TRANSDRIVE®

DRIVE PERFORMANCE

Couplings

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TRANSDRIVE®

DRIVE PERFORMANCE

TransDrive was established to bring together our passion and experience in power transmission by being able to offer affordable, high-quality products to the power transmission and bearing market. Built on the philosophy of improving performance and quality of all of our TransDrive products.

Transdrive products have been manufactured and tested to meet ISO standards and the tough, working conditions of heavy industries.

Our team have experience in power transmission and bearings. Every product we design and manufacture is backed by years of industry knowledge and an understanding of what our customers and the market need.

At TransDrive, our goal is simple: to provide accessible, high-quality products at affordable pricing. With an unwavering commitment to excellence, TransDrive operates with a focus on providing innovative industry solutions.

Whether it is through our custom products, the standard range of pulleys, slew drives, chains and sprockets, TransDrive is dedicated to delivering effective solutions for the trades that offer increased productivity and reliability.

Contents

Couplings are to be used to mechanically connect two shafts to transmit power from one shaft to another. They are also able to compensate for shaft misalignment in a torsionally rigid way.

Misalignment can be angular, parallel or skew. This is particularly important for applications where misalignment could affect the speed and acceleration of the driven shaft. The performance of the coupling depends on how it is installed and maintained.

There is a variation of couplings on the market today. Selecting the correct coupling for a particular application can be a complicated matter.

A coupling can be simply defined as “a device that transmits power (torque) from one shaft to another, while allowing some degree of misalignment (angular, parallel or combined) between the two rotating shafts”.

In addition to the above definition, some couplings allow for axial (end-float) movement. Also, couplings may be classified as flexible or rigid.

Depending on the type of the coupling may be required to tolerate a variety of conditions during its service life.

Some of these functions could be to:

- Transmit power (torque).
- Permit and accommodate limited amounts of misalignment (angular and/or parallel).
- Allow for ease of assembly, maintenance and dis-assembly.
- Allow for some amount of dampening (if required).
- Allow or compensate for end-float/axial movement/thermal expansion.
- Retain rigidity between the connecting hubs and the shafts.
- Withstand/compensate for temperature fluctuations/thermal growth.
- Provide protection against overload of the driven machine.

Flexible & Elastometric Couplings

Cone Ring Couplings

Jaw Couplings

Curved Jaw Couplings

Tyre Couplings

Mechanical Flexible Couplings

Chain couplings

Gear Couplings

Rigid Couplings

Grid Couplings

RM Rigid Couplings

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Flexible & Elastometric Couplings

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Selection

TransDrive Cone Ring Couplings transmit the load from one member to the other by means of a number of steel pins fitted with multiple, conical section Flexirings.

- Simple uncomplicated construction
- Requires no lubrication or maintenance
- Reduce starting shock
- Help absorb vibration and provide torsional flexibility
- Operate in either direction
- Coupling halves manufactured from high-grade cast-iron. They can be supplied in cast-steel on application
- Each flexiring and pin assembly can be removed by withdrawing them through the bush half of the coupling for ease of replacement of the flexirings after long service
- Available in standard, Taperbush, and Rigid coupling models.

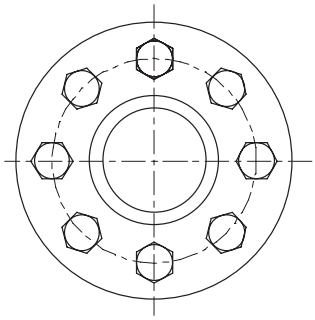
Selection Prodecure

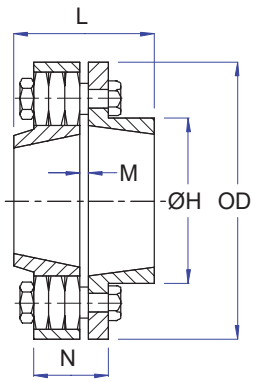
- From the table below determine the Service Factor
- Calculate the Design Power by multiplying the Absorbed Power of the driven machine by the Service Factor
- Determine the size of coupling required by matching the design power to a power ratingthat matches or exceeds the Design Power.

The Pin Half is normally mounted on the drive shaft.

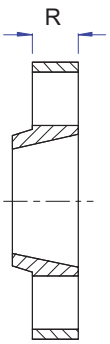
Duty	Electric Motor
Uniform	1.0
Light	1.5
Moderate	2.0
Heavy	2.5
Severe	3.0

Dimensions

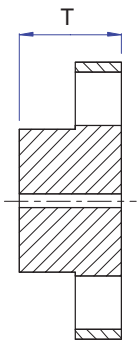




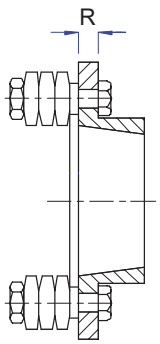
Typical Assembly



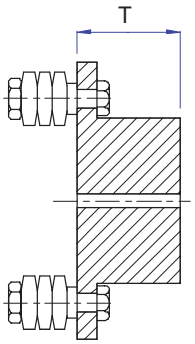
TaperFit MCT Bush Half



Pilot Bore MC Bush Half



TaperFit MCT Pin Half



Pilot Bore MCV Pin Half

Bore	MC030	MC038	MC042	MC048	MC058	MC070	MC075	MC085	MC105	MC120	MC135	MC150
Taperfit Bush Size: Bush Half MCT	-	-	1610	2012	2517	3020	-	3535	4040	4040	4545	5050
Taperfit Bush Size: Pin Half MCT	-	-	1210	1610	2012	2517	-	3030	3535	4040	4545	5050
Maximum Bore: TF Pin Half MCT	-	-	42	50	65	75	-	90	100	100	110	125
Maximum Bore: TF Bush Half MCT	-	-	32	42	50	65	-	75	90	100	110	125
Maximum Bore: Pilot Bore Pin Half MC	38	42	48	55	65	80	85	90	115	120	135	150
Max. Bore: Pilot Bore Bush Half MC	30	38	42	48	58	70	75	85	105	110	125	135
Dimensions	**MC030**	**MC38**	**MC042**	**MC048**	**MC058**	**MC070**	**MC075**	**MC085**	**MC105**	**MC120**	**MC135**	**MC150**
0D - Outside Diameter	127	132	146	171	193	216	254	279	330	370	419	457
0H - Hub Diameter: Pin Halves	64	70	82	94	110	132	142	162	200	206	230	256
0H - Hub Diameter: Bush Halves	51	64	70	82	97	117	127	147	180	206	230	256
L - Length: MC	88	102	118	128	142	159	183	207	241	270	300	336
L - Length: MCT	-	-	56	63	82	102	-	172	198	209	235	260
M-Gap	6	6	6	6	6	7	7	7	7	7	7	7
T-Flange Length: Pin Halves	12	12	12	17	17	17	30	30	30	46	46	46
T-Flange Length: Bush Halves	26	26	26	33	33	33	56	56	56	76	76	76
T-LTB: MC Pin & Bush Halves	41	48	56	61	68	76	88	100	117	132	147	117
T-LTB: MCT Pin Halves	-	-	25	32	44	51	-	89	102	102	115	102
T-LTB: MCT Bush Halves	-	-	25	25	32	44	-	76	89	102	115	89
Spares	**MC030**	**MC038**	**MC042**	**MC048**	**MC058**	**MC070**	**MC075**	**MC085**	**MC105**	**MC120**	**MC135**	**MC150**
No. of Pins per coupling	4	6	8	6	8	10	8	10	12	10	12	14
No. of Rubbers per coupling	12	18	24	18	24	30	32	40	48	40	48	56
Pin Size	GC1-3	GC1-3	GC1-3	GC1.3/4-3	GC1.3/4-3	GC1.3/4-3	GC2.3/4-3	GC2.3/4-3	GC2.3/4-3	GC4.1/4-3	GC4.1/4-3	GC4.1/4-3
Ring Size: Rubber	GC1-4	GC1-4	GC1-4	GC1.3/4-4	GC1.3/4-4	GC1.3/4-4	GC2.3/4-4	GC2.3/4-4	GC2.3/4-4	GC4.1/4-4	GC4.1/4-4	GC4.1/4-4
Mass	**MC030**	**MC038**	**MC042**	**MC048**	**MC058**	**MC070**	**MC075**	**MC085**	**MC105**	**MC120**	**MC135**	**MC150**
MC Coupling (kg)	3.5	5.0	6.3	4.0	14	20	37	49	77	120	163	210
MCT Coupling (kg)	-	-	5.5	9.0	11	-	44	14.2	72	108	144	181

All measurements are in mm

LTB is Length Through Bore

TF is Taper Fit Bush to suit MCT Coupling.

Selection

TransDrive SM series Spacers combined with either TransDrive Cone Ring Couplings or TransDrive Tyre Couplings provide a Spacer design where maintenance is more efficient by being able to move the driving or driven shafts without disturbing the mounting of the driving or driven machine.

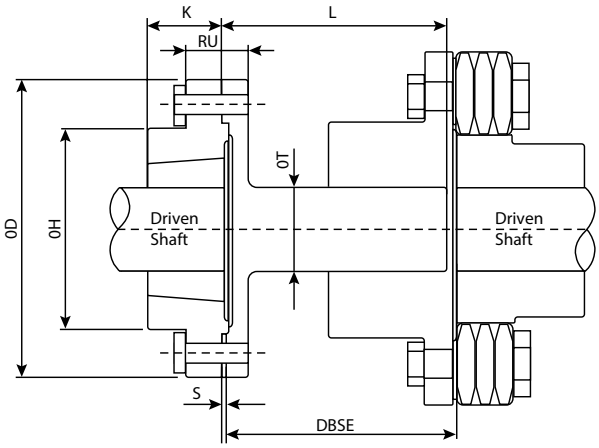
Standard Distance Between Shaft Ends (DBSE) lengths of 100, 140 and 180mm are available.

Selection Procedure

- 1. Select a suitable size of MC coupling using the selection procedure found on pages 22 -23.
- 2. Select a suitable size SM Spacer taking into consideration the required shaft spacing.

Dimensions

SM Spacer Assembly (attached to Cone Ring Coupling)



Dimensions	SM16	SM25	SM30	SM35
Use with Tyre Coupling	MC038	MC042 MC048	MC058	MC070 MC075
TF Bush Size (Spacer Flange)	1615	2517	3030	3535
TF Bush Maximum Bore	42	65	75	90
0D - Outside Diameter	127	178	216	248
0H - Hub Diameter	80	123	146	178
K*	38	46	76	89
L -Length: 100mm DBSE*	94	94	-	-
L -Length: 140mm DBSE*	134	134	134	134
L -Length: 180mm DBSE*	-	174	174	174
R	18	22	51	63
S	6	6	6	6
0T	32	48	60	80
U	15	16	20	20
Mass	**SM16**	**SM25**	**SM30**	**SM35**
100mm DBSE (kg)	3.55	8.05	-	-
140mm DBSE (kg)	3.8	8.65	16.4	25.4
180mm DBSE (kg)	-	9.25	17.3	26.9

TF is Taper Fit Bushing. All values are in mm unless otherwise stated.

Ordering Instructions

- SM Spacers ere specified by the size end DBSE (eg. A SM35 spacer with a 140mm DBSE length is specified as a SM35-140)
- SM Spacers require a Taper Fit bush which must be ordered as a separate item (specifying bush size end the required bore).
- To order a complete Spacer coupling list the individual components of the coupling and spacer including required Taper Fit bushes.

Selection

The TransDrive Jaw Coupling is recognised across a large range of industries. The Jaw Coupling is highly resilient, it does not require any lubrication and can work in environments contaminated with oil, dirt, sand, moisture and grease.

The rubber insert is designed to absorb shock loading and does not allow for any metal contact. TransDrive stocks both the Spider Elements (rubber and polyurethane) as well as the Wrap Element Kits.

TransDrive stocks a range of Jaw Couplings in a variety of pre-bored and keyed sizes.

Wrap Element Kit Features

- The Wrap Element Kit allows inspection and replacement within minutes.
- Modular hub design allow the same hubs to be used for different models.
- Hubs are fully machined which guarantees a smooth contact surface, ease of alignment and excellent balance.
- Hubs come pre-bored and keyed to standard IEC motor shaft sizes.
- Taper Fit hubs are also available to accommodate to non-standard shaft sizes.
- Spacer couplings are available for pump applications.
- Water, dust, oil and greases do not affect performance.

Service Factor	Determine appropriate service factor from the Table below
Design Power	Multiply running power of driven machinery by the Service Factor. This gives Design Power which is used as a basis for coupling selection
Coupling Size	Refer to respective table for your required coupling type and read from the appropriate speed column until a power equal to or greater than the design power is found, page 11
Bore Size	Refer respective coupling dimensional table to check that the required bores can be accommodated, page 11 & 12.

Service Factors

Special Class$_1$	Type of Driving Unit					
	Electric Motors / Steam Turbines			Internal Combustion Engines / Steam Engines / Water Turbines		
	Hours Per Day Duty			Hours Per Day Duty		
Driven Machine Class$_2$	8 and under	Over 8 to 16 inclusive	Over 16	8 and under	Over 8 to 16 inclusive	Over 16
Uniform	1.00	1.12	1.25	1.25	1.40	1.60
Moderate Shock$_3$ *	1.60	1.80	2.00	2.00	2.24	2.50
Heavy Shock$_4$ **	2.50	2.80	3.12	3.12	3.55	4.00

* It is recommended that top clearance keys are fitted for applications where load fluctuation is expected.

