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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 +120°C OPERATING RANGE

FAG



Deep groove design for radial & radial / axial loads
 Available with metal shields (2Z) or contact seals (2RS/2HRS)
 Available with radial internal clearance CN, C3, C2 (etc)
 Available in corrosion resistant material (prefix 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	20
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	42
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

BEARINGS

FAG

BEARINGS



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

6300 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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	75	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	130	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

6400 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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



FAG SmartCheck

takes intelligent machine monitoring to a new level: compact, easy to operate and at a unique price/performance ratio. Thus, makes the online monitoring of small, non process critical systems like electric motors, pumps, compressors, ventilators, fans and gearboxes cost-efficient.

The innovative real time monitoring system employs a number of novel technologies and trend-setting functions. These include the combination of information provided by the measurement of classic parameters and vibration based process parameters. The measuring system detects potential damage to machines early and reliably and helps to avoid unplanned shutdowns and costly secondary damage. Thus, the FAG SmartCheck already offers numerous options that future machine monitoring schemes cannot be imagined without.



FAG



Narrow series deep groove design for radial & radial / axial loads
 Available with non-contact shields (2RZ) or rubber seals (2RS)
 Available in corrosion resistant material (prefix S...)



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

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

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

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

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



FAG

Single row angular contact ball bearings

Many sizes of angular contact ball bearings are supplied in X-life design

Available as matched pairs (UO & UA) for mounting together

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 are units with solid inner and outer rings and ball and cage assemblies with polyamide, sheet steel or brass cages.

Their construction is similar to a pair of single row angular contact ball bearings in an O arrangement but they are narrower to a certain extent.

They differ in the size of the contact angle and the design of the bearing rings.



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



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3300 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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

2200 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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



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.



1200 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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



FAG



FAG X-life cylindrical roller bearing, single row
 Cage guided with plastic, brass or steel cages
 Bearing 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 stabilized to +200°C

N200 Series			
Product	Shaft	Outside Dia	
		(mm)	
			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

NU200 Series			
Product	Shaft	Outside Dia	
		(mm)	
			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



FAG



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

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

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



Black Series Ball Bearing Units Product Range



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



FAG



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.

51200 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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



51100 Series			
Product	Shaft	Outside Dia	Width
	(mm)		
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

Training

Schaeffler UK offers a broad mix of training courses at basic and advanced levels to suit all delegates.

Courses include:

- introduction to rolling bearings
- rolling bearing technology
- introduction to bearing lubrication
- bearing failure analysis
- mounting of bearings; bearings for electric motors
- condition monitoring
- vibration analysis (Levels 1 and 2)
- and FAG Detector III (Schaeffler's handheld vibration monitoring device).

Please contact us for more details.



FAG



The lubricants available from the Schaeffler Group are designed and tested for bearing arrangement engineering.

The Arcanol rolling bearing greases offer very good preconditions for favourable running behaviour of bearings and a long operating life and high operational security of the bearing arrangement.

The lubricant range is graduated such that almost all areas of application are covered.

Grease	Thickener	Operating temp °c	Tube			Cartridge	Can	Bucket		Hobbock	Drum
			20g	70g	250g			5kg	10kg		
MULTOP	Lithium soap with EP additives	-40 to +150			•	•	•	•	•	•	•
MULTI2	Lithium soap	-30 to +140	•		•	•	•	•	•	•	•
MULTI3	Lithium soap	-30 to +140			•	•	•	•	•	•	•
LOAD220	Lithium/calcium soap with EP additives	-20 to +140					•		•	•	•
LOAD400	Lithium/calcium soap with EP additives	-25 to +140				•	•	•	•	•	•
LOAD1000	Lithium/calcium soap with EP additives	-20 to +140						•		•	•
TEMP90	Calcium polycarbamide with EP additives	-40 to +160	•			•	•	•		•	•
TEMP110	Lithium complex soap	-40 to +160				•	•				
TEMP120	Polycarbamide with EP additives	-35 to +180					•	•		•	
TEMP200	PTFE	-40 to +260		•			•				
SPEED2,6	Polycarbamide	-50 to +120			•		•			•	
VIB3	Lithium complex soap with EP additives	-30 to +150				•	•	•		•	
BIO2	Lithium/calcium soap	-30 to +150				•	•		•	•	•
FOOD2	Aluminium complex soap	-30 to +120				•	•		•	•	•





INTRODUCING...

NEW FAG BLACK SERIES

JIS STANDARD RADIAL INSERT BALL BEARINGS



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 new Black Series provides easy mounting, smooth running and high reliability for a long, economical operating life.

The dimensions of the FAG housings, made from flake graphite cast iron and with a 2-pack paint coating, conform to JIS B 1559. These single piece cast housings can support moderate to high radial and axial loads. Schaeffler's Durotect® B coating provides the radial insert ball bearings with basic protection against corrosion.

Applications include:

- Agricultural, construction and mining machinery
- Pumps
- Steel industry
- Power transmission and conveying
- Food and beverage processing, textile, paper, and woodworking machinery

Coatings

The Durotect® B coating not only gives our housing units their characteristic black colour, it also lends them a truly unique feature as standard: The formation of rust is inhibited, which in turn increases the reliability of the housing unit.

Protective Seals

The outer flinger shield and the RSR seal provide reliable protection against the ingress of contamination. Firmly staked in the outer ring, the seal makes relubrication easy.

PRODUCT FEATURES

- Japanese Industry Standard JIS B 1559 dimensions
- Radial insert ball bearings based on series 62.. deep groove ball bearings
- Easy to fit
- Quiet operation
- Energy-efficient
- Good basic protection against corrosion
- Reliable and sturdy
- Long operating life
- Long maintenance intervals
- Reduced operating costs

Schaeffler (UK) Ltd

Email: info.uk@schaeffler.com Web: www.schaeffler.co.uk

SCHAEFFLER





The expertise of a manufacturer, the scale of a leader

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

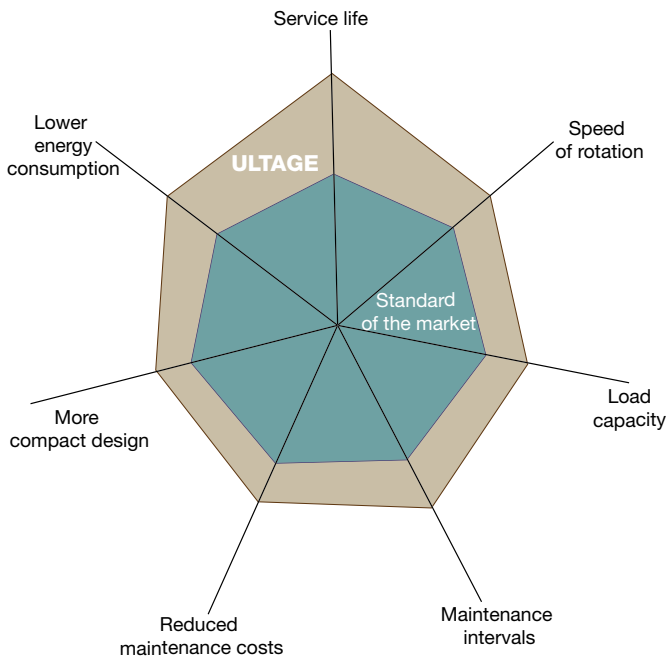
Part n°	Part n°	Part n°	Part n°
4T-47686/47620	4T-LM603049/LM603011	4T-25590/25520	4T-64450/64700
4T-47896/47820	4T-A6075/A6162	4T-25877/25821	4T-645/632
4T-LM48548/LM48510	4T-L610549/L610510	4T-27687/27620	4T-65237/65500
4T-495/493	4T-JM612949/JM612910	4T-2788/2720	4T-LM67048/LM67010
4T-495A/493	4T-623/612	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

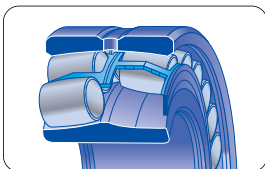


FROM 25 MM BORE UP TO 2180 MM EXTERNAL DIAMETER

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)

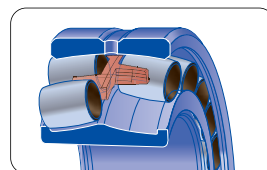
In two parts, centred on the inner ring



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

SPECIAL CAGE FOR «VIBRATION APPLICATIONS» (EF800)

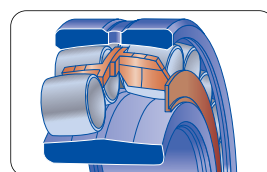
Single-piece cage with reduced bore, external diameter and radial clearance tolerances



- > Extremely accurate roller guides for longer service life.

POLYAMIDE CAGE (EG15)

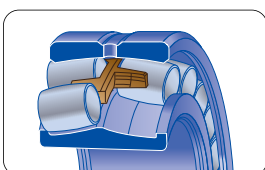
Two-part, centred on the inner ring.



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

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.



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





• Paliers auto-aligneurs en fonte grise • Grey cast iron self-aligning bearing units • Grauguss Gehäuselager
 • Soportes auto-alineantes en fundición gris • Supporti autoallineanti in ghisa • Mancais auto-alinháveis em ferro fundido cinzento



SNR	UCPE	USPE	UKPE..H	EXPE	ESPE
INA	RASEY	PASEY	-	RASE..N	PASE..N
SKF	SY..TF	-	SYJ..KF	SY..WF	SY..FM
RHP	NP	NP..A	NP10...K	NP..DEC	NP..EC
SNR	UCPLE	USPLE	UKPLE..H	EXPLE	ESPLE
RHP	SL	-	-	-	SL..EC
NTN	UCP..D1*	ASP	UKP..D1,H23..X*	UEL..D1W3**	AELP..D1
SNR	UCP**	USP	UKP..H**	EXP**	ESP
NSK	UCP	-	UKP..+H23..	EWP	ENP
ASAHI	UCP	-	UKP..+H23..	-	-
INA	RASEY - JIS	-	-	-	-
KOYO/TEKT	UCP	-	UKP	NAP..M	SAP..M
NTN	UCHP..D1	-	-	UELHP..D1W3	-
SNR	UCPH	USPH	UKPH..H	EXPH	ESPH
NSK	UCPH	-	UKPH..+H23..	-	-
ASAHI	UCPH	-	-	-	-
KOYO/TEKT	UCPH	-	-	-	-
SNR	UCPAE	USPAE	UKPAE..H	EXPAE	ESPAE
INA	RSHEY	PSHEY	-	RSHE..N	PSHE..N
SKF	SYF..TF	-	-	SYF..FM	-
RHP	SNP	SNP..A	-	SNP..DEC	SNP..EC
NTN	UCUP..D1	ASUP..	UKUP..D1,H23..X	UELUP..D1W3	AELUP..D1
SNR	UCPA/UCPG	USPA/USPG	UKPA..H/UKPG..H	EXPA/EXPG	ESPA/ESPG
NSK	UCPA	UBPA	-	EWPA	-
ASAHI	UCPA	-	-	-	-
KOYO/TEKT	UCPA	-	-	-	-
SNR	UCFE	USFE	UKFE..H	EXFE	ESFE
INA	RCJY	PCJY	-	RCJ..N	PCJ..N
SKF	FY..TF	-	FYJ..KF	FY..WF	FY..FM
RHP	SF	SF..A	MSF..K	SF..DEC	SF..EC
NTN	UCF..D1*	ASF..D1	UKF..D1,H23..X*	UEL..D1W3**	AELF..D1
SNR	UCF**	USF	UKF..H**	EXF**	ESF
NSK	UCF	-	UKF..H23..	EFW	-
ASAHI	UCF	-	UKF..H23..	-	-
INA	RCJY..-JIS	-	-	-	-
KOYO/TEKT	UCF	-	UKF	-	SAF..FM
NTN	UCFS..D1	-	UKFS..D1,H23..X	UELS..D1W3	-
SNR	UCFS	-	UKFS..H	EXFS	-
NSK	UCFS	-	UKFS..H23..	-	-
ASAHI	UCFS	-	-	-	-
KOYO/TEKT	UCFS	-	UKFS	-	-
SNR	UCFCE	USFCE	UKFCE..H	EXFCE	ESFCE
INA	RMEY	PMEY	-	RME	PME
RHP	FC	FC..A	-	FC..DEC	FC..EC
NTN	UCFC..D1***	ASFC..D1	UKFC..D1,H23..X***	UELFC..D1W3	AELFC..D1
SNR	UCFC	USFC	UKFC..H	EXFC	ESFC
SKF	FYC..TF	-	-	FYC..WF	FYC..FM
NSK	UCFC	-	UKFC..+ H23..	EWFC	-
ASAHI	UCFC	-	UKFC..+H	-	KHFC
KOYO/TEKT	UCFC	-	UKFC	-	-
SNR	-	USFEE	-	-	ESFEE
INA	-	-	-	RFE	-
SNR	-	USFTE	-	-	ESFTE
INA	-	-	-	-	PCFTR

SNR	UCFLE	USFLE	UKFLE..H	EXFLE	ESFLE
INA	RCJTY	PCJTY	-	RCJT..N	PCJT..N
SKF	FYTB..TF	-	FYTJ..KF	FYTB..WF	FYTB..FM
RHP	SFT	SFT..A	MSFT..K	SFT..DEC	SFT..EC
NTN	UCFL..D1*	ASFL..D1	UKFL..D1,H23..X*	UEL..D1W3**	AELF..D1
SNR	UCFL**	USFL	UKFL..H**	EXFL**	ESFL
NSK	UCFL	UBFL	UKFL..+ H23..	EWFL	-
INA	RCJTY..-JIS	-	-	-	-
ASAHI	UCFL	BFL	UKFL..+H	-	KHFL
KOYO/TEKT	UCFL	-	UKFL	-	SAFL..FM
SNR	UCFLZ	USFLZ	UKFLZ..H	EXFLZ	ESFLZ
INA	-	-	-	RCJTZ	-
NTN	-	ASFD..D1	-	-	AELFD..D1
SNR	-	USFD	-	-	ESFD
INA	-	FLCTEY	-	-	GLCTE
NSK	-	UBFD	-	-	ENFD
ASAHI	-	BLCTE	-	-	ENFD
RHP	-	LFTC..A	-	-	LFTC..EC
SNR	-	USFAE	-	-	ESFAE
INA	-	-	-	-	PSFT
NTN	UCFA..D1	-	UKFA..H23..X	-	AELFA..D1
SNR	UCFA	USFA	UKFA..H	EXFA	ESFA
NSK	UCFA	-	-	-	-
ASAHI	UCFA	-	-	-	-
KOYO/TEKT	UCFA	-	-	-	-
NTN	UCT..D1*	AST..D1	UKT..D1,H23..X*	UEL..D1W3**	AELT..D1
SNR	UCT**	UST	UKT..H**	EXT**	EST
INA	RTUEY	PTUEY	-	RTUE	PTUE
SKF	TUJ..TF	-	-	-	TU..FM
RHP	ST	ST..A	MST..K	ST..DEC	ST..EC
NSK	UCT	-	UKT..+ H23..	EWLT	-
ASAHI	UCT	-	UKT..+H	-	KHT
KOYO/TEKT	UCT	-	UKT	-	-
NTN	UCT+ WB	UST+ WB	UKT..H+WB	EXT+WB	EST+ WB
NSK	UCT..+ WB	-	-	-	-
ASAHI	UCT..+ WB	-	-	-	-
NTN	-	ASPT2...10	-	-	AELPT2...10
SNR	UCSP	USSP	UKSP..H	EXSP	ESSP
RHP	BT	BT..A	-	-	BT..EC
SNR	SPR 1	SPR 11 & 21	SPR 12 & 22	SPR 14 & 24	-
INA	-	HUSE..	-	-	-
RHP	BT	-	-	-	-
NTN	UCHB..D1	-	-	-	-
SNR	UCEHE	USEHE	UKEHE..H	EXEHE	ESEHE
RHP	SCH	-	-	-	-
INA	-	PHEY	-	RHE	PHE
NSK	UCEH	-	-	-	-
ASAHI	UCECH	-	-	-	-
NTN	UCC..D1	ASC..	UKC..D1,H23..X*	UEL..D1W3**	AELC..D1
SNR	UCC	USC	UKC..H**	EXC**	ESC
NSK	UCC	-	UKC..+ H23..	-	-
ASAHI	UCC	-	-	-	-
KOYO/TEKT	UCC	-	UKC	-	-

*: Egalement disponible en Série 300 et X (taille moyenne) / **: Egalement disponible en Série 300 / ***: Egalement disponible en Série X (taille moyenne)
 *: Also available in 300 and X-Series (medium size) / **: Also available in 300-Series / ***: Also available in X-Series (medium size)

(1) Pour SP, 4 versions de boîtier disponibles / For SP, 4 available boxes / Für SP, 4 verschiedene Einbaurahmen erhältlich / Para SP, 4 versiones de envoltentes disponibles / Per prodotti speciali, 4 versioni di corpi disponibili / Para SP, 4 versões de embalagens disponíveis

• Roulements spécifiques: alésage carré, cylindrique et hexagonal / Special bearings: square, cylindrical and hexagonal bore



NTN	1AS... (1)	3AS... (1)
NBCA	DC..	DS..
NSK-BSC	W2..PPB../GW2..PPB..	W2..PPB../GW2..PPB..
INA	GVK...KT-B / VK...KT-B (AH..)	-
Fafnir	W2..PPB../GW2..PPB..	W2..PPB../GW2..PPB..



NTN	1AH... (1)	2AH... (1)
NBCA	HPC	HPS
NSK-BSC	..KRR..	..KRRB..
INA	-	SK...KRR-B
Fafnir	..KRR..	..KRRB..



NTN	1AC... (1)	3AC... (1)
NBCA	DC2..	DS2..
NSK-BSC	W2..PPB../GW2..PPB..	W2..PPB../GW2..PPB..
Fafnir	W2..PPB../GW2..PPB..	W2..PPB../GW2..PPB..

(1) Autres designs sur demande / Other designs on request

• Roulement insert avec bague extérieure cylindrique / Bearing insert with cylindrical outer ring



NTN	UCS2..D1**	UCS2..D1N	UELS2..D1**	UELS2..D1N	AELS2..NW3	AELS2..D1NW3	ASS2..N	ASS2..D1N
SNR	-	CUC2..	-	CEX2..	CES2..	-	CUS2..	-
NSK-RHP	-	UR2..	ENR2..	-	13...EC	13...ECG	13...-	-
RHP	11...-	11...CG	11...DEC	-	-	-	-	-
KOYO/TEKT	RB..	ER..	-	-	-	-	-	-
ASAHI	-	SER2..	-	-	KHR2..	-	-	-
INA	-	-	E..KRR	-	-	-	-	-

** également disponible en Série 300 / also available in 300-Series

• Temperature



NTN	..HT2	..CT1
SNR	..T20	..T04
INA	..FA164.1	..FA101T
SKF	..VA201	..VA201T
ASAHI	..HR 5	..CR 2A
RHP	-	..T1
NSK	..HT2	..CT1

• Etanchéités / Seals



NTN	..LLJ	-
SNR	..L3	..L4
INA	..KPP(B)-3	-
SKF	-	..2RF
ASAHI	-	-
RHP	T...-	-
NSK	..LLJ	-
KOYO/TEKT	..L3	-

• 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	-

• Paliers auto-aligneurs thermoplastique • Thermoplastic self-aligning bearing units • Thermoplastik Gehäuselager • Soportes autoalineaes termoplásticos • Supporti autoallineanti termoplastici • Mancais auto-alinháveis termoplásticos

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	-

*: 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	UBPF	ENPF
ASAHI	PBF	KHPF
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	CM- ouvert/open	SDO../SCDE.. ouvert/open	C	C	-	-	-
Couvercle tôle / Protector cover (sheet metal)	-	PCCO..	-	-	.P	KASK	ECY..
Couvercle thermoplastique / Thermoplastic cover	-	PCO..	-	-	-	-	ECLL..
	-	CV..	-	-	-	-	ECYB..

Couvercles à utiliser pour palier en : / Covers suitable for units from:
A : fonte - inox / cast iron - stainless steel 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.

LINEAR GUIDANCE

Complete systems (shafts, systems)



- Modular design system (connection possibilities for AXC, AXDL, AXS, AXLT)
- Drive adaptations
- Power and cable tracks, gantry support legs
- Ready for installation as an integrated package

Ball rail systems



- Size: 15 to 55
- Conventional design with patented ball cage technology
- Wide range of bearing carriage styles
- Dimensions in accordance with DIN/ISO
- Miniature types. Sizes 9 to 15, available in small and wide rail versions

Ball screws



- Ground and rolled types (T7 available from stock)
- Diameter 6-80 mm, lead 1-50 mm (rolled type accuracy T7)
- Wide range of nuts (DIN/ISO, cylindrical, screw nut, with big lead)

Bearing units for ball screws



- Fixed bearing unit
- Floating bearing unit

Linear bushings



- Ball bushings
- Ball sleeve
- Top ball
- Linear Sets with ball bushings and top balls
- Shaft support rails, shaft support blocks, solid and hollow shafts



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



Christophe Quarry Operator

Need reliability and performance in your applications?

«In our business, daily production is measured in thousands of tonnes. The installations are large and are subjected to harsh treatment. As a quarry operator, my objectives are clear: to increase the active working time and improve the performance of my machines, whilst also reducing maintenance costs and improving productivity. Crushers, screens and conveyors... bearings play a key role in keeping machinery running smoothly from a mechanical point of view. Choosing NTN-SNR guarantees maximum productivity.»

NTN-SNR presents ULTAGE spherical roller bearings, the result of the latest technological breakthroughs. With the special EF800 series for screens and crushers, peace of mind is assured.



ULTAGE

NTN® **SNR**®



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

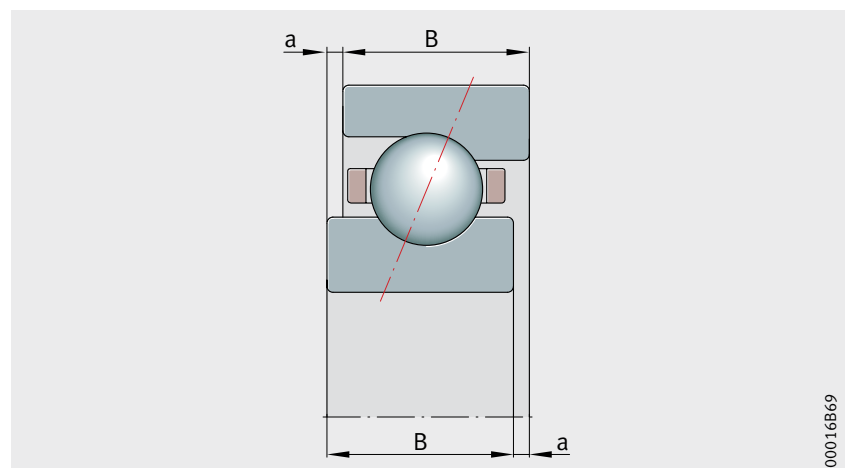


Spindle bearings

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).

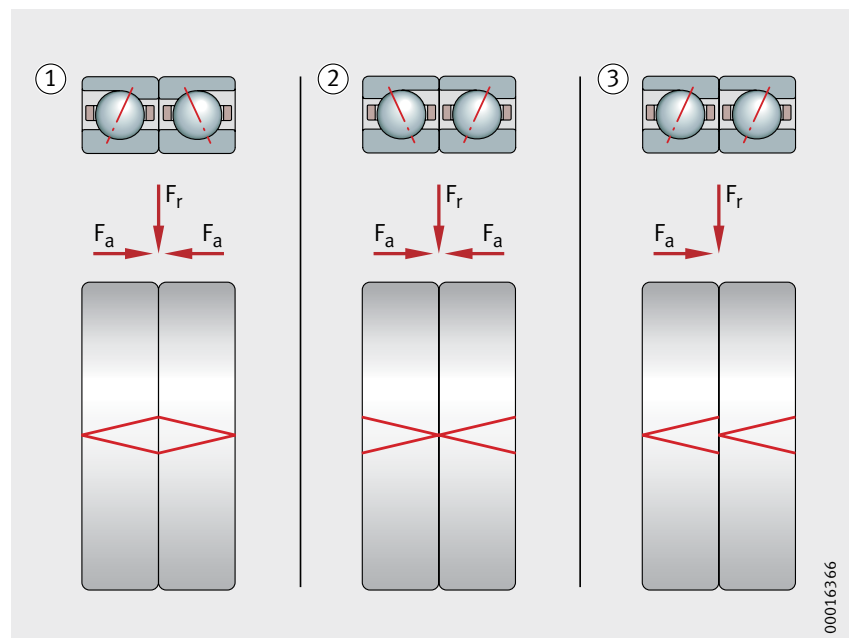
A “U” stands for “Universal”, for example in DU. After these letters, the preload class is then indicated, for example “L” for light preload, in this case DUL.

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

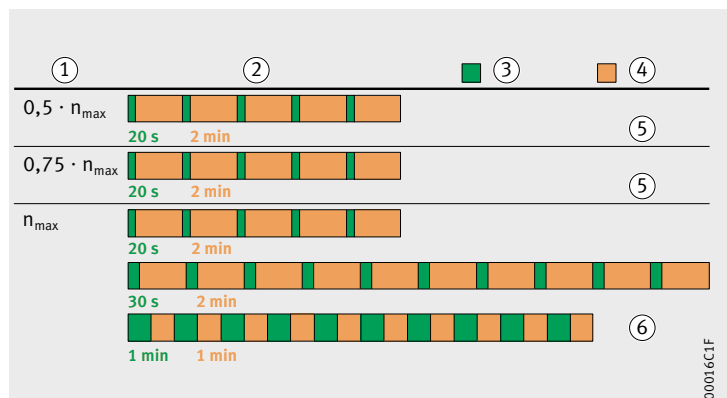


Figure 4
Grease distribution cycle for open and sealed spindle bearings

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.

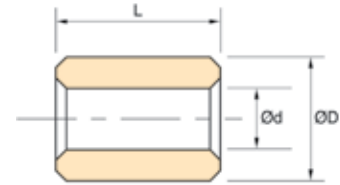


oilite® BEARINGS

PLAIN
BEARINGS

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.

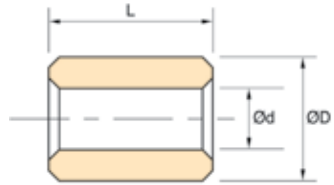
4 ID x 7 OD x 4 long = AM040704 or 12 ID x 15 OD x 25 long = AM121525.

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

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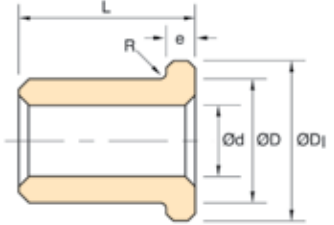
Non-standard lengths can be supplied. If the size you require is not listed please contact our sales dept. We also offer a specialised machining service for low volume non-standard sizes and tolerances.

oilite® BEARINGS

PLAIN
BEARINGS

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.

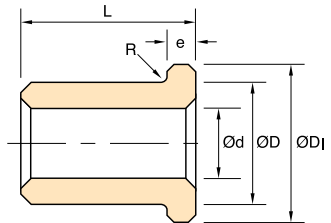
oilite® BEARINGS

PLAIN BEARINGS

Inch flanged bearings

Part Code	Inner Diameter Ød			Outer Diameter ØD			ØD1	e	Basic L					
	Basic	Min.	Max.	Basic	Min.	Max.			1/16	1/8	3/16	1/2		
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	5/8	0.6275	0.6285	3/4	0.7525	0.7535	1.1250	0.094	1/2	1	1 1/8			
AJ 1014	5/8	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 1/4	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 3/2	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	1/2	0.122	0.1280
AW 091801	5/8	0.5312	0.5412	1 1/8	1.1200	1.1250	5/16	0.059	0.0655
AW 112002	7/8	0.6562	0.6662	1 1/4	1.2450	1.2500	3/16	0.090	0.0968
AW 132402	1	0.7812	0.7912	1 1/2	1.4950	1.5000	1/8	0.122	0.1280
AW 142402	1 1/8	0.8750	0.8800	1 3/4	1.4950	1.5000	1/8	0.122	0.1280
AW 143002	1 1/8	0.8780	0.8830	1 7/8	1.8660	1.8710	1/8	0.122	0.1280
AW 162802	1 1/4	1.0100	1.0150	1 3/4	1.7710	1.7810	1/8	0.122	0.1280
AW 163202	1 1/2	1.0320	1.0420	2	1.9950	2.0000	1/8	0.120	0.1300
AW 203002	1 3/8	1.2490	1.2540	1 3/4	1.8750	1.8800	1/8	0.120	0.1300
AW 204802	1 1/2	1.2490	1.2540	3	2.9980	3.0030	1/8	0.120	0.1300
AW 204804	1 1/2	1.2490	1.2540	3	2.9980	3.0030	1/4	0.245	0.2550
AW 234002	1 3/4	1.4062	1.4162	2 1/2	2.4950	2.5000	5/16	0.151	0.1613
AW 263802	1 3/4	1.6240	1.6260	2 3/4	2.3740	2.3790	1/8	0.120	0.1300
AW 365602	2 1/4	2.2480	2.2520	3 1/2	3.4980	3.5030	1/8	0.120	0.1300

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.

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.





and W/MLF Self Lubricated Bearings



(Dimensions and tolerances to ISO 3547)

Stock range includes

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



Externally Lubricated Bearings



(Dimensions and tolerances to ISO 3547)

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.





