELTS



MICRO V-BELTS

Description

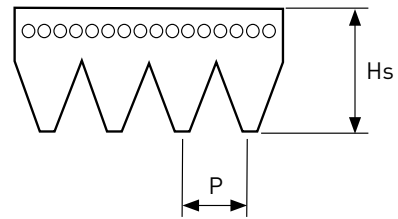
High Performance Micro V-Belts in endless construction and with triangular ribs running along the length of the belt, the entire power is transmitted by a single belt.

Drives can be reduced in size when compared with traditional V-belt drives as smaller pulleys can be used that will transmit equal or higher loads thereby reducing space requirements and cost.

Higher ratios and increased belt speeds can also be achieved.

Part numbers are identified by a 3 or 4 digit number (e.g. 1321) which represents the nominal length in mm, a letter (e.g. J) the cross section and a 2 digit number (e.g. 08) the number of ribs. 1321J08 etc.

Part No.	BELT TYPE	
	PITCH	Hs
J	2.34	4.00
K	3.56	5.50
L	4.70	9.50
M	9.40	16.70



BELT DRIVES
(VALUE RANGE)

J CROSS SECTION MICRO V-BELTS

Part No.	Effective Length (mm)	Effective Length (inches)
197J/RIB	197	7.8
207J/RIB	207	8.1
234J/RIB	234	9.2
254J/RIB	254	10.0
267J/RIB	267	10.5
274J/RIB	274	10.8
288J/RIB	288	11.3
300J/RIB	300	11.8
305J/RIB	305	12.0
330J/RIB	330	13.0
350J/RIB	350	13.8
356J/RIB	356	14.0
381J/RIB	381	15.0
406J/RIB	406	16.0
428J/RIB	428	16.9
432J/RIB	432	17.0
457J/RIB	457	18.0
483J/RIB	483	19.0
495J/RIB	495	19.5
508J/RIB	508	20.0
533J/RIB	533	21.0
559J/RIB	559	22.0
584J/RIB	584	23.0
610J/RIB	610	24.0
635J/RIB	635	25.0
650J/RIB	650	25.6
660J/RIB	660	26.0
685J/RIB	685	27.0

Part No.	Effective Length (mm)	Effective Length (inches)
711J/RIB	711	28.0
723J/RIB	723	28.5
726J/RIB	726	28.6
737J/RIB	737	29.0
762J/RIB	762	30.0
769J/RIB	769	30.3
787J/RIB	787	31.0
790J/RIB	790	31.1
813J/RIB	813	32.0
838J/RIB	838	33.0
864J/RIB	864	34.0
889J/RIB	889	35.0
895J/RIB	895	35.2
914J/RIB	914	36.0
938J/RIB	938	36.9
944J/RIB	944	37.2
955J/RIB	955	37.6
960J/RIB	960	37.8
965J/RIB	965	38.0
990J/RIB	990	39.0
995J/RIB	995	39.2
1016J/RIB	1016	40.0
1036J/RIB	1036	40.8
1040J/RIB	1040	40.9
1051J/RIB	1051	41.4
1054J/RIB	1054	41.5
1059J/RIB	1059	41.7
1065J/RIB	1065	41.9

Part No.	Effective Length (mm)	Effective Length (inches)
1067J/RIB	1067	42.0
1080J/RIB	1080	42.5
1089J/RIB	1089	42.9
1092J/RIB	1092	43.0
1100J/RIB	1100	43.3
1105J/RIB	1105	43.5
1108J/RIB	1108	43.6
1110J/RIB	1110	43.7
1116J/RIB	1116	43.9
1118J/RIB	1118	44.0
1123J/RIB	1123	44.2
1126J/RIB	1126	44.3
1130J/RIB	1130	44.5
1136J/RIB	1136	44.7
1143J/RIB	1143	45.0
1150J/RIB	1150	45.3
1160J/RIB	1160	45.7
1168J/RIB	1168	46.0
1170J/RIB	1170	46.1
1184J/RIB	1184	46.6
1190J/RIB	1190	46.9
1194J/RIB	1194	47.0
1200J/RIB	1200	47.2
1203J/RIB	1203	47.4
1210J/RIB	1210	47.6
1214J/RIB	1214	47.8
1219J/RIB	1219	48.0
1222J/RIB	1222	48.1

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Tsubaki in partnership with IADA

The Start of a New Era

CHAIN DRIVES & HARDWARE



100th Anniversary Model
TSUBAKI G8 SERIES 

The rebirth of the drive chain,
with improved quality and performance.

Stockholding UK/Europe

Tsubaki stocks a wide range of standard power transmission products; many of which provide innovative solutions. We pride ourselves on customer service excellence and understand the importance of having stock available to fulfil our customer's requirements. The UK and European warehouses hold stock in excess of £18m and offer a wide product range of drive, conveyor, attachment chains & sprockets. We also supply power transmission component products such as cam clutches, torque limiters and couplings.



Tsubakimoto UK offices and distribution centre in Nottingham, UK

About Tsubaki

Established in 1917, Tsubakimoto Chain Company is the world's premier manufacturer of power transmission products with strong market positions in premium quality ANSI & BS roller conveyor & engineering chains and associated power transmission components such as cam clutches, reducers & linear actuators.

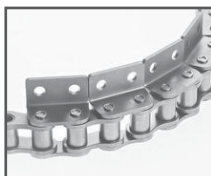
At Tsubaki we know that customers want the best. Indeed, we take pride in our ability to deliver an extensive product lineup that satisfies these high expectations. We are also aware that each and every one of our customers has unique requirements. Our focus is on providing our customers around the world with concrete solutions by developing products to suit different countries, regions and business environments.

Tsubakimoto UK in Nottingham, serves the markets of the UK, Ireland and Iceland.

Drive Chain



Attachment Chain



Large Size Conveyor Chain



Cam Clutches



Power Cylinders



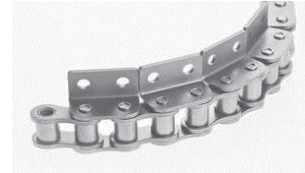
Sprockets



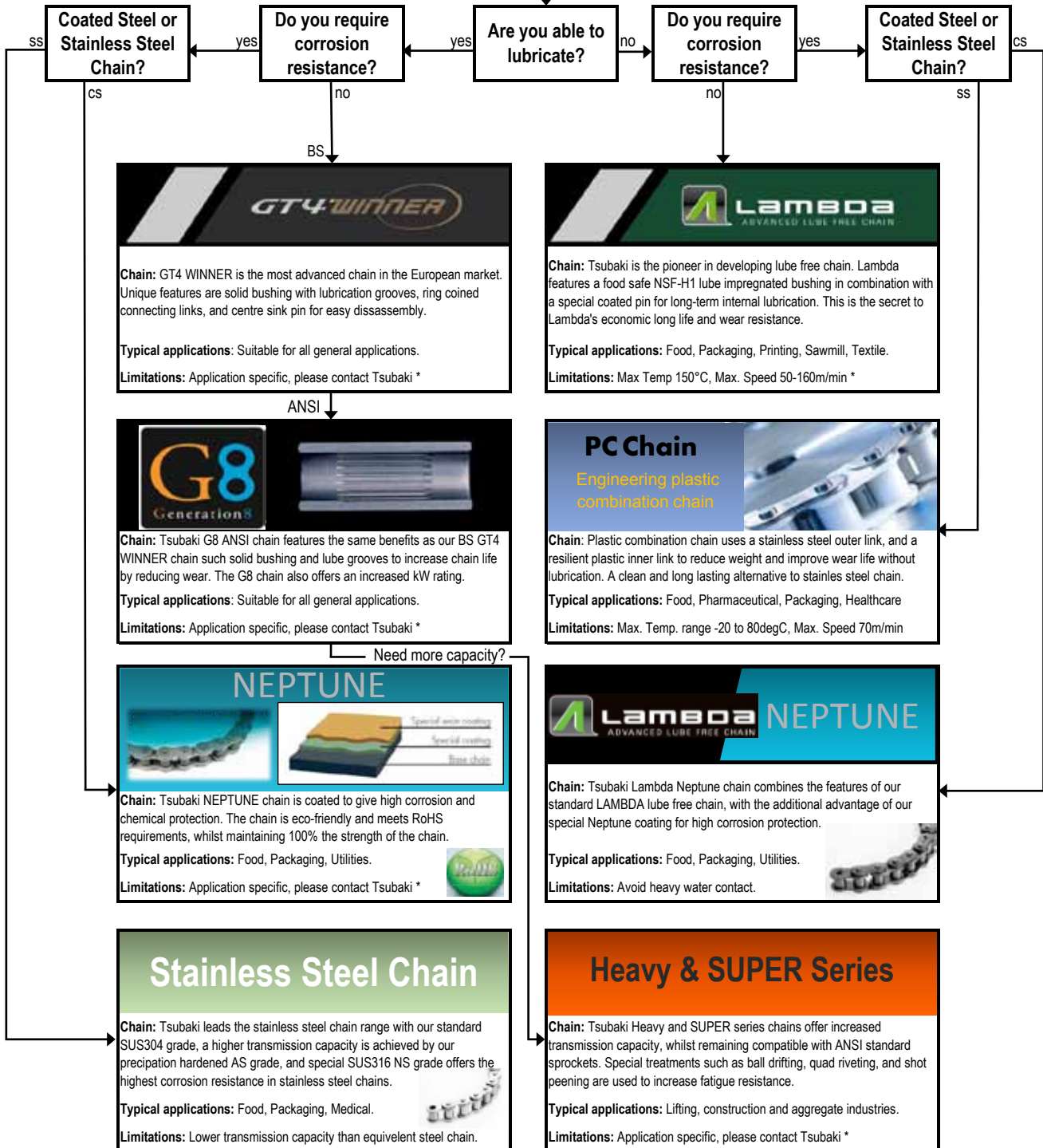
Roller Chain Selection Guide



Roller Chain



Attachment Chain



CHAIN DRIVES & HARDWARE

* Contact Tsubaki as the application requires further investigation.

TSUBAKI GT4 Winner: British Standard Roller Chain

TSUBAKI, the world's largest and most advanced manufacturer of chain has released its 4th generation BS/DIN standard roller chain. The latest generation chain, branded Tsubaki GT4 Winner hosts a number of manufacturing and material developments

Repeated testing and field data indicate that wear between the bearing parts is a primary limiting factor in overall chain life, particularly in externally lubricated chain types such as BS/DIN standard roller chain. TSUBAKI has committed significant amounts of research and development to making improvements in this area, to reduce wear and chain elongation over a longer period of time-even for standard drive roller chain.

CHAIN DRIVES & HARDWARE



Chain Features

- ① Lube Grooves (LG)
RS16B - RS24B
- ② Seamless Bush
- ③ Centre Sink Rivet
- ④ Ring Coin

Four Key Features

1. Pre Lubrication Lube Groove (LG)

TSUBAKI's BS/DIN series roller chain utilise a unique production technique to manufacture a seamless bush with grooves incorporated on the inner surface. The lube-grooved (LG) bush holds oil at the point of contact where the chain needs it most, providing an internal reservoir for the upgraded pre-lube applied by Tsubaki. The result is a chain that lasts longer with lower maintenance costs over the lifetime of the chain.

The Lube Groove Brush is available in BS sizes RS16B through RS24B perfectly sized for the most demanding applications.

2. Seamless Bush > Perfectly Cylindrical

The new Tsubaki BS/DIN series chain has a seamless bush with a very precise cylindrical profile and surface finish resulting in better surface contact between the pin and bush along with improved lubricant retention.

3. Easy dis-assembly > Centre Sink Rivet

With Tsubaki's design of rivet head the chain is easily dis-assembled with an additional benefit being that in the event of the chain being overloaded, the markings on the rivet head will identify pin rotation.

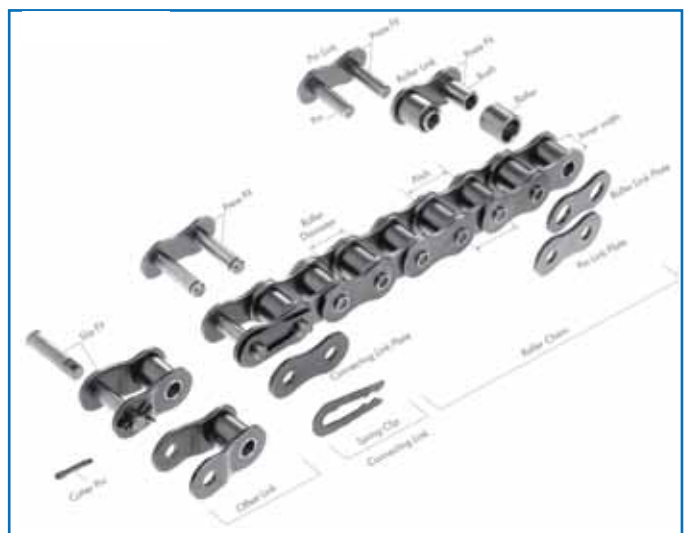
4. Increased Transmission Capacity > Ring Coining

The Ring Coined connecting link allows the chain to be specified up to its full kW rating. The precision and strength achieved on these components is far beyond that of competitor's offerings. The typical standard slip-fit connecting link is usually much weaker than the other links. Tsubaki's Ring Coin technology has overcome that.

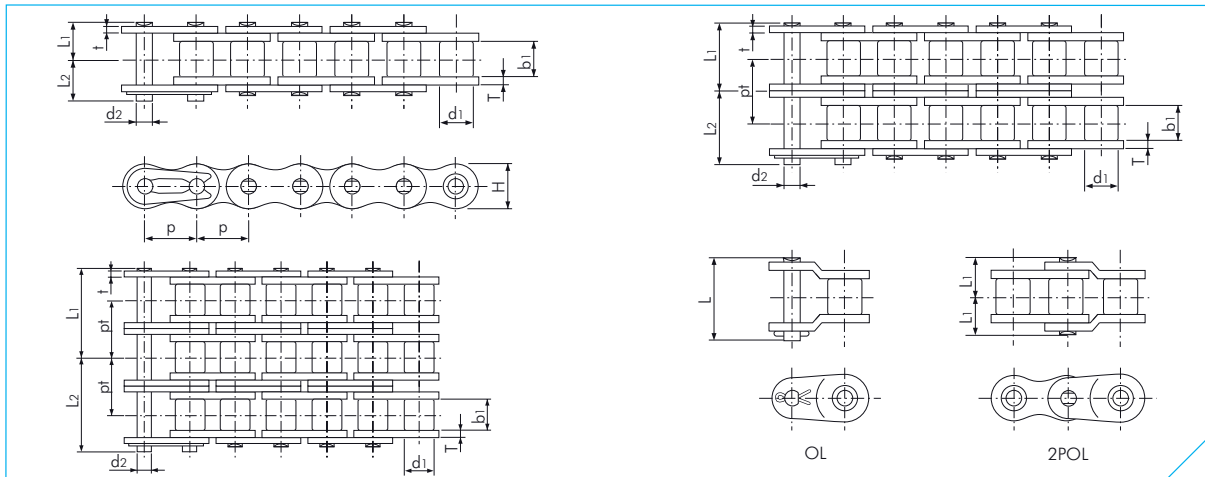
CO² Reduction

Tsubaki takes its environmental responsibility very seriously in its state-of-the-art production facilities. The new BS/DIN series chain contributes significantly to reducing CO² emissions due to the greatly extended replacement frequency.

Roller Chain Structure



BS GT4 Winner Standard Roller Chain



Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Min. Tensile Strength acc. to Tsubaki kN	Av. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t					
RS05B-1	8.00 (0.315")	5.00	3.00	2.30	3.80	4.70	-	0.75	0.75	7.10	5.64	7.8	8.9	0.35
RS05B-2					6.65	7.52	-							
RS05B-3					9.45	10.34	-							
RF06B-1	9.525 (3/8")	6.35	5.72	3.27	6.10	7.70	14.20	1.30	1.00	8.20	10.24	16.9	17.0	18.7
RF06B-2					11.43	12.57	-							
RF06B-3					16.90	17.50	-							
RS08B-1	12.70 (1/2")	8.51	7.75	4.45	8.40	10.00	18.40	1.60	1.60	12.00	13.92	31.1	32.0	35.2
RS08B-2					15.30	16.90	33.60							
RS08B-3					22.25	23.85	47.60							
RS10B-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	21.10	1.50	1.50	14.70	16.59	44.5	44.5	49.0
RS10B-2					17.85	19.55	39.40							
RS10B-3					26.15	27.85	56.10							
RS12B-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	24.80	1.80	1.80	16.10	19.46	57.8	61.0	67.1
RS12B-2					20.85	22.75	46.30							
RS12B-3					30.60	32.50	66.00							
RS16B-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	38.90	4.00	3.20	21.00	31.88	106.0	128.0	141.0
RS16B-2					33.55	35.75	73.80							
RS16B-3					49.50	51.70	105.90							
RS20B-1	31.75 (1 1/4")	19.05	19.56	10.19	19.90	23.10	46.95	4.40	3.40	26.00	36.45	170.0	197.0	217.0
RS20B-2					38.25	41.45	84.85							
RS20B-3					56.50	59.70	121.35							
RS24B-1	38.10 (1 1/2")	25.40	25.40	14.63	26.65	31.85	62.00	6.00	5.60	33.40	48.36	280.0	335.0	369.0
RS24B-H-1					29.30	34.20	-							
RS24B-2					50.80	56.00	112.95							
RS24B-3	75.10	80.20	161.35	6.00	5.60	33.40	48.36	425.0	500.0	550.0	21.75			
RS28B-1	32.45	37.45	74.50											
RS28B-2	62.15	67.15	136.85											
RS28B-3	91.95	96.95	196.45	7.50	6.30	36.40	59.56	360.0	374.0	411.0	18.80			
RS32B-1	32.10	37.70	73.50											
RS32B-2	61.25	66.85	135.25											
RS32B-3	90.50	96.10	193.80	7.00	6.30	42.20	58.55	450.0	485.0	534.0	21.10			
RS40B-1	39.25	45.05	88.85											
RS40B-2	75.40	81.20	163.55											
RS40B-3	111.50	117.30	235.85	8.50	8.00	52.90	72.29	630.0	716.0	788.0	32.00			
RS48B-1	49.30	58.80	117.70											
RS48B-2	95.00	104.40	209.00											
RS48B-3	140.60	150.00	300.20	12.10	10.00	63.80	91.21	1000.0	1000.0	1150.0	50.00			
RS48B-1	72.29	95.00	1080.0											
RS48B-2	560.0	565.0	618.0											
RS48B-3	91.21	1500.0	1520.0											

Note:

1. Connecting links are clip type for sizes up to RS16B, and cotter type for sizes RS20B to RS48B.
2. RF06B chain has flat-shaped link plates.
3. Intermediate plate of multi strand RF06B-2 and RS08B-2 chain is a solid plate.
4. Center sink riveting is applied to RS08B-1 to RS16B-1 single strand chain.
5. Double stake riveting is applied to all other sizes including multi-strand chain.
6. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.
7. RS24B-H-1 chain is a reinforced RS24B-1 chain.

TSUBAKI G8: ANSI Standard Roller Chain

TSUBAKI's 8th model upgrade, celebrating 100 years of quality. Pursuing the ultimate in quality, TSUBAKI has created the world's highest standard of roller chain.

All ANSI Chains Are Not Created Equal

ANSI defines minimum threshold standards: acceptable, but they won't improve your bottom line. TSUBAKI ANSI G8 Chains set the bar higher with design innovations that deliver solid results!

Advantages

TSUBAKI has enhanced the ANSI G8 with the following advantages:

Solid Lube Groove Bush - Our Latest Innovation

Unlike curled bush, TSUBAKI SOLID Lube Groove Bush does not have a split. This means that oil cannot leak from the bearing area as a result of that type of manufacturing process. Additional to that innovation TSUBAKI developed a unique process to add grooves to the inner surface of the solid bush. This lube groove process ensures longer and better lubrication which results in an extended chain life.

The Lube Groove Bush is available in ANSI sizes RS80 through RS140, perfectly sized for the most demanding applications.



Save Operating Costs and Reduce Downtime

Normally, ANSI chains are removed or replaced due to elongation caused by wear in the pin-bush joint. The patented Lube Groove retains lubricant right where it's needed: in the pin-bush joint. In many applications you'll notice a significant difference in maintenance, operating, and replacement costs due to the increased reliability of the ANSI G8 chains.

Increased kW Rating

Transmission capacity has been increased by applying the TSUBAKI Ring Coining process on the connecting link plate.

For easy assembling the pin and link plate of a connecting link are slip fit. In general, this type of connecting link has a 20% lower fatigue strength than the chain itself. However, TSUBAKI developed a special process to eliminate that loss of Fatigue Strength and still satisfy the customers demand for easy assembly: the Ring Coining process. By applying the Ring Coining process, TSUBAKI generates a cold deformation around the pin hole of the connecting link plate. This results in residual stress around the pin hole and thereby adds strength. By using this process transmission capacity is increased to 100% of that of the base chain.

Constant Quality Level

In pursuit of outstanding quality, every TSUBAKI chain is made of a special steel alloy developed by the TSUBAKI Engineering Department.

Besides that, TSUBAKI produces the ANSI G8 under highly controlled conditions in its advanced heat treatment facilities. This, in combination with the TSUBAKI fatigue strength confirmation tests, ensures that our customers can always rely on a constant level of TSUBAKI quality.

Customised Pre-Lubrication Service

Proper lubrication is the key to extend the life and improve the performance of a chain. In order to get the best performance in general applications (-10 to +60°C), all ANSI G8 drive chains are pre-lubricated.

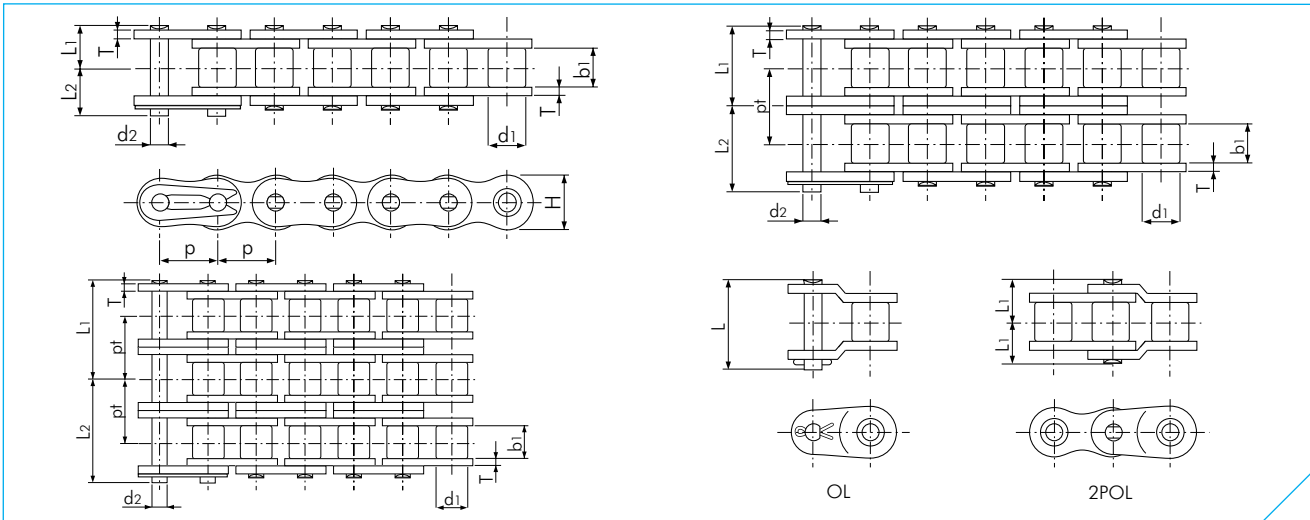
For special applications, TSUBAKI can provide chains which are pre-lubricated with a special lubricant on customer demand:

- High temperature
- Low temperature
- Food safe
- Outdoor exposure
- Dusty environment

Please consult TSUBAKI for more detailed information



ANSI G8 Standard Roller Chain



TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Diameter d2	Pin			Link Plate		Transverse Pitch pt	Min. Tensile Strength acc. to ANSI kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
					Length L1	Length L2	Length L	Thickness T	Height H (max)				
RS25-1					3.80	4.50	-			-	3.5	4.12	0.14
RS25-2	6.35 (1/4")	3.30	3.18	2.31	6.95	7.75	-	0.75	5.84	6.40	7.0	8.24	0.27
RS25-3					10.15	10.95	-			6.40	10.5	12.4	0.42
RS35-1					5.85	6.85	13.50			-	7.9	9.81	0.33
RS35-2	9.525 (3/8")	5.08	4.78	3.59	10.90	11.90	24.50	1.25	9.00	10.10	15.8	19.6	0.69
RS35-3					16.00	16.90	34.60			10.10	23.7	29.4	1.05
RS35-4					21.05	21.95	44.70			10.10	-	39.2	1.41
RS37-1	12.70 (1/2")	7.80	3.40	3.63	5.10	5.90	12.45	1.00	9.80	-	-	8.14	0.29
RS38-1	12.70 (1/2")	7.80	4.80	3.63	6.00	7.10	14.10	1.10	9.80	-	-	8.14	0.35
RS41-1	12.70 (1/2")	7.77	6.38	3.59	6.75	7.95	15.10	1.25	9.80	-	6.7	10.3	0.41
RS40-1					8.25	9.95	18.20			-	13.9	17.7	0.64
RS40-2	12.70 (1/2")	7.92	7.95	3.97	15.45	17.15	33.50	1.50	12.00	14.40	27.8	35.3	1.27
RS40-3					22.65	24.15	47.90			14.40	41.7	53.0	1.90
RS40-4					29.90	31.30	62.30			14.40	-	70.6	2.53
RS50-1					10.30	11.90	22.60			-	21.8	28.4	1.04
RS50-2	15.875 (5/8")	10.16	9.53	5.09	19.35	21.15	41.80	2.00	15.00	18.10	43.6	56.9	2.07
RS50-3					28.40	30.20	59.90			18.10	65.4	85.3	3.09
RS50-4					37.45	39.25	78.10			18.10	-	114.0	4.11
RS60-1					12.85	14.75	28.20			-	31.3	40.2	1.53
RS60-2	19.05 (3/4")	11.91	12.70	5.96	24.25	26.25	52.60	2.40	18.10	22.80	62.6	80.4	3.04
RS60-3					35.65	38.15	75.50			22.80	93.9	121.0	4.54
RS60-4					47.05	49.55	98.30			22.80	-	161.0	6.04
RS80-1					16.25	19.25	36.60			-	55.6	71.6	2.66
RS80-2	25.40 (1")	15.88	15.88	7.94	30.90	33.90	67.50	3.20	24.10	29.30	111.2	143.0	5.27
RS80-3					45.60	48.50	96.90			29.30	166.8	215.0	7.89
RS80-4					60.25	63.25	126.30			29.30	-	286.0	10.50
RS100-1					19.75	22.85	43.70			-	87.0	107.0	3.99
RS100-2	31.75 (1 1/4")	19.05	19.05	9.54	37.70	40.80	81.50	4.00	30.10	35.80	174.0	214.0	7.85
RS100-3					55.65	58.75	117.30			35.80	261.0	321.0	11.77
RS100-4					73.55	76.65	153.10			35.80	-	428.0	15.70
RS120-1					24.90	28.90	55.00			-	125.0	148.0	5.93
RS120-2	38.10 (1 1/2")	22.23	25.40	11.11	47.60	51.60	103.20	4.80	36.20	45.40	250.0	296.0	11.70
RS120-3					70.40	74.40	148.60			45.40	375.0	444.0	17.53
RS120-4					93.10	97.10	194.00			45.40	-	592.0	23.36
RS140-1					26.90	31.70	59.50			-	170.0	193.0	7.49
RS140-2	44.45 (1 3/4")	25.40	25.40	12.71	51.35	56.15	112.30	5.60	42.20	48.90	340.0	386.0	14.83
RS140-3					75.85	80.75	161.30			48.90	510.0	580.0	22.20
RS160-1					31.85	36.85	70.20			-	223.0	255.0	10.10
RS160-2	50.80 (2")	28.58	31.75	14.29	61.15	66.15	132.20	6.40	48.20	58.50	446.0	510.0	20.04
RS160-3					90.45	95.45	190.70			58.50	669.0	765.0	30.02
RS180-1					35.65	42.45	80.60			-	281.0	336.0	13.45
RS180-2	57.15 (2 1/4")	35.71	35.72	17.46	68.75	75.35	151.10	7.15	54.20	65.80	562.0	673.0	26.52
RS180-3					101.70	108.50	216.90			65.80	843.0	1010.0	38.22
RS200-1					39.00	44.80	87.30			-	347.0	427.0	16.49
RS200-2	63.50 (2 1/2")	39.68	38.10	19.85	74.85	80.65	161.20	8.00	60.30	71.60	694.0	853.0	32.63
RS200-3					110.75	116.45	233.00			71.60	1041.0	1280.0	49.02
RS240-1					47.90	55.50	106.70			-	500.0	623.0	24.50
RS240-2	76.20 (3")	47.63	47.63	23.81	91.90	99.40	198.40	9.50	72.40	87.80	1000.0	1250.0	48.10

Note:

1. RS25 - RS35 are rollerless chain (only bush). The figure shown is the bush diameter.
2. Connecting links are clip type for sizes up to RS60, and cotter type for sizes RS80 to RS200. RS240 connecting links are spring pin type.
3. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.

CHAIN DRIVES & HARDWARE

TSUBAKI Lambda: Lube Free Roller Chain

TSUBAKI's Lambda Chains were the first in the industry to use a special oil impregnated bush. Since their launch in 1988, they have been adopted for diverse industries and applications, such as food, beverage, paper, wood and packaging. TSUBAKI has a wide line-up of lube-free, long life products that help customers reduce costs.

Technical Evolution

As a pioneer in the lube-free chain market, TSUBAKI will reveal some of the key elements behind Lambda's outstanding performance:

Sintered Oil Impregnated Bush

The microscopic pores in the seamless sintered bush are vacuum filled with high performance NSF-H1 food grade lubricant, which provides a 30% increase in wear-life performance.

* Average increase compared to the previous generation of Lambda chain.

Special Coated Pin

The special coating on the pin surface enhances the long term internal lubrication.

Centre Sink Rivet

The unique centre sink pin design offers easy chain disassembly and the markings on the rivet head will identify pin rotation.

* BS only: RS08B-1 to RS16B-1

Ring Coin

The Ring Coin connecting link ensures that the chain can be specified up to its full chain capacity.



Fig. 10 Basic Construction

Save Purchasing Costs

Lower frequency of purchasing due to the high quality of the chain and its long economic life. No purchasing of lubricants or lubrication systems necessary.

Higher Productivity

No unforeseen downtime due to chain breakdown. Less time required for maintenance and therefore more time for production.

Environmental Friendly

Applications run clean thus reducing the risk of contaminating products, machines, floor etc.

Inter-Changeability

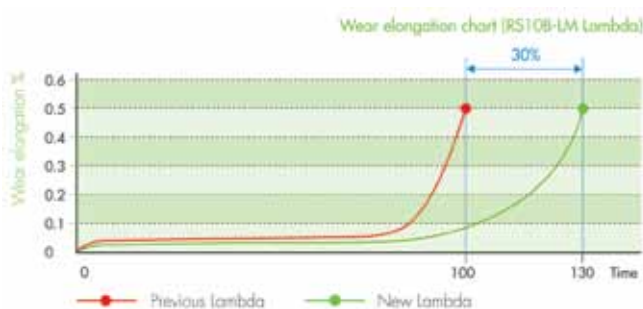
BS Chain:

BS Lambda Chains are fully interchangeable with standard BS roller chains.

ANSI Chain:

Only simplex ANSI Lambda is interchangeable with standard ANSI roller chain. However, as the pins are longer than those of the standard ANSI roller chain, please make sure that there is no interference with the machine

30% INCREASED WEAR LIFE PERFORMANCE



Advantages

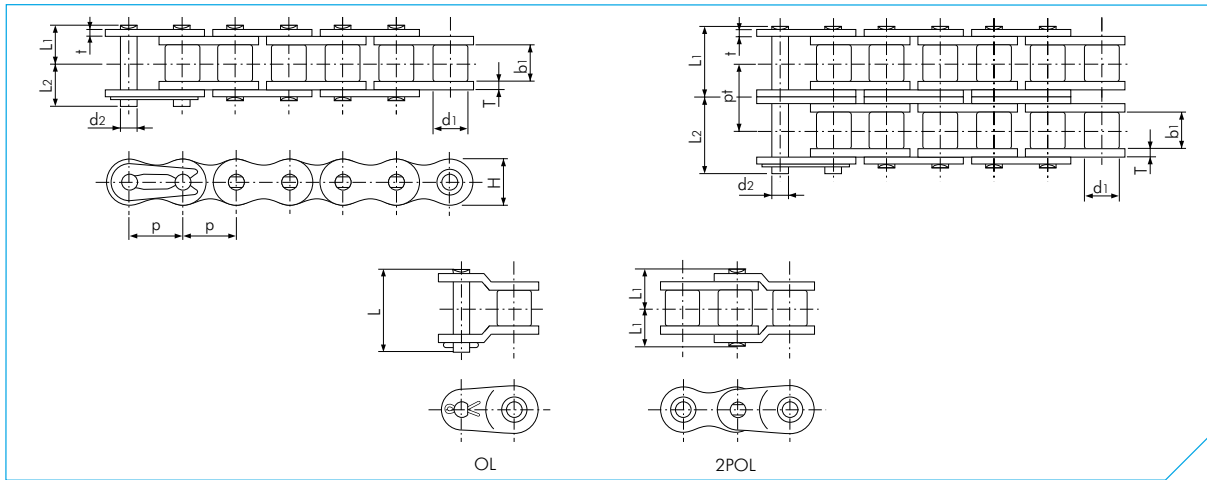
TSUBAKI has enhanced the Lambda with the following advantages:

Save Maintenance Costs

No expensive labour costs as it is not required to manually lubricate this chain.



Lambda Lube Free Roller Chain



BS Lambda Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Approx. Mass kg/m	
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t				Height H (max)
RF06B-LM-1					6.10	7.70	15.10						
RF06B-LM-2	9.525 (3/8")	6.35	5.72	3.28	11.20	12.80	25.90	1.30	1.00	8.20	10.24	8.9	0.39
RS08B-LM-1					8.40	10.00	18.60						
RS08B-LM-2	12.70 (1/2")	8.51	7.75	4.45	15.30	16.90	34.50	1.60	1.60	12.00	13.92	17.8	0.70
RS10B-LM-1					9.55	11.25	20.80						
RS10B-LM-2	15.875 (5/8")	10.16	9.65	5.08	17.85	19.55	39.40	1.50	1.50	14.70	16.59	22.2	0.95
RS12B-LM-1					11.10	13.00	24.40						
RS12B-LM-2	19.05 (3/4")	12.07	11.68	5.72	20.85	22.75	45.90	1.80	1.80	16.10	19.46	28.9	1.25
RS16B-LM-1					17.75	19.95	39.30						
RS16B-LM-2	25.40 (1")	15.88	17.02	8.28	33.55	35.75	73.40	4.00	3.20	21.00	31.88	44.5	1.85
RS20B-LM-1					19.90	23.10	46.60						
RS20B-LM-2	31.75 (1 1/4")	19.05	19.56	10.19	38.25	41.45	84.60	4.40	3.40	26.40	36.45	57.8	2.50
RS24B-LM-1					26.65	31.85	61.70						
RS24B-LM-2	38.10 (1 1/2")	25.40	25.40	14.63	50.80	56.00	112.80	6.00	5.60	33.40	48.36	76.5	3.85

CHAIN DRIVES & HARDWARE

ANSI Drive Series Lambda Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m	
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t				Height H (max)
40-LMD-1					8.75	10.45	20.00						
40-LMD-2	12.70 (1/2")	7.95	7.55	3.97	16.50	18.10	-	2.00	1.50	12.00	15.40	17.7	0.70
50-LMD-1					10.75	12.45	24.00						
50-LMD-2	15.875 (5/8")	10.16	9.26	5.09	20.20	22.00	-	2.40	2.00	15.00	19.00	28.4	1.11
60-LMD-1					13.75	15.70	32.00						
60-LMD-2	19.05 (3/4")	11.91	12.28	5.96	26.05	28.05	-	3.20	2.40	18.10	24.52	35.4	1.40
80-LMD-1					17.15	20.25	39.90						
80-LMD-2	25.40 (1")	15.88	15.48	7.94	32.70	35.90	-	4.00	3.20	24.10	31.10	56.8	2.20
100-LMD-1					20.65	23.85	47.50						
100-LMD-2	31.75 (1 1/4")	19.05	18.70	9.54	39.50	42.50	-	4.80	4.00	30.10	37.60	71.6	2.77
120-LMD-1					25.75	29.95	59.00						
120-LMD-2	38.10 (1 1/2")	22.23	24.75	11.11	50.80	56.00	-	5.60	4.80	36.20	50.80	143.0	5.50
140-LMD-1					27.70	32.20	63.70						
140-LMD-2	44.45 (1 3/4")	25.40	24.75	12.71	63.70	69.00	-	6.40	5.60	42.20	69.00	107.0	4.30

Note:

1. Connecting links are clip type for sizes up to RS16B-LM, and upto RS60-LMD, and cotter type for sizes RS20B-LM to RS24B-LM and RS80-LMD to RS140-LMD.
2. RF06B-LM chain has flat shaped link plates.
3. Intermediate plate of RF06B-LM-2 and RS08B-LM-2 is a solid plate.
4. Centre sink riveting is applied for RS08B-LM-1 to RS16B-LM-1. Double stake riveting is applied to all other sizes including multi-strand chain.
5. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.
6. Offset links for Lambda double strand chains are not available.
7. ANSI drive series Lambda has non standard dimensions, see chart above.

TSUBAKI Neptune: Corrosion Protected Roller Chain

Tsubaki proudly presents the worldwide release of surface treated anti corrosion Neptune chain series, our solution for applications exposed to water, seawater, chemicals, and high humidity conditions. Neptune Chain has superior corrosion and chemical resistant performance, developed for Tsubaki's centennial anniversary. The first release in Tsubaki's 100th Anniversary model G8 (Generation 8) series.

No Strength Reduction

A special treatment process is used that does not affect chain strength (part hardness). Neptune™ chains have the same tensile strength and allowable load as our standard roller chains.