** For Centrifugal Compressor multiply Service Factor by an additional 1.15.

1 For applications where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines, e.g. internal combustion engines, piston type pumps and compressors, refer to Power Transmission with full machine details for torsional analysis.

2 Agitators, Brewing Machinery, Centrifugal Compressors**, Conveyors, Centrifugal Fans and pumps, Generators, Sewage Disposal Equipment.

3 Clay working machinery, Crane Hoists, Laundry machinery, Wood working machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Textile machinery.

4 Reciprocating conveyors, Crushers, Shakers, Metal Mills, Rubber machinery. (Banbury Mixers and Mills, Reciprocating Compressors.)

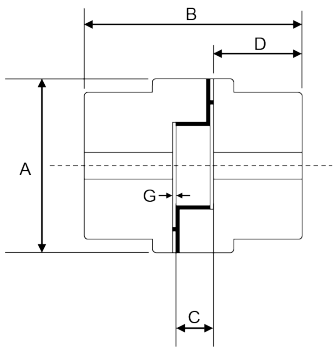
Jaw Couplings

TRANSDRIVE® DRIVE PERFORMANCE

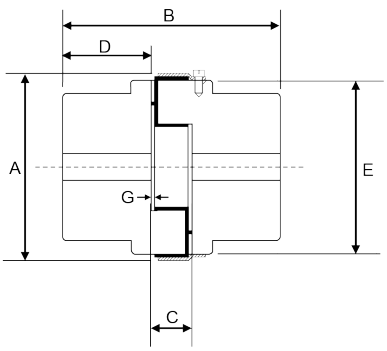
	L050	L070	L075	L095	L100	L110	L150	L190	L225
Spider	•	•	•	•	•	•	•	•	•
Wrap				•	•	•	•	•	•
Kit				•	•	•	•	•	•
Pilot Bore Hub	•	•	•	•	•	•	•	•	•
Hytrel Spider	•	•	•	•	•	•	•	•	
PU Spider	•	•	•	•	•	•	•	•	
Imperial (Inch)									
3/8	•	•							
7/16				•					
1/2	•	•	•	•	•				
9/16				•					
5/8	•	•	•	•	•				
3/4		•	•	•	•	•			
7/8			•	•	•	•			
1			•	•	•	•	•		
1-1/8				•	•	•	•		
1-1/4					•	•	•	•	
1-3/8						•	•	•	
1-1/2						•	•	•	
1-5/8								•	
2								•	
Metric (mm)									
10	•	•							
12	•	•	•						
14	•	•	•	•					
16		•	•	•					
18		•	•	•	•				
19		•	•	•	•				
20			•	•	•	•			
22			•	•	•	•			
24				•	•	•	•		
25				•	•	•	•	•	
28				•	•	•	•	•	
30					•	•	•	•	
32					•	•	•	•	
35					•	•	•	•	
38					•	•	•	•	
40						•	•	•	
45							•	•	
48							•	•	
55								•	•
60								•	•

Dimensions

TYPE 1



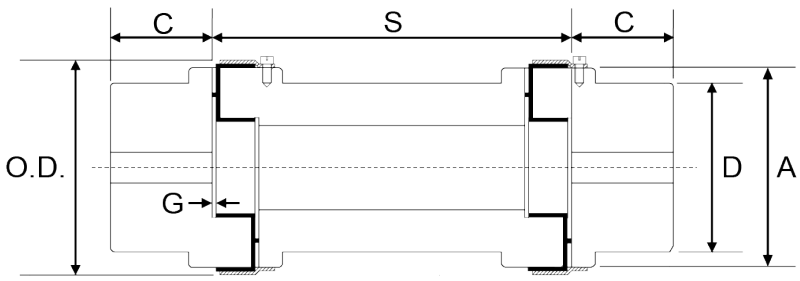
TYPE 2



Coupling	Type	A	B	C	D	E	G	Stock Bore	Weight (kg)		Max Bore (mm)
									Stock Bore	Max Bore	
L050PB	1	27.4	43.4	12.2	15.7	-	1	6	-	-	15
L070PB	1	35	53	13	19	-	2	6	0.26	0.24	19
L075PB	1	44.5	53	13	19	-	2	6	0.45	0.39	22
L095PB	1 & 2	54	65	13	25	54	2	11	0.79	0.69	29
L100PB	1 & 2	65	86	19	35	65	2	11	1.55	1.32	35
L110PB	1 & 2	84	110	24	43	84	3	16	2.93	2.55	42
L150PB	1 & 2	96	113	25	45	96	3	16	4.06	3.51	48
L190PB	1 & 2	115	133	25	50	102	3	18	-	-	55
L225PB	1 & 2	127	155	25	55	108	3	18	-	-	65

All dimensions are in mm.

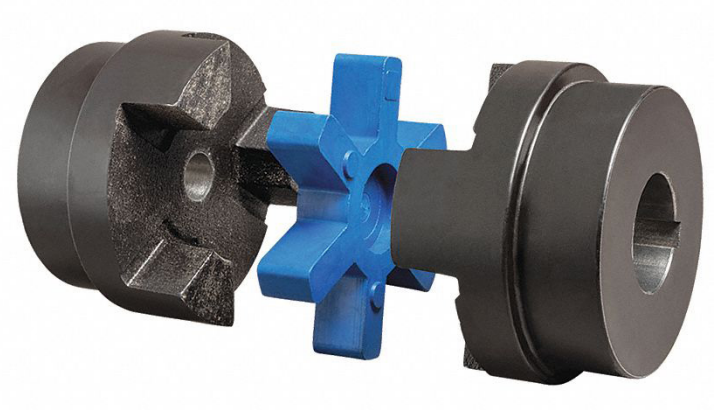
SPACER

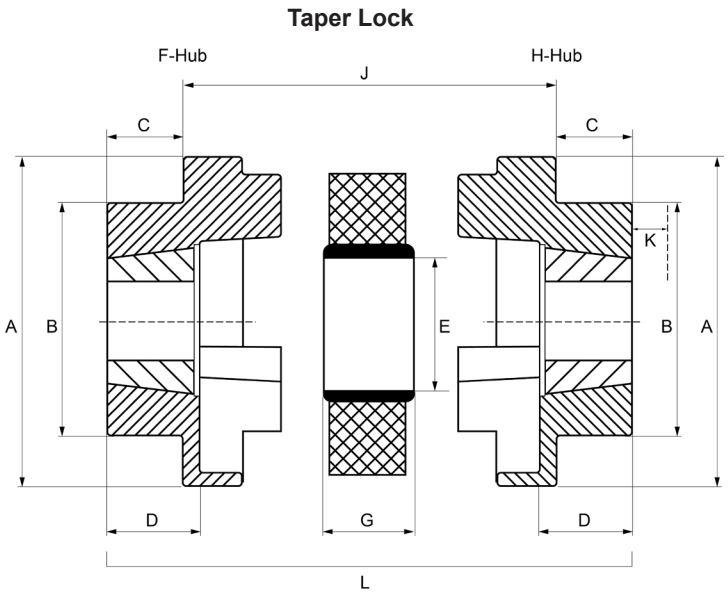


Part No.	Bore (mm)		A	C	D	O.D.	G	Spacer Length (mm)
	Min.	Max.						
L100	10	35	65	35	57	78	2	100/140
L110	15	42	85	43	76	96	3	100/140
L150	15	48	96	45	80	111	3	100/140/180
L190	20	60	115	54	102	130	3	100/140/180
	20	65	127	64	111	142	3	100/140/180

All dimensions are in mm.

Dimensions





Size TF/TWNS	Bush			A		B	E	J	G	C	D	K	T
	Size	Max. Bore											
		mm	Inch	Taper Lock	T - Type 1								
L100	1108	28	1 1/8	65	78	65	27	44	18	10.5	23.5	29	65
L110	1210	32	1 1/4	84	96	84	35	48	22	13.5	26.5	38	75
L150	1210	32	1 1/4	96	111	96	35	55	25	11.5	26.5	38	78
L190	1610	42	1 5/8	115	129	102	45	63	25	7.5	26.5	38	78
L225	2012	50	2	127	142	108	45	63	25	14.5	33.5	42	92

All measurements are in mm unless otherwise stated.

K is the wrench clearance required for tightening and loosening the bush on the shaft. The use of shortened key will allow this dimension to be reduced. Couplings can be supplied with F/F or H/H or F/H flange as required.

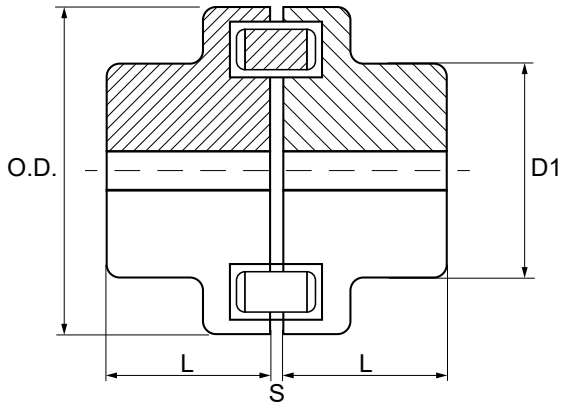
Weight is for flange without Bore.

Power Ratings (kW)

Coupling	Max. RPM	Torque (Nm)	Speed RPM					
			100	720	960	1440	2880	3600
L050PB	18000	3.51	0.037	0.26	0.35	0.53	1.73	2.17
L070PB	14000	5.77	0.06	0.43	0.58	0.87	3.61	4.51
L075PB	11000	11.9	0.12	0.9	1.2	1.8	5.78	7.22
L095PB	9000	25.8	0.27	1.95	2.59	3.89	16.73	20.91
L100PB	7000	55.4	0.58	4.18	5.58	8.36	31.77	39.71
L1100PB	5000	105	1.10	7.95	10.59	15.88	44.93	56.16
L150PB	4000	150	1.56	11.23	14.98	22.46	60.28	75.35
L190PB	3600	200	2.09	15.07	20.09	30.14	84.4	105.5
L225PB	3600	280	2.93	21.09	28.13	42.2	84.4	105.5

Flexible NM Series Jaw Couplings

Dimensions



Size	Bore (mm)		OD	D1	L	S	Max. Speed (rpm)	Torque (Nm)		Power Rating kW / rpm	Weight (kg) / set
	Min	Max						Nominal	Max.		
NM-30	7	19	50	33	25	2.0±0.5	13500	12.74	22.54	1.33	0.52
NM-67	9	28	67	46	30	2.5±0.5	10000	21.56	39.2	2.26	0.93
NM-82	10	32	82	53	40	3.0±0.5	8000	49	88.2	5.13	1.78
NM-97	12	42	97	69	50	3.0±0.5	7000	102.9	186.2	10.78	3.46
NM-112	14	48	112	79	60	3.5±0.5	6000	163.66	294	17.14	5
NM-128	18	55	128	90	70	3.5±0.5	5000	261.66	470	27.40	7.9

All dimensions are in mm.

Selection

- GE Coupling Model Selection — Refer to the Power Rating tables as shown on pages 16 and 17. Select the "Yellow 92 Shore", "Red 98 Shore", or heavy-duty "Green 64 Shore". Read down the left column to the required speed then read across horizontally until the design power is exceeded to select the coupling model. If the exact speed is not shown calculate based on power rating per/100 RPM shown in the first column.
- Bore Dimensions — Check maximum bore dimensions and select from Pilot Bore model to be machined to required bore and key or Taper Bore option in available metric and imperial bore sizes.

Selection via Tore Calculation Method

- **Torque** — Calculate tore applied to the coupling by using the formula below

$$\text{Torque (Nm)} = \frac{9550 \times \text{Power kW}}{\text{Speed (RPM)}}$$

- **Service Factor** — Apply the service factor to the torque figure in Nm, this is the deign torque rating
- **Coupling Torque Ratings** — Check the torque ratings for the Yellow 92 Shore, Red 98 shore or heavy duty Green 64 Shore as shown in the dimensions tables on the previous pages. Select a suitable coupling that exceeds the design torque rating.
- **Bore Dimensions** — Check maximum bore dimensions and select from pilot bore model to be machined to required bore and key or taper fit option in available metric and imperial bore sizes.