Wrapped Metric Plain Bearings. PTFE U Type

Reference	I.D. (mm)	O.D. (mm)	Recommended Tolerances						Standard Length Options (L)							
			Housing			Shaft			Bore		Tolerance +/- 0.25 mm					
TFP03 x L	3	4.5	H6	0	+0.006	h6	0	-0.008	3.000	3.048	3	4	5	6		
TFP04 x L	4	5.5	H6	0	+0.008	h6	0	-0.008	4.000	4.048	3	4	6	10		
TFP05 x L	5	7	H7	0	+0.015	f7	-0.010	-0.022	4.990	5.055	5	8	10			
TFP06 x L	6	8	H7	0	+0.015	f7	-0.010	-0.022	5.990	6.055	6	8	10			
TFP07 x L	7	9	H7	0	+0.015	f7	-0.013	-0.028	6.990	7.055	10					
TFP08 x L	8	10	H7	0	+0.015	f7	-0.013	-0.028	7.990	8.055	8	12				
TFP10 x L	10	12	H7	0	+0.018	f7	-0.013	-0.028	9.990	10.058	8	10	12	15	20	
TFP12 x L	12	14	H7	0	+0.018	f7	-0.016	-0.034	11.990	12.058	12	15	20	25		
TFP13 x L	13	15	H7	0	+0.018	f7	-0.016	-0.034	12.990	13.058	10	20				
TFP14 x L	14	16	H7	0	+0.018	f7	-0.016	-0.034	13.990	14.058	10	12	15	20	25	
TFP15 x L	15	17	H7	0	+0.018	f7	-0.016	-0.034	14.990	15.058	10	12	15	20	20	25
TFP16 x L	16	18	H7	0	+0.018	f7	-0.016	-0.034	15.990	16.058	10	12	15	20	25	
TFP17 x L	17	19	H7	0	+0.018	f7	-0.016	-0.034	16.990	17.061	15	20				
TFP18 x L	18	20	H7	0	+0.018	f7	-0.016	-0.034	17.990	18.061	15	20	25			
TFP20 x L	20	22	H7	0	+0.021	f7	-0.025	-0.046	19.990	20.061	10					
TFP20 x L	20	23	H7	0	+0.021	f7	-0.025	-0.046	19.990	20.071	10	15	20	25	30	
TFP22 x L	22	25	H7	0	+0.021	f7	-0.025	-0.046	21.990	22.071	15	20	25	30		
TFP24 x L	24	27	H7	0	+0.021	f7	-0.025	-0.046	23.990	24.071	20	25	30			
TFP25 x L	25	28	H7	0	+0.021	f7	-0.025	-0.046	24.990	25.071	12	15	20	25	30	50
TFP28 x L	28	32	H7	0	+0.025	f7	-0.025	-0.050	27.990	28.085	20	25	30			
TFP30 x L	30	34	H7	0	+0.025	f7	-0.025	-0.050	29.990	30.085	15	20	25	30	40	
TFP32 x L	32	36	H7	0	+0.025	f7	-0.025	-0.050	31.990	32.085	20	30	40			
TFP35 x L	35	39	H7	0	+0.025	f7	-0.025	-0.050	34.990	35.085	20	30	35	40	50	
TFP36 x L	36	40	H7	0	+0.025	f7	-0.025	-0.050	35.990	36.085	15	35				
TFP40 x L	40	44	H7	0	+0.025	f7	-0.025	-0.050	39.990	40.085	20	30	40	50		
TFP45 x L	45	50	H7	0	+0.025	f7	-0.025	-0.050	44.990	45.105	20	30	40	45	50	
TFP50 x L	50	55	H7	0	+0.030	f7	-0.025	-0.050	49.990	50.110	20	30	40	50	60	
TFP55 x L	55	60	H7	0	+0.030	f7	-0.030	-0.060	54.990	55.110	20	25	30	40	50	60
TFP60 x L	60	65	H7	0	+0.030	f7	-0.030	-0.060	59.990	60.110	20	30	40	60	70	
TFP65 x L	65	70	H7	0	+0.030	f7	-0.030	-0.060	64.990	65.110	30	50	60	70		
TFP70 x L	70	75	H7	0	+0.030	f7	-0.030	-0.060	69.990	70.110	70					
TFP75 x L	75	80	H7	0	+0.030	f7	-0.030	-0.060	74.990	75.110	40	50	60	80		
TFP80 x L	80	85	H7	0	+0.035	h8	-0.030	-0.060	80.020	80.155	60	100				
TFP85 x L	85	90	H7	0	+0.035	h8	-0.036	-0.071	85.020	85.155	60	100				
TFP90 x L	90	95	H7	0	+0.035	h8	-0.036	-0.071	90.020	90.155	60	100				
TFP95 x L	95	100	H7	0	+0.035	h8	-0.036	-0.071	95.020	95.155	60	100				
TFP100 x L	100	105	H7	0	+0.035	h8	-0.036	-0.071	100.020	100.155	60	70	80	115		
TFP105 x L	105	110	H7	0	+0.035	h8	-0.036	-0.071	105.020	105.155	60	115				
TFP110 x L	110	115	H7	0	+0.035	h8	-0.036	-0.071	110.020	110.155	60	115				
TFP115 x L	115	120	H7	0	+0.035	h8	-0.036	-0.071	115.020	115.155	50	60	70			
TFP120 x L	120	125	H7	0	+0.040	h8	-0.036	-0.071	120.070	120.210	60	100				
TFP125 x L	125	130	H7	0	+0.040	h8	-0.043	-0.083	125.070	125.210	60	100				
TFP130 x L	130	135	H7	0	+0.040	h8	-0.043	-0.083	130.070	130.210	60	100				
TFP135 x L	135	140	H7	0	+0.040	h8	-0.043	-0.083	135.070	135.210	60	100				
TFP140 x L	140	145	H7	0	+0.040	h8	-0.043	-0.083	140.070	140.210	60	100				
TFP145 x L	145	150	H7	0	+0.040	h8	-0.043	-0.083	145.070	145.210	60	100				
TFP150 x L	150	155	H7	0	+0.040	h8	-0.043	-0.083	150.070	150.210	100					
TFP155 x L	155	160	H7	0	+0.040	h8	-0.043	-0.083	155.070	155.210	60	100				
TFP160 x L	160	165	H7	0	+0.040	h8	-0.043	-0.083	160.070	160.210	60	100				
TFP165 x L	165	170	H7	0	+0.040	h8	-0.043	-0.083	165.070	165.210	60	100				
TFP170 x L	170	175	H7	0	+0.040	h8	-0.043	-0.083	170.070	170.210	60	100				
TFP175 x L	175	180	H7	0	+0.040	h8	-0.043	-0.083	175.070	175.210	60	100				
TFP180 x L	180	185	H7	0	+0.046	h8	-0.043	-0.083	180.070	180.216	60	100				
TFP200 x L	200	205	H7	0	+0.046	h8	-0.050	-0.096	200.070	200.216	100					
TFP220 x L	220	225	H7	0	+0.046	h8	-0.050	-0.096	220.070	220.216	60	100				
TFP250 x L	250	255	H7	0	+0.052	h8	-0.050	-0.096	250.070	250.222	60	100				
TFP280 x L	280	285	H7	0	+0.052	h8	-0.056	-0.108	280.070	280.222	60	100				
TFP300 x L	300	305	H7	0	+0.052	h8	-0.056	-0.108	300.070	300.222	60	100				

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Wrapped Metric Flanged Bearings. PTFE U Type

Reference	I.D. (mm)	O.D. (mm)	Recommended Tolerances			Bearing Size when fitted		Flange		Standard Length Options (L)				
			Housing		Shaft	Bore		Diameter		Tolerance +/- 0.25mm				
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.



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



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.



Washers. Metric. PTFE U Type

Reference	I.D. (mm)	O.D. (mm)	Washer Sizes						Dowell hole		Dowell hole	
			Bore		O.D.		Thickness		Diameter		PCD	
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.





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	5/8	3/4	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			

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.



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.



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		

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.





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	3/8	3/4	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 9/32	1.2822	1.2812	1.1138	1.1126	1.1202	1.1164	1/4	3/4	1		
TFPI20TX x L	1 1/4	1 13/32	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 29/32	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	1 15/16	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 1/16	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.



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.



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.



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.



LRQ 0960929

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.

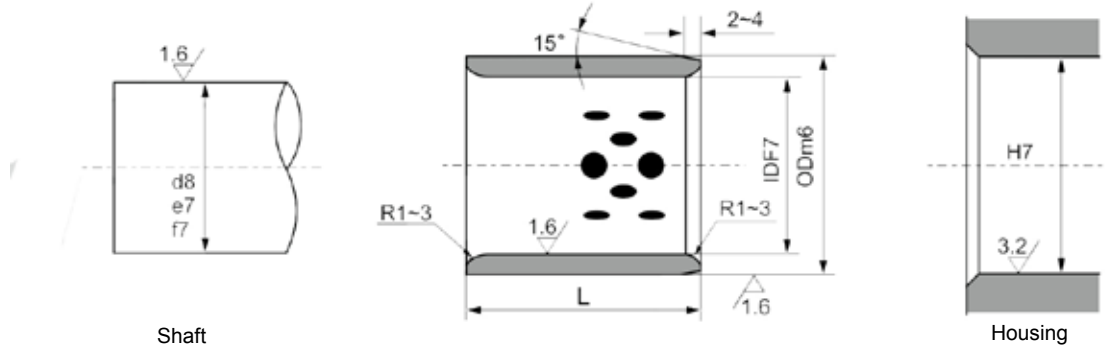




LRQ 0960929

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	

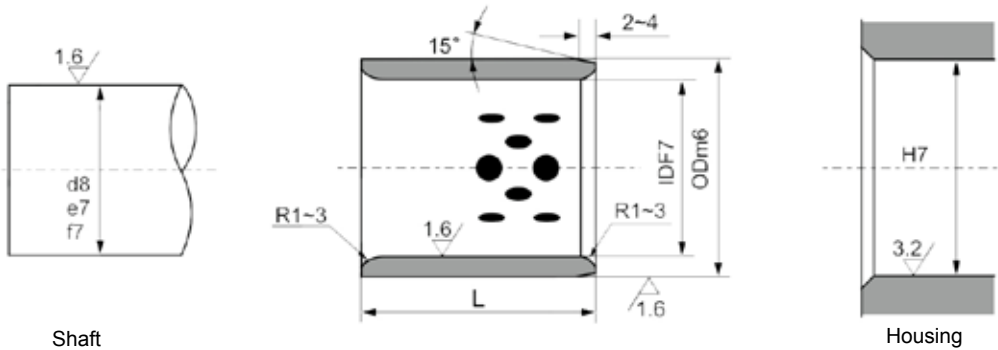
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LRQ 0960929

Metric Plain cast bronze bearings with solid graphite lubrication



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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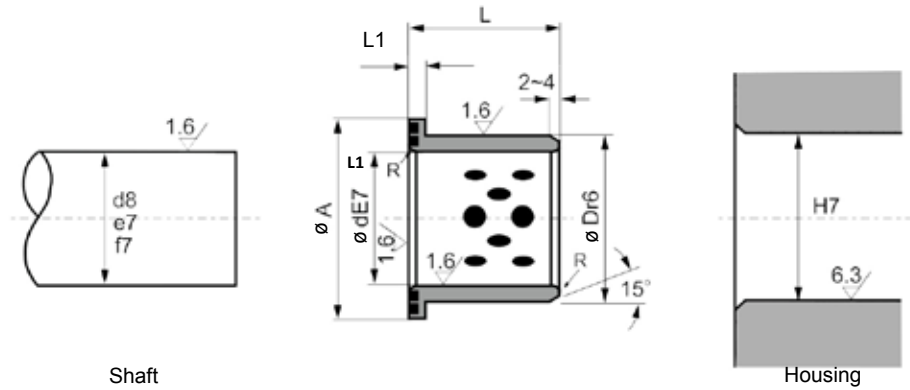
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LRQ 0960929

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		

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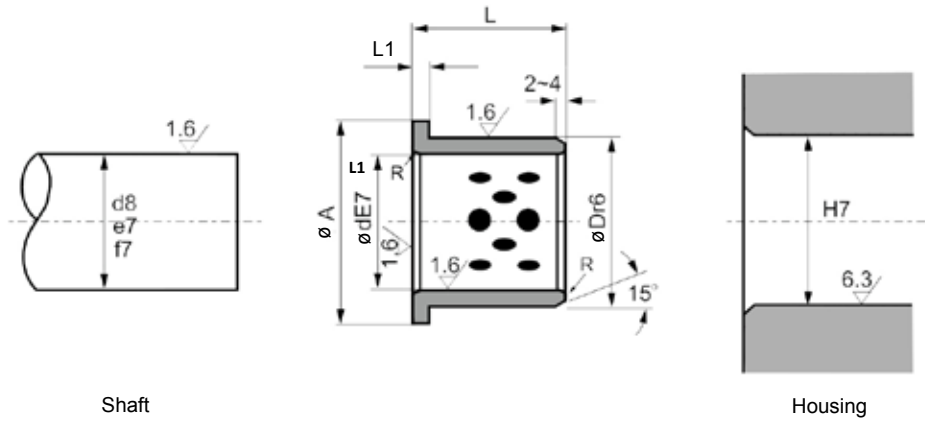
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Metric Flanged cast bronze with solid graphite lubrication



LRQ 0960929



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

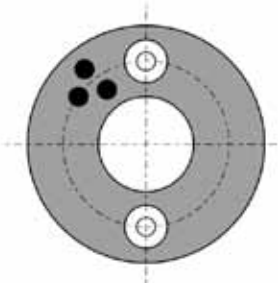
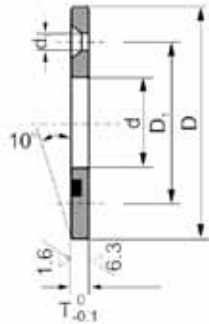
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LRQ 0960929

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

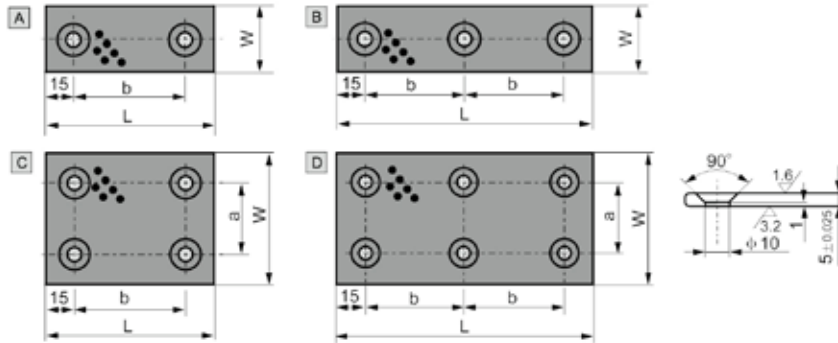
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LRQ 0960929

Cast bronze wear strips with solid graphite lubrication



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

LINKAGES CATALOGUE AVAILABLE!

- Rod Ends, Spherical Bearings, Ball Joints, Clevises and Motion Transfer Linkages
- UK Manufactured to International standards & tolerances
- Stainless Steel & 68 corrosion protection options available
- Extreme Temperature range -200°C to + 260°C
- Metric and Imperial bore and thread sizes



ROD ENDS



SPHERICAL BEARINGS



BALL JOINTS



CLEVISES



LINKAGES

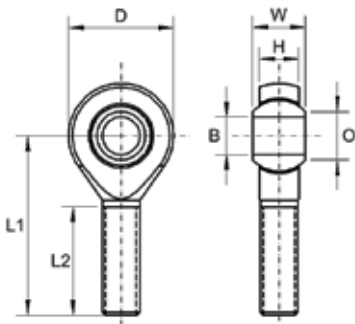


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MALE ROD ENDS



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 and inner ring: 230M07PB steel zinc plated white and blue passivate (silver/clear) and stainless steel 303L. 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: Temperature Range:

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

-200°C to + 260°C

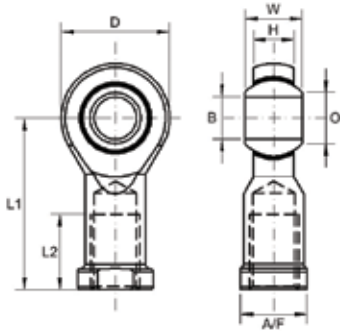
Specification:

ELV & RoHS compliant

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-MAX	16	M16X2.00	21	15.00	42	66	40	19.30	32,100



FEMALE ROD ENDS



FS SERIES: FS - FSS - FS 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 and inner ring: 230M07PB steel zinc plated white and blue passivate (silver/clear) and stainless steel 303L. 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

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	M8x0.70	8	6.00	18	27	10	7.70	9	4300
FS-M06-5	FSL-M06-5	5	M6X1.00	9	6.75	20	30	12	8.90	11	6000
FS-M06	FSL-M06	6	M6X1.00	9	6.75	20	30	12	8.90	11	6000
FS-M08-6	FSL-M08-6	6	M8X1.25	12	9.00	24	36	16	10.40	13	11,100
FS-M08-6C	FSL-M08-6C	6	M8X1.00	12	9.00	24	36	16	10.40	13	11,100
FS-M08	FSL-M08	8	M8X1.25	12	9.00	24	36	16	10.40	13	11,100
FS-M08-C	FSL-M08-C	8	M8X1.00	12	9.00	24	36	16	10.40	13	11,100
FS-M10-8	FSL-M10-8	8	M10X1.50	14	10.50	28	43	20	12.90	17	17,500
FS-M10-8C	FSL-M10-8C	8	M10X1.25	14	10.50	28	43	20	12.90	17	17,500
FS-M10	FSL-M10	10	M10X1.50	14	10.50	28	43	20	12.90	17	17,500
FS-M10-C	FSL-M10-C	10	M10X1.25	14	10.50	28	43	20	12.90	17	17,500
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-M12-C	FSL-M12-C	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-M14-C	FSL-M14-C	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



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 230M07PB, zinc plated white and blue passivate (silver/clear).
Ball: Bearing steel 100Cr6, case hardened and electroless 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

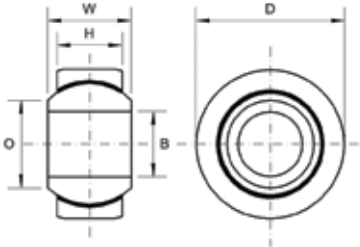
Temperature Range

-200°C to +260°C

Specification

ELV & RoHS compliant

GXSW SERIES: MAINTENANCE FREE SPHERICAL BEARING (METRIC)



Outer Ring: Steel 230M07PB, zinc plated white and blue passivate (silver/clear).

Ball: Bearing steel 100Cr6, case hardened and electroless 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°	10,000
GXSW-M06	6	9	6.75	15	1x15°	24,000
GXSW-M08	8	12	9	18	1.2x15°	41,200
GXSW-M10	10	14	10.5	21	1.2x15°	58,900
GXSW-M12	12	16	12	24.5	1.2x15°	79,000
GXSW-M14	14	19	13.5	28	1.5x15°	100,100
GXSW-M16	16	21	15	31.5	1.5x15°	124,600
GXSW-M18	18	23	16.5	34.5	1.5x15°	152,500
GXSW-M20	20	25	18	38	1.5x15°	183,400
GXSW-M22	22	28	20	41	1.5x15°	226,700
GXSW-M25	25	31	22	46	1.5x15°	275,700

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°	24,000
GXSW-05	5/16	0.437	0.344	0.7500	0.047x15°	41,200
GXSW-06	3/8	0.500	0.406	0.8437	0.047x15°	58,900
GXSW-07	7/16	0.562	0.437	1.000	0.047x15°	68,950
GXSW-08	1/2	0.625	0.500	1.0937	0.059x15°	79,000
GXSW-10	5/8	0.750	0.562	1.3125	0.059x15°	124,600
GXSW-12	3/4	0.875	0.687	1.500	0.059x15°	183,400



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 case hardened zinc plated white and blue passivate (silver/clear). 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

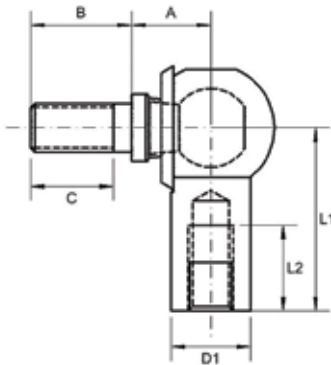
-30°C to +120°C

Specification

ELV & RoHS compliant



BL SERIES: DIE CAST BALL JOINTS (METRIC)



Body: Die cast zinc alloy.

Ball: 100CR6 bearing steel.

Ball Stud: S35C, case hardened zinc plated white and blue passivate (silver/clear).

Seal: Neoprene.

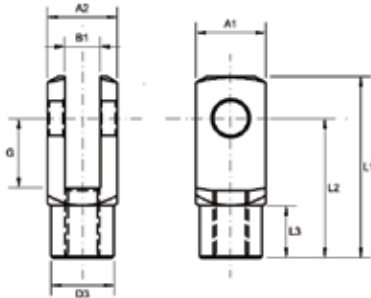
Specification: ELV and RoHS compliant.



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



CLEVIS JOINTS



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 passivate (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

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

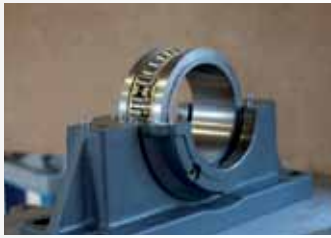
COOPER[®]

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)

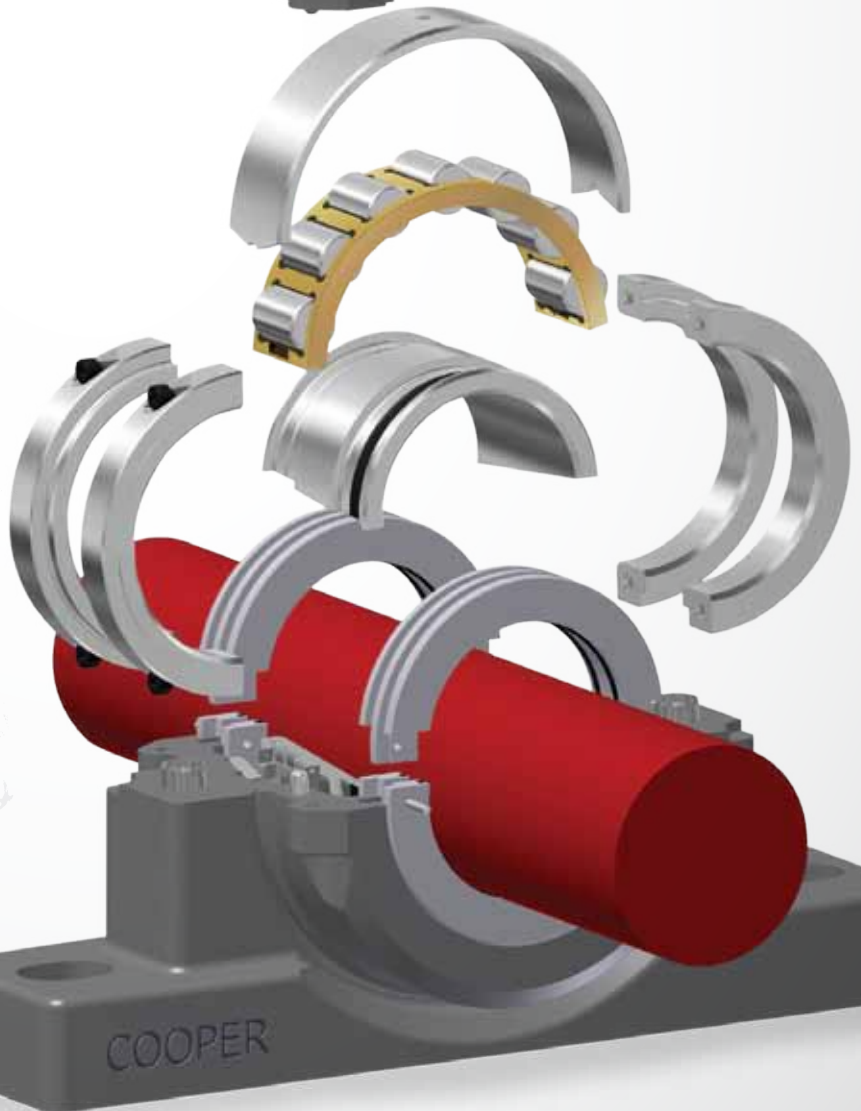


HIGHEST CAPACITY

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







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 40 YEARS BY OFFERING ONLY THE HIGHEST QUALITY PRODUCTS WHICH ARE SUPPORTED BY A FULL RANGE OF SERVICES.

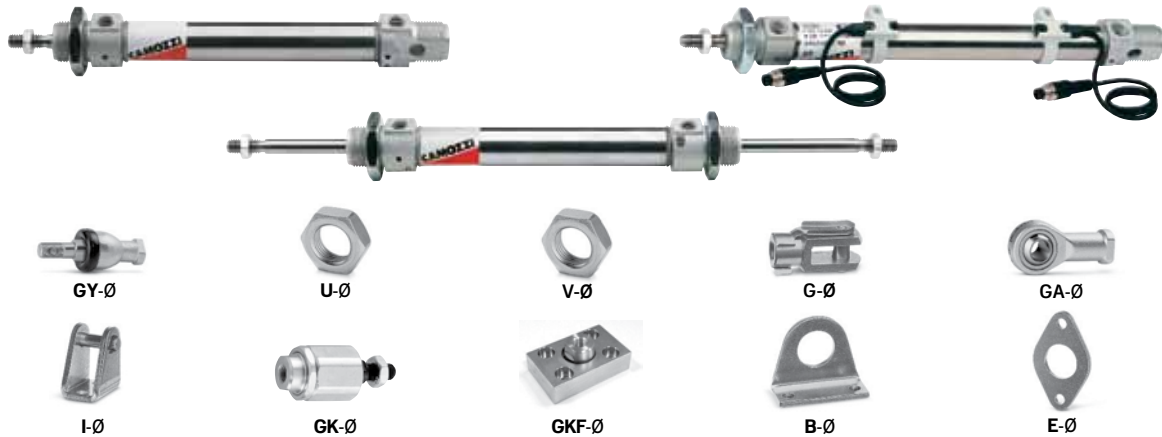
www.camozzi.co.uk



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



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POWER

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

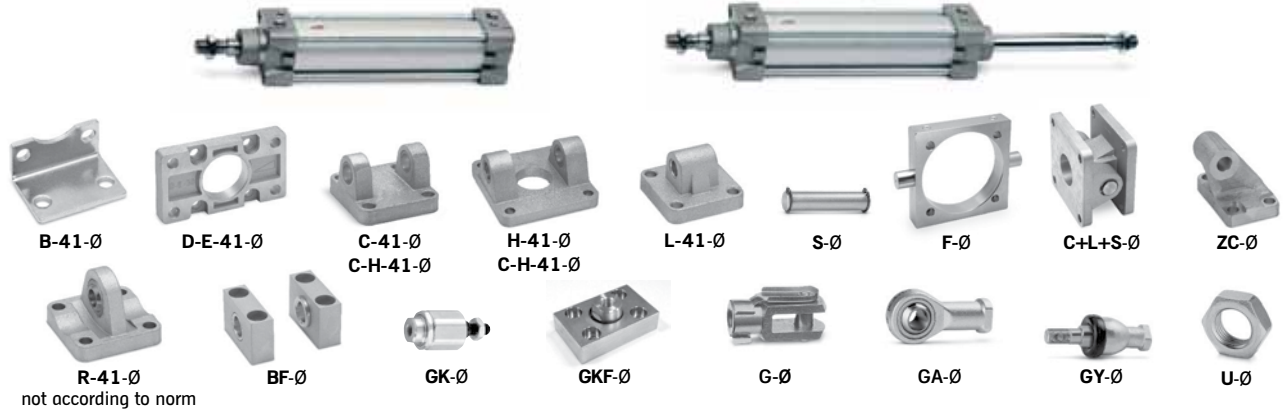
standard strokes		10	25	40	50	80	100	125	160	200	250	300	320	400	500
series	\varnothing														
16	8	■*	■*	■*	■*	■	■	■	■	■					
16	10	■*	■*	■*	■*	■	■	■	■	■					
16	12	■*	■*	■*	■*	■	■	■	■	■	■	■			
24	16	■*	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
24	20	■*	■*	■*	■*	■	■	■	■	■	■	■	■	■	■
24	25	■*	■*	■*	■*	■	■	■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





Series 60 Cylinders

Single and double-acting, magnetic, cushioned Standard and low friction versions
 ø 32 - 40 - 50 - 63 - 80 - 100 - 125 (ISO 15552)



FLUID
POWER

CODING EXAMPLE

60 M2L 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

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

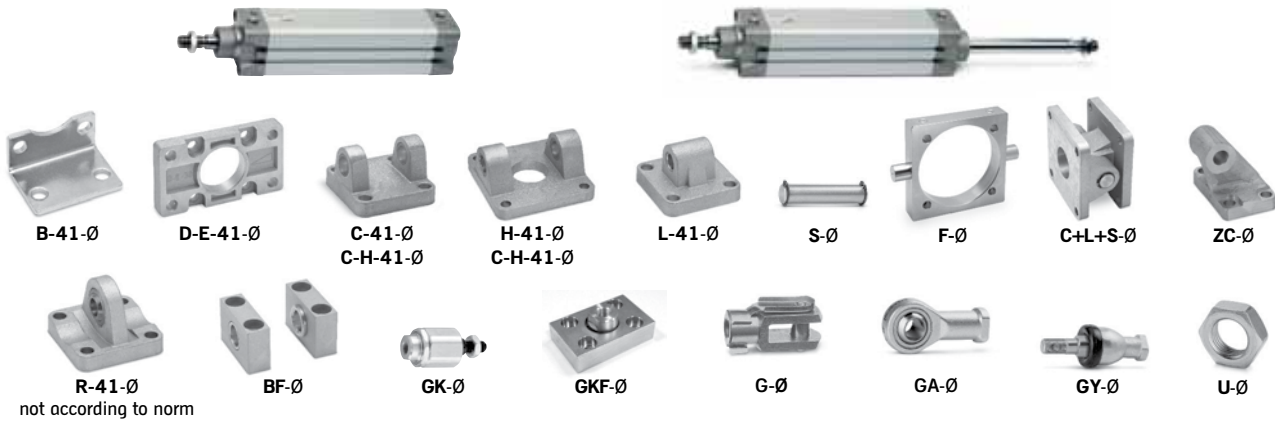
standard strokes	ø	25	50	75	100	125	150	160	200	250	300	320	400	500
32	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
40	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
50	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
63	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
80	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*	■*
100		■*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

Series 61 Cylinders - Aluminium Profile

Single and double-acting, magnetic, cushioned Standard and low friction versions
 ø 32 - 40 - 50 - 63 - 80 - 100 - 125 (ISO 15552)



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POWER



not according to norm

CODING EXAMPLE

61 M2 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 **W** = all FKM seals + 130 C°
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 61

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

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

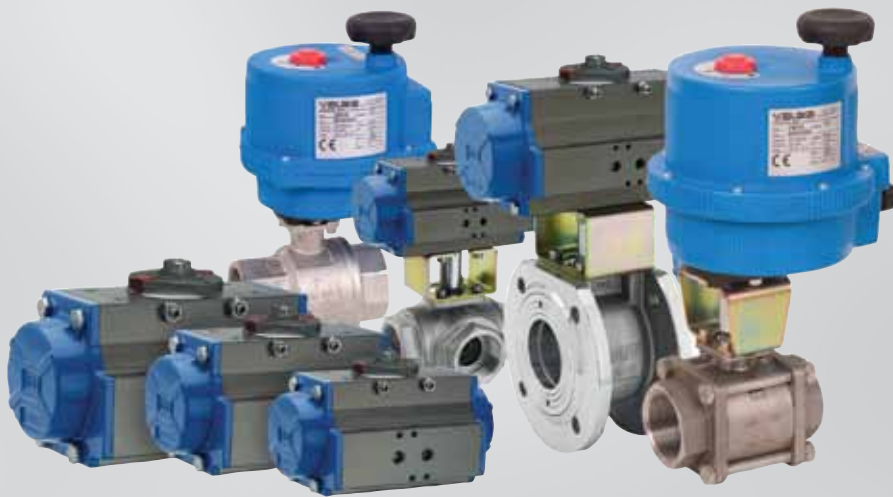


Standard and
Non-Standard Strokes

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 Coils sold separately. Full range available.

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  <p>438-015-22</p>	  <p>438-011-22</p>	  <p>458-015-22</p>	  <p>458-011-22</p>
  <p>434-015-22</p>	  <p>434-011-22</p>	  <p>454-015-22</p>	  <p>454-011-22</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



Mechanical and Manual Valves



Flow Control Valves



Automatic Valves



Series MX Filter-Regulators

MX2 Connections: 3/8, 1/2, 3/4 - MX3 Connections: 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)

FLUID
POWER



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

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

FLUID
POWER



CODING EXAMPLE

MX2 - 3/8 - F00

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

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



CODING EXAMPLE

MX2 - 3/4 - R004

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

MX2 - 3/8 - L00

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 N Filters and Coalescing Filters

Connections: 1/8 and 1/4
With screw-on transparent bowl



CODING EXAMPLE

N204 - F00

N	» SERIES
2	» SIZE 1 = small bowl 2 = standard bowl
04	» CONNECTION 08 = 1/8 04 = 1/4
F	» FILTER
0	» FILTERING ELEMENT 0 = 25 µm (standard) 1 = 5 µm B = 0.01 µm
0	» DRAINING OF CONDENSATE* 0 = manual - semiautomatic drain 4 = depressurisation only standard bowl (2) 5 = depressurisation, protected only standard bowl (2) 8 = no drain, connection 1/8

Series N Pressure Regulators

Connection: 1/8 and 1/4



CODING EXAMPLE

N1204 - R00

N	» SERIES
12	» SIZE
04	» CONNECTION 08 = 1/8 04 = 1/4
R	» REGULATOR
0	» OPERATING PRESSURE 0 = 0.5 - 10 bar (standard) 1 = 0 - 4 bar 2 = 0 - 2 bar (1/4 only) 7 = 0.5 - 7 bar (1/4 only)
0	» DESIGN TYPE 0 = self-relieving 1 = non-relieving

Series N Lubricators

Connections: 1/8 and 1/4
With transparent bowl



CODING EXAMPLE

N204 - L00

N	» SERIES
2	» SIZE 1 = small bowl 2 = standard bowl
04	» CONNECTIONS 08 = 1/8 04 = 1/4
L	» LUBRICATOR
00	» DESIGN TYPE 00 = atomized oil

Series N Filter-Regulators

Connections: 1/8 and 1/4
With transparent bowl



CODING EXAMPLE

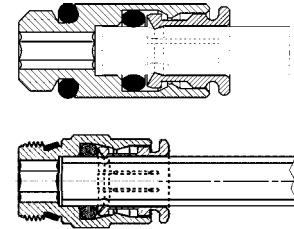
N204 - D00 - 4

N	» SERIES
2	» SIZE 1 = small bowl 2 = standard bowl
04	» CONNECTIONS 08 = 1/8 04 = 1/4
D	» FILTER-REGULATOR
0	» FILTERING ELEMENT 0 = 25 µm standard 1 = 5 µm
0	» DRAINING OF CONDENSATE* 0 = semiautomatic, self-relieving 1 = semiautomatic, non-relieving 4 = depressurisation, self-relieving only standard bowl (2) 5 = depressurisation, protected self-relieving, only standard bowl (2) 8 = Connection 1/8, self-relieving
4	» OPERATING PRESSURE = 0.5 - 10 bar 2 = 0 - 2 bar (G1/4) 4 = 0 - 4 bar 7 = 0.5 - 7 bar (G1/4)

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.