Lower Environmental Load

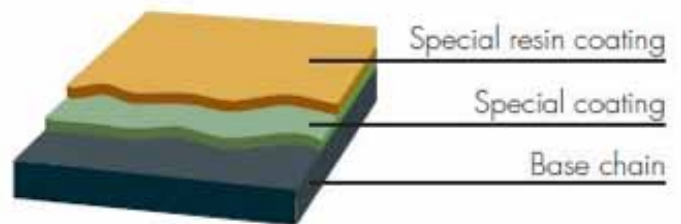
Neptune™ chains use no harmful hexavalent chromium in their corrosion resistant surface treatment, nor any other hazardous substances such as lead, cadmium, mercury, or arsenic. Neptune™ chains are RoHS compliant.

Environment

Manufacturing chain with a substantially larger wear-life serves the environment; less frequent chain replacement results in reduced consumption of raw materials and energy and reduces the CO2 emission. Neptune™ chain is a true eco-friendly product

New Surface Treatment Structure

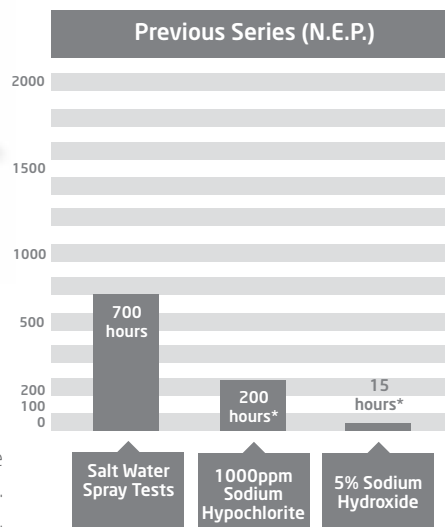
The Neptune™ surface treatment combines Tsubaki's uniquely developed special coating and special resin coating for superb corrosion (rust) and chemical resistance.



Features:

- High Corrosion resistance
- Excellent chemical resistance
- Same strength as carbon steel chain
- Less environmental load

CHAIN DRIVES & HARDWARE

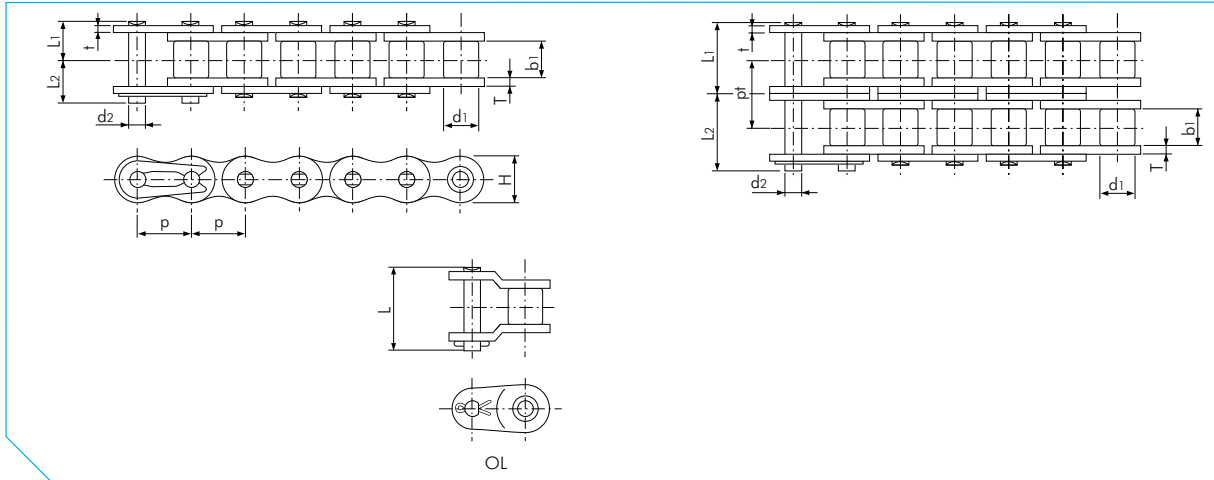


Sodium hydrochlorite and sodium hydroxide are used in the food industry to clean and disinfect. Both are alkaline aqueous solution.

*In-house test comparison



Neptune Chain for Corrosive Environments



BS Neptune Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch		Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m	
	p				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t					Height H (max)
RF06B-NEP-1	9.525 (3/8")		6.35	5.72	3.27	6.10	7.70	15.10	1.30	1.00	8.20	-	8.9	9.0	0.39
RF06B-NEP-2						11.20	12.80	25.90				10.24	16.9	17.0	0.75
RS08B-NEP-1	12.70 (1/2")		8.51	7.75	4.45	8.40	10.00	18.60	1.60	1.60	11.80	-	17.8	19.0	0.70
RS08B-NEP-2						15.30	16.90	34.50				13.92	31.1	32.0	1.35
RS10B-NEP-1	15.875 (5/8")		10.16	9.65	5.08	9.55	11.25	20.80	1.50	1.50	14.70	-	22.2	23.0	0.95
RS10B-NEP-2						17.85	19.55	39.40				16.59	44.5	44.5	1.85
RS12B-NEP-1	19.05 (3/4")		12.07	11.68	5.72	11.10	13.00	24.40	1.80	1.80	16.10	-	28.9	31.0	1.25
RS12B-NEP-2						20.85	22.75	45.90				19.46	57.8	61.0	2.50
RS16B-NEP-1	25.40 (1")		15.88	17.02	8.28	17.75	19.95	43.30	4.00	3.20	21.00	-	60.0	70.0	2.70
RS16B-NEP-2						33.55	35.75	75.20				31.88	106.0	128.0	5.40
RS20B-NEP-1	31.75 (1 1/4")		19.05	19.56	10.19	19.90	23.10	48.20	4.40	3.40	26.00	-	95.0	98.1	3.85
RS20B-NEP-2						38.25	41.45	84.60				36.45	170.0	197.0	7.65
RS24B-NEP-1	38.10 (1 1/2")		25.40	25.40	14.63	26.65	31.85	64.30	6.00	5.60	33.40	-	160.0	167.0	7.45

Note:

1. Connecting links are clip type for sizes up to RS16B-NEP, and cotter type for sizes RS20B-NEP to RS24B-NEP.
2. RF06B-NEP chain has flat-shaped link plates.
3. Intermediate plate of multi strand RF06B-NEP-2 and RS08B-NEP-2 chain is a solid plate.
4. Center sink riveting is applied to RS08B-NEP-1 to RS16B-NEP-1 single strand chain.
5. Double stake riveting is applied to all other sizes including multi-strand chain.
6. When a single pitch offset link is used, please calculate a 40% reduction of the fatigue strength.

ANSI Neptune Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch		Roller Diameter d1	Inner Width b1	Pin			Link Plate		Min. Tensile Strength acc. to ANSI kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m	
	p				Diameter d2	Length L1	Length L2	Length L	Thickness T				Height H (max)
RS35-NEP-1	9.525 (3/8")		5.08	4.78	3.59	5.85	6.85	13.50	1.25	9.00	7.9	9.81	0.33
RS40-NEP-1	12.70 (1/2")		7.92	7.95	3.97	8.25	9.95	18.20	1.50	12.00	13.9	17.7	0.64
RS50-NEP-1	15.875 (5/8")		10.16	9.53	5.09	10.30	11.90	22.60	2.00	15.00	21.8	28.4	1.04
RS60-NEP-1	19.05 (3/4")		11.91	12.70	5.96	12.85	14.75	28.20	2.40	18.10	31.3	40.2	1.53
RS80-NEP-1	25.40 (1")		15.88	15.88	7.94	16.25	19.25	38.20	3.20	24.10	55.6	71.6	2.66

Note:

1. Connecting links are clip type for sizes RS35-NEP to RS60-NEP, and cotter type for size RS80-NEP.
2. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.



TSUBAKI PC: Corrosion Resistant Poly-Steel Chain

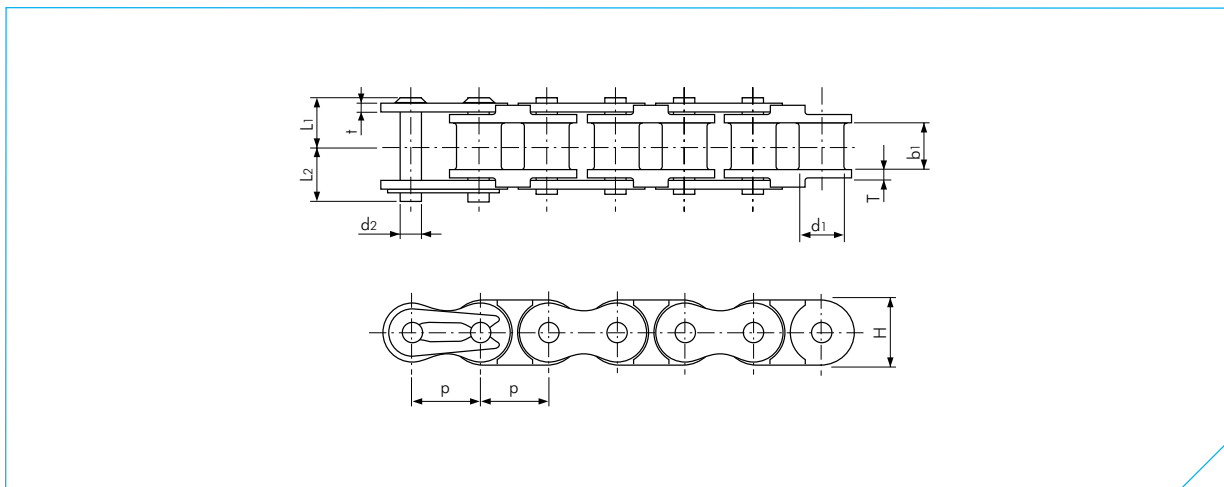
Plastic Combination Chain (PC) uses stainless steel outer link plates and pins with resilient engineering plastic inner links to reduce weight and improve wear life, without lubrication. Tsubaki is the pioneer of this chain technology. PC Chain is resilient to water and detergents as well as food ingredients such as oils and lactic acid. This product can provide an ideal solution for avoiding corrosion in a variety of machinery applications.

PC Engineering Plastic Combination Chain

The pins and pin link plates of these chains are made of SUS304 equivalent (spring clips SUS301). Engineering plastic (white) is used for the inner link. This combination makes it a lube-free, low noise (5 dB lower than standard roller chain) and lightweight chain (50% lighter than standard roller chain). Working temperature range: -20°C to +80°C.



PC Chain Dimensions



BS PC Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Bush Diameter d1	Inner Width b1	Pin			Link Plate			Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m
				Diameter d2	Length L1	Length L2	Thickness T	Thickness t	Height H (max)		
RF06B-PC-1	9.525 (3/8")	6.35	5.72	3.28	6.50	7.25	1.30	1.00	8.20	0.20	0.23
RS08B-PC-1	12.70 (1/2")	8.51	7.75	4.45	8.35	10.05	1.60	1.50	12.00	0.46	0.40
RS10B-PC-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	1.50	1.50	14.70	0.53	0.51
RS12B-PC-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	1.80	1.80	16.10	0.70	0.67

Note:

1. Make sure to check the chain load again when replacing Stainless Steel Chain with PC Chain.
2. Offset links are not available.
3. Use a chain tensioner with an idler sprocket to adjust chain tension.
4. Guide rails should support the underside of the inner links.
5. Also available in ANSI standard. Please contact Tsubaki for details.

TSUBAKI: Stainless Steel Corrosion Resistant Chain

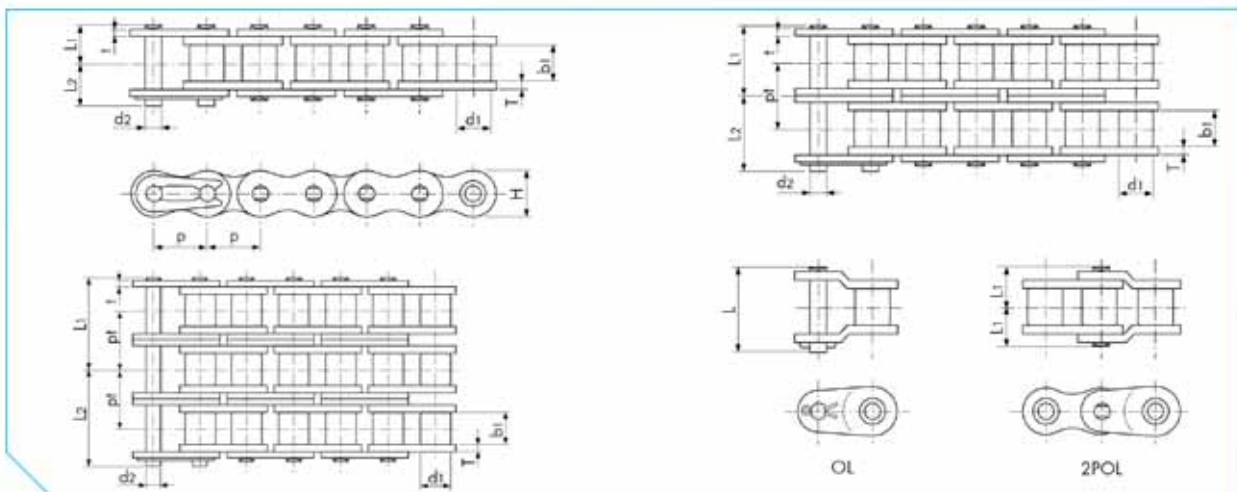
Whether your operation requires a sanitary environment, is exposed to corrosive chemicals, is heated to extreme temperatures, runs through a freezer, is exposed to the outdoors or is affected by excessive moisture: Tsubaki Stainless Steel chains will outlast your current chains and contribute to a cost-effective application.

SS Stainless Steel Chain

All basic components of this chain are made of Stainless Steel SUS304 equivalent (except the spring clips, which are made of SUS301) This chain can be used in special environments such as underwater, acidic and alkaline applications. It can also be used in high and low temperatures (-20°C to +400°C) SUS304 equivalent is only marginally magnetic, which is the result of the cold-forging process.



SS Chain Dimensions



CHAIN DRIVES
& HARDWARE

BS SS Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p	Roller Diameter d1	Inner Width b1	Pin			Link Plate			Transverse Pitch pt	Max. Allowable Load acc. to Tsubaki kN	Approx. Mass kg/m	
				Diameter d2	Length L1	Length L2	Length L	Thickness T	Thickness t				Height H (max)
RF06B-SS-1	9.525 (3/8")	6.35	5.72	3.28	6.50	7.25	15.45	1.30	1.00	8.20	-	0.27	0.39
RF06B-SS-2					11.60	12.30	25.85				10.24	0.53	0.75
RS08B-SS-1	12.70 (1/2")	8.51	7.75	4.45	8.35	10.05	20.05	1.50	1.50	11.80	-	0.48	0.70
RS08B-SS-2					15.30	17.00	34.60				13.92	0.96	1.35
RS08B-SS-3					22.25	23.95	48.60				13.92	1.44	2.00
RS10B-SS-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	22.90	1.50	1.50	14.70	-	0.66	0.95
RS10B-SS-2					17.85	19.55	39.40				16.59	1.32	1.85
RS10B-SS-3					26.20	27.80	56.00				16.59	1.97	2.80
RS12B-SS-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	26.70	1.80	1.80	16.10	-	0.87	1.25
RS12B-SS-2					20.90	22.70	46.10				19.46	1.74	2.50
RS12B-SS-3					30.65	32.55	65.60				19.46	2.61	3.80
RS16B-SS-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	43.70	4.00	3.20	21.00	-	2.06	2.70
RS16B-SS-2					33.55	35.75	75.50				31.88	4.12	5.40
RS20B-SS-1	31.75 (1 1/4")	19.05	19.56	10.19	20.10	23.10	48.40	4.50	3.50	26.00	-	2.90	3.85

Note:

1. Connecting links are clip type for sizes up to RS16B-SS, and caller type for sizes RS12B-SS to RS20B-SS.
2. RF06B-SS chain has flat shaped link plates.
3. Centre sink pins are not available. Double stake riveting is applied.
4. For details on corrosion resistance selection, please consult our Corrosion Resistance Guide in this catalogue.
5. Also available in ANSI standard. Please contact Tsubaki for details.

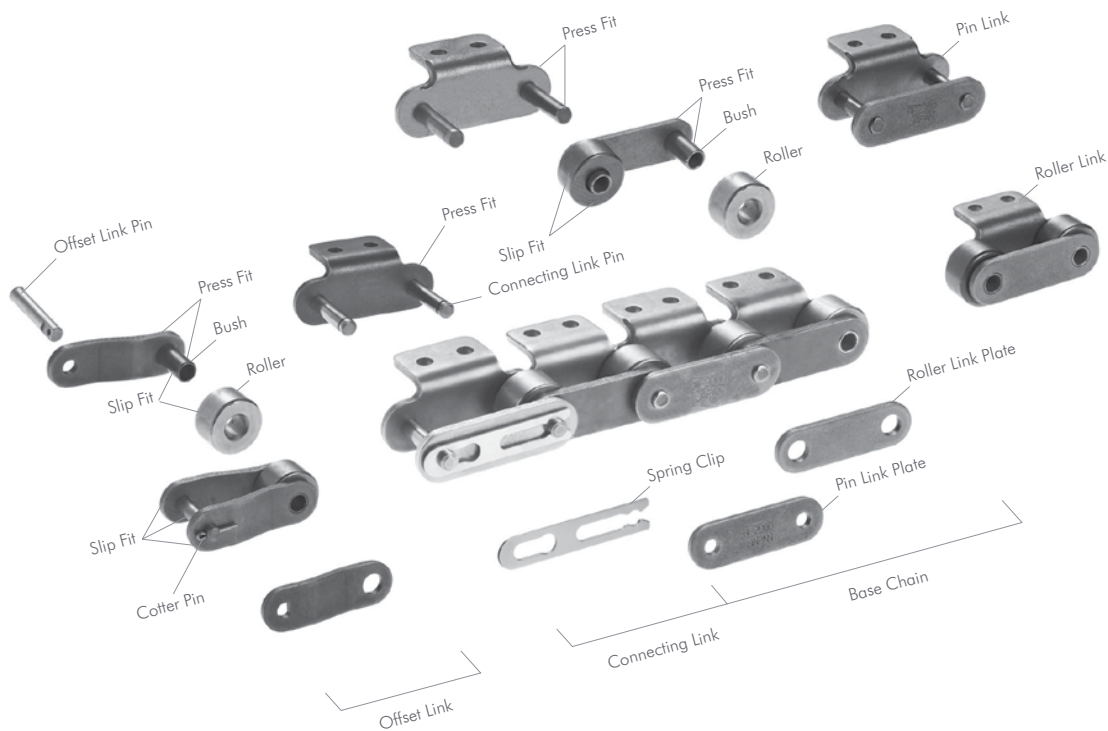


TSUBAKI

Standard Attachment Chain

In the world of attachment chain TSUBAKI is the manufacturer you require to assure smooth operation. Whether your application requires attachments or extended pins in Carbon Steel, Neptune, or Stainless Steel, TSUBAKI is your partner. TSUBAKI's maintenance free solution, Lambda, is also available with a wide range of attachments. When starting with a completely new design, TSUBAKI can tailor make an attachment chain for you in any specification.

Attachment Chain Structure



CHAIN DRIVES & HARDWARE

Standard Product Range

The product range for our standard attachment chains is:

- BS Single Pitch Standard chain + standard attachments
- ANSI Single Pitch Standard chain + standard attachments
- ANSI Single Pitch HP Hollow Pin chain
- ANSI Single Pitch CU Curved chain
- ANSI Double Pitch Standard chain + standard attachments
- ANSI Double Pitch HP Hollow Pin chain



TSUBAKI: Specialist Attachment Chain

Tsubaki can produce specialist attachment chains to suit various machine types across many industries, including: food, beverage, paper, and packaging. Tsubaki also offer complete retrofit chains for various industries which offer end users improved performance and a cost saving compared to the OEM.

Cost Performance

We can propose a chain that will lower overall costs - initial costs, costs associated with developing and manufacturing an attachment chain, costs when replacing your chain or ordering additional chains, etc.

Reduced Man-hours

We can propose a chain that will reduce worker costs and effort - time spent mounting jigs to attachments, chain replacement work, downtime for maintenance, etc.

Streamlined Manufacturing Lines

We can propose an integrated attachment chain that streamlines work conveyance on your manufacturing lines - more stable conveyance, optimized attachment shape, more compact equipment.

Customizability

We can provide customized solutions (from development to production) with original attachment chains to replace your existing chain. Let Tsubaki propose a customized solution that meets your needs.



Canning



Bookbinder



Automotive



Packaging



Thermoforming



Packaging

CHAIN DRIVES
& HARDWARE

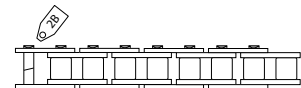
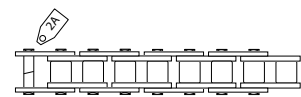
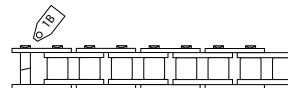
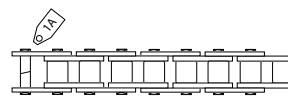
Match and Tag Service

High Accuracy, Narrow Tolerance Service

For TSUBAKI, quality is second nature- and so for customers with specific application requirements, we are able to supply chains with a specific length tolerance, or even pairs & multiple chains length matched and tagged in the same way for easy identification and installation. This is as a result of the sophisticated chain length measurement equipment (the "Matchy") kept in house within the European headquarters with supply times for such chains kept to a minimum-ideal for distributors, final consumers and OEM customers alike.

Tolerances

When chains have to run in parallel for conveying purposes in for instance packaging machines or when a minimum of difference in chain length is required in lifting applications (accumulator towers in the steel and carpet industry) TSUBAKI excels in quality performance. We can guarantee a maximum chain length difference of 0.50 mm independent of the total chain length demanded by our customers!



TSUBAKI: Sprockets

Tsubaki can also tailor make any sprocket. We have the capabilities to rework and manufacture sprockets to customer specification. Special agreements can be made to have special sprockets available in our warehouse to increase delivery performance as well as production efficiency. Please contact Tsubaki for further details.

Sprocket performance

System performance highly depends on chain-sprocket interaction, which means your choice of sprockets can elevate your operation's success. Make the right and easy choice with sprockets from Tsubaki.

- **Reduced downtime maintenance** • **Increased productivity** • **Lower replacement costs**

To ensure maximum performance of your drive system, Tsubaki carbon steel sprockets are executed with induction hardened teeth as a standard to make a perfect match with the premium quality Tsubaki chains.

For extra corrosion resistance and food-grade applications, alloy and stainless steel sprockets are also available.

1. Our sprocket range is available from stock in high quality steels (single piece type: C45, welded hub type:C20/Q235, stainless steel AiSi 304).
2. All Tsubaki carbon steel sprockets are induction hardened to achieve maximum wear life of both sprockets and chain. Hardness range: 40 - 55 HrC, hardness depth: 0,5 - 1,5 mm.
3. All Tsubaki sprockets are bored, chamfered and de-burred to ensure proper fit.
4. Each carbon steel sprocket is protected with a layer of rust preventive oil and is wrapped in a plastic cover inside the Tsubaki box.

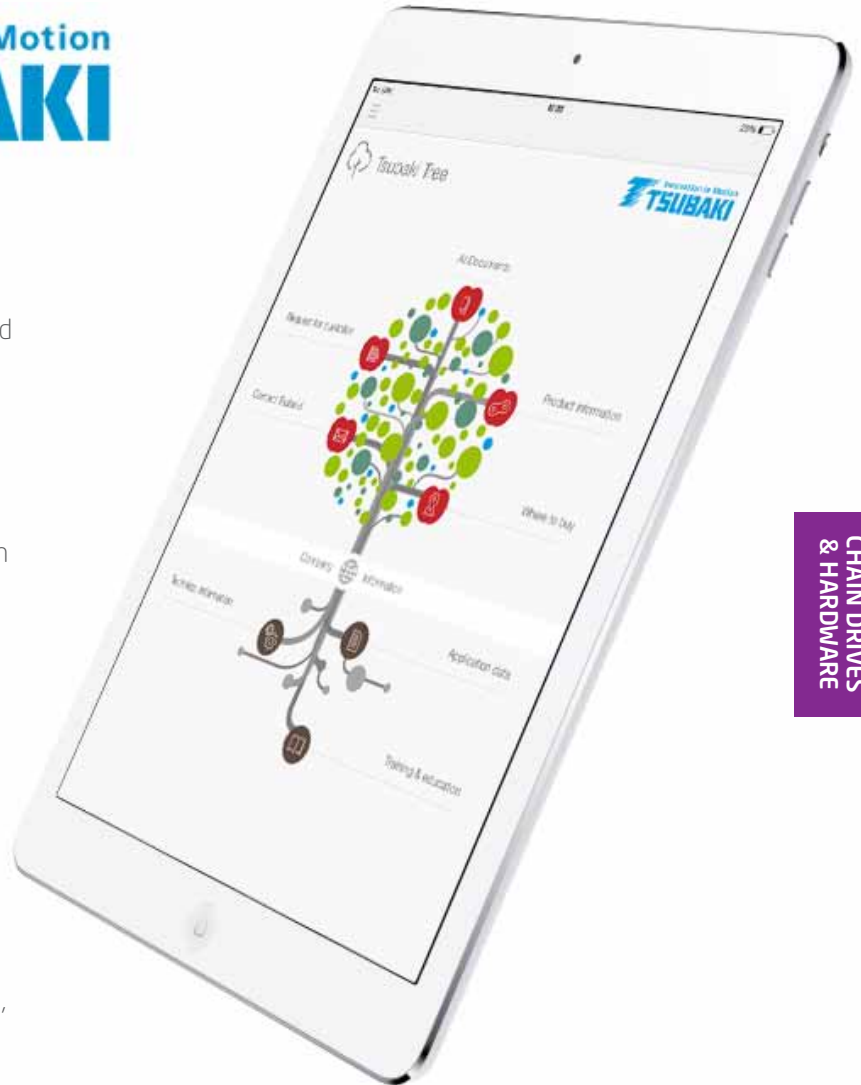


Sales Support: Tsubaki Tree



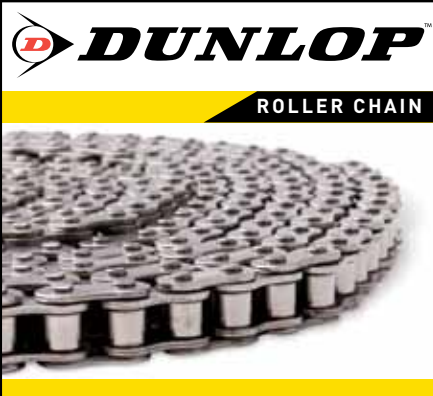
KEY BENEFITS FOR YOU:

- Easy access to all Tsubaki company and product documentation & videos
- Find IADA distributors near you
- Receive a quotation by filing your enquiry accompanied by a photo taken with your iPad
- Registration to get a higher access level to Tsubaki documentation
- Contact Tsubaki offices and sales representatives
- Manage downloads
- Available in 8 languages: English, German, Dutch, French, Italian, Spanish, Polish, Russian



CHAIN DRIVES & HARDWARE





ROLLER CHAIN DIN8187-ISO/R 606

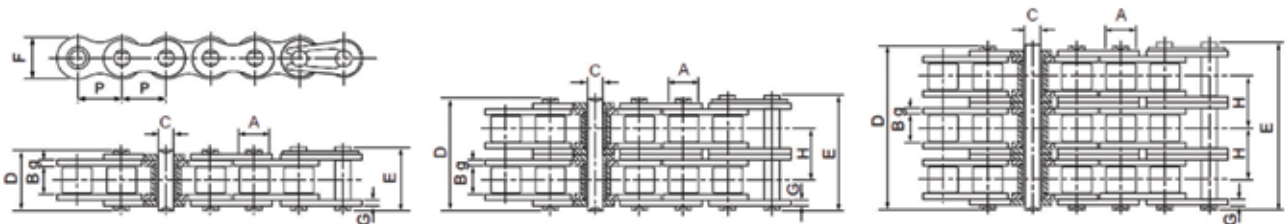
Description

Roller chains are manufactured to internationally recognised standards. European standards refer to the ISO/R 606-1982 (DIN 8187) while American standards refer to ANSI (DIN 8188).

Roller chains are available in simplex (-1), duplex (-2) and triplex (-3) and in a varying range of materials and plating options, such as stainless steel (SS), nickel plated (NP) and zinc plated (ZP).

Attachments are also available along with connecting links (CL) and single (OL) and double (DOL) offset links

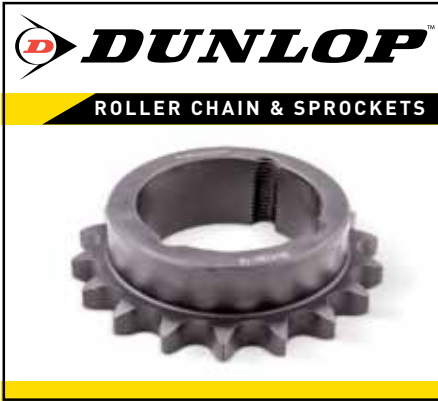
BRITISH STANDARD ROLLER CHAIN



CHAIN DRIVES & HARDWARE

ISO Chain No.	Pitch	Roller Diameter	Width between inner plates	Pin Diameter	Pin Length		Inner Plates Height	Plate thickness	Transverse Pitch	Minimum tensile strength	Average Tensile Strength	Weight per metre
	P mm	A mm	B mm	C mm	D mm	E mm	F mm	g/G mm	H mm	kN mm	kN mm	kg/m
SIMPLEX												
04B-1	6.000	4.00	2.80	1.85	6.80	7.80	5.00	0.60	-	3.00	3.20	0.11
05B-1	8.000	5.00	3.00	2.31	8.20	8.90	7.10	0.80	-	5.00	5.90	0.20
06B-1*	9.525	6.35	5.72	3.28	13.15	14.10	8.20	1.30	-	9.00	10.40	0.41
08B-1	12.700	8.51	7.75	4.45	16.70	18.20	11.80	1.60	-	18.00	19.40	0.69
10B-1	15.875	10.16	9.65	5.08	19.50	20.90	14.70	1.70	-	22.40	27.50	0.93
12B-1	19.050	12.07	11.68	5.72	22.50	24.20	16.00	1.85	-	29.00	32.20	1.15
16B-1	25.400	15.88	17.02	8.28	36.10	37.40	21.00	4.15/3.1	-	60.00	72.80	2.71
20B-1	31.750	19.05	19.56	10.19	41.30	45.00	26.40	4.5/3.5	-	95.00	106.70	3.70
24B-1	38.100	25.40	25.40	14.63	53.40	57.80	33.20	6.0/4.8	-	160.00	178.00	7.10
28B-1	44.450	27.94	30.99	15.90	65.10	69.50	36.70	7.5/6.0	-	200.00	222.00	8.50
32B-1	50.800	29.21	30.99	17.81	66.00	71.00	42.00	7.0/6.0	-	250.00	277.50	10.25
40B-1	63.500	39.37	38.10	22.89	82.20	89.20	52.96	8.5/8.0	-	355.00	394.00	16.35
48B-1	76.200	48.26	45.72	29.24	99.10	107.00	63.80	12/10	-	560.00	621.60	25.00
DUPLEX												
05B-2	8.000	5.00	3.00	2.31	13.90	14.50	7.10	0.80	5.64	7.80	10.20	0.33
06B-2*	9.525	6.35	5.72	3.28	23.40	24.40	8.20	1.30	10.24	16.90	18.70	0.77
08B-2	12.700	8.51	7.75	4.45	31.20	32.20	11.80	1.60	13.92	32.00	38.70	1.34
10B-2	15.875	10.16	9.65	5.08	36.10	37.50	14.70	1.70	16.59	44.50	56.20	1.84
12B-2	19.050	12.07	11.68	5.72	42.00	43.60	16.00	1.85	19.46	57.80	66.10	2.31
16B-2	25.400	15.88	17.02	8.28	68.00	69.30	21.00	4.15/3.1	31.88	106.00	133.00	5.42
20B-2	31.750	19.05	19.56	10.19	77.80	81.50	26.40	4.5/3.5	36.45	170.00	211.20	7.20

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk



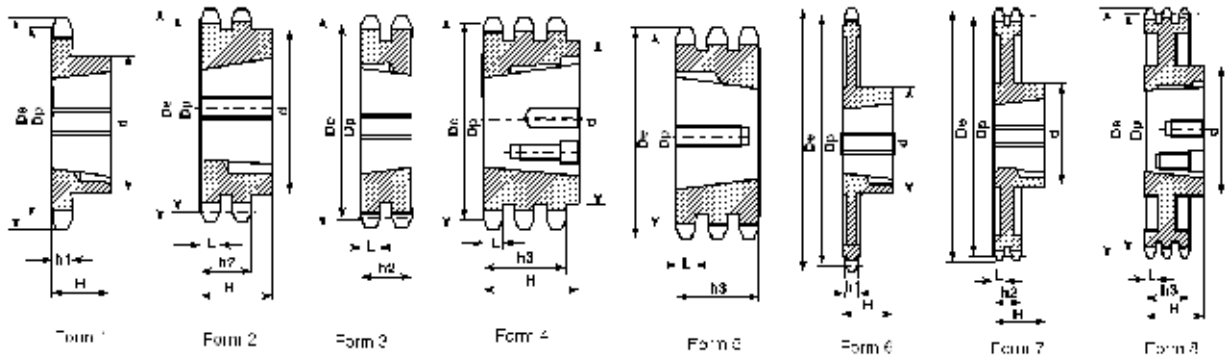
TAPER BORE SPROCKETS - STEEL & CAST IRON

Description

Roller chains are manufactured to internationally recognised standards. European standards refer to the ISO/R 606-1982 (DIN 8187) while American standards refer to ANSI (DIN 8188).

Roller chains are available in simplex (-1), duplex (-2) and triplex (-3) and in a varying range of materials and plating options, such as stainless steel (SS), nickel plated (NP) and zinc plated (ZP).

Attachments are also available along with connecting links (CL) and single (OL) and double (DOL) offset links



06B Chain 3/8" x 7/32"

Pitch: 9.525mm
Internal width: 5.72mm
Roller dia: 6.35mm

Sprocket

Tooth radius: 10mm
Radius width C: 1mm
Tooth width h1: 5.3mm
Tooth width :L 5.2mm
Tooth width h2: 15.4mm
Tooth width h3: 25.6mm

CHAIN DRIVES & HARDWARE

06B-1 (31-)

06B-2 (32-)

06B-3 (33-)

Teeth	De	Dp	Simplex					Duplex					Triplex				
			Part No.	d	Bush	H	Form	Part No.	d	Bush	H	Form	Part No.	d	Bush	H	Form
17	55.30	51.83	31-17	45	1008	22	1	32-17	41	1008	22	2	33-17	-	1008	25,6	5
18	58.30	54.85	31-18	45	1008	22	1	32-18	43	1008	22	2	33-18	-	1008	-	-
19	61.30	57.87	31-19	45	1008	22	1	32-19	46	1008	22	2	33-19	-	1008	25,6	5
20	64.30	60.89	31-20	46	1008	22	1	32-20	48	1008	22	2	33-20	-	1008	-	-
21	68.00	63.91	31-21	46	1008	22	1	32-21	49	1008	22	2	33-21	-	1008	25,6	5
22	71.00	66.93	31-22	50	1108	22	1	32-22	52	1108	22	2	33-22	-	-	-	-
23	73.50	69.95	31-23	63	1210	25	1	32-23	59	1210	25	2	33-23	-	1210	25,6	5
24	77.00	72.97	31-24	63	1210	25	1	32-24	61	1210	25	2	33-24	-	-	-	-
25	80.00	76.02	31-25	63	1210	25	1	32-25	64	1210	25	2	33-25	-	1210	25,6	5
26	83.00	79.02	31-26	63	1210	25	1	32-26	65	1210	25	2	33-26	-	-	-	-
27	86.00	82.02	31-27	63	1210	25	1	32-27	70	1210	25	2	33-27	-	1210	25,6	5
28	89.00	85.07	31-28	63	1210	25	1	32-28	70	1210	25	2	33-28	-	-	-	-
30	94.70	91.12	31-30	63	1210	25	1	32-30	75	1210	25	2	33-30	79	1615	38	4
38	119.50	115.35	31-38	70	1210	25	1	32-38	80	1610	25	2	33-38	90	1615	38	4

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk



COUPLINGS



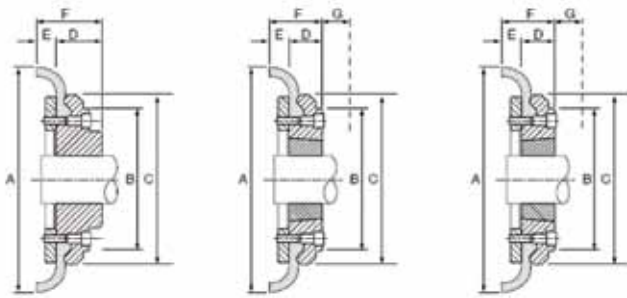
DUNFLEX COUPLINGS

Description

DUNFLEX coupling flanges are available in either F (Taper Bush fits inside) or H (Taper Bush fits outside) or pilot bored (PB) which can be bored in house to the required size. They can accommodate simultaneous misalignment without imposing undue loads on adjacent bearings, they have excellent shock absorbing properties that reduces vibration and torsional oscillation.

Inserts are available in either natural rubber for use in ambient temperatures between -50°C & +50°C or Chloroprene rubber for use in temperatures between -15°C and +70°C fire resistance and anti-static properties (F.R.A.S).