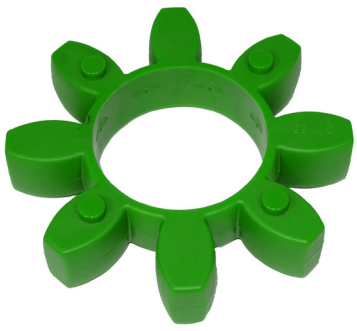
Features & Benefits

- High Torque capacity for size
- Compact design
- Low weight for reduced intertia
- Machined surfaces for extended life
- Absorbs shock loads
- Vibration dampening

Elements

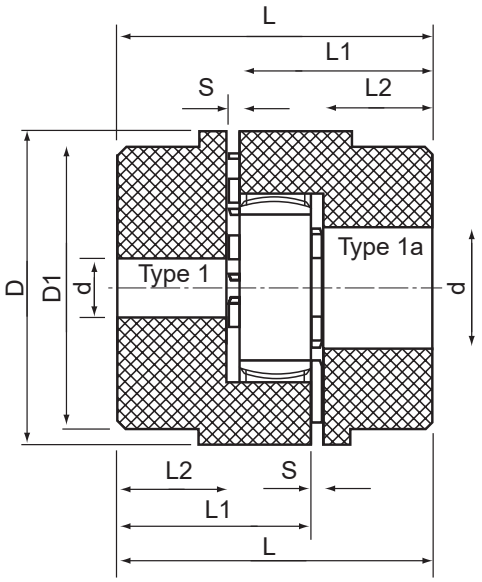
Curved Jaw (Rotex) Element - Polyurethane Red 98

Curved Jaw (Rotex) Element - Yellow 92 Shore Hardness



Curved Jaw (Rotex) Element - High Torque Green 64

Dimensions

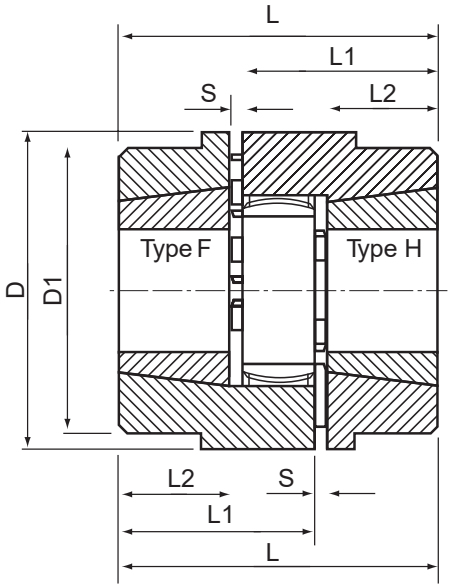


Pilot Bored														
TYPE	Hub Type	Max Speed RPM	Rated Torque (Nm)			D	D1	d-min	d-max	S	L1	L2	L	Mass kg/ hub
			92 Sh A YELLOW	98 Sh A RED	64 Sh D GREEN									
GE14	1	17000	7.5	12.5	16	30	22	6	16	1	32	20	51	0.12
	1a							19	24					
GE19	1	19000	10	17	21	40	32	6	19	1	39	25	65	0.19
	1a							19	24					
GE24	1	14000	35	60	75	56	40	9	24	1	46	30	77	0.38
	1a							22	28					
GE28	1	11800	95	160	200	65	48	10	28	1.5	52.5	35	89	0.62
	1a							28	38					
GE38	1	9500	190	325	405	80	66	12	38	1	66	45	112	1.36
	1a							38	45					
GE42	1	8000	265	450	560	95	75	14	42	1	73	50	124	2.03
	1a							42	55					
GE48	1	7100	310	525	655	105	85	15	48	1.5	80.5	56	138	2.85
	1a							48	60					
GE55	1	6300	410	685	825	120	98	20	55	2	91	65	158	4.32
	1a							55	70					
GE65	1	5600	625	940	1175	135	115	22	65	1.5	105.5	75	182	6.66
	1a							22	65					
GE75	1	4750	1280	1920	2400	160	135	30	75	1	120	85	206	10.48
	1a							30	75					
GE90	1	3750	2400	3600	4500	200	160	40	90	1.5	139.5	100	241	17.89
	1a						180	40	90					

Measurements are in mm

Hub Types: 1 = Stepped Hub 1a = Full Hub

Dimensions



Taper Bored													
TYPE	Hub Type	Rated Torque (Nm)			Brush Size	Max Bore	D	D1	S	L1	L2	L	Mass kg/hub
		92 Sh A YELLOW	98 Sh A RED	64 Sh D GREEN									
24 F	14000	35	60	75	1008	25	56	-	1.0	39.0	23.0	63.0	0.31
24 H					1008	25	56	-	1.0	39.0	23.0	63.0	0.31
28 F	11800	95	160	200	1108	28	65	-	1.5	40.5	23.0	65.0	0.46
28 H					1108	28	65	-	1.5	40.5	23.0	65.0	0.46
38 F	9500	190	325	405	1108	28	80	78	1.0	44.0	23.0	68.0	0.79
38 H					1108	28	80	78	1.0	44.0	23.0	68.0	0.79
42 F	8000	256	450	560	1610	42	95	94	1.0	49.0	26.0	76.0	1.10
42 H					1610	42	95	94	1.0	49.0	26.0	76.0	1.10
48 F	7100	310	525	655	1615	42	105	104	1.5	63.5	39.0	104.0	2.07
48 H					1615	42	105	104	1.5	63.5	39.0	104.0	2.07
55 F	6300	410	685	825	2012	50	120	118	2.0	59.0	33.0	94.0	2.22
55 H					2012	50	120	118	2.0	59.0	33.0	94.0	2.22
65 F	5600	625	940	1175	2012	50	135	133	1.5	63.5	33.0	98.0	3.14
65 H					2517	65	135	133	1.5	75.5	45.0	122.0	4.03
75 F	4750	1280	1920	2400	2517	65	160	135	1.0	81.0	46.0	128.0	4.69
75 H					3020	75	160	135	1.0	87.0	52.0	140.0	4.99
90 F	3750	2400	3600	4500	3020	75	200	160	1.5	91.5	52.0	145.0	7.74
90 H					3525	100	200	160	1.5	103.5	64.0	169.0	8.74

All dimensions are in mm.

Power Ratings (kW)

	RPM	GE14	GE19	GE24	GE28	GE38	GE42	GE48	GE55	GE65	GE75	GE90
Power Ratings (kw) for 92 shore elements (YELLOW)	100	0.07	0.1	0.37	1	1.99	2.78	3.25	42.9	6.55	13.4	25.1
	500	0.38	0.52	1.83	4.98	9.95	13.9	16.2	21.5	35.7	67	126
	700	0.54	0.73	2.56	6.97	13.9	19.4	22.7	30.1	45.8	93.8	176
	720	0.56	0.75	2.64	7.16	14.3	20	23.4	30.9	47.1	96.5	181
	800	0.62	0.84	2.93	7.96	15.9	22.2	26	34.3	52.4	107	201
	900	0.7	0.94	3.29	8.96	17.9	25	29.2	38.6	58.9	121	226
	960	0.75	1.01	3.51	9.55	19.1	26.6	31.2	41.2	62.8	129	241
	1000	0.78	1.05	3.66	9.95	19.9	27.8	32.5	42.9	65.5	134	251
	1200	0.93	1.26	4.39	11.9	23.9	33.3	39	51.5	78.5	161	302
	1400	1.09	1.47	5.12	13.9	27.9	38.9	45.4	60.1	91.6	188	352
	1440	1.12	1.51	5.27	14.3	28.7	40	46.7	61.8	94.2	193	362
	1500	1.16	1.57	5.49	14.9	29.9	41.6	48.7	64.4	98.2	201	377
	1800	1.39	1.88	6.59	17.9	35.8	50	58.4	77.3	118	241	452
	2000	1.55	2.09	7.32	19.9	39.8	55.5	64.9	85.9	131	268	503
	2880	2.23	3.02	10.5	28.7	57.3	79.9	93.5	124	188	386	724
	3000	2.32	3.14	11	29.9	59.7	83.3	97.4	129	196	402	754
	4000	3.1	4.19	14.6	39.8	79.6	111	130	172	262	536	—
Power Ratings (kw) for 98 shore elements (RED)	100	0.13	0.18	0.63	1.68	3.4	4.71	5.5	7.17	9.84	20.1	97.7
	500	0.66	0.89	3.14	8.38	17	23.6	27.5	35.9	49.2	101	189
	700	0.93	1.25	4.4	11.7	23.8	33	38.5	50.2	68.9	141	264
	720	0.95	1.28	4.52	12.1	24.5	33.9	39.5	51.6	70.9	145	271
	800	1.05	1.42	5.02	13.4	27.2	37.7	44	57.4	78.7	161	302
	900	1.18	1.6	5.65	15.1	30.6	42.4	49.5	64.6	88.6	181	339
	960	1.27	1.71	3.51	16.1	32.7	45.2	52.8	68.9	94.5	193	362
	1000	1.32	1.78	3.66	16.8	34	47.1	55	71.7	98.4	201	377
	1200	1.58	2.14	4.39	20.1	40.8	56.5	66	86.1	118	241	452
	1400	1.84	2.49	5.12	23.5	47.6	66	77	100	138	281	528
	1440	1.89	2.56	5.27	24.1	49	67.9	79.2	103	142	290	543
	2880	3.83	5.2	18.1	48.4	97.9	135.7	158.4	206.5	283.4	578.9	1085.8
Power Ratings (kw) for 64 shore elements (WHITE)	100	0.16	0.2	0.8	2.1	4.2	5.8	6.8	8.8	12.1	24.7	46.4
	500	0.81	1.1	3.9	10.3	20.9	29	33.8	44.2	60.5	124.2	232.5
	700	1.14	1.5	5.4	14.4	29.3	40.6	47.4	61.8	84.8	173.4	324.7
	720	1.16	1.6	5.6	14.9	30.1	41.7	48.7	63.5	87.2	178.4	333.3
	800	1.3	1.8	6.2	16.5	33.5	46.4	54.1	70.6	96.8	198	371.5
	900	1.46	2.0	7.0	18.6	37.6	52.2	60.9	79.5	109	222.6	417
	960	1.55	2.1	7.4	19.8	40.2	55.6	64.9	84.8	116.2	237.4	445.3
	1000	1.62	2.2	7.7	20.7	41.8	57.9	67.7	88.2	121	247.2	463.7
	1200	1.95	2.6	9.3	24.7	50.2	69.5	81.2	105.9	145.1	296.4	556
	1400	2.26	3.1	10.8	28.9	58.6	81.2	94.7	123	169.7	345.6	649.4
	1440	2.33	3.2	11.1	29.6	60.3	83.5	97.4	126.7	174.7	356.7	667.9
	2880	4.69	6.3	22.2	59.6	120.4	166.8	195.0	254	348.5	711.9	1335.5

Selection

The TransDrive HRC Coupling is a proven performer, consisting of two cast iron flanges and a rubber element, which performs under compression.

The modular design allows for a simple fittingand easy maintenance whilst the rubber element absorbs shock loading.

Selection Procedure

- Service Factor — Determine appropriate service factor from the table below.
- Design Power — Multiply running of driven machine by the service factor. This gives the Design Power which is used as a basis for coupling selection.
- Coupling Size — Refer to the Power Ratings Table, page 21 and read across from the appropriate speed until an power equal to or greater than the Design Power is found. The size of the coupling required is given at the head of that column.
- Bore Size — From the Dimension Table, page 20 check that the required bores can be accommodated.

Example

A shaft coupling is required to transmit 70kW between a 1200 rev/min DC electric motor and a Banbury Mixer running 8hrs/day. Motor shaft is 70mm and the mixer shaft is 75mm.

- Service Factor — From the table below the service factor is 2,5.
- Design Power — Design Power is 70 x 2,5 – 175kW.
- Coupling Size — Reading across from 1200 rev/min in the speed column of the Power Ratings Table; 251kW is the first power to exceed the required 175kW (Design Power). The size of the coupling at the head of this column is 230.
- Bore Size — The Dimensions Table, page 20 shows that both shaft diameters are within the bore range available.

Service Factors

Special Classes[1]	Type of Driving Unit					
	Electric Motors Steam Turbines			Internal Combustion Engines Steam Engines Water Turbines		
	Hours Per Day Duty			Hours Per Day Duty		
Driven Machine Class[2]	8 and under	Over 8 to 16 inclusive	Over 16	8 and under	Over 8 to 16 inclusive	Over 16
Uniform	1.00	1.12	1.25	1.25	1.40	1.60
Moderate Shock[3] *	1.60	1.80	2.00	2.00	2.24	2.50
Heavy Shock[4] **	2.50	2.80	3.12	3.12	3.55	4.00

*It is recommended that top clearance keys are fitted for applications where load fluctuation is expected.

**For Centrifugal Compressor multiply Service Factor by an additional 1.15.

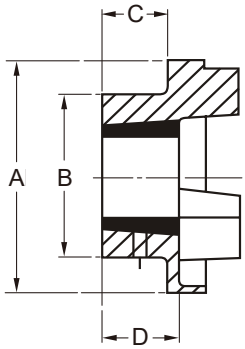
1 For applications where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines, e.g. internal combustion engines, piston type pumps and compressors, refer to TransDrive Power Transmission with full machine details for torsional analysis.

2 Agitators, Brewing Machinery, Centrifugal Compressors**, Conveyors, Centrifugal Fans and pumps, Generators, Sewage Disposal Equipment.

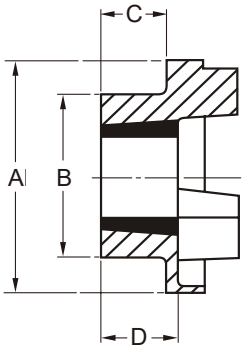
3 Clay working machinery, Crane Hoists, Laundry machinery, Wood working machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Textile machinery.

4 Reciprocating conveyors, Crushers, Shakers, Metal Mills, Rubber machinery. (Banbury Mixers and Mills, Reciprocating Compressors).

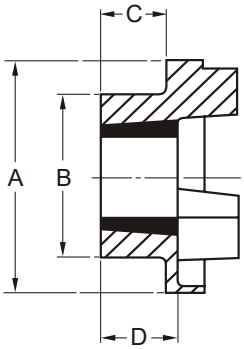
Dimensions



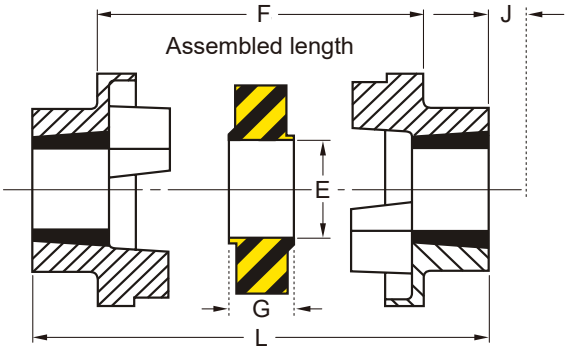
B FLANGE



H FLANGE



F FLANGE



Assembled length

Size	Bush	Bore		C	D	Bored to Size				Dia.	Dia.	Dia.	F	G	L1	L2	L3	J
		Max	Min			Bore+ Max	Bore+ Min	C	D	A	B	C						
70	1008	25	9	19.0	23.5	32	8	21	25	69	60	31	27	18	65	66.5	68	29
90	1108	28	9	18.5	23.5	38	8	26	30	85	65	32	32.5	22.5	69.5	75	82.5	29
110	1610	42	11	18.5	26.5	55	8	37	45	112	100	45	45	29	82	100.5	119	38
130	1610	42	14	17.5	26.5	60	36	47	55	130	105	50	54	36	89	117.5	145	38
150	2012	50	14	23.0	33.5	65	40	50	60	150	115	62	61	40	107	133.5	160	42
180	2517	60	16	34.0	46.5	80	46	58	70	180	125	77	74	49	142	165.5	189	48
230	3020	75	25	39.5	52.5	100	52	77	90	225	155	99	85.5	59.4	142	202	239.5	55
280	3535	90	35	74.0	90.5	115	62	90	105	275	185	119	107.5	74.5	142	270	284.5	67

All dimensions are in mm.

L 1 is the length with assembly combinations F.F - H.H F.H. / L 2 is the length with assembly combinations F.B - H.B / L 3 is the length with assembly combinations B.B

J is the wrench clearance required for tightening and loosening the bush on the shaft. The use of a shortened key will allow this dimension to be reduced.

+ Bore limit H8 unless specified otherwise.

Physical Characteristics

Size	Power Rating Per 100 rev/min	Maximum Speed* (rev/min)	Torque Rating (Nm)		Moment of Inertia MR2 (kgm2)	Torsional Stiffness (Nm/o)	Maximum Misalignment		Mass (kg)
			Normal	Maximum			Parallel	Axial	
70	0.33	9100	31.5	72	0.00085	10.2	0.3	+0.20	1.00
90	0.84	7400	80	180	0.00115	25.5	0.3	+0.49	1.17
110	1.168	5630	160	360	0.00400	48.0	0.3	+0.61	5.00
130	3.30	4850	315	720	0.00780	84.0	0.4	+0.79	5.46
150	6.28	4200	600	1500	0.01810	176	0.4	+0.92	7.11
180	9.95	350	950	2350	0.04340	240	0.4	+1.09	16.60
230	20.9	2800	2000	5000	0.12068	336	0.5	+1.32	26.00
280	33.0	230	3150	7200	0.44653	960	0.5	+1.70	50.00

Maximum Coupling speeds are calculated using an allowable peripheral speed for hub material. For selection of smaller sizes with speeds in excess of 3600 rev/min - Power Transmission.

Mass is for Coupling with mid-range bore Taper Bushes.

For speeds below 100rpm or intermediate speeds use normal torque rating.

Power Ratings (kW)

Speed rev/min	Coupling Size							
	70	90	110	130	150	180	230	280
100	0.33	0.84	1.68	3.30	6.28	9.95	20.9	33.0
200	0.66	1.68	3.35	6.6	12.6	19.9	11.9	65.0
400	1.32	3.35	6.70	13.2	25.1	39.8	83.8	132
600	1.98	5.03	10.1	19.8	37.7	59.7	126	198
720	2.37	6.03	12.1	23.8	45.2	71.6	151	238
800	2.64	6.70	13.4	26.4	50.3	79.6	168	264
960	3.17	8.04	16.1	31.7	60.3	95.5	201	317
1200	3.96	10.1	20.1	39.6	75.4	119	251	396
1440	4.75	12.1	24.1	47.5	90.5	143	302	475
1600	5.28	13.4	26.8	52.8	101	159	335	528
1800	5.94	15.1	30.2	59.4	113	179	377	594
2000	6.60	16.8	33.5	66.0	126	199	419	660
2200	7.26	18.4	36.9	72.6	138	219	461	726
2400	7.92	20.1	40.2	79.2	151	239	503	—
2600	8.58	21.8	43.6	85.8	163	259	545	—
2880	9.50	24.1	48.3	95	181	286	—	—
3000	9.90	25.1	50.3	99	188	298	—	—
3600	11.9	30.1	60.3	118	226	—	—	—

For speeds below 100 rev/min, and intermediate speeds, use normal torque ratings.

Selection

The extreme elastic design of TransDrive Tyre couplings are interchangeable with leading European and American brands. The flexible tyre possesses tremendous vibration and shock absorbing qualities and allows compensation for significant parallel and angular misalignment. TransDrive Tyre couplings have shock and vibration dampening characteristics creating significant load reduction on machinery and bearings thereby reducing costs and prolonging life. When used in conjunction with a series Spacer (see page 24) a Tyre coupling easily accommodates standard 100, 140, and 180mm spacers. TaperFit bushes, Spacer coupling, and a generous allowance for misalignment ensures Tyre couplings are extremely easy to install.

Power Ratings

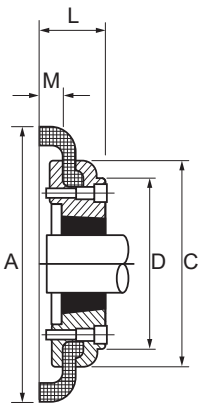
Ratings	F40	F50	F60	F70	F80	F90	F100	F110	F120	F140	F160	F180	F200	F220
Power kW per 100 rpm	0.251	0.691	1.33	2.62	3.93	5.24	7.07	9.16	13.9	24.3	39.5	65.7	96.7	121
Power kW @ 720 rpm	1.81	4.98	9.57	18.8	28.3	37.7	50.9	66.0	100	175	284	473	703	875
Power kW @ 960 rpm	2.41	6.63	12.8	25.1	37.7	50.3	67.9	88.0	134	234	379	630	937	1166
Power kW @ 1440 rpm	3.62	9.95	19.1	37.7	56.5	75.4	102	132	201	351	568	945	-	-
Power kW @ 2880 rpm	7.24	19.9	38.3	75.4	113	151	-	-	-	-	-	-	-	-
Speed Maximum (rpm)	4500	4500	4000	3600	3100	3000	2600	2300	2050	1800	1600	1500	1300	1100
Torque Nominal (Nm)	24	66	127	250	375	500	675	875	1330	2325	3770	6270	9325	11600
Torque Maximum (Nm)	64	160	318	487	759	1096	1517	2137	3547	5642	9339	16455	23508	33125

Physical Characteristics

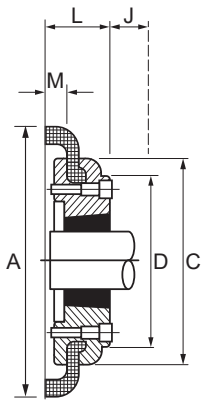
Size	Max. Speed rev/ min	Nominal Torque Nm TK N	Max. Torque Nm TK MAX	Torsional Stiffness Nm/O	Max. parallel misalignment mm	Max. end float mm ±	Approx. mass kg	Alternating Torque ± Nm @ 10Hz TKW	Resonance Factor V R	Dampening Coefficient
F40	4500	24	64	5	1.1	1.3	0.1	11	7	0.9
F50	4500	66	160	13	1.3	1.7	0.3	26	7	0.9
F60	4000	127	318	26	1.6	2	0.5	53	7	0.9
F70	3600	250	487	41	1.9	2.3	0.7	81	7	0.9
F80	3100	375	759	63	2.1	2.6	1	127	7	0.9
F90	3000	500	109	91	2.4	3	1.1	183	7	0.9
F100	2600	675	1517	126	2.6	3.3	1.1	252	7	0.9
F110	2300	875	2137	178	2.9	3.7	1.4	356	7	0.9
F120	2050	1330	3547	296	3.2	4	2.3	591	7	0.9
F140	1800	2325	5642	470	3.7	4.6	2.6	940	7	0.9
F160	1600	3770	9339	778	432	5.3	3.4	1556	7	0.9
F180	1500	6270	16455	1371	4.8	6	7.7	2742	7	0.9
F200	1300	9325	23508	1959	5.3	6.6	8.0	3918	7	0.9
F220	1100	11600	33125	2760	5.8	7.3	10.0	5521	7	0.9

Dimensions

Sizes F40 - F60

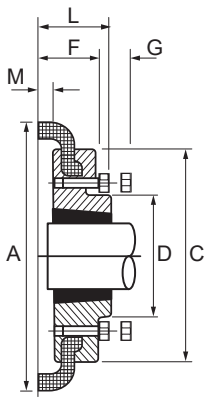


F Flange

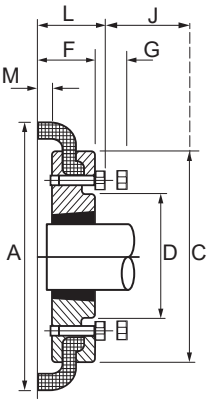


H Flange

Sizes F70 - F220



F Flange



H Flange

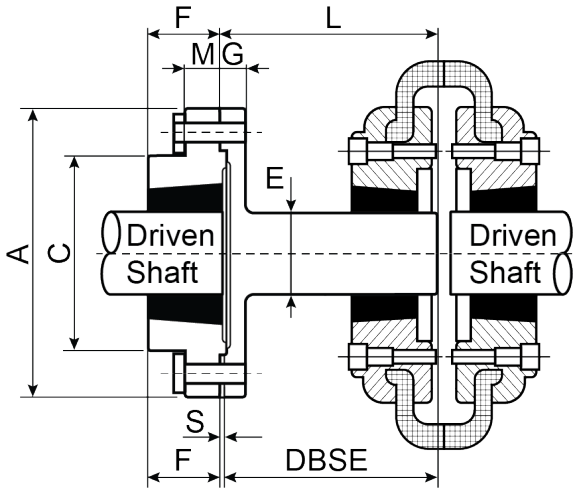
Size	A	C	D	E		F	L		G	J	M	Kg	
				F	H		F	H				F	H
F40	104	82	-	22	22	-	33.5	33.5	N/A	29	11	0.8	0.8
F50	133	100	79	25	25	-	38	38	N/A	38	12.5	1.2	1.2
F60	165	125	103	25	25	-	42	42	N/A	38	16.5	2.0	2.0
F70	187	144	80	32	25	50	44	42	13	36	11.5	3.1	3.0
F80	211	167	98	45	32	54	58	45	16	42	12.5	4.9	4.6
F90	235	188	108	45	45	60	59	56	16	48	13.5	7.0	7.0
F100	254	216	120	51	45	62	65	59	16	48	13.5	9.9	9.4
F110	279	233	134	51	51	62	63.5	63.5	16	55	12.5	11.7	11.7
F120	314	264	140	65	51	67	78.5	65.5	16	67	14.5	16.5	16.9
F140	359	311	147	65	65	73	81	81	14	67	16	22.3	22.3
F160	402	345	197	77	77	78	92	92	16	80	15	32.5	32.5
F180	470	398	205	90	90	94	112	112	19	89	23	42.2	42.2
F200	562	474	223	20	20	118	118	118	20	92	27.5	72.0	72.0
F220	474	223	118	20	20	11	129.5	102	20	92	27.5	72.0	72.0

SM series Spacers combined with a TransDrive Tyre coupling (refer to pages 22 & 23) to provide a Spacer design where maintenance is more efficient by being able to move the driving or driven shafts without disturbing the mounting of the driving or driven machine.

Standard Distance Between Shaft Ends [DBSE] lengths of 100, 140 and 180mm are available.

Dimensions

Spacer Coupling w/ Tyre Coupling



Dimensions	SM16	SM25	SM30	SM35
Use with Tyre Coupling	F50-F60	F70 F80 F90	F100 F110	F120 F140
Bush Size (Spacer Flange)	1615	2517	3030	3535
Taper Bush Max. Bore	42	65	75	90
A - Outside Diameter	127	178	216	248
C - Hub Diameter	80	123	146	178
F*	38	46	76	89
L -Length: 100mm DBSE*	94	94	-	-
L -Length: 140mm DBSE*	134	134	134	134
L -Length: 180mm DBSE*	-	174	174	174
M	18	22	51	63
S	6	6	6	6
E	32	48	60	80
G	15	16	20	20
Mass	**SM16**	**SM25**	**SM30**	**SM35**
100mm DBSE (kg)	3.55	8.05	-	-
140mm DBSE (kg)	3.8	8.65	16.4	25.4
180mm DBSE (kg)	-	9.25	17.3	26.9

All values are in mm unless otherwise stated

Ordering Instructions

- SM Spacers ere specified by the size end DBSE (eg. A SM35 spacer with a 140mm DBSE length is specified as a SM35-140)
- SM Spacers require a Taper Fit bush which must be ordered as a separate item (specifying bush size and required bore).
- To order a complete Spacer coupling list the individual components of the coupling and spacer including required Taper Fit bushes.

Physical Characteristics

- Facility protection for twirl and twist, impact and abrasion
- Very simple replacement and maintenance without oil and grease
- Very simple replacement without the separation of motor or connector on the related line due to it's simple structure
- Possible for the dissimilar connection and assembling with same hub
- Polyurethane based for having good water resistance, chemical resistance
- Highest flexible elasticity on run
- Less noise.

Application

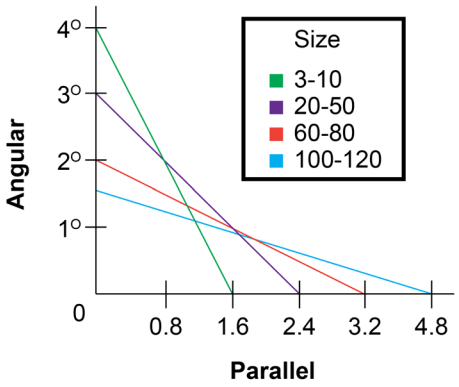
- Agitator
- Blower
- Compressor
- Conveyors
- Cranes and Hoists
- Elevators
- Fans
- Generators
- Pump
- Brewery and Distilling
- Food Industry
- Lumber Industry
- Pulp and Paper Mill
- Rubber Industry
- Steel Industry
- Textile Mills
- Aggregate Processing Cement

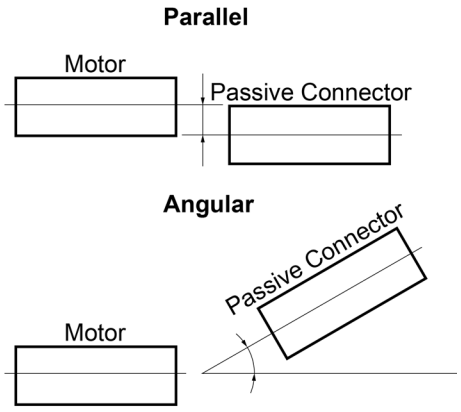
Service Factors

General Application	Service Factor	Industry Application	Service Factor
Agitator	1.5	Aggregate Processing Cement	2.0 - 3.0
Blower	1.0 - 1.5	Brewery and Distilling	1.0 - 2.0
Compressor	1.0 - 2.0	Food Industry	1.0 - 2.0
Conveyor	1.25 - 1.5	Lumber Industry	1.5 - 2.5
Cranes and Hoists	2.0 - 2.5	Power Industry	1.0 - 2.5
Elevators	1.0 - 2.0	Pulp and Paper-Mills	1.0 - 3.5
Fans	1.0 - 2.0	Rubber Industry	1.0 - 3.0
Generators	1.0 - 2.5	Steel Industry	2.0 - 4.5
Pumps	1.0 - 1.5	Textitle	1.0 - 2.0

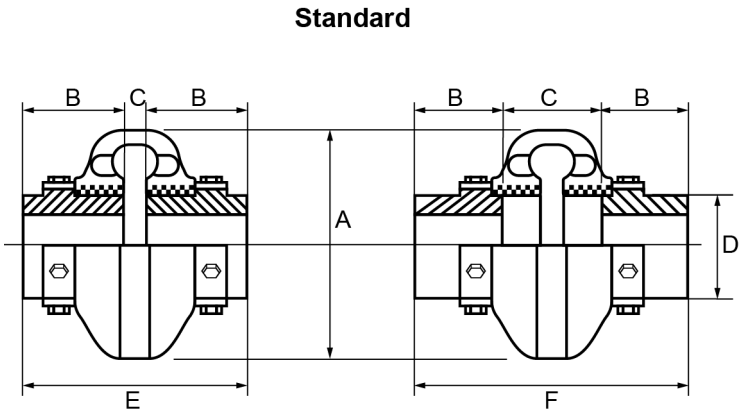
	Running Status	Service Factor
1	For being continuous and light load weight	1.0
2	For being the various change of the rotary power	1.5
3	For being various and frequent variation on the turning force	2.0
4	For being the variation of the rotary power accompanying impact	2.5
5	For being high-impact load-weight accompanying slight retro-rotation	3.0
6	For being frequent retro-rotation accompanying high-impact	Consult

Installation Tolerance





Dimensions



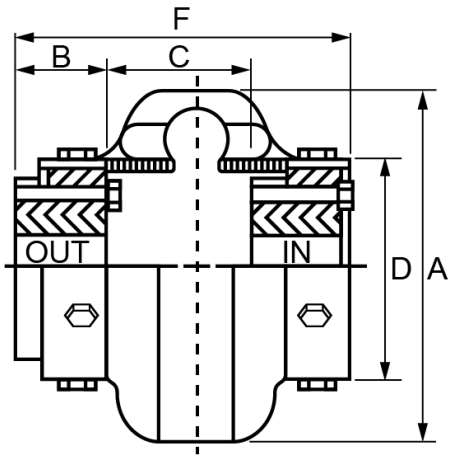
Dynamic Coupling No.	Torque (kgf.m)	Max. Bore (mm)	Max. rpm	Power Rating (kW/rpm)	Dimensions (mm)						
					A	B	C		D	Total Length	
					Outer Diameter	Hub Length	Min. Shaft Spacing	Max. Shaft Spacing	Hub Diameter	E In	F Out
D-2	2.20	28	7500	0.0023	89	24	35	47	47	83	95
D-3	4.20	34	7500	0.0043	102	32	9	47	59	83	111
D-4	6.40	42	7500	0.0066	116	37	9	47	66	83	121
D-5	11.00	48	7500	0.0110	137	45	10	52	80	100	142
D-10	16.70	55	7500	0.0170	162	45	11	53	93	101	143
D-20	26.70	65	6600	0.0270	184	50	15	63	114	115	163
D-30	42.10	75	5800	0.0430	210	56	12	68	138	124	180
D-40	63.40	85	5000	0.0660	241	61	12	74	468	134	196
D-50	88.20	90	4200	0.0900	249	69	12	86	207	150	224
D-60	144.00	105	3800	0.1480	318	80	11	99	222	171	259
D-70	254.00	120	3600	0.2620	356	85	18	109	235	189	281
D-80	455.00	155	2000	0.4670	406	114	17	149	286	245	377
D-100*	980.00	171	1900	1.000	533	140	44	95	359	324	375
D-120*	1961	190	1800	2.000	635	152	57	124	448	362	429

All dimensions are in mm.

Dimensions

Dynamic Couplings with QD Hubs

QD



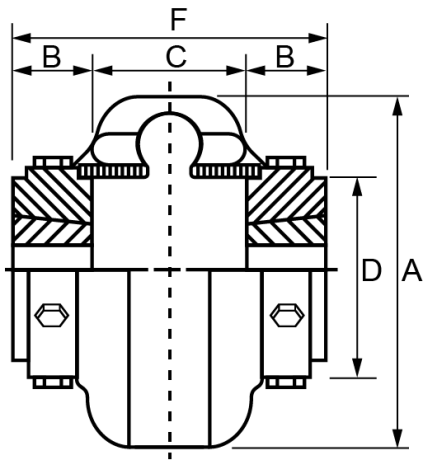
Dynamic Coupling No.	QD Bush No.	Torque (kgf.m)	Max. Bore (mm)	Max. rpm	Power Rating (kW/rpm)	Dimensions (mm)							Weight (kg)
						A	B	C		D	Total Length		
						Outer Diameter	Hub Length	Min. Shaft Spacing	Max. Shaft Spacing	Hub Diameter	E In	F Out	
D-4	JA	6.4	30	7500	0.0066	116	25	31	48	66	82	99	0.95
D-5	SH	11.0	35	7500	0.01100	137	32	44	48	80	108	114	1.63
D-10	SDS	16.7	42	7200	0.0170	162	33	30	59	93	97	125	2.18
D-20	SK	26.7	55	6600	0.0270	184	48	16	67	114	108	162	3.86
D-30	SF	42.1	60	5800	0.0430	210	51	37	56	138	138	157	6.35
D-40	E	63.4	75	5000	0.0660	241	67	32	44	168	165	178	10.80
D-50	E	88.2	75	4200	0.0900	279	67	35	73	207	168	207	17.06
D-60	F	144.0	90	3800	0.1480	318	92	38	48	222	222	232	20.64
D-70	J	254.0	100	3600	0.2620	356	114	33	36	235	262	265	30.89
D-80	M	455.0	140	2000	0.4670	406	171	19	32	286	362	375	63.50
D-100*	M	980.0	140	1900	1.0000	533	173	44	29	359	390	375	113.40
D-120*	N	1961.0	150	1800	2.0000	635	206	44	29	448	456	441	215.46

All dimensions are in mm unless otherwise stated.

Dimensions

Dynamic Couplings with Taper-Lock Hubs

Taper-Lock

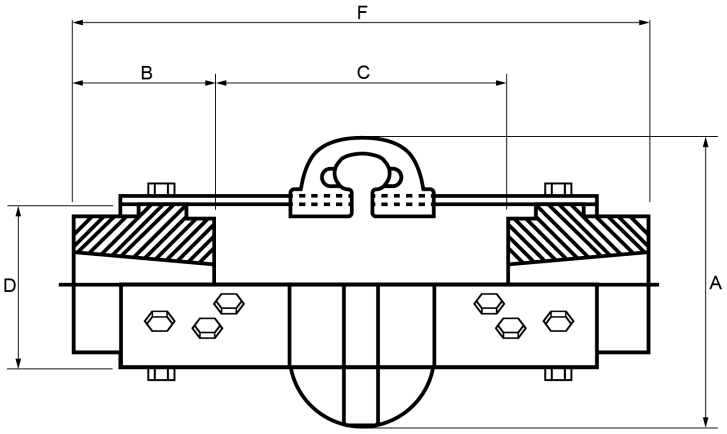


Dynamic Coupling No.	Taper Lock Bush No.	Torque (kgf.m)	Max. Bore (mm)	Max. rpm	Power Rating (kW/rpm)	Dimensions (mm)							Weight (kg)
						A	B	C		D	Total Length		
						Outer Diameter	Hub Length	In	Out	Hub Diameter	E	F	
											In	Out	
D-3	1008	4.2	25	7500	0.0043	102	22	43.0	-	59	87	-	0.82
D-4	1008	6.4	25	7500	0.0066	116	22	43.0	-	66	87	-	1.18
D-5	1108	11.0	28	7500	0.0110	137	22	56.0	-	80	100	-	1.81
D-10	1610	16.7	35	7500	0.0170	162	25	52.0	-	93	103	-	2.72
D-20	1610	26.7	42	6600	0.0270	184	25	63.5	-	114	114	-	4.08
D-30	2012	42.1	50	5800	0.0430	210	32	65.0	-	138	129	-	6.17
D-40	2517	63.4	65	5000	0.0660	241	44	60.0	-	168	149	-	9.89
D-50	2517	88.2	65	4200	0.0900	279	44	76.0	-	207	165	-	14.29
D-60	3020	144.0	75	3800	0.1480	318	51	84.0	-	222	186	-	21.14
D-70	3535	254.0	100	3600	0.2620	356	89	60.0	-	235	238	-	30.25
D-80	4040	455.0	100	2000	0.4670	406	102	95.0	-	286	298	-	37.19
D-100	4545	980.0	110	1900	1.0000	533	114	38	152	359	267	381	113.40
D-120	5050	1961	125	1800	2000	635	127	51	181	448	305	435	185.07

All dimensions are in mm unless otherwise stated.

Dimensions

Dynamic Spacer Couplings



Dynamic Coupling No.	Torque (kgf.m)	Max. Bore (mm)	Max. rpm	Power Rating (kW/rpm)	Dimensions						
					A Outer Diameter	B Hub Length	C		D Hub Diameter	Total Length	
							Min. Shaft Spacing	Max. Shaft Spacing		E In	F Out
DS-2	2.20	28	7500	0.0023	89	24	91	100	47	146	149
D-3	4.20	34	7500	0.0043	102	32	85	140	59	184	216
D-4	6.40	42	7500	0.0066	116	37	89	140	66	184	216
D-5	11.00	48	7500	0.0110	137	45	89	140	80	184	216
D-10	16.70	55	7500	0.0170	162	45	89	140	93	184	228
D-20	26.70	65	6600	0.0270	184	50	67	180	114	238	280
D-30	42.10	75	5800	0.0430	210	56	54	180	138	238	293
D-40	63.40	85	5000	0.0660	241	61	41	180	168	238	307
D-50	88.20	90	4200	0.0900	249	69	28	180	207	238	319
D-60	144.00	105	3800	0.1480	318	80	66	250	222	318	415
D-70	254.00	120	3600	0.2620	356	85	59	250	235	318	421
D-80	455.00	155	2000	0.4670	406	114	37	250	286	318	478

All dimensions are in mm unless otherwise stated.

Recommended Capscrew

Size	Torque (kgf.m)
D-2, D-3, D-4, D-5, D-10	2.3
D-20, D-30, D-40, D-50	4.1
D-60, D-70, D-80	10.2
D-100, D-120	37.7

Note:
1. A bolt having the highest tension shall be used
2. Adhesive shall be used
3. Never use a bolt more than twice.

TRANSDRIVE®

DRIVE PERFORMANCE

Mechanical Flexible Couplings

transdrive.com.au

Chain Couplings

The chain coupling is composed of double-strand roller chain and two sprockets, featuring a simple and compact structure that offers a high flexibility and greater transmission capacity compared to similar sized coupling.

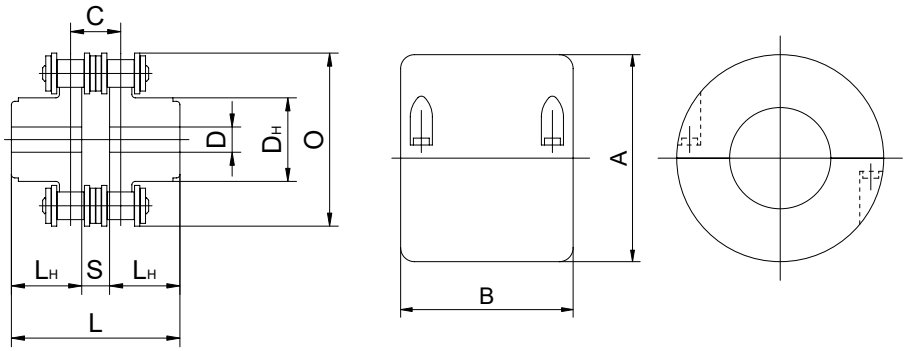
The chain coupling allows simple connection and disconnection, and use of the housing enhances safety and durability.

Service Factors

Operating Conditions	Operating hours/day			
	Hours Per Day Duty		Hours Per Day Duty	
Small load variations, small impact, light road, no reversing	1.0	1.5	2	2.5
Medium load variations, medium impact, no reversing (normally)	1.5	2	2.5	3
Large load variations, large impact, reversing while loaded	2.0	2.5	3	3.5
Type of prime mover	Motor, turbine		Combustion engine	

In case of 16 operating hours/day or longer, add 1.0 to service factor in the case of 8 operating hours/day, provided that service factor for 8 operating hours/day is applicable when speed is 50rpm or less.

Dimensions



Chain Coupling Number	Chain Pitch	Coupling									Casting		
		Drill hole	Shaft diam.		O	L	D_H	L_H	S	C	Approx. weight (kg/m)	A	B	Approx. weight (kg/m)
			Min.	Max.										
CC3012	9.525	12	13.5	16	45	65	27.2	29.5	6	10.1	0.31	69	63	0.22
CC4012	12.70	12	14	22	62	79.4	36	36	7.4	14.4	0.73	77	72	0.3
CC4014		12	14	28	69	79.4	45	36			1.12	84	75	0.31
CC4016		13.5	16	32	77	87.4	51.5	40			1.5	92	72	0.35
CC5014	15.875	14.5	17	35	86	99.7	56	45	9.7	18.1	2.15	101	85	0.47
CC5016		14.5	18	40	96	99.7	64	45			2.75	110	87	0.5
CC5018		16	18	45	106	99.7	73.5	45			3.6	122	85	0.6
CC6018	19.05	20	22	56	127	123.5	89.5	56	11.5	22.8	6.55	147	105	1.2
CC6020		20	24	60	139	123.5	102.5	56			8.38	158	105	1.2
CC6022		20	28	71	151	123.5	115	56			10.4	168	117	1.2
CC8018	20.40	20	32	80	169	141.2	115	63	15.2	29.3	13.2	190	129	1.9
CC8020		20	36	90	185	145.2	125	65			16.2	210	137	2.5
CC8022		20	40	100	202	157.2	142	71			21.8	226	137	2.7
CC10020	31.75	25	45	110	233	178.8	162	80	18.8	35.8	32.4	281	153	4.1
CC12018	38.10	35	50	125	256	202.7	173	90	22.7	45.4	43.2	307	181	5.2
CC12022		35	56	140	304	222.7	213	100			69.1	357	181	6.7

All dimensions are in mm unless otherwise stated.

The first two or three digits of chain coupling No. imply chain No. and the two succeeding digits imply the No. of teeth.

For increased safety, Chain Coupling covers should be used. The cover not ony improves the safety of the workplace, but also increases the Chain Couplings overall durability.

Power Transmission Capacity

No.	Max. shaft diam. (mm)	Allowable transmission torque at 50rpm or less (kgf . m)	Coupling Speed (rpm)													
			1	5	10	25	50	100	200	300	400	500	600	800	1000	1200	1500
CC3012	16	10.2	0.01	0.05	0.11	0.26	0.52	0.79	1.21	1.58	1.89	2.26	2.58	3.19	3.88	4.41	5.35
CC4012	22	22.2	0.02	0.11	0.22	0.58	1.15	1.73	2.63	3.46	4.15	4.96	5.67	7.01	8.53	9.68	11.6
CC4014	28	30.2	0.03	0.16	0.32	0.79	1.58	2.36	3.59	4.72	5.66	6.77	7.72	9.56	11.6	13.2	15.8
CC4016	32	39.4	0.04	0.21	0.41	1.03	2.06	3.09	4.69	6.17	7.41	8.85	10.1	12.5	15.3	17.3	21.0
CC5014	35	57.4	0.06	0.30	0.60	1.50	3.00	4.48	6.80	8.95	10.70	12.80	14.7	18.1	22.1	25.1	30.0
CC5016	40	75.0	0.08	0.39	0.78	1.95	3.91	5.86	8.92	11.7	14.1	16.8	19.2	23.8	28.9	32.9	39.9
CC5018	45	95.0	0.10	0.50	0.99	2.48	4.95	7.43	11.3	14.9	17.8	21.3	24.4	30.1	36.6	41.6	50.5
CC6018	56	179	0.18	0.93	1.87	4.67	9.33	14.0	21.3	28.0	33.6	40.1	45.9	56.8	69.1	78.4	95.2
CC6022	71	242	0.25	1.25	2.51	6.31	12.5	18.8	28.6	37.7	45.3	54.1	61.9	76.5	93.1	105	128
CC8018	80	396	0.41	2.07	4.14	10.3	20.7	31.0	47.2	62.1	74.5	89.0	101	126	153	174	211
CC8022	100	570	0.59	2.96	5.93	14.8	29.6	44.5	67.2	89.0	106	126	153	174	211	246	265
CC10020	110	896	0.93	4.66	9.33	23.3	46.6	70.0	106	140	168	200	229	283	345	392	476
CC12018	125	1350	1.40	7.02	14.0	35.1	70.2	105	160	210	252	302	345	426	519	590	716
CC12022	140	1750	1.81	9.07	18.1	45.3	90.7	136	206	272	326	390	446	551	671	762	
Lubricated Method			A					B			C						

No.	Max. shaft diam. (mm)	Allowable transmission torque at 50rpm or less (kgf . m)	Coupling Speed (rpm)								
			1800	2000	2500	3000	3600	4000	4800	5200	6000
CC3012	16	10.2	6.25	6.73	8.12	9.44	11.0	12.0	14.0	14.8	16.7
CC4012	22	22.2	13.7	14.8	17.9	20.7	24.1	26.3	30.08		
CC4014	28	30.2	18.7	20.2	24.4	28.3	32.9	35.9	42.1		
CC4016	32	39.4	24.4	26.3	31.9	37.0	43.0	46.9	54.9		
CC5014	35	57.4	35.4	38.3	46.2	53.6	62.4				
CC5016	40	75.0	46.4	50.0	60.6	70.4	81.6				
CC5018	45	95.0	58.8	63.4	76.8	89.2					
CC6018	56	179	111	120	145						
CC6022	71	242	149	161	195						
CC8018	80	396	246	265							
CC8022	100	570	352	379							
CC10020	110	896	554								
Lubricated Method			C								

Be sure to use the casing with the coupling in the case of lubricant type C. For details of lubrication types A and B, refer to "Lubrication" section on the next page.

Lubrication

There are three methods to lubricate chain couplings, according to operating speed (see Power Transmission Capacity table on page 31):

Lubrication Method A: Greasing Monthly

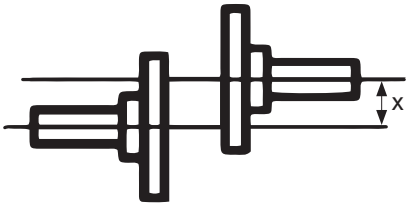
Lubrication Method B: Greasing Weekly or fill grease in the attached casing.

Lubrication Method C: Fill grease in the attached casing.

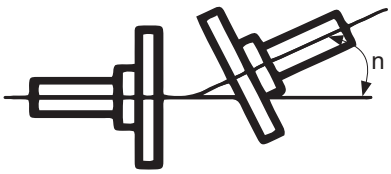
Note: When attaching the casing, use high-quality grease because the grease is pressed to the inside wall of the casing due to centrifugal force, deteriorating lubricating ability of the grease. It is recommended to change the grease periodically to maintain high performance and durability of the coupling.

Grease change intervals (with casing attached)		
Operating conditions	First change	2nd and later changes
Operating at 1/2 max speed or higher	1000 hours	2000 hours
Operating at 1/2 max speed or lower	2000 hours	4000 hours

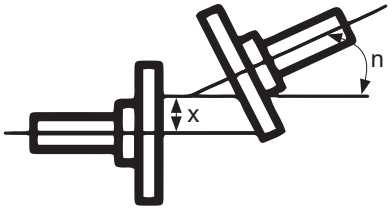
Grease change intervals (with casing attached)			
Chain coupling No.	Filing quantity (kg)	Chain coupling No.	Filing quantity (kg)
CC3012	0.08	6020	0.44
CC4012	0.12	6022	0.48
CC4014	0.16	8018	0.79
CC4016	0.17	8020	0.86
CC5014	0.24	8022	1.00
CC5016	0.25	10020	1.70
CC5018	0.26	12018	3.50
CC6018	0.42	12022	4.50



Parallel



Angular



Combined

Allowable errors

x = 2% or less of pitch of roller chain used

n = 1 or less

In case of high speed operation, shaft deviation and misalignment must be 1/2 allowable errors.

Curved Tooth Gear Couplings

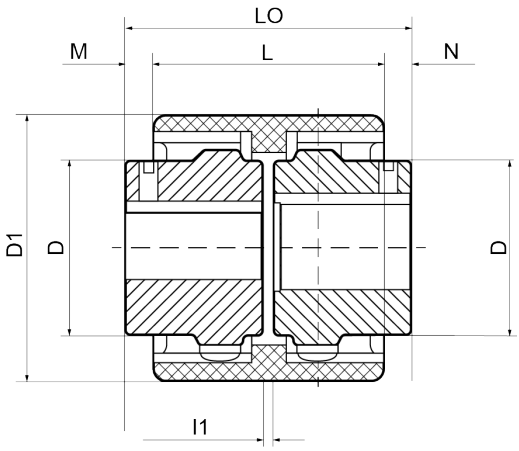
Product Characteristics

- Double Section type curved-tooth gear coupling
- Widely applicable in various mechanical & hydraulic fields
- Nylon and steel matched, maintenance free
- Able to offset axial, radial and angular misalignments
- Axial plugging assembly, very convenient

Nylon Toothed Sleeve Characteristics

- Excellent mechanical performance
- High rigidity
- High temperature resistance (+100o C)
- Not embrittled at low temperature
- Godd slippery and frictional behaviour
- Excellent electrical insulation behaviour
- Chemical corrosion endurable
- High accuracy of processing

Dimensions



Size	Max Bore (mm)	Dimensions							Torque Rating (Nm)	Weight (kg)	
		I1 I2	LO	L	M,N	E	D1	D		Nylon Sleeve	Hub Half
RGF-19	19	25	54	37	8.5	4	48	30	16	0.03	0.21
RGF-24	24	26	56	41	7.5	4	52	36	20	0.04	0.25
RGF-28	28	40	84	46	19	4	66	28	45	0.07	0.62
RGF-32	32	40	84	48	18	4	76	50	60	0.09	0.83
RGF-38	38	40	84	48	18	4	83	58	80	0.11	1.04
RGF-42	42	42	88	50	19	4	92	65	100	0.14	1.41
RGF-48	48	50	104	50	27	4	95	67	140	0.16	1.43
RGF-55	55	52	108	58	25	4	114	82	240	0.26	2.50
RGF-65	65	55	114	65	23	4	132	95	380	0.39	3.58

All dimensions are in mm unless otherwise stated.

Selection

Selection of Method size

By using the following formula, obtain Design Torque required.

$$T = 97400 \frac{kW}{N} \times SF \qquad T = 71620 \frac{HP}{N} \times SF$$

T = Design torque (kg cm) kW = Power (kilo Watts) HP = Horse Power N = Working revolution (rpm) SF = Recommended service factor

- Select the size with the same or with the greater value at the Basic Torque column, Refer to the maximum shaft diameters of the size selected, and then compare the shaft diameters of the application with the maximum bore diameter of the size selected. If the coupling bore is not suitable, select the larger size coupling.

- Special requirements

  A. on calculating the torque required,use the lowest operating speed (N) of the application

  B. If there are reverse motions repeated or frequent irregular kind changes, take service factor twice

Example

When you select a COUPLING to connects 30HP, 1,1750rm motor and rotary type pump. Motor shaft diameter is 48mm and pump's 52mm.

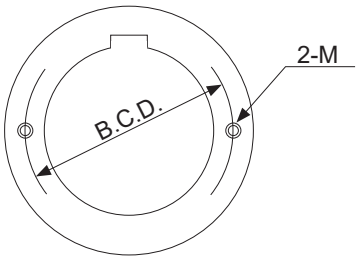
- service factor of pump is 1.8
- Normal transmitting power is 30HP

$$\text{Torque (kg cm)} = \frac{30 \times 71.620 \times 1.8}{1.750} = 2.210$$

The coupling size 1040 accepts the calculated torque 2210 and then compare the application shaft diameter sizes(52mm) to the maximum bore of the selected coupling size 1040(43 mm).

You will select the coupling size 1060 accepting up to 55mm shaft diameter. The size also accepts the application motor speed 1750 rpm. Either H (Horizontal split aluminum) or V (Vertical split steel) cover is available. Finally, the coupling size 1060 is selected.

Specification of Puller Holes

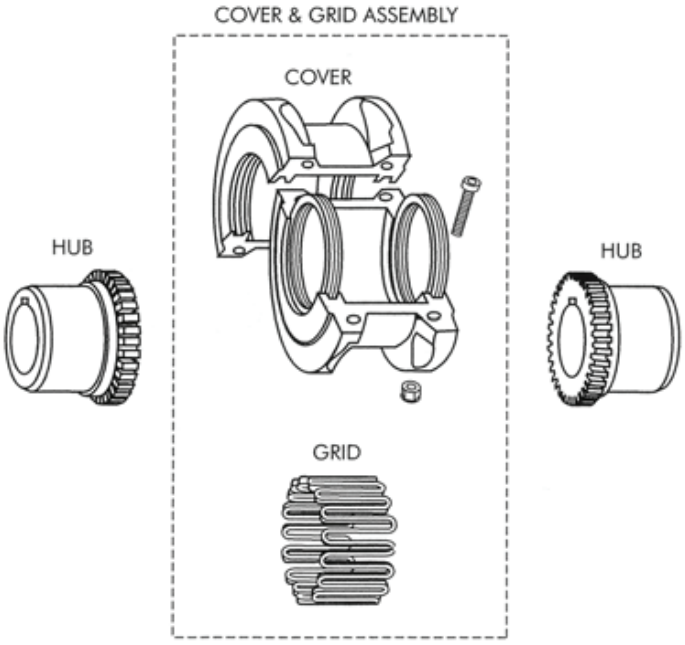


CPLG Size	B.C.D. (mm)	Bolt Size
1070	74	M8
1080	89.5	M8
1090	106	M10
1100	121.5	M10
1110	136.5	M10
1120	150.5	M12
1130	185	M16
1140	205	M16

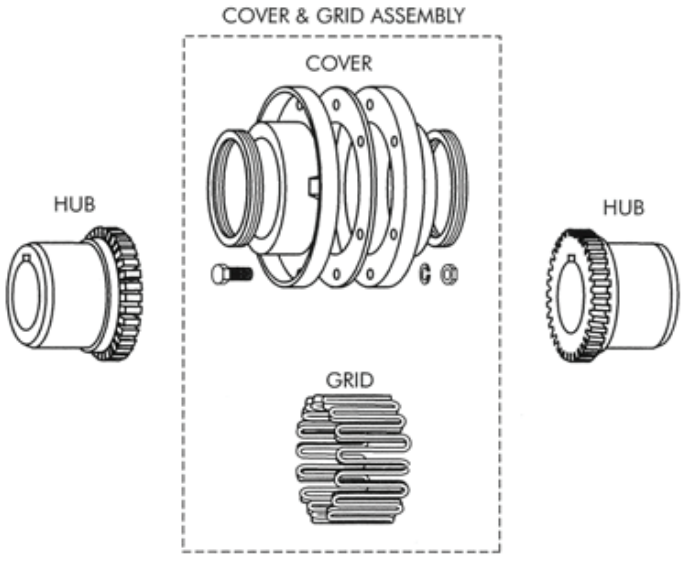
CPLG Size	B.C.D. (mm)	Bolt Size
1150	227.5	M20
1160	260	M20
1170	306	M24
1180	341	M30
1190	373	M30
1200	414	M30
1210	540	M30
1220	570	M30

Installation

TYPE H

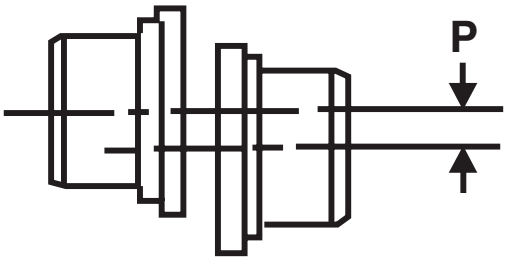


TYPE V

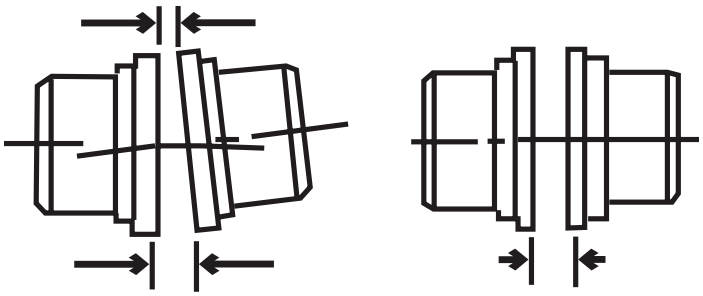


Misalignment Capacity

Parallel Misalignment



Angular Misalignment

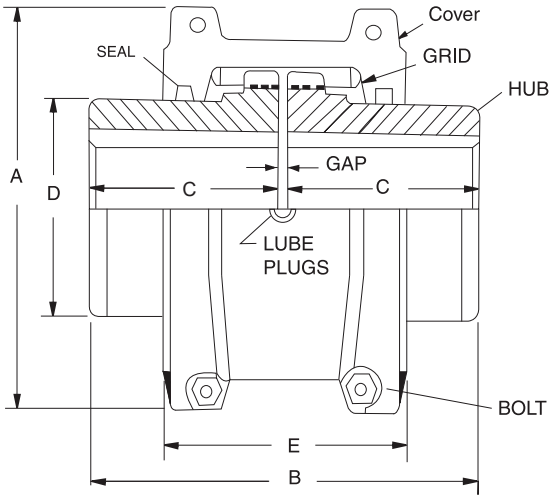


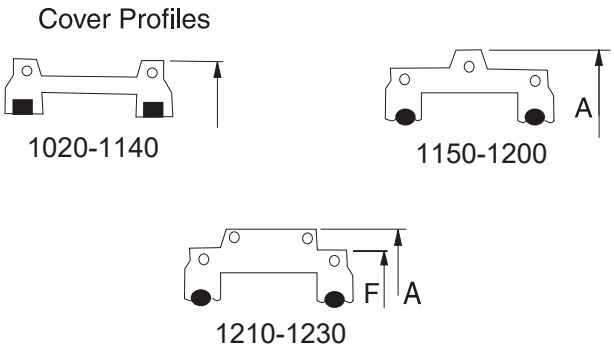
Gap

Size	Recommended Installation		Operating		Normal Gap ± 10%
	Parallel Offset P	Angular (1/16°) X - Y	Parallel Offset P	Angular (1/4°) X - Y	
1020	0.15	0.08	0.3	0.25	3
1030	0.15	0.08	0.3	0.30	3
1040	0.15	0.08	03.3	0.33	3
1050	0.20	0.10	0.4	0.41	3
1060	0.20	0.13	0.4	0.46	3
1070	0.20	0.13	0.4	0.51	3
1080	0.20	0.15	0.4	0.61	3
1090	0.20	0.18	0.4	0.71	3
1100	0.25	0.20	0.5	0.84	5
1110	0.25	0.23	0.5	0.91	5
1120	0.28	0.25	0.56	1.02	6
1130	0.28	0.30	0.56	1.19	6
1140	0.28	0.33	056	1.35	6
1150	0.30	0.41	0.6	1.57	6
1160	0.30	0.46	0.6	1.78	6
1170	0.30	0.51	0.6	2.01	6
1180	0.38	0.56	0.76	2.26	6
1190	0.38	0.61	0.76	2.46	6
1200	0.38	0.69	0.76	2.72	6

Dimensions

TYPE H (Horizontal Split Aluminium Cover)



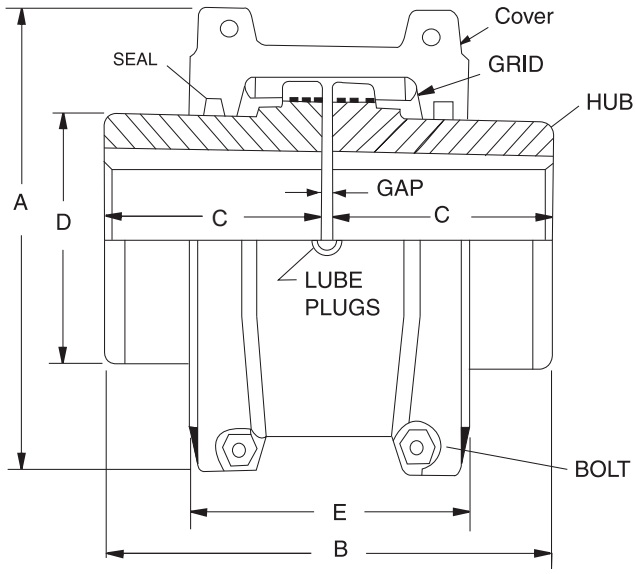


Size	HP per 100 rpm	Max. Speed (rpm)	Basic Torque (kg cm)	Bore Dia. (m)		Dimensions					Cap			Cpig Wt (kg)	Lube Wt (kg)
				Max.	Min.	A	B	C	D	E	Min.	Norm.	Max.		
1020H	0.68	4500	486	30	00012	101.6	98	47.5	39.7	66.5	1.5	3	4.5	1.9	0.03
1030H	1.93	4500	1383	35	00012	110	98	47.5	49.2	68.3	1.5	3	4.5	2.6	0.03
1040H	3.22	4500	2304	43	00012	117.5	104.6	50.8	57.1	70	1.5	3	4.5	3.4	0.05
1050H	5.63	4500	4033	50	00012	138	123.6	60.3	66.7	79.5	1.5	3	4.5	5.4	0.05
1060H	8.85	4.350	6377	55	00019	150.5	130	063.5	76.2	92	1.5	3	4.5	7.3	0.09
1070H	13	4.125	9217	65	00019	161.9	155.4	76.2	87.3	95	1.5	3	4.5	10	0.11
1080H	27	3600	19010	78	027	194	180.8	88.9	104.8	116	1.5	3	4.5	18	0.17
1090H	48	3600	34564	95	027	213	199.8	98.4	123.8	122	1.5	3	6	25	0.25
1100H	81	2400	58183	107	00041	250	245.7	120.6	142	155.5	1.5	3	6	42	0.43
1120H	177	2250	86411	117	00041	270	258.5	127	160.3	161.5	1.5	4.5	9.5	54	0.51
1130H	257	1800	184343	165	00067	346	329.8	161.9	217.5	195	1.5	6	12.5	121	0.91
1140H	370	1650	264993	184	00067	384	371.6	182.8	254	201	1.5	6	12.5	178	1.13
1150H	515	1500	368686	203	00108	453.1	3718	182.9	269.2	271.3	1.5	6	12.5	234	1.95
1160H	724	1350	518465	228	120.7	501.4	402.2	198.1	304.8	278..9	1.5	6	12.5	317	2.81
1170H	965	1225	691286	279	133.4	566.4	437.8	215.9	355.6	304.3	1.5	6	12.5	448	3.49
1180H	1338	1100	958584	311	152.4	629.9	483.6	238.8	393.7	3211	1.5	6	12.5	619	3.76
1190H	1770	1050	1267358	339	152.4	675.6	524.2	259.1	436.9	325.1	1.5	6	12.5	776	4.4
1200H	2413	900	1728216	361	177.8	756.9	564.8	279.4	497.8	355.6	1.5	6	12.5	1057	5.62
1210H	3230	820	2304288	36	177.8	844.5	622.3	304.8	533.4	431.8	3	13	24	1424	10.5
1220H	4350	730	3110788	411	203.2	820.7	622.9	325	571.5	490.2	3	13	24	1784	16.05
1230H	5640	680	4438775	450	250	1003.3	703.8	345.4	609.6	546.1	3	13	24	2267	24.0

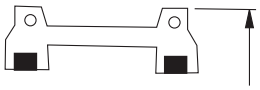
All dimensions are in mm unless otherwise stated.

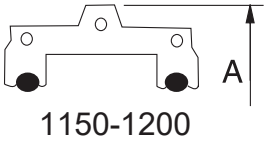
Dimensions

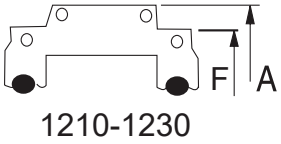
TYPE V (Vertical Split Steel Cover)



Cover Profiles







Size	HP per 100 rpm	Max. Speed (rpm)	Basic Torque (kg cm)	Bore Dia. (m)		Dimensions					Cap			Cpig Wt (kg)	Lube Wt (kg)
				Max.	Min.	A	B	C	D	E	Min.	Norm.	Max.		
1020	0.68	6000	486	30	12.7	111.1	98	47.5	39.7	24.2	1.5	3	4.5	2.0	0.03
1030	1.93	6000	1383	36	12.7	120.7	98	47.5	49.2	25	1.5	3	4.5	2.6	0.03
1040	3.22	6000	2304	44	12.7	128.5	104.6	50.8	57.1	25.7	1.5	3	4.5	3.4	0.05
1050	5.63	6000	4033	50	12.7	147.6	123.6	60.3	66.7	31.2	1.5	3	4.5	5.4	0.05
1060	8.85	6000	6377	57	19.1	162	130	063.5	76.2	32.2	1.5	3	4.5	7.3	0.09
1070	13	5500	9217	65	19.1	173	155.4	76.2	87.3	33.7	1.5	3	4.5	10.4	0.11
1080	27	4750	19010	79	27	200	180.8	88.9	104.8	44.2	1.5	3	4.5	17.7	0.17
1090	48	4000	34564	95	27	231.8	199.8	98.4	123.8	47.7	1.5	3	6	25.4	0.25
1100	81	3250	58183	107	41.3	266.7	245.7	120.6	142	60	1.5	3	6	42.2	0.43
1110	121	3000	86411	117	41.3	285.8	258.5	127	160.3	64.2	1.5	4.5	12.5	54.4	0.51
1120	177	2700	126736	136	60.3	319	304.4	149.2	179.4	73.4	1.5	4.5	12.5	81.6	0.73
1130	257	2400	184343	165	66.7	377.8	329.8	161.9	217.5	75.1	1.5	6	12.5	122.5	0.91
1140	370	2200	264993	184	66.7	416	371.6	182.8	254	78.2	1.5	6	12.5	180.1	1.13
1150	515	200	368686	203	108	453.1	3718	182.9	269.2	271.3	1.5	6	12.5	234	1.95
1160H	724	1350	518465	228	120.7	501.4	402.2	198.1	304.8	278..9	1.5	6	12.5	317	2.81
1170H	965	1225	691286	279	133.4	566.4	437.8	215.9	355.6	304.3	1.5	6	12.5	448	3.49
1180H	1338	1100	958584	311	152.4	629.9	483.6	238.8	393.7	3211	1.5	6	12.5	619	3.76
1190H	1770	1050	1267358	339	152.4	675.6	524.2	259.1	436.9	325.1	1.5	6	12.5	776	4.4
1200H	2413	900	1728216	361	177.8	756.9	564.8	279.4	497.8	355.6	1.5	6	12.5	1057	5.62
1210H	3230	820	2304288	36	177.8	844.5	622.3	304.8	533.4	431.8	3	13	24	1424	10.5
1220H	4350	730	3110788	411	203.2	820.7	622.9	325	571.5	490.2	3	13	24	1784	16.05
1230H	5640	680	4438775	450	250	1003.3	703.8	345.4	609.6	546.1	3	13	24	2267	24.0

All dimensions are in mm unless otherwise stated.

Lubrication

Choose high qualty lubricant for KCP Taper Grid Couplings for good performance and long life.

Grease

- Grease on the grid and hub teeth before assembling covers
- Fill up grease through the lub plug of the assembled coupling.

Supplement

- Every three month Every 240~250 hours operating, you should add grease.

Replacement

- Every 3 months, or every 4,000 hours operating you should replace all the deteriorated grease.

Selection

- Choose grease according to the ambient temperature range in the table below.

Common Industrial Lubricants (NYGL Grade #2)

Manufacture	Ambient Temperature Range	
	0° F to 150° F (-18° C TO 66° C)	-30° F to 100° F (-34° C TO 38° C)
Amoco Oil Co.	Amolith Grease #2	Amolith Grease #2
Atlantic Richfield Co.	Litholene HEP 2	Litholene HEP 2
Chevron U.S.A. Inc.	Chevron Dura-Lith EP-2	Chevron Dura-Lith EP-2
Cities Service Co.	Citgo HEP-2	Citgo HEP-2
Conoco Inc.	EP Conolith #2	EP Conolith #2
Exxon Company, U.S.A.	Ronex MP	Ronex MP
Gulf Oil Corp.	Gulfcrown Grease #2	Gulfcrown Grease #2
E.F. Houghton & Co.	Cosmolube #2	Cosmolube #1
Impenrial Oil Ltd.	Esso MP Grease H	Lotemp EP
Keystone Div. (Pennwalt)	#81 Light	#84 Light
Mobil Oil Corp.	Mobilux EP111	Mobilux #1
Phillips Petroleum Co.	IB & RB Grease	Philube IB & RB Grease
Shell Oil Co.	Alvania Grease #2	Alvania Grease #2
Standard Oil Co. (OH)	Factran #2	Factran #2
Sun Oil Company	Prestige 42	Prestige 42
Texaco Lubricants	Starplex HD 2	Multifac EP2
Union Oil Co. (CA)	Union Undoba #2	Union Undoba #2
Valvoline Oil Co.	Val-Lith EP #2	Val-Lith EP #2

TRANSDRIVE®

DRIVE PERFORMANCE

Rigid Couplings

transdrive.com.au

Selection

RM Rigid couplings are used to rigidly connect two shafts. Rigid couplings are often used to facilitate ease-of-maintenance or simply to aid machine assembly. TaperFit bushes provide a secure fit on the driving and driven shafts, ensuring installation and removal is simple.

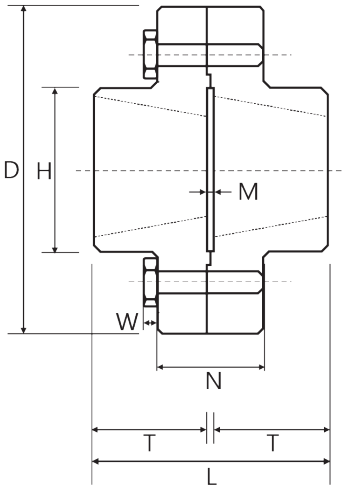
Selection Procedure

- Select a size of RM Rigid Coupling to fit the larger of the driving or driven shafts.
- For severe applications, select the next size up RM Rigid Coupling.

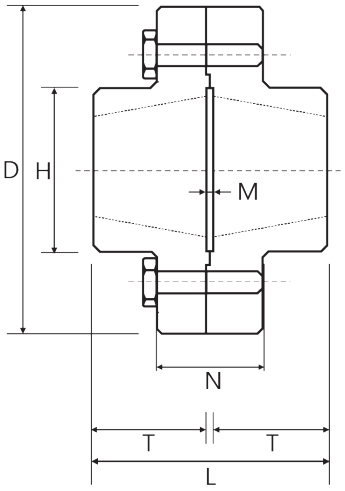
Note: HF or FF assemblies can be used on horizontal shafts, only FF assemblies are to be used on vertical shafts.

Dimensions

Coupling Assembly HF



Coupling Assembly FF



Dimensions	RM12	RM16	RM25	RM30	RM35	RM40	RM45	RM50
TF Bush Size: F & H Flanges	1210*	1615*	2517	3030	3535	4040	4545	5050
Maximum Bore: F & H Flanges	32	42	65	75	90	100	110	125
D - Outside Diameter	118	127	178	216	248	298	330	362
H - Hub Diameter	83	80	123	146	178	210	230	266
L - Assembled Length	57	83	97	159	185	210	235	260
M - Gap	7	7	7	7	7	7	7	7
N - Outer Length	35	43	51	65	75	76	86	92
W - Wrench Clearance (H Flange only)	38	38	48	54	67	79	86	92
Total Weight (kg)	3.5	4.5	11	23	38	64	88	155

All values are in mm unless otherwise stated.

Ordering instructions

- Couplings are supplied as complete assemblies in either HF or FF Configuration (e.g a RM25 configured as a HF is specified RM25HF)
- Couplings require Bushes which must be ordered as separate items (specifying bush size and the required bores)

Dimensions

The Taper bushes are manufactured i to the highest quality standards using GG22-25 cast iron depending on size. Thin wall bushes are produced from 45 steel. All surfaces are carefully machined to provide maximum contact area and transmission of torque.

Taper Bush 1008 to 3030

Bush Size	Minimum Hub Diameter H						S Cap Screws		
	0T	LTB	UTS 200 N/mm² Gray Iron	UTS 250 N/mm² Gray Iron	UTS 420 N/mm² Gray Iron	0B	QTY Screws	Size (inches)	Max Bore
1008	35.20	22.3	59	54	51	33.73	2	1/4 x 1/2	25
1108	38.38	22.3	61	57	54	36.92	2	1/4 x 1/2	28
1210	47.62	25.4	99	86	78	44.44	2	3/8 x 5/8	32
1215	47.62	38.1	79	73	68	44.44	2	3/8 x 5/8	32
1310	50.80	25.4	100	88	80	47.63	2	3/8 x 5/8	35
1610	57.15	25.4	102	92	85	53.97	2	3/8 x 5/8	42
1615	57.15	38.1	86	81	77	53.97	2	3/8 x 5/8	42
2012	69.85	31.8	115	106	99	66.68	2	7/16 x 7/8	50
2517	85.73	44.5	125	119	113	82.55	2	1/2 x 1	65
2525	85.73	63.5	115	111	108	82.56	2	1/2 x 1	60
3020	107.96	50.8	154	146	140	101.60	2	5/8 x 1.1/4	75
3030	107.96	76.2	141	136	132	101.60	2	5/8 x 1.1/4	75

All dimensions are in mm unless otherwise stated.

Taper Bush 3525 to 5050

Bush Size	Minimum Hub Diameter H						S Cap Screws			
	0T	LTB	UTS 200 N/mm² Gray Iron	UTS 250 N/mm² Gray Iron	UTS 420 N/mm² Gray Iron	0B	QTY Screws	Size (inches)	K	Max Bore
3525	127.00	63.5	206	191	178	122.68	3	1/2 X 1.1/2	40°	100
3535	127.00	89.0	185	176	168	122.68	3	1/2 X 1.1/2	40°	90
4030	146.05	76.2	220	207	197	140.72	3	5/8 X 1.3/4	40°	115
4040	146.05	101.5	203	195	188	140.72	3	5/8 X 1.3/4	40°	100
4535	161.93	89.0	221	212	205	155.70	3	3/4 X 2	40°	125
4545	161.93	114.3	211	205	200	155.70	3	3/4 X 2	40°	110
5040	177.80	101.6	236	229	223	170.69	3	7/8 X 2.1/4	37°	125
5050	177.80	127.0	230	223	219	17.69	3	7/8 X 2.1/4	37°	125

All dimensions are in mm unless otherwise stated.

Installation & Removal Procedure

Installation Procedure

1. Clean shaft, bore and outside bush, and bore of hub. Remove any oil, lacquer or dirt. Place bush in hub and match half holes to make complete holes (each complete hole will be threaded on one side only).
2. Lightly oil thread and point of set screws, or thread and under head of cap screws. Place screws loosely in holes that are threaded in hub side.
3. Make sure bush is free in hub. Slip assembly onto shaft and locate in the desired position.
4. Tighten screws alternately and evenly until all are pulled up tightly. (see table for torque settings).
5. Hammer against a large end of bush using hammer and block or sleeve to avoid damage. Screws can now be turned a little more to the specified torque setting. Repeat this alternate hammering and screw re-tightening until the specified torque is reached. Fill all holes with grease to exclude dirt.

Removal Procedure

1. Remove all screws, lightly oil thread and point of set screws, or thread and under head of cap screws.
2. Insert screws into removal holes that are treaded on the bush side. In sizes where washers are found under screw heads, be sure to use these washers.
3. Tighten screws alternately until bush is loosened in hub and then remove the complete assembly. If bush does not loosen immediately, tab on hub.

Bush Size	Screws	Tightening Torque (Nm)
1008	1/4" Set Screws	6
1108	1/4" Set Screws	6
1210	3/8" Set Screws	20
1215	3/8" Set Screws	20
1310	3/8" Set Screws	20
1610	3/8" Set Screws	20
1615	3/8" Set Screws	20
2012	7/16" Set Screws	30
2517	1/2" Set Screws	50
2525	1/2" Set Screws	50
3020	5/8" Set Screws	90
3030	5/8" Set Screws	90
3525	1/2" Set Screws	113
3535	1/2" Set Screws	113
4030	5/8" Set Screws	170
4040	5/8" Set Screws	170
4535	3/4" Set Screws	190
4545	3/4" Set Screws	190
5040	7/8" Set Screws	270
5050	7/8" Set Screws	270

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