BEARINGS INTERNATIONAL

a member of the Hudaco group

ISSUE 4

Accredited to:
ISO 26001 - 2010 • ISO 27001 - 2013
ISO 9001-2015 • ISO 14001-2015 ISO
16001 - 2016

Bearings & Power Transmission
PRODUCT CATALOGUE

Popular Product Range

Contents

Introduction to bearings

	OUTER RING	INNER RING	ROLLING ELEMENTS	CAGE Pressed	CAGE Machined	CAGE Moulded
BALL BEARINGS	 Track		 Balls	 Ribbon-type cage	 Stratified phenolic resin cage	 Polyamide cage
TAPERED ROLLER BEARINGS	 Cup	 Cone	 Tapered Rollers	 Pressed steel cage		
CYLINDRICAL ROLLER BEARINGS			 Cylindrical Rollers	 Pressed steel cage	 Machined cage	
SELF-ALIGNING ROLLER BEARINGS			 Spherical Rollers	 Pressed steel cage	 Machined cage	
NEEDLE ROLLER BEARINGS			 Needle Rollers	 Pressed steel cage		

SEALS AND SHIELDS

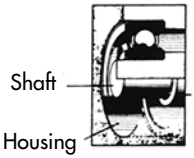
SHIELDED

1 Metal Shield: Z
2 Metal Shields: ZZ

SEALED

1 seal: RS
2 seals: 2RS

SHAFT AND HOUSING

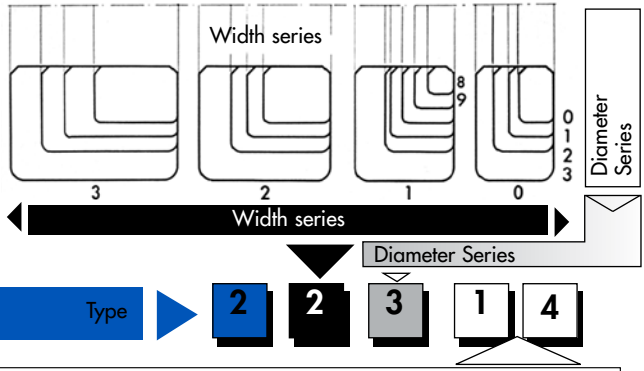


Introduction to bearings

		TYPE	WIDTH SERIES 3	WIDTH SERIES 2	WIDTH SERIES 1	WIDTH SERIES 0
DOUBLE ROW ANGULAR CONTACT BALL BEARINGS		0	32..(032..) 33..(033..)			
DOUBLE ROW SELF-ALIGNING BALL BEARINGS		1		22..(122..) 23..(123..)		12..(102..) 13..(103..)
SPHERICAL ROLLER BEARINGS		2	230.. 231.. 232..	222.. 223..	213..	202.. 203..
TAPERED ROLLER BEARINGS		3	330.. 331.. 332..	320.. 321.. 322.. 323..	313..	302.. 303..
DOUBLE ROW RIGID BALL BEARINGS		4		42..(422..) 43..(423..)		
THRUST BALL BEARINGS		5		Double thrust bearing 522.. 523..	511.. 512.. 513.. 514..	
DEEP GROOVE BALL BEARINGS		6		622.. 623..	60..(610..) 618.. 619..	160..(600..) 62..(602..) 63..(603..) 64..(604..)
ANGULAR CONTACT BALL BEARINGS		7			70..(710..) 718.. 719..	72..(702..) 73..(703..)
CYLINDRICAL ROLLER BEARINGS		N		N22.. N23..	N10..	N2..(N02..) N3..(N03..) N4..(N04..)

Example:

Note: The full bearing reference is not always used and where this applies the theoretical reference is shown in brackets

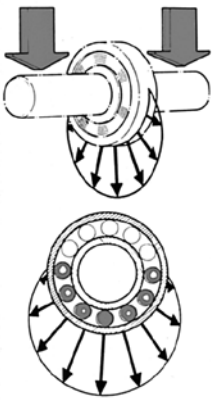


00 = 10 mm bore	Bore indication
01 = 12	
02 = 15	after 04 multiply the last two figures by 5
03 = 17	eg. 22314 x 5 → 70 mm bore

Introduction to bearings

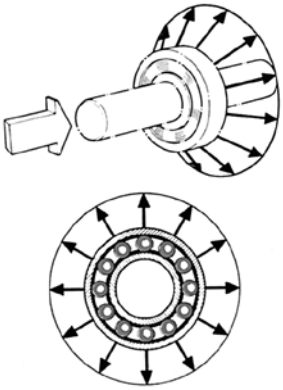
Distribution of the loads on a bearing

RADIAL LOADS



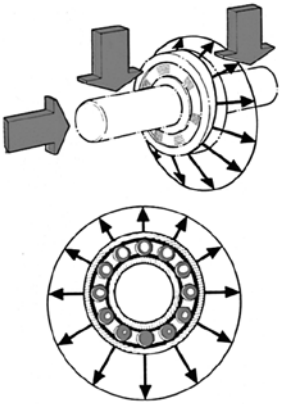
Over 180° maximum

AXIAL LOADS



Spread over 360°

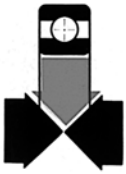
COMBINED LOADS



Variable distribution

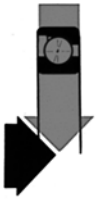
Load capabilities of the different types of bearings

BALL BEARING

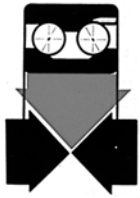


Radial load, Axial loads in both directions or combined loads

DOUBLE OR SINGLE ROW ANGULAR CONTACT BALL BEARING



Radial and axial load combined (1 direction only)



High radial load Axial load in both directions

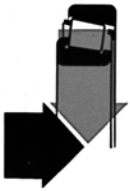
SELF-ALIGNING BALL BEARING

Moderate radial load Very light axial load in both directions

CYLINDRICAL ROLLER BEARINGS

Very high radial load No axial load

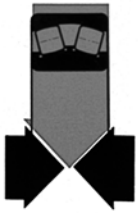
TAPERED ROLLER BEARING



Very high radial load

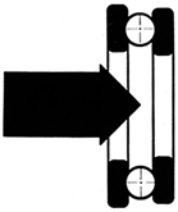
High axial load (1 direction only)

SELF-ALIGNING ROLLER BEARING



Very high radial load Moderate axial load in both directions

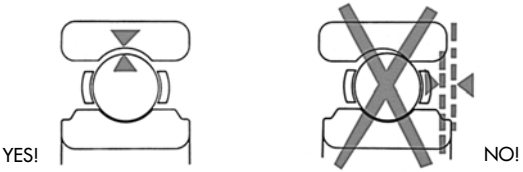
THRUST BALL BEARING



Very high axial load No radial load

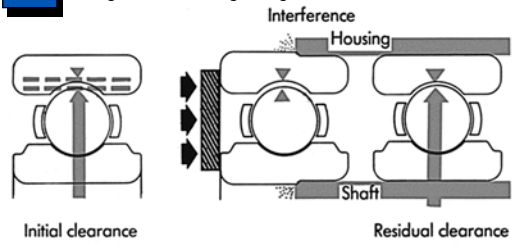
Introduction to bearings

The specification covering bearing internal clearance applies only to the radial clearance

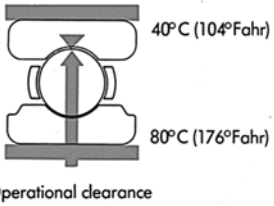


This radial internal clearance is necessary to compensate for:

1 The reduction of the radial internal clearance brought about during fitting

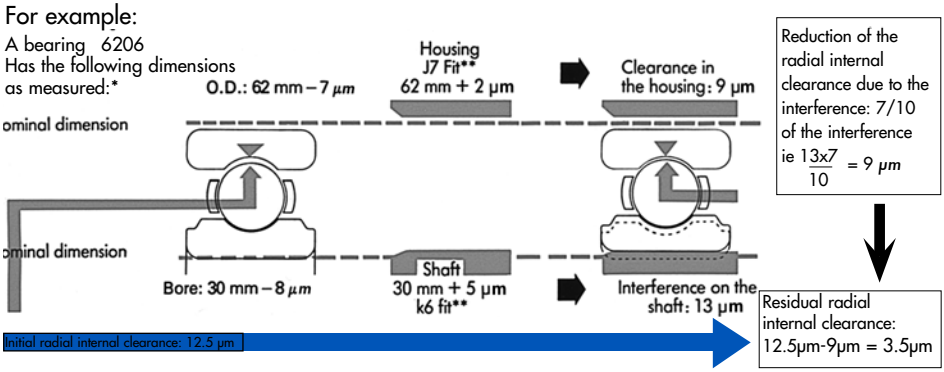


2 Different thermal expansion of the two rings during operation



For example:

A bearing 6206
Has the following dimensions
as measured:*



Reduction of the radial internal clearance due to the interference: 7/10 of the interference
ie $\frac{13 \times 7}{10}$ = 9 µm

Residual radial internal clearance:
12.5µm-9µm = 3.5µm

* The manufacturing tolerances of the O.D.'s, the bore, the width of the bearings and the radial internal clearance are laid down in the ISO International Standard (TC4)

** Shaft and housing fits are laid down in the ISO International Standard TC3 (AFNOR Specification R 910.LL).

NOTE

With extremes of tolerance, it is possible to completely eliminate the radial internal clearance
Eg. 6206 Minimum initial radial internal clearance(precision class 0): 5 µm

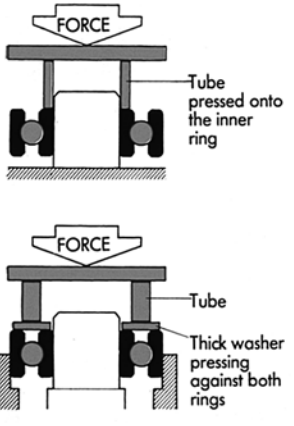
Maximum interference on the shaft (k5)	21 µm	See manufacturing tolerances given in the Koyo catalogue
Maximum interference in the housing (J6)	6 µm	
Total interference:	27 µm	
Reduction of the radial Internal clearance $\frac{27 \times 7}{10}$	19 µm	

Risidual radial internal clearance 5 µm - 19 µm = -14 µm (negative clearance or interference)
One must ensure, therefore, that the average radial internal clearance of the bearing is at least equal to the maximum reduction possible due to shaft and housing tolerances.

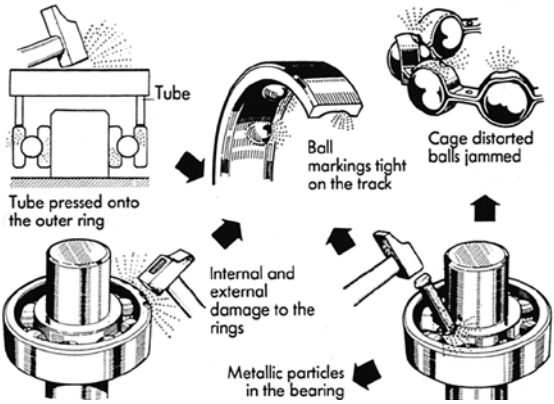
Introduction to bearings

Press fitting

CORRECT



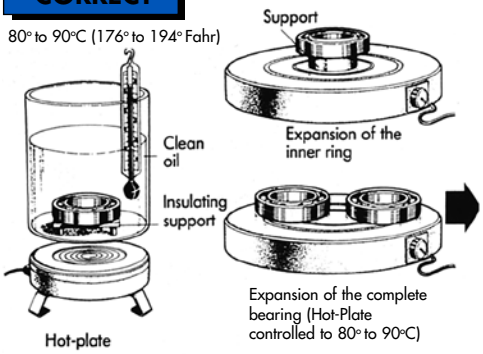
INCORRECT



Shrink fitting (heat expansion of the bearing)

CORRECT

80° to 90°C (176° to 194° Fahr)



INCORRECT

Loss of hardness due to the tempering temperature being exceeded

COEFFIENT OF EXPANSION OF STEEL TO 100 C 6 : 11.9×10^{-6}

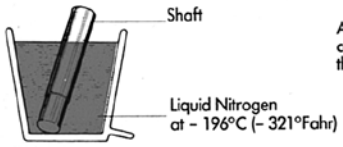
e.g. an inner ring of a bearing with 40 mm bore, subjected to a 60°C (140°Fahr) rise in temperature expands as follows :

$40 \times 11,9 \times 10^{-6} \times 60 = 0.03$ mm

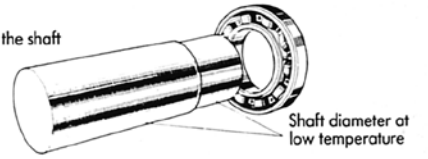
k5 fit average inteference is 0.0135 mm

Fitting clearance : 0.03 - 0.0135 ~0.02 mm

Shrink fitting (contraction of the shaft in sub-zero fluid)

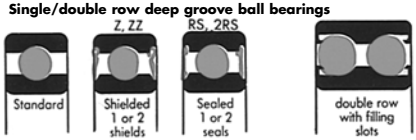


At this low temperature the shaft contracts, enabling the bearing to be fitted.



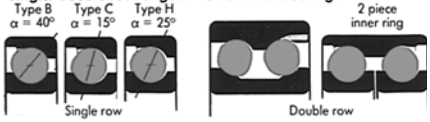
Introduction to bearings

Single/double row deep groove ball bearings



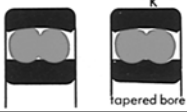
Single row SERIES		Double row SERIES
600	16000	4200
620	6000	4300
630	6200	
	6300	
	6400	

Single/double row angular contact ball bearings



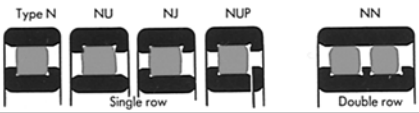
Single row SERIES	Double row SERIES
7000 C*	3200
7200 B, C*	3300
7300 B, C	
SERIES	*high precision
71900 C*	bearings

Double row self-aligning ball bearings



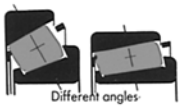
SERIES
1200 - 1300
2200 - 2300

Single/double row cylindrical roller bearings



Single row SERIES	Double row SERIES
N, NU, NJ, NUP	NN, NNU
1000 - 200	3000
300 - 400	
2200 - 2300	

Tapered roller bearings

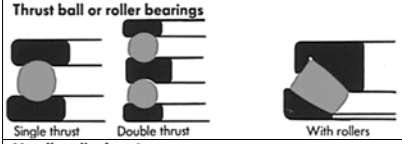


SERIES
30200
30300
31300
32000
32200
32200 B
32300
32300 B
33000
33100
33200

Single/double row spherical roller bearings

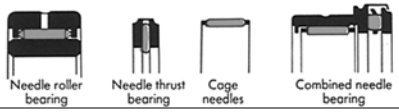
Single row SERIES	Double row SERIES	
20200	21300	23100
20300	22200	23200
	22300	23800
	23000	23900

Thrust ball or roller bearings



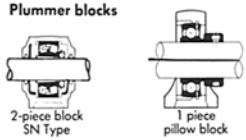
SERIES Single thrust	Double thrust	With rollers
51100	52200	29300
51200	52300	29400
51300		

Needle roller bearings



Needle roller bearings
Needle case assembles
Cage needles
Needle thrust bearings
Combined needle bearings

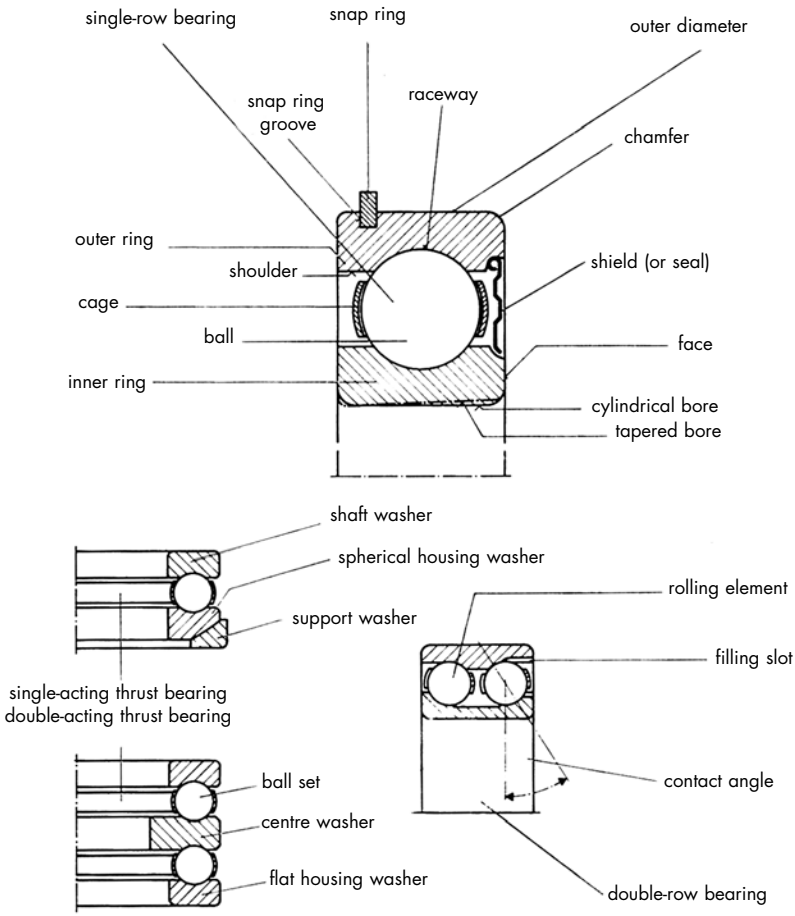
Plummer blocks



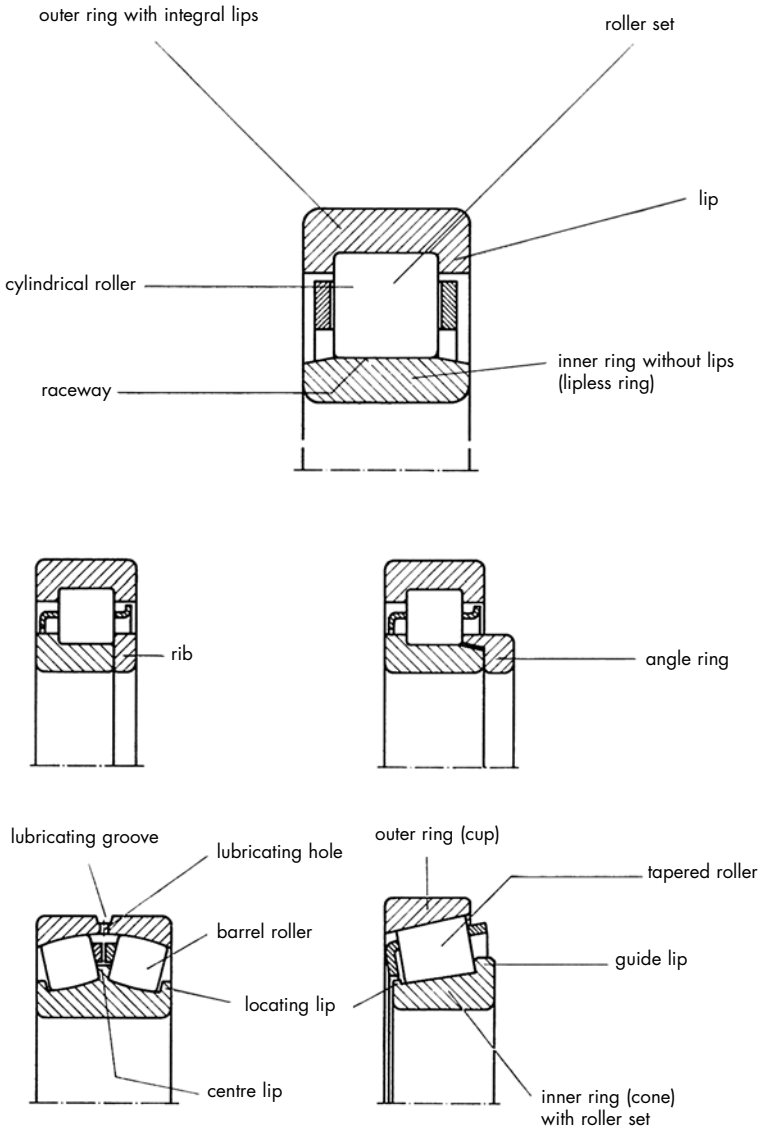
2-piece blocks
SN 500 - SN 600
series for self-aligning
ball or roller bearings.

Self-aligning pillow block
fitted with ball bearings having
spherical outside diameter.

Ball bearings



Roller bearings



Mounting of spherical roller bearings with taper bore

In order to determine the clearance reduction which takes place during mounting, it is necessary first to measure the internal clearance of the bearing before it is mounted.
For bearings with Normal clearance, the reduction should be within the lower half of the clearance
reduction range; for bearings with clearance greater than Normal, e.g. C3 (C3 being etched as a suffix to the bearing no.), the clearance reduction should be within the top half of the range.

If measurement of bearing clearance is not possible, use the values for axial drive-up.
The drive-up is measured from the position taken up by the inner ring when it makes firm contact with its tapered seating. It is always preferable, however, to measure the clearance reduction.

Recommended Criteria For Mounting Tapered Bore Spherical Roller Bearings

Nominal Bore Dia (mm)		Reduction of Radial Clearance (µm.)	Axial Displacement	Minimum Required Residual Clearance (µm)		
Over	Incl.		1:12 Taper mm	Standard Clearance	C3 Clearance	C4 Clearance
24	30	15 - 20	0.27 - 0.35	10	20	35
30	40	20 - 25	0.32 - 0.4	15	25	40
40	50	25 - 35	0.4 - 0.5	20	30	45
50	65	30 - 40	0.45 - 0.6	25	35	55
65	80	35 - 50	0.55 - 0.75	35	40	70
80	100	40 - 55	0.65 - 0.85	40	50	85
100	120	55 - 70	0.85 - 1.05	45	65	100
120	140	65 - 90	1.0 - 1.2	55	80	110
140	160	75 - 100	1.1 - 1.35	55	90	130
160	180	80 - 110	1.2 - 1.5	60	100	150
180	200	90 - 120	1.4 - 1.7	70	110	170
200	225	100 - 130	1.55 - 1.85	80	120	190
225	250	110 - 140	1.7 - 2.05	90	130	210
250	280	120 - 160	1.8 - 2.3	100	140	230
280	315	130 - 180	2.0 - 2.5	110	150	250
315	355	150 - 200	2.3 - 2.8	120	170	270
355	400	170 - 220	2.5 - 3.1	130	190	300
400	450	190 - 240	2.8 - 3.4	140	210	330
450	500	210 - 270	3.1 - 3.8	160	230	360
500	560	240 - 310	3.5 - 4.3	170	260	370
560	630	260 - 350	3.9 - 4.8	200	300	410
630	710	300 - 390	4.3 - 5.3	210	320	460
710	800	340 - 430	4.8 - 6.0	230	370	530
800	900	370 - 500	5.3 - 6.7	270	410	570
900	1000	410 - 550	5.9 - 7.4	300	450	640

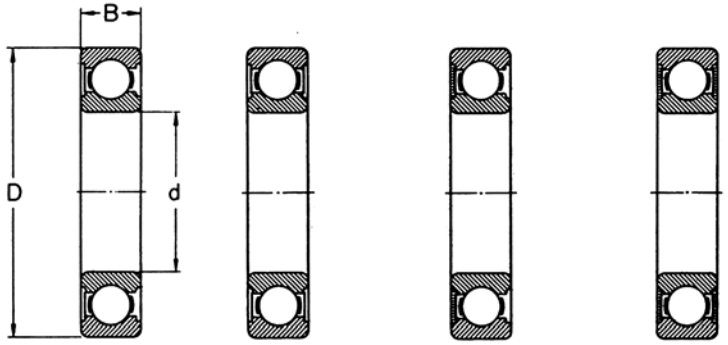
Nominal Bore Dia (mm)		Reduction in Clearance	Axial Drive Up	
Over	Incl.		1:12 Taper	1:30 Taper
50	65	.0012 - .0016	.018 - .024	-
65	80	.0014 - .0020	.022 - .030	-
80	100	.0016 - .0022	.026 - .033	-
100	120	.0020 - .0027	.033 - .041	.085 - .104
120	140	.0025 - .0035	.039 - .047	.098 - .118
140	160	.0029 - .0040	.043 - .053	.108 - .134
160	180	.0040 - .0043	.047 - .059	.118 - .150
180	200	.0035 - .0047	.055 - .066	.137 - .169
200	225	.0039 - .0050	.061 - .073	.152 - .181
225	250	.0043 - .0055	.067 - .081	.167 - .201
250	280	.0047 - .0062	.071 - .091	.177 - .226
280	315	.0051 - .0070	.079 - .098	.197 - .246
315	355	.0059 - .0078	.091 - .110	.226 - .276
355	400	.0066 - .0086	.098 - .122	.246 - .305
400	450	.0075 - .0094	.110 - .134	.276 - .335
450	500	.0082 - .0106	.122 - .150	.305 - .374
500	560	.0094 - .0122	.138 - .169	344 - .425
560	630	.0102 - .0137	.154 - .189	.384 - .472
630	710	.0118 - .0153	.169 - .209	.425 - .524
710	800	.0133 - .0169	.189 - .236	.472 - .591
800	900	.0145 - .0196	.209 - .264	.524 - .661
900	1000	.0161 - .0215	.323 - .291	.583 - .728

Note 1) These values are for solid shaft (mm)

Deep groove ball bearings (single)
1600, 623, 607 Series

Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
16002	15	32	8	16012	60	95	11
03	17	35	8	13	65	100	11
04	20	42	8	14	70	110	13
16005	25	47	8	16015	75	115	13
06	30	55	9	16	80	125	14
07	35	62	9	17	85	130	14
16008	40	68	9	16018	90	140	16
09	45	75	10	19	95	145	16
10	50	80	10	20	100	150	16
11	55	90	11	22	110	170	19

Bearing No.	Bearing with one shield	Bearing with two shields	Bearing with one seal	Bearing with two seals	Millimetres d	D	B
623	623 - Z	623 - ZZ	623 - RS	623 - 2RS	3	10	4
624	624 - Z	624 - ZZ	624 - RS	624 - 2RS	4	13	5
625	625 - Z	625 - ZZ	625 - RS	625 - 2RS	5	16	5
626	626 - Z	626 - ZZ	626 - RS	626 - 2RS	6	19	6
627	627 - Z	627 - ZZ	627 - RS	627 - 2RS	7	22	7
629	629 - Z	629 - ZZ	629 - RS	629 - 2RS	9	26	8
607	607 - Z	607 - ZZ	607 - RS	607 - 2RS	7	19	6
608	608 - Z	608 - ZZ	608 - RS	608 - 2RS	8	22	7
609	609 - Z	609 - ZZ	609 - RS	609 - 2RS	9	24	7
634	634 - Z	634 - ZZ	634 - RS	634 - 2RS	4	16	5
635	635 - Z	634 - ZZ	635 - RS	635 - 2RS	5	19	6



Type Z
with one shield

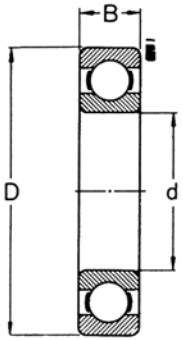
Type ZZ
with two shields

Type RS
with one seal

Type 2RS
with two seals

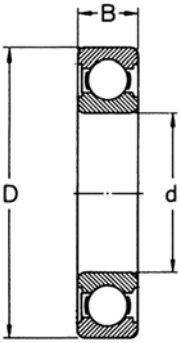
Deep groove ball bearings (single)
6000 Series

Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
6000	10	26	8	6018	90	140	24
01	12	28	8	19	95	145	24
02	15	32	9	20	100	150	24
6003	17	35	10	6021	105	160	26
04	20	42	12	22	110	170	28
05	25	47	12	24	120	180	28
6006	30	55	13	6026	130	200	33
07	35	62	14	28	140	210	33
08	40	68	15	30	150	225	35
6009	45	75	16	6032	160	240	38
10	50	80	16	34	170	260	42
11	55	90	18	36	180	280	46
6012	60	95	18	6038	190	290	46
13	65	100	18	40	200	310	51
14	70	110	20	44	220	340	56
				48	240	360	56
6015	75	115	20				
16	80	125	22				
17	85	130	22				



Deep groove ball bearings (single)
6000 Series variants Z, ZZ, RS, 2RS

Bearing with one shield	Bearing with two shields	Bearing with one seal	Bearing with two seals	Millimetres d	D	B
6000 Z	6000 - ZZ	6000 RS	6000 - 2RS	10	26	8
6001 Z	6001 - ZZ	6001 RS	6001 - 2RS	12	28	8
6002 Z	6002 - ZZ	6002 RS	6002 - 2RS	15	32	9
6003 Z	6003 - ZZ	6003 RS	6003 - 2RS	17	35	10
6004 Z	6004 - ZZ	6004 RS	6004 - 2RS	20	42	12
6005 Z	6005 - ZZ	6005 RS	6005 - 2RS	25	47	12
6006 Z	6006 - ZZ	6006 RS	6006 - 2RS	30	55	13
6007 Z	6007 - ZZ	6007 RS	6007 - 2RS	35	62	14
6008 Z	6008 - ZZ	6008 RS	6008 - 2RS	40	68	15
6009 Z	6009 - ZZ	6009 RS	6009 - 2RS	45	75	16
6010 Z	6010 - ZZ	6010 RS	6010 - 2RS	50	80	16
6011 Z	6011 - ZZ	6011 RS	6011 - 2RS	55	90	18
6012 Z	6012 - ZZ	6012 RS	6012 - 2RS	60	95	18
6013 Z	6013 - ZZ	6013 RS	6013 - 2RS	65	100	18
6014 Z	6014 - ZZ	6014 RS	6014 - 2RS	70	110	20
6015 Z	6015 - ZZ	6015 RS	6015 - 2RS	75	115	20
6016 Z	6016 - ZZ	6016 RS	6016 - 2RS	80	125	22
6017 Z	6017 - ZZ	6017 RS	6017 - 2RS	85	130	22
6018 Z	6018 - ZZ	6018 RS	6018 - 2RS	90	140	24



Type Z
with one shield

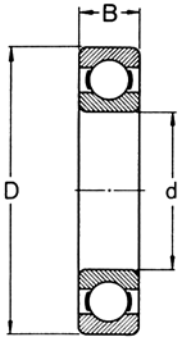
Type ZZ
with two shields

Type RS
with one seal

Type 2RS
with two seals

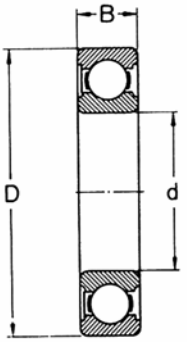
Deep groove ball bearings (single)
6000 Series

Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
6200	10	30	9	6218	90	160	30
01	12	32	10	19	95	170	32
02	15	35	11	20	100	180	34
6203	17	40	12	6221	105	190	36
04	20	47	14	22	110	200	38
05	25	52	15	24	120	215	40
6206	30	62	16	6226	130	230	40
07	35	72	17	28	140	250	42
08	40	80	18	30	150	270	45
6209	45	85	19	32	160	290	48
10	50	90	20	6234	170	310	52
11	55	100	21	36	180	320	52
6212	60	110	22	38	190	340	55
13	65	120	23	40	200	360	58
14	70	125	24	6244	220	400	65
6215	75	130	25	48	240	440	72
16	80	140	26				
17	85	150	28				



Deep groove ball bearings (single)
6000 Series variants Z, ZZ, RS, 2RS

Bearing with one shield	Bearing with two shields	Bearing with one seal	Bearing with two seals	Millimetres d	D	B
6200 Z	6200 - ZZ	6200 RS	6200 - 2RS	10	30	9
6201 Z	6201 - ZZ	6201 RS	6201 - 2RS	12	32	10
6202 Z	6202 - ZZ	6202 RS	6202 - 2RS	15	35	11
6203 Z	6203 - ZZ	6203 RS	6203 - 2RS	17	40	12
6204 Z	6204 - ZZ	6204 RS	6204 - 2RS	20	47	14
6205 Z	6205 - ZZ	6205 RS	6205 - 2RS	25	52	15
6206 Z	6206 - ZZ	6206 RS	6206 - 2RS	30	62	16
6207 Z	6207 - ZZ	6207 RS	6207 - 2RS	35	72	17
6208 Z	6208 - ZZ	6208 RS	6208 - 2RS	40	80	18
6209 Z	6209 - ZZ	6209 RS	6209 - 2RS	45	85	19
6210 Z	6210 - ZZ	6210 RS	6210 - 2RS	50	90	20
6211 Z	6211 - ZZ	6211 RS	6211 - 2RS	55	100	21
6212 Z	6212 - ZZ	6212 RS	6212 - 2RS	60	110	22
6213 Z	6213 - ZZ	6213 RS	6213 - 2RS	65	120	23
6214 Z	6214 - ZZ	6214 RS	6214 - 2RS	70	125	24
6215 Z	6215 - ZZ	6215 RS	6215 - 2RS	75	130	25
6216 Z	6216 - ZZ	6216 RS	6216 - 2RS	80	140	26
6217 Z	6217 - ZZ	6217 RS	6217 - 2RS	85	150	28



Type Z
with one shield

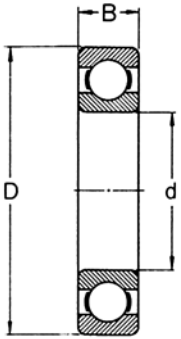
Type ZZ
with two shields

Type RS
with one seal

Type 2RS
with two seals

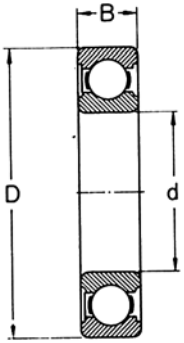
Deep groove ball bearings (single)
6300 Series

Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
6300	10	35	11	6315	75	160	37
01	12	37	12	16	80	170	39
02	15	42	13	17	85	180	41
6303	17	47	14	6318	90	190	43
04	20	52	15	19	95	200	45
05	25	62	17	20	100	215	47
6306	30	72	19	6321	105	225	49
07	35	80	21	22	110	240	50
08	40	90	23	24	120	260	55
6309	45	100	25	6326	130	280	58
10	50	110	27	28	140	300	62
11	55	120	29	30	150	320	65
6312	60	130	31				
13	65	140	33				
14	70	150	35				



Deep groove ball bearings (single)
6300 Series variants Z, ZZ, RS, 2RS

Bearing with one shield	Bearing with two shields	Bearing with one seal	Bearing with two seals	Millimetres d	D	B
6300 Z	6300 - ZZ	6300 RS	6300 - 2RS	10	35	11
6301 Z	6301 - ZZ	6301 RS	6301 - 2RS	12	37	12
6302 Z	6302 - ZZ	6302 RS	6302 - 2RS	15	42	13
6303 Z	6303 - ZZ	6303 RS	6303 - 2RS	17	47	14
6304 Z	6304 - ZZ	6304 RS	6304 - 2RS	20	52	15
6305 Z	6305 - ZZ	6305 RS	6305 - 2RS	25	62	17
6306 Z	6306 - ZZ	6306 RS	6306 - 2RS	30	72	19
6307 Z	6307 - ZZ	6307 RS	6307 - 2RS	35	80	21
6308 Z	6308 - ZZ	6308 RS	6308 - 2RS	40	90	23
6309 Z	6309 - ZZ	6309 RS	6309 - 2RS	45	100	25
6310 Z	6310 - ZZ	6310 RS	6310 - 2RS	50	110	27
6311 Z	6311 - ZZ	6311 RS	6311 - 2RS	55	120	29
6312 Z	6312 - ZZ	6312 RS	6312 - 2RS	60	130	31
6313 Z	6313 - ZZ	6313 RS	6313 - 2RS	65	140	33
6314 Z	6314 - ZZ	6314 RS	6314 - 2RS	70	150	35
3615 Z	6315 - ZZ	6315 RS	6315 - 2RS	75	160	37



Type Z
with one shield

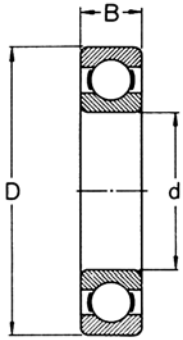
Type ZZ
with two shields

Type RS
with one seal

Type 2RS
with two seals

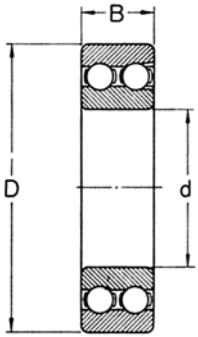
Deep groove ball bearings (single)
6400 Series

Bearing No.	Millimetres d	D	B
6403	17	62	17
04	20	72	19
05	25	80	21
6406	30	90	23
07	35	100	25
08	40	110	27
6409	45	120	29
10	50	130	31
11	55	140	33
6412	60	150	35
13	65	160	37
14	70	180	42
6415	75	190	45
16	80	200	48
17	85	210	52
18	90	225	54



Deep groove ball bearings (double)
4200, 4300 Series

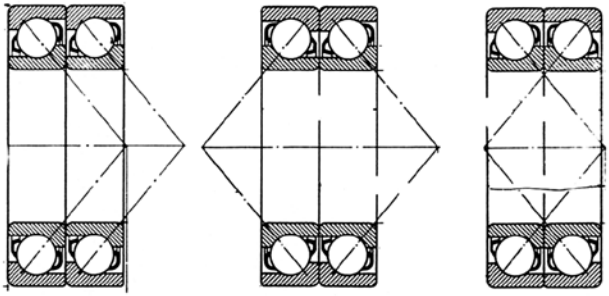
Bearing No.	Boundry Dimensions (mm) d	D	B	Bearing No.	Boundry Dimensions (mm) d	D	
4200	10	30	14	4302	15	42	17
01	12	32	14	03	17	47	19
02	15	35	14	04	20	52	21
4203	17	40	16	4305	25	62	24
04	20	47	18	06	30	72	27
05	25	52	18	07	35	80	31
4206	30	62	20	4308	40	90	33
07	35	72	23	09	45	100	36
08	40	80	23	10	50	110	40
4209	45	85	23	4311	55	120	43
10	50	90	23	12	60	130	46
11	55	100	25	13	65	140	48
				14	70	150	51
4212	60	110	28				
13	65	120	31				
14	70	125	31				

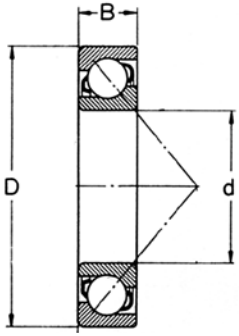


Angular contact ball bearings
7200, 7300 Series

Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
7200 B	10	30	9	7302 B	15	42	13
01 B	12	32	10	03 B	17	47	14
02 B	15	35	11	04 B	20	52	15
7203 B	17	40	12	7305 B	25	62	17
04 B	20	47	14	06 B	30	72	19
05 B	25	52	15	07 B	35	80	21
7206 B	30	62	16	7308 B	40	90	23
07 B	35	72	17	09 B	45	100	25
08 B	40	80	18	10 B	50	110	27
7209 B	45	85	19	7311 B	55	120	29
10 B	50	90	20	12 B	60	130	31
11 B	55	100	21	13 B	65	140	33
7212 B	60	110	22	7314 B	70	150	35
13 B	65	120	23	15 B	75	160	37
14 B	70	125	24	16 B	80	170	39
7215 B	75	130	25	7317 B	85	180	41
16 B	80	140	26	18 B	90	190	43
17 B	85	150	28	19 B	95	200	45
7218 B	90	160	30	7320 B	100	215	47
19 B	95	170	32	21 B	105	225	49
20 B	100	180	34	22 B	110	240	50
7221 B	105	190	36	7324 B	120	260	55
22 B	110	200	38	26 B	130	280	58
24 B	120	215	40	28 B	140	300	62
				30 B	150	320	65
7226 B	130	230	40				
28 B	140	250	42				

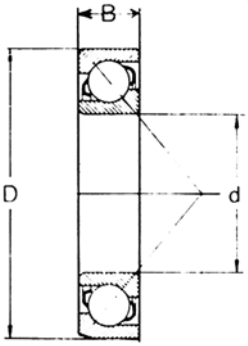
Bearings which are to be mounted in pairs as shown in the diagrams below are delivered with specially ground side faces and have the supplementary designation BG, for example, 7205 BG.





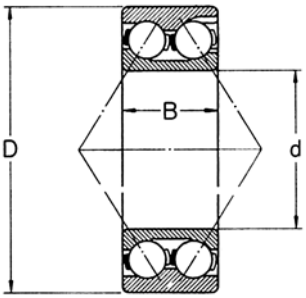
Angular contact ball bearings
7400 Series

Bearing No.	Boundary Dimensions (mm) d	D	B
7404	20	72	19
7405	25	80	21
7406	30	90	23
7407	35	100	25
7408	40	110	27
7409	45	120	29
7410	50	130	31
7411	55	140	33
7412	60	150	35
7413	65	160	37
7414	70	180	42
7415	75	190	45
7416	80	200	48



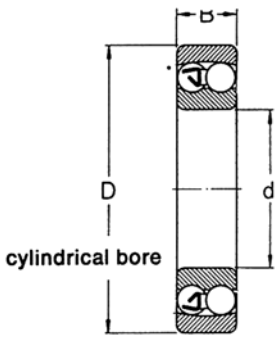
Angular contact ball bearings (duplex)
3200, 3300 Series

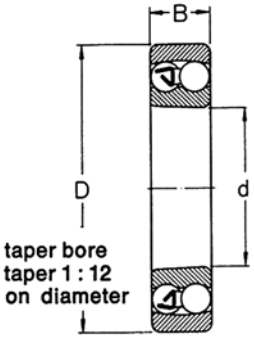
Bearing No.	Millimetres d	D	B	Bearing No.	Millimetres d	D	B
3200	10	30	14.3	3302	15	42	19
01	12	32	15.9	03	17	47	22.2
02	15	35	15.9	04	20	52	22.2
3203	17	40	17.5	3305	25	62	25.4
04	20	47	20.6	06	30	72	30.2
05	25	52	20.6	07	35	80	34.9
3206	30	62	23.8	3308	40	90	36.5
07	35	72	27	09	45	100	39.7
08	40	80	30.2	10	50	110	44.4
3209	45	85	30.2	3311	55	120	49.2
10	50	90	30.2	12	60	130	54
11	55	100	33.3	13	65	140	58.7
3212	60	110	36.5	3314	70	150	63.5
13	65	120	38.1	15	75	160	68.3
14	70	125	39.7	16	80	170	68.3
3215	75	130	41.3	3317	85	180	73
16	80	140	44.4	18	90	190	73
17	85	150	49.2	20	100	215	82.6
				22	110	240	92.1
3218	90	160	52.4				
19	95	170	55.6				
20	100	180	60.3				
22	110	200	69.8				



Self-aligning ball bearings
1200, 1300 Series

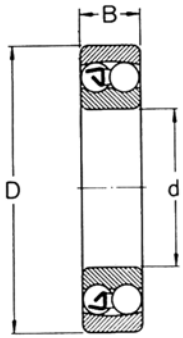
Bearing No.		Millimeters			Bearing No.		Millimeters		
Cyl bore	Taper bore	d	D	B	Cyl bore	Taper bore	d	D	B
1200		10	30	9	1300		10	35	11
01		12	32	10	01		12	37	12
02		15	35	11	02		15	42	13
1203		17	40	12	1303		17	47	14
04	1204 K	20	47	14	04	1304 K	20	52	15
05	05 K	25	52	15	05	05 K	25	62	17
1206	1206 K	30	62	16	1306	1306 K	30	72	19
07	07 K	35	72	17	07	07 K	35	80	21
08	08 K	40	80	18	08	08 K	40	90	23
1209	1209 K	45	85	19	1309	1309 K	45	100	25
10	10 K	50	90	20	10	10 K	50	110	27
11	11 K	55	100	21	11	11 K	55	120	29
1212	1212 K	60	110	22	1312	1312 K	60	130	13
13	13 K	65	120	23	13	13 K	65	140	33
14	-	70	125	24	14	-	70	150	35
1215	1215 K	75	130	25	1315	1315 K	75	160	37
16	16 K	80	140	26	16	16 K	80	170	39
17	17 K	85	150	28	17	17 K	85	180	41
1218	1218 K	90	160	30	1318	1318 K	90	190	43
19	-	95	170	32	19	19 K	95	200	45
20	20 K	100	180	34	20	20 K	100	215	47
1221	-	105	190	36	1321	-	105	225	49
22	1222 K	110	200	38	22	1322 K	110	240	50



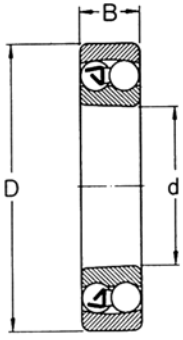


Self-aligning ball bearings
2200, 2300 Series

Bearing No.		Millimetres			Bearing No.		Millimetres		
Cyl bore	Taper bore	d	D	B	Cyl bore	Taper bore	d	D	B
2200		10	30	14					
01		12	32	14	2302		15	42	17
02		15	35	14	03		17	47	19
2203		17	40	16	2304		20	52	21
04		20	47	18	05	2305 K	25	62	24
05	2205 K	25	52	18	06	06 K	30	72	27
2206	2206 K	30	62	20	2307	2307 K	35	80	31
07	07 K	35	72	23	08	08 K	40	90	33
08	08 K	40	80	23	09	09 K	45	100	36
2209	2209 K	45	85	23	2310	2310 K	50	110	40
10	10 K	50	90	23	11	11 K	55	120	43
11	11 K	55	100	25	12	12 K	60	130	46
2212	2212 K	60	110	28	2313	2313 K	65	140	48
13	13 K	65	120	31	14	-	70	150	51
14	-	70	125	31	15	15 K	75	160	55
2215	2215 K	75	130	31	2316	2316 K	80	170	58
16	16 K	80	140	33	17	17 K	85	180	60
17	17 K	85	150	36	18	18 K	90	190	64
2218	2218 K	90	160	40					
20	20 K	100	180	46					
22	2222K	110	200	53					



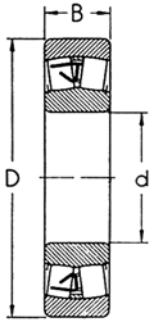
cylindrical bore



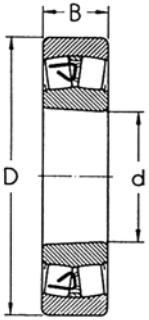
taper bore
taper 1 : 12
on diameter

Spherical roller bearings
21300 Series

Bearing No.		Millimetres		
Cylindrical bore	Taper bore	d	D	B
21304		20	52	15
21305		25	62	17
21306		30	72	19
21307		35	80	21
21308	21308 K	40	90	23
21309	21309 K	45	100	25
21310	21310 K	50	110	27
21311	21311 K	55	120	29
21312	21312 K	60	130	31
21313	21313 K	65	140	33
21314	21314 K	70	150	35
21315	21315 K	75	160	37
21316	21316 K	80	170	39
21317	21317 K	85	180	41
21318	21318 K	90	190	43
21319	21319 K	95	200	45
21320	21320 K	100	215	47
21322	21322 K	110	240	50



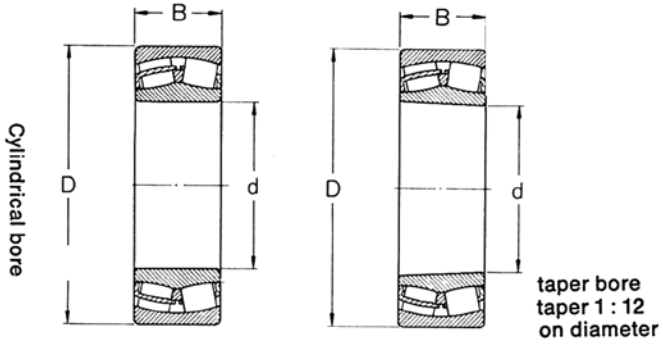
Cylindrical bore



taper bore
taper 1 : 12
on diameter

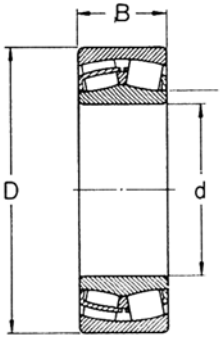
Spherical roller bearings
22200 Series

Bearing No.		Millimetres		
Cylindrical bore	Taper bore	d	D	B
22205		25	52	18
22206		30	62	20
22207	22207 K	35	72	23
22208	22208 K	40	80	23
22209	22209 K	45	85	23
22210	22210 K	50	90	23
22211	22211 K	55	100	25
22212	22212 K	60	110	28
22213	22213 K	65	120	31
22214	22214 K	70	125	31
22215	22215 K	75	130	31
22216	22216 K	80	140	33
22217	22217 K	85	150	36
22218	22218 K	90	160	40
22219	22219 K	95	170	43
22220	22220 K	100	180	46
22222	22222 K	110	200	53
22224	22224 K	120	215	58
22226	22226 K	130	230	64
22228	22228 K	140	250	68
22230	22230 K	150	270	73
22232	22232 K	160	290	80
22234	22234 K	170	310	86
22236	22236 K	180	320	86
22238	22238 K	190	340	92
22240	22240 K	200	360	98
22244	22244 K	220	400	108
22248	22248 K	240	440	120
22252	22252 K	260	480	130
22256	22256 K	280	500	130
22260	22260 K	300	540	140
22264	22264 K	320	580	150

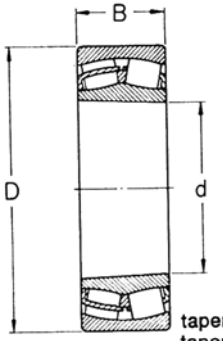


Spherical roller bearings
22300 Series

Bearing No.		Millimetres		
Cylindrical bore	Taper bore	d	D	B
22308	22308 K	40	90	33
23309	22309 K	45	100	36
22310	22310 K	50	110	40
22311	22311 K	55	120	43
22312	22312 K	60	130	46
22313	22313 K	65	140	48
22314	22314 K	70	150	51
22315	22315 K	75	160	55
22316	22316 K	80	170	58
22317	22317 K	85	180	60
22318	22318 K	90	190	64
22319	22319 K	95	200	67
22320	22320 K	100	215	73
22322	22322 K	110	240	80
22324	22324 K	120	260	86
22326	22326 K	130	280	93
22328	22328 K	140	300	102
22330	22330 K	150	320	108
22332	22332 K	160	340	114
22334	22334 K	170	360	120
22336	22336 K	180	380	126
22338	22338 K	190	400	132
22340	22340 K	200	420	138
22344	22344 K	220	460	145
22348	22348 K	240	500	155
22352	22352 K	260	540	165
22356	22356 K	280	580	175



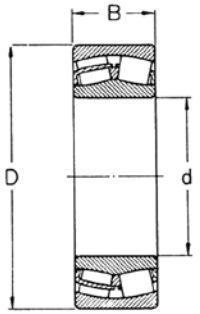
Cylindrical bore



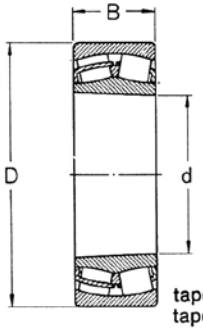
taper bore
taper 1 : 12
on diameter

Spherical roller bearings
23200 Series

Bearing No.			Millimetres		
Cylindrical bore	Taper bore		d	D	B
23218	23218	K	90	160	52.4
23220	23220	K	100	180	60.3
23222	23222	K	110	200	69.8
23224	23224	K	120	215	76
23226	23226	K	130	230	80
23228	23228	K	140	250	88
23230	23230	K	150	270	96
23232	23232	K	160	290	104
23234	23234	K	170	310	110
23236	23236	K	180	320	112
23238	23238	K	190	340	120
23240	23240	K	200	360	128
23244	23244	K	220	400	144
23248	23248	K	240	440	160
23252	23252	K	260	480	174
23256	23256	K	280	500	176
23260	23260	K	300	540	192
23264	23264	K	320	580	208
23268	23268	K	340	620	224
23272	23272	K	360	650	232
23276	23276	K	380	680	240
23280	23280	K	400	720	256
23284	23284	K	420	760	272
23288	23288	K	440	790	280
23292	23292	K	460	830	296
23296	23296	K	480	870	310
232/500	232/500	K	500	920	336
232/530	232/530	K	530	980	355



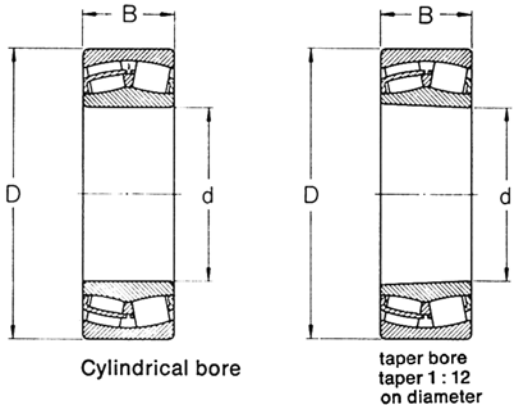
Cylindrical bore



taper bore
taper 1 : 12
on diameter

Spherical roller bearings
23000 Series

Bearing No.				Millimetres		
Cylindrical bore		Taper bore		d	D	B
23024		23024	K	120	180	46
23026		23026	K	130	200	52
23028		23028	K	140	210	53
23030		23030	K	150	225	56
23032		23032	K	160	240	60
23034		23034	K	170	260	67
23036		23036	K	180	280	74
23038		23038	K	190	290	75
23040		23040	K	200	310	82
23044		23044	K	220	340	90
23048		23048	K	240	360	92
23052		23052	K	260	400	104
23056		23056	K	280	420	106
23060		23060	K	300	460	118
23064	A	23054	K	320	480	121
23068	A	23068	K	340	520	133
23072	A	23072	K	360	540	134
23076	A	23076	K	380	560	135
23080	A	23080	K	400	600	148
23084	A	23084	K	420	620	150
23088	A	23088	K	440	650	157
23092	A	23092	K	460	680	163
23096	A	23096	K	480	700	165
230/500	A	230/500	K	500	720	167

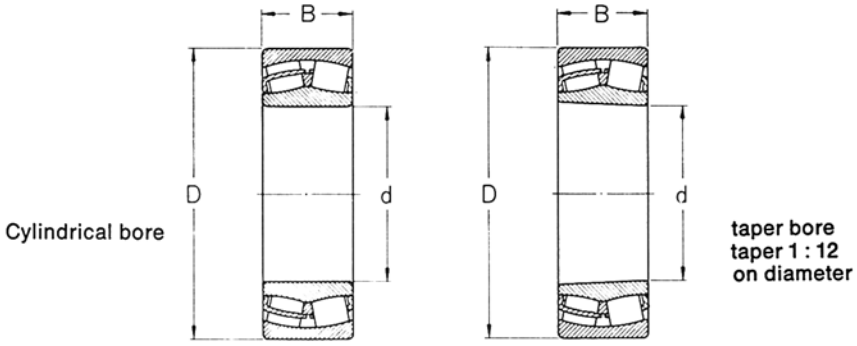


Cylindrical bore

taper bore
taper 1 : 12
on diameter

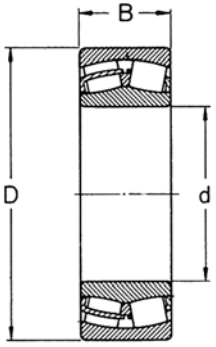
Spherical roller bearings
23100 Series

Bearing No.		Millimetres		
Cylindrical Bore	Taper Bore	d	D	B
23120	23120 K	100	165	52
23122	23122 K	110	180	56
23124	23124 K	120	200	62
23126	23126 K	130	210	64
23128	23128 K	140	225	68
23130	23130 K	150	250	80
23132	23132 K	160	270	86
23134	23134 K	170	280	88
23136	23136 K	180	300	96
23138	23138 K	190	320	104
23140	23140 K	200	340	112
23144	23144 K	220	370	120
23148	23148 K	240	400	128
23152	23152 K	260	440	144
23156	23156 K	280	460	146
23160	23160 K	300	500	160
23164	23164 K	320	540	176
23168	23168 K	340	580	190
23172	23172 K	360	600	192
23176	23176 K	380	620	194
23180	23180 K	400	650	200
23184	23184 K	420	700	224
23188	23188 K	440	720	226
23192	23192 K	460	760	240
23196	23196 K	480	790	248
231/500	231/500 K	500	830	264

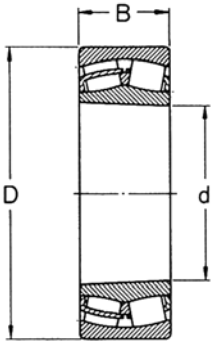


Spherical roller bearings
24000 Series

Bearing No.			Millimetres		
Cylindrical Bore	Taper Bore		d	D	B
24024	24024	K	120	180	60
24026	24026	K	130	200	69
24028	24028	K	140	210	69
24030	24030	K	150	225	75
24032	24032	K	160	240	80
24034	24034	K	170	260	90
24036	24036	K	180	280	100
24038	24038	K	190	290	100
24040	24040	K	200	310	100
24044	24044	K	220	340	118
24048	24048	K	240	360	118
24052	24042	K	260	400	140
24056	24056	K	280	420	140
24060	24060	K	300	460	160
24064	24064	K	320	480	160
24068	24068	K	340	520	180
24072	24072	K	360	540	180
24076	24076	K	380	560	180
24080	24080	K	400	600	200
24084	24084	K	420	620	200
24088	24088	K	440	650	212
24092	24092	K	460	680	218
24096	24096	K	480	700	218
240/500	240/500	K	500	720	218



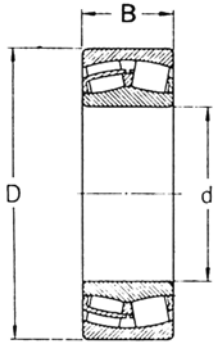
Cylindrical bore



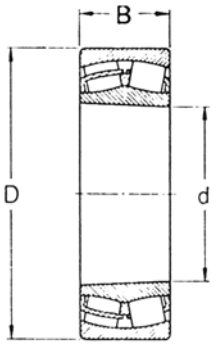
taper bore
taper 1 : 12
on diameter

Spherical roller bearings
24100 Series

Bearing No.			Millimetres		
Cylindrical Bore	Taper Bore		d	D	B
24122	24122	K	110	180	69
24124	24124	K	120	200	80
24126	24126	K	130	210	80
24128	24128	K	140	225	85
24130	24130	K	150	250	100
24132	24132	K	160	270	109
24134	24134	K	170	280	109
24136	24136	K	180	300	118
24138	24138	K	190	320	128
24140	24140	K	200	340	140
24144	24144	K	220	370	150
24148	24148	K	240	400	160
24152	24152	K	260	440	180
24156	24156	K	280	460	180
24160	24160	K	300	500	200
24164	24164	K	320	540	218
24168	24168	K	340	580	243
24172	24172	K	360	600	243
24176	24176	K	380	620	243
24180	24180	K	400	650	250
24184	24184	K	420	700	280
24188	24188	K	440	720	280
24192	24192	K	460	760	300
24196	24196	K	480	790	308
241/500	241/500	K	500	830	325



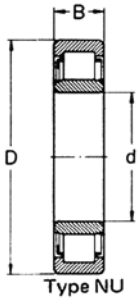
Cylindrical bore



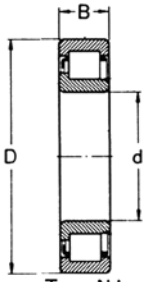
taper bore
taper 1 : 12
on diameter

Cylindrical roller bearings
200 Series

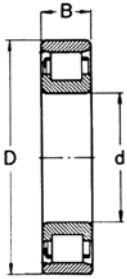
Bearing No.	Bearing No.	Bearing No.	Millimetres d	D	B
NU 202	NJ 202	N 202	15	35	11
203	203	203	17	40	12
204	204	204	20	47	14
NU 205	NJ 205	N 205	25	52	15
206	206	206	30	62	16
207	207	207	35	72	17
NU 208	NJ 208	N 208	40	80	18
209	209	209	45	85	19
210	210	210	50	90	20
NU 211	NJ 211	N 211	55	100	21
212	212	212	60	110	22
213	213	213	65	120	23
NU 214	NJ 214	N 214	70	125	24
215	215	215	75	130	25
216	216	216	80	140	26
NU 217	NJ 217	N 217	85	150	28
218	218	218	90	160	30
219	219	219	95	170	32
NU 220	NJ 220	N 220	100	180	34
221	221	221	105	190	36
222	222	222	110	200	38
NU 224	NJ 224	N 224	120	215	40
226	226	226	130	230	40
228	228		140	250	42
NU 230	NJ 230		150	270	45
232	232		160	290	48
234	234		170	310	52
NU 236	NJ 236		180	320	52
238	238		190	340	55
240	240		200	360	58
NU 244			220	400	65
248			240	440	72
252			260	480	80



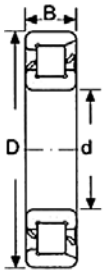
Type NU



Type NJ



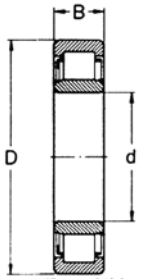
Type N



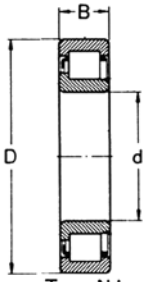
Type NF

Cylindrical roller bearings
300 Series

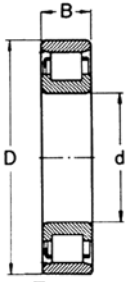
Bearing No.	Bearing No.	Bearing No.	Millimetres d	D	B
NU 304	NJ 304	N 304	20	52	15
305	305	305	25	62	17
306	306	306	30	72	19
NU 307	NJ 307	N 307	35	80	21
308	308	308	40	90	23
309	309	309	45	100	25
NU 310	NJ 310	N 310	50	110	27
311	311	311	55	120	29
312	312	312	60	130	31
NU 313	NJ 313	N 313	65	140	33
314	314	314	70	150	35
315	315	315	75	160	37
NU 316	NJ 316	N 316	80	170	39
317	317	317	85	180	41
318	318	318	90	190	43
NU 319	NJ 319	N 319	95	200	45
320	320	320	100	215	47
321	321	321	105	225	49
NU 322	NJ 322	N 322	110	240	50
324	324	324	120	260	55
326	326	326	130	280	58
NU 328	NJ 328		140	300	62
330	330		150	320	65
332	332		160	340	68
NU 334			170	360	72
336			180	380	75
338			190	400	78
340			200	420	80



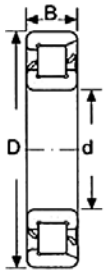
Type NU



Type NJ



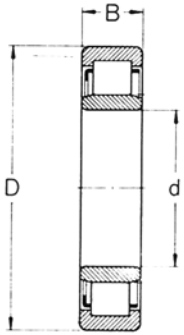
Type N



Type NF

Cylindrical roller bearings
2200 Series

Bearing No.	Bearing No.	Millimetres d	D	B
NU 2205	NJ 2205	25	52	18
2206	2206	30	62	20
2207	2207	35	72	23
NU 2208	NJ 2208	40	80	23
2209	2209	45	85	23
2210	2210	50	90	23
NU 2211	NJ 2211	55	100	25
2212	2212	60	110	28
2213	2213	65	120	31
NU 2214	NJ 2214	70	125	31
2215	2215	75	130	31
2216	2216	80	140	33
NU 2217	NJ 2217	85	150	36
2218	2218	90	160	40
2219	2219	95	170	43
NU 2220	NJ 2220	100	180	46
2222	2222	110	200	53
2224	2224	120	215	58
NU 2226	NJ 2226	130	230	64
2228	2228	140	250	68
2230	2230	150	270	73
NU 2232	NJ 2232	160	290	80
2234		170	310	86
2236		180	320	86
2238		190	340	92
2240		200	360	98



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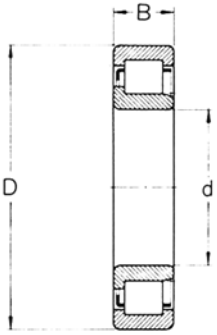
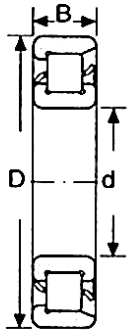


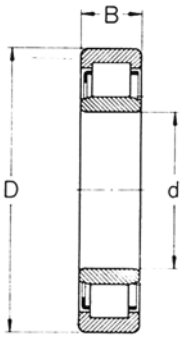
Type NJ



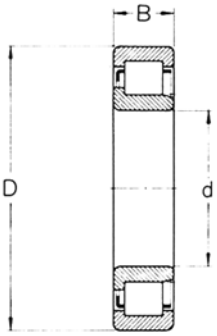
Type NF

Cylindrical roller bearings
2300 Series

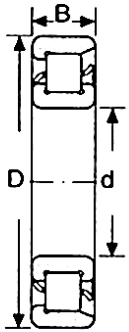
Bearing No.	Bearing No.	Millimetres d	D	B
NU 2305	NJ 2305	25	62	24
2306	2306	30	72	27
2307	2307	35	80	31
NU 2308	NJ 2308	40	90	33
2309	2309	45	100	36
2310	2310	50	110	40
NU 2311	NJ 2311	55	120	43
2312	2312	60	130	46
2313	2313	65	140	48
NU 2314	NJ 2314	70	150	51
2315	2315	75	160	55
2316	2316	80	170	58
NU 2317	NJ 2317	85	180	60
2318	2318	90	190	64
2319	2319	95	200	67
NU 2320	NJ 2320	100	215	73
2322	2322	110	240	80
2324	2324	120	260	86
NU 2326	NJ 2326	130	280	93
2328	2328	140	300	102
2330	2330	150	320	108
2332	2332	160	340	114



Type NU



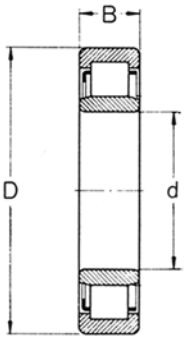
Type NJ



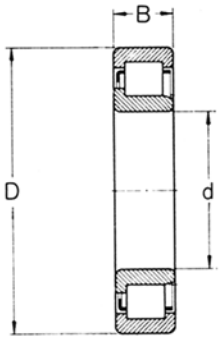
Type NF

Cylindrical roller bearings
400 Series

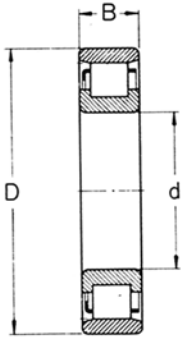
Bearing No.	Bearing No.	Bearing No.	Millimetres d	D	B
		N 405	25	80	21
NU 406	NJ 406	406	30	90	23
407	407	407	35	100	25
NU 408	NJ 408	N 408	40	110	27
409	409	409	45	120	29
410	410	410	50	130	31
NU 411	NJ 411	N 411	55	140	33
412	412	412	60	150	35
413	413	413	65	160	37
NU 414	NJ 414	N 414	70	180	42
415	415	415	75	190	45
416	416	416	80	200	48
NU 417	NJ 417	N 417	85	210	52
418	418	418	90	225	54
419	419		95	240	55
NU 420	NJ 420		100	250	58
421	421		105	260	60
422	422		110	280	65
424			120	310	72



Type NU



Type NJ

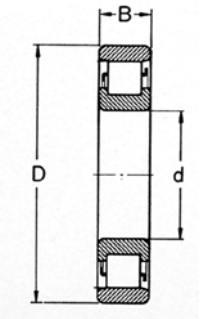


Type N

Cylindrical roller bearings
CRL, CRM, Series

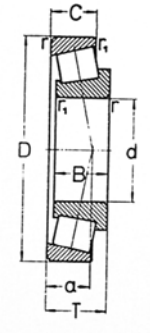
Bearing No.		Inches d	D	B
CRL	6	3/4	1 7/8	9/16
	7	7/8	2	9/16
	8	1	2 1/4	5/8
CRL	9	1 1/8	2 1/2	5/8
	10	1 1/4	2 3/4	11/16
	11	1 3/8	3	11/16
CRL	12	1 1/2	3 1/4	3/4
	13	1 5/8	3 1/2	3/4
	14	1 3/4	3 3/4	13/16
CRL	15	1 7/8	4	13/16
	16	2	4	13/16
	18	2 1/4	4 1/2	7/8
CRL	20	2 1/2	5	15/16
	22	2 3/4	5 1/4	15/16
	24	3	5 3/4	1 1/16
CRL	26	3 1/4	6	1 1/16
	28	3 1/2	6 1/2	1 1/8
	30	3 3/4	6 3/4	1 1/8
CRL	32	4	7 1/4	1 1/4
	34	4 1/4	7 1/2	1 1/4
	36	4 1/2	8	1 5/16
CRL	38	4 3/4	8 1/4	1 5/16
	40	5	9	1 3/8
	44	5 1/2	9 1/2	1 3/8
CRL	48	6	10 1/2	1 9/16
	52	6 1/2	11	1 9/16
	56	7	12	1 3/4

Bearing No.		Inches d	D	B
CRM	6	3/4	2	11/16
	7	7/8	2 1/4	11/16
	8	1	2 1/2	3/4
CRM	9	1 1/8	2 13/16	13/16
	10	1 1/4	2 1/8	7/8
	11	1 3/8	3 1/2	7/8
CRM	12	1 1/2	3 3/4	15/16
	13	1 5/8	4	15/16
	14	1 3/4	4 1/4	1 1/16
CRM	15	1 7/8	4 1/2	1 1/16
	16	2	4 1/2	1 1/16
	18	2 1/4	5	1 1/4
CRM	20	2 1/2	5 1/2	1 1/4
	22	2 3/4	6 1/4	1 3/8
	24	3	7	1 9/16
CRM	26	3 1/4	7 1/2	1 9/16
	27	3 3/8	7 1/2	1 9/16
	28	3 1/2	8 1/8	1 3/4
CRM	30	3 3/4	8 1/4	1 3/4
	32	4	8 1/2	1 3/4
	34	4 1/4	8 3/4	1 3/4
CRM	36	4 1/2	9 3/8	2
	38	4 3/4	10	2
	40	5	10	2
CRM	44	5 1/2	11	2
	48	6	12	2 1/4
	52	6 1/2	13	2 1/2



Tapered roller bearings
32000 Series

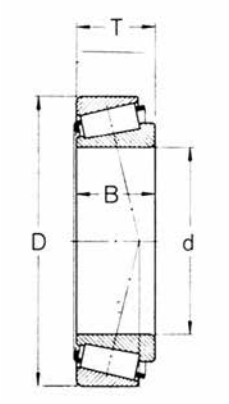
Designation	Dimensions			
	d	D	B	T
				mm
320 04 X	20	42	15	15
320/22 X	22	44	15	15
320 05 X	25	47	15	15
320/28 X	28	52	16	16
320 06 X	30	55	17	17
320/32 X	32	58	17	17
320 07 X	35	62	18	18
320 08 X	40	68	19	19
320 09 X	45	75	20	20
320 10 X	50	80	20	20
320 11 X	55	90	23	23
320 12 X	60	95	23	23
320 13 X	65	100	23	23
320 14 X	70	110	25	25
320 15 X	75	115	25	25
320 16 X	80	125	29	29
320 17 X	85	130	29	29
320 18 X	90	140	32	32
320 19 X	95	145	32	32
320 20 X	100	150	32	32
320 21 X	105	160	35	35
320 22 X	110	170	38	38
320 24 X	120	180	38	38
320 26 X	130	200	45	45
320 28 X	140	210	45	45
320 30 X	150	225	48	48
320 32 X	160	240	51	51
320 34 X	170	260	57	57
320 36 X	180	280	64	64
320 38 X	190	290	64	64
320 40 X	200	310	70	70



Tapered roller bearings
30200, 32200 Series

Bearing No.	Millimetres d	D	B	T
30203	17	40	12	13.25
04	20	47	14	15.25
05	25	52	15	16.25
30206	30	62	16	17.25
07	35	72	17	18.25
08	40	80	18	19.75
30209	45	85	19	20.75
10	50	90	20	21.75
11	55	100	21	22.75
30212	60	110	22	23.75
13	65	120	23	24.75
14	70	125	24	26.25
30215	75	130	25	27.25
16	80	140	26	28.25
17	85	150	28	30.5
30218	90	160	30	32.5
19	95	170	32	34.5
20	100	180	34	37
30221	105	190	36	39
22	110	200	38	41
24	120	215	40	43.5
30226	130	230	40	43.75
28	140	250	42	45.75
30	150	270	45	49
32	160	290	48	52

Bearing No.	Millimetres d	D	B	T
32206	30	62	20	21.25
07	35	72	23	24.25
08	40	80	23	24.75
32209	45	85	23	24.75
10	50	90	23	24.75
11	55	100	25	26.75
32212	60	110	28	29.75
13	65	120	31	32.75
14	70	125	31	33.25
32215	75	130	31	33.25
16	80	140	33	35.25
17	85	150	36	38.5
32218	90	160	40	42.5
19	95	170	43	45.5
20	100	180	46	49
32221	105	190	50	53
22	110	200	53	56
24	120	215	58	61.5
32226	130	230	64	67.75
28	140	250	68	71.75



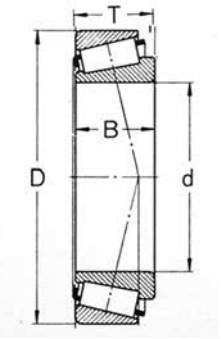
Tapered roller bearings
30300, 31300, 32300 Series

Bearing No.	Millimetres d	D	B	T
30302	15	42	13	14.25
03	17	47	14	15.25
04	20	52	15	16.25
30305	25	62	17	18.25
06	30	72	19	20.75
07	35	80	21	22.75
30308	40	90	23	25.25
09	45	100	25	27.25
10	50	110	27	29.25
30311	55	120	29	31.5
12	60	130	31	33.5
13	65	140	33	36
30314	70	150	35	38
15	75	160	37	40
16	80	170	39	42.5
30317	85	180	41	44.5
18	90	190	43	46.5
19	95	200	45	49.5
30320	100	215	47	51.5
22	110	240	50	54.5
24	120	260	55	59.5

Bearing No.	Millimetres d	D	B	T
32303	17	47	19	20.25
04	20	52	21	22.25
05	25	62	24	25.25
32306	30	72	27	28.75
07	35	80	31	32.75
08	40	90	33	35.25
32309	45	100	36	38.25
10	50	110	40	42.25
11	55	120	43	45.5
32312	60	130	46	48.5
13	65	140	48	51
14	70	150	51	54
32315	75	160	55	58
16	80	170	58	61.5
17	85	180	60	63.5
32318	90	190	64	67.5
19	95	200	67	71.5
20	100	215	73	77.5
22	110	240	80	84.5

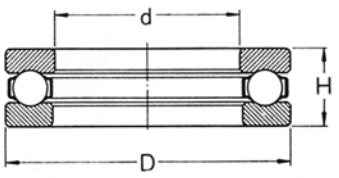
Bearing No.	Millimetres d	D	B	T
31305	25	62	17	18.25
06	30	72	19	20.75
07	35	80	21	22.75
31308	40	90	23	25.25
09	45	100	25	27.25
10	50	110	27	29.25
11	55	120	29	31.5

Bearing No.	Millimetres d	D	B	T
31312	60	130	31	33.5
13	65	140	33	36
14	70	150	35	38
31315	75	160	37	40
16	80	170	39	42.5
17	85	180	41	44.5
18	90	190	43	46.5
19	95	200	45	49.5



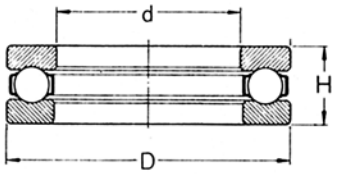
Thrust ball bearings
51100, 51200 Series

Bearing No.	Millimetres d	D	H	Bearing No.	Millimetres d	D	H
51100	10	24	9	51200	10	26	11
01	12	26	9	01	12	28	11
02	15	28	9	02	15	32	12
51103	17	30	9	51203	17	35	12
04	20	35	10	04	20	40	14
05	25	42	11	05	25	47	15
51106	30	47	11	51206	30	52	16
07	35	52	12	07	35	62	18
08	40	60	13	08	40	68	19
51109	45	65	14	51209	45	73	20
10	50	70	14	10	50	78	22
11	55	78	16	11	55	90	25
51112	60	85	17	51212	60	95	26
13	65	90	18	13	65	100	27
14	70	95	18	14s	70	105	27
51115	75	100	19	51215	75	110	27
16	80	105	19	16	80	115	28
17	85	110	19	17	85	125	31
51118	90	120	22	51218	90	135	35
20	100	135	25	20	100	150	38
22	110	145	25	22	110	160	38
51124	120	155	25	51224	120	170	39
26	130	170	30	26	130	190	45
28	140	180	31	28	140	200	46
51130	150	190	31	51230	150	215	50
32	160	200	31	32	160	225	51
34	170	215	34	34	170	240	55
51136	180	225	34	51236	180	250	56
38	190	240	37	38	190	270	62
40	200	250	37	40	200	280	62
51144	220	270	37	51244	220	300	63
48	240	300	45	48	240	340	78
52	260	320	45				
51156	280	350	53				
60	300	380	62				
64	320	400	63				
51168	340	420	64				
72	360	440	65				
76	380	460	65				
80	400	480	65				



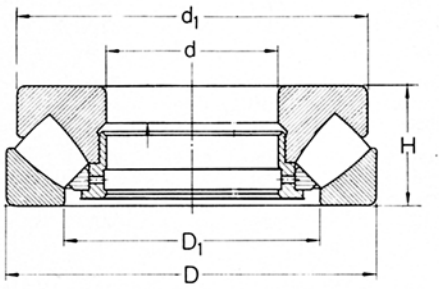
Thrust ball bearings
51300, 51400 Series

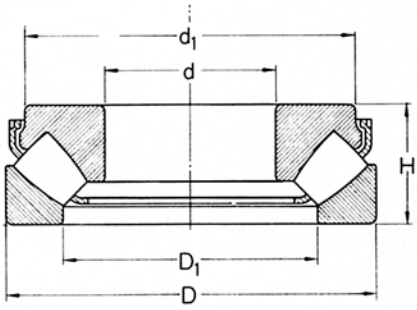
Bearing No.	Millimetres d	D	H	Bearing No.	Millimetres d	D	H
51305	25	52	18	51405	25	60	24
06	30	60	21	06	30	70	28
07	35	68	24	07	35	80	32
51308	40	78	26	51408	40	90	36
09	45	85	28	09	45	100	39
10	50	95	31	10	50	110	43
51311	55	105	35	51411	55	120	48
12	60	110	35	12	60	130	51
13	65	115	36	13	65	140	56
51314	70	125	40	51414	70	150	60
15	75	135	44	15	75	160	65
16	80	140	44	16	80	170	68
51317	85	150	49	51417	85	180	72
18	90	155	50	18	90	190	77
20	100	170	55	20	100	210	85
51322	110	190	63				
24	120	210	70				
26	130	225	75				
28	140	240	80				