Sizes 040 to 060

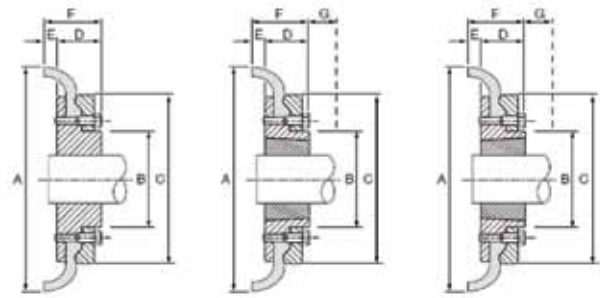


Pilot Bore (B)

Taper Flange (F)

Taper Flange (H)

Sizes 070 to 250



Pilot Bore (B)

Taper Flange (F)

Taper Flange (H)

CHAIN DRIVES & HARDWARE

DUNFLEX COUPLINGS

Coupling Size	Bush Size	Max Bore		A	B	C	E	G	Types F & H		Types B		Clamping Screw	Weight (kg)	Inertia (kgm ²)
		Metric	Inch						F	D	F	D			
F040B	-	32	-	104	-	82	11.0	29	-	-	33.0	22	M5	0.8	0.00074
F040F	1008	25	1"	104	-	82	11.0	29	33.0	22	-	-	-	0.8	0.00074
F040H	1008	25	1"	104	-	82	11.0	29	33.0	22	-	-	-	0.80	0.00074
F050B	-	38	-	133	79	100	12.5	38	-	-	-	-	-	-	0.00115
F050F	1210	32	1.1/4"	133	79	100	12.5	38	38.0	25	-	-	-	1.2	0.00115
F050H	1210	32	1.1/4"	133	79	100	12.5	38	39.0	25	-	-	-	1.2	0.00115
F060B	-	45	-	165	70	125	16.5	38	-	-	55.0	38	M6	2.0	0.0052
F060F	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	-	-	-	2.0	0.0052
F060H	1610	42	1.5/8"	165	103	125	16.5	38	42.0	25	-	-	-	2.0	0.0052
F070B	-	50	-	187	80	144	11.5	-	-	-	47.0	35	M10	3.1	0.009
F070F	2012	50	2"	187	80	144	11.5	42	44.0	32	-	-	-	3.1	0.009
F070H	1610	42	1.5/8"	187	80	144	11.5	38	42.0	25	-	-	-	3.0	0.009
F080B	-	60	-	211	98	167	12.5	-	-	-	55.0	42	M10	4.9	0.018
F080F	2517	60	2.1/2"	211	97	167	12.5	48	58.0	45	-	-	-	4.9	0.018
F080H	2012	50	2"	211	98	167	12.5	42	45.0	32	-	-	-	4.6	0.017
F090B	-	70	-	235	112	188	13.5	-	-	-	63.5	49	M12	7.1	0.032
F090F	2517	60	2.1/2"	235	108	188	13.5	48	59.5	45	-	-	-	7.0	0.031

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk





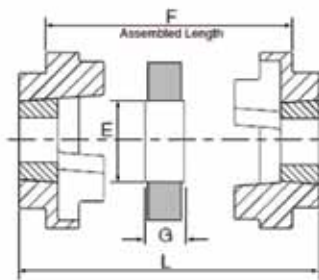
HRC COUPLINGS

Description

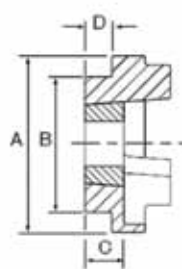
HRC coupling flanges are available in either F (Taper Bush fits inside) or H (Taper Bush fits outside) or pilot bored (PB) which can be bored in house to the required size.

These semi-elastic couplings are designed for general purpose use, they permit quick and easy assembly by means of taper bush fixing to the mating shaft.

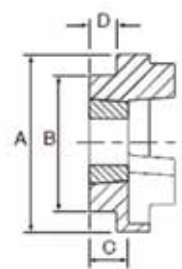
Inserts are available in either natural rubber for use in ambient temperatures between -50°C & +50°C or chloroprene rubber for use in temperatures between -15°C and +70°C fire resistance and anti-static properties (F.R.A.S).



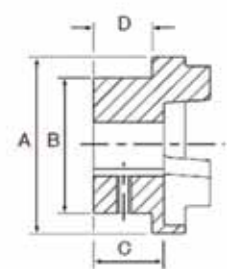
HRC Assembly



F Flange (Taper Bore)



H Flange (Taper Bore)



B Flange (Pilot Bore)

HRC COUPLINGS

Coupling No.	Nominal torque Nm	Overall Diameter A	Hub Diameter B	Flange Length F	Insert Bore Dia E	Insert Width G	Parallel Misalignment (mm)	Weight (kg)	Assembled Length		
									L FF, FH, HH	L FB, HB	L BB
HRC70	31	69	60	25.5	31	18.5	0.3	1.00	65.5	65.5	65.5
HRC90	80	85	70	30.5	32	22.5	0.3	1.17	69.5	76.5	82.5
HRC110	160	112	100	45.5	45	29.5	0.3	5.00	82.5	100.5	119.5
HRC130	315	130	105	53.5	50	36.5	0.4	5.46	89.5	110.5	131.5
HRC150	600	150	115	60.5	62	40.5	0.4	7.11	107.5	129.5	152.5
HRC180	950	180	125	73.5	77	49.5	0.4	16.65	142.5	165.5	189.5
HRC230	2000	225	155	85.5	99	59.5	0.5	26.05	164.5	202.5	239.5
HRC280	3150	275	206	105.5	119	74.5	0.5	50.05	207.5	246.5	285.5

Angular misalignment capacity up to 1 deg. Mass is for an FF, FH or HH coupling with mid range Taper Bushes

F refers to combinations of flanges: FF, FH, HH, FB, HB, BB.

HRC TYPE F & H

Coupling No.	Bush Size	(mm)	(ins)	Shoulder Width D	Hub Width C
HRC70	1008	25	1	20.0	23.5
HRC90	1108	28	1.1/8	19.5	23.5
HRC110	1610	42	1.5/8	18.5	26.5
HRC130	1610	42	1.5/8	18.0	26.5
HRC150	2012	50	2	23.5	33.5
HRC180	2517	60	2.1/2	34.5	46.5

HRC TYPE B

Coupling No.	Max Bore (mm)	Pilot Bore (mm)	Keyway Screw Size	Shoulder Width D	Hub Width C
HRC70	32	8	M6	20	23.5
HRC90	42	10	M6	26	30.5
HRC110	55	10	M10	37	45.5
HRC130	60	15	M10	39	47.5
HRC150	70	20	M10	46	56.5
HRC180	80	25	M10	58	70.5

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk



TAPER BUSHES



TAPER BUSHES

Description

Dunlop Taper Bushes are the most convenient and cost effective method of fixing components to a mating shaft without using any special tools. Taper Bushes are pre-machined with the required bore & keyway size and are supplied complete with locking set screws, thus making savings in time and cost on any machining process.

They are available with both metric or imperial bore and keyway size options.

Taper Bushes are designed for use with V-Pulleys, Chain Sprockets, Micro V-Pulleys, Timing Belt Pulleys, Couplings, Weld-On & Bolt-On Hubs. Part numbers are identified by a 4 digit number (e.g. 1610) which represents the taper bush series followed by the bore size (e.g. 28mm) for example 1610x28mm.

METRIC BORES AND KEYWAYS

CHAIN DRIVES & HARDWARE

BORE DIA.	KEYWAY		SHALLOW KEYWAY DEPTH	TAPER BUSH PART NUMBER								
	WIDTH	DEPTH		1008	1108	1210	1610	1615	2012	2517	3020	3030
9	3	1.4	-	*	*							
10	3	1.4	-	*	*							
11	4	1.8	-	*	*	*						
12	4	1.8	-	*	*	*						
14	5	2.3	-	*	*	*	*	*	*			
15	5	2.3	-	*	*	*	*	*	*			
16	5	2.3	-	*	*	*	*	*	*	*		
18	6	2.8	-	*	*	*	*	*	*	*		
19	6	2.8	-	*	*	*	*	*	*	*		
20	6	2.8	-	*	*	*	*	*	*	*		
22	6	2.8	-	*	*	*	*	*	*	*		
24	8	3.3	1.3	*	*	*	*	*	*	*		
25	8	3.3	1.3	*	*	*	*	*	*	*	*	
28	8	3.3	1.3		*	*	*	*	*	*	*	
30	8	3.3	-			*	*	*	*	*	*	
32	10	3.3	-			*	*	*	*	*	*	
35	10	3.3	-				*	*	*	*	*	*
38	10	3.3	-				*	*	*	*	*	*
40	12	3.3	-				*	*	*	*	*	*
42	12	3.3	2.2				*	*	*	*	*	*
45	14	3.8	-						*	*	*	*
48	14	3.8	-						*	*	*	*
50	14	3.8	-						*	*	*	*
55	16	4.3	-							*	*	*
60	18	4.4	-							*	*	*
65	18	4.4	-								*	*
70	20	4.9	-								*	*
75	20	4.9	-								*	*

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk





TENSIONERS



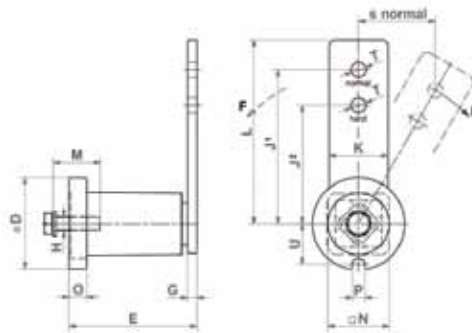
BELT AND CHAIN TENSIONERS

Description

Tensioning devices SE are available for both roller chain and V-Belt applications.

A range of idler sprockets to suit standard roller chain pitch sizes from 06B-1 to 24B-1 are available.

A range of idler roller pulleys are also available to suit standard V and wedge belt sections from Z/SPZ to C/SPC. Both designs have 2Z bearings fitted to the bore.



TENSIONER ARM TYPE SE

Part No.	D	E	G	H	J ¹	J ²	K	L	M	N	O	P	T	U	Weight (kg)	
SE 11	35	51	+1 -0.5	5	M6	80	60	20	90	20	22	6	8	8.5	16.5	0.2
SE 15	45	64	+1 -0.5	5	M8	100	100	25	112.5	25	30	8	8.5	10.5	20.8	0.4
SE 18	58	79	+1.5 -0.5	7	M10	100	100	30	115	30	35	10.5	8.5	10.5	25.3	0.6
SE 27	78	108	+2 -0.5	8	M12	130	130	50	155	40	52	15	10.5	12.5	34.3	1.7
SE 38	95	140	+2 -0.5	10	M16	175	175	60	205	40	66	15	12.5	20.5	42.0	3.6
SE 45	115	200	+3 -1	12	M20	225	225	70	260	50	80	18	12.5	20.5	52.0	6.4



CHAIN DRIVES & HARDWARE

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.iadaltd.co.uk

RENOLD



- Our leading standard steel transmission chain
- Excellent wear resistance
- Wide waisted GP plate shape
- Fatigue performance rated as ISO + 60%
- Guarantee of 15,000 hours
- End-softened, spin riveted pin for easy cutting
- 3/8" to 4" pitch, simplex & duplex

CHAIN DRIVES & HARDWARE

Renold's unique control over pin / bush contact makes sure that wear life exceeds other brands. Little initial chain adjustment is therefore required. Renold roller chain is highly fatigue resistant, giving up to four times the life of other leading competitor chains.

Breaking loads exceed the minimum requirements of the international standards.

Renold's end-softened pin and spin rivet help to minimise downtime. All you need is a Renold pin extractor

and you can disassemble Renold roller chain in seconds; no need to grind the head of the pin, no need for lengthy downtime.

Simplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	26	12	30
06B1X10FT	06B-1	0.375	✓	✓	-	✓	-	✓
08B1X10FT	08B-1	0.500	✓	✓	-	✓	-	✓
10B1X10FT	10B-1	0.625	✓	✓	-	✓	-	✓
12B1X10FT	12B-1	0.750	✓	✓	-	✓	-	✓
16B1X10FT	16B-1	1.000	✓	✓	-	✓	✓	✓
20B1X10FT	20B-1	1.250	✓	✓	-	✓	✓	✓
24B1X10FT	24B-1	1.500	✓	✓	✓	-	✓	✓

Duplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	26	12	30
06B2X10FT	06B-2	0.375	✓	✓	-	✓	-	✓
08B2X10FT	08B-2	0.500	✓	✓	-	✓	-	✓
10B2X10FT	10B-2	0.625	✓	✓	-	✓	-	✓
12B2X10FT	12B-2	0.750	✓	✓	-	✓	-	✓
16B2X10FT	16B-2	1.000	✓	✓	-	✓	✓	✓
20B2X10FT	20B-2	1.250	✓	✓	-	✓	✓	✓
24B2X10FT	24B-2	1.500	✓	✓	✓	-	✓	✓



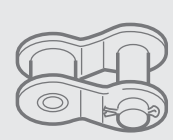
S11/S58



S26



S107



S12



S30



RENOLD Syno™



- No lubrication normally required
- Outside of chain totally dry-to-the-touch
- Nickel-plated plates
- Food industry-approved lubricant within sintered bush
- Unique food industry-approved roller coating
- Dimensionally interchangeable with standard chain
- ISO standard pin diameter, therefore standard attachments on outer links

CHAIN DRIVES & HARDWARE

For use in hygiene-sensitive applications or situations where contamination from lubricant is to be avoided, Renold Syno chain displays all the characteristics you need from a chain. With a food industry-approved lubricant within the sintered bush, this chain will in almost all instances not need relubricating. The roller coating is also suitable for use in the food industry; a unique feature on any chain.

Available in boxed 10-foot lengths from 06B to 24B and ANSI 40 to ANSI 100, simplex and duplex with a standard pin diameter, this means that Renold Syno chain is dimensionally interchangeable with standard roller chain and is even compatible with standard sprockets. With the kind of excellent wear and fatigue resistance that you expect from a Renold chain, Syno chain outlasts any competitor

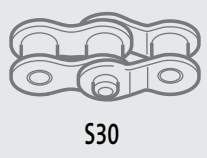
product promoted as low-lube or non-lube. Already tried and tested by major companies in the food sector and elsewhere, if you have to operate with minimal lubrication but can't compromise on performance, we can boost your productivity, cut your downtime and save you time and money.

Simplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links				
			26	107	11	12	30
06B1SNX10FT	06B-1	0.375	✓	✓	-	-	✓
08B1SNX10FT	08B-1	0.500	✓	✓	✓	-	✓
10B1SNX10FT	10B-1	0.625	✓	✓	✓	-	✓
12B1SNX10FT	12B-1	0.750	✓	✓	✓	-	✓
16B1SNX10FT	16B-1	1.000	✓	✓	✓	✓	✓
20B1SNX10FT	20B-1	1.250	✓	✓	✓	✓	✓
24B1SNX10FT	24B-1	1.500	-	✓	✓	✓	✓

Duplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links				
			26	107	11	12	30
06B2SNX10FT	06B-2	0.375	✓	✓	✓	-	✓
08B2SNX10FT	08B-2	0.500	✓	✓	✓	-	✓
10B2SNX10FT	10B-2	0.625	✓	✓	✓	-	✓
12B2SNX10FT	12B-2	0.750	✓	✓	✓	-	✓
16B2SNX10FT	16B-2	1.000	✓	✓	-	✓	✓
20B2SNX10FT	20B-2	1.250	✓	✓	✓	✓	✓
24B2SNX10FT	24B-2	1.500	-	✓	✓	✓	✓



Renold Hydro-Service®

Superior corrosion resistance for chain



- Superior corrosion resistance
- Last as much as 30 times longer than standard carbon steel
- Hexavalent chrome free
- 350 hours corrosion protection during salt spray tests to DIN 50021
- Cold extruded, solid bush and roller delivering maximum Renold performance
- Plates and rollers shot peened to our exact specifications
- Wear and fatigue resistance that delivers maximum working life
- Lubrication that improves wear performance

CHAIN DRIVES & HARDWARE

Renold Hydro-Service chain delivers superior corrosion resistance, lasting as much as 30 times longer than standard carbon steel in applications that have to deal with water or salt spray. It is ideal for wash-down environments.

Hydro-Service chain is also more economical, and stronger, than stainless steel.

Each component is mechanically treated prior to assembly to ensure consistent, secure protection. The

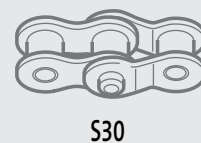
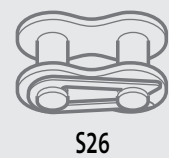
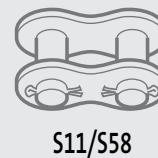
surface treatment is free of hexavalent chrome, complying with legislation relating to environmental and health & safety considerations.

Simplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links				
			26	107	11	12	30
06B1HSX10FT	06B-1	0.375	✓	✓	-	-	✓
08B1HSX10FT	08B-1	0.500	✓	✓	-	-	✓
10B1HSX10FT	10B-1	0.625	✓	✓	-	-	✓
12B1HSX10FT	12B-1	0.750	✓	✓	-	-	✓
16B1HSX10FT	16B-1	1.000	✓	✓	-	✓	-
20B1HSX10FT	20B-1	1.250	✓	✓	-	✓	-
24B1HSX10FT	24B-1	1.500	-	✓	✓	✓	-

Duplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links				
			26	107	11	12	30
06B2HSX10FT	06B-2	0.375	✓	✓	-	-	✓
08B2HSX10FT	08B-2	0.500	✓	✓	-	-	✓
10B2HSX10FT	10B-2	0.625	✓	✓	-	-	✓
12B2HSX10FT	12B-2	0.750	✓	✓	-	-	✓
16B2HSX10FT	16B-2	1.000	✓	✓	-	✓	-
20B2HSX10FT	20B-2	1.250	✓	✓	-	✓	-
24B2HSX10FT	24B-2	1.500	-	✓	✓	✓	-



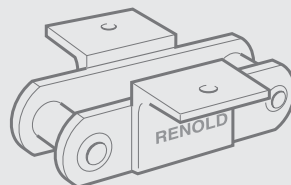
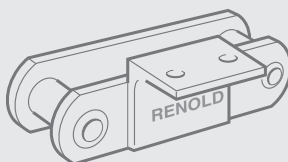
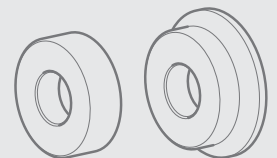
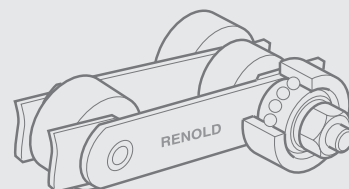
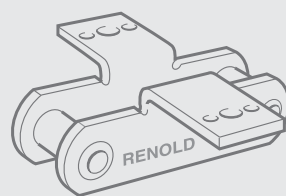
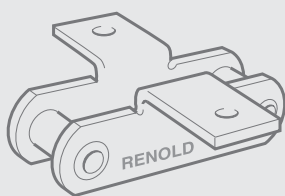
Renold Conveyor Chain

Standard stock range of BS conveyor chain, available ex-stock. 3,000 to 30,000lb chains produced in our dedicated UK manufacturing cell.



- Fast availability of standard integral attachments
- Standard cast iron sprockets available ex-stock
- Supporting this standard range we also have the capability to supply specials and custom-designed products.

CHAIN DRIVES & HARDWARE



RENOLD SD



- An extensive product line of European (BS), ANSI and DIN standard chains
- Competitive prices and delivery
- Consistent quality
- Depth of inventory

CHAIN DRIVES & HARDWARE

If you are looking for a good quality product from a reliable supplier for “standard duty” chain applications, look to **RENOLD SD**, the new benchmark in the economy chain category.

Renold is recognized as the worldwide leader in chain products and has established manufacturing facilities across the globe.

While most suppliers buy-in their economy line of chain, Renold manufactures its own.

Simplex

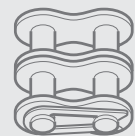
Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	26	12	30
SD06B1X10FT	06B-1	0.375	✓	✓	-	✓	-	✓
SD08B1X10FT	08B-1	0.500	✓	✓	-	✓	-	✓
SD10B1X10FT	10B-1	0.625	✓	✓	-	✓	-	✓
SD12B1X10FT	12B-1	0.750	✓	✓	-	✓	-	✓
SD16B1X10FT	16B-1	1.000	✓	✓	-	✓	✓	✓
SD20B1X10FT	20B-1	1.250	✓	✓	-	✓	✓	✓
SD24B1X10FT	24B-1	1.500	✓	✓	✓	-	✓	✓

Duplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	26	12	30
SD06B2X10FT	06B-2	0.375	✓	✓	-	✓	-	✓
SD08B2X10FT	08B-2	0.500	✓	✓	-	✓	-	✓
SD10B2X10FT	10B-2	0.625	✓	✓	-	✓	-	✓
SD12B2X10FT	12B-2	0.750	✓	✓	-	✓	-	✓
SD16B2X10FT	16B-2	1.000	✓	✓	-	✓	✓	✓
SD20B2X10FT	20B-2	1.250	✓	✓	-	✓	✓	✓
SD24B2X10FT	24B-2	1.500	✓	✓	✓	-	✓	✓



Nr.4



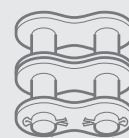
Nr. 26



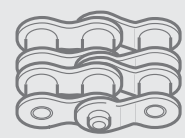
Nr. 107



Nr. 12



Nr. 11



Nr. 30



Renold Stainless Steel



- All components made from austenitic rust-proof steel
- All components receive surface finishing to remove stress raisers
- Lubrication that improves wear performance
- Tensile strength is approximately 65% that of standard carbon steel chain

CHAIN DRIVES & HARDWARE

Renold Stainless Steel chain is made from high grades of austenitic rust-proof steel. These perform extremely well in environments that are acidic, alkaline, where direct contact with food is a consideration, where the chain will be exposed

to water, and for very high or very low temperature locations (-40° to +400°C) where resistance to corrosion is a requirement.

Renold Stainless Steel chain should be selected when resistance to

chemical action is critical.

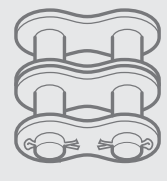
It is manufactured using FDA approved material and is prelubricated with USDA H1 approved lubricant.

Simplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	58	26	12
05B1SSX10FT	05B-1	0.315	✓	✓	-	-	✓	-
06B1SSX10FT	06B-1	0.375	✓	✓	-	-	✓	✓
08B1SSX10FT	08B-1	0.500	✓	✓	✓	-	✓	-
10B1SSX10FT	10B-1	0.625	✓	✓	✓	-	✓	-
12B1SSX10FT	12B-1	0.750	✓	✓	✓	-	✓	-
16B1SSX10FT	16B-1	1.000	✓	✓	✓	-	✓	-



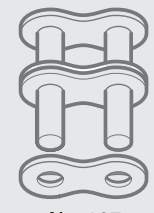
No.4



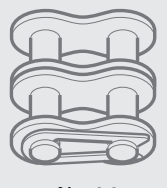
No. 11

Duplex

Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	58	26	12
05B2SSX10FT	05B-2	0.315	✓	✓	-	-	✓	-
06B2SSX10FT	06B-2	0.375	✓	✓	-	-	✓	✓
08B2SSX10FT	08B-2	0.500	✓	✓	✓	-	✓	-
10B2SSX10FT	10B-2	0.625	✓	✓	✓	-	✓	-
12B2SSX10FT	12B-2	0.750	✓	✓	✓	-	✓	-
16B2SSX10FT	16B-2	1.000	✓	✓	✓	-	✓	-



No.107



No. 26



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Supplying industrial products, services and solutions since 1998



Technical Centre

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- Circlips
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- Hydraulic Seals
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- PEEK Parts
- Turned Parts
- Hydraulic Seals
- Gamma Seals (RB Seals)
- End Caps (VK Seals)
- Washers
- Oring Cord
- Mouldings



STANDARD ORINGS BS1806

BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
001	0.74	0.08	1.02	0.08
002	1.07	0.08	1.27	0.08
003	1.42	0.08	1.52	0.08
606	1.78	0.13	1.02	0.08
607	2.54	0.13	1.02	0.08
Cross Section .070" + / - .003" (1.78mm + / - 0.08mm)				
004	1.78	0.13	1.78	0.08
005	2.57	0.13	1.78	0.08
006	2.9	0.13	1.78	0.08
801	3.17	0.13	1.78	0.08
007	3.68	0.13	1.78	0.08
008	4.48	0.13	1.78	0.08
802	4.76	0.13	1.78	0.08
009	5.28	0.13	1.78	0.08
010	6.07	0.13	1.78	0.08
803	6.35	0.13	1.78	0.08
610	6.75	0.13	1.78	0.08
011	7.66	0.13	1.78	0.08
804	7.94	0.13	1.78	0.08
611	8.73	0.13	1.78	0.08
012	9.25	0.13	1.78	0.08
013	10.82	0.13	1.78	0.08
806	11.11	0.13	1.78	0.08
014	12.42	0.13	1.78	0.08
015	14	0.18	1.78	0.08
016	15.6	0.23	1.78	0.08
017	17.16	0.23	1.78	0.08
018	18.77	0.23	1.78	0.08
019	20.35	0.23	1.78	0.08
020	21.95	0.23	1.78	0.08
021	23.53	0.23	1.78	0.08

Cross Section .070" + / - .003" (1.78mm + / - 0.08mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
022	25.12	0.25	1.78	0.08
023	26.7	0.25	1.78	0.08
024	28.3	0.25	1.78	0.08
025	29.87	0.28	1.78	0.08
026	31.47	0.28	1.78	0.08
027	33.05	0.28	1.78	0.08
028	34.65	0.33	1.78	0.08
517	36.27	0.33	1.78	0.08
029	37.82	0.33	1.78	0.08
519	39.45	0.33	1.78	0.08
030	41	0.33	1.78	0.08
031	44.17	0.38	1.78	0.08
032	47.37	0.38	1.78	0.08
033	50.32	0.46	1.78	0.08
034	53.67	0.46	1.78	0.08
035	56.87	0.46	1.78	0.08
036	60.04	0.46	1.78	0.08
037	63.22	0.46	1.78	0.08
038	66.4	0.51	1.78	0.08
039	69.57	0.51	1.78	0.08
040	72.76	0.51	1.78	0.08
041	75.92	0.61	1.78	0.08
532	79	0.61	1.78	0.08
042	82.28	0.61	1.78	0.08
534	85.34	0.61	1.78	0.08
043	88.62	0.61	1.78	0.08
536	91.7	0.69	1.78	0.08
044	94.97	0.69	1.78	0.08
538	98.05	0.69	1.78	0.08
045	101.34	0.69	1.78	0.08

The above data is obtained through our own laboratory testing on slabs and buttons and als D2137

THESE RESULTS ARE FOR REFERENCE PURPOSES ONLY AND EDCO SEAL AND SUPPLY LTD MAKES NO WARRANTY, EXPRESSED OR IMPLIED, THAT PARTS MANUFACTURED IN THIS COMPOUND WILL PERFORM SATISFACTORILY IN THE CUSTOMER'S APPLICATION. IT IS THE CUSTOMER'S RESPONSIBILITY TO TEST PARTS PRIOR TO THEIR USE .





STANDARD ORINGS BS1806

Cross Section .070" + / - .003" (1.78mm + / - 0.08mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
540	104.4	0.76	1.78	0.08
046	107.7	0.76	1.78	0.08
542	110.74	0.76	1.78	0.08
047	114	0.76	1.78	0.08
544	117.1	0.76	1.78	0.08
048	120.4	0.76	1.78	0.08
546	123.44	0.94	1.78	0.08
049	126.76	0.94	1.78	0.08
548	129.4	0.94	1.78	0.08
050	133.07	0.94	1.78	0.08
Cross Section 3/32" Nominal.103" + / - .003" (2.62mm + / - 0.08mm)				
102	1.24	0.13	2.62	0.08
103	2.06	0.13	2.62	0.08
104	2.84	0.13	2.62	0.08
105	3.63	0.13	2.62	0.08
106	4.42	0.13	2.62	0.08
107	5.23	0.13	2.62	0.08
108	6.02	0.13	2.62	0.08
109	7.6	0.13	2.62	0.08
110	9.19	0.13	2.62	0.08
613	9.92	0.13	2.62	0.08
111	10.78	0.13	2.62	0.08
614	11.91	0.13	2.62	0.08
112	12.37	0.13	2.62	0.08
615	13.1	0.13	2.62	0.08
113	13.95	0.18	2.62	0.08
616	15.08	0.18	2.62	0.08
114	15.54	0.23	2.62	0.08
809	15.88	0.23	2.62	0.08
115	17.13	0.23	2.62	0.08

Cross Section 3/32" Nominal.103" + / - .003" (2.62mm + / - 0.08mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
617	17.86	0.23	2.62	0.08
116	18.72	0.23	2.62	0.08
117	20.29	0.25	2.62	0.08
812	20.63	0.25	2.62	0.08
118	21.89	0.25	2.62	0.08
813	22.22	0.25	2.62	0.08
119	23.47	0.25	2.62	0.08
814	23.81	0.25	2.62	0.08
120	25.07	0.25	2.62	0.08
121	26.64	0.25	2.62	0.08
122	28.25	0.25	2.62	0.08
123	29.82	0.3	2.62	0.08
124	31.42	0.3	2.62	0.08
125	33	0.3	2.62	0.08
126	34.59	0.3	2.62	0.08
127	36.17	0.3	2.62	0.08
128	37.77	0.3	2.62	0.08
129	39.34	0.38	2.62	0.08
130	40.95	0.38	2.62	0.08
131	42.54	0.38	2.62	0.08
132	44.12	0.38	2.62	0.08
133	45.69	0.38	2.62	0.08
134	47.29	0.43	2.62	0.08
135	48.9	0.43	2.62	0.08
136	50.47	0.43	2.62	0.08
137	52.07	0.43	2.62	0.08
138	53.65	0.43	2.62	0.08
139	55.25	0.43	2.62	0.08
140	56.82	0.43	2.62	0.08
141	58.42	0.51	2.62	0.08

SEALS

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Cross Section 3/32" Nominal .103" + / - .003" (2.62mm + / - 0.08mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
142	60	0.51	2.62	0.08
143	61.6	0.51	2.62	0.08
144	63.17	0.51	2.62	0.08
145	64.77	0.51	2.62	0.08
146	66.35	0.51	2.62	0.08
147	67.95	0.56	2.62	0.08
148	69.52	0.56	2.62	0.08
149	71.12	0.56	2.62	0.08
150	72.69	0.56	2.62	0.08
640	74.3	0.61	2.62	0.08
151	75.87	0.61	2.62	0.08
641	77.5	0.61	2.62	0.08
642	80.6	0.61	2.62	0.08
152	82.22	0.61	2.62	0.08
643	83.8	0.61	2.62	0.08
153	88.57	0.61	2.62	0.08
154	94.93	0.71	2.62	0.08
155	101.27	0.71	2.62	0.08
156	107.63	0.76	2.62	0.08
157	113.98	0.76	2.62	0.08
158	120.33	0.76	2.62	0.08
159	126.67	0.89	2.62	0.08
160	133	0.89	2.62	0.08
161	139.38	0.89	2.62	0.08
162	145.72	0.89	2.62	0.08
163	152.07	0.89	2.62	0.08
164	158.41	1.02	2.62	0.08
165	164.78	1.02	2.62	0.08
166	171.13	1.02	2.62	0.08
167	177.47	1.02	2.62	0.08

Cross Section 3/32" Nominal .103" + / - .003" (2.62mm + / - 0.08mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
168	183.83	1.14	2.62	0.08
169	190.18	1.14	2.62	0.08
170	196.53	1.14	2.62	0.08
171	202.87	1.14	2.62	0.08
172	209.23	1.27	2.62	0.08
173	215.58	1.27	2.62	0.08
174	221.93	1.27	2.62	0.08
175	228.28	1.27	2.62	0.08
176	234.63	1.4	2.62	0.08
177	240.98	1.4	2.62	0.08
178	247.33	1.4	2.62	0.08

Cross Section 1/8" Nominal .139" + / - .004" (3.53mm + / - 0.10mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
201	4.34	0.13	3.53	0.1
202	5.94	0.13	3.53	0.1
203	7.52	0.13	3.53	0.1
204	9.12	0.13	3.53	0.1
205	10.69	0.13	3.53	0.1
206	12.29	0.13	3.53	0.1
207	13.87	0.18	3.53	0.1
208	15.47	0.23	3.53	0.1
209	17.04	0.23	3.53	0.1
210	18.64	0.25	3.53	0.1
211	20.22	0.25	3.53	0.1
212	21.82	0.25	3.53	0.1
213	23.4	0.25	3.53	0.1
214	24.99	0.25	3.53	0.1
618	25.8	0.25	3.53	0.1
215	26.58	0.25	3.53	0.1
216	28.17	0.3	3.53	0.1
217	29.75	0.3	3.53	0.1

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Cross Section 1/8" Nominal .139" + / - .004" (3.53mm + / - 0.10mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
218	31.34	0.3	3.53	0.1
219	32.92	0.3	3.53	0.1
220	34.52	0.3	3.53	0.1
221	36.1	0.3	3.53	0.1
222	37.69	0.38	3.53	0.1
824	39.69	0.38	3.53	0.1
223	40.87	0.38	3.53	0.1
825	41.28	0.38	3.53	0.1
826	42.86	0.38	3.53	0.1
224	44.04	0.38	3.53	0.1
827	44.45	0.46	3.53	0.1
828	46.04	0.46	3.53	0.1
225	47.22	0.46	3.53	0.1
829	47.63	0.46	3.53	0.1
830	49.21	0.46	3.53	0.1
226	50.4	0.46	3.53	0.1
831	50.8	0.46	3.53	0.1
832	52.39	0.46	3.53	0.1
227	53.57	0.46	3.53	0.1
833	53.98	0.51	3.53	0.1
834	55.56	0.51	3.53	0.1
228	56.74	0.51	3.53	0.1
835	57.15	0.51	3.53	0.1
836	58.74	0.51	3.53	0.1
229	59.92	0.51	3.53	0.1
837	60.33	0.51	3.53	0.1
838	61.9	0.51	3.53	0.1
230	63.09	0.51	3.53	0.1
839	63.5	0.51	3.53	0.1
840	65.1	0.51	3.53	0.1

Cross Section 1/8" Nominal .139" + / - .004" (3.53mm + / - 0.10mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
231	66.27	0.51	3.53	0.1
841	66.67	0.61	3.53	0.1
842	68.26	0.61	3.53	0.1
232	69.44	0.61	3.53	0.1
843	69.85	0.61	3.53	0.1
844	71.44	0.61	3.53	0.1
233	72.62	0.61	3.53	0.1
845	73.02	0.61	3.53	0.1
846	74.6	0.61	3.53	0.1
234	75.8	0.61	3.53	0.1
235	78.97	0.61	3.53	0.1
236	82.14	0.61	3.53	0.1
237	85.32	0.61	3.53	0.1
238	88.5	0.61	3.53	0.1
239	91.67	0.71	3.53	0.1
240	94.84	0.71	3.53	0.1
241	98.02	0.71	3.53	0.1
242	101.2	0.71	3.53	0.1
243	104.37	0.71	3.53	0.1
244	107.54	0.76	3.53	0.1
245	110.72	0.76	3.53	0.1
246	113.9	0.76	3.53	0.1
247	117.07	0.76	3.53	0.1
248	120.25	0.76	3.53	0.1
249	123.42	0.89	3.53	0.1
250	126.6	0.89	3.53	0.1
251	129.77	0.89	3.53	0.1
252	132.94	0.89	3.53	0.1
253	136.12	0.89	3.53	0.1
254	139.3	0.89	3.53	0.1

SEALS

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STANDARD ORINGS BS1806

Cross Section 1/8" Nominal .139" + / - .004" (3.53mm + / - 0.10mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
255	142.7	0.89	3.53	0.1
256	145.65	0.89	3.53	0.1
257	148.82	0.89	3.53	0.1
258	151.99	0.89	3.53	0.1
259	158.35	1.02	3.53	0.1
260	164.7	1.02	3.53	0.1
261	171.05	1.02	3.53	0.1
262	177.4	1.02	3.53	0.1
263	183.75	1.14	3.53	0.1
264	190.1	1.14	3.53	0.1
265	196.44	1.14	3.53	0.1
266	202.79	1.14	3.53	0.1
267	209.14	1.27	3.53	0.1
268	215.49	1.27	3.53	0.1
269	221.84	1.27	3.53	0.1
270	228.19	1.27	3.53	0.1
271	234.54	1.4	3.53	0.1
272	240.89	1.4	3.53	0.1
273	247.24	1.4	3.53	0.1
274	253.59	1.4	3.53	0.1
275	266.3	1.4	3.53	0.1
276	279	1.65	3.53	0.1
277	291.7	1.65	3.53	0.1
278	304.39	1.65	3.53	0.1
279	329.8	1.65	3.53	0.1
280	355.2	1.65	3.53	0.1
281	380.6	1.65	3.53	0.1
282	405.26	1.91	3.53	0.1
283	430.66	2.03	3.53	0.1
284	456.06	2.16	3.53	0.1

Cross Section 3/16" Nominal .210" + / - .005" (5.33mm + / - 0.13mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
309	10.46	0.13	5.33	0.13
310	12.07	0.13	5.33	0.13
311	13.64	0.18	5.33	0.13
312	15.24	0.23	5.33	0.13
313	16.81	0.23	5.33	0.13
314	18.42	0.25	5.33	0.13
315	19.99	0.25	5.33	0.13
316	21.59	0.25	5.33	0.13
317	23.16	0.25	5.33	0.13
318	24.77	0.25	5.33	0.13
319	26.34	0.25	5.33	0.13
320	27.94	0.28	5.33	0.13
321	29.51	0.28	5.33	0.13
322	31.12	0.28	5.33	0.13
323	32.69	0.28	5.33	0.13
324	34.29	0.28	5.33	0.13
325	37.47	0.38	5.33	0.13
326	40.65	0.38	5.33	0.13
327	43.82	0.38	5.33	0.13
328	47	0.38	5.33	0.13
329	50.16	0.46	5.33	0.13
330	53.34	0.46	5.33	0.13
331	56.52	0.46	5.33	0.13
332	59.7	0.46	5.33	0.13
333	62.87	0.51	5.33	0.13
334	66.04	0.51	5.33	0.13
335	69.22	0.51	5.33	0.13
336	72.4	0.51	5.33	0.13
619	74.63	0.51	5.33	0.13
337	75.57	0.61	5.33	0.13

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STANDARD ORINGS BS1806

Cross Section 3/16" Nominal .210" + / - .005" (5.33mm + / - 0.13mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
338	78.74	0.61	5.33	0.13
620	79.77	0.61	5.33	0.13
339	81.92	0.61	5.33	0.13
340	85.09	0.61	5.33	0.13
341	89.69	0.71	5.33	0.13
621	88.27	0.71	5.33	0.13
342	91.44	0.71	5.33	0.13
343	94.62	0.71	5.33	0.13
344	97.8	0.71	5.33	0.13
622	100	0.71	5.33	0.13
345	100.97	0.71	5.33	0.13
346	104.14	0.71	5.33	0.13
347	107.32	0.76	5.33	0.13
623	109.54	0.76	5.33	0.13
348	110.49	0.76	5.33	0.13
349	113.67	0.76	5.33	0.13
350	116.84	0.76	5.33	0.13
860	117.48	0.76	5.33	0.13
351	120.02	0.76	5.33	0.13
861	120.7	0.76	5.33	0.13
352	123.2	0.76	5.33	0.13
862	123.8	0.94	5.33	0.13
353	126.37	0.94	5.33	0.13
863	127	0.94	5.33	0.13
354	129.54	0.94	5.33	0.13
864	130.18	0.94	5.33	0.13
355	132.72	0.94	5.33	0.13
865	133.35	0.94	5.33	0.13
356	135.9	0.94	5.33	0.13
866	136.53	0.94	5.33	0.13

