COUPLINGS

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All dimensions in mm unless otherwise stated

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COUPLING SELECTION PROCESS

Step 1

Determine the Nominal Torque of your application by using the following formula:

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

(kW = HP x 0.7457)

Step 2

Using the Basic Service Factors Chart, select the service factor which best corresponds to your application (some couplings have special service factors. If in doubt contact Naismith Engineering).

Load	Driving Equipment	
	Motor or Turbine	Reciprocating Engine
Uniform	1.0	1.5
Light Shock	1.5	2.0
Medium Shock	2.0	2.5
Heavy Shock	2.5	3.0

The service factors listed are intended only as a general guide. For typical service factors used in various applications refer to manufacturers catalogue.

Step 3

Calculate the Design Torque of your application by multiplying the Nominal Torque calculated in Step 1 by the Application Service Factor determined in Step 2.

Design Torque = Nominal Torque X Service Factor

Step 4

Using the Performance Data Chart, locate the Nominal Torque column. Scan down this column to the first entry where the Torque Value is greater than or equal to the Design Torque calculated in Step 3.

Step 5

Refer to the maximum RPM value for the coupling to ensure that the application requirements are met (some couplings have different maximum RPM for different elements). If the requirement is not satisfied at this point, another type of coupling may be required for the application.

Step 6

Compare the application driver/driven shaft sizes to the maximum bore size available on the coupling selected. If coupling bore size is not large enough for the shaft diameter, select the next largest coupling that will accommodate the driver/driven shaft diameters. Then recheck the maximum RPM value for the new coupling, as the maximum RPM value will drop off as the coupling size increases.

'L' Type Coupling - Lovejoy

'GR' Trasco coupling - SIT S.p.A.

WARNING !

Refer to this Catalogue for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogues for proper installation instruction of power transmission products. Do not exceed catalogue ratings. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Do not use any of these power transmission products for elevators, man lifts or other devices that carry people. If the power transmission product fails, the lift device could fall resulting in severe injury or death

It is the responsibility of Buyer to furnish appropriate guards for machinery parts at point of installation, in compliance with Australian Standards, as well as any other safety devices required by law. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact Naismith Engineering Ph (03) 9489-9811.

The use of brand names or part numbers is for identification only. It does not signify ownership of same.

JAW TYPE 'L', 'AL', & 'SS' COUPLING

'L' TYPE

The Jaw Type couplings from Lovejoy are offered in the industry's largest variety of stock bore/keyway combinations. These couplings require no lubrication and provide highly reliable service for light, medium and heavy duty electrical motor and internal combustion power transmission applications.
Other features and benefits include:

- Fail-safe - will still perform if elastomer fails.
- No metal to metal contact.
- Resistant to oil, dirt, sand, moisture and grease.

'AL' TYPE

The aluminium construction means this coupling is light weight with low overhung load and low inertia. The AL type also offers excellent resistance to atmospheric conditions, so it is good for corrosive environment applications.

'SS' TYPE

The stainless steel hubs available for applications needing maximum protection against harsh environmental conditions. #303 and #304 grade

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM	Nominal Torque (Nm)				Normal Maximum Speed (Sox)
		kW	Sox	Urethane	Hytrel	Bronze	(RPM)
L035	9.5	0.004	0.4	-	-	-	31000
L/AL050	15.9	0.031	3.0	4.5	5.6	5.6	18000
L/AL070	19.1	0.051	4.9	7.3	12.9	12.9	14000
L/AL/SS075	22.2	0.107	10.2	15.3	25.6	25.6	11000
L/AL/SS095	28.6	0.229	21.9	32.9	63.4	63.4	9000
L/AL/SS100	35.0	0.493	47.1	70.7	128.0	128.0	7000
L/AL/SS110	42.0	0.937	89.5	134.0	256.0	256.0	5000
L/SS150	48.0	1.466	140.0	210.0	419.0	419.0	5000
AL150	48.0	1.715	163.8	-	-	-	5000
L190	55.0	2.042	195.0	293.0	529.0	529.0	5000
L225	66.7	2.764	264.0	397.0	704.0	704.0	4200
L276	73.0	5.581	533.0	-	-	-	1800

Power at 100 RPM based on Sox only.

ELEMENTS

SOX - (NBR) Rubber - Nitrile Butadiene (Buna N) Rubber is a flexible elastomer material that resembles natural rubber in resilience and elasticity and operates effectively in temperature range of -40°C to +100°C. Good resistance to oil. Standard elastomer.

SNAP WRAP - This element is made of the same material as the SOX, but it allows for the element to be installed or removed without disturbing the coupling hubs. It allows for close shaft separations all the way out to the hubs maximum bore. Maximum speed is 1750 RPM

URETHANE - Urethane has greater torque capability than NBR (1.5 times), provides less dampening effect, and operates at a temperature range of -34°C to +71°C. Good resistance to oil and chemicals.

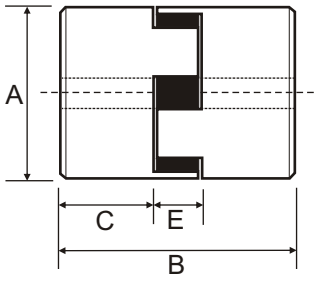
HYTREL - Hytrel is a flexible elestomer designed for high torque and high temperature operations. Hytrel can operate in temperatures of -51°C to +121°C and has an excellent resistance to oil and chemicals. Not recommended for cyclic or stop start applications.

BRONZE - Bronze is a rigid, porous oil-impregnated metal insert exclusively for slow speed (maximum 250 RPM) applications requiring high torque capabilities. Bronze operations are not affected by extreme temperatures, water, oil or dirt. Can operate in temperatures of -40°C to +232°C

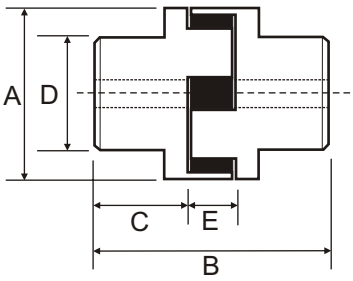
JAW TYPE 'L' & 'AL' COUPLING

DIMENSIONAL DATA

Style 1



Style 2



Part No.	Style No.	Bore Min	Bore Max	A	B	C	D	E
L035	1	3.2	9.5	16.0	20.6	6.9	-	7.1
L050	1	6.4	15.9	27.4	43.4	15.7	-	12.2
L070	1	6.4	19.1	34.5	50.3	19.1	-	12.2
L075*	1	6.4	22.2	44.5	54.1	20.8	-	12.7
L095*	1	11.1	28.6	53.6	63.8	25.4	-	13.2
L100*	1	11.1	35.0	64.5	88.4	35.1	-	18.0
L110*	1	15.9	42.0	84.3	107.2	42.7	-	22.4
L150*	1	15.9	48.0	95.3	114.3	44.5	-	25.4
L190	2	19.1	55.0	114.3	123.4	49.3	101.6	25.4
L225	2	19.1	66.7	127.0	135.6	55.4	108.0	25.4
L276	2	22.2	71.9	157.0	198.6	79.2	127.0	40.1

*Available in SS-Type
Coupling hubs are available off the shelf in a large number of metric and inch bore sizes.

Part No.	Style No.	Bore Min	Bore Max	A	B	C	D	E
AL050	1	6.4	15.9	27.4	43.4	15.7	-	12.2
AL070	1	6.4	19.1	34.5	50.8	19.1	-	12.7
AL075	2	6.4	22.2	44.5	53.8	20.6	38.9	12.7
AL095	1	12.7	28.6	53.8	63.5	25.4	-	12.7
AL100	2	12.7	35.0	64.3	88.9	34.8	61.2	19.1
AL110	1	15.9	42.0	84.1	108.0	42.9	-	22.1
AL150*	2	15.9	48.0	108.0	114.3	44.5	81.0	25.4

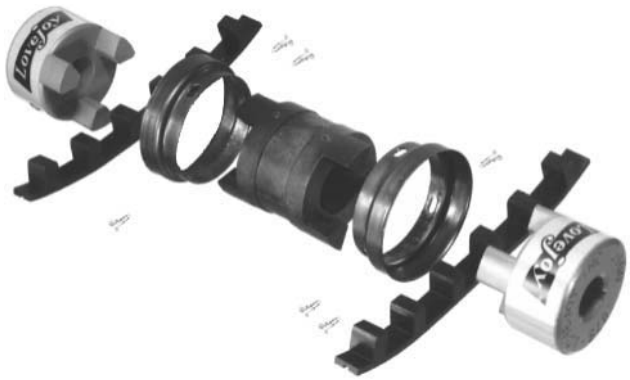
*AL150 uses eight legged spider

JAW TYPE 'RRS' COUPLING

'RRS' TYPE

The RRS coupling is based on the standard Lovejoy Jaw type coupling. The centre "dropout" section of this coupling provides proper shaft separation while also allowing easy elastomer installation without disturbing the hubs or requiring realignment of shafts. Designed for the pump industry, it accommodates metric standard pump/motor shaft separations. The drop out spacer is made of glass reinforced plastic, cast iron or aluminium.

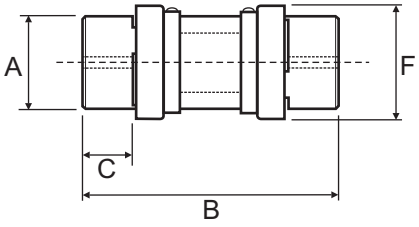
PERFORMANCE DATA



Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
RRS095	28.6	0.229	21.9	3600
RRS100	35.0	0.493	47.1	3600
RRS110	42.0	0.937	89.5	3600
RRS150	48.0	1.467	140.1	3600
RRS190	55.0	2.044	195.2	3600
RRS225	66.7	2.764	264.0	3600

DIMENSIONAL DATA

STYLE 1



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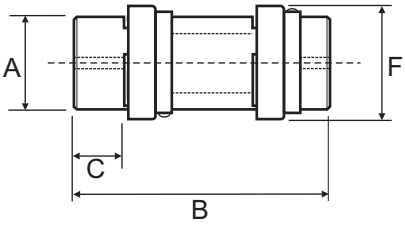
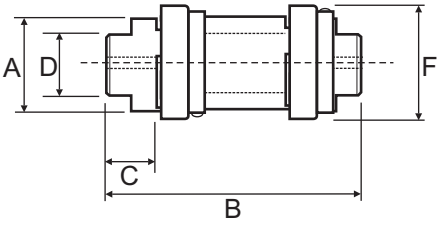


STYLE 3



Part No.	Style No.	Bore Min	Bore Max	A	B	C	D	F
RRS095-100					151.0			
RRS095-140	1	11.1	28.6	53.6	191.0	25.4	-	63.5
RRS095-180					231.0			
RRS100-100					170.0			
RSS100-140	1	11.1	35.0	64.5	210.0	35.1	-	79.2
RRS100-180					250.0			
RRS110-100					186.0			
RRS110-140	1	15.9	42.0	84.3	226.0	42.7	-	96.8
RRS110-180					266.0			
RRS150-100					189.0			
RRS150-140	2	15.9	48.0	95.3	229.0	44.5	-	112.8
RRS150-180					269.0			
RRS190-100					199.0			
RRS190-140	3	19.1	55.0	114.3	239.0	49.3	101.6	127.0
RRS190-180					277.0			
RRS225-100					221.0			
RRS225-140	3	19.1	66.7	127.0	261.0	55.4	108.0	142.7
RRS225-180					291.0			

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JAW TYPE ‘C’ COUPLING

'C' TYPE

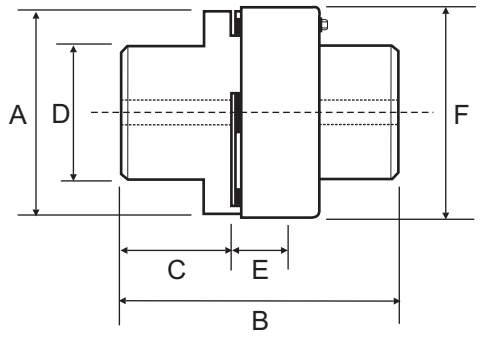
These couplings provide standard shaft-to-shaft connection for medium duty range applications. The standard ‘C’ coupling hub is made of cast iron. The coupling uses a set of SXB cushions instead of a spider. The load cushions are held in place radially by a steel collar which is attached to one of the hubs. The cushion design has the same engineering purpose as the spider design but is more effective in the medium duty applications that ‘C’ Type couplings address.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM	Nominal Torque (Nm)		Normal Maximum Speed
		kW	Sox	Hytrel	(RPM)
C226	64.0	3.539	338.0	671.0	4800
C276	73.0	5.581	533.0	1066.0	4200
C280	76.2	8.942	854.0	1567.0	3500
C285	102.0	10.869	1038.0	1882.0	3200
C295	89.0	13.414	1281.0	2563.0	2300
C2955	102.0	22.356	2135.0	4271.0	2300

Power at 100 RPM based on Sox
Normal Maximum Speed is identical for Sox & Hytrel elements.

DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	E	F
	Min	Max						
C226	22.2	64.0	130.8	177.8	69.9	104.6	38.1	139.7
C276	22.2	73.0	157.0	199.9	79.2	127.0	41.4	165.9
C280	31.8	76.2	190.5	199.9	79.2	139.7	41.4	198.4
C285	31.8	102.0	215.9	231.9	95.3	165.1	41.4	225.6
C295	38.1	89.0	231.6	238.3	95.3	158.8	47.8	244.3
C2955	44.5	102.0	231.6	263.7	108.0	180.8	47.8	244.3

C226-C295 - Set of 6 Cushions
C2955-C350 - Set of 10 Cushions

NENFLEX®

TORSIONALLY FLEXIBLE COUPLINGS

PERFORMANCE DATA

JAW TYPE 'N', 'SWN' COUPLING

'N' TYPE

The most common shaft to shaft jaw coupling around with star shaped spider. Made to industry standard and available in a wide range of bore sizes.

'SWN' TYPE

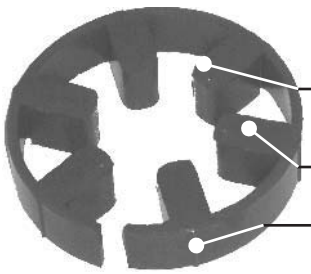
Shaft to shaft jaw coupling with all of the advantages of the N Series but with the wrap around element and retaining collar.

'N' Type

'SWN' Type

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm) Rubber Black 80 Sh A	Polyurethane Yellow 80 Sh A	Polyurethane Red 90 Sh A	Normal Maximum Speed N / SWN (RPM)
N/SWN095	30.0	0.260	25.0	30.0	40.0	8000
N/SWN100	38.0	0.630	60.0	75.0	90.0	7000
N/SWN110	42.0	1.150	110.0	140.0	165.0	5000
N/SWN150	48.0	1.570	150.0	190.0	225.0	5000
N/SWN190	55.0	2.090	200.0	250.0	300.0	5000
N/SWN225	60.0	2.720	260.0	325.0	400.0	4200

Power at 100 RPM based on Rubber 80 Shore A (Black)



New Improved SWN / SWR Wrap-Around Element

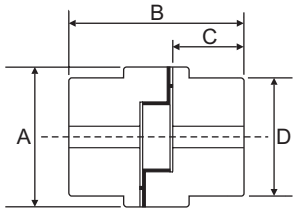
Special shape profile which does not result in a 100% contact at no load condition & thereby prevents heat build-up & hysteresis failure.

Spacer ribs no longer require gaps to be maintained during assembly.

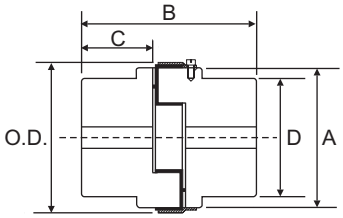
Vertical ribs grip the wrap around element firmly within the steel retaining ring.

JAW TYPE 'N' & 'SWN' COUPLING

N SERIES
(Standard spider coupling)



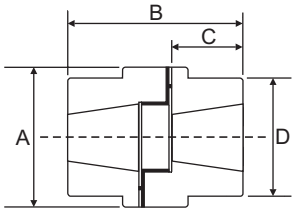
SWN SERIES
(Wrap around element coupling)



Part No.	Bore		A	B	C	D	Collar
	Min	Max					O.D.
N/SWN095	10.0	30.0	54.0	65.0	26.0	54.0	64.0
N/SWN100	10.0	38.0	65.0	86.0	34.0	55.0	77.0
N/SWN110	15.0	42.0	85.0	110.0	44.0	75.0	96.0
N/SWN150	15.0	48.0	96.0	113.0	44.0	78.0	111.0
N/SWN190	20.0	55.0	115.0	135.0	55.0	100.0	128.0
N/SWN225	20.0	60.0	127.0	155.0	65.0	106.0	141.0

HUBS TO SUIT TAPERED BUSHES

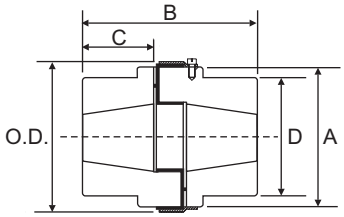
N SERIES
(Standard spider coupling)



Hub
Type J

Hub
Type H

SWN SERIES
(Wrap around element coupling)



Couplings can comprise of any combination of H type or J Type hubs.

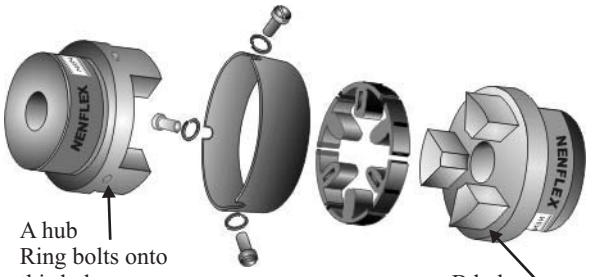
Part No.	Bore Max	Taper Bush Size	A	B	C	D	R*	Collar O.D.
N/SWN100	28.0	1108	65.0	66.0	24.0	64.0	29.0	77.0
N/SWN110	32.0	1210	85.0	76.0	27.0	84.0	38.0	96.0
N/SWN150	32.0	1210	96.0	79.0	27.0	94.0	38.0	111.0
N/SWN190	42.0	1610	115.0	79.0	27.0	114.0	38.0	128.0
N/SWN225	50.0	2012	127.0	93.0	34.0	125.0	42.0	141.0

* R = Minimum clearance required to remove taper bush.

JAW TYPE 'CWN' COUPLING

'CWN' TYPE

Shaft to shaft jaw coupling with
T-Insert elements and retaining collar. For higher power requirements than N or SWN series.



A hub
Ring bolts onto this hub

B hub
Ring sits on step of this hub

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm) Rubber Black 80 Sh A	Polyurethane Yellow 80 Sh A	Polyurethane Red 90 Sh A	Normal Maximum Speed (RPM)
CWN226	65.0	3.560	340.0	425.0	510.0	4200
CWN276	75.0	5.660	540.0	675.0	810.0	4200
CWN280	75.0	9.010	860.0	1075.0	1290.0	3000
CWN295	90.0	13.610	1300.0	1625.0	1950.0	2300
CWN2955	100.0	23.040	2200.0	2750.0	3300.0	2300
CWN300	100.0	31.940	3050.0	3800.0	4575.0	2100
CWN350	115.0	45.290	4325.0	5100.0	5740.0	1800

Power at 100 RPM based on Rubber 80 Shore A (Black)

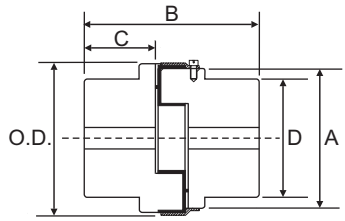
CWN / CWS T-Insert

Special T-Insert designed for ease of installation and removal.

CWN Element

Available in standard rubber spider upon request..

JAW TYPE 'CWN' COUPLING



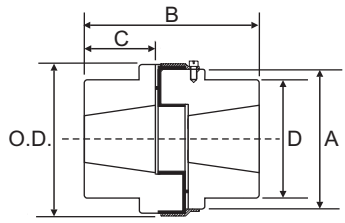
B Hub A Hub

Part No.	Bore		A	B	C	D	Collar
	Min	Max					O.D.
CWN226	25.0	65.0	137.0	178.0	70.0	115.0	143.0
CWN276	30.0	75.0	157.0	200.0	80.0	127.0	163.0
CWN280	30.0	75.0	194.0	200.0	80.0	140.0	200.0
CWN295	40.0	90.0	239.0	238.0	95.0	160.0	246.0
CWN2955	50.0	100.0	239.0	264.0	108.0	180.0	246.0
CWN300	50.0	100.0	258.0	283.0	115.0	180.0	266.0
CWN350	50.0	115.0	309.0	309.0	128.0	200.0	317.0

CWN226-CWN295 - Set of 6 T-Inserts
CWN2955-CWN350 - Set of 10 T-Inserts

Complete CWN Coupling consists of:
1 - A hub with tapped holes
1 - B Hub with step on O.D.
1 - Collar with screws
1 - Set of T-Inserts.

HUBS TO SUIT TAPERED BUSHES



Hub Type J Hub Type H

Couplings can comprise of any combination of H type or J Type hubs.

Part No.	Bore Max	Taper Bush Size	A	B	C	D	R*	Collar O.D.
CWN226	50.0	2012	137.0	106.0	34.0	115.0	48.0	143.0
CWN276	60.0	2517	157.0	134.0	47.0	127.0	48.0	163.0
CWN280	60.0	2517	194.0	134.0	47.0	140.0	48.0	200.0
CWN295	75.0	3020	239.0	154.0	53.0	160.0	55.0	246.0
CWN2955	75.0	3020	239.0	154.0	53.0	180.0	55.0	246.0
CWN300	75.0	3020	258.0	159.0	53.0	180.0	55.0	266.0
CWN350	90.0	3535	309.0	231.0	89.0	200.0	67.0	317.0

* R = Minimum clearance required to remove taper bush

CWN226-CWN295 - Set of 6 T-Inserts
CWN2955-CWN350 - Set of 10 T-Inserts

NENFLEX®

TORSIONALLY FLEXIBLE COUPLINGS

PERFORMANCE DATA

JAW TYPE 'SWR' COUPLING

'SWR' TYPE

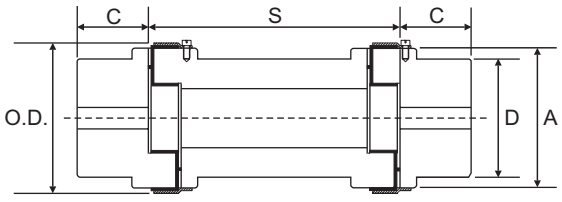
Spacer coupling for shaft to shaft connection. Ideally suited to pump applications, as the spacer can be removed radially, without disturbing driver or driven equipment.

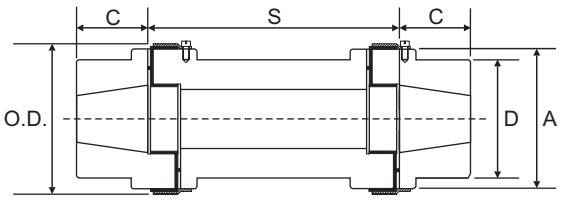
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Rubber	Polyurethane		
			Black	Yellow	Red	
			80 Sh A	80 Sh A	90 Sh A	
SWR095	30.0	0.260	25.0	30.0	40.0	3000
SWR100	38.0	0.630	60.0	75.0	90.0	3000
SWR110	42.0	1.150	110.0	140.0	165.0	3000
SWR150	48.0	1.570	150.0	190.0	225.0	3000
SWR190	55.0	2.090	200.0	250.0	300.0	3000
SWR225	60.0	2.720	260.0	325.0	400.0	3000

Power at 100 RPM based on Rubber 80 Shore A (Black)

Complete SWR Coupling Consists of:
2 - "N" type hubs
1 - Spacer
2 - Wrap around rubbers
2 - Collars with screws

DIMENSIONAL DATA





Part No.	Bore		Taper Bush Size	A	C	D	Collar O.D.	S*
	Min	Max						
SWR095	10.0	30.0	-	54.0	26.0	54.0	64.0	100/140/180
SWR100	10.0	38.0	1108	65.0	34.0	55.0	77.0	100/140/180
SWR110	15.0	42.0	1210	85.0	44.0	75.0	96.0	100/140/180
SWR150	15.0	48.0	1210	96.0	44.0	78.0	111.0	100/140/180
SWR190	20.0	55.0	1610	115.0	55.0	100.0	128.0	100/140/180
SWR225	20.0	60.0	2012	127.0	65.0	106.0	141.0	100/140/180

*S = Spacer lengths

NENFLEX®

TORSIONALLY FLEXIBLE COUPLINGS

JAW TYPE 'CWS' COUPLING

PERFORMANCE DATA

'CWS' TYPE

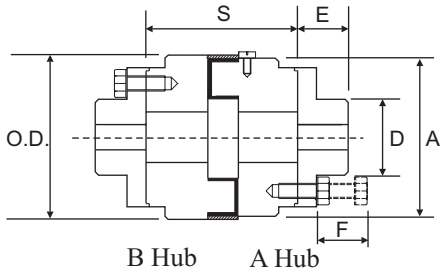
Spacer coupling for shaft to shaft connection. For higher power requirements than SWR series. The spacer can be removed radially, without disturbing driver or driven equipment.

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm) Rubber Black 80 Sh A	Polyurethane Yellow 80 Sh A	Polyurethane Red 90 Sh A	Normal Maximum Speed (RPM)
CWS226	65.0	3.560	340.0	425.0	510.0	4200
CWS276	75.0	5.660	540.0	675.0	810.0	4200
CWS280	75.0	9.010	860.0	1075.0	1290.0	3000
CWS295	90.0	13.610	1300.0	1625.0	1950.0	2300
CWS2955	100.0	23.040	2200.0	2750.0	3300.0	2300
CWS300	100.0	31.940	3050.0	3800.0	4575.0	2100
CWS350	115.0	45.290	4325.0	5100.0	5740.0	1800

Power at 100 RPM based on Rubber 80 Shore A (Black)

Complete CWS Coupling consists of:
1 - A Spacer and Adaptor with tapped holes
1 - B Spacer and Adaptor with step on O.D.
1 - Collar with screws
1 - Set of T-Inserts.

DIMENSIONAL DATA



Part No.	Bore Min	Bore Max	A	D	E	F	Collar O.D.	S*
CWS226	25.0	65.0	137.0	115.0	50.0	92.0	143.0	100/140/180
CWS276	30.0	75.0	157.0	127.0	60.0	107.0	163.0	100/140/180
CWS280	30.0	75.0	194.0	140.0	60.0	70.0	200.0	100/140/180
CWS295	40.0	90.0	239.0	160.0	65.0	80.0	246.0	100/140/180
CWS2955	50.0	100.0	239.0	180.0	80.0	80.0	246.0	100/140/180
CWS300	50.0	100.0	258.0	180.0	90.0	85.0	266.0	100/140/180
CWS350	50.0	115.0	309.0	200.0	90.0	85.0	317.0	140/180

*S = Spacer lengths

TRASCO 'GR' CURVED JAW COUPLING

CURVED JAW

PERFORMANCE DATA

The TRASCO® coupling is a flexible coupling with curved jaw design that has the highest ratio transmitted power/dimension in its category. The construction allows safe power transmission between driver and driven shafts, absorbing impact loads and torsional vibrations. Hubs are stocked in cast iron and aluminium, but also available in steel on request. It is available with both pilot bore, standard hub and long hub series, taper bore and Flange mount. A wide range of elements including Shore hardness of 80A (Blue), 92A (White/Yellow) & 98A (Red) are available across the range. Elements are rated for normal operating temperatures up to 90 °C. TRASCO couplings are available to suit standard British taper bore.

Part No.	Max Bore (A Type)	Max Bore (B Type)	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
				Shore 80 A	Shore 92 A	Shore 98 A	
14	-	14	0.079	4.0	7.5	12.5	19000
19/24	-	24	0.120	5.0	11.5	17.0	14000
24/32	24	32	0.419	17.0	40.0	60.0	10600
28/38	28	38	1.204	46.0	115.0	160.0	8500
38/45	38	45	2.356	93.0	225.0	325.0	7100
42/55	42	55	3.246	130.0	310.0	450.0	6000
48/60	48	60	3.770	150.0	360.0	525.0	5600
55/70	55	70	4.503	180.0	430.0	680.0	4750
65/75	65	75	6.597	205.0	630.0	950.0	4250
75/90	75	90	13.089	475.0	1250.0	1950.0	3550
90/100	90	100	31.937	1175.0	3050.0	3600.0	2800
100/110*	115	-	41.466		3960.0	-	2500
110/125*	125	-	50.262		4800.0	-	2240
125/145*	145	-	62.827		6000.0	-	2000

* White/Yellow element Shore 95 A instead of Shore 92 A
Power at 100 RPM based on White/Yellow element

TAPER BORE SERIES

For dimensional data
see page 16

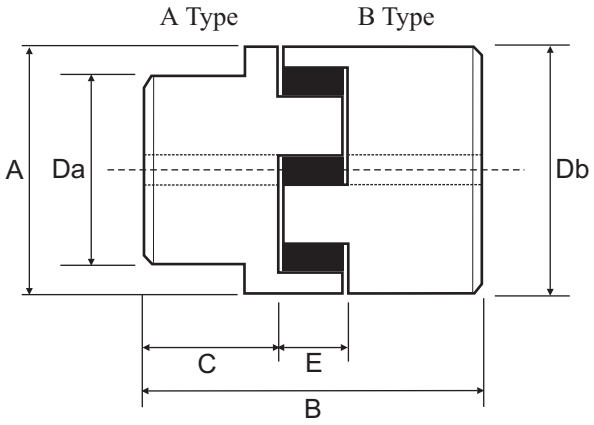
FLANGE SERIES

For dimensional data
see page 16

TRASCO 'GR' CURVED JAW COUPLING

DIMENSIONAL DATA

STANDARD



STANDARD AND LONG SERIES

Part No.	Bore A Type Min	Bore A Type Max	Bore B Type Min	Bore B Type Max	A	B Std	C Std	C Type A Long	C Type B Long	Da	Db	E
14	-	-	-	14.0	30.0	35.0	11.0	-	-	-	30.0	13.0
19/24	-	-	-	24.0	40.0	66.0	25.0	-	50.0	-	40.0	16.0
24/32	-	24.0	-	32.0	55.0	78.0	30.0	50.0	60.0	40.0	55.0	18.0
28/38	-	28.0	-	38.0	65.0	90.0	35.0	60.0	80.0	48.0	65.0	20.0
38/45	-	38.0	-	45.0	80.0	114.0	45.0	80.0	110.0	66.0	80.0	24.0
42/55	-	42.0	-	55.0	95.0	126.0	50.0	110.0	110.0	75.0	95.0	26.0
48/60	-	48.0	45.0	60.0	105.0	140.0	56.0	110.0	140.0	85.0	105.0	28.0
55/70	-	55.0	47.0	70.0	120.0	160.0	65.0	110.0	140.0	98.0	120.0	30.0
65/75	-	65.0	55.0	75.0	135.0	185.0	75.0	140.0	140.0	115.0	135.0	35.0
75/90	-	75.0	50.0	90.0	160.0	210.0	85.0	140.0	170.0	135.0	160.0	40.0
90/100*	89.0	90.0	79.0	100.0	200.0	245.0	100.0	170.0	210.0	160.0	180.0	45.0
100/110	42.0	115.0	-	-	225.0	270.0	110.0	-	-	180.0	-	50.0
110/125	55.0	125.0	-	-	225.0	295.0	120.0	-	-	200.0	-	55.0
125/145	65.0	145.0	-	-	290.0	340.0	140.0	-	-	230.0	-	60.0

* Stepped B Hub

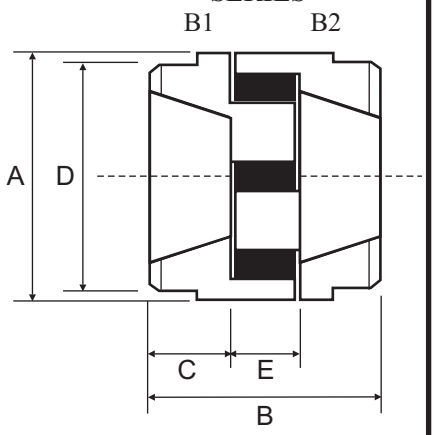
TRASCO 'GR' CURVED JAW COUPLING

DIMENSIONAL DATA

TAPER BORE SERIES

Part No.	Bore		Taper	A	B	C	D	E
	Min	Max	Bush Size					
28/38	9.5	28.0	1108	65.0	66.0	23.0	65.0	20.0
38/45	9.5	28.0	1108	80.0	70.0	23.0	78.0	24.0
42/55	12.0	42.0	1610	95.0	78.0	26.0	94.0	26.0
48/60	12.0	42.0	1615	105.0	106.0	39.0	104.0	28.0
55/70	16.0	50.0	2012	120.0	96.0	33.0	118.0	30.0
65/75	16.0	50.0	2012	135.0	101.0	33.0	133.0	35.0
75/90	19.0	60.0	2517	160.0	130.0	45.0	158.0	40.0
90/100	35.0	90.0	3535	200.0	223.0	89.0	180.0	45.0

TAPER BORE SERIES

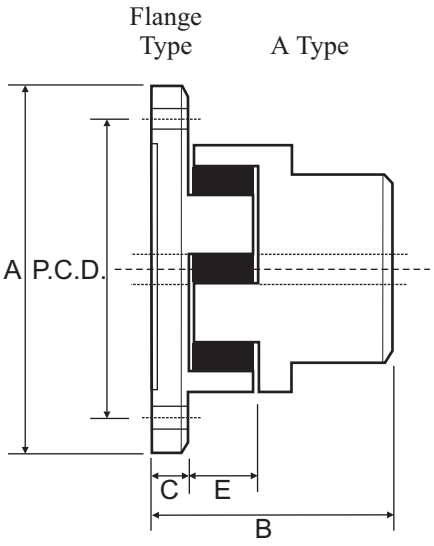


DIMENSIONAL DATA

FLANGE SERIES

FLANGE SERIES

Part No.	Bore		A	B	C	E	P.C.D.	Bolts / Hole
	Min	Max						
19	6.0	19.0	65.0	49.0	8.0	16.0	50.0	5 x 4.5
24	8.0	24.0	80.0	56.0	8.0	18.0	65.0	5 x 4.5
28	10.0	28.0	100.0	65.0	10.0	20.0	80.0	6 x 6.5
38	12.0	38.0	115.0	79.0	10.0	24.0	95.0	6 x 6.5
42	14.0	42.0	140.0	88.0	12.0	26.0	115.0	6 x 9.0
48	15.0	48.0	150.0	96.0	12.0	28.0	125.0	8 x 9.0
55	20.0	55.0	175.0	111.0	16.0	30.0	145.0	8 x 11.0
65	22.0	65.0	190.0	126.0	16.0	35.0	160.0	10 x 11.0
75	30.0	75.0	215.0	144.0	19.0	40.0	185.0	10 x 14.0
90	40.0	90.0	260.0	165.0	20.0	45.0	225.0	12 x 14.0



SITEX COUPLING

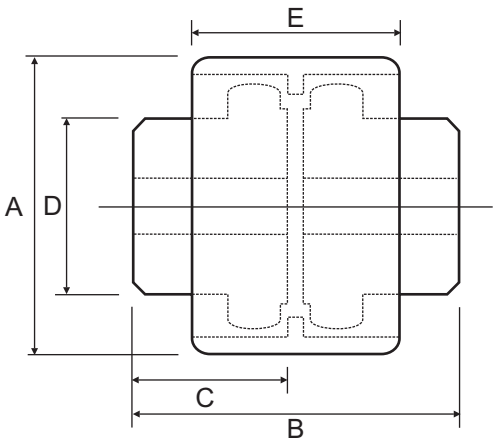
SITEX

The Sitex coupling is a gear coupling that uses two steel hubs and a superpolyamide resin sleeve. The combination of steel hubs with polyamide sleeve makes the coupling maintenance and lubrication free. Sitex couplings match the Industry Standard so they are interchangeable with many other brands.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
0.5/14	14.0	0.105	10.0	14000
19	19.0	0.168	16.0	11800
2/24	24.0	0.220	21.0	10500
3.5/28	28.0	0.471	45.0	8500
5/32	32.0	0.628	60.0	7600
6.5/38	38.0	0.848	81.0	6700
8/42	42.0	1.047	100.0	6000
12/48	48.0	1.487	142.0	5580
30/65	65.0	3.979	380.0	4000
40/80	80.0	7.330	700.0	3100

DIMENSIONAL DATA



Part No.	Bore		A	B	B1*	C	C1*	D	E
	Min	Max							
0.5/14	-	14.0	40.0	50.0	64.0	23.0	30.0	24.5	37.0
19	-	19.0	48.0	54.0	-	25.0	-	30.0	37.0
2/24	-	24.0	52.0	56.0	104.0	26.0	50.0	35.0	41.0
3.5/28	-	28.0	66.0	84.0	124.0	40.0	60.0	43.0	46.0
5/32	-	32.0	76.0	84.0	124.0	40.0	60.0	50.0	48.0
6.5/38	-	38.0	83.0	84.0	164.0	40.0	80.0	58.0	48.0
8/42	-	42.0	92.0	88.0	224.0	42.0	110.0	65.0	50.0
12/48	-	48.0	100.0	104.0	224.0	50.0	110.0	68.0	50.0
30/65	-	65.0	140.0	144.0	284.0	70.0	140.0	96.0	72.0
40/80	-	80.0	175.0	186.0	-	90.0	-	124.0	93.0

*B1 & *C1 These dimensions are for the long hubs.

CENTAFLEX ‘A’ COUPLING

CENTAFLEX ‘A’

The 'A' series coupling consists of two steel hubs and a pre-stressed polygon shaped rubber element with metal parts vulcanised. The high quality element, which is extremely flexible in any direction, can be used for almost any purpose. This coupling is available in either a three or four bolt design, and is also available in many styles. (Refer to drawings)

- Simple, compact, smooth face design
- High performance, high speed range
- Good shock & vibration absorbing
- Requires no maintenance
- No axial reaction forces

PERFORMANCE DATA

Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Hub	Flange	kW	(Nm)	(RPM)
CFA001	19.0	25.0	0.105	10.0	10000
CFA002	26.0	38.0	0.209	20.0	8000
CFA004	30.0	45.0	0.524	50.0	7000
CFA008	38.0	55.0	1.047	100.0	6500
CFA012	38.0	55.0	1.466	140.0	6500
CFA016	48.0	70.0	2.094	200.0	6000
CFA022	48.0	70.0	2.880	275.0	6000
CFA025	55.0	85.0	3.298	315.0	5000
CFA028	55.0	85.0	4.398	420.0	5000
CFA030	65.0	100.0	5.236	500.0	4000
CFA050	65.0	100.0	7.330	700.0	4000
CFA080	65.0	100.0	9.424	900.0	4000
CFA090	85.0	110.0	11.518	1100.0	3600
CFA140	85.0	110.0	17.801	1700.0	3600
CFA250	115.0	130.0	31.414	3000.0	3000

CENTAFLEX 'A' COUPLING

DIMENSIONAL DATA

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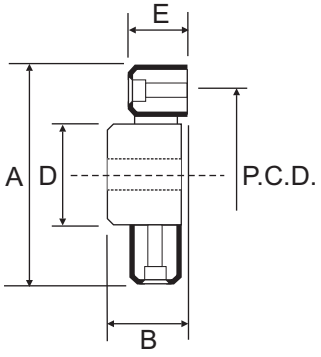

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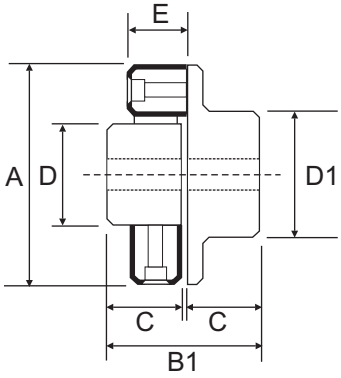

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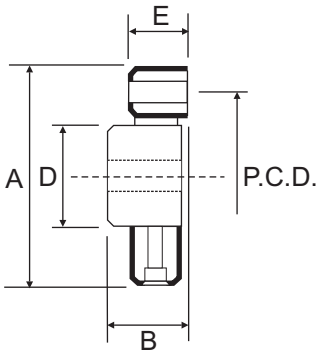

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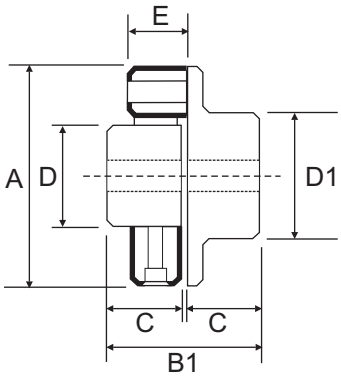


Part No.	Bore			A	B	B1	C	D	D1	E	PCD	No.
	Min Hub	Max Hub	Max Flange									Bolts
CFA001	8.0	19.0	25.0	56.0	26.0	50.0	24.0	30.0	36.0	24.0	44.0	2
CFA002	10.0	26.0	38.0	85.0	32.0	60.0	28.0	40.0	55.0	24.0	68.0	2
CFA004	12.0	30.0	45.0	100.0	34.0	64.0	30.0	45.0	65.0	28.0	80.0	3
CFA008	12.0	38.0	55.0	120.0	46.0	88.0	42.0	60.0	80.0	32.0	100.0	3
CFA012	12.0	38.0	55.0	122.0	46.0	88.0	42.0	60.0	80.0	32.0	100.0	4
CFA016	15.0	48.0	70.0	150.0	56.0	106.0	50.0	70.0	100.0	42.0	125.0	3
CFA022	15.0	48.0	70.0	150.0	56.0	106.0	50.0	70.0	100.0	42.0	125.0	4
CFA025	15.0	55.0	85.0	170.0	61.0	116.0	55.0	85.0	115.0	46.0	140.0	3
CFA028	15.0	55.0	85.0	170.0	61.0	116.0	55.0	85.0	115.0	46.0	140.0	4
CFA030	20.0	65.0	100.0	200.0	74.0	140.0	66.0	100.0	140.0	58.0	165.0	3
CFA050	20.0	65.0	100.0	200.0	74.0	140.0	66.0	100.0	140.0	58.0	165.0	4
CFA080	20.0	65.0	100.0	205.0	75.5	141.5	66.0	100.0	140.0	65.0	165.0	4
CFA090	30.0	85.0	110.0	260.0	88.0	168.0	80.0	125.0	160.0	70.0	215.0	3
CFA140	30.0	85.0	110.0	260.0	88.0	168.0	80.0	125.0	160.0	70.0	215.0	4
CFA250	40.0	115.0	130.0	340.0	108.0	208.0	100.0	160.0	195.0	85.0	280.0	4

CENTAFLEX 'B' COUPLING

CENTAFLEX 'B'

The 'B' series coupling provides an economical flexible shaft coupling transmitting up to 1400Nm torque, a great all round coupling. The element is available in two designs, polyurethane (green) & hytrel (ivory).

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
			Polyurethane	Hytrel	
CFB072	30.0	0.335	32.0	45.0	10000
CFB076	30.0	0.660	63.0	90.0	9000
CFB098	38.0	1.309	125.0	175.0	7500
CFB120	48.0	2.618	250.0	350.0	6000
CFB138	55.0	4.188	400.0	560.0	5000
CFB165	65.0	6.283	600.0	850.0	4000
CFB185	80.0	10.471	1000.0	1400.0	3600

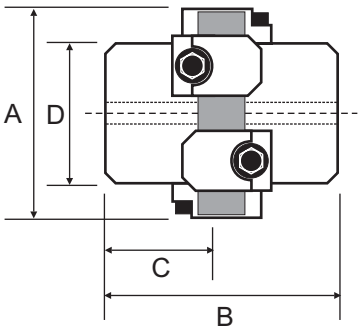
Power at 100 RPM is based on Polyurethane (Green)

PERFORMANCE DATA

- Compact, light, robust design
- Dampens vibrations & shocks
- Compensates for axial, radial and angular misalignment.

DIMENSIONAL DATA

Part No.	Bore		A	B	C	D
	Min	Max				
CFB072	9.0	30.0	72.0	62.0	28.0	50.0
CFB076	12.0	30.0	76.0	66.0	30.0	50.0
CFB098	12.0	38.0	98.0	90.0	42.0	61.0
CFB120	15.0	48.0	120.0	106.0	50.0	71.0
CFB138	15.0	55.0	138.0	116.0	55.0	86.0
CFB165	20.0	65.0	165.0	138.0	65.0	100.0
CFB185	30.0	80.0	185.0	170.0	80.0	115.0



NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

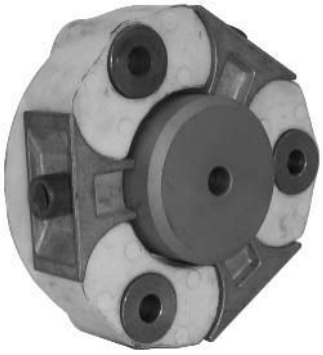
CENTAFLEX 'H' COUPLING

CENTAFLEX 'H'

The 'H' series coupling is a torsionally stiff design that is the perfect solution to problems associated with Diesel-Hydraulic couplings. The hub and flange is the same as the 'A' series Centaflex coupling.

Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Hub	Flange	kW	(Nm)	(RPM)
CFH008	38.0	55.0	1.047	100.0	6500
CFH016	48.0	70.0	2.094	200.0	5500
CFH025	55.0	83.0	3.665	350.0	5000
CFH030	65.0	110.0	5.236	500.0	4000
CFH050	65.0	100.0	8.377	800.0	4000
CFH090	65.0	100.0	9.948	950.0	4000
CFH110	63.0	-	12.565	1200.0	4000
CFH140	85.0	110.0	16.754	1600.0	3600

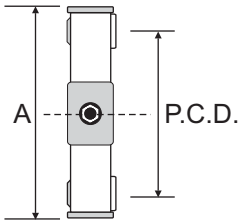
PERFORMANCE DATA



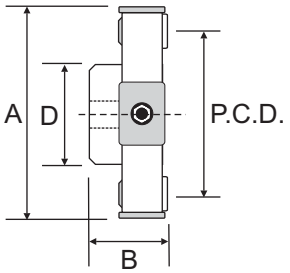
- High speed
- Extremely high thermal stability -50 to +150C
- Oil resistant

DIMENSIONAL DATA

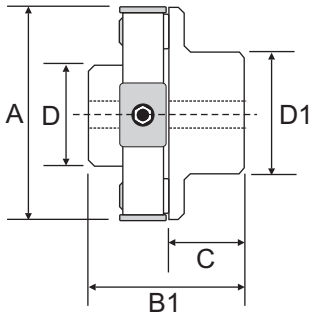
TYPE 0



TYPE 1



TYPE 2



Part No.	Bore			A	B	B1	C	D	D1	PCD	No. Bolts
	Min Hub	Max Hub	Max Flange								
CFH008	12.0	38.0	55.0	125.0	48.0	90.0	42.0	60.0	80.0	100.0	3
CFH016	15.0	48.0	70.0	155.0	58.0	108.0	50.0	70.0	100.0	125.0	3
CFH025	15.0	55.0	85.0	182.0	62.0	117.0	55.0	85.0	115.0	140.0	3
CFH030	20.0	65.0	100.0	205.0	76.0	142.0	66.0	100.0	140.0	165.0	3
CFH050	20.0	65.0	100.0	205.0	76.0	142.0	66.0	100.0	140.0	165.0	4
CFH090	20.0	65.0	100.0	215.0	76.0	142.0	66.0	100.0	140.0	165.0	4
CFH110	20.0	63.0	-	230.0	76.0	-	66.0	100.0	-	180.0	4
CFH140	30.0	85.0	110.0	270.0	88.0	168.0	80.0	125.0	160.0	215.0	4

CENTAFLEX 'D' COUPLING

CENTAFLEX 'D'

The 'D' series are very reliable, well-proven couplings for generator sets, centrifugal pump sets and other similar drives. This range was purposely designed for Diesel driven generators and similar drives. The 'D' series couplings comprise six design sizes for nominal torques from 250Nm to 20,000Nm. This range will in practice cater for all diesel engines from 3 cylinders upwards to include ratings up to 2,500kW at 1500 RPM.

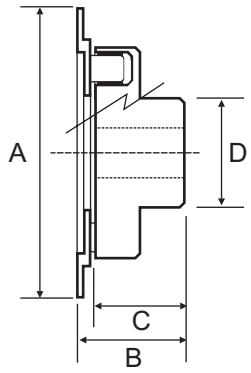
PERFORMANCE DATA

Part No.	Max Bore Hub	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Shore 50 A	Shore 60 A	Shore 75 A	
CFD160	60.0	2.932	280.0	400.0	600.0	6200
CFD198	75.0	5.864	560.0	800.0	1200.0	5000
CFD220	85.0	13.089	1250.0	1600.0	2500.0	4500
CFD275	100.0	26.178	2500.0	3200.0	5000.0	3600
CFD350	130.0	52.356	5000.0	6400.0	10000.0	2800

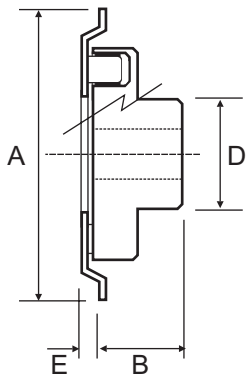
Power at 100 RPM is based on Shore 50

DIMENSIONAL DATA

TYPE 1



TYPE 2



Part No.	SAE J620	Style	Bore Min	Bore Max	A	B	C	D	E
CFD-160-*-8-110	8"	1	-	60.0	263.5	110.0	92.0	90.0	-
CFD-160-*-10-110	10"	1	-	60.0	314.3	110.0	92.0	90.0	-
CFD-160-*-11-96	11.1/2"	2	-	60.0	352.4	96.0	92.0	90.0	10.0
CFD-198-*-10-121	10"	2	-	75.0	314.3	121.0	82.0	115.0	2.0
CFD-198-*-11-131	11.1/2"	1	-	75.0	352.4	131.0	106.0	115.0	-
CFD-220-*-11-147	11.1/2"	1	-	85.0	352.4	147.0	122.0	124.0	-
CFD-220-*-14-133	14"	2	-	85.0	466.7	133.0	122.0	124.0	6.0
CFD-275-*-11-167	11.1/2"	1	-	100.0	352.4	167.0	142.0	145.0	-
CFD-275-*-14-153	14"	2	-	100.0	466.7	153.0	142.0	145.0	6.0
CFD-350-*-14-153	14"	2	65.0	130.0	466.7	153.0	150.0	192.0	15.0

* Insert shore hardness here
This is a selection of the most popular sizes, if your coupling does not match please contact Naismith Engineering.

CENTAFLEX ‘E’ COUPLING

CENTAFLEX ‘E’

The 'E' series coupling is very similar to the 'D' series but has been designed to be mounted shaft to shaft on electric motor applications.

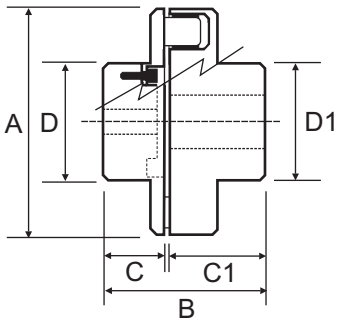
Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Hub mm	Flange mm	kW	(Nm)	(RPM)
CFE160	60.0	70.0	6.283	600	6200
CFE198	75.0	85.0	12.565	1200	5000
CFE220	85.0	100.0	26.178	2500	4500
CFE275	100.0	120.0	52.356	5000	3600
CFE350	130.0	125.0	104.712	10000	2800

PERFORMANCE DATA

- Simple, rubust, safe in operation, compact, fail safe
- Damps vibration and shock loads
- Accepts axial, angular & radial misalignment.

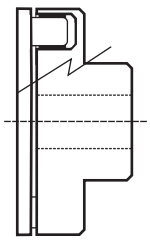
DIMENSIONAL DATA

TYPE 2

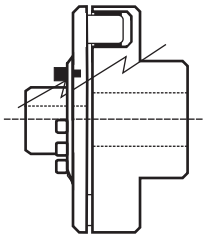


Type 2 is the most popular type for Centaflex couplings. Type 1 & 3 are also available, contact Naismith Engineering for more information.

TYPE 1



TYPE 3



Part No.	Bore				A	B	C	C1	D	D1
	Min Hub	Max Hub	Min Flange	Max Flange						
CFE-160-2-120	-	60.0	-	70.0	160.0	120.0	55.0	55.0	100.0	90.0
CFE-160-2-157	-	60.0	-	70.0	160.0	157.0	55.0	92.0	100.0	90.0
CFE-198-2-147	-	75.0	-	85.0	198.0	147.0	55.0	82.0	120.0	115.0
CFE-198-2-171	-	75.0	-	85.0	198.0	171.0	55.0	106.0	120.0	115.0
CFE-220-2-162	-	85.0	-	100.0	220.0	162.0	70.0	82.0	140.0	124.0
CFE-220-2-202	-	85.0	-	100.0	220.0	202.0	70.0	122.0	140.0	124.0
CFE-275-2-174	-	100.0	-	120.0	275.0	174.0	82.0	82.0	170.0	145.0
CFE-275-2-234	-	100.0	-	120.0	275.0	234.0	82.0	142.0	170.0	145.0
CFE-350-2-225	65.0	130.0	50.0	125.0	350.0	225.0	120.0	90.0	200.0	192.0
CFE-350-2-225	65.0	130.0	50.0	125.0	350.0	285.0	120.0	150.0	200.0	192.0

Dimensions based on TYPE 2 coupling

S-FLEX COUPLING

S-FLEX

The simple design of the S-Flex coupling ensures ease of assembly and reliable performance. No special tools are needed for installation or removal. S-Flex couplings can be used in a wide variety of applications. The S-Flex coupling is comprised of three parts:- two flanges with internal teeth which engage an elastomeric flexible sleeve with external teeth. It is available in pilot bore, taper bore and also as a spacer coupling.

- No metal to metal contact.
- Resistant to oil, dirt, sand, moisture and grease.
- Dampens vibrations and controls shock.
- Torsionally soft.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM	Nominal Torque (Nm)			Normal Maximum Speed
		kW	EDPM	Neoprene	Hytrel	(RPM)
3J	22.2	0.071	6.8	6.8	-	9200
4J	25.4	0.142	13.6	13.6	-	7600
5S	30.2	0.284	27.1	27.1	-	7600
6S/TF/TR	36.5	0.532	50.8	50.8	203.4	6000
7S/TF/TR	41.3	0.858	81.9	81.9	324.8	5250
8S/TF/TR	49.2	1.343	128.2	128.2	511.8	4500
9S/TF/TR	60.3	2.130	203.4	203.4	813.5	3750
10S/TF/TR	69.9	3.401	324.8	324.8	1282.4	3600
11S/TF/TR	85.7	5.359	511.8	511.8	2033.7	3600
12S/TF/TR	98.4	8.518	813.5	813.5	3559.0	2800
13S	114.3	13.428	1282.4	1282.4	5340.6	2400
14S	127.0	21.296	2033.7	2033.7	8189.2	2200
16S	139.7	55.901	5338.5	-	-	1500

Power at 100 RPM rating is based on EPDM Sleeve.
Normal Maximum Speed is identical for all element materials.

SLEEVE MATERIALS

EPDM - EPDM has good resistance to commonly used chemicals and is generally not affected by dirt or moisture. Normally standard. 15° wind up at the rated torque. Color is black.

NEOPRENE - Neoprene provides very good performance characteristics for most applications and offers a very good resistance to chemical and oil conditions. 15° wind up at the rated torque. Color is black with a green dot.

HYTREL - Hytrel is a polyester elastomer designed for high torque and high temperature applications and offers excellent resistance to chemical and oil conditions. 7° wind up at the rated torque. Color is orange.

SLEEVE TYPES

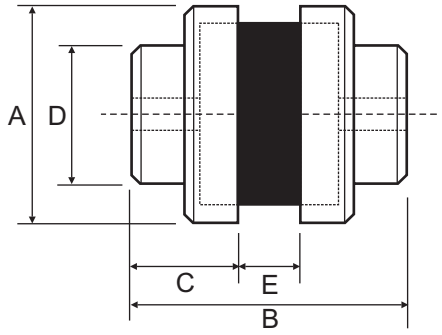
JE, JN, JES, JNS - These sleeves feature a one-piece design molded in EDPM & Neoprene rubber. In the case of JES & JNS Types, the one-piece design is split to provide for ease of installation and removal.

E, N - These sleeves feature a two-piece design with retaining ring. The E Type is molded in EDPM rubber and the N Type is molded in Neoprene. The two-piece design is ideal for applications where there is difficulty in separating the shafts of the driver and driven

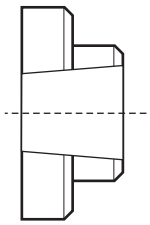
H, HS - These sleeves feature both a one-piece solid (H) and two-piece split (HS) design and are molded in Hytrel. The sleeves in Hytrel material are designed to transmit power for high torque applications. Because of the design and the properties of the Hytrel molded sleeve, the H and HS sleeves should not be used as direct replacements for EDPM or Neoprene sleeves, and can only be used with S, TF, or SC flanges.

S-FLEX COUPLING

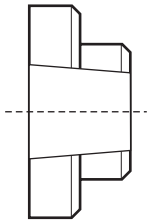
DIMENSIONAL DATA



STANDARD TAPER



REVERSE TAPER



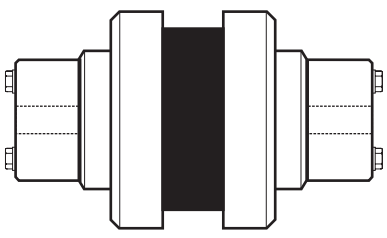
Part No.	Bore		Taper Bores		A	B	C	D	E
	Min	Max	Standard	Reverse					
3J	9.5	22.2	-	-	52.4	50.8	20.8	38.1	9.7
4J	12.7	25.4	-	-	62.5	60.5	22.4	41.4	16.0
5S	12.7	30.2	-	-	82.6	71.4	26.4	47.8	19.1
6S/TF/TR	15.9	36.5	1215	1008	101.6	88.9	33.3	63.5	22.4
7S/TF/TR	15.9	41.3	1215	1108	117.5	100.1	37.3	71.4	25.4
8S/TF/TR	19.1	49.2	1615	1215	138.4	111.5	41.4	82.6	28.7
9S/TF/TR	22.2	60.3	2012	1615	161.3	128.5	46.0	92.2	36.6
10S/TF/TR	28.6	69.9	2517	1615	190.5	144.5	51.6	111.3	41.4
11S/TF/TR	31.8	85.7	2517	2525	219.1	181.1	66.8	133.4	47.8
12S/TF/TR	38.1	98.4	3030	2517	254.0	209.6	75.4	124.0	58.7
13S	50.8	114.3	-	-	298.5	235.0	83.3	171.5	68.3
14S	50.8	127.0	-	-	352.4	251.0	84.1	190.5	82.6
16S	50.8	139.7	-	-	479.4	368.3	120.7	203.2	120.7

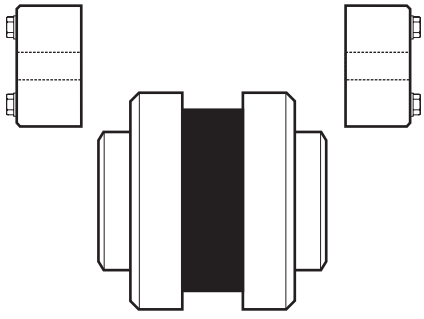
E = Gap between hubs not element length.

SPACER TYPE

SC SPACER COUPLING

Specially designed for the pump industry, this coupling accommodates industry standard as well as special pump/motor shaft separation. This shaft separation facilitates easy repair of pump packing, bearings and seals without disturbing pump or motor mounting and alignment. The SC coupling consists of two flanges, a sleeve and two shaft hubs,





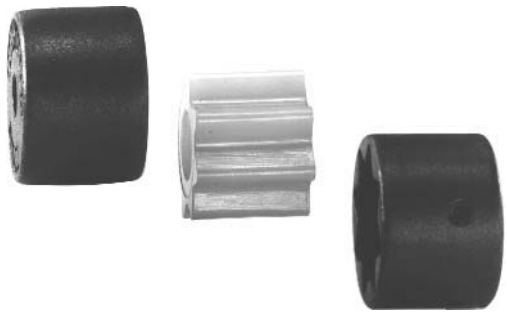
MINI SOFT COUPLING

MINI SOFT

The Mini Soft miniature coupling from Lovejoy provides protection from misalignment, vibration and shock loads. The simple design of the coupling ensures ease of assembly, installation and reliable performance. No special tools are needed for installation or removal. No lubrication is needed and once installed and aligned correctly, no maintenance is required.

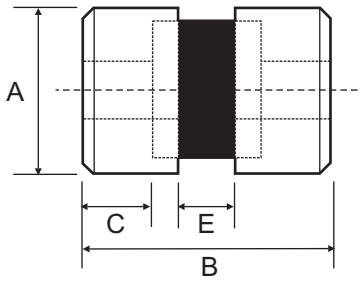
- Multiple tooth contact, low load per tooth.
- Good axial freedom.
- Good dampening capacity.
- Good torsional stiffness.
- High speed capability.

PERFORMANCE DATA



Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
MSF-16	8.0	0.005	0.5	24000
MSF-20	10.0	0.010	1.0	19000
MSF-25	12.0	0.016	1.5	15000
MSF-32	14.0	0.031	3.0	12000

DIMENSIONAL DATA



Part No.	Bore		A	B	C	E
	Min	Max				
MSF-16	3.3	8.0	16.0	27.0	8.0	3.0
MSF-20	4.8	10.0	20.0	34.0	10.0	4.0
MSF-25	6.4	12.0	25.0	41.0	12.0	5.0
MSF-32	7.9	14.0	32.0	48.0	14.0	6.0

E = Gap between hubs not element length.

OLDHAM COUPLING

OLDHAM

PERFORMANCE DATA

The Lovejoy Oldham coupling is a precision engineered, torsionally stiff, three part coupling suitable for a great many applications ranging from incremental control of fluid valves to highly dynamic drives in a closed loop servo system. It accommodates misalignment mechanically through a floating disc that engages tenons machined out of the hubs. Under severe overload the element will break cleanly, and act as a mechanical fuse to protect equipment.

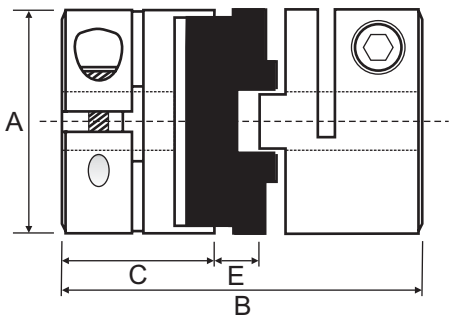
- Positive engagement.
- Good parallel misalignment capacity.
- Vibration damping ability
- Easy to install

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Set Screw Style				
MOL-16	6.0	0.007	0.7	24.0
MOL-20	8.0	0.013	1.2	19.0
MOL-25	10.0	0.021	2.0	15.0
MOL-32	14.0	0.047	4.5	12.0
Clamp Style				
MOL-16C	6.0	0.007	0.7	9.5
MOL-20C	8.0	0.013	1.2	7.6
MOL-25C	10.0	0.021	2.0	6.1
MOL-32C	14.0	0.047	4.5	4.8

DIMENSIONAL DATA

Part No.	Bore		A	B	C	E
	Min	Max				
Set Screw Style						
MOL-16	-	6.0	16.0	18.0	7.0	4.0
MOL-20	-	8.0	20.0	23.0	9.0	5.0
MOL-25	-	10.0	25.0	28.0	11.0	6.0
MOL-32	-	14.0	32.0	33.0	13.0	7.0
Clamp Style						
MOL-16C	-	6.0	16.0	29.0	12.5	4.0
MOL-20C	-	8.0	20.0	33.0	14.0	5.0
MOL-25C	-	10.0	25.0	39.0	16.5	6.0
MOL-32C	-	14.0	32.0	45.0	19.0	7.0

E = Gap between hubs not element length.



Lovejoy

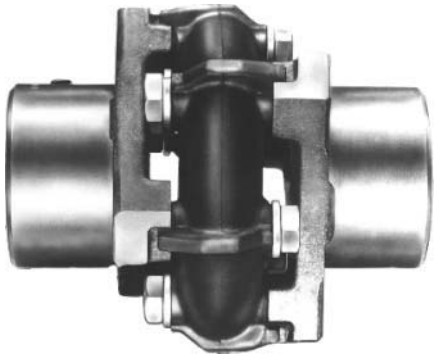
SAGA COUPLING

SAGA

Saga is a general purpose torsionally soft coupling with high tolerance to all forms of misalignment. The rubber between each apex is precompressed, so it is much more durable to the stresses arising from the various forms of misalignment and torsional vibrations.

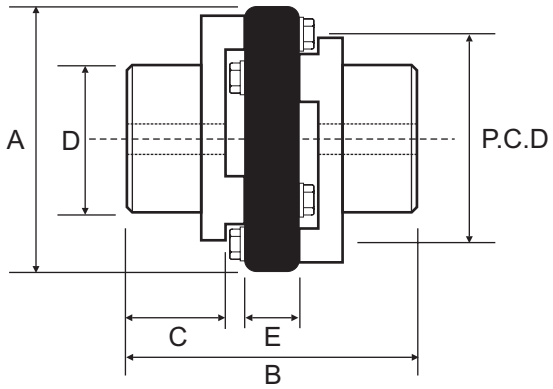
- No end thrust in misalignment position.
- Absorbs misalignment and shock.
- No axial reaction force.

PERFORMANCE DATA



Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
S-11	30.2	0.419	40.0	10000
S-13	35.0	0.712	68.0	8400
S-15	47.6	1.183	113.0	7000
S-18	57.1	2.366	226.0	5600
S-22	63.5	3.550	339.0	5000
S-26	73.2	5.916	565.0	4000
S-30	85.9	8.283	791.0	3500
S-34	101.6	14.199	1356.0	2800
S-40	120.7	23.665	2260.0	2200

DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	E	P.C.D.	No. Bolts
	Min	Max							
S-11	15.9	30.2	90.4	115.8	38.1	46.7	26.9	65.0	6
S-13	19.1	35.0	108.7	132.6	44.5	57.2	31.0	77.7	6
S-15	22.2	47.6	129.3	162.8	54.1	73.2	38.9	93.7	6
S-18	25.4	57.1	159.5	189.0	63.5	87.4	46.0	115.8	6
S-22	25.4	63.5	185.7	220.7	76.2	98.6	52.3	132.1	6
S-26	38.1	73.2	219.2	251.0	85.9	116.6	60.5	157.5	6
S-30	41.3	85.9	244.6	289.1	98.6	134.9	66.8	176.3	6
S-34	54.0	101.6	281.7	321.6	110.2	158.8	74.9	209.6	8
S-40	57.1	120.7	339.9	376.2	127.0	190.5	90.4	254.0	8

JUBOFLEX COUPLING

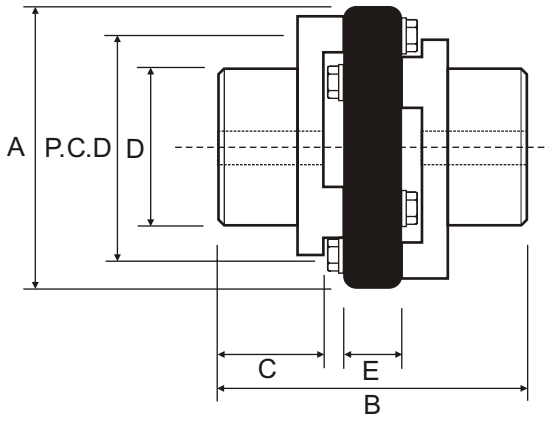
JUBOFLEX

The Juboflex coupling consists of two steel hubs and a precompressed natural rubber element. The four smaller sizes come to suit taper bushes and the other four are pilot bore. The coupling has excellent damping properties and can take high misalignment.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
GJ4	28.0	0.419	40	6000
GJ9	32.0	0.942	90	5000
GJ16	42.0	1.675	160	4500
GJ25	50.0	2.618	250	3500
GJ35	70.0	3.665	350	3000
GJ50	75.0	5.236	500	2800
GJ70	80.0	7.330	700	2400
GJ120	100.0	12.565	1200	2400

DIMENSIONAL DATA



Part No.	Bush Size	Bore Min	Bore Max	A	B	C	D	E	P.C.D.	No. Bolts
GJ4	1108	9.5	28.0	91.0	74.0	20.0	48.0	28.0	65.0	6.0
GJ9	1210	12.0	32.0	117.0	90.0	25.0	60.0	32.0	85.0	6.0
GJ16	1610	12.0	42.0	142.0	106.0	25.0	70.0	46.0	100.0	6.0
GJ25	2012	16.0	50.0	181.0	121.0	30.0	95.0	61.0	132.0	6.0
GJ35	-	-	70.0	202.0	284.0	109.0	105.0	54.0	150.0	6.0
GJ50	-	-	75.0	232.0	322.0	124.0	115.0	62.0	170.0	6.0
GJ70	-	-	80.0	263.0	346.0	133.0	122.0	68.0	190.0	6.0
GJ120	-	60.0	100.0	280.0	486.0	172.0	156.0	78.0	210.0	8.0

CONE RING TYPE COUPLING

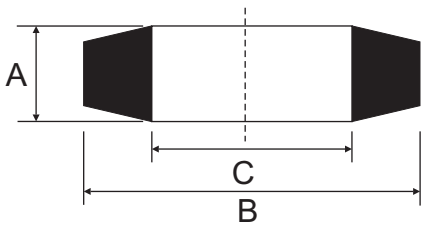
CONE RING TYPE

The Cone Ring type coupling is very popular. Naismith Engineering stock a full range of Cone Ring type couplings in pilot bore and taper bore. Replacement rings are also available. The flexible element consists of tapered rubber rings mounted on steel pins. These rings absorb commonly encountered misalignment, shock and vibration.

PERFORMANCE DATA

Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Pin Hub	Bush Hub	kW	(Nm)	(RPM)
KX030	38.0	32.0	1.160	111.0	4500
KX038	42.0	38.0	1.850	177.0	4300
KX042	48.0	42.0	2.820	269.0	3900
KX048	55.0	48.0	4.890	467.0	3300
KX058	65.0	58.0	7.550	721.0	2900
KX070	75.0	70.0	10.720	1024.0	2600
KX075	80.0	75.0	25.680	2452.0	2200
KX085	105.0	85.0	35.500	3390.0	2000
KX105	120.0	105.0	53.240	5084.0	1730
KX120	130.0	120.0	88.730	8474.0	1570
KX135	135.0	135.0	120.600	11520.0	1360
KX150	150.0	150.0	158.500	15140.0	1250

DIMENSIONAL DATA



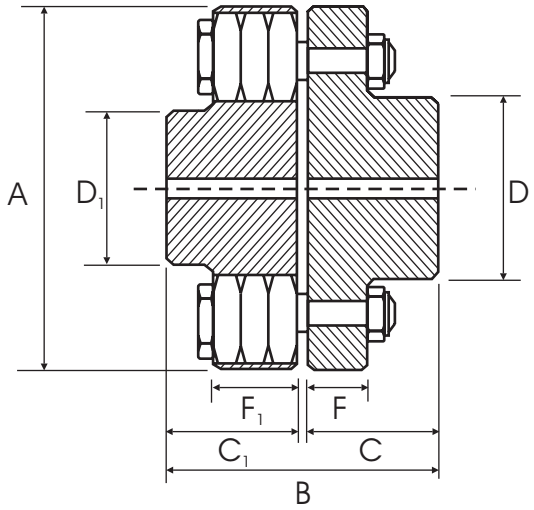
SPARE PARTS

Part No.	Pins		Cone Rings			
	Qty. Per Coupling	Thread	Qty. Per Coupling	A	B	C
KX030	4	M10	12	7.5	28.2	12.7
KX038	6	M10	18	7.5	28.2	12.7
KX042	8	M10	24	7.5	28.2	12.7
KX048	6	M12	18	10.3	37.7	17.5
KX058	8	M12	24	10.3	37.7	17.5
KX070	10	M12	30	10.3	37.7	17.5
KX075	8	M20	32	12.7	50.4	25.0
KX085	10	M20	40	12.7	50.4	25.0
KX105	12	M20	48	12.7	50.4	25.0
KX120	10	M24	40	17.9	63.1	30.2
KX135	12	M24	48	17.9	63.1	30.2
KX150	14	M24	56	17.9	63.1	30.2

CONE RING TYPE COUPLING

DIMENSIONAL DATA

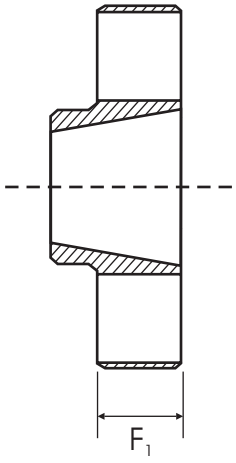
KX _ _ _ BH KX _ _ _ PH



Pilot Bore Bush Half

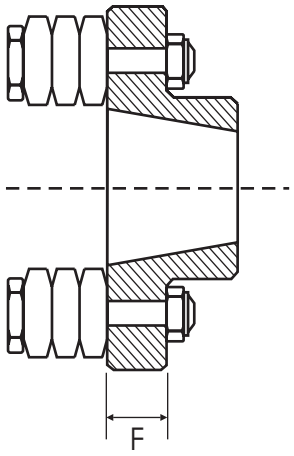
Pilot Bore Pin Half

KXT _ _ _ BH



Taper Bore Bush Half

KXT _ _ _ PH



Taper Bore Pin Half

Pin Hub Dimensions

Part No.	Bore		Taper Bush	A	B		C	D	F
	Min	Max	Pin		Pilot	Taper		Pin	Pin
KX030	12.0	38.0	-	127.0	85.0	-	41.0	64.0	12.0
KX038	15.0	42.0	-	132.0	99.0	-	48.0	72.0	12.0
KX042	15.0	48.0	1610	146.0	115.0	44.1	56.0	83.0	12.0
KX048	21.0	55.0	2012	171.0	125.0	44.1	61.0	90.0	17.0
KX058	21.0	65.0	2517	193.0	139.0	37.8	68.0	106.0	17.0
KX070	28.0	75.0	3020	216.0	155.0	70.5	76.0	128.0	17.0
KX075	28.0	80.0	-	254.0	179.0	-	88.0	145.0	30.0
KX085	28.0	105.0	3535	279.0	203.0	83.2	100.0	166.0	30.0
KX105	34.0	120.0	4040	330.0	237.0	95.9	117.0	202.0	30.0
KX120	61.0	130.0	4040	370.0	270.0	115.6	132.0	232.0	46.0
KX135	67.0	135.0	4545	419.0	300.0	125.3	147.0	240.0	46.0
KX150	82.0	150.0	5050	457.0	336.0	138.0	165.0	260.0	46.0

Bush Hub Dimensions

Part No.	Bore		Taper Bush	A	B		C_1	D_1	F_1
	Min	Max	Bush		Pilot	Taper		Bush	Bush
KX030	12.0	32.0	-	127.0	85.0	-	41.0	58.0	26.0
KX038	15.0	38.0	-	132.0	99.0	-	48.0	64.0	26.0
KX042	15.0	42.0	1215	146.0	115.0	44.1	56.0	78.0	26.0
KX048	21.0	48.0	1615	171.0	125.0	44.1	61.0	82.0	33.0
KX058	21.0	58.0	2012	193.0	139.0	37.8	68.0	98.0	33.0
KX070	28.0	70.0	2525	216.0	155.0	70.5	76.0	117.0	33.0
KX075	28.0	75.0	-	254.0	179.0	-	88.0	130.0	56.0
KX085	28.0	85.0	3030	279.0	203.0	83.2	100.0	148.0	56.0
KX105	34.0	105.0	3535	330.0	237.0	95.9	117.0	180.0	56.0
KX120	61.0	120.0	4040	370.0	270.0	115.6	132.0	206.0	76.0
KX135	67.0	135.0	4545	419.0	300.0	125.3	147.0	230.0	76.0
KX150	82.0	150.0	5050	457.0	336.0	138.0	165.0	256.0	76.0

Only available with taperlock entry from flange side.

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TYRE COUPLING

TYRE

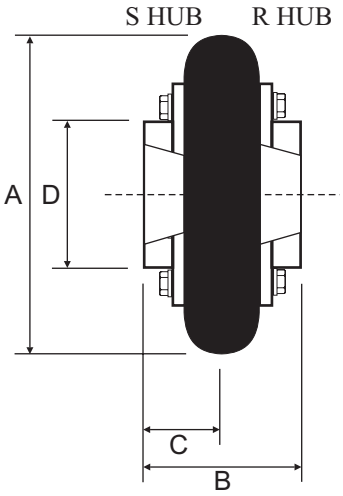
The Tyre coupling is primarily designed to allow for misalignment both angular and parallel and compensates for end float. Furthermore torsional vibration is reduced and shock loads minimized by the flexing body. The coupling has been successfully subjected, under normal circumstances, to angular misalignment up to 4º, parallel misalignment up to 3mm and end float up to 8mm. The design of the coupling, having a flexing member with remarkable durability, suppresses the initial shock load and eliminates to a marked degree the stresses common to power driven machinery.
Tyres are available in Natural Rubber and also FRAS.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
A-40	25.0	0.220	21.0	4500
A-50	32.0	0.560	53.5	4500
A-60	42.0	1.110	106.0	4000
A-70	42.0	1.700	162.4	3600
A-80	50.0	2.650	253.1	3100
A-90	60.0	3.830	365.8	2750
A100	60.0	5.300	506.2	2600
A110	60.0	7.460	712.4	2300
A120	75.0	12.380	1182.3	2050
A140	90.0	19.690	1880.4	1800
A160	100.0	32.600	3113.3	1600
A180	110.0	57.500	5491.3	1450

DIMENSIONAL DATA

Part No.	Bore		Bush	A	B	C	D
	Min	Max					
A-40	12.0	25.0	1008	105.0	66.0	22.2	-
A-50	12.0	32.0	1210	133.0	75.0	25.4	79.0
A-60	12.0	42.0	1610	165.0	83.0	25.4	103.0
A-70	12.0	42.0	1610	187.0	100.0	25.4	76.0
A-80	16.0	50.0	2012	211.0	107.0	31.8	95.0
A-90	19.0	60.0	2517	235.0	136.0	44.5	111.0
A100	19.0	60.0	2517	245.0	138.0	44.5	124.0
A110	19.0	60.0	2517	279.0	135.0	44.5	140.0
A120	32.0	75.0	3020	314.0	151.0	50.8	152.0
A140	35.0	90.0	3535	359.0	203.0	88.9	195.0
A160	40.0	100.0	4040	402.0	226.0	101.6	216.0
A180	60.0	110.0	4545	470.0	261.0	114.3	252.0



TSCHAN

TSCHAN-S COUPLING

TSCHAN-S

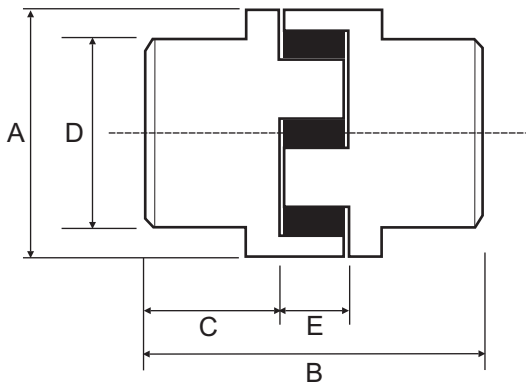
The Tschan-S coupling is another jaw type coupling that has round legs instead of straight or curved. The Tschan-S is ideally suited to general purpose coupling applications and is capable of reducing shock loads and vibration from drives. The element is made of polyurethane that is resistant to oils and has a temperature range from -30°C up to 100°C. Naismith Engineering stock the elements and hubs to suit.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
CS050	25.0	0.157	15.0	15000
CS070	38.0	0.576	55.0	11000
CS085	40.0	0.785	75.0	9000
CS100	42.0	1.361	130.0	7250
CS125	55.0	2.618	250.0	6000
CS145	65.0	4.188	400.0	5250
CS170	85.0	6.597	630.0	4500
CS200	95.0	11.518	1100.0	3750
CS230	105.0	17.801	1700.0	3250
CS260	125.0	27.749	2650.0	3000

DIMENSIONAL DATA

Part No.	Bore		A	B	C	D	E
	Min	Max					
CS050	-	25.0	50.0	75.0	30.0	41.0	12.0
CS070	-	38.0	70.0	100.0	38.5	55.0	18.0
CS085	-	40.0	85.0	110.0	43.5	60.0	18.0
CS100	-	42.0	105.0	125.0	49.5	65.0	20.0
CS125	-	55.0	126.0	145.0	56.5	85.0	25.0
CS145	-	65.0	145.0	160.0	61.0	95.0	30.0
CS170	-	85.0	170.0	190.0	75.0	120.0	30.0
CS200	-	95.0	200.0	245.0	99.0	135.0	35.0
CS230	-	105.0	230.0	270.0	110.0	150.0	35.0
CS260	-	125.0	260.0	285.0	112.5	180.0	45.0



NAISMITH

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HRC COUPLING

PERFORMANCE DATA

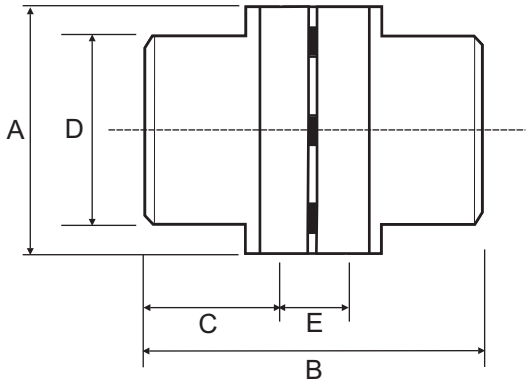
HRC

The HRC is a very popular coupling, and many people have them in machines today. It is a general purpose coupling using an element in compression. They are easy to install and take up small amounts of misalignment while still reducing the shock loads often found at start up. Naismith Engineering stock a full range of HRC couplings in pilot bore and taper bore. Elements are also available

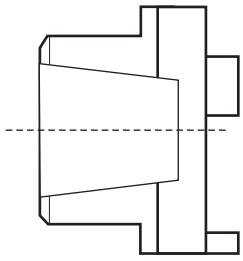
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
HRC-70	32.0	0.330	31.5	7700
HRC-90	38.0	0.838	80.0	6300
HRC110	55.0	1.675	160.0	5000
HRC130	60.0	3.298	315.0	4100
HRC150	65.0	6.283	600.0	3600
HRC180	80.0	9.948	950.0	3000
HRC230	100.0	20.942	2000.0	2600
HRC280	115.0	32.984	3150.0	2200

DIMENSIONAL DATA

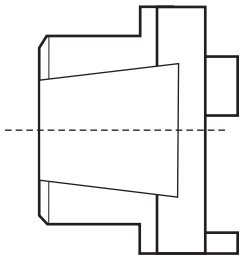
B Type (Pilot Bore)



H Type



F Type



Part No.	Bore		Bush	A	C		D	E	B*		
	Min	Max	Size		Type F & H	Type B			Type FF,FH,HH	Type FB,HB	Type BB
HRC-70	8.0	32.0	1008	69.0	23.5	25.0	60.0	18.0	65.0	66.5	68.0
HRC-90	8.0	38.0	1108	85.0	23.5	30.0	70.0	22.5	69.5	76.0	82.5
HRC110	8.0	55.0	1610	112.0	26.5	45.0	100.0	29.0	82.0	100.5	119.0
HRC130	36.0	60.0	1610	130.0	26.5	55.0	105.0	36.0	89.0	117.5	146.0
HRC150	40.0	65.0	2012	150.0	33.5	60.0	115.0	40.0	107.0	133.5	160.0
HRC180	46.0	80.0	2517	180.0	46.5	70.0	125.0	49.0	142.0	165.5	189.0
HRC230	52.0	100.0	3020	225.0	52.5	90.0	155.0	59.5	164.5	202.0	239.5
HRC280	60.0	115.0	3525	275.0	66.5	105.5	206.0	74.5	207.5	246.5	285.5

TSCHAN

NOR-MEX COUPLING

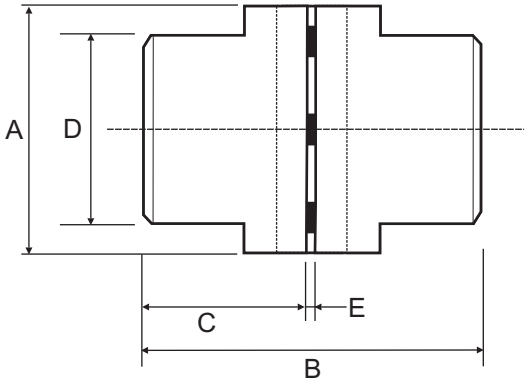
NOR-MEX

The Normex coupling has a very distinctive element that weaves in and out between the jaws. It is very good at taking up misalignment between the driver and driven shafts. The coupling will also help to reduce vibrations and shock loads from the drive. Naismith Engineering stock the element and the hubs to suit.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
050	19.0	0.136	13.0	12500
067	28.0	0.230	22.0	10000
082	32.0	0.503	48.0	8000
097	42.0	1.005	96.0	7000
112	48.0	1.571	150.0	6000
128	55.0	2.618	250.0	5000
148	65.0	4.084	390.0	4500
168	75.0	6.597	630.0	4000
194	85.0	10.995	1050.0	3500
214	95.0	15.707	1500.0	3000
240	110.0	25.131	2400.0	2750

DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	E
	Min	Max					
050	-	19.0	50.0	52.0	25.0	33.0	2.0
067	-	28.0	67.0	62.5	30.0	46.0	2.5
082	-	32.0	82.0	83.0	40.0	53.0	3.0
097	-	42.0	97.0	103.0	50.0	69.0	3.0
112	-	48.0	112.0	123.5	60.0	79.0	3.5
128	-	55.0	128.0	143.5	70.0	90.0	3.5
148		65.0	148.0	163.5	80.0	107.0	3.5
168	-	75.0	168.0	183.5	90.0	124.0	3.5
194	-	85.0	194.0	203.5	100.0	140.0	3.5
214	-	95.0	214.0	224.0	110.0	157.0	4.0
240	-	110.0	240.0	244.0	120.0	179.0	4.0

O.M.T. COUPLING

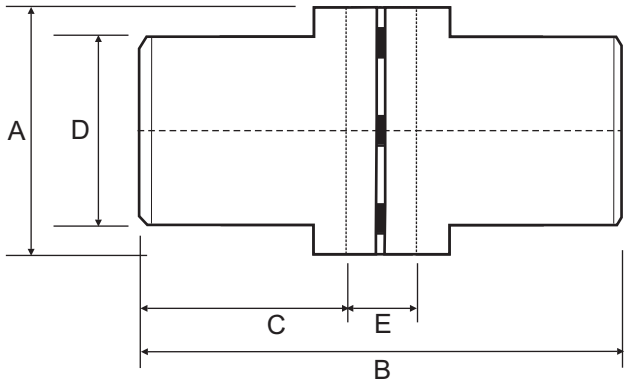
OMT

PERFORMANCE DATA

The OMT coupling is a simple jaw type coupling designed to suit most shaft to shaft connections for the hydraulic market. The hubs are made in aluminium and use a simple rubber cross type element. The many different sizes allow for most motor to pump applications to be quickly and easily installed.

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
NS48C	24.0	0.072	6.9	3000
NS65C	28.0	0.400	38.2	3000
NS86B	40.0	0.914	87.3	3000
NS108C	55.0	2.199	210.0	3000
NS143C	75.0	7.592	725.0	3000

DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	E
	Min	Max					
NS48C	-	24.0	48.0	124.0	54.0	38.0	16.0
NS65C	-	28.0	65.0	133.0	57.5	53.0	18.0
NS86B	-	40.0	86.0	196.0	88.0	73.0	20.0
NS108C	-	55.0	108.0	244.0	110.0	100.0	24.0
NS143C	-	75.0	143.0	309.0	140.0	137.0	29.0

LOVEJOY JAURE DISC COUPLING

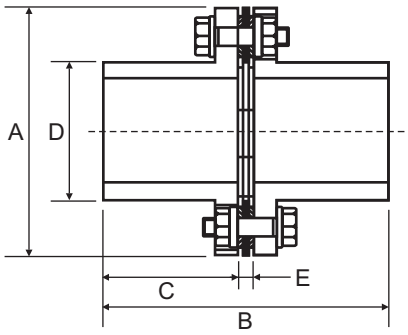
JAURE DISC

PERFORMANCE DATA

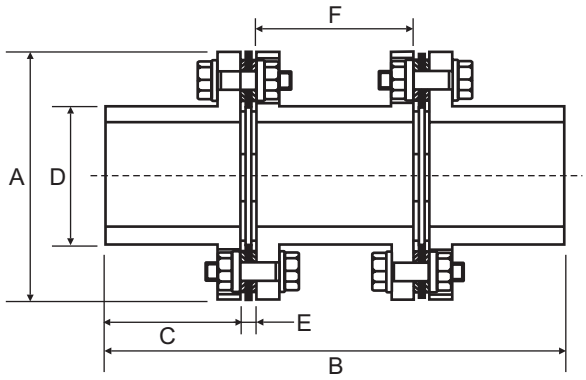
The Lovejoy-Jaure disc coupling is a great low maintenance coupling. It has been developed using the latest technology, Finite Element Analysis, to create a high torque, long life coupling. The discs are made from a high-grade stainless steel, ensuring not only a high strength and high endurance to fatigue, but also resistance to most chemicals. Furthermore, the discs can be covered with a low coefficient of friction coating to improve the resistance to fretting wear, which is the biggest cause of disc coupling failure.

Coupling Size	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
-90-6	41.0	2.094	200.0	22700
110-6	46.0	6.283	600.0	18000
132-6	60.0	11.518	1100.0	14600
158-6	70.0	20.942	2000.0	12300
185-6	80.0	34.555	3300.0	10500
202-6	90.0	48.168	4600.0	9600
228-6	100.0	73.298	7000.0	8500
255-6	110.0	106.806	10200.0	7700
278-6	124.0	148.691	14200.0	7000
302-6	135.0	209.424	20000.0	6400

DIMENSIONAL DATA



TYPE SU



TYPE SX

Coupling Size	Bore Min	Bore Max	A	B SU	B SX	C	D	E	F
-90-6	-	41.0	90.0	84.0	134.0	40.0	58.0	4.0	46.0
110-6	-	46.0	110.0	108.0	189.0	50.0	65.0	8.0	73.0
132-6	-	60.0	132.0	128.0	228.0	60.0	84.0	8.0	92.0
158-6	-	70.0	158.0	151.0	264.0	70.0	98.0	11.0	102.0
185-6	-	80.0	185.0	174.0	300.0	80.0	112.0	14.0	112.0
202-6	-	90.0	202.0	195.0	339.0	90.0	125.0	16.0	127.0
228-6	-	100.0	228.0	218.0	375.0	100.0	140.0	18.0	139.0
255-6	-	110.0	255.0	251.0	427.0	115.0	155.0	21.0	155.0
278-6	-	124.0	278.0	271.0	469.0	125.0	174.0	21.0	177.0
302-6	-	135.0	302.0	295.0	505.0	135.0	190.0	24.0	187.0

E = Gap between hubs or spacer not element length.

GEAR COUPLING C & CFR

SIER-BATH GEAR 'C' & 'CFR'

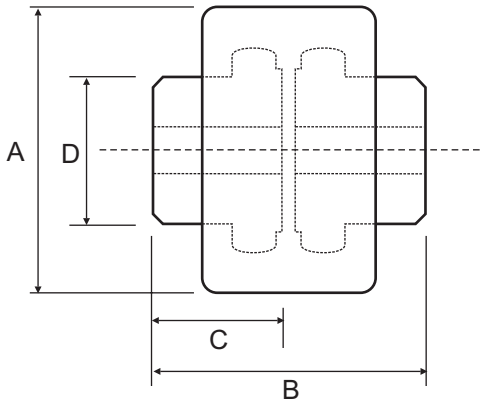
'C' TYPE (FLEX - FLEX)
The basis for all types of Lovejoy Sier-Bath continuous sleeve flexible gear couplings. suitable for most applications. Gear teeth are precision cut, 20° pressure angle with minimum backlash, and even distribution of load, greater capacity and longer life.

'CFR' TYPE (FLEX - RIGID)
The Flex-Rigid gear coupling consists of a flexible hub and a rigid hub with a single sleeve. The flexible hub is a standard hub from a Flex-Flex coupling. The rigid hub uses a splined type hub. The Flex-Rigid coupling accommodates angular misalignment only and does not allow for parallel misalignment.

PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
C 7/8	31.8	3.141	300	6000
C 1.1/2	42.0	9.424	900	5000
C 2	56.0	24.084	2300	4200
C 2.1/2	70.0	35.602	3400	3750
C 3	84.0	59.686	5700	3000
C 3.1/2	97.0	104.712	10000	2800
C 4	111.0	148.691	14200	2400
C 4.1/2	130.0	217.801	20800	2200
C 5	160.0	320.419	30600	2100
C 6	186.0	447.120	42700	2000

DIMENSIONAL DATA



Part No.	Bore		A	B	C	D
	Min	Max				
C 7/8	11.2	31.8	84.1	79.5	38.1	50.8
C 1.1/2	16.0	42.0	95.3	95.3	46.0	60.5
C 2	18.5	56.0	120.7	108.0	52.3	82.6
C 2.1/2	22.4	70.0	139.7	120.7	57.2	100.1
C 3	30.2	84.0	168.4	139.7	66.8	120.7
C 3.1/2	31.8	97.0	190.5	222.3	108.0	136.7
C 4	44.5	111.0	222.3	228.6	111.3	158.8
C 4.1/2	60.5	130.0	241.3	260.4	127.0	184.2
C 5	73.2	160.0	273.1	311.2	152.4	209.6
C 6	98.6	180.0	311.2	330.2	162.1	241.3

GEAR COUPLING F & FFR

SIER BATH GEAR 'F' & 'FFR'

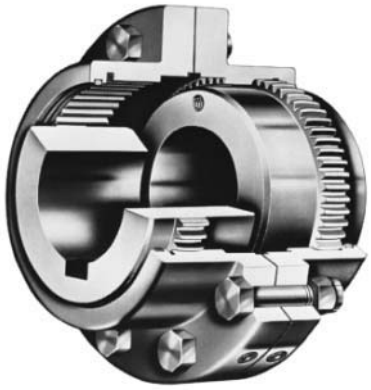
'F' TYPE (FLEX - FLEX)

Double engagement provides standard engagement for parallel misalignment, angular misalignment and end float with the ability to accommodate close coupled application requirements.

'FFR' TYPE (FLEX - RIGID)

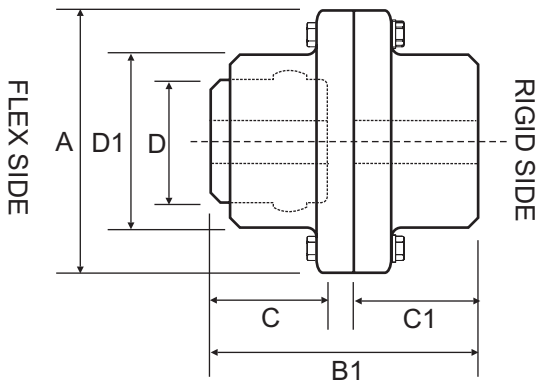
Single engagement accommodates angular misalignment only and does not allow for parallel misalignment. This design consists of a flexible and rigid half, most commonly used in floating shaft applications to solve remote drive and excessive misalignment problems.

PERFORMANCE DATA



Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Flex Hub	Rigid Hub	kW	(Nm)	(RPM)
F 1	42.0	56.0	8.901	850	6000
F 1.1/2	56.0	76.0	22.408	2140	5500
F 2	73.0	95.0	37.277	3560	5000
F 2.1/2	88.0	114.0	67.120	6410	4400
F 3	107.0	134.0	112.042	10700	4000
F 3.1/2	124.0	150.0	179.058	17100	3500
F 4	147.0	176.0	260.733	24900	3000
F 4.1/2	167.0	202.0	358.115	34200	2700
F 5	176.0	231.0	514.136	49100	2500
F 5.1/2	202.0	260.0	678.534	64800	2200
F 6	225.0	288.0	886.911	84700	2100
F 7	254.0	318.0	1192.670	113900	2000

Shrouded bolts are standard to size 3.1/2
Exposed bolts are standard size 4 and larger



DIMENSIONAL DATA

Part No.	Bore				A	B*	B1	C	C1	D	D1
	Min Flex	Min Rigid	Max Flex	Max Rigid							
F 1	11.2	-	42.0	56.0	115.8	88.9	86.6	42.9	39.6	58.7	77.7
F 1.1/2	17.5	-	56.0	76.0	152.4	101.6	100.1	49.3	46.7	76.2	100.8
F 2	23.9	-	73.0	95.0	177.8	127.0	124.0	62.0	57.9	101.6	124.7
F 2.1/2	36.6	-	88.0	114.0	212.9	158.8	155.7	77.0	73.9	117.6	150.1
F 3	36.6	-	107.0	134.0	239.8	187.5	182.6	91.2	86.6	143.0	175.5
F 3.1/2	46.0	-	124.0	150.0	279.4	219.2	212.9	106.4	100.8	165.1	200.9
F 4	62.0	-	147.0	176.0	317.5	247.7	241.3	120.7	112.8	190.5	235.0
F 4.1/2	76.2	-	167.0	202.0	346.2	277.9	271.5	134.9	127.8	215.9	263.7
F 5	76.2	101.6	176.0	231.0	388.9	314.5	306.3	153.2	144.5	241.3	293.6
F 5.1/2	101.6	114.3	202.0	260.0	425.5	358.9	340.6	175.5	156.5	266.7	325.4
F 6	101.6	139.7	225.0	288.0	457.2	384.3	386.6	188.2	188.2	292.1	355.6
F 7	127.0	146.1	254.0	318.0	527.1	450.9	454.2	220.7	220.7	330.2	400.1

*B = the overall length of a Flex - Flex coupling, not shown

GRID COUPLING

GRID

PERFORMANCE DATA

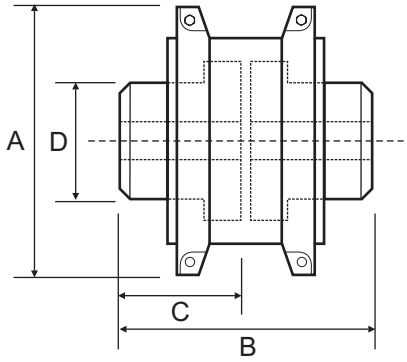
The Lovejoy Grid Type flexible grid coupling reduces vibration by as much as 30%, and cushions shock loads to safeguard your driving and driven equipment. The flexible nature of the spring like grid absorbs impact energy by spreading it out over time, thus reducing the magnitude of the peak loads. This is possible because of the progressive contact that occurs between the curved profile of the hub teeth and the flexible grid.
Grid couplings are designed for versatility. Common hubs and grids are used within a given size range for both horizontal and vertical split cover models. Grid installation and replacement is a 'snap', making maintenance very easy.

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Maximum Speed Horizontal (RPM)	Maximum Speed Vertical (RPM)
1020	28.6	0.503	48	4500	6000
1030	35.0	1.424	136	4500	6000
1040	44.0	2.366	226	4500	6000
1050	51.0	4.136	395	4500	6000
1060	57.0	6.503	621	4350	6000
1070	68.0	9.466	904	4125	5500
1080	83.0	19.518	1864	3600	4750
1090	95.0	35.497	3390	3600	4000
1100	108.0	59.749	5706	2440	3250
1110	117.0	88.733	8474	2250	3000
1120	137.0	130.136	12428	2025	2700
1130	165.0	189.298	18078	1800	2400
1140	184.0	272.115	25987	1650	2200
1150	203.2	380.105	36300	1500	-
1160	228.6	540.314	51600	1350	-
1170	254.0	709.948	67800	1225	-
1180	280.0	980.105	93600	1100	-
1190	305.0	1301.340	124278	1050	-
1200	330.2	1774.555	169470	900	-

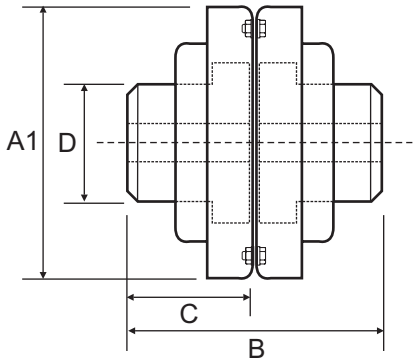
Lovejoy

GRID COUPLING

DIMENSIONAL DATA



HORIZONTAL



VERTICAL

Part No.	Bore		A	A1	B	C	D
	Min	Max					
1020	12.7	28.6	101.6	111.3	98.6	47.8	39.6
1030	12.7	35.0	111.3	120.7	98.6	47.8	49.3
1040	12.7	44.0	117.6	128.5	104.9	50.8	57.2
1050	12.7	51.0	138.2	147.6	124.0	60.5	66.8
1060	19.1	57.0	150.9	162.1	130.3	63.5	76.2
1070	19.1	68.0	162.1	173.0	155.7	76.2	87.4
1080	25.4	83.0	193.8	200.2	181.1	88.9	104.9
1090	25.4	95.0	212.9	231.9	200.2	98.6	124.0
1100	41.3	108.0	251.0	266.7	246.1	120.7	142.0
1110	41.3	117.0	270.0	285.8	258.8	127.0	160.3
1120	60.3	137.0	308.1	319.0	304.8	149.4	179.3
1130	66.7	165.0	346.2	378.0	330.2	162.1	217.4
1140	66.7	184.0	384.3	416.1	374.7	184.2	254.0
1150*	76.2	203.2	453.1	-	371.9	182.9	269.2
1160*	106.4	228.6	501.4	-	402.1	198.1	304.8
1170*	106.4	254.0	566.4	-	437.9	215.9	355.6
1180*	130.2	280.0	629.9	-	483.6	238.8	393.7
1190*	152.4	305.0	675.6	-	524.3	259.1	436.9
1200*	152.4	330.2	756.9	-	564.9	279.4	497.8

* available only in horizontal

BAUMANN COUPLING

BAUMANN

LM
The LM type couplings have a stainless steel spring and two light alloy hubs. Maximum torque can only be achieved with correctly aligned shafts. The maximum shaft misalignment is 8°angular and 2mm parallel.

ZG
The ZG type coupling comprises a nickel plated steel spring and two cast zinc push-on hubs which are available with metric bores. The maximum shaft misalignment is 5°angular and 1mm parallel.

PERFORMANCE DATA

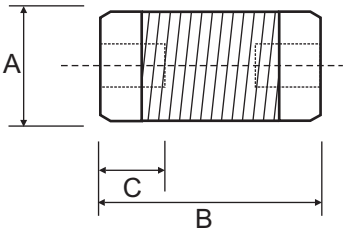
BLS
The BLS type coupling is constructed entirely of stainless steel allowing for corrosive environments and ambient temperatures up to 500°C. The maximum shaft misalignment is 1.5°angular and 0.1mm parallel on the size 15 & 3°angular and 0.2mm parallel on the size 23.

CHP
The CHP type coupling consists of a synthetic rubber bellows and two alloy hubs. The coupling is backlash free and torsionally rigid. The maximum shaft misalignment is 5°angular and 0.25mm parallel.

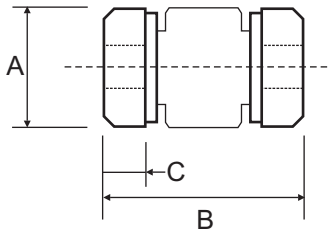
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
LM 35 X 14	6.0	0.005	0.5	6000
LM 40 X 20	9.0	0.010	1.0	6000
LM 50 X 26	14.0	0.021	2.0	6000
ZG 25 X 12	6.0	0.002	0.2	8000
ZG 35 X 16	8.0	0.005	0.5	3000
ZG 50 X 26	14.0	0.016	1.5	3000
BLS 15	10.0	0.004	0.4	9000
BLSC 15	6.4	0.004	0.4	9000
BLS 23	15.0	0.010	1.0	7000
BLSC 23	10.0	0.010	1.0	7000
CHP 20	8.0	0.004	0.4	9000
CHP 26	13.0	0.007	0.7	7000
CHP 34	18.0	0.016	1.5	5500

ZG Type

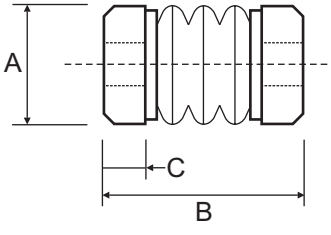
DIMENSIONAL DATA



TYPE LM & ZG



TYPE BLS



TYPE CHP

Part No.	Bore		A	B	C
	Min	Max			
LM 35 X 14	4.0	6.0	14.0	35.0	12.0
LM 40 X 20	5.0	9.0	20.0	40.0	14.0
LM 50 X 26	8.0	14.0	26.0	50.0	17.0
ZG 25 X 12	2.0	6.0	12.0	25.0	9.0
ZG 35 X 16	3.0	8.0	16.0	35.0	12.5
ZG 50 X 26	6.0	14.0	26.0	50.0	17.0
BLS 15	3.0	10.0	15.0	28.0	8.0
BLSC 15	4.0	6.4	15.0	28.0	8.0
BLS 23	5.0	15.0	22.5	35.0	11.0
BLSC 23	6.0	10.0	22.5	35.0	11.0
CHP 20	3.0	8.0	20.0	28.0	8.0
CHP 26	6.0	13.0	26.0	34.0	10.0
CHP 34	8.0	18.0	34.0	40.0	12.0

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

NAISMITH

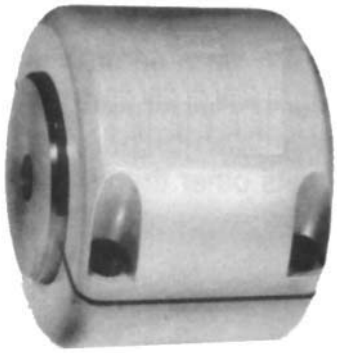
Power Transmission is all we do

CHAIN COUPLING

CHAIN

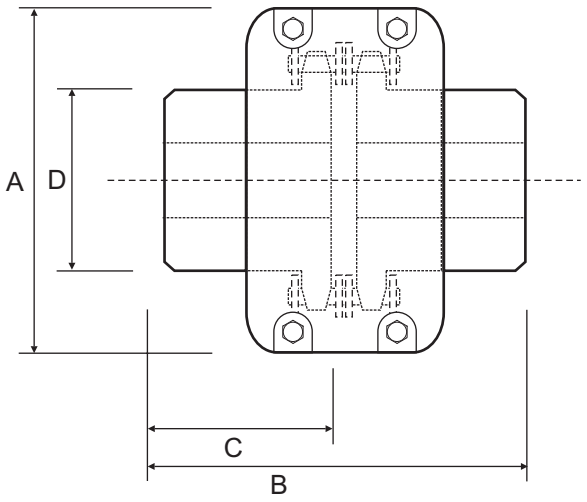
Roller chain couplings have a torque capacity in excess of the torque normally transmitted by shafting which falls within the coupling bore range. Select the smallest coupling which will accommodate both shafts. For reversing operation, shock or pulsating loads, or other severe operating conditions, select the next larger coupling.
A cover should be used to assure maximum service life, particularly if the coupling operates at high speeds or under moist or abrasive conditions. For proper lubrication, fill the space between the cover and the coupling with soft to medium consistency bearing grease.

DIMENSIONAL DATA



Part No.	Bore						Max Speed
	Min	Max	A	B	C	D	(RPM)
C3012	12.7	16.0	69.1	63.5	26.2	29.5	6000
C4012	12.7	22.0	77.0	72.2	36.5	34.9	4800
C4014	12.7	28.0	84.1	75.4	36.5	42.1	4800
C4016	14.3	32.0	92.1	75.4	39.7	50.0	4800
C5014	14.3	35.0	101.6	84.9	45.2	54.0	3600
C5016	15.9	40.0	110.3	87.3	45.2	61.9	3600
C5018	15.9	45.0	122.2	87.3	45.2	69.9	3000
C6018	19.1	56.0	145.3	104.8	55.6	90.5	2500
C6020	19.1	60.0	158.8	104.8	55.6	100.0	2500
C6022	19.1	71.0	168.3	116.8	55.6	110.3	2500
C8018	19.1	80.0	190.5	128.6	63.5	110.3	2000
C8020	19.1	90.0	209.6	137.3	65.1	119.1	2000
C8022	19.1	100.0	225.4	137.3	70.6	139.7	2000
C10020	25.4	110.0	281.0	153.2	79.4	161.9	1800
C12018	34.9	127.0	305.6	181.0	89.7	169.9	1500
C12022	34.9	140.0	356.4	181.0	100.0	209.6	1200

For more performance information, please contact Naismith Sales



TRASCO 'ES' CURVED JAW COUPLING

CURVED JAW BACKLASH FREE

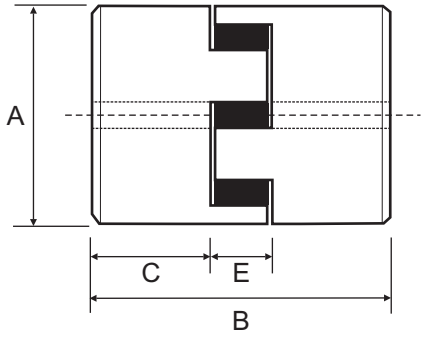
PERFORMANCE DATA

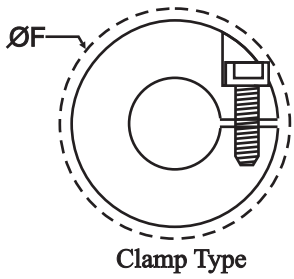
The main design function of the TRASCO® ES coupling is to transmit motion while absorbing misalignments and vibrations, with absolute precision and without any backlash. A wide range of element including Shore hardness of 80A (Blue), 92A (White/Yellow), 98A (Red), & 64D (Green) are available across the range. Elements are rated for normal operating temperatures up to 90 °C. Most hubs are aluminium and are zero backlash. They are available in standard or clamp type.
The very compact design makes it a very functional coupling ideal for positioning or feedback application.

Part No.	Max Bore		Power at 100 RPM	Nominal Torque (Nm)				Normal Maximum Speed
	Set Screw	Clamp	kW	Shore 80 A	Shore 92 A	Shore 98 A	Shore 65 D	(RPM)
7	7.0	7.0	0.013	-	1.2	2.0	2.4	40000
9	9.0	9.0	0.031	-	3.0	5.0	6.0	28000
14	16.0	16.0	0.079	-	7.5	12.5	16.0	19000
19/24	24.0	20.0	0.105	5.0	10.0	17.0	21.0	14000
24/28	28.0	28.0	0.366	17.0	35.0	60.0	75.0	10600
28/38	38.0	35.0	0.995	46.0	95.0	160.0	200.0	8500
38/45	45.0	45.0	1.990	-	190.0	325.0	405.0	7100
42	55.0	45.0	2.775	-	265.0	450.0	560.0	6000
48	60.0	60.0	3.246	-	310.0	525.0	655.0	5600

Power at 100 RPM based on Shore 92 A

DIMENSIONAL DATA





Clamp Type

Part No.	Min Bore		Max Bore		A	B	C	E	F
	Set Screw	Clamp	Set Screw	Clamp					
7	3.0	3.0	7.0	7.0	14.0	22.0	7.0	8.0	15.0
9	4.0	4.0	9.0	9.0	20.0	30.0	10.0	10.0	23.4
14	6.0	6.0	16.0	16.0	30.0	35.0	11.0	13.0	32.2
19/24	6.0	10.0	24.0	20.0	40.0	66.0	25.0	16.0	45.7
24/28	8.0	10.0	28.0	28.0	55.0	78.0	30.0	18.0	56.4
28/38	10.0	14.0	38.0	35.0	65.0	90.0	35.0	20.0	72.6
38/45	12.0	15.0	45.0	45.0	80.0	114.0	45.0	24.0	83.3
42*	14.0	20.0	55.0	45.0	95.0	126.0	50.0	26.0	-
48*	20.0	25.0	60.0	60.0	105.0	140.0	56.0	28.0	-

*Not available in Clamp Style

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

JAW COUPLING

RULAND JAWFLEX™ JAW

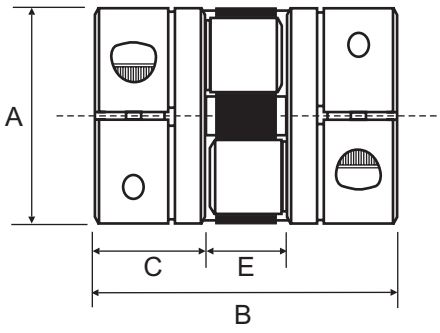
PERFORMANCE DATA

Ruland's zero backlash jaw couplings are three piece couplings comprised of two hubs and an elastic element. The spider, made of an advanced polyurethane material, provides dampening of impulse loads, minimizing shock to the motor and other sensitive equipment. Available in two shore hardnesses, these spiders allow the user to customize the jaw coupling's performance. Selecting a soft spider will give the Jawflex™ the greatest dampening characteristics, while a hard spider will provide the greatest torsional stiffness and strength. All spiders are press fit onto a curved jaw profile, assuring zero backlash operation.

Part No.		Max Bore	Power at 100 RPM	Nominal Torque (Nm)		Normal Maximum Speed
Clamp	Set Screw		kW	92 Shore A	98 Shore A	(RPM)
JC10	JS10	6.4	0.006	0.6	0.9	8000
JC12	JS12	7.9	0.010	1.0	1.7	8000
JC16	JS16	12.7	0.035	3.3	8.5	8000
JC21	JS21	15.9	0.042	4.0	9.9	8000
JC26	JS26	19.1	0.115	11.0	18.7	8000
JC32	JS32	25.4	0.261	24.9	31.2	8000
JC36	JS36	28.6	0.338	32.3	46.5	8000

Power at 100 RPM based on Shore 92 A

DIMENSIONAL DATA



Part No.		Bore		A	B	C	E
Clamp	Set Screw	Min	Max				
JC10	JS10	3.2	6.4	15.0	22.9	7.6	7.7
JC12	JS12	4.8	7.9	19.1	27.9	9.8	8.3
JC16	JS16	6.4	12.7	25.4	31.8	11.9	8.0
JC21	JS21	7.9	15.9	33.3	47.6	15.0	17.6
JC26	JS26	9.5	19.1	41.3	50.8	18.0	14.8
JC32	JS32	12.7	25.4	50.8	61.0	20.8	19.4
JC36	JS36	12.7	28.6	57.2	80.0	28.7	22.6

BEAM COUPLING - METRIC

RULAND FLEXBEAM BEAM

Flexbeam™ zero backlash flexible shaft couplings are available with inch and metric bores and outside diameters ranging from 3/8" (6mm) to 1-1/2" (38mm). The Flexbeam series are machined from a single piece of aluminium and feature multiple spiral cuts. Stainless steel available on request.

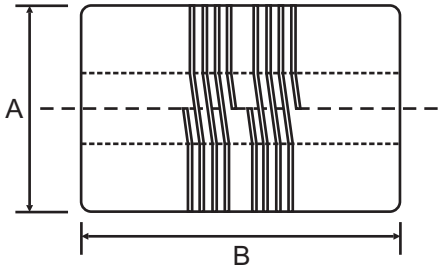
PERFORMANCE DATA

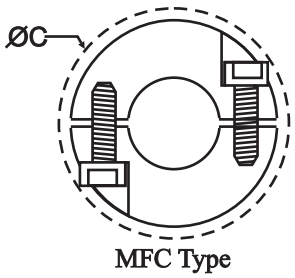
Part No.		Max Bore	Power at 100 RPM	Nominal Torque (Nm)		Normal Maximum Speed
Clamp	Set Screw		kW	Min Bore	Max Bore	(RPM)
Flexbeam-3 Beam Coupling						
MFC20	MFS20	8.0	0.008	1.45	1.15	6000
MFC25	MFS25	12.0	0.010	2.00	1.40	6000
MFC30	MFS30	14.0	0.019	3.65	2.35	6000
MFC40	MFS40	16.0	0.032	6.20	5.35	6000
Flexbeam-2 Beam Coupling						
PCMR10	PSMR10	3.0	0.002	0.31	0.31	6000
PCMR13	PSMR13	3.0	0.002	0.45	0.45	6000
PCMR16	PSMR16	5.0	0.004	0.85	0.68	6000
PCMR19	PSMR19	6.0	0.008	1.47	0.79	6000
PCMR22	PSMR22	8.0	0.006	1.13	0.91	6000
PCMR25	PSMR25	9.0	0.011	2.04	1.70	6000
PCMR29	PSMR29	12.0	0.014	2.66	1.92	6000
PCMR32	PSMR32	12.0	0.020	3.84	2.94	6000
MWC15	MWS15	5.0	0.002	0.43	0.41	6000
MWC20	MWS20	6.0	0.003	0.65	0.58	6000
MWC25	MWS25	10.0	0.009	1.71	1.55	6000
MWC30	MWS30	12.0	0.018	3.45	3.30	6000

Ratings are for aluminium.
For static torque rating multiply nominal torque by 2.
This coupling is fully suited to carrying torque up to this rating.

DIMENSIONAL DATA

Part No.		Bore		A	B	B	C
Clamp	Set Screw	Min	Max				
Flexbeam-3 Beam Coupling					MFC	MFS	MFC
MFC20	MFS20	5.0	8.0	20.0	30.0	30.0	22.8
MFC25	MFS25	6.0	12.0	25.0	40.0	40.0	30.2
MFC30	MFS30	8.0	14.0	30.0	45.0	45.0	34.9
MFC40	MFS40	10.0	16.0	40.0	55.0	55.0	45.6
Flexbeam-2 Beam Coupling					PCMR	PSMR	
PCMR10	PSMR10	3.0	3.0	9.5	14.3	14.3	
PCMR13	PSMR13	3.0	3.0	12.7	19.1	19.1	
PCMR16	PSMR16	3.0	5.0	15.9	20.3	20.3	
PCMR19	PSMR19	3.0	6.0	19.1	22.9	22.9	
PCMR22	PSMR22	5.0	8.0	22.2	27.0	27.0	
PCMR25	PSMR25	6.0	9.0	25.4	31.8	31.8	
PCMR29	PSMR29	6.0	12.0	28.6	38.1	38.1	
PCMR32	PSMR32	6.0	12.0	31.8	38.1	38.1	
					MWC	MWS	
MWC15	MWS15	3.0	5.0	15.0	22.0	20.0	
MWC20	MWS20	4.0	6.0	20.0	28.0	20.0	
MWC25	MWS25	6.0	10.0	25.0	30.0	24.0	
MWC30	MWS30	8.0	12.0	30.0	38.0	30.0	





MFC Type

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

BEAM COUPLING - INCH

RULAND FLEXBEAM BEAM

Flexbeam™ zero backlash flexible shaft couplings are available with inch and metric bores and outside diameters ranging from 3/8" (6mm) to 1-1/2" (38mm). The Flexbeam series are machined from a single piece of aluminium and feature multiple spiral cuts. Stainless steel available on request.

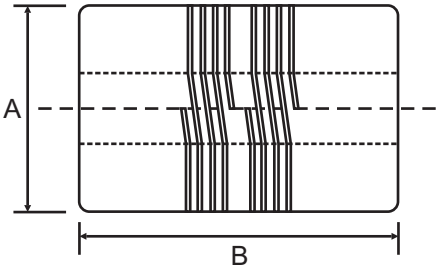
PERFORMANCE DATA

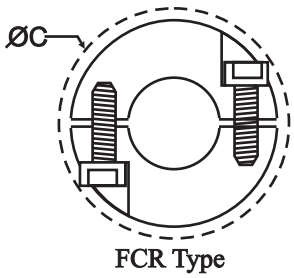
Part No.			Max Bore	100 RPM*	Nominal Torque (Nm)		Normal Maximum Speed
Clamp	Set Screw			kW	Min Bore	Max Bore	(RPM)
Flexbeam-3 Beam Coupling							
FCR10	FSR10		6.4	0.004	0.73	0.73	6000
FCR12	FSR12		7.9	0.008	1.47	1.13	6000
FCR16	FSR16		9.5	0.010	1.98	1.86	6000
FCR20	FSR20		12.7	0.021	3.95	2.82	6000
FCR24	FSR24		19.1	0.035	6.78	4.52	6000
Flexbeam-2 Beam Coupling							
PCR6	PSR6	ISR6	2.4	0.002	0.31	0.31	6000
PCR8	PSR8	ISR8	3.2	0.002	0.45	0.45	6000
PCR10	PSR10	ISR10	4.8	0.004	0.85	0.68	6000
PCR12	PSR12	ISR12	6.4	0.008	1.47	0.79	6000
PCR14	PSR14	ISR14	7.9	0.006	1.13	0.90	6000
PCR16	PSR16	ISR16	9.5	0.011	2.03	1.69	6000
PCR18	PSR18	ISR18	12.7	0.014	2.66	1.92	6000
PCR20	PSR20	ISR20	12.7	0.020	3.84	2.94	6000

Ratings are for aluminium.
For static torque rating multiply nominal torque by 2.
This coupling is fully suited to carrying torque up to this rating.

DIMENSIONAL DATA

Part No.			Bore		A	B	B	C
Clamp	Set Screw		Min	Max				
Flexbeam-3 Beam Coupling						FCR	FSR	FCR
FCR10	FSR10		4.8	6.4	15.9	25.4	25.4	20.2
FCR12	FSR12		4.8	7.9	19.1	31.8	31.8	22.3
FCR16	FSR16		6.4	9.5	25.4	38.1	38.1	28.4
FCR20	FSR20		7.9	12.7	31.8	44.5	44.5	37.1
FCR24	FSR24		9.5	19.1	38.1	57.2	57.2	41.7
Flexbeam-2 Beam Coupling						PCR/PSR	ISR	
PCR6	PSR6	ISR6	2.4	2.4	9.5	14.3	9.5	
PCR8	PSR8	ISR8	2.4	3.2	12.7	19.1	12.7	
PCR10	PSR10	ISR10	3.2	4.8	15.9	20.3	15.9	
PCR12	PSR12	ISR12	3.2	6.4	19.1	22.9	19.1	
PCR14	PSR14	ISR14	4.8	7.9	22.2	27.0	22.2	
PCR16	PSR16	ISR16	6.4	9.5	25.4	31.8	25.4	
PCR18	PSR18	ISR18	6.4	12.7	28.6	38.1	28.6	
PCR20	PSR20	ISR20	6.4	12.7	31.8	38.1	31.8	





FCR Type

BELLOWS COUPLING - METRIC

RULAND BELFLEX BELLOWS COUPLING

PERFORMANCE DATA

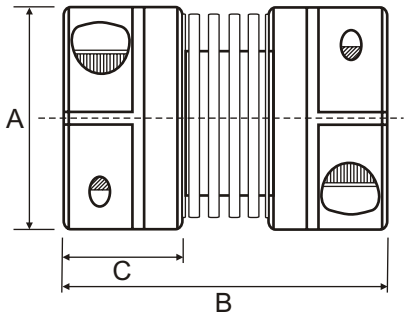
Belflex™ bellows couplings are an assembly of two aluminium hubs and a uniform, thin walled stainless steel bellows. The use of aluminium hubs with a bellows results in a coupling with very low inertia, a feature that is very important in today's highly responsive systems. The characteristics of bellows make them an ideal method for transmitting torque in motion control applications. The bellows allow the coupling to bend easily under loads caused by the three basic types of misalignment between shafts (angular, parallel, axial motion). Among servo couplings, bellows type couplings are one of the stiffest available, making them ideal in high performance applications that require a high degree of accuracy and repeatability.

Part No.		Max Bore	Power at 100 RPM	Nominal Torque	Normal Maximum Speed
Clamp	Set Screw		kW	(Nm)	(RPM)
MBC15	MBS15	6.0	0.007	1.25	10000
MBC19	MBS19	8.0	0.012	2.25	10000
MBC25	MBS25	12.0	0.018	3.40	10000
MBC33	MBS33	16.0	0.036	6.80	10000
MBC41	MBS41	20.0	0.073	14.00	10000
MBC51	MBS51	25.0	0.118	22.60	10000

Nominal torque ratings are at maximum misalignment.
For static torque rating multiply nominal torque by 2.
This coupling is fully suited to carrying torque up to this rating.
For reversing applications divide nominal torque by 2.

DIMENSIONAL DATA

Part No.		Bore		A	B	C
Clamp	Set Screw	Min	Max			
MBC15	MBS41	3.0	6.0	15.0	25.0	8.7
MBC19	MBS19	4.0	8.0	19.0	30.0	10.4
MBC25	MBS25	6.0	12.0	25.0	33.0	11.9
MBC33	MBS33	8.0	16.0	33.0	40.0	15.0
MBC41	MBS41	10.0	20.0	41.0	51.0	18.1
MBC51	MBS51	12.0	25.0	51.0	59.0	20.6



BELLOWS COUPLING - INCH

RULAND BELFLEX BELLOWS

PERFORMANCE DATA

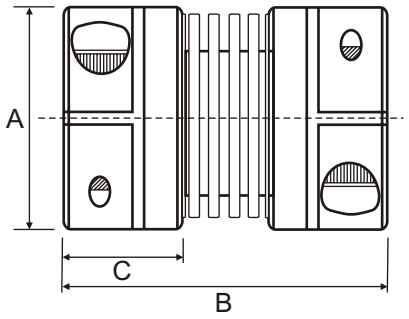
Belflex™ bellows couplings are an assembly of two aluminium hubs and a uniform, thin walled stainless steel bellows. The use of aluminium hubs with a bellows results in a coupling with very low inertia, a feature that is very important in today's highly responsive systems. The characteristics of bellows make them an ideal method for transmitting torque in motion control applications. The bellows allow the coupling to bend easily under loads caused by the three basic types of misalignment between shafts (angular, parallel, axial motion). Among servo couplings, bellows type couplings are one of the stiffest available, making them ideal in high performance applications that require a high degree of accuracy and repeatability.

Part No.		Max Bore	Power at 100 RPM	Nominal Torque	Normal Maximum Speed
Clamp	Set Screw		kW	(Nm)	(RPM)
BC10	BS10	6.4	0.007	1.24	10000
BC12	BS12	7.9	0.012	2.26	10000
BC16	BS16	12.7	0.018	3.39	10000
BC21	BS21	15.9	0.035	6.78	10000
BC26	BS26	19.1	0.074	14.12	10000
BC32	BS32	25.4	0.118	22.60	10000

Nominal torque ratings are at maximum misalignment.
For static torque rating multiply nominal torque by 2.
This coupling is fully suited to carrying torque up to this rating.
For reversing applications divide nominal torque by 2.

DIMENSIONAL DATA

Part No.		Bore		A	B	C
Clamp	Set Screw	Min	Max			
BC10	BS10	3.2	6.4	15.0	25.4	8.6
BC12	BS12	4.8	7.9	19.1	30.2	10.4
BC16	BS16	6.4	12.7	25.4	33.3	11.9
BC21	BS21	7.9	15.9	33.4	39.7	15.0
BC26	BS26	9.5	19.1	41.3	50.8	18.0
BC32	BS32	12.7	25.4	50.8	58.7	20.6



DISC COUPLING - INCH

RULAND DISCFLEX™ DISC

PERFORMANCE DATA

Discflex™ is available in single and double disc styles with bore sizes ranging from 1/8" to 1 1/4" in the inch series and 3mm to 30mm in the metric series. The couplings are an assembly of two anodized aluminum hubs, multiple flat stainless steel disc springs and a center spacer for double disc styles. The center spacer is available in a choice of anodized aluminum or insulating acetal for electrical isolation. This results in a high performance motion control coupling with excellent high speed capabilities up to 10,000 rpm, strength and torsional stiffness characteristics, and low inertia for today's highly responsive systems.

DCD

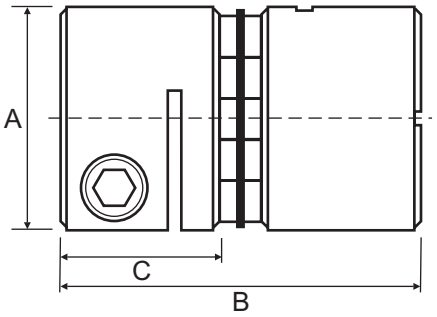
DCS

Part No		Max Bore	Power at 100 RPM	Nominal Torque	Normal Maximum Speed
Single	Double		kW	(Nm)	(RPM)
DCS10	DCD10	6.4	0.009	0.85	10000
DCS12	DCD12	7.9	0.015	1.41	10000
DCS16	DCD16	12.7	0.030	2.82	10000
DCS21	DCD21	15.9	0.059	5.65	10000
DCS26	DCD26	19.1	0.106	10.17	10000
DCS32	DCD32	25.4	0.207	19.77	10000
DCS36	DCD36	31.8	0.266	25.42	10000

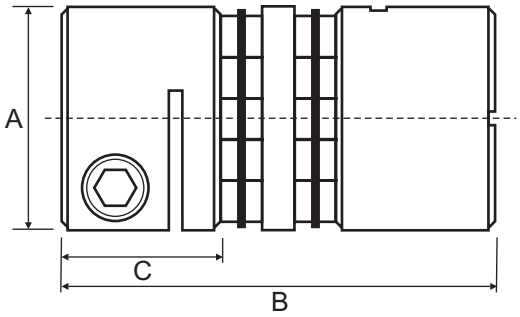
For static torque rating multiply nominal torque by 2.
This coupling is fully suited to carrying torque up to this rating.

DIMENSIONAL DATA

DCS



DCD



Part No.		Bore		A	B	B	C
Single	Double	Min	Max		DCS	DCD	
DCS10	DCD10	3.2	6.4	15.0	18.3	23.8	8.3
DCS12	DCD12	4.8	7.9	19.1	23.0	30.2	10.6
DCS16	DCD16	6.4	12.7	25.4	26.2	34.9	11.9
DCS21	DCD21	7.9	15.9	33.4	33.4	44.5	15.0
DCS26	DCD26	9.5	19.1	41.3	39.7	54.0	18.0
DCS32	DCD32	12.7	25.4	50.8	46.0	61.9	20.6
DCS36	DCD36	12.7	31.8	57.2	58.8	76.2	26.7

OLDHAM COUPLING - INCH

RULAND PARADRIVE™ OLDHAM

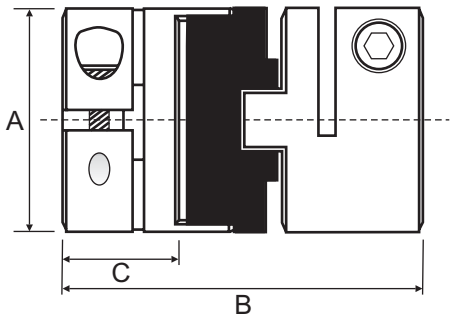
PERFORMANCE DATA

Oldham couplings are three piece couplings comprised of two aluminium hubs and a center member. The center disc, which is available in a choice of acetal for high torsional stiffness or nylon for vibration and shock absorption, is the torque transmitting element. Torque transmission is accomplished by mating slots in the center disc, located on opposite sides of the disc and oriented 90 degrees apart, with the drive tenons on the hubs. The slots of the disc fit on the tenons of the hub with a slight press fit. This press fit allows the coupling (with an acetal disc) to operate with zero backlash. Coupling can act as a mechanical fuse, contact Naismith Engineering for more information..

Part No.		Max Bore	Power at 100 RPM	Nominal Torque (Nm)		Normal Maximum Speed
Clamp	Set Screw		kW	Acetal	Nylon	(RPM)
	OST08	6.4	0.007	0.68	0.17	4500
OCT12	OST12	7.9	0.024	2.25	0.57	4500
OCT16	OST16	12.7	0.050	4.75	1.13	4500
OCT21	OST21	15.9	0.084	8.00	2.05	4500
OCT26	OST26	19.1	0.154	14.75	3.65	4500
OCT32		25.4	0.298	28.50	-	4500
OCT36		25.4	0.445	42.50	-	4500

Power at 100 RPM rating is based on Acetal.
This coupling is fully suited to carrying torque up to this rating.

DIMENSIONAL DATA



Part No.		Bore		A	B	B	C	C
Clamp	Set Screw	Min	Max		OCT	OST	OCT	OST
	OST08	3.2	6.4	12.7	-	15.7	-	5.6
OCT12	OST12	4.8	7.9	19.1	25.4	22.2	9.7	7.6
OCT16	OST16	6.4	12.7	25.4	31.8	28.6	11.9	9.9
OCT21	OST21	7.9	15.9	33.3	47.6	47.6	15.0	15.0
OCT26	OST26	9.5	19.1	41.3	50.8	50.8	18.0	18.0
OCT32		12.7	25.4	50.8	59.7	-	20.8	-
OCT36		12.7	25.4	57.2	78.7	-	28.7	-

SERVOFLEX SFC COUPLING

SERVOCLASS

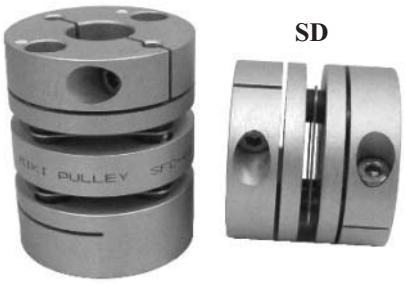
PERFORMANCE DATA

ServoClass Couplings are specifically designed to meet the precision positioning requirements and high reverse-load characteristics common to many of today's AC and DC servomotor applications.
ServoClass Couplings feature zero-backlash flexible metal discs and zero-backlash "keyless" clamp-type mounting hubs. This high-performance coupling has high torsional stiffness and low inertia to avoid system resonance. Yet it is remarkably flexible as a result of its double-flex-disc design, which provides exceptional misalignment capacity. This flexibility reduces reaction loads, thereby extending the operating life of the connected components while providing smoother system performance.

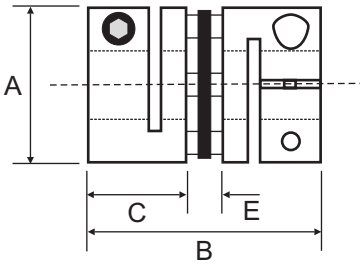
Part No.		Max Bore	Power at 100 RPM	Nominal Torque	Normal Maximum Speed
SD	WD		kW	(Nm)	(RPM)
SFC-010SD	SFC-010WD	8.0	0.010	1.0	10000
SFC-020SD	SFC-020WD	10.0	0.016	1.5	10000
SFC-030SD	SFC-030WD	14.0	0.031	3.0	10000
SFC-035SD	SFC-035WD	16.0	0.063	6.0	10000
SFC-040SD	SFC-040WD	19.0	0.094	9.0	10000
SFC-050SD	SFC-050WD	25.0	0.262	25.0	10000
SFC-060SD	SFC-060WD	30.0	0.628	60.0	10000
SFC-080SD	SFC-080WD	35.0	1.047	100.0	10000

WD

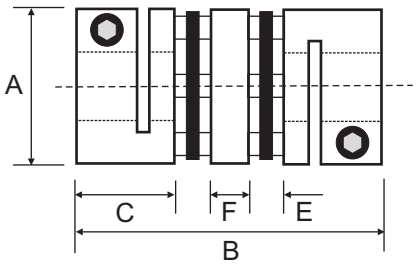
SD



DIMENSIONAL DATA



SD



WD

Part No		Bore		A	B		C	E	F
		Min	Max		SD	WD			
SFC-010SD	SFC-010WD	4.0	8.0	19.0	19.9	26.7	9.0	1.9	5.0
SFC-020SD	SFC-020WD	5.0	10.0	26.0	23.5	31.9	10.5	2.5	6.0
SFC-030SD	SFC-030WD	6.0	14.0	34.0	27.1	37.2	12.0	3.1	7.0
SFC-035SD	SFC-035WD	8.0	16.0	39.0	34.1	47.2	15.0	4.1	9.0
SFC-040SD	SFC-040WD	8.0	19.0	44.0	34.1	47.2	15.0	4.1	9.0
SFC-050SD	SFC-050WD	10.0	25.0	56.0	45.0	61.0	20.0	5.0	11.0
SFC-060SD	SFC-060WD	15.0	30.0	68.0	54.0	74.0	24.0	6.0	14.0
SFC-080SD	SFC-080WD	20.0	35.0	82.0	68.0	98.0	30.0	8.0	22.0

SERVOFLEX SFS COUPLING

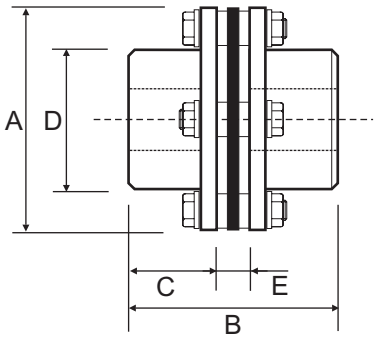
SERVOCLASS

The SFS ServoClass Couplings are also designed to meet the precision positioning requirements and high reverse-load characteristics. With higher torque ratings this coupling suits larger applications. ServoClass Couplings feature zero-backlash flexible metal discs. This high-performance coupling has high torsional stiffness and low inertia to avoid system resonance. Yet it is remarkably flexible as a result of its double-flex-disc design, which provides exceptional misalignment capacity. Available in single 'S', double 'W' and spacer 'G' type.

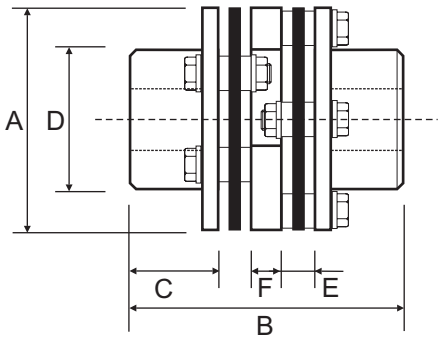
PERFORMANCE DATA

Part No.			Max Bore	Power at 100 RPM	Nominal Torque	Normal Maximum Speed (RPM)		
S	W	G		kW	(Nm)	S	W	G
SFS-05S	SFS-05W	SFS-05G	20.0	0.209	20.0	25000	10000	20000
SFS-06S	SFS-06W	SFS-06G	25.0	0.419	40.0	20000	8000	16000
SFS-08S	SFS-08W	SFS-08G	35.0	0.838	80.0	17000	6800	13000
SFS-09S	SFS-09W	SFS-09G	38.0	1.885	180.0	15000	6000	12000
SFS-10S	SFS-10W	SFS-10G	42.0	2.618	250.0	13000	5200	10000
SFS-12S	SFS-12W	SFS-12G	50.0	4.712	450.0	11000	4400	8000
SFS-14S	SFS-14W	SFS-14G	60.0	8.377	800.0	9500	3800	7000

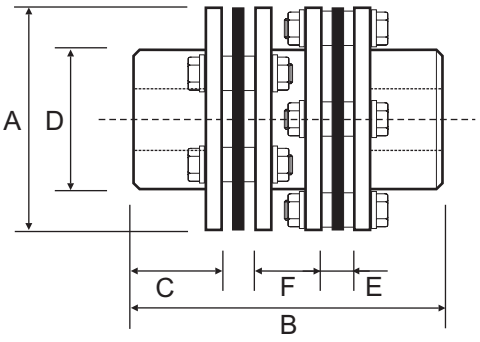
DIMENSIONAL DATA



TYPE S



TYPE W



TYPE G

Part No.			Bore		A	B			C	D	E	F	
S	W	G	Min	Max		S	W	G				W	G
SFS-05S	SFS-05W	SFS-05G	7.0	20.0	56.0	45.0	58.0	74.0	20.0	32.0	5.0	8.0	24.0
SFS-06S	SFS-06W	SFS-06G	7.0	25.0	68.0	56.0	74.0	86.0	25.0	40.0	6.0	12.0	24.0
SFS-08S	SFS-08W	SFS-08G	12.0	35.0	82.0	66.0	84.0	98.0	30.0	54.0	6.0	12.0	26.0
SFS-09S	SFS-09W	SFS-09G	12.0	38.0	94.0	68.0	98.0	106.0	30.0	58.0	8.0	22.0	30.0
SFS-10S	SFS-10W	SFS-10G	20.0	42.0	104.0	80.0	110.0	120.0	35.0	68.0	10.0	20.0	30.0
SFS-12S	SFS-12W	SFS-12G	20.0	50.0	126.0	91.0	127.0	140.0	40.0	78.0	11.0	25.0	38.0
SFS-14S	SFS-14W	SFS-14G	20.0	60.0	144.0	102.0	144.0	160.0	45.0	88.0	12.0	30.0	46.0

BAUMANN COUPLING

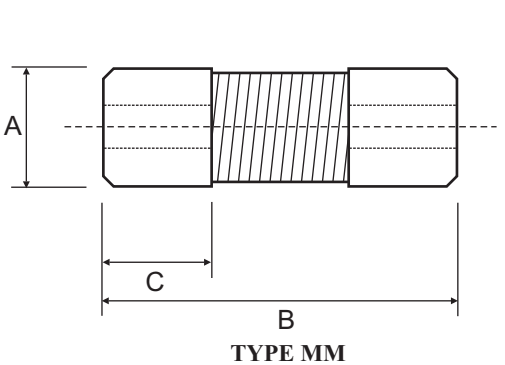
BAUMANN

PERFORMANCE DATA

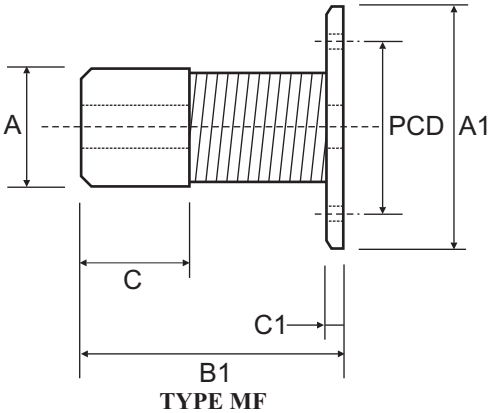
The principal feature of the Baumann Flex Coupling is the multi-layer and multi-coil spring assembly, which is brazed firmly to the end pieces designed either as collars, flanges or hubs. The coupling serves primarily to take up inaccuracies of alignment between two rotating shafts; it provides torsional flexibility in the coupling of such shafts and damps vibration.
Its effectiveness is largely independent of the direction of rotation, as in one direction the outer and middle counter-coiled spring layers work together to transmit the load, while in the other direction, the middle and inner layers come into operation.
Coupling Type MM and MF are also available with clamping style hubs in sizes 6 through to 28.

Part No.	Max Bore & Key	Max Bore No Key	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
6	6.0	10.0	0.026	2.5	20000
8	8.0	12.0	0.052	5.0	15000
12	12.0	15.0	0.105	10.0	12000
14	14.0	19.0	0.105	10.0	10000
16	16.0	20.0	0.209	20.0	9000
19	19.0	25.0	0.209	20.0	8000
20	20.0	27.0	0.419	40.0	7000
24	24.0	31.0	0.419	40.0	7000
25	25.0	34.0	0.942	90.0	6000
28	28.0	35.0	0.942	90.0	6000
30	30.0	40.0	1.571	150.0	5000
35	35.0	45.0	2.304	220.0	4500
40	40.0	50.0	3.141	300.0	3000

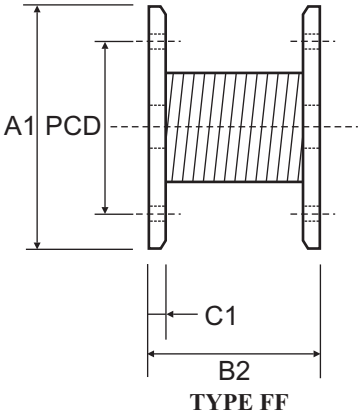
Maximum torque can only be achieved with correctly aligned shafts.



TYPE MM



TYPE MF



TYPE FF

Other types available, contact Naismith Engineering.

BAUMANN COUPLING

DIMENSIONAL DATA

Part No.	Bore					Length						
	Min	Max With Key	Max No Key	A	A1	Code	B	B1	B2	C	C1	PCD
6	2.5	6.0	10.0	17.0	32.0	K	25.0	20.0	15.0	8.0	4.0	24.0
						L	30.0	25.0	20.0			
						D	35.0	30.0	25.0			
8	3.5	8.0	12.0	21.0	42.0	K	35.0	30.0	25.0	10.0	6.0	30.0
						L	45.0	40.0	35.0			
						D	50.0	45.0	40.0			
12	5.5	12.0	15.0	26.0	48.0	K	50.0	40.0	30.0	15.0	6.0	37.0
						L	60.0	50.0	40.0			
						D	70.0	60.0	50.0			
14	5.5	14.0	19.0	30.0	52.0	K	50.0	40.0	30.0	15.0	6.5	40.0
						L	60.0	50.0	40.0			
						D	70.0	60.0	50.0			
16	5.5	16.0	20.0	35.0	58.0	K	65.0	50.0	35.0	20.0	6.5	47.0
						L	80.0	65.0	50.0			
						D	90.0	75.0	60.0			
19	5.5	19.0	25.0	38.0	62.0	K	65.0	50.0	35.0	20.0	7.0	50.0
						L	80.0	65.0	50.0			
						D	90.0	75.0	60.0			
20	5.5	20.0	27.0	45.0	65.0	K	80.0	60.0	40.0	25.0	7.0	52.0
						L	95.0	75.0	55.0			
						D	110.0	90.0	70.0			
24	5.5	24.0	31.0	48.0	70.0	K	80.0	60.0	40.0	25.0	7.0	57.0
						L	95.0	75.0	55.0			
						D	110.0	90.0	70.0			
25	5.5	25.0	34.0	55.0	75.0	K	100.0	75.0	50.0	31.0	8.5	62.0
						L	120.0	95.0	70.0			
						D	140.0	115.0	90.0			
28	5.5	28.0	35.0	55.0	78.0	K	100.0	75.0	50.0	31.0	8.5	65.0
						L	120.0	95.0	70.0			
						D	140.0	115.0	90.0			
30	5.5	30.0	40.0	65.0	90.0	K	125.0	95.0	65.0	37.0	10.0	74.5
						L	150.0	120.0	90.0			
						D	175.0	145.0	115.0			
35	5.5	35.0	45.0	75.0	100.0	K	150.0	115.0	80.0	44.0	13.0	84.0
						L	180.0	145.0	110.0			
						D	210.0	175.0	140.0			
40	21.0	40.0	50.0	80.0	120.0	K	170.0	130.0	90.0	50.0	14.0	101.5
						L	200.0	160.0	120.0			
						D	240.0	200.0	160.0			

UNIFLEX COUPLING

UNIFLEX

PERFORMANCE DATA

U
This is a durable one-piece flexible coupling for general purpose shaft-to-shaft applications. It is the basis for all Uniflex coupling types.

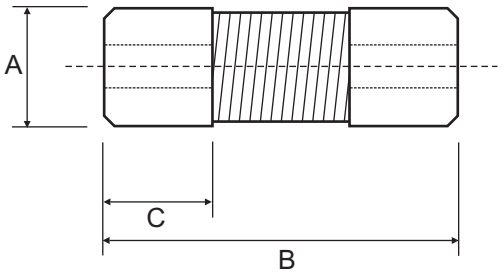
RRU
This design offers "quick disconnect" for drop out requirements. It can also accommodate a slightly larger shaft diameter than the standard U type.

UFH
A flange-to-shaft configuration, this couples flange mounted equipment to a shaft with all the benefits of Uniflex versatility. The stock flange plate is the same as used on the UF type.

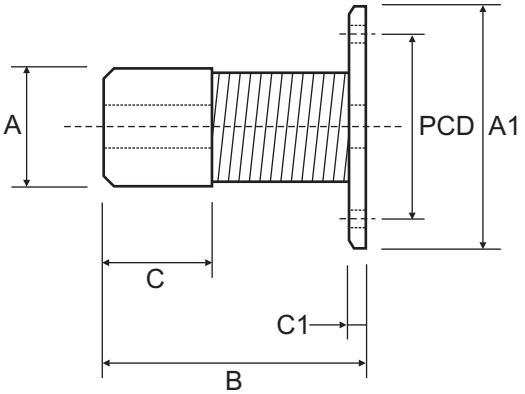
UF
This flange-to-flange type is designed to connect flange mounted equipment to another flange while compensating for misalignment. It is also the centre drop out section for the RRU type.

All Uniflex couplings use steel hubs/flanges and steel springs.

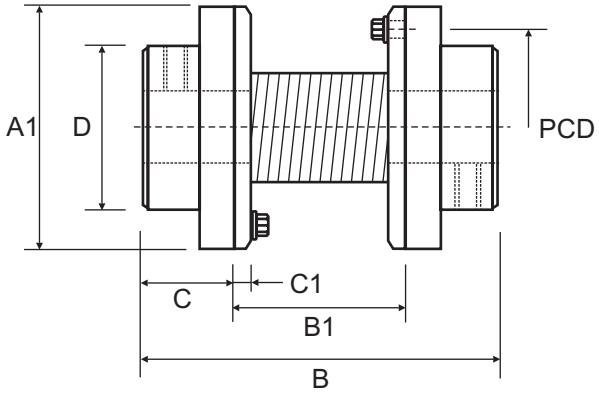
Size	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	U, UFH	RRU, UF	kW	(Nm)	(RPM)
18	6.4	-	0.021	2.0	30000
25	8.0	-	0.040	3.8	30000
37	9.7	-	0.046	4.4	30000
50	12.7	25.4	0.097	9.3	30000
62	16.0	-	0.149	14.2	20000
75	19.1	32.0	0.207	19.8	20000
87	22.4	35.1	0.409	39.1	10000
100	25.4	35.1	0.668	63.8	6000
125	31.8	42.0	0.893	85.3	6000
137	35.1	48.0	1.491	142.4	6000
150	38.1	54.0	2.236	213.5	3000



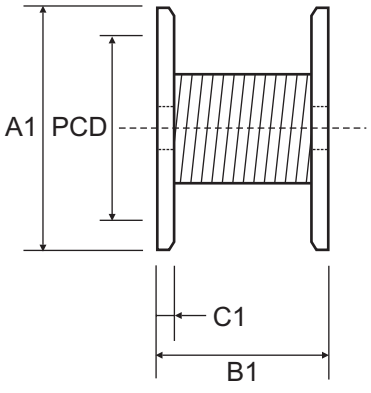
TYPE U



TYPE UFH



TYPE RRU



TYPE UF

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

Lovejoy

UNIFLEX COUPLING

DIMENSIONAL DATA

Part No.	Bore Min	Bore Max U, UFH	Bore Max RRU, UF	Style Code	A	A1	B Reg	B Short	B1	C Reg	C Short	C1	D	PCD
18	3.0	6.4	-	U	15.5	-	25.4	-	-	7.9	-	-	-	-
25	3.0	8.0	-	U	18.5	-	38.1	25.4	-	9.7	8.1	-	-	-
37	6.4	9.7	-	U	21.8	-	52.3	41.9	-	13.2	13.2	-	-	-
50	7.9	12.7	25.4	U	26.4	-	63.5	46.2	-	16.3	12.7	-	-	-
				UFH	26.4	50.8	51.6	38.1	-	16.3	12.7	6.4	-	38.1
				RRU	-	50.8	89.4	-	39.6	25.4	-	6.4	50.8	38.1
				UF	-	50.8	-	-	39.6	-	-	6.4	-	38.1
62	7.9	16.0	-	U	36.1	-	69.1	57.9	-	21.3	15.7	-	-	-
75	9.7	19.1	32.0	U	36.1	-	84.1	69.1	-	21.3	21.3	-	-	-
				UFH	36.1	63.5	65.5	50.8	-	21.3	21.3	9.7	-	50.8
				RRU	-	63.5	108.5	-	46.0	31.8	-	9.7	63.5	50.8
				UF	-	63.5	-	-	46.0	-	-	9.7	-	50.8
87	11.2	22.4	35.1	U	43.9	-	88.9	73.9	-	21.3	21.3	-	-	-
				UFH	43.9	73.2	71.6	56.9	-	21.3	21.3	9.7	-	57.2
				RRU	-	73.2	122.9	-	53.8	35.1	-	9.7	72.9	57.2
				UF	-	73.2	-	-	53.8	-	-	9.7	-	57.2
100	11.2	25.4	35.1	U	53.6	-	104.6	90.4	-	32.8	25.4	-	-	-
				UFH	53.6	82.6	80.5	73.2	-	32.8	25.4	9.7	-	68.1
				RRU	-	82.6	124.5	-	55.4	35.1	-	9.7	58.7	68.1
				UF	-	82.6	-	-	55.4	-	-	9.7	-	68.1
125	15.7	31.8	42.0	U	55.1	-	124.0	95.3	-	32.5	27.9	-	-	-
				UFH	55.1	93.5	95.3	71.6	-	32.5	27.9	12.7	-	79.2
				RRU	-	93.5	148.3	-	66.5	41.1	-	12.7	69.9	79.2
				UF	-	93.5	-	-	66.5	-	-	12.7	-	79.2
137	15.7	35.1	48.0	U	64.5	-	133.4	104.6	-	40.1	25.7	-	-	-
				UFH	64.5	111.3	102.4	87.9	-	40.1	25.9	12.7	-	95.3
				RRU	-	111.3	165.9	-	71.4	47.8	-	12.7	82.6	95.3
				UF	-	111.3	-	-	71.4	-	-	12.7	-	95.3
150	19.1	38.1	54.0	U	75.7	-	159.5	127.0	-	47.8	43.7	-	-	-
				UFH	75.7	136.7	123.4	95.3	-	47.8	43.7	16.0	-	111.3
				RRU	-	136.7	194.6	-	87.4	53.8	-	16.0	95.3	111.3
				UF	-	136.7	-	-	87.4	-	-	16.0	-	111.3

ZERO-MAX

COMPOSITE DISC COUPLING

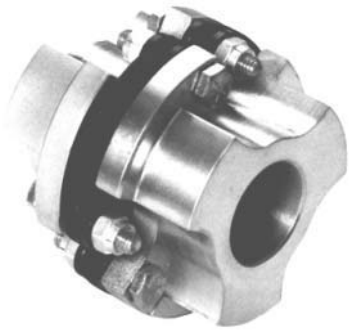
COMPOSITE DISC

The Zero-Max CD coupling is a unique hybrid coupling, combining the best features found in both steel and elastomeric couplings. Through its new open arm disc design and use of rugged composite materials, the coupling offers the high misalignment capacity found in many elastomeric couplings, but with higher torsional stiffness. Compared to steel disc couplings, these couplings offer superior damping and isolation shock and vibrational loads, including elimination of fretting corrosion. Double Flex & Spacer couplings are also available. Hubs are available in Aluminium and Stainless Steel and also available as Clamp style.

PERFORMANCE DATA

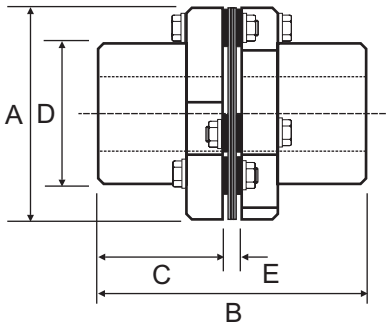
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
6A18*	16.0	0.241	23.0	14000
6A22	26.0	0.471	45.0	12000
6A26	32.0	0.681	65.0	10500
6A30	35.0	1.298	124.0	9000
6A37	46.0	2.482	237.0	7400
6A45	60.0	3.906	373.0	6100
6A52	66.0	5.319	508.0	5200
6A60	76.0	9.466	904.0	4600
6A67	85.0	14.785	1412.0	4300
6A77	100.0	22.482	2147.0	3900
6A90	115.0	35.497	3390.0	3600
6A105	130.0	52.063	4972.0	3300
6A120	152.0	70.995	6780.0	3000

* Round boss on hub



DIMENSIONAL DATA

Part No.	Bore		A	B	C	D	E
	Min	Max					
6A18	-	16.0	47.0	38.8	15.9	28.6	7.0
6A22	-	26.0	57.2	55.4	23.8	47.6	7.8
6A26	-	32.0	66.0	61.7	27.0	54.8	7.8
6A30	12.0	35.0	76.2	75.0	31.8	64.0	11.7
6A37	12.0	46.0	95.3	86.0	36.5	79.0	13.3
6A45	18.0	60.0	114.0	101.0	42.9	95.0	14.8
6A52	18.0	66.0	133.0	115.0	49.2	111.0	16.4
6A60	24.0	76.0	152.0	143.0	61.9	127.0	19.5
6A67	24.0	85.0	172.0	162.0	69.9	143.0	21.8
6A77	24.0	100.0	197.0	185.0	79.4	164.0	25.7
6A90	50.0	115.0	229.0	219.0	95.3	191.0	28.8
6A105	50.0	130.0	267.0	253.0	108.0	222.0	36.8
6A120	50.0	152.0	305.0	280.0	121.0	254.0	39.0



NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

ZERO-MAX

CONTROL FLEX COUPLING

CONTROL FLEX

The Schmidt Control-Flex coupling was developed to satisfy the higher performance requirements of today's modern power transmission drives. To meet this goal, Schmidt Coupling engineered the unique
Control Flex disc which is based on a parallel linkage system.
Unlike elastomeric couplings, the Control-Flex disc allows parallel, angular and axial misalignment, while offering higher torque rigidity and maintaining constant transmission of torque and angular velocity.

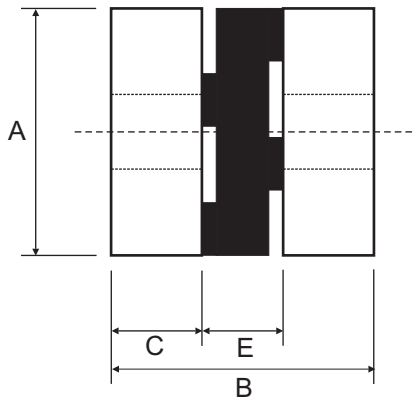
PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Type 1	*Single Flex Disc*			
C030P	25.4	0.296	28.25	3200
C045P	40.0	1.006	96.03	2700
C060P	55.0	2.366	225.96	2200
C075P	63.0	4.615	440.70	1800
Type 2	*Single Flex Disc*			
C008P	10.0	0.005	0.45	5000
C011P	12.7	0.011	1.02	4600
C016P	16.0	0.037	3.50	4200
C023P	27.0	0.125	11.98	3700
C031P	40.0	0.296	28.25	3200
Type 2A	*Double Flex Discs*			
C208P	10.0	0.008	0.79	4700
C211P	12.7	0.020	1.92	4400
C216P	16.0	0.067	6.44	4000
C223P	27.0	0.227	21.69	3500
C231P	40.0	0.515	49.15	3000

TYPE 2/2A **TYPE 1**

DIMENSIONAL DATA

Part No.	Bore Min	Bore Max	A	B	C	E
Type 1	*Single Flex Disc*					
C030P	10.0	25.4	76.2	69.9	25.4	19.1
C045P	8.0	40.0	114.3	104.8	38.1	28.6
C060P	26.0	50.0	152.4	139.7	50.8	38.1
C075P	29.0	63.0	190.5	174.6	63.5	47.6
Type 2	*Single Flex Disc*					
C008P*	4.0	10.0	18.7	15.9	5.6	4.7
C011P	4.0	12.7	25.0	25.4	9.5	6.4
C016P	7.0	16.0	37.7	28.6	9.5	9.5
C023P	10.0	27.0	57.2	42.8	14.3	14.3
C031P	10.0	40.0	76.2	57.2	19.1	19.1
Type 2A	*Double Flex Discs*					
C208P*	4.0	10.0	18.7	19.9	5.6	8.7
C211P	4.0	12.7	25.0	30.7	9.5	11.6
C216P	7.0	16.0	37.7	36.5	9.5	17.5
C223P	10.0	27.0	57.2	54.8	14.3	26.2
C231P	10.0	40.0	76.2	73.0	19.1	34.9



* Coupling diameter will be 20.6mm for bores over 8mm

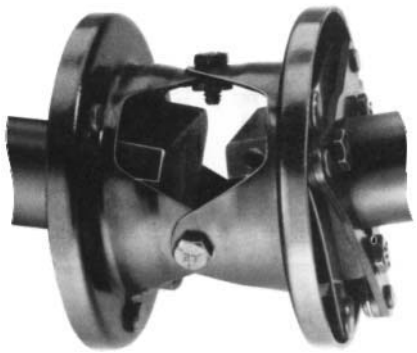
DELTA FLEX COUPLING

DELTA FLEX

The unique design, misalignment capability and simple installation, make Deltaflex easily adaptable to special applications. This is an all metal coupling (also available in stainless steel). High misalignment capability means that there is less reactionary load on the rest of the machine.

- Operates smoothly when misaligned.
- No lubrication.
- No backlash.
- Many standard coupling configurations for application versatility.

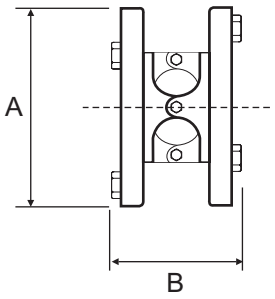
PERFORMANCE DATA



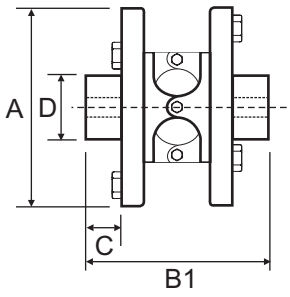
Part No.	Max Bore		Power at 100 RPM	Nominal Torque	Normal Maximum Speed
	Delta Hub	Round Hub	kW	(Nm)	(RPM)
40	35.0	42.0	0.880	84.0	8000
50	49.0	58.0	2.241	214.0	6000
60	65.0	79.0	4.848	463.0	5000
80	90.0	106.0	11.236	1073.0	4000
100	112.0	132.0	27.089	2587.0	3000

DIMENSIONAL DATA

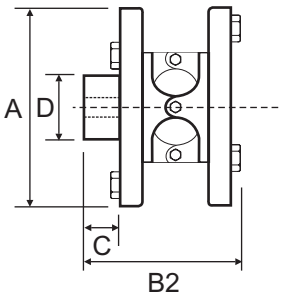
TYPE 1 ARRANGEMENT



TYPE 2 ARRANGEMENT



TYPE 2A ARRANGEMENT



Part No.	Bore			A	B	B1	B2	C	D
	Min	Max Delta Hub	Max Round Hub						
40	11.2	35.0	42.0	111.3	89.2	140.0	114.6	31.2	65.0
50	11.2	49.0	58.0	157.0	122.7	187.2	154.9	39.9	90.4
60	19.1	65.0	79.0	184.2	158.0	237.0	197.4	48.3	114.3
80	34.9	90.0	106.0	244.3	191.0	295.7	243.3	64.3	149.4
100	44.5	112.0	132.0	323.9	247.4	408.4	327.9	95.3	184.2

UNIVERSAL JOINT

UNIVERSAL JOINT

'D' TYPE

A standard industrial type universal joint with pin and block design, the 'D' type is ideal for applications with up to 25° angular misalignment and speeds up to 1750 RPM. It is available unassembled with no bore, or assembled with a std bore. Boot retaining grooves are standard.

'HD' TYPE

The 'HD' Type is a high quality universal joint made to exacting tolerances, perfect for your toughest high angle, high RPM applications. Precision machining, hardened yokes and matched fitting of all components means that it normally provides at least twice the life of a standard industrial type universal joint. It is available unassembled with no bore, or assembled with a std bore. Boot retaining grooves are standard.

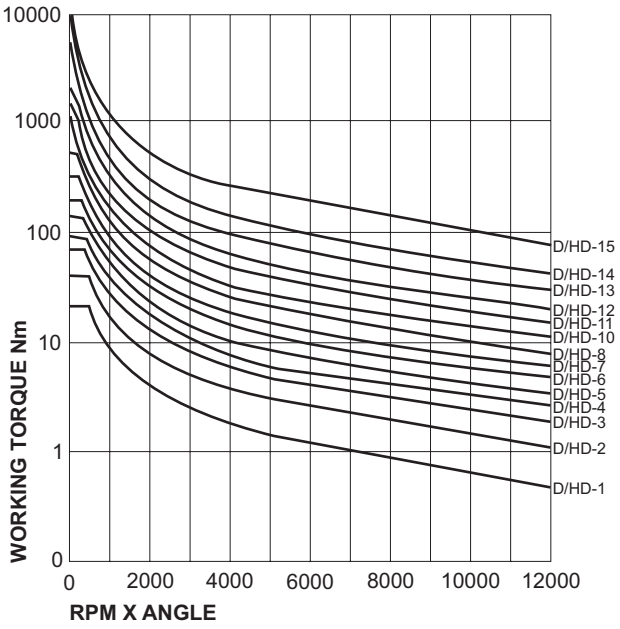
Part No.	Max Bore & Key	Max Bore No Key	Normal Maximum Speed (RPM)
D/HD-1	-	6.4	1750
D/HD-2	-	9.7	1750
D/HD-3	6.4	12.7	1750
D/HD-4	11.2	15.7	1750
D/HD-5	12.7	17.5	1750
D/HD-6	14.2	19.1	1750
D/HD-7	15.7	22.4	1750
D/HD-8	19.1	25.4	1750
D/HD10	22.2	28.4	1750
D/HD11	25.4	31.8	1750
D/HD12	30.2	38.1	1750
D/HD13	39.0	44.5	1750
D/HD14	48.0	50.8	1750
D/HD15	63.5	63.5	1750

NOTE: These universals are available with no bore (solid) unassembled and std bore assembled.

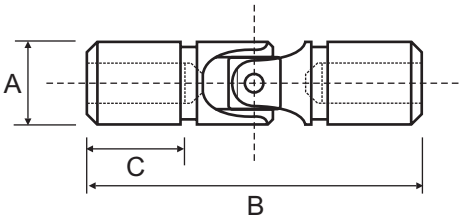
Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	C
D/HD-1	4.8	-	6.4	9.7	44.5	14.2
D/HD-2	6.4	-	9.7	12.7	50.8	15.7
D/HD-3	7.9	6.4	12.7	15.7	57.2	17.3
D/HD-4	9.7	11.2	15.7	19.1	68.1	22.4
D/HD-5	11.2	12.7	17.5	22.4	76.2	22.4
D/HD-6	12.7	14.2	19.1	25.4	85.9	25.4
D/HD-7	14.2	15.7	22.4	28.4	88.9	25.4
D/HD-8	15.7	19.1	25.4	31.8	95.3	26.9
D/HD10	19.1	22.2	28.4	38.1	108.0	30.0
D/HD11	22.4	25.4	31.8	44.5	127.0	35.1
D/HD12	25.4	30.2	38.1	50.8	138.2	38.1
D/HD13	31.8	39.0	44.5	63.5	177.8	50.8
D/HD14	38.1	48.0	50.8	76.2	230.1	69.9
D/HD15	50.8	63.5	63.5	101.6	269.7	76.2

Standard bore sizes are in inches

PERFORMANCE DATA



DIMENSIONAL DATA



Steps in Selecting a Universal Joint

Step 1 Multiply RPM by the working angle

Step 2 Determine the nominal torque of your application in Nm

Step 3 Multiply the calculated torque by the desired service factor

Step 4 Refer to the running curves that apply to the desired U-Joint. D and HD. The required universal joint size can be determined by establishing the point of intersection of the RPM X Working angle figure on the horizontal scale and the service factor torque on the vertical scale. Size is stated against the curve

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

UNIVERSAL JOINT NEEDLE BEARING

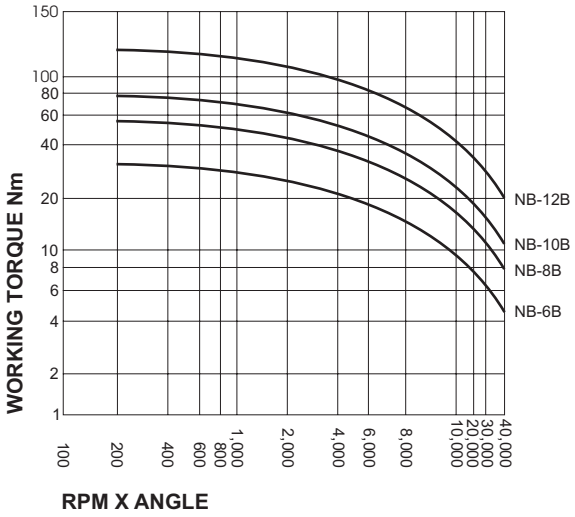
NEEDLE BEARING TYPE

Designed with high quality, pre-lubricated and sealed needle bearings, this universal joint provides the reliability necessary for speeds up to 6000 RPM, and operating angles up to 25°
Needle bearing universal joints also ensure the precision required for robotics, instrumentation, control equipment, and many other demanding applications. It is available assembled with both no bore or with a std bore. Boot retaining grooves are standard.

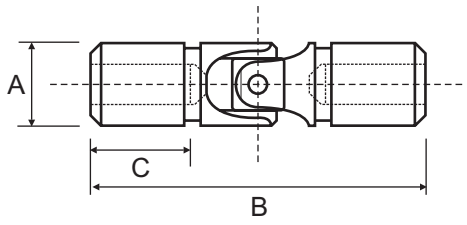
Part No.	Max Bore & Key	Max Bore No Key	Normal Maximum Speed (RPM)
NB-6	14.2	19.1	6000
NB-8	19.1	25.4	6000
NB10	22.4	28.4	6000
NB12	30.2	38.1	6000

NOTE: These universals are available with no bore (solid) assembled and std bore assembled.

PERFORMANCE DATA



DIMENSIONAL DATA



Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	C
NB-6	12.7	14.2	19.1	25.4	85.9	25.4
NB-8	15.7	19.1	25.4	31.8	95.3	26.9
NB10	19.1	22.4	28.4	38.1	108.0	31.8
NB12	25.4	30.2	38.1	50.8	138.2	41.1

Standard bore sizes are in inches

Steps in Selecting a Universal Joint

Step 1 Multiply RPM by the working angle

Step 2 Determine the nominal torque of your application in Nm

Step 3 Multiply the calculated torque by the desired service factor

Step 4 Refer to the running curves that apply to the desired U-Joint. NB. The required universal joint size can be determined by establishing the point of intersection of the RPM X Working angle figure on the horizontal scale and the service factor torque on the vertical scale. Size is stated against the curve immediately above this point.

UNIVERSAL JOINT 303 STAINLESS STEEL

STAINLESS STEEL

PERFORMANCE DATA

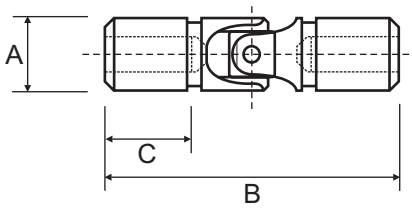
'D' Type universal joints are available in stainless steel. For use when contact with corrosive chemicals, exposure to corrosive atmosphere, or sanitation requirements are a factor. It is available unassembled with no bore, or assembled with a std bore. Boot retaining grooves are standard. To select a stainless steel universal joint use the D & HD chart on page 61

Part No.	Max Bore & Key	Max Bore No Key	Normal Maximum Speed (RPM)
D-4SS	11.2	15.7	1750
D-6SS	14.2	19.1	1750
D-8SS	19.1	25.4	1750
D10SS	22.4	28.4	1750
D12SS	30.2	38.1	1750

NOTE: These universals are available with no bore (solid) unassembled and std bore assembled.

DIMENSIONAL DATA

Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	C
D-4SS	9.7	11.2	15.7	19.1	68.1	22.4
D-6SS	12.7	14.2	19.1	25.4	85.9	25.4
D-8SS	15.7	19.1	25.4	31.8	95.3	26.9
D10SS	19.1	22.4	28.4	38.1	108.0	30.0
D12SS	25.4	30.2	38.1	50.8	138.2	38.1



Standard bore sizes are in inches

UNIVERSAL JOINT OFFSET PIN & BLOCK

LOJ TYPE

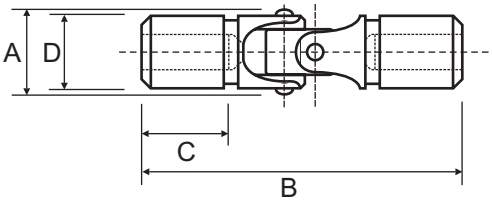
PERFORMANCE DATA

These economical universal joints have an offset pin design. They are ideal for use on hand operated, low torque drives such as remote control linkages, awning devices, and much more. Capable of operating angles up to 45°.

Part No.	Max Bore & Key	Max Bore No Key	Normal Maximum Speed (RPM)
LOJ-6	11.2	15.7	Hand
LOJ-8	14.2	19.1	Wheel
LOJ10	19.1	25.4	Operation

DIMENSIONAL DATA

Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	C	D
LOJ-6	12.7	11.2	15.7	22.4	74.7	19.1	19.1
LOJ-8	15.7	14.2	19.1	28.4	93.5	23.1	25.4
LOJ10	19.1	19.1	25.4	36.6	95.3	25.4	31.8



Standard bore sizes are in inches

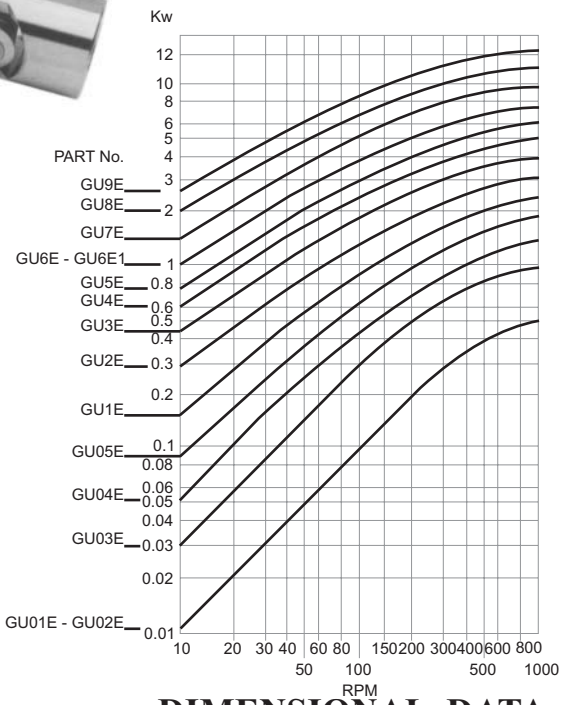
UNIVERSAL JOINT

STANDARD

The SIT universal joint is a very versatile universal joint with a maximum speed of 1000RPM and a maximum angle 45º with the E type and 90º with the ED type.

Part No.	Max Bore & Key	Max Bore No Key	Maximum Speed (RPM)
GU01E/ED	6.0	12.0	1000
GU02E/ED	8.0	12.0	1000
GU03E/ED	12.0	18.0	1000
GU04E/ED	14.0	19.0	1000
GU05E/ED	16.0	22.0	1000
GU1E/ED	19.0	25.0	1000
GU2E/ED	22.0	28.0	1000
GU3E/ED	25.0	30.0	1000
GU4E/ED	25.0	32.0	1000
GU5E/ED	30.0	38.0	1000
GU6E/ED	38.0	42.0	1000
GU6E1/ED1	38.0	42.0	1000
GU7E/ED	40.0	50.0	1000
GU8E/ED	50.0	55.0	1000
GU9E/ED	60.0	65.0	1000

PERFORMANCE DATA



Step 1 Determine the speed of the application.

Step 2 Divide the Kw by the correction factor according to the chart.

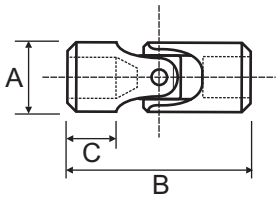
Step 3 Refer to the running curves that apply to the desired U-Joint E and ED. The required universal joint size can be determined by establishing the point of intersection of the RPM on the horizontal scale and the Kw on the vertical scale. Size is stated against the curve immediately above this point.

Working angle	5º	10º	15º	20º	25º	30º	35º	40º	45º
Correction factor	1.25	1.00	0.80	0.65	0.55	0.45	0.38	0.30	0.25

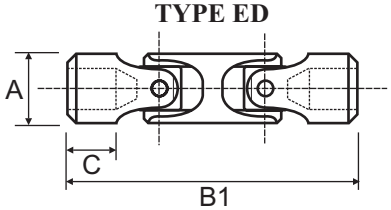
DIMENSIONAL DATA

Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	B1	C
GU01E/ED	6.0	6.0	12.0	16.0	34.0	56.0	8.0
GU02E/ED	8.0	8.0	12.0	16.0	40.0	62.0	11.0
GU03E/ED	10.0	12.0	18.0	22.0	48.0	74.0	12.0
GU04E/ED	12.0	14.0	19.0	25.0	56.0	86.0	13.0
GU05E/ED	14.0	16.0	22.0	28.0	60.0	96.0	13.0
GU1E/ED	16.0	19.0	25.0	32.0	68.0	104.0	16.0
GU2E/ED	18.0	22.0	28.0	36.0	74.0	114.0	17.0
GU3E/ED	20.0	25.0	30.0	42.0	82.0	128.0	18.0
GU4E/ED	22.0	25.0	32.0	45.0	95.0	145.0	22.0
GU5E/ED	25.0	30.0	38.0	50.0	108.0	163.0	26.0
GU6E/ED	30.0	38.0	42.0	58.0	122.0	190.0	29.0
GU6E1/ED1	32.0	38.0	42.0	58.0	130.0	198.0	33.0
GU7E/ED	35.0	40.0	50.0	70.0	140.0	212.0	35.0
GU8E/ED	40.0	50.0	55.0	80.0	160.0	245.0	40.0
GU9E/ED	50.0	60.0	65.0	95.0	190.0	290.0	50.0

TYPE E



TYPE ED



NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

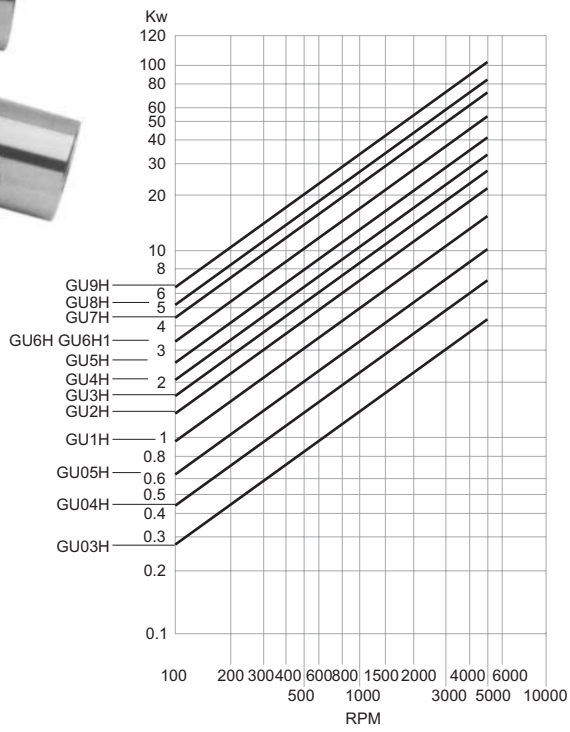
NEEDLE BEARING UNIVERSAL JOINT

NEEDLE BEARING

The SIT universal joint is a very versatile universal joint with a maximum speed of 4000RPM and a maximum angle 45º with the H type and 90º with the HD type.

Part No.	Max Bore & Key	Max Bore No Key	Maximum Speed (RPM)
GU03H/HD	12.0	18.0	4000
GU04H/HD	14.0	19.0	4000
GU05H/HD	16.0	22.0	4000
GU1H/HD	19.0	25.0	4000
GU2H/HD	22.0	28.0	4000
GU3H/HD	25.0	30.0	4000
GU4H/HD	25.0	32.0	4000
GU5H/HD	30.0	38.0	4000
GU6H/HD	38.0	42.0	4000
GU6H1/HD1	38.0	42.0	4000
GU7H/HD	40.0	50.0	4000
GU8H/HD	50.0	55.0	4000
GU9H/HD	60.0	65.0	4000

PERFORMANCE DATA



Step 1 Determine the speed of the application.

Step 2 Divide the Kw by the correction factor according to the chart.

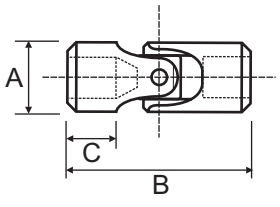
Step 3 Refer to the running curves that apply to the desired U-Joint H and HD. The required universal joint size can be determined by establishing the point of intersection of the RPM on the horizontal scale and the Kw on the vertical scale. Size is stated against the curve immediately above this point.

Working angle	5º	10º	15º	20º	25º	30º	35º	40º	45º
Correction factor	1.25	1.00	0.90	0.80	0.70	0.50	0.40	0.30	0.25

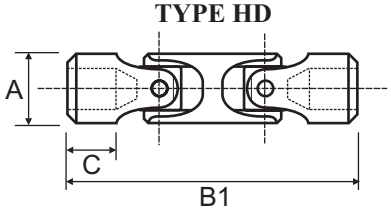
DIMENSIONAL DATA

Part No.	Bore Std	Bore Max & Key	Bore Max No Key	A	B	B1	C
GU03H/HD	10.0	12.0	18.0	22.0	48.0	74.0	12.0
GU04H/HD	12.0	14.0	19.0	25.0	56.0	86.0	13.0
GU05H/HD	14.0	16.0	22.0	28.0	60.0	96.0	13.0
GU1H/HD	16.0	19.0	25.0	32.0	68.0	104.0	16.0
GU2H/HD	18.0	22.0	28.0	36.0	74.0	114.0	17.0
GU3H/HD	20.0	25.0	30.0	42.0	82.0	128.0	18.0
GU4H/HD	22.0	25.0	32.0	45.0	95.0	145.0	22.0
GU5H/HD	25.0	30.0	38.0	50.0	108.0	163.0	26.0
GU6H/HD	30.0	38.0	42.0	58.0	122.0	190.0	29.0
GU6H1/HD1	32.0	38.0	42.0	58.0	130.0	198.0	33.0
GU7H/HD	35.0	40.0	50.0	70.0	140.0	212.0	35.0
GU8H/HD	40.0	50.0	55.0	80.0	160.0	245.0	40.0
GU9H/HD	50.0	60.0	65.0	95.0	190.0	290.0	50.0

TYPE H



TYPE HD



NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

RIGID COUPLING - METRIC

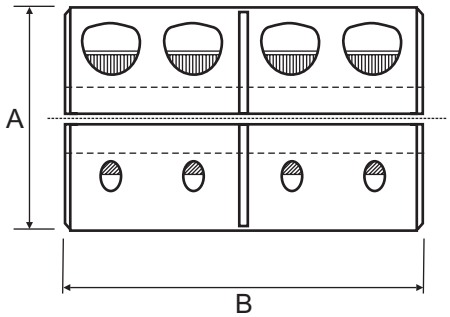
RULAND NOMAR® RIGID COUPLING

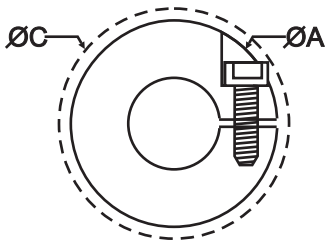
DIMENSIONAL DATA

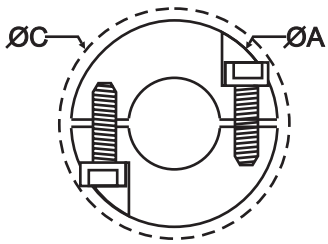
Ruland's rigid couplings are available in one and two piece clamp designs, with and without keyways in steel or stainless steel. Clamp style rigid couplings wrap around the shaft, providing high torsional holding power without the shaft damage and fretting that occurs when set screw style couplings are used. Two-piece clamp styles also allow for disassembly and maintenance without removal of other machine components and feature opposing hardware for a balanced design.

Part No. One Piece Split	Part No. Two Piece Split	Bore	A	B	C
MCLX-3-3	MSPX-3-3	3.0	15.0	22.0	15.0
MCLX-4-4	MSPX-4-4	4.0	15.0	22.0	15.0
MCLX-5-5	MSPX-5-5	5.0	15.0	22.0	15.0
MCLX-6-6	MSPX-6-6	6.0	18.0	30.0	21.5
MCLX-8-8	MSPX-8-8	8.0	24.0	35.0	27.1
MCLX-10-10	MSPX-10-10	10.0	29.0	45.0	33.0
MCLX-12-12	MSPX-12-12	12.0	29.0	45.0	33.0
MCLX-14-14	MSPX-14-14	14.0	34.0	50.0	39.4
MCLX-15-15	MSPX-15-15	15.0	34.0	50.0	39.4
MCLX-16-16	MSPX-16-16	16.0	34.0	50.0	39.4
MCLX-20-20	MSPX-20-20	20.0	42.0	65.0	48.9
MCLX-25-25	MSPX-25-25	25.0	45.0	75.0	51.5
MCLX-30-30	MSPX-30-30	30.0	53.0	83.0	58.7
MCLX-35-35	MSPX-35-35	35.0	67.0	95.0	74.7
MCLX-40-40	MSPX-40-40	40.0	77.0	108.0	84.0
MCLX-50-50	MSPX-50-50	50.0	85.0	124.0	94.2

Part number with no keyway.
F - indicates steel with black oxide
SS - indicates stainless steel







RIGID COUPLING - INCH

RULAND NOMAR® RIGID

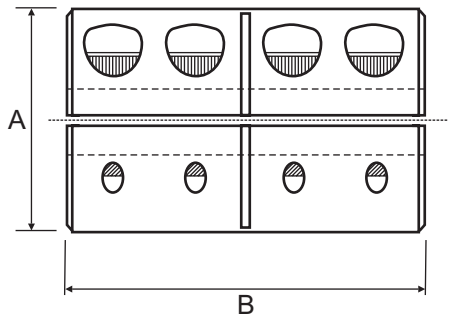
DIMENSIONAL DATA

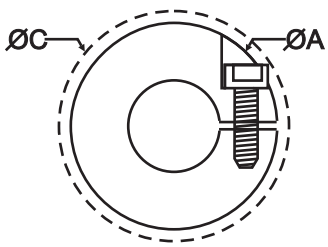
Ruland's rigid couplings are available in one and two piece clamp designs, with and without keyways in steel and stainless steel. Clamp style rigid couplings wrap around the shaft, providing high torsional holding power without the shaft damage and fretting that occurs when set screw style couplings are used. Two-piece clamp styles also allow for disassembly and maintenance without removal of other machine components and feature opposing hardware for a balanced design.

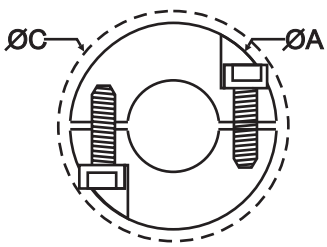
Part No. One Piece Split	Part No. Two Piece Split	Bore	A	B	C
CLX-4-4	SPX-4-4	6.4	15.9	25.4	20.7
CLX-6-6	SPX-6-6	9.5	22.2	34.9	26.2
CLX-8-8	SPX-8-8	12.7	28.6	44.5	33.7
CLX-10-10	SPX-10-10	15.9	33.3	50.8	38.5
CLX-12-12	SPX-12-12	19.1	38.1	57.2	46.8
CLX-14-14	SPX-14-14	22.2	41.3	63.5	49.1
CLX-16-16	SPX-16-16	25.4	44.5	76.2	52.0
CLX-18-18	SPX-18-18	28.6	47.6	79.4	55.4
CLX-20-20	SPX-20-20	31.8	52.4	82.6	58.1
CLX-22-22	SPX-22-22	34.9	63.5	92.1	70.4
CLX-24-24	SPX-24-24	38.1	66.7	98.4	73.3
CLX-28-28	SPX-28-28	44.5	79.4	114.3	85.5
CLX-32-32	SPX-32-32	50.8	85.7	123.8	94.4

Bore sizes are in inches

Part number with no keyway.
F - indicates steel with black oxide
SS - indicates stainless steel







RIGID SLEEVE COUPLING - INCH

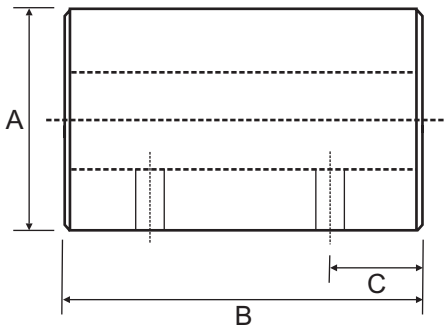
RIGID SLEEVE

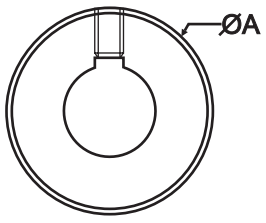
DIMENSIONAL DATA

Lovejoy Rigid Sleeve coupling fit the standards of the industry. These couplings, the simplest type, provide a fixed union between two shafts which are precisely aligned. They are suitable for use in joining any two shafts when flexibility is not required, shaft alignment is maintained and proper bearing support is provided. Bore tolerances are -.000/+.002 inches.
These couplings have American Standard Keyways.

Part No.	Bore	A	B	C
SC--250*	6.4	12.7	19.1	4.8
SC--312*	7.9	15.9	25.4	6.4
SC--375*	9.5	19.1	25.4	6.4
SC--500	12.7	25.4	38.1	9.5
SC--625	15.9	31.8	50.8	12.7
SC--750	19.1	38.1	50.8	12.7
SC--875	22.2	44.5	50.8	12.7
SC-1000	25.4	50.8	76.2	19.1
SC-1125	28.6	53.8	76.2	19.1
SC-1250	31.8	57.2	101.6	25.4
SC-1375	34.9	63.5	114.3	25.4

* These sizes do not have a keyway.
Bore sizes are in inches





NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

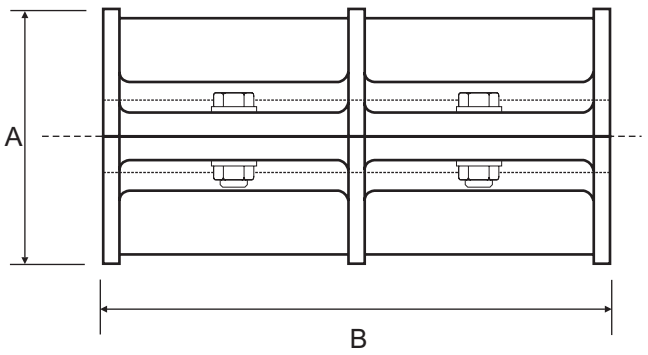
BOLT COUPLING

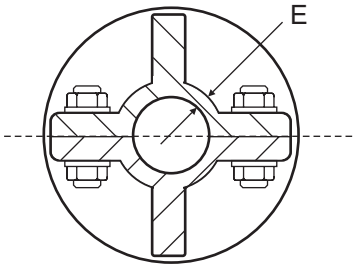
BOLT

DIMENSIONAL DATA

The bolt coupling is a rigid coupling. It is made of two cast iron halves, which are bolted together. The coupling is maintenance and lubrication free, and its construction prevents fretting corrosion and allows for easy installation and removal. Coupling must be an interference fit with the shaft.

Part No.	Bore	A	B	E
GB20	20.0	74.0	110.0	10.0
GB25	25.0	72.0	115.0	10.0
GB30	30.0	96.0	145.0	10.0
GB35	35.0	103.0	158.0	12.0
GB40	40.0	116.0	170.0	12.0
GB45	45.0	113.0	190.0	12.0
GB50	50.0	120.0	205.0	12.0
GB55	55.0	140.0	220.0	12.0
GB60	60.0	142.0	220.0	13.0
GB65	65.0	150.0	250.0	13.0
GB70	70.0	160.0	260.0	15.0
GB80	80.0	185.0	280.0	20.0
GB90	90.0	210.0	310.0	20.0
GB100	100.0	225.0	343.0	20.0





RIGID COUPLING

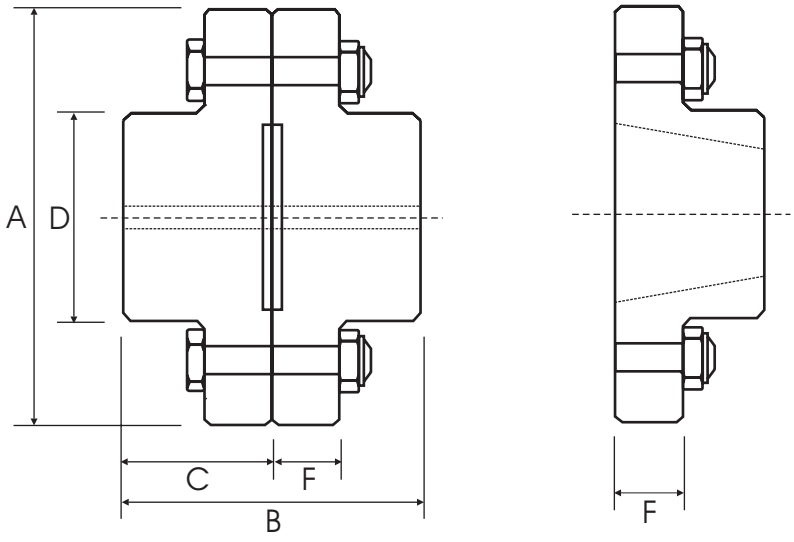
RIGID

The KTR rigid coupling consists of 2 pin half's from the KTR cone ring coupling, high tensile machine bolts and a locating ring to make sure that everything is in line. The simple construction means that the coupling is lubrication and maintenance free. Rigid couplings are ideal for applications where there is no misalignment. The KTR rigid coupling is available in pilot bore and Taper bore.

DIMENSIONAL DATA

Part No.	Bore		Taper	A	B	C	D	F	Max Speed (RPM)
	Min	Max	Bush						
KXR030	12.0	38.0	-	127.0	82.0	41.0	64.0	12.0	4500
KXR038	15.0	42.0	-	132.0	96.0	48.0	72.0	12.0	4300
KXR042	15.0	48.0	1610	146.0	112.0	56.0	83.0	12.0	3900
KXR048	21.0	55.0	2012	171.0	122.0	61.0	90.0	17.0	3300
KXR058	21.0	65.0	2517	193.0	136.0	68.0	106.0	17.0	2900
KXR070	28.0	75.0	3020	216.0	152.0	76.0	128.0	17.0	2600
KXR075	28.0	80.0	-	254.0	176.0	88.0	145.0	30.0	2200
KXR085	28.0	105.0	3535	279.0	200.0	100.0	166.0	30.0	2000
KXR105	34.0	120.0	4040	330.0	234.0	117.0	202.0	30.0	1730
KXR120	61.0	130.0	4040	370.0	264.0	132.0	232.0	46.0	1570
KXR135	67.0	135.0	4545	419.0	294.0	147.0	240.0	46.0	1360
KXR150	82.0	150.0	5050	457.0	330.0	165.0	260.0	46.0	1250

KX_ _ _PH **KX_ _ _PH** **KXT_ _ _PH**



JAW IN-SHEAR TYPE COUPLING

JAW IN-SHEAR

PERFORMANCE DATA

Spider is non-fail-safe and thus acts as a fuse to prevent equipment damage in the event of torque overloads. It is radially removable, meaning that neither hub (or driver/driven equipment) has to be moved to make replacement of the spider. This saves time and money in maintenance costs.
The retaining ring which encloses the In-Shear Spider has small pins which simply slide through grooves in the perimeter of the spider and twist-lock into place. It will not work its way loose and since there are no fasteners involved, maintenance/removal of the spider takes only a few minutes. It uses the standard L-Type and C-Type Jaw Coupling hubs. Existing applications using in-compression spiders can simply be retrofitted with the new In-Shear Spider if the features are beneficial. The Jaw In-Shear Spider is made from Urethane. The In-Shear coupling has different power ratings to the standard jaw coupling and also uses different service factors, please contact Naismith Engineering.

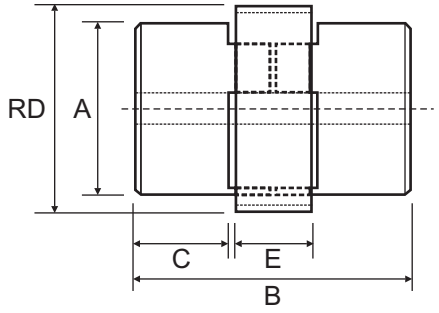
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
LS095	28.6	0.398	38.0	9200
LS100	35.0	0.660	63.0	7700
LS110	42.0	1.288	123.0	5900
LS150	48.0	2.147	205.0	5200
LS190	55.0	3.455	330.0	4300
LS225	66.7	4.974	475.0	3900
LS276	73.0	8.827	843.0	3100
CS280	76.2	15.738	1503.0	2600
CS285	102.0	22.199	2120.0	2300

General specifications of the Lovejoy Jaw In-Shear Coupling are:-

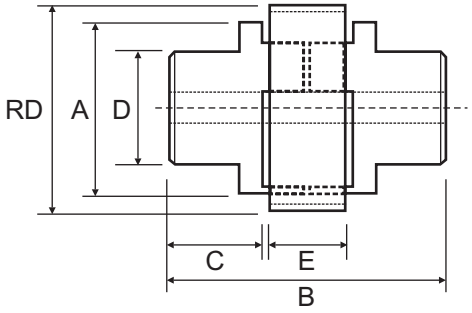
- 2º angular misalignment capability
- 0.7mm - 1.2mm parallel misalignment capability
- 50D shore Urethane material, max temperature of 93ºC (200ºF)
- Torsional wind-up of 5º at full load
- Retaining ring is made from #347 cast stainless steel
- Can be used with SS-type Stainless Steel jaw coupling hubs
- Can be used with AL-type aluminium jaw coupling hubs for sizes AL095, AL 100 and Al110

DIMENSIONAL DATA

Style 1



Style 2



Part No.	StyLSe No.	Bore Min	Bore Max	A	B	C	D	E	RD
LS095	1	11.1	28.6	53.6	76.2	25.4	-	21.1	69.9
LS100	1	11.1	35.0	64.5	105.7	35.1	-	30.7	81.0
LS110	1	15.9	42.0	84.3	127.0	42.7	-	36.8	101.6
LS150	1	15.9	48.0	95.3	138.2	44.4	-	43.4	119.1
LS190	2	19.1	55.0	114.3	147.8	49.3	101.6	43.4	139.7
LS225	2	19.1	66.7	127.0	160.0	55.4	108.0	43.4	155.7
LS276	2	22.2	73.0	157.0	239.5	79.2	127.0	75.4	188.2
CS280	2	31.8	76.2	190.5	239.5	79.2	139.7	75.4	227.1
CS285	2	31.8	102.0	215.9	271.5	95.3	165.1	75.4	254.0

ZERO-MAX

TORQUE TENDER

TORQUE TENDER

PERFORMANCE DATA

Torq-Tenders are positive drive couplings which provide accurate overload protection in many mechanical power transmission systems. When a jam-up or excess overload occurs, Torq-Tenders disengage motor drives. Their effective, versatile design, protects your drive train, motor, and entire system. When load exceeds the rating determined by precision tempered torque springs, the unit's drive key pivots out of a slot to disengage the coupling. Once the overload is removed and speed reduced, the Torq-Tender resets itself automatically. All models are available with actuating pins or actuating disc, which will automatically signal an overload warning or shut the machine systems down entirely.

Part No.	Max Bore Hub	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
			Min	Max	
Standard					
TT1X	12.7	0.071	0.3	6.8	2500
TT2	15.9	0.165	0.5	15.8	2500
TT2X	19.1	0.414	2.0	39.5	2500
TT3	28.6	0.592	2.0	56.5	2500
TT3X	38.1	1.775	33.9	169.5	2500
TT4X	44.5	3.549	84.7	338.9	2500
JF Type					
TT1XJF	12.7	0.071	0.3	6.8	2500
TT2JF	15.9	0.165	0.5	15.8	2500
TT2XJF	19.1	0.414	2.0	39.5	2500
TT3JF	28.6	0.592	2.0	56.5	2500
TT3XJF	38.1	1.775	33.9	169.5	2500
TT4XJF	44.5	3.549	84.7	338.9	2500

Power at 100 RPM based on max torque

STANDARD UNIT

SPRING DATA

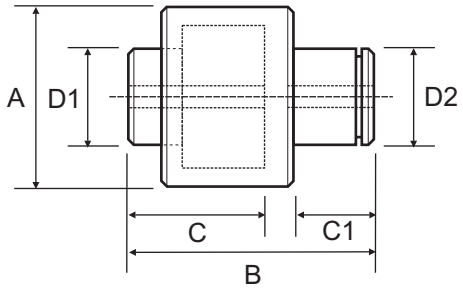
Spring Colour	TT1X Nm	TT2 Nm	TT2X Nm	TT3 Nm	TT3X Nm	TT4X Nm
Garden Green	-	-	-	2.03	-	-
Grey	-	-	2.03	2.71	-	-
Slicker Yellow	-	-	2.71	-	-	-
Purple	-	-	3.16	4.07	-	-
Copper	-	0.45	-	4.52	-	-
Light Blue	0.34	0.90	4.52	5.65	-	-
Gold	0.56	-	5.65	6.78	-	-
Red	0.90	1.36	6.78	9.04	-	-
Brown	1.13	2.03	10.17	11.30	33.89	84.74
Silver/Aluminium	1.36	2.82	11.30	13.56	45.19	112.98
Black	1.69	3.39	13.56	16.95	56.49	141.23
Almond	2.26	4.52	15.25	20.34	73.44	169.47
Orange	2.82	5.65	16.95	24.86	84.74	197.72
Medium Green	3.39	6.78	20.34	28.25	96.03	225.96
Yellow	4.52	9.60	22.60	33.89	112.98	254.21
Blue	5.65	11.30	28.25	39.54	129.93	282.45
No Colour	6.78	14.12	33.89	47.45	146.87	310.70
White	-	15.82	39.54	56.49	169.47	338.94

ZERO-MAX

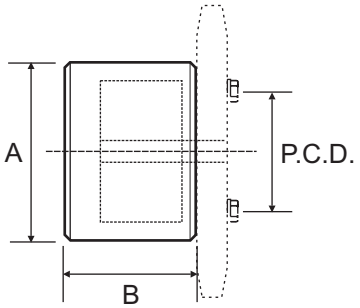
TORQUE TENDER

DIMENSIONAL DATA

STANDARD



JF TYPE
SPROCKET NOT INCLUDED



Part No.	Bore Min	Bore Max	A	B	C	C1	D1	D2
TT1X	6.4	12.7	39.7	45.7	29.0	15.2	22.2	25.4
TT2	9.5	15.9	55.0	61.5	39.1	19.1	31.7	34.9
TT2X	12.7	19.1	63.5	75.0	45.8	25.4	38.1	41.3
TT3	15.9	28.6	76.2	88.1	53.3	30.1	44.4	44.4
TT3X	22.2	38.1	92.1	115.6	78.2	31.7	57.1	63.5
TT4X	25.4	44.5	117.5	137.5	94.4	33.8	76.2	76.2

Part No.	Bore Min	Bore Max	A	B	P.C.D. 4 Bolts
TT1XJF	6.4	12.7	39.7	38.1	31.7
TT2JF	9.5	15.9	55.0	47.6	44.4
TT2XJF	12.7	19.1	63.5	57.1	50.8
TT3JF	15.9	28.6	76.2	66.7	60.3
TT3XJF	22.2	38.1	92.1	90.2	76.2
TT4XJF	25.4	44.5	117.5	111.1	101.6

STANDARD UNIT
WITH ACTUATING DISC

STANDARD UNIT
WITH ACTUATING PIN

JF TYPE UNIT
SPROCKET NOT INCLUDED

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

ZERO-MAX

SCHMIDT L100, L200 & L300 COUPLING

SCHMIDT L100, L200 & L300

Only the Schmidt Offset Coupling, which requires a minimum offset, offers so much flexibility in shaft displacement while maintaining undisturbed power transmission at constant angular velocity. The coupling does not add secondary forces to the drive. It also will not transmit radial vibration between the drive and the driven shafts. It is a dynamically clean drive which will help provide a smooth flow of power for maximum product quality, and, unlike universal joints, there is no performance loss by increasing shaft offset.

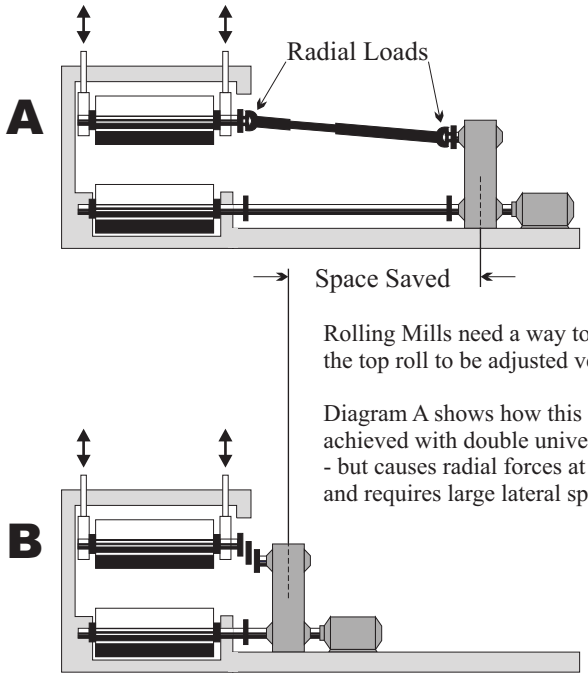
Standard Schmidt Offset Couplings are available for parallel shaft displacement from a minimum of 4 to 440 mm and torque capacities from 6.2 to 51864 Nm. Special coupling sizes can be manufactured for any specific customer requirement.

The L100 series couplings will handle parallel shaft displacement from a minimum of 4 mm to a maximum linear shaft displacement of 77 mm with torque ratings from 6.2 to 146.8 Nm and shaft speeds up to 4000 RPM. The L100 series is especially suitable for applications in business machines, optical, electronic equipment and robotics.

The L200 and L300 series couplings are capable of handling parallel shaft displacement from a minimum of 11 mm to a maximum linear shaft displacement of 440 mm with torque ratings from 71.9 to 51864 Nm and shaft speeds up to 2500 RPM. The L200 and L300 series are equipped with caged type needle bearings. The shafts are hardened and serve as the inner race of the needle bearings. The coupling can be mounted on shaft hubs or directly to existing flanges. This mounting technique permits installation of the offset coupling without any need to move either of the shafts being coupled.

The Schmidt Offset Coupling has a slight built-in axial freedom to compensate for thermal shaft expansion and assembly tolerances.

To select an Offset Coupling contact Naismith Engineering.



Rolling Mills need a way to permit the top roll to be adjusted vertically.

Diagram A shows how this can be achieved with double universal joints - but causes radial forces at the joints and requires large lateral space.

Digaram B overcomes both problems - by the use of a SCHMIDT OFFSET COUPLING

ZERO-MAX

SCHMIDT L400 COUPLING

SCHMIDT L400

Schmidt Inline Couplings are of the torque-rigid type, designed with two pairs of parallel links installed 90 degrees out of phase with each other. This patented arrangement allows for the precise transmission of torque and constant angular velocity between shafts with relatively large parallel misalignments. The coupling utilizes needle bearings which can be preloaded for "zero" backlash conditions. Typical applications which benefit from the high accuracy provided by Schmidt Inline Couplings are feeders, embossers, compactors, printing presses and many others.
Schmidt Inline Couplings are available for a torque range from 56 to 2824 Nm. Couplings for higher torque requirements are made available on special orders. To select an Inline Coupling contact Naismith Engineering.

SCHMIDT L500 COUPLING

SCHMIDT L500

Schmidt 5-D Couplings were developed to fill a gap in the family of torque-rigid couplings. Most couplings in this family are designed to accommodate either axial, angular, or parallel shaft displacements only. For some applications, however, the operational conditions require all possible shaft misalignments. If these shaft misalignments exceed the limit of the selected coupling capacity, excess sideloads are introduced into the equipment which can cause vibrations, life reduction or failure of vital machine components such as bearings, motors, etc. The 5-D Couplings, are a modification of the Schmidt Inline Coupling, designed to accommodate all 5 types of shaft displacements. This patented coupling allows easy adjustment to any possible misaligned shaft position without imposing heavy sideloads on shafts, bearings or other machine equipment. Schmidt 5-D Couplings offer large shaft misalignment capabilities and constant angular velocity. The acting forces within the coupling can be precisely calculated, assuring a sound coupling design which is especially important for heavy-duty applications. To select a 5-D Coupling contact Naismith Engineering

CANDY
CONTROLS

CANDY TIMING HUB

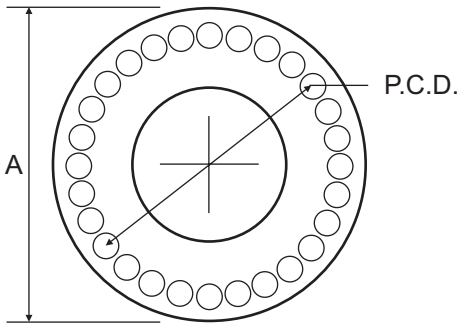
TIMING HUB

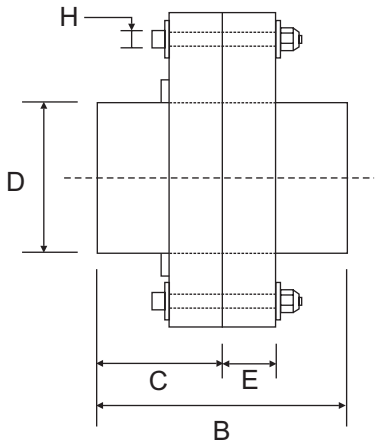
PERFORMANCE DATA

The Candy Timing Hub is the low-cost positioner used to positively lock gears, sprockets, cams and levers to shafts while still providing full adjustable timing control. This precision timing hub allows the use of low-cost plate sprockets and hubless gears, and eliminates the cost of machining special slots or clamps often used for timing adjustment. These savings and the low-cost of the hub, clearly show that the Candy Timing Hub is the most economical way to provide positive and accurate positioning control.

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)
TH-3	25.0	0.710	67.8
TH-5	44.0	1.893	180.8
TH-8	64.0	7.097	677.8

DIMENSIONAL DATA





Part No.	Bore		A	B	C	D	E	H	P.C.D.
	Min	Max							
TH-3	-	25.0	82.5	50.4	25.4	38.1	11.5	#8-32	69.9
TH-5	-	44.0	127.0	69.9	34.9	69.9	19.1	1/4-20	108.0
TH-8	-	65.0	203.2	101.6	50.8	101.6	25.8	3/8-16	174.5

CANDY
CONTROLS

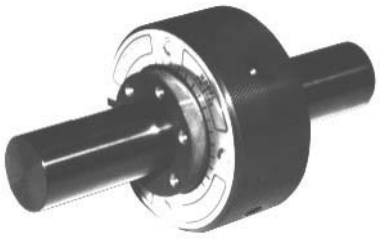
CANDY PHASING HUB

PHASING HUB

PERFORMANCE DATA

The Phasing Hub is a static phase adjusting coupling designed for precise angular displacements. When in motion, the phasing hub operates as a rigid 1:1 shaft coupling. Phase change of the coupling and connected shafts is accomplished with the drive stopped. By manually turning the adjusting ring, the phasing hub becomes a phase changing device providing infinitely variable and stepless phase correction in either direction. One rotation of the adjusting ring results in 3.6 degrees of adjustment.

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)
PH-500	13.0	0.592	56.5
PH-1000	19.0	1.183	113.0
PH-2500	25.0	2.958	282.5
PH-5000	32.0	5.915	564.9
PH-10000	44.0	11.830	1129.8
PH-20000	64.0	23.661	2259.6



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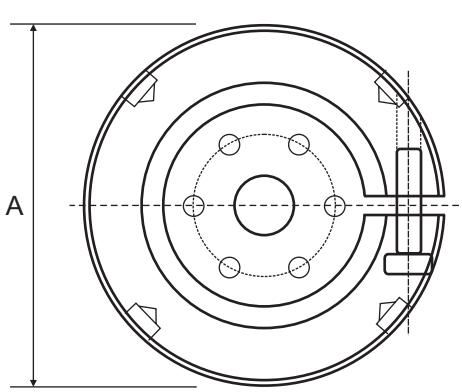

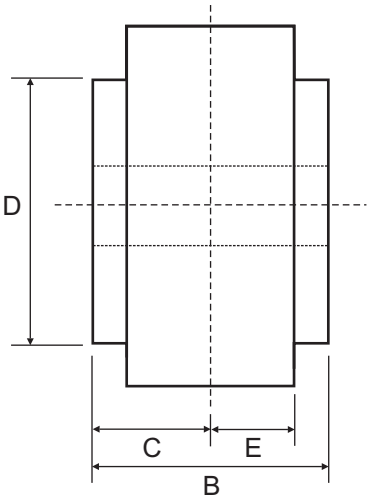

Part No.	Bore		A	B	C	D	E
	Min	Max					
PH-500	6.4	13.0	50.4	36.3	18.1	25.3	23.1
PH-1000	12.7	19.0	60.5	42.9	21.3	35.1	26.9
PH-2500	19.1	25.0	76.2	55.6	27.6	44.5	35.1
PH-5000	25.4	32.0	95.3	60.2	29.9	55.1	41.4
PH-10000	31.8	44.0	120.7	83.6	41.3	74.7	52.3
PH-20000	44.5	64.0	165.1	102.9	50.8	95.3	60.5

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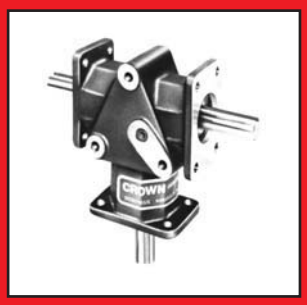
Sprocket in both B.S. A.S.A. - Plates, Simplex, Duplex & Triplex. Chain in B.S. A.S.A. Conveyor & Special chains.

We can supply more than 50 different types of coupling from 14 different suppliers.

Variable speed pulleys.
Zero-Max variable speed drives.



Winsmith gear boxes, Zero-max Crown Gear Drives & Tol-O-Matic Float-A-Shafts.

A large range of Tensioners are available, with attachments including; Rollers, Polyethylene Slide Bocks and Sprockets to suit British Standard chain.

Timing pulleys Classical, HTD, Metric T & AT & Poly Chain G.T. With belts to suit.

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A full range of Ruland shaft collars is available.

Miki Pulley clutches and brakes, Tol-O-Matic caliper disc brakes & pneumatic clutches.

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