Spherical roller thrust bearings
29300 Series

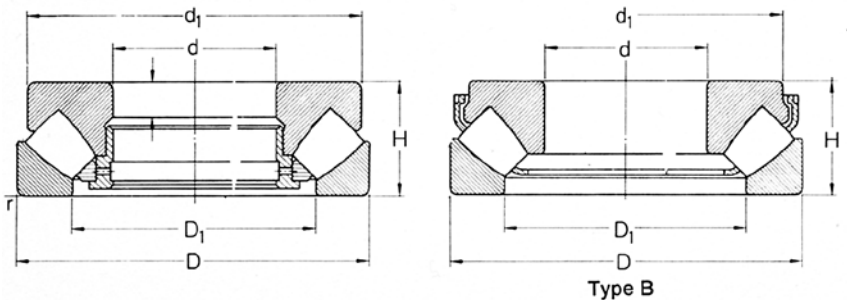
Bearing No.	Boundry Dimensions (mm) d	D	H	D1	d1
29322 B	110	190	48	143	182
29324 B	120	210	54	159	200
29326 B	130	225	58	171	215
29328 B	140	240	60	183	230
29330 B	150	250	60	194	240
29332 B	160	270	67	208	260
29334 B	170	280	67	216	270
29336 B	180	300	73	232	290
29338 B	190	320	78	246	308
29340 B	200	340	85	261	325
29344	220	360	85	280	345
29348	240	380	85	300	365
29352	260	420	95	329	405
29356	280	440	95	348	423
29360	300	480	109	379	460
29364	320	500	109	399	482





Spherical roller thrust bearings
29400 Series

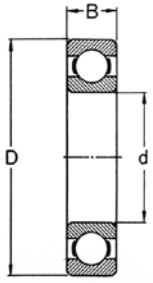
Bearing No.	Boundary Dimensions (mm) d	D	H	D1	d1
29412 B	60	130	42	89	117
29413 B	65	140	45	96	133
29414 B	70	150	48	103	142
29415 B	75	160	51	109	152
29416 B	80	170	54	117	162
29417 B	85	180	58	125	170
29418 B	90	190	60	132	180
29420 B	100	210	67	146	200
29422 B	110	230	73	162	220
29424 B	120	250	78	174	236
29426 B	130	270	85	189	255
29428 B	140	280	85	199	268
29430 B	150	300	90	214	285
29432 B	160	320	95	229	306
29434 B	170	340	103	243	324
29436 B	180	360	109	255	342
29438 B	190	380	115	271	360
29440 B	200	400	122	286	380
29444	220	420	122	308	400
29448	240	440	122	326	420
29452	260	480	132	357	460
29456	280	520	145	387	495
29460	300	540	145	402	515
29464	320	580	155	435	555
29468	340	620	170	462	590
29472	360	640	170	480	610
29476	380	670	175	504	640
29480	400	710	185	536	680
29484	420	730	185	556	700
29488	440	780	206	588	745
29492	460	800	206	608	765
29496	480	850	224	638	810
294/500	500	870	224	661	830
294/630	630	1090	280	830	1040



Type B

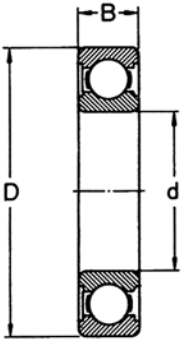
Deep groove ball bearings
RLS and RMS Series

Bearing No.	Inches d	D	B	Bearing No.	Inches d	D	B
RLS 4	1/2	1 5/16	3/8	RMS 4	1/2	1 5/8	5/8
5	5/8	1 9/16	7/16	5	5/8	1 13/16	5/8
6	3/4	1 7/8	9/16	6	3/4	2	11/16
RLS 7	7/8	2	9/16	RMS 7	7/8	2 1/4	11/16
8	1	2 1/4	5/8	8	1	2 1/2	3/4
9	1 1/8	2 1/2	5/8	9	1 1/8	2 13/16	13/16
RLS 10	1 1/4	2 3/4	11/16	RMS 10	1 1/4	3 1/8	7/8
11	1 3/8	3	11/16	11	1 3/8	3 1/2	7/8
12	1 1/2	3 1/4	3/4	12	1 1/2	3 3/4	15/16
RLS 13	1 5/8	3 1/2	3/4	RMS 13	1 5/8	4	15/16
14	1 3/4	3 3/4	13/16	14	1 3/4	4 1/4	1 1/16
15	1 7/8	4	13/16	15	1 7/8	4 1/2	1 1/16
RLS 16	2	4	13/16	RMS 16	2	4 1/2	1 1/16
18	2 1/4	4 1/2	7/8	18	2 1/4	5	1 1/4
20	2 1/2	5	15/16	20	2 1/2	5 1/2	1 1/4
RLS 22	2 3/4	5 1/4	15/16	RMS 22	2 3/4	6 1/4	1 3/8
24	3	5 3/4	1 1/16	24	3	7	1 9/16
26	3 1/4	6	1 1/16	26	3 1/4	7 1/2	1 9/16
RLS 28	3 1/2	6 1/2	1 1/8	RMS 27	3 3/8	7 1/2	1 9/16
30	3 3/4	6 3/4	1 1/8	28	3 1/2	8 1/8	1 3/4
32	4	7 1/4	1 1/4	30	3 3/4	8 1/4	1 3/4
RLS 34	4 1/4	7 1/2	1 1/4	RMS 32	4	8 1/2	1 3/4
36	4 1/2	8	1 5/16	34	4 1/4	8 3/4	1 3/4
38	4 3/4	8 1/4	1 5/16	36	4 1/2	9 3/8	2
RLS 40	5	9	1 3/8	RMS 38	4 3/4	10	2
44	5 1/2	9 1/2	1 3/8	40	5	10	2
48	6	10 1/2	1 9/16	44	5 1/2	11	2
RLS 52	6 1/2	11	1 9/16				
RLS 56	7	12	1 3/4				
60	7 1/2	12 1/2	1 3/4				
64	8	13	1 3/4				



Deep groove ball bearings (single)
RLS Series variants

Bearing with one shield	Bearing with two shields	Bearing with one seal	Bearing with two seals	Inches d	D	B
RLS 4-Z	RLS 4-ZZ	RLS 4-RS	RLS 4-2RS	1/2	1 5/16	3/8
RLS 5-Z	RLS 5-ZZ	RLS 5-RS	RLS 5-2RS	5/8	1 9/16	7/16
RLS 6-Z	RLS 6-ZZ	RLS 6-RS	RLS 6-2RS	3/4	1 7/8	9/16
RLS 7-Z	RLS 7-ZZ	RLS 7-RS	RLS 7-2RS	7/8	2	9/16
RLS 8-Z	RLS 8-ZZ	RLS 8-RS	RLS 8-2RS	1	2 1/4	5/8
RLS 9-Z	RLS 9-ZZ	RLS 9-RS	RLS 9-2RS	1 1/8	2 1/2	5/8
RLS 10-Z	RLS10-ZZ	RLS 10-RS	RLS 10-2RS	1 1/4	2 3/4	11/16



Type Z
with one shield

Type ZZ
with two shields

Type RS
with one seal

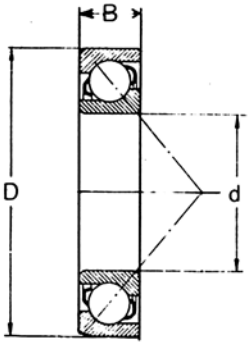
Type 2RS
with two seals

Bearing No.	Inches d	D	B
EE 2	1/4	3/4	7/32
3	3/8	7/8	7/32
4	1/2	1 1/8	1/4
EE 5	5/8	1 3/8	9/32
6	3/4	1 5/8	5/16
7	3/4	1 3/4	3/8
EE 8	7/8	1 7/8	3/8
9	1	2	3/8
10	1 1/8	2 1/8	3/8
11	1 1/4	2 1/4	3/8

Angular contact ball bearings
ALS, AMS Series

Bearing No.		Inches d	D	B
ALS	5	5/8	1 9/16	7/16
	6	3/4	1 7/8	9/16
	7	7/8	2	9/16
ALS	8	1	2 1/4	5/8
	9	1 1/8	2 1/2	5/8
	10	1 1/4	2 3/4	11/16
ALS	11	1 3/8	3	11/16
	12	1 1/2	3 1/4	3/4
	13	1 5/8	3 1/2	3/4
ALS	14	1 3/4	3 3/4	13/16
	15	1 7/8	4	13/16
	16	2	4	13/16
ALS	18	2 1/4	4 1/2	7/8
	20	2 1/2	5	15/16
	22	2 3/4	5 1/4	15/16
ALS	24	3	5 3/4	1 1/16
	28	3 1/2	6 1/2	1 1/8
	30	3 3/4	6 3/4	1 1/8
ALS	32	4	7 1/4	1 1/4
	34	4 1/4	7 1/2	1 1/4
	36	4 1/2	8	1 5/16
	40	5	9	1 3/8
	44	5 1/2	9 1/2	1 3/8

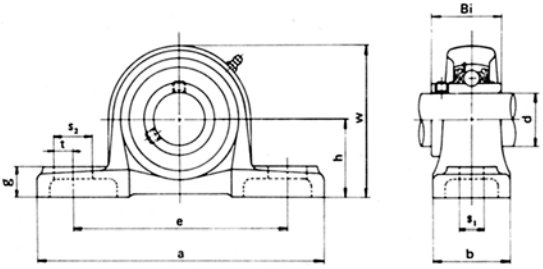
Bearing No.		Inches d	D	B
AMS	6	3/4	2	11/16
	7	7/8	2 1/4	11/16
	8	1	2 1/2	3/4
AMS	9	1 1/8	2 13/16	13/16
	10	1 1/4	3 1/8	7/8
	11	1 3/8	3 1/2	7/8
AMS	12	1 1/2	3 3/4	15/16
	13	1 5/8	4	5/16
	14	1 3/4	4 1/4	1 1/16
AMS	15	1 7/8	4 1/2	1 1/16
	16	2	4 1/2	1 1/16
	18	2 1/4	5	1 1/4
AMS	20	2 1/2	5 1/2	1 1/4
	22	2 3/4	6 1/4	1 3/8
	24	3	7	1 9/16
AMS	28	3 1/2	8 1/8	1 3/4
	30	3 3/4	8 1/4	1 3/4
	32	4	8 1/2	1 3/4
	36	4 1/2	9 3/8	2



QUICK REFERENCE EQUIVALENTS FOR IMPERIAL BEARINGS

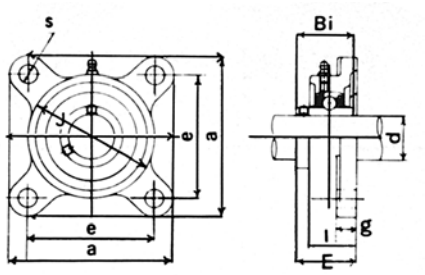
SKF	RHP	FAG	SKF	RHP	FAG
ALS	LJT	LS --- AC	ALS	LJT	LS --- AC
AMS	MJT	MS --- AC	AMS	MJT	MS --- AC
CRL	LRJ	RLS	CRL	LRJ	RLS
CRM	MRJ	RMS	CRM	MRJ	RMS
CFL	LRJA	RL --- L	CFL	LRJA	RL --- L
CFM	MRJA	RM --- L	CFM	MRJA	RM --- L
RLS	LJ	LS	RLS	LJ	LS
RMS	MJ	MS	RMS	MJ	MS
4	1/2	5	24	3	19
5	5/8	7	26	3 1/4	19 1/2
6	3/4	8	27	3 3/8	19 3/4
7	7/8	9	28	3 1/2	20
8	1	10	30	3 3/4	20 1/2
9	1 1/8	11	32	4	21
10	1 1/4	12	34	4 1/4	21 1/2
11	1 3/8	12 1/2	36	4 1/2	22
12	1 1/2	13	38	4 3/4	22 1/2
13	1 5/8	13 1/2	40	5	23
14	1 3/4	14	44	5 1/2	23 1/2
15	1 7/8	14 1/2	48	6	24
16	2	15	52	6 1/2	24 1/2
18	2 1/4	16	56	7	25
20	2 1/2	17	60	7 1/2	25 1/2
22	2 3/4	18			

Ball bearings units
UCP 200 Series (pillow block units)



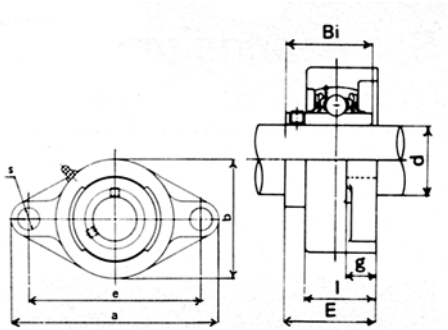
BASIC UNIT NO.	SHAFT DIA. d		BASIC BRG. NO.	NOMINAL DIMENSIONS inch / mm										BOLT SIZE inch / mm	HOUSING NO.
	Inch	mm		h	a	e	b	s_1	s_2	t	g	w	Bi		
UCP 201 201-08 201-09 202 201-10 203 203-11	 1/2 9/16 5/8 11/16	12 15 17 	UC 201 201-08 201-09 202 202-10 203 203-11	30.2	127	95	38	12	18	9.5	12	60	31	M10	P203
UCP 204-12 204	3/4	20	UC 204-12 204	33.3	127	95	38	12	18	9.5	13	64	31	M10	P204
UCP 205-13 205-14 205-15 205 205-16	13/16 7/8 15/16 1	 25 	UC 205-13 205-14 205-15 205 205-16	36.5	140	105	38	12	19	9.5	13	71	34	M10	P205
UCP 206-17 206-18 206 206-19	1 1/16 1 1/8 1 3/16	 30 	UC 206-17 206-18 206 206-19	42.9	165	121	48	16	21	10.5	15	84	38.1	M14	P206
UCP 207-20 207-21 207-22 207 207-23	1 1/4 1 5/16 1 3/8 1 7/16	 35 	UC 207-20 207-21 207-22 207 207-23	47.6	167	127	48	16	20	10.5	16	93	42.9	M14	P207
UCP 208-24 208-25 208	1 1/2 1 9/16 	 40	UC 208-24 208-25 208	49.2	184	137	54	16	23	12.5	17	98	49.2	M14	P208
UCP 209-26 209-27 209-28 209	1 5/8 1 11/16 1 3/4 	 45	UC 209-26 209-27 209-28 209	54	190	146	54	16	21	10.5	17	106	49.2	M14	P209
UCP 210-29 210-30 210-31 210	1 13/16 1 7/8 1 15/16 	 50	UC 210-29 210-30 210-31 210	57.2	206	159	60	20	22	11	19	113	51.6	M16	P210
UCP 211-32 211-33 211-34 211 211-35	2 2 1/16 2 1/8 2 3/16	 55 	UC 211-32 211-33 211-34 211 211-35	63.5	219	171	60	20	22	11	19	125	55.6	M16	P211
UCP 212-36 212-37 212 212-38 212-39	2 1/4 2 5/16 2 3/8 2 7/16	 60 	UC 212-36 212-37 212 212-38 212.39	69.8	241	184	70	20	25	12.5	22	138	65.1	M16	P212
UCP 213-40 213	2 1/2 	 65	UC 213-40 213	76.2	265	203	70	23	30	16	25	150	65.1	M20	P213
UCP 214-43 214-44 214	2 11/16 2 3/4 	 70	UC 214-43 214-44 214	79.4	266	210	72	23	30	16	28	156	74.6	M20	P214
UCP 215-46 215-47 215 215-48	2 7/8 2 15/16 3	 75 	UC 215-46 215-47 215 215-48	82.6	275	217	74	23	31	17	28	162	77.8	M20	P215
UCP 216		80	UC 216	88.9	292	232	78	23	33	18	32	174	82.6	M20	P216
UCP 217		85	UC 217	95.2	310	247	83	23	35	19	32	185	85.7	M20	P217
UCP 218		90	UC 218	101.6	327	262	88	27	37	20	34	198	96	M22	P218

Ball bearings units
UCF 200 Series (flange units)



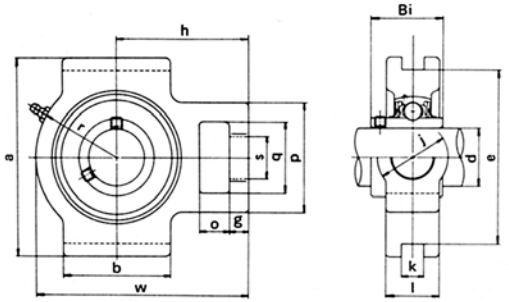
BASIC UNIT NO.	SHAFT DIA. d		BASIC BRG. NO.	NOMINAL DIMENSIONS inch mm								BOLT SIZE inch mm	HOUSING NO.
	Inch	mm		o	e	g	l	E	J	s	Bi		
UCF 201		12	UC 201										
201-08	1/2		201-08										
201-09	9/16		201-09										
202		15	202										
202-10	5/8		202-10	86	64	11	25.5	33.3	60	12	31	M10	F204
203		17	203										
203-11	11/16		203-11										
204-12	3/4		204-12										
204		20	204										
UCF 205-13	13/16		UC 205-13										
205-14	7/8		205-14										
205-15	15/16		205-15										
205		25	205	95	70	13	27	35.7	70	12	34	M10	F205
205-16	1		205-16										
UCF 206-17	1 1/16		UC 206-17										
206-18	1 1/8		206-18										
206		30	206	108	83	13	31	40.2	83	12	38.1	M10	F206
206-19	1 3/16		206-19										
UCF 207-20	1 1/4		UC 207-20										
207-21	1 5/16		207-21										
207-22	1 3/8		207-22										
207		35	207	117	92	15	34	44.4	95	14	42.9	M12	F207
207-23	1 7/16		207-23										
UCF 208-24	1 1/2		UC 208-24										
208-25	1 9/16		208-25										
208		40	208	130	102	15	36	51.2	105	16	49.2	M14	F208

Ball bearings units
UCFL 200 Series (flange units)



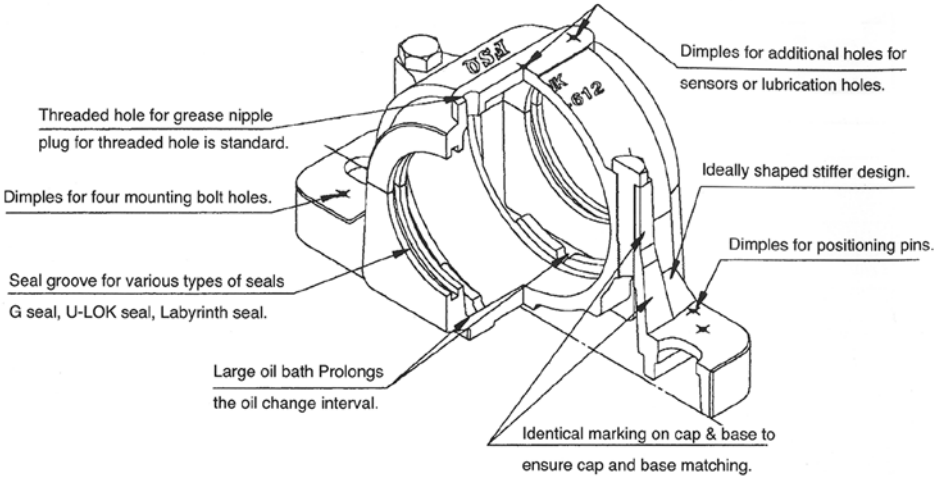
BASIC UNIT NO.	SHAFT DIA. d		BASIC BRG. NO.	NOMINAL DIMENSIONS inch / mm								BOLT SIZE inch / mm	HOUSING NO.
	Inch	mm		a	e	g	l	E	s	b	Bi		
UCFL 201		12	UC 201										
201-08	1/2		201-08										
201-09	9/16		201-09										
202		15	202										
202-10	5/8		202-10										
203		17	203	113	90	11	25.5	33.3	12	60	31	M10	FL204
203-11	11/16		203-11										
204-12	3/4		204-12										
204		20	204										
UCFL 205-13	13/16		UC 205-13										
204-14	7/8		205-14										
205-15	15/16		205-15										
205		25	205	130	99	13	27	35.7	16	68	34	M14	FL205
205-16	1		205-16										
UCFL 206-17	1 1/16		UC 206-17										
206-18	1 1/8		206-18										
206		30	206	148	117	13	31	40.2	16	80	38.1	M14	FL206
206-19	1 3/16		206-19										
UCFL 207-20	1 1/4		UC 207-20										
207-21	1 5/16		207-21										
207-22	1 3/8		207-22										
207		35	207	161	130	14	34	44.4	16	90	42.9	M14	FL207
207-23	1 7/16		207-23										

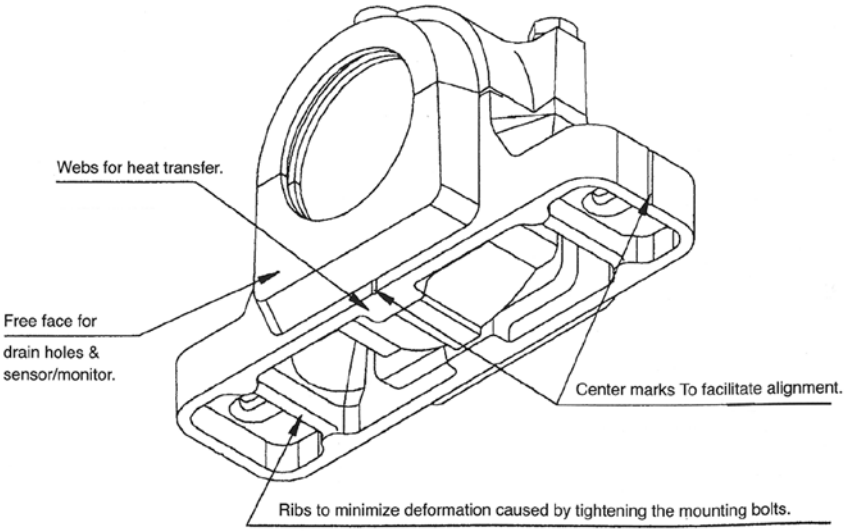
Ball bearings units
UCT 200 Series (take-up units)



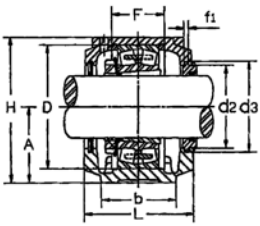
BASIC UNIT NO.	SHAFT DIA. d		BASIC BRG. NO.	NOMINAL DIMENSIONS inch / mm														
	Inch	mm		o	g	p	q	s	b	k	e	a	w	j	l	r	h	Bi
UCT 201		12	UC 201															
201-08	1/2		201-08															
201-09	9/16		201-09															
202		15	202															
202-10	5/8		202-10															
203		17	203	16	10	51	32	19	51	12	76	89	94	32	21	33	61	31
203-11	11/16		203-11															
204-12	3/4		204-12															
204		20	204															
UCT 205-13	13/16		UC 205-13															
205-14	7/8		205-14															
205-15	15/16		205-15															
205		25	205	16	10	51	32	19	51	12	76	89	97	32	24	35	62	34
205-16	1		205-16															
UCT 206-17	1 1/16		UC 206-17															
206-18	1 1/8		206-18															
206		30	206	16	10	56	37	22	57	12	89	102	113	37	28	43	70	38.1
206-19	1 3/16		206-19															
UCT 207-20	1 1/4		UC 207-20															
207-21	1 5/16		207-21															
207-22	1 3/8		207-22															
207		35	207	16	13	64	37	22	64	12	89	102	129	37	30	51	78	42.9
207-23	1 7/16		207-23															
UCT 208-24	1 1/2		UC 208-24															
208-25	1 9/16		208-25															
208		40	208	19	16	83	49	29	83	16	102	114	144	49	33	56	88	49.2
UCT 209-26	1 5/8		UC 209-26															
209-27	1 11/16		209-27															
209-28	1 3/4		209-28	19	16	83	49	29	83	16	102	117	144	49	35	57	87	49.2
209		45	209															
UCT 210-29	1 13/16		UC 210-29															
210-30	1 7/8		210-30															
210-31	1 15/16		210-31	19	16	83	49	29	86	16	102	117	149	49	37	59	90	51.6
210		50	210															
UCT 211-32	2		UC 211-32															
211-33	2 1/16		211-33															
211-34	2 1/8		211-34															
211		55	211	25	19	102	64	35	95	22	130	146	171	64	38	65	106	55.6
211-35	2 3/16		211-35															
UCT 212-36	2 1/4		UC 212-36															
212-37	2 5/16		212-37															
212		60	212															
212-38	2 3/8		212-38	32	19	102	64	35	102	22	130	146	194	64	42	75	119	65.1
212-39	2 7/16		212-39															
UCT 213-40	2 1/2		UC 213-40															
213		65	213	32	21	111	70	41	121	26	151	167	224	70	44	87	137	65.1
UCT 214-43	2 11/16		UC 214-43															
214-44	2 3/4		214-44															
214		70	214	32	21	111	70	41	121	26	151	167	224	70	46	87	137	74.6
UCT 215-46	2 7/8		UC 215-46															
215-47	2 15/16		215-47															
215		75	215	32	21	111	70	41	121	26	151	167	232	70	48	92	140	77.8
215-48	3		215-48															
UCT 216		80	UC 216	32	21	111	70	41	121	26	165	184	235	70	51	95	140	82.6
UCT 217		85	UC 217	38	29	124	73	48	157	30	173	198	260	73	54	98	162	85.7

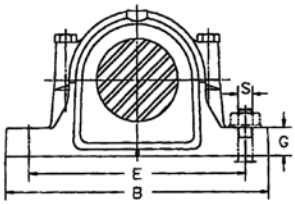
Interchangeable with SNU/SNH/SNN

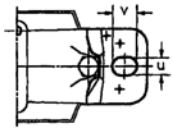




SNK HOUSING







HOUSING NO	L	b	f1	F	D	d2	d3	H	A	G	E	B	v	u	S	WEIGHT (kg)
SNK 505	67	46	5	25	52	31.5	39.5	72	40	19	130	165	20	13	10	1.50
SNK 506-605	77	52	5	32	62	36.5	44.5	87	50	22	150	185	22	13	10	2.00
SNK 507-606	82	52	5	34	72	46.5	54.5	92	50	22	150	185	20	13	10	2.32
SNK 508-607	85	60	5	39	80	51.5	59.5	106	60	25	170	205	20	15	12	2.90
SNK 509	85	60	5	30	85	56.5	64.5	108	60	25	170	205	20	15	12	3.10
SNK 510-608	90	60	5	41	90	62	70.5	112	60	25	170	205	20	15	12	3.31
SNK 511-609	95	70	5	44	100	67	75.5	126	70	28	210	255	23	18	16	4.54
SNK 512-610	105	70	5	48	110	72	80.5	132	70	30	210	255	23	18	16	5.47
SNK 513-611	110	80	5	51	120	77	85.5	147	80	30	230	275	24	18	16	6.60
SNK 515-612	115	80	5	56	130	87	95.5	153	80	30	230	280	26	18	16	7.30
SNK 516-613	120	90	5	58	140	92.5	101	174	95	32	260	315	29	22	20	9.95
SNK 517	125	90	5	61	150	97.5	106	180	95	32	260	320	30	22	20	10.82
SNK 518-615	140	100	5	65	160	105	111	190	100	35	290	345	27	22	20	13.30
SNK 519-616	145	100	6	68	170	131	141	208.5	112	35	290	345	27	22	20	15.00
SNK 520-617	160	110	6	70	180	137.5	147.5	214.5	112	40	320	380	32	26	24	18.80
SNK 522-619	175	120	6	80	200	147.5	157.5	238.5	125	45	350	410	32	26	24	23.50
SNK 524-620	185	120	6	86	215	157.5	167.5	271	140	45	350	410	32	26	24	28.00
SNK 526	190	130	6	90	230	167.5	177.5	290	150	50	380	445	35	28	24	34.00
SNK 528	205	150	6	98	250	177.5	187.5	302	150	50	420	500	42	35	30	41.50
SNK 530	220	160	6	106	270	192.5	202.5	323	160	60	450	530	42	35	30	50.50
SNK 532	235	160	6	114	290	202.5	212.5	344	170	60	470	550	42	35	30	56.70

- SNK/SNU housings can be equipped with TSNA-G, U-LOK, TS-U & TS-UF seals.
- SNU/SSNU/SNA housings are available.
- Weight is only for reference.

SNK / SNU 500-600 Series

Shaft Dia. mm	Housing No.	Bearing No.		Adapter Sleeve	Sealing arrangement *		End cover	Locating Ring	
		Self-Alig. Ball	Sperical Roller		Standard	Alternative		Number	Q'ty
					U-Lok	TSNA-G			
20	SNK 505	1205K		H205	U505		505A	52x10	1
	SNK 505	2205K		H305	U505		505A	52x7	1
	SNK 505-605	1305K		H305	U605		506A	62x7.5	2
	SNK 506-605	2305K		H2305	U605		506A	62x8	1
25	SNK 506-605	1206K		H206	U506		506A	62x8	2
	SNK 506-605	2206K		H306	U506		506A	62x6	2
	SNK 507-606	1306K		H306	U606		507A	72x7.5	2
	SNK 507-606	2306K		H2306	U606		507A	72x7	1
30	SNK 507-606	1207K	-	H207	U507	TSNG 507	507A	72x8.5	2
	SNK 507-606	2207K	22207K	H307	U507	TSNG 507	507A	72x5.5	2
	SNK 508-607	1307K	-	H307	U607	TSNG 607	508A	80x9	2
	SNK 508-607	2307K	-	H2307	U607	TSNG 607	508A	80x8	1
35	SNK 508-607	1208K	-	H208	U508	TSNG 508	508A	80x10.5	2
	SNK 508-607	2208K	22208K	H308	U508	TSNG 508	508A	80x8	2
	SNK 510-608	1308K	21308K	H308	U608	TSNG 608	510A	90x9	2
	SNK 510-608	2308K	22308K	H2308	U608	TSNG 608	510A	90x8	1
40	SNK 509	1209K	-	H209	U509	TSNG 509	509A	85x5.5	2
	SNK 509	2209K	22209K	H309	U509	TSNG509	509A	85x7	1
	SNK 511-609	1309K	21309K	H309	U609	TSNG 609	511A	100x9.5	2
	SNK 511-609	2309K	22309K	H2309	U609	TSNG 609	511A	100x8	1
45	SNK 510-608	1210K	-	H210	U510	TSNG 510	510A	90x10.5	2
	SNK 510-608	2210K	22210K	H310	U510	TSNG 510	510A	90x9	2
	SNK 512-610	1310K	21310K	H310	U610	TSNG 610	512A	110x10.5	2
	SNK 512-610	2310K	22310K	H2310	U610	TSNG 610	512A	110x8	1
50	SNK 511-609	1211K	-	H211	U511	TSNG 511	511A	100x11.5	2
	SNK 511-609	2211K	22211K	H311	U511	TSNG 511	511A	100x9.5	2
	SNK 513-611	1311K	21311K	H311	U611	TSNG 611	513A	120x11	2
	SNK 513-611	2311K	22311K	H2311	U611	TSNG 611	513A	120x8	1
55	SNK 512-610	1212K	-	H212	U512	TSNG 512	512A	110x13	2
	SNK 612-610	2212K	22212K	H312	U512	TSNG 512	512A	110x10	2
	SNK 515-612	1312K	21312K	H312	U612	TSNG612	515A	130x12.5	2
	SNK 515-612	2312K	22312K	H2312	U612	TSNG 612	515A	130x10	1
60	SNK 513-611	1213K	-	H213	U513	TSNG 513	513A	120x14	2
	SNK 513-611	2213K	22213K	H313	U513	TSNG 513	513A	120x10	2
	SNK 516-613	1313K	21313K	H313	U613	TSNG 613	516A	140x12.5	2
	SNK 516-613	2313K	22313K	H2313	U613	TSNG 613	516A	140x10	1
65	SNK 515-612	1215K	-	H215	U515	TSNG 515	515A	130x15.5	2
	SNK 515-612	2215K	22215K	H315	U515	TSNG 515	515A	130x12.5	2
	SNK 518-615	1315K	21315K	H315	U615	TSNG 615	518A	160x14	2
	SNK 518-615	2315K	22315K	H2315	U615	TSNG 615	518A	160x10	1

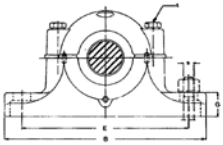
SNK / SNU 500-600 Series

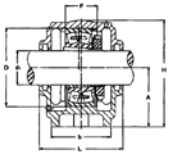
Shaft Dia. mm	Housing No.	Bearing No.		Adapter Sleeve	Sealing arrangement *		End cover	Locating Ring	
		Self-Alig. Ball	Sperical Roller		Standard	Alternative		Number	Q'ty
					U-Lok	TSNA-G			
70	SNK 516-613	1216K	-	H216	U516	TSNG 516	516A	140x16	2
	SNK 516-613	2216K	22216K	H316	U516	TSNG 516	516A	140x12.5	2
	SNK 519-616	1316K	21316K	H316	U616	TSNG 616	519A	170x14.5	2
	SNK 519-616	2316K	22316K	H2316	U616	TSNG 616	519A	170x10	1
75	SNK 517	1217K	-	H217	U517	TSNG 517	517A	150x16.5	2
	SNK 517	2217K	22217K	H317	U517	TSNG 517	517A	150x12.5	2
	SNK 520-617	1317K	21317K	H317	U617	TSNG 617	520A	180x14.5	2
	SNK 520-617	2317K	22317K	H2317	U617	TSNG 617	520A	180x10	1
80	SNK 518-615	1218K	-	H218	U518	TSNG 518	518A	160x17.5	2
	SNK 518-615	2218K	22218K	H318	U518	TSNG 518	518A	160x12.5	2
	SNK 518-615	-	23218K	H2318	U518	TSNG 518	518A	160x12.5	1
85	SNK 519-616	1219K	-	H219	U519	TSNG 519	519A	170x18	2
	SNK 519-616	2219K	22219K	H319	U519	TSNG 519	519A	170x12.5	2
	SNK 522-619	-	22319K	H2319	U619	TSNG 619	522A	200x13	1
90	SNK 520-617	1220K	-	H220	U520	TSNG 520	520A	180x18	2
	SNK 520-617	2220K	22220K	H320	U520	TSNG 520	520A	180x12	2
	SNK 520-617	-	23220K	H2320	U520	TSNG 520	520A	180x9.7	1
	SNK 524-620	-	22320K	H2320	U620	TSNG 620	524A	215x13	1
100	SNK 522-619	1222K	-	H222	U522	TSNG 522	522A	200x21	2
	SNK 522-619	2222K	22222K	H322	U522	TSNG 522	522A	200x13.5	2
	SNK 522-619	-	23222K	H2322	U522	TSNG 522	522A	200x10	1
110	SNK 524-620		22224K	H3124	U524	TSNG 524	524A	215x14	2
	SNK 524-620		23224K	H2324	U524	TSNG 524	524A	215x10	1
115	SNK 526		22226K	H3126	U526	TSNG 526	526A	230x13	2
	SNK 526		23226K	H2326	U526	TSNG 526	526A	230x10	1
125	SNK 528		22228K	H3128	U528	TSNG 528	528A	250x15	2
	SNK 528		23228K	H2328	U528	TSNG 528	528A	250x10	1
135	SNK 530		22230K	H3130	U530	TSNG 530	530A	270x16.5	2
	SNK 530		23230K	H2330	U530	TSNG 530	530A	270x10	1
140	SNK 532		22232K	H3132	U532	TSNG 532	532A	290x17	2
	SNK 532		23232K	H2332	U532	TSNG 532	532A	290x10	1

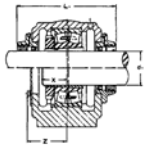
NOTES:

* U-Lok seal, TSNG seal and TS-U seal are interchangeable.

SN-SSN 500-600 Series

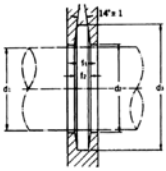


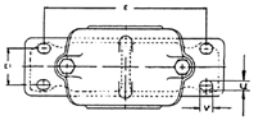




Housing No.	NOMINAL DIMENSIONS (mm)															
	SHAFT DIA. d1		D H8	B	b	G	F H13	A h13	L	H	E	E1	L1	X	Z	d2H12
	METRIC	INCH														METRIC
SN 505	20	3/4	52	165	46	22	25	40	67	75	130	25	-	22	-	21.5
SN 506	25	1	62	185	52	22	30	50	77	90	150	25		22		26.5
SN 507	30	1 1/8	72	185	52	22	33	50	82	95	150	25	-	24	-	31.5
SN 508	35	1 1/4	80	205	60	25	33	60	85	110	170	30		26		36.5
SN SSN 509	40	1 1/2	85	205	60	25	31	60	85	112	170	30		28		41.5
SN SSN 510	45	1 3/4	90	205	60	25	33	60	90	115	170	30		28		46.5
SN SSN 511	50	2	100	255	70	28	33	70	95	130	210	35	160	30	54	51.5
SN SSN 512	55	2 1/8	110	255	70	30	38	70	105	135	210	35	172	32	62	56.5
SN SSN 513	60	2 1/4	120	275	80	30	43	80	110	150	230	40	172	36	62	62
SN SSN 515	65	2 1/2	130	280	80	30	41	80	115	155	230	40	182	38	68	67
SN SSN 516	70	2 3/4	140	315	90	32	43	95	120	175	260	50	184	40	68	72
SN SSN 517	75	3	150	320	90	32	46	95	125	185	260	50	184	42	70	77
SN SSN 518	80	3 1/4	160	345	100	35	62.4	100	145	195	290	50	204	50	81	82
SN SSN 519	85	-	170	345	100	35	53	112	140	210	290	50	-	-	-	87
SN SSN 520	90	3 1/2	180	380	110	40	70.3	112	160	218	320	60	224	54	90	92
SN SSN 522	100	4	200	410	120	45	80	125	175	240	350	70	232	60	92	102
SN SSN 524	110	4 1/4	215	410	120	45	86	140	185	270	350	70	248	64	95	113
SN SSN 526	115	4 1/2	230	445	130	50	90	150	190	290	380	70	268	64	100	118
SN SSN 528	125	5	250	500	150	50	98	150	205	305	420	80	286	70	108	128
SN SSN 530	135	5 1/4	270	530	160	60	106	160	220	325	450	90	304	76	113	138
SN SSN 532	140	5 1/2	290	550	160	60	114	170	235	345	470	90	320	80	122	143

SN-SSN 500 Series

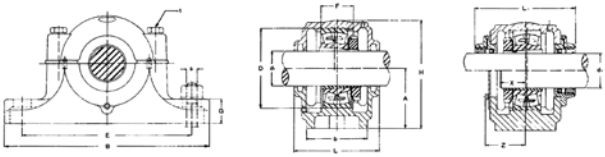




NOTES: Foot of standard housing SSN type is solid without mounting holes or can be precast as 2-bolt (with prefix T) or 4-bolt mounting holes (with prefix F).
Taconite seal will be supplied as optional for perfect arrangement in severe operating conditions to prevent contamination from fine abrasive dust.
ZF rubber seals can be supplied upon request.

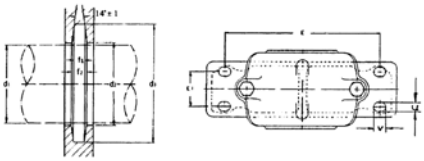
										BEARING NO.		ADAPTER SLEEVE			
d3 H12	t	f1 H13	f2	u	v	S		WEIGHT (kg)		SELF-ALIG BALL	SPHERICAL ROLLER	METRIC	INCH		
						2 bolt	4 bolt	SN5	SSN5						
31	M8	3	4.2	15	20	M12	M8	1.5	2.3	1205K 2205K	- 22205K	H205 H305	HE205 HE305	52X5 52X7	2 1
38	M8	4	5.4	15	20	M12	M10	1.74	2.8	1206K 2206K	- 22206K	H206 H306	HE206 HE306	62X7 62X10	2 1
43	M10	4	5.4	15	20	M12	M10	1.9	3.2	1207K 2207K	- 22207K	H207 H307	HS207 HS307	72X8 72X10	2 1
48	M10	4	5.4	15	20	M12	M10	2.63	3.2	1208K 2208K	- 22208K	H208 H308	HE208 HE308	80X7.5 80X10	2 1
53	M10	4	5.4	15	20	M12	M10	2.64	3.7	1209K 2209K	- 22209K	H209 H309	HE209 HE309	85X6 85X8	2 1
58	M10	4	5.4	15	20	M12	M10	2.8	3.8	1210K 2210K	- 22210K	H210 H310	HE210 HE310	90X6.5 90X10	2 1
67	M12	5	6.9	18	23	M16	M12	4.32	6.2	1211K 2211K	- 22211K	H211 H311	HE211 HE311	100X6 100X8	2 1
72	M12	5	6.9	18	23	M16	M12	4.99	6.5	1212K 2212K	- 22212K	H212 H312	HS212 HS312	110X8 110X10	2 1
77	M12	5	6.8	18	23	M16	M12	5.64	8.3	1213K 2213K	- 22213K	H213 H313	HE213 HE313	120X10 120X12	2 1
82	M12	5	6.8	18	23	M16	M12	6.19	9.0	1215K 2215K	- 22215K	H215 H315	HE215 HE315	130X8 130X10	2 1
89	M16	6	8.1	22	27	M20	M12	8.17	12.1	1216K 2216K	- 22216K	H216 H316	HE216 HE316	140X8.5 140X10	2 1
94	M16	6	8.1	22	27	M20	M12	9.37	12.2	1217K 2217	- 22217K	H217 H317	HE217 HE317	150X9 150X10	2 1
99	M16	6	8.1	22	27	M20	M16	11.5	15.2	1218K 2218K -	- 22218K 23218K	H218 H318 H2318	HE218 HE318 HE2318	160X16.2 160X11.2 160X10	2 2 1
104	M16	6	8.1	22	28	M20	M16	13.5	17.7	1219K -	- 22219K	H219 H319		170X10.5 170X10	2 1
111	M20	7	9.3	26	32	M24	M16	16.3	20.5	2220K -	22220K 23220K	H320 H2320	HE320 HE2320	180X12.1 180X10	2 1
125	M20	8	10.8	26	32	M24	M16	25.1	29.2	2222K -	22222K 23222K	H322 H2322	HE322 HE2322	200X13.5 200X10	2 1
135	M20	8	10.7	26	34	M24	M16	27.2	33	- -	22224K 23224K	H3124 H2324	HE3124 HE2324	215X14 215X10	2 1
140	M24	8	10.7	28	35	M24	M20	35.2	40.9	- -	22226K 23226K	H3126 H2326	HE3126 HE2326	230X13 230X10	2 1
154	M24	9	12.2	34	44	M30	M24	43.7	48.6	- -	22228K 23228K	H3128 H2328	HE3128 HE2328	250X15 250X10	2 1
164	M24	9	12.2	34	42	M30	M24	45.3	56.2	- -	22230K 23230K	H3130 H2330	HE3130 HE2330	270X16.5 270X10	2 1
173	M24	10	13.7	32	44	M30	M24	50.75	68.5	- -	22232K 23232K	H3132 H2332	HE3132 HE2332	290X17 290X10	2 1

SN-SSN 600 Series



Housing No.	NOMINAL DIMENSIONS (mm)															
	SHAFT DIA. d1		D H8	B	b	G	F H13	A h13	L	H	E	E1	L1	X	d2H12	d3 H12
	METRIC	INCH													METRIC	
SN 605	20	3/4	62	185	52	22	34	50	80	90	150	25	-	27	21.5	31
SN 606	25	1	72	185	52	22	37	50	82	95	150	25	-	27	26.5	38
SN 607	30	1 1/8	80	205	60	25	41	60	90	110	170	30	-	32	31.5	43
SN 608	35	1 1/4	90	205	60	25	43	60	95	115	170	30	-	34	36.5	48
SN SSN 609	40	1 1/2	100	255	70	28	46	70	105	130	210	35	-	36	41.5	53
SN SSN 610	45	1 3/4	110	255	70	30	50	70	115	135	210	35	-	39	46.5	58
SN SSN 611	50	2	120	275	80	30	53	80	120	150	230	40	185	40	51.5	67
SN SSN 612	55	2 1/8	130	280	80	30	56	80	125	155	230	40	185	44	56.5	72
SN SSN 613	60	2 1/4	140	315	90	32	58	95	130	175	260	50	200	46	62	77
SN SSN 615	65	2 1/2	160	345	100	35	65	100	140	195	290	50	210	51	67	82
SN SSN 616	70	2 3/4	170	345	100	35	68	112	145	212	290	50	210	52	72	89
SN SSN 617	75	3	180	380	110	40	70	112	155	218	320	60	220	56	77	94
SN SSN 618	80	3 1/4	190	400	110	33	74	112	160	230	320	60	225	58	82	99
SN SSN 619	85		200	420	120	36	77	125	170	245	350	70	235	60	87	104
SN SSN 620	90	3 1/2	215	420	120	38	83	140	175	280	350	70	240	64	92	111
SN SSN 622	100	4	240	460	130	40	90	150	190	300	390	70	258	69	102	125
SN SSN 624	110	4 1/4	260	540	160	50	96	160	205	325	450	90	280	73	113	135
SN SSN 626	115	4 1/2	280	560	160	50	103	170	215	350	470	90	300	77	118	140
SN SSN 628	125	5	300	630	170	55	112	180	235	375	520	90	320	83	128	154
SN SSN 630	135	5 1/4	320	680	180	55	118	190	245	395	560	90	340	88	138	164
SN SSN 632	140	5 1/2	340	710	190	60	124	200	255	415	580	100	350	93	143	173

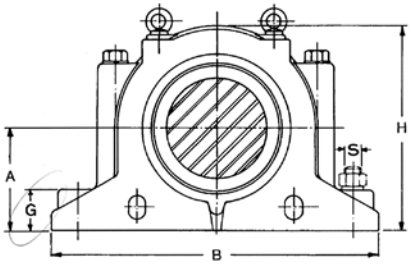
SN-SSN 600 Series

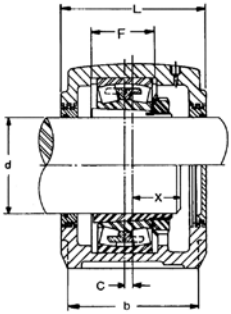


NOTES: Foot of standard housing SSN type is solid without mounting holes or can be precast as 2-bolt (with prefix T) or 4-bolt mounting holes (with prefix F). Taconite seal will be supplied as optional for perfect arrangement in severe operating conditions to prevent contamination from fine abrasive dust.
ZF rubber seals can be supplied upon request.

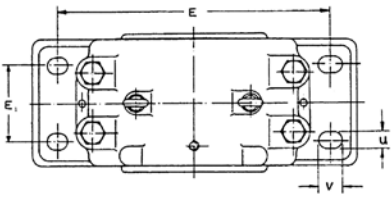
									BEARING NO.		ADAPTER SLEEVE		LOCATING RING	
t	f1 H13	f2	u	v	S		WEIGHT (kg)		SELF-ALIG BALL	SPHERICAL ROLLER	METRIC	INCH	NUMBER	QTY
					2 bolt	4 bolt	SN5	SSN5						
M8	3	4.2	16	20	M12	M10	2.11	–	1305K 2305K	–	H305 H2305	HE305 HE2305	62X8.5 62X10	2 1
M10	4	5.4	16	20	M12	M10	2.09	–	1306K 2306K	–	H306 H2306	HE306 HE2306	72X9 72X10	2 1
M10	4	5.4	16	20	M12	M10	3.4	4.1	1307K 2307K	–	H307 H2307	HE307 HE2307	80X10 80X10	2 1
M10	4	5.4	15	24	M12	M10	3.6	4.7	1308K 2308K	21308K 22308K	H308 H2308	HE308 HE2308	90X10 90X10	2 1
M12	4	5.4	19	25	M16	M12	5.3	6.8	1309K 2309K	21309K 22309K	H309 H2309	HE309 HE2309	100X10.5 100X10	2 1
M12	4	5.4	18	23	M16	M12	5.5	6.8	1310K 2310K	21310K 22310K	H310 H2310	HE310 HE2310	110X11.5 110X10	2 1
M12	5	6.9	20	28	M16	M12	6.9	9.0	1311K 2311K	21311K 22311K	H311 H2311	HE311 HE2311	120X12 120X10	2 1
M12	5	6.9	20	28	M16	M12	8.8	10.5	2312K 2312K	22312K 22312K	H2312 H2312	HE2312 HE2312	130X10 130X10	2 1
M16	5	6.8	22	30	M20	M12	9.8	12.4	1313K 2313K	21313K 22313K	H313 H2313	HE313 HE2313	140X12.5 140X10	2 1
M16	5	6.8	23	28	M20	M16	13.0	16.4	1315K 2315K	21315K 22315K	H315 H2315	HE315 HE2315	160X14 160X10	2 1
M16	6	8.1	23	30	M20	M16	15.5	19.7	1316K 2316K	21316K 22316K	H316 H2316	HE316 HE2316	170X14.5 170X10	2 1
M20	6	8.1	26	35	M24	M16	16.3	20.7	1317K 2317K	21317K 22317K	H317 H2317	HE317 HE2317	180X14.5 180X10	2 1
M20	6	8.1	27	38	M24	M16	20.0	24	1318K 2318K	- 22318K	H318 H2318	HE318 HE2318	190X15.5 190X10	2 1
M20	6	8.1	28	36	M24	M16	28.0	29.7	1319K 2319K	- 22319K	H319 H2319	HE319 HE2319	200X16 200X10	2 1
M20	7	9.3	27	33	M24	M16	30.5	37.1	1320K 2320K	- 22320K	H320 H2320	HE230 HE2320	215X18 215X10	2 1
M20	8	10.0	28	32	M24	M16	42	49.2	1322K 2322K	- 22322K	H322 H2322	HE322 HE2322	240X20 240X10	2 1
M24	8	10.7	34	42	M30	M20	59	72	-	22324K	H2324	HE2324	260X10	1
M24	8	10.7	34	42	M30	M20	61.5	80.9	-	22326K	H2326	HE2326	280X10	1
M30	9	12.2	34	46	M30	M20	88	105	-	22328K	H2328	HE2328	300X10	1
M30	9	12.2	38	44	M30	M20	89	115	-	22330K	H2330	HE2330	320X10	1
M30	10	13.7	40	52	M36	M24	127	145	-	22332K	H2332	HE2332	340X10	1

SD 3100 Series



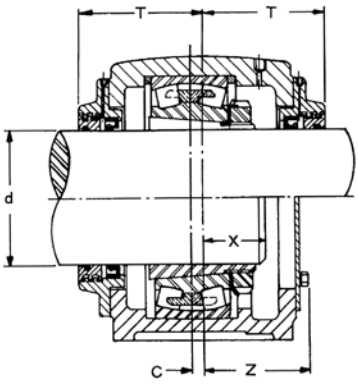


TRIPLE "TS" SEAL
STANDARD ON SD HOUSINGS



Housing No.	SHAFT DIA. d1 d				
	METRIC	INCH	A	B	F
SD 3134	150	6	170	510	108
SD 3136	160	6 1/2	180	530	116
SD 3138	170	6 3/4	190	560	124
SD 3140	180	7	210	610	132
SD 3144	200	8	220	640	140
SD 3148	220	9	240	700	148
SD 3152	240	9 1/2	260	770	164
SD 3156	260	10	280	790	166
SD 3160	280	11	300	830	180
SD 3164	300		320	880	196
SD 3168	320		340	965	210
SD 3172	340		360	1040	212
SD 3176	360		380	1120	214
SD 3180	380		400	1245	220

SD 3100 Series



TS TACONITE TYPE SEAL

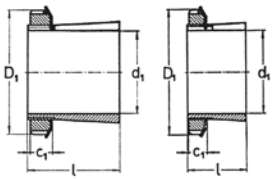
Plummer blocks of series SD 31 TS are used for large spherical roller bearings of Series 231xx CK with adapter sleeves. They are equipped with two labyrinth sealing collars having a push fit on the shaft. A rubber O-ring is fitted between the collar and shaft to ensure rotating together.

Special bosses are provided on the lower half of the housing to allow easy modification for oil lubrication. The bosses can be drilled and tapped to take an oil level gauge and drain plug. An oil circulating system can also be connected. The housings can carry very heavy loads and are designed for heavy duty applications. For severe conditions, taconite seal are available to exclude fine abrasive dust and to retain lubricant.

DIMENSIONS mm												BOLT DIA.	SPHERICAL ROLLER BEARING	ADAPTER SLEEVE			LOCATING RING	
E	b	G	H	L	C	E1	X	T	Z	U	V	S		METRIC	INCH	kg	NUMBER	QTY
430	180	70	335	230	14	100	65	154	120	28	35	M24	23134K	H3134	HE3134	66	280X10	2
450	190	75	355	240	15	110	68	159	130	30	38	M24	23136K	H3136	HE3136	75	300X10	2
480	210	80	375	260	10	120	80	168	140	35	48	M24	23138K	H3138	HE3138	87	320X10	2
510	230	85	410	280	10	130	82	178	150	35	42	M30	23140K	H3140	HE3140	113	340X10	2
540	240	90	435	290	12	140	90	184	155	36	46	M30	23144K	H3144		129	370X10	2
600	260	95	475	310	12	150	100	194	160	38	46	M30	23148K	H3148		163	400X10	2
650	280	100	515	320	13	160	105	200	170	45	60	M36	23152K	H3152		199	440X10	2
670	280	105	550	330	16	160	105	200	170	45	60	M36	23156K	H3156		226	460X10	2
710	310	110	590	350	22	190	110	213	190	44	64	M36	23160K	H3160		283	500X10	2
750	330	115	630	370	23	200	120	224	200	45	72	M36	23164K	H3164		346	540X10	2
840	380	120	670	390	25	240	135	244	220	52	70	M45	23168K	H3168		514	580X10	2
890	390	130	720	400	22	255	145	249	225	60	77	M50	23172K	H3172		594	600X10	2
980	400	135	750	405	22	255	145	260	240	68	88	M55	23176K	H3176		702	620X10	2
1050	420	140	790	425	22	270	150	276	260	75	96	M60	23180K	H3180		740	650X10	2

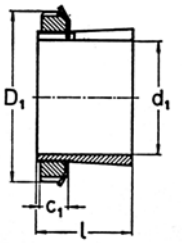
Adapter sleeves
H2, HE2, H23, HE23 Series

Designation	d1 mm	Designation	d1 in	ℓ	D1 mm	C_1
H 204	17	–	–	24	32	7
H 205	20	HE 205	3/4	26	38	8
H 206	25	HE 206	1	27	45	8
H 207	30	–	–	29	52	9
H 208	35	HE 208	1 1/4	31	58	10
H 209	40	HE 209	1 1/2	33	65	11
H 210	45	HE 210	1 3/4	35	70	12
H 211	50	HE 211	2	37	75	12
H 212	55	–	–	38	80	13
H 213	60	HE 213	2 1/4	40	85	14
H 214	60	–	–	41	92	14
H 215	65	HE 215	2 1/2	43	98	15
H 216	70	HE 216	2 3/4	46	105	17
H 217	75	HE 217	3	50	110	18
H 218	80	–	–	52	120	18
H 219	85	HE 219	3 1/4	55	125	19
H 220	90	HE 220	3 1/2	58	130	20
H 222	100	HE 222	4	63	145	21
H 2304	17	–	–	31	32	7
H 2305	20	HE 2305	3/4	35	38	7
H 2306	25	HE 2306	1	38	45	8
H 2307	30	–	–	43	52	9
H 2308	35	HE 2308	1 1/4	46	58	10
H 2309	40	HE 2309	1 1/2	50	65	11
H 2310	45	HE 2310	1 3/4	55	70	12
H 2311	50	HE 2311	2	59	75	12
H 2312	55	–	–	62	80	13
H 2313	60	HE 2313	2 1/4	65	85	14
H 2314	60	–	–	68	92	14
H 2315	65	HE 2315	2 1/2	73	98	15
H 2316	70	HE 2316	2 3/4	78	105	17
H 2317	75	HE 2317	3	82	110	18
H 2318	80	–	–	86	120	18
H 2319	85	HE 2319	3 1/4	90	125	19
H 2320	90	HE 2320	3 1/2	97	130	20
H 2322	100	HE 2322	4	105	145	21
H 2324	110	HE 2324	4 1/4	112	155	22
H 2326	115	HE 2326	4 1/2	121	165	23
H 2328	125	HE 2328	5	131	180	24



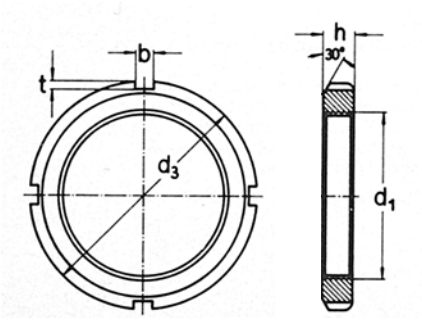
Adapter sleeves
H3, H31, HE3, HE31 Series

Designation	d1 mm	Designation	d1 in	ℓ	D1 mm	c1
H 304	17	-	-	28	32	7
H 305	20	HE 305	3/4	29	38	8
H 306	25	HE 306	1	31	45	8
H 307	30	–	–	35	52	9
H 308	35	HE 308	1 1/4	36	58	10
H 309	40	HE 309	1 1/2	39	65	11
H 310	45	HE 310	1 3/4	42	70	12
H 311	50	HE 311		45	75	12
H 312	55	–	–	47	80	13
H 313	60	HE 313	2 1/4	50	85	14
H 314	60	–	–	52	92	14
H 315	65	HE 315	2 1/2	55	98	15
H 316	70	HE 316	2 3/4	59	105	17
H 317	75	HE 317	3	63	110	18
H 318	80	–	–	65	120	18
H 319	85	HE 319	3 1/4	68	125	19
H 320	90	HE 320	3 1/2	71	130	20
H 322	100	HE 322	4	77	145	21
H 3124	110	HE 3124	4 1/4	88	155	22
H 3126	115	HE 3126	4 1/2	92	165	23
H 3128	125	HE 3128	5	97	180	24
H 3130	135	HE 3130	5 1/4	111	195	26
H 3132	140			119	210	28
H 3134	150			122	220	29
H 3136	160			131	230	30
H 3138	170			141	240	31
H 3140	180			150	250	32
H 3144	200			161	280	35
H 3148	220			172	300	37
H 3152	240			211	330	39
H 3156 A	260			195	350	41
H 3160	280			208	380	40
H 3164	300			226	400	42



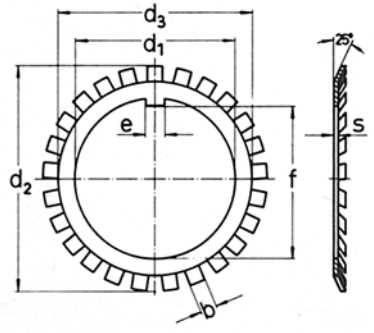
Lock nuts
KM Series

Designation	thread	Dimensions				
		d3 mm	d1 mm	h mm	b mm	t mm
KM 4	M 20x1	32	26	6	4	2
KM 5	M 25x1,5	38	32	7	5	2
KM 6	M 30x1,5	45	38	7	5	2
KM 7	M 35x1,5	52	44	8	5	2
KM 8	M 40x1,5	58	50	9	6	2,5
KM 9	M 45x1.5	65	56	10	6	2,5
KM 10	M 50x1,5	70	61	11	6	2,5
KM 11	M 55x2	75	67	11	7	3
KM 12	M 60x2	80	73	11	7	3
KM 13	M 65x2	85	79	12	7	3
KM 14	M 70x2	92	85	12	8	3,5
KM 15	M 75x2	98	90	13	8	3,5
KM 16	M 80x2	105	95	15	8	3,5
KM 17	M 85x2	110	102	16	8	3,5
KM 18	M 90x2	120	108	16	10	4
KM 19	M 95x2	125	113	17	10	4
KM 20	M 100x2	130	120	18	10	4
KM 21	M 105x2	140	126	18	12	5
KM 22	M 110x2	145	133	19	12	5
KM 23	M 115x2	150	137	19	12	5
KM 24	M 120x2	155	138	20	12	5
KM 25	M 125x2	160	148	21	12	5
KM 26	M 130x2	165	149	21	12	5
KM 27	M 135x2	175	160	22	14	6
KM 28	M 140x2	180	160	22	14	6
KM 30	M 150x2	195	171	24	14	6
KM 31	M 155x3	200	182	25	16	7
KM 32	M 160x3	210	182	25	16	7
KM 34	M 170x3	220	193	26	16	7



Lock Washers
MB Series

Designation	Dimensions						
	d1 mm	d2 mm	d3 mm	max. e mm	f mm	max. b mm	s mm
MB 4	20	36	26	4	18,5	4	1
MB 5	25	42	32	5	23	5	1
MB 6	30	49	38	5	27,5	5	1,25
MB 7	35	57	44	6	32,5	5	1,25
MB 8	40	62	50	6	37,5	6	1,25
MB 9	45	69	56	6	42,5	6	1,25
MB 10	50	74	61	6	47,5	6	1,25
MB 11	55	81	67	8	52,5	7	1,25
MB 12	60	86	73	8	57,5	7	1,5
MB 13	65	92	79	8	62,5	7	1,5
MB 14	70	98	85	8	62,5	8	1,5
MB 15	75	104	90	8	71,5	8	1,5
MB 16	80	112	95	10	76,5	8	1,75
MB 17	85	119	102	10	81,5	8	1,75
MB 18	90	126	108	10	86,5	10	1,75
MB 19	95	133	113	10	91,5	10	1,75
MB 20	100	142	120	12	96,5	10	1,75
MB 21	105	145	126	12	100,5	12	1,75
MB 22	110	154	133	12	105,5	12	1,75
MB 23	115	159	137	12	110,5	12	2
MB 24	120	164	138	14	115	12	2
MB 25	125	170	148	14	120	12	2
MB 26	130	175	149	14	125	12	2
MB 27	135	185	160	14	130	14	2
MB 28	140	192	160	16	135	14	2
MB 30	150	105	171	16	145	14	2
MB 31	155	212	182	16	147,5	16	2,5
MB 32	160	217	182	18	154	16	2,5
MB 34	170	232	193	18	164	16	2,5

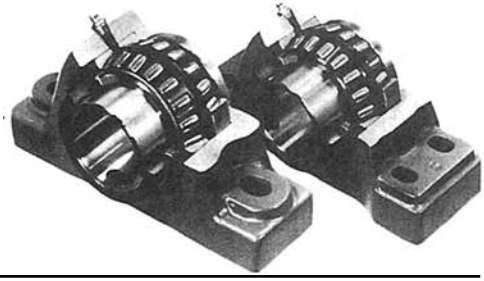


Series B22400
Spherical Roller Bearing Units

FIXED TYPE *FLOATING TYPE*

Pillow Blocks, cast iron
EP-B22400H*, EPE-B22400H*, EP-B22400FH*, EPE-B22400FH*
P-B22400H, PE-B22400H, P-B22400FH, PE-B22400FH
P-B22500FH, PE-22500FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1″ through 4″ and 25 mm through 100 mm, and 4-bolt base pillow blocks for shaft sizes 1.15/16″ through 5″ and 45 mm through 125 mm. Units are available for fixed or expansion mounting.

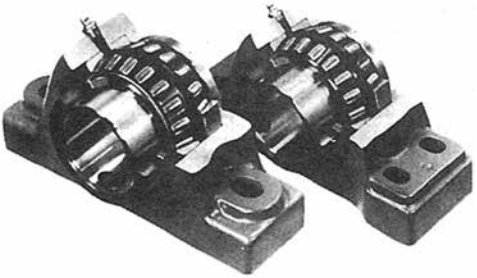


Pillow Blocks, cast steel
PK-B22400H, PKE-B22400H, PK-B22400FH, PKE-B22400FH,
PH-B22500FH, PKE-B22500FH

Self-aligning 2-bolt base pillow blocks for shaft sizes 1.3/16″ through 4″ and 30 mm through 100 mm, 4-bolt base pillow blocks

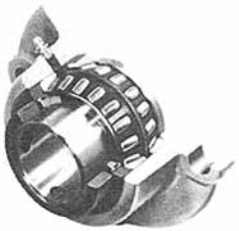
Blocks for shaft sizes 1. 15/16″ through 5″ and 45 mm through 125mm

Units are available for fixed or expansion mounting.



Flanged Units, cast iron
*EFR-B400H**
F-B22400H, FE-B22400H

Self-aligning flanged units for shaft sizes 1″ through 4″ and 25 mm through 100 mm. Units are available for fixed or expansion mounting.

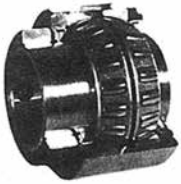


Flanged Cartridge Units, cast iron
FC-B22400H*

Self-aligning flanged cartridge units for shaft sizes 1″ through 4″ and 25 mm through 100 mm. Units are available for fixed mounting.

Cartridge Units, cast iron and steel
C-B22400H, CSE-B22400H

Self-aligning cartridge units. Cast iron housings for shaft sizes 1″ through 3.1/2″ and 25 mm through 85 mm, steel housings for shaft sizes 1″ through 4″ and 25 mm through 100 mm. Cast iron cartridige unts are for fixed mounting and steel cartridge units are available for fixed or expansion mounting.



Takeup Units, cast iron
T-B22400H

Self-aligning units for takeup applications with shaft sizes 1″ through 4″ and 25 mm through 100 mm. Fixed units without frames, guides, or adjusting screws.

Takeups, cast iron
DS-B22400H; DS-B22500H, LHD

DS-B22400H and DS-B22500H for shaft sizes 1.15/16″ through 4.7/16″ and 45 mm through 115 mm have welded steel adjustable frames.

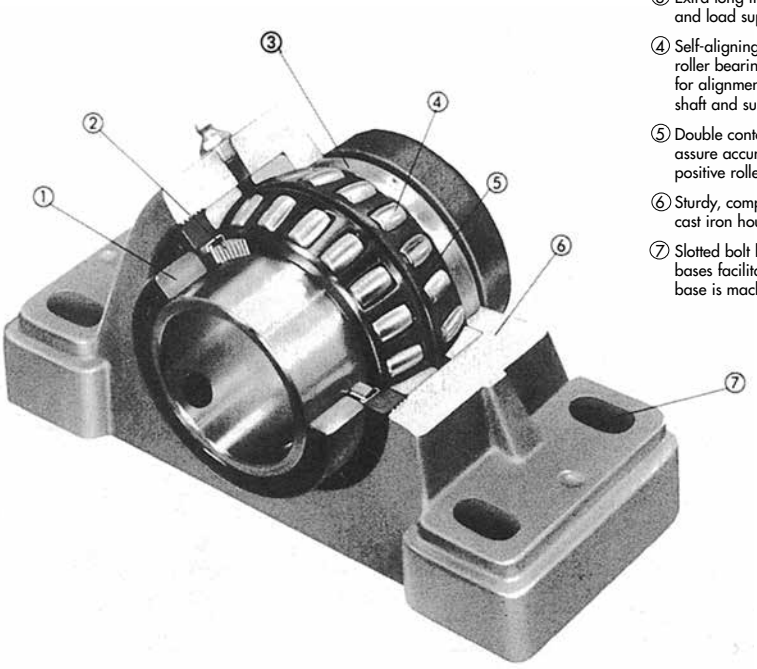
LHD universal takeup frames use pillow blocks mounted to takeup frame. For shaft sizes 1.13/16″ through 5″ and 25mm through 125mm

Replacement Bearings
B22400HL

Self-aligning double row spherical roller bearings with spring locking collars for shaft sizes 1″ through 4″ and 25 mm through 100 mm.

Series B22500
Spherical Roller Bearing Units

Series B22500 double collar mounted spherical roller bearing units will support shafts carrying substantial radial or combination radial and thrust loads. These units are adaptable for conveyors, elevators, general industrial machinery, heavier duty fans and blowers, power transmission applications, ditchers, trenchers, pavers and other applications. They differ from series B22400 units in that they have two locking collars and the pillow blocks have higher backing and longer bolt centers. Series B22500 units are easy to mount, sealed, prelubricated and do not require bearing adjustment during mounting.



① Two spring locking collars lock inner ring securely to shaft.

② Choice of two seals, floating labyrinth Type H, and spring-loaded lip Type E.

③ Extra long inner ring for high stability and load support.

④ Self-aligning double row spherical roller bearing adjusts ± 2° to allow for alignment variations between shaft and supporting structure.

⑤ Double contoured retainer pockets assure accurate roller guidance and positive roller control.

⑥ Sturdy, compact one-piece high-test cast iron housing.

⑦ Slotted bolt holes in pillow block bases facilitate mounting; bottom of base is machined.

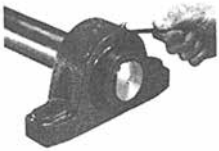
Spherical Roller Bearings

Series B22500 self-aligning double row spherical roller bearings have extra long inner rings, high LDN values and are designed to distribute the load over the symmetrical rollers, assuring positive tracking and smooth operation. The large roller complement provides high capacity for radial or combined radial-thrust loads.

Osculation clearance at the ends of the rollers compensates for shock loads and prevents destructive edge loading. These precision bearings with double contoured retainer pockets are designed to meet a broad range of application requirements.

Spring Locking Collars

The two spring locking collar design provides a secure grip of the extra long inner ring bearing to the shaft. The four set screws extend through the inner ring of the beaing and lock firmly onto the shaft. Installation is fast and simple. Correctly tightening the four set screws produces elastic strain in the spring locking collars resulting in a continuous pressure on the set screw threads and providing a positive lock.



Seals

Two standard sealing systems are available...each offering maximum protection for the bearing.

Type H floating labyrinth seals have multiple self-centering rings held securely in a steel carrier. Type H seals are normally furnished.

Type E spring-loaded lip seals utilize a spring to provide uniform pressure for keeping the sealing lip in contact with the inner ring. Type E seals are normally used for liquid splash environments.

Seals are interchangeable and are designed for grease lubrication.

TYPE H SEAL

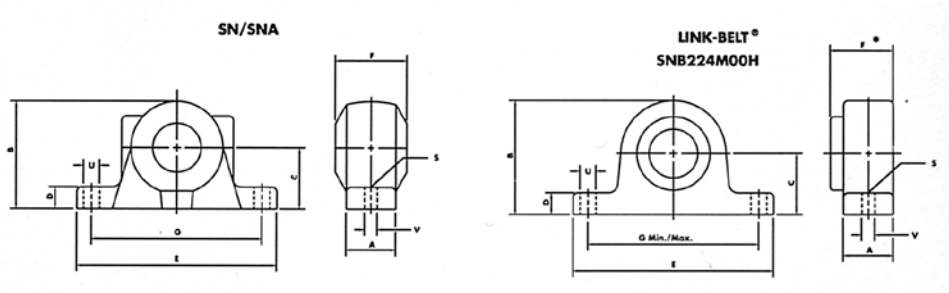
TYPE E SEAL

One-piece Cast Iron Housings

Compact one-piece housings provide for strength and load support. Scientifically contoured housing design provides superior rigidity. Pillow blocks have two or four slotted bolt holes with ample space provided for drilling dowel pin holes. Cartridge units have steel housings and are finished to precision tolerances. Pillow blocks and cartridge units are available for fixed or expansion operation.

SNB224M00H Collar-mounted Spherical Roller Bearings

Interchangeable for faster mounting and better performance
in SN/SNA Plummer Block applications



All dimensions in MM

SHAFT DIA	SN PART NUMBER	LINK-BELT PART NUMBER •	A HSG WIDTH AT BASE		B HSG HEIGHT		C † BACKING HT.		D FOOT HEIGHT		E HSG LENTH		F * TOTAL WIDTH		G BOLT CTR		U BOLT HOLE LENTH		V BOLT HOLE WIDTH		S BOLT DIA.	
			SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B	SN	L-B
40	SN 509	SN B224M40H	60	64	109	114	60	60	25	25	205	205	85	80.4	170	164/176	20	21	15	15	12	12
45	SN 510	SN B224M45H	60	64	112	119	60	60	25	25	205	205	90	80.4	170	154/176	20	21	15	15	12	12
50	SN 511	SN B224M50H	70	64	127	129	70	70	28	28	255	255	95	80.4	210	204/216	23	24	18	18	16	16
55	SN 512	SN B224M55H	70	65	133	133	70	70	30	30	255	255	105	84.8	210	204/216	23	24	18	18	16	16
60	SN 513	SN B224M60H	80	67.5	148	150	80	80	30	30	275	275	110	89.3	230	221/239	24	25	18	18	16	16
65	SN 515	SN B224M65H	80	81	154	161	80	80	30	30	280	280	115	102.4	230	221/239	26	27	18	18	16	16
70	SN 516	SN B224M70H	90	81	175	176	95	95	32	32	315	315	120	102.4	260	252/268	29	30	22	22	20	20
75	SN 517	SN B224M75H	90	81	181	176	95	95	32	32	320	320	125	102.4	260	250/268	30	31	22	22	20	20
80	SN 518	SN B224M80H	100	87	192	195	100	100	35	35	345	345	140	111.0	290	283/295	27	28	22	22	20	20
85	SN 519	SN B224M85H	100	87	209	207	112	112	35	35	345	345	145	111.0	290	283/295	27	28	22	22	20	20
90	SN 520	SN B224M90H	110	102	215	220	112	112	40	40	380	380	160	128.8	320	312/326	32	33	26	26	24	24
100	SN 522	SN B224M100H	120	102	239	233	125	125	45	45	410	410	175	128.8	350	342/356	32	33	26	26	24	24
110	SN 524	SN B225M110H	120	115	271	258	140	140	45	45	410	410	185	171.4	350	342/356	32	33	26	26	24	24
115	SN 526	SN B225M115H	130		290		150		50		445		190		380		35		28		24	
125	SN 528	SN B225M125H	150	122	302	287	150	150	50	50	500	500	205	184.2	420	412/426	42	43	35	36	30	30

* FOR EXPANSION UNITS, ADD "E" TO THE PREFIX - SUCH AS SNE B224M40H
EXPANSION UNITS ALLOW - 4.8 MM AXIAL MOVEMENT IN EITHER DIRECTION FROM CENTERED POSITION SHOWN.

† TOLERANCE - 0.013 MM.

SALES28C

SNB224M00H Collar-mounted Spherical Roller Bearings

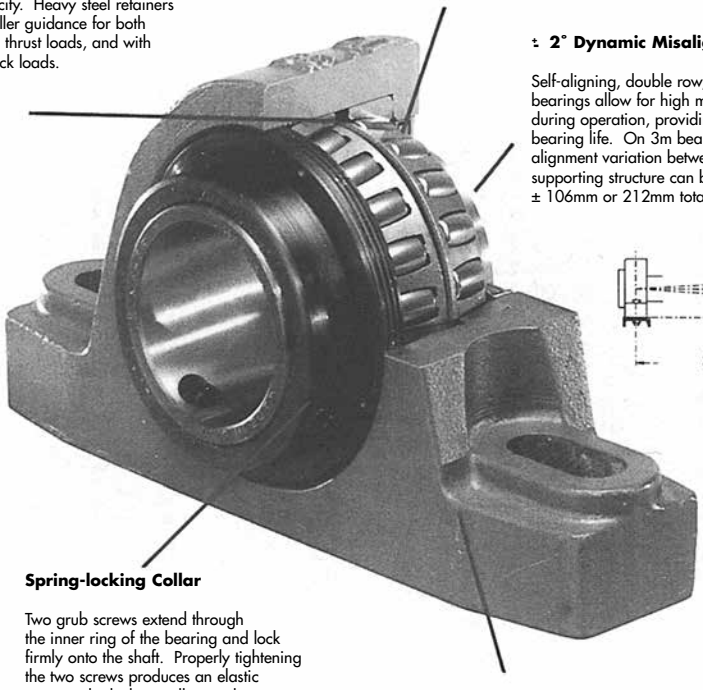
Interchangeable for faster mounting and better performance
in SN/SNA Plummer Block applications

Seals

Unitized, multi-disc design Seals are factory assembled to provide sealing and accept 2 degrees mis-alignment

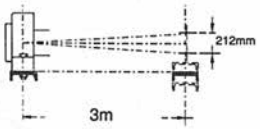
Rollers and Retainer

Extra-large rollers provide superior load capacity. Heavy steel retainers provide roller guidance for both radial and thrust loads, and with stands shock loads.



± 2° Dynamic Misalignment

Self-aligning, double row, spherical roller bearings allow for high misalignment during operation, providing extended bearing life. On 3m bearing centers, alignment variation between shaft and supporting structure can be as much as ± 106mm or 212mm total.



Spring-locking Collar

Two grub screws extend through the inner ring of the bearing and lock firmly onto the shaft. Properly tightening the two screws produces an elastic strain in the locking collar resulting in continuous pressure on the shaft.

One-Piece Cast Iron Housing

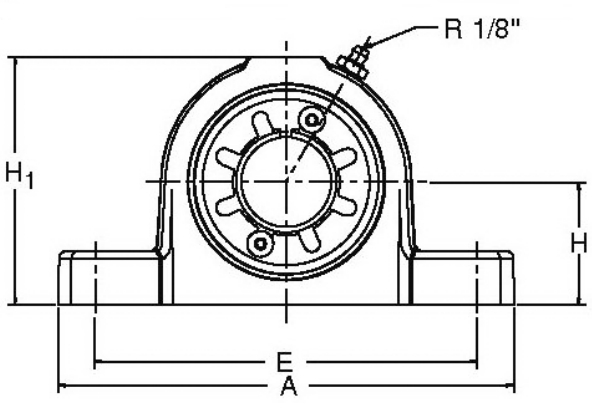
Compact one piece housings, made from high strength cast iron provide strength and load support. The scientifically contoured solid housing offers superior rigidity.