Cross Section 3/16" Nominal .210" + / - .005" (5.33mm + / - 0.13mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
357	139.07	0.94	5.33	0.13
867	139.7	0.94	5.33	0.13
358	142.24	0.94	5.33	0.13
868	142.88	0.94	5.33	0.13
359	145.42	0.94	5.33	0.13
869	146.05	0.94	5.33	0.13
360	148.6	0.94	5.33	0.13
870	149.23	0.94	5.33	0.13
361	151.77	0.94	5.33	0.13
644	155	1.02	5.33	0.13
362	158.12	1.02	5.33	0.13
645	161.3	1.02	5.33	0.13
363	164.47	1.02	5.33	0.13
646	167.7	1.02	5.33	0.13
364	170.82	1.02	5.33	0.13
365	177.17	1.02	5.33	0.13
366	183.52	1.14	5.33	0.13
367	189.87	1.14	5.33	0.13
368	196.22	1.14	5.33	0.13
369	202.57	1.14	5.33	0.13
370	208.92	1.27	5.33	0.13
371	215.27	1.27	5.33	0.13
372	221.62	1.27	5.33	0.13
373	227.97	1.27	5.33	0.13
374	234.32	1.4	5.33	0.13
375	240.67	1.4	5.33	0.13
376	247.02	1.4	5.33	0.13
377	253.37	1.4	5.33	0.13
378	266.07	1.52	5.33	0.13
379	278.77	1.52	5.33	0.13

SEALS

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STANDARD ORINGS BS1806

Cross Section 3/16" Nominal .210" + / - .005" (5.33mm + / - 0.13mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
380	291.47	1.65	5.33	0.13
381	304.17	1.65	5.33	0.13
382	329.57	1.65	5.33	0.13
383	354.97	1.78	5.33	0.13
384	380.37	1.78	5.33	0.13
385	405.26	1.91	5.33	0.13
386	430.66	2.03	5.33	0.13
387	456.06	2.16	5.33	0.13
388	481.46	2.29	5.33	0.13
389	506.81	2.41	5.33	0.13
390	532.2	2.41	5.33	0.13
391	557.6	2.54	5.33	0.13
392	582.68	2.67	5.33	0.13
393	608.08	2.79	5.33	0.13
394	633.48	2.92	5.33	0.13
395	658.88	3.05	5.33	0.13
Cross Section 1/4" Nominal .275" + / - .006 (6.99mm + / - 0.15mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
425	113.67	0.84	6.99	0.15
624	114.7	0.84	6.99	0.15
426	116.84	0.84	6.99	0.15
427	120.02	0.84	6.99	0.15
428	123.2	0.84	6.99	0.15
625	124.6	0.94	6.99	0.15
429	126.37	0.94	6.99	0.15
430	129.54	0.94	6.99	0.15
431	132.72	0.94	6.99	0.15
626	134.5	0.94	6.99	0.15
432	135.9	0.94	6.99	0.15
433	139.07	0.94	6.99	0.15
434	142.24	0.94	6.99	0.15

Cross Section 1/4" Nominal .275" + / - .006 (6.99mm + / - 0.15mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
435	145.42	0.94	6.99	0.15
436	148.6	0.94	6.99	0.15
437	151.77	0.94	6.99	0.15
872	155.6	1.02	6.99	0.15
438	158.12	1.02	6.99	0.15
627	159.5	1.02	6.99	0.15
874	161.9	1.02	6.99	0.15
439	164.47	1.02	6.99	0.15
628	166.7	1.02	6.99	0.15
876	168.3	1.02	6.99	0.15
440	170.82	1.02	6.99	0.15
878	174.6	1.02	6.99	0.15
441	177.17	1.02	6.99	0.15
880	181	1.14	6.99	0.15
442	183.52	1.14	6.99	0.15
882	187.3	1.14	6.99	0.15
443	189.87	1.14	6.99	0.15
884	193.7	1.14	6.99	0.15
444	196.22	1.14	6.99	0.15
886	199.8	1.14	6.99	0.15
445	202.57	1.14	6.99	0.15
674	208.92	1.4	6.99	0.15
446	215.27	1.4	6.99	0.15
676	221.62	1.4	6.99	0.15
447	227.97	1.4	6.99	0.15
678	234.32	1.4	6.99	0.15
448	240.67	1.4	6.99	0.15
680	247	1.4	6.99	0.15
449	253.57	1.4	6.99	0.15
682	259.7	1.52	6.99	0.15

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STANDARD ORINGS BS1806

Cross Section 1/4" Nominal .275" + / - .006 (6.99mm + / - 0.15mm)				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
450	266.07	1.52	6.99	0.15
684	272.4	1.52	6.99	0.15
451	278.77	1.52	6.99	0.15
686	285.1	1.52	6.99	0.15
452	291.47	1.52	6.99	0.15
688	297.8	1.52	6.99	0.15
453	304.17	1.52	6.99	0.15
648	310.5	1.52	6.99	0.15
454	316.87	1.52	6.99	0.15
455	329.57	1.52	6.99	0.15
456	342.27	1.78	6.99	0.15
457	354.97	1.78	6.99	0.15
458	367.67	1.78	6.99	0.15
459	380.37	1.78	6.99	0.15
460	393.07	1.78	6.99	0.15
461	405.26	1.91	6.99	0.15
462	417.96	1.91	6.99	0.15
463	430.66	2.03	6.99	0.15
464	443.36	2.16	6.99	0.15
465	456.06	2.16	6.99	0.15
466	468.76	2.16	6.99	0.15
467	481.46	2.29	6.99	0.15
468	494.16	2.29	6.99	0.15
469	506.86	2.41	6.99	0.15
470	532.26	2.41	6.99	0.15
471	557.66	2.54	6.99	0.15
472	582.68	2.67	6.99	0.15
473	608.08	2.79	6.99	0.15
474	633.48	2.92	6.99	0.15
475	658.88	3.05	6.99	0.15

Special ORing Gaskets For Pipe Fittings To AGS 3018 And SAE J515A For Use With Fractional Inch Size Threads				
BS1806 REF	ID mm	ID Tolerance +/-mm	Cross Section mm	Section Tolerance +/-mm
901	4.7	0.13	1.42	0.08
902	6.07	0.13	1.63	0.08
903	7.65	0.13	1.63	0.08
904	8.92	0.13	1.83	0.08
905	10.52	0.13	1.83	0.08
906	11.89	0.13	1.98	0.08
907	13.46	0.18	2.08	0.08
908	16.36	0.23	2.2	0.08
909	17.93	0.23	2.46	0.08
910	19.18	0.23	2.46	0.08
911	21.92	0.23	2.95	0.08
912	23.47	0.23	2.95	0.08
913	25.04	0.25	2.95	0.08
914	26.62	0.25	2.95	0.08
916	29.74	0.25	2.95	0.08
918	34.42	0.3	2.95	0.08
920	37.47	0.36	3	0.08
924	43.69	0.36	3	0.08
928	53.09	0.46	3	0.08
932	59.36	0.46	3	0.08

SEALS

The above data is obtained through our own laboratory testing on slabs and buttons and als D2137

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Competitor Alternatives

Company	Material									
EDCO / Phoenix Sealing	PG-C	PG-E	PG-G	PG-O / Y	PG-X	PG-F	PG-T	PC-B	PC-F	PC-W
Klinger	C-4500	C-4324	Top Graph 2000	C-4400	C-4430	SLS	PSM	Top Chem 2003	Top Chem 2005	Top Chem 2006
Donit	BA-CF	BA-202 BA-203	BA-F Doniflex G	BA-U BA-50	BA-X BAM 6000 BA-GL	Grafilit SL	Grafilit SP	Doniflon 2010	Doniflon 2020	Doniflon 2030
Novus	Novus 10	Novus 45	Novus 49	Novus 30	Novus 34	Novus FI	Novus TI	Uniflon 50	Uniflon 51	Uniflon 53
Garlock	HTC 9800 HTC 9850		9900	3000	5500	Graph-Lock 3125SS	Graph-Lock 3125TC	Gylon 3504	Gylon 3500	Gylon 3510
Montero	CSA 120	CSA 45 / 320		CSA 420	CSA 90			Belpaflon PL9006 LC	Belpaflon PL9005 LC	Belpaflon PL9000 LC
Reinz		AFM 37 AFM 38		AFM 30	AFM 34					
Teadit	NA1100	NA1001 NA1002		NA1090	NA1005	GR 1520	GE 1520	TF 1570	TF 1590	TF 1580
Flexitallic	SF5000		SF5001	SF2400/ 2800	SF3300	RGS 4	RGS 3	Sigma 500	Sigma 511	Sigma 533
James Walker	Chieftan			Sentinel Inca	Centurion	Supagraf Laminated	Supagraf Tanged T10	Fluolion Integra Blue	Fluolion Integra White	
Beldam Crossley		Pilotseal 125		Pilotseal 178	Pilotseal 34		Pilotseal 2T	Pilotseal 570	Pilotseal 550	Pilotseal 590
Hecker	WS 3640	WS 3825		WS 3822	UDP 3620 / 3850	Grafotherm 3204	Grafotherm 3202			
Temac	Temacarb		Graftem	Temasil	Temaplus	Temagraph FI	Temagraph TI			
British Gaskets	NASB12	NASB3		NASB7Y	NASB9 / NASB8XG					

This chart should be used as a guide only as there are many variables in manufacturing production and the products are used in multiple applications. As we have no control over the method of their use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise. Product data should always be checked to ensure that the product meets the requirements of the application. Where assistance is sought from our Technical Centre, advice is given for customers' assistance only and without liability on the part of the company.

What we offer

Phoenix manufactures a range of high quality industrial sealing products, provides industry leading emission reduction programmes and delivers world class expertise through a range of technical services.



PG-E

Description:
PG-E is a cost effective medium quality grade of compressed fibre sheet material based on aramid and inorganic fibre with a high quality nitrile binding system.

Application:
PG-E is a general purpose gasket material with excellent mechanical properties, suitable for a wide range of fluids including oils, water, solvents, gas, low pressure steam and many chemicals.



PG-O / PG-Y

Description:
PG-O and PG-Y are good quality compressed sheet materials, based on aramid and inorganic fibre with a high quality nitrile binding system. The grades are identical and differ only in colour.

Application:
PG-O and PG-Y are high performance materials that meet the requirements of BS 7531 Grade Y. The materials have excellent sealing properties and are suitable for oils, water, solvents, gas, low pressure steam and many dilute acids and alkalis.



PG-G

Description:
PG-G is a high quality grade of compressed fibre sheet material based on a combination of expanded graphite and synthetic fibres with a high quality nitrile binder system.

Application:
PG-G is a premium performance material with excellent mechanical properties and a high degree of flexibility. The material is designed for use in a wide range of applications including steam, hydrocarbons and general chemicals.



PG-X

Description:
PG-X is a premium grade of compressed fibre sheet material based on aramid and inorganic fibres with a high quality nitrile binding system.

Application:
PG-X is a superior performance material meeting the requirements of BS 7531 Grade X and with outstanding mechanical properties. It is suitable for many fluids including hydrocarbons, steam, gases, dilute acids and alkalis.



PG-C

Description:
PG-C is a premium quality grade of compressed fibre sheet material based on aramid and carbon fibre with a high quality nitrile binding system.

Application:
PG-C is an outstanding material that exceeds the requirements of BS 7531 Grade X and has excellent temperature resistance. The material is suitable for alkalis, hydrocarbons, fuels, refrigerants, steam and many other fluids.



PG-1995

Description:
PG-1995 is a compressed fibre material comprising inorganic and aramid fibres with an oil-resistant synthetic rubber binder.

Application:
PG-1995 is an outstanding gasket material with a track record of successful applications in demanding environments, supported by a wealth of approvals. Suitable for a wide range of fluids and for applications requiring good electrical resistance or fire safety.



PC-B

Description:
PC-B is a high quality, restructured PTFE sealing material with a glass microsphere filler system.

Application:
PC-B is a highly compressible material suitable for steel, glass-lined, ceramic or plastic coated flanges. It is suitable for sealing all chemicals across the whole pH range, except molten alkali metals, fluorine or hydrogen fluoride.



PC-F

Description:
PC-F is a high quality, restructured PTFE sealing material with a silica filler system.

Application:
PC-F is a high performance material with excellent mechanical properties. The material is suitable for use across a wide range of chemicals including strong acids (except hydrofluoric), steam, solvents and hydrocarbons.



PC-W

Description:
PC-W is a high quality, restructured PTFE sealing material with a barium sulphate filler system.

Application:
PC-W is a high performance material with excellent mechanical properties. The material is suitable for use across a wide range of chemicals including strong caustics, hydrofluoric acid, chlorine and aluminium fluoride.



PC-S

Description:
PC-S is a high compression PTFE material with a biaxially orientated core and highly conformable surface layers.

Application:
The soft surface layers make the material ideal for irregular, distorted or plastic and glass lined flanges and in applications where the available bolt load is limited. The rigid core reduces cold flow and creep and make the gaskets easy to install even at large diameters. The material is suitable for sealing across the full pH range.



PC-EX

Description:
PC-EX is an expanded PTFE sheet manufactured in such a way to have good strength in all directions.

Application:
PC-EX is a soft and compressible material with almost universal chemical resistance. It can be used to seal FRP, porcelain, plastic, and glass-lined piping or vessels as well as large diameter steel flanges.

Also available in tape form.

EDCO
SEAL&SUPPLY



PG-T

Description:
PG-T is a high quality graphite laminate material in which exfoliated graphite is mechanically bonded to a 316 stainless steel tang insert.

Application:
PG-T has excellent mechanical strength, a wide temperature range and outstanding stress retention properties, making it ideal for demanding applications. It is capable of sealing a wide range of fluids including steam, hydrocarbons and most chemicals.



PG-F

Description:
PG-F is a high quality graphite laminate material in which exfoliated graphite is bonded to a 316 stainless steel foil insert.

Application:
PG-F has a wide temperature range, excellent chemical resistance and good stress retention properties making it ideal for many demanding applications. It is relatively easy to cut and so is a good alternative to PG-T in sheet form if cutting on site is required.



PG-P

Description:
PG-P is a high quality exfoliated graphite material supplied without metallic reinforcement.

Application:
PG-P is a high compressibility material with excellent stress retention properties. Its wide temperature range makes it ideal for applications in the petrochemical industry and as a filler or facing for metallic gaskets. It is available in either sheet form or as rolls and can be slit into any width.



PG-ML

Description:
PG-ML is a multi-layer material in which layers of exfoliated graphite are mechanically bonded to a 316 stainless steel foil, without the use of an adhesive.

Application:
PG-ML has excellent mechanical strength and can be used to seal high internal pressures. Its ability to resist high loads makes it ideal for tongue and groove and heat exchanger flanges or in hazardous applications where resistance to blow out is paramount.



PG-Therm

Description:
PG Therm is a high temperature gasket material comprising mica (phlogopite) and a small amount of high quality silicone binder.

Application:
PG Therm is ideal for high temperature applications such as exhaust systems, heat exchangers and turbochargers. It is designed for high temperature sealing applications of moderate pressure. Due to its excellent thermal and electric insulation properties it is often specified as an insulator or thermal barrier.



PG-Therm (Tang)

Description:
PG-Therm (Tang) is a high temperature gasket material comprising mica (phlogopite) and a small amount of high quality silicone binder, reinforced with a tang insert.

Application:
PG Therm (Tang) is ideal for high temperature applications such as exhaust systems, heat exchangers and turbochargers. It is designed for high temperature sealing applications of moderate pressure. The tang insert provides stability particularly for gaskets of narrow width.



PG-Therm (Strip)

Description:
PG-Therm (Strip) is a high temperature sealing material comprising mica (phlogopite) and a small amount of high quality silicone binder. It is available in strip and roll form.

Application:
PG-Therm (Strip) is available in various thicknesses and a variety of widths and lengths. It is ideally suited as filler material for spiral wound gaskets. When combined with oxidation resistant graphite, it delivers outstanding sealability even under extreme process conditions.



Spiral Wound Gasket

Description:
Our spiral wound gaskets comprise a pre-formed metal strip and a softer filler material, spirally wound together to form a seal with excellent mechanical resistance and outstanding recovery. By the addition of retaining rings and the selection of specific alloys and materials, the gaskets can be configured to suit almost any application.

Application:
Spiral wound gaskets have wide scale applicability in a range of industrial sectors including refining, chemical, power and general pipeline construction. The robust nature of their design means that they are particularly suited to arduous operating conditions. They can be used across the full range of pipe pressure classes as well as in vessel flanges and other non-standard applications.



Kammprofile

Description:
Our Kammprofile gaskets comprise a concentrically grooved metal core with a thin layer of sealing material applied to each face. The soft sealing layer compresses into the grooves of the core and provides a high integrity seal, while the core imparts compressive strength and resistance to lateral flow of the layer material.

Application:
Kammprofiles are suited to high temperature and high pressure systems, making them ideal for heat exchanger service. Their unique combination of soft sealing material and grooved core also makes them suitable for relatively lightly loaded flanges. They can be used across the full range of flange classes as well as in non-standard applications.



Metal Jacketed Gasket

Description:
Metal Jacketed Gaskets consist of a soft filler material encased in a metallic shell. The filler material deforms under load and gives the gasket resilience while the metal jacket provides compressive strength and protection against the service conditions.

Application:
Metal Jacketed Gaskets are available in a wide range of configurations, materials and sizes, making them an economic choice for heat exchangers, pressure vessels and other equipment applications. Due to their limited strength and recovery characteristics, they have largely been replaced by Kammprofiles in arduous applications.



Ring Type Joints

Description:
Our Ring Type Joints are solid metal gaskets capable of sealing extreme pressures. They are machined to concentrate bolt load over a small area generating high sealing stresses. To prevent flange damage, the hardness of the ring joint should always be less than that of the flange groove.

Application:
Ring Type Joints are widely used in the oil and gas and petrochemical industries in ASME and API flanges. They are available in a wide range of standard styles and in various alloys. We also supply specialised ring type joints for critical and non-standard applications.



Halo Seal

Description:
The Halo Seal is a revolutionary sealing product that delivers a reliable, cost effective and an environmentally friendly method of sealing flange joints. The gasket has a unique, detachable sealing element and reusable outer ring, reducing the life cycle cost of the gasket considerably.

Application:
The Halo Seal is ideal as a replacement for Spiral Wound and Kammprofile gaskets in standard pressure classes. The unique reusable sealing core is common across all flange standards and pressure classes making it a cost effective choice. The sealing core, based on Kammprofile technology, delivers low emission sealing.

Ambersil

ESSENTIAL TOOL BOX CHEMICALS



LUBRICATION & MAINTENANCE

CLEANERS & DEGREASERS



AMBERCLENS

- Multipurpose foaming cleaner
- Use to remove general grime and soiling on all hard surfaces or on upholstery to gently lift out grime
- Quick and easy use. Spray on, wipe off
- Anti-static formulation inhibits dust attraction



31592-AA



31593-AA



31594-AA (NON-FLAM)



31759-AB



DEGREASER RTU

- Use to degrease components when a regular solvent cleaner cannot be used
- Removes tough, stubborn soiling such as heavy oil, grease, grime, silicones, wax and old lubricants
- Safe for use on most plastics, rubber and painted surfaces
- Available as Low Foam (LF) for automated applications
- Contains a highly effect corrosion inhibitor to help prevent flash rusting



31464



32090



31765 (LF)



31763



31764



31766 (LF)



LABEL REMOVER

- An optimum blend of solvent and citrus active ingredients penetrate paper labels rapidly
- Reduces need for scraping and the potential damage that may cause
- Improves packaging line efficiency by reducing jamming caused by label and adhesive build-up
- Pleasant citrus smell
- Test plastics compatibility prior to use



31629

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



Ambersil

www.ambersil.com

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YOUR COMPLETE CHEMICAL SOLUTION™

CLEANERS & DEGREASERS



AMBERKLENE FE10

- Fast and effective solvent degreaser for use on chains, gears, cogs, motors and more
- Fast evaporation that does not leave a residue
- Powerful flushing action, rapidly removes contaminants
- Safe for use on ferrous and non-ferrous metals and most plastics



31553-AA



32116-AA



31563-AF



30308-AA



31697-AA



AMBERKLENE ME20

- Heavy-duty cleaner for extra stubborn soiling which requires a longer contact time
- Leaves a clean, dry surface
- Removes heavy deposits of oil and grease, waxes and silicones
- Higher flash point of +41C



31554-AA



31636-AB



31698-AA



30309-AA



AMBERKLENE LO30

- Use for general light degreasing on bearings, motors, gears and chains without the traditional odour associated with solvent degreasers
- Safe for use on ferrous and non-ferrous metals, most painted surfaces, and most plastics
- Will not stress-crack acrylic
- Listed in British Airways 'Standard Practice' manual. Meets US Federal Spec. TT-N-95Bv Type 2; and is approved by Ford Motor Company (Tox: 166741)



31555



31699



31700



31701

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CLEANERS & DEGREASERS



BRAKE CLEANER

- Effectively removes brake fluid, grease, oil and hardened deposits instantly
- Safe on metals, most plastics, coatings and rubbers (always test prior to use)
- Removes anti-corrosion coating on new brake discs prior to fitting
- Reduces disc-brake squeal and clutch



30282-AA



31772-AA



AMBERSOLV SB1

- A solvent degreaser with added citrus power for use on grease and grime that may contain multiple contamination types. Ideal for use in the printing industry
- Safe for use on most plastics and all metals
- Effective on a wide range of soiling such as: oil, grease, tar, bitumen, silicones, rubber-based adhesives, oil-based paints, inks and dyes
- Military & Aviation approved



31598



31785



31786

My Ambersil

A Step By Step Guide

- 1 Navigate to www.ambersil.com
- 2 Click on the My Ambersil logo
- 3 Select the link "New user: register"
- 4 Fill in company details and up to 5 email addresses
- 5 The unique log-in ID and password will be emailed to you
- 6 Enter the log-in ID and password on the My Ambersil homepage
- 7 Once logged in, select the country from the drop-down list at the top of the page (e.g United Kingdom)
- 8 No products will be displayed yet as My Ambersil defaults to your selected products. To add products, simply untick the 'My Selection' box
- 9 The complete list of Ambersil products will now be displayed - using the selection boxes on the right, both MSDS and TDS updates can be selected
- 10 Select the Ambersil products of interest, by navigating through each page. My Ambersil remembers your selection as you move between pages, but it needs to be 'saved' by clicking 'update' before closing the website
- 11 If product selection needs to be modified, simply log-in to My Ambersil and change the update options (click on the My Ambersil logo to update email preferences)

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Ambersil

www.ambersil.com

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YOUR COMPLETE CHEMICAL SOLUTION™

WIPES



TOUGH WIPES

- Highly effective on a range of soiling types tar, resins, oils, paints and more
- Contains anti-pathogen agents effective against common bacteria and viruses such as Weil's Disease, MRSA and E. Coli
- Cleaner and towel together in one convenient wipe

30 30766-AA

100 30767-AC



HAND CLEANING WIPES

- Use for cleaning light to medium grime from hands, tools and equipment
- Combats common germs
- Economical hand cleaning
- Keeps expensive hand-tools clean

150 31798-AA



ENGINEERS WIPES

- High quality, extremely low lint dry wipes for use with all Ambersil solvents, cleaners, lubricants.
- Tear resistant and "non-linting"
- Suitable for use with all Ambersil chemicals
- Excellent wet strength - resists tearing and can be reused
- Ideal for use on delicate surfaces: computer monitors, touch screens, LCD/plasma screens, and more
- Highly absorbent

50 31797

LUBRICATION & MAINTENANCE

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LUBRICANTS



40+

- An engineers essential 'cure-all' product
- Quickly frees seized nuts, bolts and fasteners
- High corrosion protection and water displacement properties
- Safe on most paints, plastics and rubbers



31563-AA



31532-AC



31711-AA



31712-AA



PX24

- Meets military specification Def. Stan 68-10 Issue 5 PX24
- Zero copper corrosion: IP 154, max 1: no pitting or etching
- Operational temperature range: -20°C to +115°C
- Rolls Royce Aerospace Approved: 1042E
- AgustaWestland approved: WHPS: 158
- Fitted with a 360o Spray System for all angle use



31565



31705



31706



31707



AMBERGLIDE

- Use where temperatures regularly reach a sustained +120C to +160C
- Provides long lasting durable film
- Significantly increases re-lubrication intervals
- PTFE fortified lubricant
- Displaces moisture



31571-AA

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LUBRICANTS



PENETRATING OIL

- Frees seized components rapidly
- Lubricates fine and close tolerance threads
- Contains MoS2
- Softens rust and carbon deposits



30240-AA



32117-AA



SILICONE LUBRICANT

- Odourless, colourless and non-staining
- Exhibits excellent slip properties on blades, tables, chutes and conveyors
- Safe on wood, glass, fabrics, metals, rubbers and most hard surfaces
- WRAS approved



31631-AA



CHAINSPRAY

- Molybdenum Disulfide (MoS2) fortified chain lubricant
- Offers maximum adhesion to chain links with excellent penetration
- Resists 'water wash off' and dust absorption
- High temperature resistance up to +200C
- Ideal for fast moving or exposed chains



31575-AA

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LUBRICANTS



DRY FILM ANTI-STICK


- The high level of PTFE in the dry film provides excellent anti-friction and slip performance to all sliding surfaces
- Excellent materials compatibility
- Suitable for use as an anti-tracking agent
- The dry film is unaffected by oil or solvents
- Operational Temperature range: -100°C to +200°C

 31573



DRY MOLY SPRAY


- Use in higher load applications where PTFE lubricants would fail, but a dry film is still required
- Tough and long lasting
- Operational temp range: -150C to +400C
- Use as a running-in treatment on rolling and sliding bearings

 31576-AA



COPPER ANTI-SEIZE

- Use on threaded fasteners to prevent seizing during prolonged maintenance intervals
- Reduces friction and wear
- Formulated with micro-ionised copper and anti-oxidant additives
- Good protection even in highly corrosive environments

 30303-AA

 30239-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com



LUBRICANTS



BLUE ADHESIVE LUBRICANT

- Penetrates upon application then thickens
- Ideal for applications where shock loading occurs
- Highly visible blue colour upon application for visible coverage, which then turns transparent after a few days
- Temperature range: -12°C to +150°C (180°C intermittent)

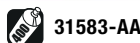


32500



GEAR & WIRE ROPE LUBRICANT

- Deep penetration for internal protection of wire ropes
- Forms a dry non-peeling film that overcomes the limitations of grease lubrication
- Can be applied to gears in motion and is suitable for all running speeds

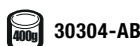


31583-AA



AMBERGREASE EXL

- Highly visible red, NLGI type 2 grease, Lithium-Calcium Complex thickened
- Suitable for use in all types of anti-friction sliding surfaces and plain bearings
- Exceptional load carrying capacity: 4-ball weld load >800Kg
- Use on critical and high load bearings and sliding surfaces



30304-AB



31574-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

GENERAL MAINTENANCE



TUF CUT RANGE

- Range of specialist metal cutting lubricants based on a mixture of lubricants, extreme pressure additives and anti-oxidants
- Ready-to-use products that provide exceptional performance in demanding applications
- Suitable for use on a wide range of metals, including stainless and high carbon steels.



LEAK DETECTOR

- Water-based formulation, no oils, silicones or harmful solvents; no 'run-off' hazard
- Non-flammable and completely odourless
- Ideal for preventative maintenance checks, new installation checks, and on all HVAC systems



EASY WELD

- Biodegradable solvent anti-spatter
- Easy removal of spatter by light brushing after welding
- Economical in use due to its thin film performance
- Helps keep treated nozzles clear for optimal gas flow
- Non-silicone, heat resistance barrier




FLAW DETECTORS

- Highly effective system that can be used anywhere, simply, and without complicated test equipment
- Simple, economical and cost effective
- Can be applied direct to the component to be tested without the need for dismantling
- Fast acting visual results












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ANTI-CORROSION



GALVA COLOUR


















- 2-in-1 anti-corrosion primer and colour top coat
- Easy application with fast results
- Ideal for external pipe-line identification, railings, security fences, and storage tanks
- RAL colours for accurate colour matches


	20673-AA		20679-AA
	20674-AA		20680-AA
	20675-AA		20681-AA
	20676-AA		
	20677-AA		
	20678-AA		










ACRYLIC PAINTS

- RAL referenced for accurate colour matches
- Fast drying <5 minutes
- Good flexibility and hardness
- Once dry it has a high UV resistance
- Available in 400ml spray can

	20180-AA MATT BLACK		20555-AA		20191-AA
	20181-AA MATT WHITE		20556-AA		20192-AA
	20182-AA GLOSS BLACK		20557-AA		20193-AA
	20183-AA GLOSS WHITE		20558-AA		20194-AA
			20559-AA		
			20188-AA		20189-AA
			20195-AA		20190-AA



- Use for metal working/fabrication, electrical installations, machine construction, civil engineering, or general component identification and quality control checks
- Tenacious resin binds paint to the writing surface almost eliminating the problems associated with accidental rub-off and will not wash off with water/rain

	20394-AA		20399-AA		20387-AA		20364-AA
	20379-AA		20368-AA		20383-AA		

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PREVENTION. NOT DETECTION.™



Available from Ambersil

LOCKED IN FOR SAFETY

INTEGRATED DESIGN BENEFITS:

- Secure spray straw locks in place
- Non-slip grip
- Traditional spray in the “down” position
- Precision application in the “up” position
- Useful catch curb - prevents oily can

Perma-Lock® is a unique, non-detachable spray system with dual position spray.

There are no detachable pieces that can fall off, leading to contamination of goods and exposing food manufacturers and processors to costly recalls.

Perma-Lock® reduces the need for expensive x-ray or metal detection equipment:
preventing loss is better than **detecting loss**.

You Just Can't Lose!™

LUBRICATION & MAINTENANCE

Ambersil

www.ambersil.com
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 sales.uk@ambersil.com



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YOUR COMPLETE CHEMICAL SOLUTION™

FOOD GRADE CLEANERS & DEGREASERS



INDUSTRIAL DEGREASER FG



- Formulated for use in the food/ beverage industry to tackle 'difficult' degreasing applications.
- Excellent general purpose solvent degreaser
- NSF A8 and K1 registered (No140255 and 140250)
- Powerful flushing action with superior wetting properties ensures excellent results
- Zero residue



30251



30252



DEGREASER FG



- Use to degrease components when a regular solvent degreaser cannot be used.
- Formulated specifically for use in the food/beverage industry for risk reduction.
- NSF A1 registered (No137997)
- Readily biodegradable and non-flammable
- Effective in both hot and cold water
- Use on gearbox housing, hydraulic systems, large panels, and even walls and floors.
- Concentrated for convenience and economy
- Non-flammable



30243



HARD SURFACE SANITISING WIPES FG



- Kills common pathogens such as: Staphylococcus aureus, E.Coli, Pseudomonas aeruginosa, and Enterococcus hirae
- Highly visible blue wipes for contamination risk reduction
- NSF D2 registered (No147561)



32325

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LUBRICATION & MAINTENANCE



FOOD GRADE CLEANERS & DEGREASERS



LABEL & ADHESIVE REMOVER FG



- Use to remove labels from shipping containers, packing boxes and bulk storage
- NSF K3 registered
- Removes paper labels in 3 mins
- Improves packaging line efficiency by reducing jamming caused by label and adhesive build-up

30254-AA



CONTACT CLEANER FG



- NSF K2 registered
- Use to remove grime and contamination from PCB's and contacts
- Non-conductive and non-corrosive
- Prolongs the life expectancy of components
- Reduces voltage drops due to contamination

31588-AA



UNIVERSAL SCREEN CLEANER



- Removes finger-marks and contamination from visual display units (VDU's) such as LCD monitors, production control screens, and all monitors. Ideal for cleaning thermal imaging camera screens.
- Can be used on most screen types (LCD, TFT, Plasma, etc.)
- Exceptionally economical in use
- NSF P1 registered (No147407)

30236

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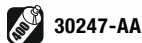
FOOD GRADE LUBRICANTS



MACHINE OIL FG



- NSF H1 registered for use on metal-to-metal moving parts such as hinges
- Can be used as an anti-corrosion coating for metal in high humidity conditions
- Creates a highly effective lubricating and anti-friction film



30247-AA



30255-AA



PENETRATING OIL FG



- For use in the food & beverage industry on fasteners seized by heat, corrosion, over-tightening and contamination
- NSF H1 registered (No140260)
- Spray on, allow to penetrate, and remove seized fasteners without damaging the head, thread or risk shearing
- Does not contain silicone
- Safe for use on all metals



30256



SILICONE FG



- NSF H1 registered for use in the food and beverage industry
- Eliminates squeaking, binding and sticking
- Highly water-resistant and repels water from treated areas
- Use on high-speed bagging lines and on chutes/slides



30248-AA

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

FOOD GRADE LUBRICANTS



DRY PTFE LUBE FG



- A fine, dry PTFE lubricant for the general lubrication of moving parts where an oily or silicone lubricant cannot be used
- NSF H1 registered (No139899)



31589

- Excellent materials compatibility
- Deposits a dry, non-staining film of pure PTFE
- The dry film is unaffected by oil and solvents
- Operational Temperature range: -100°C to +200°C



CHAIN LUBE FG



- NSF H1 PTFE chain lubricant for use above the food line
- Excellent penetration and lubrication properties



30245-AA



30278-AA

- Can be used as a general, heavy duty, PTFE lubricant
- Leaves a tenacious, long lasting lubricating film



AMBERGREASE FG1



- NSF H1 registered, white, NLGI type 2, aluminium complex grease
- Very good extreme pressure performance: 4-ball weld load: >200Kg
- Ideal for all types of bearings and rails surfaces in low temperature areas
- Use in areas subjected to moist or wet operating conditions



31584-AA



AMBERGREASE FG2



- NSF H1 registered, translucent, NLGI type 2 silicone grease
- Operational temp. range: -20C to +220C
- Shell Four Ball Weld Load (IP 239): 180Kg
- Use on bearings subjected to high temperatures such as oven conveyors, oven fan bearings and bakery lines



31585-AA

ASK ABOUT OUR FOOD GRADE (NSF H1) HYDRAULIC AND GEAR OILS

Prices ex VAT. All information is given in good faith but without warranty. Users should conduct their own tests to determine application suitability. Colour squares are representative only and may not match actual paint colour. Full Technical Data and MSDS are available from Ambersil.com

POLIPUMP

YOUR OWN CENTRALISED LUBRICATION SYSTEM IN JUST A FEW QUICK STEPS



With You

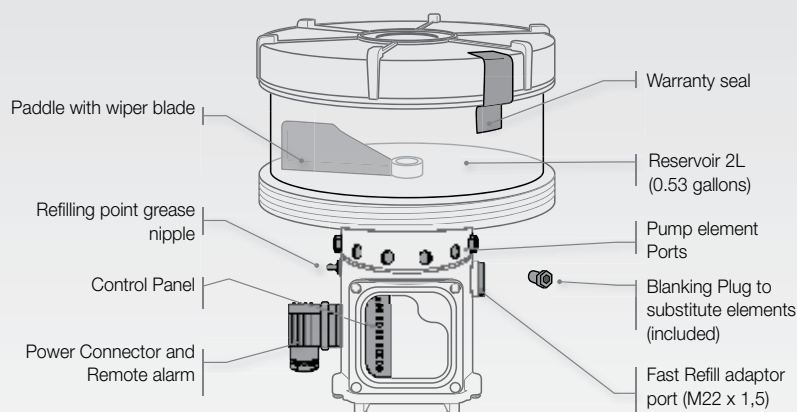
- PROFITABILITY
- POWERFUL and ECONOMICAL solution
- EASY set up and ECOLOGICAL



SET UP YOUR OWN MULTIPOINT LUBRICATION SYSTEM IN 4 BASIC STEPS

- 1 How many points do need to lubricate?** determine the type of pumping elements required and connect to the pump
- 2 Connect the pump** to the power supply
- 3 Fill the reservoir** using our filling tool kit and the grease of your choice
- 4 Set up the timer according to your lubricant needs** and the pump is ready to start

TECHNICAL INFORMATION



Also available, our range of high quality lubricants dedicated for use with bearings and fully compatible with the POLIPUMP.



3 PUMP MODELS

- 1-12 pumping elements
- 1-24 pumping elements
- 1-35 pumping elements
- 12VDC or 24VDC
- 6 different pumping elements
0,02CC – 0,03 CC – 0,04CC – 0,08 CC – 0,10 CC – 0,13 CC
- 12 timer settings
- 2 liter reservoir
- Grade of grease to be used: NLGI 00 to NLGI 2
- Working temperature: -10°C to + 60 °C
- Protection class: IP 65
- Maximum pressure: 80 bar

A range of accessories is also available:

- 2 hoses (with or without grease)
- 6 connectors
- Cartridge filling kit



READY BOOSTER

THE SINGLE POINT LUBRICATOR



From NTN-SNR



With You



READY BOOSTER BENEFITS

- Significant savings due to the flexibility of use (1-12 months and stoppable)
- Suitable for tight and restricted areas (125 cm³)
- Ready to use: no assembly and no tools required
- Only one lubricator for all of your applications: inside and outside (-20°C up to 60°C)
- IP68 protection class: Reliable lubrication even in extremely moist and dusty areas

APPLICATIONS

Due to its compact size, the Ready Booster can be used in various applications:

- Bearings, Plummer block
- Chains
- Electrical motors, fans, pumps, conveyors, etc.



ATEX CERTIFIED



II 1G Ex ia IIC T6
II 1D Ex iaD 20 T85°C
I M1 Ex ia I

> FOR YOUR APPLICATION, COMBINE THE MOST SUITABLE GREASE WITH THE BEST AUTOMATIC LUBRICATION



DESCRIPTION

General purpose grease for industrial use

Suitable for very high loads, compatible with many applications, intended for arduous applications

Parts subject to extensive vibrations or impact. For high-load applications in humid environments.

This grease is ideal for long-term lubrication at high temperatures up to +150°C. Accepts peaks of +175°C

Multi-purpose grease for the food and pharmaceutical industries. Complies with NSF-H1 recommendations

Food-grade oil for chains designed for the food-processing and pharmaceutical industry. Complying with NSF-H1 recommendations

Synthetic oils for high temperature chains

APPLICATIONS

Agricultural equipment, handling equipment, general mechanical devices, low-power electric motors, etc.