FLUID
POWER

Sprint®



- 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

Male Connector



- 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

With O-Ring Assembled



- 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

Female Stud

Sprint®



- 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



- 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

Swivel Elbow
with O-Ring Assembled

Sprint®



- 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

Fixed Male Elbow-Taper

Sprint®



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

Extended Swivel Elbow



- 6501 4-M5

With 2661 assembled

Full Range Available:

Super-Rapid Compact™ Fittings in Technopolymer
Series 7000



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

Tubing & Accessories



QRC Series 5000



Hydraulic Couplings

FLUID
POWER

Flat Face Couplings - CAM FF (F/M) Series

ISO 16028

Flat face hydraulic quick release couplings to ISO 16028 in carbon steel. NBR seals. BSP female end connections. Max working pressure 320 to 250 Bar depending on size.



DN	ISO	Thread	Carrier Half	Probe Half	Max. Working Pressure (BAR)
06	6.3	1/4	CAM FFF 0404	CAM FFM 0404	320
13	10	3/8	CAM FFF 0606	CAM FFM 0606	250
13	10	1/2	CAM FFF 0608	CAM FFM 0608	250
20	12.5	3/4	CAM FFF 0812	CAM FFM 0812	250
25	19	1	CAM FFF 1216	CAM FFM 1216	250

Quick Release Couplings - CAM IA(F/M) Series

ISO A Norm

Hydraulic quick release couplings to ISO 7241-A in carbon steel. NBR seals. BSP female end connections. Max working pressure 350 to 250 Bar depending on size.



DN	ISO	Thread	Carrier Half	Probe Half	Max. Working Pressure (BAR)
1/4	6.3	1/4	CAM IAF 0404	CAM IAM 0404	350
3/8	10	3/8	CAM IAF 0606	CAM IAM 0606	315
1/2	12.5	1/2	CAM IAF 0808	CAM IAM 0808	300
3/4	19	3/4	CAM IAF 1212	CAM IAM 1212	250
1	25	1	CAM IAF 1616	CAM IAM 1616	250

Full Range Available:

High Pressure Ball Valves



Bi Directional Flow Control Valves



Uni Directional Flow Control Valves





Energy Efficient ELECTRIC MOTORS

The use of energy efficient motors is a worldwide industry trend as a result of the need to reduce energy costs to preserve the environment. Wonder Power energy efficient motors benefit from a superior tolerance to thermal stresses, and an improved ability to handle overload conditions. Furthermore, each unit has a superior resistance to abnormal operating conditions with a higher than normal tolerance to inconsistent and noisy voltage and current wave shapes.

Wonder Power motors require minimal energy whilst simultaneously providing high levels of productivity for the lifetime of the motor. The motors can be relied upon for continuous operation and no unplanned downtime providing a high quality performance and guaranteed energy savings.

In addition to IE2 and IE3 motors, other options are available upon request:

- Three phase NEMA super efficiency motors
- Fan motors
- Smoke extraction motors
- Oil immersed motors
- Hydraulic DC motors
- Water pump IP23 motors

FLUID
POWER

FEATURES & BENEFITS



Reliability

Guarantees high efficiency with minimal temperature rise, reliability and durability. 12 month guarantee.

Reduced Operating Temperatures

Design enables air flow through all motor frames maintaining low operational temperatures, assuring reliability and extending product lifetime.

High Efficiency & Energy Saving

Wonder Power motors operate at an optimum level for the entire lifetime of the motor, consuming minimal energy with high levels of productivity. Continuous operation without unplanned downtime and performance encourages high levels of productivity guaranteeing energy savings.

Quality

Innovative production and total quality control standards during construction ensures maximum quality of all motors.

Safety

Designed with various mechanical, electrical and heating safety features. Preventing sparks, electric arc, flames and other ignitions from occurring under normal and abnormal operating conditions.

Insulation

Stators are well insulated with the highest quality winding and insulation materials. High grade copper wire and the finest insulation materials are used including slot liners, slot separators, phase separators, wedges, banding tape and sleeveings.

"Directive 2005/32/EC states that in the EU, with the exception of some special applications, motors 7.5kW to 375kW shall not be less efficient than the IE3 efficiency level as from 1 January 2015. IE3 for all motors by January 2017".

Please note:
IE3 motors may create higher starting current requiring higher rated starter systems.

www.wonder-power.com



Please refer to pages 248-250 of our main 2015/16 Fluid Power Catalogue



EAGLE PRO®

High Force Hydraulic Tools & Solutions

- Innovative hydraulic technology
- Extensive product range
- Competitively priced
- Lifetime warranty*

*Excludes blades, hoses, electric motors & air pumps



FLUID
POWER

Single Acting, Low Height Cylinder with Fixing Holes

Tech Sheet
10062



Features

- Use in confined spaces.
- Complies with ASME B30.1. High strength steel for durability and increased safety.
- Mounting holes permit easy fixing.
- Heavy-duty piston return spring.
- High quality EAB-201 quick couplers.
- Grooved piston end requires no saddle.
- Environmentally friendly painting process provides a durable anti-corrosion finish.

Double Acting, High Tonnage Cylinder

Tech Sheet
10068



Features

- Complies with ASME B30.1. High strength steel for durability and increased safety.
- Double acting operation for fast piston retraction.
- Built-in safety valve prevents accidental over-pressurization.
- High quality EAB-201 quick couplers.
- Collar and piston threads for easy fixing.
- Environmentally friendly painting process provides a durable corrosion resistant finish.

Hydraulic Pump, Cylinder, Hose & Gauge

Tech Sheet
10072



Features

- Each set comes with a 6 foot hose, a high flow coupler, gauge, and gauge adaptor.
- Cylinders can be used in more applications.
- Monitor the system pressure is provided with the gauge.
- Low weight and high flow pumps provide more effective performance.

Electric Pumps

Tech Sheet
10077



Features

- Covers most applications in the industry.
- High flow rate reaches 20in³/min and 39in³/min.
- 10Ft 24V, remote control or solenoid control for operator safety.
- 0.75hp and 1.0 hp motor.
- Starts under full load.
- High strength frame with handle for maximum portability.

Bottle Jack, In-line Design

Tech Sheet
10088



Features

- Complies with ANSI/ASME PALD standards and CE/GS.
- Forged base and cylinder to ensure strength and eliminated leaks.
- Chromed pump piston and ram for added rust resistance.
- In-line design makes the jack more convenient to be positioned and operated.

Hydraulic Punch

Tech Sheet
10546



Features:

- Covers most applications in the industry.
- High flow rate reaches 17 in³/min.
- 10 ft 24V remote control for operator safety.
- 0.5hp motor.
- Starts under full load.

Also Available from Eagle Pro

- High Pressure Hoses
- Pull Cylinders
- Tools
- Hydraulic Nut Splitters
- Electric Pumps
- Bottle Jack, In-line Design

Please refer to pages 286-305 of our main 2015/16 Fluid Power Catalogue





WATER PUMPS

Transfer large volumes of water quickly and effortlessly

Page Tech Sheet **10436**

- Low fuel consumption for high efficiency
- Lightweight and portable
- Robust frame for easy transportation
- Low vibration and noise levels
- Multi-purpose
- Fuel tank capacity 3.79 litres
- Unleaded fuel
- Max output: 4KW (5.5HP)
- Easy start-up for convenient operation
- dB level 96-110
- Supplied with filter and connecting clamp

Water Pumps



Honda Engine

0389	Port Size	LPM	Total Max Head Height M
JWPH-2000	2"	400	55



Loncin Engine

0389	Port Size	LPM	Total Max Head Height M
JWPL-2000	2"	400	55
JWPL-3000	3"	1000	28

Please refer to pages 1154-1155 of our main 2015/16 Fluid Power Catalogue

www.jaymacindustrial.com

New High Pressure Layflat... NOW AVAILABLE

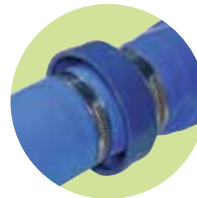
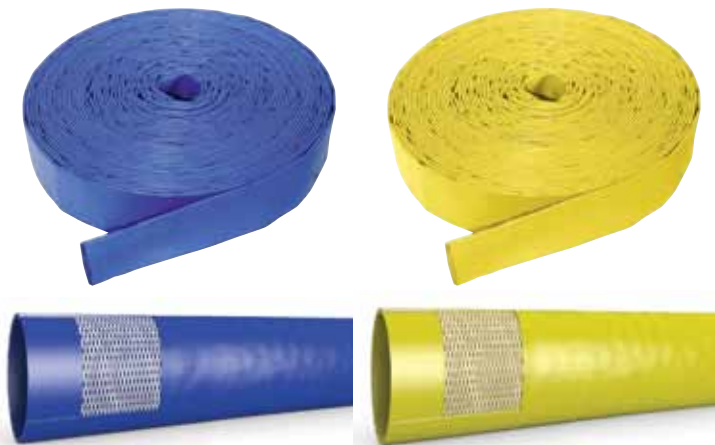


Please refer to pages 1156-1157 & 1212-1222 of our main 2015/16 Fluid Power Catalogue

Layflat Delivery Hose, Dallai Lever Locks & Assemblies

Jaymac is a tried and tested manufacturer of hose and coupling solutions with over 50 year's of expertise in the fluid power industry. The company provides layflat delivery hose solutions for the conveyance & discharge of fluids, particularly suitable for irrigation & water supply applications in general industries, civil & construction engineering, agricultural & shipbuilding.

Yellow, Blue and Blue High Pressure PVC layflat is manufactured with a smooth and seamless inner surface and smooth PVC cover with a very high adhesion between inner and outer layers. Available in 10m or 100m coils with male and female couplings in varying diameters.



Female Coupling



Male Coupling



Please Note:
Two items are needed to make a coupling set.

Hose Assemblies

Hose assemblies are also available with Dallai Lever Locks or Band-It clamps male/female lever lock couplings. This product is only suitable for open ended discharge applications. Pressure ratings are based on discharge pressure from the pump unit.





SECURE CLAMPING SOLUTIONS



- Extensive range of clips and clamps
- Millions sold throughout the UK
- Guarantees a secure pipe and hose fitting

C-Cure...The new name in secure clamping solutions; accredited to ISO 9001, ensures the quality you receive from this range is assured.

The success of the brand is based on the principal foundation of quality. Through both the quality of product and quality of service, the company's aim is simple; to provide reliable clamping solutions.

The range offers a wide variety of options, from lighter clamping such as single ear hose clamps & worm drive clips to heavier solutions including; spiral clamps, heavy duty steel and superior clamps. This coupled with the brands product variations of pipe hanging components, pipe clips, fixings and ferrules in steel, stainless steel, brass & nylon makes C-Cure a secure source for all clamping.

FLUID
POWER

Standard & Heavy Duty Clamps



Saddle Clips



Spiral Clamps



Constant Tension Clamps



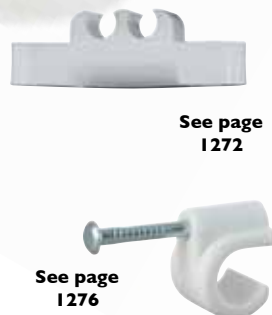
Pipe Clips & Clamps



Single Ear & Easy Clamps



Plastic Clips



Ferrules & Crimping Tools



Please refer to pages 1268-1276 of our main 2015/16 Fluid Power Catalogue

www.c-cure.co.uk

HiPRHO₂

**POWERFUL
EFFICIENT
RELIABLE**

Industrial Pressure Washer

**Pressure Lance, 6 Metre
Hose & 5 Nozzle Types**

FLUID
POWER



Page Tech Sheet **10547**



Inlet Water Temperature:
+60°C



Rated Pressure: 250 bar
Maximum Pressure: 290 bar

- **Powerful petrol** pressure washer produces 4200 PSI (290 bar) at 3.5 GPM (13.5 L/min)
- **4-stroke** high performance 389cc engine
- **Heavy duty maintenance free** crank pump, provides reliable performance
- **Quiet muffler** design directs noise away from the user
- **User friendly** controls
- **Low oil level shutdown** protects engine
- Complete with **pressure lance** and **6 metre pressure hose** assembly as standard
- **5 spray nozzles** as standard (5°, 15°, 25°, 40° & detergent nozzle)
- **LwA=112dB**

Petrol

0363

bar

LPM

HP

kg

HIPW3635-250

250

13.5

13.5

70

Please refer to pages 1366-1367 of our main 2015/16 Fluid Power Catalogue

www.hiprho.com



Manufacturer of flexible hose system solutions worldwide

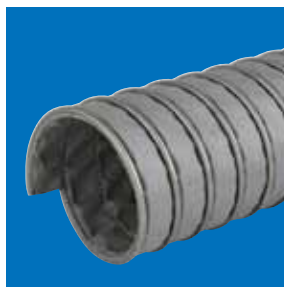
FLUID
POWER

NORRES provides a comprehensive and unparalleled product portfolio with future oriented solutions in the field of plastic hoses. The objective; reliability, certified quality and a broad spectrum across all product segments.

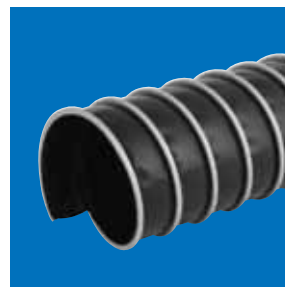
- Wide range of premium grade ducting for many applications, guaranteed to last longer
- Range includes; industrial ducting, ATEX compliant, food & pharmaceutical grade & many more
- Global market leader
- Competitively priced



Industrial PU Ducting for abrasive material, fumes gases and liquids



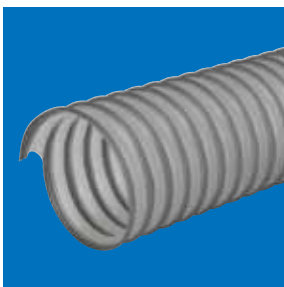
Regular and High Temperature Suction & Blast Hose suitable for dust, powder, fibres, fumes & gases.



Transport hose for flammable bulk materials e.g. dust, powder



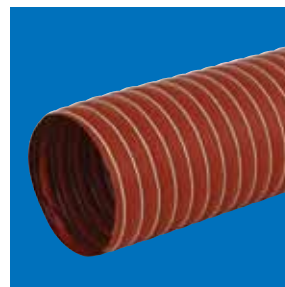
Ducting for air conditioning / ventilation, extraction arms & welding fume extraction



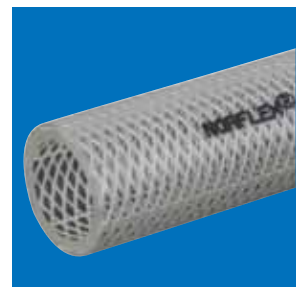
Industrial Woodworking & Timber Processing PU Ducting



High grade PVC hose for conveying powders, chips, pellets, gases & liquids in industrial, agricultural & food industries



Neoprene and Silicone Hose for air movement & fume extraction in extreme temperature environments



Compressed Air Hose for transport of abrasive materials especially within food & pharmaceutical industries

All with ISO 9001: 2008 certification and compliance with ATEX directive, UL approvals, FDA Conformity, EU directives and many more...

Please refer to pages 1176-1190 of our main 2015/16 Fluid Power Catalogue

Stainless Steel Instrumentation Pipe Fittings Range

Twin Ferrule Pipe Fittings, Metric and Imperial...

See pages **119-131**

Our instrumentation twin ferrule fittings provide a leak-proof seal for high pressure systems and designed to work at an optimum level with elements of vibration, impulse surges and varied temperature. All are manufactured in accordance to ISO9001 quality standard and CE marking requirements.



10K Stainless Adaptor Range...

See pages **222-226**

Our 10,000 PSI fittings are of a UK manufacturer where quality is of the highest standard. 10K fittings as they are more commonly known are suited to all hydraulic and instrumentation high pressure applications with varied threads and are manufactured to integrity they are designed for.



Glycerine Filled Gauges...

See pages **260-261**

We have stock of a full range of glycerine filled gauges stainless case to all stainless steel and accessories with pressure ranging up to 600 bar in bottom and back entry.



Stainless Steel Tube...

See pages **134-135**

Seamless tube to ASTM A213/A269 Type 316L, metric and imperial OD in both 3 and 6 metre lengths.



NPT Pipe Fittings...

See pages **214-215**

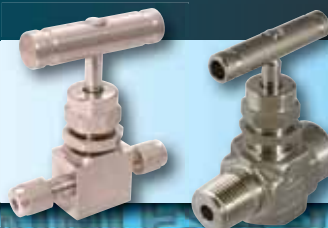
Our range of NPT instrumentation pipe fittings are manufactured with 316 stainless steel material and to the highest quality with markings for easy traceability. We stock a size ranges from 1/8" to 1" and conform to the ASME/ANSI B1.20.1 standard.



6,000 and 10,000 PSI Needle Valves...

See page **706**

All valves are 100% factory tested and a complete traceability is available on request. Sizes range from 1/8" to 1" NPT thread configurations and also imperial OD compression; they are manufactured with one piece body construction for optimum strength and safety.



We also offer an in-house tube manipulation and welding service



CONAH

Premium quality Steel, Stainless Steel and Plastic Hose Reels and Hose Carts to suit low, medium and high pressure applications from 12 bar-270 bar

Features & benefits:

- Highly Durable and versatile for increased efficiency
- Ease of handling and storage – floor, wall or ceiling mounting options, compact reels available
- Hi-Vis hose options available to avoid slips and trips
- Plastic and metal hose reels come complete with anti-locking mechanism
- Build your own metal reel options - hose assemblies can be made to order - all high pressure hose reels are assembled by BFPA trained technicians



Metal Air, Oil & Water Hose Reels

Strong, mountable manual or spring rewind steel hose reels with anti-snag rollers and adjustable guide arm for multi-position mounting. Available in 15 – 40m lengths for various hose diameters and hose options including Hi-Vis.

See pages 1195, 1196, 1197



Plastic Air & Water Hose Reels

Tough yet lightweight portable hose reels, with speed control return spring and auto-locking mechanism. Available in 9 to 20m lengths with reinforced PU and Hi-Vis PVC hose options

See pages 1193 & 1194



Stainless Steel Hose Reels

Strong, mountable spring rewind Stainless Steel Air & Water Hose Reels suitable for harsh, corrosive environments or where hygiene is of primary importance. Available in 15m capacity (3/8" and 1/2" O.D) with various hose options.

See page 1198



Hose Reel Carts

Lacquered steel carts available as self-assembly or fully assembled. Available in varying reel capacities from 30m to 100m (5/8" O.D. to 1")

See page 1199

The connection termination on all CONAH hose reels can be adapted to suit specific requirements.

Please refer to pages 1192-1199 of our main 2015/16 Fluid Power Catalogue



Combining precision technology
with optimal efficiency...

Introducing **SYNAIRGY**, a new range of
portable piston air compressors

FLUID
POWER



Features & Benefits

- Available in Belt Driven or Direct Driven options
- Quiet and compact making them ideal for use in many industrial and commercial settings
- Lightweight design
- Easy operation
- Excellent safety characteristics
- Low noise levels

SYNAIRGY Air Compressors are built to the highest standard and have CE and TUV approval and are manufactured and tested to conform to EN1012-1 for compliance with the Machines Directive.

Please refer to pages 1444-1447 of our main 2015/16 Fluid Power Catalogue

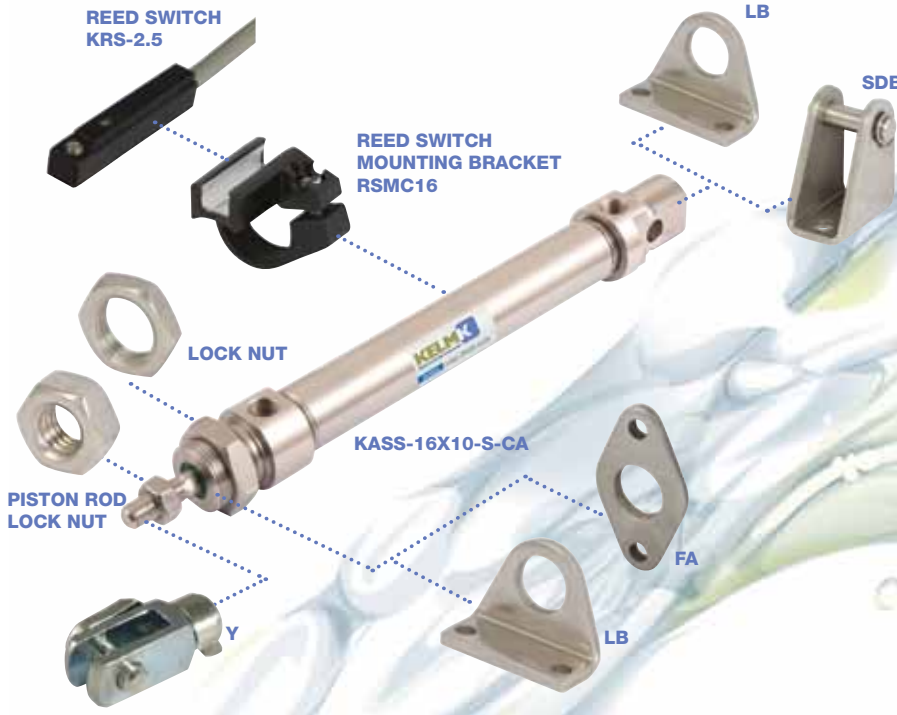
www.synairgy-eu.com





Pneumatic Stainless Steel ISO 6432 Cylinder

Accessories & Mounting Selector



ISO 6432 Cylinders



P472

ISO 15552 Cylinders



P487

Gen 2 ISO 15552 Cylinders

NEW



P483

Compact Magnetic Cylinders



P494

Double Acting ISO 6432 Stainless Steel Mini Cylinders

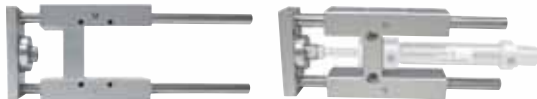
- FA - Front Flange Mounting
- SDB - Rear Hinge Mounting
- LB - Foot Mounting (Single)
- Y - Piston Rod Clevis
- Lock Nut

- Piston Rod Lock Nut
- Reed Switches Two Wire N/O with LED
- Reed Switch Bracket

Cylinder Guides Now Available

ISO6432 Mini Cylinder Guides

See page 478



These guide units allows for standard ISO6432 or ISO15552 cylinder to move loads with high positioning accuracy.

ISO15552 Standard Cylinder Guides

See page 493



Features & Benefits

- Protection against rotation at high torques.
- High guide precision for cylinder guiding.
- Supplied plain or recirculating ball bearing guides.

For full range of Cylinder & Accessories see pages 472 - 498

www.kelm-uk.com

FLUID POWER



Push-in Fittings

- Convenient One-Touch fittings provide instant connections.
- Elliptical release ring facilitates pneumatic installation in confined spaces.*
- Light manual pressure on the elliptical release ring is all that is required to instantly disconnect each tube, no special tools required.
- Nickel plated brass threaded body ensures anti-corrosion and anti-contamination.
- All taper threaded fittings are pre-coated with Teflon sealant and require no additional sealing.*
- Full stainless steel construction prevents corrosion and increases compatibility with more aggressive medias & environments.*

ONE TOUCH & ONE TOUCH+ 16 bar

One Touch Construction:

Resin Body: PBT

Metal Body: Brass nickel plated

Packing: NBR

Back Ring: POM

O-Ring: NBR

Collar: Nickel plated zinc

Sleeve: POM

Locking Claw: Stainless steel

Media: Air and Vacuum



Temperature Range: 0°C to +60°C*

Working Pressure: 10 bar (150 psi)

Please refer to pages 520-533 of our main 2015/16 Fluid Power Catalogue

One Touch+ Construction:

Resin Body: Technopolymer Resin

Metal Body: Brass nickel plated

Packing: NBR

Back O-Ring: POM

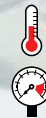
O-Ring: NBR

Collar: Nickel plated zinc

Collet: Technopolymer Resin

Sleeve: POM

Collet Ring: Brass nickel plated



Temperature Range: -10°C to +60°C*

Working Pressure: -0.8 bar to 16 bar*

Please refer to pages 534-539 of our main 2015/16 Fluid Power Catalogue

MICRO & ALL METAL

Micro Construction:

Resin Body: PBT

Metal Body: Brass nickel plated

Packing: NBR

Back O-Ring: POM

O-Ring: NBR

Collar: Nickel plated zinc

Collet: PBT

Sleeve: POM

Collet Ring: Brass nickel plated



Temperature Range: 0°C to +60°C*

Working Pressure: -0.8 bar to 10 bar*

Please refer to pages 546-552 of our main 2015/16 Fluid Power Catalogue

All Metal Construction:

Resin Body: Brass nickel plated

Packing: NBR

Back O-Ring: POM

O-Ring: NBR

Collet Ring: Brass nickel plated



Temperature Range: -10°C to +60°C*



Working Pressure: 0.8 bar to 8 bar*

Please refer to pages 540-544 of our main 2015/16 Fluid Power Catalogue

STAINLESS STEEL

Construction:

Material:

Body & Collet: 316 Stainless Steel

O-ring:

FKM (FDA Certified)

Tube to Connect: PU, Nylon & Teflon

Media: Compressed Air, Steam Water & Other Compatible Liquids



Temperature Range: -20°C to +200°C*

Working Pressure: 10 bar*

Please refer to pages 553-555 of our main 2015/16 Fluid Power Catalogue

EMERGENCY FITTINGS KITS

Convenient, compact boxes containing a selection of popular KELM® One Touch, One Touch+ & All Metal Push-in Fittings along with handy tube cutter.

Available in three sizes: 6mm, 8mm & 10mm.



Please refer to pages 521, 235 & 541 of our main 2015/16 Fluid Power Catalogue

*Dependent upon tubing specification



ISO K SUB-BASED VALVES

Medium:

Clean Compressed Air.
Filtered (40um) & Lubricated

Full technical specifications
available on request

- All ISO sizes conform to the ISO 5599/1 standard.

- Seal technology allows for high flow rates and long life.
- Easy adjustment of the pilot direction from internal to external by flipping an o-ring.
- Choice of sub-bases, Individual or Manifold mount in side ported and bottom ported options.
- All manifolds have a exhaust throttle feature as standard.



Temperature Range:
-20°C to +70°C

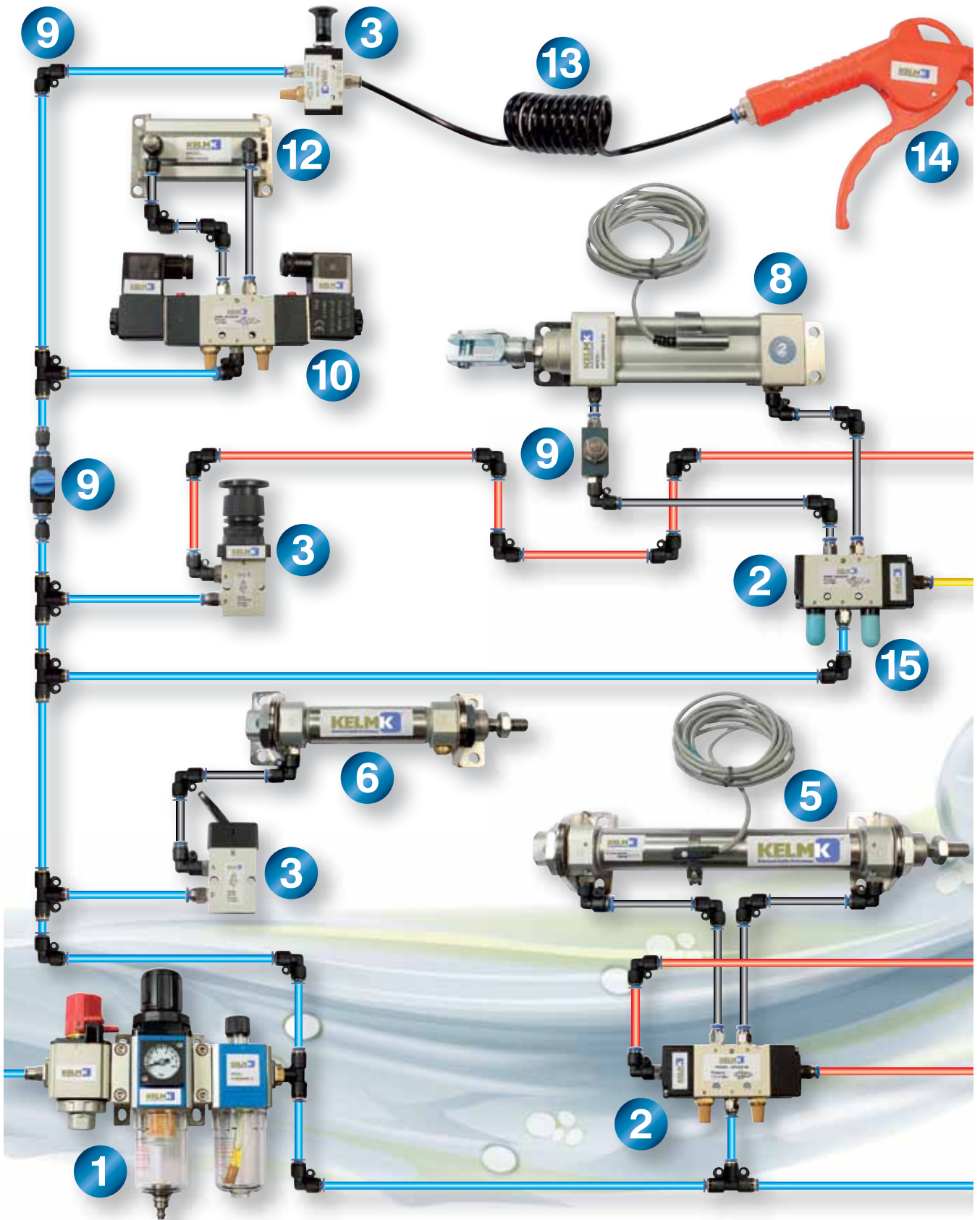


Control Pressure:
External Pilot: 2.0 to 8 bar

Operating Pressure:
Single Pilot: 2.0 to 8 bar
Double Pilot: -0.5 to 8 bar

Proof Pressure:
15 bar

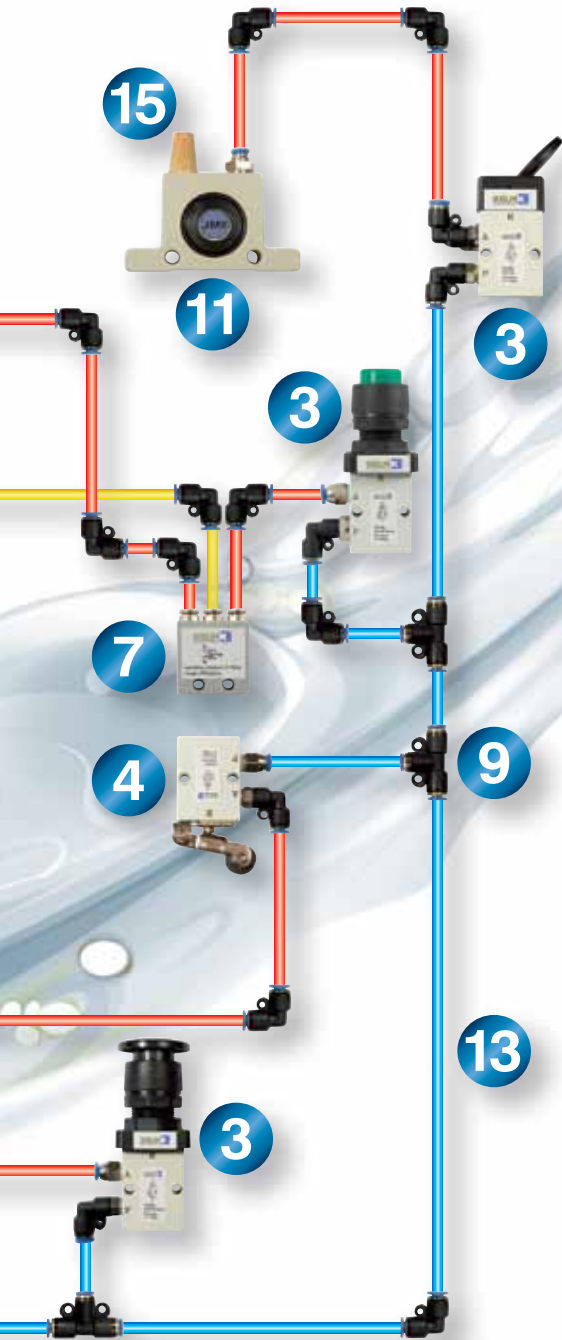
Please refer to pages 509-515 of our main
2015/16 Fluid Power Catalogue





Compressed Air System Guide

Please refer to pages 458-459 of our main 2015/16 Fluid Power Catalogue



	Pages
1 Air Preparation 1/8" up to 1" – Filters, Regulators and Lubricators	460-470
2 Pilot Operated Valves 1/8", 1/4", 3/8" and 1/2" - 3/2, 5/2 and 5/3 Valves	504-505
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	499-503
4 Mechanical Operated Valves M5, 1/8" and 1/4" - 3/2	499-502
5 ISO 6432 Mini Cylinders Double Acting Magnetic, in Bore Sizes 8mm to 40mm Mounting and Reed Switch to suit	475-476 476-477
6 ISO 6432 Mini Cylinders Single Acting Magnetic, in Bore Sizes 8mm to 40mm Mounting and Reed Switch to suit	474 476-477
7 Logic and Specialist Valves Not, And, Yes, Oscillating, Impulse	516-518
8 ISO 15552 (Formally ISO 6431/VDMA 24562) Double Acting Magnetic Cylinders In Bore Sizes 32mm to 200mm Mounting and Reed Switch to suit	489-490 491-492
9 Plastic and Metal Push-in Fittings and Flow Restrictors 4mm O.D. up to 12mm O.D.	521-555
10 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	506-508
11 Pneumatic Vibrators 1/4" and 3/8" - Ball and Turbine	519
12 Compact Magnetic Cylinder Double Acting Magnetic in Bore Sizes 12mm to 100mm Mounting and Reed Switch to suit	496-497 498
13 Spring Coils and Tubing Nylon and Polyurethane	573-581
14 Blow Guns Plastic Metal	569 1348
15 Silencers Plastic, Sintered Bronze and Stainless Steel	562-564

VACUUM

KELM™ has designed and developed a range of vacuum components that will suit most applications in an automated system. All vacuum products will operate from a compressed air airline and have been designed to be used in conjunction with other KELM components with energy saving and efficiencies in mind.



Vacuum Filters



Vacuum Saving Valves



Rotary One Touch Fittings



Quick Exhaust Valves



Flow Controllers



Vacuum Pads



Vacuum Pad Spigots



Vacuum Pads, Heavy Duty



Vacuum Pad Adaptor Plates



Vacuum Ejectors

Please refer to pages 606-616 of our main 2015/16 Fluid Power Catalogue



OPTIBELT WEDGE BELTS

optibelt RED POWER 3

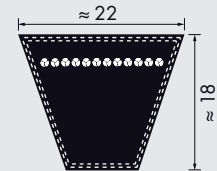
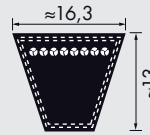
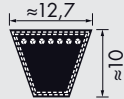
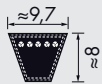


Maintenance Free
Up to 50% more power
Up to 97% efficient
Precision length tolerance
Available from
SPZ 1202 – SPC 10000

optibelt SK



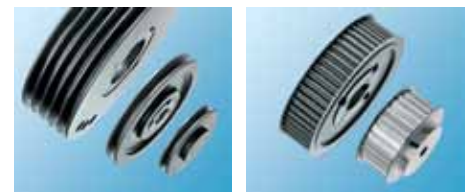
Premium quality as standard
Precise length tolerance
Up to 97% efficient



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			

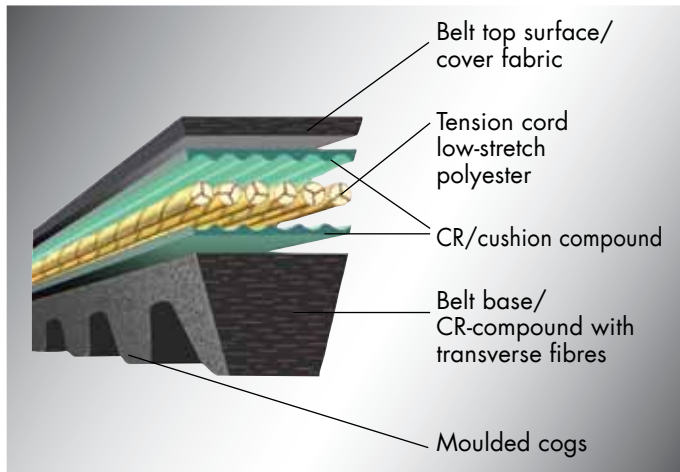
Intermediate and longer lengths available
Also available in American standard 3V/5V/8V

Optibelt pulleys available to suit



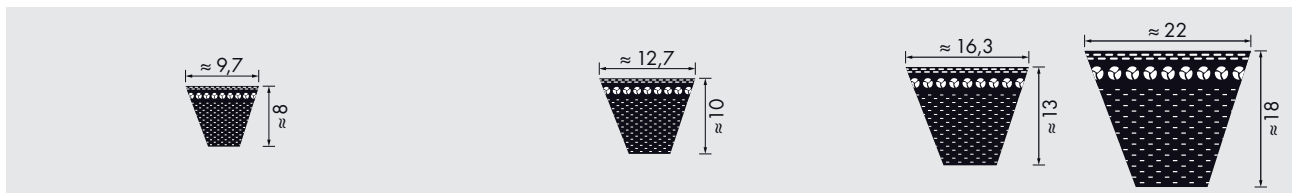
OPTIBELT RAW EDGE COGGED BELTS

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

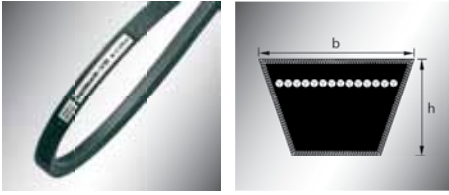


XPZ			XPA			XPB	XPC
Min. Rec. Pulley Ø = 56 mm			Min. Rec. Pulley Ø = 71 mm			Min. Rec. Pulley Ø = 112 mm	Min. Rec. Pulley Ø = 180 mm
587	1012	1562	707	1272	1882	1250	2000
612	1037	1587	732	1282	1900	1320	2120
630	1060	1600	757	1307	1932	1400	2240
637	1077	1612	782	1320	1950	1500	2360
662	1087	1662	800	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=CPlus range.

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

BELT DRIVES

OPTIBELT CLASSICAL V-BELTS

optibelt VB

BELT DRIVES

B/17									C/22								
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
B23	610	570	B 60	1565	1525	B107	2758	2718	C43	1148	1090	C 98	2558	2500	C240	6154	6096
B24	655	615	B 61	1590	1550	B108	2790	2750	C47	1258	1200	C 99	2583	2525	C248	6358	6300
B25	670	630	B 62	1615	1575	B110	2840	2800	C48	1273	1215	C100	2598	2540	C264	6758	6700
B26	690	650	B 63	1640	1600	B112	2885	2845	C49	1308	1250	C101	2618	2560	C270	6916	6858
B26½	710	670	B 64	1665	1625	B114	2940	2900	C51	1353	1295	C102	2649	2591	C280	7158	7100
B27	726	686	B 65	1690	1650	B115	2961	2921	C52	1378	1320	C104	2700	2642	C295	7558	7500
B28	750	710	B 66	1716	1676	B116	2990	2950	C53	1408	1350	C105	2725	2667	C300	7678	7620
B29	765	725	B 67	1740	1700	B118	3040	3000	C54	1433	1375	C106	2750	2692	C315	8058	8000
B30	790	750	B 68	1765	1725	B120	3088	3048	C55	1458	1400	C108	2808	2750			
B31	815	775	B 69	1790	1750	B122	3139	3099	C56	1483	1425	C110	2858	2800			
B32	840	800	B 69½	1801	1761	B124	3190	3150	C57	1508	1450	C112	2903	2845			
B32½	865	825	B 70	1815	1775	B126	3240	3200	C58	1533	1475	C114	2954	2896			
B33	876	836	B 71	1840	1800	B128	3290	3250	C59	1558	1500	C115	2979	2921			
B34	890	850	B 72	1869	1829	B130	3342	3302	C60	1582	1524	C116	3008	2950			
B34½	915	875	B 73	1890	1850	B132	3390	3350	C61	1608	1550	C117	3023	2965			
B35	929	889	B 74	1920	1880	B134	3444	3404	C62	1632	1574	C118	3058	3000			
B36	940	900	B 75	1940	1900	B136	3490	3450	C63	1658	1600	C120	3106	3048			
B37	965	925	B 76	1970	1930	B138	3545	3505	C65	1708	1650	C122	3157	3099			
B37½	990	950	B 77	1990	1950	B140	3590	3550	C66	1734	1676	C124	3208	3150			
B38	1005	965	B 78	2021	1981	B142	3640	3600	C67	1758	1700	C126	3258	3200			
B38½	1015	975	B 79	2040	2000	B144	3698	3658	C68	1785	1727	C128	3308	3250			
B39	1040	1000	B 80	2072	2032	B146	3740	3700	C69	1808	1750	C130	3360	3302			
B40	1056	1016	B 81	2100	2060	B148	3790	3750	C70	1836	1778	C132	3408	3350			
B40½	1070	1030	B 82	2123	2083	B150	3850	3810	C71	1858	1800	C134	3462	3404			
B41	1080	1040	B 83	2140	2100	B151	3890	3850	C72	1887	1829	C136	3508	3450			
B41½	1090	1050	B 83½	2160	2120	B152	3901	3861	C73	1912	1854	C138	3563	3505			
B42	1100	1060	B 84	2174	2134	B154	3952	3912	C74	1938	1880	C140	3608	3550			
B42½	1115	1075	B 85	2200	2160	B155	3990	3950	C75	1958	1900	C142	3665	3607			
B43	1130	1090	B 86	2240	2200	B156	4002	3962	C76	1988	1930	C144	3716	3658			
B43¼	1140	1100	B 87	2250	2210	B158	4040	4000	C77	2014	1956	C146	3758	3700			
B44	1160	1120	B 88	2280	2240	B160	4104	4064	C78	2039	1981	C148	3808	3750			
B45	1190	1150	B 89	2301	2261	B162	4155	4115	C79	2058	2000	C150	3868	3810			
B45½	1203	1163	B 90	2326	2286	B165	4240	4200	C80	2090	2032	C158	4058	4000			
B46	1215	1175	B 91	2340	2300	B167	4290	4250	C81	2118	2060	C162	4158	4100			
B46½	1220	1180	B 92	2377	2337	B173	4434	4394	C82	2141	2083	C166	4274	4216			
B47	1240	1200	B 93	2400	2360	B175	4490	4450	C83	2166	2108	C167	4308	4250			
B48	1255	1215	B 94	2428	2388	B177	4540	4500	C83½	2178	2120	C168	4325	4267			
B48½	1265	1225	B 94½	2440	2400	B180	4612	4572	C84	2192	2134	C170	4376	4318			
B49	1290	1250	B 95	2453	2413	B187	4790	4750	C85	2217	2159	C173	4452	4394			
B50	1315	1275	B 96	2478	2438	B195	4993	4953	C86	2242	2184	C175	4503	4445			
B51	1340	1300	B 96½	2490	2450	B197	5040	5000	C87	2268	2210	C177	4558	4500			
B52	1360	1320	B 97	2505	2465	B208	5340	5300	C88	2298	2240	C180	4630	4572			
B52½	1375	1335	B 98	2540	2500	B210	5374	5334	C89	2319	2261	C187	4808	4750			
B53	1390	1350	B 99	2555	2515	B220	5640	5600	C90	2344	2286	C190	4884	4826			
B53½	1400	1360	B100	2580	2540	B236	6040	6000	C 92	2395	2337	C195	5011	4953			
B54	1412	1372	B101	2605	2565	B240	6136	6096	C 93	2418	2360	C197	5058	5000			
B55	1440	1400	B102	2640	2600	B248	6340	6300	C 94	2446	2388	C208	5358	5300			
B56	1462	1422	B103	2656	2616	B264	6740	6700	C 95	2471	2413	C210	5392	5334			
B57	1490	1450	B104	2690	2650	B276	7040	7000	C 96	2496	2438	C220	5658	5600			
B58	1513	1473	B105	2707	2667	B280	7140	7100	C 96½	2508	2450	C225	5773	5715			
B 59	1540	1500	B106	2740	2700				C 97	2522	2464	C236	6058	6000			

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 aforementioned constructions and sizes including:

RedPower 3 [SPB, SPC, 3V, 5V, 8V]

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

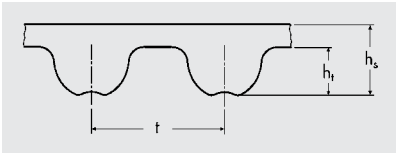
Raw Edge Cogged [3VX, 5VX]

OPTIBELT 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
OMEGA HP – High Performance, allows up to 2.5X power on standard pulleys
 Also available in selected sizes 8M & 14M
 OMEGA HL – for high shock load applications
 OMEGA FanPower – Ultra high performance for fan drives in the petro/Chem industry



Section	2M	3M	5M	8M	14M
Tooth height h_t [mm]	0.70	1.10	1.90	3.20	5.60
Total belt thickness h_s [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



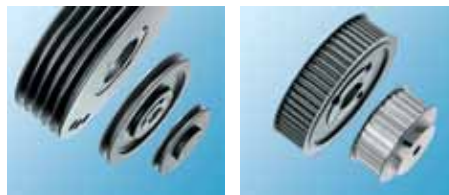
OPTIBELT TIMING BELTS

optibelt OMEGA / optibelt OMEGA HP

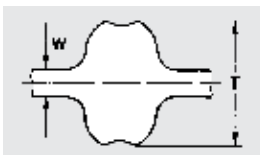
BELT DRIVES

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	2800	200
352	44	1248	156	1092	78	3150	225
376	47	1256	157	1190	85	3360	240
416	52	1264	158	1344	96	3500	250
424	53	1280	160	1400	100	3850	275
480	60	1304	163	1456	104	4326	309
512	64	1328	166	1512	108	4578	327
520	65	1344	168	1610	115		
560	70	1360	170	1680	120		
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	2450	175		
640	80	1584	198	2590	185		
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						

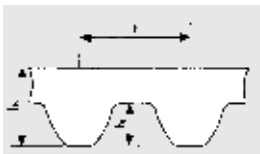
Optibelt pulleys also available to suit



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

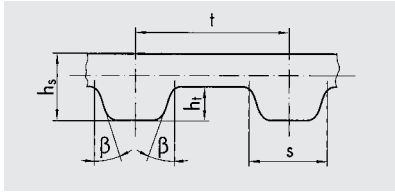
8M in Widths 10, 15, 20, 25, 30 mm

High Power OmegaHP 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



OPTIBELT CLASSICAL TIMING BELTS

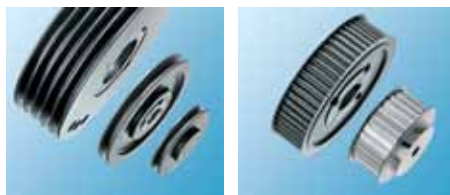
optibelt ZR

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	2082,80	164	1289,05	58
314,33	33	609,60	48	2159,00	170	1422,40	64
381,00	40	647,70	51	2184,40	172	1600,20	72
419,10	44	685,80	54	2286,00	180	1778,00	80
428,63	45	711,20	56	2413,00	190	1955,80	88
438,15	46	762,00	60	2540,00	200	2133,60	96
476,25	50	787,40	62	2794,00	220	2489,20	112
514,35	54	800,10	63	2844,80	224	2844,80	128
533,40	56	812,80	64	2895,60	228	3200,40	144
571,50	60	838,20	66	2921,00	230	3556,00	160
590,55	62	850,90	67	3175,00	250	3911,60	176
600,08	63	863,60	68	3556,00	280	4445,00	200
609,60	64	889,00	70	4318,00	340		
647,70	68	914,40	72				
657,23	69	939,80	74				
666,75	70	952,50	75				
685,80	72	990,60	78				
723,90	76	1016,00	80				
762,00	80	1041,40	82				
819,15	86	1066,80	84				
876,30	92	1092,20	86				
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	1727,20	136				
1600,20	168	1778,00	140				
1676,40	176	1828,80	144				
2075,18	218	1854,20	146				
		1905,00	150				
		1955,80	154				
		2032,00	160				
		2057,40	162				

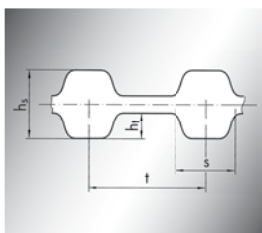
BELT DRIVES

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



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

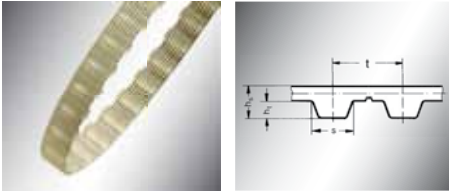
L in Width 037, 050, 075, 100

H in width 050, 075, 100, 150, 200



OPTIBELT POLYURETHANE TIMING BELTS

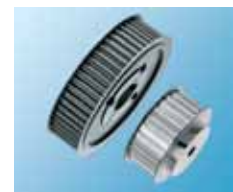
optibelt ALPHA



	t [mm]	h ₁ [mm]	h _s [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

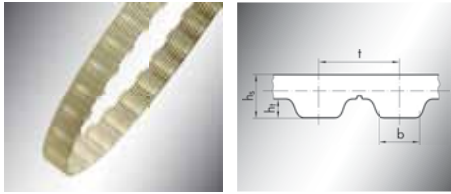
T2.5		T5				T10			
Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth	Pitch Length (mm)	No. Teeth
120	48	165	33	690	138	260	26	1460	146
145	58	185	37	700	140	320	32	1500	150
160	64	200	40	720	144	350	35	1560	156
177,5	71	215	43	725	145	370	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		

BELT DRIVES



OPTIBELT POLYURETHANE TIMING BELTS

optibelt ALPHA



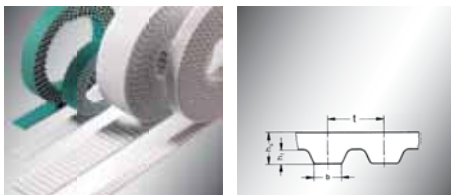
	t [mm]	h _i [mm]	h _s [mm]	b [mm]
AT5	5,0	1,20	2,70	2,50
AT10	10,0	2,50	5,00	5,00

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.



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 ALPHAFLEX

Truly Endless PU Timing Belts.



lengths from 1500 mm to 12,000 mm in increments of tooth pitch. Reinforced with steel cords for heavy duty conveying and motion control applications. Available in Profiles : T5, T10, T20, AT5, AT10, AT20, 5M, 8M, 14M

optibelt ALPHA SPECIAL

Adapted timing belts

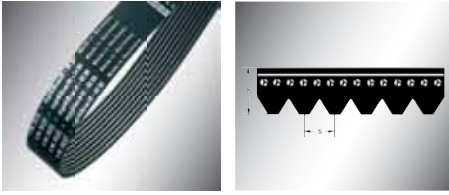


optibelt ALPHA LINEAR, V & FLEX belts can be supplied with a wide variety of backings, attachments and machines profiles to suit a variety of conveying and handling operations.



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 (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)	Effective Length (mm)
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

OPTIBELT INSTALLATION & MAINTENANCE TOOLS

Even premium quality OPTIBELT belts will not perform if they are incorrectly installed.

Two of the biggest contributing factors towards premature belt failure and poor energy efficiency are incorrect belt tension and pulley misalignment.

OPTIBELT installation & maintenance tools including the Optical or Acoustic tension testers or laser pulley alignment tool make correcting these problems a quick and straight forward job, and one which can result in significant cost savings and improved reliability.



Optical tension tester



Laser pulley aligner



Acoustic tension tester



Service Box



ARE YOUR BELT DRIVES OPTIMISED?

Optibelt are a German based, globally present, manufacturer of drive belts. We only manufacture premium quality products which, we believe, offer the ultimate in performance and value to the user.

“Precision for your drive“

Norbert, 42, Foreman

Quiet running Timing belts which can transmit up to 250% more power using standard pulleys.

V-Belts which can run at 97% efficiency without any maintenance throughout their service life.

BELT DRIVES

- Increased Productivity
- Reduced Energy Consumption
- Exceptional Reliability
- Lower Replacement Costs
- Reduced Maintenance Costs





**MATERIAL HANDLING
ALPHA**

POLYURETHANE TIMING BELTS

FIRST CLASS PRODUCTS FOR FLEXIBLE DRIVE SOLUTIONS AND CONVEYANCE CHALLENGES

“It’s matter of trust.”

Paul, 46, Chief engineer



optibelt ALPHA FLEX

- Length range from approx. 1500 mm to 24,000 mm
- Optional with polyamide fabric on the teeth
- Direct weld on of cleats and guides possible

optibelt ALPHA LINEAR

- High tension force with low elongation
- High positioning accuracy
- Optional design includes high flexible steel, aramid and stainless steel tension members



**optibelt
ALPHA FLEX**



**optibelt
ALPHA LINEAR**



▶ **High Performance Composite (HPC) V-Belts**



A quick to install, easy to inventory, permanent upgrade for conventional endless rubber V-belts. Made from high performance polyurethane elastomers reinforced with multiple plies of polyester fabric, Fenner Drives' HPC V-Belts offer problem solving alternatives to V-belts of classical and metric SP wedge cross-sections.

▶ **Keyless Locking Devices**

B-LOC® Trantorque®

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. 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 specialty.



▶ **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 and Chain 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!





BEARINGS · TRANSMISSIONS · LINKAGES

TRANSMISSIONS CATALOGUE AVAILABLE!

- The UK's largest range of mechanical power transmission products
- High power rated options available
- Oil and heat resistant to ISO 1813
- Increased productivity
- Lower replacement costs



DUNLOP™ and the Flying D device™ are used under licence



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V & WEDGE BELTS



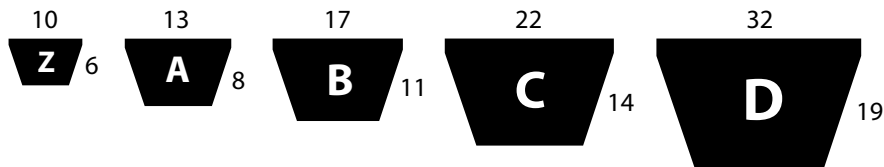
V-BELTS WRAPPED

Description

Traditional V-Belts are manufactured with cross-sections Z, A, B, C & D sections with a range of over 500 lengths currently available.

V-Belts for industrial use are designated both to RMA standard e.g. A52, where the letter designates its cross-section and the number corresponds to a nominal internal length in inches and to DIN standard e.g. 13x1320Li, where the first number denotes the width in mm, and the second number is the internal length in mm.

Dunlop V-belts have specially treated jackets to give superior anti-static, heat and oil-resistant properties and are static conductive to ISO1813.



Z - SECTION

Part No.	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)	Inside Length (in)
Z15	419	403	381	15
Z16	444	428	406	16
Z16-1/2	457	441	419	16.5
Z17	470	454	432	17
Z18	495	479	457	18
Z19	521	505	483	19
Z19-1/2	533	517	495	19.5
Z20	546	530	508	20
Z20-1/2	559	543	521	20.5
Z21	571	555	533	21
Z21-1/4	578	562	540	21.25
Z21-1/2	584	568	546	21.5
Z21-3/4	590	574	552	21.75
Z22	597	581	559	22
Z22-1/4	603	587	565	22.25
Z22-1/2	610	594	572	22.5
Z23	622	606	584	23
Z23-1/2	635	619	597	23.5
Z23-3/4	641	625	603	23.75
Z24	648	632	610	24
Z24-1/2	660	644	622	24.5
Z24-3/4	667	651	629	24.75
Z25	673	657	635	25
Z25-1/2	686	670	648	25.5
Z26	698	682	660	26
Z26-1/2	711	695	673	26.5
Z27	724	708	686	27

Part No	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)	Inside Length (in)
Z27-1/2	737	721	699	27.5
Z28	749	733	711	28
Z28-1/2	762	746	724	28.5
Z29	775	759	737	29
Z29-1/2	787	771	749	29.5
Z30	800	784	762	30
Z30-1/2	813	797	775	30.5
Z30-3/4	819	803	781	30.75
Z31	825	809	787	31
Z31-1/2	838	822	800	31.5
Z32	851	835	813	32
Z32-1/2	864	848	826	32.5
Z33	876	860	838	33
Z33-1/2	889	873	851	33.5
Z34	902	886	864	34
Z34-1/4	908	892	870	34.25
Z34-1/2	914	898	876	34.5
Z35	927	911	889	35
Z35-1/2	940	924	902	35.5
Z36	952	936	914	36
Z36-1/2	965	949	927	36.5
Z36-3/4	971	955	933	36.75
Z37	978	962	940	37
Z37-1/2	991	975	953	37.5
Z38	1003	987	965	38
Z38-1/4	1010	994	972	38.25
Z38-1/2	1016	1000	978	38.5

Part No	Outside Length (mm)	Pitch Length (mm)	Inside Length (mm)	Inside Length (in)
Z39	1029	1013	991	39
Z39-1/2	1041	1025	1003	39.5
Z40	1054	1038	1016	40
Z40-1/2	1067	1051	1029	40.5
Z41	1079	1063	1041	41
Z41-1/2	1092	1076	1054	41.5
Z41-3/4	1098	1082	1060	41.75
Z42	1105	1089	1067	42
Z42-1/2	1118	1102	1080	42.5
Z43	1130	1114	1092	43
Z43-1/2	1143	1127	1105	43.5
Z44	1156	1140	1118	44
Z45	1181	1165	1143	45
Z45-1/2	1194	1178	1156	45.5
Z46	1206	1190	1168	46
Z46-1/2	1219	1203	1181	46.5
Z47	1232	1216	1194	47
Z47-3/4	1251	1235	1213	47.75
Z48	1257	1241	1219	48
Z49	1283	1267	1245	49
Z50	1308	1292	1270	50
Z50-1/2	1321	1305	1283	50.5
Z51	1333	1317	1295	51
Z52	1359	1343	1321	52
Z53	1384	1368	1346	53
Z54	1410	1394	1372	54
Z55	1435	1419	1397	55

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbtl.com

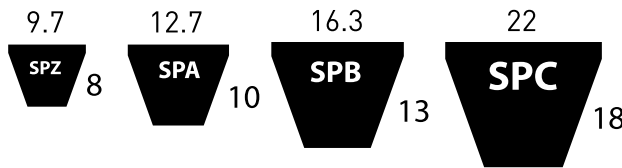


WEDGE BELTS WRAPPED

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.



BELT DRIVES

SPZ - 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

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbt.com



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 - 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	-

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbt.com





MICRO V-BELTS

Description

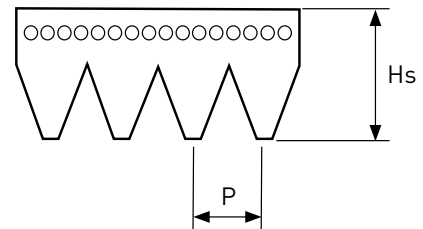
High performance micro V-belts in endless construction and with triangular ribs running along the length of the belt, the entire power is transmitted by a single belt.

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



J CROSS SECTION

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

Part No.	Effective Length (mm)	Effective Length (inches)
660J/RIB	660	26.0
685J/RIB	685	27.0
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

Part No.	Effective Length (mm)	Effective Length (inches)
1051J/RIB	1051	41.4
1054J/RIB	1054	41.5
1059J/RIB	1059	41.7
1065J/RIB	1065	41.9
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

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BELT DRIVES



MICRO V PULLEYS



MICRO V-PULLEYS

Description

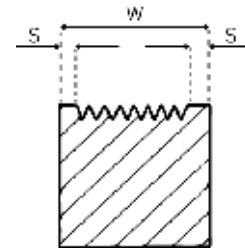
Dunlop micro V-pulleys are manufactured from cast iron EN-GJL-200 UNI EN1561 and are black phosphated according to ISO 9982 norms. All pulleys are statically balanced for peripheral speeds up to 35 m/sec.

Micro V-Pulleys are available in both 'J' & 'L' cross sections and are available from stock in both taper and pilot bore options.

Part numbers are identified by 3 numbers (e.g. 100) which represents the pitch circle diameter, a letter (e.g. L) the pulleys pitch/belt cross section and a 2 digit number (e.g. 12) the number of grooves, for example 100L12.

J Section

Groove No.	4	8	12	16	20
W (mm)	13.5	23	32.5	42	52
S (mm)	3.24	3.31	3.38	3.45	3.77



J SECTION

Part No.	Taper Bush Type	Fig	L (mm)	Z (mm)	M (mm)	U (mm)	d (mm)
20J04	-	1	22,5	-	-	-	5
20J08	-	1	32	-	-	-	5
20J12	-	1	41.5	-	-	-	5
20J16	-	1	51	-	-	-	5
20J20	-	1	61	-	-	-	5
25J04	-	1	22,5	-	-	-	5
25J08	-	1	32	-	-	-	5
25J12	-	1	41.5	-	-	-	5
25J16	-	1	51	-	-	-	5
25J20	-	1	61	-	-	-	5
30J04	-	1	22,5	-	-	-	9.5
30J08	-	1	32	-	-	-	9.5
30J12	-	1	41.5	-	-	-	9.5
30J16	-	1	51	-	-	-	9.5
30J20	-	1	61	-	-	-	9.5
35J04	-	1	22,5	-	-	-	9.5
35J08	-	1	32	-	-	-	9.5
35J12	-	1	41.5	-	-	-	9.5
35J16	-	1	51	-	-	-	9.5
35J20	-	1	61	-	-	-	9.5
40J04	-	1	22,5	-	-	-	12
40J08	-	1	32	-	-	-	12
40J12	-	1	41.5	-	-	-	12
40J16	-	1	51	-	-	-	12
40J20	-	1	61	-	-	-	12
45J04	-	1	22,5	-	-	-	12

Part No.	Taper Bush Type	Fig	L (mm)	Z (mm)	M (mm)	U (mm)	d (mm)
45J08	-	1	32	-	-	-	12
45J12	-	1	41.5	-	-	-	12
45J16	-	1	51	-	-	-	12
45J20	-	1	61	-	-	-	12
50J04	-	1	22,5	-	-	-	12
50J08	-	1	32	-	-	-	12
50J12	-	1	41.5	-	-	-	12
50J16	-	1	51	-	-	-	12
50J20	-	1	61	-	-	-	12
56J04	1108	7	23	9.5	50	-	-
56J08	1108	3	23	-	-	-	-
56J12	-	1	41.5	-	-	-	12
56J16	-	1	51	-	-	-	12
56J20	-	1	61	-	-	-	12
60J04	1108	7	23	9.5	50	-	-
60J08	1108	3	23	-	-	-	-
60J12	1108	2	23	9.5	-	45	-
60J16	-	1	51	-	-	-	12
60J20	-	1	61	-	-	-	12
63J04	1108	7	23	9.5	50	-	-
63J08	1108	3	23	-	-	-	-
63J12	1108	2	23	9.5	-	45	-
63J16	-	1	51	-	-	-	12
63J20	-	1	61	-	-	-	12
67J04	1108	7	23	9.5	50	-	-
67J08	1108	3	23	-	-	-	-

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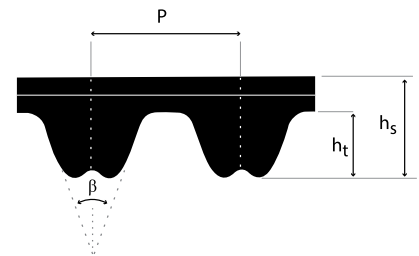
HTD TIMING BELTS RUBBER CHAIN

Description

The new HTD 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



3M RUBBER CHAIN

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

3M - CROSS SECTION		BELT WIDTH			
Part Number	Effective Length (mm)	Number of teeth	6mm	9mm	15mm
249-3M-	249	83	06	09	15
252-3M-	252	84	06	09	15
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

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbt.com

BELT DRIVES



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-30.

5M - SECTION 15

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 20

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		

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbt.com





V & Wedge Belts

V & Wedge belts are available in both wrapped and cogged raw edge constructions, they are oil and heat resistant and meet ISO 1813 for static conductivity, also available banded and hexagonal making them truly universal.

Range;

Z, A, B, C, D, E, AA, BB & CC (V wrapped)

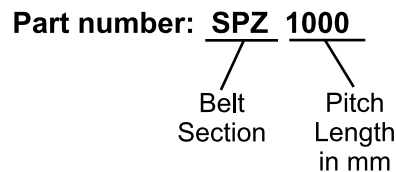
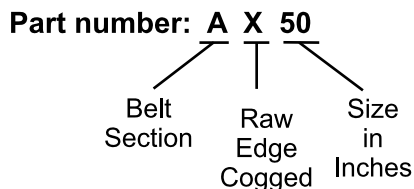
AX, BX, CX, AVX10 & AVX13 (V raw edge cogged)

SPZ, SPA, SPB & SPC (wedge wrapped)

SPZX, SPAX, SPBX & SPCX (wedge raw edge cogged)

A, B, C, SPZ, SPA, SPB, SPC, 3V, 5V & 8V (V & wedge wrapped banded)

V & Wedge belts conform to all ISO, DIN, BS & ASAE International standards.