Dodge ISN - Shaft Ready

Factory lubed, sealed and adjusted - ready to slip onto the shaft

Features and Benefits:

- Patented adapter mounting system
- Superior holding power decudes the fretting corrosion caused by vibration
- Shaft ready installation
- No special tools required for installation
- DODGE "R" seal provides superior sealing system
- Full 2° misalignment capability
- Sphered seal land on OD of inner ring maintains full contact pressure even when misaligned
- Less shaft damage vs. setscrew mounts
- Reduced vibration damage vs. setcrew mounts

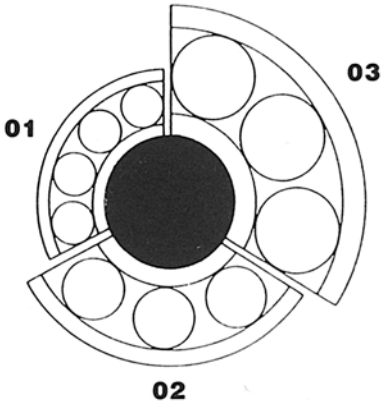


Description	Shaft Size	Width	Diamensions in mm				Dynamic Load Ratings	Locknut rotation	Part Numbers			
		I	A	E	H1	H			F[5]R[2]	L[4]R[2]	F[5]L[3]	L[4]L[3]
P2B-ISN 507-030M	30 mm	59,5	184,8	150,0	100,8	50,0	93.000 N	5/8 - 3/4	071000	071017	071034	071051
P2B-ISN 508-035M	35 mm	59,5	205,8	162,3	110,8	60,0	93.000 N	5/8 - 3/4	071001	071018	071035	071052
P2B-ISN 509-040M	40 mm	61,5	206,2	164,8	114,0	60,0	93.000 N	3/4 - 7/8	071002	071019	071036	071053
P2B-ISN 510-045M	45 mm	61,9	204,7	170,0	113,8	60,0	98.000 N	3/4 - 7/8	071003	071020	071037	071054
P2B-ISN 511-050M	50 mm	61,9	253,8	203,0	124,4	70,0	98.000 N	3/4 - 7/8	071004	071021	071038	071055
P2B-ISN 512-055M	55 mm	68,6	253,9	203,0	130,3	70,0	120.000 N	7/8 - 1 1/8	071005	071022	071039	071056
P2B-ISN 513-060M	60 mm	75,4	274,8	220,0	152,4	80,0	169.000 N	7/8 - 1 1/8	071006	071023	071040	071057
P2B-ISN 515-065M	65 mm	79,1	280,0	225,5	156,0	80,0	185.000 N	7/8 - 1 1/8	071007	071024	071041	071058
P2B-ISN 516-070M	70 mm	79,1	317,7	256,4	176,0	95,0	185.000 N	7/8 - 1 1/8	071008	071025	071042	071059
P2B-ISN 517-075M	75 mm	79,1	317,7	256,4	176,0	95,0	185.000 N	7/8 - 1 1/8	071009	071026	071043	071060
P2B-ISN 518-080M	80 mm	90,8	345,3	281,9	196,8	100,0	285.000 N	1 1/8 - 1 3/8	071010	071027	071044	071061
P2B-ISN 519-085M	85 mm	90,8	345,0	280,2	205,3	112,0	285.000 N	1 1/8 - 1 3/8	071011	071028	071045	071062
P2B-ISN 520-090M	90 mm	101,6	397,7	309,9	218,4	112,0	356.000 N	1 1/8 - 1 3/8	071012	071029	071046	071063
P2B-ISN 522-100M	100 mm	101,6	410,0	335,2	239,0	125,0	356.000 N	1 1/8 - 1 3/8	071013	071030	071047	071064
P2B-ISN 524-110M	110 mm	110,9	410,0	335,3	260,7	140,0	454.000 N	1 - 1 1/4	071014	071031	071048	071065
P2B-ISN 526-115M	115 mm	137,2	444,7	373,3	292,9	150,0	636.000 N	1 1/4 - 1 1/2	071015	071032	071049	071066
P2B-ISN 528-125M	125 mm	137,2	500,0	413,5	290,4	150,0	636.000 N	1 1/4 - 1 1/2	071016	071033	071050	071067

TYPE AND SERIES OF BEARINGS

EXPANSION EX
Bearings for radial loads only, The inner race and shaft have axial freedom.

FIXED GR
Bearings for radial and axial loads. Position the shaft endways and resist axial load by cycloidal contact of the roller ends within the inner and outer race grooves.
The halves of the inner races are aligned by recessed clamping rings and are fitted to plain shafts as above or between abutments when specified. The split outer race must also be accurately registered axially.



COMPARISON RATINGS
To provide optimum selection, standard Cooper Split Roller Bearings are classified in Series 01, 02 and 03 according to their respective ratings as depicted above.

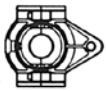
REFERENCES FOR STANDARD UNIT RANGE

ROLLER BEARING
B

BEARING in SWIVEL CARTRIDGE
BC

PEDESTAL Complete
BCP

BC in FLANGE
BCF



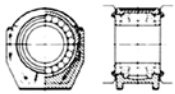
BC in TAKE UP

Tension	Push
BCTT	BCTP

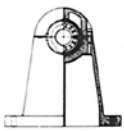
BC in ROD END

Shoe	Tee
BCRES	BCRET

BEARING in HANGER
BH



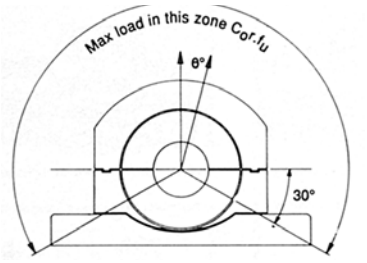
Water Cooled Bearing



Electrical & High Rise Pedestal

CASTING LOADING

Pedestal
The following diagram and table give the maximum cap loading. Values for Series 03E are lower-please submit details.



θ		0	15	30	45	60	65	70	over 120
f_u	Cast Iron	0.16	0.17	0.19	0.23	0.33	0.38	0.52	1.0
	Nodular Iron	0.20	0.21	0.22	0.28	0.39	0.46	0.52	1.0
	Steel	0.22	0.23	0.25	0.31	0.43	0.51	0.52	1.0

The recommended minimum grade for pedestal base bolts is 4.6. High upward loads or axial loads may require the use of high tensile bolts(grade 8.8).

Also consider:

1. The strength of the support,
2. The use of steel pedestals for shock loads,
3. Chocks or dowels for loads within 45° of the horizontal.

Flange
Maximum load on C.I. Flanges 0.26 $\mathbf{C_{or}}$ or 0.25 $\mathbf{C_a}$. Higher loads at slow speeds and shock conditions require nodular iron or steel flanges and HT bolts. In these cases the support plate must be adequate and a spigot provided. Please consult our Sales Department.

Tension Take-Up and Hanger
Maximum load 0.16 $\mathbf{C_{or}}$

Rod End
Normal selection.

The maximum loads are the effective loads, i.e. the net resultant load with Dynamic Factors, but without Speed and Life Factors.

RACE POSITIONING

Shaft Axial Positioning
One bearing only, of the Fixed GR type, should be used to position a shaft axially. See below.

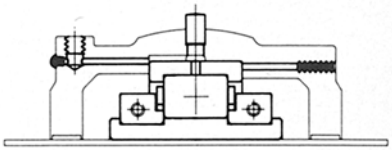
INNER RACE
Plain parallel shafts are suitable for most applications of EX and GR bearings where, in the case of GR bearings, the effective axial load P_a does not exceed 50% of the C_a value given on page 3 without the velocity factor f_a. Shaft Tolerances and Tightening

For fixed GR bearings a shaft recess or some form of abutment is required if the axial load exceeds 50% C_a or a combination of axial loading and one or more of the following: shock loads; vertical shafts; fluctuating temperatures over 100°C; or when special precautions are considered desirable for adverse or deteriorating conditions. Please submit details.

The recommended abutment diameter would be:

Sizes to 90mm	+5 on shaft dia. 1,2 fillet rad.
over 90mm to 155m	+10 on shaft dia. 2,0 fillet rad.
over 155mm to 300mm	+15 on shaft dia. 2,3 fillet rad.
over 300mm	+20 on shaft dia. 5,0 fillet rad.

Axial loads can be applied to GR bearings in either direction.



OUTER RACE
Expansion outer races should be just free sideways in housing groove.

All outer races having one or two lips must be positioned axially in the housing groove by axial screws.

Some large or heavy bearings have four radial screws to retain the outer races and clearance holes for these are required in the housing, as shown on page 78.

Details for race-fixing supplied on request.

Tolerances

and Surface Texture

			Diameters and widths. mm. over / to													Surface Texture	
			over		50	80	120	180	250	315	400	500	630	800	1000	Maximum [1]	
			to	50	80	120	180	250	315	400	500	630	800	1000	1250	Roughness	
Shafts	BS 4500		Tolerance. µm. (0.001mm)													µm. Ra	Grade No.
Uni-directional loads at speeds up to dn = 100 000																	
Moderate loads (C/P >10)	h7	+0 -	25	30	35	40	46	52	57	63	70	80	90	105		3.2	N8
d																	
Reciprocating loads. Vibratory duty																	
Extra-fine clearance bearings Speeds over dn = 100 000 Heavy loads (C/P < 10)	h6	+0 -	16	19	22	25	29	32	36	40	44	50	56	66		1.6	N7
	h9	+0 _	62	74	87	100	115	130	140	155	175	200	230	260			
Abutment diameter } when used	d_1																
Width between abutments } see above	C D11	+	80	100	120	145	170	190	210	230							
		+	240	290	340	395	460	510	570	630							
Geometric Accuracy																	
Cylindricity of shaft journal	d																
	IT6		16	19	22	25	29	32	36	40	44	50	56	65			
Squareness of abutments	d_1																

ASSEMBLY

How to assemble your unique solution - the totally split to the shaft bearing.

1 Check shaft diameter. Roundness and parallelism as specified on Page 77. The inner race, before assembly, measures undersize equivalent to the final gap at the joints. This gap is a feature of the design to ensure that the half races seat on the shaft

2 Place the two halves of the inner race at the correct position on the cleaned shaft. Expansion races are normally set centrally with the outer race but in cases of axial expansion may be offset to within 10% of the outer race width.

3 Fit the clamping rings with the joints at about 90° to the inner race joint. (Discolouration on certain clamping rings is associated with localised heat treatment to increase wear resistance). There should be approximately equal gaps at both joints of the clamping rings and races. To achieve this more easily use a soft packing in the race joint under the clamping rings, especially for large bearings. Take care not to damage the joint faces. Tighten all four clamping srews equally using the correct hexagon key and torque wrench.

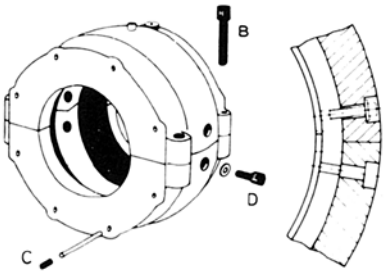
4 Tap down each half of the inner race and clamping rings all round the shaft, interposing a fibre or hardwood block between the hammer and bearing parts. Retighten screws. Repeat until the screws are fully tight. The recommended torque values are shown below. Check there is a gap at both joints of the inner race. The total gap varies and is not critical provided the shaft is within the required tolerance. Check that expansion inner races will be central or correctly offset when all parts are finally positioned.

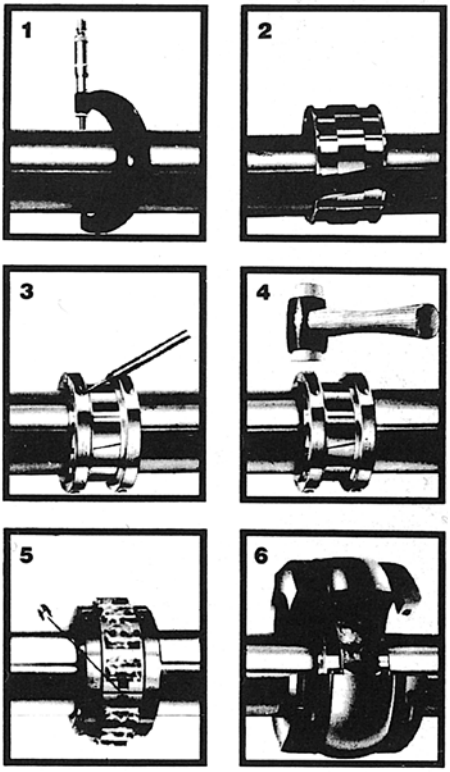
5 Coat the roller cage with grease and lightly cover the other parts for protection. Place the cage round the inner race and engage the jointing clips. Place the half outer race with the lubrication hole into the top half cartridge and the second half race into the lower half cartridge ensuring the pairing marks will coincide. Ensure that the ends of the outer race project from the cartridge joint faces by equal amounts. For fitting of axial and/or radial screws, see diagram. Inject grease to fill the grease passages. End bore seals should be well lubricated on assembly including the bores of the revolving triple labyrinth seals. Blanking plates should be sealed with grease or compound. Add grease to the cartridge as specified on Page 79.

6 Close cartridge and tighten joint screws. For expansion bearings, indicate an shaft the correct axial position of cartridge. Lubricate spherical seating, anti-scuffing compounds are advantageous. Pedestal bases must be supported to avoid deflection. To ensure swivel alignment the shaft should be run for a short period before fully tightening the pedestal cap screws. Where oil lubrication is to be used the cartridge joint faces and screws should be treated with a sealing compound.

Fitting an Outer Race where radial and/or Axial screws are used

All lipped outer races must be clamped axially.





Side screws **C** are fitted to all GR cartridges but rods are not required for sizes 100-155mm in Series 01 and 02.
Clean the cartridge bore and lightly oil.
Fit the half outer races-see paragraph 5.
Just enter radial holding screws **D** where provided-it is important to fit washers.
Fit the side rods and screws **C** where provided and very lightly tighten.
Place together the half cartridges and fully tighten the cartridge joint screws **B**.
Progressively and fully tighten the radial screws **D** and/or side screws **C**.
In some sizes two cartridge joint screws must be removed to gain access to the side screws.
When subsequently lifting half cartridges, take care the half outer race does not fall.

Check List

The correct shaft limit is important.
Parts should not be interchanged.
Markings should coincide.
Lightly oil threads and interfaces.
Fully tighten the inner race clamping rings.
Lubricate before closing the cartridge.
Lubricate swivel seatings.
Safeguard rolling surfaces for transit.

LUBRICATION

Routine Greasing
If possible it is better to re-grease as the bearing rotates. The grease charges listed below are for bearings up to 75mm bore; use progressively more grease as the bearing size increases. EXPANSION EX BEARINGS. One or two shots (3ml) from a grease gun two or three times a year, i.e., every 1,000 operating hours is usually sufficient.

FIXED GR BEARINGS FOR THRUST. One or two shots (3ml) from a grease gun every two weeks,i.e., every 100 operating hours or longer according to duty and experience.

FIXED GR BEARINGS USED FOR LOCATION ONLY.
Treat as Expansion Bearings.
For bearings with speeds up to dn = 50,000 which are assembled with a full pack of grease, re-greasing intervals can be increased to one year, provided the thrust load on the GR bearing is nominal.
Pumped systems should be metered to be equivalent to the above quantities.

Clean out and replace the grease after several years or as determied by the conditions.
Extreme pressure lithium based greases of No. 2 or No. 3 consistency are recommended for most applications.

Procedure
Calculate dn by multiplying the shaft speed by the bore of the bearing in millimetres. Eg. 750rpm x 100mm = 75000dn
Ensure that all bearing parts are clean and apply grease as follows.

For speed up to dn = 50,000 the roller bearing and cartridge should be packed full on assembly - full pack weights are given in the table. As the dn value increases use progressively less grease to coat the bearing parts, from a full coating of the cage and bearing surfaces at dn = 50,000 down to a smear about 1mm thick at dn = 200,000, the remaining amount to be added in the cartridge. Proportional amounts are listed below.

dn over	dn to	Percentage of full pack
	50.000	100
50.000	100.000	75
100.000	150.000	50
150.000	200.000	33
200.000		25

All cartridge and bore seals should be well lubricated on assembly including the bores of the revolving triple labyrinth seals and of thrust bearings where fitted.

Blanking plates should be sealed with grease or jointing compound.

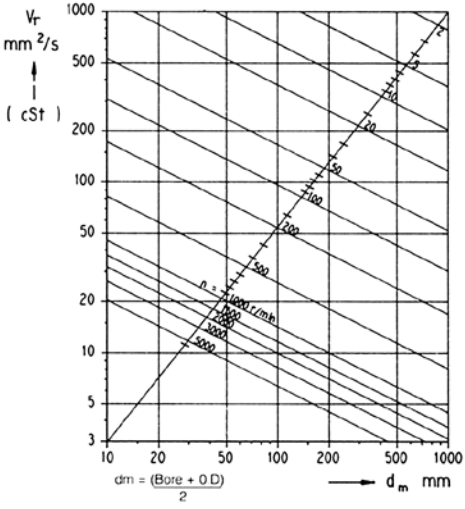
NEVER ASSEMBLE THE BEARINGS DRY AND INJECT THE GREASE AFTER CLOSING THE CARTRIDGE. ALWAYS COAT SWIVEL SEATINGS WITH OIL OR GREASE.

Selection of Lubricant

For most applications, a good lithium based grease, preferably with EP additives and having a base oil viscosity of at least 68cSt is suitable. At slower speeds, a higher viscosity may be required to maintain good lubrication and this can be checked using the chart. From the dimensions given in the catalogue find the mean diameter of the bearing. Locate this point on the horizontal axis. Trace a line vertically until it intersects the curve for the operating speed of the bearing and then read off the required viscosity in cSt on the vertical axis. If this is less than the base oil of the lubricant at the operating temperature, find the a23 factor and the expected reduction in L10 life.

The normal temperature range for standard bearings is 0-100°C. Outside of this range special consideration must be given to the lubricant as well as design and seals.

SELECTION OF OIL VISCOSITY V_r AT BEARING OPERATING TEMPERATURE



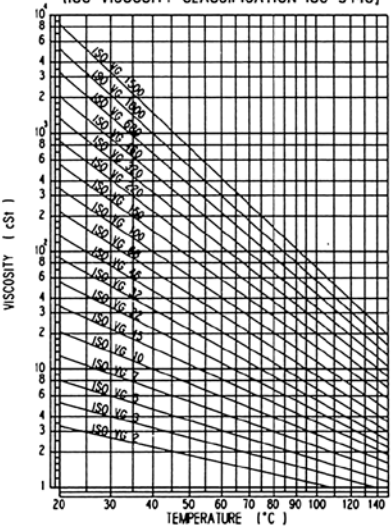
Variation of Viscosity with Temperature.
Where the operating temperature of the bearing is greater than 40°C, the chart below can be used to estimate the viscosity grade of the oil required to maintain correct lubrication at that temperature. On the chart, find the point of intersection between the horizontal line representing the required viscosity and the vertical line representing the operating temperature. This will fall between two sloping lines which give the required viscosity grade of the base oil of the lubricant. Select the higher value.

For example:

A bearing with dm = 100mm rotating at 500rpm requires a base oil viscosity of at least 25cSt at the operating temperature. If the operating temperature is 100°C, then from the chart a lubricant with a base oil viscosity equivalent to VG220 (220cSt at 40°C) is required to maintain correct lubrication.

Note that chart applies only to mineral oils.

VARIATION OF VISCOSITY WITH TEMPERATURE
(ISO VISCOSITY CLASSIFICATION ISO 3448)



SCREW SIZES - All threads are metric coarse

Series 01

SERIES 01 Bore d mm		Pedestal	flange	Take-up	Cartridge Joint	Cartridge Radial	Cartridge side	Clamping Ring
40		8	8	8	4		4	4
50		8	8	8	4		4	4
60		10	10	10	4		4	4
65								
70		12	12	12	4		4	4
75								
80								
85	90	16	12	16	5		4	5
100								
105		16	16	16	6		4	6
110	115	20	16	20	6		6	6
120								
125	130	20	20	20	6		6	6
135	140	20	20	20	8		6	8
150		20	20	20	8		6	8
160		16	20		8		6	8
170	180	16	20		8		6	8
190	200	16	20		8	10	6	8
220		16	24		10	10	6	10
240		20	24		10	10	6	10
260	280	20	24		10	10	10	10
300		20	24		10	10	10	10

Series 02

SERIES 02 Bore d mm		Pedestal	flange	Take-up	Cartridge Joint	Cartridge Radial	Cartridge side	Clamping Ring
-		-	-	-	-		-	-
50		10	10	10	5		4	5
60		12	12	12	5		4	5
65								
70		16	12	16	6		4	6
75								
80		16	16	16	6		4	6
85	90							
100		20	16	20	6		4	6
110	115	20	20	20	8		6	8
120								
125	130	20	20	20	8		6	8
140		20	24	20	8		6	8
150		20	24	20	8		6	8
160	170	20	24		10		6	10
180		20	24		10	10	6	10
190	200	20	24		12	10	6	12
220		20	24		12	10	6	12
240	260	20	24		12	10	6	12
280		20	24		16	10	10	16
300		20	24		16	10	10	16

Tightening Torque

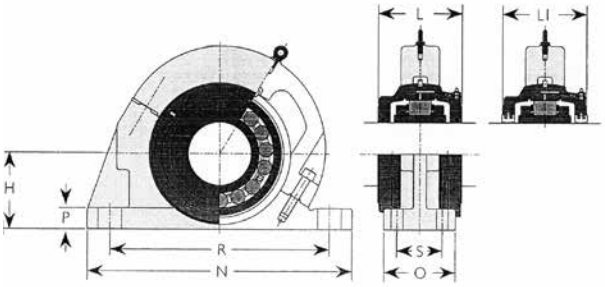
Clamping Ring Screw Size	Clamping Ring Torque Nm	Clamping Ring Torque Lbf ft	Clamping Ring Key A/F	Side Screw Key A/F
4	4.5	3.5	3	2
5	8.5	6.5	4	-
6	15	11	5	3
8	35	26	6	-
10	70	52	8	5
12	120	88	10	-
16	300	220	14	8
20	560	415	17	-
24	950	700	19	-

Torque values for screws other than Clamping Ring are 75% of the above.

COOPER

A Supplier of Competitive Advantage

COOPER ANGLED PEDESTALS



Cooper SNQ and SDQ Series pedestals are designed for use where interchangeability with SNC500 and SD500 series pillow block units is required, and where there is particularly difficult access for mounting the pedestal base.

The angled joint of the pedestal allows the pedestal base to be slid into position under the shaft without the need to hoist it, where there are no other means (such as removable packing) to create extra height between the mounting structure and the shaft and no possibility to put the pedestal base under the shaft in an area of greater clearance and move axially into position.

As with our conventional-style SNC and SDC pedestals, the SNQ and SDQ pedestals have bolt hole spacings and heights to centres corresponding to the equivalent industry standard units for unsplit bearings. However, the footprint, overall height and length on shaft may differ and should be checked against the available space.

The tables on the following pages list the Cooper pedestal with the bearings and cartridges of the same bore size as the shaft diameter that is commonly accommodated in the equivalent pillow block with an unsplit bearing mounted on an adaptor sleeve. These pedestals may also be used with alternative sizes of Cooper bearings in a similar way to the conventional style pedestals.

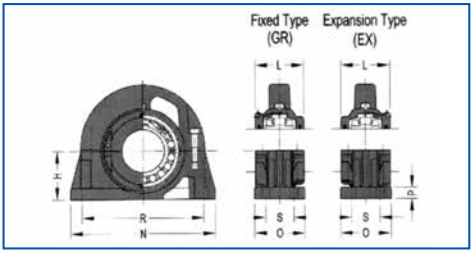
Cooper SNQ and SDQ pedestals are manufactured from grade EN-GJS-400/18 ductile iron to BS EN 1563 : 1997 as standard, and have tenon-style joints.

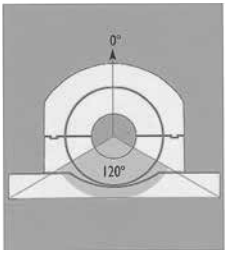
Shaft size (mm)	Pedestal only	SN Reference	Complete Assembly	H	R Min	Max	S	Bolt Size	L	N	O	P
60	SNQ 513	513	01 EBC SNQ513 60mm	80	226	242		2 x M16	104	280	70	32
65	SNQ 515	515	01 EBC SNQ515 65mm	80	226	242		2 x M16	104	280	70	32
70	SNQ 516	516	01 EBC SNQ516 70mm	95	254	280		2 x M20	114	315	90	38
75	SNQ 517	517	01 EBC SNQ517 75mm	95	254	280		2 x M20	114	315	90	38
80	SNQ 518	518	01 EBC SNQ518 80mm	100	284	296		2 x M20	136	345	100	32
85	SNQ 519	519	01 EBC SNQ519 85mm	112	284	296		2 x M20	136	345	100	44
90	SNQ 520	520	01 EBC SNQ520 90mm	112	312	328		2 x M24	136	380	90	44
100	SNQ 522	522	01 EBC SNQ522 100mm	125	342	366		2 x M24	134	420	102	52
110	SNQ 524	524	01 BC SNQ524 110mm	140	344	356		2 x M24	142	410	120	45
115	SNQ 526	526	01 BC SNQ526 115mm	150	372	388		2 x M24	142	450	130	50
125	SNQ 528	528	01 BC SNQ528 125mm	150	414	426		2 x M30	156	500	150	50
135	SNQ 530	530	01 BC SNQ530 135mm	160	444	456		2 x M30	168	530	160	56
140	SNQ 532	532	01 BC SNQ532 140mm	170	462	478		2 x M30	168	558	178	41
Add EX Expansion Type of GR Fixed Type to reference for complete assembly.												
150	SDQ 3134	3134	01BC SDQ3134 150mm	170	424	436	100	4 x M24	174	510	178	40
160	SDQ 3136	3136	01EBC SDQ3136 160mm	180	438	462	110	4 x M24	192	530	190	40
170	SDQ 3138	3138	01EBC SDQ3138 170mm	190	468	492	120	4 x M24	200	560	200	40
180	SDQ 3140	3140	01EBC SDQ3140 180mm	210	503	517	130	4 x M30	200	600	210	40
200	SDQ 3144	3144	01EBC SDQ3144 200mm	220	533	547	140	4 x M30	200	640	240	45
220	SDQ 3148	3148	01EBC SDQ3148 220mm	240	593	607	150	4 x M30	216	700	250	45
240	SDQ 3152	3152	01EBC SDQ3152 240mm	260	642	658	160	4 x M36	222	770	280	49
260	SDQ 3156	3156	01EBC SDQ3156 260mm	280	662	678	160	4 x M36	232	790	280	55
280	SDQ 3160	3160	01EBC SDQ3160 280mm	300	702	718	190	4 x M36	232	830	310	55
300	SDQ 3164	3164	01EBC SDQ3164 300mm	320	742	758	200	4 x M36	248	880	320	60

SDC Compatible Spilt Roller Bearings

The housings have bolt hole centre distances and base to bearing centreline heights that conform to industry standard SD dimension. The Cooper SD Compatible unit is available for shaft sizes from 150mm (SD3134) to 300mm (SD3164) to replace solid bearings mounted on adaptor sleeves. The pedestals use Cooper 01 and 02 series cartridges and pedestals. This makes possible the use of the comprehensive range of Copper sealing options suitable for almost any application. The seals remain concentric to the shaft under misalignment conditions.

All SDC Copper pedestals are manufactured form grade EN-G5S - 400/18 Ductile Iron as standard.





MEDIUM DUTY 01 SERIES - TECHNICAL SPECIFICATIONS

Shaft size (mm)	Pedestal only	SD Ref	Complete Metric Assembly	Other Pedestal compatible BC Units	H	R Min	R Max	S	Bolt Size	L	N	O	P
150	SDC 3134	3134	01 BC SD3134 150mm	EX / GR 155mm "6"	170	424	436	100	4 x M24	174	510	178	40
160	SDC 3136	3136	01 EBC SD3136 160mm	EX / GR 160mm "6 1/2 "	180	438	462	110	4 x M24	192	530	190	40
170	SDC 3138	3136	01 EBC SD3138 170mm	EX / GR 180mm "7"	190	468	492	120	4 x M24	200	560	200	40
180	SDC 3140	3140	01 EBC SD3140 180mm	EX / GR 170mm "7"	210	503	517	130	4 x M30	200	600	210	40
200	SDC 3144	3144	01 EBC SD3144 200mm	EX / GR 190mm "8"	220	533	547	140	4 x M30	200	640	240	45
220	SDC 3148	3148	01 EBC SD3148 220mm	9"	240	593	607	150	4 x M30	216	700	250	45
240	SDC 3152	3152	01 EBC SD3152 240mm	10"	260	642	658	160	4 x M36	222	770	280	49
260	SDC 3156	3156	01 EBC SD3156 260mm	EX / GR 280mm 11"	280	662	678	160	4 x M36	232	790	280	55
280	SDC 3160	3160	01 EBC SD3160 280mm	EX / GR 260mm 11"	300	702	718	190	4 x M36	232	830	310	55
300	SDC 3164	3164	01 EBC SD3164 300mm	12"	320	742	758	200	4 x M36	248	830	320	60
HEAVY DUTY 02 SERIES - TECHNICAL SPECIFICATIONS													
150	PN3112	3134	02BC SD3134 150mm	EX / GR 155mm "6"	170	424	436	100	4 x M24	174	510	178	40
160	PN3113	3136	02EBC SD3136 160mm	EX / GR 160mm "6 1/2 "	180	438	462	110	4 x M24	192	530	190	40
170	PN3210	3138	02EBC SD3138 170mm	EX / GR 180mm "7"	190	468	492	120	4 x M24	200	560	200	40
180	PN3312	3140	02EBC SD3140 180mm	EX / GR 170mm "7"	210	503	517	130	4 x M30	200	600	210	40
200	PN3410	3144	02EBC SD3144 200mm	EX / GR 190mm "8"	220	533	547	140	4 x M30	200	640	240	45
220	PN3510	3148	02EBC SD3148 220mm	9"	240	593	607	150	4 x M30	216	700	250	45
240	PN3610	3152	02EBC SD3152 240mm	10"	260	642	658	160	4 x M36	222	770	280	49
260	PN3612	3156	02EBC SD3156 260mm	EX / GR 280mm 11"	280	662	678	160	4 x M36	232	790	280	55
280	PN3711	3160	02EBC SD3160 280mm	EX / GR 260mm 11"	300	702	718	190	4 x M36	232	830	310	55
300	PN3811	3164	02EBC SD3164 300mm	12"	320	742	758	200	4 x M36	248	880	320	60

Note: Add EX Expansion Type of GR Fixed Type to reference for complete assembly.

THE COOPER SN PRODUCT LINE

SN Product Line

The housing have bolt hole centre distances and base to bearing centreline heights that conform to ISO 113-2. Complete SN assemblies are suitable for replacement of solid, self aligning ball bearings and, in most cases 222 Series double row spherical bearings, using adaptor sleeves, the Cooper SN compatible pedestal is available for bearings with shaft sizes from 60mm (SN513) to 140mm (SN532).

The pedestals are standard Cooper 01 Series bearings and cartridges. This gives the option of using the comprehensive tange Cooper sealing options suitable for almost any application. The seals remain concentric to the shaft under misalignment conditions.

The use of standard Cooper bearings and cartridges will cause the footprint area and total housing height to differ from compatible SN housings.

Pedestals are made from grey cast iron. Temperature and vibration mounting points may be specified.

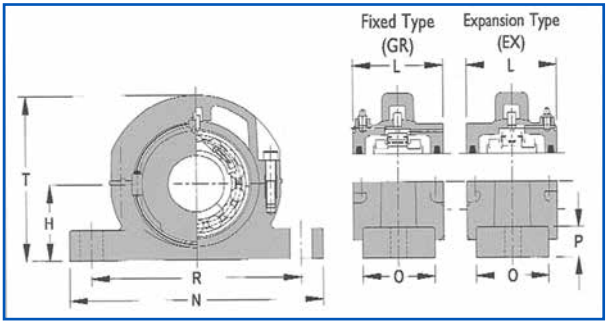
Pedestal Loads

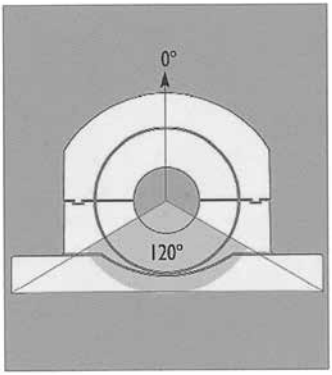
The maximum safe radial load for a pedestal casting is based on the bearing static rating Cor. The full Cor rating can be applied if the angle of the load falls within the shaded area of the diagram below.

If the load falls outside th ehaded area or is greater than Cor, please consult our technical department.

When considering suitability of pedestal castings, the resultant effective radial load must be used. The effective radial load is the resultant of net loads appropriate dynamic factors, excluding speed and life factors.

TECHNICAL SPECIFICATIONS





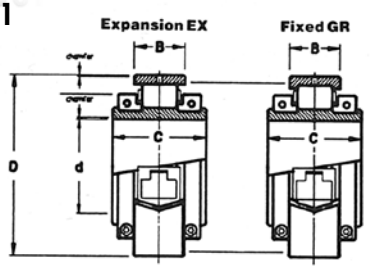
Shaft Size (mm)	Pedestal Only	SN Reference	Complete Assmbly	H	R Min	Max	Bolt Size	L	N	O	P	T
60	SNC513	513	01EBC SNC513 60mm	80	226	242	2 x M16	104	280	70	32	180
65	SNC515	515	01EBC SNC515 65mm	80	226	242	2 x M16	104	280	70	32	180
70	SNC516	516	01EBC SNC516 70mm	95	254	266	2 x M20	114	315	90	38	206
75	SNC517	517	01EBC SNC517 75mm	95	254	266	2 x M20	114	315	90	38	206
80	SNC518	518	01EBC SNC518 80mm	100	284	296	2 x M20	136	345	100	32	240
85	SNC519	519	01EBC SNC519 85mm	112	284	296	2 x M20	136	345	100	44	252
90	SNC520	520	01EBC SNC520 90mm	112	312	328	2 x M24	136	380	90	44	252
100	SNC522	522	01EBC SNC522 100mm	125	342	366	2 x M24	134	420	102	52	271
110	SNC524	524	01BC SNC524 110mm	140	344	356	2 x M24	142	410	120	45	310
115	SNC526	526	01BC SNC526 115mm	150	372	388	2 x M24	142	450	130	50	320
125	SNC528	528	01BC SNC528 125mm	150	414	426	2 x M30	156	500	150	50	360
135	SNC530	530	01BC SNC530 135mm	160	444	456	2 x M30	168	530	160	56	381
140	SNC532	532	01BC SNC532 140mm	170	462	478	2 x M30	168	558	178	41	391

Add EX for Expansion Type or GR Fixed Type to reference for complete assembly.

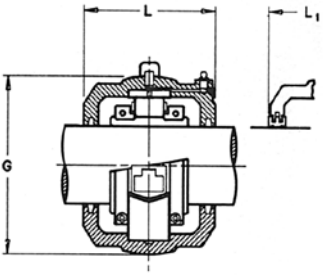
COOPER
A Supplier of Competitive Advantage

SERIES 01

Series 01 Bearing



Series 01 Cartridge



d mm	Reference Bearing only	Bearing Rating kN Dynamic C	Static Cor	Axial Ca	Max rpm	D	B	C	Wt B kg
40	01 B 40	65	67	3.2	5400	84.14	23.8	50.1	1.0
50	01 EB 50	95	105	3.8	4630	98.42	25.4	55.7	1.5
60	01 EB 60	135	157	7.2	3940	114.30	27.0	55.7	1.05
65	01 EB 65								
70	01 EB 70	166	197	10.8	3310	133.35	31.8	61.2	2.5
75	01 EB 75								
80	01 EB 80								
85	01 EB 85	234	299	13.6	2790	152.40	38.9	70.7	4.0
90	01 EB 90								
100	01 EB 100	320	421	19.6	2340	174.62	45.3	81.0	6.0
105	01 EB 105								
110	01 B 110	306	407	18.6	1970	203.20	46.9	84.9	9.0
115	01 B 115								
120	01 B 120								
125	01 B 125	355	484	22.2	1740	222.25	54.0	89.7	11.0
130	01 B 130								
135	01 B 135	394	542	25.8	1570	241.30	55.6	98.4	14.0
140	01 B 140								
150	01 B 150	428	616	29.4	1450	254.00	55.6	98.4	16.0
155	01 B 155								
160*	01 EB 160	594	863	56.5	1320	273.05	60.3	109	20
170*	01 EB 170	577	845	52.2	1220	285.75	55.5	109	23
180	01 EB 180								
190	01 EB 190	679	1078	72.5	1070	311.15	60.3	109	25
200	01 EB 200								
220	01 EB 220	715	1191	79.8	930	342.90	63.5	115	32
240	01 EB 240	804	1367	96.6	820	374.65	66.7	122	40
260	01 EB 260	917	1560	127	730	406.40	69.0	128	50
280	01 EB 280								
300	01 EB 300	1041	1885	139	650	438.15	74.6	143	60
320	01 B 320	894	1638	89.0	590	463.55	74.6	136	72
340	01 B 340	935	1774	99.6	540	488.95	74.6	136	78
360	01 B 360	1005	1925	110	500	520.70	76.2	140	86
380	01 B 380								
400	01 B 400	1048	2071	116	460	546.10	76.2	140	95
420	01 B 420	1089	2218	121.0	430	571.50	76.2	140	104
440	01 B 440	1129	2366	127	410	596.90	76.2	140	114
460	01 B 460								
480	01 B 480	1169	2433	133	380	628.65	81.0	144	128
500	01 B 500	1213	2593	138	360	654.05	80.2	168	136
530	01 B 530	1253	2755	141	340	692.15	81.0	168	164
560	01 B 560	1294	2916	142	330	717.55	81.0	168	178
600	01 B 600	1431	3311	147	300	774.70	84.1	172	210

Add mm and EX or GR to reference.

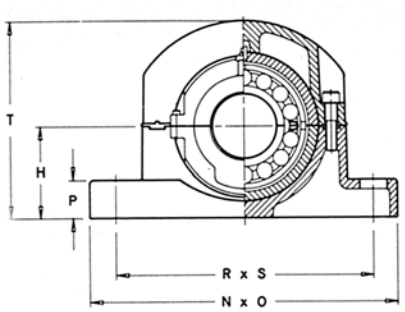
*160mm size can also be supplied with overall dimensions and ratings as 150mm Ref. 01 B 600 160mm.

*170mm size can also be supplied with overall dimensions and ratings as 160mm Ref.01 B 608 170mm.

Reference Cartridge Shell only	L & L1	G	Wt BC kg	Full pack Grease Wt kg
01 C 40	86	100.00	3	0.06
01 C 50	89	117.48	4	0.09
01 C 60	104	134.94	5	0.15
01 C 65				
01 C 70	114	157.16	8	0.18
01 C 75				
01 C 80				
01 C 85	136	177.80	11	0.30
01 C 90				
01 C 100	134	203.20	14	0.36
01 C 105				
01 C 110	142	231.78	21	0.51
01 C 115				
01 C 120				
01 C 125	156	266.70	31	0.60
01 C 130				
01 C 135	168	279.40	35	0.78
01 C 140				
01 C 150	174	295.28	42	0.90
01 C 155				
01 C 160	172 192	311.15	52	1.00
01 C 170	172 200	323.85	54	1.10
01 C 180				
01 C 190	172 200	358.78	66	1.40
01 C 200				
01 C 220	178 216	387.35	78	1.40
01 C 240	188 222	419.10	98	2.00
01 C 260	204 232	454.00	120	2.00
01 C 280				
01 C 300	216 248	489.00	146	2.00
01 C 320	260	520.70	178	2.70
01 C 340	260	546.10	195	3.00
01 C 360	260	571.50	212	3.00
01 C 380				
01 C 400	280	603.30	236	3.60
01 C 420	292	628.70	254	4.20
01 C 440	304	650.90	265	4.20
01 C 460				
01 C 480	304	682.60	290	4.80
01 C 500	304	717.60	328	4.80
01 C 530	330	755.70	390	5.40
01 C 560	336	781.10	430	5.40
01 C 600	342	841.40	500	6.00

Add mm and EX or GR to reference.

Series 01 Pedestal



Reference Pedestral casting	H	NxO	P	bolts	R x S	T	Wt BCP kg
P 01	60	228 x 60	22	2-M12	180	138	5
P 02	70	270 x 60	25	2-M16	214	158	8
P 03	80	280 x 70	32	2-M16	234	180	11
P 04	95	330 x 76	38	2-M20	270	208	16
P 05	112	380 x 90	44	2-M24	320	252	26
P 06	125	420 x 102	52	2-M24	354	272	30
P 07	143	466 x 120	60	2-M24	392	314	42
P 08	162	508 x 178	38	4-M24	450 x 120	372	76
P 09	181	558 x 178	40	4-M24	482 x 120	405	87
P 10	181	558 x 178	40	4-M24	496 x 120	415	97
P 11	213	508 x 178	32	4-M24	368 x 114	430	113
P 12	235	534 x 190	35	4-M24	388 x 128	470	123
P 13	248	572 x 204	38	4-M24	422 x 140	495	154
P 14	270	636 x 216	40	4-M30	460 x 140	540	190
P 15	292	686 x 228	44	4-M30	502 x 140	585	240
P 16	311	724 x 228	48	4-M30	534 x 140	620	286
P 17	343	762 x 254	50	4-M30	584 x 178	685	340
P 18	368	812 x 254	54	4-M36	622 x 178	735	386
P 19	387	850 x 254	57	4-M36	654 x 166	775	430
P 20	397	902 x 254	60	4-M36	676 x 166	795	500
P 21	432	940 x 254	67	4-M36	724 x 166	865	545
P 22	445	966 x 254	67	4-M36	756 x 166	890	570
P 23	464	1042 x 280	70	4-N42	788 x 190	925	635
P 24	483	1092 x 304	73	4-M42	816 x 188	965	750
P 25	489	1092 x 304	76	4-M42	844 x 216	980	770
P 26	553	1194 x 304	80	4-M42	904 x 206	1065	885
P 27	552	1220 x 304	83	4-M42	936 x 206	1110	1000
P 29	597	1372 x 304	90	8-M36	1118 & 908 X 200	1200	1220

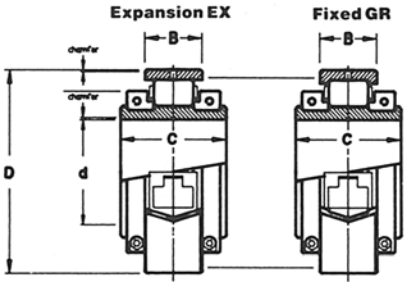
The adjacent table shows the range of bearings available for metric and imperial shaft sizes. Additional sizes can be made to order. All bearings in a single group have the same overall dimensions apart from bore size.

Series 01 Size Range

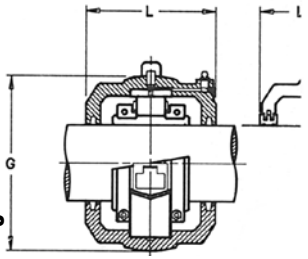
METRIC Shaft Dia.		IMPERIAL Shaft Dia.	
mm	REF	Inches	REF
30	30mm	1 3/16	103
35	35mm	1 1/4	104
40	40mm	1 7/16	107
		1 1/2	108
45	45mm	1 11/16	111
50	50mm	1 3/4	112
		1 15/16	115
		2	200
55	55mm	2 3/16	203
60	60mm	2 1/4	204
65	65mm	2 7/16	207
		2 1/2	208
70	70mm	2 11/16	211
75	75mm	2 3/4	212
		2 15/16	215
		3	300
80	80mm	3 3/16	303
85	85mm	3 1/4	304
90	90mm	3 7/16	307
		3 1/2	308
95	95mm	3 11/16	311
100	100mm	3 3/4	312
105	105mm	3 15/16	315
		4	400
110	110mm	4 3/16	403
115	115mm	4 1/4	404
		4 3/8	406
		4 7/16	407
		4 1/2	408
120	120mm	4 11/16	411
125	125mm	4 3/4	412
130	130mm	4 15/16	415
		5	500
135	135mm	5 3/16	503
140	140mm	5 1/4	504
		5 7/16	507
		5 1/2	508
150	150mm	5 11/16	511
155	155mm	5 3/4	512
160	600/160mm	5 7/8	514
		5 15/16	515
		6	600
160	160mm	6 7/16	607
170	608/170mm	6 1/2	608
170	170mm	6 11/16	611
175	175mm	6 3/4	612
180	180mm	6 15/16	615
		7	700
190	190mm	7 1/4	704
200	200mm	7 1/2	708
		7 15/16	715
		8	800
220	220mm	8 1/2	808
230	230mm	8 7/8	814
		9	900
240	240mm	9 1/2	908
250	250mm	9 3/4	912
260	1000/260mm	10	1000
260	260mm	10 1/2	1008
270	270mm	10 3/4	1012
280	280mm	11	1100
300	300mm	11 1/2	1108
305	305mm	12	1200
320	320mm	12 1/2	1208
330	330mm	13	1300
340	1300/340mm		
340	340mm	14	1400
350	350mm		
360	1400/360mm		
360	360mm	15	1500
380	380mm		
390	390mm	16	1600
400	400mm		
420	420mm	17	1700
440	440mm	18	1800
460	460mm		
480	480mm	19	1900
500	500mm	20	2000
530	530mm	20 1/2	2008
		21	2100
560	560mm	22	2200
		23	2300
600	600mm	24	2400

SERIES 02

Series 02 Bearing



Series 02 Cartridge



d mm	Reference Bearing only	Bearing Rating kN Dynamic C	Static Cor	Axial CA	Max rpm	D	B	C	Wt B kg
50	02 B 50	119	125	6.2	4350	107.95	35.0	67.5	2
60	02 B 60	168	193	8.8	3680	127.00	38.9	72.3	3
65	02 B 65								
70	02 B 70	229	268	10.6	3080	149.22	46.1	82.6	5
75	02 B 75								
80	02 B 80								
85	02 B 85	280	345	17.8	2520	169.86	48.4	89.7	7
90	02 B 90								
100	02 B 100	362	456	25.0	2130	193.68	51.6	92.1	9
110	02 B 110	454	583	31.2	1820	228.60	57.2	100.0	16
115	02 B 115								
120	02 B 120								
125	02 B 125	547	713	38.2	1600	254.00	63.5	114.3	20
130	02 B 130								
140	02 B 140	608	808	45.4	1450	273.05	66.7	117.5	24
150	02 B 150	729	1005	52.4	1320	292.10	68.3	123.8	29
160*	02 EB 160	887	1262	71.2	1200	317.50	83.3	140	39
170	02 EB 170								
180	02 EB 180	936	1334	82.8	1120	330.20	83.3	140	45
190	02 EB 190	1137	1627	122	960	368.30	90.5	156	59
200	02 EB 200								
220	02 EB 220	1233	1863	138	850	393.70	90.5	163	68
240	02 EB 240	1346	1986	167	750	431.80	96.8	170	77
260	02 EB 260								
280	02 EB 280	1545	2435	190	670	463.55	101.6	186	86
300	02 EB 300	1660	2735	214	610	495.30	103.2	193	123
320	02 EB 320	1570	2622	144	550	527.05	106.4	192	150
340	02 B 340	1744	2940	159	500	565.15	115.9	200	182
360	02 B 360								
380	02 B 380	1862	3254	174	460	584.20	111.1	200	186
400	02 B 400	1948	3438	188	430	615.95	115.9	200	209
420	02 B 420	2069	3702	202	400	647.70	119.1	200	241
440	02 B 440	2195	4057	216	380	666.75	115.9	200	250
460	02 B 460								
480	02 B 480	2313	4419	230	360	698.50	119.1	223	263
500	02 B 500	2430	4776	244	340	717.55	115.9	226	272
530	02 B 530	2658	5137	258	330	762.00	119.1	229	309
560	02 B 560	2790	5556	272	310	793.75	122.2	233	336
600	02 B 600	2905	5992	300	290	838.20	119.1	214	381

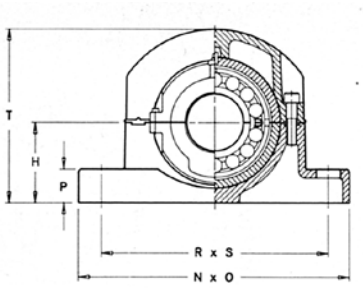
Add mm and EX or GR to reference.

*160mm size can also be supplied with overall dimensions and ratings as 150mm.
REF: 02B600 160mm.

Reference Cartridge Shell only	L & L		G	Wt BC kg	Full Pack Grease Wt kg
02 C 50	114		134.94	6	0.15
02 C 60	126		157.16	10	0.21
02 C 65					
02 C 70	140		177.80	14	0.30
02 C 75					
02 C 80					
02 C 85	154		203.20	17	0.45
02 C 90					
02 C 100	146		231.78	21	0.60
02 C 110	162		266.70	35	0.90
02 C 115					
02 C 120					
02 C 125	184		295.28	46	1.10
02 C 130					
02 C 140	188		323.85	57	1.40
02 C 150	204		336.55	68	1.40
02 C 160	206	232	368.3	95	1.40
02 C 170					
02 C 180	222	242	381.0	111	2.00
02 C 190	235	258	425.5	143	2.70
02 C 200					
02 C 220	242	274	457.2	166	3.60
02 C 240	248	280	495.3	182	4.20
02 C 260					
02 C 280	264	300	527.1	217	4.80
02 C 300	268	306	552.5	252	5.40
02 C 320	298		587.4	322	6.60
02 C 340	305		628.7	368	7.20
02 C 360					
02 C 380	305		647.7	395	7.80
02 C 400	324		685.8	463	9.00
02 C 420	324		717.6	505	9.60
02 C 440	324		733.4	515	9.60
02 C 460					
02 C 480	338		762.0	535	10.20
02 C 500	350		787.4	595	10.80
02 C 530	350		831.9	660	11.40
02 C 560	356		866.8	715	11.40
02 C 600	388		914.4	835	12.60

Add mm and EX or GR to reference.

Series 02 Pedestal



Reference Pedestal Castings	H	NxO	P	bolts	R x S	T	Wt BCP kg
P 03	80	280 x 70	32	2-M16	234	180	12
P 04	95	330 x 76	38	2-M20	270	208	18
P 05	112	380 x 90	44	2-M24	320	252	29
P 06	125	420 x 102	52	2-M24	354	272	33
P 07	143	466 x 120	60	2-M24	392	314	42
P 08	162	508 x 178	38	4-M24	450 x 120	372	80
P 10	181	558 x 178	40	4-M24	496 x 120	415	101
P 30	203	610 x 178	50	4-M24	546 x 120	460	132
P 31	210	636 x 204	50	4-M24	558 x 128	470	154
P 32	267	596 x 242	44	4-M30	448 x 172	535	209
P 33	273	636 x 242	44	4-M30	458 x 166	545	245
P 34	305	686 x 266	50	4-M30	508 x 190	610	331
P 35	324	750 x 280	50	4-M36	550 X 190	650	390
P 36	356	812 x 292	54	4-M36	596 x 204	710	454
P 37	378	914 x 330	60	8-M30	736 & 534 x 254	760	545
P 38	394	958 x 330	60	8-M30	768 & 566 x 254	790	625
P 39	419	1016x 292	64	8-m30	812 & 610 x 210	840	705
P 40	451	1092 x 368	67	8-M36	864 & 660 x 280	900	840
P 41	464	1092 x 368	67	8-M36	886 & 682 x 280	925	885
P 42	495	1168 x 368	70	8-M36	934 & 730 x 280	990	1000
P 43	514	1194 x 368	70	8-M36	972 & 768 x 280	1030	1090
P 44	533	1244 x 368	73	8-M36	996 & 788 x 280	1070	1135
P 45	552	1270 x 368	76	8-M36	1042 & 812 x 280	1110	1225
P 46	572	1296 x 368	80	8-M36	1074 & 844 x 280	1145	1340
P 47	591	1398 x 368	83	8-M36	1118 & 890 x 280	1180	1565
P 48	616	1422 x 382	86	8-M42	1158 & 930 x 280	1230	1680
P 50	673	1524 x 382	92	8-M42	1238 & 1010x 280	1345	1885

The adjacent table shows the range of bearings available for metric and imperial shaft sizes.

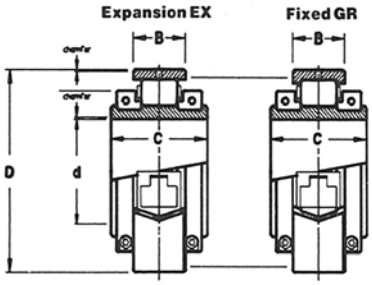
Additional sizes can be made to order. All bearings in a single group have the same overall dimensions apart from bore size.

Series 02 Size Range

METRIC Shaft Dia. mm	REF	IMPERIAL Shaft Dia. Inches	REF
45	45mm	1 11/16	111
50	50mm	1 3/4	112
		1 15/16	115
		2	200
60	60mm	2 3/16	203
65	65mm	2 1/4	204
		2 7/16	207
		2 1/2	208
70	70mm	2 11/16	211
75	75mm	2 3/4	212
		2 15/16	215
		3	300
80	80mm	3 3/16	303
85	85mm	3 1/4	304
90	90mm	3 7/16	307
		3 1/2	308
95	95mm	3 11/16	311
100	100mm	3 3/4	312
105	105mm	3 15/16	315
		4	400
110	110mm	4 3/16	403
115	115mm	4 1/4	404
		4 7/16	407
		4 1/2	408
120	120mm	4 11/16	411
125	125mm	4 3/4	412
130	130mm	4 15/16	415
		5	500
140	140mm	5 3/16	503
145	145mm	5 1/4	504
		5 7/16	507
		5 1/2	508
150	150mm	5 11/16	511
155	155mm	5 3/4	512
160	600/160mm	5 15/16	515
		6	600
160	160mm	6 7/16	607
170	170mm	6 1/2	608
175	175mm	6 11/16	611
180	180mm	6 7/8	614
		6 15/16	615
		7	700
190	190mm	7 1/2	708
200	200mm	7 15/16	715
		8	800
220	220mm	8 1/2	808
230	230mm	9	900
240	240mm	9 1/2	908
250	250mm	10	1000
260	260mm		
280	280mm	10 1/2	1008
		11	1100
300	300mm	11 1/2	1108
		12	1200
320	320mm	13	1300
340	340mm	14	1400
360	360mm		
380	380mm	15	1500
400	400mm	16	1600
420	420mm	17	1700
440	440mm	18	1800
460	460mm		
480	480mm	19	1900
500	500mm	20	2000
530	530mm	21	2100
560	560mm	22	2200
600	600mm	24	2400

SERIES 03

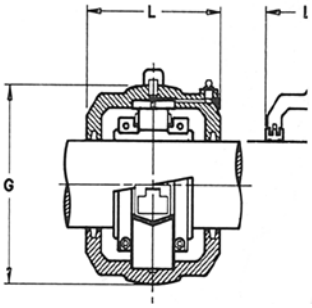
Series 03 Bearing



d mm	Reference Bearing only			Bearing Rating kN Dynamic C	Static Cor	Axial Ca	Max rpm	D	B	B_1	C	Wt B kg
100	03	B	100	610	684	31.2	1820	254.00	84.2	84.2	136	30
110	03	B	110	614	698	39.2	1640	266.70	87.3	87.3	147	36
120	03	B	120									
130	03	B	130	706	852	49.0	1500	279.40	73.1	84.2	140	36
140	03	B	140	886	1069	58.8	1340	304.80	79.4	90.5	147	44
150	03	B	150	994	1213	69.4	1220	330.20	81.0	96.9	160	57
160	03	B	160	1156	1564	79.2	1110	355.60	103.2	103.2	171	72
170	03	B	170									
180	03	B	180	1242	1704	89.0	1030	374.65	92.1	108.8	178	79
190	03	B	190	1451	2022	99.6	880	419.10	97.7	118.3	191	105
200	03	B	200									
220	03	B	220	1586	2163	109.4	760	469.90	109.6	131.8	212	145
240	03	B	240	1778	2551	130.8	700	482.60	105.6	124.6	211	150
260	03	B	260									
280	03X	B	280	2105	2960	153.0	620	520.70	131.8	131.8	231	197
280	03E	B	280	2105	3233	153.0	620	495.30	139.7	139.7	244	182
300	03	B	300	2156	3312	174.4	560	558.80	139.7	139.7	244	238
320	03	B	320	2529	3795	198.8	500	622.30	160.4	160.4	272	327
340	03E	B	340	2750	4392	213.6	460	615.95	158.0	158.0	279	318
360	03E	B	360									
360	03X	B	360	2827	4377	226.0	460	647.70	160.4	160.4	279	372
380	03	B	380	3019	4800	250.8	420	685.80	166.7	166.7	292	431
400	03	B	400									
420	03E	B	420	3474	6006	275.8	360	700.00	160.0	160.0	284	395
440	03E	B	440									
460	03E	B	460	3650	6156	302.4	340	740.00	170.0	170.0	294	431
460	03X	B	460	3831	6186	308.8	340	800.10	187.4	187.4	300	630
480	03X	B	480									
500	03	B	500	4087	7041	347.0	310	850.90	187.4	187.4	300	730
530	03	B	530									
560	03E	B	560	4669	8511	382.6	280	863.60	196.9	196.9	310	635
600	03E	B	600	4887	9130	400.0	270	890.00	184.0	184.0	310	680

Add mm and EX or GR to reference.

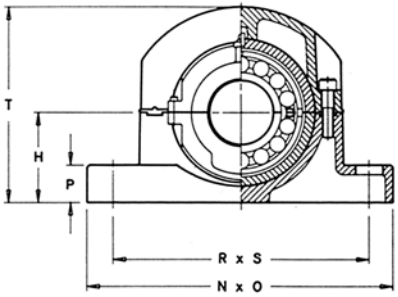
Series 03 Cartridge



Reference Cartridge Shell only	L	L_1	G	Wt BC kg	Full pack Grease Wt kg
03 C 100	200	206	308.00	71	1.20
03 C 110	210	222	323.85	82	1.40
03 C 120					
03 C 130	214	222	323.85	84	1.40
03 C 140	216	230	355.6	96	2.00
03 C 150	232	254	393.7	127	2.70
03 C 160	244	268	422.3	153	3.60
03 C 170					
03 C 180	254	284	431.8	166	4.20
03 C 190	270	300	489.0	214	5.40
03 C 200					
03 C 220	298	334	546.1	300	6.90
03 C 240	298	334	558.8	311	8.10
03 C 260					
03X C 280	324	352	596.9	397	10.00
03E C 280	356	356	571.5	386	10.00
03 C 300	346	370	641.4	468	11.00
03 C 320	368		717.6	600	12.00
03E C 340	432		704.9	703	15.00
03E C 360					
03X C 360	380		739.8	725	16.20
03 C 380	400		774.7	830	19.20
03 C 400					
03E C 420	440		788.0	803	21.60
03E C 440					
03E C 460	450		840.0	885	24.60
03X C 460	476		914.4	1370	24.60
03X C 480					
03 C 500	495		958.9	1500	30.00
03 C 530					
03E C 560	490		958.9	1306	36.00
03E C 600	490		990.0	1400	38.40

Add mm and EX or GR to reference.

Series 03 Pedestal



Reference Pedestal Castings	H	NxO	P	bolts	R x S	T	Wt BCP kg
P 54	191	514 x 152	38	4-M24	438 x 82	405	145
P 55	197	534 x 166	38	4-M24	458 x 88	425	168
P 56	203	546 x 166	48	4-M24	470 x 96	435	182
P 57	229	622 x 178	54	4-M30	514 x 102	485	222
P 58	254	666 x 204	57	4-M30	558 x 120	535	302
P 59	267	736 x 228	60	4-M30	628 x 140	570	340
P 60	279	762 x 254	64	4-M30	636 x 152	580	385
P 61	311	838 x 266	67	4-M36	636 x 172	655	515
P 62	349	952 x 280	76	4-M42	736 x 178	730	715
P 63	394	914 x 406	76	4-M42	670 x 304	790	815
P 64	425	1028 x 406	76	8-M36	812 & 610 x 318	850	1000
P 83	368	940 x 280	70	8-M36	742 & 502 x 178	785	600
P 65	457	1092 x 420	76	8-M36	876 & 674 x 330	915	1135
P 66	518	1194 x 356	80	8-M36	978 & 762 x 266	1035	1270
P 86	470	1220 x 318	82	8-M42	928 & 660 x 190	1000	1150
P 67	533	1244 x 368	90	8-M42	1012 & 784 x 266	1065	1545
P 68	599	1270 x 394	92	8-M42	1036 & 806 x 292	1120	1770
P 89	508	1270 x 360	90	8-M48	990 & 690 x 210	1075	1325
P 90	550	1370 x 380	95	8-M48	1080 & 780 x 220	1165	1590
P 71	660	1574 x 470	108	8-M48	1290 & 934 x 362	1320	2700
P 94	622	1600 x 406	102	8-M56	1270 & 940 x 242	1340	2500
P 94	622	1600 x 406	102	8-M56	1270 & 940 x 242	1340	2300
P 65	622	1600 x 406	102	8-M56	1270 & 940 x 242	1340	2330

The adjacent table shows the range of bearings available for metric and imperial shaft sizes. Additional sizes can be made to order. All bearings in a single group have the same overall dimensions apart from bore size.

Series 03 Size Range

METRIC Shaft Dia.		IMPERIAL Shaft Dia.	
mm	REF	Inches	REF
100	100mm	$3\,^{3}/_{4}$	312
		$3\,^{15}/_{16}$	315
		4	400
110	110mm	$4\,^{7}/_{16}$	407
120	120mm	$4\,^{1}/_{2}$	408
125	125mm	$4\,^{15}/_{16}$	415
130	130mm	5	500
140	140mm	$5\,^{7}/_{16}$	507
		$5\,^{1}/_{2}$	508
150	150mm	$5\,^{15}/_{16}$	515
		6	600
160	160mm	$6\,^{7}/_{16}$	607
170	170mm	$6\,^{1}/_{2}$	608
180	180mm	$6\,^{15}/_{16}$	615
		7	700
		$7\,^{1}/_{2}$	700/708
190	190mm	$7\,^{1}/_{2}$	708
200	200mm	$7\,^{15}/_{16}$	715
		8	800
		$8\,^{1}/_{2}$	800//808
220	220mm	9	900
240	240mm	10	1000
250	250mm		
260	260mm		
280	X 280mm	11	X 1100
280	E 280mm	11	E 1100
300	300mm	12	1200
320	320mm	13	1300
340	E 340mm	14	E 1400
360.	E 360mm	14	E 1400
	X 360mm	14	X 1400
380	380mm	15	1500
400	400mm		
420	E 420mm	17	E 1700
440	E 440mm		
460	E 460mm	18	E 1800
480	X 460mm	18	X 1800
480	X 480mm		
500	500mm	20	2000
530	530mm		
560	E 560mm	22	E 2200
600	E 600mm		

FLANGE

Flange units provide a simple means of mounting Cooper Split Roller Bearings against a vertical or horizontal face. These units embody standard swivel cartridges which may be assembled with Expansion or Fixed type bearings.

Where shafts terminate at the bearings, cartridge ends may be fitted with blanking plates or, in the case of Expansion bearings to 90mm, blanking plates with thrust bearings for one-way positioning.

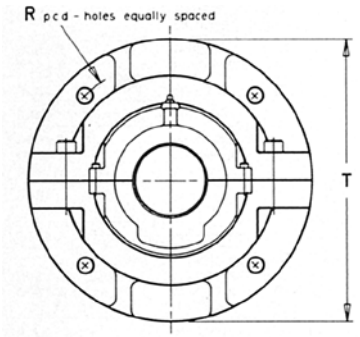
The rear face of the flange is recessed for use with the spigot if required. The top halves of both flange unit and cartridge can be lifted for inspection of the rolling surfaces.

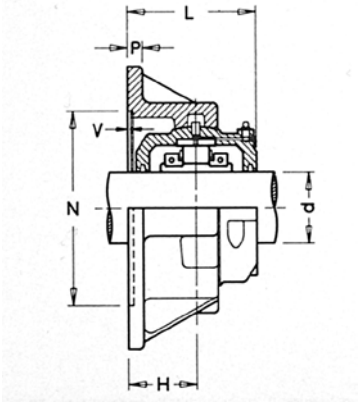
Standard cast iron flanges normally have drilled bolt holes, outer surface as cast - fit flat washer under bolt heads. Cast steel flanges normally have drilled holes, spot faced.

Tolerance f8 on spigot to fit recess N.
Flanges for bearings above 300mm bore and in Series 03 - prices and availability according to quantity.

Vertical shafts - bearings and vertical shafts may require modified construction, special seals and lubrication.

Maximum load on C.l.Flanges 0.26 **Cor** or 0.25 **Ca**, Higher loads at slow speeds and shock conditions require steel or nodular iron flanges and HT bolts. The support plate must be adequate. Please consult our Sales Department.





Series 01

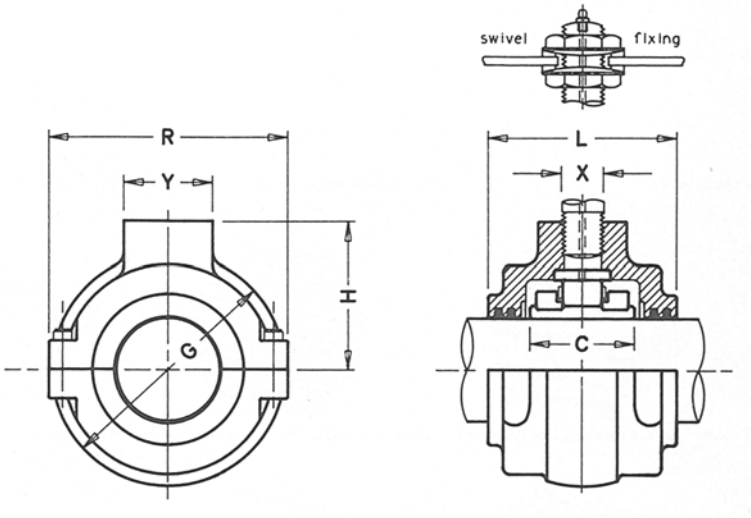
d mm	Flange casting	T	bolts	R	P	H	N	V	L	wt kg
40	F 01	204	4-M12	164	13	51	119.06	3	94	8
50	F 02	216	4-M12	180	13	57	136.52	3	106	11
60 65	F 03	260	4-M12	218	16	67	166.69	3	120	15
70 75	F 04	286	4-M12	242	16	73	192.09	3	130	21
80 85 90	F 05	330	4-M16	274	19	79	215.90	3	148	31
100 105	F 06	356	4-M16	302	19	86	244.47	3	154	37
110 115	F 07	382	4-M16	334	22	92	276.22	3	164	51
120 125 130	F 08	432	4-M24	374	22	98	314.32	3	176	72
135 140	F 09	444	4-M24	384	25	98	317.50	3	182	72
150 155	F 10	470	4-M24	412	25	114	346.07	3	202	94
160	F 11	496	4-M24	426	25	105	352.42	3	202	100
170 180	F 12	508	4-M24	438	29	108	365.12	3	208	105
190 200	F 13	534	4-M24	474	32	108	400.05	3	208	126
220	F 14	584	4-M30	512	35	117	431.80	3	226	148
240	F 15	610	4-M30	542	35	117	463.55	3	228	168
260 280	F 16	660	4-M30	584	38	124	504.82	3	240	215
300	F 17	712	4-M30	626	38	133	539.75	3	258	265

Series 02

d mm	Flange casting	T	bolts	R	P	H	N	V	L	wt kg
50	F 03	260	4-M12	218	16	67	166.69	3	124	15
60 65	F 04	286	4-M12	242	16	73	192.09	3	136	22
70 75	F 05	330	4-M16	274	19	79	215.90	3	150	33
80 85 90	F 06	356	4-M16	302	19	86	244.47	3	164	40
100	F 07	382	4-M16	334	22	92	276.22	3	166	51
110 115	F 08	432	4-M24	374	22	98	314.32	3	180	75
120 125 130	F 10	470	4-M24	412	25	114	346.07	3	206	100
140	F 30	508	4-M24	444	25	114	377.82	3	208	120
150	F 31	534	4-M24	466	25	124	393.70	3	226	140
160 170	F 32	584	4-M30	508	29	124	428.62	5	240	170
180	F 33	596	4-M30	524	32	130	444.50	5	252	210
190 200	F 34	648	4-M30	572	32	137	492.12	5	266	290
220	F 35	712	4-M36	620	35	146	527.05	5	284	318
240 260	F 36	736	4-M36	660	38	149	568.32	5	290	340
280	F 37	762	8-M30	682	38	159	603.25	5	310	395
300	F 38	788	8-M30	708	41	162	628.65	5	316	446

HANGER

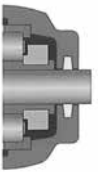
Hangers sre compact means of supporting the shafts of screw conveyors and similar equipment. The unit comprises a split roller bearing in a cast iron split housing with threaded boss to facilitate suspension from the conveyor cross-bracing. A swivel fixing at the cross-bracing joint is recommended to provide alignment of the bearings.
Double felt or lipped rubber seals are provided, air purge seals are also available. The aspect of sealing should be carefully considered for each application. Continuous grease feed is sometimes desirable and provision may be made through the hanger rods.



d mm	Reference Hanger complete	Hanger casting	C	G	L	H	X	Y	R	Wt Kg
40	01 BH 40	01 H 40	50.1	100	108	66	M30	50	105	4
50	01 BH 50	01 H 50	55.7	117	108	76	M30	50	121	5
60	01 BH 60	01 H 60	55.7	135	108	82	M30	50	137	6
65	01 BH 65	01 H 65								
70	01 BH 70	01 H 70	61.2	157	130	92	M30	50	162	8
75	01 BH 75	01 H 75								
80	01 BH 80	01 H 80	70.7	178	146	114	M36	76	187	13
85	01 BH 85	01 H 85								
90	01 BH 90	01 H 90								
100	01 BH 100	01 H 100	81.0	203	152	128	M36	76	200	17
105	01 BH 105	01 H 105								
110	01 BH 110	01 H 110	84.9	232	156	140	M36	76	222	24
115	01 BH 115	01 H 115								

Add mm to reference

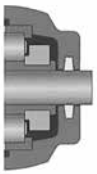
Sealing Solutions



Felt (F)

Made from wool and selected fibres. Felt is the current UK and South African standard seal.

Temperature limits	-94˚F to + 212˚F -70˚C to +100˚C
Maximum speed	6000dn 150000mm dn
Shaft surface finish	1.6 µm Ra.



High Temperature Packing (HTP)

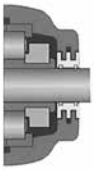
A PTFE filament yarn impregnated with graphite and lubricated with silicon. A direct replacement for felt in high temperature applications. Also available silicon free.

Temperature limits	-94˚F to + 500˚F -70˚C to + 260˚C
Maximum speed	6000dn 150000mm dn
Shaft surface finish	0.8 µm Ra.

Labyrinth grease groove (LAB)

Standard seal for bearings over 12"/300mm. Particularly successful on marine applications. Suitable for low or high speed operation.

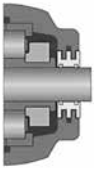
Temperature limits	As bearing
Maximum speed	As bearing
Shaft surface finish	3.2 µm Ra.



Aluminium Triple Labyrinth (ATL)

Machined aluminium bodied triple labyrinth seal for high speed and general applications. Supplied as standard in USA and Canada.

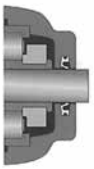
Temperature limits	-4˚F to + 212˚F -20˚C to +100˚C
Maximum speed	Bearing maximum
Shaft surface finish	3.3 µm Ra.



Triple labyrinth with Viton rubber cord insert (TL HT)

Suitable for high speed and high temperature applications.

Temperature limits	-4˚F to + 347˚F -20˚C to +175˚C
Maximum speed	Bearing maximum
Shaft surface finish	3.2 µm Ra.

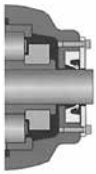


Synthetic nitrile rubber single lip (SRS)*

For wet but not submerged applications. Can be used to retain bearing lubricant by mounting lip innermost.

* High and low temperature versions also availabe.

Temperature limits	-4˚F to + 212˚F -20˚C to +100˚C
Maximum speed	6000dn 150000mm dn
Shaft surface finish	0.8 µm Ra.



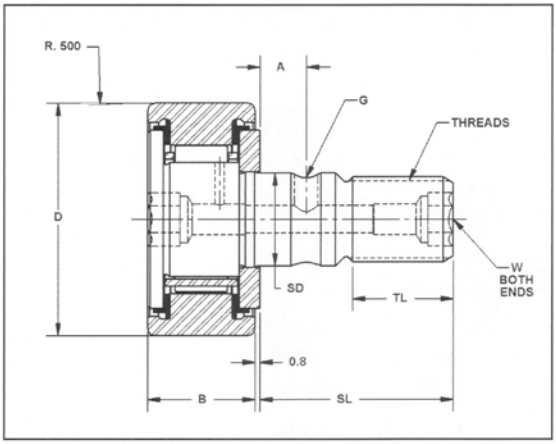
Single lip with spring loaded retaining plate (SRS RP)

Suitable for severe splash or completely submerged applications. two grades are available, one operates up to 2 meters of fluid the other up to 30 meters.

Temperature limits	-4˚F to + 212˚F -20˚C to +100˚C
Maximum speed	6000dn 150000mm dn
Shaft surface finish	0.4 µm Ra.

Shaft surface finish shown is the recommended shaft finish for optimum performance

Metric Series Cam Followers



Part Number			Roller		Stud					Dimensions			
RBC Part Number	INA* Reference P/N	McGill ** Part Number	D +0 / -0.05	B +0 / -0.12	SD +0 / -0.15	SD +0 / -0.18	SL Shank Length	TL Eft Thread Length	Thread	Approx. Weight (g)	A Loc.	G Dia	Socket Head Wrench Size (w)
CFM19	KR19PP	MCFR19SB	19	11	8	–	20	10	M8 X 1.25	29	–	–	–
CFM22	KR22PP	MCFR22SB	22	12	10	–	23	12	M10 X 1	42	–	–	5
CFM26	KR26PP	MCFR26SB	26	12	10	–	23	12	M10 X 1	57	–	–	5
CFM30	KR30PP	MCFR30SB	30	14	–	12	25	13	M12 X 1.5	86	6	3	6
CFM35	KR35PP	MCFR35SB	35	18	–	16	32.5	17	M16 X 1.5	166	8	3	8

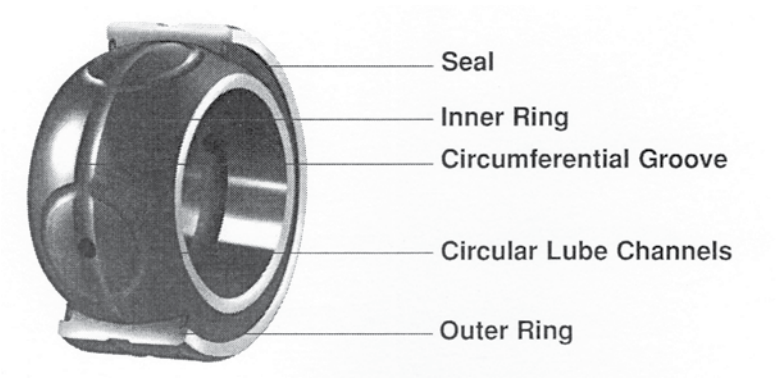
Part Number			Capacities					Mounting Data		
RBC Part Number	INA* Reference P/N	McGill ** Part Number	Speed Limit (rpm)	Dynamic Capacities (N)	Static Capacities (N)	Max Allow Load (N)	Track Capacity 40 RC (N)	Max Clamping Torque (Nm)	Housing Bore Tolerance H7	Min. Housing OD
CFM19	KR19PP	MCFR19SB	10000	5300	6200	4500	5100	8	0/+0.015	14
CFM22	KR22PP	MCFR22SB	8500	6200	7100	5200	5200	15	0/+0.015	17
CFM26	KR26PP	MCFR26SB	8500	6200	7100	5200	6100	15	0/+0.015	17
CFM30	KR30PP	MCFR30SB	6800	8000	9300	11500	7800	22	0/+0.018	23
CFM35	KR35PP	MCFR30SB	5000	13300	19500	12500	12500	50	0/+0.018	27

Note: Each part is supplied with 2 nuts and grease fittings.
All dimensions are in mm.

* INA is a registered trademark of the Schaeffler Group.

** McGill is a registered trademark of Emerson Power Transmission Manufacturing LP.

The RBC Quadlube® Long life Spherical Plain Bearing



Though applications in construction and material handling requires a spherical plain bearing with longer life, less maintenance and less downtime that standard spherical plain bearings. A bearing with total interchangeability to standard designs is preferred. RBC engineering developed the QuadLube® spherical plain bearing after observing the three predominant factors which contribute to the failure of spherical plain bearings:

1) Unidirectional loads

2) Heavy loads

3) Neglected lubrication intervals

Each factor contributes to a lack of lubrication in the load zone area which eventually allows for metal to metal contact and premature failure of the bearing in the application.

RBC engineering developed the QuadLube® spherical plain bearing to solve each of these three failure modes. The RBC QuadLube® spherical plain bearing is manufactured within the same envelope dimension as standard inch and metric spherical plain bearings. The lubrication system contains four precisely machined circular grooves on the spherical surface of the inner ring. The bearing is packed with an EP moly grease and is sealed with lip contacts seals for grease retention.

Industry Applications for

The RBC QuadLube® Long life Sphecial Plain Bearing

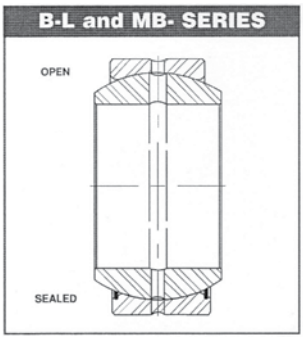
- ***Construction Equipment***
- ***Mining Machinery***
- ***Lift Trucks and Material Handling Equipment***
- ***Log Skidders***
- ***Off-Highway Vehicles***
- ***Satellite Dishes***

Spherical Plain Bearing Selection Guide

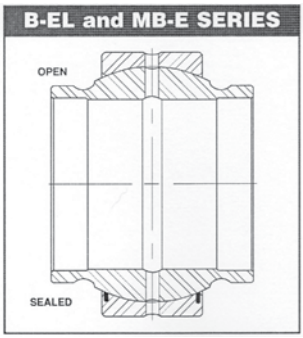
RBC originated the precision ground single fracture spherical plain bearing and continues to be the leader in design and innovation. Listed below are the basic types of spherical plain bearings that RBC makes with pertinent selection criteria.

	B-L **B-LSS** **MB-** **MB-SS** Standard Radial	**B-EL** **B-ELSS** **MB-E** **MB-ESS** Extended Inner Ring	**BH-L** **BH-LSS** **MBH-** **MBH-ESS** High Misalignment	**B-LSSQ** **MB-SSQ** QuadLube®	**B-LNMSS** **MB-NMSS** Self-Lubricated DuraLube®	**B-SA** **MB-SA** Angular Contact	**B-DSA-3** **MB-DSA3** Double Acting Angular Contact
Radial load Reversing radial load Uni-Directional Load	Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Good	Excellent Excellent Excellent	Excellent Good Excellent	Excellent Good Excellent	Excellent Excellent Good
Thrust Load Reversing Thrust Load Capability of Misalignment	Good Good Good	Good Good Good	Good Good Excellent	Good Good Good	Good Poor Good	Excellent None Good	Excellent Excellent Minimal
Max. Operating Temp. (open) ❶ Max. Operating Temp. (sealed) Sensitivity to Contamination	500 250 Low	500 250 Low	500 250 Low	500 250 Low	– 250 High	500 – Low	500 – Low
Re-lubrication Corrosion Protection Adjustable Clearance	Yes Good No	Yes Good No	Yes Good No	Yes Good No	No Excellent No	Yes Good Yes	Yes Good Yes
❶ Operating temperatures above 300°F require a special head treatment.							

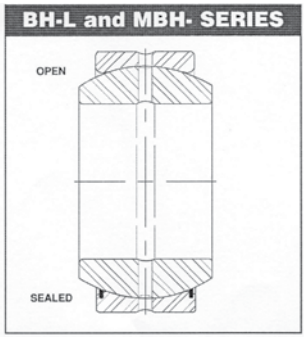
Radial Type Spherical Plain Bearings - Standard Series



Designed to support heavy radial loads under misalignment. These bearings also posses moderate thrust loading capability. They are non- separable with a single fractured outer ring, and are available in open or sealed designs and inch or metric sizes.