Heavy industry: metallurgy, construction, transport, conveyors, lifting devices, water pumps, etc.

Quarries, cement works, public works and humid environments: paper works, boring, crushers, vibrating scalpers, etc.

Textile machines, paper transformation machines, hot fans, dryers, water pumps, etc.

Bottling machines, dairy equipment, industrial baking, pasta manufacturing, confectionery, slaughterhouses, etc.

Straight, bevel and worm gearing, main bearings, pivots, articulations as well as for the lubrication of lifting, drive and transmission chains even at low temperatures

Textile and plastic materials transformation machines: for all types of chains, oil-lubricated reams

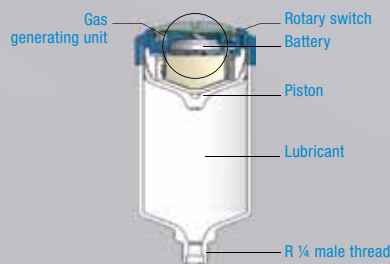
TECHNICAL DATA

Soap	Lithium Calcium	Lithium	Lithium Calcium	Polyurea	Aluminium complex Paraffinic mineral	•	•
Oil	Mineral	Mineral	Semi-synthetic	Semi-synthetic	Aluminium complex Paraffinic mineral	Ester + Pao	Ester + PAO
Operating temperature	-30°C/+130°C	-30°C/+150°C	-20°C/+140°C	-40°C/+160°C	-30°C/+120°C	-30°C/ +120°C	-20°C/+250°C
Viscosity at 40°C	220 cSt	150 cSt	360 cSt	160 cSt	195 cSt	220 cSt	320 cSt

TECHNICAL INFORMATION



Rotary switch for discharge period setting



Oil-filled units with integrated oil retaining valve (red plug)

Condition Monitoring – FAG SmartQB



Equipment monitoring with plain text display



FAG SmartQB is a new type of plug-and-play multichannel complete solution for the condition monitoring of equipment:

- Clearly understood plain text messages in the touch panel on the possible defect cause when changes occur in the condition of the equipment
- 24/7 monitoring for maximum plant availability
- Preconfigured for capture of anomalies in motors, pumps, fans etc.
- Output of up to five defect causes on the display: bearing damage, unbalance, friction/cavitation, temperature increases and basic variations
- Complete commissioning in only 5 minutes

Applications

Typical areas of application for FAG SmartQB are motors, pumps and fans in the industry sectors:

- Cement
- Paper
- Steel
- Water management
- Machinery and plant engineering



Technical details

- For machinery with fixed and variable speeds from 100 to 15 000 rpm
- Preconfigured for up to six sensors
- Touch panel with plain text messages in more than 15 languages
- Minimal installation work, using just one cable
- Live display of current values
- Trend pattern / damage development
- RJ45 Ethernet interface for service technicians
- Contact address for expert support
- Static information on
 - operating hours
 - defect frequency (yesterday/today/overall)
 - maximum values
 - mean values since last evaluation

Scope of delivery of FAG SmartQB base unit:

088632016-0000-10
Housing for FAG SmartQB with 7 inch touch panel, FAG SmartQB Sensor #1 incl. 10 m Ethernet cable and mains connection plug

FAG SmartQB sensors each with 10 m cable:

088640370-0000-10 FAG SmartQB Sensor #2
088640396-0000-10 FAG SmartQB Sensor #3
088640442-0000-10 FAG SmartQB Sensor #4
088640469-0000-10 FAG SmartQB Sensor #5
088640493-0000-10 FAG SmartQB Sensor #6

Other components:

088640302-0000-10
FAG SmartQB Lamp (incl. 2 x 10 m cables)

075222922-0000-10
FAG SmartQB Ethernet cable 10 m

075223252-0000-10
FAG SmartQB Ethernet cable 20 m

085792446-0000-10
FAG SmartQB Ethernet cable 30 m

088640272-0000-10
FAG SmartQB mounting frame for demonstration purposes

Condition Monitoring



FAG SmartCheck / DTECT X1 s



FAG SmartCheck

Online Condition Monitoring Device

An ultra compact, online condition monitoring device that monitors vibration and temperature, as well as other machine and process-specific parameters such as pressure and flow rate. The device can also be used as a machine condition guard with safety switch-off.

Cost effective alternative for online monitoring of small, process critical and non-process critical plant and machinery, including machine tools, spindles, motors, drives, pumps, compressors, HVAC systems and gearboxes.

Uses patented diagnosis technology. Helps companies optimise their manufacturing processes, whilst maximising plant availability and reducing the Life Cycle Cost and Total Cost of Ownership of plant and machinery.

- Easy to operate - requires no special programming skills or knowledge
- Compact and easy to install
- Typically mounted to the machine housing
- Small and lightweight and requires less wiring
- Patented self-learning or 'Teach-In' mode, so, alarm thresholds are adjusted automatically. After set up and commissioning, the device operates autonomously.
- Modular, scalable system that provides multiple expansion options
- IP67 protection rating



Dtect X1 s

Online Condition Monitoring System

DTECT X1 s is the upgraded online system for permanent vibration monitoring and diagnosis of plant where downtime can incur high costs. The individual modules – the monitoring unit and the multiplexer – have been integrated in a single compact housing with standardised connectors.

Signals from up to 8 sensors can be recorded and up to 16 monitoring tasks can be stored and executed automatically. The system can be customised to match the specific requirements of the application and process variables such as speed, temperature, torque and pressure can be recorded.

Data can be accessed at the central control station for direct analysis or can be retrieved from any location via telecom links, allowing remote analysis and adjustment of parameters.

- Vibration diagnosis by means of frequency-selective monitoring allows objective assessment of complex plant
- Large number of measurement channels
- Comprehensive software for various data presentation and analysis options
- Increased reliability through a combination of process parameters
- Space saving due to compact construction
- Suitable for harsh conditions (-20 °C to +70 °C)
- Versatile communication interfaces and connection options
- Breakdown protection for increased operational security
- Flexible and simple installation

FAG SmartLamp

Alarm indicator for FAG SmartCheck

The perfect accessory for a simple alarm function when, for instance, the unit is enclosed or FAG SmartCheck is not directly visible. Suitable for displaying the status of isolated fans, electric motors, pumps, or compressors.

- Patented LED technology
- Equipped with a standard cable and M12 plug connector
- Machine condition visible from a long distance
- No configuration necessary, simply plug & play
- Simple, low cost installation



FAG SmartConnectBox

Power supply distribution for FAG SmartCheck devices

The FAG SmartConnectBox power supply unit enables easy distribution of power supply inputs and outputs to a maximum of four FAG SmartCheck devices.

Rather than running separate cables from four FAG SmartCheck devices to a speed sensor, this new system provides a cleaner, more elegant solution for customers, particularly when monitoring the condition of large rotating machines such as electric motors, geared motors and variable speed drives.



Maintenance Products



Schaeffler Mounting Toolbox

The correct mounting and dismounting of rolling bearings can save time and dramatically increase the life of bearings, as well as maximising the availability of critical plant and machinery by avoiding costly breakdowns. The key is to ensure that the appropriate tools for the mounting and dismounting of rolling bearings are on hand at the installation or assembly stage. Appropriate tools may include thermal mounting and dismounting tools such as induction heating devices and heating plates, mounting paste and heating rings, as well as feeler gauges, hydraulic extractors, hydraulic nuts and hand pump sets. Using the correct tools ensures that bearings are mounted and removed easily and quickly without causing damage to the bearings or surrounding equipment.

The Schaeffler Mounting Toolbox is a web-based information guide on how to professionally install rolling bearings. As well as learning about which tools and fitting aids are required to install rolling bearings, users can also view short videos that demonstrate how these tools should be used.

Website users are presented with a 'Virtual Plant' home screen, which serves as the main user interface, allowing fast navigation around the website. The objective is to make users feel that they are actually in a factory, looking over the shoulder of a professionally-qualified mounting service technician, who is demonstrating how to correctly mount the bearings.

The website provides details of mounting tools and accessories, and demonstrates the benefits of correctly mounted rolling bearings, which include longer operating life for the bearing, reduced unplanned downtime, and higher machine availability.

Moreover, correct alignment and lubrication can achieve improved energy efficiency of machines and equipment.

The Virtual Plant comprises three pillars that represent the main topics of the Mounting Toolbox: 'Mounting/ Dismounting', 'Alignment', and 'Lubrication'.

mounting-toolbox.schaeffler.com



Mounting

Mounting tool set



Designed to enable economical and secure mounting of rolling bearings up to 50mm bore and can also be used to easily mount sleeves, intermediate rings, seals and similar parts.

Mechanical extractors



Designed to dismount small rolling bearings up to approx. 100mm bore diameter that are located with a tight fit on a shaft or in a housing.

Hook wrenches



For tightening and loosening of locknuts on shafts, adapter and withdrawal sleeves, mounting of small bearings on tapered shaft seats, adapter or withdrawal sleeves, dismounting of withdrawal sleeves and nuts.

Spider hydraulic extractors



Designed for use where higher extraction forces are required, these devices allow rolling bearings, gears, sleeves and many other shrink-fitted parts to be dismounted.



Puller TRISECTION



Three section plates allow the extraction of complete bearings, tightly fitted inner rings and other components.

Maintenance Products



Thermal Mounting/Dismounting products

Hydraulic nuts



Hydraulic nuts can be used to press parts with a tapered bore onto their tapered seat.

Induction heating devices



The range includes three table units suitable for mobile and fixed use and three heavy duty, standalone devices capable of handling work pieces up to 1600 kg.

Hand pump sets



The range includes one hand pump set with a single stage pump (1000 bar) and three hand pump sets with twin stage pumps (1000 bar, 1600 bar and 2500 bar).

Medium frequency heating



Alternative induction heating method for mounting and dismounting large-sized bearings and housings.

Maintenance product hire

You can also hire all mechanical maintenance products including hydraulic nuts or measuring and maintenance devices etc.

Our highly skilled engineers are available to assist with any enquires, including on-site visits as well.

Lubricants

Arcanol lubricants



Schaeffler Group has worked with leading lubricant manufacturers to develop the Arcanol range of lubricating greases that are particularly suitable for rolling bearings.

FAG CONCEPT8



Multi-point lubricator for up to eight different bearing positions

FAG CONCEPT2



Compact lubricator with one or two individually controllable pump bodies for up to two lubrication points.

Alignment products

Top-Laser TRUMMY2



An optical-electrical instrument for measuring and setting optimum belt tension.

Top-Laser Equilign



Simple and precise laser optical alignment of shafts

Top-Laser SMARTY2



An economical measuring device for the alignment of belt pulley and chain sprockets.

Selecting the right grease for rolling bearings



Often overlooked by design and maintenance engineers, selecting the most suitable grease for a rolling bearing can prevent premature bearing failure, while also ensuring high reliability and optimum operating life.

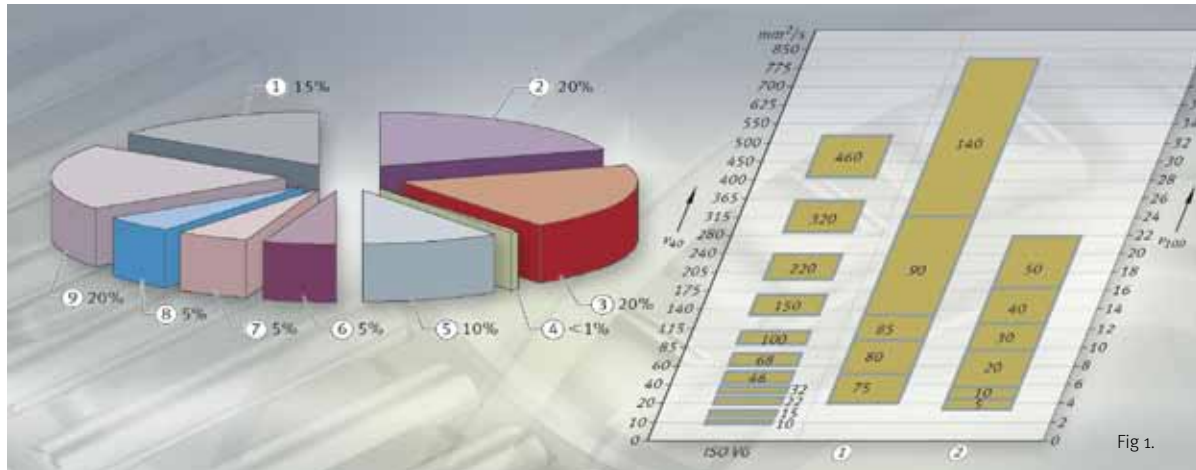


Fig 1.

Selecting the correct lubricant is a critical factor in ensuring the reliability and optimum operating life of a rolling bearing. Failure statistics (see Fig 1) show that a significant proportion of premature rolling bearing failures are directly or indirectly related to the lubricant used. The main causes of failure here are unsuitable lubricants (20%), aged lubricants (20%) and insufficient lubrication (15%).

Although lubricating oils (e.g. mineral oils and synthetic oils) are sometimes recommended for use with rolling bearings in extreme operating conditions (e.g. high temperatures or radiation), most bearing manufacturers recommend the use of greases. This article will therefore focus on selecting suitable greases for rolling bearings.

Grease Selection

When selecting a suitable grease for a rolling bearing, a number of application-related factors need to be considered. These include the type of bearing, operating speed, temperature and load. Other factors such as mounting position, sealing, shock and vibration, and legal/environmental regulations may also need to be considered.

Grease Characteristics and Classification

The characteristics of a grease fundamentally depend on the following three properties:

Base oil type & viscosity

The viscosity of the base oil is responsible for the formation of the lubricant film. As a base oil, mineral oils or synthetic oils are commonly used. It is important that synthetic oils are differentiated according to their type as these possess very different characteristics.

Thickeners

Typical thickeners used include metal soaps or metal complex soaps. Organic or polymer thickeners such as polycarbamide are becoming increasingly important.

Additives

All greases contain additives. A distinction is made between additives that have an effect on the oil itself (oxidation inhibitors, viscosity index improvers, detergents, etc.) and additives that have an effect on the bearing or the metal

surface (e.g. anti-wear additives, corrosion inhibitors, friction value modifiers).

Greases are classified in terms of their principal components: thickener and base oil. Greases are produced in various consistencies, which are defined as NLGI grades. These are determined by the 'worked penetration' of the grease according to ISO 2137. The higher the NLGI grade, the harder the grease. Preferred greases for rolling bearings are those with NLGI grades of 1, 2 or 3.

Factors influencing grease selection

Bearing type

A distinction needs to be made between point contact (ball bearings) and line contact (needle roller bearings and cylindrical roller bearings).

In ball bearings, each overrolling motion at the rolling contact places strain on only a relatively small volume of grease. In addition, the rolling kinematics of ball bearings exhibit only relatively small proportions of sliding motion. The specific mechanical strain placed on greases in bearings with point contact is therefore significantly less than in bearings with line contact. Typically, greases with a base oil viscosity ISO VG 68 to 100 are used.

In rolling bearings with line contact, higher requirements are placed on the grease. Not only is a larger grease quantity at the contact subjected to strain, but sliding and rib friction is also to be expected. This prevents the formation of a lubricant film and would therefore lead to wear. As a countermeasure, greases should be selected that exhibit a higher base oil viscosity (ISO VG 150 to 460 or higher). Anti-wear additives may also be required and consistency is normally NLGI 2.

Speed

The speed parameter of the bearing should always be a good match for the speed parameter of the grease. This depends on the type and proportion of the thickener, the base oil type and the proportion of base oil.

The speed parameter of a grease is not a material parameter but depends on the bearing type and the required minimum running time.

As a general guide, for rolling bearings rotating at high speeds or with a low requisite starting torque, greases with a high speed parameter should be selected. For rolling bearings rotating at low speeds, grease with a low speed parameter is recommended.

Temperature

The temperature range of the grease must correspond to the range of possible operating temperatures in the rolling bearing. The operating temperature range is dependent on the type and proportion of thickener, the type and proportion of base oil, the production quality and production process. The stability of the grease at high temperature also depends primarily on production quality and production process.

In order to achieve reliable lubrication and an acceptable grease operating life, it is generally recommended that greases should be selected according to the bearing temperature that normally occurs in the standard operating range.

Other factors to consider include the upper operating temperature of the grease, the dropping point and the lower operating temperature.

Load

For a load ratio $C/P < 10$ or $P/C > 0.1$, greases are recommended that have higher base oil viscosity and anti-wear additives. These additives form a reaction layer on the metal surface that provides protection against wear. These greases are also recommended for bearings with an increased proportion of sliding motion (including slow running) or line contact, as well as under combined radial and axial loads.

Water & Moisture

If the application is in a damp environment, moisture can enter the bearing. Water may condense within the bearing if there are rapid temperature fluctuations between warm and cold. This is a particular problem if large cavities exist in the bearing or housing.

Water can cause severe damage to the grease or bearing and is often due to ageing or hydrolysis, interruption of the lubricant film and corrosion.

Selecting the right grease for rolling bearings



Barium and calcium complex soap greases have proved favourable in these conditions as they provide good water resistance and act to repel water. The anti-corrosion effect of a grease is also influenced by additives.

Oscillations, shocks and vibrations

Oscillation loads can have a considerable effect on the structure of thickeners in greases. If mechanical stability is not sufficient, changes in consistency may occur. This leads to softening, de-oiling on an isolated basis, but also hardening of the grease with a corresponding reduction in lubrication capability. It is therefore recommended that a grease should be selected whose mechanical stability has been tested accordingly.

Options here include the expanded worked penetration, the Shell Roller Test in accordance with ASTM D 1831 and a test run on the FAG AN42 test rig.

Seals

If hard contaminant particles penetrate the bearing, this will not only lead to increased noise but also to wear. Appropriate sealing of the bearing should prevent this. The grease can assist this sealing effect by forming a stable collar on the seal. In this case, more solid type greases are more suitable, as greases that are too soft tend to favour the escape of grease.

Mounting position & adjacent components
Even where an axis of rotation is vertical or inclined, lubricant must remain at the lubrication point. In addition to appropriate seals, flowing away of the grease can be prevented by using a more viscous grease. If several lubrication points are located close together, unintentional contact can occur.

Attention must therefore be paid to compatibility of the lubricants with each other. However, where possible, the optimum solution is to use only one grease, which should also be compatible with the cage and seal material.

Legal & Environmental

Depending on the application and the industry sector, legal and environmental factors must be considered when selecting a suitable grease. In the food processing industry, for example, the use of greases with appropriate authorisation is specified. A worldwide standard that can be used is approval in accordance with the NSF (National Sanitary Foundation) H1 or H2, listed in the so-called White Book™.

A lubricant with the code H1 (food-grade lubricant) may be used where occasional, technically unavoidable contact with foodstuffs cannot be eliminated. This means that the grease must be non-toxic, rapidly broken down by the organism and neutral in terms of both odour and taste. Such lubricants often comprise aluminium complex soap thickeners and polyalphaolefins or medicinal white oils as a base oil.

H2 lubricants are intended for general use within the food processing industry where no contact with foodstuffs occurs. Greases with biological degradability must be provided where the lubricant can pass directly into the environment.

Overview of Arcanol Rolling Bearing Greases

	Arcanol MULTITOP	MULTI2	MULTI3	LOAD150	LOAD220	LOAD400	LOAD1000	TEMP90	TEMP110	TEMP120	TEMP200	SPEED2,6	VIB3	FOOD2
Characteristic	Universal grease for ball and roller bearings	Universal grease for ball bearings OD † 62mm	Universal grease for ball bearings OD > 62mm	Special grease for ball, roller and needle roller bearings, linear guidance systems	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings	Special grease for ball bearings	Special grease for ball and roller bearings	Special grease for ball and roller bearings
Areas of application	in rolling mills, construction machinery, automotive engineering, spinning and grinding spindles	in small electric motors, agricultural and construction machinery, household appliances	in large electric motors, agricultural and construction machinery, fans	in machine tools	in rolling mill plant, rail vehicles	in mining machinery, construction machinery, wind turbines	in mining machinery, construction machinery, preferably under shock loads and large bearings	in couplings, electric motors, automotive engineering	in electrical equipment, automotive engineering	in continuous casting plant	in track rollers in baking machinery, piston pins in compressors, kiln trucks, chemical plant	in machine tools, instruments	in blade adjusters in rotors for wind turbines, packaging machinery, rail vehicles	in applications with food contact, H1 to USDA
Performance	at increased speeds, high loads, low and high temperatures			at high loads, with wide speed range movements	at high loads, with wide speed range, high humidity	at very high loads, moderate temperatures, moderate speeds	at very high loads, moderate temperatures, low speeds	at high temperatures, high loads	at high temperatures, high speeds	at high temperatures, high loads	at very high temperatures, in chemically aggressive environments	at very high speeds, low temperatures	at high temperatures, high loads, with oscillating motion	



EXCELLENCE IN LUBRICANTS

IT'S NOT JUST OUR STRAPLINE - IT'S OUR PHILOSOPHY...

We're the largest independent lubricants company in the UK, manufacturing and supplying a range of lubricants and associated products to automotive, commercial, agricultural, industrial, off highway & rail sectors.

Our commitment to total quality management covers everything from design to production, distribution and customer support. Throughout the company's history, our product development has been at the forefront of lubricant technology.

INDUSTRIAL

Exol's extensive industrial product range has been designed to cover all the needs of machine shops and industrial plant. The range includes both neat and water miscible metal cutting and forming fluids through to machine tool lubricants and rust preventatives



Hydraulic Oils



Gear Oils



Machine & Slideway Oils



Compressor Oils



Multi-Functional Oils



Turbine Oils



Soluble Cutting & Grinding Oils



Neat Cutting & Grinding Oils



Forming Oils



Greases



Ancillary Products

AGRICULTURAL

The highly developed agricultural machinery in use in today's intensive farming environment needs the specialised protection afforded by Exol's range of agricultural lubricants. Exol's agricultural product range has been developed to satisfy the requirements of the latest specialised tractors through to older types of farming machinery and ancillary equipment



Universal Oils



Engine Oils



Gear & Transmission Oils



Hydraulic Oils



Greases



Ancillary Products

RAIL

Exol has a range of specialised products for use in the rail industry including heavy duty diesel engine oils, power transmission fluids and high quality greases. Exol's rail products are renowned for their long predictable service life and trouble-free operation.



Engine Oils Gear & Transmission Oils General Lubricating Oils Hydraulic Oils Greases Ancillary Products

COMMERCIAL

Exol's commercial vehicle lubricants satisfy the needs of the most modern trucks and buses as well as older models. The exhaustive range features low SAPS, fully synthetic engine oils, long drain semi synthetics and traditional mineral oil grades as well as sophisticated automatic transmission fluids, manual gear oils and ancillary products.



Low SAPS Engine Oils Fully & Semi Synthetic Engine Oils Mineral Oil Based Engine Oils Gear & Transmission Oils Hydraulic Oils Greases Ancillary Products

OFF HIGHWAY

Exol's off-highway range of lubricants and fluids encompasses a wide variety of sectors including construction, marine and forestry. The range includes specialised transmission fluids, marine specific engine oils, biodegradable lubricants and sophisticated greases.



Engine Oils Universal Oils Gear & Transmission Oils Marine Engine Oils Gas Engine Oils Hydraulic Oils Greases

AUTOMOTIVE

Exol's comprehensive range of automotive lubricants combine a high level of protection to engines and transmissions with long, trouble free service life. The range includes premium grade low SAPS engines oils, robust semi synthetic and mineral oil based grades and manual and automatic transmission fluids.



Low SAPS Fully Synthetic Engine Oils Fully Synthetic Engine Oils Semi Synthetic Engine Oils Mineral Oil Based Engine Oils Two Stroke Oils Gear & Transmission Oils Greases

Please contact your IADA Distributor for details of pack sizes and product range

OILS AVAILABLE IN:

GREASES AVAILABLE IN:



BONDLOC[™]

FORMULAS THAT WORK

ADHESIVES & SEALANTS

Bondloc have been manufacturing adhesives in the UK for over 20 years and have built a worldwide reputation for manufacturing very competitively priced, high performance adhesives for a wide range of industries.

With over 2000 adhesive product formulations all available to the IADA group of distributors we have a solution for most bonding applications. Bondloc's highly experienced technical team are available to give you free advice on any bonding requirements that you may have.

FROM INNOVATION...



...TO APPLICATION

LUBRICATION & MAINTENANCE

Anaerobics

A full range of high spec products, including threadlockers, pipes seals, gasketing and retaining compounds. Anaerobic adhesives cure in the absence of air and in the presence of metals and they exhibit excellent chemical and environmental resistances.

UV Cure

We manufacture a wide range of UV cure and visible light-curing adhesives. We can also supply equipment and accessories to meet the needs of all types of bonding, encapsulating, coating, tacking and sealing applications.

Cyanoacrylates

Universally known as superglues, our cyanoacrylate adhesives are triple distilled to ensure they are suitable for the most stringent of applications. They are available in a range of viscosities and are suited for use on a wide variety of substrates.

Maintenance Range (MRO)

A wide array of aerosols and pastes for the most demanding of MRO applications. The range also includes pre-treatment cleaners and adhesive activators.

Structural Adhesives

Bondloc structural adhesives utilise a wide range of resin bases in order to provide end users with the best possible product for each individual application. Our innovative range includes 10:1 and 1:1 ratio and are designed to provide high strength joints and greater flexibility in component design.

Sealants

Our versatile and durable adhesives and sealants include high-performance RTV silicones, polyurethanes and MS polymers. They offer exceptional performance in sealing and bonding applications.

Save up to 50% when compared to the other leading brands





B222 Screwlock

For small fasteners, where vibration loosening prevention and non-leakage through threaded fastening is required.

- Colour: Purple
- Viscosity: 1,200cps
- Breakaway Strength: 6Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 15 mins
- Loctite Ref: 222



B243 Oil Tolerant Threadlock

Oil tolerant and designed for direct application onto "as received parts" where oily film exists or where contamination is a problem.

- Colour: Blue
- Viscosity: 1,200-1,800cps
- Breakaway Strength: 19Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.1mm
- Cure Time (without activator): 15 mins
- Loctite Ref: 243



B270 Studlock

Locks studs up to M25, sealing against leakage and corrosion.

- Colour: Green
- Viscosity: 500cps
- Breakaway Strength: 40Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.25mm
- Cure Time (without activator): 2 hrs
- Loctite Ref: 270



B515 Flexible Gasket

Typically used as a form-in-place gasket for pumps and compressors.

- Colour: Purple
- Viscosity: Paste
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 12 hrs
- Loctite Ref: 515



B518 Flexible Gasket

Seals close fitting joints between rigid metal faces and flanges.

- Colour: Red
- Viscosity: 3,500cps
- Shear Strength 12.5N/mm²
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 12 hrs
- Loctite Ref: 518



B542 Hydraulic Thread Sealant

Used for hydraulic valves, threaded couplings, adaptors, quick disconnect parts, compression fittings and vibration proofing joints.

- Colour: Brown
- Viscosity: 400-800cps
- Breakaway Strength: 15Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.05mm - 0.25mm
- Cure Time (without activator): 10-20 mins
- Loctite Ref: 542



B574 Instant Gasket

Instant in-place gasket former making almost any size and shape, replacing paper, cork, etc. Ideal for gearbox sealing, pump flanges, transmission assemblies, cover plates on tanks, cam shaft sealing and bearing gaps.

- Colour: Orange
- Viscosity: 50,000cps
- Breakaway Strength: 8Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): 15-30 mins
- Loctite Ref: 574



B577 Pipe Seal

Seals all types of threaded connections. Good chemical/solvent resistance to ethanol, motor oil, unleaded petrol, acetone and brake fluid.

- Colour: Yellow
- Viscosity: 50,000cps
- Breakaway Strength: 11Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.5mm
- Cure Time (without activator): <15 mins
- Loctite Ref: 577



B603 Oil Tolerant Retainer

Designed for direct use on "as received parts" such as those with protective films or where surrounding parts contamination is a problem in maintenance.

- Colour: Green
- Viscosity: 125cps
- Breakaway Strength: 28Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.15mm
- Cure Time (without activator): <15 mins
- Loctite Ref: 603



B638 High Strength Retainer

For under load structural components such as cylindrical parts, keys, splines, even structural tubing with close tolerance fit.

- Colour: Green
- Viscosity: 2500cps
- Shear Strength (Steel): 30Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.2mm
- Cure Time (without activator): 5 mins
- Loctite Ref: 638



B641 Bearing Retainer

Secures all types and sizes of bearings, shafts and cylindrical parts which will require disassembly in the future.

- Colour: Yellow
- Viscosity: 400-800cps
- Shear Strength (Steel): 12Nm
- Min / Max Temperature: -55°C - +150°C
- Gap Fill: 0.2mm
- Cure Time (without activator): 10-15 mins
- Loctite Ref: 641



B648 High Temperature Retainer

Secures all types of cylindrical parts as per B641 but with continuous working temperature up to 180°C.

- Colour: Green
- Viscosity: 500cps
- Shear Strength (Steel): 25Nm
- Min / Max Temperature: -55°C - +180°C
- Gap Fill: 0.15mm
- Cure Time (without activator): 5-15 mins
- Loctite Ref: 648

Our products are used for thousands of different applications across the industrial market; including automotive, aerospace, marine, transport, general and precision engineering.



BONDLOC
FORMULAS THAT WORK



B401 Superglue Adhesive

Rapid bonding for a range of materials including metals, plastics, elastomers, wood, paper, leather and fabric.

- Colour: Clear
- Base: Ethyl
- Viscosity: 90-120cps
- Shear Strength: 25N/mm²
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 401



B415 Superglue Adhesive

Designed for metal bonding, high viscosity. Can also be used for general purpose.

- Colour: Clear
- Base: Methyl
- Viscosity: 1,200-1,800cps
- Gap Fill: 0.2mm
- Shear Strength: 15-25 N/mm²
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 415



B480 Superglue Adhesive

Rubber toughened adhesive with increased flexibility and peel strength along with enhanced resistance to shock.

- Colour: Black
- Base: Ethyl
- Viscosity: 350-450cps
- Shear Strength: 15-25N/mm²
- Fixture Time (EPDM): <15 seconds
- Loctite Ref: 480



B2001 Steel Epoxy Stick

A steel-filled epoxy putty for general maintenance and repairs. For filling, rebuilding and bonding metal surfaces.

- Colour: Grey (mixed)
- Viscosity: Putty
- Tensile Strength: 5N/mm²
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs
- Loctite Ref: 3463



B2003 Plastic Epoxy Stick

Fast, permanent repairs to most plastics. Allows patching in areas where welding is not possible. Ideal for emergencies.

- Colour: Light Blue (mixed)
- Viscosity: Putty
- Lap Shear Strength (steel): 4.8N/mm²
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs



B3298 Universal Bonder

Toughened 1:1 ratio structural adhesive formulated for bonding thermoplastics, metals and composites. Minimal surface preparation and rapid fixture time makes it ideal for many assembly applications.

- Colour: Off white / Black (mixed)
- Viscosity: 55,000 - 100,000 cps
- Tensile Strength (GBS): 3,500 - 4,500 psi
- Min / Max Temperature: -40°C - +150°C
- Working time: 4 - 6 minutes
- Fixture Time: 10 - 12 minutes
- Full Cure: 4 hrs



B406 Superglue Adhesive

Designed for bonding plastics and elastomeric materials where a rapid fixture is required.

- Colour: Clear
- Base: Ethyl
- Viscosity: 25-35cps
- Shear Strength: 15-25 N/mm²
- Fixture time (EPDM): <5 seconds
- Loctite Ref: 406



B454 Superglue Adhesive

No Drip. Designed for difficult to bond materials which require uniform stress distribution and strong tension/shear strength. Ideal for vertical or overhead applications.

- Colour: Clear
- Base: Ethyl
- Viscosity: Gel
- Shear Strength: 15-25N/mm²
- Fixture Time (EPDM): <5 seconds
- Loctite Ref: 454



B7649 Anaerobic Activator

Speeds cure of all anaerobic fluids and pastes and extends cure through volume. B7649 helps fixture time and reduces ultimate cure time. Use B7649 when materials are inactive (plastic or passivated metals) or where temperature is under 15°C

- Colour: Yellow/Amber
- Base: Heptane
- Evaporation: 60 seconds



B2002 Aluminium Epoxy Stick

Epoxy putty for general maintenance and repairs. For permanent repairs to aluminium surfaces.

- Colour: Light Silver (mixed)
- Viscosity: Putty
- Lap Shear Strength (steel): 4.8N/mm²
- Min / Max Temperature: +121°C
- Cure Time: 24 hrs



B2012 Rapid Five Minute Cure

Epoxy Resin Suitable for bonding a wide variety of surfaces including steel, aluminium, and galvanised iron. Product reacts within a few minutes to give a tough resilient bond.

- Colour: Clear
- Viscosity: Part A: 100cps, Part B: 130cps
- Shear Strength (Steel): 3.8N/mm²
- Min / Max Temperature: -40°C - +121°C
- Cure Time (without activator): 5 mins
- Loctite Ref: 3430



Merchandisers and Stands

Point of sale displays that have been developing and increasing sales for our distributors for many years. Bondloc's 16 product merchandising stand is our most popular starting package for our distribution partners. Whereas Bondloc's 8 product merchandising stand is ideal for the smaller trade counter or retail outlet where space is a premium. There is a 24 product merchandiser available for distributors who have a more extensive range to display. Please contact use for further details.

LUBRICATION & MAINTENANCE

If the product you require isn't shown here please contact your local IADA distributor who will be able to provide you with any product you require from the Bondloc range.



BONDLOC[®]

FORMULAS THAT WORK

NEW FOR 2017 - STRUCTURAL ADHESIVES

Bondloc have extended their range of Structural adhesives that utilise a wide range of resin bases in order to provide end users with the best possible product for each individual application. A key factor of our modern design and engineering processes is the desire to produce unique products that will distinguish you from your competitors.

Our innovative range of high strength structural adhesives are fully compatible with modern manufacturing processes and are capable of providing even greater flexibility in component design.



Please contact our Technical desk for further information and to discuss your application requirements

LUBRICATION & MAINTENANCE

Engineer's Kit

Packed with 15 different products which have been carefully selected for even the most demanding engineer. Comes in a tough, reinforced plastic case with foam interior.



- B222 Screwlock 50ml
- B242 Nutlock 50ml
- B270 Studlock 50ml
- B401 Cyanoacrylate 20g
- B406 Cyanoacrylate 20g
- B454 Cyanoacrylate Gel 20g
- B574 Instant Gasket 50ml
- B577 Pipe Seal 50ml
- B603 Retainer 50ml
- B641 Bearing Fit 50ml
- B660 Metal Fill Retainer 50ml
- B2001 Steel Epoxy Stick 114g
- B2003 Plastic Epoxy Stick 114g
- B2012 Epoxy Resin 28ml
- B5299 High Temp Silicone 220ml

Minimate Kit

Selection of 12 products in a compact case. The smaller pack sizes and low cost make the Minimate ideal for emergencies.



- B242 Nutlock 10ml
- B270 Studlock 10ml
- B401 Cyanoacrylate 20g
- B542 Hydraulic Seal 10ml
- B567 Stainless Pipe Seal 50ml
- B574 Instant Gasket 50ml
- B577 Pipe Seal 50ml
- B603 Retainer 10ml
- B641 Bearing Fit 10ml
- B2001 Steel Epoxy Stick 50ml
- B3294 Plastic Weld 28g
- RTV123 Silicone 80ml





LEVELS



STORAGE



SAWS

CLAMPS



KNIVES

TAPES



HAMMERS

SCREWDRIVERS



STAPLING

STANLEY
FATMAX

DEWALT®

GUARANTEED TOUGH.®

XR FLEX VOLT

POWER OF CORDED
FREEDOM OF CORDLESS



TOOLS



130 YEARS OF LEADING THE WAY



SOCKETS & ACCESSORIES



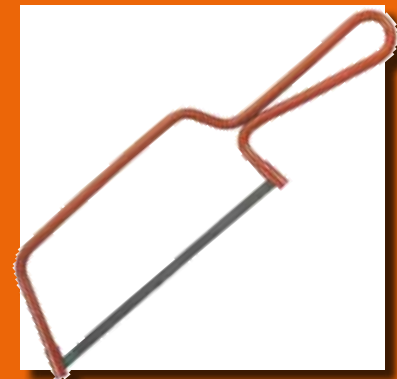
ADJUSTABLE WRENCHES



SCREWDRIVERS



PLIERS



HACKSAWS



LINDSTROM PLIERS



FILES



HOLESAWS

IN PROFESSIONALS' HANDS SINCE 1886

Technically advanced products with industry needs at the core.