V & Wedge Belt Pulleys

V-Pulleys are manufactured according to ISO 4183 and DIN2211-3 norms and are made from cast iron EN-GJL-200 UNI EN 1561 and phosphate.

Range;

SPZ (50 - 630mm pitch dia) 1 - 6 grooves

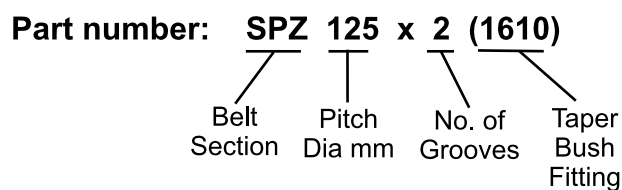
SPA (75 - 800mm pitch dia) 1 - 6 grooves

SPB (112 - 1000mm pitch dia) 1- 10 grooves

SPC (200 - 1250mm pitch dia) 3 - 10 grooves

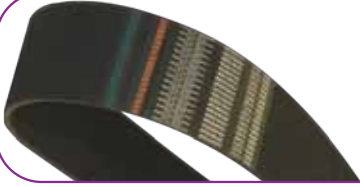
Both pilot & taper bored options and available and are designed for use with both standard Vee and Wedge belt sections.

All V-pulleys are statically balanced and suitable for peripheral speeds up to 35mtrs/sec.



MEDWAY®



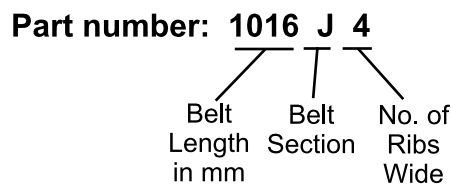


Poly V Belts

Poly-V belts also known as “Ribbed belts” are ideally suited for high speed or high ratio applications. They offer smooth, vibration free performance, in a single compact drive, which is resistant to heat and abrasion so leading to a longer service life and meet ISO 1813 for static conductivity.

Range;
 H section (1.60mm pitch)
 J section (2.34mm pitch)
 K section (3.56mm pitch)
 L section (4.70mm pitch)
 M section (9.40mm pitch)

Poly-V belts conform to ISO9982, DIN7867 & ASA S 211.5



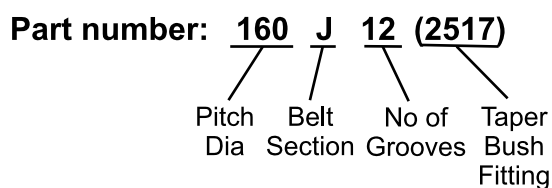
Poly V Belt Pulleys

Poly V-Pulleys are manufactured according to ISO 4183 and DIN2211-3 norms and are made from cast iron EN-GJL-200 UNI EN 1561 and phosphate.

Range;
 J section (20 - 400mm pitch dia) 4 - 6 - 8 & 12 grooves
 K section (limited range)
 L section (80 - 630mm pitch dia) 6 - 8 - 10 - 12 - 16 & 20 grooves
 M section (180 - 710mm pitch dia) 6 - 10 - 16 & 20 grooves

Both pilot & taper bored options are available and are designed for use with standard width poly-V belt sections.

All Poly V-pulleys are statically balanced and suitable for peripheral speeds up to 35mtrs/sec.



MEDWAY®





Timing (Synchronous) Belts

Timing (Synchronous) drive belts today can provide more HP/KW, higher torque, lower speeds and quieter operations than ever before; they provide a positive drive by the meshing of belt teeth with the grooves of mating pulleys and eliminate belt slip.

They are oil and heat resistant and meet ISO 1813 for static conductivity, full anti-static options are available.

Range;
 XL, L, H & XH (classical sections)
 3M, 5M, 8M & 14M (HTD sections)
 T2.5, T5 & T10 (Metric pitch sections)

Timing (Synchronous) belts conform to all ISO, DIN, BS & ASAE International standards.

Part number: 800 - 8M - 30

/		/
Belt	Belt	Belt
Length	Section	Width
in mm		in mm



Timing Belt Pulleys

Timing (Synchronous) Pulleys are manufactured from either cast iron EN-GJL-200 UNI EN 1561, Aluminium 6082 T6 UNI 9006/4 or Steel C45 E UNI EN 10083-1.

Range;
 MXL - XL - L - H - XH & XXH sections
 3M - 5M - 8M - 14M & 20M sections
 T2.5 - T5 & T10 sections

Both pilot & taper bored options are available in a wide range of standard widths and are designed for use with both standard synchronous & high power belt sections.

Not all timing pulleys are statically balanced but are suitable for peripheral speeds up to 35mtrs/sec.

Part number: 44 - 8M - 30 F (2012)

No. of	Pitch	Belt	Flanged	Taper
Teeth		Width		Bush
				Fitting

MEDWAY®



Tsubaki in partnership with IADA

Tsubaki, the world's leading manufacturer of roller chain products, was awarded the title of supplier of the year from the Independent Authorised Distributor Alliance (IADA) for 2010 in its inaugural year of supply. The award, which is voted for by the group's members, is presented to the supplier that best matches the group's philosophy of high quality and service throughout the year.

Throughout the first twelve months with IADA, Tsubaki consistently provided IADA members with the highest levels of performance in relation to delivery, customer service and product quality. It has a wide product range that is designed to meet the needs of most applications; consistently outperforming competitors in operational life and efficiency.

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.



Tsubakimoto UK offices and distribution centre in Nottingham, UK

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.

Visit the app store to download the Tsubaki (ipad only)



Roller Chain Guide



Roller Chain

Start your product selection here



Attachment Chain



CHAIN DRIVES & HARDWARE

GT4 WINNER

Chain: GT4 WINNER is the most advanced chain in the European market. Unique features are solid bushing with lubrication grooves, ring coined connecting links, and centre sink pin for easy disassembly.

Typical applications: Suitable for all general applications.

Limitations: Application specific, please contact Tsubaki *

LAMBDA CHAIN
LUBE FREE OPERATION

Chain: Tsubaki is the pioneer in developing lube free chain. Lambda features an oil impregnated bush in combination with a special coated pin for long-term internal lubrication is the secret to Lambda's economic long life and wear resistance. This chain also comes with our standard features such as ring coined connecting links and easy break style pin head.

Typical applications: Food, Packaging, Printing, Sawmill, Textile.

Limitations: Max. Temp. 150degC, Max. Speed 50-160m/min *

New BS G7

Chain: Tsubaki G7 ANSI chain features the same benefits as our BS GT4 WINNER chain such solid bushing and lube grooves to increase chain life by reducing wear. The G7 chain also offers an increased kW rating.

Typical applications: Suitable for all general applications.

Limitations: Application specific, please contact Tsubaki *

PC Chain
Engineering plastic combination chain

Chain: Plastic combination chain uses a stainless steel outer link, and a resilient plastic inner link to reduce weight and improve wear life without lubrication. A clean and long lasting alternative to stainless steel chain.

Typical applications: Food, Pharmaceutical, Packaging, Healthcare.

Limitations: Max. Temp. range -20 to 80degC, Max. Speed 70m/min.

N.E.P.
New Environmental Plating

Chain: Tsubaki NEP chain is coated to give high corrosion protection to carbon steel chain. The chain is eco-friendly and meets RoHS requirements, whilst maintaining 100% the strength of the chain.

Typical applications: Food, Packaging, Utilities.

Limitations: Application specific, please contact Tsubaki *

LAMBDA N.E.P.

Chain: Plastic combination chain uses a stainless steel outer link, and a resilient plastic inner link to reduce weight and improve wear life without lubrication. A clean and long lasting alternative to stainless steel chain.

Typical applications: Food, Packaging, Utilities.

Limitations: Avoid heavy water contact.

Stainless Steel Chain

Chain: Tsubaki leads the stainless steel chain range with our standard SUS304 grade, a higher transmission capacity is achieved by our precipitation hardened AS grade, and special SUS316 NS grade offers the highest corrosion resistance in stainless steel chains.

Typical applications: Food, Packaging, Medical.

Limitations: Lower transmission capacity than equivalent steel chain.

Heavy & SUPER Series

Chain: Tsubaki Heavy and SUPER series chains offer increased transmission capacity, whilst remaining compatible with ANSI standard sprockets. Special treatments such as ball drifting, quad riveting, and shot peening are used to increase fatigue resistance.

Typical applications: Lifting, construction and aggregate industries.

Limitations: Application specific, please contact Tsubaki *

* Contact Tsubaki as the application requires further investigation.

TSUBAKI GT4 Winner: Standard Roller Chain

TSUBAKI, the world's largest and most advanced manufacturer of chain has released a new 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)
- ② Seamless Bush
- ③ Centre Sink Rivet
- ④ Ring Coin

Four Key Features

1. Pre Lubrication Lube Groove (LG)

TSUBAKI's new BS/DIN series roller chain utilise a new 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 lubricant. The result is a chain that lasts longer with lower maintenance costs over the lifetime of the chain.

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

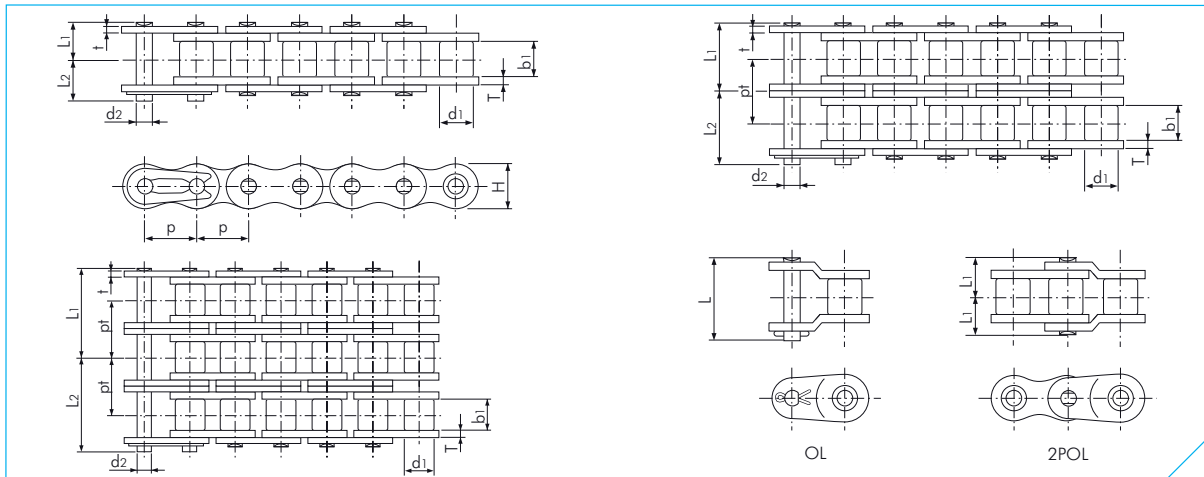
Tsubaki takes its environmental responsibility very seriously in its state-of-the-art production facilities. The new BS/DIN series chain contributes significantly to reducing CO² emissions due to the greatly extended replacement frequency.



Visit the app store to download the Tsubaki (ipad only)



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						Height H (max)		
RS05B-1	8.00 (0.315")	5.00	3.00	2.30	3.80	4.70	-	0.75	0.75	7.10	-	4.4	5.8	0.18			
RS05B-2					6.65	7.52	-				5.64	7.8	7.8	8.9	0.35		
RS05B-3					9.45	10.34	-				5.64	11.1	11.2	12.8	0.53		
RF06B-1	9.525 (3/8")	6.35	5.72	3.27	6.10	7.70	14.20	1.30	1.00	8.20	-	8.9	9.9	0.39			
RF06B-2					11.43	12.57	-				10.24	16.9	17.0	18.7	0.75		
RF06B-3					16.90	17.50	-				10.24	24.9	24.9	27.4	1.11		
RS08B-1	12.70 (1/2")	8.51	7.75	4.45	8.40	10.00	18.40	1.60	1.60	12.00	-	17.8	19.0	0.70			
RS08B-2					15.30	16.90	33.60				13.92	31.1	32.0	35.2	1.35		
RS08B-3					22.25	23.85	47.60				13.92	44.5	47.5	52.3	2.00		
RS10B-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	21.10	1.50	1.50	14.70	-	22.2	23.0	0.95			
RS10B-2					17.85	19.55	39.40				16.59	44.5	44.5	49.0	1.85		
RS10B-3					26.15	27.85	56.10				16.59	66.6	66.8	73.5	2.80		
RS12B-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	24.80	1.80	1.80	16.10	-	28.9	31.0	1.25			
RS12B-2					20.85	22.75	46.30				19.46	57.8	61.0	67.1	2.50		
RS12B-3					30.60	32.50	66.00				19.46	86.7	92.0	101.0	3.80		
RS16B-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	38.90	4.00	3.20	21.00	-	60.0	77.0	2.70			
RS16B-2					33.55	35.75	73.80				31.88	106.0	128.0	141.0	5.40		
RS16B-3					49.50	51.70	105.90				31.88	160.0	192.0	211.0	8.00		
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	-	95.0	98.1	3.85			
RS20B-2					38.25	41.45	84.85				36.45	170.0	197.0	217.0	7.65		
RS20B-3					56.50	59.70	121.35				36.45	250.0	295.0	325.0	11.45		
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	-	160.0	167.0	7.45			
RS24B-H-1					29.30	34.20	-				7.50	6.00	36.20	-	234.0	270.0	8.20
RS24B-2					50.80	56.00	112.95				6.00	5.60	33.40	48.36	280.0	335.0	369.0
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	44.45 (1 3/4")	27.94	30.99	15.90	32.45	37.45	74.50	7.50	6.30	36.40	-	200.0	200.0	9.45			
RS28B-2					62.15	67.15	136.85				59.56	360.0	374.0	411.0	18.80		
RS28B-3					91.95	96.95	196.45				59.56	530.0	560.0	616.0	28.20		
RS32B-1	50.80 (2")	29.21	30.99	17.81	32.10	37.70	73.50	7.00	6.30	42.20	-	250.0	255.0	10.25			
RS32B-2					61.25	66.85	135.25				58.55	450.0	485.0	534.0	21.10		
RS32B-3					90.50	96.10	193.80				58.55	670.0	729.0	802.0	29.90		
RS40B-1	63.50 (2 1/2")	39.37	38.10	22.89	39.25	45.05	88.85	8.50	8.00	52.90	-	355.0	373.0	16.35			
RS40B-2					75.40	81.20	163.55				72.29	630.0	716.0	788.0	32.00		
RS40B-3					111.50	117.30	235.85				72.29	950.0	1080.0	1190.0	47.75		
RS48B-1	76.20 (3")	48.26	45.72	29.23	49.30	58.80	117.70	12.10	10.00	63.80	-	560.0	565.0	25.00			
RS48B-2					95.00	104.40	209.00				91.21	1000.0	1000.0	1150.0	50.00		
RS48B-3					140.60	150.00	300.20				91.21	1500.0	1520.0	1750.0	75.00		

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.

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, and their performance has been highly rated. 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 Bush

A special oil-impregnated sintered bush in combination with a special coated pin for long-term internal lubrication is the secret of Tsubaki Lambda's long economic life and wear resistance.

Easy Cutting

BS Lambda chain can be disassembled quick and safely with an original Tsubaki Chain Tool without damaging the bushes (RS08B-LM-1 to RS16B-LM-1).

Patented Ring Coining Process

Breakage of the chains connecting link is no issue at Tsubaki thanks to this unique feature. By applying the patented 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 100% of the base chain.

Special Environments

Tsubaki Lambda has outstanding performance in temperatures up to 150°C. For temperatures above 150°C Tsubaki has a special high-temperature Lambda available. Please contact Tsubaki for more detailed information.

For applications in the food industry, Tsubaki can supply Lambda chain with bushes impregnated with food grade lubricating oil (NSF-H1 and H3 certified).

When an application needs water wash downs or is exposed to moisture, and lubrication is not possible or desirable, Lambda N.E.P. is most efficient.

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.

Save Purchasing Costs

Lower frequency of purchasing due to the high quality of the chain and it's 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.

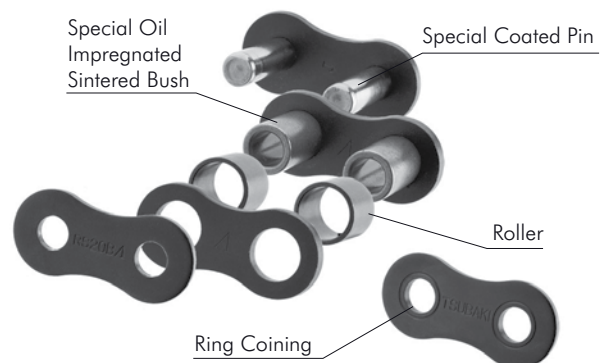
Inter-Changeability

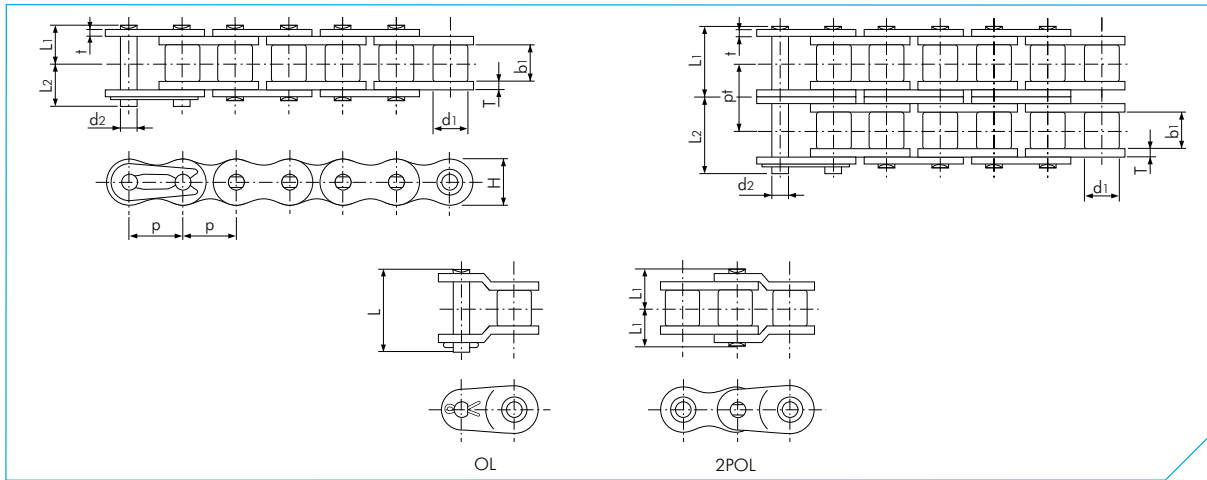
Chains:

- BS Lambda: BS Lambda Chains are fully interchangeable with standard BS roller chains.
- ANSI Lambda: 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.

Sprockets:

- BS Lambda: Standard BS roller chain sprockets can be used. However, due to the extended lifetime of BS Lambda chain, Tsubaki recommends to install sprockets with hardened teeth in every Lambda application.
- ANSI Lambda: Only simplex ANSI roller chain sprockets are interchangeable. Multi strand sprockets need to be customised due to the thickness of the roller link plates. Due to the extended lifetime of ANSI Lambda chain, Tsubaki advises to install sprockets with hardened teeth in every Lambda application.





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	9.525 (3/8")	6.35	5.72	3.28	6.10	7.70	15.10	1.30	1.00	8.20	-	8.9	0.39
RF06B-LM-2					11.20	12.80	25.90				10.24	16.9	0.75
RS08B-LM-1	12.70 (1/2")	8.51	7.75	4.45	8.40	10.00	18.60	1.60	1.60	12.00	-	17.8	0.70
RS08B-LM-2					15.30	16.90	34.50				13.92	31.1	1.35
RS10B-LM-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	0.95
RS10B-LM-2					17.85	19.55	39.40				16.59	44.5	1.85
RS12B-LM-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	1.25
RS12B-LM-2					20.85	22.75	45.90				19.46	57.8	2.50
RS16B-LM-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	39.30	4.00	3.20	21.00	-	60.0	2.70
RS16B-LM-2					33.55	35.75	73.40				31.88	106.0	5.40
RS20B-LM-1	31.75 (1 1/4")	19.05	19.56	10.19	19.90	23.10	46.60	4.40	3.40	26.40	-	95.0	3.85
RS20B-LM-2					38.25	41.45	84.60				36.45	170.0	7.65
RS24B-LM-1	38.10 (1 1/2")	25.40	25.40	14.63	26.65	31.85	61.70	6.00	5.60	33.40	-	160.0	7.45
RS24B-LM-2					50.80	56.00	112.80				48.36	280.0	14.65

Note:

1. Connecting links are clip type for sizes up to RS16B-LM, and cotter type for sizes RS20B-LM to RS24B-LM.
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. Warning: previous generations of Lambda chain can not be connected with the above chains due to different dimensions.
6. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.
7. Also available in N.E.P. specification.

BS Chain For Corrosive Environments

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: our specially designed and tested chains will outlast your current chains and contribute to a cost effective application.

Corrosion Resistant Chain (Stainless Steel base)

BS PC Engineering Plastic Combination Chain

The pins and pin link plates of these chains are made of SUS304 (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 BS standard roller chain) and lightweight chain (50% lighter than BS standard roller chain). Working temperature range: -20°C to +80°C.

BS SS Stainless Steel Chain

All basic components of this chain are made of Stainless Steel SUS304 (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 is only marginally magnetic, which is the result of the cold-forging process.

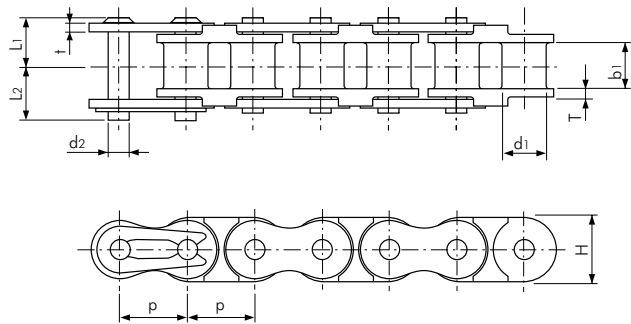
Corrosion Protected Chain (Carbon Steel base)

BS N.E.P. New Environmental Plating Chain

BS N.E.P. Chain is a TSUBAKI BS chain that has undergone a special surface treatment. The link plates, bushes and bearing pins have a special three stage layer applied in order to provide the maximum protection from the operating or environmental conditions. (Spring clips are SUS301). N.E.P. Rollers have a special coating designed to resist the corrosive conditions as well as the severe dynamic contact between roller and sprocket.

This chain is suitable for use in environments exposed to seawater, acid-rain and other adverse weather conditions. This chain does not contain any chemically hazardous substances such as Hexavalent Chromium, Lead, Cadmium and Mercury as regulated by RoHS \checkmark . The kilowatt ratings are the same as those of the corresponding BS chain with a working temperature range: -10°C to +150°C. Above +60°C a special high-temperature lubrication is required. Of course, BS LAMBDA N.E.P. chain is also available.

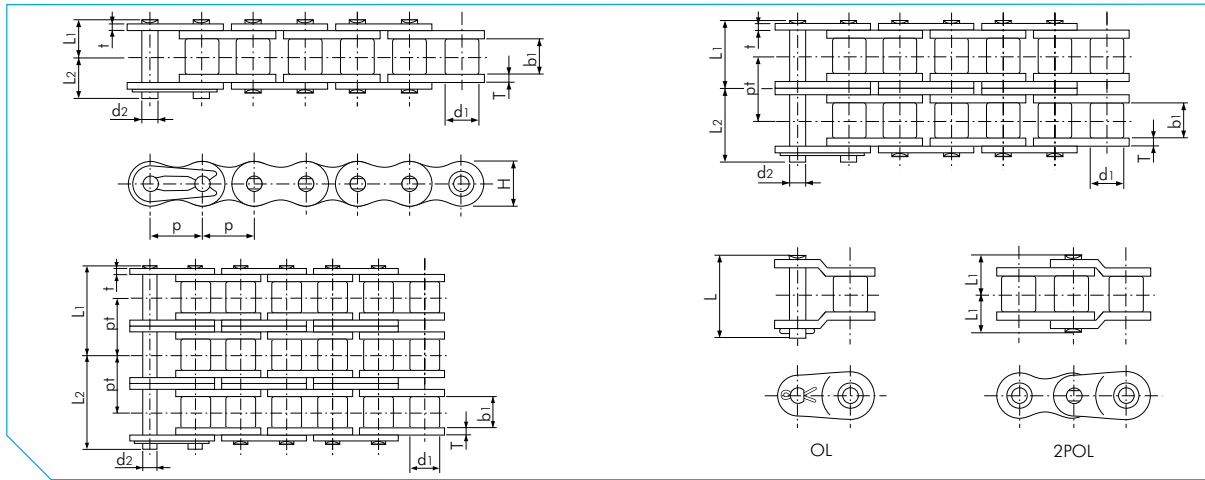
\checkmark RoHS= Restriction of Hazardous Substances



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	8.60	0.20	0.23
RF08B-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
RF10B-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
RF12B-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



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	-	0.28	0.39
RF06B-SS-2					11.60	12.30	28.85				10.24	0.56	0.75
RS08B-SS-1					8.35	10.05	20.05				-	0.50	0.70
RS08B-SS-2	12.70 (1/2")	8.51	7.75	4.45	15.30	17.00	34.60	1.50	1.50	12.00	13.92	1.00	1.35
RS08B-SS-3					22.25	23.95	48.60				13.92	1.50	2.00
RS10B-SS-1					9.55	11.25	22.90				-	0.67	0.95
RS10B-SS-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	1.34	1.85
RS10B-SS-3					26.20	27.80	56.00				16.59	2.01	2.80
RS12B-SS-1					11.10	13.00	26.70				-	0.89	1.25
RS12B-SS-2	19.05 (3/4")	12.07	11.68	5.72	20.90	22.70	46.10	1.80	1.80	16.10	19.46	1.78	2.50
RS12B-SS-3					30.65	32.60	65.60				19.46	2.67	3.80
RS16B-SS-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	38.90	4.00	3.20	21.00	-	2.10	2.70
RS16B-SS-2					33.55	35.75	73.80				31.88	4.20	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	-	2.95	3.85

BS N.E.P. CHAIN

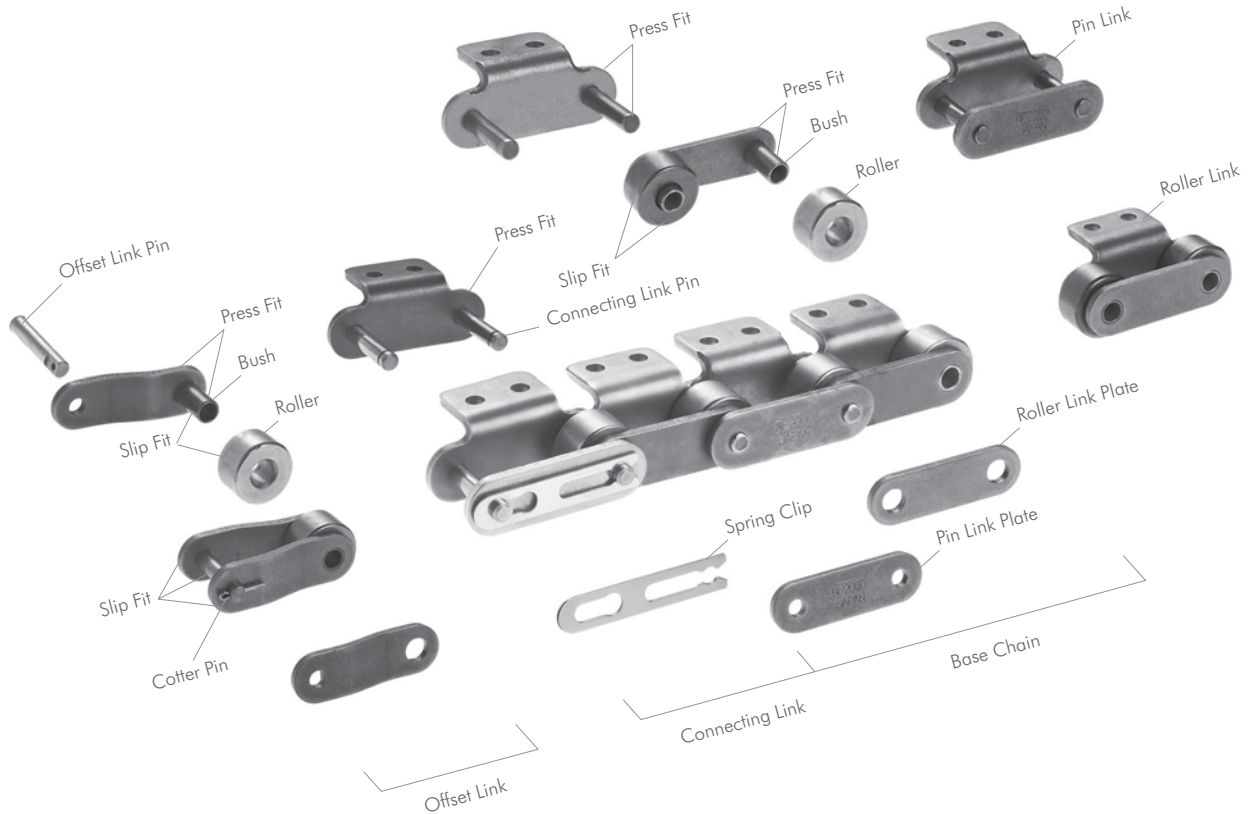
Dimensions in mm

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						Height H (max)
RF06B-NEP-1					6.35	7.65	14.20				-	8.9	9.0	9.9	0.39
RF06B-NEP-2	9.525 (3/8")	6.35	5.72	3.28	11.43	12.57	-	1.30	1.00	8.20	10.24	16.9	17.0	18.7	0.75
RS08B-NEP-1					8.40	10.00	18.40				-	17.8	19.0	20.9	0.70
RS08B-NEP-2	12.70 (1/2")	8.51	7.75	4.45	15.30	16.90	33.60	1.60	1.60	11.80	13.92	31.1	32.0	35.2	1.35
RS10B-NEP-1					9.55	11.25	21.10				-	22.2	23.0	25.3	0.95
RS10B-NEP-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	44.5	44.5	49.0	1.85
RS12B-NEP-1					11.20	13.10	24.80				-	28.9	31.0	34.1	1.25
RS12B-NEP-2	19.05 (3/4")	12.07	11.68	5.72	20.85	22.75	46.30	1.80	1.80	16.10	19.46	57.8	61.0	67.1	2.50
RS16B-NEP-1					17.75	19.95	38.90				-	60.0	70.0	77.0	2.70
RS16B-NEP-2	25.40 (1")	15.88	17.02	8.28	33.55	35.75	73.80	4.00	3.20	21.00	31.88	106.0	128.0	141.0	5.40
RS20B-NEP-1	31.75 (1 1/4")	19.05	19.56	10.19	19.90	23.10	46.95	4.40	3.40	26.00	-	95.0	98.1	108.0	3.85
RS20B-NEP-2					38.25	41.45	84.85				36.45	170.0	197.0	217.0	7.65
RS24B-NEP-1	38.10 (1 1/2")	25.40	25.40	14.63	26.65	31.85	62.00	6.00	5.60	33.44	-	160.0	167.0	184.0	7.45

Introduction to TSUBAKI 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, N.E.P., Nickel Plating 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



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



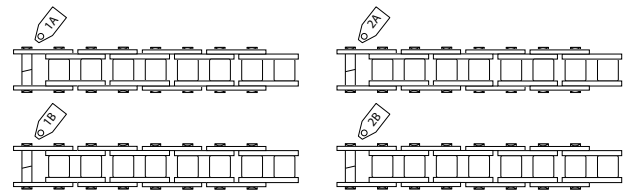
Match & Tag Service: High Accuracy, Narrow Tolerance Service

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!



Custom Made Attachments



Canning



Bookbinder

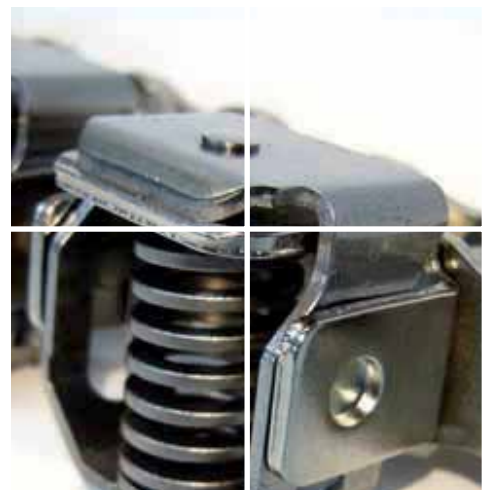


Packaging

Tsubaki Gripper Chain

New solution for the thermoforming process found with Tsubaki's wide range of 'Gripper' chains.

Tsubaki has launched a new range of 'gripper' chains to be used for thermoforming in various sectors including food, electrical and medical packaging. Whereas conventional gripping attachments often open vertically, Tsubaki's range opens to the side as well which provides a larger opening preventing jams and making loading easier. This innovative solution is available with many variations of transmission chain, including Tsubaki's unique Lambda lube-free chain. Offering extended chain life and minimal maintenance Tsubaki's gripper chain offers a fresh, new option for thermoforming.





PERFORMANCE THROUGH INNOVATION

Drive Chain Series



GT4 Winner

- Unique Lube Groove Bush
- Longer Wear Life - Lower CO₂ Emission
- High Transmission Capacity
- Easy Disassembly
- Accuracy of Chain Length Tolerance

Lube Free Series



LAMBDA Chain

- Absolutely no Lubrication Required
- Longer Wear Life
- Clean Handling & Running
- Higher Production Output & Reduced Maintenance
- ANSI LAMBDA KF Series now available (usable at high temperatures up to 230°C and suitable for food product applications)

Corrosion Resistant Series



Engineering Plastic Chain

- Lube Free Operation
- Cleaner & Quieter Operation
- Easy Maintenance
- Alternative to Stainless Steel Chain

Corrosion Protected Series



N.E.P. Chain

- Innovative Surface Treatment
- Superior Corrosion Resistance
- Environmentally Friendly

Mechanical Components



Cam Clutches (Freewheel)

- Full European Range
- For Indexing, Backstopping & Over-running Applications
- From as low as 6 Nm up to 686.000 Nm Torque Capacity
- Available from Stock

Industry Specific



TSUBAKI's product range and service capabilities are amongst the best in the business, from standard attachments through to specific industry applications. For example: **Gripper chain** - for form, fill & vacuum seal wrapping industry. Specialist attachments and specific matched length tolerance chains are available to meet your production schedules.



TSUBAKI: Value Added Services

Installation

TSUBAKI engineers can support installation projects from initial quotation stage, through on-site support during installation and then to final sign off at commission. TSUBAKI products offer best value for money when correctly installed, hence our support during this critical stage.



Surveying

TSUBAKI can support chain users by providing a site survey of their entire plant. This ensures the ordering of complex chain is made simple by an easy-to-use survey database. TSUBAKI wants this to be an effective business tool so uses simple language to identify chain and attachment detail. The survey results can also help reduce your overall stock level and further reduce cost by identifying and consolidating common chain types.



Condition Based Monitoring Service

TSUBAKI offers regular and scheduled site visits to monitor its chain's performance. Customers receive a detailed report recommending the necessary actions to ensure best possible performance and value.



Training Services

TSUBAKI offers technical training packages tailored to suit your needs. From a simple introduction to chain and installation basics; through to chain selection, advanced failure analysis and application specific advice; TSUBAKI can partner with apprentices, maintenance engineers, and designers to ensure its wealth of experience is available.



Chain Analysis

TSUBAKI can analyse any returned chain to make a comprehensive and easy-to-follow report. We can often recommend TSUBAKI products that will offer further application benefits.



Chain Selection

TSUBAKI has experience of many application types and unique machine designs. We can offer a full chain selection package, working directly with engineers and designers to ensure the product specified is the 'perfect fit' for your needs.





ROLLER CHAIN



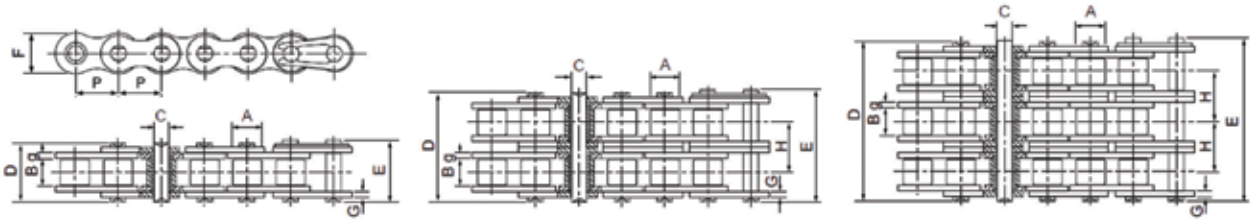
ROLLER CHAIN DIN8187-ISO/R 606

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

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

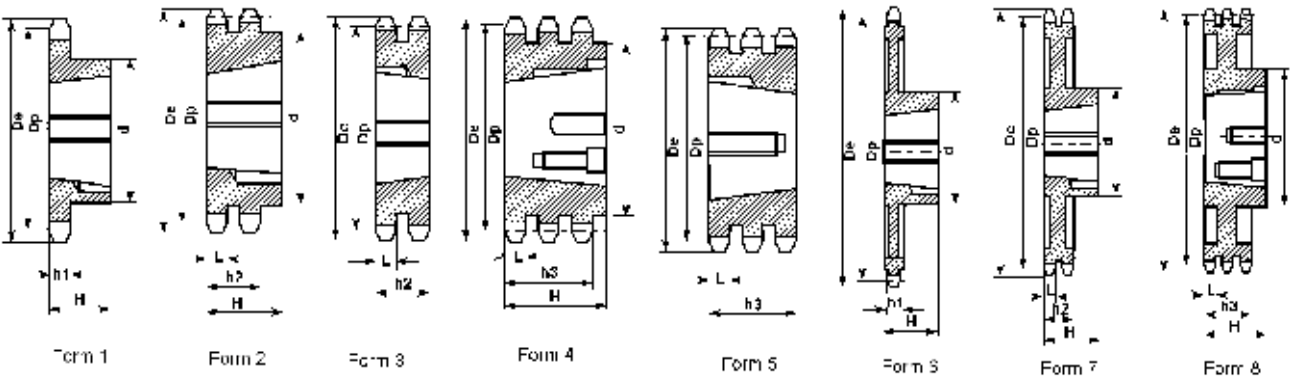
If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbtl.com



TAPER BORE SPROCKETS - STEEL & CAST IRON

Description

Taper bore sprockets are manufactured to internationally recognised standards DIN8187-ISO/R 606 and are produced from C45 steel UNI EN 10083-1 having a minimum strength of 600 N/mm² and GG22 EN-GJL-200 UNI 1561 cast iron. They have a black phosphated finish to increase corrosion resistance so extending the sprockets working life. Conveniently stocked with a taper bore to suit a standard taper bush that are pre-bored to suit both metric & imperial bore and key way sizes. Available from stock to suit British standard roller chains from 06B (3/8" pitch) up to 20B (1-1/4" pitch) sizes in Simplex (single), Duplex (double) & Triplex (treble) rows of teeth.



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

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	-	-	-	-

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbtl.com





COUPLINGS

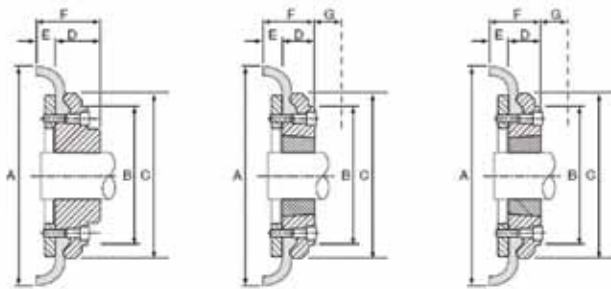


DUNFLEX COUPLINGS

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

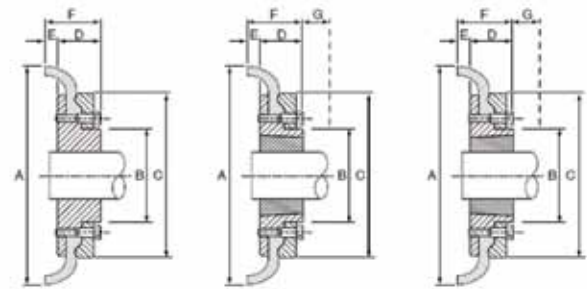


Pilot Bore (B)

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

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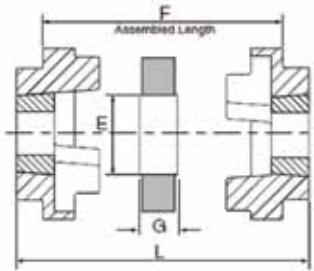


HRC COUPLINGS

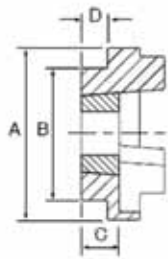
Description

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.

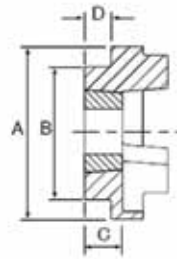
Inserts are available in either natural rubber for use in ambient temperatures between -50°C & +50°C or chloroprene rubber for use in temperatures between -15°C and +70°C fire resistance and anti-static properties (F.R.A.S).



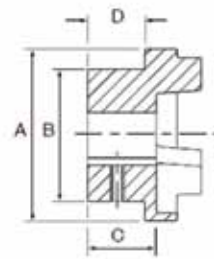
HRC Assembly



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.dunlopbt.com



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

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	-								*	*

CHAIN DRIVES & HARDWARE

If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbt.com





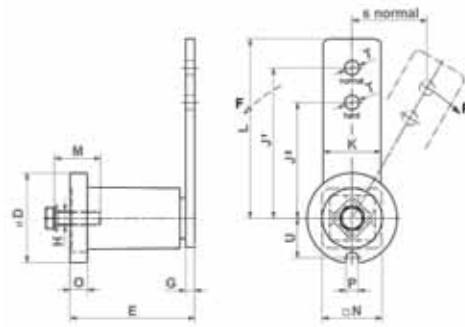
BELT AND CHAIN TENSIONERS

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 O6B-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



If you would like to view our full range, please refer to our Transmissions Catalogue online at: www.dunlopbtl.com

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
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

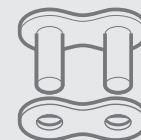
Renold BS Order Code	ISO No.	Pitch inch	Connecting links					
			4	107	11	26	12	30
SD06B2X10FT	06B-2	0.375	✓	✓	-	✓	-	✓
SD08B2X10FT	08B-2	0.500	✓	✓	-	✓	-	✓
SD10B2X10FT	10B-2	0.625	✓	✓	-	✓	-	✓
SD12B2X10FT	12B-2	0.750	✓	✓	-	✓	-	✓
SD16B2X10FT	16B-2	1.000	✓	✓	-	✓	✓	✓
SD20B2X10FT	20B-2	1.250	✓	✓	-	✓	✓	✓
SD24B2X10FT	24B-2	1.500	✓	✓	✓	-	✓	✓



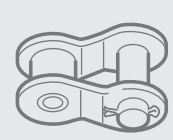
S11/S58



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	-	✓	✓	✓	✓



S11/S58



S26



S107



S12



S30



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	-	✓	✓	✓	-



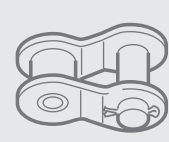
S11/S58



S26



S107



S12



S30



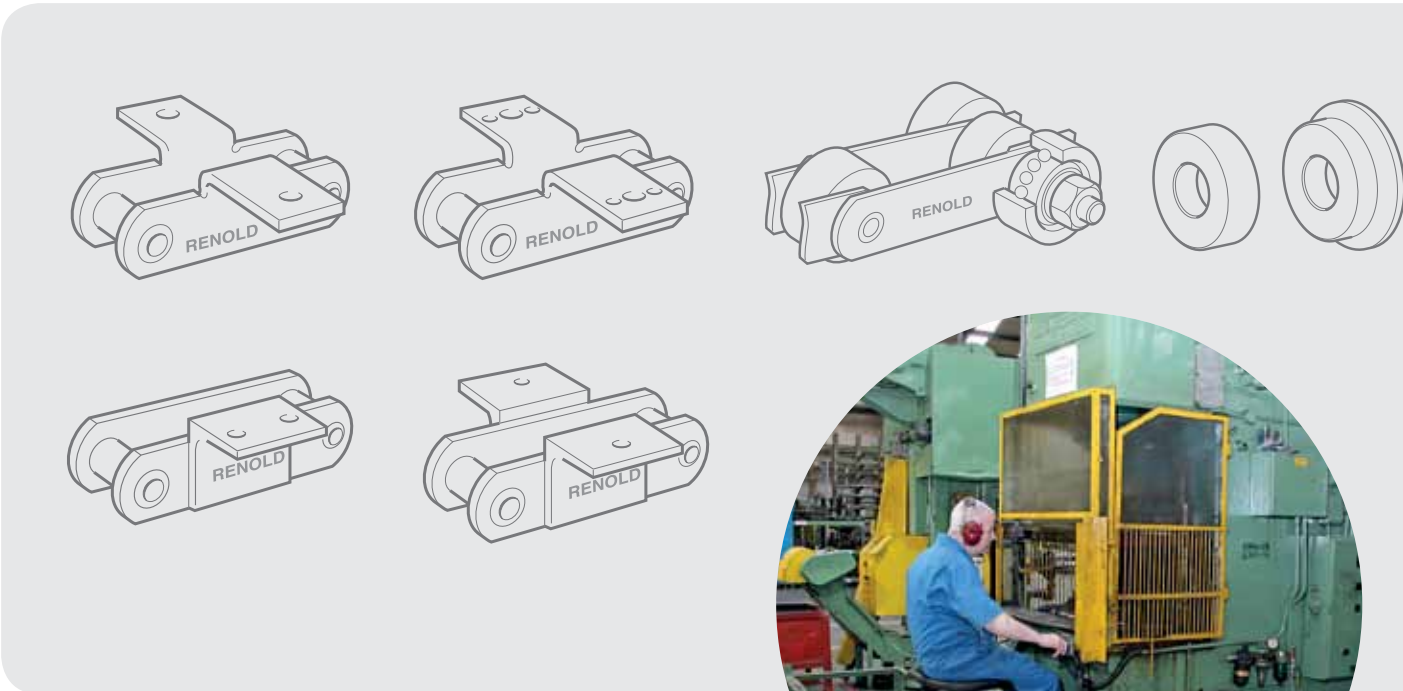
Renold Conveyor Chain

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



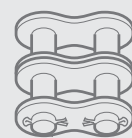
Nr. 26



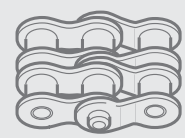
Nr. 107



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.

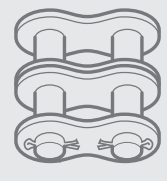
It is manufactured using FDA approved material and is prelubricated with USDA H1 approved lubricant.

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	✓	✓	✓	-	✓	-



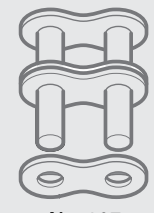
No.4



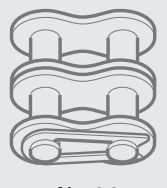
No. 11

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



RENOLD

www.renold.com



National Power Local Strength

Supplying industrial products, services and solutions since 1998

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



www.ntn-snr.com



With You



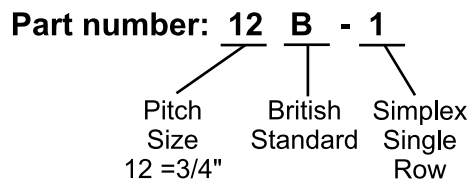
Roller Chain

Roller chain and sprockets provide high power, synchronous drive systems suitable for a wide range of applications, Steel, Stainless Steel and Nickel plated options are available, coupled together produce a precision gear system.

Range;
 06B-1 to 32B-3 (3/8" - 2" pitch British STD)
 ASA35-1 to ASA160-3 (3/8" - 2" pitch American STD)

-1 = Simplex (single row) -2 = Duplex (2 rows) -3 = Triplex (3 rows)

An extensive range is available of BS, ANSI and DIN standard chains.



CHAIN DRIVES & HARDWARE (VALUE RANGE)



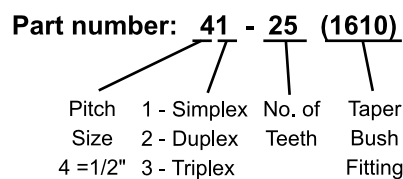
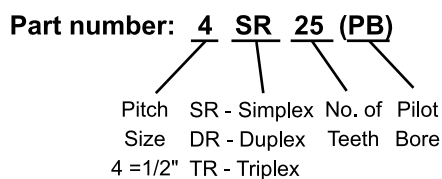
Roller Chain Sprockets

Sprockets & Platewheels are manufactured for Simplex, Duplex & Triplex chains to DIN 8187 & ISO/R 606 and are made from either cast iron EN-GJL-200 UNI EN 1561 and phosphate or Steel C45E UNI EN 10083-1.

Range;

06B-1-2-3	3/8"x7/32"	081-1	1/2"x1/8"	083-1	1/2"x3/16"
085-1	1/2"x1/4"	08B-1-2-3	1/2"x5/16"	10B-1-2-3	5/8"x3/8"
12B-1-2-3	3/4"x7/16"	16B-1-2-3	1"x17.02mm	20B-1-2-3	1-1/4"x3/4"
24B-1-2-3	1-1/2"x1"	28B-1-2-3	1-3/4"x1-1/4"	32B-1-2-3	2"x1-1/4"

Both pilot & taper bored options and available and are designed for use with British standard roller chain.





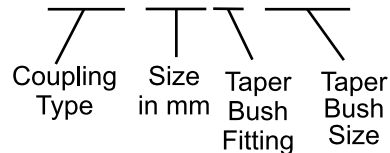
Couplings

Couplings are essentially a quick and simple solution to connecting 2 shafts of the same or different diameters. Flexible allow for slight misalignments of the shafts while rigid will hold the shafts dead parallel to each other.

Range;
 HRC 70 - HRC280 (Flexible spider)
 F40 - F220 (Flexible tyre)
 L070 - L225 (Flexible insert)
 RM12 - RM50 (Rigid)

Both flexible and rigid couplings are available with either pilot & taper bored options. Rubber inserts and tyres can be supplied in FRAS (Fire resistant & anti-static) compounds.

Part number: HRC 130 F (1610)



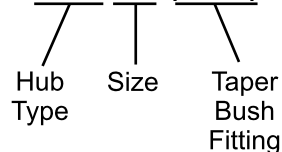
Weld On & Bolt On Hubs

A Weld on hub is fixed to its mating component by welding into position. Bolt on hubs have predetermined holes on a defined PCD for fixing to its mating component. Both designs are drilled, tapped and taper bored to accommodate a standard taper bush to create a location point for a drive shaft.

Range;
 WH12 - WH50 (1215 - 5050 taper bush)
 BF12 - BF30 (1210 - 3020 taper bush)

Weld on hubs are manufactured from C45E UNI EN 10083-1 and Bolt on hubs are made from cast iron EN-GJL-200 UNI EN 1561 and phosphate.

Part number: WH 16 (1615)



MEDWAY®



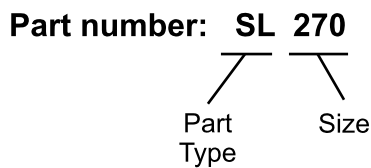


Motor Bases

Motor slide bases are a cost effective method of mounting electric motors, that may require adjustment to center distances or where re-tensioning may be required.

Manufactured from steel they have pre-machined slots to suit the corresponding motor frame size.

Range;
SL210 - SL490 (Motor frame sizes 63 - 180)

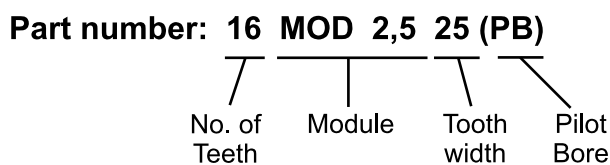


Gears & Racks

Gears and Racks are manufactured from C45 E UNI EN 10083-1 Steel and are produced to DIN 3962/63/67.

Both Bevel & Spur gears are available with standard pilot bore sizes, our in-house machine workshop can add the required bore and keyway sizes, in addition we can add grub screws or change the dimensions to suit your requirements.

Range;
Spur gears with boss (mod 1 - mod 6)
Spur gears without boss (mod 1 - mod 6)
Bevel gear pairs 1:1, 2:1, 3:1 & 4:1 (mod 1,5 - mod 5)



MEDWAY®





Male Rod End Bearings

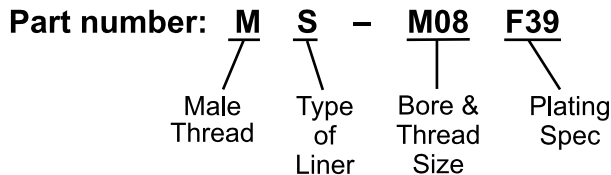
Male Rod End bearings are available in a wide range of designs and materials, metric and imperial threads both right and left handed and metric and imperial bore sizes.

Materials include Steel, Stainless Steel and Aluminium and are plated or anodised to the colour of your choice with GR-Nylon, Bronze, Polyurethane and PTFE liners.

Range;

MP-M (3 - 25mm bore and thread sizes)	MP- (3/16" - 1" bore and thread sizes)
MB-M (3 - 25mm bore and thread sizes)	MB- (3/16" - 1" bore and thread sizes)
MH-M (3 - 25mm bore and thread sizes)	MH- (3/16" - 1" bore and thread sizes)
MS-M (3 - 25mm bore and thread sizes)	MS- (3/16" - 1" bore and thread sizes)

Metric rod ends are based on DIN 648 specifications and imperial rod ends are based on SAE J1120 specification. All products are ELV and RoHS compliant.



CHAIN DRIVES & HARDWARE (VALUE RANGE)



Female Rod End Bearings

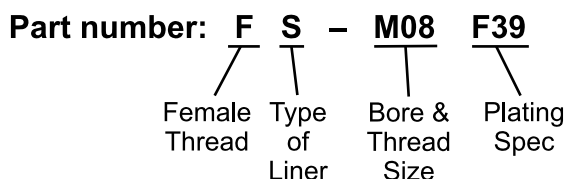
Female Rod End bearings are available in a wide range of designs and materials, metric and imperial threads both right and left handed and metric and imperial bore sizes.

Materials include Steel, Stainless Steel and Aluminium and are plated or anodised to the colour of your choice with GR-Nylon, Bronze, Polyurethane and PTFE liners.

Range;

FP-M (3 - 25mm bore and thread sizes)	FP- (3/16" - 1" bore and thread sizes)
FB-M (3 - 25mm bore and thread sizes)	FB- (3/16" - 1" bore and thread sizes)
FH-M (3 - 25mm bore and thread sizes)	FH- (3/16" - 1" bore and thread sizes)
FS-M (3 - 25mm bore and thread sizes)	FS- (3/16" - 1" bore and thread sizes)

Metric rod ends are based on DIN 648 specifications and imperial rod ends are based on SAE J1120 specification. All products are ELV and RoHS compliant.





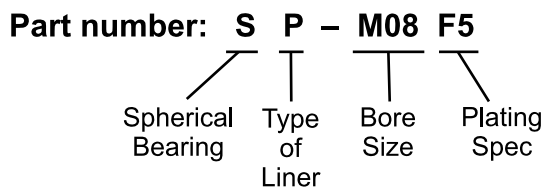
Spherical Bearings

Spherical bearings are available in a wide range of designs and materials, including Steel, Stainless Steel and Aluminium and are plated or anodised to the colour of your choice with GR-Nylon, Bronze, Polyurethane and PTFE liners.

Range;

SP-M	(3 - 25mm bore size)	SP-	(3/16" - 1" bore size)
SPH-M	(6 - 16mm bore size)	SPH-	(3/16" - 1" bore size)
GE-ES	(6 - 140mm bore size)	GEZ-	(1/2" - 3-1/2" bore size)
GE-UK	(6 - 120mm bore size)	COM-	(3/16" - 1" bore size)

Metric spherical bearings are based on DIN 648 specifications and imperial spherical bearings are based on SAE J1120 specification. All products are ELV and RoHS compliant.



CHAIN DRIVES & HARDWARE (VALUE RANGE)



Ball Joints

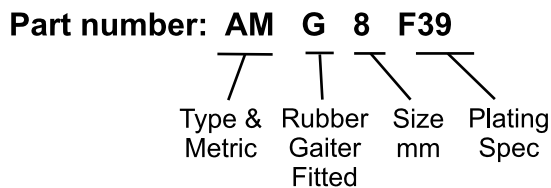
Ball Joints are available in a wide range of designs and materials, light-weight nylon, die cast zinc alloy, steel and stainless steel are available in styles incorporating retaining springs, safety clips, swaging, nylon liners and detachable studs.

Range;

A, BL, BM, C, D, F, I, M, P, Q & T series

Metric ball joints are based on DIN 648 and imperial ball joints are based on SAE J1120 specification.

All products are ELV and RoHS compliant.



MEDWAY®



Clevises

Clevis joints, also known as 'yoke' or 'fork' ends, are available in both metric and imperial thread and hole sizes. Folding spring pins along with standard clevis pins are available to ease assembly of clevises with their mating parts.

Range;

GM series (Metric clevis)

ESM (Metric folding spring pin)

NBM (Metric clevis pin)

DEM (Metric clevis pin)

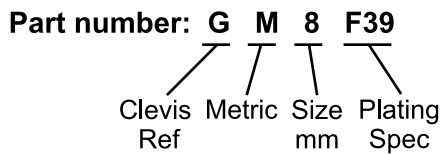
GI series (Imperial clevis)

ESI (Imperial folding spring pin)

NBI (Imperial clevis pin)

DEI (Imperial clevis pin)

Metric Clevis components are based on DIN 71752 and all imperial on DIN 71802, all items are ELV and RoSH compliant.



CHAIN DRIVES
& HARDWARE
(VALUE RANGE)



Linkages

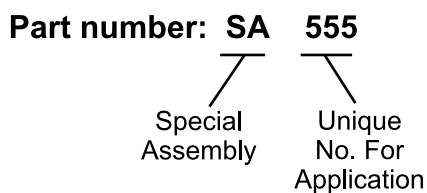
Rod-based linkage assemblies comprise typically of a linkage rod, and two linkage components, such as a clevis, rod end or ball joint attached to each end, the centers of the components might be set to a pre-determined distance.

Medway is the UK's market leader for linkage related components, as shown in the previous pages, but in addition we are able to produce a wide range of custom made linkage assemblies to suit individual customer requirements. Such assemblies are used in a wide variety of applications; agricultural, construction equipment, road sweepers, motor-sport, position sensors, lawn mowers, luxury cars... and so on. To assist you our design team are on hand to help with design and application requirements.

Range;

100% to individual customer applications.

All linkages are produced to tight dimensional tolerances and are ELV and RoSH compliant.



MEDWAY®



Our products

Orings

At IADA we stock all ranges of Orings including British Imperial (BS1806), British Metric (BS4518). European Metric (ISO/DIN 3601), including German (DIN 3771), Swedish (SMS 1586/1588) and French (NFT 47 501). American (SAE AS568A, MS 29 513) and Japanese Metric (JISB 2401).



Many of our Orings are available with various approvals FDA, WRC, WRAS, UL, DVGW, KTW, BGVV, KIWA, USP, NSF/ANSI, EN549, EN681-1, EN682 are just some of the approvals available.

All approvals can be provided with full certification.

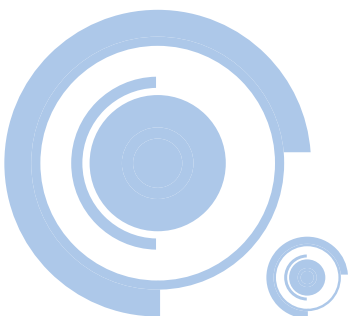
Bonded Seals

Our huge stock holding of Bonded Seals makes IADA many engineers first choice when faced with assembly downtime. All ranges are stocked in standard and self centred with a wide choice of elastomers and metals to suit your application. Consignment stocks are available, for more information please contact our sales department to discuss further.



Circlips

Both standard and non-standard ranges are stocked by IADA. Our range includes parts manufactured by Beneri, Rotor-clip and Cirteq. Our main stock holding is produced from Carbon spring steel and Stainless steel. However IADA offers a quick turnaround plating facility for those special requirements. IADA also carries a comprehensive range of E-clips, Wire rings, Snap rings and numerous other Fastener supplies.



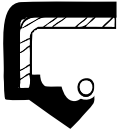

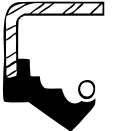
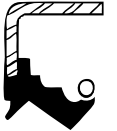

Many of our Orings are available with various approvals



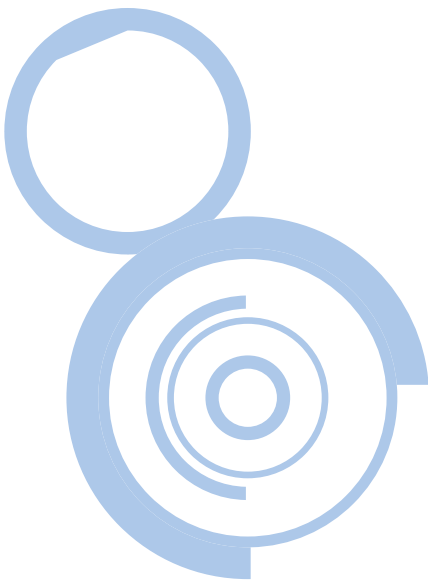
Oil Seals

With our extensive Oilseal stock of over 8,000 different sizes and various styles, IADA is an ideal choice to service your production and replacement part requirements.

Brands available include NTK, TTO, NAK, MFC, GUFERO, FREUDENBERG, NOK, CR, NATIONAL, PIONEER WESTON, STEMCO , GOETZE, GARLOCK, KACO, PAYEN, JM CLIPPER, STEFA, AEROQUIP, MERKEL,CORTECO AND MORE

	Rubber Covered Single Lipped	Rubber Covered Double Lipped	Metal Cased Single Lipped	Metal Cased Double Lipped	Totally Metal Cased Seal
					
Pioneer	R21	R23	R4	R6	R1
Stefa	CB	CC	BB	BC	DB
Nok	SC	TC	VC1	SB	SA
Garlock	92	94	71, 91	76	68
Freudenberg	BA	BASL	B1	B1SL	B2
Chicago-Rawhide			CRW1	CRWA1	CRWA1
Kaco	DG	DGS	DF	DFS	DFK
Goetze	827N	827S	822N	822S	824S

SEALS



Over 8,000 different sizes and various styles

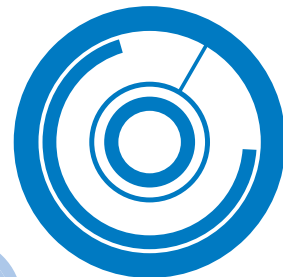


Kits

Oring kits, Bonded Seal Kits, Circlips kits, Copper washer kits, Fibre Washer kits, Splicing kits are just some of the off the shelf kits available.

Other quality products stocked at IADA include:

- V Rings
- Gamma Seals
- RJT Orings
- Back up Rings
- VK Seals
- U seals
- Distributor Seals (DE & DI)
- Gland Packing
- Hydraulic Seals
- Selon Washers
- Seloc Washers
- Oring Cord
- Quad Rings
- Speedi – Sleeves
- Rubber Sheeting
- PTFE BAR
- Lubricants and Greases
- Safety Equipment
- Gaskets



We also have a unique in house kitting facility



Special Parts

Our extensive capabilities continue with our moulding facility. IADA is able to manufacture and supply high performance moulded Orings and rubber components to various industries.

There are no minimum order values and more importantly for that critical application all orings are molded. We Produce from all common elastomers many of which are able to operate in extreme conditions. Our extensive offer of elastomers includes the worlds most specified elastomer, Viton®.

There are three major generally used grades of Viton® fluoroelastomer: A, B and F. They differ primarily in their resistance to fluids, and in particular aggressive lubricating oils and oxygenated fuels. Such as methanol and ethanol automotive fuel blends. There is also a class of high performance Viton® grades: GB, GBL, GP, GLT, ETP, and GFLT.

SEALS



Our extensive capabilities continue with our moulding facility



The following materials and advanced versions of them are available in a number of colours and shore hardness.

- Nitrile (Buna-N)
- Viton® (FPM, FKM)
- Neoprene® (CR)
- EPDM
- Silicone (VMQ)
- High Nitrile
- Aflas® (Tetrafluoroethylene Propylene, FEPM)
- Fluorosilicone (FVMQ)
- Polyurethane
- HNBR
- SBR (Styrene-Butadiene)
- Natural Rubber
- Polyacrylate (ACM)
- Butyl (IIR)
- PTFE
- Hypalon®
- Vamac® (AEM) - Ethylene Acrylic
- Perfluoroelastomers
- XNBR -Carboxylated Nitrile
- ECO - epichlorohydrin rubber
- PTFE Encapsulated

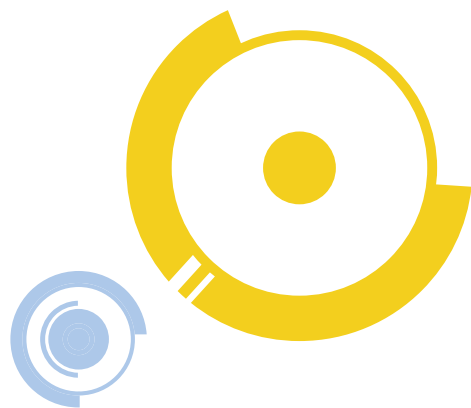


SEALS

Many of the above are available with various approvals, including full certification FDA, WRC, WRAS, UL, DVGW, KTW, BGVV, KIWA, USP, NSF/ANSI, EN549, EN681-1, EN682 are just some of the approvals available.

All approvals can be provided with full certification.

Lifting the Ceiling on Sealing



Material temperature ranges

Nitrile (Buna-N, NBR)

-30°F to 250°F (-34°C to 121°C)

EPDM (Ethylene Propylene, EPM)

-70°F to 300°F (-57°C to 149°C)

Neoprene® (Chloroprene, CR)

-35°F to 225°F (-37°C to 107°C)

SBR (Styrene-Butadiene)

-70°F to 225°F (-57°C to 107°C)

Silicone (VMQ)

-65°F to 450°F (-54°C to 232°C)

Butyl (IIR)

-75°F to 250°F (-59°C to 121°C)

Polyacrylate (ACM)

-5°F to 350°F (-21°C to 177°C)

Hypalon®

-20°F to 250°F (-29°C to 121°C)

Viton® (Fluorocarbon, FKM)

-15°F to 400°F (-26°C to 205°C)

Polyurethane

-40°F to 180°F (-40°C to 82°C)

Fluorosilicone (FVMQ)

-100°F to 350°F (-73°C to 177°C)

Aflas® (Tetrafluoroethylene Propylene, FEPM)

25°F to 450°F (-4°C to 232°C)


Kalrez® (Perfluoroelastomer, FFKM)

-15°F to 600°F (-26°C to 316°C)


Viton® Neoprene® Vamac® Hypalon® Kalrez® are registered trademarks of DuPont Dow Elastomers

Aflas® is a registered trademark of the Asahi Glass Co.
All technical information supplied in this brochure is for guide only








HYDRAULIC OIL SUPER 32/46/68 FG








- Fully synthetic, transparent, odourless hydraulic fluids based on Poly Alpha Olefins (PAO)
- NSF H1 registered for use where incidental food contact may occur
- Operates over a wide temperature range and demonstrates excellent low foam characteristics
- Provides excellent protection against wear of hydraulic system components

	32	46	68
	30265-AA	30267-AA	30270-AA
	30266-AA	30268-AA	30271-AA



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

	31564-AA		31563-AA
	31532-AC		31711-AA
			31712-AA




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
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PENETRATING OIL

- Frees seized components rapidly
- Lubricates fine and close tolerance threads
- Contains MoS2
- Softens rust and carbon deposits

	30240-AA		32117-AA
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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	
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SILICONE ANTI-STICK

- Concentrated silicone lubricant
- Helps prevent jams, inhibits adhesive build up on blades and sealers
- Odourless, tasteless, colourless and chemically inert
- Operational temp range: -50C to +200C


	31572-AA
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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
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LUBRICATION & MAINTENANCE



GEAR OIL SUPER 150/220/320 FG



- Fully synthetic, transparent, odourless gear oils based on Poly Alpha Olefins (PAO)
- NSF H1 registered for use where incidental food contact may occur
- Excellent lubricity with EP additives for proven anti-wear performance. Ideal for use on highly loaded gears and gears subjected to extremes of temperature

150
 30272-AA
 30273-AA

220
 30274-AA
 30275-AA

320
 30276-AA
 30277-AA



COPPER ANTI-SEIZE

- Use on threaded fasteners to prevent seizing during prolonged maintenance intervals
- Formulated with micro-ionised copper and anti-oxidant additives
- Good protection even in highly corrosive environments
- Reduces friction and wear

30303-AA

30239-AA



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



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



MOISTURE REMOVER FG



- Prevents corrosion by displacing moisture
- Provides precision lubrication with its thin, high dielectric strength, lubricating film
- NSF H2 registered, ideal for use on electronics in the food & beverage industry
- Can be used as a multi light purpose lubricant

30260-AA



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



ASSEMBLY PASTE FG



- Prevents seizure of threaded components enabling easy and quick dismantling
- Particularly effective as an anti-seize on oven fans
- NSF H1 registered

31587-AA

31586-AA



AQUA PAINT MARKER

- Environmentally preferred temporary marking paint
- Highly visible colours that last 4-6 months and can be removed sooner with soapy water and a brush
- Unique 360 spray system for use at all angles, even vertically
- ONE-CLICK safety cap prevents accidental discharge in transit
- Ideal for industries where environmental impact and product performance are critical

	32050-AA		32051-AA		32052-AA
	32053-AA		32054-AA		32055-AA



CHAIN LUBE FG



- NSF H1 PTFE chain lubricant for use above the food line
- Excellent penetration and lubrication properties
- Can be used as a general, heavy duty, PTFE lubricant
- Leaves a tenacious, long lasting lubricating film

 30245-AA

 30278-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



BELT DRESSING FG



- Apply to all types of belt to increase grip, reduce squeak and prolong life
- Protects belts from deterioration through oxidation and heat
- NSF H1 registered
- Use on belts subjected to wet environments

 30257-AA



AMBERGREASE FG1



- NSF H1 registered, white, NLGI type 2, aluminium complex grease
- Very good extreme pressure performance: 4-ball weld load: >200Kg
- Use in areas subjected to moist or wet operating conditions
- Ideal for all types of bearings and rails/surfaces in low temperature areas

 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



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



PAINT MARKER HD

- Acrylic Paint Pen with abrasion resistant nib
- Long-lasting vibrant colours
- Rapid drying
- Ideal for marking rusted surfaces

 32067-AA	 32068-AA	 32069-AA
 32070-AA	 32071-AA	 32072-AA



FOOD GREASE FG



- NSF H1 registered, NLGI type 2, white grease, aluminium complex thickened
- Use on plain bearings and hinges. Particularly useful for limited access areas where regular grease penetration may be difficult
- Operational temp. range: -50C to +165C
- High corrosion protection and water displacement properties

 30259-AA



HI-LOAD LUBE FG



- Heavy duty / high pressure resistant grease
- NSF H1 registered, NLGI type 2, white, aluminium complex thickened grease
- Operational temp range: -40C to +180C
- Use on heavily loaded bearings and components
- 4-ball weld load >400Kg

 30279-AB

 31966-AA



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
- Removes heavy deposits of oil and grease, waxes and silicones
- Higher flash point of +41C
- Leaves a clean, dry surface

 31554-AA

 31636-AB

 31698-AA


 30309-AA



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

 31759-AB

 31594-AA (NON-FLAM)



AMBERCLENS FG



















- NSF A1 registered for general cleaning in the food industry
- Use to remove grime or soiling from equipment, metal parts and machinery
- Foaming action helps break down soiling for effective cleaning
- Stable, non-dripping foam

 30241-AA



ACRYLIC PAINT

- 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	
	 20189-AA	
	 20195-AA	 20190-AA



AMBERTRON


- Ultra pure contact cleaner for mission critical electronics maintenance
- Very fast evaporation
- Excellent material compatibility. Safe for use on glass, metals, plastics and rubber
- Quick and efficient cleaning

 31552-AA  31694-AA  31695-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



IPA SOLVENT


- Gentle, yet highly effective alcohol based cleaning solvent
- Excellent material compatibility, safe to use on plastics and rubber
- Particularly effective on production line optical devices. Also removes moisture
- Evaporates to leave a clean, dry surface

 31713-AA  31569-AA
 31714-AA  31716-AA  31715-AA



AIR DUSTER


- Powerful, dry, inert gas that removes dust and loose debris from electronics
- Safe on all surfaces, including delicate sensors and electronics
- Non ozone depleting, does not contain CFC's or HCFC's
- Zero odour in use

 31570-AA



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



FAST CLEAN 200










- Powerful degreaser for removing oil, grease, tar, bitumen and other tough soiling
- Safe on all metals, test on plastics before use
- For use where a chlorinated solvent cannot be used but a high solvency power and very fast evaporation are still required
- Dries to a residue free finish

 31890-AA



MARKER PEN

- 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

 20364-AA	 20368-AA	 20379-AA	 20383-AA
 20387-AA	 20394-AA	 20399-AA	 32061-AA
			 32062-AA



SUGAR REMOVER & INHIBITOR FG

- Dual action: Softens sugar whilst oil removes sugar bond to metal surfaces
- NSF H1 registered
- Helps reduce scraping, improves equipment performance
- Leaves a light lubricating film that inhibits re-adhesion



32082-AA



31590-AA



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



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



30766-AA



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



31798-AA



SOLID MARKER

- Solid paint stick for rough and hard surfaces
- Use on difficult surfaces such as concrete, timber and stone
- Nib can be 'sharpened' for more detailed lines
- Marks are highly visible, long-lasting and resistant to wash-off



32065-AA



32066-AA



5024A SILICONE SEALANT

- Ready to use, one part silicone sealant suitable for use as a general purpose sealing and bonding agent, a space filling rubber adhesive, or formed-in-place gasket
- High modulus & Non-slump
- Offers good adhesion to glass, glazed ceramics, aluminium and metal



30730-AA



30732-AA



30735-AA



31753-AA



31753-AB



Ambersil

www.ambersil.com
 @AmbersilMRO

YOUR COMPLETE CHEMICAL SOLUTION™



TUF CUT

- 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.

- | | | | |
|------------------|-------------------|---------------------|-----------------|
| 31579-AA (SPRAY) | 31580-AA (LIQUID) | 31581-AA (COMPOUND) | 30313-AA (AQUA) |
| 31582-AA (FOAM) | 31723-AA (LIQUID) | 31724-AA (COMPOUND) | 30314-AA (AQUA) |



FLAW DETECTOR

- 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

- | | | |
|----------|----------|----------|
| 30288-AA | 30289-AA | 30290-AA |
|----------|----------|----------|



RUST CONVERTER

- Restores rusted metal to form a sound, paintable, and protected surface
- Easy and ready to use - not necessary to paint afterwards
- Reduces the need for brushing/grinding back to bare metal, saving time and money
- Non corrosive product

- | |
|----------|
| 30301-AA |
|----------|



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

- | | |
|----------|----------|
| 31633-AA | 31781-AA |
|----------|----------|



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

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| 30287-AA |
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BIOWELD

- Water-based spatter release agent which gives exceptional results without the use of harmful solvents or silicones
- Odourless, non-flammable and safe in use
- Allows post welding operations, painting etc to be undertaken without interference
- Contains rust inhibiting agent

- | | | |
|----------|----------|----------|
| 31621-AA | 31775-AA | 31776-AA |
|----------|----------|----------|



SPATTER RELEASE

- Traditional, non-flammable, solvent based spatter release formulation
- Prevents spatter adhesion on welding equipment, work pieces, jigs and surrounding areas
- Does not affect post welding operations
- Anti-spatter film is easily wiped away

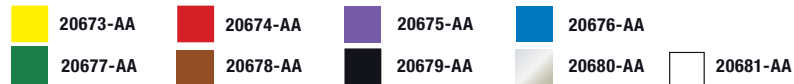
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| 31620-AA |
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LUBRICATION & MAINTENANCE



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



BRIGHT, COLD GALVANISE

- Barrier coating protects metalwork and steels from corrosion
- For use on bare, non-rusted steel and seams
- Weathers at same rate as surrounding hot-dip zinc layer for 'invisible' repairs
- Long lasting corrosion protection

30292-AA



COLD GALVANISE

- 99% pure zinc at 88% concentration in cured film for maximum protection and adhesion to the metal
- Maximum anti-corrosion protection
- Ideal for pipes, housings, and structural metals exposed to the weather
- Can be used as a primer

30291-AA



CORROSION INHIBITOR

- Use on ferrous metal as a long-term protective coating for stored equipment
- Film will not harden or crack
- Can be used as an anti-seize/anti-rust treatment for fasteners
- Forms a 'self repairing' waxy film

31628-AA 31708-AA 31709-AA



CLEAR MOULD PROTECTIVE

- Repels and displaces moisture, leaving a durable, clear, protective film
- Will not stain the moulding, recommended for use with clear or white polymers
- Protective film allows handling, and will resist acid finger marks
- Easily 'moulded-off'

31547-AA



FORMULA 6

- A medium duty, silicone mould release agent
- Improves surface finish and will not build up in the mould
- Also useful as an anti-stick agent in the textiles, printing and shoe industries
- Operational up to +200C

31535-AA 31680-AA



FORMULA 5

- Medium duty, non-silicone release agent
- For release of all types of thermoplastics, some thermosetting plastics, silicone rubber and many other types of rubber
- Does not build up in the mould
- Operational up to +150C

31540-AA 31679-AA

65 years ago Ambersil began manufacturing products developed to meet the most exacting standards of industry.

Ambersil has grown to become a true 'single source' supplier for industrial aerosols and chemicals. We provide maintenance professionals with exceptional product quality and performance, whilst maximising value for money. The Ambersil MRO product range is your strategic maintenance chemical partner.

Ambersil



Targeting
Cleaning / Degreasing



Targeting
Lubrication, Oils, & Greases



Targeting
Anti-Corrosion & Paints



Targeting
Welding



Targeting
Metal Working



Targeting
Fault Finding



Targeting
Workshop Additions



Targeting
Polymer Processing



Targeting
Food / Beverage / Pharma

POLIPUMP

YOUR OWN CENTRALISED LUBRICATION SYSTEM
IN JUST A FEW QUICK STEPS



The choice for PROFITABILITY

Good lubrication is crucial to extend the life of your bearings. This is why the POLIPUMP has been designed especially to increase the reliability of your machine by providing the right amount of grease at the right time. With a very fast return on investment, this new multipoint lubrication system will increase the availability of your equipment and will reduce your maintenance costs at the same time.

Your POWERFUL and ECONOMICAL solution

With the POLIPUMP, you will be able to lubricate from 1 to 35 points simultaneously and automatically under the control of the built in electronic timer. With its high pressure capability, (80 bar) the POLIPUMP can dispense the grease to several points up to a distance of 20 meters. Precise and reliable, the POLIPUMP is your best tool to increase your productivity.

EASY set up and ECOLOGICAL

The POLIPUMP can be used straight from the box after a few basic steps. No need for special engineering skills, you can easily install your multipoint centralised system by yourself. No special maintenance is required and you can refill your pump very easily with our filling kit that can be used with the grease of your choice. No need for special cartridges with dedicated greases.

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

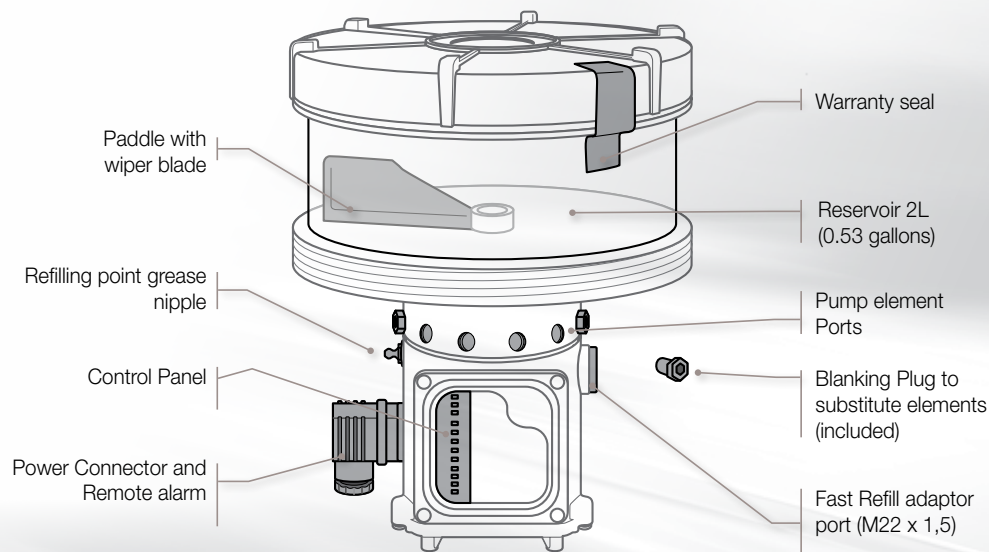
2 Connect the pump to the power supply

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



With You

FAG



The lubricants available from the Schaeffler Group are designed and tested for bearing arrangement engineering.

The Arcanol rolling bearing greases offer very good preconditions for favourable running behaviour of bearings and a long operating life and high operational security of the bearing arrangement.

The lubricant range is graduated such that almost all areas of application are covered.

Grease	Thickener	Operating temp °c	Tube			Cartridge	Can	Bucket		Hobbock	Drum
			20g	70g	250g	400g	1Kg	5kg	10kg	25kg	180kg
MULITOP	Lithium soap with EP additives	-40 to +150			•	•	•	•	•	•	•
MULTI2	Lithium soap	-30 to +140	•		•	•	•	•	•	•	•
MULTI3	Lithium soap	-30 to +140			•	•	•	•	•	•	•
LOAD220	Lithium/calcium soap with EP additives	-20 to +140					•		•	•	•
LOAD400	Lithium/calcium soap with EP additives	-25 to +140				•	•	•	•	•	•
LOAD1000	Lithium/calcium soap with EP additives	-20 to +140						•		•	•
TEMP90	Calcium polycarbamide with EP additives	-40 to +160	•			•	•	•		•	•
TEMP110	Lithium complex soap	-40 to +160				•	•				
TEMP120	Polycarbamide with EP additives	-35 to +180					•	•		•	
TEMP200	PTFE	-40 to +260		•			•				
SPEED2,6	Polycarbamide	-50 to +120			•		•			•	
VIB3	Lithium complex soap with EP additives	-30 to +150				•	•	•		•	
BI02	Lithium/calcium soap	-30 to +150				•	•		•	•	•
FOOD2	Aluminium complex soap	-30 to +120				•	•		•	•	•

READY BOOSTER

THE NEW SINGLE POINT LUBRICATOR FROM NTN-SNR



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.

FOR YOUR APPLICATION, SELECT THE MOST SUITABLE GREASE FOR YOUR AUTOMATIC LUBRICATOR



UNIVERSAL



HEAVY DUTY +



VIB



HIGH TEMP



CHAIN OIL



FOOD AL



TECHNICAL INFORMATION

- Gas generating unit
- Reliable and economical
- Transparent cartridge
- Immediate activation (less than 1 day)

IP68 protection

Max. pressure 5 bars

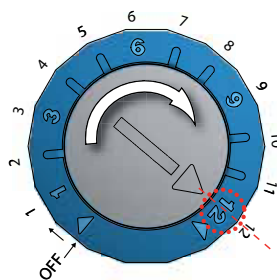
Discharge period from 1 to 12 months

Stoppable

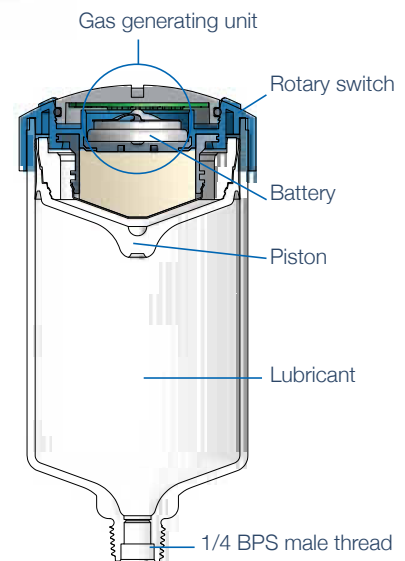
Capacity of 125 cm³

Operating temperatures: from -20°C up to +60°C

Several accessories available



Rotary switch for discharge period setting



Operating temperatures: from -20°C up to +60°C



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 Soluable 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

LUBRICATION & MAINTENANCE



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[®]

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.

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 Technical Desk: +44 (0)1299 269 269
www.bondloc.co.uk

THREAD LOCKING

Engineers Kit

Designed and manufactured by Bondloc UK, this easy to carry, tough reinforced plastic case, with expanded polystyrene interior, contains a range of Bondloc adhesives and sealant products which have proven to be the most frequently used by engineers across a broad spectrum of industries.



LUBRICATION & MAINTENANCE

Screwlock B222

Anaerobic adhesive for locking threads and preventing loosening. Seals out moisture to prevent corrosion. Ideal for small screws, circuit board fixings etc.

- ◆ Ideal for fine threaded components.
- ◆ Prevents loosening.
- ◆ Chemical resistant.
- ◆ Low strength.
- ◆ Temperature resistance -40 to +150°C.

Sizes:
25ml. 50ml. 250ml.



Nutlock B243

Oil tolerant adhesive for direct application to 'as received' parts. Locks threads and prevents loosening. Seals out moisture to prevent corrosion.

- ◆ Oil tolerant.
- ◆ Prevents loosening.
- ◆ Chemical Resistant.
- ◆ Medium strength.
- ◆ Temperature resistance -55 to +150°C.

Sizes:
25ml. 50ml. 250ml.



Studlock B270

Anaerobic adhesive for locking threads and preventing loosening. Use on all studs up to 1" diameter & coarse threaded bolts and casting interfaces.

- ◆ Locks threads.
- ◆ Prevents loosening.
- ◆ High breakout strength.
- ◆ High strength.
- ◆ Temperature resistance -55 to +150°C.

Sizes:
25ml. 50ml. 250ml.



CYANOACRYLATES

Superglue B401

General purpose adhesive for bonding most materials including metals, plastics, wood, ceramics, rubber, glass, card and leather.

- ◆ Surface insensitive.
- ◆ General purpose adhesive.
- ◆ Super fast cure.
- ◆ Medium viscosity.
- ◆ 110cP.
- ◆ Bonds in 5 seconds.

Sizes:
20g. 50g.



Superglue B406

For bonding most rubbers and plastics, 'O' Rings and EFDM in seconds. Can be used with B770 Primer for difficult plastics and Elastomers.

- ◆ Fast cure.
- ◆ 30cP.
- ◆ Temperature resistance -40 to +100 C.

Sizes:
20g. 50g.



Superglue B454

Gap fill, non drip general purpose adhesive gel, suitable for bonding metals, plastics, wood, ceramics, metals, card, leather, plastics, rubber and many other absorbent materials.

- ◆ Instant thixotropic gel.
- ◆ Gap fills and non drip.
- ◆ Toughened.

Sizes:
20g.



Superglue - B480 Black

Rubber toughened adhesive for bonding most materials including plastics, rubbers, metals, card, glass and wood.

- ◆ Rubber toughened.
- ◆ Flexible.
- ◆ Black cyanoacrylate.
- ◆ 400cP

Sizes:
20g. 50g.



STRUCTURAL

Rapid 5 minute Epoxy - B2012

Bonds most materials including metals, plastics, wood, ceramics, rubber, leather, card, glass and many other materials.

- ◆ Ideal for non close fitting surfaces.
- ◆ Suitable for bonding and filling cracks.
- ◆ Good clarity
- ◆ Neutral in appearance.
- ◆ Cures in 5 minutes.

Size: _____
28ml



Plastic Weld B3294

Ideal for bonding most plastics including ABS, PVC, acrylics, and most reinforced plastics, styrene and vinyls, Metals and wood.

- ◆ Ideal for Bonding dissimilar surfaces, e.g. plastic to metal.
- ◆ Impact and fluid resistant.
- ◆ High strength.

Size: _____
28ml



GASKETING

Gasket Eliminator B518

For sealing flanges and gaskets on close fitting, rigid machined parts.

- ◆ Any shape or size of gasket can be made, replacing the need for pre-cut gaskets.
- ◆ For close fitting parts up to 0.5mm gap.
- ◆ Resists temperatures up to 150°C.
- ◆ Fast cure

Size: _____
50ml, 250ml.



Multi Gasket B574

Simple to apply, fast curing, flexible, scratch filling gasket maker that provides an instant low pressure seal.

- ◆ Seals rapidly.
- ◆ General purpose flange sealant to fill scratches and gauges up to 0.5mm.
- ◆ Works to a maximum continuous operating temperature of 150°C.

Size: _____
50ml, 250ml.



RETAINING

Retainer B603

Ideal for retaining bearings brushes and keyways.

- ◆ Use to bond all cylindrical close fitting parts up to 0.15mm gap, especially where thorough degreasing is not possible.
- ◆ Temperature resistance -55 to +150°C.

Size: _____
25ml, 50ml, 250ml.



Retainer B638

Increases torsional strength and enables slip-fitted parts to withstand higher cyclic loadings.

- ◆ Use to retain and seal heavy duty parts.
- ◆ Typical fixture time is 5 minutes.
- ◆ Temperature resistance -50 to +120°C.

Size: _____
25ml, 50ml, 250ml.



Bearing Fit B641

Recommended for use on parts that may need future dismantling.

- ◆ Gap fills to 0.2mm diametrically
- ◆ Replaces mechanical fixings.
- ◆ Medium strength.
- ◆ Temperature resistance -50 to +150°C.

Size: _____
25ml, 50ml, 250ml.



High Temp Retainer - B648

Ideal for high temperature - retention of parts with a clearance or interference fit, i.e. retaining bushes, fans, bearings, seals, liners etc.

- ◆ Retains slip & press fit parts.
- ◆ Replaces mechanical fixings.
- ◆ High strength.
- ◆ Temperature resistance -50 to +175°C.

Size: _____
25ml, 50ml, 250ml.



THREADSEALING

Hydraulic Seal - B542

B542 is used for all types of hydraulic connections, sealing against typical pressure line ratings, use to fit valves and threaded couplings.

- ◆ Ideal for all types of metal parts.
- ◆ Locks and seals hydraulic and pneumatic fittings.
- ◆ High pressure resistant.
- ◆ Medium strength.
- ◆ Temperature resistance -55 to +150°C

Size: _____
25ml, 50ml, 250ml



Stainless Steel Pipe Seal B567

Provides an instant seal at low pressures on stainless steel, copper and other metals.

- ◆ Lubricating Teflon particles smooth assembly and increase sealing tightness.
- ◆ Vibration proof and can withstand temperature and pressure changes.
- ◆ Temperature resistance -50 to +150°C

Size: 50ml
250ml



Pipe Seal - B577

Ideal for sealing pipes, pipe fittings and plugs and gives an instant low pressure seal.

- ◆ Seals threads and pipes up to 75mm.
- ◆ Replaces pastes, hemp and PTFE tape.
- ◆ Allows repositioning of parts or fittings.
- ◆ Will not shred, creep or shrink.
- ◆ Resists 10 bar pressure.
- ◆ Temperature resistance -55 to +150°C.

Size: 50ml
250ml



Hand Tools



Our most competitively priced hand tools which are still covered by a lifetime guarantee.



Our top-of-the-range hand tools suitable for daily use by the professional user. Designed and manufactured from the highest quality components, these tools are made to last a lifetime.

Air Tools



The workshop range features traditional designs with proven reliability. These tools represent the very best value in everyday air tools yet are supported by our extensive after-sales service.



The Generation range incorporates some of the best designs in air tools of recent date. Features include soft grip handles and housings which help reduce vibration and chill, and exhaust systems designed to reduce noise levels.



Our Premier range offers the very best in performance and price backed with a 2-year guarantee. We specify the very highest quality components and manufacturing designs to ensure a long and durable life.

Gardening



Tried and tested traditional garden tools incorporate hardwood solid ash shafts with YD handles.



Top of the range tools incorporating the best quality, design and materials for long life.

Jacking, Lifting & Towing



Our entry level range of hydraulic equipment. Designed for the professional user in a demanding workshop environment a good value for money.



Our top-range of hydraulic equipment, predominately manufactured in Europe to exacting standards.



The same quality as the 'Red' Premier range. These models are fitted with 'Rocket Lift' function which reduces the number of strokes needed to operate the unit.

Electric Power Tools



These tools offer good reliability at the very best value in everyday electric power tools. They still have the same professional support and after-sales service as with the rest of the Sealey range.



Traditional designs and proven workshop reliability define our Sealey Power Tool range. They represent the very best value in everyday power tools and are supported by our extensive after-sales service in exactly the same way as our high-end Premier range.



Our range of Premier Power Tools offer the very best in performance. We specify the very highest quality components and manufacturing designs to ensure a long and durable working life and are confident that these tools offer the best value around.

Storage & Workstations



Competitive range of Professional Topchests and Rollcabs featuring:

- ✓ Ball Bearing Drawer Runners.
- ✓ High gloss triple baked enamel finish.
- ✓ Tumbler type security locks.
- ✓ Heavy-duty castors.



Full range of Professional Topchests and Rollcabs:

- ✓ Heavy-Duty Ball Bearing Drawer Runners.
- ✓ Full Height Rear-Locking Mechanism.
- ✓ Models available in Red and Black.



Our top of the range Professional Topchests and Rollcabs:

- ✓ Self Locking Drawer Mechanism.
- ✓ Heavy-Duty Ball Bearing Drawer Runners.
- ✓ Full Range of Tool Trays available.
- ✓ Rollcabs feature Heavy-duty Worktable.
- ✓ Anti-shock Rubber Protection on all corners.



Range of Industrial quality cabinets, workbenches and accessories:

- ✓ Heavy-Duty Ball Bearing Drawer Runners.
- ✓ Heavy gauge steel with powder coating for rust and solvent protection.
- ✓ Cabinets feature partitioned drawers with high load bearing capacity.
- ✓ Self locking drawer mechanism with high quality lock and coded keys.

EXPERTS & TOOLS: THE TOOLS



MOUNTING & DISMOUNTING TOOLS:

Mounting and dismounting a bearing: these essential stages determine the life span of the installation as well as its correct operation.

Experts
& Tools



Cold mounting:

The tool case for a quick and accurate bearing fitting in complete safety.



Hot mounting:

Induction heating: Practical, simple, safe, environmentally-friendly ... What else?



Hydraulic mounting:

Precise, effortless with a revolutionary nut, always ready for use thanks to its "back & forth" feature!



Dismounting tools:

Hydraulic or mechanical dismounting:
All kinds of pullers (2 or 3 arms) for a safe and clean operation whatever the position and the size of the bearing.



Instruments:

Simple, safe and precise monitoring of operating machine temperature with a laser pointer thermometer.

And more tools for bearing fitting and handling...



- Designed to protect wearers against hazards in the building, construction, maintenance and associated industries.
- All SCAN safety products meet “EN or CE Standards” where applicable.

SAFETY WORKWEAR PRODUCTS



TOOLS

RIDGID®

INSPECTION



THREADING



DRAIN CLEANING



TOOLS





- More than 3,300 professional quality tools for the automotive, building, construction, decorating, engineering, gardening, plumbing, electrical and woodworking trades.
- Top quality manufacture to the latest standards for long life and durability.
- 5-year guarantee (excludes electrical tools, tools with cutting edges and abrasives).

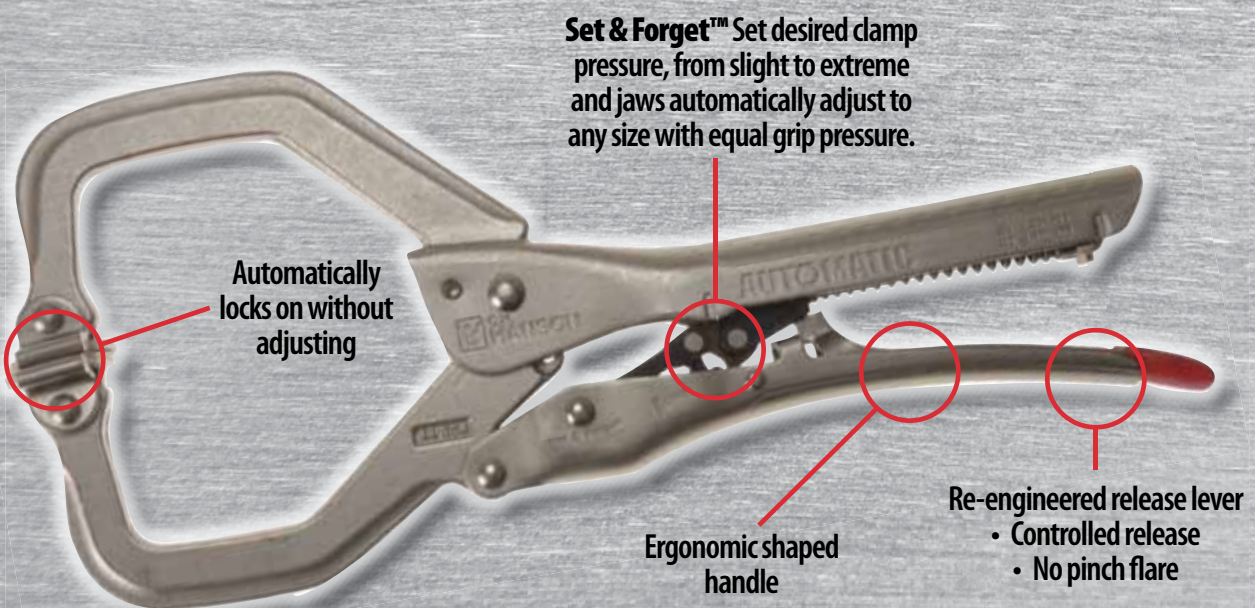


**C.H.
HANSON**[®]
Since 1866 • Tools for Generations™

AUTOMATICALLY LOCKS ON ANY SIZE WITHOUT ADJUSTING



TOOLS



Since 1869, the Vaughan family has been committed to producing hand tools that proudly state "Made in the USA". Vaughan is best known for it's range of hammers and bars which are considered to be best in class. Many hammer and bar designs we see today originated from Vaughan.

Alongside these we also have available an excellent range of Bear Saws, Axes and Flip Markers.



STEEL EAGLE®

Balance is difficult to describe and impossible to formulate, but when a hammer's got it - you can just "feel it."

Proper head-to-handle weight distribution is one of the key factors and Vaughan hammers have it!

There's never been a solid steel hammer like the Vaughan Steel Eagle®. Forged entirely of high quality, American made, high carbon steel, it has all the toughness and durability you would expect in a solid steel hammer, yet there's none of the irritating vibration you normally get from a solid steel hammer...



Unique Shock-Blok™ hickory + rubber shock absorber reduces sting and eliminates ring.



Exclusive, high strength I-Beam handle reduces weight for better balance.



VAUGHAN®



ROUGHNECK®
TOUGH TOOLS FOR A TOUGH WORLD™

High quality tools designed for the professional

Offers more than 300 products covering:

- Striking tools
- Pry & wrecking bars
- Clamps & vices
- Landscaping
- Bolsters & chisels
- Fencing
- Builders tools

Workwear and safety footwear

AND NOT FORGETTING THE WORLD FAMOUS GORILLA BAR STILL THE ONLY WRECKING BAR TO BE ASKED FOR BY NAME!





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
--	--	--	--	--

- 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
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
								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	Height	Width	Load Capacity	Wheel Diameter	Wheel Width	Castor Height	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	Height	Width	Load Capacity	Wheel Diameter	Wheel Width	Castor Height	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	Height	Width	Load Capacity	Wheel Diameter	Wheel Width	Castor Height	Weight	Swivel	+ total brake	+ total brake
75	25	100				11	75	AT075P5Z21	AT075P6Z21	-
100	32	135				11	100	AT100P5Z21	AT100P6Z21	AT100P6Z22
125	32	160				11	100	AT125P5Z31	AT125P6Z31	AT125P6Z32
150	32	185				11	100	AT150P5Z21	AT150P6Z21	AT150P6Z22



Wheel Size	Height	Width	Load Capacity	Wheel Diameter	Wheel Width	Castor Height	Weight	Swivel	+ total brake	+ total brake
75	25	100				11	75	AT075B5Z21	AT075B6Z21	-
100	32	135				11	100	AT100B5Z21	AT100B6Z21	AT100B6Z22
125	32	160				11	100	AT125B5Z31	AT125B6Z31	AT125B6Z32
150	32	185				11	100	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			11	70	swivel	swivel brake	swivel	swivel brake
75	25	102			11	100	AT050P5Z81 AT075P5Z81	AT050P6Z81 AT075P6Z81	AT050B5Z81 AT075B5Z81	AT050B6Z81 AT075B6Z81



B

GREY NON MARKING RUBBER TYRE ON BLACK PLASTIC CENTRE WHEELS & CASTORS



80mm - 200mm



70Kg - 205Kg



roller bearing

- Polypropylene black wheel centre with grey solid rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for handling trolleys.

Wheel



Wheel	Width	Height	Weight	Roller bearing
80	35	12	40	70
100	35	12	40	75
125	38	15	50	100
160	40	20	59	135
200	50	20	59	205

Top Plate & Bolt Hole Castors



Wheel	Width	Height	Weight	Swivel	Fixed	+ total brake	bolt hole	+ total brake				
80	35	105	105x80	80/77x60	9	13	70	B080R2Z21	B080R3Z21	B080R4Z21	B080R5Z21	B080R6Z21
100	35	125	105x80	80/77x60	9	13	75	B100R2Z21	B100R3Z21	B100R4Z21	B100R5Z21	B100R6Z21
125	38	155	105x80	80/77x60	9	13	100	B125R2Z21	B125R3Z21	B125R4Z21	B125R5Z21	B125R6Z21
160	40	195	135x110	105x84/76	11	13	135	B160R2Z21	B160R3Z21	B160R4Z21	B160R5Z21	B160R6Z21
200	50	235	135x110	105x84/76	11	13	205	B200R2Z21	B200R3Z21	B200R4Z21	B200R5Z21	B200R6Z21

C

BLACK RUBBER TYRE ON BLACK PLASTIC CENTRE WHEELS & CASTORS



80mm - 200mm



70Kg - 205Kg



roller bearing

- Black polypropylene wheel centre with black solid rubber tread.
- Pressed steel, zinc plated castor body.
- Without threadguards.
- Ideal for handling trolleys.

Wheel



Wheel	Width	Height	Weight	Roller bearing
80	35	12	40	70
100	35	12	40	75
125	38	15	50	100
160	40	20	59	135
200	50	20	59	205

Top Plate & Bolt Hole Castors



Wheel	Width	Height	Weight	Swivel	Fixed	+ total brake	bolt hole	+ total brake				
80	35	105	105x80	80/77x60	9	13	70	C080R2Z21	C080R3Z21	C080R4Z21	C080R5Z21	C080R6Z21
100	35	125	105x80	80/77x60	9	13	75	C100R2Z21	C100R3Z21	C100R4Z21	C100R5Z21	C100R6Z21
125	38	155	105x80	80/77x60	9	13	100	C125R2Z21	C125R3Z21	C125R4Z21	C125R5Z21	C125R6Z21
160	40	195	135x110	105x84/76	11	13	135	C160R2Z21	C160R3Z21	C160R4Z21	C160R5Z21	C160R6Z21
200	50	235	135x110	105x84/76	11	13	205	C200R2Z21	C200R3Z21	C200R4Z21	C200R5Z21	C200R6Z21



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		D080R1021				
100	27	12	40					75		D100R1021				
125	38	15	40					100		D125R1021				
160	40	20	50					135		D160R1021				
200	50	20	50					205		D200R1021				

Top Plate & Bolt Hole Castors



80	27	105	105x80	80/77x60	9	13	70					
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		D200R1071			

Top Plate Swivel



200	50	235	135x110	105x84/76	11	55	205					
								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



											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



											swivel		fixed		+ total brake			
80	34	105	105x80	87/77x60	9				130		F080P2Z21		F080P3Z21		F080P4Z21			
100	36	125	105x80	87/77x60	9				150		F100P2Z21		F100P3Z21		F100P4Z21			
125	38	155	105x80	87/77x60	9				200		F125P2Z21		F125P3Z21		F125P4Z21			
160	40	195	135x110	105x84/76	11				300		-		-		-			
200	50	235	135x110	105x84/76	11				300		-		-		-			

											swivel		fixed		+ total brake			
80	34	105	105x80	87/77x60	9				130		F080R2Z21		F080R3Z21		F080R4Z21			
100	36	125	105x80	87/77x60	9				150		F100R2Z21		F100R3Z21		F100R4Z21			
125	38	155	105x80	87/77x60	9				200		F125R2Z21		F125R3Z21		F125R4Z21			
125	38	155	135x110	105x84/76	11				250		F125R2Z25		F125R3Z25		F125R4Z25			
160	40	195	135x110	105x84/76	11				300		F160R2Z21		F160R3Z21		F160R4Z21			
200	50	235	135x110	105x84/76	11				300		F200R2Z21		F200R3Z21		F200R4Z21			

Bolt Hole Castors



											swivel		+ total brake				
80	34	105			13				130		F080P5Z21		F080P6Z21				
100	36	125			13				150		F100P5Z21		F100P6Z21				
125	38	155			13				150		F125P5Z21		F125P6Z21				
160	40	195			13				200		-		-				
200	50	235			13				200		-		-				

											swivel		+ total brake				
80	34	105			13				130		F080R5Z21		F080R6Z21				
100	36	125			13				150		F100R5Z21		F100R6Z21				
125	38	155			13				150		F125R5Z21		F125R6Z21				
160	40	195			13				200		F160R5Z21		F160R6Z21				
200	50	235			13				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 Type	Width	Height	Weight	Weight (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 Type	Width	Height	Wheel Size	Wheel Size	Weight	Weight (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 Type	Width	Height	Wheel Size	Wheel Size	Weight	Weight (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 Type	Width	Height	Weight	Weight (Kg)	swivel	+ total brake
80	34	104	13	70	G080P5Z21	G080P6Z21
100	36	124	13	90	G100P5Z21	G100P6Z21
125	38	154	13	140	G125P5Z21	G125P6Z21
160	40	194	13	200	-	-
200	50	234	13	200	-	-

Castor Type	Width	Height	Weight	Weight (Kg)	swivel	+ total brake
80	34	104	13	70	G080R5Z21	G080R6Z21
100	36	124	13	90	G100R5Z21	G100R6Z21
125	38	154	13	140	G125R5Z21	G125R6Z21
160	40	194	13	200	G160R5Z21	G160R6Z21
200	50	234	13	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 Depth	Wheel Height	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 Depth	Wheel Height	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 Depth	Wheel Height	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



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



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

Wheel Size	Width	Height	Plate Size	Plate Size	Plate Size	Plate Size	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

Wheel Size	Width	Height	Plate Size	Plate Size	Plate Size	Plate Size	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

Wheel Size	Width	Height	Plate Size	Plate Size	Plate Size	Plate Size	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



Wheel	Width	Height	Weight	Material	Load	Bearing	Part No.
100	40	12	40		250	ball bearing	T100B1051
125	40	15	40		300		T125B1051

Top Plate Castors



Wheel	Width	Height	Plate Size	Plate Size	Plate Size	Weight	Load	Swivel	Fixed	+ total brake
100	40	128	105x80	80/77x60	9	250	250	T100B2Z51	T100B3Z51	T100B4Z51
100	40	128	135x110	105x84/76	11	250	250	T100B2Z52	T100B3Z52	T100B4Z52
125	40	155	105x80	80/77x60	9	300	300	T125B2Z51	T125B3Z51	T125B4Z51
125	40	155	135x110	105x84/76	11	300	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



Wheel	Width	Height	Weight	Material	Load	Bearing	Part No.
125	40	15	50		250	ball bearing	V125B1051
160	40	15	60		300		V160B1051
200	50	20	60		400		V200B1051

Top Plate Castors



Wheel	Width	Height	Plate Size	Plate Size	Plate Size	Weight	Load	Swivel	Fixed	+ total brake
125	40	162	135x110	105x84/76	11	250	250	V125B2Z51	V125B3Z51	V125B4Z51
160	40	195	135x110	105x84/76	11	300	300	V160B2Z51	V160B3Z51	V160B4Z51
200	50	235	135x110	105x84/76	11	400	400	V200B2Z51	V200B3Z51	V200B4Z51



Standard Duty Castors - NL



								4 km/h	(Kg)	swivel	(Kg)	fixed	(Kg)	swivel + brake				
80	28	107	100x85	80x60	9	39	120	220	0.95	644551	0.82	644651	1.11	645451				
100	38	128	100x85	80x60	9	37	120	220	1.51	644552	1.40	644652	1.67	645452				
125	38	156	100x85	80x60	9	39	120	220	1.97	644553	1.86	644653	2.13	645453				
125	50	165	140x110	105x80	11	57	156	300	3.38	644563	2.89	644663	3.58	645463				
150	50	194	140x110	105x80	11	56	156	300	3.87	644554	3.59	644654	4.12	645464				
160	50	199	140x110	105x80	11	56	156	300	3.98	644564	3.71	644664	4.23	645474				
200	50	220	140x110	105x80	11	56	156	300	4.48	644555	4.21	644655	4.68	645465				
200	50	240	140x110	105x80	11	56	156	300	5.16	644556	4.92	644656	5.36	645466				

Medium Duty Castors - M



								4 km/h	(Kg)	swivel	(Kg)	fixed	(Kg)	swivel + brake				
150	50	194	140x110	105x80	11	56	178	500	4.21	644954	3.59	644654	4.65	645564				
160	50	199	140x110	105x80	11	56	178	500	4.33	644964	3.71	644664	4.78	645574				
200	50	240	140x110	105x80	11	56	178	500	5.55	644956	4.92	644656	5.91	645566				

Medium-Heavy Duty Castors - P



								4 km/h	6 km/h	(Kg)	swivel	(Kg)	fixed	(Kg)	swivel + brake	(Kg)	swivel + brake		
80	28	128	100x85	80x60	9	46	-	280	220	1.38	645851	0.96	646851	-	-	-	-		
100	38	138	100x85	80x60	9	46	123	350	300	1.93	645852	1.52	646852	2.06	644852	-	-		
125	38	161	100x85	80x60	9	46	123	350	300	2.37	645853	2.04	646853	2.50	644853	-	-		
125	50	170	140x110	105x80	11	70	126	550	440	3.66	645863	2.65	646863	-	-	4.24	644863		
150	50	200	140x110	105x80	11	70	126	700	560	4.81	645854	3.55	646854	-	-	5.33	644854		
160	50	205	140x110	105x80	11	70	126	750	600	4.93	645864	4.08	646864	-	-	5.45	644864		
180	50	228	140x110	105x80	11	70	126	750	600	5.30	645855	4.45	646855	-	-	5.90	644855		
200	50	250	140x110	105x80	11	70	126	750	600	6.06	645856	5.15	646856	-	-	6.66	644856		

Extra-Heavy Duty Castors - EP



								4 km/h	6 km/h	(Kg)	swivel	(Kg)	fixed	(Kg)	swivel + brake				
100	38	140	100x85	80x60	9	46	-	350	300	2.15	647852	1.92	648852	-	-				
125	38	164	100x85	80x60	9	48	-	350	300	2.64	647853	2.44	648853	-	-				
125	50	188	140x110	105x80	11	70	-	550	440	4.61	647863	4.16	648863	-	-				
150	50	200	140x110	105x80	11	70	126	700	560	5.04	647854	4.63	648854	5.56	646654				
150	60	200	135x110	105x80	11	70	-	850	680	5.44	647824	4.96	648824	-	-				
160	50	205	140x110	105x80	11	70	126	750	600	5.16	647864	4.75	648864	5.68	646664				
180	50	228	140x110	105x80	11	70	126	900	720	5.60	647855	5.20	648855	6.20	646655				
200	50	250	140x110	105x80	11	70	126	1000	800	6.35	647856	6.06	648856	6.95	646656				
200	80	275	175x140	140x105	14	66	-	1600	1300	12.30	647866	10.46	648866	-	-				
250	60	300	175x140	140x105	14	66	-	1500	1200	13.16	647857	11.32	648857	-	-				

Electro Welded Castors - EE MHD



								4 km/h	6 km/h	(Kg)	swivel	(Kg)	fixed	(Kg)	swivel + brake				
125	50	182	135x110	105x80	11	51	157	550	440	4.88	648303	3.90	648403	5.76	648503				
150	50	210	135x110	105x80	11	60	157	700	560	5.50	648304	4.51	648404	6.38	648504				
160	50	215	135x110	105x80	11	60	157	750	600	5.65	648314	4.66	648414	6.53	648514				
180	50	242	135x110	105x80	11	70	157	900	720	6.14	648305	5.16	648405	7.02	648505				
200	50	252	135x110	105x80	11	70	157	1000	800	6.77	648306	5.79	648406	7.65	648506				



Electro Welded Castors - EE HD



150	80	218	175x140	140x105	14	50	166	1000	800	12.15	648315	10.61	648415	13.03	648515				
150	80	218	200x160	160x120	17	74	-	1000	800	12.15	648324	10.61	648424	-	-				
200	80	275	175x140	140x105	14	65	166	1600	1300	13.72	648316	12.18	648416	13.72	648516				
250	60	320	175x140	140x105	14	74	166	1500	1200	14.82	648307	13.23	648407	14.82	648507				
250	80	320	175x140	140x105	14	74	166	1600	1300	16.50	648317	14.91	648417	16.50	648517				
250	80	325	200x160	160x120	17	74	166	1900	1500	17.56	648327	15.23	648427	17.56	648527				
300	60	360	175x140	140x105	14	81	166	1600	1300	18.24	648308	16.62	648408	18.24	648508				
300	60	365	200x160	160x120	17	81	166	1750	1400	19.30	648328	16.95	648428	19.30	648528				
300	80	360	175x140	140x105	14	81	166	1600	1300	20.61	648318	18.99	648418	20.61	648518				
300	80	365	200x160	160x120	17	81	166	2300	1800	21.67	648338	19.32	648438	21.67	648538				

Twin Wheel Electro Welded Castors - EE EHD



300	100	384	250x200	210x160	19	78	2500	2000	29.80	648309	25.10	648409						
400	100	475	250x200	210x160	19	95	2800	2200	44.91	648310	40.21	648410						

Twin Wheel Electro Welded Castors - EEG MHD



100	38+38	140	135x110	105x80	11	55	700	600	4.50	648062	3.75	648162						
125	38+38	170	135x110	105x80	11	55	900	720	5.45	648063	4.70	648163						

Twin Wheel Electro Welded Castors - EEG HD



125	50+50	210	175x140	140x105	14	50	1100	880	11.00	648072	7.70	648172						
150	50+50	223	175x140	140x105	14	50	1400	1100	13.10	648074	8.70	648174						
160	50+50	228	175x140	140x105	14	50	1500	1200	13.40	648084	9.00	648184						
200	50+50	280	175x140	140x105	14	65	1600	1300	15.90	648066	11.30	648166						
200	50+50	285	200x160	160x120	17	62	2000	1600	17.55	648076	12.70	648176						

Twin Wheel Electro Welded Castors - EEG EHD



200	78+78	280	250x200	210x160	19	52	3200	2500	34.80	648086	25.05	648186						
250	60+60	330	250x200	210x160	19	62	3000	2400	36.95	648067	27.20	648167						
250	78+78	330	250x200	210x160	19	62	3500	2800	40.30	648077	30.55	648177						
300	78+78	385	250x200	210x160	19	75	4300	3500	50.00	648078	40.00	648178						





MOTOR BASES

MOTOR BASES

Description

The fastest and most economical method of securing motors to machine beds. The five sizes are manufactured from galvanised steel and they can accommodate motor frame sizes 63 to 180. They have four slotted holes for fastening the base to the foundation.

Motor base range from SL210 to SL490.



Specification

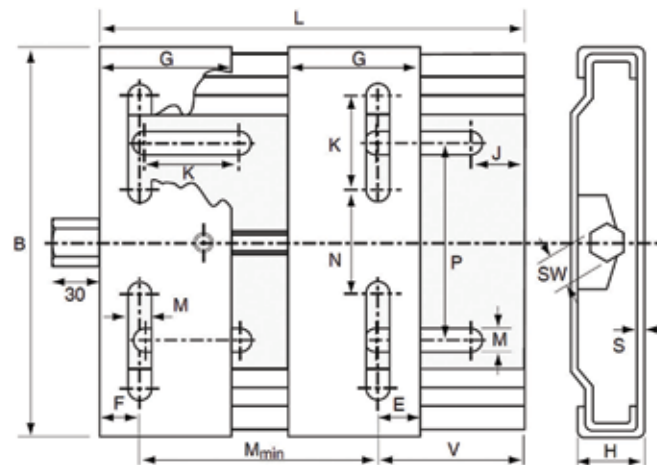
The fastest and most economical method of securing motors to machine beds. The five sizes are manufactured from galvanised steel and they can accommodate motor frame sizes 63 to 180. They have four slotted holes for fastening the base to the foundation.

Alignment

The pressed top plate is designed to slide over the base plate preventing vibration and noise whilst ensuring continuous belt alignment. Belts are tensioned by adjusting a single screw.

Motor Mount

The motor is bolted to the two piece top plate which accomodates a wide range of motors. Centre distance adjustments can be made without the need to loosen the motor bolts.



MOTOR BASES

Part No.	Frame Size	L	B	H	M	G	E	J	K	M	N	P	SW	S
SL210	63 - 80	210	195	33	100	70	20	25	50.0	10.5	43	98	19	3
SL270	63 - 100	270	195	33	100	70	20	25	50.0	10.5	43	98	19	3
SL340	90 - 132	340	290	39	136	95	27	29	62.5	12.5	90	165	22	4
SL430	90 - 160	430	290	39	136	95	27	29	62.5	12.5	90	165	22	4
SL490	160 - 180	490	409	40	110	95	40	30	60.0	15.0	193	142	22	4

BONFIGLIOLI

Geared Motors and Drives Solutions



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



F series shaft mounted gearmotors

Torque range 140 ... 14,000 Nm
Mechanical rating 0,17 ... 125 kW
Gear ratios 6,4 ... 2099



RAN series bevel gearboxes

Torque range 3 ... 3,000 Nm
Mechanical rating 0,15 ... 91 kW
Gear ratios 1 ... 7,4



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 IE2 high 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)



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.



TECA and TA Aluminium Ranges:

- Powers – 0.09kW – 30kW
- Speeds – 2, 4, 6 and 8 pole
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages: - 3.0kw and below 230/3/50, 400/3/50, 278/3/60, 480/3/60 (all +/- 10%)
- 4.0kw and above 400/3/50, 690/3/60, 480/3/60, 830/3/60 (all +/- 10%)

The high efficient IE2 and IE3 TEC aluminium motor ranges from 56-200 frame are multi mount and highly versatile for a variety of applications. All motors are fitted with PTC 130°C thermistors and with drain hole plugs at both the drive and none drive end as standard, and all have sealed for life bearings.



TECC Cast Iron Range:



- Powers – 0.75kW – 315kW
- Speeds – 2, 4, 6 and 8 pole
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages - 3.0kw and below 230/3/50, 400/3/50, 278/3/60, 480/3/60 (all +/- 10%)
- 4.0kw and above 400/3/50, 690/3/60, 480/3/60, 830/3/60 (all +/- 10%)
- Bearings – Sealed for life up to and including 132 frame – re-greasable 160 frame and above.

TEC ECOL cast iron motors with IE2 and IE3 efficiency to the latest IEC 60034 standards are an adaptable and robust design for light and heavy duty use. The ECOL range is available from 80-355 frame with a multi-mount design up to 280 frame. All motors are fitted with PTC 150°C thermistors and with drain hole plugs at both the drive and none drive end as standard.

NEMA TXC American Motor range:

- Powers – 1HP – 200HP
- Speeds – 2, 4 and 6 pole
- Mountings – NEMA C face and NEMA D flange
- Voltages – 190/3/50, 380/3/50, 230/3/60, 460/3/60 (all +/- 10%)

TEC are now able to offer NEMA premium efficiency motors in imperial frames. The 9 lead no terminal block design motors can be offered in Cast iron housings with fixed or removable feet. In this range, all motors have a left hand terminal box when viewed from the drive end and are CSA and CUR/US approved as standard.





- Powers – 0.18kW – 3.7kW
- Speeds – 2 and 4 pole
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages – 110/1/50 and 230/1/50
- 2 capacitors mounted within terminal box with a centrifugal switch arrangement internally

TEC TCC capacitor start capacitor run motors are available in 63-112 frame sizes and in all mounting types. TCC motors have a high starting torque and are generally used on applications where the load is present on start-up such as grinders, conveyors, car ramps and other equipment. The 110v range is ideal for use with portable equipment that is being used on building sites where voltage is limited to 110v.

TCC Cap Cap Motor Range:



TPC Perm Cap Motor Range:



- Powers – 0.09kW – 3.0kW
- Speeds – 2 and 4 pole
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages – 230/1/50
- Single capacitor arrangement which is mounted within the terminal box.

TEC TPC Permanent capacitor run motors are available in 56-100 frame sizes and in all mounting types. Fan and pump duty applications are where the TPC motor performs best. With lower starting torque and starting current, they are also generally used in domestic applications. Permanent capacitor motors are suitable for square low torque applications such as fans or centrifugal pumps.

- Powers – 1/4HP – 1HP
- Speeds – 2 and 4 pole
- Mountings – Resilient base
- Voltages – 230/1/50 1PH

Imperially measured TEC B56 1ph motors are suitable replacements for many older B56 motors. These motors were classically used on lathes, machine tools and fairground rides along with other applications

B56 1ph resilient base motors



ATEX Zone 1 – II 2G IIC T4 – Exd
 ATEX Zone 2 – II 3G Ex nA IIC T4 Gc
 ATEX Zone 22 – II 3D Ex tc IIIC T125°C DC
 ATEX Zone 1/21 - 2GD Exd IIC T4 Ex tb IIIC T125°C Zone 1/21

- Powers – 0.09kw – 315kw
- Speeds – 2, 4, 6 and 8 pole
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages – 3.0kw and below 230/3/50, 400/3/50, 278/3/60, 480/3/60 (all +/- 10%)
 - 4.0kw and above 400/3/50, 690/3/60, 480/3/60, 830/3/60 (all +/- 10%)

TEC ATEX motors are designed, certified and manufactured with safety in mind. All TEC ATEX motors are fitted with thermistors as standard and suitable for a wide range of applications.

ATEX Motor Ranges:



TECA-BM Brake Motor Range:



- Powers – 0.75kw – 15kw
- Speeds – 2, 4, and 6
- Mountings – B3, B5, B14, B35, B34, B5R, B14B, B35R, B34B
- Voltages – 3.0kw and below 230/3/50, 400/3/50, 278/3/60, 480/3/60 (all +/- 10%)
 - 4.0kw and above 400/3/50, 690/3/60, 480/3/60, 830/3/60 (all +/- 10%)
- Other sizes and speeds available as a retro fit along with 24vD.C, 400vA.C and larger than standard Nm brake motors.

TEC TECA-BM brake motors are a combination of a standard TECA range motor with an electro-magnetic D.C brake fitted to the non-drive end. The rectification from A.C to D.C happens through the brake rectifier which is conveniently mounted inside the motors terminal box. All standard TECA-BM motors come with hand release and are fitted with thermistors

B56 3ph resilient base motors

- Powers – 1/4HP – 1HP
- Speeds – 2 and 4 pole
- Mountings – Resilient base
- Voltages – 400/3/50 3PH

TEC are now able to offer NEMA B56 resilient base motors. These act as ideal replacements for any old B56 ranges normally found on machine tools such as lathers and leisure applications such as fairground rides.





Lenze SMV Inverters:

- Powers – 0.25kW – 30kW
- IP rating – IP65
- Voltages – 1ph-3ph models - 230/1/50 in and 230/3/50 out
- 3ph-3ph models – 400/3/50 in and 400/3/50 out

All Lenze SMV inverters come with an in-built EPM programming chip for ease of multiple inverter programming and are IP65 meaning that they can be mounted free standing. The range is UL, cUL, CE, GOST and C-Tick approved with a multitude of additions available for closed loop systems.



Lenze SMD Inverters:

- Powers – 0.25kW – 30kW
- IP rating – IP20
- Voltages – 1ph-3ph models - 230/1/50 in and 230/3/50 out
- 3ph-3ph models – 400/3/50 in and 400/3/50 out

Lenze SMD inverters also have the EPM programming chip built-in for ease of multiple inverter programming and are IP20 meaning that are suitable for panel mount use. The 1ph-3ph version has a built in EMC filter and the 3ph-3ph has a foot print filter available as an optional extra.



Other inverter ranges:

- Powers – 0.25kw – 1MW
- IP rating – IP20, IP31 and IP65
- Voltages – A complete range of input and output voltages available.

The Santerno Sinus Penta range of inverters are manufactured in Italy and have 4 overload ranges available, light duty, medium duty, heavy duty and strong duty as standard. As each inverter is built to order, Santerno can meet any specification that is required by the end user.



As of 1st January 2015, any standard duty 3ph motor 7.5kw-375kw must be IE3 unless used with an inverter. If an inverter is supplying the motor then IE2 motors can still be used.



TEC Right Angle Worm Range:

- Ratios – 5:1 – 100:1 for Worm 61.8 - 504:1 for Helical Worm
- Torques – 1 - 1800Nm
- Size 25 - 150
- Lightweight, adaptable and a relatively inexpensive solution

TEC FCNDK right angle worms are interchangeable with the majority of other manufacturers making them ideal for new and replacement motor/gearbox applications. With output bore options and many flange options available, the TEC range will cover most requirements.



TEC In-Line Gearbox Range:



- Ratios – 2.5:1 – 600:1
- Torques – 1 - 18,000Nm
- 2 and 3 stage units available in same output casing

The TEC in-line range is lightweight durable die-cast aluminium up to size 40mm output shaft diameter, then heavy duty rugged cast iron up to 120mm shaft diameter.

TEC Helical/Bevel Helical Gearbox Range:

- Ratios – 7.5:1 – 300:1
- Torques – 1 - 50,000Nm
- Aluminium and cast iron construction

TEC bevel - helical high efficiency range comprises of lightweight durable die-cast aluminium up to 38mm bore diameter, then heavy duty rugged cast iron up to 160mm bore diameter.



TEC are the UK distributor for Varvel Italy who are a leading manufacturer of gearbox products, we also have an in house build centre for bevel/helical and in-line gearboxes.



TEC can offer a wide range in-house motor modifications including:

- IP upgrades
- Thermistor fitting
- Heater fitting
- Klixon fitting
- Mounting changes
- Tropicalized windings
- Epoxy paint finishes

This flexibility allows for lower downtime periods for the end user during breakdowns situations.

TEC In-House Motor Modifications:



TEC Machine Shop Modifications



TEC Motors work closely with a number of re-winders and machine shops throughout the UK for any modifications that cannot be achieved in house such as:

- Brake fitting
- Shaft extensions
- Voltage changes
- Class H rewinds and
- Double ended motors

Associated Motor Products:

TEC have a range of slide bases and slide rails for all sizes of motors. All are made from galvanised steel and are a robust solution for motor mounting. Although generally used on fans, these associated products can be used on a variety of applications. Slide bases are available in mono plate or dual plate design.





Vertical and horizontal pressure boosting centrifugal pumps. Using multiple impellers on a common shaft to delivery high pressure. Founded in 1968 and based in Italy, Lowara make a full range of industrial surface mounted and submersible pumps



Calpeda are a specialist in industrial pumps for processes and widely found as part of production lines. They also supply a full water boosting range.



UK market leader for heating and air conditioning, Grundfos also have a wide water supply, waste water and pressure boosting offer.



Small high pressure low flow centrifugal pumps commonly used in fuel and pressure systems and machine tools.



Specialist supplier of niche water supply and boosting pumps for a wide variety of applications



KSB have a long association and high reputation for water industry pumps but now are reinforcing their presence in the HVAC market since their acquisition of Smedegaard Pumps.



UK Market leader for shower and homebooster pumps, Stewart Turner also have a range of light duty water supply and booster products.





With over 20 years of expertise, EBARA Pumps is a world leader in the design and manufacture of centrifugal electric pumps for the industrial and domestic markets. A philosophy bringing together three essential concepts: quality, cutting-edge solutions and life.



Wilo have a complete range of heating, water supply and waste water pumps. Wilo pride themselves on being a leading company in design of energy efficient designs.



Part of the Grundfos Group, DAB supply solid designs for process and water pumps. Good value, solid engineering.



Capable of handling aggressive fluids, chemicals, suspended solids, slurries and non-newtonian fluids, PC pumps are widely used in the food, sewage, oil and mining industries. Specialist supplier of Air Operated Diaphragm pumps. Market leading designs for chemical, aggressive fluids.



Mono pumps are found throughout the process industries and waste water industry. Market leader for progressive cavity pumps with a broad range of spares for all manufacturers models.



Flygt pumps are the specialist market leaders for sewage and waste water applications. Part of the Xylem group, their pumps are the cornerstone of water treatment sites throughout the country.



Notes