With an extended inner ring, the need for additional locational spaces is eliminated. The inner ring bore is relieved to prevent excess bending stress. Available in open or sealed designs and inch or metric sizes.



Due to greater inner ring cross section, the BH-L and MBH series is capable of greater misalignment. Available in open or sealed designs and inch or metric sizes.

Interchange Tables

SKF	RBC
GAC25SA	MB24SA
GAC30SA	MB30SA
GAC35SA	MB35SA
GAC40SA	MB40SA
GAC45SA	MB45SA
GAC50SA	MB50SA
GAC60SA	MB60SA
GAC70SA	MB70SA
GAC80SA	MB80SA
GAC90SA	MB90SA
GAC100SA	MB100SA
GA110SA	MB110SA
GAC120SA	MB120SA
GAZ008SA	B8SA
GAZ008AIR	IRB8SA
GAZ008SA0R	ORB8SA
GAZ010SA	B10SA
GAZ010SAIR	IRB10SA
GAZ010SA0R	ORB10SA
GAZ023SA	B12SA
GAZ012SAIR	IBR12SA
GAZ12SA0R	ORB12SA
GAZ100SA	B16SA
GAZ100SAIR	IBR16SA
GAZ100SA0R	ORB16SA
GAZ104SA	B20SA
GAZ104SAIR	IBR20SA
GAZ104SA0R	ORB20SA
GAZ106SA	B22SA
GAZ106SAIR	IBR22SA
GAZ106SA0R	ORB22SA
GAZ108SA	B24SA
GAZ108SAIR	IBR24SA
GAZ108SA0R	ORB24SA
GAZ112SA	B28SA
GAZ112SAIR	IBR28SA
GAZ112SA0R	ORB28SA
GAZ200SA	B32SA
GAZ200SAIR	IBR32SA
GAZ200SA0R	ORB32SA
GAZ204SA	B36SA
GAZ204SAIR	IBR36SA
GAZ204SA0R	ORB36SA
GAZ208SA	B40SA
GAZ208SAIR	IBR40SA
GAZ208SA0R	ORB40SA
GAZ212SA	B44SA
GAZ212SAIR	IRB44SA
GAZ2122SA0R	ORB44SA
GAZ300SA	B48SA
GZ300SAIR	IBR48SA
GAZ300SA0R	ORB48SA
GAZ304SA	B52SA
GAZ304SAIR	IBR52SA
GAZ304SA0R	ORB52SA
GAZ308SA	B56SA
GAZ308SAIR	IBR56SA

Unsealed Spherical Plain Bearing

Sealed Spherical Plain Bearing

SKF	RBC
GAZ308SA0R	ORB56SA
GAZ312SA	B60SA
GAZ312SAIR	IBR60SA
GAZ312SA0R	ORB60SA
GAZ400SA	B64SA
GAZ400SAIR	IBR64SA
GAZ400SA0R	ORB64SA
GAZ408SA	B72SA
GAZ408SAIR	IBR72SA
GAZ408SA0R	ORB72SA
GAZ500SA	B80SA
GAZ500SAIR	IBR80SA
GAZ500SA0R	ORB80SA
GAZ600SA	B96SA
GAZ600SAIR	IRB96SA
GAZ600SA0R	ORB96SA
GE12ES	MB12
GE15S	MB15
GE17ES	MB17
GE17ES-2RS	MB17SS
GE20ES	MB20
GE20ES-2RS	MB20SS
GE25ES	MB25
GE25ES-2RS	MB25SS
GE30ES	MB30
GE30ES-2RS	MB30SS
GE35ES	MB35
GE35ES-2RS	MB35SS
GE40ES	MB40
GE40ES-2RS	MB40SS
GE45ES	MB45
GE45ES-2RS	MB45SS
GE50ES	MB50
GE50ES-2RS	MB50SS
GE60ES	MB60
GE60ES-2RS	MB60SS
GE70ES	MB70
GE70ES-2RS	MB70SS
GE80ES	MB80
GE80ES-2RS	MB80SS
GE90ES	MB90
GE90ES-2RS	MB90SS
GE100ES	MB100

SKF	RBC
GE100ES-2RS	MB100SS
GE110ES	MB110
GE110ES-2RS	MB110SS
GE120ES	MB120
GE120ES-2RS	MB120SS
GE140ES	MB140
GE140ES-2RS	MB140SS
GE160ES	MB160-9L
GE160ES-2RS	MB160-9LSS
GE180ES	MB180-9L
GE180ES-2RS	MB180-9LSS
GE200ES	MB200-9L
GE200ES-2RS	MB200-9LSS
GE220ES	MB220-9L
GE220ES-2RS	MB220-9LSS
GE240ES	MB240-9L
GE240ES-2RS	MB240-9LSS
GE260ES	MB260-9L
GE260ES-2RS	MB260-9LSS
GE280ES	MB280-9L
GE280ES02RS	MB280-9LSS
GE300ES	MB300-9L
GE300ES-2RS	MB300-9LSS
GEH20ES	MBH2025
GEH20ES-2RS	MBH20255S
GEH25ES	MBH2530
GEH26ES-2RS	MBH2530SS
GEH30ES	MBH3035
GEH30ES-2RS	MBH3035SS
GEH35ES	MBH3540
GEH35ES-2RS	MBH3540SS
GEH40ES	MBH4045
GEH40ES-2RS	MBH4045SS
GEH45ES	MBH4550
GEH45ES-2RS	MBH4550SS
GEH50ES	MBH5060
GEH50ES-2RS	MBH5060SS
GEH60ES	MBH6070
GEH60ES-2RS	MBH6070SS
GEH70ES	MBH7080
GEH70ES-2RS	MBH7080SS
GEH80ES	MBH8090
GEH80ES-2RS	MBH8090SS
GEH90ES	MBH90100
GEH90ES-2RS	MBH90100SS
GEH100ES	MBH100110
GEH100ES-2RS	MBH100110SS
GEH110ES	MBH110120
GEH110ES-2RS	MBH110120SS
GEH120ES	MBH120140
GEH120ES-2RS	MBH120140SS
GEM20ES-2RS	MB20ESS
GEM25ES-2RS	MB25ESS
GEM30ES-2RS	MB30ESS
GEM35ES	MB35ESS
GEM40ES-2RS	MB40ESS
GEM45ES-2RS	MB45ES

Interchange Tables - continued

SKF	RBC
GEM50ES-2RS	MB50ESS
GEM60ES-2RS	MB60ESS
GEM70ES-2RS	MB70ESS
GEM80ES-2RS	MB80ESS
GEM90ES-2RS	MB90ESS
GEM140ES-2RS	MBH1401609LSS
GEZ008ES	B8L
GEZ010ES	B10L
GEZ012ES	B12L
GEZ012ES-2RS	B12LSS
GEZ014ES	B14L
GEZ014ES-2RS	B14LSS
GEZ100ES	B16L
GEZ100ES-2RS	B16LSS
GEZ104ES	B20L
GEZ104ES-2RS	B20LSS
GEZ106ES	B22L
GEZ106ES-2RS	B22LSS
GEZ108ES	B24L
GEZ108ES-2RS	B24LSS
GEZ112ES	B28L
GEZ112ES-2RS	B28LSS
GEZ200ES	B32L
GEZ200ES-2RS	B32LSS
GEZ204ES	B36L
GEZ204ES-2RS	B36LSS
GEZ208ES	B40L
GEZ208ES-2RS	B40LSS
GEZ212ES	B44L
GEZ212ES-2RS	B44LSS
GEZ300ES	B48L
GEZ300ES-2RS	B48LSS
GEZ304ES	B52L
GEZ304ES-2RS	B52LSS
GEZ308ES	B56L
GEZ308ES-2RS	B56LSS
GEZ312ES	B60L
GEZ312ES-2RS	B60LSS
GEZ400ES	B64L
GEZ400ES-2RS	B64LSS
GEZ408ES	B72-9L
GEZ408ES-2RS	B72-9LSS
GEZ500ES	B80-9L
GEZ500ES-2RS	B80-9LSS
GEZ600ES	B96-9L
GEZ600ES-2RS	B96-9LSS
GEZH104ES	BH2024L
GEZH104ES-2RS	BH2024LSS
GEHZ108ES	BH2428L
GEHZ108ES-2RS	BH24288LSS
GEZH112ES	BH2832L
GEZH112ES-2RS	BH2832LSS
GEZH200ES	BH3236L
GEZH200ES-2RS	BH3236LSS
GEZH204ES	BH3640L
GEZH204ES-2RS	BH3640LSS

SKF	RBC
GEZH208ES	BH4044L
GEZH208ES-2RS	BH4044LSS
GEZH212ES	BH4448L
GEZH212ES-2RS	BH4448LSS
GEZH300ES	BH4852L
GEZH300ES-2RS	BH4852LSS
GEZH304ES	BH5256L
GEZH304ES-2RS	BH5256LSS
GEZH308ES	BH5660L
GEZH308ES-2RS	BH5660LSS
GEZH312ES	BH6064L
GEZH312ES-2RS	BH6064LSS
GEZH400ES	BH6472-9L
GEZH400ES-2RS	BH6472-9LSS
GEZH408ES	BH7280-9L
GEZH408ES-2RS	BH7280-9LSS
GEZH508ES	BH8096-9L
GRZH508ES-2RS	BH8096-9LSS
GEZM008ES	B8EL
GEZM010ES	B10EL
GEZM012ES	B12EL
GEZM012ES-2RS	B12ELSS
GEZM014ES	B14EL
GEZM014ES-2RS	B14ELSS
GEZM100ES	B16EL
GEZM100ES-2RS	B16ELSS
GEZM104ES	B20EL
GEZM104ES-2RS	B20ELSS
GEZM106ES	B22EL
GEZM106ES-2RS	B22ELSS
GEZM108ES	B24EL
GEZM108ES-2RS	B24ELSS
GEZM112ES	B28EL
GEZM112ES-2RS	B28ELSS
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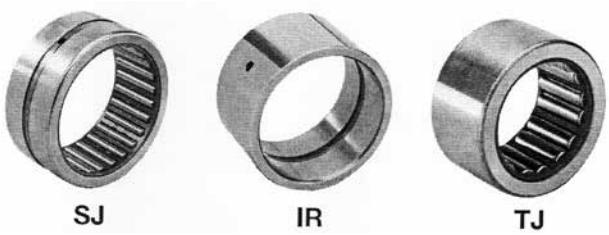
GEZM304ES-2RS	B52ELSS
GEZM308ES	B56EL
GEZM308ES-2RS	B56ELSS
GEZM312ES	B60EL
GEZM312ES-2RS	B60ELSS
GEZM400ES	B64EL
GEZM400ES-2RS	B64ELSS
GEZM408ES	B72E9L
GEZM408ES-2RS	B72E9LSS
GEZM508ES	B80E9L
GEZM508ES-2RS	B80E9LSS

SKF	RBC
5SFB	B8L
6SF10	B10L
7SBT12	B12SA
7SF12	B12L
7SF12-TT	B12LSS
8SF14	B14L
8SF14-TT	B14LSS
10SBT16	B16SA
10SF16	B16L
10SF16-TT	B16LSS
12SBT20	B20SA
12SF20	B20L
12SF20-TT	B20LSS
13SBT22	B22SA
13SF22	B22L
15SBT24	B24SA
15SF24	B24L
15SF24-TT	B244LSS
17SF28	B28L
17SBT28	B28SA
17SF28-TT	B28LSS
20SBT32	B32SA
20SF32	B32L
20SF32-TT	B32LSS
22SBT36	B36SA
22SF36	B36L
22SF36-TT	B36LSS
25SBT40	B40SA
25SF40	B40L
25SF40-TT	B40LSS
27SF44	B44L
27SBT44	B44SA
27SF44-TT	B44LSS
30SF48	B48L
30SF48-TT	B48LSS
32SBT52	B52SA
32SF52	B52L
32SF52-TT	B52LSS
35SBT56	B56SA
35SF56	B56L
35SF56-TT	B56LSS
37SF60	B60L
37SF60-TT	B60LSS
40SBT64	B64SA
40SF64	B64L
45SBB72	B72-9L
50SBB80	B80-9L
50SBB80-TT	B80-9LSS
60SBB96	B96-9L
60SBB96-SS	B96-9LSS

RBC PITCHLIGN® Roller Bearings

Interchange Tables



TORRINGTON	RBC	SIZE
HJ-101812	SJ7133	5/8
HJ-122012	SJ7153	3/4
HJ-122016	SJ7154	3/4
HJ-142212	SJ7173	7/8
HJ-142216	SJ7174	7/8
HJ-162412	SJ7193	1
HJ-162416	SJ7194	1
HJ-182616	SJ7214	1 1/8
HJ-182620	SJ7215	1 1/8
HJ-202816	SJ7234	1 1/4
HJ-202820	SJ7235	1 1/4
HJ-223016	SJ7254	1 3/8
HJ-223020	SJ7255	1 3/8
HJ-243316	SJ7274	1 1/2
HJ-243320	SJ7275	1 1/2
HJ-263516	SJ7294	1 5/8
HJ-263520	SJ7295	1 5/8
HJ-283716	SJ7314	1 3/4
HJ-283720	SJ7315	1 3/4
HJ-303920	SJ7335	1 7/8
HJ-324116	SJ7354	2
HJ-324120	SJ7355	2
HJ-364824	SJ8406	2 1/4
HJ-364828	SJ8407	2 1/4
HJ-405224	SJ8446	2 1/2
HJ-405228	SJ8447	2 1/2
HJ-445616	SJ8474	
HJ-445624	SJ8476	2 3/4
HJ-445628	SJ8477	2 3/4
HJ486024	SJ8516	3
HJ-486028	SJ8517	3
HJ-526828	SJ9567	3 1/4
HJ-526832	SJ9568	3 1/4
HJ-567232	SJ9608	3 1/2
HJ-607632	SJ9648	3 3/4
HJ-648032	SJ9688	4
HJ-688432	SJ9728	4 1/4
HJ-729636	TJ6769	4 1/2
HJ-729640	TJ6770	4 1/2
HJ-8010436	SJ6849	5
HJ-8010440	SJ6850	5
HJ-8811240	TJ6918	5 1/2
HJ-8811248	TJ6919	5 1/2
HJ-9612040	SJ6925	6
HJ-9612048	SJ6926	6
HJ-10412840	SJ6935	6 1/2
HJ-10412848	SJ6936	6 1/2
HJ-11614648	SJ2326	7 1/4
HJ-124415448	SJ2426	7 3/4
HJ-13216248	SJ2526	8 1/4
HJT-101816	SJ7134S	5/8
HJT-122016	SJ7154S	3/4
HJT-142216	SJ7174S	7/8
HJT-162416	SJ7194S	1
HJT-182620	SJ7215S	11/8
HJT-202820	SJ7235S	1 1/4
HJT-223020	SJ7255S	1 3/8
HJT-243320	SJ7275S	1 1/2
HJT263520	SJ7295S	1 5/8
HJT-283720	SJ7315S	1 3/4

TORRINGTON	RBC	SIZE
HJT-324120	SJ7355S	2
HJT-364828	SJ8407S	2 1/4
HJT-405228	SJ8447S	2 1/2
HJT-445628	SJ8477S	23/4
HJT-486028	SJ8517S	3
HJTT-101816	SJ7134SS	5/8
HJTT-122816	SJ7154SS	3/4
HJTT-142216	SJ7174SS	7/8
HJTT-162416	SJ7194SS	1
HJTT-182620	SJ7215SS	1 1/8
HJTT-202820	SJ7235SS	1 1/4
HJTT-223020	SJ7255SS	1 3/8
HJTT-243320	SJ7275SS	1 1/2
HJTT-263520	SJ7295SS	1 5/8
HJTT-283720	SJ7315SS	1 3/4
HJTT-324120	SJ7355SS	2
HJTT-364828	SJ8407SS	2 1/4
HJTT-405228	SJ8447SS	2 1/2
HJTT-445628	SJ8477SS	2 3/4
HJTT-486028	SJ8517SS	3
IR-061012	IR7133	5/8
IR-081212	IR7153	3/4
IR-081216	IR7154	3/4
IR101412	IR7173	7/8
IR-111412	IR7173C	7/8
IR-101416	IR7174	7/8
IR-121612	IR7193	1
IR-121616	IR7194	1
IR131616	IR7194C	1
IR141816	IR7214	1 1/8
IR-606832	IR9728C1	4 1/4
IR-151816	IR7214C	1 1/8
IR-151820	IR7215C	1 1/8
IR-162016	IR7234	1 1/4
IR-162020	IR7235	1 1/4
IR-182216	IR7254	1 3/8
IR182220	IR7255	1 3/8
IR-192420	IR7275	1 1/2
IR-202416	IR7274C	1 12
IR-202420	IR7275C	1 1/2
IR-212616	IR7294	1 5/8
IR-212620	IR7295	1 5/8
IR222620	IR7295C	1 5/8
IR-222820	IR7315D	1 3/4
IR-232816	IR7314	1 3/4
IR-232820	IR7315	1 3/4

TORRINGTON	RBC	SIZE
IR-242816	IR7314C	1 3/4
IR242820	IR7315C	1 3/4
IR-253020	IR7335	1 7/8
IR243220	IR7355D2	2
IR-253220	IR7355D1	2
IR-263220	IR7355D	2
IR-273216	IR7354	2
IR-273220	IR7355	2
IR-283624	IR8406	2 1/4
IR-283628	IR8407	2 1/4
IR-314024	IR8446	2 1/2
IR314028	IR8447	2 1/2
IR324024	IR8446C	2 1/2
IR-324028	IR8447C	2 1/2
IR-354428	IR8477	2 3/4
IR-364424	IR8476C	2 3/4
IR-364428	IR8477C	2 3/4
IR-384828	IR8517	3
IR-404824	IR8516C	3
IR-404828	IR8517C	3
IR-445228	IR9567	3 1/4
IR-445232	IR9568	3 1/4
IR-475632	IR9608	3 1/2
IR-485632	IR9608C	3 1/2
IR-506032	IR9648	3 3/4
IR-526032	IR9648C	3 3/4
IR-526432	IR9688D	4
IR-546432	IR9688	4
IR-566432	IR9688C	4
IR-566832	IR9728	4 1/4
IR-606832	IR9728C1	4 1/4
IR-607236	IR6769	4 1/2
IR-648036	IR6848	5
IR-648040	IR6850	5
IR-688036	IR6849C	5
IR-728840	IR6918	5 1/2
IR-728848	IR6919	5 1/2
IR-809640	IR6925	6
IR809648	IR6926	6
IR-8810440	IR6935	6 1/2
IR-8810448	IR6936	6 1/2
IR-9611648	IR2326	7 1/4
IR-10412448	IR2426	7 3/4
IR-11213248	IR2526	8 1/4
IR-12014048	IR2626	8 3/4
IR-12814848	IR2726	9 1/4

RBC PITCHLIGN® Roller Bearings

MCGILL	RBC	SIZE
MR-10	SJ7134	5/8
MR-10-N	SJ7133	5/8
MR-10-RS	SJ7134S	5/8
MR-10-RSS	SJ7134SS	5/8
MR-12	SJ7154	3/4
MR-12-N	SJ7153	3/4
MR-12-RS	SJ7154S	3/4
MR-12-RSS	SJ7154SS	3/4
MR-14	SJ7174	7/8
MR-14-N	SJ7173	7/8
MR-14-RS	SJ7174S	7/8
MR-14-RSS	SJ7174SS	7/8
MR-16	SJ7194	1
MR-16-N	SJ7193	1
MR-16-RS	SJ7194S	1
MR-16-RSS	SJ7194SS	1
MR-18	SJ7215	1 1/8
MR-18-N	SJ7214	1 1/8
MR-18-RS	SJ7215S	1 1/8
MR-18-RSS	SJ7215SS	1 1/8
MR-20	SJ7235	1 1/4
MR-20-N	SJ7234	1 1/4
MR-20-RS	SJ7235S	1 1/4
MR-20-RSS	SJ7235SS	1 1/4
MR-22	SJ7255	1 3/8
MR-22-N	SJ7254	1 3/8
MR-22-RS	SJ7255S	1 3/8
MR-22-RSS	SJ7255SS	1 3/8
MR-24	SJ7275	1 1/2
MR-24-N	SJ7274	1 1/2
MR-24-RS	SJ7275S	1 1/2
MR-24-RSS	SJ7275SS	1 1/2
MR-26	SJ7295	1 5/8
MR-26-N	SJ7294	1 5/8
MR-26-RS	SJ7295S	1 5/8
MR-26-RSS	SJ7295SS	1 5/8
MR-28	SJ7315	1 3/4
MR-28-N	SJ7314	1 3/4
MR-28-RS	SJ7315S	1 3/4
MR-28-RSS	SJ7315SS	1 3/4
MR-30	SJ7335	1 7/8
MR-30-N	SJ7334	1 7/8
MR-30-RS	SJ7335S	1 7/8
MR-30-RSS	SJ7335SS	1 7/8
MR-31	SJ7345	1 15/16
MR-32	SJ7355	2
MR-32-N	SJ7354	2
MR-32-RS	SJ7355S	2
MR-32-RSS	SJ7355SS	2
MR-36	SJ8407	2 1/4
MR-36-N	SJ8406	2 1/4
MR-36-RS	SJ8407S	2 1/4
MR-36-RSS	SJ8407SS	2 1/4
MR-40	SJ8447	2 1/2
MR-40-N	SJ8446	2 1/2
MR-40-RS	SJ8447S	2 1/2
MR-40-RSS	SJ8447SS	2 1/2
MR-44	SJ8477	2 3/4
MR-44-N	SJ8476	2 3/4
MR-44-RS	SJ8477S	2 3/4
MR-44-RSS	SJ8477SS	2 3/4
MR-48	SJ8517	3
MR-48-N	SJ8516	3
MR-48-RS	SJ8517S	3
MR-48-RSS	SJ8517SS	3
MR-52	SJ9567	3 1/4
MR-56	SJ9608	3 1/2
MR-56-N	SJ9607	3 1/2
MR-56-RS	SJ9608S	3 1/2
MR-56-RSS	SJ9608SS	3 1/2

MCGILL	RBC	SIZE
MR-60	SJ9648	3 3/4
MR-64	SJ9688	4
MR-68	SJ9728	4 1/4
MR-72	TJ6769	4 1/2
MR-80	SJ6849	5
MR-88	TJ6919	5 1/2
MR-88-N	TJ6918	5 1/2
MR-104-N	SJ6935	6 1/2
MR-116	SJ2326	7 1/4
MR-132	SJ2526	8 1/4
MI-6	IR7134	5/8
I-6-N	IR7133	5/8
MI-8	IR7154	3/4
MI-8-N	IR7153	3/4
MI-9-N	IR7153C	3/4
MI-10	IR7174	7/8
MI-10-N	IR7173	7/8
MI-11-N	IR7173C	7/8
MI-12	IR7194	1
MI-12-N	IR7193	1
MI-13	IR7194C	1
MI-13-N	IR7193C	1
MI-14	IR7215	1 1/8
MI-14-N	IR7214	1 1/8
MI-15	IR7215C	1 1/8
MI-15-N	IR7214C	1 1/8
MI-16	IR7235	1 1/4
MI-16-N	IR7234	1 1/4
MI-17	IR7255D	1 3/8
MI-18	IR7255	1 3/8
MI-18-N	IR7254	13/8
MI-19	IR7275	1 1/2
MI-20	IR7275C	1 1/2
MI-20-N	IR7274C	1 1/2
MI-21	IR7295	1 5/8
MI-21-N	IR7294	1 5/8
MI-22-4S	IR7295C	1 5/8
MI-22	IR7315D	1 3/4
MI-23	IR7315	1 3/4
MI-24	IR7315C	1 3/4
MI-24-N	IR7314C	1 3/4
MI-25	IR7355D1	2
MI-25-4S	IR7335	1 7/8
MI-26	IR7355D	2
MI-26-2S	IR7345	1 15/16
MI-27	IR7355	2
MI-28	IR8407	2 1/4
MI-28N	IR8406	2 1/4
MI-30	IR8407C1	2 1/4
MI-31	IR8447	2 1/2
MI-32	IR8447C	2 1/2
MI-32-N	IR8446C	2 1/2
MI-34	IR8447C1	2 1/2
MI-35	IR8477	2 3/4
MI-36	IR8477C	2 3/4
MI-36-N	IR8476C	2 3/4
MI-38	IR8517	3
MI-39	IR8517C1	3
MI-40	IR8517C	3
MI-40-N	IR8516C	3
MI-42	IR9567D	3 1/4
MI-44	IR9567	3 1/4
MI-47	IR9608	3 1/2
MI-48	IR9608C	3 1/2
MI-48-N	IR9607C	3 1/2
MI-50	IR9648	3 3/4
MI-52	IR9648C	3 3/4
MI-54	IR9688	4
MI-56	IR9688C	4
MI-58	IR9728C	4 1/4
MI-60	IR9728C1	4 1/4

MCGILL	RBC	SIZE
MI-62	IR6769C	4 1/2
MI-64	IR6849	5
MI-68	IR6849C	5
MI-72	IR6919	5 1/2
MI-72-N	IR6918	5 1/2
MI-80	IR6926	6
MI-80-N	IR6925	6
MI-88	IR6936	6 1/2
MI-88-N	IR6935	6 1/2
MI-96	IR2326	7 1/4
MI-104	IR2426	7 3/4
MI-112	IR2526	81/4
MI-120	IR2625	8 3/4
MI-128	IR2726	9 1/4

INA	RBC	SIZE
NCS-1012	SJ7133	5/8
NCS-1016	SJ7134	5/8
NCS-1212	SJ715	3/4
NCS-1216	SJ7154	3/4
NCS-1412	SJ7173	7/8
NCS-1416	SJ7174	7/8
NCS-1612	SJ7193	1
NCS-1616	SJ7194	1
NCS-1816	SJ7214	1 1/8
NCS-1820	SJ7215	1 1/8
NCS-2016	SJ7234	1 1/4
NCS-2020	SJ7235	1 1/4
NCS-2216	SJ7254	1 3/8
NCS-2220	SJ7255	1 3/8
NCS-2416	SJ7274	1 1/2
NCS-2420	SJ7275	1 1/2
NCS-2616	SJ7294	1 5/8
NCS-2620	SJ7295	1 5/8
NCS-2816	SJ7314	1 3/4
NCS-2820	SJ7315	1 3/4
NCS-3020	SJ7335	1 7/8
NCS-3220	SJ7355	2
NCS-3624	SJ8406	2 1/4
NCS-4024	SJ8446	2 1/2
NCS-4424	SJ8476	2 3/4
NCS-4824	SJ8516	3
NCS-5228	SJ9567	3 1/4
NCS-5632	SJ9608	3 1/2
NCS-6832	SJ9728	4 1/4
PI-081212	IR7153	3/4
PI-081216	IR7154	3/4
PI-101412	IR7173	7/8
PI-101416	IR7174	7/8
PI-121612	IR7193	1
PI-121616	IR7194	1
PI-141816	IR7214	1 1/8
PI-141820	IR7215	1 1/8
PI-162016	IR7234	1 1/4
PI-162020	IR7235	1 1/4
PI-182216	IR7254	1 3/8
PI-182220	IR7255	1 3/8
PI-202420	IR7275C	1 1/2
PI-212616	IR7294	1 5/8
PI-222620	IR7295C	1 5/8
PI232820	IR7315	1 3/4
PI-242820	IR7315C	1 3/4
PI-253020	IR7335	1 7/8
PI-273220	IR7355	2
PI-283264	IR8406C	2 1/4
PI-283624	IR8407C1	2 1/4
PI-324024	IR8447	2 1/2
PI-364424	IR8447	2 3/4
PI-404824	IR8517	3
PI-445228	IR9568	3 1/4
PI-485632	IR9648	3 3/4

Universal Series™ Interchange Tables

STANDARD STUD - With Hex Socket Head – Sealed

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange		**REPLACES**					
RBC Part No.	**McGill**	**Torrington**	**RBC**		**McGill**		**Torrington**	
S16LW	CF-1/2-SB	CRSB-8-1						
S18LW	CF-9/16-SB	–						
S20LW	CF-5/8-SB	CRSB-10-1						
S22LW	CF-11/16-SB	–						
S24LW	CF-3/4-SB	CRSB-12	S24	S24L	CF-3/4	CF-3/4S	CR-12	CRS-12
S28LW	CF-7/8-SB	CRSB-14	S28	S28L	CF-7/8	CF-7/8S	CR-14	CRS14
S32LW	CF-1-SB	CRSB-16	S32	S32L	CF-1	CF-1S	CR-16	CRS-16
S36LW	CF-1 1/8-SB	CRSB-18	S36	S36L	CF-1 1/8	CF-1 2/8S	CR-18	CRS-18
S40LW	CF-1 1/4-SB	CRSB-20	S40	S40L	CF-1 1/4	CF-1 1/4S	CR20	CRS-20
S44LW	CF-1 3/8-SB	CRSB-22	S44	S44L	CF-1 3/8	CF-1 3/8S	CR22	CRS-22
S48LW	CF-1 1/2-SB	CRSB-24	S48	S48L	CF-1 1/2	CF-1 1/2S	CR-24	CRS-24
S52LW	CF-1 5/8-SB	CRSB-26	S52	S52L	CF-1 5/8	CF-1 5/8S	CR-26	CRS-26
S56LW	CF-1 3/4-SB	CRSB-28	S56	S56L	CF-1 3/4	CF-1 3/4S	CR-28	CRS-28
S60LW	CF-1 7/8-SB	CRSB-30	S60	S60L	CF-1 7/8	CF-1 7/8S	CR-30	CRS-30
S64LW	CF-2-SB	CRSB-32	S64	S64L	CF-2	CF-2S	CR-32	CRS-32
S72LW	CF-2 1/4-SB	CRSB-36	S72	S72L	CF-2 1/4	CF-2 1/4S	CR-36	CRS-36
S80LW	CF-2 1/2-SB	CRSB-40	S80	S80L	CF- 2 1/2	CF-2 1/2S	CR-40	CRS-40
S88LW	CF-2 3/4-SB	CRSB-44	S88	S88L	CF-2 3/4	CF-2 3/4S	CR-44	CRS-44
S96LW	CF-3-SB	CRSB-48	S96	S96L	CF-3	CF-3S	CR-48	CRS-48
S104LW	CF-3 1/4-SB	CRSB-52	S104	S104L	CF-3 1/4	CF-3 1/4S	CR-52	CRS-52
S112LW	CF-3 1/2-SB	CRSB-56	S112	S112L	CF- 3 1/2	CF-3 1/2S	CR-56	CRS-56
S128LW	CF-4-SB	CRSB-64	S128	S128L	CF-4	CF-4S	CR64	CRS-64
S160LW	CF-5-SB	CRSB-80	S160	S160L	CF-5	CF-5S	CR-80	CRS-80
S192LW	CF-6-SB	CRSB-96	S192	S192L	CF-6	CF-6S	CR-96	CRS-96

STANDARD STUD - With Crowned Outer – Sealed – Hex Head

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange		**REPLACES**		
RBC Part No.	**McGill**	**Torrington**	**RBC**	**McGill**	**Torrington**
S16LW	CCF-1/2-SB	CRSB-8-1			
S18LW	CCF-9/16-SB	–			
S20LW	CCF-5/8-SB	CRSB-10-1			
S22LW	CCF-11/16-SB	–			
S24LW	CCF-3/4-SB	CRSB-12	CS24L	CCF-3/4S	CRSC-12
S28LW	CCF-7/8-SB	CRSB-14	CS28L	CCF-7/8S	CRSC14
S32LW	CCF-1-SB	CRSB-16	CS32L	CCF-1S	CRSC-16
S36LW	CCF-1 1/8-SB	CRSB-18	CS36L	CCF-1 2/8S	CRSC-18
S40LW	CCF-1 1/4-SB	CRSB-20	CS40L	CCF-1 1/4S	CRSC-20
S44LW	CCF-1 3/8-SB	CRSB-22	CS44L	CCF-1 3/8S	CRSC-22
S48LW	CCF-1 1/2-SB	CRSB-24	CS48L	CCF-1 1/2S	CRSC-24
S52LW	CCF-1 5/8-SB	CRSB-26	CS52L	CCF-1 5/8S	CRSC-26
S56LW	CCF-1 3/4-SB	CRSB-28	CS56L	CCF-1 3/4S	CRSC-28
S60LW	CCF-1 7/8-SB	CRSB-30	CS60L	CCF-1 7/8S	CRSC-30
S64LW	CCF-2-SB	CRSB-32	CS64L	CCF-2S	CRSC-32
S72LW	CCF-2 1/4-SB	CRSB-36	CS72L	CCF-2 1/4S	CRSC-36
S80LW	CCF-2 1/2-SB	CRSB-40	CS80L	CCF-2 1/2S	CRSC-40
S88LW	CCF-2 3/4-SB	CRSB-44	CS88L	CCF-2 3/4S	CRSC-44
S96LW	CCF-3-SB	CRSB-48	CS96L	CCF-3S	CRSC-48
S104LW	CCF-3 1/4-SB	CRSB-52	CS104L	CCF-3 1/4S	CRSC-52
S112LW	CCF-3 1/2-SB	CRSB-56	CS112L	CCF-3 1/2S	CRSC-56
S128LW	CCF-4-SB	CRSB-64	CS128L	CCF-4S	CRSC-64
S160LW	CCF-5-SB	–	CS160L	CCF-5S	CRSC-80
S192LW	CCF-6-SB	–	CS192L	CCF-6S	CRSC-96

Universal Series™ Interchange Tables

STANDARD STUD - With Hex Socket Head – Eccentric Bushing – Sealed

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange	
RBC Part No.	**McGill**	**Torrington**
S16LW	CFE-1/2-SB	CRSBE-8-1
S18LW	CFE-9/16-SB	–
S20LW	CFE-5/8-SB	CRSBE-10-1
S22LW	CFE-11/16-SB	–
S24LW	CFE-3/4-SB	CRSBE-12
S28LW	CFE-7/8-SB	CRSBE-14
S32LW	CFE-1-SB	CRSBE-16
S36LW	CFE-1 1/8-SB	CRSBE-18
S40LW	CFE-1 1/4-SB	CRSBE-20
S44LW	CFE-1 3/8-SB	CRSBE-22
S48LW	CFE-1 1/2-SB	CRSBE-24
S52LW	CFE-1 5/8-SB	CRSBE-26
S56LW	CFE-1 3/4-SB	CRSBE-28
S60LW	CFE-1 7/8-SB	CRSBE-30
S64LW	CFE-2-SB	CRSBE-32
S72LW	CFE-2 1/4-SB	CRSBE-36
S80LW	CFE-2 1/2-SB	CRSBE-40
S88LW	CFE-2 3/4-SB	CRSBE-44
S96LW	CFE-3-SB	CRSBE-48
S104LW	CFE-3 1/4-SB	CRSBE-52
S112LW	CFE-3 1/2-SB	CRSBE-56
S128LW	CFE-4-SB	CRSBE-64
S160LW	CFE-5-SB	CRSBE-80
S192LW	CFE-6-SB	CRSBE-96

STANDARD STUD - With Hex Socket Head Crowned Outer Eccentric Bushing – Sealed

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange	
RBC Part No.	**McGill**	**Torrington**
S16LW	CCF-1/2-SB	CRSB-8-1
S18LW	CCF-9/16-SB	–
S20LW	CCF-5/8-SB	CRSB-10-1
S22LW	CCF-11/16-SB	–
S24LW	CCF-3/4-SB	CRSB-12
S28LW	CCF-7/8-SB	CRSB-14
S32LW	CCF-1-SB	CRSB-16
S36LW	CCF-1 1/8-SB	CRSB-18
S40LW	CCF-1 1/4-SB	CRSB-20
S44LW	CCF-1 3/8-SB	CRSB-22
S48LW	CCF-1 1/2-SB	CRSB-24
S52LW	CCF-1 5/8-SB	CRSB-26
S56LW	CCF-1 3/4-SB	CRSB-28
S60LW	CCF-1 7/8-SB	CRSB-30
S64LW	CCF-2-SB	CRSB-32
S72LW	CCF-2 1/4-SB	CRSB-36
S80LW	CCF-2 1/2-SB	CRSB-40
S88LW	CCF-2 3/4-SB	CRSB-44
S96LW	CCF-3-SB	CRSB-48
S104LW	CCF-3 1/4-SB	CRSB-52
S112LW	CCF-3 1/2-SB	CRSB-56
S128LW	CCF-4-SB	CRSB-64
S160LW	CCF-5-SB	–
S192LW	CCF-6-SB	–

Universal Series™ Interchange Tables

HEAVY STUD - With Hex Socket Head – Sealed

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange		**REPLACES**				
RBC Part No.	**McGill**	**Torrington**	**RBC**		**McGill**		**Torrington**
H16LW	CFH-1/2-SB						
H18LW	CFH-9/16-SB						
H20LW	CFH-5/8-SB						
H22LW	CFH-11/16-SB						
H24LW	CFH-3/4-SB	N/A	H24	H24L	CFH-3/4	CFH-3/4S	N/A
H28LW	CFH-7/8-SB	N/A	H28	H28L	CFH-7/8	CFH-7/8S	N/A
H32LW	CFH-1-SB	N/A	H32	H32L	CFH-1	CFH-1S	N/A
H36LW	CFH-1 1/8-SB	N/A	H36	H36L	CFH-1 1/8	CFH-1 2/8S	N/A
H40LW	CFH-1 1/4-SB	N/A	H40	H40L	CFH-1 1/4	CFH-1 1/4S	N/A
H44LW	CFH-1 3/8-SB	N/A	H44	H44L	CFH-1 3/8	CFH-1 3/8S	N/A
H48LW	CFH-1 1/2-SB	N/A	H48	H48L	CFH-1 1/2	CFH-1 1/2S	N/A
H52LW	CFH-1 5/8-SB	N/A	H52	H52L	CFH-1 5/8	CFH-1 5/8S	N/A
H56LW	CFH-1 3/4-SB	N/A	H56	H56L	CFH-1 3/4	CFH-1 3/4S	N/A
H60LW	CFH-1 7/8-SB	N/A	H60	H60L	CFH-1 7/8	CFH-1 7/8S	N/A
H64LW	CFH-2-SB	N/A	H64	H64L	CFH-2	CFH-2S	N/A
H72LW	CFH-2 1/4-SB	N/A	H72	H72L	CFH-2 1/4	CFH-2 1/4S	N/A
H80LW	CFH-2 1/2-SB	N/A	H80	H80L	CFH- 2 1/2	CFH-2 1/2S	N/A
H88LW	CFH-2 3/4-SB	N/A	H88	H88L	CFH-2 3/4	CFH-2 3/4S	N/A
H96LW	CFH-3-SB	N/A	H96	H96L	CFH-3	CFH-3S	N/A
H104LW	CFH-3 1/4-SB	N/A	H104	H104L	CFH-3 1/4	CFH-3 1/4S	N/A
H112LW	CFH-3 1/2-SB	N/A	H112	H112L	CFH- 3 1/2	CFH-3 1/2S	N/A
H128LW	CFH-4-SB	N/A	H128	H128L	CFH-4	CFH-4S	N/A
H160LW	CFH-5-SB						
H192LW	CFH-6-SB						
H224LW	CFH-7-SB						

HEAVY STUD With Crowned Outer – Sealed – Hex Head

RBC UNIVERSAL **HexLube™** Series	**REPLACES** Direct Interchange		**REPLACES**		
RBC Part No.	**McGill**	**Torrington**	**RBC**	**McGill**	**Torrington**
CH16LW	CCFH-1/2-SB	N/A	CH16L	CCFH-1/2S	N/A
CH18LW	CCFH-9/16-SB	N/A	CH18L	CCFH-9/16-S	N/A
CH20LW	CCFH-5/8-SB	N/A	CH20L	CCFH-5/8-S	N/A
CH22LW	CCFH-11/16-SB	N/A	CH22L	CCFH-11/16S	N/A
CH24LW	CCFH-3/4-SB	N/A	CS24L	CCFH-3/4S	N/A
CH28LW	CCFH-7/8-SB	N/A	CS28L	CCFH-7/8S	N/A
CH32LW	CCFH-1-SB	N/A	CS32L	CCFH-1S	N/A
CH36LW	CCFH-1 1/8-SB	N/A	CS36L	CCFH-1 2/8S	N/A
CH40LW	CCFH-1 1/4-SB	N/A	CS40L	CCFH-1 1/4S	N/A
CH44LW	CCFH-1 3/8-SB	N/A	CS44L	CCFH-1 3/8S	N/A
CH48LW	CCFH-1 1/2-SB	N/A	CS48L	CCFH-1 1/2S	N/A
CH52LW	CCFH-1 5/8-SB	N/A	CS52L	CCFH-1 5/8S	N/A
CH56LW	CCFH-1 3/4-SB	N/A	CS56L	CCFH-1 3/4S	N/A
CH60LW	CCFH-1 7/8-SB	N/A	CS60L	CCFH-1 7/8S	N/A
CH64LW	CCFH-2-SB	N/A	CS64L	CCFH-2S	N/A
CH72LW	CCFH-2 1/4-SB	N/A	CS72L	CCFH-2 1/4S	N/A
CH80LW	CCFH-2 1/2-SB	N/A	CS80L	CCFH-2 1/2S	N/A
CH88LW	CCFH-2 3/4-SB	N/A	CS88L	CCFH-2 3/4S	N/A
CH96LW	CCFH-3-SB	N/A	CS96L	CCFH-3S	N/A
CH104LW	CCFH-3 1/4-SB	N/A	CS104L	CCFH-3 1/4S	N/A
CH112LW	CCFH-3 1/2-SB	N/A	CS112L	CCFH-3 1/2S	N/A
CH128LW	CCFH-4-SB	N/A	CS128L	CCFH-4S	N/A
CH160LW	CCFH-5-SB	N/A	CS160L	CCFH-5S	N/A
CH192LW	CCFH-6-SB	N/A	CS192L	CCFH-6S	N/A

Company Overview

The FAG brand started with an ingenious idea. In 1883, Friedrich Fischer designed a ball grinding machine in Schweinfurt, Germany that, for the first time, made it possible to produce absolutely round steel balls by grinding. This invention is regarded as the foundation for the entire rolling bearing industry.

This is one of the reasons why FAG has long been considered to be a pioneer in rolling bearing technology. Today, FAG is one of the leading brands for applications in machine building, the automotive industry and in aviation and aerospace technology.

The Schaeffler Group's FAG brand has companies, subsidiaries and sales agencies in all major industrial countries.

Since 2001, FAG has been part of the Schaeffler Group and has been active in all of the group's divisions - Aerospace, Automotive and Industrial. Together with INA's complementary product range, FAG has one of the widest product portfolios in the rolling bearing industry, covering nearly all applications in production machinery, power transmission and rail technology, heavy industry and consumer products.

FAG ball bearings and roller bearings are manufactured as standard and special bearings in many designs and sizes with diameters ranging from 3 millimeters to 4.25 meters. Together with INA, FAG offers customers comprehensive support and services for the diagnosis, maintenance and mounting of rolling bearings and complete systems.

As a forward-looking company, the Schaeffler Group with its brand FAG has invested significant amounts in research and development. Modern simulation methods and testing facilities as well as special materials engineering laboratories ensure the continuous development and improvement of all product lines and confirm the innovative force of FAG.

Production

We produce precision products in 63 plants across the globe - everything from 2mm drawn cup needle roller bearings to large rolling bearings with an outside diameter of 4.25 meters.

At our Schweinfurt locations we have one of the world's largest bearing ring forges. 80,000 metric tons of steel are processed here every year alone. At our location in Herzogenaurach, 520 million finished parts are produced from 45,000 metric tons of steel every year.

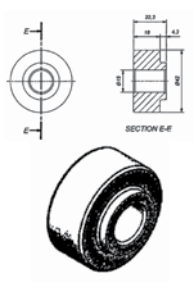
With its brands INA and FAG the Schaeffler Group is among the leaders in the fields of cold forming technology, forging, machining, heat treatment, plating technology, and assembly.

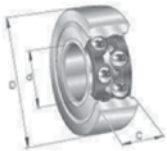
Deep drawing, a process in cold forming is one of the core technologies at INA and FAG. Our unique expertise in metal forming of precision products enables us to manufacture solutions tailored to the customer in high-volume production at an outstanding cost-performance ratio.

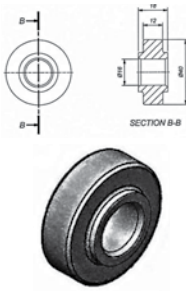
Member of the Schaeffler Group

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	IB07330_SRSP	WATER PUMP SPINDLE BEARING AA35741 (DO NOT REORDER) 15.918X 30 X 38.9 X 69.4	15,8	30	69,4	39

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	58043X25	BUSH SQUARE for CB205 BEARING16mm id	15,8	25		

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1542_C	DEEP GROOVE BALL BEARING (CJ13975) 15 x 42 x 18/22.3	15	42	22	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LR5202_KDDU_C	TRACK ROLLER BEARING	15	35	11	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	203_KRRAH02_C	CYLINDRICAL INSERT BALL BEARING ROUND ID 5/8" (15.87) (AN142670)	5/8	40	18	12

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	885117_C	WATER PUMP SPINDLE BEARING	15,91	30	119,1	38,9

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	885118_C	WATER PUMP SPINDLE BEARING 30 X 38,9 X 15,91 - 119,1 X 37,3 X 42,9	15,91	30	136,4	38,9

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	885151_G_C	WATER PUMP SPINDLE BEARING (W247658) 15,9 X 30 X 127,8X 38,9	15,91	30	127,8	38,9

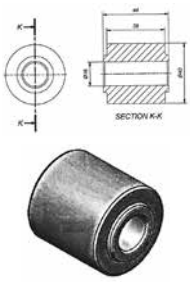
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	885158_C	WATER PUMP SPINDLE BEARING 15.918 X 30 X 38.9 X 82,6	15,918	30	82,6	38,9

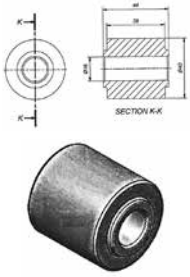
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	885165_C	WATER PUMP SPINDLE BEARING 15.918 X 30 X 38.9 X 82,6	15,918	30	82,6	38,9

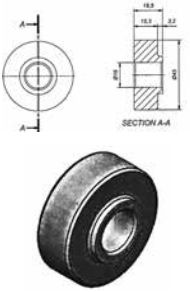
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W2637_C	WATER PUMP SPINDLE BEARING	15,94	30	161,8	38,73

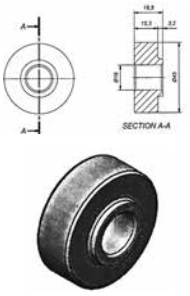
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W3520_2_C	WATER PUMP SPINDLE BEARING	15,94	30	132,1	38,73

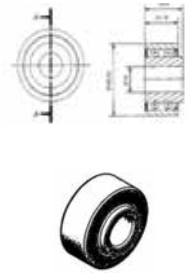
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	836_B_C	WATER PUMP SPINDLE BEARING	16	30	127,8	38,9

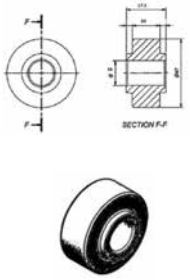
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DAC164044_2RSLCS16	ANGULAR CONTACT BALL BEARING (AN212132)	16	40	22	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1640_C	DEEP GROOVE BALL BEARING (AN212132) 16 x 40 x 39/44	16	40	22	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1645_ARSLRS	DEEP GROOVE BALL BEARING (AA21480) 16 x 45 x 15.3/18.5	16	45	18,7	15,5

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1645ARSLRS	DEEP GROOVE BALL BEARING (AA21480) 16 x 45 x 15.3/18.6	16	45	18,7	15,5

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1645ARSLS_WC	DEEP GROOVE BALL BEARING (AA59196) 16 x 45 x 22.76/25.9	16	45	18,7	15,5

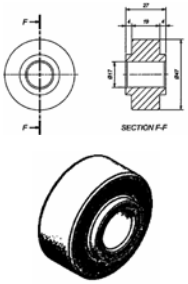
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1647_C	DEEP GROOVE BALL BEARING (W247167B) 16 x 47 x 14/17.5	16	47	17,5	14

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	FS555	BEARING KIT COMPLETE SOILMASTER PLANTER WHEEL	16/19	51,5	115	60

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6203_2RS_5/8IN_C	DEEP GROOVE BALL BEARING	17	40	12	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CB203_C	DEEP GROOVE BALL BEARING SPHERICAL OD	17	40	12	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CSA203_C	INSERT BEARING CYLINDRICAL ODECCENTRIC LOCKING COLLAR	17	40	12	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1747_C	DEEP GROOVE BALL BEARING (CJ13976) 17 x 47 x 19/27	16	47	27	19

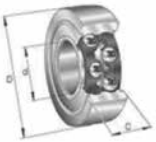
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	DG1952_C	DEEP GROOVE BALL BEARING (AA27002) 19 x 52 x 15/21	19	52	21	15

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SER204-12_C	IINSERT BEARINGS CYLINDRICAL OD	3/4	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CSA204_C	IINSERT BEARING CYLINDRICAL ODECCENTRIC LOCKING COLLAR	20	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CUC204_12_C	BALL BEARING INSERT	3/4	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CUC204_C	BALL BEARING INSERT	20	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LR5204_KDD_C	TRACK ROLLER BEARING	20	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SER204_C	IINSERT BEARINGS CYLINDRICAL OD	20	47	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	205_KRRAH02_C	CYLINDRICAL INSERT BALL BEARING HEX ID 7/8" (22.25) AA28271	22,25	52	25,4	16,7

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	205_KRRBAH02_C	RADIAL INSERT BALL BEARING HEX ID 7/8" (22.25) AA22097	22,25	52	25,4	16

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	PF205	PRESSED ROUND STEEL PLATES FOR INSERT BEARINGS 2 PER SET	25	24	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	PF205_KRRAH02_C	INSERT BALL BEARING HEX ID 22,25mm CYLINDRICAL OD WITH PLATES	25	24	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	PF205_KRRBAH02_C	INSERT BALL BEARING HEX ID 22,25mm SPHERICAL OD WITH PLATES (AA22098)	25	24	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	PFL205_C	PRESSED STEEL TRIANGULAR FLANGE CW ECCENTRIC LOCKING COLLAR ON BEARING	25	24	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W205_PPB7	RADIAL BALL BEARING ROUND ID 15/16" SPHERICAL OD 52mm INNER RING 35 mm WIDE	1"	24	18	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W208_PP6_C	DISC HARROW BALL BEARING SQUARE ID 1" (25,4) CYLINDRICAL OD 80mm	1"	80	36,51	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W208_PPB6	DISC HARROW BALL BEARING SQUARE ID 1" SPHERICAL OD 80mm	1"	80	36,51	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W208_PPB6_C	DISC HARROW BALL BEARING SQUARE ID 1" SPHERICAL OD 80mm	1"	80	36,51	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	207_KRRB12_C	RADIAL INSERT BALL BEARING HEX 1.1/8" (28,6) NM156816_C911.1/8" (28,6) X 72 X 17/25	1 1/8	72	25	17

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	207_KRRB9_C	RADIAL INSERT BALL BEARING HEX 1.1/8" (28,6) X 72 X 17/37,7	1 1/8	72	37,7	17

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W208_PP5_C	DISC HARROW BALL BEARING SQUARE ID 1,1/8" (28,6) CYLINDRICAL OD 80mm	1 1/8	80	36,51	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W208_PPB5	DISC HARROW BALL BEARING SQUARE ID 1,1/8" SPHERICAL OD 80mm	1 1/8	80	36,51	18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	88506	DEEP GROOVE BALL BEARING 30 X 62 X 24/16	30	62	24	16

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	30BG05S2G_2DS_C	DOUBLE ROW ANGULAR CONTACT BALL BEARINGS 30X52	30	52	22	22

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	30BG05S5G_2DS_C	DOUBLE ROW ANGULAR CONTACT BALL BEARINGS 30X55 (AA38601)	30	55	22	22

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4509_B	DISC HARROW BALL BEARING SQUARE ID CYLINDRICAL OD 30 X 85 X 30/35	30	85	36,7	36,7

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	613233_H_C	DISC HARROW BALL BEARING UNIT LUBRICATABLE SQUARE ID 30 CYLINDRICAL od 85mm 4509B	30	85	36,7	36,7

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	88506_2RS_C	DEEP GROOVE BALL BEARING 30 X 62 X 24/16	30	62	24	16

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	88107_C	DEEP GROOVE BALL BEARING	35	72	25	

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	88507_C	DEEP GROOVE BALL BEARING 35 X 72 X 25/17	35	72	25	17

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W209_PPB11	DISC HARROW BALL BEARING ROUND ID 45.24mm SPHERICAL OD 85mm	45	85	36,53	22

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W209_PPB2	DISC HARROW BALL BEARING ROUND ID 45mm SPHERICAL OD 85mm	45	85	30,18	30,18

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	XF009	4 HOLE SQUARE STEEL FLANGE BALL BEARING UNIT 44,45mm ID 180OD 94 HC	45	127	42,8	42

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W211_PPB13	DISC HARROW BALL BEARING ROUND ID 45.34mm SPHERICAL OD 100mm	45,43	100	33,34	25

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	GW211_PP2	DISC HARROW BALL BEARING UNIT LUBRICATABLE ROUND ID 2,3/16" (55,58) CYLINDRICAL OD 125mm	2 3/16	100	33,34	33,34

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	GW211_PPB2	DISC HARROW BALL BEARING UNIT LUBRICATABLE ROUND ID 2,3/16" (55,58) SPHERICAL OD 125mm	2 3/16	100	33,34	33,34

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W211_PPB2	DISC HARROW BALL BEARING ROUND ID 55.58mm SPHERICAL OD 100mm	2 3/16	100	33,34	33,34

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W211_PPB20_C	DISC HARROW BALL BEARING ROUND ID 56mm SPHERICAL OD 100mm	2 3/16	100	33,34	33,34

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W211_PPB8	DISC HARROW BALL BEARING ROUND ID 55.58mm SPHERICAL OD 100mm	2 3/16	100	33,34	25

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	W211_PPB9	DISC HARROW BALL BEARING ROUND ID 55.75mm SPHERICAL OD 100mm (AHGM_21695)	55,75	100	39,69	25

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	BAA0001_C	ANGULAR CONTACT HUB UNIT FOR CJ15624 4 HOLE DISC				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	BAA0003-1647	ANGULAR CONTACT HUB UNIT FOR CJ14048 DISC JD15626				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	38_4VB_CH_K12_UN	38,4VB CHAIN C/W K1 ATT. EVERY 2ND, 38,4 X 15,88 X 19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	38_4VB_CH_K14_UN	38,4VB CHAIN C/W K1 ATT. EVERY 4TH, 38,4 X 15,88 X 19,05				

Agricultural Hub Units

Sample	Item Reference	Description	ID
	BAA0001_C	ANGULAR CONTACT HUB UNIT FOR CJ15624 4 HOLE DISC	22

Sample	Item Reference	Description	ID
	BAA0002_C	ANGULAR CONTACT HUB UNIT FOR CJ15624 5 HOLE DISC	22

Sample	Item Reference	Description	ID
	BAA0003-1647	ANGULAR CONTACT HUB UNIT FOR CJ14048 DISC JD15626	16

Sample	Item Reference	Description	ID
	BAA0004_C	ANGULAR CONTACT HUB UNIT FOR CQ54003 20" DISC FURROW OPENER.	20

Agricultural Hub Units

Sample	Item Reference	Description	ID
	BAA0005_L	ANGULAR CONTACT HUB UNIT LEFT HAND THREAD	20

Sample	Item Reference	Description	ID
	BAA0005_R	ANGULAR CONTACT HUB UNIT RIGHT HAND THREAD	20

Sample	Item Reference	Description	ID
	CW_SHAFT_L or CW_SHAFT_R	ANGULAR CONTACT HUB UNIT CLOSER WHEEL ADAPTOR SHAFT LEFT or RIGHT BAA0005	20

Sample	Item Reference	Description	ID
	GW_SHAFT_L or GW_SHAFT_R	ANGULAR CONTACT HUB UNIT GUAGE WHEEL ADAPTOR SHAFT LEFT or RIGHT BAA0005	30

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	38_4V_SD4_CH_TYC	38,4V CHAIN C/W SD ATT EVERY 4TH, 38,4 X 15,88 X 18,0				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	40MM_CH_LV_S1/L4_UN	40mm CHAIN C/W S1 ATT EVERY 4TH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A2050_CH_UN	A2050 DOUBLE PITCH CHAIN 1,1/4", 31,75 X 10,16 X 9,25				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/2/4_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 2ND AND 4TH, 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/2/6_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 2ND AND 6TH, 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/L2_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 2ND 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/L4_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 4TH 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/L6_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 6TH 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	A557_CH_K39MS/L8_UN	A557 CHAIN C/W K39 SLOTTED ATT EVERY 8TH 41,4 X 17,75 X19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	AL667XH_CH	AL667XH PINTEL CHAIN 57.15MM, 57,15 X * X 26,6				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	C2040_CH_HP_UN	DOUBLE PITCH CHAIN 1" HOLLOW PIN, 25,4 X 7, 92 X 7,94				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	C2052_CH_HP_UN	DOUBLE PITCH CHAIN 1.1/4" LARGE ROLLER HOLLOW PIN , 31,75 X19,05 X 9,25				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	C2052_CH_SP_L4_ZP	DOUBLE PITCH CHAIN 1.1/4" LARGE ROLLER SP EV 4TH ZINC PLATED, 31,75 X 19,05 X 9,25				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA2062H_CH_UN	DOUBLE PITCH HEAVY DUTY CHAIN 1.1/2" LARGE ROLLER WITH EMBOSSED SIDES , 38,1 X 22,22 X 12,7				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA2062X24_PB	1.1/2" LARGE ROLLER PILOT BORE SPROCKET 24 TEETH, 38,1 X 22,22 X 12,7				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_CH_K25/L2/L4	CA550 CHAIN C/W K25 ATT EVERY 2ND AND EVERY 4TH, 41,4 X 16,87 X 19,81				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_CH_K25/L4_UN	CA550 CHAIN C/W K25 ATT EVERY 4TH, 41,4 X 16,87 X 19,81				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_CH_SD6_UN	CA550 CHAIN C/W SD ATT EVERY 6TH, 41,4 X 16,87 X 19,81				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_CHX54P_C5EL6	CA550 CHAIN C/W C5E ATT EVERY 6TH 300121120, 41,4 X 16,87 X19,81				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_CHX54P_LV41/L6	CA550 CHAIN C/W C5E ATT EVERY 6TH 300121121, 41,4 X 16,87 X19,81				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA557_CH_K39MS/L2 CA557_CH_K39MS/L4 CA557_CH_K39MS/L6 CA557_CH_K39MS/L8 CA557_CH_K39MSL2/4 CA557_CH_K39MSL2/6	CHAIN K39MS SLOTTED ATT EVERY 2ND, 41,4 X 17,78 X 20,24 SLOTTED ATT EVERY 4TH SLOTTED ATT EVERY 4TH SLOTTED ATT EVERY 4TH SLOTTED ATT EVERY 2ND AND 4TH SLOTTED ATT EVERY 2ND AND 6TH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA620_CH_A24/L4_UN	CA620 A2 ATT EV 4TH, 42,01 X 17,91 X 24,51				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA627_CHX72P_CPE12 CA627_CHX76P_C6E12 CA627_CHX81P_C6E10 CA627_CHX91P_C6E10	CA627 WITH C6 ATT EVERY 12TH 72 PITCHES (CL523308_2) (GH34850) 30 X 15,88 X 19,04 CA627 WITH C6 ATT EVERY 12TH 76 PITCHES (CL523308_2) (GH34851) 30 X 15,88 X 19,05 CA627 WITH C6 ATT EVERY 10TH 81 PITCHES (CL6921262) (FAHR 643782) 30 X 15,88 X 19,05 CA627 WITH C6 ATT EVERY 10TH 81 PITCHES (FAHR_643782) 30 X 15,88 X 19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	F_C14C137_COMP	S42 CHAIN X 74P C/W 19 BUCKETS(SLATERY), 34,93 X 14,27 X 19,5				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	JD_AN102009_UN	CA555 CHAIN X 48P C6E ATT, 41,4 X 16,87 X 12,7				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	NO25_CH NO32_CH NO42_CH NO55_CH	NO25 PRESSED STEEL CHAIN P= 23MM, 23 X * X 11,5 NO32 PRESSED STEEL CHAIN P= 29.5MM, 29,5 X * X 15 NO42 PRESSED STEEL CHAIN P=35MM, 35 X * X 20 NO55 PRESSED STEEL CHAIN P=41.4 , 41,3 X * X 20				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828_CH/311L4_UN	CHAIN C/W ROUND 311 ATT EVERY 4TH, 50,8 X 15,87 X 17,1 (A216B/4L)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SNH_P2155	38,4VB X 68P ATT EV 6TH PITCH,38,4 X 15,88 X 19,05				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CJ15624	FERTILIZER COULTER SCOLLOPED 558 X 5mm 4 HOLE (22")				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CQ54003	FURROW OPENER COULTER PLAIN 510 X 5mm (20")				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CJ14048	SEED COULTER PLAIN 380 X 4mm (15") 6 HOLE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	25_GREY_D 32_GREY_D 35_GREY_D 36_GREY_D	RECOMFLEX HOSE 25mm RECOMFLEX HOSE 32mm RECOMFLEX HOSE 35mm RECOMFLEX HOSE 36 mm				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LFNG15_43_PIVOT	Pivot Centre Drive Motor and Gearbox 40:1 Ratio 1,1Kw				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LSNG_M_50_PIVOT	Pivot Gearbox Wheel 50:1 Ratio Non Towable				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LSNG_V_52_PIVOT	Pivot Gearbox Wheel 52:1 Ratio Non Towable Valley				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	LZQ_00_A_COUPLING	Pivot Drive Shaft Coupling 7/8" 22,23mm				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	10825_PTO	QUICK RELEASE PIN KIT				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	2_03_PTO	SERIES 2 TRIANGULAR STEEL TUBING, OUTER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	2_04_PTO	SERIES 2 TRIANGULAR STEEL TUBING, INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	2_05_30_PTO	SERIES 2 METRIC BORE CLAMP YOKE 30MM				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	2_13_PTO	SERIES 2 ROLL PIN 8X55				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	201_10_PTO	SERIES 2 PTO GUARD 1 METER				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_03_PTO	SERIES 3 & 4 TRIANGULAR STEEL TUBING, OUTER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_03LP_PTO	SERIES 3 & 4 LEMON STEEL TUBING, OUTER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_04_PTO	SERIES 4 TRIANGULAR STEEL TUBING, INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_04LP_PTO	SERIES 4 LEMON STEEL TUBING,INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_05_07_PTO	SERIES 4 QUICK RELEASE YOKE,6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_05_32_PTO	SERIES 4 METRIC BORE CLAMP YOKE 32mm				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_05_HEX_PTO	SERIES 4 HEX YOKE 1,1/8" (28,58)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_13_PTO	SERIES 4 ROLL PIN 8X56				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_41_B	SERIES 4 WIDE ANGLE CROSS JOURNAL 27X74 - 23X91				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_41_PTO	SERIES 4 UNIVERSAL CROSS JOURNAL 27X74.5				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_AR_3_PTO	SERIES 4 RATCHET CLUTCH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_FF1_10_PTO 4_FF1_PTO	SERIES 4 FRICTION CLUTCH FLANGE YOKE, 20 SPLINE 1.3/4 SERIES 4 FRICTION CLUTCH FLANGE YOKE, 6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_WA_1	SERIES 4 WIDE ANGLE TRIANGLE TUBE YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_WA_2	SERIES 4 WIDE ANGLE CENTRE BODY ASSEMBLY				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_WA_4	SERIES 4 WIDE ANGLE END YOKE 6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	4_WA_PTO	SERIES 4 COMPLETE WIDE ANGLE YOKE ASSEMBLY				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	401_10_PTO	SERIES 4 PTO GUARD 1 METER				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_03_PTO	SERIES 6 TRIANGULAR STEEL TUBING, OUTER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_04_PTO	SERIES 6 TRIANGULAR STEEL TUBING, INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_04_PTO	SERIES 6 TRIANGULAR STEEL TUBING, INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_04LP_PTO	SERIES 6 LEMON STEEL TUBING, INNER, 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_05_07_PTO	SERIES 6 QUICK RELEASE YOKE,6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_05_17_PTO	SERIES 6 BOLTED 6 SPLINE 1.3/8 YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_05_25_PTO	SSERIES 6 METRIC BORE CLAMP YOKE 25MM				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_13_PTO	SERIES 6 ROLL PIN 10X80				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_41_B	SERIES 6 WIDE ANGLE CROSS JOURNAL 32X76 - 27X94				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_41_PTO	SERIES 6 UNIVERSAL CROSS JOURNAL 30.2X92				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_FF2_PTO	SERIES 6 FRICTION CLUTCH 2 PLATE, 6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_ORC_PTO	SERIES 6 OVERUN CLUTCH YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_SB_PTO	SERIES 6 SHEAR BOLT YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_WA_1	SERIES 6 WIDE ANGLE TRIANGLE TUBE YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_WA_2	SERIES 6 WIDE ANGLE CENTRE BODY ASSEMBLY				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_WA_4	SERIES 6 WIDE ANGLE 6 SPLINE 1.3/8 YOKE				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	6_WA_PTO	SERIES 6 COMPLETE WIDE ANGLE ASSEMBLY				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	601_10_PTO	SERIES 6 PTO GUARD 1 METER LENGTH				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	B410SFF_PTO B612SFF_PTO	SERIES 4, 1 METER LENGTH, 6 SPLINE 1.3/8 AND FRICTION CLUTCH 6 SPLINE 1.3/8 SERIES 6, 1,2 METER LENGTH, 6SPLINE 1.3/8 AND FRICTION CLUTCH 6 SPLINE 1.3/8				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	B412SZ_WA_PTO B415S05_2HEX_PTO	SERIES 4, 1.2 METER LENGTH, WIDE ANGLE AND 6 SPLINE 1.3/8YOKES SERIES 4, 1.5 METER LENGTH, 6SPLINE 1.3/8 AND 1.1/8 HEX YOKES				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	B615SWAFF2_PTO	SERIES 6, 1.5 METER LENGTH, 6SPLINE 1.3/8 WIDE ANGLE and FRICTION CLUTCH 6 SPLINE 1,3/8"				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA550_210X150_PADDLE	PADDLE CA550 SD ATTACHMENT				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	RC61_PTO	RC61 N= 1:1.93 SLASHER GEARBOX				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	CA557X13T_PW	CA557 X 13T PLATE WHEEL SPROCKET (FEEDER HOUSE)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	JD_AN102448X9T	CA555 X 9T SPRKT C/W BEARING AND BUSHES. (WITH JD_H85252X6TAND JD_AN102009 CHAIN)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	JD_H85252	CA555 X 8T DRIVE SPRKT (WITH JD_AN102009 CHAIN)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828XRND6_DRV SK828XRND6_IDL	SK828X 12 TOOTH 45MM DRIVER ROUND 311 ATT EV 6th SK828X 12 TOOTH 55MM IDLER ROUND 311 ATT EV 6th				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828XRND4_DRV	SK828X 9 TOOTH 45MM DRIVER ROUND 311 ATT EV 4th SK828X9T_RND4_DRV				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828XRND4_IDL	SK828X 9 TOOTH 55MM IDLER ROUND 311 ATT EV 4th				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828XSQ4_DRV	SK828 X 9T SQ DRIVE SPROCKET 45mm DRIVE SQUARE S311 EVERY 4th (SK828X9T_SQ4_DRV)				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SK828XSQ4_IDL	SK828 X 9T SQ IDLER SPROCKET 55mm IDLER SQUARE S311 EV 4th (SK828X9T_SQ4_IDL)				

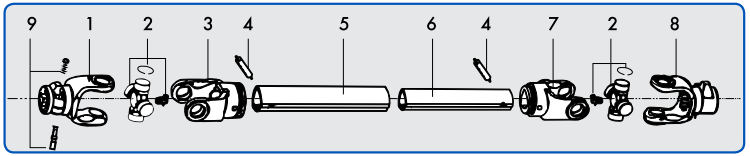
Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SM_305210_CASS	CASETTE SEAL PLANTER DQ22107				

Sample	Item Reference	Description	ID	OD	Width ID	Width OD
	SM_609014/16.5_VIT	CASSETTE SEAL BALDAN POT				

AGRICULTURAL DRIVE SHAFT SPARES CHART

BEARINGS INTERNATIONAL

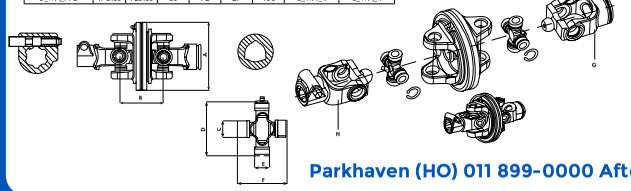
ALWAYS THERE,
MAKING IT WORK.



	1		2	3		4	5	5	6	6	7		8		9
Series	Tractor Yoke		Universal Joint	Outer Tube Yoke Triangular	Outer Tube Yoke Lemon	Roll Pin	Outer Tubing Triangular	Outer Tubing Lemon	Inner Tubing Triangular	Inner Tubing Lemon	Inner Tube Yoke Triangular	Inner Tube Yoke Lemon	Pinch Bolt Yoke (Bore Size)		QR Pin Kit
1	6 Spline	1_05_07_PTO	22x54 1_41_PTO	54x22x32.4 1_06_PTO	54x22x39.1 1_06LP_PTO	8x50 1_13_PTO	32.4x2.5 1_03_PTO	39.1x30x2.8 1_03LP_PTO	26.6x3.5 1_04_PTO	30.8x23.7x3.4 1_04LP_PTO	54x22x26.6 1_07_PTO	54x22x30.8 1_07LP_PTO	20 30 32	1_05_20_PTO 1_05_30_PTO 1_05_32_PTO	10825SS
2	6 Spline	2_05_07_PTO	23.8x61.3 2_41_PTO	61.3x23.8x36.1 2_06_PTO	61.3x23.8x48 2_06LP_PTO	8x55 2_13_PTO	36.1x3.4 4_03_PTO	48x41.2x2.8 4_03LP_PTO	29x4 4_04_PTO	40.1x34.5x4 4_04LP_PTO	61.3x23.8x29 2_07_PTO	61.3x23.8x40.1 2_07LP_PTO	25 30 32	2_05_25_PTO 2_05_30_PTO 2_05_32_PTO	10825SS
3	6 Spline	3_05_07_PTO	27x70 3_41_PTO	70x27x43.4 3_06_PTO	70x27x48 3_06LP_PTO	8x60 4_13_PTO	43.4x3.3 4_03_PTO	48x41x3 4_03LP_PTO	36.1x4.4 4_04_PTO	40.1x34.5x4 4_04LP_PTO	70x27x36.1 3_07_PTO	70x27x40.1 3_07LP_PTO	25 32 35	3_05_25_PTO 3_05_32_PTO 3_05_35_PTO	10825
4	6 Spline (Z6)1t 21 Spline (Z21)1t 6 Spline (Z6)1k 20 Spline (Z20)1k	4_05_07_PTO 4_05_08_PTO 4_05_09_PTO 4_05_10_PTO	27x74.6 4_41_PTO	74.6x27x43.4 4_06_PTO	74.6x27x48 4_06LP_PTO	8x60 4_13_PTO	43.4x3.3 4_03_PTO	48x41.2x2.8 4_03LP_PTO	36.1x4.4 4_04_PTO	40.1x34.5x4 4_04LP_PTO	74.6x27x36.1 4_07_PTO	74.6x27x40.1 4_07LP_PTO	25 32 38	4_05_25_PTO 4_05_32_PTO 4_05_38_PTO	10825
5	6 Spline	5_05_07_PTO	30.2x80 5_41_PTO	80x30.2x51.3 5_06_PTO	80x30.2x57.5 5_06LP_PTO	10x80 6_13_PTO	51.3x2.9 5_03_PTO	57.5x48x3.8 6_03LP_PTO	44.7x4 5_04_PTO	49x39.5x4.5 6_04LP_PTO	80x30.2x44.7 5_07_PTO	80x30.2x49 5_07LP_PTO	32 35	5_05_32_PTO 5_05_35_PTO	10825
6	6 Spline (Z6)1t 21 Spline (Z21)1t 6 Spline (Z6)1k 20 Spline (Z20)1k	6_05_07_PTO 6_05_08_PTO 6_05_09_PTO 6_05_10_PTO	30.2x92 6_41_PTO	92x30.2x53.6 6_06_PTO	92x30.2x57.5 6_06LP_PTO	10x80 6_13_PTO	53.6x3.8 6_03_PTO	57.5x48x3.8 6_03LP_PTO	44.7x4 6_04_PTO	49x39.5x4.5 6_04LP_PTO	92x30.2x44.7 6_07_PTO	92x30.2x49 6_07LP_PTO	30 32 38 45 50	6_05_30_PTO 6_05_32_PTO 6_05_38_PTO 6_05_45_PTO 6_05_50_PTO	10825

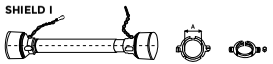
WIDE ANGLE JOINT

BI PART NO.	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H BI Code
4_WA_PTO	145.00	102.00	27	74	23	91	4_WA_4	4_WA_4
6_WA_PTO	175.00	120.00	30	92	27	100	6_WA_4	6_WA_4

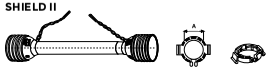


PLASTIC SHIELD CROSS JOINT

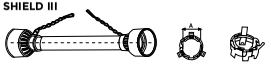
SHIELD I



SHIELD II



SHIELD III



SIZE	SHIELD TUBE DIAMETER		BEARING RING DIMENSION A (mm)	
	OUTER	INNER	OUTER	INNER
1	66.3mm	60.2mm	42mm	35mm
2			47mm	41mm
3/4			54mm	47mm
5/6/7	81mm	75mm	65.5mm	59.5mm
8			70.2mm	64.3mm

FEATURES AND BENEFITS

Bauer's range of electric motos offer you these exciting features and benefits:

FEATURE	BENEFIT
CLASS F INSULATION	Able to operate up to 155° C.
IP55 PROTECTION	Suitable for outdoor installation and dusty environments.
IEC STANDARD	International standard. Fully interchangeable with other IEC motors.
HIGH EFFICIENCY	Lower running cost for a given power rating.
BUILT-IN THERMISTORS (STANDARD ON CAST IRON UNITS) (OPTIONAL ON ALUMINIUM UNITS)	Failsafe protection against burn-out when used in conjection with a thermistor relay.
MULTI-MOUNT DESIGN (BOLT-ON-FOOT)	Variable terminal box positions available on foot mounted aluminium framed units.
NATIONAL AVAILABILITY	Distrubution network throughout Southern Africa.
COMPETITIVE PRICING	Exceptional value for money.
1 YEAR WARRANTY	World class Peace Of Min on Cast Iron Framed units.

CAST IRON IP55

T.E.F.C. SQUIRREL CAGE INDUCTION MOTORS 380-400 OR 525V three phase, 50HZ

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
0.37	2	2800	71	14
	4	1400	71	14
	6	910	80	19
	8	700	90S	24
0.55	2	2850	71	14
	4	1420	80	19
	6	875	80	19
	8	655	90L	24
0.75	2	2870	80	19
	4	1420	80	19
	6	920	90S	24
	8	690	100L	28
1.1	2	2875	80	19
	4	1390	90S	24
	6	930	90L	24
	8	695	100L	28
1.5	2	2855	90S	24
	4	1410	90L	24
	6	930	100L	28
	8	710	112M	28
2.2	2	2840	90L	24
	4	1425	100L	28
	6	940	112M	28
	8	715	132S	38
3	2	2865	100L	28
	4	1425	100L	28
	6	970	132S	38
	8	710	132M	38
4	2	2885	112M	28
	4	1440	112M	28
	6	975	132M	38
	8	720	160M	42
5.5	2			
	4			

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
5.5	2	2920	132S	38
	4	1450	132S	38
	6	975	132M	38
	8	720	160M	42
7.5	2	2895	132S	38
	4	1450	132M	38
	6	965	160M	42
	8	720	160L	42
9.2	2	2900	132M	38
	4	1450	132M	38
11	2	2930	160M	42
	4	1450	160M	42
	6	970	160L	42
	8	725	180L	48
15	2	2935	160M	42
	4	1460	160L	42
	6	980	180L	48
	8	725	200L	55
18.5	2	2930	160L	42
	4	1470	180M	48
	6	980	200L	55
	8	730	225S/M	60
22	2	2950	180M	48
	4	1465	180L	48
	6	975	200L	55
	8	730	225S/M	60
30	2	2950	200L	55
	4	1480	200L	55
	6	985	225S/M	60
	8	735	250S/M	70
37	2	2955	200L	55
	4	1485	225S/M	60
	6	980	250S/M	70
	8	730	250S/M	70

CAST IRON IP55

T.E.F.C. SQUIRREL CAGE INDUCTION MOTORS 380-400 OR 525V three phase, 50HZ

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
45	2	2960	225S/M	55
	4	1480	225S/M	60
	6	975	250S/M	70
	8	735	280S/M	80
55	2	2965	250S/M	60
	4	1475	250S/M	70
	6	985	280S/M	80
	8	735	280S/M	80
75	2	2965	250S/M	60
	4	1475	250S/M	70
	6	985	280S/M	80
	8	740	315S/M	85
90	2	2970	280S/M	65
	4	1485	280S/M	80
	6	985	315S/M	85
	8	740	315S/M	85
110	2	2975	280S/M	65
	4	1485	280S/M	80
	6	985	315S/M	85
	8	735	315S/M	85
132	2	2980	315S/M	65
	4	1480	315S/M	85
	6	985	315S/M	85
	8	745	355S/M	100
160	2	2980	315S/M	65
	4	1480	315S/M	85
	6	990	315S/M	85
	8	745	355S/M	100
185	2	2980	315S/M	70
	4	1485	315S/M	90
	6	990	355S/M	100
	8	745	355S/M	100

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
200	2	2975	315S/M	70
	4	1485	315S/M	90
	6	985	355S/M	100
	8	740	355S/M	100
220	2	2970	355S/M	90
	4	1490	355S/M	100
	6	985	355S/M	100
	8	740	355S/M	100
250	2	2970	355S/M	90
	4	1490	355S/M	100
	6	985	355S/M	100
280	2	2970	355S/M	90
	4	1490	355S/M	100
315	2	2970	355S/M	90
	4	1485	355S/M	100
	6	970	355S/M	100
355	2	2970	355S/M	90
	4	1490	355S/M	100
400	4	2970	355S/M	100

Larger sizes and different speed variations available, please enquire at sales office.

ALUMINIUM IP55

T.E.F.C. SQUIRREL CAGE INDUCTION MOTORS 380-400 three phase, 50HZ

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
0.09	4	1350	MS56	9
0.12	4	1380	MS56	9
0.18	2	2800	MS63	11
	4	1400	MS63	11
0.25	2	2800	MS63	11
	4	1400	MS63	11
0.37	2	2800	MS63	11
	4	1400	MS63	11
	6	970	MS71	14
0.55	2	2800	MS71	14
	4	1400	MS71	14
	6	970	MS71	14
0.75	2	2800	MS71	14
	4	1400	MS80	19
	6	970	MS90L	14
1.1	2	2800	MS80	19
	4	1400	MS90S	19
	6	910	MS90L	19
1.5	2	2800	MS90S	19
	4	1400	MS90L	19
	6	910	MS100L	24
2.2	2	2800	MS90L	19
	4	1400	MS100L	24
	6	910	MS112M	24
3	2	2800	MS100L	24
	4	1400	MS100L	24
	6	940	MS132S	28
4	2	2800	MS112M	24
	4	1430	MS112M	28
	6	940	MS132M	28
	8	720	MS160M	42
5.5	2	2870	MS112M	38
	4	2870	MS112M	38

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
5.5	2	2870	MS132S	38
	4	1430	MS132S	38
	6	940	MS132M	38
	8	720	MS160M	42
7.5	2	2900	MS132M	38
	4	1430	MS132M	38
	6	960	MS160M	42
	8	720	MS160L	42
11	2	2900	MS132M	38
	4	1440	MS132M	38
11	2	2900	MS160M	42
	4	1440	MS160M	42
	6	960	MS160L	42
15	2	2900	MS160M	42
	4	1440	MS160L	42
18.5	2	2900	MS160L	48

ALUMINIUM IP55

SINGLE PHASE MOTORS - 220V - 50HZ

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
0.09	4	1400	MY56	9
0.12	4	1400	MY63	11
0.18	2	2800	MY63	11
	4	1400	MY63	11
0.25	2	2800	MY63	11
	4	1400	MY71	14
0.37	2	2800	MY71	14
	4	1400	MY71	14
0.55	2	2800	MY71	14
	4	1400	MY80	19
0.75	2	2800	MY80	19
	4	1400	MY80	19
1.1	2	2800	MY80	19
	4	1400	MY90S	24
1.5	2	2800	MY90S	24
	4	1400	MY90L	24

ALUMINIUM IP55

SINGLE PHASE MOTORS - 220V - 50HZ
(HIGH STARTING TORQUE) (CAPACITOR START AND CAPACITOR RUN)

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
0.25	4	1400	ML71	14
0.37	2	2800	ML71	14
	4	1400	ML71	14
0.55	2	2800	ML71	14
	4	1400	ML80	19
0.75	2	2800	ML80	19
	4	1400	ML80	19

KW	POLE	SPEED RPM	FRAME SIZE	SHAFT Diam. (mm)
1.1	2	2800	ML80	19
	4	1400	ML90S	24
1.5	2	2800	ML90S	24
	4	1400	ML90L	24
2.2	2	2800	ML90L	24
	4	1400	ML100L	28
3	2	2800	ML100L	28
	4	1400	ML100L	28

PERFORMANCE DATA
D:2 - POLE/ 3000 min $^{-1}$

BAUER

D = Cast iron series 1 frame size IEC-DIN / SABS	rated output power	Rated current at (Full Load Current)				full-load speed rmp	full-load power factor	full-load efficiency	Starting current	Starting torque	Pull-out torque	moment of inertia $J = {}^1/_4\ GD^2$	Weight foot mounted
	P_N	380 V I_s	400 V I_N	420 V I_o	500 V	n_N							
	kW	A	A	A		min^{-1}	cos φ	%	I_s/I_n	M_s/M_n	M_k/M_N	kgm^2	kg
D 80	0.75	1.89	1.80	1.71	1.44	2870	0.81	75.8	6.8	3.3	3.6	0.00085	16
D 80	1.10	2.52	2.40	2.29	1.92	2875	0.84	79.0	7.2	3.1	3.4	0.00110	17
D 90 S1	1.50	3.58	3.40	3.24	2.72	2840	0.82	79.0	6.4	3.1	3.3	0.00146	22
D 90 L2	2.20	4.74	4.50	4.29	3.60	2855	0.86	81.1	6.2	3.2	3.4	0.00185	25
D 110 L2	3.00	6.32	6.00	5.71	4.80	2860	0.87	83.2	7.6	2.9	3.6	0.00325	33
D 112 M2	4.00	7.68	7.30	6.95	5.90	2860	0.93	84.8	6.9	2.1	3.5	0.0055	40
D 132 S2	10.95	10.40	10.40	9.90	8.40	2890	0.89	86.0	7.6	2.5	3.7	0.01378	59
D 132 SX2	14.42	14.42	13.70	13.05	13.70	2878	0.91	87.2	6.8	2.0	3.4	0.01456	62
D 160 M2	11.0	21.26	20.20	19.24	16.20	2925	0.89	88.4	7.9	2.3	3.3	0.0442	107
D 160 MX2	15	27.79	26.4	25.14	21.1	2931	0.92	89.4	8.4	2.7	3.7	0.0549	117
D 160 L2	18.5	34.53	32.8	31.24	26.2	2838	0.90	90.4	8.3	2.8	3.7	0.0654	134
D 180 M2	22	40.2	38.2	36.38	31.1	2951	0.92	90.5	7.7	2.8	3.4	0.0955	169
D 200 L2	30	54.84	52.1	49.62	41.7	2952	0.91	91.4	7.9	2.6	3.4	0.153	220
D 200 LX2	37	67.05	63.7	60.67	51.0	2950	0.91	92.1	7.6	2.2	3.2	0.173	239
D 225 S/M2	45	81.68	77.6	73.9	62.1	2962	0.90	92.3	7.8	2.0	2.3	0.268	297
D 250 S/M2	55	99.79	94.8	62.1	79.5	2965	0.90	93.0	7.8	2.0	2.3	0.365	377
D 250 S/M2	77	136.8	130	90.28	104	2974	0.90	92.7	7.5	2.0	2.3	0.601	382
D 280 S/M2	90	160	152	144.76	122	2961	0.91	93.9	7.0	2.3	3.5	0.683	540
D 280 S/M2	110	196.8	187	178.1	150	2974	0.91	93.3	7.1	1.8	2.2	1.408	550
D 315 S/M2	132	232.63	221	210.48	177	2972	0.91	94.5	5.9	2.0	2.9	1.558	970
D 315 S/M2	160	237.89	266	253.33	213	2974	0.92	94.6	6.9	2.2	3.3	1.726	1080
D 315 S/M2	185	326.26	309	294.29	247	2974	0.92	93.9	7.1	1.8	2.2	1.834	1120
D 315 S/M2	200	350.53	333	317.14	266	2972	0.91	94.8	6.7	2.1	3.2	19.41	1170
D 355 M/L2	250	440	418	398.1	334	2985	0.92	95.3	7.1	1.6	2.0	3.296	1690
D 355 M/2	315	554.74	527	501.9	422	2988	0.92	95.6	7.4	1.6	2.0	3.95	1850

PERFORMANCE DATA
D:4 - POLE/ 1500 min $^{-1}$

BAUER

D = Cast iron series 1 frame size IEC-DIN / SABS	rated output power	Rated current at (Full Load Current)				full-load speed rmp	full-load power factor	full-load efficiency	Starting current	Starting torque	Pull-out torque	moment of inertia $J = {}^1/_4 GD^2$	Weight foot mounted
	P_N	380 V I_s	400 V I_N	420 V I_o	500 V	n_N							
	kW	A	A	A		min^{-1}	cos φ	%	I_s/I_n	M_s/M_n	M_k/M_N	kgm^2	kg
D 80 G4	0.75	2.0	1.9	1.81	1.52	1400	0.77	73.4	5.9	2.9	3.0	0.00148	18
D 90 S4	1.10	2.84	2.7	2.57	2.16	1395	0.78	76.3	5.3	2.7	2.7	0.00212	12
D 90 L4	1.50	3.68	3.5	3.33	2.66	1412	0.78	78.6	6.2	2.1	3.2	0.00287	27
D 100 L4	2.20	5.05	4.8	4.57	3.66	1430	0.81	81.3	6.2	2.3	3.1	0.00606	34
D 100 LX4	3.00	6.84	6.5	6.19	5.2	1420	0.82	82.7	7.0	2.9	3.2	0.00779	38
D 112 M4	4.00	8.53	8.1	7.71	6.5	1438	0.85	84.6	6.8	2.4	3.2	0.01176	44
D 132 S4	5.50	11.68	11.1	10.57	8.9	1445	0.84	85.7	7.4	2.2	3.4	0.02465	61
D 132 M4	7.50	15.16	14.4	13.71	11.5	1445	0.86	87.3	8.2	2.4	3.3	0.03301	73
D 160 M4	11.0	22.00	20.9	19.90	16.7	1451	0.86	89.5	7.2	2.1	3.0	0.0808	113
D 160 L4	15.0	29.57	28.1	26.76	22.5	1452	0.86	89.5	7.4	2.2	3.1	0.1052	133
D 180 M4	18.5	34.95	33.2	31.62	26.6	1465	0.89	90.5	7.0	2.2	3.1	0.1499	167
S 180 L4	22	42.00	39.9	38.00	33.0	1464	0.89	90.7	6.9	2.1	3.1	0.1659	181
D 200 L4	30	56.63	53.8	51.24	43.0	1468	0.88	91.6	7.0	2.4	3.2	0.273	232
D 225 S/M4	37	70.53	67.0	63.81	53.6	1472	0.88	92.0	7.2	2.2	2.3	0.469	287
D 225 S/M4	45	84.84	80.6	76.76	64.4	1477	0.87	92.8	7.2	2.2	2.3	0.538	322
D 250 S/M4	55	103.26	98.1	93.43	78.5	1475	0.87	93.0	7.3	2.2	2.3	0.689	381
D 250 S/M4	75	141.05	134	127.62	107	1480	0.87	92.7	7.2	2.2	2.3	1.267	385
D 280	90	163.16	155	147.62	125	1481	0.89	93.9	7.1	2.5	3.2	1.552	600
D 280	110	203.16	193	183.81	155	1485	0.88	93.3	6.9	2.1	2.2	2.98	620
D 315 S/M4	132	237.89	226	215.24	183	1485	0.88	94.7	5.7	2.0	2.8	3.48	1002
D 315 S/M4	160	282.11	268	255.24	214	1486	0.89	94.9	5.6	2.0	2.9	3.678	1070
D 315 S/M4	185	340.00	323	307.62	259	1485	0.88	93.9	6.9	2.1	2.2	3.564	1030
D 315 S/M4	200	357.89	340	323.81	272	1485	0.89	95.0	6.0	2.2	3.0	4.47	1181
D 355	250	445.26	423	402.86	338	1490	0.90	95.5	7.0	2.1	2.2	7.164	1720
D 355	315	560.00	532	506.67	426	1490	0.90	95.4	7.0	21	2.2	8.702	1950

All technical details are based on 400V/50Hz; We make all efforts to better our products. Versions, technical data and figures could be changed. They are therefore not binding before written confirmation.

PERFORMANCE DATA
D:6 - POLE/ 1000 min $^{-1}$

BAUER

D = Cast iron series 1 frame size IEC-DIN / SABS	rated output power	Rated current at (Full Load Current)				full-load speed rmp	full-load power factor	full-load efficiency	Starting current	Starting torque	Pull-out torque	moment of inertia $J = {}^1/_4\ GD^2$	Weight foot mounted
	P_N	380 V I_s	400 V I_N	420 V I_o	500 V	n_N							
	kW	A	A	A		min^{-1}	cos φ	%	I_s/I_n	M_s/M_n	M_k/M_N	kgm^2	kg
D 80 K6	0.37	1.26	1.2	1.14	0.96	905	0.72	62.1	3.4	2.2	2.6	0.00152	17
D 80 G6	0.55	1.79	1.7	1.62	1.36	910	0.73	65.5	3.6	2.4	2.6	0.00194	19
D 90 S6	0.75	2.30	2.2	2.10	1.76	922	0.72	69.3	4.3	2.3	2.7	0.00297	23
D 90 L6	1.10	3.16	3.0	2.86	2.4	918	0.73	73.0	4.4	2.2	2.8	0.00392	25
D 110 L6	1.50	4.00	3.8	3.61	3.04	933	0.76	76.3	5.5	2.6	2.9	0.00745	33
D 112 M6	2.20	5.26	5.0	4.76	4.0	946	0.80	79.8	5.8	1.9	3.0	0.01324	39
D 132 S6	3.00	7.37	7.0	6.67	5.6	965	0.76	81.4	6.5	2.1	3.3	0.02821	56
D 132 M6	4.00	9.47	9.0	8.57	7.2	965	0.78	82.3	6.8	2.0	3.3	0.03716	71
D 132 MX6	5.50	12.42	11.8	11.24	9.44	967	0.80	84.0	7.1	2.0	3.4	0.04889	75
D 160 L6	7.50	16.95	16.1	15.33	12.9	968	0.78	86.5	6.4	1.9	3.2	0.0877	108
D 160 L6	11.0	22.95	21.8	20.76	17.4	966	0.83	87.9	6.4	1.9	2.9	0.1212	131
D 180 L6	15.0	30.84	29.3	27.90	23.4	976	0.83	89.0	6.7	2.6	2.9	0.2086	171
D 200 L6	18.5	37.16	35.3	33.62	28.2	978	0.84	90.2	6.6	2.3	3.0	0.302	216
D 200 LX6	22	43.68	41.5	39.52	33.2	976	0.85	90.1	6.6	2.1	2.9	0.342	225
D 225 S/M6	30	58.95	89	53.33	44.8	980	0.84	91.5	7.0	2.0	2.3	0.576	292
D 250	37	71.05	67.5	64.29	54	980	0.86	92.0	7.0	2.1	2.3	0.807	408
D 280 S/M6	55	101.47	96.4	91.81	77.1	983	0.89	92.8	6.5	2.1	2.7	1.732	540
D 280 S/M6	75	143.16	136	129.52	109	990	0.86	92.6	7.0	2.0	2.3	3.194	560
D 315 S/M6	90	173.68	165	157.14	132	988	0.86	93.8	6.1	2.0	2.7	3.723	940
D 315 S/M6	110	206.32	196	186.67	157	988	0.86	94.0	5.9	1.9	2.6	4.526	1110
D 315 S/M6	132	243.16	231	220	185	989	0.87	94.2	6.0	2.0	2.6	5.157	1175
D 355 M/L6	160	283.16	269	256.19	215	990	0.88	94.5	7.1	2.0	2.0	9.27	1690
D 355 M/L6	200	353.68	336	320	269	990	0.88	94.8	7.0	1.9	3.2	10.8	1870
D 355 M/L6	250	442.11	420	400	336	990	0.88	95.0	7.0	2.0	2.0	11.8	1980

All technical details are based on 400V/50Hz; We make all efforts to better our products. Versions, technical data and figures could be changed. They are therefore not binding before written confirmation.

PERFORMANCE DATA
D:8 - POLE/ 750 min $^{-1}$

BAUER

D = Cast iron series 1 frame size IEC-DIN / SABS	rated output power	Rated current at (Full Load Current)				full-load speed rmp	full-load power factor	full-load efficiency	Starting current	Starting torque	Pull-out torque	moment of inertia $J = {}^1/_4\ GD^2$	Weight foot mounted
	P_N	380 V I_s	400 V I_N	420 V I_o	500 V	n_N							
	kW	A	A	A		min^{-1}	cos φ	%	I_s/I_n	M_s/M_n	M_k/M_N	kgm^2	kg
D 80 K8	0.18	0.88	0.84	0.80	0.67	693	0.61	51.1	3.0	2.7	3.1	0.00173	19
D 80 G8	0.25	1.16	1.1	1.05	0.88	689	0.60	54.3	2.8	2.6	3.1	0.00204	20
D 90 S8	0.37	1.47	1.4	1.33	1.12	691	0.61	62.3	3.4	2.2	2.7	0.00343	24
D 90 L8	0.55	2.11	2.0	1.90	1.6	703	0.61	65.5	3.6	2.6	2.8	0.00425	25
D 100 L8	0.75	2.42	2.3	2.19	1.84	695	0.67	71.3	4.0	2.3	2.8	0.00598	33
D 100 LX8	1.10	3.26	3.1	2.95	2.48	696	0.69	73.2	4.1	2.5	2.9	0.00745	34
D 112 M8	1.50	4.42	4.2	4.0	3.36	700	0.70	75.0	4.2	2.3	2.9	0.01326	39
D 132 S8	2.20	5.89	5.6	5.33	4.48	715	0.72	78.1	5.2	2.0	3.0	0.02903	62
D 132 M8	3.00	7.58	7.2	6.86	5.76	713	0.75	80.7	5.0	2.2	2.9	0.03828	66
D 160	4.00	9.68	9.2	8.76	7.4	718	0.76	82.7	5.0	2.0	2.8	0.065	94
D 160	5.50	13.37	12.7	12.10	10.2	722	0.74	84.4	6.2	2.5	3.3	0.088	106
D 160	7.50	17.16	16.3	15.52	13.0	721	0.77	86.5	5.9	2.2	3.0	0.1229	128
D 180 L8	11.0	24.95	23.7	22.57	19.0	725	0.77	87.5	6.4	2.3	2.7	0.2059	170
D 200		33.79	32.1	30.57	25.7	731	0.76	89.3	6.3	2.2	2.8	0.325	220
D 225 S/M8	18.5	40.84	38.8	36.95	31.0	733	0.76	90.0	6.7	1.9	2.0	0.538	272
D 225 S/M8	22	46.11	43.8	41.71	35.0	734	0.77	90.5	6.9	1.9	2.0	0.629	294
D 250 S/M8	30	63.26	60.1	57.24	48.1	730	0.79	91.2	6.5	1.9	2.0	0.809	370
D 280	37	75.58	71.8	68.38	57.4	736	0.81	91.6	5.6	2.1	2.6	1.547	475
D 280 S/M8	45	93.26	88.6	84.38	70.9	737	0.80	92.1	5.8	2.1	2.7	1.857	555
D 280 S/M8	55	105.26	100	95.34	80.0	740	0.86	92.6	6.6	1.8	2.0	3.682	575
D 315 S/M8	75	150.53	143	136.19	114	740	0.81	93.0	6.1	2.0	2.7	4.959	981
D 315 S/M8	90	178.95	170	161.90	136	741	0.82	93.5	6.2	2.1	2.7	5.825	1071
D 315 S/M8	110	216.84	206	196.19	165	742	0.82	93.7	5.9	2.0	2.6	6.753	1160
D 355	132	251.58	239	227.62	191	740	0.83	94.0	6.6	1.8	2.0	12.9	1800
D 355	160	297.89	283	269.52	226	740	083	94.0	6.6	1.8	2.0	14.3	1890
D 355	200	394.74	375	357.14	300	740	083	94.0	6.6	1.8	2.0	15.9	2040

All technical details are based on 400V/50Hz; We make all efforts to better our products. Versions, technical data and figures could be changed. They are therefore not binding before written confirmation.

PERFORMANCE DATA
380V ALUMINIUM THREE PHASE MOTORS

BAUER

Frame	Power Kw	Current A	Speed r/min	Eff %	Power factor	Tstart /Tn	Tmax /Tn	1st / In	Mass Kg
MS561-2	0.09	0.33	2800	62	0.68	2.3	2.4	6	4.6
MS562-2	0.12	0.38	2800	67	0.71	2.3	2.4	6	4.8
MS631-2	0.18	0.53	2800	69	0.75	2.2	2.4	6	5
MS632-2	0.25	1.68	2800	72	0.78	2.2	2.4	6	5.3
MS711-2	0.37	0.95	2800	73.5	0.8	2.2	2.4	6	6.5
MS712-2	0.55	1.35	2800	75.5	0.82	2.2	2.4	6	7
MS801-2	0.75	1.75	2800	76.5	0.85	2.2	2.4	6	9.5
MS802-2	1.1	2.55	2800	77	0.85	2.2	2.4	6	11
MS90S-2	1.5	3.84	2800	77	0.85	2.2	2.4	6	14.5
MS90L-2	2.2	4.98	2800	78	0.86	2.2	2.4	6	17
MS100L-2	3	6.4	2870	82	0.87	2.2	2.3	7	24.5
MS112M-2	4	8.2	2890	85.5	0.87	2.2	2.3	7	30
MS132S-2	5.5	11	2900	85.5	0.88	2	2.2	7	42
MS132S-2	7.5	15	2900	86.2	0.88	2	2.2	7	50
MS561-4	0.06	0.28	1400	56	0.58	2.3	2.4	6	4.6
MS562-4	0.09	0.39	1400	58	0.61	2.3	2.4	6	4.8
MS631-4	0.12	0.48	1400	60	0.63	2.2	2.4	6	4.8
MS632-4	0.18	0.65	1400	64	0.66	2.2	2.4	6	5
MS711-4	0.25	0.83	1400	67	0.68	2.2	2.4	6	6.3
MS712-4	0.37	1.12	1400	69.5	0.72	2.2	2.4	6	7
MS801-4	0.55	1.56	1400	73.5	0.73	2.2	2.4	6	9.5
MS802-4	0.75	2.01	1400	75.5	0.75	2.2	2.4	6	11
MS90S-4	1.1	2.75	1400	78	0.78	2.2	2.4	6	14.5
MS90L-4	1.5	3.65	1400	79	0.79	2.2	2.4	6	16
MS100L-4	2.2	5	1430	81	0.82	2.2	2.3	7	23
MS100L-4	3	6.8	1430	82.5	0.81	2.2	2.3	7	27
MS112M-4	4	8.8	1440	84.5	0.82	2.2	2.3	7	33.5
MS132S-4	5.5	12	1440	85.5	0.84	2.2	2.2	7	49.5
MS132M-4	7.5	15	1440	87	0.85	2.2	2.2	7	57.5
MS90S-6	0.75	2.3	910	72.5	0.7	2.2	2.2	5.5	14.5
MS90L-6	1.1	3.2	910	73.5	0.72	2.2	2.2	5.5	17
MS100L-6	1.5	4	940	77.5	0.74	2.2	2.2	6	22.5
MS112M-6	2.2	5.6	940	80.5	0.74	2.2	2.2	6	29
MS132S-6	3	7.2	960	83	0.76	2	2	6.5	48
MS132M-6	4	9.4	960	84	0.77	2	2	6.5	49
MS132M-6	5.5	13	960	85.3	0.78	2	2	6.5	57.5
MS132S-8	2.2	5.8	710	85.5	0.71	2	2	5.5	39
MS132M-8	3	7.7	710	82	0.72	2	2	5.5	45

230V SINGLE PHASE (Capacitor Run)

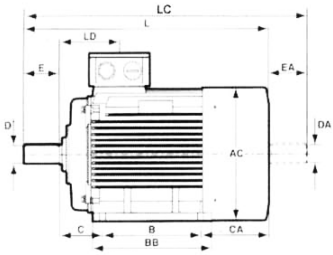
Frame	Power Kw	Current A	Speed r/min	Eff %	Power fator	Tstart /Tn	Tmax /Tn	Start current A	Mass\ Kg
MY63	0.18	1.48	2800	60	0.92	0.4	1.7	5	3.9
MY63	0.25	1.96	2800	63	0.92	0.4	1.7	7	4.4
MY71	0.37	2.73	2800	67	0.92	0.35	1.7	10	6.2
MY71	0.55	3.88	2800	70	0.92	0.35	1.7	15	6.5
MY80	0.75	5.15	2800	72	0.92	0.33	1.7	20	8.3
MY80	1.1	7.02	2800	75	0.95	0.33	1.7	30	9
MY90	1.5	9.44	2800	76	0.95	0.3	1.7	45	13
MY90	2.2	13.67	2800	77	0.95	0.3	1.7	65	15
MY63	0.12	1.1	1400	55	0.90	0.4	1.7	3.5	4
MY63	0.18	1.62	1400	56	0.90	0.4	1.7	5	4.5
MY71	0.25	2.02	1400	61	0.92	0.35	1.7	7	6.1
MY71	0.37	2.95	1400	62	0.92	0.35	1.7	10	7
MY80	0.55	4.25	1400	64	0.92	0.35	1.7	15	9.5
MY80	0.75	5.45	1400	68	0.92	0.32	1.7	20	10
MY90S	1.1	7.45	1400	71	0.95	0.32	1.7	30	13
MY90L	1.5	9.83	1400	73	0.95	0.3	1.7	45	16

230V SINGLE PHASE (Capacitor Start and Capacitor Run)

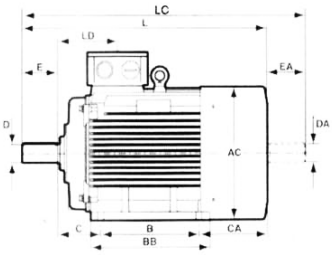
Frame	Power Kw	Current A	Speed r/min	Eff %	Power fator	Tstart /Tn	Tmax /Tn	Start current A	Mass\ Kg
ML71	0.37	2.73	2800	67	0.92	2.3	1.8	16	7
ML71	0.55	3.88	2800	70	0.92	2.5	1.8	21	8
ML80	0.75	5.15	2800	72	0.92	2.5	1.8	30	8.5
ML80	1.1	7.02	2800	75	0.95	2.5	1.8	40	9.5
ML90S	1.5	9.44	2800	76	0.95	2.5	1.8	55	12.5
ML90L	2.2	13.67	2800	77	0.95	2.5	1.8	80	14
ML71	0.25	1.99	1400	62	0.92	2.5	1.8	12	6.9
ML71	0.37	2.81	1400	65	0.92	2.5	1.8	16	8.1
ML80	0.55	4	1400	68	0.92	2.5	1.8	21	8.9
ML80	0.75	5.22	1400	71	0.92	2.5	1.8	30	9.6
ML90S	1.1	7.2	1400	73	0.95	2.5	1.8	40	13
ML90L	1.5	9.57	1400	75	0.95	2.5	1.8	55	16
ML100L	2.2	13.9	1400	76	0.95	2.5	1.8	80	23

MOTOR DIMENSIONS
CAST IRON 3 PHASE

D80 - D355 (B3) FOOT MOUNTED

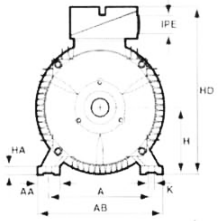


D 80 - 90



D 100 - 355

Terminal box for D 355 is different!



D 80 - 355

Terminal box for D 355 is different!

Schaft dimensions see next page.

Dimensions in mm																					
Type	**Poles**	**A**	**AA**	**AB**	**AC**	**B**	**BB**	**C**	**CA**	**D**	**DA**	**E**	**EA**	**H**	**HA**	**HD**	**K**	**L**	**LC**	**D**
D 80 K/G	2/4/6/8	**125**	34	160	157	**100**	130	**50**	108	**19j6**	19i6	**40**	40	**80**	12	222	10	278	322	72
D 90 S		**140**		180	174		140	**56**	112	**24j6**	24j6	**50**	50	**90**		241		315	368	75
D 90 L						**125**	165											340	393	
D 100 L/LX		**160**	40	200	195	**140**	176	**63**	125	**28j6**	28j6	**60**	60	**100**	14	266	12	375	438	83
D 112 M		**190**	45	230	220		180	**70**	133					**112**	17	300		399	463	92
D 132 S/SX		**216**	55	262	256		191	**89**	164	**38k6**	38k6	**80**	80	**132**	18	345		465	548	96
D 132 M						**178**	229		166									503	586	
D 160 M/MX		**254**	65	314	314	**210**	260	**108**	190	**42k6**	42k6	**110**	110	**160**	20	412	15	600	713	145
D 160 L						**254**	300		201									640	753	
D 180 M		**279**	70	350	358	**241**	310	**121**	231	**48k6**	48k6			**180**	22	453		688	801	160
D 180 L						**279**	350		233									728	841	
D 200 L/LX	2	**318**		390	397	**305**	369	**133**	225	**55m6**	18k6			**200**	25	505	19	760	873	185
D 200 L/LX	4/6/8										55m6									
D 225 S/M	2	**356**	75	435	442	**286**	393	**149**	–					**225**	28	555		815	928	
D 225 S/M	4/6/8					**311**				**60m6**		**140**						845	958	
D 250 S/M	2	**406**	80	490	481		445	**168**						**250**	30	615	24	910	1028	203
D 250 S/M	4/6/8					**349**				**70m6**										
D 280 S/M	2	**457**	88	545	543	**368**	536	**90**		**65m6**				**280**	35	680		1045	1158	220
D 280 S/M	4/6/8					**419**				**80m6**	60m6	**170**	140					1075	1218	
D 315 S/M	2	**508**	120	630	616	**406**	680	**216**		**65m6**	65m6	**140**		**315**	45	874	28	1270	1413	260
D 315 S/M	4/6/8					**457**				**85m6**	80m6	**170**	170					1300	1473	
D 315 S/M*	2					**406**				**70m6**	65m6	**140**	140					1270	1413	
D 315 S/M*	4/6/8					**457**				**90m6**	80m6	**170**	170					1300	1473	
D 355 M/L	2	**610**	116	730	710	**560**	750	**254**			–		–	**355**	52	1010		1530	–	330
D 355 M/L	4/6/8					**630**				**100M6**		**210**						1570		

* for 185kW and higher

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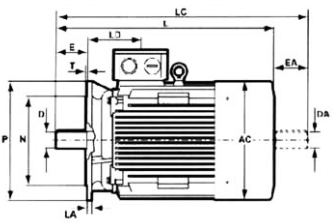
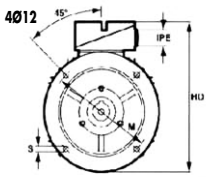
MOTOR DIMENSIONS
CAST IRON 3 PHASE

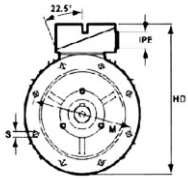
D80 - D355 (B5) FLANGE MOUNTED



D 80 - 280



D 80 - 200



D 225 - 280

D135 - 355 can only be mounted in IM V1.
For D 180-355 mounting IM V1 see next page.

Dimensions in mm													Dimensions in mm						
Type	Poles	AC	D	DA	E	EA	HD	L	LA	LC	LD	M	N	P	S	T	FLANGE	IPE*
D 80 K/G	2/4/6/8	157	19j6	19i6	40	40	245	278	12	322	72	P.C.D. 165	SPIGOT 130j6	QD 200	4Ø12	3.5	FF 165	2 x M 25x1,5
D 90 S		174	24j6	24j6	50	50	252	315		368	75							
D 90 L								340		393								
D 100 L/LX		195	28j6	28j6	60	60	290	375	13	438	83	215	180j6	250	4Ø15	4	FF 215	
D 112 M		220					310	399	13.4	463	92							2 x M32c1,5
D 132 S/SX		256	38k6	38k6	80	80	363	465	14.2	548	96	265	230j6	300			FF 265	
D 132 M								503		586								
D 160 M/MX		314	42k6	42k6	110	110	425	600		713	145	300	250j6	350	4Ø19	5	FF 300	2 x M 40x1,5
D 160 L								640		753								
D 180 M		358	48k6	48k6			448	688	15.8	801	160							
D 180 L								728		841								
D 200 L/LX	2	397	55m6	18k6			503	760	16.5	873	185	350	300h6	400			FF 350	2 x M 50x1,5
D 200 L/LX	4/6/8			55m6														
D 225 S/M	2	442					555	815	20.1	928		400	350h6	450	8Ø19		FF 400	
D 225 S/M	4/6/8		60m6		140			845		958								
D 250 S/M	2	481					615	910	22.5	1028	203	500	450h6	550			FF500	2 x M 63x1,5
D 250 S/M	4/6/8		70m6															
D 280 S/M	2	543	65m6				680	1045	20.6	1158	220							
D 280 S/M	4/6/8		80m6	60m6	170	140		1075		1218								

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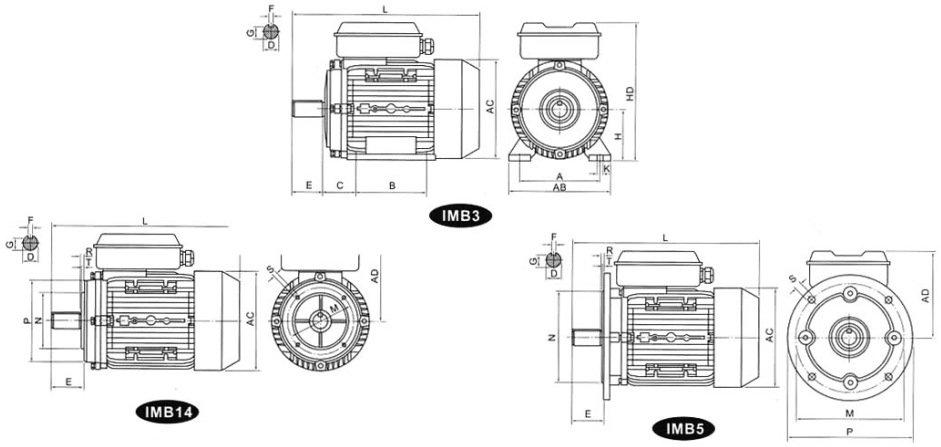
They are therefore not binding before written confirmation.



THREE PHASE (MS Series).

Frame Size	Mounting Dimensions in mm																					Frame Dimensions (mm)				
										IMB14						IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
56	90	71	36	9	20	3	7.2	56	5.8	65	50	80	0	M5	2.5	98	80	120	0	7	3.0	110	120	110	155	195
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	130	130	115	165	230
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	185	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	215	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	235	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	235	360
100L	160	140	63	28	60	8	24	100	12	130	110	160	0	M8	3.5	215	180	250	0	12	4.0	205	215	170	255	380
112M	190	140	70	28	60	8	24	112	12	130	110	160	0	M8	3.5	215	180	250	0	15	4.0	245	240	180	285	400
132S	216	140	89	38	80	10	33	132	12	165	130	200	0	M10	4.0	265	230	300	0	15	4.0	280	272	195	325	475
132M	216	178	89	38	80	10	33	132	12	165	130	200	0	M10	4.0	265	230	300	0	15	4.0	280	275	195	325	515

MOTOR DIMENSIONS
SINGLE PHASE ALUMINIUM FRAME

SINGLE PHASE (MY Series) CAPACITOR RUN ONLY

Frame Size	Mounting Dimensions in mm																					Frame Dimensions (mm)				
										IMB14						IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
63	100	80	40	11	23	4	8.5	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3.0	130	130	115	185	230
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	205	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	235	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	265	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	265	360

SINGLE PHASE (ML Series) DUAL CAPACITOR (START AND RUN)

Frame Size	Mounting Dimensions in mm																					Frame Dimensions (mm)				
										IMB14						IMB5										
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	145	145	125	210	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3.0	165	130	200	0	12	3.5	160	165	135	240	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	270	335
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3.0	165	130	200	0	12	3.5	180	185	145	270	360
100L	160	140	63	28	60	8	24	100	12	–	–	–	–	–	–	215	180	250	0	15	4.0	205	215	170	280	380

Bearings / Bearing Cap / V-seal and Oil series

The series D are standard equipped with first quality deep groove ball bearings. The bearings are maintenance free, lubricated with lithium based grease class II, for replacements schedules see separate mounting and maintenance instructions or ask the bearing manufactures or their representatives. The motors frame size D 80 - 160 have a V-seal mounted on the shaft, frame size D 180 - 355 bearing caps and a V-seal mounted on the shaft. In the DE and NDE shield a special place is made where the V-seal is placed. The dimensions for this place is made in such a way that if the V-seal is taken away, an oil seal can be mounted easily.

Regreasing device series D

For frame size D 280 and up motors are standard equipped with a regreasing device with grease slinger and a flat grease nipple M10x1 mounted. Motors with a "NU" bearing are also delivered with a regreasing device.

Terminal box series D

The motors frame size D 80 - 355 is supplied with the terminal box top mounted, executed with "D" sign in the terminal box cover. A rubber plate is mounted between the motor house and terminal box and a rubber seal between the terminal box and terminal box cover, to ensure protection against dust particles and water (IP55) entering the motor. The terminal box can be rotated by 40 x 90. Frame size D355 has two cable holes and the terminal box can be rotated by 2 x 180. All cable holes are completely closed for transport with plastic blind stop. The earth screw is placed inside the terminal box. For frame size D250 - 355 an extra screw is placed on the outside of the motor.

Eyebolts series D

All motors frame size D100 - 355 are equipped with one eyebolt. Motors for mounting IM B5/V1 for frame size D132 - 355 are equipped with 2 eyebolts.

Belt Drive

All motors are suitable for belt drive.

Shaft

The centre bore in the shaft is in accordance with the standardDIN332 sheet 1-2, form DS.

Balancing

The motors are dynamic balanced included 1/2 key in the Shaft. The standard balancing is according to international standard IEC 34-14, class N (Normal).

Key and Keyway

Moonkey for frame size D80 - 355 according to DIN 6885, PI form A. The key length is in according with DIN 748, P3, draft December 1991.

Shaft Roughness

The shaft is machined for proper mounting of V-seal or oil-seal, roughness 0.8 $\overline{\nabla\nabla}$.

Fans

Motors frame sizes D 80 - 355 have standard fans with Polypropylene / Glass fibre mixture. Frame sizes D 80 - 280 are also available with aluminium fan. All fans independent of rotation direction according IEC34 part 6.

Voltage and Frequency

The D motors are standard supplied for the following design parameters:

- 230/400V/Y 50Hz (P_N) /275/480V/Y 60Hz (P_N•1,2)
- 400/690V/Y 50Hz (P_N) /480/830V/Y 60Hz (P_N•1,2)

The motors can run without changing the rated power output on mains in which the voltage at the rated frequency diverges by +/–5% from the nominal value (design voltage range A). The above standard voltages according to DIN IEC38 are taken as the design point. The range covered by the standard motor is:

- 220–420V / 380–420V / Y 50Hz (P_N = 100%)
- 380–420V / 660–720V / Y 50Hz (P_N = 100%)
- 240–265V / 420–460V / Y 60Hz (P_N = 100%)
- 420–460V / 720–800V / Y 60Hz (P_N = 100%)
- 265–290V / 460–500V / Y 60Hz (P_N = 100%)
- 460–500V / 790–870V / Y 60Hz (P_N = 100%)

Design Voltage Range

Motors to be used for a mains voltage as specified in DIN IEC 38 with the total tolerance of +/–10%. When the motors are connected to voltages between 95% and 105% of the design voltage range – this corresponds to the mains voltage value according to DIN IEC 38 with +/–10% –maximum permissible temperature rise of the stator winding maybe approx. 10K according to IEC 34–1.

Power

The power rating (design rating) applies for continuous operation as specified in IEC 34 part 1 at a coolant temperature of max 40°C and an altitude of 1000m above mean sea level, at nominal frequency of 50Hz and design voltage.

The motors have thermal reserves which permit the following overloads in continuous operation:

- 10% above the rated power output at max. 40°C coolant temperature or
- rated power output at 50°C coolant temperature or
- at an installation altitude of 2500m above sea-level.

These conditions apply only alternatively; when both apply, the power much be reduced.

Overload capacities

In compliance with IEC 34 part 1, all motors can be exposed to the following overload conditions:

- 1,5 times the rated current for 2 min
- 1,6 times the rated torque for 15 sec.

Both conditions apply to the rated voltage and the rated frequency.

Restarting with residual and phase opposition

Restarting after mains failure against a 100% residual field is possible with all motors.

Ambient temperature

All standard motors can be used at ambient temperature of –35°C up to +40°C.

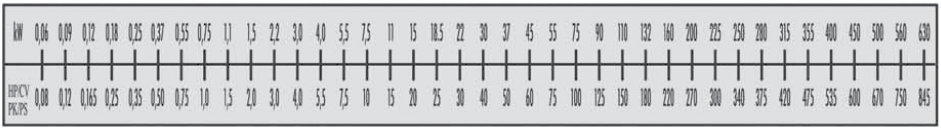
CAST IRON MOTORS

Frame	Poles	Bearing Sizes		Cable Glands & Plugs
		Driving End (DE)	Non Driving End (NDE)	
D80 D90 D100	2/4/6/8 2/4/6/8 2/4/6/8	6204 ZZ 6205 ZZ – C3 6206 ZZ – C3	6204 ZZ 6205 ZZ – C3 6206 ZZ – C3	2 x M25*1.5+1 x M20*1.5 (PTC)
D112 D132	2/4/6/8 2/4/6/8	6306 ZZ – C3 6308 ZZ – C3	6306 ZZ – C3 6308 ZZ – C3	2 x M32*1.5+1 x M20*1.5 (PTC)
D160 D180	2/4/6/8 2/4/6/8	6309 ZZ – C3 6311 ZZ – C3	6309 ZZ – C3 6311 ZZ – C3	2 x M40*1.5+1 x M20*1.5 (PTC)
D200 D225	2/4/6/8 2/4/6/8	6312 ZZ – C3 6313 ZZ – C3	6312 ZZ – C3 6313 ZZ – C3	2 x M50*1.5+1 x M20*1.5 (PTC)
D250 D250	2 4/6/8	6314 ZZ – C3 6316 ZZ – C3	6314 ZZ – C3 6314 ZZ – C3	2 x M63*1.5+1 x M20*1.5 (PTC)
D280 D280	2 4/6/8	6314 C3 / NU314* NU319 / 6319 C3*	6314 C3 6317 C3	
D315 D315	2 4/6/8	6317 C3 / NU317* NU319 / 6319 C3*	6317 C3 / 7317 B ** 6319 C3 / 7319 B **	
D355 D355	2 4/6/8	6319 C3 / NU319* NU322 / 6322 C3*	6317 C3 / 7317 B ** 6320 C3 / 7320 B **	

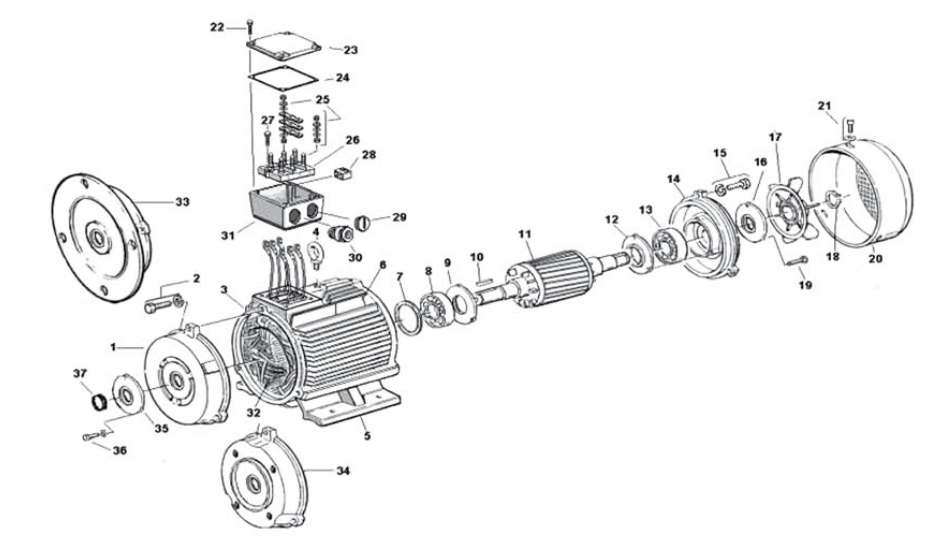
* On request only
** Required for V1 Mounting

ALUMINIUM MOTORS

Frame	Poles	Bearing Sizes		Cable Glands & Plugs
		Driving End (DE)	Non Driving End (NDE)	
56 63 71	2/4 2/4 2/4	6201ZZ-C3 6201ZZ-C3 6202ZZ-C3	6201ZZ–C3 6202ZZ–C3 6204ZZ–C3	1 x MG16 + 1 x PG11
80 90 100	2/4/6 2/4/6 2/4/6	6204ZZ-C3 6205ZZ-C3 6206ZZ-C3	6204ZZ–C3 6206ZZ–C3 6206ZZ–C3	1 x MG20 + 1 x PG16
112 132	2/4/6 2/4/6	6306ZZ – C3 6308ZZ – C3	6308ZZ–C3 6309ZZ–C3	1 x MG25 + 1 x PG21



EXPLODED VIEW OF THE D MOTOR

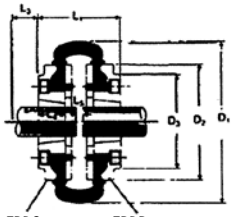


Description of the parts:

1 Drive end shield IM B3
2 Drive end shield bolts (fixing)
3 Stator - frame
4 Eye bolt
5 Feet - IM B3
6 Name plate
7 Spring washer
8 Drive end bearing
9 Drive end inner bearing cap (D180 – 355)
10 Key (full moon)
11 Rotor
12 Non drive end inner bearing cap (D 180 – 355)
13 Non drive end bearing
14 Non drive end shield
15 Non drive end shield bolts
16 Non drive end outer bearing cap (D 180 – 355)
17 Fan
18 Cir-clip
19 Non drive end outer bearing cap bolts
20 Fan cowl
21 Fan cowl screw
22 Terminal box cover screw
23 Terminal box cover
24 Gasket
25 Connection fixation nuts & bridges
26 Terminal board
27 Terminal board holder bolts
28 Terminal block PTC
29 Blindstop
30 Cable gland
31 Terminal box house
32 Windings
33 Flange - IM B5
34 Flange - IM B14 (small or large)
35 Drive end outer bearing cap (D 180 – 355)
36 Drive end outer bearing cap bolts
37 V-ring

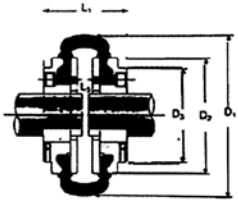
All technical details are based on 400V / 50Hz; We make all efforts to better our products. Versions, technical data and figures could be changed. They are therefore not binding before written confirmation.

A40
A50
A60



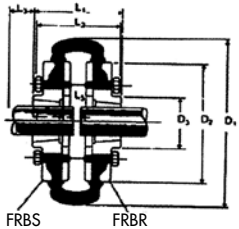
FRBS FRBR

A50
A60



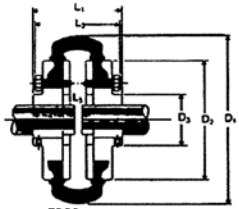
FRPB

A70
A80
A90
A100
A110
A120



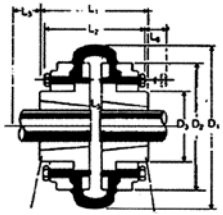
FRBS FRBR

A70
A80
A90
A100
A110
A120



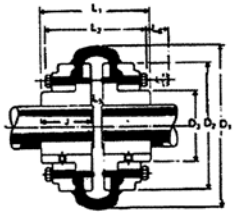
FRPB

A140
A160
A180



FRBS FRBR

A140
A160
A180



FRPB

Type S - Standard flange Type R - Reverse flange Type B - Parallel bored

Table 3 - Physical characteristics and dimensions

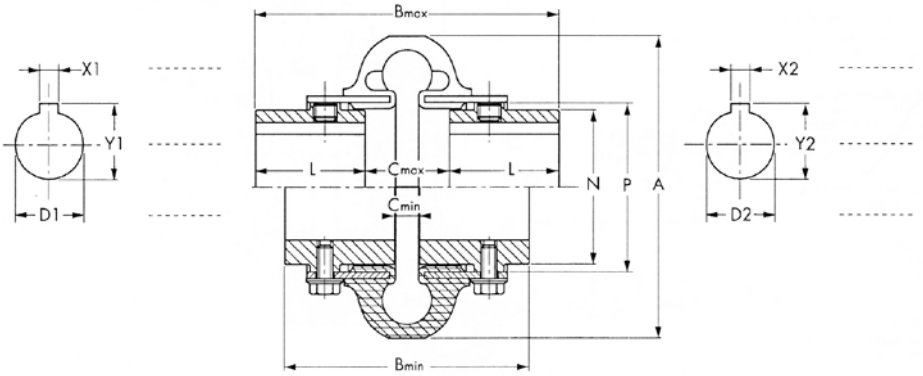
	A40	A50	A60	A70	A80	A90	A100	A110	A120	A140	A160	A180	A200
Bush size ø	1 008	1 210	1 610	1 610	2 012	2 517	2 517	2 517	3 020	3 535	4 040	4 545	4 545
Max. bush bore (mm)	25	32	42	42	50	60	60	60	75	90	100	110	110
Max. parallel bore (mm)	32	38	45	50	65	76	85	90	102	127	140	165	180
Max.speed (rpm)	4 500	4 500	4 000	3 600	3 100	2 750	2 600	2 300	2 050	1 800	1 600	1 450	1 300
Normal torque (Nm)	30	75	131	226	339	500	604	783	1 290	2 087	4 347	6 515	8 694
Max. parallel misalignment (mm)	1.05	1.30	1.55	1.87	2.10	2.40	2.62	2.90	3.15	3.70	4.25	4.75	5.28
Max. end float (mm)	1.30	1.60	2.00	2.30	2.60	3.00	3.25	3.60	4.00	4.60	5.25	5.90	6.60
Approx, mass (kg)	2.3	2.7	5.1	6.3	9.4	14.1	20.1	26.4	36.7	70.6	96.8	139.7	190.0
Dimensions (mm)													
D1	105	133	165	187	211	235	254	279	314	359	402	470	508
D2	82	100	125	144	167	188	216	233	264	311	346	394	429
D3	--	79	103	76	95	111	124	140	152	195	216	252	267
L1	66	75	83	100	107	136	138	135	151	203	226	261	261
L2	--	--	--	99	105	118	122	125	141	171	183	208	256
L3*	29	38	38	38	42	48	48	48	54	67	80	89	89
l4	22	38	25	38	32	45	45	45	51	89	102	114	114
L5†	22	25	33	40	43	46	48	45	49	25	22	33	33
If bored to size													
L1	66	89	109	130	145	160	168	175	201	203	226	261	261
L4	22	32	38	45	51	57	60	65	76	89	102	114	114
L6 ⊨										14	15	16	16

* Wrench clearance required.
† Distance between shafts to allow for each ends float and misalignment.
¥ Distance clamping screws have to be withdrawn to release tyre.
ø Bush information see page Nos. D11 and D12.

E	
	Standard version
2 ▶140	**Size**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
SHRB / SHCB	**Solid hubs**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	TN (Nm) 9550 . kW / min-1	nmax min-1 (1)	D1 D2 min.	D1 D2 max. (2)	A	B min.	B max.	C min.	C max.	L	N	P	J kgm² (3)	m kg (3)
2	22	7 500	13	28	89	84	94	36	46	24	38	47	0,00032	0,5
3	41	7 500	13	34	102	84	122	8	46	38	50	59	0,00073	1,0
4	62	7 500	13	42	116	84	122	8	46	38	57	66	0,0012	1,3
5	105	7 500	13	48	137	97	147	8	59	44	70	80	0,0032	2,3
10	164	7 500	13	55	162	97	147	8	59	44	84	93	0,0064	3,4
20	260	6 600	19	60	184	113	165	13	65	50	102	114	0,016	6,8
30	412	5 800	19	75	210	125	182	12	69	58	118	138	0,034	10
40	622	5 000	19	85	241	135	202	8	75	63	146	168	0,080	17
50	864	4 200	26	90	279	151	230	11	91	70	152	207	0,158	24
60	1 412	3 800	26	105	318	173	262	8	97	82	165	222	0,266	34
70	2 490	3 600	32	120	356	189	281	18	109	85	175	235	0,366	39
80	4 460	2 000	32	155	406	245	377	17	149	114	240	286	1,054	77
100	9 600	1 900	42	171	533	324	375	44	95	140	267	359	2,19	95
120	19 200	1 800	48	190	635	362	429	57	124	152	305	448	2,93	163
140	38 400	1 500	48	229	762	432	483	76	127	178	381	530	4,0	280

Remarks:

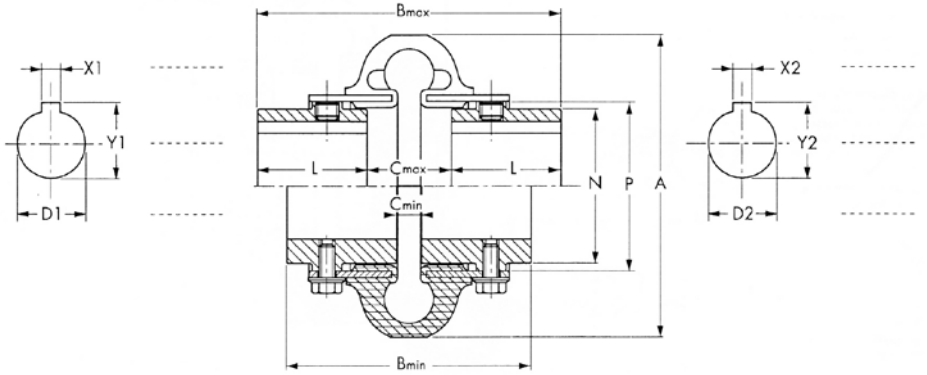
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.

E	
	Standard version
3 ▶140	**Size**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
HTL	**For Taper lock bushing**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	TN (Nm) 9550, kW min-1	nmax min-1 (1)	A	B min.	B max.	C min.	C max.	N	P	Bush n°	D1 D2 min.	D1 D2 max. (2)	L	Screw	J kgm2 (3)	m kg (3)
3	41	7 500	102	87	87	43	43	50	59	1008	13	24	22	1/4" x 1/2"	0,00073	1,0
4	62	7 500	116	87	87	43	43	57	66	1008	13	24	22	1/4" x 1/2"	0,0012	1,3
5	105	7 500	137	102	102	52	52	70	80	1210	13	32	25	3/8" x 5/8"	0,0032	2,0
10	164	7 500	162	102	102	52	52	84	93	1610	13	40	25	3/8" x 5/8"	0,00064	2,8
20	260	6 600	184	114	114	64	64	102	114	1610	13	40	25	3/8" x 5/8"	0,016	4,2
30	412	5 800	210	129	129	56	56	118	138	2012	13	48	32	7/16" x 7/8"	0,034	6,4
40	622	5 000	241	150	150	60	60	146	168	2517	13	63	45	1/2" x 1"	0,080	10,1
50	864	4 200	279	166	166	76	76	152	207	2517	13	63	45	1/2" x 1"	0,158	14,6
60	1412	3 800	318	186	186	84	84	165	222	3020	24	75	51	5/8" x 1"1/4	0,266	21,4
70	2490	3 600	356	238	238	60	60	175	235	3535	31	97	89	1/2" x 1"1/2	0,366	31,0
80	4460	2 000	406	299	299	95	95	204	286	4040	37	109	102	5/8" x 1"3/4	1,054	38,0
100	9600	1 900	533	267	381	38	152	267	359	4545	62	110	114	3/4" x 2"	2,19	113,8
120	19200	1 800	635	304	435	51	181	305	448	5050	75	127	127	7/8" x 2"1/4	2,93	185,8
140	38400	1 500	762	281	483	76	178	381	530	7060	100	177	152	1"1/4 x 3"1/2	4,0	294,0

Remarks:

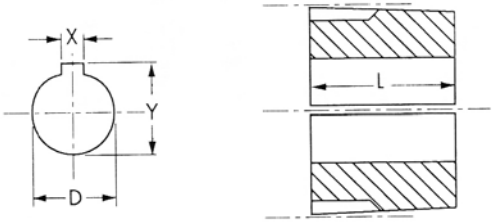
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.
4) Reduce keyway.

E	
	Standard version
3 ▶140	**Size**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
HTL	**For Taper lock bushing**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



D x y	12 4 13,8	14 5 16,3	15 5 17,3	16 5 18,3	18 6 20,8	19 6 21,8	20 6 22,8	22 6 24,8	24 8 27,3	25 8 28,3	28 8 31,3	30 8 33,3	32 10 35,3	35 10 38,3	38 10 41,3	40 12 43,3	42 12 45,3	45 14 48,8	48 14 51,8	50 14 53,8	55 16 59,3	60 18 64,4	65 18 69,4	70 20 74,9	75 20 79,9	80 22 85,4	85 22 90,4	90 25 95,4	L	m (kg) (3)
1008										(4)																			22,3	0,09
1210																													25,4	0,18
1610																(4)	(4)												25,4	0,23
ML 2012																													31,8	0,41
2517																													44,5	0,82
3020																													50,8	1,54
3535																													88,9	2,30
4040																													101,6	3,80
4545																													114,3	5,10
5050																													127,0	9,20
7060																													152,4	30,0

Standard bores

Standard

Standard

Remarks:

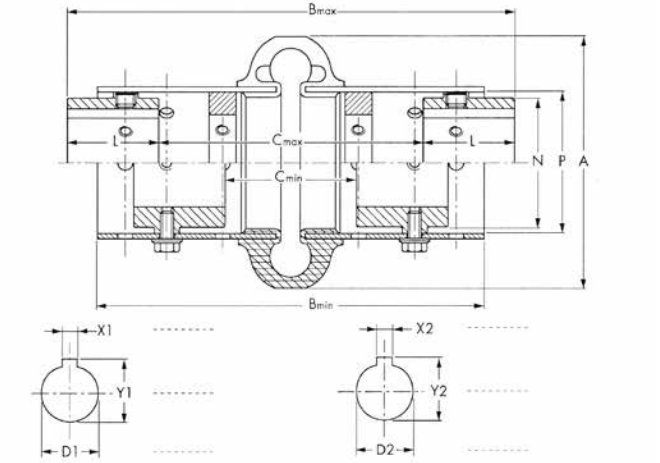
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.
4) Reduce keyway.

E	
S	**Spacer version**
2 ▶140	**Size**
– / R	**High speed ring**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
SHRB / SHCB	**Solid hubs**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	TN (Nm) 9550 . kW min-1	nmax min-1 (1)	D1 D2 min.	D1 D2 max. (2)	A	B min.	B max.	C min.	C max.	L	N	P	J kgm2 (3)	J kgm2 (4)	m kg (3)	m kg (4)
2-R	22	7 500	13	28	89	146	149	91	100	24	38	47	–	0,00053	–	1,1
3-R	41	7 500	13	34	102	184	216	85	140	38	50	59	–	0,0017	–	2,3
4-R	62	7 500	13	42	116	184	216	85	140	38	57	66	–	0,0027	–	2,8
5-R	105	7 500	13	48	137	184	228	89	140	44	70	80	–	0,0059	–	4,1
10-R	164	7 500	13	55	162	184	228	89	140	44	84	93	–	0,010	–	5,4
20	260	4 800	19	60	184	238	280	67	180	50	102	114	0,021	0,023	68,2	8,6
30	412	4 200	19	75	210	238	293	54	180	58	118	138	0,044	0,047	12	13
40	622	3 600	19	85	241	238	307	41	180	63	146	168	0,099	0,11	19	20
50	864	3 100	26	90	279	238	319	28	180	70	152	207	0,19	0,20	27	29
60	1 412	2 800	26	105	318	318	415	66	250	82	165	222	0,34	0,37	39	42
70	2 490	2 600	32	120	356	318	421	59	250	85	175	235	0,47	0,50	46	49
80	4 460	1 800	32	155	406	318	478	37	250	114	240	286	1,14	1,29	82	89

Remarks:

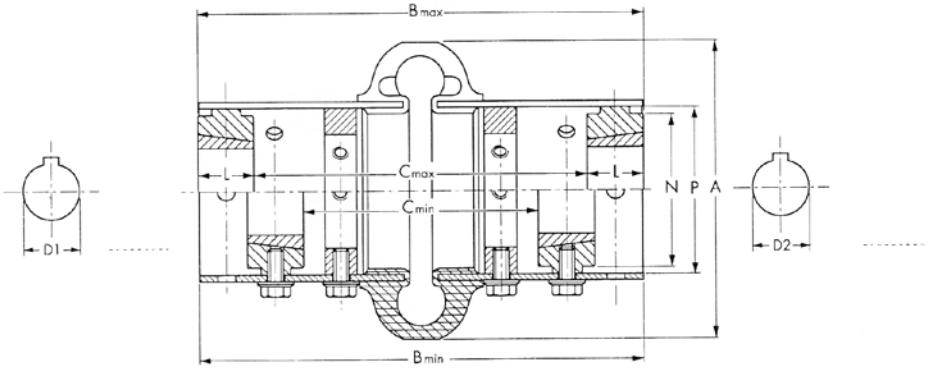
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3)Without high speed ring and for maximum bore.
4) With high speed ring and for maximum bore.

E	
S	**Spacer version**
3 ▶80	**Size**
– / R	**High speed ring**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
HTL	**For Taper lock bushing**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	T_N (Nm) 9550, kW min^{-1}	n_{max} min^{-1} (1)	A	B min.	B max.	C min.	C max.	N	P	Bush n°	D1 D2 min.	D1 D2 max. (2)	L	Screw	J kgm^2 (3)	J kgm^2 (4)	m kg (3)	m kg (4)
3-R	41	7 500	102	184	184	97	137	50	59	1008	13	25	22	1/4" x 1/2"	–	0,0017	–	2,3
4-R	62	7 500	116	184	184	97	137	57	66	1008	13	25	22	1/4" x 1/2"	–	0,0027	–	2,8
5-R	105	7 500	137	184	184	94	133	70	80	1210	13	32	25	3/8" x 5/8"	–	0,0059	–	4,1
10-R	164	7 500	162	184	184	94	133	84	93	1610	13	42	25	3/8" x 5/8"	–	0,010	–	5,4
20	260	4 800	184	238	238	123	172	102	114	1610	13	42	25	3/8" x 5/8"	0,021	0,023	8,2	8,6
30	412	4 200	210	238	238	117	165	118	138	2012	13	50	32	7/16" x 7/8"	0,044	0,047	12	13
40	622	3 600	241	238	244	104	153	146	168	2517	13	60	45	1/2" x 1"	0,099	0,11	19	20
50	864	3 100	279	238	244	104	153	152	207	2517	13	60	45	1/2" x 1"	0,19	0,20	27	29
60	1412	2 800	318	318	326	155	223	165	222	3020	24	75	51	5/8" x 1"1/4	0,34	0,37	39	42
70	2490	2 600	356	318	364	116	185	175	235	3535	31	90	89	1/2" x 1"1/2	0,47	0,50	46	49
80	4460	1 800	406	318	377	104	172	204	286	4040	37	100	102	5/8" x 1"3/4	1,14	1,29	82	89

Remarks:

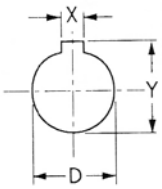
Unless specified on the order draft, couplings are delivered without boring.

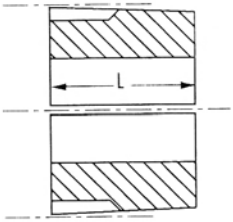
1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) Without high speed ring and for maximum bore.
4) With high speed ring and for maximum bore.
5) Reduced Keyways.

E	
S	**Spacer version**
3 ▶80	**Size**
- / R	**High speed ring**
- / SS / SS2	**Shoes & capscrews material**
M	**Metric**
HTL	**For Taper Lock bushing**
STD / STL	**Hubs material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.





D x y	12 4 13,8	14 5 16,3	15 5 17,3	16 5 18,3	18 6 20,8	19 6 21,8	20 6 22,8	22 6 24,8	24 8 27,3	25 8 28,3	28 8 31,3	30 8 33,3	32 10 35,3	35 10 38,3	38 10 41,3	40 12 43,3	42 12 45,3	45 14 48,8	48 14 51,8	50 14 53,8	55 16 59,3	60 18 64,4	65 18 69,4	70 20 74,9	75 20 79,9	80 22 85,4	85 22 90,4	90 25 95,4	L	m (kg) (3)
1008										(5)																			22,3	0,09
1210																													25,4	0,18
1610																(5)	(5)												25,4	0,23
ML 2012																													31,8	0,41
2517																													44,5	0,82
3020																													50,8	1,54
3535																													88,9	2,30
4040																													101,6	3,80

Standard bores

Standard

Standard

Remarks:

Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.

2) Maximum bores for keyways as per ISO R773.

3) Without high speed ring and for maximum bore.

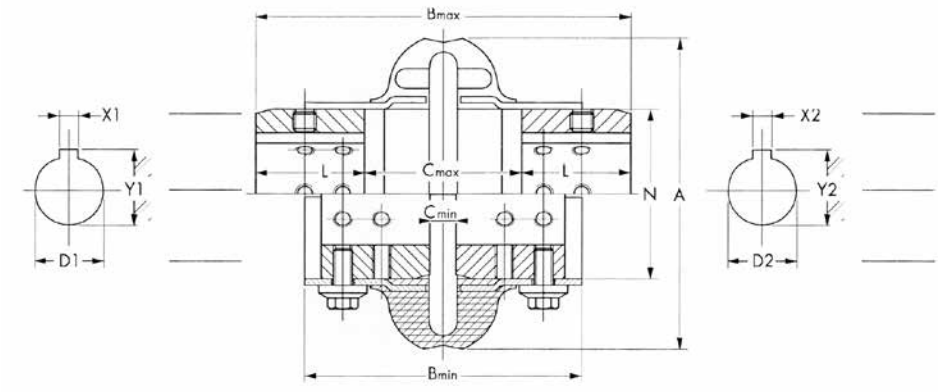
4) With high speed ring and for maximum bore.

5) Reduced Keyways.

VIVA	
	Standard version
100 ▶ 460	**Size**
- / SS / SS2	**Shoes & capscrews material**
–	
HRB / HCB	**Hub type**
– / STL / SS / X	**Hub material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	TN (Nm) 9550 . kW min-1	nmax min-1 (1)	D1 D2 min.	D1 D2 max. (2)	A	B min.	B max.	C min.	C max.	L	N	J kgm² (3)	m kg (3)
110	62	5 400	10	38	110	97	132	9	55	38	60	0,00123	1,4
125	105	5 400	10	48	120	98	132	9	55	38	70	0,00202	1,7
130	164	5 100	11	55	129	97	136	7	55	41	80	0,00310	2,1
150	250	4 800	10	65	150	111	162	9	60	51	95	0,009	4,2
170	308	4 800	11	65	168	111	162	9	60	51	95	0,00931	4,3
190	412	4 600	19	75	190	116	164	7	60	52	117	0,0173	5,5
215	662	4 300	19	80	213	134	191	11	64	64	140	0,0303	9,6
245	938	4 100	19	95	245	137	202	7	73	65	171	0,076	14,4
290	1 412	3 900	27	110	290	153	241	8	94	73	215	0,192	24,9
365	3 200	3 600	35	127	365	200	311	20	131	90	235	0,373	42,0
425	5 580	2 000	35	155	425	247	361	19	133	114	286	1,180	85,0
460	6 270	2 000	48	165	460	267	380	19	132	124	302	1,720	93,0

Remarks:

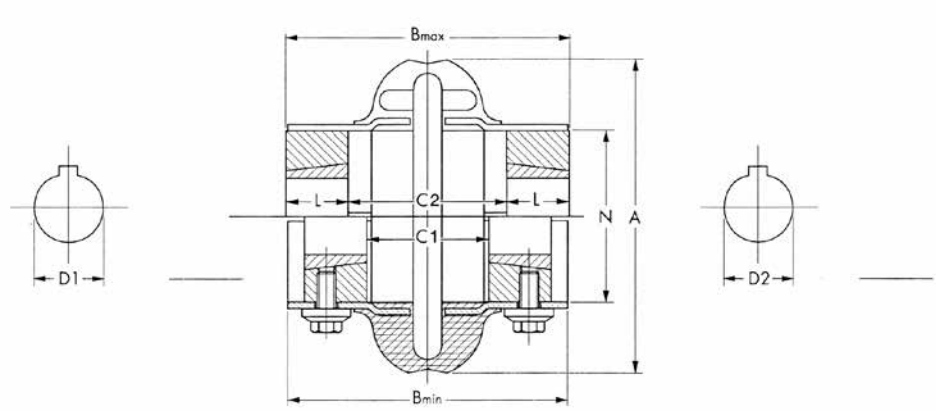
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.

VIVA	
	Standard version
110 ▶ 460	**Size**
–	
HTL	**Hubs for Taper Lock bushing**
– / STL / SS / X	**Hub material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	TN (Nm) 9550, kW min-1	nmax min-1 (1)	A	B min.	B max.	C1	C2	N	Bush n°	D1 D2 min.	D1 D2 max. (2)	L	Screw	J kgm² (3)	m kg (3)
110	62	5 400	110	97	99	41	55	60	1108	12	25	22,3	1/4" x 13	0,00103	1,2
125	105	5 400	120	98	100	41	55	70	1108	12	25	22,3	1/4" x 13	0,00176	1,7
130	164	5 100	129	97	106	35	55	80	1310	12	32	25,4	3/8" x 16	0,00282	2,2
150	250	4 800	150	111	117	54	66	95	1610	14	38	25,4	3/8" x 16	0,00716	4,1
170	308	4 800	168	111	117	54	66	95	1610	14	38	25,4	3/8" x 16	0,00716	3,4
190	412	4 600	190	116	123	47	60	117	2012	14	50	31,8	7/16" x 22	0,0165	5,9
215	662	4 300	213	134	150	51	61	140	2517	19	65	44,5	1/2" x 25	0,0331	10,7
245	938	4 100	245	137	158	50	57	171	3020	35	75	50,8	5/8" x 32	0,0769	16,6
290	1 271	3 900	290	153	188	40	87	215	3020	35	75	50,8	5/8" x 32	0,180	24,8
365	3 200	3 600	365	200	311	20	131	235	3535	30	90	90,0	1/2" x 38	0,34	36,0
425	5 580	2 000	425	247	335	44	132	286	4040	37	100	101,6	5/8" x 44	1,08	80,0
460	6 270	2 000	460	267	361	38	132	302	4045	50	110	114,3	3/4" x 50	1,52	89,0

Remarks:

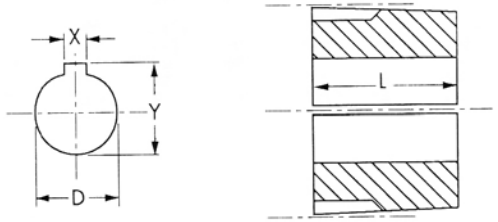
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.
4) Reduced keyway.

VIVA	
	Standard version
110 ▶ 460	**Size**
–	
HTL	**Hubs for Taper Lock bushing**
– / STL / SS / X	**Hub material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



D x y	12 4 13,8	14 5 16,3	15 5 17,3	16 5 18,3	18 6 20,8	19 6 21,8	20 6 22,8	22 6 24,8	24 8 27,3	25 8 28,3	28 8 31,3	30 8 33,3	32 10 35,3	35 10 38,3	38 10 41,3	40 12 43,3	42 12 45,3	45 14 48,8	48 14 51,8	50 14 53,8	55 16 59,3	60 18 64,4	65 18 69,4	70 20 74,9	75 20 79,9	80 22 85,4	85 22 90,4	90 25 95,4	95 25 100,4	100 28 106,4	105 28 111,4	110 28 116,4	115 32 122,4	120 32 127,4	125 32 132,4	L	m (kg) (3)
1108										(4)																											22,3	0,09
1310																																					25,4	0,18
1610																(4)	(4)																				25,4	0,23
ML 2012																																					31,8	0,41
2517																																					44,5	0,82
3020																																					50,8	1,54
3535																																					88,9	2,30
4040																																					101,6	3,80
4545																																					115,0	6,60

Standard bores

Standard

Standard

Remarks:

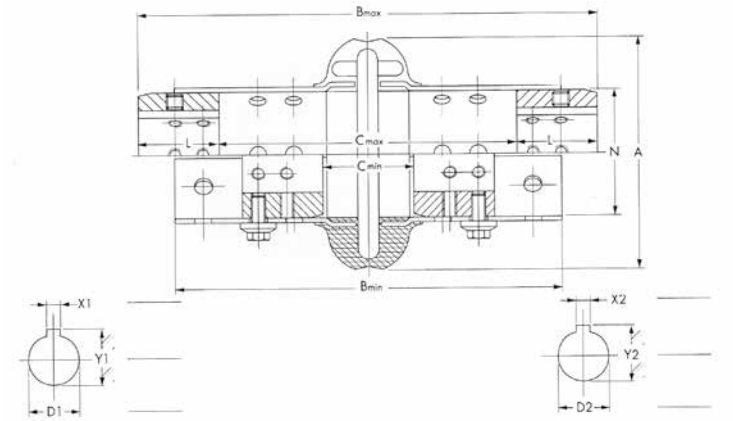
Unless specified on the order draft, couplings are delivered without boring.

1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.
4) Reduced keyway.

VIVA	
S	**Spacer version**
110 ▶ 460	**Size**
–	**Shoes & capscrews material**
– / R	
HRB / HCB	**Hub type**
– / STL / SS / X	**Hub material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.



Size	T_N (Nm) 9550 . kW min^{-1}	n_{max} min^{-1} (1)	D1 D2 min.	D1 D2 max. (2)	A	B min.	B max.	C min.	C max.	L	N	J kgm^2 (3)	m kg (3)
110	62	4 300	10	38	110	182	217	43	140	38	60	0,00148	1,7
125	105	4 300	10	48	120	191	225	54	148	38	70	0,00254	2,1
130	164	4 200	11	55	129	182	221	33	140	41	80	0,00378	2,6
150	250	4 000	10	65	150	235	280	51	180	51	95	0,01	5,0
170	308	4 000	11	65	168	235	280	51	180	51	95	0,0113	5,1
190	412	3 900	19	75	190	235	283	48	180	52	117	0,0213	6,6
215	662	3 800	19	80	213	251	308	50	180	64	140	0,0439	11,1
245	938	3 700	19	95	245	259	324	40	195	65	171	0,0947	16,8
290	1 412	3 600	27	110	290	315	403	80	257	73	215	0,238	28,7
365	3 200	2 600	35	127	365	319	430	67	250	90	235	0,493	52,0
425	5 580	1 800	35	155	425	319	454	54	250	114	286	1,340	97,0
460	6 270	1 800	48	165	460	319	479	67	250	124	302	1,98	110,0

Remarks:

Unless specified on the order draft, couplings are delivered without boring.

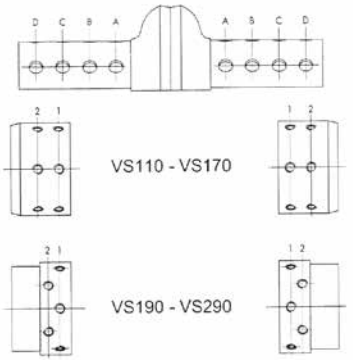
1) For speeds > nmax: Consult factory.
2) Maximum bores for keyways as per ISO R773.
3) For maximum bore.

VIVA	
S	**Spacer version**
110 ▶ 460	**Size**
–	**Shoes & capscrews material**
– / R	
HRB / HCB	**Hub type**
– / STL / SS / X	**Hub material**

The User is responsible for the provision of safety guards and correct installation of all the equipment.

Certified dimensions available on request.

D.B.S.E. Combinations



Size	ISO & Din (mm) 100	140	180	C 250	ANSI (Inches) 3 1/2	5	7
110	C2 – B1	C1 – C1			B1 – B1	C2* – C1	
125	B1 – B1	C1 – C2*			B2 – B2	C2 – C2*	
130	B2* – C2*	C1 – C1			B1 – B1	C2* – C2*	
150	B1 – B1	C1 – C1	D1 – D1		B1* – D1*	D1 – D2*	
170	B1 – B1	C1 – C1	D2* – D2*		B1* – D1*	D1* – D1*	D1 – D2*
190	B1 – B1	C1 – C1	D1 – D1		C1* – C1*	D1* – D1*	D1 – D1
215	B1 – B1	C1 – C1	D1 – D1		C1* – C1*	D1* – D1*	D1 – D1
245	B2* – C2*	D1 – C1*	D2 – D1		B1* – D1*	B2 – C1	D1 – C1
290	B2* – B1*	B2* – B1*	C1 – B2*	C2 – C1	B2* – B1*	C2* – B1*	B2 – B1
365		C1* – C1*	B1 – B1	C1 – C1	B1 – B1*	B1 – B1	C2 – B2
425		C1* – C1*	B1 – B1	C1 – C1	B1 – B2*	B1 – B1	C2 – B2
460		C1* – C1*	B1 – B1	C1 – C1	B1 – B2*	B1 – B1	C1 – D2

Note:

* = Chanfer or shoulder side turned inside.

The element holes "A" are for mounting optional High-speed rings.

D.B.S.E: Distance Between Shaft Ends.

ORC Coupling

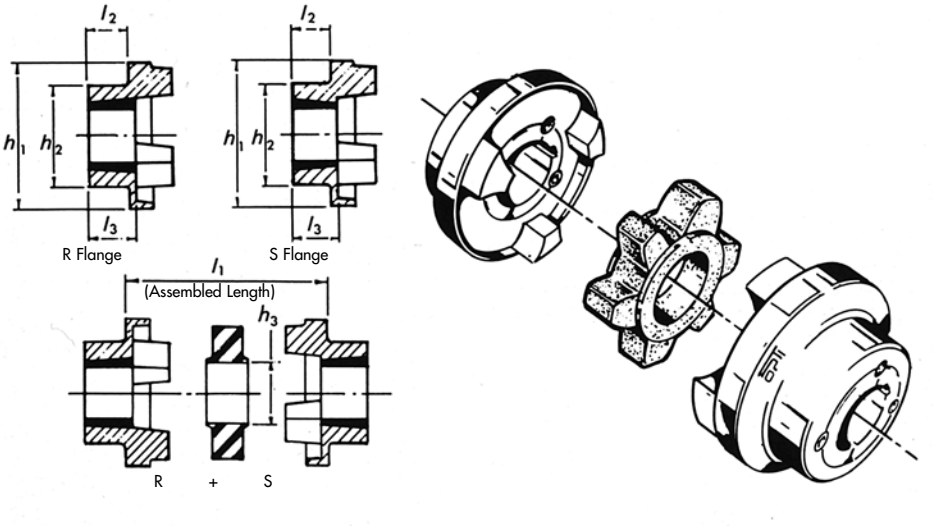


TABLE 3: PHYSICAL CHARACTERISTICS AND DIMENSIONS

Size	Max* Speed (r/min	Moment of inertia m.r² (k.g.m²)	Torsional Stiffness (N.m/ §)	Maximum Misalignment		Taper-Bush		Bored to Size									
				Parallel	Axial	Bush No.	Max Bores Metric	Max.	Min	h_1 • •	h_2	h_3	l_1	l_2	l_3	l_6 +	Approx. Mass (kg) §
07	9 100	0,000 85	10,17	0,3	+0,2	1008	25	32	-	69	60	31	25	20,6	23,5	29	1,00
09	7 400	0,001 15	25,45	0,3	+0,5	1108	28	42	-	85	70	32	30,5	19,5	23,5	29	1.17
11	5 630	0,004 00	47,99	0,3	+0,6	1610	32	55	-	112	100	45	45	18,5	26,5	38	5,00
13	4 850	0,007 80	84,00	0,4	+0,8	1610	42	60	-	130	105	50	53	18,0	26,5	38	5,46
15	4 200	0,018 10	176,27	0,4	+0,9	2012	50	70	32	150	115	62	60	23,5	33,5	42	7,11
18	3 500	0,043 40	239,96	0,4	+1,1	2517	60	80	32	180	125	77	73	34,5	46,5	48	16,6
23	2 800	0,120 68	335,95	0,5	+1,3	3020	75	100	48	225	155	99	85,5	39,5	52,5	55	26,0
28	2 300	0,446 53	959,86	0,5	+1,7	3525	90	130	60	275	206	119	105,5	51	66,5	67	50,0

• Maximum coupling speeds are calculated using an allowable peripheral speed for the hub material. For selection of smaller sizes with speeds in excess of 3 600 r/min - Consult OPTI
+l_6 is the wrench clearance required for tightening and loosening the bush on the shaft. The use of a shortened key will allow this demension to be reduced.

§ Mass is for coupling with mid-range bore Taper-Bushes.
: Sizes 07, 09, 11 and 13 can be supplied solid.

All dimensions in millimetres.

PINFLEX COUPLINGS

Table 1

The PinFlex coupling consists of two cast iron flanges, connected by means of pins but cushioned by a flexible rubber impregnated disc. To facilitate ease of fitting of the coupling to the shafts, the well-known "Taper Bush" bushings are used. Available with either standard flanges or reverse flanges or a combination of both. When ordering, please specify wich is required.

EXAMPLE

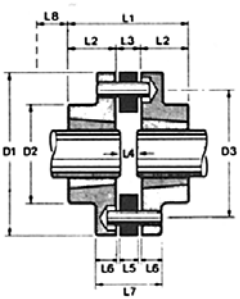
Calculate PinFlex coupling required on a rod mill drive.
Power transmitted 7,0 kW at 960 rpm. Shaft size 50 mm.

STEP 1. Service factor 1,5

STEP 2. Design power = 7,0 x 1,5 = 10,5 kW

STEP 3. Referring to Table 2 at 960 rpm, a size 178 PinFlex coupling is required.

STEP 4. Referring to Table 3, check maximum bore. Maximum bore for 178 PinFlex is 60 mm. Bore of 50 mm is in order.



Type S - Standard Flange

Type R - Reverse Flange

Normal service - Factor 1,0

General application such as agitators, compressors (centrifugal plus three or more cylinders), conveyors, elevators, fans, pumps, screws, etc.

Severe Service - Factor 1,5

Pulsating and varying loads such as compressors (1 or 2 cylinders), crushing plant, mills, pump (1 or 2 cylinders), saw mill machinery.

Table 2 - Power rating (kW)

Speed rev/min	PINFLEX COUPLING Size							
	67	**83**	**102**	**134**	**178**	**204**	**254**	**318**
10	0.02	0.04	0.07	0.16	0.35	0.80	1.86	5.37
20	0.05	0.09	0.14	0.32	0.70	1.60	3.76	10.6
40	0.10	0.18	0.28	0.64	1.41	3.20	7.43	20.7
60	0.16	0.27	0.43	0.96	2.11	4.81	11.1	30.2
80	0.21	0.36	0.57	1.28	2.82	6.42	14.8	39.2
100	0.26	0.45	0.72	1.60	3.52	8.06	18.6	47.7
150	0.37	0.65	1.04	2.33	5.11	11.6	26.9	68.9
200	0.48	0.83	1.34	2.97	6.53	14.8	34.5	88.0
250	0.57	0.99	1.58	3.53	7.76	17.7	40.9	105.0
300	0.61	1.12	1.79	4.01	8.80	20.1	46.5	119.0
350	0.72	1.23	1.97	4.39	9.62	21.9	50.7	132.0
400	0.79	1.32	2.11	4.71	10.4	23.6	54.6	145.0
500	0.90	1.45	2.36	5.27	11.6	26.4	61.2	162.0
600	0.99	1.62	2.58	5.77	12.7	28.9	66.9	175.0
720	**1.07**	**1.76**	**2.81**	**6.29**	**13.8**	**31.5**	**72.8**	**189.0**
800	1.13	1.86	2.97	6.64	14.6	33.2	76.8	198.0
960	1.22	2.02	3.23	7.24	16.0	36.2	84.0	211.0
1 000	1.24	2.06	3.30	7.39	16.3	36.9	85.8	214.0
1 200	1.36	2.24	3.59	7.98	17.6	40.1	93.3	240.0
1 400	1.46	2.40	3.83	8.58	18.8	42.8	99.2	261.0
1 440	**1.48**	**2.44**	**3.88**	**8.68**	**19.0**	**43.3**	**100.0**	**264.0**
1 600	1.57	2.60	4.07	9.10	20.0	45.5	105.0	274.0
1 800	1.68	2.76	4.30	9.62	21.2	48.1	111.0	-
2 000	1.80	2.95	4.51	10.2	22.4	50.7	-	-
2 400	2.03	3.30	4.99	11.3	24.9	56.2	-	-
2 880	**2.29**	**3.74**	**5.54**	**12.7**	**27.9**	**60.6**	**-**	**-**
3 000	2.36	3.85	5.68	13.1	28.6	-	-	-
3 600	2.73	4.39	6.37	14.8				

The figures in bolt type are for standard motor speeds.

Table 3 - Physical Characteristics and Dimensions

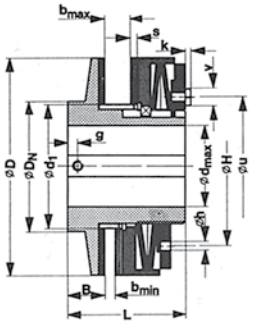
Size	ø Bush No.	Max Bore Sizes mm	Mass kg	D_1	D_2	D_3 Nom.	L_1	L_2	L_3	L_4	L_5	L_6	L_7	L_8*	Pins per flange No	Pins per flange Dia Nom.
67	1108	28	1.2	67	-	51	58	22	14	+	11	22	58	29	3	8
83	1210	32	1.8	83	-	64	66	25	16	+	13	25	66	38	3	10
102	1210	32	2.5	102	67	76	66	25	16	+	13	14	44	38	4	10
134	1610	42	4.5	134	83	102	70	25	20	+	16	18	56	38	4	13
178	2517	60	10.2	178	124	143	108	44	20	+	16	22	67	48	5	16
204	2517	60	13.6	204	124	162	115	44	27	+	22	25	77	48	6	19
254	3020	75	34.9	254	152	197	139	51	37	+	32	35	107	54	6	25
318	3535	90	66.2	318	178	248	228	89	50	+	45	41	132	67	7	32

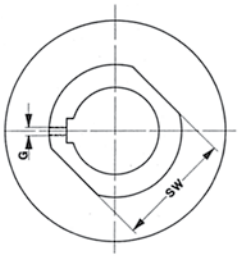
* L_8 Wrench clearance to allow for tightening and loosening the bush on the shaft. The use of a shortened wrench will permit this dimension to be reduced.

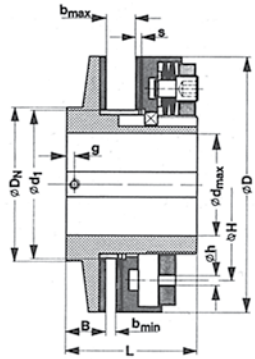
+ L_4 Shaft ends, although normally located dimension L_3 apart, can project beyond the flanges as shown. In this event, allow sufficient space between shaft ends for end float and misalignment

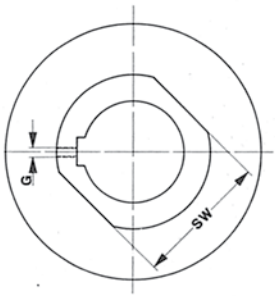
ø Bush information see page Nos D11 and D12

sizes 0 -12 Type 100.1 _ _, 100.2_ _
sizes 1 - 5 Type 100.3 _ _









Order example:

To be included when ordering, please state:	size	type	bore ød H7	keyway to DIN	width of the drive element b	with speed monitoring system
Order number:		**100._ _ _**				**see page 24**

0 ÷ 12
* lower torque range 1
* medium torque range 2
* high torque range 6) 3
standard friction lining 1
flame proof friction lining 3
friction lining for oil bath 7) 4
special low-friction material 7) 5
adjusting nut standard 0
adjusting nut with radial adjustment 8) 1
adjusting nut for triple laye 2
(with high torque range: sizes 3-5

depending on size; when not stated we will deliver with a bearing bushing for maximum overall width bmax. For smaller drive elements the bearing bushing is shortened, see page 19.
6885/1
6885/3
depending on size

* see technical data, limiting torque for overload
6) only sizes 1 ÷ 5
7) available torques on request
8) only sizes 0 ÷ 5

Example: Order number: 4 / 100.210 / 50 / 6885-1 / 15

Technical data

size	max. torque for overload				speed n_{max}	weight pilot bore
	type 100.11_ Nm	type 100.21_ Nm	type 100.31_ sizes 1, 2 Nm	Type 100.312 sizes 3, 4, 5 Nm	rpm	kg
0	2 - 10	10 - 20	-	-	8500	0.3
01	6 - 30	30 - 60	-	-	6600	0.6
1	14 - 70	70 - 130	130 - 200	-	5600	0.9
2	26 - 130	130 - 250	250 - 400	-	4300	1.6
3	50 - 250	250 - 550	-	550 - 800	3300	3.1
4	110 - 550	550 - 1100	-	1100 - 1600	2700	5.4
5	140 - 700	700 - 1400	-	1400 - 2100	2200	9.0
6	240 - 1200	1200 - 2400	-	-	1900	12.4
7	400 - 2000	2000 - 4000	-	-	1600	21.2
8	680 - 3400	3400 - 6800	-	-	1300	30.7
9	1200 - 6000	6000 - 12000	-	-	1100	79
10	2000 - 10000	10000- 20000	-	-	920	125
11	3400 - 17000	17000- 34000	-	-	780	179
12	5000 - 25000	25000- 50000	-	-	690	278

Dimensions

size	B	b_{min}	b_{max}	D	D_N	d_1 H8*	d_{min}	d_{max}	G
0	8.5	2	6	45	45	35	7	20 1)	M4
01	16	3	8	58	40	40	12	22	2)
1	17	3	10	68	45	44	12	25	2)
2	19	4	12	88	58	58	15	35	3)
3	21	5	15	115	75	72	19	45	4)
4	23	6	18	140	90	85	25	55	M8
5	29	8	20	170	102	98	30	65	M8
6	31	8	23	200	120	116	40	80	M8
7	33	8	25	240	150	144	48	100	M10
8	35	8	25	285	180	170	60	120	M10
9	53	12	28	350	225	237	57	140	M12
10	60	15	35	415	255	270	80	160	M12
11	73	20	45	490	285	305	90	180	M16
12	79	25	55	555	315	335	100	200	M16

Size	g	H	h	k	L	SW	s	u	v
0	3	37	3	- 5)	33	-	2.5	37	2 5)
01	4	46	5	- 5)	45	32	3	46	2.5 5)
1	6	50	5	1.3 5)	52	41	3	50	3 5)
2	6	67	6	3	57	50	3	67	10
3	6	84	6	5.5	68	65	4	84	13
4	6	104	7	5.5	78	80	4	97	13
5	8	125	8	5.5	92	90	5	109	13
6	8	150	10	-	102	105	5	-	-
7	8	185	10	-	113	135	5	-	-
8	8	230	10	-	115	165	5	-	-
9	9	290	10	-	162	220	6	-	-
10	9	340	10	-	185	250	6	-	-
11	11	400	10	-	222	280	7	-	-
12	11	450	10	-	250	310	7	-	-

1) up to ø 19 keyway to DIN 6885/1
over ø 19 keyway to DIN 6885/3

2) up to ø 12 M4
over ø 12 to ø 17 M5
over ø 17 M6

3) up to ø 17 M5
over ø 17 M6

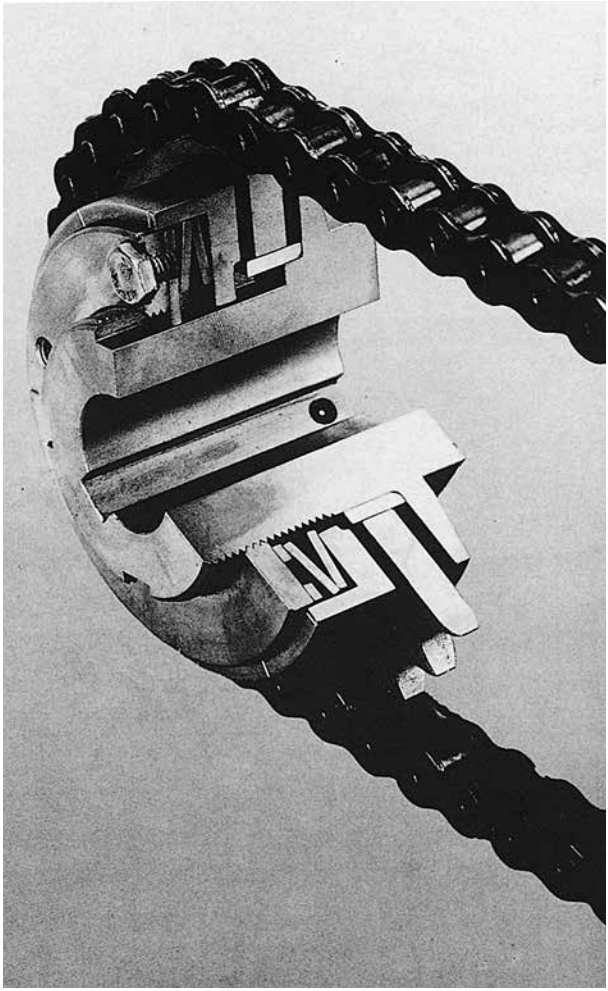
4) up to ø 22 M6
over ø 22 M8

5) hexagon socket countersunk head cap screw to DIN 7991

* fit indication H8 refers to bore of the output element

ROBA® -sproc

Ready to use overload protection for roller chain drives.



❑ **Keep torque under control**

ROBA®-sproc slip hubs provide reliable protection against overloads in machine drives equipped with roller chains. Available in a wide range of models, they can be easily adapted to a diversity of drive conditions. They are simple to adjust to any desired torque, are sturdy and dependable and their high-quality friction linings guarantee long service life.

❑ **Product Improvement**

Machines and drives can easily be fitted with a Mayr ROBA®-sproc slip hub to replace an existing roller chain sprocket, thus increasing the potential productivity of the machine by reducing down-time due to overload, jams etc. infinite torque adjustment settings for every type of application.

❑ **Protection**

The ROBA®-sproc slip hub operates when torque increases excessively in the event of a malfunction, jam-up or torque overload in the machine, thus protecting drive components from damage. ROBA®-sproc slip hubs are easily adjusted via the unique Mayr locking nut and safety plate.

❑ **Reliability**

High quality precision components, enclosed design with phosphated surfaces for rust prevention ensure that ROBA®-sproc slip hubs are hard to beat in terms of design and reliability. Minimum maintenance ensures durable, dependable and cost effective machine safety.

❑ **Ex-stock Availability**

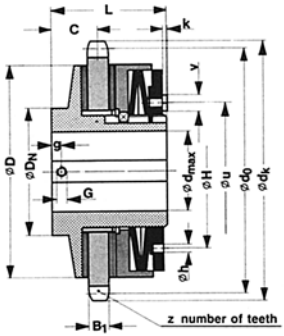
Modular standardised design ensures a highly advantageous cost/benefit ratio, allied to fast delivery with pilot bore or finished bore hubs. The simple yet flexible design and wide torque range per size of unit offers the user a readily available safety element.

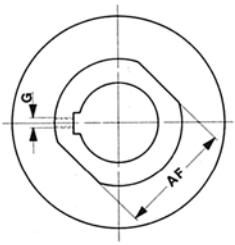
ROBA® -sproc

Overload protection for roller chain drives

Sizes 01-5

Type 110.1__
110.2__





ROBA®-sproc is a standard chain plate wheel fully assembled with the appropriate ROBA® slip hub.

The smallest possible chain plate wheel for the corresponding slip hub has been chosen for the ROBA®-sproc. Other plate wheel sizes available on request.

The ROBA®-sproc is the most reasonably priced drive element for all chain drives with a high safety factor.

Technical data and dimensions

Size	Max. torque for overload Type 110.11_ Nm	Max. torque for overload Type 110.21_ Nm	Speed n_{max} rpm	Weight pilot bore kg	B_1	C	D	D_N	d_{min}	d_{max}	d_k
01	6 - 30	30 - 60	6600	0.7	5.0	18.5	58	40	12	22	69.95
1	14 - 70	70 - 130	5600	1.1	7.0	20.5	68	45	12	25	89.24
2	26 - 130	130 - 250	4300	1.9	7.0	22.5	88	58	15	35	109.40
3	50 - 250	250 - 550	3300	2.8	10.5	26.25	115	75	19	45	133.86
4	110 - 550	550 - 1100	2700	6.9	15.3	30.65	140	90	25	55	170.43
5	140 - 700	700 - 1400	2200	11.2	15.3	36.65	170	102	30	65	194.59

Size	d_k	G	g	H	h	k	L	AF	u	v	z	Chain for standard plate wheel
01	74	1)	4	46	5	-	45	32	46	2.5 4)	23	3/8″ 06B
1	95	1)	6	50	5	1.3 4)	52	41	50	3 4)	22	1/2″ 08B
2	115	2)	6	67	6	3	57	50	67	10	27	1/2″ 08B
3	142.5	3)	6	84	6	5.5	68	65	84	13	22	3/4″ 12B
4	182	M8	6	104	7	5.5	78	80	97	13	21	1″ 16B
5	206	M8	8	125	8	5.5	92	90	109	13	24	1″ 16B

1) up to ø12 M4
over ø12 to ø17 M5
over ø17 M6

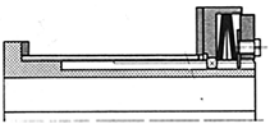
2) up to ø17 M5
over ø17 M6

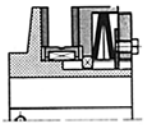
3) up to ø22 M6
over ø22 MB

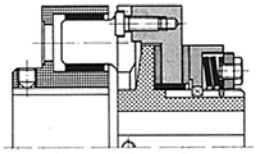
4) hexagon socket countersunk head cap screw to DIN 7991

Example: Order No 3/110.211/40/6885-1

Mayr ROBA® - sproc slip hub components


ROBA®-min


ROBA® slip hub with needle bearing


ROBA®-lastic minimum play

mayr® power transmission

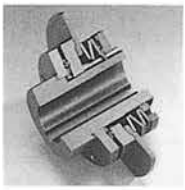
Our product-basis for our solutions...

Mechanical torque /force limiters

Notes

EAS®

mayrEAS® mechanical torque limiting clutches provide accurate, reliable overload protection for all types of machinery and equipment. Available in single or multiple positions, free wheeling and torque sensing models, EAS®-clutches feature either manual or automatic re-engagement and an unique method for setting the overload torque.
With torque capacities up to 190.000Nm, bores from 9 to 300 mm and the industries widest variety of mounting arrangements, EAS-clutches can easily be adapted to meet your overload protection requirements.

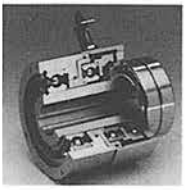


EAS®-NC/EAS®-Compact

Featuring a patented system for backlash free torque transmission, and instantaneous disengagement, the EAS®-NC and EAS®-Compact are ideally suited for precision drive applications, such as machine tool feed drives, indexing drives, etc.
The EAS®-NC is available in ten sizes with torque capacities from 0.5 to 2400 Nm and bores from 6 to 75 mm.

OPTI torque

Featuring wide torque ranges in all sizes, a positive locking arrangement to prevent torque setting changes during operating and a large diameter limit switch plate allowing the use of commercially available, inexpensive limit switch the OPTI torque is an economical solution to accurate, reliable overload protection.
The OPTI torque is available with torque capacities form 3 to 650 Nm and bore from 9 to 56 mm.



EAS®-Sp/EAS®-Sm/Zr

The EAS®-Sp and the EAS®-Sm/Zr are air or electromagnetic controlled torque limiters.
The disengaging torque setting can be altered remotely, even while the equipment is operating. This is done simply by adjusting the voltage or air pressure to the clutch. In addition both types offer the function of an ON/OFF clutch with either single or multiple re-engagement. A control unit is available for both units and can be interfaced with most sophisticated control systems.
The EAS®-Sp clutches are available with torque capacities from 6 to 2500 Nm, the EAS®-Sm/Zr from 6 to 375 Nm.

EAS®-axial

For those systems involving linear motion, the ***mayer*** EAS®-axial overload element limits axial forces. Acting as a rigid connection in normal operation, the EAS®-axial overload element transmits tensile and compressive forces without backlash or play. However, once the infinitely adjustable overload force has been exceeded, the EAS®-axial overload element disengages. Re-engagement is aotomatic the point of disengagement.
The EAS®-axial overload element is available in eight sizes, with capacities from 50 to 300,000 N.

ROBA-stop®

ROBA-stop® brakes are spring loaded safety brakes for various applications. The standard range ROBA-stop® is a very sophisticated line of torque adjustable brakes in various options, from high torque parking brakes to sealed peak load brakes. The motor brake programme also offers a cost effective brake especially designed for the integration with electric motors. A dual path design, being used in personnel lifts provides high safety and silent operation.

ROBATIC®/ROBA®-quick

These products are electromagnetic energize to engage single face clutches and brakes. Based on a unique design feature they offer optimum positioning accuracy and long service life.

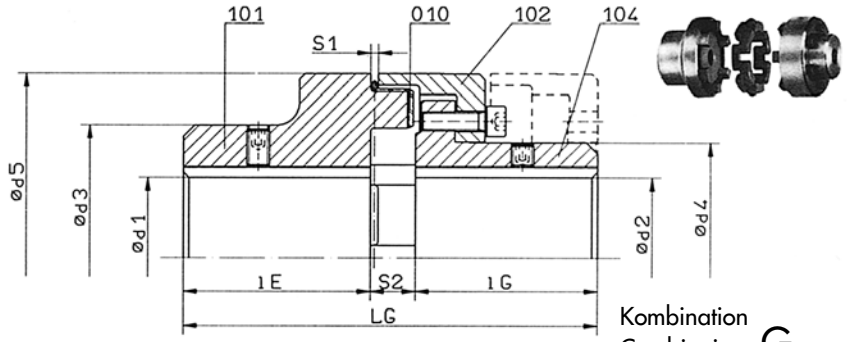
ROBA®-takt clutch/brake units

This unit is a package of our high performance clutches and brakes combined with unique automatic wear adjustment. It provides fast and accurate control of motion sequences in machines and systems with extreme cyclic frequencies - absolutely maintenance-free.

→ Kindly notice that mayr's solutions for versatile industries are not limited to above products.

mayr®
... a reliable partner for you

Normex Coupling



Kombination
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Nor Mex	Größe Dimension Size d_5 mm	T^{kn} Pb 75 Nm	Tkmax Pb 75 Nm	n Max min.$^{-1}$	Fertigbohrung Perçage fini Finished bore hole d^1 mm	d^2 mm	d_3 mm	d_4 mm	l_E mm	l_G mm	L_G mm	S_2 zul. Abw. tol. adm. max. tol. mm	J^1 Teil Pièce Part 101 kgm^2	102+104 kgm^2	Masse Teil plèce 101 Part kg	Mass [2] gesamt total kg
G	82	48	100	8000	32	32	53	44,5	40	40	92	12 ± 1	0,0006	0,0008	0,87	1,85
G	97	96	200	7000	42	39	69	54,5	50	49	113	14 ± 1	0,0014	0,0018	1,7	3,8
G	112	150	310	6000	48	46	79	64,5	60	58	133	15 ± 1	0,00026	0,0033	2,45	5
G	128	250	500	5000	55	53	90	74,5	70	68	154	16 ± 1	0,0056	0,0067	3,9	7,9
G	148	390	800	4500	65	65	107	92,5	80	78	176	18 ± 1	0,0095	0,0127	6,1	12,3
G	168	630	1300	4000	75	75	124	104,5	90	87	198	21 ± 1,5	0,0230	0,0258	9,1	18,3
G	194	1050	2000	3500	85	85	140	121,5	100	97	221	24 ± 1,5	0,0447	0,0514	13	26,7
G	214	1500	3100	3000	95	95	157	135,5	110	107	243	26 ± 2	0,0753	0,0848	17,7	35,5
G	240	2400	4800	2750	110	100	179	146	120	117	267	30 ± 2	0,1253	0,1376	23,1	45,6
G	265	3700	7500	2500	120	115	198	164	140	137	310	33 ± 2,5	0,2153	0,2420	32,9	65,7
G	295	4900	10000	2250	130	130	214	181	150	147	334	37 ± 2,5	0,3428	0,3932	41,9	83,9
G	330	6400	13000	2000	150	135	248	208	160	156	356	40 ± 2,5	0,6303	0,6659	64,3	125,5
G	370	8900	18200	1750	170	160	278	241	180	176	399	43 ± 2,5	1,110	1,1783	89,4	177,2
G	415	13200	27000	1500	190	180	315	275	200	196	441	45 ± 2,5	1,930	2,070	125,3	249,2
G	480	18000	36000	1400	190	200	315	289	220	220	485	45 ± 2,5	3,025	3,975	167,6	352,9
G	575	27000	54000	1200	210	260	350	370	240	240	525	45 ± 2,5	6,600	8,300	242	517,2

(ungebohrt) (non percé) (not drilled)

1) incl. the half share of the elastic transitional rings with max. bore hole.
2) based on not drilled couplings.
3) cam ring pushed back to change elastic transitional ring, part 010.

Coupling hub, part 101 and claw ring, part 102 of soft cast iron, size 480 and 575 of nodular graphite iron.
Flange hub, part 104 of steel, sizes 330, 370, and 415 however of nodular graphite iron.
Elastic transitional ring of a meterial which is highly damping, oil resistant and insensitive to temperature.

1. Introduction

Nor-mex, the yielding coupling of the TSCHAN product range, is flexible in all directions and therefore, able to compensate the angular, radial and axial displacements occuring between motor and machine shafts. These displacements can arise as a result of inaccuracy during assembly, movement or setting of the machine foundations or shaft expansion caused by heat.

Due to their yielding characteristics, it is possible to displace dangerous torsional oscillations arising during the operation of machinery, so that they occur in ranges where no negative effects are to be expected. The elastic transitional rings have a high internal damping characteristic, which enables the couplings, on reaching a dangerous speed range, to limit the torsional oscillation and thus protect the linked machines from damage. In addition, the couplings also moderate torque shocks. The oscillation, stimulated by these shocks, is rapidly eliminated by the internal damping. The continued flow of solid-borne sound is prevented.

The basic materials for the elastic elements of Nor-Mex are synthetic rubbers. They are normally electrically conductive and thus prevent undesired frictional electricity.

The elastic elements of the TSCHAN Nor-Mex product range come in two standard elastomer material hardness grades.

1. Perbunan (Pb 75) with nitrile rubber (NBR) as basic material and a hardness of 75 Shore A.
2. Perbunan (Pb 82) with nitrile rubber (NBR) as basic material and a hardness of 82 Shore A.

The strengths of the individual elastomer materials is qualified by the Shore hardness rating.
These values infer indirectly the transferable coupling torques and spring rates. For more detailed information please see the technical data sheet. The elastomer materials employed, are suitable for use in an environment with temperatures ranging from -40º to +120º degrees C. The influence of temperature on determining of couplings size is explained more clearly in the following guidelines.

2. Dimensioning of Coupling

According to DIN740 Part 2, the dimensioning of coupling can be carried out using three methods.

Method I: Rough determination of the coupling size using application factors. These are based on experimental values and estimate the operating performance of the driving/output mechanism in general.

Method II: Rough calculations of the coupling load for a linear system with 2 masses.

Method III: Higher methods of calculation.

Dimensioning according to Method I is the most simple, but also the most inaccurate method. Dimensioning using Method II is the most accurate and enables the ideal coupling to be established for each machine.

This is the method employed by TSCHAN. It requires, however a detailed description of the ascillation system, both with regard to the mechanical assembly(spring-mass-system) as well as to the excitation function, typical for the machinery.

The scale of this cataloque does not, however, permit a more

concentrated explanation of this method of calculation TSCHAN experts will be pleased to assist customers in case of enquiry.

A detailed description of Method II follows as this presents a good compromise between Methods I and III and is used to limit excessive calculations.

2.1 Determinationof Coupling Size According to DIN 740 - Linearised System with 2 Masses

The system nominal load torque is used as a basis for the dimensioning of Nor-Mex couplings.

Equation 1

$$T_{AN} = T_N = 9550 \bullet \frac{P_{AN}}{n}$$

$T_{AN} = T_N$ = system nominal load torque [Nm]
P_{AN} = system nominal capacity [kW]
n = coupling nominal speed [min-1]

The determination of coupling size is then carried out in accordance with Method I

Equation 2

$$T_{KN} \geq T_K \bullet SJ$$

whereby the temperature factor SJ is given in Table 1. The coupling toques T_{KN} and TK_{max} are given in the technical data sheets.

Following this, the maximum torque TK_{max} is examined.

2.2 Examination of the Coupling Maximum Torque TK_{max} Using Method II

Equation 3

$$Tk_{max} \geq T_S \bullet S_z \bullet SJ + T_N \bullet SJ$$

This equation is valid in such cases where the system nominal load torquw T_N is subjected to additional shocks.

T_S = maximum coupling torque as in equation 4a/4b
SJ = temperature factor from Table 1.
S_Z = start-up factor from Table 2.

The maximum coupling torque TS during torque shocks, is determined using the following equation:

Equation 4a

$$T_s = T_{AS} \bullet \frac{1}{m+1} \bullet S_A$$

shock on pinion end

Equation 4b

$$T_s = T_{LS} \bullet \frac{m}{m+1} \bullet S_L$$

shock on output side.

T_{AS} = maximum value of non-periodic torque shock on pinion end (e.g. on start up) Nm

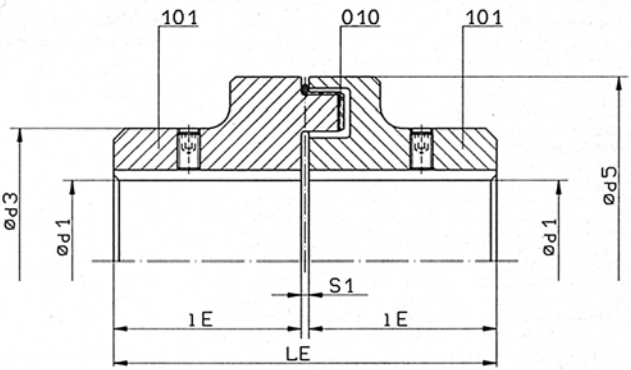
T_{LS} = maximum value of non-periodic torque shock on output side (e.g. generator short circuit).

$m = \frac{J_A}{J_L}$ ration between pinion end and output side mass moment of inertia, incl. coupling quota on systems with 2 oscillating masses

(J_A ans J_L refer to coupling rotary speed)

S_A, S_L = shock factor as in Table 3.

Normex Coupling



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Combinaison E
Combination

Nor Mex	Größe Dimension Size d_5 mm	T_{kn} Pb 75 Nm	T_{kmax} Pb 75 Nm	n Max $min.^{-1}$	Fertigbohrung Perçage fini Finished bore hole d_1 mm	d_3 mm	l_E mm	L_E mm	S_1 zul. Abw. tol. adm. max. tol. mm	$J^{1)}$ Teil Pièce 101 Part kgm^2	Masse Teil plèce 101 Part kg	Mass 2) gesamt total kg
E	50	13	27	12500	19	33	25	52	2 ± 0,5	0,0001	0,22	0,46
E	67	22	45	10000	28	46	30	62,5	2,5 ± 0,5	0,0002	0,46	0,93
E	82	48	100	8000	32	53	40	83	3 ± 1	0,0006	0,57	1,76
E	97	96	200	7000	42	69	50	103	3 ± 1	0,0014	1,7	3,46
E	112	150	310	6000	48	79	60	123,5	3,5 ± 1	0,0026	2,45	5,0
E	128	250	500	5000	55	90	70	143,5	3,5 ± 1	0,0056	3,9	7,9
E	148	390	800	4500	65	107	80	163,5	3,5 ± 1	0,0095	6,1	12,3
E	168	630	1300	4000	75	124	90	183,5	3,5 ± 1,5	0,0230	9,1	18,4
E	194	1050	2000	3500	85	140	100	203,5	3,5 ± 1,5	0,0447	13	26,3
E	214	1500	3100	3000	95	157	110	224	4 ± 2	0,0753	17,7	35,7
E	240	2400	4800	2750	110	179	120	244	4 ± 2	0,1253	23,1	46,7
E	265	3700	7500	2500	120	198	140	285.5	5,5 ± 2,5	0,2153	32,9	66,3
E	295	4900	10000	2250	130	214	150	308	8 ± 2,5	0,3428	41,9	84,8
E	330	6400	13000	2000	150	248	160	328	8 ± 2,5	0,6303	64,3	129,4
E	370	8900	18200	1750	170	278	180	368	8 ± 2,5	1,110	89,4	180,3
E	415	13200	27000	1500	190	315	200	408	8 ± 2,5	1,930	125,3	252,6
E	480	18000	36000	2100	190	315	220	448	8 ± 2,5	3,025	167,6	397,1
E	575	27000	54000	1800	210	350	240	488	8 ± 2,5	6,600	242	487

(ungebohrt) (non percé) (not drilled)

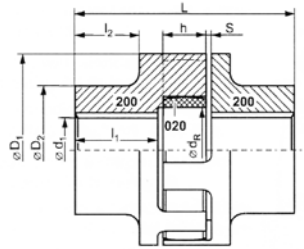
1) incl. the half share of the elastic transitional rings with max. bore hole.
2) based on not drilled couplings.

Coupling hub, part 101 of soft cast iron, size 480 and 575 of nodular graphite iron.
Elastic transitional ring of a meterial which is highly damping, oil resistant and insensitive to temperature.

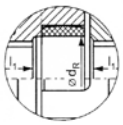
TSCHAN®-S
Coupling with standard hub

Dimensioned drawing

WS_K 0001 MB1



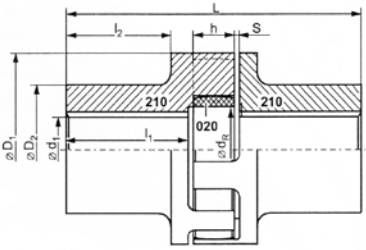
Size 50 to 200



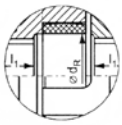
Size 230 to 400

Dimensioned drawing

WS_K 0001 MB2



Size 50 to 170



Size 200 to 400

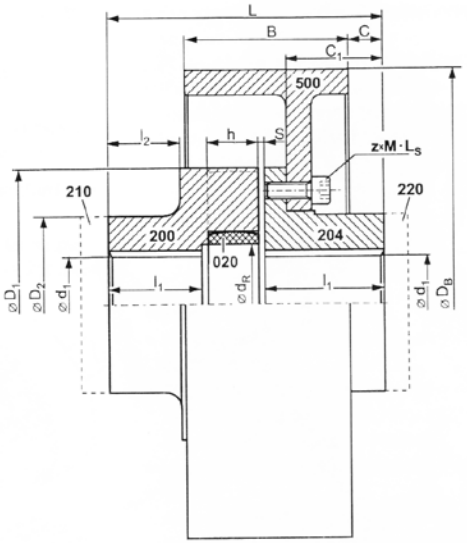
Size	Dimensions									Torque [1]		Speed	Total weight[2]
	d_1 max	D_1	D_2	L	l_1	l_2	S	h	D_R	T_{kn}	T_{kmax}	n_{max}	
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Nm)	(Nm)	(min-1)	(kg)
S-St S-LSt 50	25	50	41 42	75 96	30,0 40,5	23,5 34,0	1,5+1,0	12	19	15	40	15000	0,7 0,9
S-St 70	38	70	55	100	38,5	31,5	2,5+1,5	18	26	55	160	11000	1,6
S-St S-LSt 85	40	85	60	110 184	43,5 80,5	35,0 72,0	2,5+2,0 2,5+1,5	18	38	75	225	9000	2,6 4,1
S-St S-LSt 100	42	105	65	125 187	49,5 80,5	37,5 68,5	3,0+2,0	20	42	130	390	7250	4,0 5,6
S-St S-LSt 125	55	126	85	145 253	56,5 110,5	44,0 98,0	3,5+2,5	25	54	250	750	6000	7,0 11,8
S-St S-LSt 145	65	145	95	160 259	61,0 110,5	47,5 97,0	4,0+2,5	30	66	400	1200	5250	10,0 15,4
S-St S-LSt 170	85	170	120	190 321	75,0 140,5	60,5 126,0	5,0+3,0	30	90	630	1900	4500	16,5 28,0
S-St S-LSt 200	95 85	200	135 120	245 328	99,0 140,0	79,5 124,0	6,0+3,0	35	100	1100	3300	3750	28,6 37,8
S-St S-LSt 230	105	230	150	270 390	110,0 170,0	88,5 151,0	7,0+3,5	35	115	1700	5150	3250	40,0 56,4
S-St S-LSt 260	125	260	180	285 400	112,5 170,0	88,5 146,0	7,0+4,0	45	150	2650	7950	3000	57,5 80,2
S-St 300	140	300	200	330	131,5	107,5	7,0+4,0	50	162	3900	11700	2500	84,0
S-St 360	150	360	210	417	172,0	140,0	8,0+4,0	55	215	6500	19500	2150	134,0
S-St S-LSt 400	160	400	225	400 440	163,5 183,5	137,0 157,0	7,5+4,0	55	250	8900	26700	1900	133,0 144,0

Notes: • Standard material for intermediate ring: VkR. See chapter 3 for further information on choice of elastic materials.
• Installed size L must be maintained without fail.

1) Torque values for VkR
2) Total weight with middle bore

TSCHAN®-S
Coupling with standard hub

WS_K 0005 MB1



Size	Dimensions													Screw connection [1]		Torque [1]			Speed	Total weight[2]
	d_1 max	D_1	D_2	L	l_1	l_2	S	h	D_R	D_B	B	C	C_1	z x M - L_s	MA	T_{kn}	T_{kmax}	T_{BS} [4]	n_{max}	
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(Nm)	(Nm)	(Nm)	(Nm)	(min^{-1})	(kg)
100 - 200 - 75	42	105	65	125	49,5	37,5	3,0+2,0	20	42	200	75	14	39,5	6 x M8 - 20	25	130	390	260	4200	8,8
125 - 200 - 75	55	126	85	145	56,5	44,0	3,5+2,5	25	54	200	75	20	45,5	6 x M8 - 20	25	250	750	310	4200	11,6
145 - 200 - 75 145 - 250 - 95	65	145	95	160	61,0	47,5	4,0+2,5	30	66	200 250	75 95	21 13	48,5 48,5	6 x M10 - 25	49	400	1200	730	4200 3400	14,5 19,1
170 - 250 - 95 170 - 315 - 118	85	170	120	190	75,0	60,5	5,0+3,0	30	90	250 315	95 118	27 13	62,0 62,0	6 x M10 - 25 6 x M10 - 30	49	630	1900	1200 1350	3400 2700	25,2 34,6
200 - 315 - 118 200 - 400 - 150	95	200	135	245	99,0	79,5	6,0+3,0	35	100	315 400	118 150	38 26	84,0 84,0	6 x M12 - 30 6 x M12 - 35	85	1100	3300	2450 2650	2700 2100	45,5 62,1
230 - 400 - 150 230 - 500 - 190	105	230	150	270	110,0	88,5	7,0+3,5	35	115	400 500	150 190	36 25	93,0 93,0	10 x M12 - 35	85	1700	5150	3800	2100 1700	72,3 99,6
260 - 500 - 190	125	260	180	285	112,5	88,5	7,0+4,0	45	150	500	190	25	91,0	10 x M16 - 40	210	2650	7950	9000	1700	116,0
300 - 630 - 236 300 - 710 - 265	140	300	200	330	131,5	107,5	7,0+4,0	50	162	630 710	236 265	20 0	110,5 110,5	10 x M16 - 45 10 x M16 - 50	210	3900	11700	10500 11000	1360 1200	195,0 245,0
360 - 630 - 236 300 - 710 - 265	150	360	210	417	172,0	140,0	8,0+4,0	55	215	630 710	236 265	51 34	144,0 144,0	12 x M20 - 50 12 x M20 - 55	425	6500	19500	26000	1360 1200	242,0 292,0
400 - 710 - 265	160	400	225	400	163,5	137,0	7,5+4,0	55	250	710	265	30	141,0	14 x M20 - 50	425	8900	26700	35000	1200	288,0

Notes:
- Version with extended hub (part 210, 220) possible.
- Standard material for intermediate ring: VkR. See chapter 3 for further information on choice of elastic materials.
- Installed size L must be maintained without fail.
- Axial displacement must be taken into account through allowances for value L.

1) Screws and bolts to DIN 912, strength class 8.8 with tightening torque M_A
2) Torque values for VkR
3) Total weight with middle bore
4) Maximum allowed brake torque

TSCHAN BH 350 /450 / 550

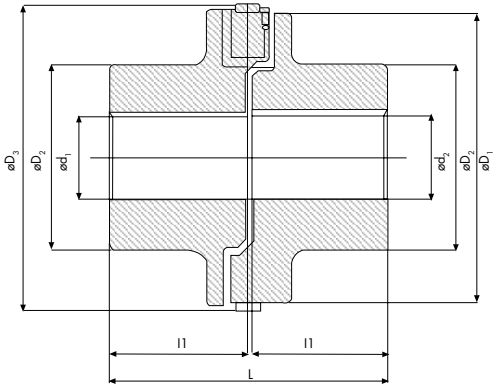
... the low-cost solution for use with high torque

The TSCHAN Couplings BH 350 / 450 / 550 are torsionally flexible shock-proof jaw couplings. It compensates for angular, radial and axial shaft misalignment within specified tolerances. The couplings can be used in either direction of rotation and be installed in any position.

The elastic buffer elements *

- **absorb torsional vibrations**
- **are resistant to oil**
- **are largely insensitive to temperature**
- **are electrical non conducting (VKR and VKW material)**

*) The elastic buffers can be radially replaced as required, by pushing back the retaining ring without disturbing the coupled machines



	D1	D2	D3	L	l1	S	d/d2 (max)	
BH 350	350	240	370	370	180	10	160	mm
BH 450	450	300	470	446	218	10	200	mm
BH 550	550	350	580	527	256,5	14	240	mm

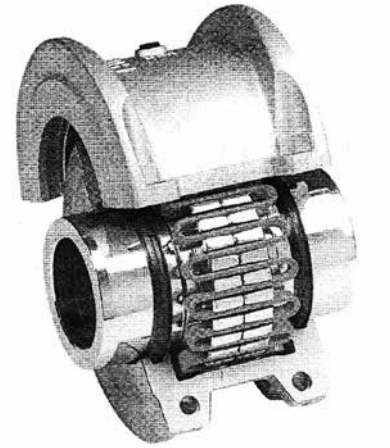
TORQUE VALUES						
Buffer material	Nominal torque TkN (Nm)			Max. torque Tkmax (Nm)		
	BH 350	BH 450	BH 550	BH 350	BH 450	BH 550
VKR	10000	21000	45000	31500	62000	135000
VKW	14000	31000	65000	43500	93000	195000

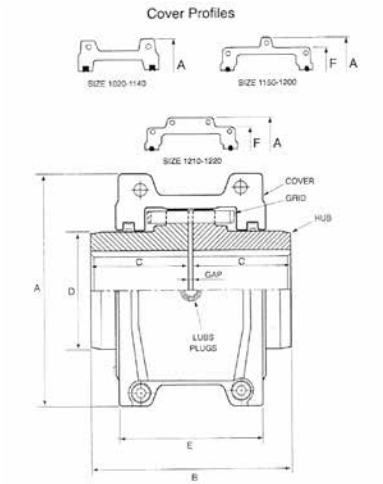
Misalignment			
	BH 350	BH450	BH 5500
radial ΔKr(max)	0,7mm	0,85mm	1,0 mm
axial ΔKa(max)	± 3 mm		
angular ΔKw(max)	0,5°		

Temperature
-30° bis 80°C

Speed n_{max}			
	BH 350	BH 450	BH 550
	2500 min^{-1}	2150 min^{-1}	1800 min^{-1}

Type H (T10)
Horizontal Split Aluminium Cover

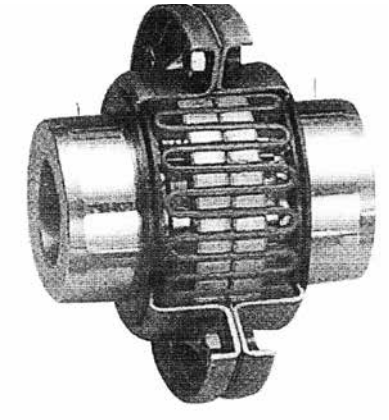


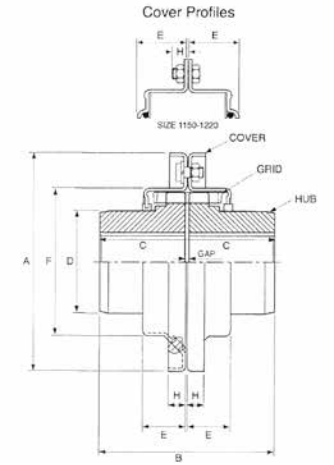


Size	HP Per 100 rpm	Max. Speed (rpm)	Basic Torque (kg . cm)	Bore Dia. (mm)		Dimensions (mm)					Gap (mm)			Cpig wt (kg)	Lub. wt)kg)	Size
				Max.	Min.	A	B	C	D	E	Min.	Normal	Max.			
1020	0.68	4,500	486	30	12.7	101.6	98.0	47.5	39.7	66.5	1.5	3	4.5	1.9	0.03	1020
1030	1.93	4,500	1,383	36	12.7	111.0	98.0	47.5	49.2	68.3	1.5	3	4.5	2.6	0.03	1030
1040	3.22	4,500	2,304	44	12.7	117.5	104.6	50.8	57.1	70.0	1.5	3	4.5	3.4	0.05	1040
1050	5.63	4,500	4,033	50	12.7	138.0	123.6	60.3	66.7	79.5	1.5	3	4.5	5.4	0.05	1050
1060	8.85	4,350	6,227	57	19.1	150.5	130.0	63.5	76.2	92.0	1.5	3	4.5	7.3	0.09	1060
1070	13	4,125	9,217	65	19.1	161.9	155.4	76.2	87.3	95.0	1.5	3	4.5	10	0.11	1070
1080	27	3,600	19,010	79	27.0	194.0	180.8	88.9	104.8	116.0	1.5	3	6	18	0.17	1080
1090	48	3,600	34,564	95	27.0	213.0	199.8	98.4	123.8	122.0	1.5	3	6	25	0.25	1090
1100	81	2,400	58,183	107	41.3	250.0	245.7	120.6	142.0	155.5	1.5	4.5	9.5	42	0.43	1100
1110	121	2,250	86,411	117	41.3	270.0	258.5	127.0	160.3	161.5	1.5	4.5	9.5	54	0.51	1110
1120	177	2,025	126,736	136	60.3	308.0	304.4	149.2	179.4	191.5	1.5	6	12.5	81	0.73	1120
1130	257	1,800	184,343	165	66.7	346.0	329.8	161.9	217.5	195.0	1.5	6	12.5	121	0.91	1130
1140	370	1,650	264,993	184	66.7	384.0	371.6	182.8	254.0	201.0	1.5	6	12.5	178	1.13	1140
1150	515	1,500	368,686	203	108.0	453.1	371.8	182.9	269.2	271.3	1.5	6	12.5	234	1.95	1150
1160	724	1,350	518,465	228	120.7	501.4	402.3	198.1	304.8	278.9	1.5	6	12.5	317	2.81	1160
1170	965	1,225	691,286	279	133.4	566.4	437.8	215.9	355.6	304.3	1.5	6	12.5	448	3.49	1170
1180	1,338	1,100	958,584	311	152.4	629.9	483.6	238.8	393.7	321.1	1.5	6	12.5	619	3.76	1180
1190	1,770	1,050	1,267,358	339	152.4	675.6	524.2	259.1	436.9	325.1	1.5	6	12.5	776	4.40	1190
1200	2,413	900	1,728,216	361	177.8	756.9	564.8	279.4	497.8	355.6	1.5	6	12.5	1,057	5.62	1200
1210	3,217	820	2,304,288	386	177.8	844.5	622.3	304.8	533.4	431.8	3.0	12.7	24.0	1,424	10.50	1210
1220	4,343	730	3,110,788	411	203.2	920.7	622.9	325.0	571.5	490.2	3.0	12.7	24.0	1,784	16.05	1220

(Coupling weight without finish bore).

Type V (T20)
Vertical Split Steel Cover



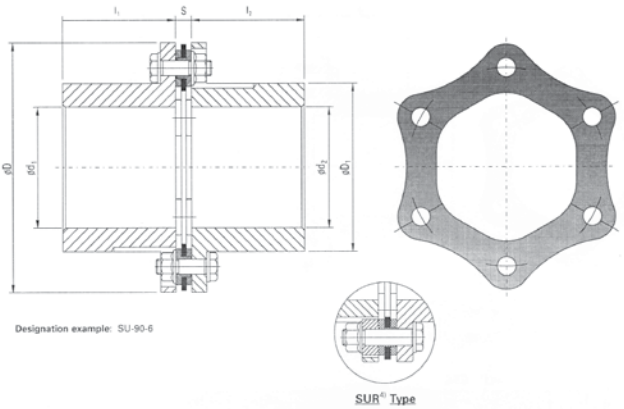


Size	HP Per 100 rpm	Max. Speed (rpm)	Basic Torque (kg . cm)	Bore Dia. (mm)		Dimensions (mm)					Gap (mm)			Cpig wt (kg)	Lub. wt)kg)	Size
				Max.	Min.	A	B	C	D	E	Min.	Normal	Max.			
1020	0.68	6,000	486	30	12.7	111.1	98.0	47.5	39.7	24.2	1.5	3	4.5	2.0	0.03	1020
1030	1.93	6,000	1,383	36	12.7	120.7	98.0	47.5	49.2	25.0	1.5	3	4.5	2.6	0.03	1030
1040	3.22	6,000	2,304	44	12.7	128.5	104.6	50.8	57.1	25.7	1.5	3	4.5	3.4	0.05	1040
1050	5.63	6,000	4,033	50	12.7	147.6	123.6	60.3	66.7	31.2	1.5	3	4.5	5.4	0.05	1050
1060	8.85	6,000	6,337	57	19.1	162.5	130.0	63.5	76.2	32.2	1.5	3	4.5	7.3	0.09	1060
1070	13	5,500	9,217	65	19.1	173.0	155.4	76.2	87.3	33.7	1.5	3	4.5	10.4	0.11	1070
1080	27	4,750	19,010	79	27.0	200.0	180.8	88.9	104.8	44.2	1.5	3	6	17.7	0.17	1080
1090	48	4,000	34,564	95	27.0	213.8	199.8	98.4	123.8	47.7	1.5	3	6	25.4	0.25	1090
1100	81	3,250	58,183	107	41.3	266.7	245.7	120.6	142.0	60.0	1.5	4.5	9.5	42.2	0.43	1100
1110	121	3,000	86,411	117	41.3	285.8	258.5	127.0	160.3	64.2	1.5	4.5	9.5	54.4	0.51	1110
1120	177	2,700	126,736	136	60.3	319.0	304.4	149.2	179.4	73.4	1.5	6	12.5	81.6	0.73	1120
1130	257	2,400	184,343	165	66.7	377.8	329.8	161.9	217.5	75.1	1.5	6	12.5	122.5	0.91	1130
1140	370	2,200	264,993	184	66.7	416.0	371.6	182.8	254.0	78.2	1.5	6	12.5	180.1	1.13	1140
1150	515	2,000	368,686	203	108.0	476.3	371.8	182.9	269.2	106.9	1.5	6	12.5	230.0	1.95	1150
1160	724	1,750	518,465	228	120.7	533.4	402.3	198.1	304.8	114.3	1.5	6	12.5	321.1	2.81	1160
1170	965	1,600	691,286	279	133.4	584.2	437.8	215.9	355.6	119.4	1.5	6	12.5	448.2	3.49	1170
1180	1,338	1,400	958,584	311	152.4	630.0	483.6	238.8	393.7	130.0	1.5	6	12.5	591.0	3.76	1180
1190	1,770	1,300	1,267,358	339	152.4	685.0	524.2	259.1	436.9	135.0	1.5	6	12.5	761.0	4.40	1190
1200	2,413	1,100	1,728,216	361	177.8	737.0	564.8	279.4	497.8	145.0	1.5	6	12.5	1,021.0	5.62	1200
1210	3,217	820	2,304,288	386	177.8	830	621.6	304.8	533.4	167.5	3.0	12.7	24.0	1,389	10.50	1210
1220	4,343	730	3,110,788	411	203.2	872	622.0	325.0	571.5	195.0	3.0	12.7	24.0	1,746	16.05	1220

(Coupling weight without finish bore).

Lamidisc® coupling

SU-6 Type: Single disc pack configuration

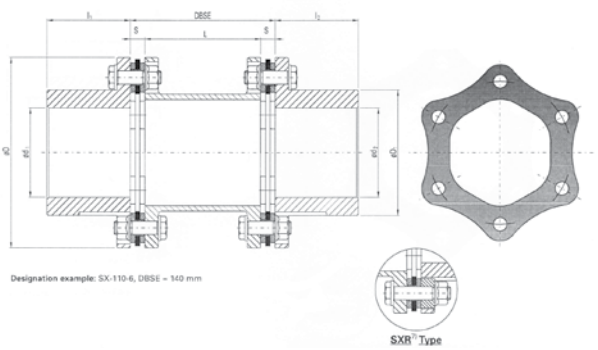


Coupling Type **SU** Size	NOMINAL TORQUE Nm.	PEAK TORQUE Nm.	DIMENSIONS (mm.) d1-d2 1) max.	D	D1	l_1-l_2	S	2) Inertia J kgm^2	2) Weight kg.	3) Axial Misalig. ± ΔKa mm.	3) Ang. Misalig. ± ΔKw deg.
90-6	240	480	41	90	58	40	7.5	0.0012	1.4	0.75	
110-6	575	1150	50	110	70	50	8.4	0.003	2.3	1.0	
132-6	1100	2200	65	132	89	60	8.4	0007	3.8	1.3	1.5°
158-6	2000	4000	75	158	104	70	11.2	0.017	6.4	1.5	
185-6	3300	6600	87	185	121	80	14.0	0.037	9.9	1.8	
202-6	4600	9200	95	202	132	90	15.5	0.061	13.5	1.9	
228-6	7000	14000	107	228	150	100	17.5	0.11	19	2.1	
255-6	10200	20400	117	255	163	115	20.5	0.21	29	2.3	
278-6	14200	28400	131	278	183	125	21.2	0.32	37	2.6	
302-6	20000	40000	145	302	201	135	24.4	0.50	49	2.8	
325-6	25000	50000	156	325	219	145	26.0	0.71	60.5	3.2	
345-6	31000	62000	165	345	230	155	28.2	0.98	73	3.4	1°
380-6	42300	84600	178	380	249	170	32.0	1.57	96	3.8	
410-6	57100	114200	192	410	269	185	33.2	2.33	124	4.1	
440-6	73500	147000	206	440	289	195	36.4	3.32	151	4.4	
475-6	92000	184000	220	475	309	210	38.2	4.89	191	4.7	
505-6	117000	234000	233	505	327	230	42.0	6.69	233	5.0	

Larger sizes are available on demand.

1) The maximum bores show are for cylindrical or taper shafts with keys. For other types of connections consult JAURE.
2) Value of complete coupling with DBSE min, d_1 and d_2 max., $GD^2 = 4J$.
3) This configuration allows only stated axial and angular misalignments. RADIAL MISALIGNMENTS ARE NOT ADMISSIBLE.
4) Overload bushings (SUR) are available on demand.

SX-6, SXR-6 Types: Standard Configuration with Variable DBSE[4)]



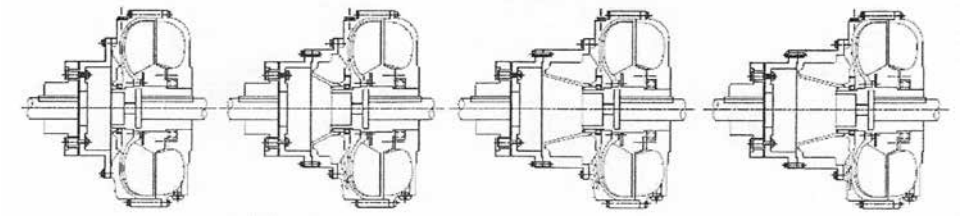
Coupling Type **SU** Size	NOMINAL TORQUE Nm.	PEAK TORQUE Nm.	MAX.[1)] SPEED UNBALANCED r.p.m.	MAX.[2)] SPEED BALANCED r.p.m.	DIMENSIONS (mm.) d1-d2 3) max.	D	D1	l_1-l_2	DBSE min 4)	L min.	S	5) Inertia J kgm^2	5) Weight kg.	6) Axial Misalig. ± ΔKa mm.	6) Ang. Misalig. ± ΔKw deg.
90-6	240	480	9100	22700	41	90	58	40	71	56	7.5	0.002	2.1	1.5	
110-6	575	1150	7200	18000	50	110	70	50	88	71.2	8.4	0.004	2.9	2.1	
132-6	1100	2200	5840	14600	65	132	89	60	108	91.2	8.4	0.012	5.5	2.6	1.5°
158-6	2000	4000	4920	12300	75	158	104	70	124	101.6	11.2	0.025	8.6	3.1	
185-6	3300	6600	4200	10500	87	185	121	80	140	112.0	14.0	0.063	15	3.7	
202-6	4600	9200	3840	9600	95	202	132	90	158	127.0	15.5	0.11	21	3.8	
228-6	7000	14000	3400	8500	107	228	150	100	174	139.0	17.5	0.20	30	4.2	
255-6	10200	20400	3080	7700	117	255	163	115	196	155.0	20.5	0.32	40	4.7	
278-6	14200	28400	2800	7000	131	278	183	125	218	175.6	21.2	0.56	57	5.2	
302-6	20000	40000	2560	6400	145	302	201	135	234	185.2	24.4	0.86	74	5.7	
325-6	25000	50000	2400	6000	156	325	219	145	254	202.0	26.0	1.17	89	6.5	
345-6	31000	62000	2200	5500	165	345	230	155	270	213.6	28.2	1.63	109	6.9	1°
380-6	42300	84600	2040	5100	178	380	249	170	296	232.0	32.0	2.64	146	7.6	
410-6	57100	114200	1880	4700	192	410	269	185	320	253.6	33.2	4.04	190	8.2	
440-6	73500	147000	1740	4350	206	440	289	195	334	261.2	36.4	5.45	224	8.8	
475-6	92000	184000	1680	4200	220	475	309	210	358	281.6	38.2	8.20	288	9.5	
505-6	117000	234000	1520	3800	233	505	327	230	394	310.0	42.0	11.96	366	10.1	

Larger sizes are available on demand.

1) Operating speed must be equal or less than permissible speed. Permissible speeds could be limited by the weight and critical speeds of spacers. Check the dynamic balancing guide and critical speeds on page 5.
2) Max. rotation speeds considered in special mat. and/or execution. For higher rotation speeds, please consult JAURE.
3) The maximum bores shown are for cylindrical or taper shafts with keys. For other type of connections consult JAURE.
4) Dimension DBSE is the distance between shafts ends and is a variable parameter.
5) Value of complete coupling with DBSE min, d_1 and d_2 max., GD^2 - 4J.
6) The value for axial misalignment is given for a complete 2 disc pack. Angular misalignment is given per pack. Refer to page 5 for combined permissible misalignment.
7) Overload bushings (SRX) are available on demand.

ELECON FLUID COUPLING QUICK DATA

SELECTION TABLE							
POWER TRANSMITTED IN kW							
Motor speed	**(rpm)**	**750**	**960**	**1170**	**1450**	**1760**	**2950**
Fluid Coupling size	**185**	0.20	0.45	0.75	1.5	3	5
	235	0.60	1.30	2.30	4.5	9	15
	270	1.10	2.50	4.50	9	17	28
	320	2.5	5.5	10	20	38	65
	370	5	12	22	42	85	130
	420	10	22	40	80	150	250
	480	20	40	75	155	250	500
	584	40	100	175	340	500	–
	660	80	180	310	600	700	–
	760	180	350	580	950	–	–



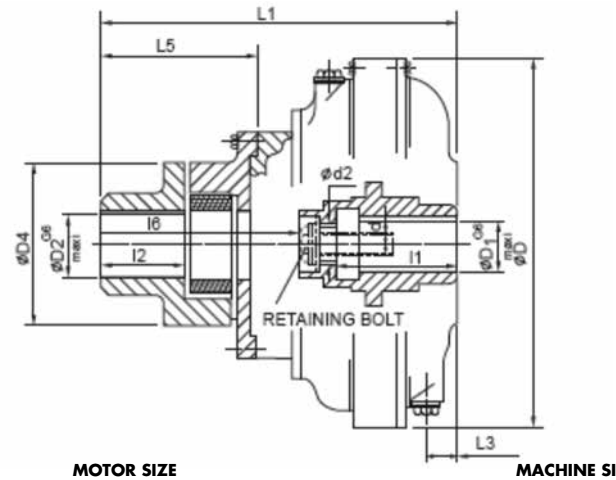
CD
"BASIC COUPLING"
The CD design without delay fill chamber is used for high inertia machines requiring a starting torque limited to 200% of normal torque.

CDR
"SOFT START COUPLING"
The CDR design with standard delay fill chamber is used where the starting torque limitation down to 140% of normal torque is required.

CDRP
"PROLONGED SOFT START COUPLING"
The CDRP design has a delay fill chamber of twice the volume of that of the CDR, and is used for belt conveyors where torque limitation down to 120% of normal torque is required.

CDRS
"SUPER SOFT START COUPLING"
The CDRS design is used particularly on belt conveyors where the motor starting torque is limited to 60% of the nominal torque. It allows progressive tensioning of the belt before accelerating of the load with a torque limitation down to 120% of nominal torque.

ELECON FLUID COUPLING QUICK DATA



MOTOR SIZE **MACHINE SIZE**

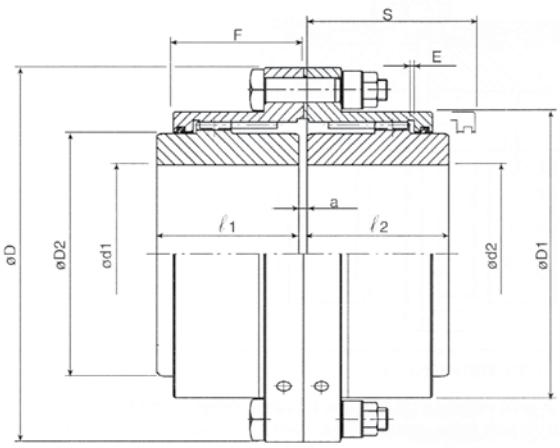
TYPE: CDR with flexible coupling EX

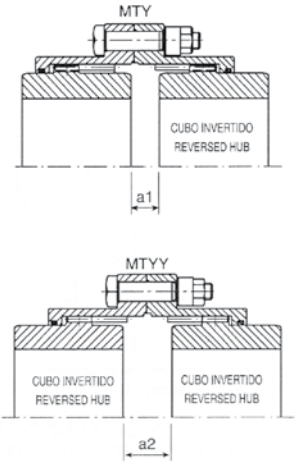
FLUID COUPLING / FLEXIBLE COUPLING — SIZE / TYPE			320 EX65	370 EX75	420 EX95	480 EX110	584 EX125	660 EX140	760 EX140
FLUID COUPLING + FLEXIBLE COUPLING	J	FLUID COUP.	0.28	0.55	0.88	1.70	3.75	6.50	12.1
	(kgm^2)	FLUID COUP.	0.07	0.13	0.26	0.53	1.11	2.70	3.47
	TOTAL WEIGHT (DRY)	FLUID COUP. kg	28	38	53	78	135	192	262
		FLUID COUP. kg	14	22	33	50	78	128	141
		D	365	425	475	550	670	760	870
		D1	60	65	80	90	110	120	135
		D2	65	75	95	100	120	140	140
		D4	170	200	230	260	300	360	360
		L1	329.5	382	428	485	552	656	718
		L3	25	29	37	37	49	55	49
		L5	126.5	157	171	188	219	272	273
		l1	110	110	120	155	170	200	240
		l2	74.5	98.5	110	112.5	131.5	172	172
		l6	149.5	181	200	237	261	300	322
TAPPED HOLE		d2	1"BSP	1"BSP	1-1/4" BSP	1-1/4" BSP	1-1/4" BSP	1-1/4" BSP	1-1/4" BSP
		d	AS PER THREADED HOLE IN THE SHAFT						

"D4" = Tschan Coupling Size

NB:... Complete Fluid Coupling consists of ..... Fluid Coupling + Tschan Flexible Coupling + Unbored Sleeve

Coupling MT / Basic design





Denomination Example

MT-132
MT-Y-132
MT-YY-132

Basic design
One revered hub
Two reserved hubs

Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS											WEIGHT Max (4)	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	GREASE QTY.	TORSIONAL STIFFNESS (4)
	Nm	Nm	1/min	D	D1	D2	d1-d2 (Min-Max) (2)	ℓ_1-ℓ_2	a	a1	a2	E	F	S(3)	Kg	Kg	J (Kgm²)	Kg	MN/rad
52	1.800	3.600	8.600	111	82,5	69	14-52	43	3	5	7	1,5	39	57	4	3	0,005	0,03	2,51
62	2.760	5.520	7.000	141	104,5	85	17-62	50	3	8	13	1,5	46	64	8	6	0,016	0,06	5,79
78	5.550	11.100	5.800	171	127,5	107	20-78	62	3	14	25	1,5	61	76	14	10	0,040	0,09	8,76
98	8.700	17.400	4.700	210	156	133	26-98	76	5	12	19	2,5	69,5	92	26	18	0,11	0,12	16,46
112	14.100	28.200	4.200	234	181,5	152	30-112	90	5	24	43	2,5	84,5	108	39	26	0,20	0,3	21,86
132	22.800	45.600	3.600	274	210,5	178	35-132	105	6	27	48	3	96	125	58	42	0,45	0,4	34,87
156	34.800	69.600	3.200	312	248,5	209	70-156	120	6	32	58	3	109	140	91	61	0,88	0,6	60,06
174	44.000	88.000	2.900	337	274	234	85-174	135	8	37	66	4	123	162	115	77	1,33	0,8	69,56
190	69.800	139.600	2.600	380	308,5	254	95-190	150	8	50	92	4	142,5	180	165	115	2,48	1,4	113
210	83.800	167.600	2.400	405	334	279	110-210	175	8	52	96	4	154,5	205	211	142	3,59	2,5	119
233	152.000	304.000	2.200	444	365,5	305	120-233	190	8	58	108	4	166,5	218	260	167	5,00	3	140
275	203.500	407.000	2.000	506	424	355	130-275	220	10	72	134	5	193,5	252	411	252	10,39	4,5	216

1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Clearance to align coupling hubs and replacement of sealing rings.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore.
5) Weight is given for maximum bore.

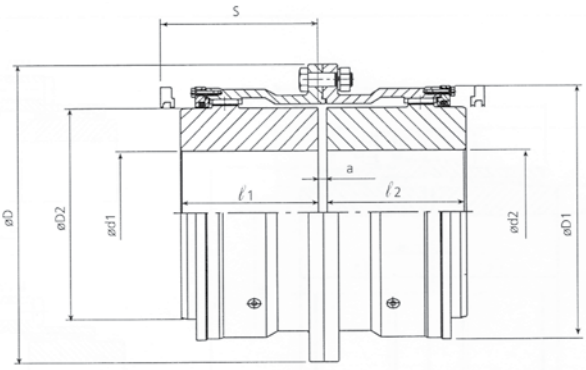
Technical modifications reserved

Coupling MTG / Basic design

Denomination Example (*) : **MTG-370**

(*) If $\ell 1$ and $\ell 2$ are different from the ones mentioned in the table below corresponding to standard couplings, they must be specified.

Example: MTG-370/$\ell 1$= 400/$\ell 2$= 400 ($\ell 1$,$\ell 2$mm)

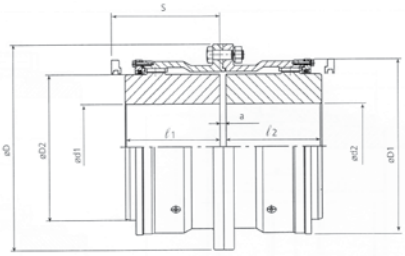


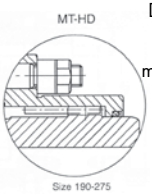
Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS							WEIGHT Max (4)	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	GREASE QTY.	TORSIONAL STIFFNESS (4)
	Nm	Nm	1/min	D	D1	D2	d1-d2 (Min-Max) (2)	$\ell 1$-$\ell 2$	a	S(3)	Kg	Kg	J (Kgm²)	Kg	MN/rad
280	220.000	440.000	1.800	540	465	370	140-280	250	16	300	527	346	14,95	3	118
310	250.000	500.000	1.600	585	505	410	160-310	270	16	320	676	442	22,93	3,6	274
345	320.000	640.000	1.500	650	548	450	180-345	290	16	340	884	574	36,84	4,8	387
370	400.000	800.000	1.400	690	588	490	210-370	325	20	370	1.105	733	53,16	5	434
390	510.000	1.020.000	1.300	760	640	520	230-390	345	20	400	1.379	957	79,63	9	637
420	660.000	1.320.000	1.200	805	690	560	250-420	365	20	420	1.667	1.154	110	9,8	817
460	780.000	1.560.000	1.100	850	730	600	275-460	400	20	450	2.043	1.372	153	11,5	966
500	1.000.000	2.000.000	1.050	930	780	650	300-500	410	25	490	2.452	1.643	217	11,5	1.180
550	1.200.000	2.400.000	950	995	850	710	325-550	430	25	520	3.035	1.991	313	14,5	1.533
590	1.600.000	3.200.000	900	1.055	910	760	350-590	470	25	550	3.720	2.413	434	23	1.827
620	1.800.000	3.600.000	850	1.140	970	810	375-620	500	30	600	4.648	3.145	633	23	2.117
650	1.900.000	3.800.000	800	1.190	1.020	840	400-650	520	30	630	5.152	3.469	765	30	2.383
680	2.100.000	4.200.000	750	1.250	1.080	890	425-680	540	30	650	5.954	4.077	990	36	2.991
730	2.600.000	5.200.000	700	1.300	1.150	950	450-730	570	30	680	6.956	4.634	1.277	38	3.361
800	3.800.000	7.600.00	660	1.420	1.270	1.050	475-800	600	30	725	9.036	5.971	1.980	46	4.557
900	5.420.000	10.840.000	590	1.600	1.430	1.180	500-900	670	35	800	13.330	8.670	3.663	57	7.743
1.000	7.250.000	14.500.000	550	1.740	1.570	1.320	525-1000	740	35	890	17.975	11.130	5.766	75	9.391
1.100	8.650.000	17.300.000	500	1.880	1.710	1.450	550-1100	800	35	980	23.150	13.930	8.683	115	10.967
1.200	10.750.000	21.500.000	480	1.990	1.830	1.580	575-1200	850	35	1.030	28.602	16.680	12.239	125	12.923

1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Clearance to align coupling hubs and replacement of sealing rings.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore.
5) Weight is given for maximum bore.

Technical modifications reserved

Coupling MTG-HD / Heavy duty gear coupling





Denomination Example (*) : **MTG-370-HD**

(*) If ℓ1 and ℓ2 are different from the ones mentioned in the table below corresponding to standard couplings, they must be specified.

Example:

MTG-370-HD/ℓ1= 400/ℓ2= 400

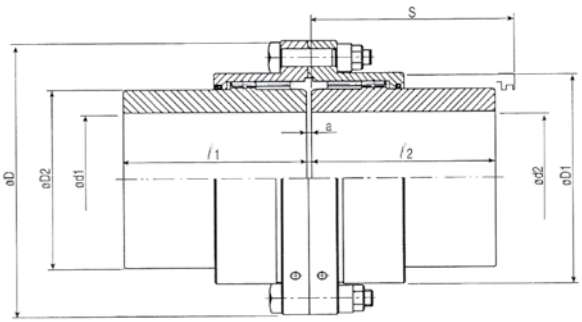
(ℓ1, ℓ2mm)

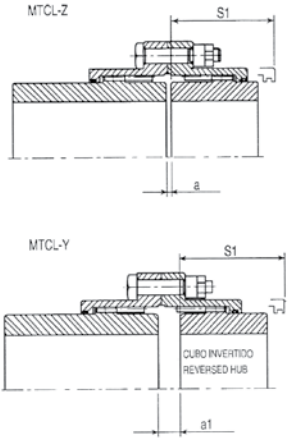
Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS							WEIGHT Max (4)	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	GREASE QTY.	TORSIONAL STIFFNESS (4)
	Nm	Nm	1/min	D	D1	D2	d1-d2 (Min-Max) (2)	ℓ1ℓ2	a	S(3)	Kg	Kg	J (Kgm²)	Kg	MN/rad
190	115.200	230.400	2.600	380	308,5	254	95-190	150	8	180	165	115	2,48	1,40	113
210	138.300	276.600	2.400	405	334	279	110-210	175	8	205	211	142	3,59	2,50	119
233	250.800	501.600	2.200	444	365,5	305	120-233	190	8	218	260	167	5,00	3,00	140
275	335.800	671.600	2.000	506	424	355	130-275	220	10	252	411	252	10,39	4,50	216
280	363.000	726.000	1.800	540	465	370	140-280	250	16	300	527	346	14,95	3	118
310	412.500	825.000	1.600	585	505	410	160-310	270	16	320	676	442	22,93	3,6	274
345	528.000	1.056.000	1.500	650	548	450	180-345	290	16	340	884	574	36,84	4,8	387
370	660.000	1.320.000	1.400	690	588	490	210-370	325	20	370	1.105	733	53,16	5	434
390	841.500	1.683.000	1.300	760	640	520	230-390	345	20	400	1.379	957	79,63	9	637
420	1.089.000	2.178.000	1.200	805	690	560	250-420	365	20	420	1.667	1.154	110	9,8	817
460	1.287.000	2.574.000	1.100	850	730	600	275-460	400	20	450	2.043	1.372	152	11,5	966
500	1.650.000	3.300.000	1.050	930	780	650	300-500	410	25	490	2.452	1.643	217	11,5	1.180
550	1.980.000	3.960.000	950	995	850	710	325-550	430	25	520	3.035	1.991	313	14,5	1.533
590	2.640.000	5.280.000	900	1.055	910	760	350-590	470	25	550	3.720	2.413	434	23	1.827
620	2.970.000	5.940.000	850	1.140	970	810	375-620	500	30	600	4.648	3.145	633	23	2.117
650	3.135.000	6.270.000	800	1.190	1.020	840	400-650	520	30	630	5.152	3.469	765	30	2.383
680	3.465.000	6.930.000	750	1.250	1.080	890	425-680	540	30	650	5.954	4.077	990	36	2.991
730	4.290.000	8.580.000	700	1.300	1.150	950	450-730	570	30	680	6.956	4.634	1.277	38	3.361
800	6.270.000	12.540.000	660	1.420	1.270	1.050	475-800	600	30	725	9.036	5.971	1.980	46	4.557
900	8.943.000	17.886.000	590	1.600	1.430	1.180	500-900	670	35	800	13.330	8.670	3.663	57	7.743
1.000	11.962.500	23.925.000	550	1.740	1.570	1.320	525-1000	740	35	890	17.975	11.130	5.766	75	9.391
1.110	14.272.500	28.545.000	500	1.880	1.710	1.450	550-1100	800	35	980	23.150	13.930	8.683	115	10.967
1.200	17.737.500	35.475.000	480	1.990	1.830	1.580	575-1200	850	35	1.030	28.605	16.680	12.239	125	12.923

1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Clearance to align coupling hubs and replacement of sealing rings.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore.
5) Weight is given for maximum bore.

Technical modifications reserved

Coupling MTCL / Longer hubs





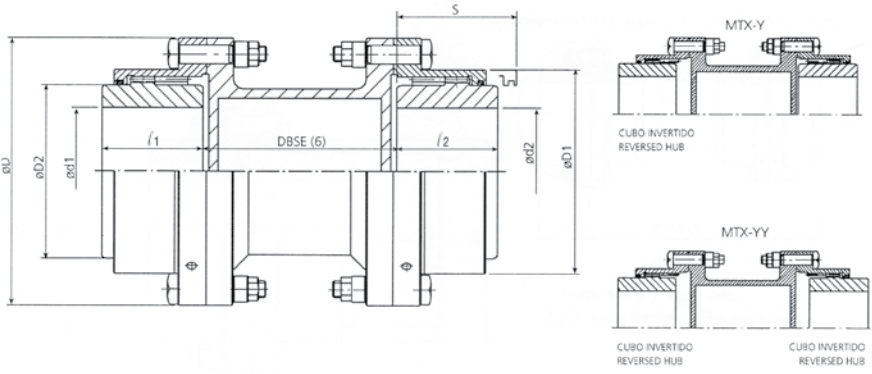
Denomination Example	MTCL-132	Two large hubs
	MTCL-Z-132	One large hub
	MTCL-Y-132	One large hub and one reversed

Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS									WEIGHT Max (4)	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	GREASE QTY.	TORSIONAL STIFFNESS (4)
	Nm	Nm	1/min	D	D1	D2	d1-d2 (Min-Max) (2)	l1-l2	a	a1	S (3)	S1 (3)	Kg	Kg	J (Kgm²)	Kg	MN/rad
52	1.800	3.600	8.600	111	82,5	69	14-52	105	3	5	119	57	7	4	0,007	0,03	1,14
62	2.760	5.520	7.000	141	104,5	85	17-62	115	3	8	129	64	14	9	0,022	0,06	2,57
78	5.550	11.100	5.800	171	127,5	107	20-78	130	3	14	144	76	24	15	0,055	0,09	4,90
98	8.700	17.400	4.700	210	156	133	26-98	150	5	12	166	92	42	25	0,15	0,12	9,82
112	14.100	28.200	4.200	234	181,5	152	30-112	170	5	24	188	108	59	36	0,27	0,3	13,94
132	22.800	45.600	3.600	274	210,5	178	35-132	185	6	27	205	125	85	56	0,57	0,4	23,53
156	34.800	69.600	3.200	312	248,5	209	70-156	215	6	32	235	140	137	84	1,16	0,6	39,39
174	44.000	88.000	2.900	337	274	234	85-174	245	8	37	272	162	180	110	1,83	0,8	47,98
190	69.800	139.600	2.600	380	308,5	254	95-190	295	8	50	325	180	265	166	3,39	1,4	66,71
210	83.800	167.600	2.400	405	334	279	110-210	300	8	52	330	205	313	194	4,73	2,5	83,12
233	152.000	304.000	2.200	444	365,5	305	120-233	305	8	58	333	218	372	222	6,50	3	105
275	203.500	407.000	2.000	506	424	355	130-275	310	10	72	342	252	532	308	12,56	4,5	177

1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Clearance to align coupling hubs and replacement of sealing rings.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore and MTCL type.
5) Weight is given for maximum bore and MTCL type.

Technical modifications reserved

Coupling MTX / With spacer



Denomination Example

MTX-132 / DBSE = 1000 (mm) / = V=1500 rpm
MTX-Y-132 / DBSE = 1000 (mm) / = V=1500 rpm
MTX-YY-132 / DBSE = 1000 (mm) / = V=1500 rpm
/ Where "V" is the maximum speed

Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS						WEIGHT Max (4)	WEIGHT per 100 mm spacer	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	MOMENT OF INERTIA per 100 mm spacer	GREASE QTY.	Ra TORSIONAL STIFFNESS for 1 meter DBSE (4)	Rb TORSIONAL STIFFNESS per 1mm spacer
	Nm	Nm	1/min	D	D1	D2	d1-d2 (Min-Max) (2)	l1 -l2	S (3)	Kg	Kg	Kg	J (Kgm²)	J (Kgm²)	Kg	MN/rad	MN/rad
52	1.800	3.600	For max. allowable speed consult fig. nº6 on sheet 33	111	82,5	69	14-52	43	57	14	0,8	13	0,017	0,0009	0,03	0,08	85
62	2.760	5.520		141	104,5	85	17-62	50	64	23	1,0	21	0,047	0,0019	0,06	0,19	190
78	5.550	11.100		171	127,5	107	20-78	62	76	36	1,5	31	0,099	0,0033	0,09	0,33	329
98	8.700	17.400		210	156	133	26-98	76	92	60	2,4	52	0,27	0,0096	0,12	0,95	961
112	14.100	28.200		234	181,5	152	30-112	90	108	80	2,7	67	0,45	0,015	0,3	1,44	1.490
132	22.800	45.600		274	210,5	178	35-132	105	125	113	3,9	106	0,96	0,025	0,4	2,49	2.530
156	34.800	69.600		312	248,5	209	70-156	120	140	169	4,7	139	1,72	0,042	0,6	4,17	4.235
174	44.000	88.000		337	274	234	85-174	135	162	216	6,6	177	2,62	0,074	0,8	7,02	7.410
190	69.800	139.600		380	308,5	254	95-190	150	180	324	10,1	274	5,26	0,17	1,4	15,40	16.790
210	83.800	167.600		405	334	279	110-210	175	205	359	8,0	290	6,48	0,14	2,5	13,01	13.640
233	152.000	304.000		444	365,5	305	120-233	190	218	433	12,2	340	9,32	0,29	3	24,32	28.860
275	203.500	407.000		506	424	355	130-275	220	252	659	17,2	500	18,38	0,52	4,5	42,74	52.070

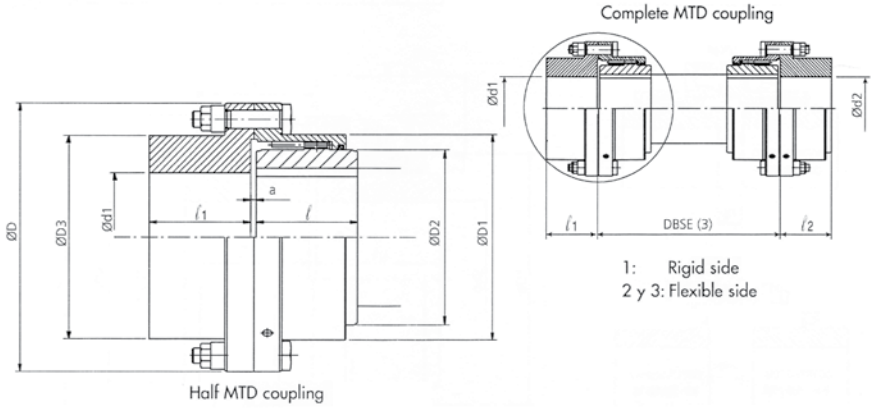
1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Clearance to align coupling hubs and replacement of sealing rings.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore and 1m DBSE.
5) Weight is given for maximum bore and 1m DBSE.
6) Distance to be specified by customer. **DBSE is distance between shaft ends, not between flanges**.

Torsional stiffness calculation

$$Rt.(MN/rad) = \frac{1}{\frac{1}{Ra} + \frac{DBSE(mm) - 1000}{Rb}}$$

Technical modifications reserved

Coupling MTD / With floating shaft



Denomination Example (*) : **MTD-132 / DBSE=1200 (mm) / V = 1500 rpm**

(*) If ℓ1 and ℓ2 are different from the ones mentioned in the table below corresponding to standard couplings, they must be specified.
Example: MTD-132/ ℓ1= 900/ ℓ2= 220 (ℓ1, ℓ2, DBSE mm) / V = 1500 rpm

/ Where "V" is the maximum speed

Size	TN NOMINAL	TP MÁX	n MAX (1)	GENERAL DIMENSIONS							WEIGHT Max (4)	WEIGHT per 100 mm shaft	WEIGHT Min. (5)	MOMENT OF INERTIA (4)	MOMENT OF INERTIA per 100 mm shaft	GREASE QTY.	Ra TORSIONAL STIFFNESS for 1 meter DBSE (4)	Rb TORSIONAL STIFFNESS per 1mm shaft
	Nm	Nm	1/min	D	D1	D2	D3	d1-d2 (Min-Max) (2)	ℓ1-ℓ2	a	Kg	Kg	Kg	J (Kgm²)	J (Kgm²)	Kg	MN/rad	MN/rad
52	1.800	3.600	For max. allowable speed consult fig. nº7 on sheet 33	111	82,5	69	80	14-52	43	3	27	2,0	25	0,018	0,001	0,03	0,09	81
62	2.760	5.520		141	104,5	85	100	17-62	50	3	42	2,8	40	0,048	0,002	0,06	0,18	155
78	5.550	11.100		171	127,5	107	125	20-78	62	3	68	4,4	63	0,117	0,004	0,09	0,44	383
98	8.700	17.400		210	156	133	148	26-98	76	5	111	6,8	103	0,30	0,01	0,12	1,09	936
112	14.100	28.200		234	181,5	152	173	30-112	90	5	150	8,6	137	0,54	0,01	0,3	1,76	1.490
132	22.800	45.600		274	210,5	178	204	35-132	105	6	227	12,3	206	1,18	0,03	0,4	3,64	3.040
156	34.800	69.600		312	248,5	209	242	70-156	120	6	321	17,0	292	2,28	0,06	0,6	7,20	5.845
174	44.000	88.000		337	274	234	268	85-174	135	8	404	21,1	366	3,47	0,09	0,8	11,11	9.020
190	69.800	139.600		380	308,5	254	302	95-190	150	8	535	24,9	485	6,13	0,13	1,4	16,68	12.560
210	83.800	167.600		405	334	279	327	110-210	175	8	669	30,4	600	9,01	0,19	2,5	24,39	18.700
233	152.000	304.000		444	365,5	305	354	120-233	190	8	820	37,3	727	12,18	0,28	3	36,06	28.190
275	203.500	407.000		506	424	355	410	130-275	220	10	1.199	51,1	1.039	25,66	0,53	4,5	69,43	52.950

1) Consult JAURE for couplings operating at higher speeds.
2) Max. allowable bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
3) Distance to be specified by customer. **DBSE is distance between shaft ends, not between flanges**.
4) Weight, moment of inertia and torsional stiffness are given for minimum bore and 2,5m DBSE for full MTD coupling.
5) Weight is given for maximum bore and 2,5m DBSE for full coupling.

Torsional stiffness calculation

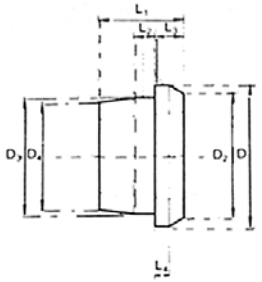
$$Rt.(MN/rad) = \frac{1}{\frac{1}{Ra} + \frac{DBSE(mm) - 2500}{Rb}}$$

Technical modifications reserved

WELD-ON HUBS

Both the 'W' and 'WH' Series Opti-Weld-On-Hubs are manufactured from steel. They are suitable for welding into any rotary component which has to be fixed to a shaft. The standard Taper Bushes are used in these hubs.

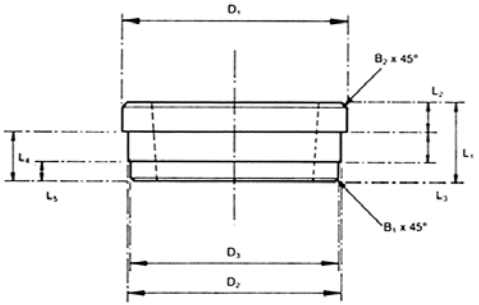
Opti-Weld-On-Hubs are available in two series; viz. 'W' series and 'WH' series.



'W' Series

Hub No.	ø Bush Size	Max. Bore of Bush		Mass kg	D_1	L_1	L_2	L_3	L_4	D_3	D_4	D_2
		mm	inches									
W12	1215	32	1.25	0.59	73	38	11	16	10	63.5/63.45	60	67
W16	1615	42	1.625	0.68	83	38	11	16	10	73.03/72.97	70	76
W25	2517	60	2.50	1.81	127	44	13	19	10	111.13/111.07	108	117
W30	3030	75	3.00	3.9	152	76	19	25	13	133.35/133.3	125	140
W35	3535	90	3.50	6.8	184	89	25	32	16	158.75/158.7	151	159
W40	4040	100	4.00	13.15	225	102	32	32	16	196.85/196.77	187	210
W45	4545	110	4.50	19.05	254	114	38	38	16	222.25/222.17	213	232
W50	5050	125	5.00	25.85	276	127	38	38	19	241.3/241.22	229	241
W60	6050	152	6.00	52.15	375	127	32	38	19	342.90/342.79	330	318
W70	7060	178	7.00	70.29	425	152	38	50	32	374.65/374.54	356	349
W80	8065	203	8.00	81.63	445	165	38	50	32	393.70/393.59	375	368

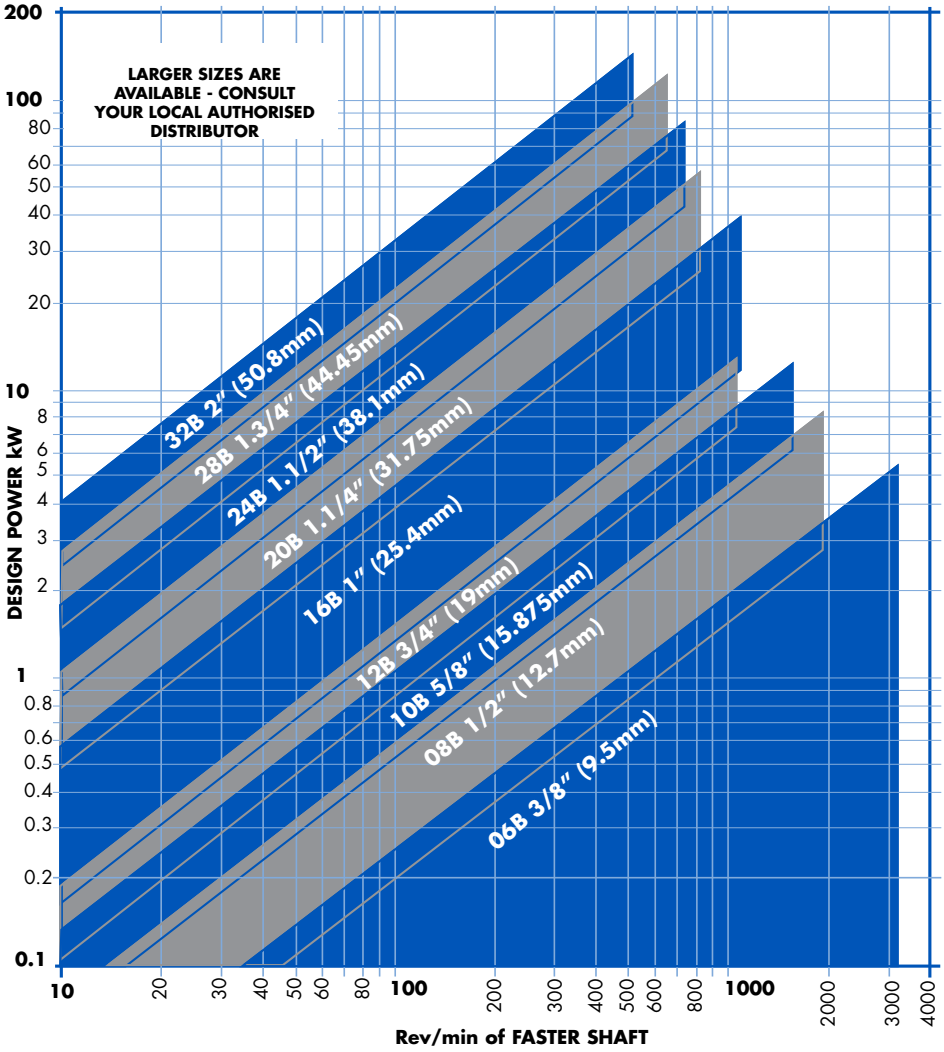
'WH' Series



Hub No.	ø Bush Size	D_1	D_2 $^{+0}_{-0.05}$	D_3	L_1 $^{+0.5}_{-0}$	L_2	L_3	L_4	L_5	B_1	B_2
WH12	1210	70	65	64.5	25	9	10	16	6	1.5	2
WH16	1610	80	75	74.5	25	9	10	16	6	1.5	2
WH20	2012	95	90	89.5	32	12	12	20	8	1.5	2
WH25	2517	115	110	109.5	44	19	15	25	10	1.5	3
WH30	3020	145	140	139.5	50	19	15	30	15	1.5	3
WH35	3525	190	180	179.5	65	25	25	45	15	2	4
WH40	4040	200	100	189.5	101	32	30	69	39	2	4
WH45	4545	210	200	199.0	114	40	30	74	44	2	4
WH50	5050	230	220	219.5	127	40	35	87	52	2	4

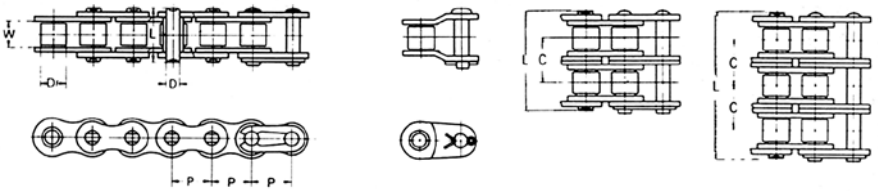
ø Bush information see page Nos. D11 and D12.

TABLE 2 - BRITISH STANDARD CHAIN



TRANSMISSION CHAIN
BRITISH SERIES

DIN 8187
BS 228-1970
ISO/R606

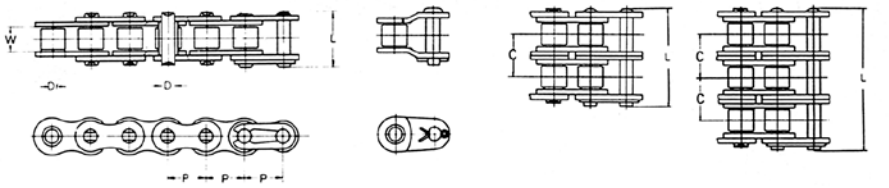


Chain		Pitch		Width between inner plates		Roller diameter		Pin diameter 1		Pin length 2		Transverse pitch		Breaking load		Weight	
DIN Nr.	ISO B.S. No.	P		w min		Dr max		D max		L max		C		min			
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Lbf	kgf	Lb/ft	kg/m
03		0.197	5.00	0.098	2.50	0.126	3.20	0.059	1.49	0.291	7.4			450	200	0.05	0.08
04		0.236	6.00	0.110	2.80	0.157	4.00	0.073	1.85	0.291	7.4			680	310	0.08	0.11
05B	05B	0.315	8.00	0.118	3.00	0.197	5.00	0.091	2.31	0.34	8.6			1,000	460	0.11	0.17
06B	06B	3/8	9.525	0.225	5.72	0.250	6.35	0.129	3.28	0.53	13.5			2,000	910	0.28	0.42
081		1/2	12.70	0.130	3.30	0.305	7.75	0.144	3.66	0.40	10.2			1,800	820	0.19	0.28
082		1/2	12.70	0.094	2.38	0.305	7.75	0.144	3.66	0.32	8.2			2,200	1,000	0.17	0.26
083		1/2	12.70	0.192	4.88	0.305	7.75	0.161	4.09	0.51	12.9			2,600	1,200	0.28	0.42
084		1/2	12.70	0.192	4.88	0.305	7.75	0.161	4.09	0.58	14.8			3,500	1,600	0.40	0.59
085		1/2	12.70	0.251	6.38	0.306	7.77	0.141	3.58	0.55	14.0			1,500	680		
08B	08B	1/2	12.70	0.305	7.75	0.335	8.51	0.175	4.45	0.67	17.0			4,000	1,820	0.44	0.65
10B	10B	5/8	15.875	0.380	9.65	0.400	10.16	0.200	5.08	0.77	19.6			5,000	2,270	0.61	0.91
12B	12B	3/4	19.05	0.460	11.68	0.475	12.07	0.225	5.72	0.89	22.7			6,500	2,950	0.83	1.23
16B	16B	1	25.40	0.670	17.02	0.625	15.88	0.326	8.28	1.42	36.1			9,500	4,310	1.73	2.57
20B	20B	1 1/4	31.75	0.770	19.56	0.750	19.05	0.401	10.19	1.70	43.2			14,500	6,580	2.55	3.80
24B	24B	1 1/2	38.10	1.00	25.40	1.000	25.40	0.576	14.63	2.10	53.4			22,000	9,980	4.73	7.04
28B	28B	1 3/4	44.45	1.22	30.99	1.100	27.94	0.626	15.90	2.56	65.1			29,000	13,160	5.57	8.30
32B	32B	2	50.80	1.22	30.99	1.150	29.21	0.701	17.81	2.65	67.4			38,000	17,240	7.05	10.50
40B	40B	2 1/2	63.50	1.50	38.10	1.550	39.37	0.901	22.89	3.25	82.6			59,000	26,770	10.74	16.00
05B-2	05B-2	0.315	8.00	0.118	3.00	0.197	5.00	0.091	2.31	0.57	14.3	0.222	5.64	1,750	800	0.24	0.36
06B-2	06B-2	3/8	9.525	0.225	5.72	0.250	6.35	0.129	3.28	0.94	23.8	0.403	10.24	3,800	1,730	0.52	.078
08B-2	08B-2	1/2	12.70	0.305	7.75	0.335	8.51	0.175	4.45	1.22	31.0	0.548	13.92	7,000	3,180	0.91	1.35
10B-2	10B-2	5/8	15.875	0.380	9.65	0.40	10.16	0.200	5.08	1.43	36.2	0.653	16.59	10,000	4,540	1.24	1.85
12B-2	12B-2	3/4	19.05	0.460	11.68	0.475	12.07	0.225	5.72	1.66	42.2	0.766	19.46	13,000	5,900	1.68	2.50
16B-2	16B-2	1	25.40	0.670	17.02	0.625	15.88	0.326	8.28	2.68	68.0	1.255	31.88	19,000	8,620	3.63	5.40
20B-2	20B-2	1 1/4	31.75	0.770	19.56	0.75	19.05	0.401	10.19	3.14	79.7	1.435	36.45	29,000	13,160	4.83	7.20
24B-2	24B-2	1 1/2	38.10	1.00	25.40	1.00	25.40	0.576	14.63	4.01	101.8	1.904	48.36	44,000	19,960	9.06	13.50
28B-2	28B-2	1 3/4	44.45	1.22	30.99	1.10	27.94	0.626	15.90	4.91	124.7	2.345	59.56	58,000	26,320	11.14	16.60
32B-2	32B-2	2	50.80	1.22	30.99	1.15	29.21	0.701	17.81	4.96	126.0	2.305	58.55	76,000	34,480	14.10	21.00
40B-2	40B-2	2 1/2	63.50	1.50	38.10	1.55	39.37	0.901	22.89	6.10	154.9	2.846	72.29	118,000	53,540	21.48	32.00
05B-3	05B-3	0.315	8.00	0.118	3.00	0.197	5.00	0.091	2.31	0.79	19.9	0.222	5.64	2,500	1,140	0.36	0.54
06B-3	06B-3	3/8	9.525	0.225	5.72	0.250	6.35	0.129	3.28	1.34	34.0	0.403	10.24	5,600	2,540	0.79	1.18
08B-3	08B-3	1/2	12.70	0.305	7.75	0.335	8.51	0.175	4.45	1.77	44.9	0.548	13.92	10,000	4,540	1.34	2.00
10B-3	10B-3	5/8	15.875	0.380	9.65	0.40	10.16	0.200	5.08	2.08	52.8	0.653	16.59	15,000	6,810	1.88	2.80
12B-3	12B-3	3/4	19.05	0.460	11.68	0.475	12.07	0.225	5.72	2.43	61.7	0.766	19.46	19,500	8,850	2.55	3.80
16B-3	16B-3	1	25.40	0.670	17.02	0.625	15.88	0.326	8.28	3.93	99.9	1.255	31.88	28,500	12,930	5.37	8.00
20B-3	20B-3	1 1/4	31.75	0.770	19.56	0.75	19.05	0.401	10.19	4.57	116.1	1.435	36.45	43,500	19,740	7.39	11.00
24B-3	24B-3	1 1/2	38.10	1.00	25.40	1.00	25.40	0.576	14.63	5.91	150.2	1.904	48.36	66,000	29,940	14.10	21.00
28B-3	28B-3	1 3/4	44.45	1.22	30.99	1.10	27.94	0.626	15.90	7.25	184.3	2.345	59.56	87,000	39,480	16.78	25.00
32B-3	32B-3	2	50.80	1.22	30.99	1.15	29.21	0.701	17.81	7.26	184.5	2.305	58.55	114,000	51,720	21.48	32.00
40B-3	40B-3	2 1/2	63.50	1.50	38.10	1.55	39.37	0.901	22.89	8.95	227.2	2.846	72.29	177,000	80,310	32.23	48.00

1 Bearing pin body diameter 2 Width over bearing pins

TRANSMISSION CHAIN
AMERICAN SERIES

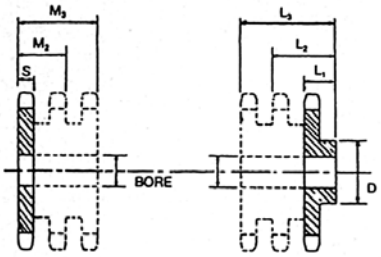
DIN 8188
ANSI B29,1-1975
ISO/R606



Chain		Pitch		Width between inner plates		Roller diameter		Pin diameter		Pin length 2		Transverse pitch		Breaking load		Weight	
ANSI Nr.	DIN ISO No.	P		W min		Dr max		D max		L		C					
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Lbf	kgf	Lb/ft	kg/m
25		1/4	6.35	0.122	3.10	0.130*	3.30*	0.091	2.31	0.339	8.60			880	400	0.09	0.13
35		3/8	9.525	0.184	4.68	0.200*	5.08*	0.141	3.59	0.510	12.95			1,980	900	0.21	0.32
40	08A	1/2	12.70	0.309	7.85	0.312	7.92	0.156	3.97	0.691	17.55			3,530	1,600	0.40	0.60
41	085	1/2	12.70	0.246	6.25	0.306	7.77	0.141	3.59	0.567	14.40			1,980	900	0.27	0.40
50	10A	5/8	15.875	0.370	9.40	0.400	10.16	0.200	5.09	0.856	21.75			5,360	2,430	0.68	1.01
60	12A	3/4	19.05	0.495	12.58	0.469	11.91	0.234	5.96	1.059	26.90			7,760	3,520	1.01	1.50
80	16A	1	25.40	0.620	15.75	0.625	15.87	0.312	7.94	1.390	35.30			13,700	6,200	1.69	2.51
100	20A	1 1/4	31.75	0.744	18.90	0.750	19.05	0.375	9.54	1.699	43.15			20,500	9,300	2.56	3.82
120	24A	1 1/2	38.10	0.993	25.23	0.875	22.22	0.437	11.11	2.122	53.90			29,800	13,500	3.69	5.49
140	28A	1 3/4	44.45	0.993	25.23	1	25.40	0.500	12.71	2.303	58.50			40,300	18,300	4.68	6.96
160	32A	2	50.80	1.242	31.55	1.125	28.57	0.562	14.29	2.742	69.65			52,500	23,800	6.29	9.36
200	40A	2 1/2	63.50	1.490	35.49	1.562	39.67	0.781	19.85	3.398	86.30			82,000	37,200	10.70	15.92
25-2		1/4	6.35	0.122	3.10	0.130	3.30	0.091	2.31	0.691	15.00	0.252	6.40	1,760	800	0.18	0.26
35-2		3/8	9.525	0.184	4.68	0.200	5.08	0.141	3.59	0.907	23.05	0.398	10.10	3,970	1,800	0.42	0.64
40-2	08A-2	1/2	12.70	0.309	7.85	0.312	7.92	0.156	3.97	1.254	31.85	0.567	14.40	7,050	3,200	0.80	1.20
50-2	10A-2	5/8	15.875	0.370	9.40	0.400	10.16	0.200	5.09	1.569	39.85	0.713	18.10	10,700	4,860	1.36	2.02
60-2	12A-2	3/4	19.05	0.495	12.58	0.469	11.91	0.234	5.96	1.957	49.70	0.898	22.80	15,500	7,040	2.02	3.00
80-2	16A-2	1	25.40	0.620	15.75	0.625	15.87	0.312	7.94	2.543	64.60	1.154	29.30	27,300	12,400	3.38	5.02
100-2	20A-2	1 1/4	31.75	0.744	18.90	0.750	19.05	0.375	9.54	3.108	78.95	1.409	35.80	41,000	18,600	5.12	7.64
120-2	24A-2	1 1/2	38.10	0.993	25.23	0.875	22.22	0.437	11.11	3.909	99.30	1.787	45.40	59,500	27,000	7.38	10.98
140-2	28A-2	1 3/4	44.45	0.993	25.23	1	25.40	0.500	12.71	4.228	107.40	1.925	48.90	80,700	36,600	9.36	13.92
160-2	32A-2	2	50.80	1.242	31.55	1.125	28.57	0.562	14.29	5.045	128.15	2.303	58.50	104,900	47,600	12.58	18.72
200-2	40A-2	2 1/2	63.50	1.490	35.49	1.562	39.67	0.781	19.85	6.217	157.90	2.819	71.60	164,000	74,400	21.40	31.84
25-3		1/4	6.35	0.122	3.10	0.130	3.30	0.091	2.31	0.843	21.40	0.252	6.40	2,650	1.200	0.27	0.39
35-3		3/8	9.525	0.184	4.68	0.200	5.08	0.141	3.59	1.305	33.15	0.398	10.10	5,950	2,700	0.63	0.96
40-3	08A-3	1/2	12.70	0.309	7.85	0.312	7.92	0.156	3.97	1.821	46.25	0.567	14.40	10,600	4,800	1.20	1.80
50-3	10A-3	5/8	15.875	0.370	9.40	0.400	10.16	0.200	5.09	2.281	57.95	0.713	18.10	16,100	7,290	2.04	3.03
60-3	12A-3	3/4	19.05	0.495	12.58	0.469	11.91	0.234	5.96	2.854	72.50	0.898	22.80	23,300	10,560	3.03	4.50
80-3	16A-3	1	25.40	0.620	15.75	0.625	15.87	0.312	7.94	3.697	93.90	1.154	29.30	41,000	18,600	5.07	7.53
100-3	20A-3	1 1/4	31.75	0.744	18.90	0.750	19.05	0.375	9.54	4.518	114.75	1.409	35.80	61,500	27,900	7.68	11.46
120-3	24A-3	1 1/2	38.10	0.993	25.23	0.875	22.22	0.437	11.11	5.697	144.70	1.787	45.40	89,300	40,500	11.07	16.47
140-3	28A-3	1 3/4	44.45	0.993	25.23	1	25.40	0.500	12.71	6.154	156.30	1.925	48.90	121,000	54,900	14.04	20.88
160-3	32A-3	2	50.80	1.242	31.55	1.125	28.57	0.562	14.29	7.348	186.65	2.303	58.50	157,000	71,400	18.87	28.08
200-3	40A-3	2 1/2	63.50	1.490	35.49	1.562	39.67	0.781	19.85	9.035	229.50	2.819	71.60	246,000	111,600	32.10	47.76
60H		3/4	19.05	0.495	12.58	0.469	11.91	0.234	5.96	1.177	29.90			9,260	4,200	1.20	1.80
80H		1	25.40	0.620	15.75	0.625	15.87	0.312	7.94	1.516	38.50			14,770	6,700	1.95	2.90
100H		1 1/4	31.75	0.744	18.90	0.750	19.05	0.375	9.54	1.824	46.35			23,400	10,600	2.84	4.22
120H		1 1/2	38.10	0.993	25.23	0.875	22.22	0.437	11.11	2.248	57.10			33,700	15,300	4.07	6.05
140H		1 3/4	44.45	0.993	25.23	1	25.40	0.500	12.71	2.429	61.70			45,900	20,800	5.08	7.56

1 Bearing pin body diameter 2 Width over bearing pins

PILOT BORED



TYPE A TYPE B

We offer Type A and Type B Sprockets.

Material:
All sprockets above 38 teeth will be supplied in cast iron.
All others in steel. Sprockets with hardened teeth, available on request.

BRITISH STANDARD SERIES

Chain 06B
Pitch 9.525 mm
Roller Diameter 6.350 mm
Inside Width 5.720 mm

NOMINAL DIMENSIONS 06B			
	Simplex mm	Duplex mm	Triplex mm
S	5.2	5.2	5.2
M_2		15.4	15.4
M_2			25.6

No. of Teeth	Outside Diam. (mm)	Pitch Diam. (mm)	SIMPLEX			DUPLEX			TRIPLEX		
			L1 (mm)	Hub Diam. D (mm)	Bore (mm)	L2 (mm)	Hub Diam. D (mm)	Bore (mm)	L3 (mm)	Hub Diam. D (mm)	Bore (mm)
13	44,00	39.79	25	28	8	25	28	10	35	28	12
15	50.00	45.81	25	34	10	25	34	12	35	34	12
17	56.00	51.83	28	40	10	30	40	12	35	40	12
19	62.00	57.87	28	46	12	30	46	12	35	46	12
21	68.00	63.91	28	50	12	30	52	16	38	52	16
23	74.00	69.95	28	50	12	30	58	16	38	58	16
25	80.00	76.00	28	50	12	30	64	16	38	64	16
27	86.00	82.05	28	50	12	30	73	16	38	73	16
30	95.50	91.12	28	60	12	30	79	16	38	79	16
38	119.50	115.35	32	70	20	35	75	20	45	75	25
45	141.00	136.55	32	70	20	40	75	20	45	80	25
57	177.00	172.91	32	70	20	40	80	20	56	90	25
76	234.50	230.49	32	70	20	40	80	20	56	90	25
95	292.50	288.08	40	80	20	45	85	20	56	90	25
114	349.00	345.68	40	80	20	45	90	20	56	100	25

Chain 08B
Pitch 12.70 mm
Roller Diameter 8.51 mm
Inside Width 7.75 mm

NOMINAL DIMENSIONS 08B			
	Simplex mm	Duplex mm	Triplex mm
S	7.1	7.0	7.0
M_2		21.0	21.0
M_2			34.9

No. of Teeth	Outside Diam. (mm)	Pitch Diam. (mm)	SIMPLEX			DUPLEX			TRIPLEX		
			L1 (mm)	Hub Diam. D (mm)	Bore (mm)	L2 (mm)	Hub Diam. D (mm)	Bore (mm)	L3 (mm)	Hub Diam. D (mm)	Bore (mm)
13	59,00	53,06	28	37	10	35	38	12	50	38	12
15	67,00	61,09	28	45	10	35	46	16	50	46	16
17	75,00	69,11	28	52	10	35	54	16	50	54	16
19	83,00	77,16	28	60	12	35	62	16	50	62	16
21	90,00	85,22	28	65	12	38	70	16	55	70	16
23	98,00	93,27	28	65	12	38	70	16	55	70	16
25	107,00	101,33	28	65	12	38	80	16	55	80	16
27	115,00	109,40	30	70	16	38	85	20	55	85	20
30	127,00	121,50	30	80	16	38	100	20	55	100	20
38	159,00	153,80	40	70	20	50	80	25	55	85	25
45	187,50	182,07	43	70	20	50	80	25	60	100	25
57	236,00	230,54	40	70	25	50	90	25	60	100	25
76	313,00	307,33	40	80	25	56	100	25	60	100	25
95	389,50	384,11	45	80	25	56	100	25	67	120	25
114	465,00	460,90	45	80	25	63	100	25	67	120	25

PILOT BORED

Chain 10B
Pitch 15.87 mm
Roller Diameter 10.16 mm
Inside Width 9.65 mm

NOMINAL DIMENSIONS 10B			
	Simplex mm	Duplex mm	Triplex mm
S	8.9	8.8	8.8
M_2		25.5	25.5
M_2			42.1

No. of Teeth	Outside Diam. (mm)	Pitch Diam. (mm)	SIMPLEX			DUPLEX			TRIPLEX		
			L1 (mm)	Hub Diam. D (mm)	Bore (mm)	L2 (mm)	Hub Diam. D (mm)	Bore (mm)	L3 (mm)	Hub Diam. D (mm)	Bore (mm)
13	73.50	66.32	28	47	12	40	49	16	55	49	16
15	83.50	76.36	28	57	12	40	59	16	55	59	16
17	93.50	86.39	28	65	12	45	69	16	60	69	20
19	104.00	96.45	28	70	16	45	79	16	60	79	20
21	114.00	106.52	30	75	16	45	85	20	60	85	20
23	124.00	116.58	30	80	16	45	95	20	60	95	20
25	134.00	126.66	30	80	16	45	105	20	60	105	20
27	144.00	136.75	35	85	20	45	110	25	60	110	25
30	159.00	151.87	35	85	20	45	120	25	60	120	25
38	199.50	192.24	35	100	20	45	120	25	60	120	25
45	235.00	227.58	40	80	25	50	100	30	60	100	32
57	295.00	288.18	45	90	25	56	100	30	63	100	32
76	391.50	384.16	50	90	25	63	100	30	67	110	32
95	487.50	480.14	56	100	25	70	100	30	70	125	32
114	583.00	576.13	56	100	25	70	125	30	80	125	32

Chain 12B
Pitch 19.05 mm
Roller Diameter 12.07 mm
Inside Width 11.68 mm

NOMINAL DIMENSIONS 12B			
	Simplex mm	Duplex mm	Triplex mm
S	10.8	10.5	10.5
M_2		30.3	30.3
M_2			49.8

No. of Teeth	Outside Diam. (mm)	Pitch Diam. (mm)	SIMPLEX			DUPLEX			TRIPLEX		
			L1 (mm)	Hub Diam. D (mm)	Bore (mm)	L2 (mm)	Hub Diam. D (mm)	Bore (mm)	L3 (mm)	Hub Diam. D (mm)	Bore (mm)
13	88.50	79.59	30	58	16	50	59	20	70	59	20
15	100.50	91.63	35	70	16	50	71	20	70	71	20
17	112.50	103.67	35	80	16	50	83	20	7D	83	20
19	124.50	115.71	35	80	20	50	95	20	70	95	20
71	136.50	127.82	38	88	20	50	100	20	70	100	25
23	148.50	139.90	38	88	20	50	110	20	70	110	25
25	160.50	152.00	33	88	20	50	120	20	70	120	25
27	172.50	164.09	38	90	20	50	120	25	70	120	75
30	191.00	182.31	38	90	20	50	120	25	70	120	25
38	239.00	230.69	56	100	25	56	100	30	65	110	30
45	282.50	273.10	56	100	25	63	110	30	65	120	30
57	355.40	345.81	56	100	30	63	120	30	70	140	40
76	469.90	460.99	56	100	30	63	120	30	75	140	40
95	585.10	576.17	65	100	30	70	135	30	82	150	40
114	700.70	691.36	65	100	30	70	135	45	82	170	50

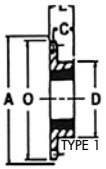
Chain 16B
Pitch 25.40 mm
Roller Diameter 15.88 mm
Inside Width 17.02 mm

NOMINAL DIMENSIONS 16B			
	Simplex mm	Duplex mm	Triplex mm
S	15.7	15.5	15.5
M_2		47.7	47.7
M_2			79.5

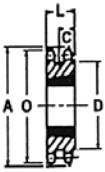
No. of Teeth	Outside Diam. (mm)	Pitch Diam. (mm)	SIMPLEX			DUPLEX			TRIPLEX		
			L1 (mm)	Hub Diam. D (mm)	Bore (mm)	L2 (mm)	Hub Diam. D (mm)	Bore (mm)	L3 (mm)	Hub Diam. D (mm)	Bore (mm)
13	117.50	106.12	40	76	20	70	80	20	100	80	20
15	133.50	122.17	40	92	20	70	96	20	100	96	20
17	149.50	138.22	45	100	20	70	112	25	100	112	25
19	165.50	154.33	45	100	20	70	120	25	100	120	25
21	182.00	170.43	50	110	25	70	140	25	100	140	25
23	198.00	186.54	50	110	25	70	140	25	100	140	25
25	214.00	202.66	50	110	25	70	140	25	100	140	25
27	230.00	218.79	50	120	25	70	140	25	100	140	25
30	754.50	243.00	50	120	25	70	150	25	100	150	25
38	319.00	307.58	65	110	30	75	110	35	100	130	45
45	375.50	364.13	70	125	30	75	140	35	100	130	45
57	472.50	461.08	70	125	35	90	155	35	100	150	45
76	626.00	614.65	80	140	35	95	155	35	110	200	45
95	779.50	768.22	80	140	40	95	175	45	110	200	50
114	933.00	921.81	80	140	40	95	175	45	115	206	50

Note:
1. All sprockets up to 25 teeth are fabricated in steel.
2. 38 teeth and above ('C') are manufactured in cast iron.
3. Reverse taper or hardened teeth available on request.

A = O/D O = PCD C = TO CENTRE

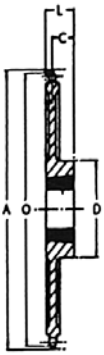


TYPE 1



TYPE 2

TYPE 3



TYPE 4

TYPE 5

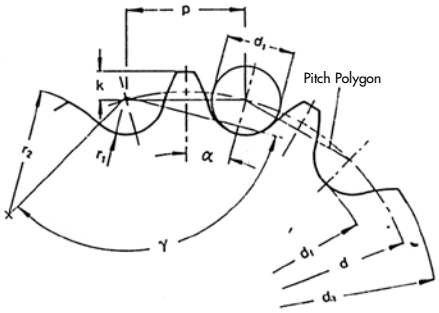
TYPE 6

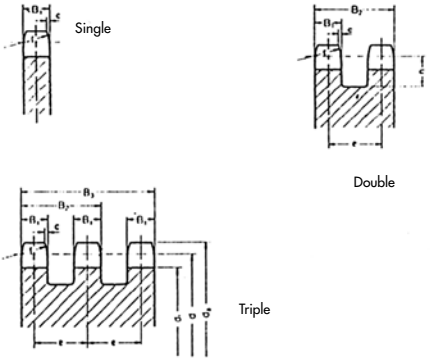
TAPER-BUSH SPROCKETS - BRITISH STANDARD SERIES

Chain	No. of Teeth	Outside Diam.	Pitch Diam.	SIMPLEX						DUPLEX							TRIPLEX						
				Bush	Max Bore	Sprocket	L	D	C	Bush	Max Bore	Sprocket	L	D	C	F	Bush	Max Bore	Sprocket	L	B	C	F
		mm	mm	No.	mm	Type	mm	mm	mm	No.	mm	Bore	mm	mm	mm	mm	No.	mm	Type	mm	mm	mm	mm
06B 3/8 Pitch	17	56.00	51.83	1008	25	1	22	45	19.6	1008	25	2	22	41	14.2	-	1008	25	3	22	-	-	25.6
	19	62.00	57.87	1008	25	1	22	46	19.6	1008	25	2	22	47	14.2	-	1008	25	3	22	-	-	25.6
	21	68.00	63.91	1008	25	1	22	46	19.6	1008	25	2	22	49	14.2	-	1008	25	3	22	-	-	25.6
	23	74.00	69.95	1210	32	1	25	60	22.6	1210	32	2	25	59	17.2	-	1210	32	3	25	-	-	25.6
	25	80.00	76.00	1210	32	1	25	63	22.6	1210	32	2	25	65	17.2	-	1610	42	3	25	-	-	25.6
	38 C	119.50	115.35	1210	32	4	25	73	18.5	1610	42	2	25	76	17.2	-	1610	42	3	25	-	-	25.6
	57 C	177.02	172.91	1210	32	4	25	83	18.5	1610	42	5	25	89	17.2	-	2012	50	6	32	102	19.2	-
	76 C	234.50	230.49	1210	32	4	25	83	18.5	1610	42	5	25	89	17.2	-	2012	50	6	32	111	19.2	-
08B 1/2 Pitch	15	67100	61.09	1008	25	1	22	46	18.4	1008	25	2	22	48	11.4	-	-	-	-	-	-	-	-
	17	75.00	69.11	1210	32	1	25	60	21.4	1210	32	2	25	56	14.4	-	1210	32	3	25	-	-	35.0
	19	83.00	77.16	1210	32	1	25	63	21.4	1210	32	2	25	64	14.4	-	1610	42	3	25	-	-	35.0
	21	90.00	85.22	1610	42	1	25	71	21.4	1610	42	2	25	71	14.4	-	1610	42	3	25	-	-	35.0
	23	98.00	93.27	1610	42	1	25	76	21.4	1610	42	2	25	79	14.4	-	2012	50	3	32	-	-	35.0
	25	107.00	101.33	1610	42	1	25	76	21.4	2012	50	2	32	87	21.4	-	2012	50	3	32	-	-	35.0
	38 C	159.00	153.80	2012	50	4	32	102	24.1	2012	50	2	32	102	21.4	-	2517	60	5	45	102	27.5	-
	57 C	236.00	230.54	2012	50	4	32	111	24.1	2012	50	5	32	111	21.4	-	2517	60	5	45	111	27.5	-
	76 C	313.00	307.33	2012	50	4	32	111	24.1	2012	50	5	32	111	21.4	-	2517	60	5	45	111	27.5	-
10 B 5/8 Pitch	13	73.50	66.32	1008	25	1	22	46	17.5														
	15	83.50	76.36	1210	32	1	25	63	21.5														
	17	93.50	86.39	1610	42	1	25	71	21.5														
	19	104.00	96.45	1610	42	1	25	76	21.5														
	21	114.00	106.52	1610	42	1	25	76	21.5														
	23	124.00	116.58	1610	42	1	25	76	21.5														
	25	134.00	126.66	2012	50	1	32	90	27.5														
	38 C	199.50	192.24	2012	50	4	32	102	22.4														
	57 C	295.50	288.18	2012	50	4	32	111	22.4														
	76 C	391.50	384.16	2012	50	4	32	111	22.4														
12B 3/4 Pitch	13	88.50	79.59	1210	32	1	25	61	19.5														
	15	100.50	91.63	1610	42	1	25	71	19.5	1610	42	3	25	100	-	30.1	-	-	-	-	-	-	-
	17	112.50	103.67	1610	42	1	25	76	19.5	1610	42	3	25	112	-	30.1	2012	50	3	32	-	-	49.7
	19	124.50	115.71	2012	50	1	32	90	26.5	2012	50	2	32	123	37.9	-	2012	50	3	32	-	-	49.7
	21	136.50	127.82	2517	60	1	45	102	39.5	2517	60	2	45	135	50.9	-	2517	60	3	45	-	-	49.7
	23	148.50	139.90	2517	60	1	45	108	39.5	2517	60	2	45	148	50.9	-	2517	60	3	45	-	-	49.7
	25	160.50	152.00	2517	60	1	45	108	39.5	2517	60	2	45	162	50.9	-	2517	60	3	45	-	-	49.7
	38 C	239.00	230.69	2517	60	4	45	124	33.3	3020	75	5	51	240	56.9	-	3020	75	5	51	152	26.2	-
	57 C	355.40	345.81	2517	60	4	45	124	33.3	3020	75	5	51	355	56.9	-	3020	75	5	51	159	26.2	-
	76 C	469.90	460.99	2517	60	4	45	124	33.3	3020	75	5	51	471	56.9	-	3020	75	5	51	159	26.2	-
16B 1" Pitch	13	117.50	106.12	1615	42	1	38	73	29.9	-	-	-	-	-	-	-							
	15	133.50	122.17	1615	42	1	38	76	29.5	2012	50	3	32	132	-	48.0							
	17	149.50	138.22	2012	50	1	32	90	23.9	2517	60	3	45	148	-	48.0	2525	60	3	64	-	-	79.9
	19	165.50	154.33	2517	60	1	45	108	36.9	2517	60	3	45	164	-	48.0	3030	75	3	76	-	-	79.9
	21	182.00	170.43	2517	60	1	45	108	36.9	3020	75	2	51	180	27.0	-	3030	75	3	76	-	-	79.9
	23	198.00	186.54	2517	60	1	45	108	36.9	3020	75	2	51	196	27.0	-	3535	90	2	89	159	49.0	-
	21	214.00	202.66	2517	61	1	45	108	36.9	3020	75	2	51	215	27.0	-	3535	90	2	89	175	49.0	-
	38 C	319.00	307.58	3020	75	4	51	159	38.1	3030	75	5	76	320	52.0	-	3535	90	5	89	178	49.0	-
	57 C	472.50	416.08	3020	75	4	51	159	38.1	3535	90	5	89	474	65.0	-	4040	100	5	102	216	62.0	-
	76 C	626.00	614.65	3020	75	4	51	159	38.1	3535	90	5	89	627	65.0	-	4040	100	5	102	216	62.0	-

PROFILE DIMENSIONS

for Roller Chain Sprockets acc. to DIN 8187 / BS 228 / ISO R 606 and DIN 8188 (ANSI)





Pitch Diameter	d	= p y
Bottom Diameter	d_1	= d - d_1
	(d_1	= Roller Diameter)
Outside Diameter:	d_a	
Seating Curve Radius:	r_1	
Topping Curve Radius:	r_2	
Number of Teeth	Z	
Pitch Angle	$2\alpha = \frac{360^0}{Z}$	$\alpha = \frac{180^0}{Z}$
Tooth Width:	B1	
Tooth Height above Pitch Polygon:	k	

Sprocket Dimensions acc. to DIN 8196

ISO Chain No.	B1 mm	B2 mm	B3 mm	c mm	r mm	e mm	e1 mm	n mm
04	2,5	-	-	0.5	6	-	10	3
05 B	2,7	8,3	13,9	0,65	7,5	5,64	12	4,2
06 B	5,3	15,4	25,6	0,8	10	10,24	18	5
08 B	7,2	21	34,9	1	13	13,92	20	7
10 B	9,1	25,5	42,1	1,3	15	16,59	23	8,5
12 B	11,1	30,3	49,8	1,5	18	19,46	25	9,5
16 B	16,2	47,7	79,6	2	24	31,88	44	13
20 B	18,5	54,6	91	2,5	29	36,45	48	14,5
24 B	24,1	72	120,3	3,5	38	48,36	62	19
28 B	28	87,5	147	3,5	42	59,56	73	22
32 B	28	86,5	145	3,8	44	58,55	78	24
R 57	31	98	165	4,5	52	67	86	28
40 B	34	106	178	5	60	72,29	90	35
48 B	41	132	223	6	72	91,21	110	40
56 B	50,8	157	264	8	81	106,6	130	47

The width dimensions B1, B2, B3 are approx. dimensions acc. to DIN 8196

ANSI Chain No.	B1 mm	B2 mm	B3 mm	c mm	r mm	e mm	e1 mm	n mm
40	7,2 7	21,4	35,8	1	12	14,38	19	7
50	8,7 8,4	26,5	44,6	1.3	15	18,11	25	8.5
60	11,6 11,2	34,1	56,9	1.7	18	22,78	30	10
80	14,6 14,2	43,4	72,7	2.2	24	29,29	38	13
100	17,6 17	52,9	88,6	3	29	35,76	46	16
120	23,4 22,7	68,1	113,5	3.8	33	45,44	57	19
140	23,4 22,7	71,6	120,5	4.7	38	48,87	60	23
160	29,4 28,4	86,9	145,5	5.5	43	58,55	70	26
200	35,3 34,2	105,5	177	6.3	60	71,55	78	35

B1 second value for miltiple strand sprockets.

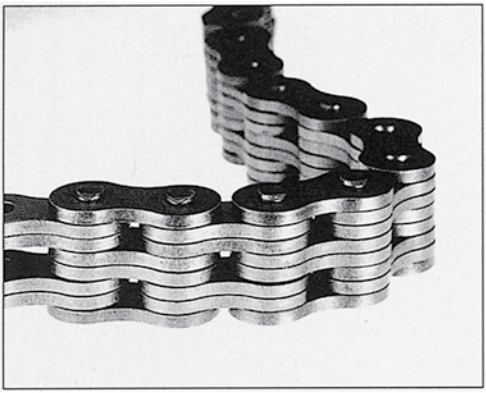
Taper Bushes - Metric Bore

Bore dia.	Keway		Shallow Keway Depth	Nominal O.D. at large end of taper.															
				35	38	48	57	70	86	108	127	127	146	146	162	162	178	178
	Width	Depth		1008	1108	1210	1610	2012	2517	3020	3525	3535	4030	4040	4535	4545	5040	5050
10	3	1,4	-	1 008	1 108													
11	4	1,8	-	1 008	1 108	1 210												
12	4	1,8	-	1 008	1 108	1 210												
14	5	2,3	-	1 008	1 108	1 210	1 610	2 012										
16	5	2,3	-	1 008	1 108	1 210	1 610	2 012	2 517									
18	6	2,8	-	1 008	1 108	1 210	1 610	2 012	2 517									
19	6	2,8	-	1 008	1 108	1 210	1 610	2 012	2 517									
20	6	2,8	-	1 008	1 108	1 210	1 610	2 012	2 517									
22	6	2,8	-	1 008	1 108	1 210	1 610	2 012	2 517									
24	8	3,3	1,3	1 008	1 108	1 210	1 610	2 012	2 517									
25	8	3,3	1,3	1 008	1 108	1 210	1 610	2 012	2 517	3 020								
28	8	3,3	1,3		1 108	1 210	1 610	2 012	2 517	3 020								
30	8	3,3	–			1 210	1 610	2 012	2 517	3 020								
32	10	3,3	–			1 210	1 610	2 012	2 517	3 020								
35	10	3,3	–				1 610	2 012	2 517	3 020	3 525	3 535						
38	10	3,3	–				1 610	2 012	2 517	3 020	3 525	3 535						
40	12	3,3	–				1 610	2 012	2 517	3 020	3 525	3 535	4 030	4 040				
42	12	3,3	–				1 610	2 012	2 517	3 020	3 525	3 535	4 030	4 040				
45	14	3,8	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
48	14	3,8	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
50	14	3,8	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
55	16	4,3	–						2 517	3 020	3 525	3 535	4 030	4 040	4 535	4 545		
60	18	4,4	–						2 517	3 020	3 525	3 535	4 030	4 040	4 535	4 545		
65	18	4,4	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545		
70	20	4,9	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
75	20	4,9	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
80	22	5,4	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
85	22	5,4	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
90	25	5,4	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
95	25	5,4	–								•3 525		4 030	4 040	4 535	4 545	5 040	5 050
100	28	6,4	4,4								•3 525		4 030	4 040	4 535	4 545	5 040	5 050
105	28	6,4	–										•4 030		4 535	4 545	5 040	5 050
110	28	6,4	–										•4 030		4 535	4 545	5 040	5 050
115	32	7,4	5,4										•4 030		•4 535		5 040	5 050
120	32	7,4	–												•4 535		5 040	5 050
125	32	7,4	–												•4 535		5 040	5 050
130	32	7,4	–														•5 040	
Approx. mass mid bore (kg)				0.1	0.1	0.2	0.3	0.7	1.5	2.7	3.8	5.0	5.6	7.7	7.5	9.0	11.1	14
Grub screw torque (N.m)				5.6	5.6	20	20	30	50	90	115	115	170	170	190	190	270	270
Allen key size (inch size)				0.25	0.25	0.375	0.375	0.4375	0.5	0.625	0.5	0.5	0.625	0.625	0.75	0.75	0.875	0.875

Taper Bushes - Imperial Bore

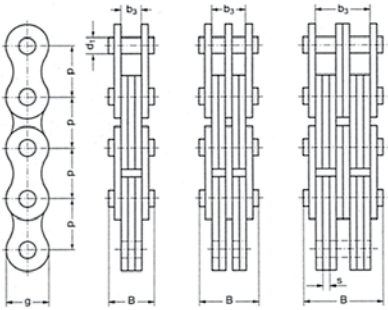
Bore dia.	Keway		Shallow Keway Depth	Nominal O.D. at large end of taper.															
	Width	Depth		35	38	48	57	70	86	108	127	127	146	146	162	162	178	178
				1008	1108	1210	1610	2012	2517	3020	3525	3535	4030	4040	4535	4545	5040	5050
0.375	0.125	0.062	–	1 008	1 108													
0.500	0.125	0.062	–	1 008	1 108	1 210	1 610											
0.625	0.187	0.093	–	1 008	1 108	1 210	1 610											
0.750	0.187	0.093	–	1 008	1 108	1 210	1 610	2 012	2 517									
0.875	0.250	0.125	–	1 008	1 108	1 210	1 610	2 012	2 517									
1.000	0.250	0.125	0.062	1 008	1 108	1 210	1 610	2 012	2 517									
1.125	0.312	0.125	0.078		1 108	1 210	1 610	2 012	2 517									
1.250	0.312	0.125	–			1 210	1 610	2 012	2 517	3 020								
1.375	0.375	0.125	–				1 610	2 012	2 517	3 020								
1.437	0.375	0.125	–				1 610	2 012	2 517	3 020								
1.500	0.375	0.125	–				1 610	2 012	2 517	3 020	3 525	3 535						
1.625	0.437	0.156	0.125				1 610	2 012	2 517	3 020	3 525	3 535						
1.750	0.437	0.156	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
1.875	0.500	0.156	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
2.000	0.500	0.156	–					2 012	2 517	3 020	3 525	3 535	4 030	4 040				
2.125	0.625	0.218	–						2 517	3 020	3 525	3 535	4 030	4 040				
2.250	0.625	0.218	–						2 517	3 020	3 525	3 535	4 030	4 040	4 535	4 545		
2.375	0.625	0.218	–						2 517	3 020	3 525	3 535	4 030	4 040	4 535	4 545		
2.500	0.625	0.218	–						2 517	3 020	3 525	3 535	4 030	4 040	4 535	4 545		
2.625	0.750	0.250	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545		
2.750	0.750	0.250	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
2.875	0.750	0.250	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.000	0.750	0.250	–							3 020	3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.125	0.875	0.312	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.250	0.875	0.312	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.375	0.875	0.312	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.500	0.875	0.312	–								3 525	3 535	4 030	4 040	4 535	4 545	5 040	5 050
3.750	1.000	0.375	0.312								•3 525		4 030	4 040	4 535	4 545	5 040	5 050
4.000	1.000	0.375	0.218								•3 525		4 030	4 040	4 535	4 545	5 040	5 050
4.250	1.250	0.437	–										•4 030		4 535	4 545	5 040	5 050
4.500	1.250	0.437	0.343										•4 030		4 535	4 545	5 040	5 050
4.750	1.250	0.437	–												•4 535		5 040	5 050
5.000	1.250	0.437	0.343												•4 535		5 040	5 050
Approx. mass mid bore (kg)				0.1	0.1	0.2	0.3	0.7	1.5	2.7	3.8	5.0	5.6	7.7	7.5	9.0	11.1	14
Grub screw torque (N.m)				5.6	5.6	20	20	30	50	90	115	115	170	170	190	190	270	270
Allen key size (inch size)				0.25	0.25	0.375	0.375	0.4375	0.5	0.625	0.5	0.5	0.625	0.625	0.75	0.75	0.875	0.875

Leaf Chains



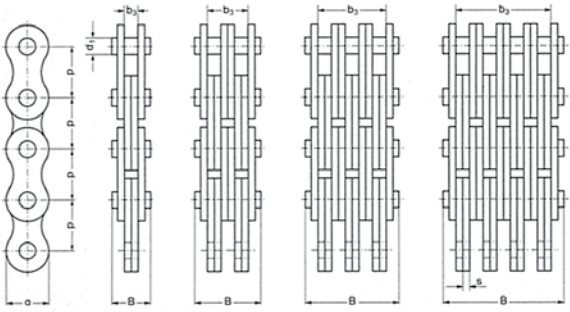
Safety Lifting Chains

Leaf Chains - lacings



2x3 3x4 4x6

Leaf Chains - lacings



2x2 4x4 6x6 8x8

Leaf Chains acc. to DIN 8152, American Standard, Heavy Series

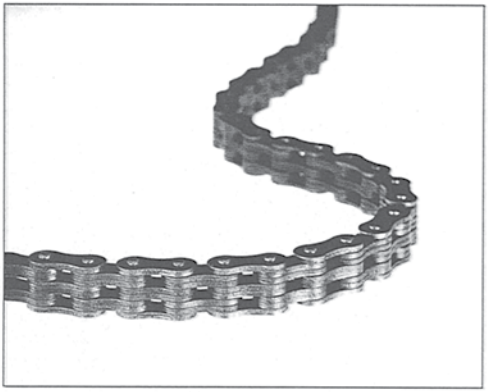
Chain No.	Chain Type ISO DIN	Pitch p Inch	Pitch p mm	Lacing	Pin Diameter d_1 max. mm	Plate Height g max. mm	Plate Thickness s mm	Lenth exceeding 100xpitches ■ mm	Overall width B max. mm	Bearing Area A cm^2	Inner Width of Outer Plates b_3 min. mm	Required*) Ultimate Strenth min. F_f N	Weight ≈q kg/m
•BL 423	LH 0823			2x3					12.4	0.3	6.3	22 200	0.65
•BL 434	LH 0834			3x4					16.7	0.41	10.5	33 300	0.9
BL 444	LH 0844	0.50	12.7	4x4	5.08	11.6	2.0	1277	18.9	0.41	12.6	44 400	1.02
•BL 446	LH 0846			4x6					22.8	0.61	16.8	44 400	1.26
BL 466	LH 0866			6x6					27.1	0.61	21.0	66 600	1.51
•BL 523	LH 1023			2x3					14.8	0.43	7.5	33 400	0.9
•BL 534	LH 1034			3x4					19.9	0.57	12.5	50 100	1.32
•BL 544	LH 1044	0.625	15.875	4x4	5.94	14.6	2.4	1596	22.5	0.57	15.0	66 800	1.51
•BL 546	LH 1046			4x6					27.4	0.86	20.0	66 800	1.86
BL 566	LH 1066			6x6					32.0	0.86	25.0	100 200	2.24
•BL 623	LH 1223			2x3					19.7	0.76	9.9	48 900	1.76
•BL 634	LH 1234			3x4					26.4	1.0	16.5	73 400	2.43
•BL 644	LH 1244	0.75	19.05	4x4	7.92	17.8	3.2	1908	29.5	1.0	19.8	97 800	2.76
•BL 646	LH 1246			4x6					35.9	1.5	26.4	97 800	3.43
•BL 666	LH 1266			6x6					42.4	1.5	33.0	146 900	4.1
•BL 823	LH 1623			2x3					24.6	1.11	12.0	84 500	3.0
•BL 834	LH 1634			3x4					33.1	1.48	20.0	126 800	4.15
•BL 844	LH 1644	1.00	25.4	4x4	9.53	23.6	3.9	2544	37.4	1.48	24.0	169 000	4.72
•BL 846	LH 1646			4x6					45.5	2.22	32.0	169 000	5.86
•BL 866	LH 1666			6x6					54.0	2.22	40.0	253 600	7.0
•BL 1023	LH 2023			2x3					28.6	1.56	14.4	115 600	4.35
•BL 1034	LH 2034			3x4					38.7	2.09	24.0	173 400	6.05
BL 1044	LH 2044	1.25	31.75	4x4	11.1	29.2	4.7	3179	43.6	2.09	28.8	231 200	6.9
•BL 1046	LH 2046			4x6					53.3	3.12	38.4	231 200	8.5
•BL 1066	LH 2066			6x6					63.3	3.12	48.0	346 800	10.25
BL 1223	LH 2423			2x3					33.6	2.1	16.8	151 200	5.8
•BL 1234	LH 2434			3x4					45.5	2.79	28.0	226 800	8.0
BL 1244	LH 2444	1.50	38.1	3x4	12.7	34.4	5.5	3812	51.2	2.79	33.6	302 400	9.1
•BL 1246	LH 2446			4x6					62.7	4.2	44.8	302 400	11.4
BL 1266	LH 2466			6x6					74.5	4.2	56.0	453 600	13.6
•BL 1288	LH 2488			8x8					97.8	5.4	78.4	604 800	17.9
BL 1423	LH 2023			2x3					38.2	2.7	19.2	191 300	7.9
BL 1434	LH 2834			3x4					51.7	3.6	32.0	287 000	11.0
•BL 1444	LH 2844	1.75	44.45	4x4	14.27	40.8	6.3	4445	58.2	3.6	38.4	382 600	12.6
•BL 1446	LH 2846			4x6					71.5	5.4	51.2	382 600	15.7
•BL 1466	LH 2866			6x6					85.0	5.4	64.0	574 000	18.8
•BL 1623	LH 3223			2x3					42.1	3.8	21.6	289 100	9.0
•BL 1634	LH 3234			3x4					57.0	5.0	36.0	433 700	12.5
•BL 1646	LH 3246	2.00	50.8	4x6	17.46	47.9	7.1	5080	78.9	7.6	57.6	578 200	17.9
•BL 1666	LH 3266			6x6					95.0	7.6	72.0	867 400	21.3
•BL 1688	LH 3288			8x8					125.6	10.0	100.8	1 156 400	28.3

BL Leaf Chains can be directly fastened by means of connecting pins.
You do not need any additional endplates.
It is desirable to select a BL Chain where possible

- • Stock Sizes
- ■ Chain lenth tolerance: ± 0.25% of unlubricated chain under force measurement. Force measurement = $\frac{F_f}{100}$
- **F** =Pin and link plate dimensions according to DIN 8187 (BS) roller chain
- **AL** =Pin and link plate dimensions according to DIN 8188 (ANSI) roller chain
- **BL** =Pin and link plate dimensions according to ANSI standard, however, the plate dimensions and pin diameter are those of the next largest size. This provides increased bearing area and tensile strength for longer wear-life with reduced outer dimensions.

*) On request, we shall advise the effective higher Rexnord breaking load values

Leaf Chains



F Series: Machine Tool Quality

The effective pitch dimensions of F and AL leaf chains are different from basic dimensions.

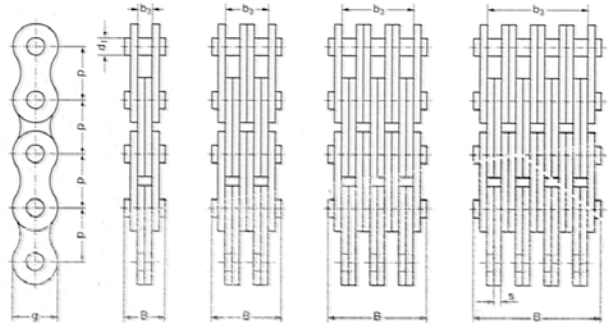
Please pay attention to "Length exceeding 100 x Pitches".

Please use for machine tolls chain of "F" - series in special machine tool quality.

- Stock Sizes
- ■ Chain lenth tolerance: ± 0.25% of unlubricated chain under force measurement.

Force measurement = $\frac{F_B}{100}$

Leaf Chains - Lacings



2x2 4x4 6x6 8x8

Leaf Chains - Industry Standard

Chain No.	Chain Type ISO DIN	Pitch p Inch	Pitch p mm	Lacing	Pin Diameter d_1 max. mm	Plate Height g max. mm	Plate Thickness s mm	Lenth exceeding 100xpitches ■ mm	Overall width B max. mm	Bearing Area A cm^2	Required*) Ultimate Strenth min. F_B N	Weight ≈q kg/m	
FSH - 5	-	0.625	15.875	2 x 3	4.75	14.6	2.5	1592	14.9	0.24	30 300	1.0	
• F19C-44	-	0.75	19.05	4 x 4	6.5	15.2	2.35	1901	22.4	0.61	71 000	1.75	
*F19V-66	-			6 x 6					32.3	0.91	106 000	2.6	
834(SK 507)	-	1.00	25.4	3 x 4	10.85	23.4	IL/AL	2544	28.4	1.37	125 000	3.6	
432(SK 508)	-			6 x 6			3.05/4.0		44.4	2.06	250 000	5.9	

*) On request, we shall advise the effective higher Rexnord breaking load values

Leaf Chains acc. to DIN 8152, European Standard, Light Series

Chain No.	Chain Type ISO DIN	Pitch p Inch	Pitch p mm	Lacing	Pin Diameter d_1 max. mm	Plate Height g max. mm	Plate Thickness s mm	Lenth exceeding 100xpitches ■ mm	Overall width B max. mm	Bearing Area A cm^2	Inner Width of Outer Plates b_3 min. mm	Required*) Ultimate Strenth min. F_B N	Weight ≈q kg/m
•F12-44	LL 0844	0.50	12.7	4 x 4	4.45	10.2	1.6	1258	16.1	0.28	10.2	36 000	0.82
•F12-66	LL 0866			6 x 6					23.4	0.42	17.0	54 000	1.2
•F15-44	LL 1044	0.625	15.875	4 x 4	5.08	12.8	1.6	1588	14.99	0.32	10.2	44 800	0.94
•F15-66	LL 1066			6 x 6					21.4	0.48	17.0	67 200	1.4
•F25-44	LL 1644	1.00	25.4	4 x 4	8.28	20.5	3.0	2540	28.2	0.99	18.6	120 000	2.8
•F25-66	LL 1666			6 x 6					40.5	1.49	31.0	180 000	4.2
•F25-88	LL 1688			8 x 8					54.2	1.98	43.4	240 000	5.2
•F31-44	LL 2044	1..25	31.75	4 x 4	10.19	25.7	3.5	3160	33.3	1.42	21.6	190 000	4.2
•F31-66	LL 2066			6 x 6					48.2	2.12	36.0	285 000	6.3
•F31-88	LL 2088			8 x 8					63.2	2.83	50.4	380 000	8.4
•F38-44	LL 2444	1.50	38.1	4 x 4	14.63	33.0	5.0	3785	46.9	2.91	30.6	320 000	8.2
•F38-66	LL 2466			6 x 6					68.3	4.37	51.0	480 000	12.0
•F38-88	LL 2488			8 x 8					89.7	5.82	71.4	640 000	16.3
•F44-22	LL 2822	1.75	44.45	2 x 2	15.9	36.0	6.0	4410	29.4	1.9	72.2	200 000	4.8
•F44-44	LL 2844			4 x 4					54.7	3.8	36.6	400 000	9.5
•F44-66	LL 2866			6 x 6					80.2	5.7	61.0	600 000	14.1
•F50-22	LL 3222	2.00	50.8	2 x 2	17.81	41.2	6.3	5048	32.5	2.24	12.8	250 000	6.2
F50-44	LL 3244			4 x 4					59.1	4.47	38.4	500 000	11.9
F50-66	LL 3266			6 x 6					85.4	6.71	64.0	750 000	17.8
•F50-88	LL 3288			8 x 8					112.0	8.94	89.6	1 000 000	23.8
•F63-22	LL 4022	2.50	63.5	2 x 2	22.89	48.0	8.0	6325	39.5	3.65	16.2	355 000	9.2
F63-44	LL 4044			4 x 4					73.1	7.3	48.6	710 000	17.9
F63-66	LL 4066			6 x 6					106.5	10.94	81.0	1 065 000	26.6
F76-44	LL 4844	3.00	76.2	4 x 4	29.24	62.0	10.0	7597	91.2	11.66	60.6	1 120 000	29.6
F76-66	LL 4866			6 x 6					131.0	17.5	101.0	1 680 000	44.0

Leaf Chains, American Standard, Light Series

Chain No.	Chain Type ISO DIN	Pitch p Inch	Pitch p mm	Lacing	Pin Diameter d_1 max. mm	Plate Height g max. mm	Plate Thickness s mm	Lenth exceeding 100xpitches ■ mm	Overall width B max. mm	Bearing Area A cm^2	Inner Width of Outer Plates b_3 min. mm	Required*) Ultimate Strenth min. F_B N	Weight ≈q kg/m
*AL 422	-	0.50	12.7	2 x 2	3.96	10.2	1.5	1257	8.1	0.12	3.2	14 100	0.35
*AL 444	-			4 x 4					14.5	0.23	9.6	28 200	0.67
*AL 466	-			6 x 6					20.9	0.35	16.0	42 300	1.0
*AL 522	-	0.625	15.874	2 x 2	5.08	12.8	2.0	1566	10.5	0.2	4.2	22 000	0.63
*AL 544	-			4 x 4					18.7	0.4	12.6	44 000	1.2
*AL 566	-			6 x 6					27.1	0.6	21.0	66 000	1.75
*AL 622	-	0.75	19.05	2 x 2	5.94	14.8	2.4	190532.0	12.6	0.28	5.0	37 000	0.93
*AL 644	-			4 x 4					22.5	0.57	15.0	63 600	1.6
*AL 666	-			6 x 6					0.85	25.0	95 400	2.5	
AL 688	-			8 x 8					43.0	1.14	35.0	127 200	3.3
*AL 844	-	1.00	25.4	4 x 4	7.92	20.5	3.1	2540	30.8	1.01	19.2	113 400	3.3
*AL 866	-			6 x 6					44.4	1.52	32.0	170 100	4.9
AL 1044	-	1.25	31.75	4 x 4	9.53	25.7	3.9	3175	37.3	1.52	24.0	177 000	4.9
*AL 1066	-			6 x 6					54.0	2.29	40.0	265 500	7.3
*AL 1266	-	1.50	38.1	6 x 6	11.1	29.4	4.7	3810	63.3	3.12	48.0	381 000	10.5
*AL 1288	-			8 x 8					83.0	4.17	67.2	508 000	14.0
AL 1466	-	1.75	44.45	6 x 6	12.7	36.0	5.5	4445	74.5	4.2	56.0	558 000	13.0
AL 1666	-	2.00	50.8	6 x 6	14.27	41.2	6.3	5080	85.0	5.39	64.0	642 000	18.0

*) On request, we shall advise the effective higher Rexnord breaking load values

Fastening of Leaf Chains

Connecting Pins for Fastening Leaf Chains

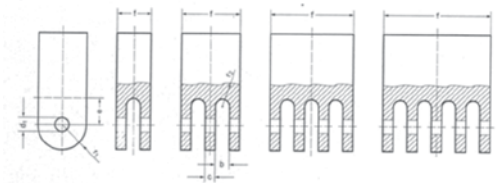
For sizes exceeding BL 1234/F38 the connecting pin is supplied with additional 2 plates.

Chain No.	Connecting Pin Order No.	Dimensions of Connecting Pins in mm			
		l min	L max	d max	d_2
F12 -44	•709-204-44	16.0	22.2	4.45	1.6
F12 -66	•709-204-66	23.0	29.2		
F15 -44	•709-205-44	15.0	21.1	5.08	1.6
F15 -66	•709-205-66	22.0	28.0		
F25 -44	•709-208-44	28.0	38.7	8.28	3.2
F25 -66	•709-208-66	41.0	51.7		
F25 -88	•709-208-88	54.0	64.7		
F31 -44	•709-210-44	33.0	43.7	10.19	3.2
F31 -66	•709-210-66	47.0	57.7		
F31 -88	•709-210-88	62.0	72.7		
F38 -44	•709-214-44	48.2	60.6	14.63	4.0
F38 -66	•709-214-66	69.2	81.6		
F38-888	•709-214-88	90.2	102.6		
F44 -22	•709-215-22	29.7	42.1	15.9	4.0
F44 -44	•709-215-44	55.0	67.5		
F44 -66	709-215-66	80.2	92.7		
F44 -88	709-215-88	106.0	118.5		
F50 -22	•709-217-22	34.4	51.9	17.81	5.0
F50 -44	709-217-44	59.9	77.5		
F50 -66	709-217-66	86.4	104.0		
F50 -88	•709-217-88	113.9	131.5		
F63 -22	709-222-22	39.9	60.8	22.89	6.3
F63 -44	709-222-44	73.3	94.3		
F63 -66	709-222-66	106.6	127.6		
F63 -88	709-222-88	140.1	161.1		
F76 -44	709-229-44	91.5	112.5	29.23	6.3
F76 -66	709-229266	133.5	154.5		
F76 -88	709-229-88	174.2	195.2		
F19V-44	709-206-44	23.0	30.2	6.5	2.0
F19V-66	709-206-66	33.0	40.3		

• Stock sizes

Chain No.	Connecting Pin Order No.	Dimensions of Connecting Pins in mm			
		l min	L max	d max	d_2
BL422/AL522	•709-305-22	10.8	17.0	5.08	1.6
BL423	•709-305-23	12.7	18.9		
BL434	•709-305-34	17.0	23.2		
BL444/AL544	709-305-44	19.0	25.0		
BL446	•709-305-46	23.0	29.2		
BL466/AL566	709-305-66	27.0	33.3		
BL488/AL588	709-305-88				
BL522	709-355-22	12.8	19.4	5.94	2.0
BL523	•709-355-23	15.0	21.6		
BL534	•709-355-34	20.0	26.6		
BL544/AL644	•709-355-44	22.5	29.1		
BL546	•709-355-46	27.0	33.7		
BL566/AL666	•709-355-66	32.0	38.7		
BL588/AL688	709-355-88	42.5	49.3		
BL623	•709-307-23	20.0	30.7	7.92	3.2
BL634	•709-307-34	27.0	37.7		
BL644/AL844	•709-307-44	30.0	40.7		
BL646	•709-307-46	37.0	47.7		
BL666/AL866	•709-307-66	43.0	53.7		
BL688/AL	709-307-88	56.5	67.2		
BL823	•709-309-23	25.0	35.7	9.53	3.2
BL834	•709-309-34	33.0	43.7		
BL844/AL1044	•709-309-44	37.0	47.7		
BL846	•709-309-46	46.0	56.7		
BL866/AL1066	•709-309-66	53.0	63.7		
BL888/AL1088	709-309-88	69.5	80.3		
BL1023	•709-311-23	30.0	42.4	11.1	4.0
BL1034	•709-311-34	39.2	51.6		
BL1044/AL1244	709-311-44	44.2	56.6		
BL1046	•709-311-46	54.2	66.6		
BL1066/AL1266	•709-311-66	63.2	75.6		
BL1088/AL1288	•709-311-88	79.9	92.4		
BL1223	709-312-23	34.5	46.9	12.7	4.0
BL1234	709-312-34	46.2	58.6		
BL1244/AL1444	709-312-44	50.0	64.4		
BL1246	•709-312-46	63.5	76.0		
BL1266/AL1466	709-312-66	75.3	87.8		
BL1288/AL1488	•709-312-88	98.6	111.1		
BL1423	709-314-23	38.7	51.1	14.27	4.0
BL1434	709-314-34	52.2	64.6		
BL1444	•709-314-44	58.6	71.1		
BL1446	•709-314-46	71.7	84.2		
BL1466	•709-314-66	85.1	97.7		
BL1623	•709-317-23	43.1	60.6	17.46	5.0
BL1634	•709-317-34	58.0	75.5		
BL1644	•709-317-44	65.7	82.9		
BL1646	•709-317-46	79.9	97.4		
BL1666	•709-317-66	94.6	112.2		
BL1688	•709-317-88	124.0	141.6		

Lacings



2x2
2x3

3x5
4x4
4x6

6x6

8x8

Chain No.	Recommendation of Dimensions of Fastening blocks Dimensions in mm						
	f max	b min	c max	d_1 D10	e min	r_1 max	r_2 max
BL422/AL522	10.7	4.2	-	5.1	9.0	6.5	2.0
BL423	12.6	6.4	-				3.0
BL434	16.9	4.2	2.0				2.0
BL444/AL544	18.9	4.2	4.0				2.0
BL446	22.9	6.4	4.0				3.0
BL466/AL566	26.9	4.2	4.0				2.0
BL488/AL588	35.4	4.2	4.0				2.0
BL522	12.7	5.1	-	6.0	11.0	8.0	2.0
BL523	14.9	7.5	-				3.0
BL534	19.9	5.0	2.4				2.0
BL544/AL644	22.4	5.0	4.8				2.0
BL546	26.9	7.5	4.8				3.0
BL566/AL666	31.9	5.0	4.8				2.0
BL588/AL688	42.4	5.0	4.8				2.0
BL623	19.9	10.3	-	8.0	14.0	9.5	5.0
BL634	26.9	6.8	3.2				3.0
BL644/AL844	29.9	6.8	6.4				3.0
BL646	36.9	10.3	6.4				5.0
BL666/AL866	42.9	6.8	6.4				3.0
BL688/AL	56.4	6.8	6.4				3.0
BL823	24.9	12.8	-	9.6	18.0	12.5	6.0
BL834	32.9	8.5	4.0				4.0
BL844/AL11044	36.9	8.5	8.0				4.0
BL846	45.9	12.8	8.0				6.0
BL866/AL1066	52.9	8.5	8.0				4.0
BL888/AL1088	69.4	8.5	8.0				4.0
BL1023	29.8	15.1	-	11.2	22.0	15.0	7.0
BL1034	39.0	10.0	4.7				5.0
BL1044/AL1244	44.0	10.0	9.4				5.0
BL1046	54.0	15.1	9.4				7.0
BL1066/AL1266	63.0	10.0	9.4				5.0
BL1088/AL1288	79.7	10.0	9.4				5.0
BL1223	34.3	17.7	-	12.8	26.0	19.0	8.0
BL1234	46.0	11.8	5.5				5.0
BL1244/AL1444	49.0	11.8	11.0				5.0
BL1246	63.3	17.7	11.0				8.0
BL1266/AL1466	75.1	11.8	11.0				5.0
BL1288/AL1488	98.4	11.8	11.0				5.0
BL1423	38.5	20.1	-	14.3	31.0	22.0	10.0
BL1434	52.0	13.4	6.3				6.0
BL1444	58.4	13.4	12.6				10.0
BL1446	71.5	20.1	12.6				10.0
BL1466	84.9	13.4	12.6				10.0
BL1623	42.8	22.5	-	17.5	34.0	25.0	10.0
BL1634	57.7	15.0	7.1				7.0
BL1644	65.4	15.0	14.2				7.0
BL1646	79.6	22.5	14.2				10.0
BL1666	94.3	15.0	14.2				7.0
BL1688	123.7	15.0	14.2				7.0

Recommendations for Dimensions of Fastening Blocks

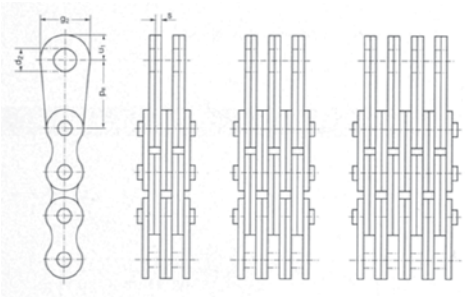
Fastening Block: Material 590 N/mm²

Fastening Blocks are not part of our delivery programme

Chain No.	Recommendation of Dimensions of Fastening blocks Dimensions in mm						
	f max	b min	c max	d_1 D10	e min	r_1 max	r_2 max
F12-44	15.9	3.7	3.4	4.5	7.0	6.5	1.7
F12-66	22.9						
F15-44	14.9	3.5	3.0	5.1	8.5	8.0	1.7
F15-66	21.9						
F25-44	27.9	6.7	6.2	8.3	13.5	13.0	3.0
F25-66	40.9						
F25-88	53.9						
F31-44	32.9	7.5	7.0	10.2	17.0	16.5	3.5
F31-66	46.9						
F31-88	61.9						
F38-44	48.0	11.0	10.0	14.7	22.0	20.0	5.0
F38-66	69.0						
F38-88	90.9						
F44-22	29.5	13.0	12.0	16.0	25.0	24.0	6.0
F44-44	54.8						
F44-66	80.0						
F44-88	105.8						
F50-22	34.2	13.6	12.6	17.9	28.0	27.0	6.0
F50-44	59.7						
F50-66	86.2						
F50-88	113.7						
F63-22	39.6	17.0	16.0	23.0	35.0	35.0	8.0
F63-44	73.0						
F63-66	106.3						
F63-88	139.8						
F76-44	91.2	21.0	20.0	29.3	45.0	40.0	10.0
F76-66	133.2						
F76-88	173.9						
F19V-44	22.9	5.2	4.7	6.6	10.0	10.5	2.0
F19C-66	32.9						

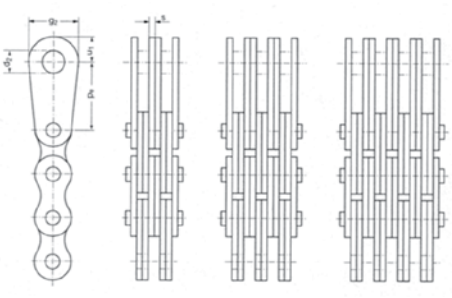
Fastening of Leaf Chains

Endplates as Inner Link



Scope of delivery:
Endplate and outer link for rivetting are parts of our delivery program.

Endplates as Outer Link



Scope of delivery:
Endplate and rivet pin are parts of our delivery program.

Chain No.	Endplates Order No.		Dimensions in mm				
	IEG	AEG	Pe	d_2 A11	g_2	s	u_1
F12-44 F2-66	170-112-44 170-112-66	45 65	15	6	16.0	1.7	10.0
F15-44 F15-66	170-115-44 170-115-66	45 65	20	8	18.0	1.5	11.0
F25-44 F25-66 F25-88	170-124-44 170-124-66 170-124-88	45 65 85	30	12	25.0	3.0	15.0
F31-44 F31-66 F31-88	170-131-44 170-131-66 170-131-88	45 65 85	50	18	40.0	3.5	25.0
F38-44 F38-66 F38-88	170-138-44 170-138-66 170-138-88	45 65 85	65	24	50.0	5.0	29.0
F44-22 F44-44 F44-66	170-144-22 170-144-44 170-144-66	25 45 65	80	28	60.0	6.0	32.0
F50-22 F50-88	170-150-22 170-150-88	25 85	`90	32	70.0	6.3	43.0
F63-44 F63-66	170-163-44 170-163-66	45 65	100	38	80.0	8.0	46.5
AL644 AL6666 AL688	170-118-44 170-118-66 170-118-88	45 65 85	25	10	19.8	2.4	11.2
AL1044 AL1066	170-130-44 170-120-66	45 65	40	14	30.0	4.0	18.0
F19V44 F19V66	170-120-44 170-120-66	45 65	25	10	19.8	2.35	11.2

Endplates are available as inner and outer links.

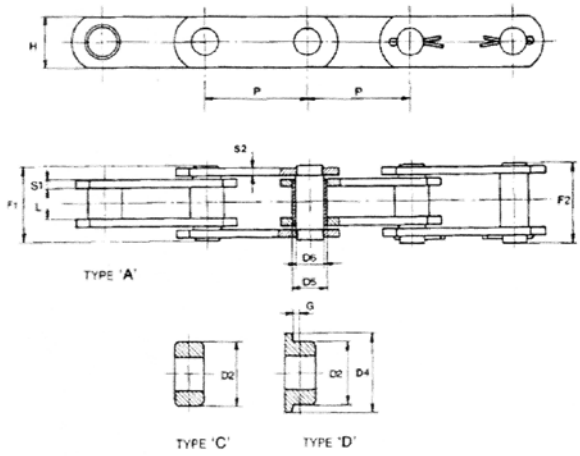
Chain and outer link will be connected with connecting pin (page 34).

Example for ordering Endplates for leaf chain F38-44
a) as inner link (IEG): 170-138-44
b) as outer link (AEG): 170-138-45

Conveyor Chain

Light-Medium Duty

SOLID PIN SERIES



* Normally held in Stock-Type 'C'
Types 'A' - 'D' – Ex Import
also stocked with extended pins.

Example: Part No. = **Z40C 50.8**

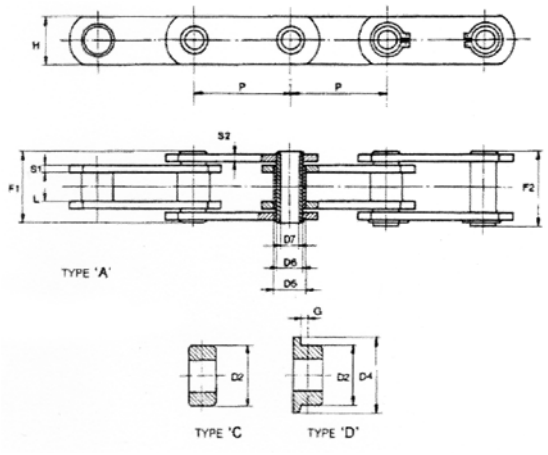
Equivalent British Series	Chain No	P	P	L	D2	D4	G	DS	DG	H	S1	S2	F1	F2	Tensile Strength
	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N
7 500 lbf	Z 40	2	50.8	15	31.75	40	2.5	17	14	25	4	4	36	40	40000
	*	3	76.2												
		3.5	88.9												
	*	4	101.6												
		5	127												
	*	6	152.4												
15 000 lbf	Z 100	3	76.2	19	47.5	60	3.5	23	18	40	5	4	42.5	47	100000
	*	4	101.3												
		4.5	114.3												
		5	127												
	*	6	152.4												
		7	177.8												
		8	203.2												
30 000 lbf	Z 160	4	101.6	25.4	66.7	82	4	32	22	50	7	5	56	60	160000
		4.5	114.3												
		5	127												
	*	6	152.4												
		7	177.8												
		8	203.2												
		10	254												
45 000 lbf	Z 300	6	152.4	38	88.9	114.3	8.5	38	28	60	10	8	83	88.5	300000
		7	177.8												
		8	203.2												
		10	254												
		12	304.8												
–	C100A*	–	100	25	–	–	–	20	14	35	5	5	53	56	100000

Dimensions are nominal, for reference purpose only.

Conveyor Chain

Light-Medium Duty

HOLLOW PIN SERIES

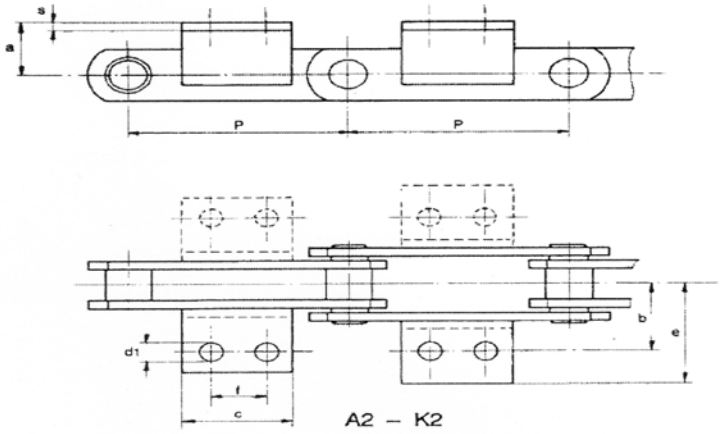


* Normally held in Stock-Type 'C' Example: Part No. = **Z40C 50.8**

Equivalent British Series	Chain No	P	P	L	D2	D4	G	DS	DG	D7	H	S1	S2	F1	F2	Tensile Strength
	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N
6 000 lbf	ZC* 40	2	50.8	15	31.75	40	2.5	17	14	10.2	25	4	4	35	36.5	40000
	*	3	76.2													
		3.5	88.9													
	*	4	101.6													
		4.5	114.3													
		5	127													
	*	6	152.4													
12 000 lbf	ZC*60	3	76.2	19	47.5	60	3.5	23	18	13.2	40	5	4	42	43.5	60000
	*	4	101.6													
		4.5	114.3													
		5	127													
	*	6	152.4													
		7	177.8													
		8	203.2													
24 000 lbf	ZC 150	4	101.6	25.4	66.7	82	4	32	25	19.1	50	7	5	56	59	150000
		4.5	114.3													
		5	127													
	*	6	152.4													
		7	177.8													
		8	203.2													
		10	254													
36 000 lbf	ZC 300	6	152.4	38	88.9	114	8.5	38	32	22.5	60	10	8	82	85	300000
		7	177.8													
		8	203.2													
		10	254													
		12	304.8													

Dimensions are nominal, for reference purpose only.

Attachments



* Normally held in Stock-Type 'C'
Other attachment sizes - Please enquire.

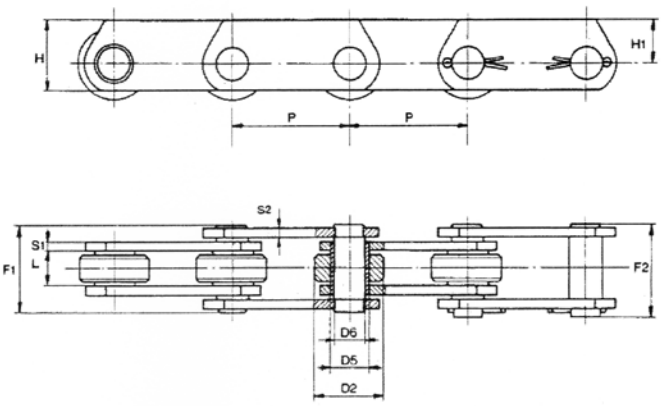
Chain No	P	a	b	c	d1	e	f	Mass			Mass
								Type A	Type C	Type D	
	mm	mm	mm	mm	mm	mm	mm	kg/m	kg/m	kg/m	kg/each
Z 40	50.8	–	–	–	–	–	–	3	4.2	4.4	0.072
*	76.2	19	38.1	45	9.5	46	22.2	2.5	3.3	3.4	0.084
	88.9	–	–	–	–	–	–	2.42	3.1	3.2	0.090
*	101.6	19	38.1	57	10.4	46	31.75	2.25	2.9	3.0	0.074
	114.3	–	–	–	–	–	–	2.23	2.8	2.9	0.140
	127	–	–	–	–	–	–	2.15	2.6	2.7	0.140
*	152.4	19	38.1	84	10.4	46	57	2.05	2.4	2.6	0.180
Z100	76.2	–	–	–	–	–	–	4.90	7.7	8.2	0.073
*	101.6	32	44.5	57	10.4	61	31.75	4.60	6.5	7	0.130
	114.3	–	–	–	–	–	–	4.50	6	6.6	0.130
	127	–	–	–	–	–	–	4.26	5.6	6.2	0.180
*	152.4	32	44.5	84	10.4	61	57	4.10	5.2	5.7	0.180
	177.8	–	–	–	–	–	–	3.90	4.8	5.2	0.270
	203.2	–	–	–	–	–	–	3.80	4.6	5	0.270
Z 160	101.6	–	–	–	–	–	–	8.83	13.7	14.9	0.140
	114.3	–	–	–	–	–	–	8.50	12.8	13.8	0.140
	127	–	–	–	–	–	–	8	11.8	12.8	0.30
*	152.4	38	52	84	12.3	77	57	7.50	10.8	11.5	0.37
	177.8	–	–	–	–	–	–	7	9.8	10.5	0.37
	203.2	–	–	–	–	–	–	6.70	9.2	9.7	0.60
	254	–	–	–	–	–	–	5.60	7.6	8	0.60
Z 300	152.4	–	–	–	–	–	–	14.70	24.3	26	0.43
	177.8	–	–	–	–	–	–	13.70	22	23.5	0.43
	203.2	–	–	–	–	–	–	13.10	20.5	21.6	0.71
	254	–	–	–	–	–	–	12.15	18	19	0.86
	304.8	–	–	–	–	–	–	11.60	16.5	17.5	1.60

Dimensions are nominal, for reference purpose only.

Conveyor Chain

Light-Medium Duty

DEEP LINK SERIES



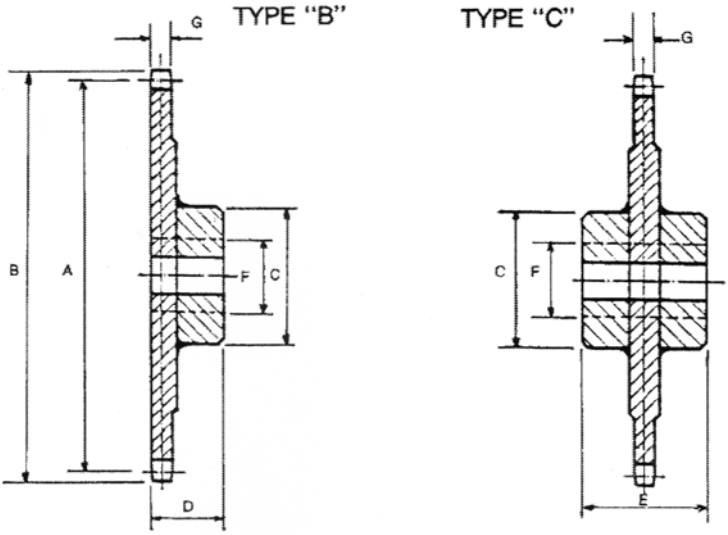
* Normally - Ex Import

Example: Part No. = **Z40C 50.8**

Equivalent British Series	Chain No	P	P	L	D2	D5	D6	H	H1	S1	S2	F1	F2	Tensile Strength	Mass
	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	kg/m
7 500 lbf	ZE 40	2 3 3.5 4 4.5 5 6	50.8 76.2 88.9 101.6 114.3 127 152.4	15	31.75	17	14	35	22.5	4	4	36	40	40000	5.6 4.4 4.1 3.9 3.7 3.6 3.5
15 000 lbf	ZE 100	3 4 4.5 5 6 7 8	76.2 101.6 114.3 127 152.4 177.8 203.2	19	47.5	23	18	50	130	5	4	42.5	47	100000	9.2 7.8 7.3 6.9 6.4 6 5.7
30 000 lbf	ZE 160	4 4.5 5 6 7 8 10	101.6 114.3 127 152.4 177.8 203.2 254	25.4	66.7	32	22	70	45	7	5	56	60	160000	17.6 16.4 15.4 13.9 12.9 12.1 11
45 000 lbf	ZE 300	6 7 8 10 12	152.4 177.8 203.2 254 304.8	38	88.9	38	28	90	60	10	8	83	88.5	300000	32.2 29.4 27.3 24.4 22.6

Dimensions are nominal, for reference purpose only.

Conveyor Chain Sprocket Wheels

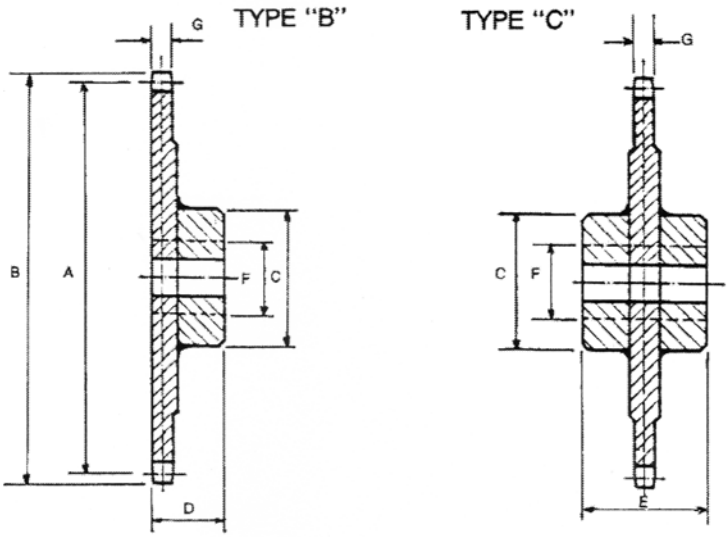


*** Normally carried in stock with pilot bore, Type 'B', in mild steel.**

Chain Series		Chain Pitch		No of Teeth	Roller Dia	P.C.D.	Max Top Dia	Boss Dia	Bore Length		Normal Max Bore	Tooth Width
N	lbf	Inch	mm			A	B	C	D	E	F	G
40000	6000 7500	2	50.8	8*	31.75	133	144	75	50	60	40	12
				10		164	178	90	50	60	50	
				12*		196	212	110	60	70	65	
				16		260	278	120	60	70	70	
		3	76.2	8*	31.75	199	215	100	55	65	60	12
				10		246	264	110	55	65	65	
				12*		294	314	120	65	75	70	
				16		390	413	140	65	75	80	
		4	101.6	8*	31.75	265	281	110	60	70	65	12
				10		329	347	120	60	70	70	
				12*		392	411	140	70	80	90	
				16		521	542	160	70	80	100	
		6	152.4	8*	31.75	398	414	120	65	75	70	12
				10		493	512	140	65	75	90	
				12*		589	608	160	75	85	100	
				16		781	801	180	75	85	120	

Dimensions are nominal, for reference purpose only.

Conveyor Chain Sprocket Wheels



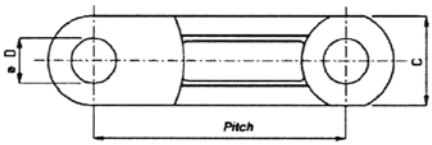
*** Normally carried in stock with pilot bore, Type 'B', in mild steel.**

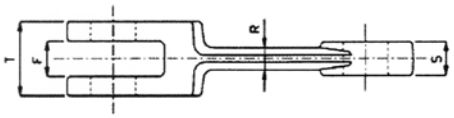
Chain Series		Chain Pitch		No of Teeth	Roller Dia	P.C.D.	Max Top Dia	Boss Dia	Bore Length		Normal Max Bore	Tooth Width
N	lbf	Inch	mm			A	B	C	D	E	F	G
60000	12000	3	76.2	8*	47.5	199	218	130	50	60	75	16
100000	15000			10		246	273	130	50	60	75	
				12*		294	323	140	55	65	80	
				16		391	421	140	55	65	80	
		4	101.6	8*	47.5	265	286	130	55	65	75	16
				10		329	358	140	55	65	80	
				12*		392	418	140	60	70	80	
				16		521	549	160	60	70	100	
		6	152.4	8*	47.5	398	418	140	60	70	80	16
				10		493	518	140	60	70	80	
				12*		589	607	160	65	75	100	
				16		781	805	160	65	75	100	
150000	24000	4	101.6	8	66.7	265	280	160	75	85	100	20
160000	30000			10		329	348	180	75	85	110	
				12		392	420	200	85	95	125	
				16		521	548	220	85	95	140	
		6	152.4	8*	66.7	398	418	180	80	90	110	20
				10		493	516	200	80	90	125	
				12*		589	618	220	90	100	140	
				16		781	810	240	100	120	160	

Dimensions are nominal, for reference purpose only.

Scraper Chains Forged Links

Drive Sprockets and Driven Wheels for Links Code 10160-R

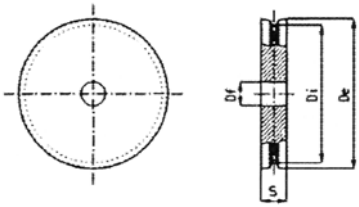




Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
10160-R	101.60	30	36	13	14	9	14

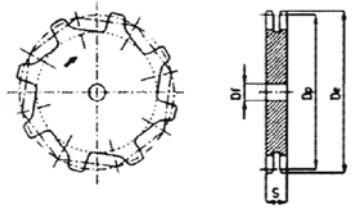
Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	180	195	235	330

DRIVEN WHEEL



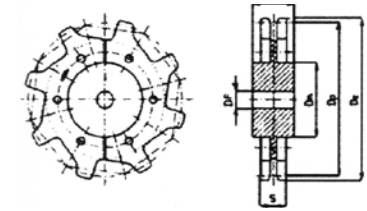
Code	De (mm)	Di (mm)	Df (mm)	S (mm)
10160-R/06R	160	136	25	40
10160-R/08R	229	205	25	40
10160-R/10R	295	271	30	40
10160-R/12R	356	332	40	40
10160-R/14R	420	396	40	40

MONOBLOC DRIVING-WHEEL



Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	S (mm)
10160-R/06C	6	203.20	216	30	40
10160-R/08C	8	265.49	277	40	40
10160-R/10C	10	328.78	340	40	40
10160-R/12C	12	392.55	404	50	40
10160-R/14C	14	456.58	468	50	40

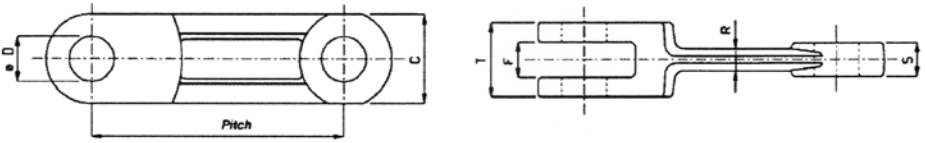
SECTOR DRIVING-WHEEL



Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	Dm (mm)	S (mm)	Sm (mm)
10160-R/06CS	6	203.20	216	25	85	40	75
10160-R/08CS	8	265.49	277	30	120	40	75
10160-R/10CS	10	328.78	340	40	160	40	95
10160-R/12CS	12	392.55	404	50	230	40	95
10160-R/14CS	14	456.58	468	50	280	40	95

Scraper Chains Forged Links

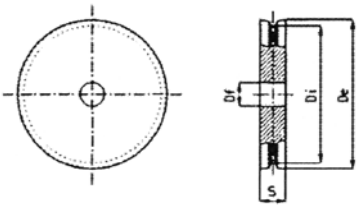
Drive Sprockets and Driven Wheels for Links Code 14218



Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
14218	142	42	50	19	20	11	25

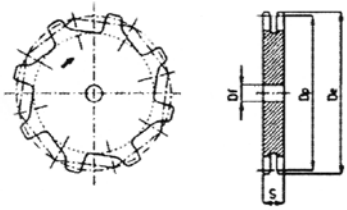
Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	290	320	370	550

DRIVEN WHEEL



Code	De (mm)	Di (mm)	Df (mm)	S (mm)
14218/06R	234	210	40	50
14218/07R	280	256	40	50
14218/08R	320	296	40	50
14218/09R	362	338	40	50
14218/10R	415	391	40	50
14218/11R	454	430	40	50
14218/12R	500	476	40	50
14218/13R	545	521	40	50
14218/14R	588	564	40	50
14218/15R	632	608	40	50
14218/16R	677	653	40	50

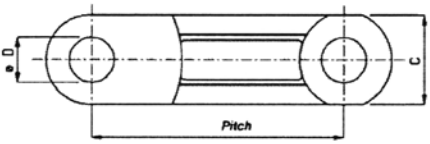
MONOBLOC DRIVING-WHEEL

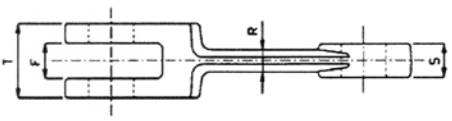


Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	S (mm)
14218/06C	6	284.00	304	40	50
14218/07C	7	327.31	344	40	50
14218/08C	8	371.06	390	40	50
14218/09C	9	415.18	435	40	50
14218/10C	10	459.52	480	40	50
14218/11C	11	504.02	524	40	50
14218/12C	12	548.64	570	40	50
14218/13C	13	593.37	614	40	50
14218/14C	14	638.15	660	40	50
14218/15C	15	682.87	702	40	50
14218/16C	16	727.90	748	40	50

Scraper Chains Forged Links

Drive Sprockets and Driven Wheels for Links Code 14218

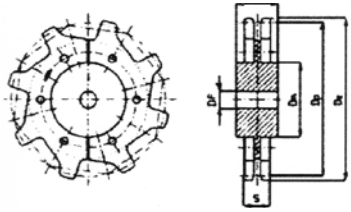




Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
14218	142	42	50	19	20	11	25

Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	290	320	370	550

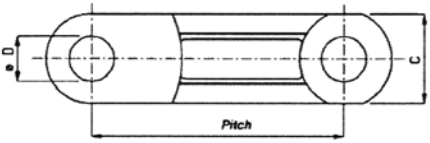
SECTOR DRIVING-WHEEL

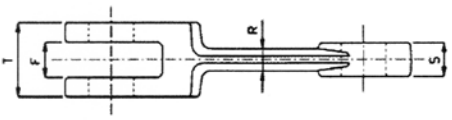


Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	Dm (mm)	S (mm)	Sm (mm)
14218/06CS	6	284.00	304	40	120	62	90
14218/07CS	7	327.31	344	40	150	62	100
14218/08CS	8	371.06	390	40	180	62	100
14218/09CS	9	415.18	435	40	230	62	100
14218/10CS	10	458.52	480	40	240	62	110
14218/11CS	11	504.02	524	40	280	62	110
14218/12CS	12	548.64	570	40	330	62	110
14218/13CS	13	593.37	614	40	370	62	110
14218/14CS	14	638.15	660	40	450	62	110
14218/15CS	15	682.87	702	40	470	62	110
14218/16CS	16	727.90	748	40	500	62	110

Scraper Chains Forged Links

Drive Sprockets and Driven Wheels for Links Code 14226

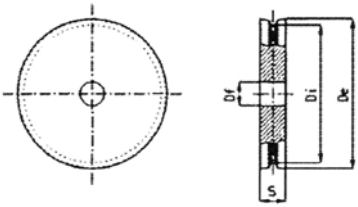




Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
14226	142	62	50	28	30	15	25

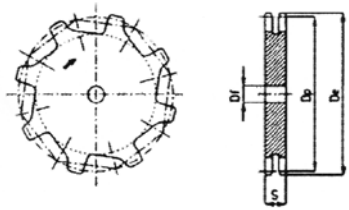
Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	440	470	570	790

DRIVEN WHEEL



Code	De (mm)	Di (mm)	Df (mm)	S (mm)
14226/06R	234	214	40	70
14226/07R	280	260	40	70
14226/08R	320	300	50	70
14226/09R	362	342	50	70
14226/10R	415	396	50	70
14226/11R	454	434	50	70
14226/12R	500	480	50	70
14226/13R	545	525	50	70
14226/14R	588	568	50	70
14226/15R	632	612	50	70
14226/16R	677	657	50	70

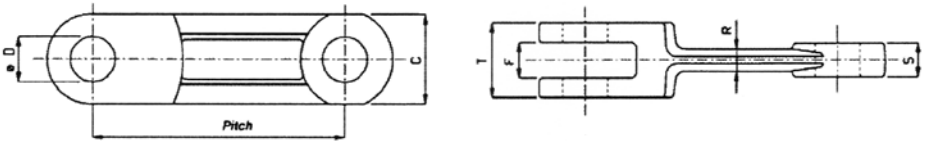
MONOBLOC DRIVING-WHEEL



Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	S (mm)
14226/06C	6	284.00	304	40	70
14226/07C	7	327.31	344	40	70
14226/08C	8	371.06	390	40	70
14226/09C	9	415.18	435	40	70
14226/10C	10	459.52	480	40	70
14226/11C	11	504.02	524	40	70
14226/12C	12	548.64	570	40	70
14226/13C	13	593.37	614	40	70
14226/14C	14	638.15	660	40	70
14226/15C	15	682.87	702	40	70
14226/16C	16	727.90	748	40	70

Scraper Chains Forged Links

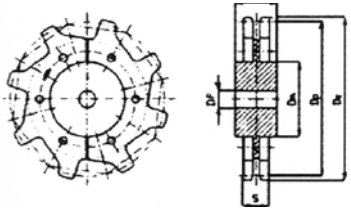
Drive Sprockets and Driven Wheels for Links Code 14226



Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
14226	142	62	50	28	30	15	25

Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	440	470	570	790

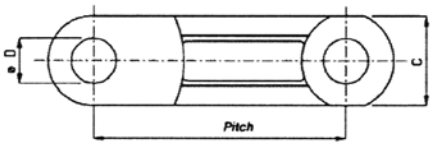
SECTOR DRIVING-WHEEL

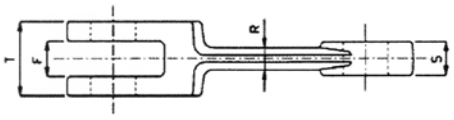


Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	Dm (mm)	S (mm)	Sm (mm)
14226/06CS	6	284.00	304	40	120	70	90
14226/07CS	7	327.31	344	40	150	70	110
14226/08CS	8	371.06	390	40	180	70	110
14226/09CS	9	415.18	435	40	230	70	110
14226/10CS	10	458.52	480	40	240	70	110
14226/11CS	11	504.02	524	40	280	70	110
14226/12CS	12	548.64	570	40	330	70	110
14226/13CS	13	593.37	614	40	370	70	110
14226/14CS	14	638.15	660	40	450	70	110
14226/15CS	15	682.87	702	40	470	70	110
14226/16CS	16	727.90	748	40	500	70	110

Scraper Chains Forged Links

Drive Sprockets and Driven Wheels for Links Code 26040

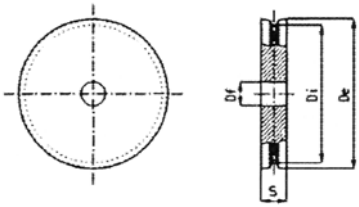




Code	Pitch (mm)	T (mm)	C (mm)	S (mm)	F (mm)	R (mm)	ØD (mm)
26040	260	70	75	31	33	20	32

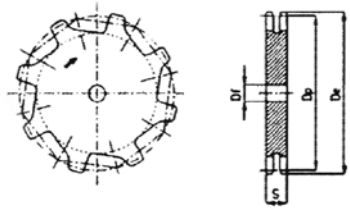
Materials	MN 18MnCrB5	CN 18NiCrMo5	C40 C45	CD 42CrMo4
Treatment	Case hardening	Case hardening	Hardening and tempering	Hardening and tempering
Average theoretical breaking load	840	900	1100	1480

DRIVEN WHEEL



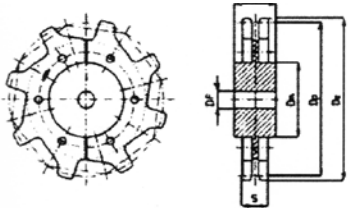
Code	De (mm)	Di (mm)	Df (mm)	S (mm)
26040/08R	604	580	60	80
26040/10R	766	742	60	80
26040/12R	929	905	60	80

MONOBLOC DRIVING-WHEEL



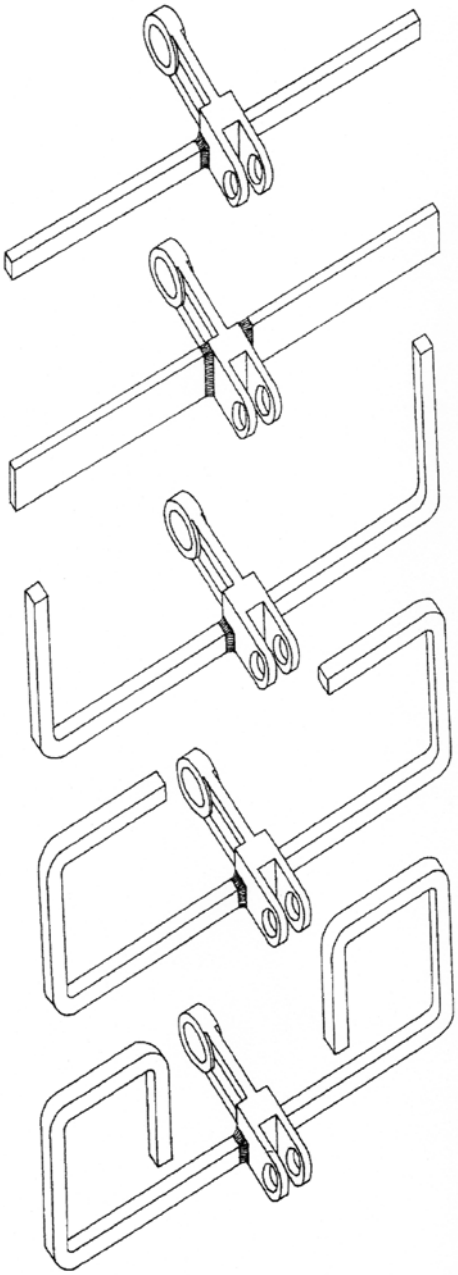
Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	S (mm)
26040/08C	8	679.41	709	60	80
26040/10C	10	841.37	870	60	80
26040/12C	12	1004.56	1035	60	80

SECTOR DRIVING-WHEEL

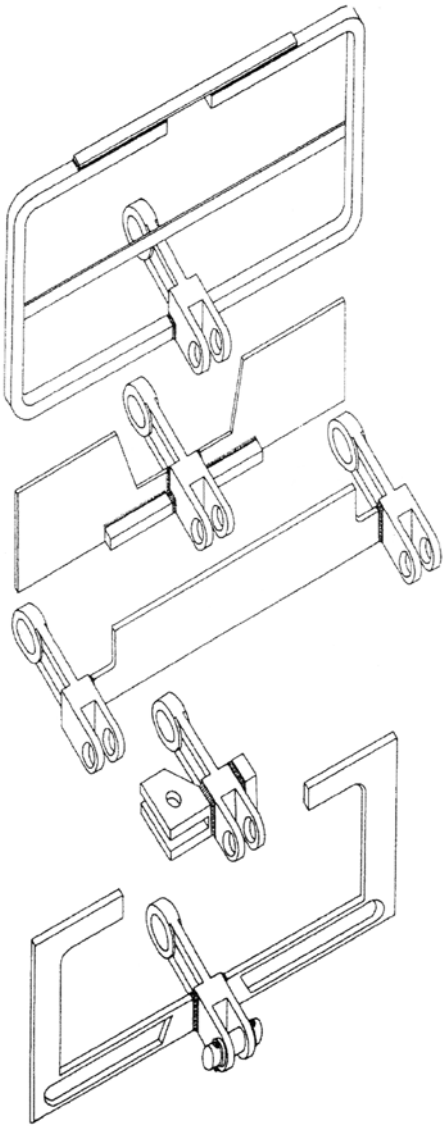


Code	Nr. Teeth	Dp (mm)	De (mm)	Df (mm)	Dm (mm)	S (mm)	Sm (mm)
26040/08CS	8	679.41	709	60	350	82	150
26040/10CS	10	841.37	870	60	400	82	150
26040/12CS	12	1004.56	1035	60	550	82	150

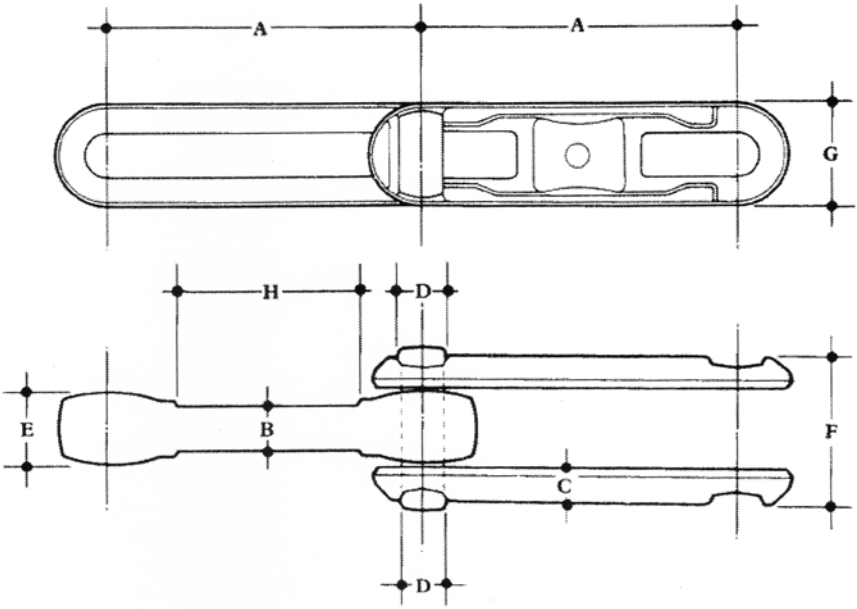
Drop Forged Scraper Chains

SHAPE OF SCRAPER	SCRAPER TYPE	TYPE OF CONVEYOR
	Square or rectangular	Horizontal or inclined till 100°
	Plate	Horizontal or inclined till 100° for dusty material.
	"U" folded	Inclined till 250°.
	"C" folded	Inclined from 250° till 90° for dusty material.
	Double 0′ folded	Inclined from 250° till 90°.

Drop Forged Scraper Chains

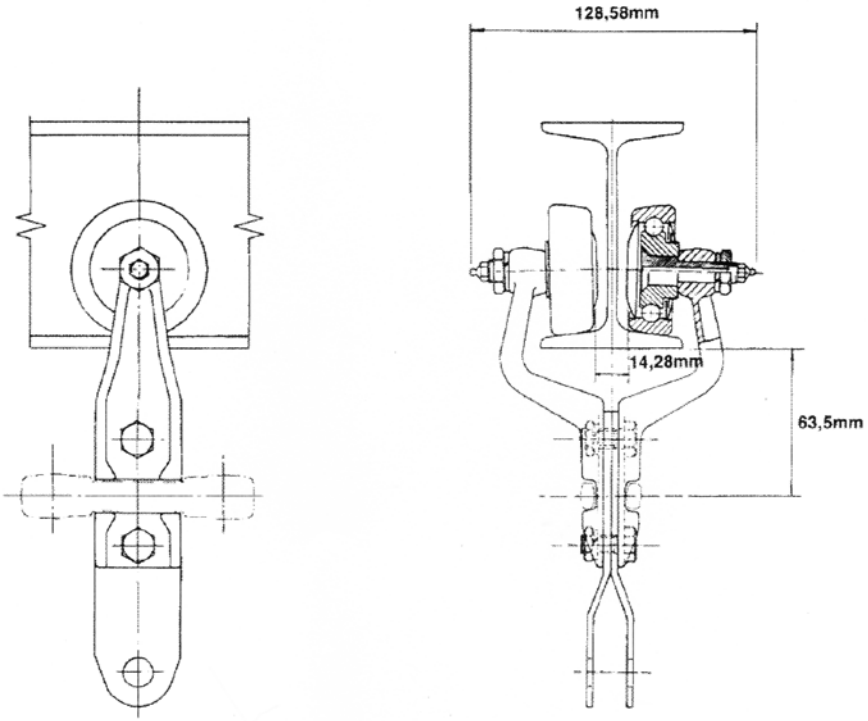
SHAPE OF SCRAPER	SCRAPER TYPE	TYPE OF CONVEYOR
	"C" folded	Horizontal or inclined from 20° to 90°.
	K reinforced	Horizontal or inclined till 30° for dusty material.
	Special attachments	For special use.
	"C" folded	Inclined till 250° for dusty material.
	Double 0' folded	Inclined till 90° for big load.

Drop Forged Rivetless Chain



Chain Ref	A		B		C		D		E		F		G		H	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
348	3.015	76.6	0.512	13.00	0.409	10.40	0.500	12.70	0.756	19.2	1.730	44.0	1.09	27.7	1.63	41.4
458	4.031	102.4	0.625	15.88	0.468	11.89	0.625	15.88	1.000	25.4	2.320	59.0	1.42	36.0	2.31	58.7
468	4.031	102.4	1.140	29.00	0.630	16.00	0.750	19.10	1.610	40.9	3.280	83.3	1.87	47.6	1.57	40.0
658	6.031	153.2	0.640	16.30	0.470	11.90	0.625	15.88	1.000	25.4	2.320	59.0	1.38	35.0	2.20	58.0
678	6.031	153.2	0.810	20.60	0.750	19.05	0.875	22.20	1.280	32.5	3.122	79.3	2.00	50.8	3.44	87.4
698	6.031	153.2	1.000	25.40	0.870	22.20	1.120	28.40	1.540	39.1	3.870	98.4	2.50	63.5	2.36	60.0

348 Trolley Assembly

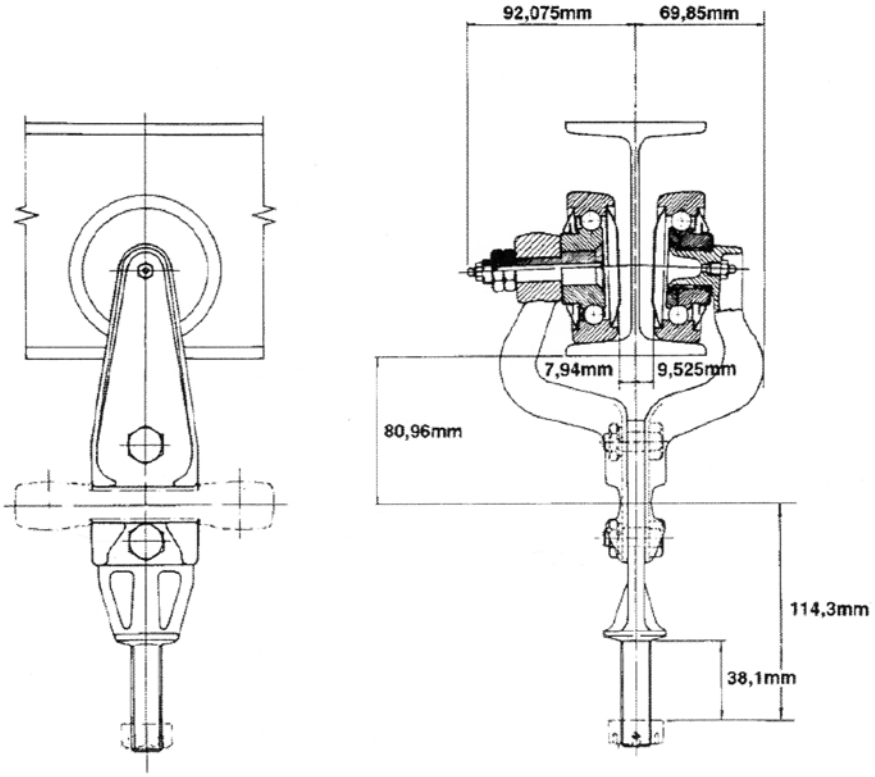


Trolley illustrated is with H attachment.
Wheels can be riveted or bolted to bracket.
Trolley brackets are drop forged from high carbon steel.

Mass of 2 Wheel Trolley	Maximum Payload of 2 Wheel Trolley	Trolley Pitch	Track Size	
kg	kg	min mm	max mm	min mm
1.14	91	150	750	127 x 76 Joist

Dimensions are nominal, for reference purpose only.

458 Trolley Assembly

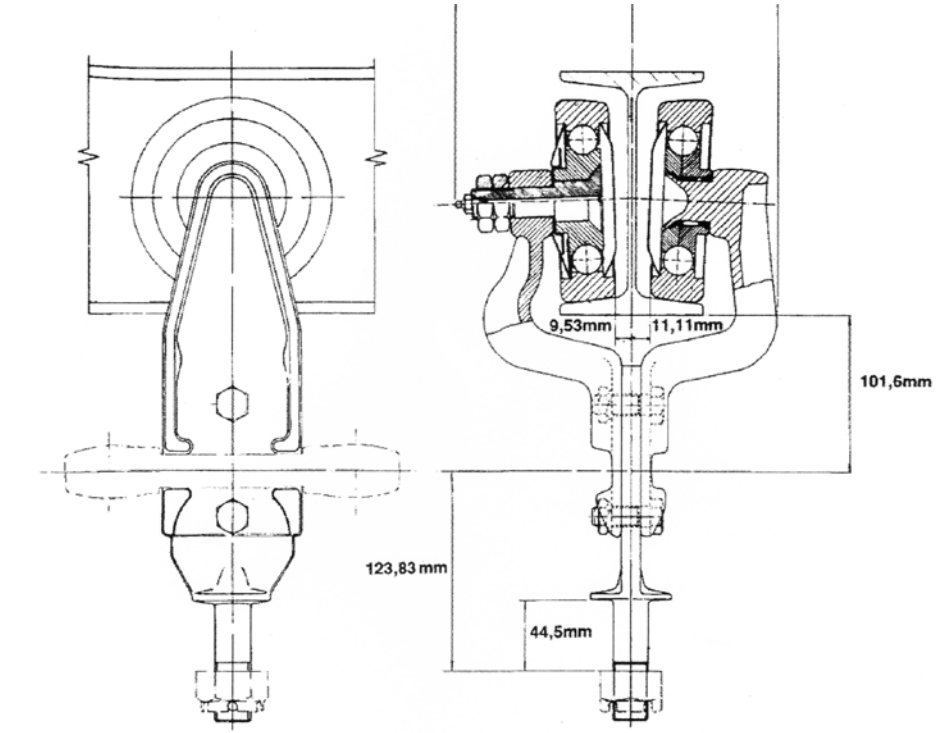


Trolley illustrated is with B attachment.
Wheels can be riveted or bolted to bracket.
Trolley brackets are drop forged from high carbon steel.

Mass of 2 Wheel Trolley	Maximum Payload of 2 Wheel Trolley	Trolley Pitch	Track Size	
kg	kg	min mm	max mm	min mm
2.5	182	200	800	127 x 76 Joist

Dimensions are nominal, for reference purpose only.

678 Trolley Assembly



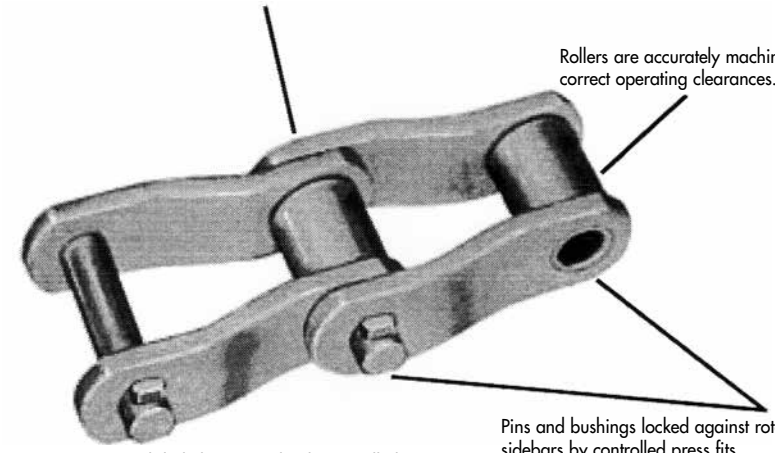
Trolley illustrated is with B attachment.
Wheels can be riveted or bolted to bracket.
Trolley brackets are drop forged from high carbon steel.

Mass of 2 Wheel Trolley	Maximum Payload of 2 Wheel Trolley	Trolley Pitch	Track Size	
kg	kg	min mm	max mm	min mm
7.7	545	300	900	152 x 89 Joist

RO Bushed Roller Chains

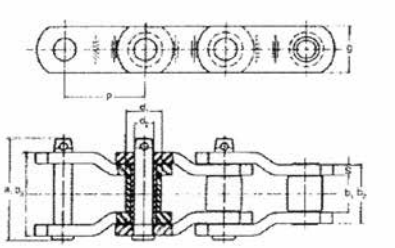
DRIVE CHAINS

Pins, bushings and rollers made of steel and hardened for superior resistance.



RO offset sidebar roller chains are manufactured to close limits and are designed for heavy duty drive services at speeds up to 305 m/min. Depending on chain size, they are capable of transmitting as high as 150 to 370kW.

These rugged, all-steel chains are suitable for a wide variety of drive applications where difficult operating conditions prevail. Hence, they are commonly used for the propel and crowd drives on cranes and shovels, for drum drives on transit mixer trucks, and for drives on heavy duty conveyors and processing equipment.



Most RO Drive chains have heat-treated sidebars of either medium carbon or alloy steel. Sidebar pitch holes are accurately sized and spaced to assure interference fits with pins and bushings and close control of chain pitch.

Joint parts are uniformly sized to provide proper operating clearances. Pins are heat-treated for high strength and wear life. Full-round bushings are hardened to resist shock and wear. Rollers are processed to withstand sprocket tooth impact.

The live bearing areas of these drive chains are carefully proportioned to achieve even load distribution and long wear life. Most of these chains are pre-stressed to further enhance their resistance to fatigue and wear.

RO Bushed Roller Chains

OFFSET SIDEBAR CHAINS TO API STD AND DIN 8182

Chain No		Pitch		Inside Width	Inner Link Width	Outer Link Width	Roller Dia.	Pin Dia	Linkplate Depth Max	Linkplate Thickness	Pin Length	Bearing Area	Tensile Strength	Approx. Mass
		P Inch	P mm	b1	b2 max mm	b3 mm	d1 mm	d2 max mm	g mm	s mm	a1 mm	cm^2	FB N	kg/m
RO 1032	Ro 3	3.075	78.1	38.1	55.2	55.8	31.75	16.0	40	8	98.1	8.8	300 000	11.0
RO .40 HYPER	Ro 3c	3.075	78.1	38.1	59.5	60.5	31.75	16.5	45	9.5	100.0	9.8	340 000	12.0
RO 1242	Ro 4	4.063	103.2	49.2	76.2	76.8	44.45	22.0	57	13	130.0	16.8	620 000	23.2

OFFSET SIDEBAR CHAINS TO AMERICAN STD ANSI 29.10 DIN 8182

Chain No		Pitch		Inside Width	Inner Link Width	Outer Link Width	Roller Dia.	Pin Dia	Linkplate Depth Max	Linkplate Thickness	Pin Length	Bearing Area	Tensile Strength	Approx. Mass
		P Inch	P mm	b1	b2 max mm	b3 mm	d1 mm	d2 max mm	g mm	s mm	a1 mm	cm^2	FB N	kg/m
RO 2512	Ro 3b	3.067	77.9	39.6	59.2	59.8	41.28	19.05	58	9.5	99.0	11.3	490 000	18.5
RO 2814	Ro 3 1/2	3.5	88.9	38.1	64.0	64.7	44.45	22.22	60	12.7	120.0	14.2	628 000	24.5
RO 3315	Ro 4b	4.073	103.45	49.3	79.3	80	45.24	23.8	60	14	145.0	18.9	756 000	27.5
RO 3618	Ro 4 1/2	4.5	114.3	52.3	82.5	83	57.15	27.78	75	14	140.0	22.9	981 000	36.5
RO 4020	Ro 5b	5	127	69.8	104.3	105	63.5	31.75	90	16	168.0	33.1	1 373 000	52.5
RO 5542	Ro 5 1/2	5 1/2	139.7	74.6	114.3	115.2	76.2	38.1	102	19	182.2	43.5	1 335 000	67.9
RO 4824	Ro 6	6	152.4	76.2	115.1	118	76.2	38.1	100	19	185.0	43.8	1 860 000	67.5

Dimensions are nominal, for reference purpose only.

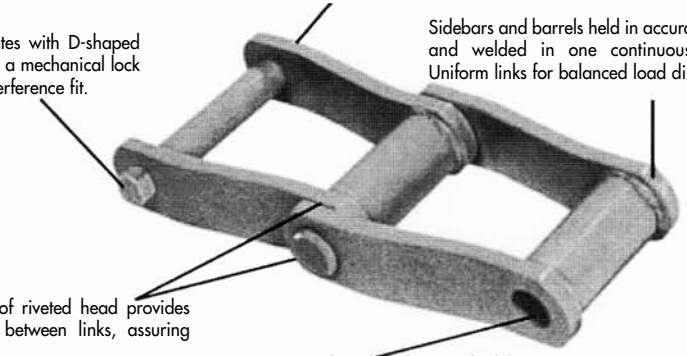
Other sizes of Offset Sidebar and Heavy Industrial Drives can be supplied to order. Sprockets for Rotary Chains are produced by us with standard tooth profile.

W and WH Welded Steel Mill Chain

Heat-treated pins resist wear. Three-Diamenter design simplifies coupling, yet assures an interference fit with pitch holes.

Flat on pin end mates with D-shaped pitch hole to provide a mechanical lock in addition to an interference fit.

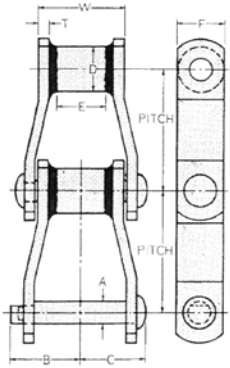
Sidebars and barrels held in accurate alignment and welded in one continuous operation. Uniform links for balanced load distribution.



Controlled forming of riveted head provides uniform clearances between links, assuring free articulation.

Precision-spaced pitch holes punched by progressive, automatic machinery. Holes accurately sized to close tolerances to assure uniform pitch control.

Welded steel mill chains are designed for heavy-duty conveyor services. They readily cope with shock loads and abrasive conditions; hence, they are widely used in the forest products, pulp and paper, and similar industries where demanding operating conditions are common.



Welded steel chains are frequently used to replace cast pintle chains and combination chains when application requirements are increased. The smaller sizes can also be used for slow-speed power transmission drives.

Welded steel mill chains are available in two series. The W series consists of steel links with offset sidebars, coupled together by heat-treated pins. The WH series, with heat-treated links and pins, is preferred when additional resistance to abrasion is required. This heat treating process gives the chain extra protection against shock and impact loading and wear.

Several attachments are available to suite a variety of conveyor and elevator applications.

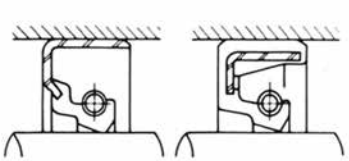
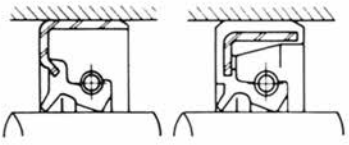
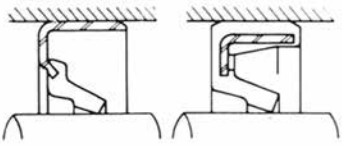
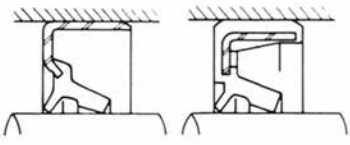
- Normally held in stock – Riveted construction
  Normally held in stock – Cottered construction
  Normally held in stock – Riveted and cottered construction

Chain No		Nominal Pitch		Allowable Chain Pull		Average Ultimate Strength		Nominal Dimensions (mm)								Approx. mass	Standard Attachments
W Series	WH Series			W Series	WH Series	W Series	WH Series	A	B	C	D	E	F	T	W		
		Inch	mm	N	N	N	N									kg/m	
W78*	WH78	2.609	66.3	13640	15900	109000	136400	12.7	41.9	36.8	22.3	28.7	28.7	6.3	51.0	5.7	K1, K2, H2, W1
W124	WH124	4.000	101.6	28640	33410	209100	272700	19.0	58.7	51.8	36.6	41.4	38.1	9.5	71.6	12.1	K2, W1
W111	WH111	4.750	120.6	34550	40450	209100	272700	19.0	64.3	58.2	36.6	57.1	38.1	9.5	86.0	12.5	K2, W1
W110	WH110	6.000	152.4	30680	35900	209100	272700	19.0	63.1	55.8	31.7	47.6	38.1	9.5	76.2	9.7	K2, W1
W132	WH132	6.060	153.7	59550	65900	381800	454540	25.4	83.3	78.5	44.5	76.2	50.8	12.7	111.8	20.6	K2, W1, G9, G20

Dimensions are norminal, for reference purpose only.

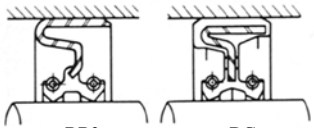
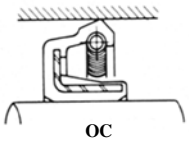
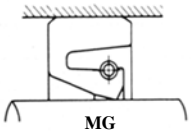
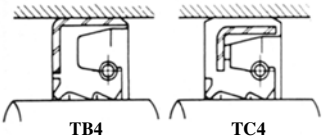
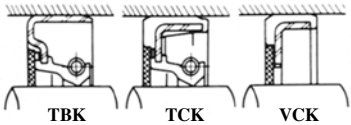
TYPES AND FEATURES OF NOK OIL SEALS

1. STANDARD DESIGN

NOK TYPE & DESIGN	APPLICATION	FEATURES	
S Type  SB2 SC	General purpose, non pressure fluid & severe grease sealing. (max. pressure 0.3 kg/cm2).	**Lip :** Having spring fitted seal lip.Most popular seal type. **Casing:** SB2 (metal casing) SC (rubber casing)	ROTARY SHAFT
T Type  TB2 TC	General purpose, non pressure fluid & severe grease sealing with light exclusion of foreign materials. (max. pressure 0.3 kg/cm2).	**Lip :** A combination of spring fitted seal lip and dust lip. If grease is applied between the sealing lip and dust lip, it can be used even if temporary lubeless condition occurs **Casing:** TB2(metal casing) TC (rubber casing)	
V Type  VB2 VC	Economical design for grease & dust sealing not suitable for viscous fluid.	**Lip:** A springless seal lip. Can be used with S type or T type seal. **Casing:** VB2 (metal casing) VC (rubber casing)	
K Type  KB2 KC	Economical design for grease retention or sealling viscous fluid with light duty exclusion of dust or foreign materials.	**Lip:** A combination of spring-less seal lip and dust lip. If grease is applied between the seal lip & dust lip, it can be used even if temporary lubeless condition temporary occurs. **Casing:** KB2(metal casing) KC(rubber casing)	

TYPES AND FEATURES OF NOK OIL SEALS

2. SPECIAL DESIGN

NOK TYPE & DESIGN	APPLICATION	FEATURES	
D Type  DB2 DC	This seal is designed for sealing two different sealing fluids. (max. pressure 0.3 kg/cm2). This design can be substituted with 2 SB2/SC type by installing back to back	**Lip:** A Combination of two springs fitted seal lip facing in the opposite direction. **Casing:** DB2 (metal casing) DC (rubber casing)	ROTARY SHAFT
O Type  OC	Outer sealing, the shaft does not revolve but the housing rotates (max. pressure 0.3 kg/cm2).	**Lip:** The spring is fitted on the outer seal lip. Require good housing bore inner surface finish. **Casing:** OC (rubber casing)	ROTARY HOUSING
MG Type  MG	This seal can be installed in places where the seal cannot be inserted from the shaft end.	**Lip:** A split seal with hook spring fitted seal lip. This seal can be easily replaced **Casing:** rubber only	ROTARY SHAFT
T4-Type  TB4 TC4	For recipocal motion. Hydraulic or shock absorber seal.	**Lip:** A combination of spring fitted seal lip and dust lip. The seal lip is designed to prevent lip deformation due to reciprocal motion. **Casing:** TB4 (metal casing) TC4 (rubber casing)	RECIPROCAL MOTION
NF Type  TBK TCK VCK	Seals for construction machinery & vehicles. Also for heavy dust condition and preventing vacuum between lips in case of high speed shaft.	**Lip:**A combination of spring fitted seal lip and special synthetic fabric dust lip. This arrangement provides dust proof ventilation & low abrasion **Casing:**TBK (metal casing) TCK (rubber casing) VCK (rubber casing springless type)	ROTARY SHAFT

D. MATERIAL SELECTION

1 LIP MATERIAL

One of the most important components of the oil seal is the elastomer material. NOK has specially developed elastomer blends to meet a wide variety of sealing requirements.
Available are many classes of materials with over 100 individual formulas to satisfy various sealing conditions.
Table VI and Table VII provide general information and fluid compatibility ratings.

TABLE VI. GENERAL ELASTOMER INFORMATION

BASE POLYMER	NITRILE	POLYACRYLATE	SILICONE	FLUOROELASTOMER
Material Code	A	T	S	F
Temperature* Range	-45°C ~ 120°C	-30°C ~ 150°C	*60°C ~ 200°C	-35°C ~ 200°C
Oil resistance	❄	❄	❑	❄
Acid Resistance	❑	▲	▲	❄
Alkali Resistance	❑	X	X	▲
Water Resistance	❑	▲	❑	❑
Heat Resistance	❑	❄	❄	❄
Cold Resistance	❑	▲	❄	▲
Wear Resistance	❄	❄	❑	❄
Ozone Resistance	❑	❄	❄	❄

	Advantages	Disadvantages
NITRILE	• Commonly referred to as Buna-N and is Copolymer of Butadiene and Acryonitrile. • Low cost. • Good resistance to petroleum oils, water, silicone oils, water, greases, glycol base fluids. • Good abrasion resistance, cold flow, tear resistance.	• Poor resistance to ozone and weather ageing. (But NOK has developed special NITRILE RUBBER compound, which is suitable for this condition).
POLYACRYLATE	• Polymerised acrylic acidesters • Good resistance to mineral oils, hypooid gear oils, E.P. additives, greases, aging and flex cracking. • Higher temperature limit than Nitrile.	• Poor cold temperature limit, dry running ability, water resistance. • Lower mechanical strength. • Cost slightly higher than Nitrile.
SILICONE	• Broad temperature range. • Good ozone resistance. • Resistance to compression set.	• Low resistance to hydrocarbon fluids like gasoline or paraffin fluids or steam above to 50 psi. • Cost is higher than Polyacrylate.
FLUOROELASTMER	• Good temperature resistance. • Compatible with wide range of fluids. • Commonly chosen as high temperature replacement for Nitrile or Polyacrylate.	• Fair resistance to water, dry running. • Low temperature resistance is fair. • Cost is high.

*Maximum temperature limits dependent on other operating conditions.
1. ❄ Very good.
❑ Good for most applications.
▲ Fair, can be used if no other materials available but otherwise not recommended.
X Not recommended.
2. Phosphate Ester and Water Glycol hydraulic fluids are not included in the Table.
3. Water resistance includes steam.
No material is ideally compatible as lubricity of water is very poor.
4. PTFE, Ethylene Acrylate, and other elastomers are available.

TABLE VII. FLUID COMPATIBILTY

TYPE OF FLUID TO BE SEALED		LIP MATERIAL			FLUOROELASTOMER
		NITRILE	POLYACRYLATE	SILICONE	
Engine Oil	SAE 30 Wt.	❄	❄	❄	❄
	SAE 10 Wt,	❄	❄	❑	❄
Gear Oil	Super Gear	❄	❄	▲	❄
	Hypoid Gear	❑	❑	X	❄
Turbine Oil No. 2		❑	❑	❑	❄
Machine Oil No. 2		❑	❑	▲	❄
Automatic Transmission Fluid		❄	❄	▲	❄
Petroleum Base Lubricating Oil		❄	❄	▲	❄
Gasoline		▲*	X	X	❄
Light Oil/Kerosene		▲	X	X	❑
Cutting Oil		❄	❑	▲	❄
Grease		❄	❄	❄	❄
E.P.Lubricants		❑	❄	X	❄
Water-Glucol		❄	X	❑	❑
Alcohol		❄	X	❑	▲
20% Hydrochloric Acis Solution		▲	▲	▲	❄
30% Sulfuric Acid Solution		▲	▲	X	❄

***Special Compound Available**

❄ Very Good

❑ Good for most applications.

▲ Fair, can be used if no other materials available but otherwise not recommended.

X Not recommended.

Standard Oil Seal Range

Size		
0.75x	1.25x	0.25 TC
1.00x	1.75x	0.25 TC
1.00x	1.75x	0.37 TC
1.00x	2.00x	0.37 TC
1.25x	2.00	0.37 TC
1.56x	2.68x	0.37 TC
1.62x	2.62x	0.37 TC
1.75x	2.50x	0.37 TC
2.00x	2.75x	0.37 TC
2.00x	3.00x	0.50 TC
2.25x	3.00x	0.37 TC
2.25x	3.37x	0.50
2.37x	3.37x	0.50 TC
3.00x	4.00x	0.50
3.00	4.00	0.50 TC
4.00x	5.00x	0.50 TC
12.00x	22.00x	7.00 TC
15.00x	32.00x	7.00 TC
15.00x	35.00x	7.00 TC
16.00x	30.00x	7.00 TC
17.00x	28.00x	7.00 TC
17.00x	40.00x	7.00 TC
18.00x	30.00x	7.00 TC
20.00x	30.00x	7.00 TC
20.00x	32.00x	7.00 TC
20.00x	35.00x	7.00 TC
20.00x	40.00x	7.00 TC
20.00x	47.00x	7.00 TC
22.00x	32.00x	7.00 TC
22.00x	35.00x	7.00 TC
22.00x	40.00x	7.00 TC
22.00x	47.00x	7.00 TC
24.00x	40.00x	7.00
25.00x	35.00x	7.00 TC
25.00x	42.00x	7.00 TC
25.00x	47.00x	7.00 TC
25.00x	52.00x	7.00 TC
25.00x	52.00x	10.00 TC
27.00x	43.00x	9.00 TC
28.00x	40.00x	8.00 TC
28.00x	47.00x	7.00 TC
30.00x	40.00x	7.00 TC
30.00x	42.00x	7.00 TC
30.00x	45.00x	7.00 TC

Size		
30.00x	47.00x	7.00 TC
30.00x	47.00x	10.00 TC
30.00x	50.00x	7.00 TC
30.00x	52.00x	7.00 TC
30.00x	52.00x	10.00 TC
30.00x	55.00x	7.00 TC
30.00x	62.00x	7.00 TC
32.00x	45.00x	7.00 TC
32.00x	47.00x	7.00 TC
32.00x	52.00x	7.00 TC
32.00x	52.00x	10.00 TC
35.00x	45.00x	7.00 TC
35.00x	47.00x	7.00 TC
35.00x	50.00x	7.00 TC
35.00x	50.00x	10.00 TC
35.00x	52.00x	7.00 TC
35.00x	52.00x	10.00 TC
35.00x	55.00x	10.00 TC
35.00x	62.00x	7.00 TC
35.00x	62.00x	10.00 TC
35.00x	72.00x	10.00 TC
38.00x	58.00x	11.00 TC
40.00x	52.00x	7.00 TC
40.00x	52.00x	8.00 TC
40.00x	54.00x	7.00 TC
40.00x	55.00x	7.00 TC
40.00x	56.00x	8.00 TC
40.00x	60.00x	10.00 TC
40.00x	62.00x	7.00 TC
40.00x	62.00x	10.00 TC
40.00x	65.00x	10.00 TC
40.00x	80.00x	10.00 TC
42.00x	55.00x	7.00 TC
42.00x	60.00x	7.00 TC
42.00x	62.00x	7.00 TC
42.00x	62.00x	10.00 TC
42.00x	72.00x	10.00 TC
45.00x	60.00x	7.00 TC
45.00x	62.00x	10.00 TC
45.00x	65.00x	8.00 TC
45.00x	65.00x	10.00 TC
45.00x	72.00x	10.00 TC
45.00x	75.00x	10.00 TC
45.00x	80.00x	10.00 TC

Size		
48.00x	65.00x	10.00 TC
48.00x	70.00x	9.00 TC
50.00x	70.00x	10.00 TC
50.00x	80.00x	10.00 TC
50.00x	90.00x	10.00 TC
55.00x	70.00x	8.00 TC
55.00x	70.00x	10.00
55.00x	75.00	10.00 TC
55.00x	80.00x	8.00 TC
55.00x	80.00x	10.00 TC
55.00x	85.00x	10.00 TC
55.00x	90.00x	10.00 TC
60.00x	75.00x	8.00 TC
60.00x	80.00x	8.00 TC
60.00x	80.00x	10.00 TC
60.00x	85.00x	8.00 TC
65.00x	90.00x	10.00 TC
68.00x	90.00x	10.00 TC
70.00x	85.00x	8.00 TC
70.00x	90.00x	10.00 TC
70.00x	100.00x	10.00 TC
75.00x	95.00x	10.00 TC
75.00x	100.00x	10.00 TC
80.00x	100.00x	10.00 TC
80.00x	105.00x	12.00 TC
85.00x	105.00x	10.00 TC
85.00x	110.00x	10.00 TC
85.00x	110.00x	12.00 TC
85.00x	120.00x	12.00 TC
90.00x	110.00x	12.00 TC
95.00x	120.00x	12.00 TC
100.00x	120.00x	12.00 TC
100.00x	125.00x	12.00 TC
100.00x	130.00x	12.00 TC
110.00x	130.00x	12.00 TC
110.00x	140.00x	13.00 TC
115.00x	140.00x	12.00 TC
120.00x	150.00x	12.00 TC
130.00x	160.00x	12.00 TC
150.00x	180.00x	15.00 TC
200.00x	240.00x	20.00
340.00x	380.00x	20.00

CODE SELECTOR

BEARINGS	300g	400g	4kg	4.5kg	5kg	18kg	50kg	170kg	185kg		
SAPPHIRE* LO-TEMP 2		12741		12745		12744					
SAPPHIRE* PREMIER	12471		12475			12474		12479			
SAPPHIRE* ADVANCE 2	12441					12446					
SAPPHIRE* 2		12171			12176	12175	12178		12179		
SAPPHIRE* 1		12601				12614	12608		12609		
SAPPHIRE 000					12276	12284					
SAPPHIRE* AQUA 2	12751		12755			12754	12758				
SAPPHIRE* EXTREME		12211			12216	12214	12218				
SAPPHIRE* HI-LOAD 2		12761			12765	12764					
SAPPHIRE* HI-SPEED 2	12051			12056		12055					
SPECIALIST	**300ml**	**5L**	**85g**	**100g**	**400g**	**500g**	**700g**	**1kg**	**5kg**	**18kg**	**50g**
SAPPHIRE* ENDURE				12330			12331	12334	12336	12337	
SAPPHIRE* HI-PRESSURE					12011	12013			12016	12024	12018
BELT DRESSING SPRAY	34295										
SAPPHIRE* AQUA - SIL			12551			12253			12256		
SAPPHIRE* AQUA - SIL HI LOAD						12263			12266		
GENERAL LUBRICATION	**300ml**	**400ml**	**85g**	**100g**	**500g**	**750g**	**5kg**				
SAPPHIRE* PRECISION LUBE SPRAY		34341									
SAPPHIRE* SPRAY GREASE		34305									
WD SPRAY	34271										
PRESISION SILICONE SPRAY		34035									
DRY PTFE SPRAY		34235									
DRY MOLY PASTE				10040		10046					
DRY MOLY SPRAY		10025									
DRY MOLY FLUID		10205									
POWER TRANSMISSION	**400ml**	**5L**	**20L**	**200L**	**400g**	**4kg**	**5kg**	**18kg**			
SAPPHIRE* HI-POWER 32			52545	52549							
SAPPHIRE* HI-POWER 46			52555	52559							
SAPPHIRE* HI-POWER 68			52565	52569							
SAPPHIRE* HI-POWER 100			52575	52579							
TUFGEAR UNIVERSAL					18302		18305	18304			
TUFGEAR SPRAY	18105										
TUFLUBE ALL WEATHER					18271		18276	18244			
SAPPHIRE* HI-TORQUE 150			21055	21057							
SAPPHIRE* HI-TORQUE 220		21016	21015	21019							
SAPPHIRE* HI-TORQUE 320			21025	21029							
SAPPHIRE* HI-TORQUE 460			21035	21039							
WIRE ROPE DRESSING						20026		20024			
SAPPHIRE* HI-TORQUE 680			21045								

CORROSION	300ml	400ml	500ml	5L	20L	200L					
Z30 SPRAY	37020										
Z30 FLUID				37022	37028						
Z25 FLUID					37118	37019					
COLD GALVANISING SPRAY		69515									
GALVA BRIGHT			69523								
GALVA FLASH			69522								
CLEANERS	**300ml**	**400ml**	**5L**								
HEAVY DUTY CLEANER SPRAY	34011										
HEAVY DUTY CLEANER FLUID			34014								
FOAM CLEANER SPRAY		34141									
INDUSTRIAL CLEANER RAPID DRY SPRAY	34131										
ELECTRA CLEAN SPRAY	34066										
ANTI-SEIZE & ASSEMBLY	**300ml**	**400ml**	**5L**	**85g**	**100g**	**750g**	**500g**	**6kg**	**18kg**		
ANTI-SEIZE COMPOUND				14030			14033	14035	14038		
ANTI-SEIZE SPRAY		14015									
ANTI-SEIZE 797							16403				
ANTI-SEIZE STAINLESS							14143				
DRY MOLY PASTE					10040	10046					
DRY MOLY SPRAY		10025									
DRY MOLY FLUID			10205								
PENETRATING SPRAY	14021										
MTLM					10050	10056			10057		
OXYLUBE SPRAY		10125									
SHOCK RELEASE SPRAY		32040									
DRIVE & CONVEYOR CHAINS	**300ml**	**400ml**	**5L**	**20L**							
CHAIN & DRIVE FLUID			22306	22309							
CHAIN & DRIVE SPRAY	22001										
CHAIN GUARD HI-LOAD SPRAY	22141										
CHAIN GUARD 550			22076	22075							
CHAIN GUARD 280			22235	22236							
CHAIN GUARD 230			22255	22265							

TPM	NSF	GENERAL LUBRICATION	300ml	400ml	500ml	5L	20L	200L					
20	H1	FOODLUBE MULTI-LUBE			15120	15126							
31	H1	FOODLUBE SPRAYGREASE		15030									
12	H1	FOODLUBE SPRAY	15710										
32	H1	FOODLUBE WD SPRAY	15010										
1	H1	PRESISION SILICONE SPRAY		34035									
4	H1	DRY PTFESPRAY		34235									
29	H1	BELT DRESSING SPRAY	34295										
35	H1	VAC PUMP OIL				16806	16805						
21	H1	FOODLUBE® SUGAR DISSOLVING FLUID			15110	15116							
53	H1.3H	PUROL SPRAY GREASE		15631									
51	H1.3H	PUROL FLUID			15617	15618	15619						
58	H1	FOOFLUBE SEAMER FLUID 150						16029					
TPM	**NSF**	**BEARINGS**	**100g**	**370g**	**380g**	**380g (Lubeshuttle)**	**700g**	**125ml**	**1kg**	**4kg**	**5kg**	**18kg**	**160kg**
11	H1	FOODLUBE UNIVERSAL GREASE 000								15286		15284	
14	H1	FOODLUBE UNIVERSAL GREASE 0								15276		15274	
7	H1	FOODLUBE UNIVERSAL GREASE 2			15231					15236		15234	
60	H1	FOODLUBE AUTOLUBE COMPLETE*						15224					
60	H1	FOODLUBE AUTOLUBE REFILL*						15220					
42	H1	FOODLUBE PREMIER 1			15291	15281				15296		15294	
61	H1	FOODLUBE UNILUBE						13010					
59	H1	FOODLUBE AUTO SF								15912		15913	15914
37	H1	FOODLUBE ULTRA			15811							15814	
34	H1	FOODLUBE EXTREME			15241	15282				15246		15244	
15	H1	FOODLUBE HI-TEMP 2			15251					15256		15254	
56	H1	SAPPHIRE ENDURE	12330				12331		12334		12336	12337	
52	H1.3H	PUROL GREASE		15611						15616		15614	
TPM	**NSF**	**DRIVE & CONVEYOR CHAINS**	**525g**	**125ml**	**400ml**	**500ml**	**5L**	**20L**	**200L**				
20	H1	FOODLUBE MULTI-LUBE				15120	15126						
10	H1	FOODLUVE CHAIN FLUID					15506	15505					
62	H1	FOODLUVE CHAIN FLUID UNILUBE		13011									
16	H1	FOODLUBE CHAIN SPRAY			15610								
25	H1	FOODLUBE OVERHEAD CHAIN FLUID					15786	15785					
57	H1	FOODLUBE XT CHAIN FLUID						15800	15801				
24	H1	FOODLUBE ENDURE 00	15503										
44	H2	BAKERLUBE CL						15605					
45	H2	BAKERLUBE HT						15705					
		BAKERLUBE WG						15805					
TPM	**NSF**	**CORROSION PROTECTION**	**300ml**										
33	H1	FOODLUBE PROTECT SPRAY	15020										

TPM	NSF	COMPRESSOR & HYDRAULIC	5L	20L	200L				
5	H1	FOODLUBE HI-POWER 22	15796	15795	15799				
6	H1	FOODLUBE HI-POWER 32	15896	15895	15899				
18	H1	FOODLUBE HI-POWER 46	15996	15995	15999				
3	H1	FOODLUBE HI-POWER 68	16006	16005	16009				
17	H1	FOODLUBE HI-POWER 100	15946	15945	15949				
TPM	**NSF**	**GEARBOXES**	**5L**	**20L**	**200L**				
40	H1	RAPID DEMULSE 220		15965					
65	H2	REFRIGERATION COMPRESSOR OIL			31009				
28	H1	FOODLUBE HI-TORQUE 150	15426	15425	15429				
8	H1	FOODLUBE HI-TORQUE 220	15526	15525	15529				
13	H1	FOODLUBE HI-TORQUE 320	15766	15765	15769				
27	H1	FOODLUBE HI-TORQUE 460		15775	15779				
35	H1	VAC PUMP OIL	16806	16805					
TPM	**NSF**	**ANTI-SEIZE & ASSEMBLY**	**85g**	**400g**	**500g**	**5kg**	**300ml**	**400ml**	
64	H1	FOODLUBE ANTI-SEIZE			15743				
2	H1	FOODLUBE MULTIPASTE	15750	15851	15753	15756			
26	H1	FOODLUBE MULTIPASTE SPRAY					15751		
50	H1	SHOCK RELEASE SPRAY						32040	
23	H1	FOODLUBE DISMANTLING SPRAY				15720			
TPM	**NSF**	**CLEANERS**	**300ml**	**400ml**					
36	K2	ELECCTRA CLEAN SPRAY	34066						
49	C1	REMOVER & DEGREASER	34151						
46	K1	INDUSTRIAL CLEANER RAPID DRY SPRAY	34131						
22	A1	FOAM CLEANER SPRAY		34141					

BEARING PRODUCTS

COOPER Split Roller Bearings
FSQ Housings and Sleeves
FAG / INA Bearings
JIB Ball Bearing Units
LINK-BELT Bearings
TIMKEN Tapered Roller Bearings
KML Bearings
KOYO Bearings

TRANSMISSION PRODUCTS

Agricultural Chains & Spares
Transmission Chain
Conveyor Chain
Elevator Chain
Leaf Chain
Stacker Reclaimer Chain
Sprockets
Vee Belts, Pulleys & Taper Brushes
OPTI Vee & Wedge Belts
CONTITECH Vee & Wedge Belts
NORMEX Couplings
ORC Couplings
PINFLEX Couplings
MAYR Clutches
BAUER Gearboxes & Electric Motors
Invertors
Chain Tensioners

OTHER PRODUCTS

Rotary Shaft Seals
FREUDENBURG Rotary Shaft Seals
GARLOCK Seals
LOCTITE Adhesives & Sealants
CITRONOL Hand Cleaner
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