- Trusted Superior Performance.
- Problems Solving.
- High Quality.
- Technical Innovation.
- Excellent Technical and After-Sales Support



ROCOL®



TOUGH PROTECTION FOR TOUGH JOBS



TOOLS

- SKIN CLEANSERS ● SURFACE CLEANING & MAINTENANCE ●
- DISPENSERS & ACCESSORIES ●

Swarfega®



TOOL KITS & TOOL STORAGE



STAINLESS STEEL SOCKETRY



SOCKET SETS & ACCESSORIES



SPANNERS & WRENCHES



SCREWDRIVERS & BITS



INSULATED TOOLS



SERVICE TOOLS

TOOLS

EVERLASTING POWER GUARANTEE

GET ORGANISED™



METRIC / IMPERIAL CONVERSION CHART

Length (mm)	Length (Inch)
12	1/2"
16	5/8"
20	3/4"
25	1"
30	1.1/4"
40	1.1/2"
45	1.3/4"
50	2"
60	2.3/8"
70	2.3/4"
75	3"
80	3.1/4"
90	3.1/2"
100	4"
110	4.3/8"
120	4.3/4"
125	5"
150	6"



Starrett®

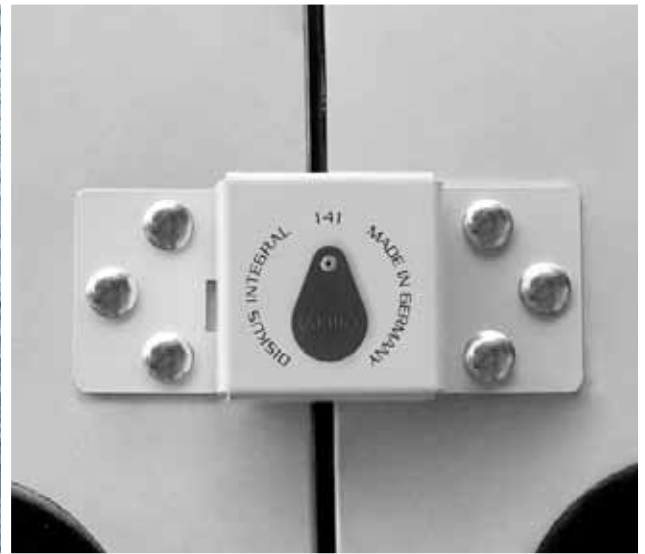
Manufacturing Quality Hole Saws Since 1978

Padlocks

For every application



Security Tech Germany



TOOLS



DORMER



HOLEMAKING TOOLS

MILLING TOOLS

THREADING TOOLS

TURNING TOOLS

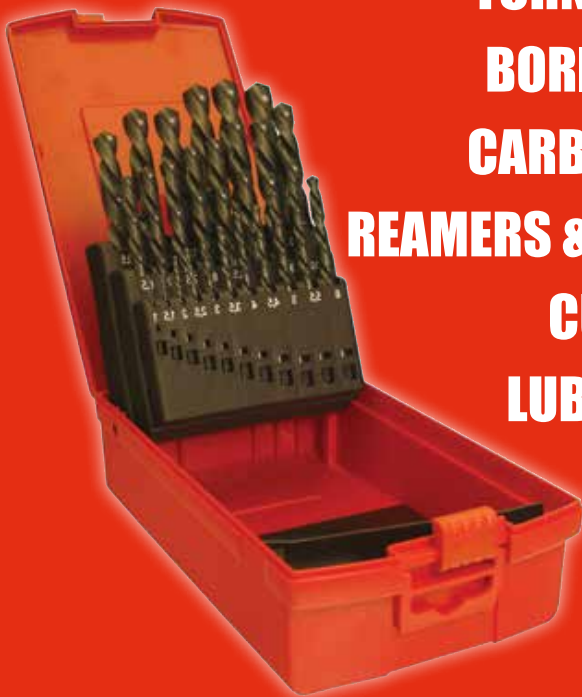
BORING TOOLS

CARBIDE BURRS

REAMERS & COUNTERSINKS

CUTTING

LUBRICANTS



METRIC / IMPERIAL CONVERSION CHART

Screw Size (Imp)	Clearance Drill (mm)	Pilot Drill (mm)	Clearance Drill (Imp)	Pilot Drill (Imp)
4	2.8mm	1.6mm	7/64	1/16
6	3.6mm	2.0mm	9/64	5/64
8	4.5mm	2.4mm	11/64	3/32
10	5.0mm	2.8mm	3/16	7/64
12	5.5mm	3.2mm	7/32	1/8
14	6.5mm	3.6mm	1/4	9/64
16	7.0mm	4.0mm	17/64	5/32
18	7.5mm	5.0mm	19/64	3/16
20	8.5mm	5.5mm	21/64	13/64
24	9.0mm	5.5mm	3/8	7/32



Nothing but **HEAVY DUTY.**[™]



TOOLS





Storage



Wrenches



Ratchets - Sockets



Screwdrivers - Keys and bits



Torque Control



Power Tools



Pliers



Measuring - Scribing



Hammer - Chisels - Punch



Sawing - Cutting



Lighting



Pipework - Maintenance - Pullers



Electricity - Electronics



Automotive Tooling



TOOLS

FAITHFULL®

QUALITY TOOLS

We are a long established British company with an excellent reputation for service and reliability. Through constant re-investment and development, our organisation now includes multiple Regional Branches and Central Distribution Centres, which between them provide a specialist tool distribution service to the whole of the United Kingdom, Ireland and beyond.

Our success has been built on Customer Focus, Innovation, Leadership, Integrity and People.

We remain a privately owned company, who constantly reinvest in products, services and initiatives. We aim to be alert to our customer's requirements, through our team of national and local field based representatives, who are experienced and knowledgeable about our products and services.

We exclusively source, stock and distribute Faithfull Tools, Scan and Lighthouse Brands which must be manufactured to a high standard aiming to give long lasting and dependable service.

The Faithfull Tools team are dedicated to the development of the range. All the sourcing, ordering, marketing, promoting, artwork development, importing, quality checks and of course selling are handled by this team.

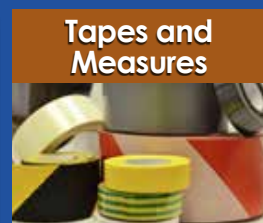
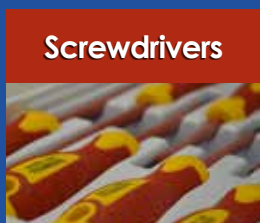
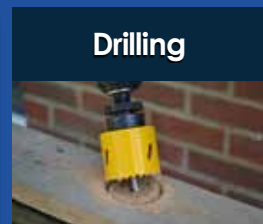
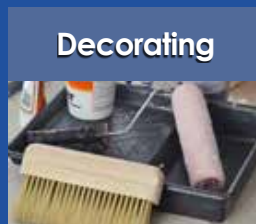
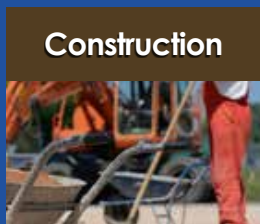
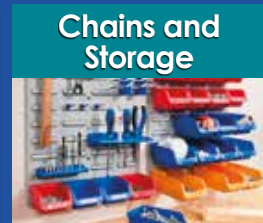
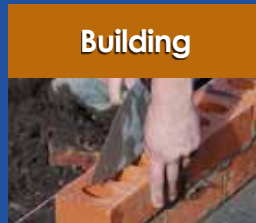
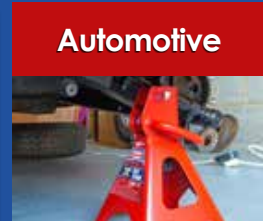
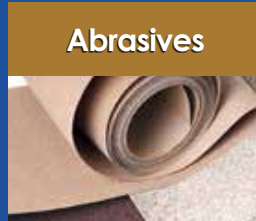
We have a customer base of over 13,000 outlets which includes many of the UK and Republic of Ireland's key National Builder Merchants, Engineer Merchant Groups, Online Retailers, Hardware Outlets and Garden Centres.

Our excellent credit rating has been established from solid trading practices, providing security for our Staff, Customers and Suppliers.

We are proud of our achievements so far. We are also proud of our strong trading relationships with our suppliers in the UK, Europe and Asia. We are now looking to build a long term relationship with you, through the development of our Faithfull Brand.

Further details of our products can be found on our website

www.fairthfulltools.com



MaxiDry®



Reference	56-425
Coating	3/4 dipped
EN 388	4121
EN 374	no
Sizes	6-11



Where to use:
MaxiDry® is designed for use in oily or wet environments. i.e. primary assembly, building and construction, maintenance, assembly and engineering.

MaxiDry®

ZERO™



proRange™



Reference	56-451
Coating	Fully
EN 388	4232
EN 511	111
Sizes	7-11



Where to use:
MaxiDry® Zero™ is designed for use in dry or wet environments requiring thermal resistance. i.e. cold store, agriculture, construction and logistics.

MaxiCut®

OIL™



Reference	34-305
Coating	3/4 dipped
EN 388	4331
Sizes	7-11



Where to use:
MaxiCut® Oil™ is designed for use in oily or wet environments with an increased risk of cut. i.e. sheet metal, handling broken glass, primary assembly, maintenance, fabrication, press shops and heavy engineering.

MaxiCut®

OIL™



Reference	34-505
Coating	3/4 dipped
EN 388	4542
Sizes	6-11



Where to use:
MaxiCut® Oil™ is designed for use in oily or wet environments with an increased risk of cut. i.e. sheet metal, handling broken glass, primary assembly, maintenance, fabrication, press shops and heavy engineering.

MaxiDry®

ZERO™



Waterproof, Cold Temperature Glove (as low as -30°C)

- Retains flexibility and will not stiffen or crack at low temperatures
- Warm fleece liner wicks perspiration away from the skin
- Available from sizes 7 – 11

MaxiFlex[®] ULTIMATE™



Reference	42-874
Coating	palm
EN 388	4131
Sizes	5-12



Where to use:
MaxiFlex[®] Ultimate™ has become the benchmark for precision handling in dry environments. i.e. assembly, automotive, aerospace, construction, logistics and general handling.

MaxiFlex[®] ELITE™



Reference	34-274
Coating	palm
EN 388	4121
Sizes	6-11



Where to use:
MaxiFlex[®] Elite™ is designed for use in dry environments requiring precision handling. i.e. assembling small parts, final assembly, maintenance etc.

proRange™

MaxiFlex[®] CUT™



Reference	34-8743
Coating	palm
EN 388	4331
Sizes	6-12



Where to use:
MaxiFlex[®] Cut™ is designed for use in dry environments requiring precision handling with an increased risk of cut. i.e. sheet metal handling, primary, secondary and final assembly, maintenance, automotive, aerospace, construction and fabrication.

MaxiCut[®] ULTRA™



Reference	44-3745
Coating	palm
EN 388	4542
Sizes	6-11



Where to use:
MaxiCut[®] Ultra™ is designed for use in dry environments with an increased risk of cut. i.e. sheet metal, broken glass handling, primary, secondary and final assembly, maintenance, automotive, aerospace and construction.

proRange™

TOOLS



KEEPING HOT HANDS COOL,
DRY and PRODUCTIVE

MaxiFlex[®] ULTIMATE™



ORANGE GRIPPER®

NITRILE TYRE TREAD DISPOSABLE GLOVES



- TYRE TREAD GRIP
- CHEMICAL RESISTANT
- POWDER FREE
- EXTRA THICK 0.18mm
- NITRILE DISPOSABLE
- AQL 1.5
- FOOD APPROVED



CODE	DESCRIPTION	SIZE	BOX QTY.
7181-08	ORANGE GRIP NITRILE GLOVE MED 1=BOX/100	8	100
7181-09	ORANGE GRIP NITRILE GLOVE LGE 1=BOX/100	9	100
7181-10	ORANGE GRIP NITRILE GLOVE XL 1=BOX/100	10	100
7181-11	ORANGE GRIP NITRILE GLOVE 2XL 1=BOX/90	11	90

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THE MOST PROFESSIONAL SOLUTION FOR HEATING A MECHANICAL PIECE



Fast Therm Induction Heaters



With You

Experts & Tools



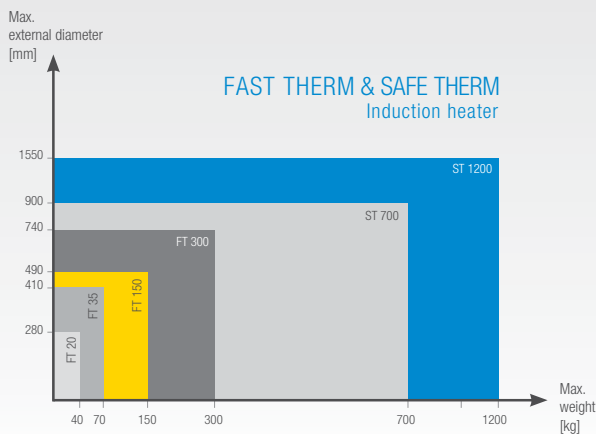
EXPERTS & TOOLS SUPPLIES DIFFERENT INDUCTION HEATERS FOR YOUR PARTICULAR REQUIREMENTS.

	FAST THERM 20	FAST THERM 35	FAST THERM 150	FAST THERM 300	SAFE THERM 700	SAFE THERM 1200
Max. bearing weight (kg)	40	70	150	300	700	1200
Minimum bore (mm)	10	15	30	30	45	85
Max. external diameter (mm)	280	410	490	740	900	1550
Max. power consumption (KVA)	3.6	3.6	12.8	12.8	25	40
Max. voltages/current*	230V/16A	230V/16A	400V/32A	400V/32A	400V/63A	400V/100A
Temperature range	+40°C to 240°C	+40°C to 240°C	+40°C to 240°C	+40°C to 240°C	+40°C to 240°C	+40°C to 240°C
Including	<ul style="list-style-type: none"> • 3 magnetic field-guiding bars • Carrying case 	<ul style="list-style-type: none"> • Swivel-mounted bar 	<ul style="list-style-type: none"> • Swivel-mounted bar 	<ul style="list-style-type: none"> • Mobile trolley • Swivel-mounted bar 	<ul style="list-style-type: none"> • Infrared remote control 	<ul style="list-style-type: none"> • Infrared remote control

* Other voltages on request.

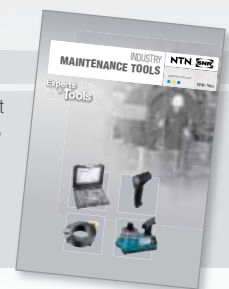
TOOLS

SELECTION GUIDE FOR HEATERS



ACCESSORIES

Experts & Tools supplies additional equipment such as support ledges (yokes), extensions, hoists, temperature probes, gloves and much more. Details in our maintenance tool catalogue.



PULLERS

Bearing Removal Made Easy



PULLER KIT FOR DEEP-GROOVE BALL BEARINGS



APPLICATION
Tool to extract deep groove ball bearings of 10-100mm bore from blind housings.

ADVANTAGES
Enables easy removal

Part Number:
TOOL BBPS 10-100 / Ball Bearing Puller Set



PULLER KITS FOR THE INTERNAL GRIPPING OF THE BORE OF A BEARING



APPLICATION
Tool to extract tightly fitted bearings from housings by pulling on the internal diameter. Range from 5-100mm

ADVANTAGES
Comprehensive range of Pullers adjustable to suit your application. Two sets (5-44mm) and (45-100mm)

Part Number:
TOOL BP Set 5-44 / Bore Puller Set
TOOL BP Set 45-100 / Bore Puller Set



SELF-CENTRING HYDRAULIC PULLERS 2/3 ARMS SELF-CENTRING HYDRAULIC PULLERS



APPLICATION
Tools to enable the extraction of large bearings and other components with an interference fit such as pulleys and gears. Maximum outside diameters ranging from 325 to 680mm.

ADVANTAGES
Sturdy, compact self-centring pullers with hydraulic assistance to enable dismantling with minimum effort. Convertable from 3 leg to 2 leg.

Part Number:
TOOL SCHP 4TONS / Self-Center hyd Puller
> also available in: 12.20 and 30 TONS



TOOLS

Experts & Tools

At your service
for more
performance

Experienced and well equipped Bearing Experts at your side to scale new heights.

Our custom-made offer:

- tools and products to maintain your bearings
- theoretical and practical training on bearings and their maintenance
- technical assistance in mounting and extracting bearings
- renovation of bearings and machine tool spindles.
- expertise in damaged bearings and lubrication
- vibration analysis of rotating machinery
- rental of special tools
- maintenance audit of your organisation

Find Experts & Tools on our site at www.ntn-snr.com/services

And through expertsandtools@ntn-snr.com

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TOOLS



www.ntn-snr.com



With You





Wheels and Castors

AUT (Wheels and Castors) Ltd are a national castor company that have supplied quality wheels and castors for the last 35 years.

All our castors are tested to all relevant European norms so you can be confident on quality and conformity.






Our Utility Range has been designed specifically to cater for as much as 90% of the everyday applications of wheels and castors.

- The range is versatile meaning it can be used across a broad spectrum of industries and applications.
- It is extremely cost effective.
- It has been designed to look as stylish as possible, meaning it will complement your finished products.
- It offers a broad range of carrying capacities meaning you can be confident we can meet any weight specific requirements,
- The range is also available in stainless steel making it perfect for hygienic or clean areas.

This is of course a standard range of castors, there are many other options available upon request. We have included our series 64 range which shows some of our heavier duty castors for your reference.

AT














GREY TPR TYRED APPARATUS WHEELS & CASTORS

 85 shore A	 50mm	 50Kg	 plain bore	 ball bearing
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- Polypropylene light grey wheel centre with thermoplastic rubber dark grey tread.
- Pressed steel, zinc plated castor body.
- Plain bearing without threadguards. Single ball bearing has plastic threadguards.
- Ideal for use in manual handling, medical centres and the hotel industry.

Apparatus Castors



													
50	19	70	60x60	48/39x48/39	6.3	11	50	swivel	fixed	+ total brake	bolt hole	bolt hole + total brake	
									AT050P2Z21	AT050P3Z21	AT050P4Z21	AT050P5Z21	AT050P6Z21
50	19	70	60x60	48/39x48/39	6.3	11	50	swivel	fixed	+ total brake	bolt hole	bolt hole + total brake	
									AT050B2Z21	AT050B3Z21	AT050B4Z21	AT050B5Z21	AT050B6Z21



AT

GREY TPR TYRED APPARATUS WHEELS & CASTORS



85 shore A



75mm - 150mm



75Kg - 100Kg



plain bore



ball bearing

- Polypropylene light grey wheel centre with thermoplastic rubber dark grey tread.
- Pressed steel, zinc plated castor body.

- Plain bearing without threadguards. Single ball bearing has plastic threadguards.
- Ideal for use in manual handling, medical centres and the hotel industry.

Top Plate Castors



Wheel Size	Width	Height	Wheel Dia	Wheel Dia	Wheel Dia	Weight	Swivel	Fixed	+ total brake	+ total brake
75	25	100	60x60	48/38x48/38	6.3	75	AT075P2Z21	AT075P3Z21	AT075P4Z21	-
100	32	135	77x67	61.5/56x51.5/46.56	8.5	100	AT100P2Z21	AT100P3Z21	AT100P4Z21	AT100P4Z22
125	32	160	77x67	1.5/56x51.5/46.5	8.5	100	AT125P2Z21	AT125P3Z21	AT125P4Z21	AT125P4Z22
125	32	160	95x70	75x50	11	100	AT125P2Z31	AT125P3Z31	AT125P4Z31	AT125P4Z32
150	32	185	77x67	61.5/56x51.5/46.5	8.5	100	AT150P2Z21	AT150P3Z21	AT150P4Z21	AT150P4Z22



Wheel Size	Width	Height	Wheel Dia	Wheel Dia	Wheel Dia	Weight	Swivel	Fixed	+ total brake	+ total brake
75	25	100	60x60	48/38x48/38	6.3	75	AT075B2Z21	AT075B3Z21	AT075B4Z21	-
100	32	135	77x67	61.5/56x51.5/46.56	8.5	100	AT100B2Z21	AT100B3Z21	AT100B4Z21	AT100B4Z22
125	32	160	77x67	1.5/56x51.5/46.5	8.5	100	AT125B2Z21	AT125B3Z21	AT125B4Z21	AT125B4Z22
125	32	160	95x70	75x50	11	100	AT125B2Z31	AT125B3Z31	AT125B4Z31	AT125B4Z32
150	32	185	77x67	61.5/56x51.5/46.5	8.5	100	AT150B2Z21	AT150B3Z21	AT150B4Z21	AT150B4Z22

Bolt Hole Castors



Wheel Size	Width	Height	Weight	Swivel	+ total brake	+ total brake
75	25	100	11	AT075P5Z21	AT075P6Z21	-
100	32	135	11	AT100P5Z21	AT100P6Z21	AT100P6Z22
125	32	160	11	AT125P5Z31	AT125P6Z31	AT125P6Z32
150	32	185	11	AT150P5Z21	AT150P6Z21	AT150P6Z22



Wheel Size	Width	Height	Weight	Swivel	+ total brake	+ total brake
75	25	100	11	AT075B5Z21	AT075B6Z21	-
100	32	135	11	AT100B5Z21	AT100B6Z21	AT100B6Z22
125	32	160	11	AT125B5Z31	AT125B6Z31	AT125B6Z32
150	32	185	11	AT150B5Z21	AT150B6Z21	AT150B6Z22



AT

GREY TPR TYRED APPARATUS WHEELS & CASTORS



95 shore A



50mm - 75mm



50Kg - 100Kg



plain bore



ball bearing

- Polypropylene light grey wheel centre with thermoplastic rubber dark grey tread.
- Pressed steel, zinc plated castor body.
- Plain bearing without threadguards. Single ball bearing has plastic threadguards.
- Ideal for use in manual handling, medical centres and the hotel industry.

Top Plate Castors



50	19	70	60x60	48/38x48/38	6.3	70	swivel	swivel brake	swivel	swivel brake
75	25	102	77x67	61.5/56x51.5/46.5	8.5	100	AT050P2Z81 AT075P2Z81	AT050P4Z81 AT075P4Z81	AT050B2Z81 AT075B2Z81	AT050B4Z81 AT075B4Z81

Bolt Hole Castors



50	19	70				70	swivel	swivel brake	swivel	swivel brake
75	25	102				100	AT050P5Z81 AT075P5Z81	AT050P6Z81 AT075P6Z81	AT050B5Z81 AT075B5Z81	AT050B6Z81 AT075B6Z81



D

BLACK RUBBER TYRE ON STEEL CENTRE WHEELS & CASTORS



80mm - 200mm



70Kg - 205Kg



roller bearing

- Steel centre wheel with black solid rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for handling trolleys.



Wheel

80	27	12	40					70	roller bearing					
100	27	12	40					75	D080R1021					
125	38	15	40					100	D100R1021					
160	40	20	50					135	D125R1021					
200	50	20	50					205	D160R1021					
									D200R1021					

Top Plate & Bolt Hole Castors



80	27	105	105x80	80/77x60	9	13	70	swivel	fixed	+ total brake	bolt hole	+ total brake
100	27	128	105x80	80/77x60	9	13	75	D080R2Z21	D080R3Z21	D080R4Z21	D080R5Z21	D080R6Z21
125	38	155	105x80	80/77x60	9	13	100	D100R2Z21	D100R3Z21	D100R4Z21	D100R5Z21	D100R6Z21
160	40	195	135x110	105x84/76	11	13	135	D125R2Z21	D125R3Z21	D125R4Z21	D125R5Z21	D125R6Z21
200	50	235	135x110	105x84/76	11	13	205	D160R2Z21	D160R3Z21	D160R4Z21	D160R5Z21	D160R6Z21
								D200R2Z21	D200R3Z21	D200R4Z21	D200R5Z21	D200R6Z21

D

BLACK RUBBER TYRE ON PRESSED STEEL CENTRE WHEELS IN REFUSE CASTOR



200mm



205Kg



roller bearing

- Steel centre wheel with black solid rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.



Wheel

200	50	20	60				205	roller bearing				
								D200R1071				

Top Plate Swivel



200	50	235	135x110	105x84/76	11	55	205	swivel	+ back brake	+ back brake & screw		
								D200R2Z71	D200R4Z71	D200R4Z81		



DG

GREY RUBBER TYRE ON STEEL CENTRE WHEELS & CASTORS



80mm - 200mm



70Kg - 205Kg



roller bearing

- Steel centre wheel with grey solid rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for handling trolleys.

Top Plate & Bolt Hole Castors



Wheel Icon	Castor Body Icon	Top Plate Icon	Dimensions	Dimensions	Dimensions	Weight (Kg)	swivel	fixed	+ total brake	bolt hole	+ total brake
80	27	105	105x80	80/77x60	9 13	70	DG080R2Z21	DG080R3Z21	DG080R4Z21	DG080R5Z21	DG080R6Z21
100	27	125	105x80	80/77x60	9 13	75	DG100R2Z21	DG100R3Z21	DG100R4Z21	DG100R5Z21	DG100R6Z21
125	38	155	105x80	80/77x60	9 13	100	DG125R2Z21	DG125R3Z21	DG125R4Z21	DG125R5Z21	DG125R6Z21
160	40	195	135x110	105x84/76	11 13	135	DG160R2Z21	DG160R3Z21	DG160R4Z21	DG160R5Z21	DG160R6Z21
200	50	235	135x110	105x84/76	11 13	205	DG200R2Z21	DG200R3Z21	DG200R4Z21	DG200R5Z21	DG200R6Z21

E

INJECTION MOULDED POLYURETHANE TYRE BONDED TO NYLON CENTRE WHEEL & CASTORS



95 shore A



80mm - 125mm



100Kg - 200Kg



roller bearing



ball bearing

- Red polyurethane tyre on grey polyamide centre wheel.
- Pressed steel, zinc plated castor body.
- Roller bearing has metal threadguards.
- Ball bearing has plastic threadguards.
- Ideal for handling trolleys.

Wheels



Wheel Icon	Castor Body Icon	Top Plate Icon	Dimensions	Dimensions	Dimensions	Weight (Kg)	roller bearing	ball bearing				
80	30	12	39			120	E080R1021	-				
80	30	8	40			100	-	E080B1021				
100	32	12	40			150	E100R1021	-				
100	32	15	40			150	-	E100B1021				
125	32	15	50			200	E125R1021	E125B1021				
160	40	20	59			300	E160R1055	E160B1055				
200	50	20	59			350	E200R1055	E200B1055				

Top Plate Castors



Wheel Icon	Castor Body Icon	Top Plate Icon	Dimensions	Dimensions	Dimensions	Weight (Kg)	swivel	fixed	+ total brake			
80	30	108	105x80	80/77x60	9	120	E080R2Z21	E080R3Z21	E080R4Z21			
100	32	125	105x80	80/77x60	9	150	E100R2Z21	E100R3Z21	E100R4Z21			
125	32	155	105x80	80/77x60	9	200	E125R2Z21	E125R3Z21	E125R4Z21			
160	40	195	135x110	105x84/76	11	300	E160R2Z55	E160R3Z55	E160R4Z55			
200	50	235	135x110	105x84/76	11	350	E200R2Z55	E200R3Z55	E200R4Z55			

Wheel Icon	Castor Body Icon	Top Plate Icon	Dimensions	Dimensions	Dimensions	Weight (Kg)	swivel	fixed	+ total brake			
80	30	108	105x80	80/77x60	9	120	E080B2Z21	E080B3Z21	E080B4Z21			
100	32	125	105x80	80/77x60	9	150	E100B2Z21	E100B3Z21	E100B4Z21			
125	32	155	105x80	80/77x60	9	200	E125B2Z21	E125B3Z21	E125B4Z21			
160	40	195	135x110	105x84/76	11	300	E160B2Z55	E160B3Z55	E160B4Z55			
200	50	235	135x110	105x84/76	11	350	E200B2Z55	E200B3Z55	E200B4Z55			

Bolt Hole Castors available on request.



F

NATURAL POLYAMIDE WHEELS & STANDARD CASTORS



80mm - 200mm



130Kg - 300Kg



plain bore



roller bearing

- Natural polyamide wheel.
- Pressed steel, zinc plated castor body.

- Plain bearing without threadguards. Roller bearing has metal threadguards.
- Ideal for handling trolleys.

Wheels



Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Weight (Kg)	plain bore	roller bearing
80	34	12	40	130	F080P1021	F080R1021
100	36	12	40	150	F100P1021	F100R1021
125	38	15	50	200	F125P1021	F125R1021
160	40	20	59	300	-	F160R1021
200	50	20	59	300	-	F200R1021

Plain bore larger sizes available on request.

Top Plate Castors



Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Wheel Diameter	Weight (Kg)	swivel	fixed	+ total brake
80	34	105	105x80	87/77x60	9	F080P2Z21	F080P3Z21	F080P4Z21
100	36	125	105x80	87/77x60	9	F100P2Z21	F100P3Z21	F100P4Z21
125	38	155	105x80	87/77x60	9	F125P2Z21	F125P3Z21	F125P4Z21
160	40	195	135x110	105x84/76	11	-	-	-
200	50	235	135x110	105x84/76	11	-	-	-

Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Wheel Diameter	Weight (Kg)	swivel	fixed	+ total brake
80	34	105	105x80	87/77x60	9	F080R2Z21	F080R3Z21	F080R4Z21
100	36	125	105x80	87/77x60	9	F100R2Z21	F100R3Z21	F100R4Z21
125	38	155	105x80	87/77x60	9	F125R2Z21	F125R3Z21	F125R4Z21
125	38	155	135x110	105x84/76	11	F125R2Z25	F125R3Z25	F125R4Z25
160	40	195	135x110	105x84/76	11	F160R2Z21	F160R3Z21	F160R4Z21
200	50	235	135x110	105x84/76	11	F200R2Z21	F200R3Z21	F200R4Z21

Bolt Hole Castors



Wheel Size	Wheel Width	Wheel Height	Weight (Kg)	swivel	+ total brake
80	34	105	130	F080P5Z21	F080P6Z21
100	36	125	150	F100P5Z21	F100P6Z21
125	38	155	150	F125P5Z21	F125P6Z21
160	40	195	200	-	-
200	50	235	200	-	-

Wheel Size	Wheel Width	Wheel Height	Weight (Kg)	swivel	+ total brake
80	34	105	130	F080R5Z21	F080R6Z21
100	36	125	150	F100R5Z21	F100R6Z21
125	38	155	150	F125R5Z21	F125R6Z21
160	40	195	200	F160R5Z21	F160R6Z21
200	50	235	200	F200R5Z21	F200R6Z21

CASTORS



G

WHITE POLYPROPYLENE WHEELS & CASTORS



80mm - 200mm



80Kg - 250Kg



plain bore



roller bearing

- White polypropylene wheel.
- Pressed steel, zinc plated castor body.

- Plain bearing without threadguards.
- Roller bearing has metal threadguards.
- Ideal for handling trolleys.

Wheels



Wheel Icon	W	H	D	W	H	D	W	H	D	W	H	D	W	H	D	kg	plain bore	roller bearing
	80	34	12	40												80	G080P1021	G080R1021
	100	36	12	40												100	G100P1021	G100R1021
	125	38	15	50												150	G125P1021	G125R1021
	160	40	20	59												250	-	G160R1021
	200	50	20	59												250	-	G200R1021

Plain bore larger sizes available on request.

Top Plate Castors



Castor Icon	W	H	D	W	H	D	W	H	D	W	H	D	W	H	D	kg	swivel	fixed	+ total brake
	80	34	105	105x80	87/77x60	9										80	G080P2Z21	G080P3Z21	G080P4Z21
	100	36	125	105x80	87/77x60	9										100	G100P2Z21	G100P3Z21	G100P4Z21
	125	38	155	105x80	87/77x60	9										150	G125P2Z21	G125P3Z21	G125P4Z21
	160	40	195	135x110	105x84/76	11										200	-	-	-
	200	50	235	135x110	105x84/76	11										250	-	-	-

Castor Icon	W	H	D	W	H	D	W	H	D	W	H	D	W	H	D	kg	swivel	fixed	+ total brake
	80	34	105	105x80	87/77x60	9										80	G080R2Z21	G080R3Z21	G080R4Z21
	100	36	125	105x80	87/77x60	9										100	G100R2Z21	G100R3Z21	G100R4Z21
	125	38	155	105x80	87/77x60	9										150	G125R2Z21	G125R3Z21	G125R4Z21
	125	38	155	135x110	105x84/76	11										200	G125R2Z25	G125R3Z25	G125R4Z25
	160	40	195	135x110	105x84/76	11										200	G160R2Z21	G160R3Z21	G160R4Z21
	200	50	235	135x110	105x84/76	11										250	G200R2Z21	G200R3Z21	G200R4Z21

Bolt Hole Castors



Castor Icon	W	H	D	W	H	D	W	H	D	W	H	D	W	H	D	kg	swivel	+ total brake
	80	34	104													70	G080P5Z21	G080P6Z21
	100	36	124													90	G100P5Z21	G100P6Z21
	125	38	154													140	G125P5Z21	G125P6Z21
	160	40	194													200	-	-
	200	50	234													200	-	-

Castor Icon	W	H	D	W	H	D	W	H	D	W	H	D	W	H	D	kg	swivel	+ total brake
	80	34	104													70	G080R5Z21	G080R6Z21
	100	36	124													90	G100R5Z21	G100R6Z21
	125	38	154													140	G125R5Z21	G125R6Z21
	160	40	194													200	G160R5Z21	G160R6Z21
	200	50	234													200	G200R5Z21	G200R6Z21



H

BLUE ELASTIC TYRE BONDED TO NYLON WHEEL CENTRE & CASTORS



65 shore A



80mm - 200mm



130Kg - 250Kg



roller bearing



ball bearing

- Black polyamide wheel with blue elastic rubber tread.
- Pressed steel, zinc plated castor body.

- Roller bearing without threadguards.
- Ball bearing has plastic threadguards.
- Ideal for handling trolleys.

Wheels



								Kg	roller bearing	ball bearing	double ball bearing
	80	35	12	40				130	H080R1021	H080B1021	-
	100	35	12	40				150	H100R1021	-	-
	100	35	15	40				150	-	H100B1021	-
	125	38	15	50				150	H125R1021	H125B1021	-
	160	46	20	59				200	H160R1021	-	H160B1021
	200	46	20	59				250	H200R1021	-	H200B1021

Top Plate Castors



								Kg	swivel	fixed	+ total brake
	80	35	105	105x80	80/77x60	9		130	H080R2Z21	H080R3Z21	H080R4Z21
	100	35	125	105x80	80/77x60	9		150	H100R2Z21	H100R3Z21	H100R4Z21
	125	38	155	105x80	80/77x60	9		150	H125R2Z21	H125R3Z21	H125R4Z21
	160	46	195	135x110	105x84/76	11		200	H160R2Z21	H160R3Z21	H160R4Z21
	200	46	235	135x110	105x84/76	11		250	H200R2Z21	H200R3Z21	H200R4Z21

								Kg	swivel	fixed	+ total brake
	80	35	105	105x80	87/77x60	9		130	H080B2Z21	H080B3Z21	H080B4Z21
	100	35	125	105x80	87/77x60	9		150	H100B2Z21	H100B3Z21	H100B4Z21
	125	38	155	105x80	87/77x60	9		150	H125B2Z21	H125B3Z21	H125B4Z21
	160	46	195	135x110	105x84/76	11		200	H160B2Z21	H160B3Z21	H160B4Z21
	200	46	235	135x110	105x84/76	11		250	H200B2Z21	H200B3Z21	H200B4Z21

Bolt Hole Castors



								Kg	swivel	+ total brake
	80	35	104			13		130	H080R5Z21	H080R6Z21
	100	35	124			13		150	H100R5Z21	H100R6Z21
	125	38	154			13		150	H125R5Z21	H125R6Z21
	160	46	194			13		200	H160R5Z21	H160R6Z21
	200	46	234			13		250	H200R5Z21	H200R6Z21

								Kg	swivel	+ total brake
	80	35	104			13		130	H080B5Z21	H080B6Z21
	100	35	124			13		150	H100B5Z21	H100B6Z21
	125	38	154			13		150	H125B5Z21	H125B6Z21
	160	46	194			13		200	H160B5Z21	H160B6Z21
	200	46	234			13		250	H200B5Z21	H200B6Z21



K

THERMOPLASTIC RUBBER TYRED WHEELS WITH POLYPROPYLENE CENTRE & STANDARD CASTORS



65 shore A



80mm - 200mm



70Kg - 205Kg



roller bearing



ball bearing

- Light grey polypropylene wheel with dark grey thermoplastic rubber tread.
- Pressed steel, zinc plated castor body.

- Roller bearing has metal threadguards. Ball bearing has plastic threadguards.
- Ideal for handling trolleys.

Wheels



Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Weight (Kg)	Roller Bearing	Ball Bearing
80	30	12	39	70	K080R1021	-
80	30	8	40	70	-	K080B1021
100	32	12	40	100	K100R1021	-
100	32	15	40	100	-	K100B1021
125	32	15	50	135	K125R1021	K125B1021
160	40	20	59	200	K160R1021	K160B1021
200	50	20	59	205	K200R1021	K200B1021

Top Plate Castors



Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Wheel Diameter	Weight (Kg)	Swivel	Fixed	+ total brake
80	30	108	105x80	80/77x60	9	K080R2Z21	K080R3Z21	K080R4Z21
100	32	125	105x80	80/77x60	9	K100R2Z21	K100R3Z21	K100R4Z21
125	32	155	105x80	80/77x60	9	K125R2Z21	K125R3Z21	K125R4Z21
160	40	195	135x110	105x84/76	11	K160R2Z21	K160R3Z21	K160R4Z21
200	50	235	135x110	105x84/76	11	K200R2Z21	K200R3Z21	K200R4Z21

Wheel Size	Wheel Width	Wheel Height	Wheel Depth	Wheel Diameter	Weight (Kg)	Swivel	Fixed	+ total brake
80	30	108	105x80	80/77x60	9	K080B2Z21	K080B3Z21	K080B4Z21
100	32	125	105x80	80/77x60	9	K100B2Z21	K100B3Z21	K100B4Z21
125	32	155	105x80	80/77x60	9	K125B2Z21	K125B3Z21	K125B4Z21
160	40	195	135x110	105x84/76	11	K160B2Z21	K160B3Z21	K160B4Z21
200	50	235	135x110	105x84/76	11	K200B2Z21	K200B3Z21	K200B4Z21

Bolt Hole Castors available on request.



ST

STAINLESS STEEL CASTORS

COPOLYMER	0°C min +60°C max	80mm - 100mm	80Kg - 125Kg	plain bore
NYLON	-20°C min +80°C max	125mm - 200mm	130Kg - 180Kg	plain bore

- Standard duty loads.
- Pressed stainless steel castor housing.
- Suitable for use on compact floors.

Stainless Steel Standard Duty Castors



								swivel	fixed	swivel + brake	bolt hole	bolt hole + brake
80	30	108	100x80	80x60	9	12	80	F080P2S01	F080P3S01	F080P4S01	F080P5S01	F080P6S01
100	30	127	100x80	80x60	9	12	125	F100P2S01	F100P3S01	F100P4S01	F100P5S01	F100P6S01
125	35	155	100x80	80x60	9	12	130	F125P2S01	F125P3S01	F125P4S01	F125P5S01	F125P6S01
150	45	192	129x106	105x80	11	16	180	F150P2S01	F150P3S01	F150P4S01	F150P5S01	F150P6S01
200	55	240	129x106	105x80	11	16	180	F200P2S01	F200P3S01	F200P4S01	F200P5S01	F200P6S01

-20°C min +70°C max	80mm - 200mm	70Kg - 200Kg	plain bore
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- Grey non marking thermoplastic.
- Standard duty loads.
- Pressed steel and stainless steel castor housings.
- Excellent rolling resistance.

Stainless Steel Standard Duty Castors



								swivel	fixed	swivel + brake	bolt hole	bolt hole + brake
80	30	108	100x80	80x60	9	12	70	K080P2S01	K080P3S01	K080P4S01	K080P5S01	K080P6S01
100	30	127	100x80	80x60	9	12	100	K100P2S01	K100P3S01	K100P4S01	K100P5S01	K100P6S01
125	35	155	100x80	80x60	9	12	120	K125P2S01	K125P3S01	K125P4S01	K125P5S01	K125P6S01
150	45	192	129x106	105x80	11	16	180	K150P2S01	K150P3S01	K150P4S01	K150P5S01	K150P6S01
200	55	240	129x106	105x80	11	16	200	K200P2S01	K200P3S01	K200P4S01	K200P5S01	K200P6S01



ST

STAINLESS STEEL CASTORS

65 shore D -15°C min +80°C max 80mm - 200mm 120Kg - 200Kg plain bore

- Polyurethane on polyamide centre.
- Standard duty loads.
- Pressed steel and stainless steel castor housings.
- Suitable for food processing and chemical industry.

Stainless Steel Standard Duty Castors



Castor Type	Width	Height	Wheel Dia	Plate Dia	Plate Dia	Plate Dia	Weight (Kg)	swivel	fixed	swivel + brake	bolt hole	bolt hole + brake
80	30	108	100x80	80x60	9	12	120	E080P2S01	E080P3S01	E080P4S01	E080P5S01	E080P6S01
100	30	127	100x80	80x60	9	12	130	E100P2S01	E100P3S01	E100P4S01	E100P5S01	E100P6S01
125	35	155	100x80	80x60	9	12	130	E125P2S01	E125P3S01	E125P4S01	E125P5S01	E125P6S01
150	45	192	129x106	105x80	11	16	200	E150P2S01	E150P3S01	E150P4S01	E150P5S01	E150P6S01
200	55	240	129x106	105x80	11	16	200	E200P2S01	E200P3S01	E200P4S01	E200P5S01	E200P6S01

73 shore A ±3 -20°C min +70°C max 100mm - 200mm 130Kg - 200Kg plain bore

- Blue non marking elastic rubber.
- Standard duty loads.
- Pressed steel and stainless steel castor housings.
- Suitable for use on compact floors.

Stainless Steel Standard Duty Castors



Castor Type	Width	Height	Wheel Dia	Plate Dia	Plate Dia	Plate Dia	Weight (Kg)	swivel	fixed	swivel + brake	bolt hole	bolt hole + brake
100	30	127	100x80	80x60	9	12	130	H100P2S01	H100P3S01	H100P4S01	H100P5S01	H100P6S01
125	35	155	100x80	80x60	9	12	130	H125P2S01	H125P3S01	H125P4S01	H125P5S01	H125P6S01
160	45	197	129x106	105x80	11	16	200	H160P2S01	H160P3S01	H160P4S01	H160P5S01	H160P6S01
200	55	240	129x106	105x80	11	16	200	H200P2S01	H200P3S01	H200P4S01	H200P5S01	H200P6S01

-20°C min +60°C max 80mm - 200mm 70Kg - 200Kg plain bore

- Grey non marking rubber.
- Standard duty loads.
- Pressed steel and stainless steel castor housings.
- Suitable for use on compact floors.

Stainless Steel Standard Duty Castors



Castor Type	Width	Height	Wheel Dia	Plate Dia	Plate Dia	Plate Dia	Weight (Kg)	swivel	fixed	swivel + brake	bolt hole	bolt hole + brake
100	30	127	100x80	80x60	9	12	70	B100P2S01	B100P3S01	B100P4S01	B100P5S01	B100P6S01
125	35	155	100x80	80x60	9	12	100	B125P2S01	B125P3S01	B125P4S01	B125P5S01	B125P6S01
160	45	197	129x106	105x80	11	16	150	B160P2S01	B160P3S01	B160P4S01	B160P5S01	B160P6S01
200	55	240	129x106	105x80	11	16	200	B200P2S01	B200P3S01	B200P4S01	B200P5S01	B200P6S01



T

CAST POLYURETHANE TYRE BONDED TO CAST ALUMINIUM WHEEL CENTRES & CASTORS



100mm - 200mm



250Kg - 400Kg



ball bearing

- Aluminium centre wheel with brown polyurethane tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for handling trolleys and pallet trucks.

Wheel



100	40	12	40					250	T100B1051					
125	40	15	40					300	T125B1051					

Top Plate Castors



100	40	128	105x80	80/77x60	9		250	T100B2Z51	T100B3Z51	T100B4Z51				
100	40	128	135x110	105x84/76	11		250	T100B2Z52	T100B3Z52	T100B4Z52				
125	40	155	105x80	80/77x60	9		300	T125B2Z51	T125B3Z51	T125B4Z51				
125	40	155	135x110	105x84/76	11		300	T125B2Z52	T125B3Z52	T125B4Z52				

V

BLACK ELASTIC RUBBER TYRE BONDED TO ALUMINIUM WHEEL CENTRES & CASTORS



125mm - 200mm



250Kg - 400Kg



ball bearing

- Aluminium centre wheel with black elastic rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for pallet trucks.

Wheel



125	40	15	50					250	V125B1051					
160	40	15	60					300	V160B1051					
200	50	20	60					400	V200B1051					

Top Plate Castors



125	40	162	135x110	105x84/76	11		250	V125B2Z51	V125B3Z51	V125B4Z51				
160	40	195	135x110	105x84/76	11		300	V160B2Z51	V160B3Z51	V160B4Z51				
200	50	235	135x110	105x84/76	11		400	V200B2Z51	V200B3Z51	V200B4Z51				



LDV Series Pressed Steel Castor

- Load capacities from 50kg up to 250kg
- Wheel sizes from 50mm to 200mm
- Strong pressed steel bracket
- Double ball race swivel head

White Polypropylene

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
50	18	Plain	50x50	36x36	32	72	50	LSV050PP	LSV050PPBR	N/A
75	25	Plain	75x60	55x42	34	95	70	LSV075PP	LSV075PPBR	LFV075PP
100	35	Plain	102x84	80x60	34	128	125	LSV100PP	LSV100PPBR	LFV100PP
125	37	Plain	102x84	80x60	34	155	160	LSV125PP	LSV125PPBR	LFV125PP
160	40	Plain	135x110	105x80	48	190	200	LSV160PP	LSV160PPBR	LFV160PP
200	40	RB	135x110	105x80	58	235	250	LSV200PP	LSV200PPBR	LFV200PP



Grey Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
50	18	Plain	50x50	36x36	32	72	50	LSV050RP	LSV050RPBR	N/A
75	25	Plain	75x60	55x42	34	95	50	LSV075RP	LSV075RPBR	LFV075RP
100	24	RB	102x84	80x60	34	128	70	LSV100RP	LSV100RPBR	LFV100RP
125	24	RB	102x84	80x60	34	155	100	LSV125RP	LSV125RPBR	LFV125RP
160	22	Plain	135x110	105x80	48	190	135	LSV160RP	LSV160RPBR	LFV160RP
200	30	Plain	135x110	105x80	58	235	205	LSV200RP	LSV200RPBR	LFV200RP



Black Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
75	22	RB	75x60	55x42	32	95	50	LSV075RMB	LSV075RMBBR	LFV075RMB
100	24	RB	102x84	80x60	34	128	70	LSV100RMB	LSV100RMBBR	LFV100RMB
125	24	RB	102x84	80x60	34	155	100	LSV125RMB	LSV125RMBBR	LFV125RMB
160	22	RB	135x110	105x80	48	190	160	LSV160RMB	LSV160RMBBR	LFV160RMB
200	30	RB	135x110	105x80	58	235	205	LSV200RMB	LSV200RMBBR	LFV200RMB



All available in the following types

Top plate



Swivel

Swivel Brake

Fixed

LDV Series

Pressed Steel Castor

- Load capacities from 50kg up to 250kg
- Wheel sizes from 50mm to 200mm
- Strong pressed steel bracket
- Double ball race swivel head

White Polypropylene

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked
50	20	Plain	10	23	72	50	LSV050PPBH	LSV050PPBHBR
75	20	Plain	10	30	100	70	LSV075PPBH	LSV075PPBHBR
100	20	Plain	12	38	135	80	LSV100PPBH	LSV100PPBHBR
125	35	Plain	12	38	155	125	LSV125PPBH	LSV125PPBHBR



Grey Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked
50	18	Plain	10	23	72	50	LSV050RPBH	LSV050RPBHBR
75	21	Plain	10	30	100	70	LSV075RPBH	LSV075RPBHBR
100	27	Plain	12	38	135	80	LSV100RPBH	LSV100RPBHBR
125	27	Plain	12	38	155	100	LSV125RPBH	LSV125RPBHBR



All available in the following types
Bolt hole



Swivel

Swivel Brake

Expander Fittings

This range of Nylon fittings allow castors to be fitted to hollow tube constructed equipment and furniture. Available loose or factory fitted to your choice of castor.

Tube Size (Internal mm)		Catalogue Reference	
Min	Max	Round	Square
19	21.5	WR07 19/21.5	n/a
21.5	24	WR07 21.5/24	WR47 21.5/24
24	27	WR07 24/27	WR47 24/27
27	30	WR07 27/30	WR47 27/30
31	35	WR07 31/35	n/a
32	35	n/a	WR47 32/35
36	40	n/a	WR47 36/40

All available in the following types
Expander Fittings



Round



Square



MDV Series Pressed Steel Castor

- Load capacities from 70kg up to 350kg
- Wheel sizes from 80mm to 200mm
- Strong pressed steel bracket
- Double ball race swivel head
- Bottle cap thread guards

Red Polyurethane Tyre/Nylon Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
80	30	RB	105x80	80x60	40	108	150	MSV080PN1B	MSV080PN1BSWB	MFV080PN1B
100	32	RB	105x80	80x60	40	128	150	MSV100PN1B	MSV100PN1BSWB	MFV100PN1B
125	32	RB	105x80	80x60	40	155	200	MSV125PN1B	MSV125PN1BSWB	MFV125PN1B
160	40	RB	135x110	105x80	55	195	300	MSV160PN1B	MSV160PN1BSWB	MFV160PN1B
200	50	RB	135x110	105x80	55	235	350	MSV200PN1B	MSV200PN1BSWB	MFV200PN1B



Blue Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
80	35	RB	105x80	80x60	40	108	150	MSV080RN1B	MSV080RN1BSWB	MFV080RN1B
100	36	RB	105x80	80x60	40	128	160	MSV100RN1B	MSV100RN1BSWB	MFV100RN1B
125	38	RB	105x80	80x60	40	155	200	MSV125RN1B	MSV125RN1BSWB	MFV125RN1B
160	46	RB	135x110	105x80	55	195	300	MSV160RN1B	MSV160RN1BSWB	MFV160RN1B
200	46	RB	135x110	105x80	55	235	350	MSV200RN1B	MSV200RN1BSWB	MFV200RN1B



White Nylon

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
80	32	RB	105x80	80x60	40	108	130	MSV080NY1B	MSV080NY1BSWB	MFV080NY1B
100	36	RB	105x80	80x60	40	128	150	MSV100NY1B	MSV100NY1BSWB	MFV100NY1B
125	40	RB	105x80	80x60	40	155	200	MSV125NY1B	MSV125NY1BSWB	MFV125NY1B
160	50	RB	135x110	105x80	55	195	300	MSV160NY1B	MSV160NY1BSWB	MFV160NY1B
200	50	RB	135x110	105x80	55	235	300	MSV200NY1B	MSV200NY1BSWB	MFV200NY1B



Grey Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
80	35	RB	105x80	80x60	40	108	70	MSV080GRP1B	MSV080GRP1BSWB	MFV080GRP1B
100	35	RB	105x80	80x60	40	128	75	MSV100GRP1B	MSV100GRP1BSWB	MFV100GRP1B
125	37	RB	105x80	80x60	40	155	100	MSV125GRP1B	MSV125GRP1BSWB	MFV125GRP1B
160	40	RB	135x110	105x80	55	195	135	MSV160GRP1B	MSV160GRP1BSWB	MFV160GRP1B
200	50	RB	135x110	105x80	55	235	205	MSV200GRP1B	MSV200GRP1BSWB	MFV200GRP1B



Black Rubber Tyre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
80	35	RB	105x80	80x60	40	108	70	MSV080BRP1B	MSV080BRP1BSWB	MFV080BRP1B
100	35	RB	105x80	80x60	40	128	75	MSV100BRP1B	MSV100BRP1BSWB	MFV100BRP1B
125	37	RB	105x80	80x60	40	155	100	MSV125BRP1B	MSV125BRP1BSWB	MFV125BRP1B
160	40	RB	135x110	105x80	55	195	135	MSV160BRP1B	MSV160BRP1BSWB	MFV160BRP1B
200	50	RB	135x110	105x80	55	235	205	MSV200BRP1B	MSV200BRP1BSWB	MFV200BRP1B



All available in the following types



Swivel



Swivel Brake



Fixed

MSS Series Stainless Steel Castor

- Load capacities from 120kg up to 300kg
- Wheel sizes from 80mm to 200mm
- Strong stainless steel bracket
- Double ball race swivel head
- Plain or roller bearing wheels

White Nylon

		Plain bearing		Roller bearing		Wheel bearing Key					
		Plain bearing		Roller bearing		Wheel bearing Key					
Bolt hole	Wheel Dia. (mm)	Tread Width (mm)	Bolt Hole (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Swivel	Swivel Brake	
	80	30	12	37	105	150	MSS080NYBH	MSS080NYBHBR	MSS080NYBBH	MSS080NYBBHBR	
	100	30	12	37	126	150	MSS100NYBH	MSS100NYBHBR	MSS100NYBBH	MSS100NYBBHBR	
	125	40	12	42	150	150	MSS125NYBH	MSS125NYBHBR	MSS125NYBBH	MSS125NYBBHBR	
	150	40	12	45	178	200	MSS150NYBH	MSS150NYBHBR	MSS150NYBBH	MSS150NYBBHBR	
	160	40	16	55	194	300	MSS160NYBH	MSS160NYBHBR	MSS160NYBBH	MSS160NYBBHBR	
200	50	16	55	232	300	MSS200NYBH	MSS200NYBHBR	MSS200NYBBH	MSS200NYBBHBR		
Top plate	Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Total Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
	80	30	Plain	100x85	80x60	37	107	150	MSS080NY	MSS080NYBR	MFS080NY
	100	30	Plain	100x85	80x60	37	128	150	MSS100NY	MSS100NYBR	MFS100NY
	125	40	Plain	115x85	80x60	42	155	150	MSS125NY	MSS125NYBR	MFS125NY
	160	40	Plain	140x110	105x80	55	197	300	MSS160NY	MSS160NYBR	MFS160NY
	200	50	Plain	140x110	105x80	55	235	300	MSS200NY	MSS200NYBR	MFS200NY



Polyurethane Tyre/Nylon Centre

		Plain bearing		Roller bearing		Wheel bearing Key							
		Plain bearing		Roller bearing		Wheel bearing Key							
Bolt hole	Wheel Dia. (mm)	Tread Width (mm)	Bolt Hole (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Swivel	Swivel Brake			
	80	30	12	37	105	120	MSS080PNBH	MSS080PNBHBR	MSS080PNBBH	MSS080PNBBHBR			
	100	30	12	37	126	150	MSS100PNBH	MSS100PNBHBR	MSS100PNBBH	MSS100PNBBHBR			
	125	35	12	42	150	150	MSS125PNBH	MSS125PNBHBR	MSS125PNBBH	MSS125PNBBHBR			
	150	40	12	45	178	150	MSS150PNBH	MSS150PNBHBR	MSS150PNBBH	MSS150PNBBHBR			
	200	50	16	55	232	300	MSS200PNBH	MSS200PNBHBR	MSS200PNBBH	MSS200PNBBHBR			
Top plate	Wheel Dia. (mm)	Tread Width (mm)	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Total Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed	Swivel	Swivel Brake	Fixed
	80	30	100x85	80x60	37	107	120	MSS080PN	MSS080PNBR	MFS080PN	MSS080PNB	MSS080PNBBR	MFS080PNB
	100	30	100x85	80x60	37	128	150	MSS100PN	MSS100PNBR	MFS100PN	MSS100PNB	MSS100PNBBR	MFS100PNB
	125	35	115x85	80x60	42	155	150	MSS125PN	MSS125PNBR	MFS125PN	MSS125PNB	MSS125PNBBR	MFS125PNB
	150	40	115x85	80x60	45	181	150	MSS150PN	MSS150PNBR	MFS150PN	MSS150PNB	MSS150PNBBR	MFS150PNB
	200	50	140x110	105x80	55	235	300	MSS200PN	MSS200PNBR	MFS200PN	MSS200PNB	MSS200PNBBR	MFS200PNB



Elastic Rubber Tyre/Polyamide Centre

Bolt hole	Wheel Dia. (mm)	Tread Width (mm)	Bearing	Bolt Hole (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake		
	100	36	RB	12	37	126	150	MSS100RNBH	MSS100RNBHBR		
	125	36	RB	12	42	150	150	MSS125RNBH	MSS125RNBHBR		
	160	50	RB	16	55	194	300	MSS160RNBH	MSS160RNBHBR		
	200	50	RB	16	55	232	300	MSS200RNBH	MSS200RNBHBR		
Top plate	Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
	80	36	RB	100x85	80x60	37	108	120	MSS080RNB	MSS080RNBBR	MFS080RNB
	100	36	RB	100x85	80x60	37	128	150	MSS100RNB	MSS100RNBBR	MFS100RNB
	125	36	RB	115x85	80x60	42	155	150	MSS125RNB	MSS125RNBBR	MFS125RNB
	160	50	RB	140x110	105x80	55	197	300	MSS160RNB	MSS160RNBBR	MFS160RNB
	200	50	RB	140x110	105x80	55	235	300	MSS200RNB	MSS200RNBBR	MFS200RNB



All available in the following types



CASTORS

MG Series

Fabricated Steel Castor

- Load capacities from 200kg up to 600kg
- Wheel sizes from 100mm to 200mm
- Robust fabricated steel bracket
- Double ball race swivel head
- Double pedal brake

Cast Iron

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
100	50	RB	135x110	105x80	35	143	300	KSMG100CIB	KBMG100CIB	KFMG100CIB
125	40	BJ	135x110	105x80	39	165	350	KSMG125CIB	KBMG125CIB	KFMG125CIB
150	45	BJ	135x110	105x80	45	190	500	KSMG150CIB	KBMG150CIB	KFMG150CIB
200	45	BJ	135x110	105x80	56	240	600	KSMG200CIB	KBMG200CIB	KFMG200CIB



Polyurethane Tyre/Cast Iron Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
100	40	BJ	135x110	105x80	35	143	300	KSMG100PCB	KBMG100PCB	KFMG100PCB
125	50	BJ	135x110	105x80	39	165	350	KSMG125PCB	KBMG125PCB	KFMG125PCB
150	50	BJ	135x110	105x80	45	190	500	KSMG150PCB	KBMG150PCB	KFMG150PCB
160	50	BJ	135x110	105x80	45	195	500	KSMG160PCB	KBMG160PCB	KFMG160PCB
200	50	BJ	135x110	105x80	56	240	600	KSMG200PCB	KBMG200PCB	KFMG200PCB



Polyurethane Tyre/Aluminium Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
160	50	BJ	135x110	105x80	45	195	500	KSMG160PAB	KBMG160PAB	KFMG160PAB
200	50	BJ	135x110	105x80	56	240	600	KSMG200PAB	KBMG200PAB	KFMG200PAB



Rubber Tyre/Cast Iron Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
150	50	BJ	135x110	105x80	45	190	400	KSMG150RUB	KBMG150RUB	KFMG150RUB
200	50	BJ	135x110	105x80	56	240	500	KSMG200RUB	KBMG200RUB	KFMG200RUB



White Nylon

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
100	50	BJ	135x110	105x80	35	143	270	KSMG100NYB	KBMG100NYB	KFMG100NYB
125	45	BJ	135x110	105x80	39	165	350	KSMG125NYB	KBMG125NYB	KFMG125NYB
150	50	BJ	135x110	105x80	45	190	500	KSMG150NYB	KBMG150NYB	KFMG150NYB
160	50	BJ	135x110	105x80	45	195	450	KSMG160NYB	KBMG160NYB	KFMG160NYB
200	50	RB	135x110	105x80	56	240	500	KSMG200NYB	KBMG200NYB	KFMG200NYB



Elastic Rubber Tyre/Aluminium Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Braked	Fixed
100	40	BJ	135x110	105x80	35	143	200	KSMG100EAB	KBMG100EAB	KFMG100EAB
125	50	BJ	135x110	105x80	39	165	250	KSMG125EAB	KBMG125EAB	KFMG125EAB
150	50	BJ	135x110	105x80	45	190	300	KSMG150EAB	KBMG150EAB	KFMG150EAB
160	50	BJ	135x110	105x80	45	195	300	KSMG160EAB	KBMG160EAB	KFMG160EAB
200	50	BJ	135x110	105x80	56	240	400	KSMG200EAB	KBMG200EAB	KFMG200EAB



All available in the following types



Swivel



Swivel Brake



Fixed

HK Series

Fabricated Steel Castor

- Load capacities from 250kg up to 1300kg
- Wheel sizes from 125mm to 300mm
- Robust heavy duty fabricated steel bracket
- Double ball race swivel head

Polyurethane Tyre/Cast Iron Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
125	50	BJ	149x110	105x80	45	177	400	HKS12520241	HKB12520241	HKF12520241
150	50	BJ	149x110	105x80	49	202	730	HKS15020241	HKB15020241	HKF15020241
200	50	BJ	149x110	105x80	54	252	1000	HKS20020241	HKB20020241	HKF20020241
250	50	BJ	149x110	105x80	70	303	1150	HKS25025241	HKB25025241	HKF25025241
300	50	BJ	149x110	105x80	80	353	1300	HKS30025241	HKB30025241	HKF30025241



Cast Iron

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
125	40	BJ	149x110	105x80	45	177	500	HKS12520441	HKB12520441	HKF12520441
150	45	BJ	149x110	105x80	49	202	600	HKS15020441	HKB15020441	HKF15020441
200	45	BJ	149x110	105x80	54	252	1000	HKS20020441	HKB20020441	HKF20020441
250	54	BJ	149x110	105x80	70	303	1150	HKS25025441	HKB25025441	HKF25025441



White Nylon

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
125	45	BJ	149x110	105x80	45	177	300	HKS12520111	HKB12520111	HKF12520111
150	50	BJ	149x110	105x80	49	202	600	HKS15020111	HKB15020111	HKF15020111
200	50	BJ	149x110	105x80	54	252	1000	HKS20020111	HKB20020111	HKF20020111
250	50	BJ	149x110	105x80	70	303	1100	HKS25025111	HKB25025111	HKF25025111



Rubber Tyre/Cast Iron Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
150	50	BJ	149x110	105x80	49	202	370	HKS15020341	HKB15020341	HKF15020341
200	50	BJ	149x110	105x80	54	252	535	HKS20020341	HKB20020341	HKF20020341
250	54	BJ	149x110	105x80	70	303	615	HKS25025341	HKB25025341	HKF25025341
300	54	BJ	149x110	105x80	80	353	680	HKS30025341	HKB30025341	HKF30025341



Elastic Rubber Tyre/Aluminium Centre

Wheel Dia. (mm)	Tread Width (mm)	Bearing	Top Plate (mm)	Bolt Holes (mm)	Offset (mm)	Overall Height (mm)	Load Cap. (kg)	Swivel	Swivel Brake	Fixed
125	50	BJ	149x110	105x80	45	177	250	HKS12520341	HKB12520341	HKF12520341



All available in the following types



Swivel



Swivel Brake



Fixed

KGD Series

Footmaster multifunctional levelling castors

Fixing Type	Wheel Dia. (mm)	Method Of Operating	Top Plate (mm)	Bolt Holes (mm)	Stem Size (mm)	Overall Height (mm)	Load Cap. (kg)		Part Number
							Static	Dynamic	
Stem	42	Handwheel	-	-	M8x15	71+10	50	25	KGD-40S
Top Plate	50	Handwheel	73x73	58x58	-	82+10	250	125	KGD-60F
Stem	50	Handwheel	-	-	M12x18	82+10	250	125	KGD-60S
Top Plate	50	Ratchet	73x73	58x58	-	82+10	250	125	KGDR-60F
Stem	50	Ratchet	-	-	M12x18	82+10	250	125	KGDR-60S
Top Plate	63	Handwheel	90x90	70x70	-	102+15	500	250	KGD-80F
Top Plate	63	Ratchet	90x90	70x70	-	102+15	500	250	KGDR-80F
Top Plate	75	Handwheel	95x95	70x70	-	120+12	750	375	KGD-100F
Stem	75	Handwheel	-	-	M16x24	120+12	750	375	KGD-100S
Top Plate	75	Hex Spanner	95x95	70x70	-	120+12	1000	500	KGD-120F
Top Plate	97	Hex Spanner	100x100	70x70	-	130+15	1500	750	KGD-150F

Designed to offer 360° swivel castor function, this easily operated range offer mobility, levelling and vibration damping features for light to heavy weight equipment. Footmaster multifunctional castors allow users to move and position large equipment single handily. Levelling can be achieved with ease. Static load capacities of 50kg to 1500kg and Dynamic load capacities of 25kg to 750kg offer unrivalled mobility. (KGD-60F,60S,80F & 80S available in black finish or stainless steel)

All available in the following types



KGD S Type
(Optional Black Finish)



KGDR S Type



KGD F Type
(Optional Stainless Steel)





VF W series worm gearmotors

Torque range 13 ... 7,100 Nm
Mechanical rating 0.04 ... 75kW
Gear ratios 7 ... 10000



C series in-line helical gearmotors

Torque range 45 ... 12,000 Nm
Mechanical rating 0.08 ... 213kW
Gear ratios 2,6 ... 1481



A series helical bevel gearmotors

Torque range 100 ... 14,000 Nm
Mechanical rating 0.22 ... 150kW
Gear ratios 5,4 ... 1715



300 series planetary gearmotors

Torque range 1,000 ... 1,100,00 Nm
Mechanical rating up to 450 kW
Gear ratios 3,4 ... 5000



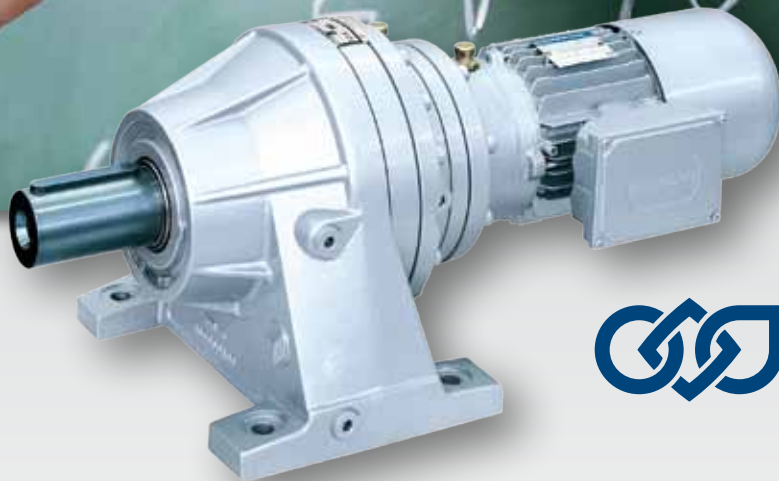
S series single reduction helical gearmotors

Torque range 21 ... 200 Nm
Mechanical rating 0.12 ... 11,6 kW
Gear ratios 1,4 ... 13,1



TA series shaft mounted speed reducers

Torque range 150 ... 16,000 Nm
Mechanical rating 1,1 ... 156 kW
Gear ratios 5 ... 31,5



 **Bonfiglioli**
Forever Forward

Our philosophy has always been to keep things simple. Why overcomplicate things looking for a magic formula. In today's market stocking complete geared motors is no longer the solution. To ensure a fast reliable service and short lead times local assembly is the way forward, achieved by investing in build centres across the world.

Our formula for success is simple...

Local assembly = fast reliable delivery = less downtime





RAN series bevel gearboxes

Torque range 3 ... 3,000 Nm
Mechanical rating 0.15 ... 91 kW
Gear ratios 1 ... 7,4



F series shaft mounted gearmotors

Torque range 140 ... 14,000 Nm
Mechanical rating 0.17 ... 125 kW
Gear ratios 6,4 ... 2099



HDO series bevel helical gear units (Heavy Duty)

Torque range 25,650 ... 194,050 Nm
Gear ratios 5,6 ... 400



HDP series parallel shaft gear units (Heavy Duty)

Torque range 5,000 ... 194,050 Nm
Gear ratios 7,1 ... 500



BN series AC motors & brake motors

kW rating 0.06 ... 30 kW
Frame sizes 56A ... 200L
Compliance 2006/95/EC (LVD) &
2004/108/EC (EMC)



BE series IE3 premium efficiency AC motors

kW rating 0.75 ... 22 kW
Frame sizes 80B ... 180L
Compliance IEC 60034-30:2008(IE), 640/2009/EC
2006/95/EC (LVD) &
2004/108/EC (EMC)



HDO Series The new generation

 **Bonfiglioli**
Forever Forward

Historically Bonfiglioli has always been well known in the market for high quality worm gearboxes and small to medium power geared motors. Much has changed since 1956 with significant investment in the heavy duty gearbox range putting us firmly on the map for this sector.

The range now offers output torque ratings up to 1.25 million Nm with higher ratings being developed.

Demanding applications? Don't compromise on quality.





BS series single phase induction motors

kW rating 0.06 ... 1,5 kW
Frame sizes 56A ... 90L
Compliance 2006/95/EC (LVD) &
2004/108/EC (EMC)



MAK series hazardous area motors

Exd & Exde groups IIB & IIC, II2G and II2GD
Temperature classes T3 to T6
Single and three phase, double speed and brake
motors
0,09kW to 55kW frame sizes 63 to 250



AT series fanless & bespoke electric motors

Special applications such as carwash machines.
Other bespoke designs for special applications.
Special voltages and configurations even for small
quantity on short lead times.



V series mechanical speed variators

Speed range 5,2 times or infinitely variable through
differential unit
Transmissible power 0.18 ... 9,2 kW



BC series permanent magnet DC motors

Torque range 0.3 ... 4.5 Nm
Speed 1500, 2000, 3000
Supply 12,24,36,48,65,1100,
180 Vdc



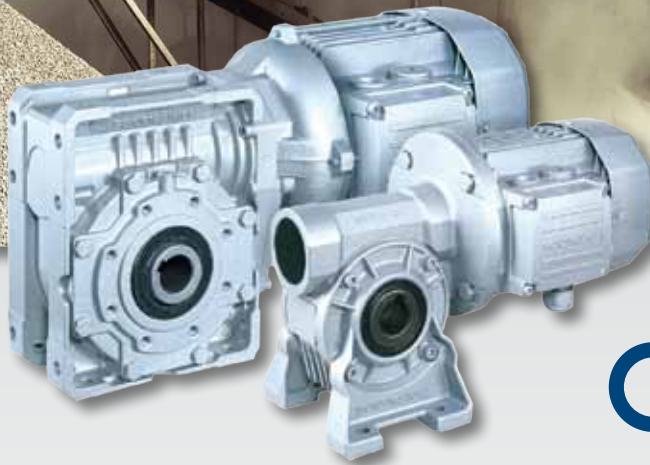
Agile frequency inverters

Power range 0,25 - 11kW
3-phase
Agile inverters are Sensorless
vector inverters. Innovative,
eco-friendly and user friendly.



Synthesis frequency inverters

Power range 0,2 - 2,2kW single
phase input. IP20 and IP65.
Synthesis inverters are simple,
integrated EMC filter yet
compact design.



 **Bonfiglioli**
Forever Forward

Aggregates, Bottling & Packaging, Food, Water treatment...

Many industries rely on geared motors and drives to keep important processes running around the clock. Bonfiglioli is one of the leading manufacturers with a commanding global presence thanks to an extensive and reliable product range.

Specify Bonfiglioli and have peace of mind.



TEC MOTORS | PRODUCT OVERVIEW



3 PHASE MOTORS

IE1, IE2, IE3 and IE4 all Ex Stock
 Multi-mount design in Cast Iron and Aluminium
 Thermistors fitted as standard, Increased output motors.
 Brake motors and 2 speed motors. Sizes ranging from 0.06kW - 1000kW.

1 PHASE MOTORS

TPC permanent capacitor range for general pump and fan applications.
 TCC range for applications where higher starting torque is required.
 230v and 110v available.
 sizes ranging from 0.09kW - 3.7kW



GEARBOX RANGE

TEC FCNDK RANGE - Sizes 25/150, Ratios 5/1 to 100/1 from stock.
 TEC WK-TKM RANGE - 20-90mm output bores, 100-8000Nm from stock.
 TEC & VARVEL HELICAL INLINE - 17-70mm output bores, 100-8000Nm from stock.



INVERTERS

TECDrive IP66 and IP20 UK Manufactured inverters.
 0.25kW to 22kW stocked with internal EMC filter included.
 Lenze SMD, SMV and I500 ranges stocked.
 IP20, IP31 and IP65 available.

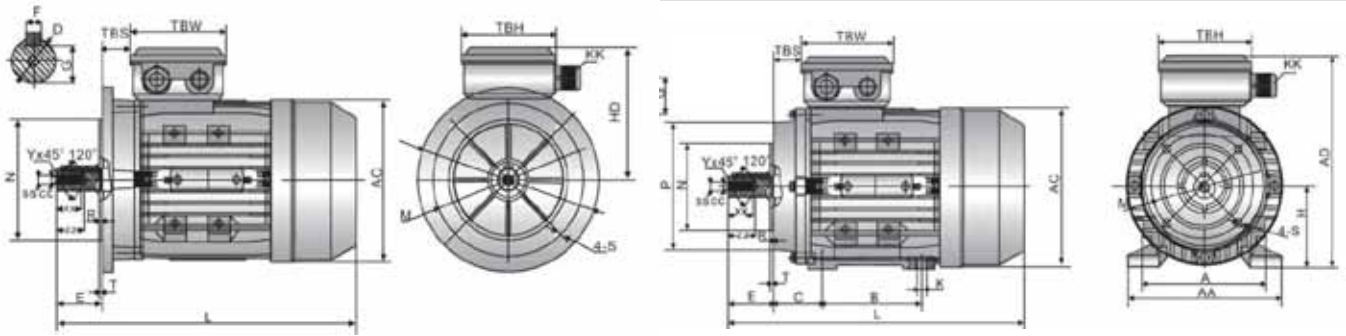


OTHER SERVICES

WIMES spec motors, flying leads, marine motors,
 full inspection and testing facilities.
 Anti-condensation heater fitting, retro fitted brakes, shaft extensions.
 IP upgrades, winding tropicalisation. and much, much more!!



TEC MOTORS | 3PH MOTOR DIMENSIONS

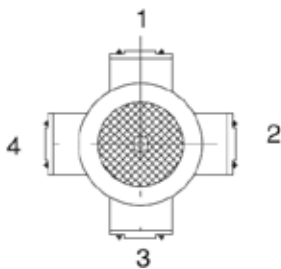


Frame	Foot B3 (B34,B35)				Shaft				General					B14			B5		
	A	AA	B	C	D	E	G	F	AC	L	H	AD	HD	N	M	P	N	M	P
56	90	110	71	36	9	20	7.2	3	117	196	56	156	100	50	65	80	80	100	120
63	100	120	80	40	11	23	8.5	4	130	220	63	171	108	60	75	90	95	115	140
71	112	132	90	45	14	30	11	5	147	241	71	186	115	70	85	105	110	130	160
80	125	160	100	50	19	40	15.5	6	163	290	80	213	133	80	110	120	130	165	200
90S	140	175	100	56	24	50	20	8	183	312	90	229	139	95	115	140	130	165	200
90L	140	175	125	56	24	50	20	8	183	367	90	229	139	95	115	140	130	165	200
100	160	198	140	63	28	60	24	8	205	369	100	252	152	110	130	160	180	215	250
112	190	220	140	70	28	60	24	8	229	395	112	279	167	110	130	160	180	215	250
132S	216	252	140	89	38	80	33	10	265	437	132	318	186	130	165	200	230	265	300
132M/L	216	252	178	89	38	80	33	10	265	501	132	318	186	130	165	200	230	265	300
160M	254	290	210	108	42	110	37	12	325	640	160	384	224	180	215	250	250	300	350
160L	254	290	254	108	42	110	37	12	325	640	160	384	224	180	215	250	250	300	350
180M	279	340	241	121	48	110	42.5	14	368	730	180	440	260				250	300	350
180L	279	340	279	121	48	110	42.5	14	368	730	180	440	260				250	300	350
200	318	390	305	133	55	110	49	16	368	745	200	460	260				300	350	400
225S	356	436	286	149	60	140	53	18	465	814	225	553	328				350	400	450
225M	356	436	311	149	(55)60	(110)140	(49)53	(16)18	465	(809) 839	225	553	328				350	400	450
250M	406	484	349	168	(60)65	140	(53)58	18	506	918	250	616	366				450	500	550
280S	457	557	368	190	(65)75	140	(58)67.5	(18)20	559	984	280	668	388				450	500	550
280M	457	557	419	190	(65)75	140	(58)67.5	(18)20	559	1035	280	668	388				450	500	550
315S	508	630	406	216	(65)80	(140)170	(58)71	(18)22	680	(1160)1190	315	845	530				550	600	660
315M	508	630	457	216	(65)80	(140)170	(58)71	(18)22	680	(1310)1340	315	845	530				550	600	660
355M	610	740	560	254	(75) 95	(140)170	(67.5)86	(20) 25	820	(1770)1840	355	920	565				680	740	800
355L	610	740	630	254	(75) 95	(140)170	(67.5)86	(20) 25	820	(1770)1840	355	920	565				680	740	800

Aluminium Cast iron

*Please note Shaft dimension's in brackets are for 2 pole motor variants.

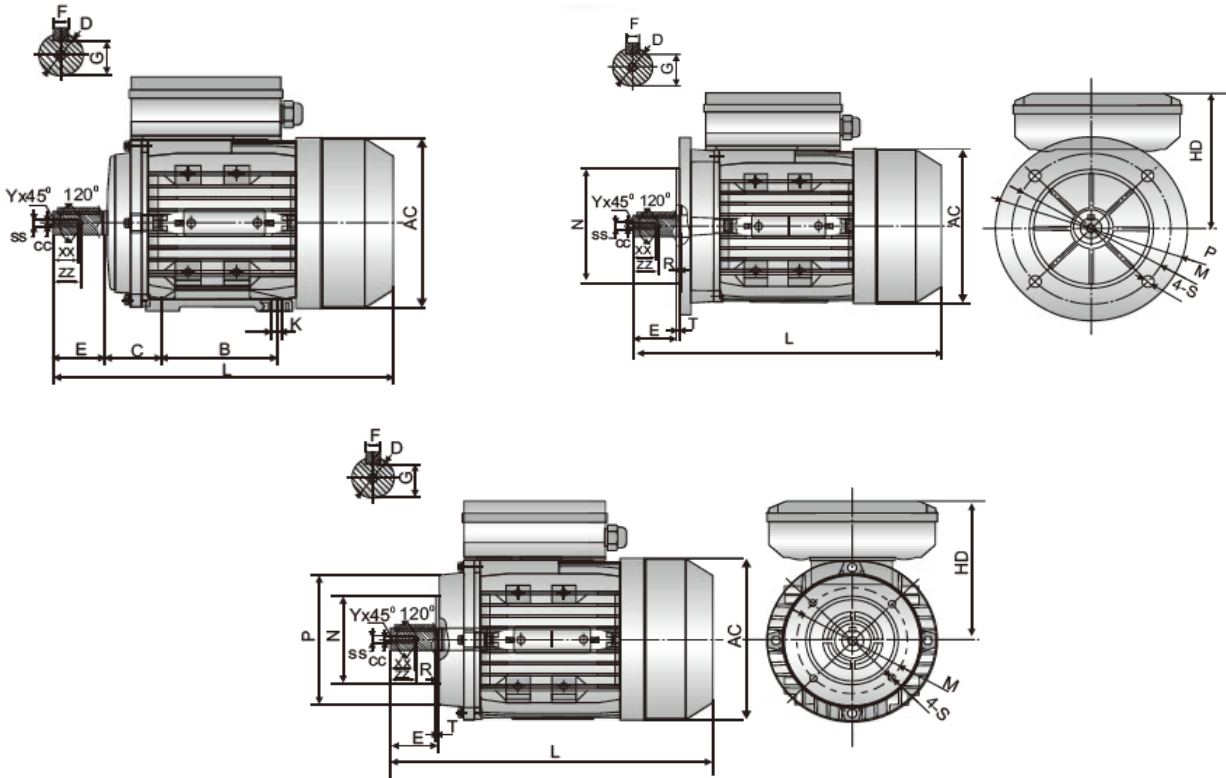
Terminal box position (relates to all types of units shown in mounting positin B3/M1)



Please note - All Three Phase IE2 motors 0.75kW and above must be run on an inverter to meet with regulations.



TEC MOTORS | 1PH MOTOR DIMENSIONS



Frame	Mounting Dimensions																Overall Dimensions					Shaft End Screw Dimensions							
	A	B	C	D	E	F	G	H	K	IM B14						IM B5						AA	AC	AD	HD	L	SS	XX	ZZ
										M	N	P	R	S	T	M	N	P	R	S	T								
63	100	80	40	11	23	4	8.5	63	7x10	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	120	130	179	116	212	M4	10	15
71	112	90	45	14	30	5	11	71	7x10	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	132	145	194	123	255	M5	12	18
80	125	100	50	19	40	6	15.5	80	10x13	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	157	165	223	143	290	M6	16	22
90S	140	100	56	24	50	8	20	90	10x13	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	172	185	240	150	335	M8	20	25
90L	140	125	56	24	50	8	20	90	10x13	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	172	185	240	150	365	M8	20	25
100L	160	140	63	28	60	8	24	100	12x15	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	196	205	260	160	398/416	M10	22	28
112M	190	140	70	28	60	8	24	112	12x15	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	222	230	295	183	416	M10	22	28
56	90	71	36	9	20	3	7.2	56	5.8x8.8	65	50	80	0	M5	2.5	100	80	120	0	7	3.0	110	117	144	88	196	M3	9	12
63	100	80	40	11	23	4	8.5	63	7x10	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	120	130	181	118	220	M4	10	14
71	112	90	45	14	30	5	11	71	7x10	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	132	147	196	125	241/255	M5	12	17
80	125	100	50	19	40	6	15.5	80	10x13	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	163	226	146	290	M6	16	21
90S	140	100	56	24	50	8	20	90	10x13	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	175	183	243	153	312	M8	19	25
90L	140	125	56	24	50	8	20	90	10x13	115	95.0	140	0	M8	3.0	165	130	200	0	12	3.5	175	183	243	153	337/367	M8	19	25
100L	160	140	63	28	60	8	24	100	12x15	130	110.0	160	0	M8	3.5	215	180	250	0	15	4.0	198	205	265	165	369/387	M10	22	30

 Cap/Cap Motors  Perm/Cap Motors

Please note - Single Phase motors are only designed to be stop/start a maximum of 15 times in 1 hour to allow the safe discharge of the capacitors.



TEC MOTORS | ODP IP23 LARGE FRAME MOTORS



FRAME SIZE	2 Pole	4 Pole	6 Pole
	kW	kW	kW
TEC1C-IE2 315X	220	220	200
TEC1C-IE2 315X	250	250	220
TEC1C-IE2 315X	280	280	250
TEC1C-IE2 315X	315	315	280
TEC1C-IE2 315X		355	
TEC1C-IE2 315X		400	
TEC1C-IE2 355XA	355	355	280
TEC1C-IE2 315XB	400	400	315
TEC1C-IE2 315XC	450	450	355
TEC1C-IE2 315XD	500	500	400
TEC1C-IE2 315XE		560	
TEC1C-IE2 400		400	315
TEC1C-IE2 400		450	355
TEC1C-IE2 400		500	400
TEC1C-IE2 400XA	560	560	450
TEC1C-IE2 400XB	630	630	500
TEC1C-IE2 400XC	710	710	560
TEC1C-IE2 450XA			630
TEC1C-IE2 450XB		800	710
TEC1C-IE2 450XC		900	800
TEC1C-IE2 450XD		1000	900
TEC1C-IE2 500XA		1120	1000
TEC1C-IE2 500XB		1250	1120

TEC are now offering a full range of IP23 ODP series motors up to and including 710kW.

Standard specification as follows:

- IE2 and IE3 efficiency.
- Poles 2, 4 and 6.
- Cast iron construction.
- Squirrel cage induction motors (according to EN60034-30 IEC).
- Class F Insulation with a class B temperature and are specifically designed to provide maximum ventilation and heat dispersion.
- 230-400/3/50 - 276-480/3/60.
- 400-690/3/50 - 480-828/3/60.
- 3 x 150° PTC thermistors & 3 x 130° PTC thermistors.
- Mounting IM B3, B5, B35 (V1 available upon request).
- Painted RAL 7031.
- TEFC IC01.
- 315 Frame and above with insulated NDE Bearing and anti-con heaters.

For further information on lead times and prices please give us a call on 01299 252990.



TEC MOTORS | MOTOR TECHNICAL INFORMATION

Motor Modifications

TEC can supply motors with a range of optional extra's and upgrades whether it's a one off order or an urgent requirement where factory lead times are not feasible.

The following modifications can be achieved at our machine shop:

- Reduced shaft motors.
- Extended shaft motors.
- Special flanges.
- Externally switched motors.
- Increased output bore gearboxes.
- Double ended motors.
- Vector motors (Encoders and forcevent).
- Retro fit brake motors.
- TENV "Air over" motors.
- IP upgrades (IP65/IP56/IP66).
- Special voltage rewinds.
- Anti-condensation heater fitting.
- Forced ventilation motors.
- Extra drain holes.
- PTC thermistors (different temperatures).
- Flying lead motors.
- Epoxy paint finishes.
- Open ended keyways.
- Thermal cut outs.



WIMES Motors

As standard:

- Must be cast iron where possible
- Thermistors
- 2 sets of heaters fitted (110v rear, 240v front)
- Stainless plate
- External earth point

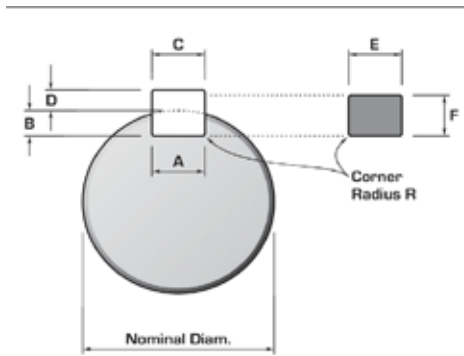
Optional extras:

- Auxiliary terminal box
- Tropicalised windings
- IP upgrades (IP56/65)
- ATEX
- Located bearings for pump application
- Epoxy Paint Finish

TEC MOTORS | IEC SHAFT AND KEYWAY DIMENSIONS



Please note - TEC can offer a modification service for custom keyway sizes to suit most applications.



Metric - Rectangular

Nominal Shaft Diam		Key Size	Dimensions (mm)						R
Over	To (incl.)		A	B	C	D	E	F	
10	12	4 x 4	3.970 4.000	2.5 2.6	3.985 4.015	1.8 1.9	4.030 3.970	0.16	
12	17	5x5	4.970 5.000	3.0 3.1	4.985 5.015	2.3 2.4	5.030 4.970	0.25	
17	22	6x6	5.970 6.000	3.5 3.6	5.985 6.015	2.8 2.9	6.030 5.970	0.25	
22	30	8x7	7.964 8.000	4.0 4.2	7.982 8.018	3.3 3.5	8.000 7.964	7.000 6.910	0.25
30	38	10x8	9.964 10.000	5.0 5.2	9.982 10.018	3.3 3.5	10.000 9.964	8.000 7.910	0.40
38	44	12x8	11.957 12.000	5.0 5.2	11.979 12.021	3.3 3.5	12.000 11.957	8.000 7.910	0.40
44	50	14x9	13.957 14.000	5.5 5.7	13.979 14.021	3.8 4	14.000 13.957	9.000 8.910	0.40
50	58	16x10	15.957 16.000	6.0 6.2	15.979 16.021	4.3 4.5	16.000 15.957	10.000 9.910	0.40
58	65	18x11	17.957 18.000	7.0 7.2	17.979 18.021	4.4 4.6	18.000 17.957	11.000 10.890	0.40
65	75	20x12	19.948 20.000	7.5 7.7	19.974 20.026	4.9 5.1	20.000 19.948	12.000 11.890	0.60
75	85	22x14	21.948 22.000	9.0 9.2	21.974 22.026	5.4 5.6	22.000 21.948	14.000 13.890	0.60
85	95	25x14	24.948 25.000	9.0 9.2	24.974 25.026	5.4 5.6	25.000 24.948	14.000 13.890	0.60
95	110	28x16	27.948 28.000	10.0 10.2	27.974 28.026	6.4 6.6	28.000 27.948	16.000 15.890	0.60
110	130	32x18	31.938 32.000	11.0 11.2	31.969 32.031	7.4 7.6	32.000 31.938	18.000 17.890	0.60
130	150	36x20	35.938 36.000	12.0 12.3	35.969 36.031	8.4 8.7	36.000 35.938	20.000 19.870	1.00
150	170	40x22	39.938 40.000	13.0 13.3	39.969 40.031	9.4 9.7	40.000 39.938	22.000 21.870	1.00
170	200	45x25	44.938 45.000	15.0 15.3	44.969 45.031	10.4 10.7	45.000 44.938	25.000 24.870	1.00
200	230	50x28	49.938 50.000	17.0 17.3	49.969 50.031	11.4 11.7	50.000 49.938	28.000 27.870	1.00

Imperial - Rectangular

Nominal Shaft Diam		Key Size	Dimensions (Inches)						
Over	To (incl.)		A	B	C	D	E	F	R
1	1 1/4	5/16 x 1/4	0.311 0.312	0.146 0.152	0.312 0.313	0.112 0.118	0.314 0.312	0.253 0.250	0.010
1 1/4	1 1/2	3/8 x 1/4	0.374 0.375	0.150 0.156	0.375 0.376	0.108 0.114	0.377 0.375	0.253 0.250	0.010
1 1/2	1 3/4	7/16 x 5/16	0.437 0.438	0.186 0.192	0.438 0.439	0.135 0.141	0.440 0.438	0.315 0.312	0.020
1 3/4	2	1/2 x 5/16	0.499 0.500	0.190 0.196	0.500 0.501	0.131 0.137	0.502 0.500	0.315 0.120	0.020
2	2 1/2	5/8 x 7/16	0.624 0.625	0.260 0.266	0.625 0.626	0.185 0.191	0.627 0.625	0.441 0.438	0.020
2 1/2	3	3/4 x 1/2	0.749 0.750	0.299 0.305	0.750 0.751	0.209 0.215	0.752 0.750	0.503 0.500	0.020
3	3 1/2	7/8 x 5/8	0.874 0.875	0.370 0.376	0.875 0.876	0.264 0.270	0.877 0.875	0.629 0.625	0.062
3 1/2	4	1 x 3/4	0.999 1.000	0.441 0.447	1.000 1.001	0.318 0.324	1.003 1.000	0.754 0.750	0.062
4	5	1 1/4 x 7/8	1.248 1.250	0.518 0.524	1.250 1.252	0.366 0.372	1.253 1.250	0.879 0.875	0.062
5	6	1 1/2 x 1	0.599 0.605	0.599 0.605	1.500 1.502	0.412 0.418	1.504 1.500	1.006 1.000	0.062

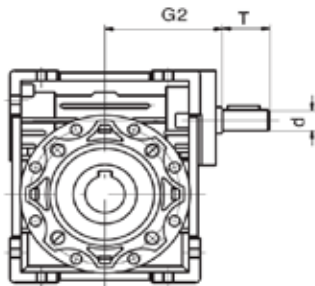
Imperial - Square

Nominal Shaft Diam		Key Size	Dimensions (Inches)						
Over	To (incl.)		A	B	C	D	E	F	R
1/4	1/2	1/8 x 1/8	0.124 0.125	0.072 0.078	0.125 0.126	0.060 0.066	0.127 0.125	0.010	
1/2	3/4	3/16 x 3/16	0.187 0.188	0.107 0.113	0.188 0.189	0.088 0.094	0.190 0.188	0.010	
3/4	1	1/4 x 1/4	0.249 0.250	0.142 0.148	0.250 0.251	0.115 0.121	0.252 0.250	0.010	
1	1 1/4	5/16 x 5/16	0.311 0.312	0.177 0.183	0.312 0.313	0.142 0.148	0.314 0.312	0.010	
1 1/4	1 1/2	3/8 x 3/8	0.374 0.375	0.213 0.219	0.375 0.376	0.169 0.175	0.377 0.375	0.010	
1 1/2	1 3/4	7/16 x 7/16	0.437 0.438	0.248 0.254	0.438 0.439	0.197 0.203	0.440 0.438	0.020	
1 3/4	2	1/2 x 1/2	0.499 0.500	0.283 0.289	0.500 0.501	0.224 0.230	0.502 0.500	0.020	
2	2 1/2	5/8 x 5/8	0.624 0.625	0.354 0.360	0.625 0.626	0.278 0.284	0.627 0.625	0.020	
2 1/2	3	3/4 x 3/4	0.749 0.750	0.424 0.430	0.750 0.751	0.333 0.339	0.752 0.750	0.020	
3	3 1/2	7/8 x 7/8	0.874 0.875	0.495 0.501	0.875 0.876	0.387 0.393	0.877 0.875	0.062	
3 1/2	4	1 x 1	0.999 1.000	0.566 0.572	1.000 1.001	0.442 0.448	1.003 1.000	0.062	
4	5	1 1/4 x 1 1/4	1.248 1.250	0.707 0.713	1.250 1.252	0.551 0.557	1.253 1.250	0.062	
5	6	1 1/2 x 1 1/2	1.498 1.500	0.848 0.854	1.500 1.502	0.661 0.667	1.504 1.500	0.062	

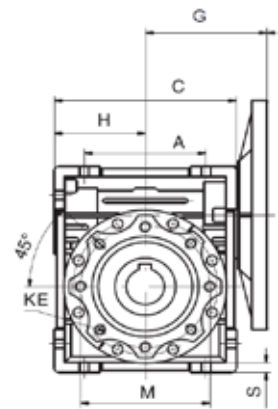
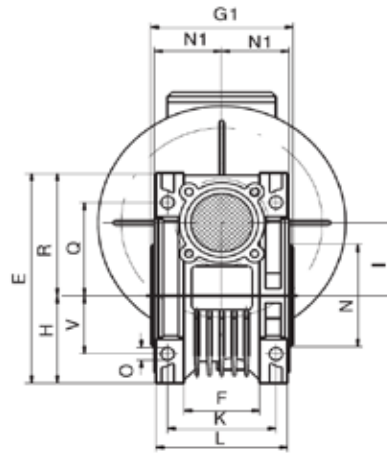


TEC MOTORS | TEC WORM GEARBOX DIMENSIONS

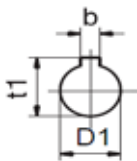
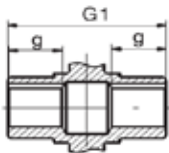
FCNK



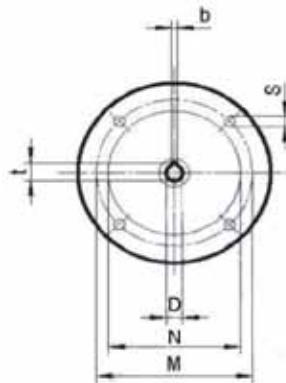
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Output Hub



Input Flange



Input Motor Flange Dimensions

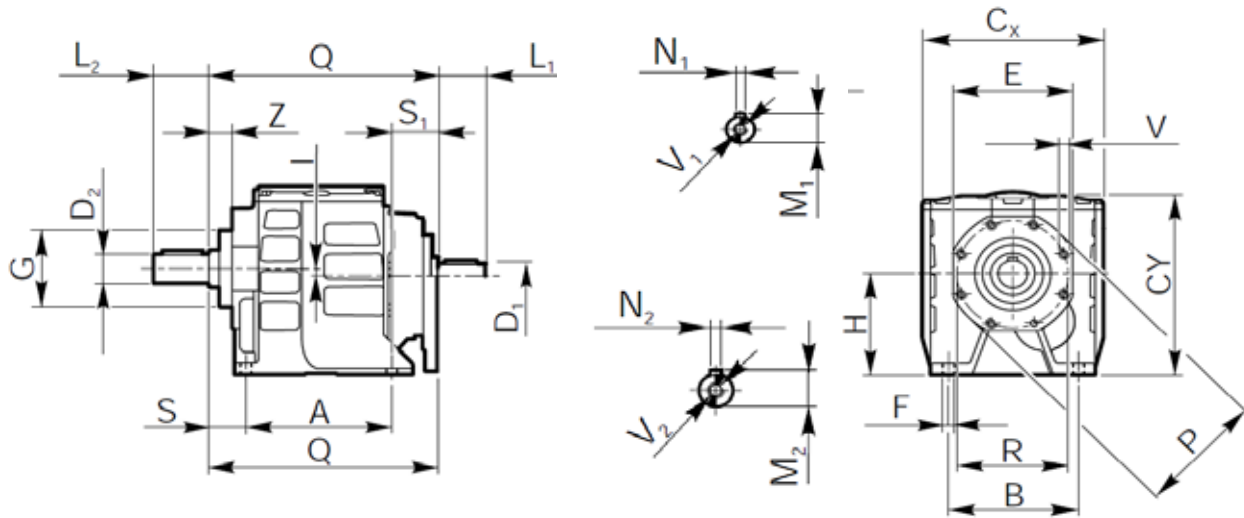
Ref	D	P	M	N	b	s	t
56B14	9	80	65	50	3	5	10.4
56B5	9	120	100	80	3	7	10.4
63B14	11	90	75	60	4	9	12.8
63B5	11	140	115	95	4	9	12.8
71B14	14	105	85	70	5	7	16.3
71B5	14	160	130	110	5	9	16.3
80B14	19	120	100	80	6	7	21.8
80B5	19	200	165	130	6	11	21.8
90B14	24	140	115	95	8	9	27.3
90B5	24	200	165	130	8	11	27.3
100-112B14	28	160	130	110	8	9	31.3
100-112B5	28	250	215	180	8	13.5	31.3
132B14	38	200	165	130	10	11	41.3
132B5	38	300	265	230	10	13.5	41.3
160B5	42	350	300	250	12	17	45.3

Size	Dimensions																			
	A	C	D1*	E	F	G _{max}	H	I	L	M	N(h8)	O	Q	R	S	T	V	K	G1	G2
25	45	70	11	83	22	45	35	25	45	55.0	45	6.0	35.5	48	5		22.5	34.0	50	
30	54	80	14	97	32	55	40	30	56	65	55	6.5	44	57	5.5	20	27	44	63	51
40	70	101	18	122	43	69	50	40	71	75	60	6.5	55	72	6.5	23	35	60	78	60
50	80	122	25	144	49	90	60	50	85	85	70	8.5	64	85	7	30	40	70	92	74
63	100	148	25	174	67	106	72	63	103	95	80	8.5	80	102	8	40	50	85	112	90
75	120	174	28	205	72	121	86	75	113	115	95	11	93	119	10	50	60	90	120	105
90	140	208	35	238	72	138	103	90	130	130	110	13	102	135	11	50	70	100	140	125
110	170	253	42	295		159	128	110	142	165	130	14	125	167	15	60	85	115	155	142
130	200	293	45	335		179	148	130	155	215	180	16	140	188	15	80	100	120	170	162
150	240	340	50	400		212	170	150	185	215	180	18	180	230	18	80	120	145	200	210

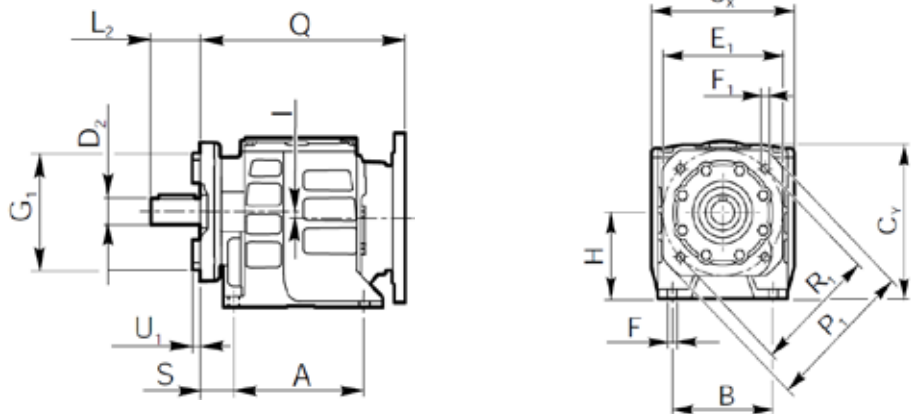
Size	g	N1	KE	d (j6)	b	t1	weight (kg)
25		22.5	6.5				0.7
30	20	29	M6x11(n4)	9	5	16.3	1.2
40	23	36.5	M6x8 (n4)	11	6	20.8	2.3
50	30	43.5	M8x10(n4)	14	8	28.3	3.5
63	40	53	M8x14(n8)	19	8	28.3	6.2
75	40	57	M8x14(n8)	24	8	31.3	9.0
90	45	67	M10x18(n8)	24	10	38.3	13.0
110	50	74	M10x18(n8)	28	12	45.3	35.0
130	60	81	M12x20(n8)	30	14	48.8	48.0
150	70	96	M12x21(n8)	35	14	53.8	84.0

Size	D1 Bore options (H7)					
	D1	b	t1	D1	b	t1
40	19	6	21.8			
50	24	8	28.3			
63	28	8	31.3	30	8	33.3
75	30	8	33.3	35	10.0	38.3
90	38	10	41.2	40	12.0	43.3

TEC MOTORS | VARVEL INLINE GEARBOX DIMENSIONS



Size	Flange Dimensions					
	E1	F1	G1/h7	P1	R	S
RD02/3	100	7	80	120	100	3
RD02/3	115	9	95	140	115	3
RD02/3	130	9	110	160	130	3
RD12/3	100	7	80	120	100	3
RD12/3	115	9	95	140	115	3
RD12/3	130	9	110	160	130	3
RD22/3	115	9	95	140	115	3
RD22/3	130	9	110	160	130	3
RD22/3	165	11	130	200	165	3
RD32/3	130	9	110	160	130	3.5
RD32/3	165	11	130	200	165	3.5
RD32/3	215	13	180	250	215	3.5
RD42/3	165	11	130	200	165	4
RD42/3	215	13.5	180	250	215	4
RD42/3	265	17	230	300	265	4
RD52/3	215	13.5	180	250	215	4
RD52/3	265	17.5	230	300	265	4
RD52/3	300	17.5	250	350	300	4
RD62/3	215	13.5	180	250	215	4
RD62/3	265	17.5	230	300	265	4
RD62/3	300	17.5	250	350	300	4



Size	Dimensions																										
	A	B	Cx	Cy	D1/h6	D2/h6	E	F	G/g6	H	I	L1	L2	M1	M2	N1	N2	P	P1	Q	R	R1	S1	U1	V	V1	V2
RD02	95	80	100	111	11	17-20	82	9	60	60	4	23	35(40)	12.5	19-22.5	4	5-6	84	140	75	20	25	M6X14	M5X12	M6X16	13	3
RD03	95	80	100	111	11	17-20	82	9	60	60	4	23	35(40)	12.5	19-22.5	4	5-6	84	143	75	20	28	M6X14	M5X12	M6X16	13	3.2
RD12	110	110	140	131	14	20-25	82	9	60	75	5	30	40(50)	16	22.5-28	5	6-8	84	151	75	18	23	M6X14	M5X12	M6X16	10	4.8
RD13	110	110	140	131	14	20-25	82	9	60	75	5	30	40(50)	16	22.5-28	5	6-8	84	161	75	18	33	M6X14	M5X12	M6X16	10	4.8
RD22	130	110	155	158	19	25-30	102	9	65	90	6	40	50(60)	21.5	28-33	6	8-8	108	190	95	25	35	M6X10	M6X16	M6X16	13	7.9
RD23	130	110	155	158	19	25-30	102	9	65	90	6	40	50(60)	21.5	28-33	6	8-8	108	208	95	25	53	M6X10	M6X16	M6X16	13	8.5
RD32	165	135	190	198	24	30-35	125	11.5	85	115	8.5	50	60(70)	27	33-38	8	8-10	130	220	115	30	25	M8X18	M8X19	M10X22	13	13.5
RD33	165	135	190	198	24	30-35	125	11.5	85	115	8.5	50	60(70)	27	33-38	8	8-10	130	253	115	30	58	M8X18	M8X19	M10X22	13	14.5
RD42	195	150	215	222	28	35-40	142	13.5	95	130	13.5	60	70(80)	31	38-43	8	10-12	145	265	130	30	40	M8X18	M10X22	M10X22	15	20
RD43	195	150	215	222	28	35-40	142	13.5	95	130	13.5	60	70(80)	31	38-43	8	10-12	145	305	130	30	80	M8X18	M10X22	M10X22	15	21.5
RD52	205	170	284	255	38	40-50	180	18	130	140	0	80	80(100)	41	43-53.50	10	12-14	190	353[367]	165	35[49]	82	M10X25	M12X28	M12X28	18	49
RD53	205	170	284	255	38	40-50	180	18	130	140	0	80	80(100)	41	43-53.50	10	12-14	190	353[367]	165	35[49]	82	M10X25	M12X28	M12X28	18	52
RD62	260	215	340	302	48	50-60	180	18	130	180	0	100	100(120)	51.5	53.5-64	14	14-18	190	410[424]	165	40(54)	79	M10X25	M16X36	M16X36	18	62
RD63	260	215	340	302	48	50-60	180	18	130	180	0	100	100(120)	51.5	53.5-64	14	14-18	190	410[424]	165	40(54)	79	M10X25	M16X36	M16X36	18	70



TEC MOTORS | GEARBOX TECHNICAL INFORMATION



Useful Formulas

When making a selection for gearboxes or trying to work out the speed of an existing unit there are a number of calculations you may need to make.

$$\text{Power (kW)} = \frac{\text{Torque (Nm)} \times \text{Speed (rpm)}}{9550}$$

$$\text{Torque (Nm)} = \frac{9550 \times \text{Motor Power (kW)}}{\text{Output Speed (rpm)}}$$

$$\text{Output Speed} = \frac{\text{Input Speed}}{\text{Gear Ratio}}$$

$$\text{Gear Ratio} = \frac{\text{No. Output Gear Teeth}}{\text{No. Input Gear Teeth}}$$

Service Factors Explained

All the performance figures in the TEC catalogue are based on the following information.
Service factor (fs) 1.0 equates to 8 hours per day operation, uniform load, mass acceleration factor $fa \leq 0.2$, start/stops less than 300 per hour and ambient temperature between 15 and 35° Celsius.

Duration of service - hours per day	Load classification of driven machine		
	Uniform	Moderate	Heavy Shock
Under 3	0.8	1	1.5
3 to 10	1	1.25	1.75
Over 10	1.25	1.5	2

The above must also take into account the number of stops/starts per hour shown in the table below.

Start/Stops per hour	1	5	10	40	60	> 200
Factor Fs	1	1.03	1.06	1.1	1.15	1.2

Example: Page 5, FCNDK63 ratio 20:1. Service factor 1 = 1.2 KW, so if fitting a 1.1KW motor
SF = 1.2/1.1 = 1.09. If fitting a 1.5KW motor SF = 1.2/1.5 = 0.8.

Load Classification

- (A) Uniform, permitted mass acceleration $fa \leq 0.2$
- (B) Moderate shock load, permitted mass acceleration $fa \leq 3$
- (C) Heavy shock load, permitted mass acceleration $fa \leq 10$

$$fa = Je/Jm$$

fa, factor of inertia

Je, (kgm²) all external mass moment of inertia. Jm, (kgm²) moment of inertia of motor

A - Screw feeders for light materials, fans, assembly lines, conveyor belts for light materials, small mixers, lifts, cleaning machines, fillers, control machines.

B - Winding devices, woodworking machine feeders, goods lifts, balancers, threading machines, medium mixers, conveyor belts for heavy materials, winches, sliding doors, fertilizer scrapers, packing machines, concrete mixers, crane mechanisms, milling cutters, folding machines, gear pumps.

C - Mixers for heavy materials, shears, presses, centrifuges, rotating supports, winches and lifts for heavy materials, grinding lathes, bucket elevators, drilling machines, hammer mills, turntables, tumbling barrels, vibrators, cam presses, stone mills, folding machines, shredders.

TEC MOTORS | TECDrive Inverters



TEC are proud to announce our new line of inverter drives, we will be stocking a full range of the following specifications:

*IP66, 1ph-3ph
IP66, 3ph-3ph
IP20, 1ph-3ph
IP20, 3ph-3ph*

All TECDrive inverters have an in-built C1 EMC filter, brake chopper CAN Open and Modbus RTU as standard, Bluetooth options are also available upon request.

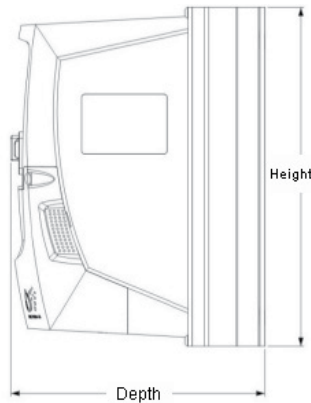
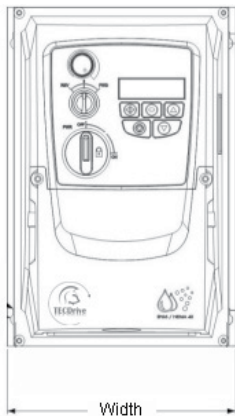
The TECDrive E3 Inverter is easy to use, compact and robust.

Application Macros means that the inverter can be switched between Fan, Pump and industrial mode with great ease

The TECDrive E3 IP66 inverter is wash-down ready with a sealed ABS enclosure and corrosion resistant heat sync. The design is also dust tight which gives it the IP66/NEMA 4X status.

All TECDrive inverters have a simple power up status; they are ready to be used out of the box. There are 14 basic parameters that can be changed to suit the application requirements, with another 36 settings for fine tuning should it be necessary.

Single Phase Data



1ph-3ph	kW	HP	Amps	Frame
200-240v +/- 10% Input. 230/3/50 Output.	0.37	0.5	2.3	1
	0.75	1	4.3	1
	1.5	2	7	1
	2.2	3	10.5	2
	4	5	15.3	3
	5.5	7.5	24	3
	7.5	10	30	4
11	15	46	4	

Three Phase Data

3ph-3ph	kW	HP	Amps	Frame
400v +/- 10% Input. 400/3/50 Output.	0.75	1	2.2	1
	1.5	2	4.1	1
	2.2	3	5.8	2
	4	5	9.5	2
	5.5	7.5	14	3
	7.5	10	18	3
	11	15	24	3
	15	20	30	4
	18.5	25	39	4
	22	30	46	4

TECDrive Dimensions

Frame size	1	2	3	4
Height	173	221	261	420
Width	83	110	131	171
Depth	123	150	175	212
Weight	1.0	1.7	3.2	9.1
Fixings	4 x M5	4 x M5	4 x M5	4 x M8

PUMP SOLUTIONS FOR INDUSTRY

Huge ranges of stock supported by pump experts



Centrifugal Pumps

Manufactured as standard with cast iron or stainless steel pump body. Suitable for pumping hot and cold, moderately aggressive liquids.



Single Stage Pumps

Manufactured as standard with cast iron or stainless steel pump body. Suitable for pumping hot and cold, moderately aggressive liquids.

Available: Close-coupled with special motor shaft extension, stub shaft and standard motor or with flexible coupling, adapter, base and standard motor in compliance with EN 733 – DIN 24255.



Multistage Pumps

Using multiple impellers on a common shaft to delivery high pressure, their corrosion resistant liquid-ends and heavy-duty drive-ends are essential features in continuous duty applications.

Available: In vertical and horizontal for boiler feed, carwash, washdown, pressure cleaning, reverse osmosis, chemical and oil processing.



Circulator Pumps

The most common heating pumps are these small (generally under 2kw), single phase, high efficiency circulators.

Available: In single or twin head versions.



Inline Pumps

For larger heating and cooling application as well as process pumps, these inline designs can be single or three phase powered, fixed speed or inverter driven.

Available: In single or twin pump versions.



Self-Priming Pumps

Ideal for transporting liquids containing solids in suspension. Suited for applications where the main feature is the difficulty in priming and are used across industry, construction and emergency.

Available: In cast iron, marine bronze or stainless steel.



Submersible Pumps

For use in markets ranging from water and wastewater treatment, raw water supply, abrasive or contaminated industrial processes, mining and irrigation.

Available: As a stand-alone pump, with or without integral level control, or as an easy install packaged pumping station ensuring minimal on-site work.



Positive Displacement Pumps

Self-priming by design. Suitable for handling viscous products which may also contain solids.



Air Operated Pumps

Air Operated Diaphragm Pumps are easy to use and maintain, have infinitely variable flow control, can suction lift up to 8m, run dry and operate against closed valve without damage.

Available: In a variety of both metal and plastic constructions.



Progressive Cavity

Ideal for handling slurries, viscous and shear sensitive products. Multi-stage pumps are available for high pressure applications or where accurate dosing is required.

Available: In a variety of metals with a huge array of stator materials to suit any application.



Gear Pumps

Used in industrial plants for pumping liquids of any viscosity without solids in suspension: Chemicals and petroleum products, soaps and detergents, adhesives, paint and ink, high temperature liquids and chocolate.

Available: In external and internal gear options.



Screw Pumps

They can handle virtually any non-homogenous fluid, regardless of viscosity, lubricity or abrasiveness e.g. seawater, bitumen, molasses, lime, acid, caustic solution or hydrocarbon.

Available: In high pressure, high capacity, compact and hygienic versions.



Flexible Impeller Pumps

Reversible pump offers smooth, low pulsating, low shear flow. Stainless steel and bronze casings are available for hygienic and marine applications.

Available: Impellers are produced in a variety of materials, (e.g. Natural Rubber, Neoprene, Nitrile and EPDM) making them compatible with a range of fluids.



Peristaltic Pumps

Hose pumps are seal-less, can dry run without damage and self-prime up to 9.8m. Used widely for pumping minerals, ceramics, chemicals and inks/dyes at pressures up to 15 bar.

Available: As a close-coupled unit, constructed in Aluminium or Cast Iron and with a wide variety of hose materials suitable for any application.

Specialist Pumps

Available in a variety of configurations, materials and finishes appropriate for a huge range of specialist applications.



Dosing Pumps

These are used for precise dosing of fluids with highly varied viscosities, most of which are chemically aggressive and toxic, and some of which are actually abrasive or emit gasses.

Available: In solenoid, motor and stepper motor driven, diaphragm and piston construction.



Drum Pumps

Drum and container pumps are constructed to assure safety and economy when transferring neutral, aggressive and flammable liquids from different-sized containers. Used for pumping aqueous and light viscous liquids.

Available: In a variety of standard materials and stem lengths.



Hygienic Pumps

Designed to reduce the build-up of bacteria by minimising crevices and dead areas. Consideration is paid to the ease with which the pump can be disassembled for manual cleaning.

- Centrifugal,
- Self-priming
- Cleaning-in-place



Rotary Lobe Pumps

Hygienic – approved to relevant standards, offering gentle pumping action to suit viscous, delicate and particle-laden liquids. Easy to clean, easy to maintain.

Available: In AISI316 stainless steel construction.



ATEX Pumps

For hazardous areas, we can provide ATEX pumps and safety devices.

If you have specific flammable gasses or dust present in the atmosphere and temperature limit requirements within the pump installation envelope, we can provide you with a solution.



Packages

Off the shelf or bespoke, automatic packaged sets, designed and built to the highest standards.

Available: In fixed or trolley mounted configuration, fixed or variable speed, complete with pipework, valves, control panel and flow / pressure / temperature sensors.



OUR SERVICES

Pumps, Spare Parts and Accessories in Stock

EXTENSIVE STOCK of both pumps and spare parts are available for immediate despatch to cover emergency situations. Whilst a next day carrier service is available as standard, same day deliveries can be expedited to overcome critical process failure. Of course, any items we do not have in stock can be ordered and shipped direct to site.



Design & Systems

We can provide a fully detailed specification for pumps and controls consistent with the quality, reliability and efficiency that the customer expects.

Examples of our design capabilities include pressure boosting, pressurisation, oil transfer, sewage pumping, rainwater harvesting and boiler feed.

Pumps can be assembled on bespoke skid mounted systems. These can be either fixed or trolley mounted and come complete with pipework, valves and safety devices.



Commissioning, Service & Repair

We have fully trained, experienced engineers based across the UK who are able to commission all of your pumping equipment and will ensure that they are operating correctly with minimal disruption to site. Our engineers can also provide support in the form of routine maintenance as well as the unforeseen breakdown.

Trained in preventing unpredictable breakdowns, our service teams can provide a tailor made preventative maintenance program to suit your particular requirements.



Installation

We can provide a fully integrated, readily available, engineered solution to ensure that a cost effective installation is carried out with the minimum of delay. The work is undertaken by our specialist installation engineers and covers both mechanical and electrical work



Our pump brands we supply:

