

# NAISMITH

*Power Transmission is all we do*



COUPLINGS

2011

## COUPLING SELECTION PROCESS ..... 3

### ELASTOMERIC COUPLINGS

LOVEJOY - JAW TYPE 'L' & 'AL' COUPLING .....	4 - 5
LOVEJOY - JAW TYPE 'RRS' COUPLING .....	6
LOVEJOY - JAW TYPE 'C' COUPLING .....	7
UTKUR - JAW TYPE 'N' & 'SWN' COUPLING .....	8 - 9
UTKUR - JAW TYPE 'CWN' COUPLING .....	10 - 11
UTKAR - JAW TYPE 'SWR' COUPLING .....	12
UTKAR - JAW TYPE 'CWS' COUPLING .....	13
SIT SPA - TRASCO 'GR' CURVED JAW COUPLING .....	14 - 16
SIT SPA - SITEX COUPLING .....	17
CENTA - CENTAFLEX 'A' COUPLING .....	18 - 19
CENTA - CENTAFLEX 'B' COUPLING .....	20
CENTA - CENTAFLEX 'H' COUPLING .....	21
CENTA - CENTAFLEX 'D' COUPLING .....	22
CENTA - CENTAFLEX 'E' COUPLING .....	23
LOVEJOY - S-FLEX COUPLING .....	24 - 25
LOVEJOY - MINI SOFT COUPLING .....	26
LOVEJOY - OLDHAM COUPLING .....	27
LOVEJOY - SAGA COUPLING .....	28
SIT SPA - JUBOFLEX COUPLING .....	29
UTKUR - CONE RING COUPLING .....	30 - 31
OTHER - TYRE COUPLING .....	32
OTHER - HRC COUPLING .....	33
TSCHAN - TSCHAN-S COUPLING .....	34
TSCHAN - TSCHAN NORMEX COUPLING .....	35
TSCHAN - TSCHAN-B COUPLING .....	36
TSCHAN - TSCHAN B-XXTREME-TORQUE COUPLING .....	37
OTHER - OMT COUPLING .....	38

### STEEL COUPLINGS

LOVEJOY - JAURE DISC COUPLING .....	39
SIT SPA - SITEX GEAR GST C & CV .....	40 - 41
LOVEJOY - GEAR COUPLING C & CFR .....	42
LOVEJOY - GEAR COUPLING F & FFR .....	43
WOO CHANG - GEAR COUPLING .....	44 - 46
OTHER - CHAIN COUPLING .....	47
WOO CHANG - GRID COUPLING .....	48 - 49
LOVEJOY - DELTA FLEX COUPLING .....	50

### ZERO BACKLASH COUPLINGS

RULAND - JAW COUPLING .....	51
RULAND - BEAM COUPLING .....	52 - 53
RULAND - BELLOWS COUPLING .....	54 - 55
RULAND - DISC COUPLING .....	56
RULAND - OLDHAM COUPLING .....	57

MIKI PULLEY - SERVOFLEX SFC COUPLING .....	58
MIKI PULLEY - SERVOFLEX SFS COUPLING .....	59
SIT SPA - TRASCO 'ES' CURVED JAW COUPLING .....	60
BAUMANN - BAUMANN COUPLING LM, ZG, BLS & CHP .....	61
BAUMANN - BAUMANN COUPLING .....	62 - 63
LOVEJOY - UNIFLEX COUPLING .....	64 - 65
ZERO-MAX - COMPOSITE DISC COUPLING .....	66
ZERO-MAX - CONTROL FLEX COUPLING .....	67

### UNIVERSAL JOINTS

MARIO FERRI - UNIVERSAL JOINTS .....	68
MARIO FERRI - UNIVERSAL JOINTS NEEDLE BEARING .....	69
LOVEJOY - UNIVERSAL JOINTS .....	70
LOVEJOY - UNIVERSAL JOINTS NEEDLE BEARING .....	71
LOVEJOY - UNIVERSAL JOINTS .....	72
LOVEJOY - UNIVERSAL JOINTS 303 STAINLESS STEEL .....	72
LOVEJOY - UNIVERSAL JOINTS OFFSET PIN & BLOCK .....	72

### RIGID COUPLINGS

LOVEJOY - RIGID SLEEVE COUPLING .....	73
RULAND - RIGID COUPLING .....	74 - 75
UTKUR - RIGID COUPLING .....	76
SIT SPA - BOLT COUPLING .....	77
OTHER - RM RIGID COUPLING .....	78
WOO CHANG - RIGID GEAR COUPLING .....	44 - 46

### FLUIDOMAT COUPLINGS

FLUIDOMAT - SM FLUID COUPLING .....	79
FLUIDOMAT - HF FLUID COUPLING .....	80
FLUIDOMAT - HDP FLUID COUPLING .....	81
FLUIDOMAT - SC FLUID COUPLING .....	82

### OVERLOAD COUPLING

LOVEJOY - JAW IN-SHEAR TYPE COUPLING .....	83
ZERO-MAX - TORQUE TENDER .....	84 - 85

### OTHER COUPLING

ZERO-MAX - SCHMIDT L100, L200 & L300 COUPLING .....	86
ZERO-MAX - SCHMIDT L400 COUPLING .....	87
ZERO-MAX - SCHMIDT L500 COUPLING .....	87
CANDY CONTROLS - TIMING HUB .....	88
CANDY CONTROLS - PHASING HUB .....	89

## ELEMENT IDENTIFICATION TABLE ..... 90 - 91

All dimensions in mm unless otherwise stated

All descriptions and dimensions as published are believed to be correct, but subject to the possibility of printing errors. The right is reserved by us or our suppliers to alter or modify dimensions or designs without notice.

## 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.

$$\text{Design Torque} = \text{Nominal Torque} \times \text{Service Factor}$$

### 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 kW	Nominal Torque (Nm)				Normal Maximum Speed (Sox) (RPM)
			Sox	Urethane	Hytrel	Bronze	
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 with retaining ring only. Speeds up to 3600RPM permitted with collar and screws.

**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.

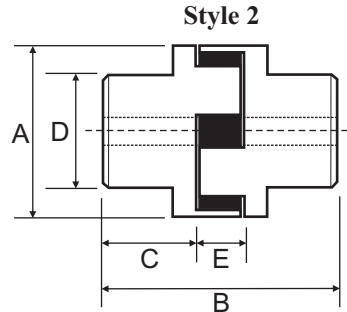
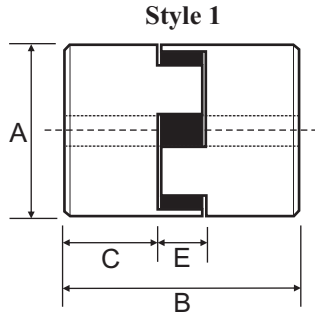
**HYTREL** - Hytrel is a flexible elastomer designed for high torque and high temperature operations. Hytrel can operate in temperatures of -51°C to +121°C and has an excellent resistance to oil and chemicals. Not recommended for cyclic or stop start applications.

**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



Part No.	Style No.	Bore		A	B	C	D	E
		Min	Max					
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		A	B	C	D	E
		Min	Max					
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

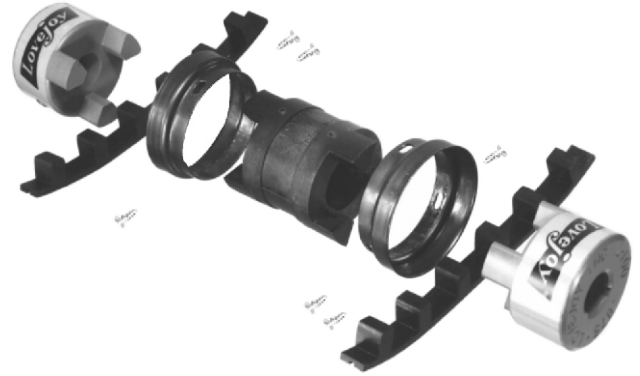


## JAW TYPE 'RRS' COUPLING

### 'RRS' TYPE

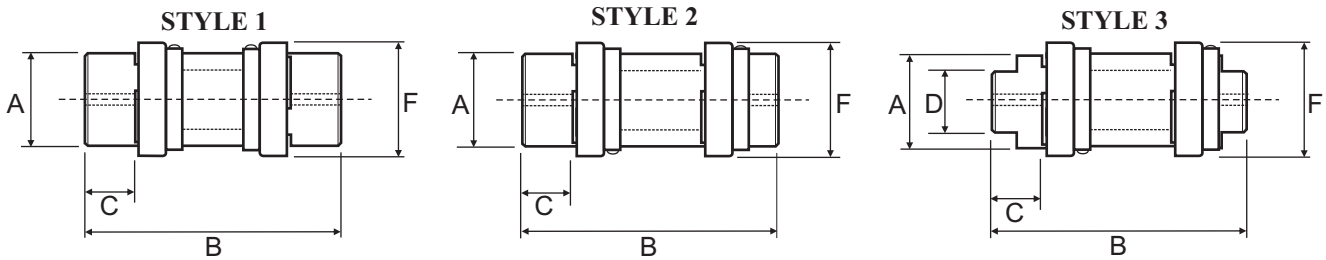
The RRS coupling is based on the standard Lovejoy Jaw type coupling. The centre "dropout" section of this coupling provides proper shaft separation while also allowing easy elastomer installation without disturbing the hubs or requiring realignment of shafts. Designed for the pump industry, it accommodates 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



Part No.	Style No.	Bore		A	B	C	D	F
		Min	Max					
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			
RRS100-140	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			



## 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

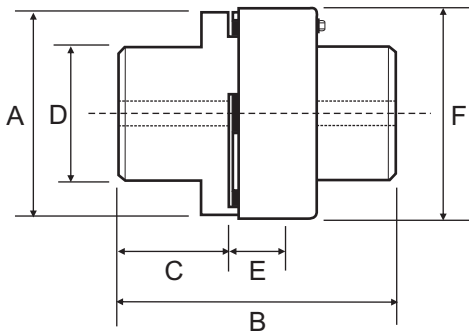


Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
			Sox	Hytrel	
C226	64.0	3.539	338.0	671.0	4800
C276	73.0	5.581	533.0	1066.0	4200
C280	76.2	8.942	854.0	1567.0	3500
C285	102.0	10.869	1038.0	1882.0	3200
C295	89.0	13.414	1281.0	2563.0	2300
C2955	102.0	22.356	2135.0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



## 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)			Normal Maximum Speed* N (RPM)
			Rubber Black	Polyurethane		
			80 Sh A	80 Sh A	90/92 Sh A	
N050	16.0	0.029	2.8	-	-	18000
N070	20.0	0.051	4.9	-	-	14000
N075	22.0	0.103	9.8	-	-	11000
N/SWN095	28.0	0.221	21.1	30.0	40.0	8000
N/SWN100	38.0	0.486	46.4	75.0	90.0	7000
N/SWN110	42.0	0.932	89.0	140.0	165.0	5000
N/SWN150	48.0	1.476	141.0	190.0	225.0	5000
N/SWN190	60.0	1.990	190.0	250.0	300.0	5000
N/SWN225	65.0	2.775	265.0	325.0	400.0	4200

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

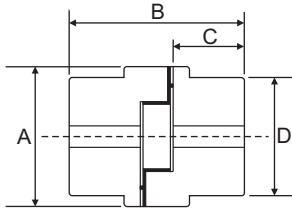
\* SWN Normal Maximum Speed of 3600 RPM



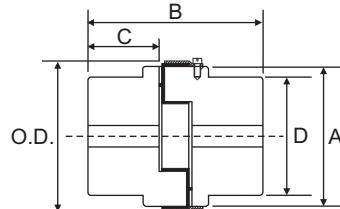


**JAW TYPE 'N' & 'SWN' COUPLING**

**N SERIES**  
(Standard spider coupling)



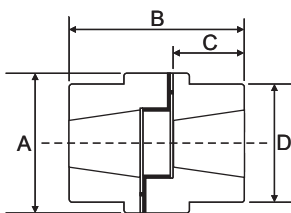
**SWN SERIES**  
(Wrap around element coupling)



Part No.	Bore		A	B	C	D	Collar O.D.
	Min	Max					
N050	6.0	16.0	28.0	46.0	17.0	28.0	-
N070	9.0	20.0	36.0	51.0	19.0	36.0	-
N075	9.0	22.0	45.0	55.0	21.0	45.0	-
N/SWN095	10.0	28.0	54.0	63.0	25.0	49.0	64.0
N/SWN100	10.0	38.0	65.0	88.0	35.0	57.0	78.0
N/SWN110	15.0	42.0	85.0	108.0	43.0	76.0	96.0
N/SWN150	15.0	48.0	96.0	115.0	45.0	80.0	111.0
N/SWN190	20.0	60.0	115.0	133.0	54.0	102.0	130.0
N/SWN225	20.0	65.0	127.0	153.0	64.0	111.0	142.0

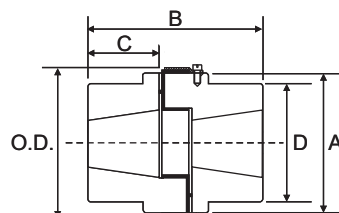
**HUBS TO SUIT TAPERED BUSHES**

**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	63.8	23.6	65.0	29.0	78.0
N/SWN110	32.0	1210	85.0	73.3	27.2	85.0	38.0	96.0
N/SWN150	32.0	1210	96.0	76.5	27.2	96.0	38.0	111.0
N/SWN190	42.0	1610	115.0	76.7	27.6	115.0	38.0	130.0
N/SWN225	50.0	2012	127.0	89.9	33.5	115.0	42.0	142.0

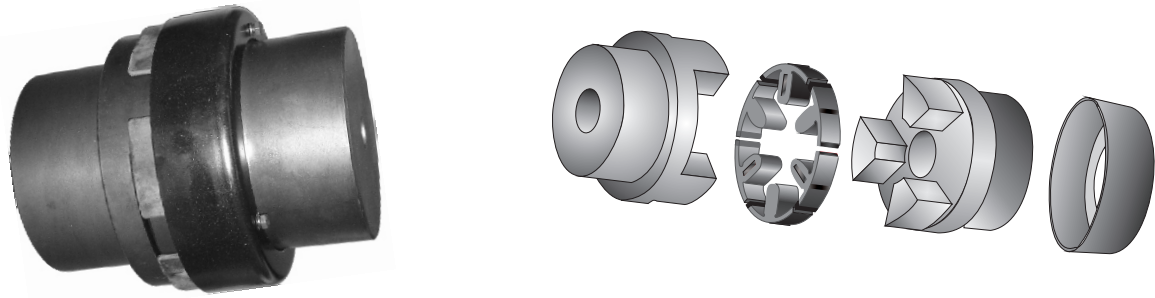
\* R = Minimum clearance required to remove taper bush.



**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.



Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Rubber Black	Polyurethane		
			80 Sh A	80 Sh A	90/92 Sh A	
CWN226	70.0	3.424	327.0	425.0	510.0	4200
CWN276	75.0	5.571	532.0	675.0	810.0	4200
CWN280	80.0	8.188	782.0	1075.0	1290.0	3000
CWN295	95.0	13.393	1279.0	1625.0	1950.0	2300
CWN2955	105.0	22.325	2132.0	2750.0	3300.0	2300
CWN300	105.0	31.906	3047.0	3800.0	4575.0	2100
CWN350	115.0	45.110	4308.0	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.

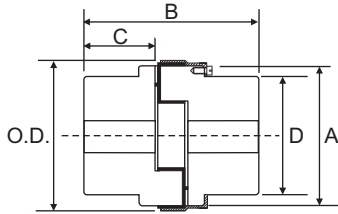
Available in standard rubber spider upon request..

**CWN Element**





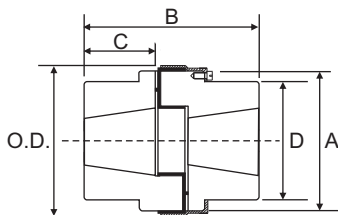
**JAW TYPE 'CWN' COUPLING**



Part No.	Bore		A	B	C	D	Collar O.D.
	Min	Max					
CWN226	25.0	70.0	137.0	178.0	70.0	119.0	150.0
CWN276	25.0	75.0	157.0	200.0	80.0	127.0	170.0
CWN280	30.0	80.0	192.0	200.0	80.0	140.0	205.0
CWN295	40.0	95.0	237.0	238.0	95.0	162.0	251.0
CWN2955	50.0	105.0	237.0	264.0	108.0	180.0	251.0
CWN300	50.0	105.0	254.0	283.0	115.0	180.0	266.0
CWN350	50.0	115.0	305.0	309.0	128.0	200.0	317.0

CWN226-CWN295 - Set of 6 T-Inserts  
 CWN2955-CWN350 - Set of 10 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	150.0
CWN276	60.0	2517	157.0	134.0	47.0	124.0	48.0	170.0
CWN280	60.0	2517	192.0	134.0	47.0	124.0	48.0	205.0
CWN295	75.0	3020	237.0	154.0	53.0	159.0	55.0	251.0
CWN2955	75.0	3020	237.0	154.0	53.0	180.0	55.0	251.0
CWN300	75.0	3020	254.0	156.0	53.0	180.0	55.0	266.0
CWN350	90.0	3535	305.0	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



## 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.

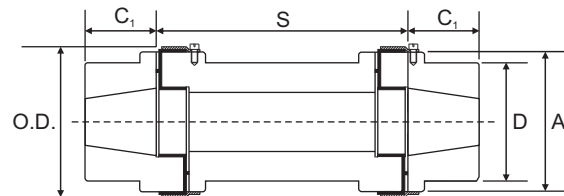
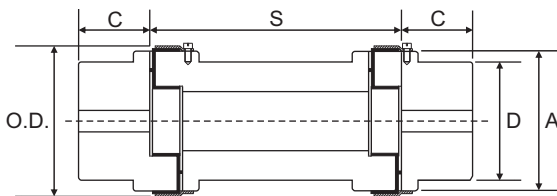


Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Rubber	Polyurethane		
			Black 80 Sh A	Yellow 80 Sh A	Red 90 Sh A	
SWR095	28.0	0.221	21.1	30.0	40.0	3000
SWR100	35.0	0.486	46.4	75.0	90.0	3000
SWR110	42.0	0.932	89.0	140.0	165.0	3000
SWR150	48.0	1.476	141.0	190.0	225.0	3000
SWR190	60.0	1.990	190.0	250.0	300.0	3000
SWR225	65.0	2.775	265.0	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	C <sub>1</sub>	D	Collar O.D.	S*
	Min	Max							
SWR095	10.0	28.0	-	54.0	25.0	-	49.0	64.0	100/140
SWR100	10.0	35.0	1108	65.0	35.0	23.6	57.0	78.0	100/140
SWR110	15.0	42.0	1210	85.0	43.0	27.2	76.0	96.0	100/140/180
SWR150	15.0	48.0	1210	96.0	45.0	27.2	80.0	111.0	100/140/180
SWR190	20.0	60.0	1610	115.0	54.0	27.6	102.0	130.0	100/140/180
SWR225	20.0	65.0	2012	127.0	64.0	33.5	111.0	142.0	100/140/180

\*S = Spacer lengths

## 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.

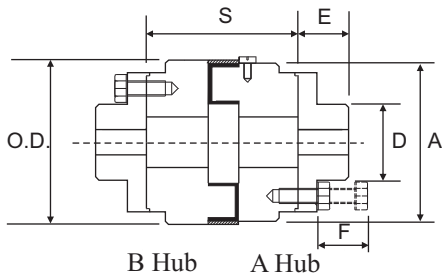
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Rubber Black	Polyurethane		
			80 Sh A	80 Sh A	90 Sh A	
CWS226	65.0	3.560	340.0	425.0	510.0	4200
CWS276	75.0	5.660	540.0	675.0	810.0	4200
CWS280	75.0	9.010	860.0	1075.0	1290.0	3000
CWS295	90.0	13.610	1300.0	1625.0	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		A	D	E	F	Collar O.D.	S*
	Min	Max						
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

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.

### PERFORMANCE DATA



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



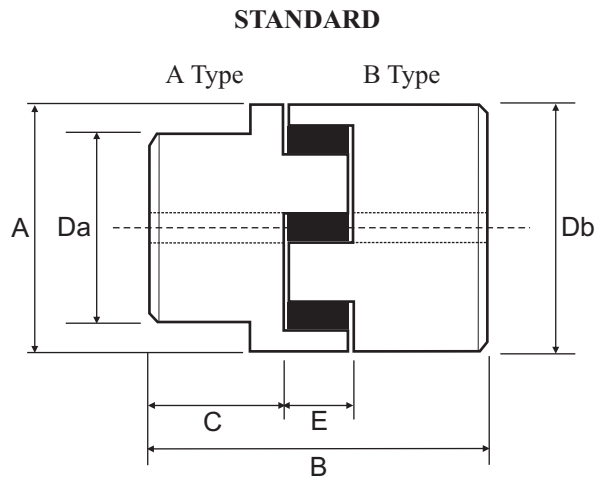
FLANGE SERIES

For dimensional data  
see page 16



# TRASCO 'GR' CURVED JAW COUPLING

## DIMENSIONAL DATA



### STANDARD AND LONG SERIES

Part No.	Bore				A	B Std	C Std	C		Da	Db	E
	A Type		B Type					Type A	Type B			
	Min	Max	Min	Max				Long	Long			
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

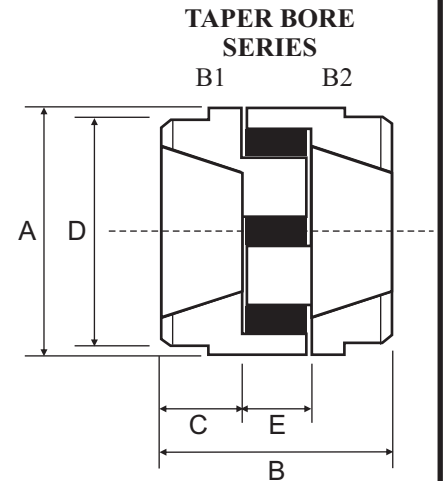


# TRASCO 'GR' CURVED JAW COUPLING

## DIMENSIONAL DATA

### TAPER BORE SERIES

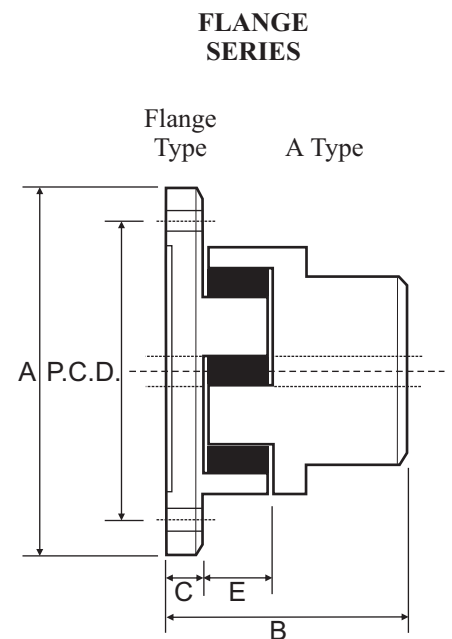
Part No.	Bore		Taper Bush Size	A	B	C	D	E
	Min	Max						
28/38	9.5	28.0	1108	65.0	66.0	23.0	65.0	20.0
38/45	9.5	28.0	1108	80.0	70.0	23.0	78.0	24.0
42/55	12.0	42.0	1610	95.0	78.0	26.0	94.0	26.0
48/60	12.0	42.0	1615	105.0	106.0	39.0	104.0	28.0
55/70	16.0	50.0	2012	120.0	96.0	33.0	118.0	30.0
65/75	16.0	50.0	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



## DIMENSIONAL DATA

### 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

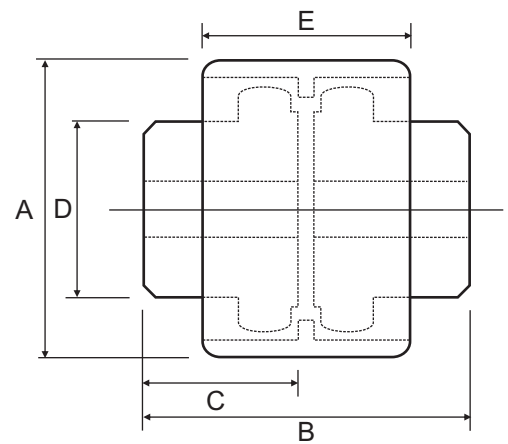
The Sitex coupling is a gear coupling that uses two steel hubs and a superpolyamide resin sleeve. The combination of steel hubs with polyamide sleeve makes the coupling maintenance and lubrication free. Sitex couplings match the Industry Standard so they are interchangeable with many other brands.

### 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 kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Hub	Flange			
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

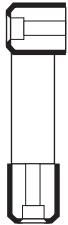




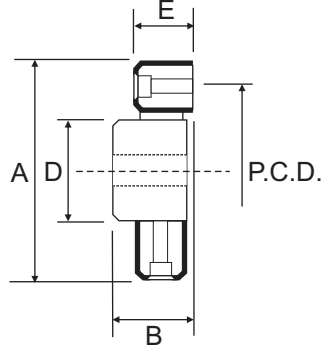
# CENTAFLEX 'A' COUPLING

## DIMENSIONAL DATA

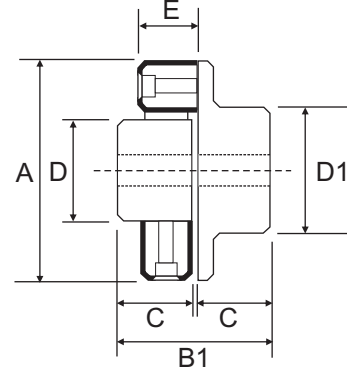
**TYPE 0**



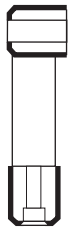
**TYPE 1**



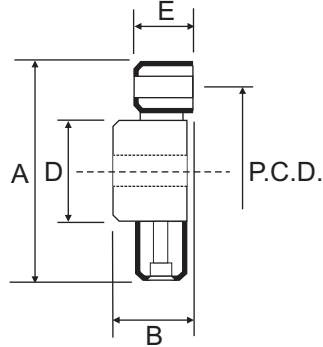
**TYPE 2**



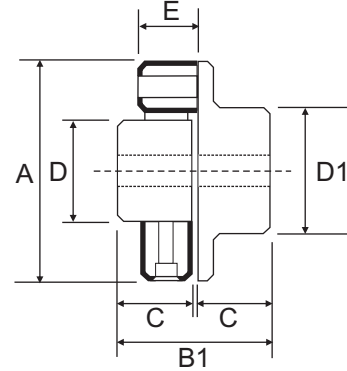
**TYPE 0S**



**TYPE 1S**



**TYPE 2S**



Part No.	Bore			A	B	B1	C	D	D1	E	PCD	No. Bolts
	Min Hub	Max Hub	Max Flange									
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

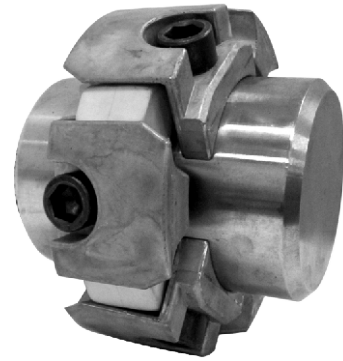
### CENTAFLEX 'B'

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)

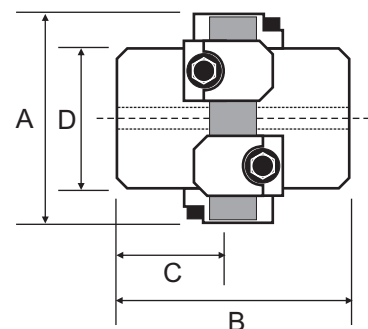
### PERFORMANCE DATA



- 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



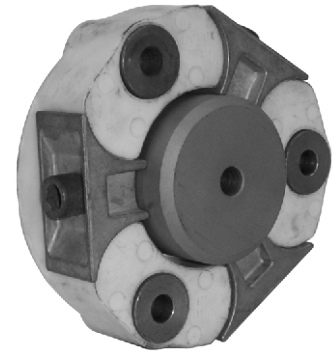


# CENTAFLEX 'H' COUPLING

## 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.

## PERFORMANCE DATA

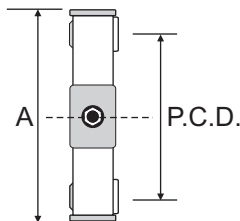


Part No.	Max Bore		Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Hub	Flange			
CFH008	38.0	55.0	1.047	100.0	6500
CFH016	48.0	70.0	2.094	200.0	5500
CFH025	55.0	85.0	3.665	350.0	5000
CFH030	65.0	100.0	5.236	500.0	4000
CFH050	65.0	100.0	8.377	800.0	4000
CFH090	65.0	100.0	9.948	950.0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

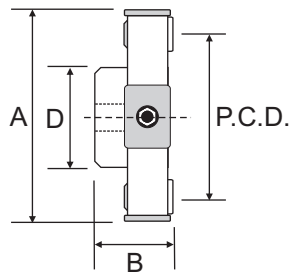
- High speed
- Extremely high thermal stability -50 to +150C
- Oil resistant

## DIMENSIONAL DATA

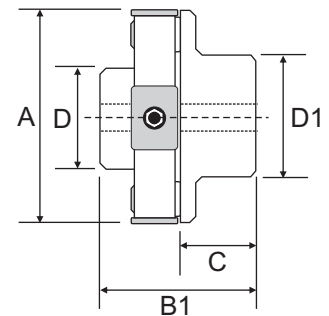
TYPE 0



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.

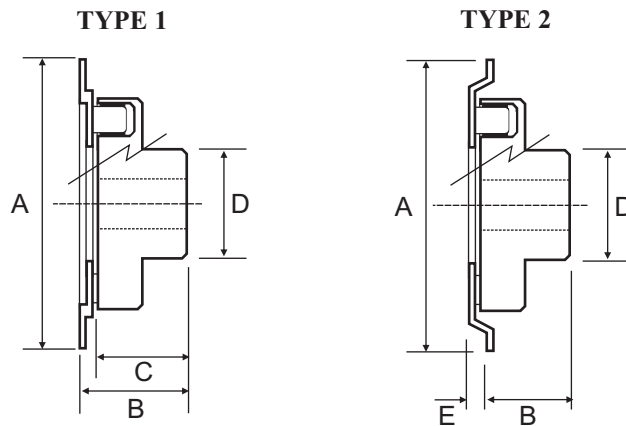
Part No.	Max Bore Hub	Power at 100 RPM kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			Shore 50 A	Shore 60 A	Shore 75 A	
CFD160	60.0	2.932	280.0	400.0	600.0	6200
CFD198	75.0	5.864	560.0	800.0	1200.0	5000
CFD220	85.0	13.089	1250.0	1600.0	2500.0	4500
CFD275	100.0	26.178	2500.0	3200.0	5000.0	3600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

Power at 100 RPM is based on Shore 50

## PERFORMANCE DATA



## DIMENSIONAL DATA



Part No.	SAE J620	Style	Bore		A	B	C	D	E
			Min	Max					
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.



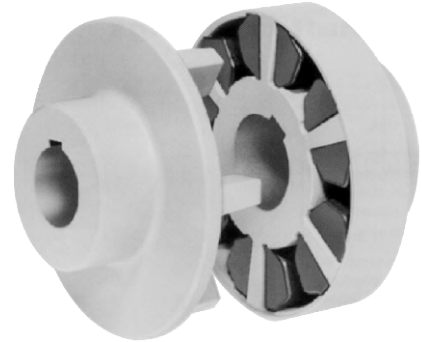
# CENTAFLEX 'E' COUPLING

## 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 kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Hub mm	Flange mm			
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

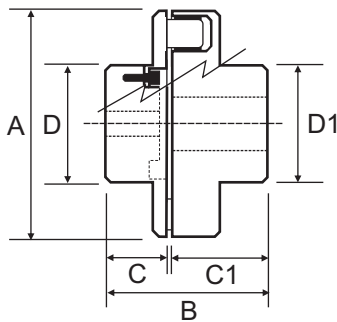
## PERFORMANCE DATA



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

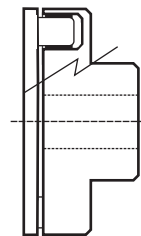
## DIMENSIONAL DATA

### TYPE 2

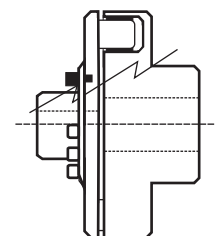


Type 2 is the most popular type for Centaflex couplings. Type 1 & 3 are also available, contact Naismith Engineering for more information.

### 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



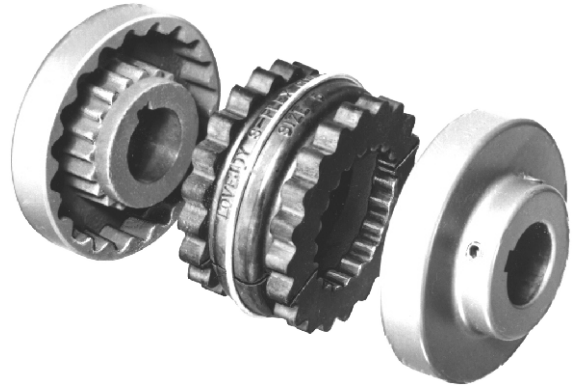
## S-FLEX COUPLING

### 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 kW	Nominal Torque (Nm)			Normal Maximum Speed (RPM)
			EDPM	Neoprene	Hytrel	
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. Colour 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. Colour 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. Colour 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

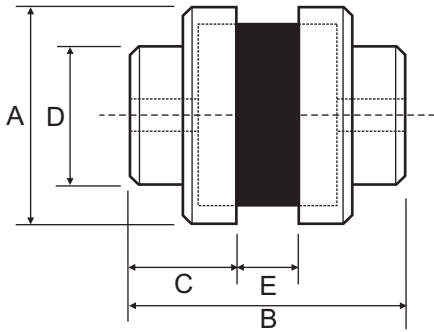
**H, HS** - These sleeves feature both a one-piece solid (H) and two-piece split (HS) design and are molded in Hytrel. The sleeves in Hytrel material are designed to transmit power for high torque applications. Because of the design and the properties of the Hytrel molded sleeve, the H and HS sleeves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



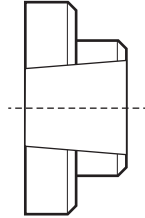


## S-FLEX COUPLING

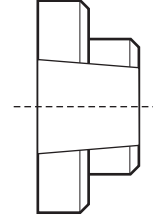
### DIMENSIONAL DATA



STANDARD TAPER



REVERSE TAPER



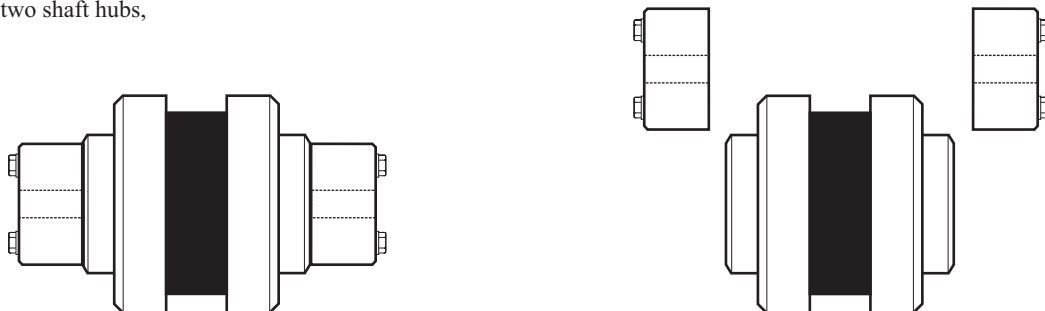
Part No.	Bore		Taper Bores		A	B	C	D	E
	Min	Max	Standard	Reverse					
3J	9.5	22.2	-	-	52.4	50.8	20.8	38.1	9.7
4J	12.7	25.4	-	-	62.5	60.5	22.4	41.4	16.0
5S	12.7	30.2	-	-	82.6	71.4	26.4	47.8	19.1
6S/TF/TR	15.9	36.5	1215	1008	101.6	88.9	33.3	63.5	22.4
7S/TF/TR	15.9	41.3	1215	1108	117.5	100.1	37.3	71.4	25.4
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

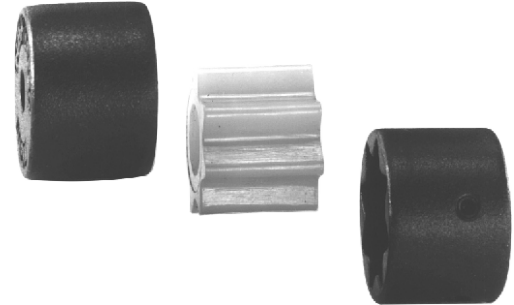
### MINI SOFT

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.

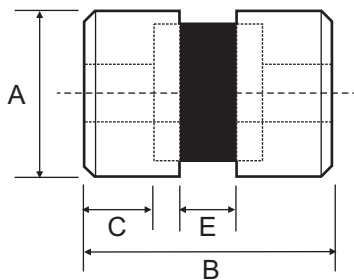
- Multiple tooth contact, low load per tooth.
- Good axial freedom.
- Good dampening capacity.
- Good torsional stiffness.
- High speed capability.

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

### PERFORMANCE DATA



### 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

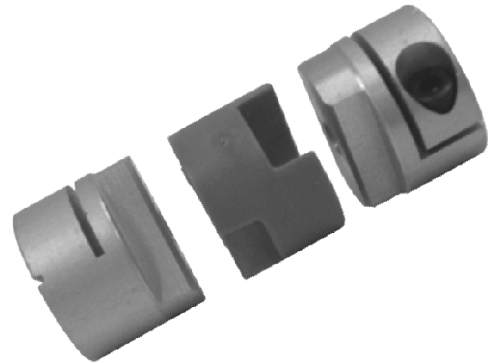
### OLDHAM

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

### PERFORMANCE DATA

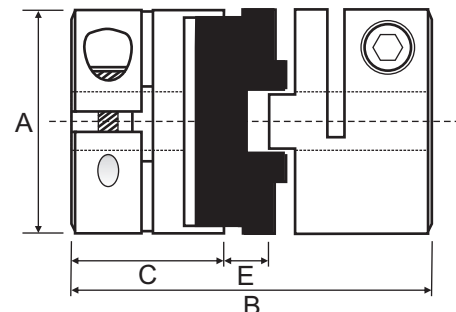
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Set Screw Style				
MOL-16	6.0	0.007	0.7	24000
MOL-20	8.0	0.013	1.2	19000
MOL-25	10.0	0.021	2.0	15000
MOL-32	14.0	0.047	4.5	12000
Clamp Style				
MOL-16C	6.0	0.007	0.7	9500
MOL-20C	8.0	0.013	1.2	7600
MOL-25C	10.0	0.021	2.0	6100
MOL-32C	14.0	0.047	4.5	4800



### 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.





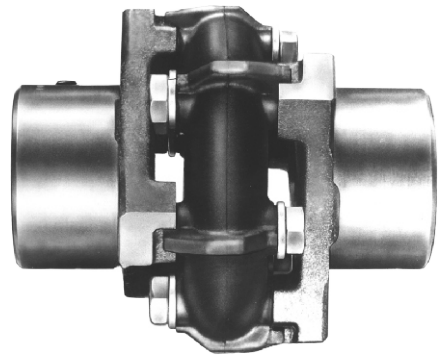
## SAGA COUPLING

### 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.

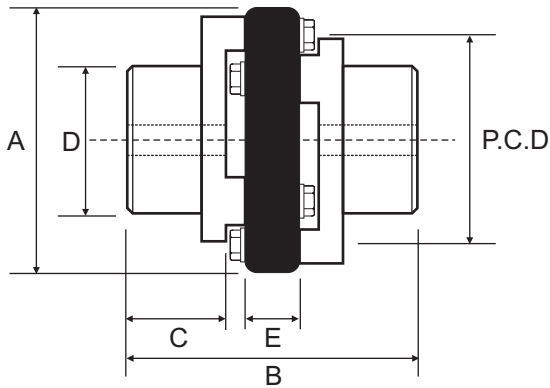
- No end thrust in misalignment position.
- Absorbs misalignment and shock.
- No axial reaction force.

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



### PERFORMANCE DATA

### 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



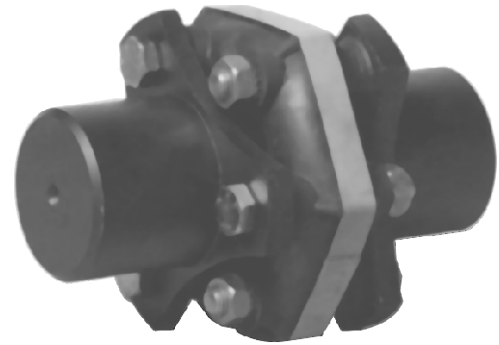
## JUBOFLEX COUPLING

### JUBOFLEX

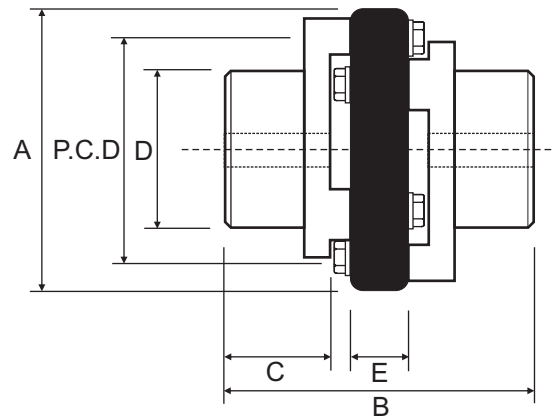
The Juboflex coupling consists of two steel hubs and a precompressed natural rubber element. The four smaller sizes come to suit taper bushes and the other four are pilot bore. The coupling has excellent damping properties and can take high misalignment.

### 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		A	B	C	D	E	P.C.D.	No. Bolts
		Min	Max							
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



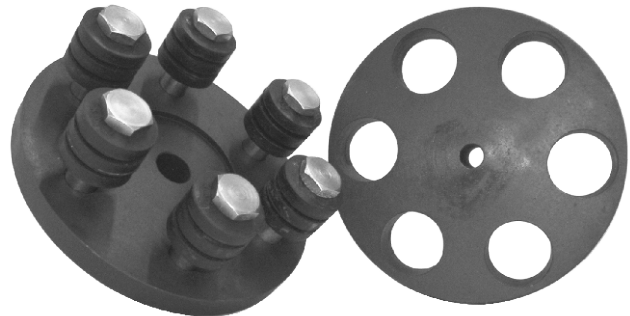
## CONE RING TYPE COUPLING

### PERFORMANCE DATA

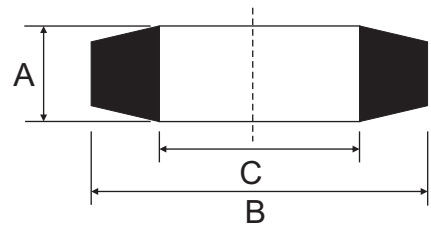
#### CONE RING TYPE

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.

Part No.	Max Bore		Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Pin Hub	Bush Hub			
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



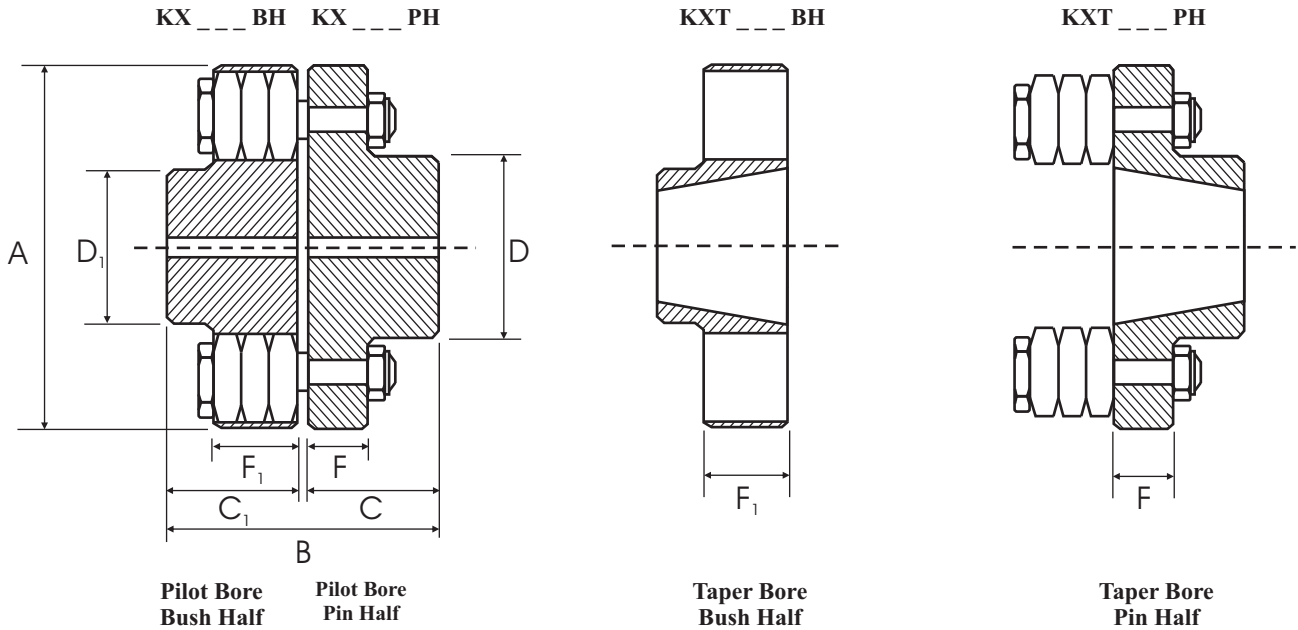
#### SPARE PARTS

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



Pin Hub Dimensions

Part No.	Bore		Taper Bush Pin	A	B		C	D Pin	F Pin
	Min	Max			Pilot	Taper			
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	1215	146.0	115.0	44.1	56.0	83.0	12.0
KX048	21.0	55.0	1615	171.0	125.0	44.1	61.0	90.0	17.0
KX058	21.0	65.0	2017	193.0	139.0	37.8	68.0	106.0	17.0
KX070	28.0	75.0	2525	216.0	155.0	70.5	76.0	128.0	17.0
KX075	28.0	80.0	2525	254.0	179.0	-	88.0	145.0	30.0
KX085	28.0	105.0	3030	279.0	203.0	83.2	100.0	166.0	30.0
KX105	34.0	120.0	3535	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 Bush	A	B		C <sub>1</sub>	D <sub>1</sub> Bush	F <sub>1</sub> Bush
	Min	Max			Pilot	Taper			
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	2017	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	2525	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.

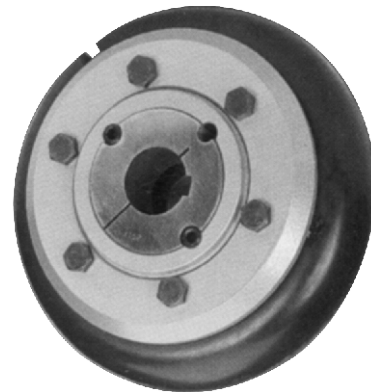
## TYRE COUPLING

### 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 4°, 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.

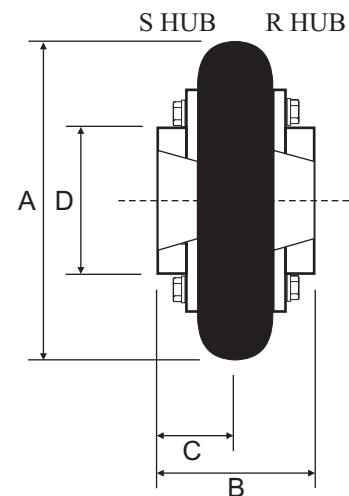
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
A-40	25.0	0.220	21.0	4500
A-50	32.0	0.560	53.5	4500
A-60	42.0	1.110	106.0	4000
A-70	42.0	1.700	162.4	3600
A-80	50.0	2.650	253.1	3100
A-90	60.0	3.830	365.8	2750
A100	60.0	5.300	506.2	2600
A110	60.0	7.460	712.4	2300
A120	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

### PERFORMANCE DATA



### DIMENSIONAL DATA

Part No.	Bore		Bush		A	B	C	D
	Min	Max	S	R				
A-40	12.0	25.0	1008	1008	105.0	66.0	22.2	-
A-50	12.0	32.0	1210	1210	133.0	75.0	25.4	79.0
A-60	12.0	42.0	1610	1610	165.0	83.0	25.4	103.0
A-70	12.0	42.0	1610	2012	187.0	100.0	25.4	76.0
A-80	16.0	50.0	2012	2012	211.0	107.0	31.8	95.0
A-90	19.0	60.0	2517	2517	235.0	136.0	44.5	111.0
A100	19.0	60.0	2517	3020	245.0	138.0	44.5	124.0
A110	19.0	60.0	3020	3020	279.0	135.0	44.5	140.0
A120	32.0	75.0	3020	3525	314.0	151.0	50.8	152.0
A140	35.0	90.0	3525	3525	359.0	203.0	88.9	195.0
A160	40.0	100.0	4030	4030	402.0	226.0	101.6	216.0
A180	60.0	110.0	4535	4535	470.0	261.0	114.3	252.0



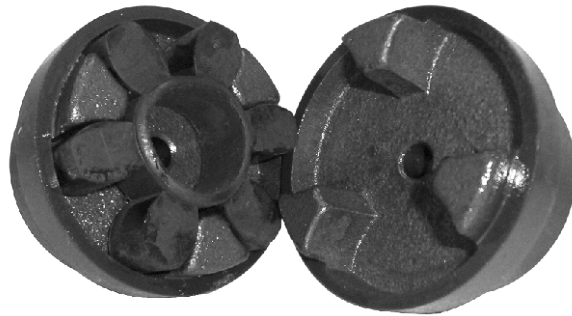


### PERFORMANCE DATA

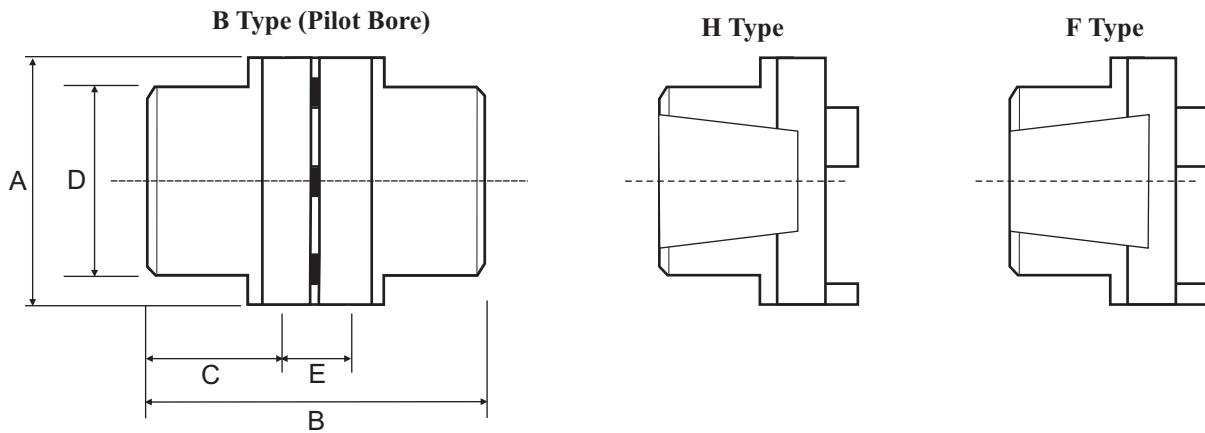
#### HRC

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



Part No.	Bore		Bush Size	A	C		D	E	B*		
	Min	Max			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-S COUPLING

### TSCHAN-S

The Tschan-S coupling is a torsionally flexible, shock-proof jaw coupling which compensates angular, radial & axial shaft misalignment within specified tolerances. Polyurethane elastomers (VkR) are oil resistant & withstand temperatures between -30°C to +100°C and ensure electrical insulation between connected machines as long as there are no other electrically conductive connections. Elastomers made of Buna N (pb) and grade VkB are electrically conductive and could prevent undesirable electrostatic charges. Elastomers of different strengths are colour-coded for identification.

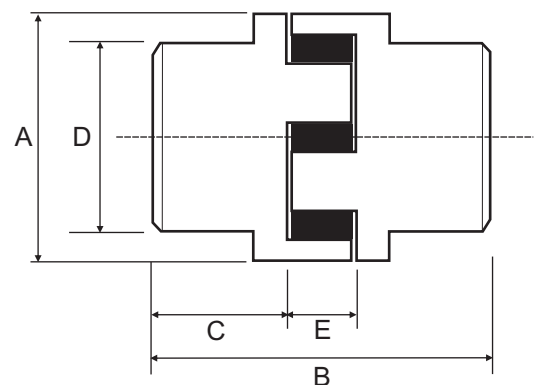
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque Vkr Red (Nm)	Normal Maximum Speed (RPM)
S050	25.0	0.157	15.0	15000
S070	38.0	0.576	55.0	11000
S085	40.0	0.785	75.0	9000
S100	42.0	1.361	130.0	7250
S125	55.0	2.618	250.0	6000
S145	65.0	4.188	400.0	5250
S170	85.0	6.597	630.0	4500
S200	95.0	11.518	1100.0	3750
S230	105.0	17.801	1700.0	3250
S260	125.0	27.749	2650.0	3000
S300	140.0	40.838	3900.0	2500
S360	150.0	68.063	6500.0	2150
S400	160.0	93.194	8900.0	1900



### PERFORMANCE DATA

### DIMENSIONAL DATA

Part No.	Bore		A	B	C	D	E
	Min	Max					
S050	-	25.0	50.0	75.0	30.0	41.0	12.0
S070	-	38.0	70.0	100.0	38.5	55.0	18.0
S085	-	40.0	85.0	110.0	43.5	60.0	18.0
S100	-	42.0	105.0	125.0	49.5	65.0	20.0
S125	-	55.0	126.0	145.0	56.5	85.0	25.0
S145	-	65.0	145.0	160.0	61.0	95.0	30.0
S170	-	85.0	170.0	190.0	75.0	120.0	30.0
S200	-	95.0	200.0	245.0	99.0	135.0	35.0
S230	-	105.0	230.0	270.0	110.0	150.0	35.0
S260	-	125.0	260.0	285.0	112.5	180.0	45.0
S300	-	140.0	300.0	330.0	131.5	200.0	50.0
S360	-	150.0	360.0	417.0	172.0	210.0	55.0
S400	-	160.0	400.0	400.0	163.5	225.0	55.0



## NOR-MEX COUPLING

### NOR-MEX

The Nor-Mex coupling has a very distinctive element that weaves in and out between the jaws. This ring has a high internal damping characteristic, which enables the coupling, on reaching a dangerous speed range, to limit the torsional oscillation and thus protect the linked machines from damage. Elements come in material grade Perbunan (Pb72) with nitrile rubber (NBR) and hardness of 72 & 82 shore A with temperature range of -40°C to +120°C.

### PERFORMANCE DATA

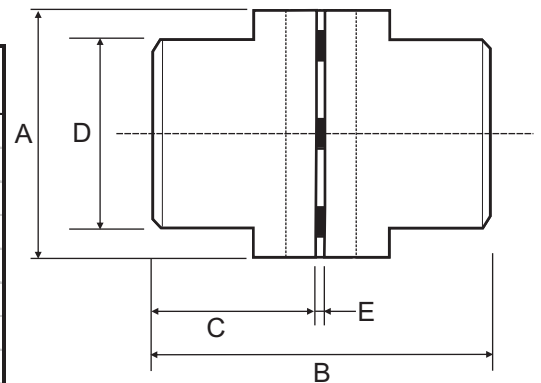
Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
N050	19.0	0.136	13.0	12500
N067	28.0	0.230	22.0	10000
N082	32.0	0.503	48.0	8000
N097	42.0	1.005	96.0	7000
N112	48.0	1.571	150.0	6000
N128	55.0	2.618	250.0	5000
N148	65.0	4.084	390.0	4500
N168	75.0	6.597	630.0	4000
N194	85.0	10.995	1050.0	3500
N214	95.0	15.707	1500.0	3000
N240	110.0	25.131	2400.0	2750
N265	120.0	38.743	3700.0	2500
N295	130.0	51.309	4900.0	2250
N330	150.0	67.016	6400.0	2000
N370	170.0	93.194	8900.0	1750
N415	190.0	138.220	13200.0	1500
N480	210.0	188.482	18000.0	1400
N575	230.0	282.723	27000.0	1200



E Hub Standard  
G Hub with Flange also available

### DIMENSIONAL DATA

Part No.	Bore		A	B	C	D	E
	Min	Max					
N050	-	19.0	50.0	52.0	25.0	33.0	2.0
N067	-	28.0	67.0	62.5	30.0	46.0	2.5
N082	-	32.0	82.0	83.0	40.0	53.0	3.0
N097	-	42.0	97.0	103.0	50.0	69.0	3.0
N112	-	48.0	112.0	123.5	60.0	79.0	3.5
N128	-	55.0	128.0	143.5	70.0	90.0	3.5
N148	-	65.0	148.0	163.5	80.0	107.0	3.5
N168	-	75.0	168.0	183.5	90.0	124.0	3.5
N194	-	85.0	194.0	203.5	100.0	140.0	3.5
N214	-	95.0	214.0	224.0	110.0	157.0	4.0
N240	-	110.0	240.0	244.0	120.0	179.0	4.0
N265	-	120.0	265.0	285.5	140.0	198.0	5.5
N295	-	130.0	295.0	308.0	150.0	214.0	8.0
N330	-	150.0	330.0	328.0	160.0	248.0	8.0
N370	-	170.0	370.0	368.0	180.0	278.0	8.0
N415	-	190.0	415.0	408.0	200.0	315.0	8.0
N480	-	210.0	480.0	448.0	220.0	315.0	8.0
N575	-	230.0	575.0	488.0	240.0	350.0	8.0



## TSCHAN-B COUPLING

### TSCHAN-B

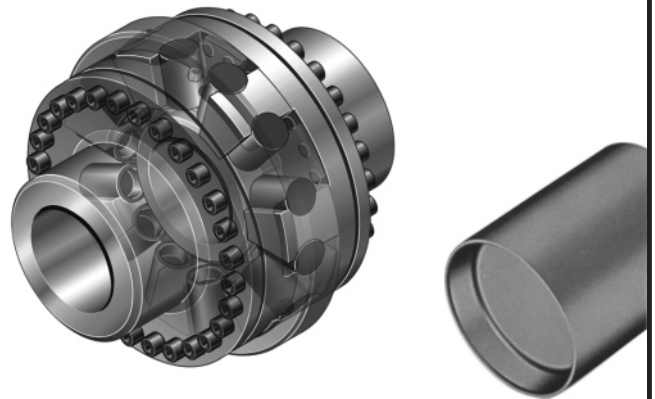
Tschan-B Couplings are torsionally flexible fail-safe jaw couplings. They compensate for angular, radial and axial shaft misalignment within specified tolerances. The coupling can be used in either direction of rotation and may be installed in any position.

The elastic buffer elements

- Absorb torsional vibrations
- Are resistant to oil
- Are largely insensitive to temperature
- Are electrical non conductive

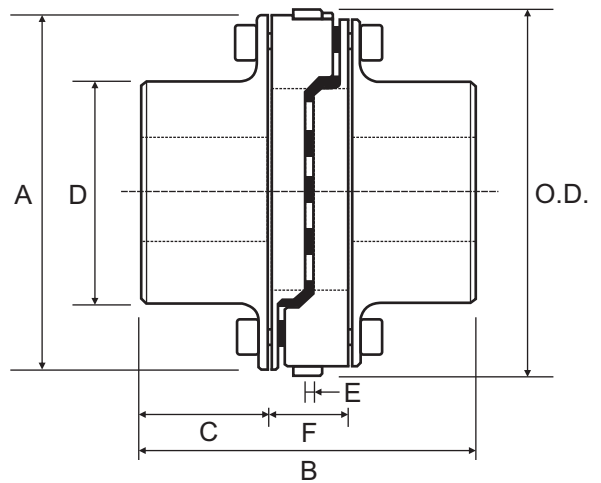
### PERFORMANCE DATA

Part No.	Max Bore	VKR Power at 100 RPM kW	Nominal Torque VkR (Nm)	Normal Maximum Speed (RPM)
BHDD240	100.0	26.178	2500.0	7600
BHDD300	135.0	62.827	6000.0	4600
BHDD350	170.0	109.948	10000.0	4400
BHDD400	190.0	167.539	16000.0	4000
BHDD450	205.0	219.895	21000.0	3750
BHDD500	225.0	298.429	28500.0	3400
BHDD550	240.0	471.204	45000.0	3250
BHDD600	265.0	575.916	55000.0	3100
BHDD650	265.0	680.628	65000.0	2850
BHDD700	310.0	942.408	90000.0	2750
BHDD800	340.0	1256.545	120000.0	2500
BHDD900	400.0	1884.817	180000.0	2200



Enlarged view  
elastic buffer

### DIMENSIONAL DATA



#### Reinforced Hubs

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

Part No.	Bore		A	B	C	D	Ring O.D.	E	F
	Min	Max							
BHDD240	-	100.0	240.0	400.0	150.0	150.0	260.0	10.0	104.0
BHDD300	-	135.0	300.0	490.0	186.0	200.0	320.0	10.0	124.0
BHDD350	-	170.0	350.0	580.0	231.0	250.0	370.0	10.0	124.0
BHDD400	-	190.0	400.0	610.0	239.0	280.0	420.0	10.0	138.0
BHDD450	-	205.0	450.0	610.0	239.0	300.0	470.0	10.0	138.0
BHDD500	-	225.0	500.0	710.0	279.0	330.0	530.0	14.0	160.0
BHDD550	-	240.0	550.0	710.0	279.0	350.0	580.0	14.0	160.0
BHDD600	-	265.0	600.0	760.0	299.0	385.0	630.0	14.0	170.0
BHDD650	-	265.0	650.0	760.0	299.0	385.0	680.0	14.0	182.0
BHDD700	-	310.0	700.0	880.0	345.0	450.0	740.0	14.0	200.0
BHDD800	-	340.0	800.0	920.0	365.0	490.0	840.0	14.0	200.0
BHDD900	-	400.0	900.0	1000.0	399.0	590.0	940.0	14.0	214.0

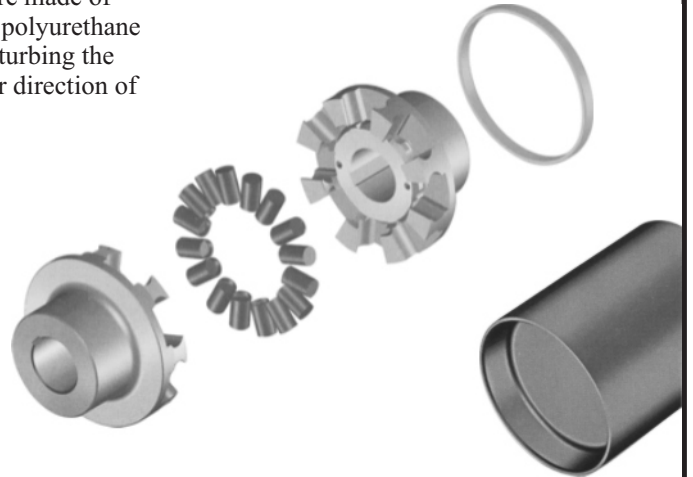
## TSCHAN-B COUPLING

### TSCHAN B-Xxtreme-Torque

The Tschan B-Xxtreme-Torque coupling is a low-cost solution for use with high torque up-to Nominal 260000Nm and shaft capacity 360mm. Hubs are made of nodular iron and elastic buffer elements of electrical non-conducting polyurethane Vkr & Vkw material. Elements can be radially replaced without disturbing the alignment of the coupled machine. The coupling can be used in either direction of rotation and may be installed in any position.

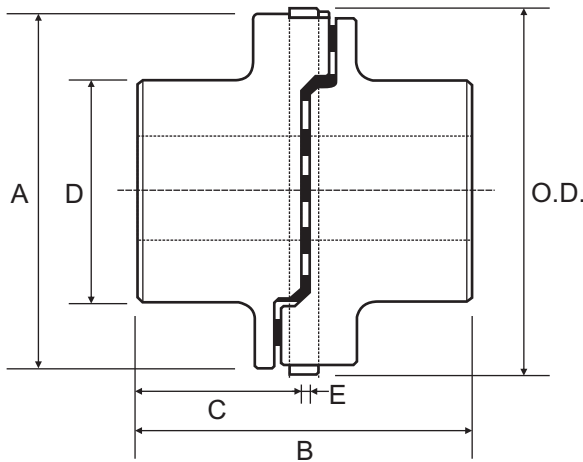
### PERFORMANCE DATA

Part No.	Max Bore	VKR Power at 100 RPM kW	Nominal Torque Vkr (Nm)	Nominal Torque Vkw (Nm)	Normal Maximum Speed (RPM)
BH350	160.0	109.948	10500.0	15000.0	2500
BH450	200.0	219.895	21000.0	31000.0	2150
BH550	240.0	471.204	45000.0	66000.0	1800
BH650	260.0	680.628	65000.0	94000.0	1500
BH700	300.0	942.408	90000.0	130000.0	1400
BH800	330.0	1308.901	125000.0	180000.0	1200
BH900	360.0	1884.817	180000.0	260000.0	1100



Enlarged view elastic buffer

### DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	Ring O.D.	E
	Min	Max						
BH350	-	160.0	350.0	370.0	180.0	240.0	370.0	10.0
BH450	-	200.0	450.0	446.0	218.0	300.0	470.0	10.0
BH550	-	240.0	550.0	527.0	256.5	350.0	580.0	14.0
BH650	-	260.0	650.0	587.0	286.5	400.0	680.0	14.0
BH700	-	300.0	700.0	668.0	327.0	450.0	740.0	14.0
BH800	-	330.0	800.0	728.0	357.0	490.0	840.0	14.0
BH900	-	360.0	900.0	828.0	407.0	540.0	940.0	14.0



## O.M.T. COUPLING

### OMT

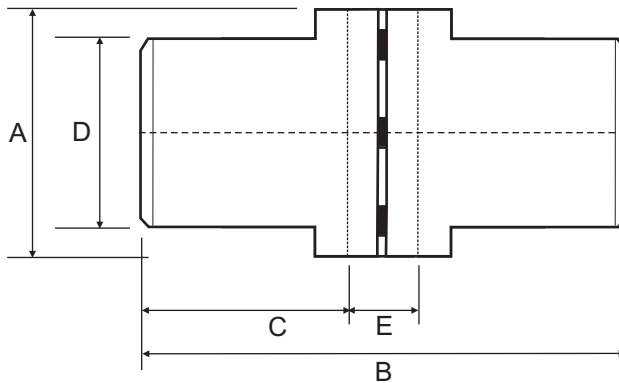
The OMT coupling is a simple jaw type coupling designed to suit most shaft to shaft connections for the hydraulic market. The hubs are made in aluminium and use a simple rubber cross type element. The many different sizes allow for most motor to pump applications to be quickly and easily installed.

### PERFORMANCE DATA

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

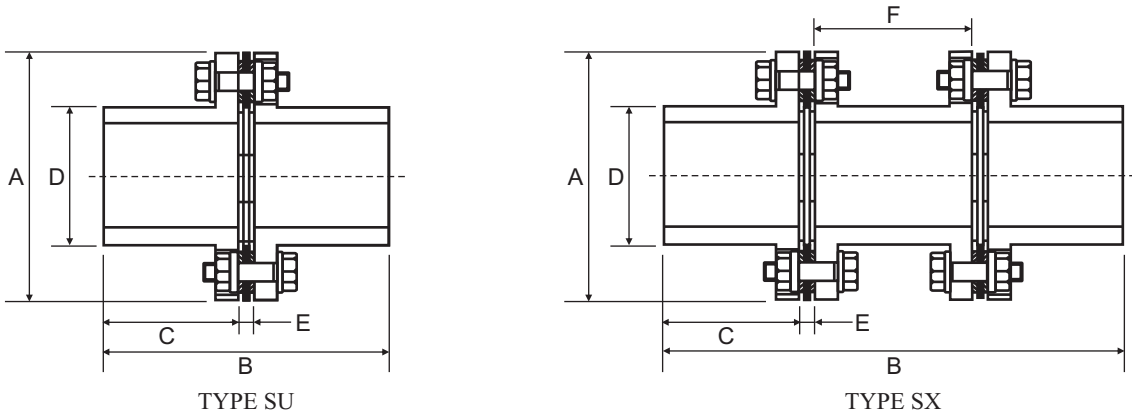
The Lovejoy-Jaure disc coupling is a great low maintenance coupling. It has been developed using the latest technology, Finite Element Analysis, to create a high torque, long life coupling. The discs are made from a high-grade stainless steel, ensuring not only a high strength and high endurance to fatigue, 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.

### PERFORMANCE DATA

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



Coupling Size	Bore		A	B		C	D	E	F
	Min	Max		SU	SX				
-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.



## GST Type C

### SITEX - ST

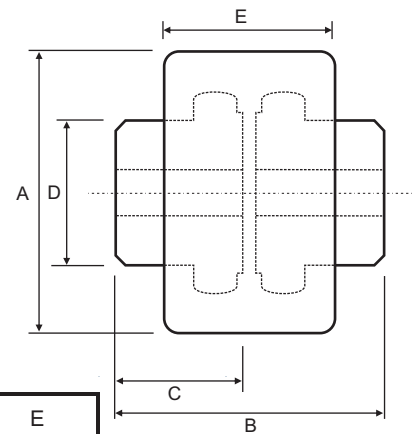
This coupling is based on the standard SITEX Gear Coupling but uses a steel sleeve instead of a Polyamide one. It uses the Optigear crown gear tooth, to allow greater surface contact on the tooth and greater misalignment. A seal is attached to the sleeve on each side of the coupling to hold in the coupling grease. Much stronger than the Polyamide coupling this coupling, is capable of transmitting up to 34,000Nm

Part No.	Max bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal maximum Speed (RPM)
GSTC-28	28	6.3	600	7700
GSTC-38	38	8.9	850	5800
GSTC- 48	48	13.6	1300	5100
GSTC- 62	62	23.0	2200	4000
GSTC- 82	82	39.8	3800	3200
GSTC- 98	98	73.3	7000	2750
GSTC- 110	110	104.7	10000	2300
GSTC- 133	133	157.1	15000	2000
GSTC- 155	155	251.3	24000	1650
GSTC- 170	170	356.0	34000	1550

### PERFORMANCE DATA



### DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	E
	Min	Max					
GSTC-28	-	28	70.0	85.0	41.0	40.0	61.0
GSTC-38	-	38	85.0	100.0	48.5	55.0	65.0
GSTC- 48	-	48	95.0	115.0	56.0	65.0	82.0
GSTC- 62	-	62	120.0	140.0	68.0	85.0	90.0
GSTC- 82	-	82	145.0	153.0	74.5	110.0	96.0
GSTC- 98	-	98	175.0	170.0	82.5	130.0	113.0
GSTC- 110	-	110	198.0	216.0	105.0	150.0	130.0
GSTC- 133	-	133	230.0	288.0	140.0	180.0	175.0
GSTC- 155	-	155	270.0	330.0	160.0	210.0	214.0
GSTC- 170	-	170	300.0	370.0	180.0	230.0	240.0





## GST Type CV

### SITEX - ST

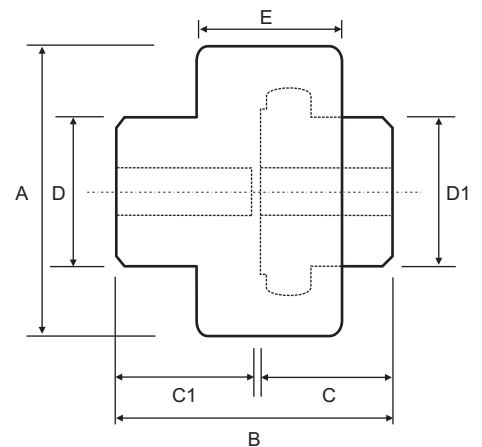
This coupling is based on the standard SITEX Gear Coupling but uses a steel sleeve instead of a Polyamide one. It uses the Optigear crown gear tooth, to allow greater surface contact on the tooth and greater misalignment. This coupling is a 2 piece with one male hub and 1 female sleeve. A seal is attached to the hub to hold in the coupling grease. Much stronger than the Polyamide coupling, this coupling is capable of transmitting up to 10,000Nm

Part No.	Max bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal maximum Speed (RPM)
GSTCV-28	28	6.3	600	7700
GSTCV-38	38	8.9	850	5800
GSTCV- 48	48	13.6	1300	5100
GSTCV- 62	62	23.0	2200	4000
GSTCV- 82	82	39.8	3800	3200
GSTCV- 98	98	73.3	7000	2750
GSTCV- 110	110	104.7	10000	2300

### PERFORMANCE DATA



### DIMENSIONAL DATA



Part No.	Bore		A	B	C	C1	D	D1	E
	Min	Max							
GSTCV-28	-	28	70.0	85.0	41.0	41.0	42.0	40.0	43.0
GSTCV-38	-	38	85.0	100.0	48.5	48.5	55.0	55.0	49.0
GSTCV- 48	-	48	95.0	115.0	56.0	56.0	65.0	65.0	54.5
GSTCV- 62	-	62	120.0	132.0	68.0	60.0	85.0	85.0	60.0
GSTCV- 82	-	82	145.0	140.0	74.5	61.5	110.0	110.0	63.0
GSTCV- 98	-	98	175.0	153.0	82.5	65.5	130.0	130.0	76.0
GSTCV- 110	-	110	198.0	201.0	105.0	90.0	150.0	150.0	92.0



## GEAR COUPLING C & CFR

### SIER-BATH GEAR 'C' & 'CFR'

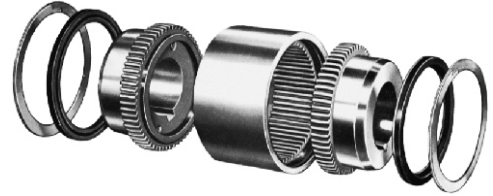
#### 'C' TYPE (FLEX - FLEX)

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)

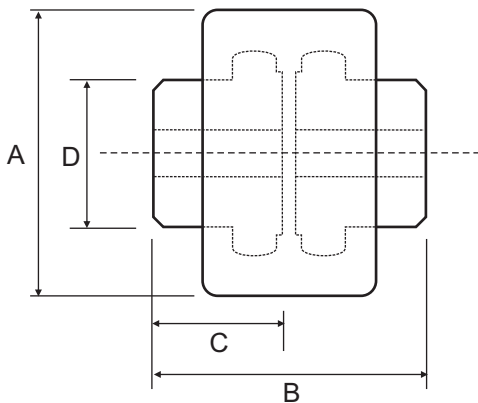
The Flex-Rigid gear coupling consists of a flexible hub and a rigid hub with a single sleeve. The flexible hub is a standard hub from a Flex-Flex coupling. The rigid hub uses a splined type hub. The Flex-Rigid coupling accommodates angular misalignment only and does not allow for parallel misalignment.

### 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'

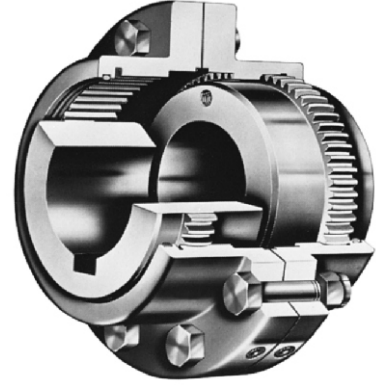
#### 'F' TYPE (FLEX - FLEX)

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

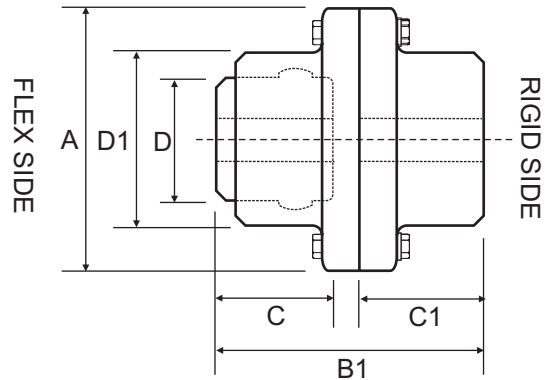
#### 'FFR' TYPE (FLEX - RIGID)

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 kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Flex Hub	Rigid Hub			
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



### 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



## GEAR COUPLING

### GDE (FLEX - FLEX)

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

### GSE (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.

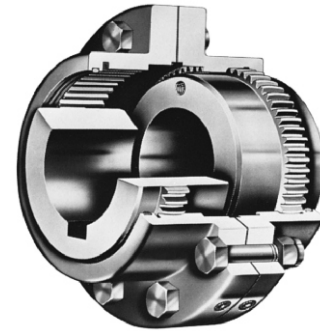
### GRC (RIGID COUPLING)

The GRC coupling consists of 2 rigid hubs and high tensile machine bolts. The simple construction means that the coupling is lubrication and maintenance free. Rigid couplings are ideal for applications where there is no misalignment.

### GSCD (SPACER COUPLING)

This Double Engagement Spacer Coupling with Drop-out Spacers is suitable to take misalignment over increased distances between shaft ends. It is also able to compensate for Parallel and Angular misalignment.

## PERFORMANCE DATA



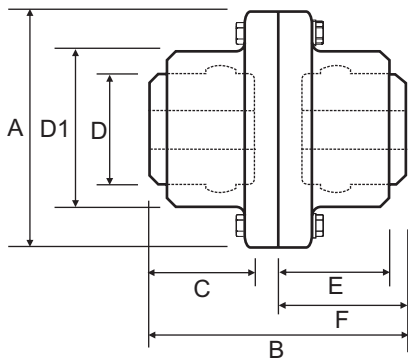
Part No.	Max Bore		Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)	Normal Maximum Speed GSCD (RPM)
	Flex Hub	Rigid Hub				
10	48.0	60.0	11.927	1139	8000	7000
15	60.0	75.0	24.607	2350	6500	5500
20	73.0	92.0	44.712	4270	5600	4600
25	92.0	111.0	78.220	7470	5000	4000
30	105.0	130.0	126.702	12100	4400	3600
35	124.0	149.0	193.717	18500	3900	3100
40	146.0	171.0	320.419	30600	3600	2800
45	165.0	194.0	439.791	42000	3200	2600
50	178.0	222.0	592.670	56600	2900	2400
55	197.0	248.0	774.869	74000	2650	2200
60	222.0	267.0	946.597	90400	2450	2100
70	254.0	305.0	1413.613	135000	2150	1800
80	279.0	343.0	1780.105	170000	1750	-
90	305.0	381.0	2366.492	226000	1550	-
100	343.0	406.0	3246.073	310000	1450	-
110	387.0	445.0	4324.607	413000	1330	-
120	425.0	495.0	5811.518	555000	1200	-



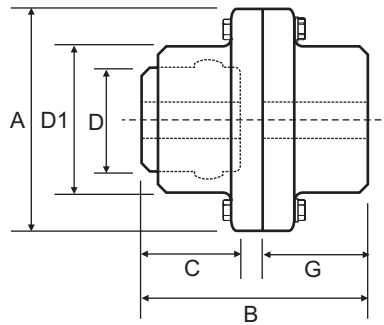
# GEAR COUPLING

## DIMENSIONAL DATA

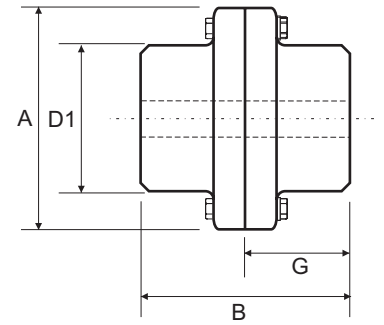
**GDE**  
Double Engagement



**GSE**  
Single Engagement



**GRC**  
Rigid Coupling



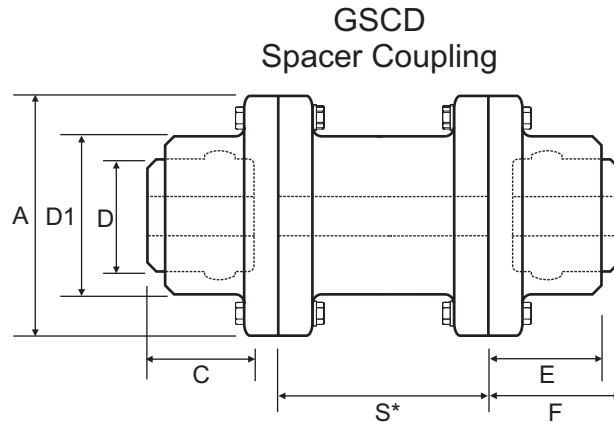
Part No.	Bore				A	B		C	E	F	G	D	D1
	Min Flex	Min Rigid	Max Flex	Max Rigid		GDE	GSE						
10	13.0	13.0	48.0	60.0	116.0	89.0	87.0	43.0	39.0	44.5	40.0	69.0	84.0
15	19.0	19.0	60.0	75.0	152.0	101.0	99.0	49.0	48.0	50.5	46.0	86.0	105.0
20	25.0	25.0	73.0	92.0	178.0	127.0	124.0	62.0	59.0	63.5	58.0	105.0	126.0
25	32.0	32.0	92.0	111.0	213.0	159.0	156.0	77.0	72.0	79.5	74.0	131.0	155.0
30	38.0	38.0	105.0	130.0	240.0	187.0	184.0	91.0	84.0	93.5	88.0	152.0	180.0
35	51.0	51.0	124.0	149.0	279.0	218.0	213.5	106.0	98.0	109.0	102.0	178.0	211.0
40	64.0	64.0	146.0	171.0	318.0	248.0	243.0	121.0	111.0	124.0	115.0	210.0	245.0
45	76.0	76.0	165.0	194.0	346.0	278.0	274.0	135.0	123.0	139.0	131.0	235.0	274.0
50	89.0	89.0	178.0	222.0	389.0	314.0	309.0	153.0	141.0	157.0	147.0	254.0	306.0
55	102.0	102.0	197.0	248.0	425.0	344.0	350.0	168.0	158.0	172.0	173.0	279.0	334.0
60	114.0	114.0	222.0	267.0	457.0	384.0	384.0	188.0	169.0	192.0	186.0	305.0	366.0
70	89.0	89.0	254.0	305.0	527.0	451.5	454.0	221.0	196.0	225.8	220.0	343.0	-
80*	102.0	102.0	279.0	343.0	591.0	507.5	511.0	249.0	243.0	253.8	249.0	356.0	-
90*	114.0	114.0	305.0	381.0	660.0	565.0	566.0	276.0	265.0	282.5	276.0	394.0	-
100*	127.0	127.0	343.0	406.0	711.0	623.0	626.0	305.0	294.0	311.5	305.0	445.0	-
110*	140.0	140.0	387.0	445.0	775.0	679.0	682.0	333.0	322.0	339.5	333.0	495.0	-
120*	152.0	152.0	425.0	495.0	838.0	719.0	722.0	353.0	341.0	359.5	353.0	546.0	-

\* Design differs from drawing shown.  
Exposed Bolt Design



# GEAR COUPLING

## DIMENSIONAL DATA



Part No.	Bore		A	C	E	F	D	D1	S*					
	Min Flex	Max Flex							Standard Spacer Lengths Available					
									100	140	180	250	300	350
10	13.0	48.0	116.0	43.0	39.0	44.5	69.0	84.0	x	x	x			
15	19.0	60.0	152.0	49.0	48.0	50.5	86.0	105.0	x	x	x	x		
20	25.0	73.0	178.0	62.0	59.0	63.5	105.0	126.0	x	x	x	x		
25	32.0	92.0	213.0	77.0	72.0	79.5	131.0	155.0		x	x	x		
30	38.0	105.0	240.0	91.0	84.0	93.5	152.0	180.0		x	x	x		
35	51.0	124.0	279.0	106.0	98.0	109.0	178.0	211.0		x	x	x		
40	64.0	146.0	318.0	121.0	111.0	124.0	210.0	245.0		x	x	x	x	
45	76.0	165.0	346.0	135.0	123.0	139.0	235.0	274.0		x	x	x		
50	89.0	178.0	389.0	153.0	141.0	157.0	254.0	306.0			x	x	x	
55	102.0	197.0	425.0	168.0	158.0	172.0	279.0	334.0			x	x	x	
60	114.0	222.0	457.0	188.0	169.0	192.0	305.0	366.0				x	x	x
70	89.0	254.0	527.0	221.0	196.0	225.8	343.0	425.0					x	x

S\* - Distance Between Shaft Ends  
Exposed Bolt Design

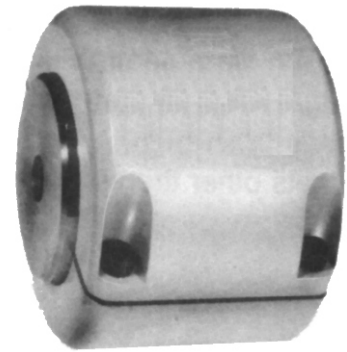
## CHAIN COUPLING

### 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.

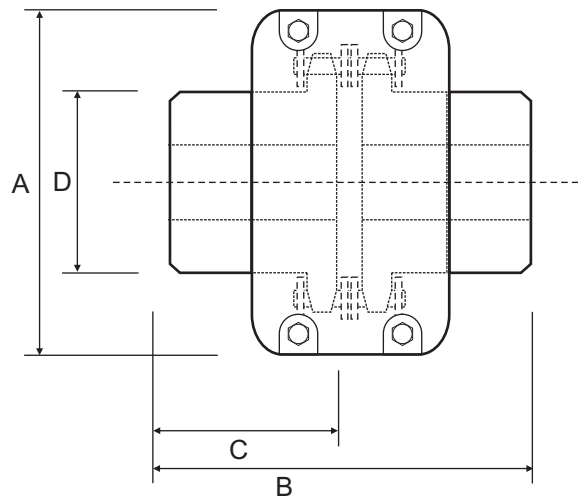
A cover should be used to assure maximum service life, particularly if the coupling operates at high speeds or under moist or abrasive conditions. For proper lubrication, fill the space between the cover and the coupling with soft to medium consistency bearing grease.

### DIMENSIONAL DATA



Part No.	Bore		A	B	C	D	Max Speed (RPM)
	Min	Max					
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





# GRID COUPLING

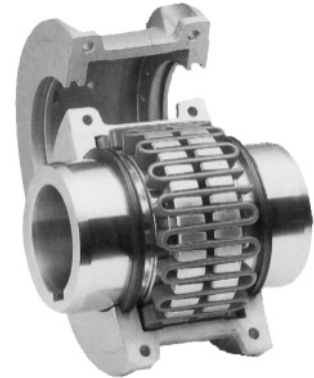
## GRID

The Woo Chang 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.

## PERFORMANCE DATA

Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Maximum Speed Horizontal (RPM)	Maximum Speed Vertical (RPM)
1020	28.0	0.545	52	4500	6000
1030	35.0	1.560	149	4500	6000
1040	43.0	2.607	249	4500	6000
1050	50.0	4.555	435	4500	6000
1060	56.0	7.162	684	4350	6000
1070	67.0	10.408	994	4125	5500
1080	80.0	21.466	2050	3600	4750
1090	95.0	39.058	3730	3600	4000
1100	110.0	65.759	6280	2400	3250
1110	120.0	97.592	9320	2250	3000
1120	140.0	143.455	13700	2025	2700
1130	170.0	208.377	19900	1800	2400
1140	200.0	299.476	28600	1650	2200
1150	215.0	416.754	39800	1500	2000
1160	240.0	585.340	55900	1350	1750
1170	280.0	781.152	74600	1225	1600
1180	300.0	1078.534	103000	1100	1400
1190	335.0	1434.555	137000	1050	1300
1200	360.0	1774.550	186000	900	1100
1210	390.0	2607.330	249000	820	-
1220	420.0	3518.325	336000	730	-

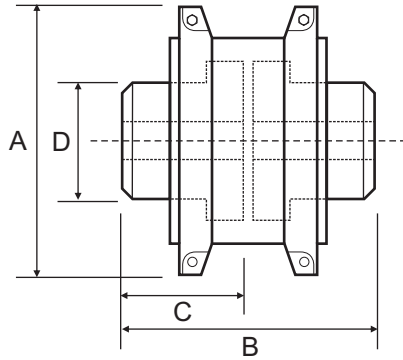




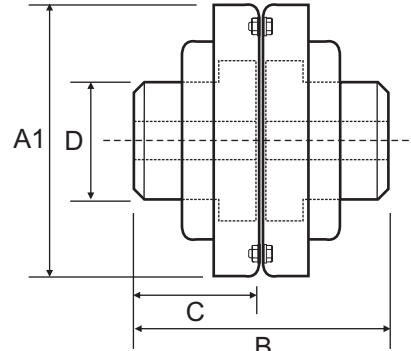


# GRID COUPLING

## DIMENSIONAL DATA



**HORIZONTAL**



**VERTICAL**

Part No.	Bore		A	A1	B	C	D
	Min	Max					
1020	12.7	28.0	101.6	111.1	98.0	47.5	39.7
1030	12.7	35.0	110.0	120.7	98.0	47.5	49.2
1040	12.7	43.0	117.5	128.5	104.6	50.8	57.1
1050	12.7	50.0	138.0	147.6	123.6	60.3	66.7
1060	19.1	56.0	150.5	162.0	130.0	63.5	76.2
1070	19.1	67.0	161.9	173.0	155.4	76.2	87.3
1080	27.0	80.0	194.0	200.0	180.8	88.9	104.8
1090	27.0	95.0	213.0	231.8	199.8	98.4	123.8
1100	41.3	110.0	250.0	266.7	245.7	120.6	142.0
1110	41.3	120.0	270.0	285.8	258.5	127.0	160.3
1120	60.3	140.0	308.0	319.0	304.4	149.2	179.4
1130	66.7	170.0	346.0	377.8	329.8	161.9	217.5
1140	66.7	200.0	384.0	416.0	371.6	182.8	254.0
1150	108.0	215.0	453.1	476.3	371.8	182.9	269.2
1160	120.7	240.0	501.4	533.4	402.2	198.1	304.8
1170	133.4	280.0	566.4	584.2	437.8	215.9	355.6
1180	152.4	300.0	629.9	630.0	483.6	238.8	393.7
1190	152.4	335.0	675.6	685.0	524.2	259.1	436.9
1200	177.8	360.0	756.9	737.0	564.8	279.4	497.8
1210*	178.0	390.0	844.5	-	622.3	304.8	533.4
1220*	203.0	420.0	920.7	-	662.9	325.1	571.5

\* available only in horizontal



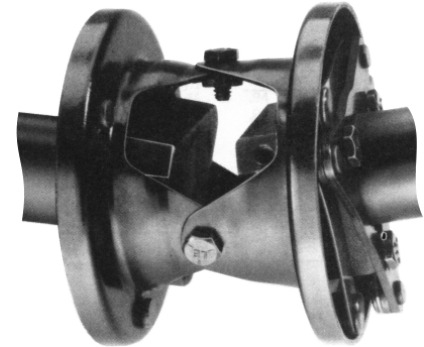
## DELTA FLEX COUPLING

### 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.

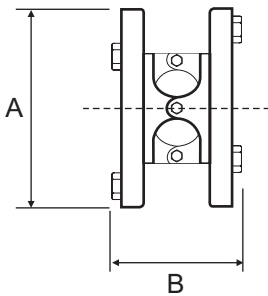
### PERFORMANCE DATA



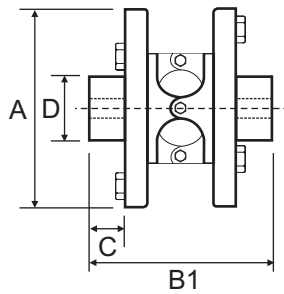
Part No.	Max Bore		Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	Delta Hub	Round Hub			
40	35.0	42.0	0.880	84.0	8000
50	49.0	58.0	2.241	214.0	6000
60	65.0	79.0	4.848	463.0	5000
80	90.0	106.0	11.236	1073.0	4000
100	112.0	132.0	27.089	2587.0	3000

### DIMENSIONAL DATA

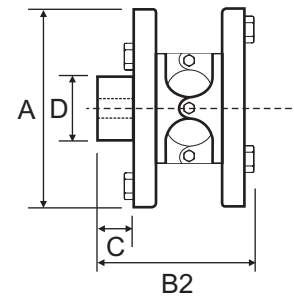
**TYPE 1  
ARRANGEMENT**



**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



## JAW COUPLING

### RULAND JAWFLEX™ JAW

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.

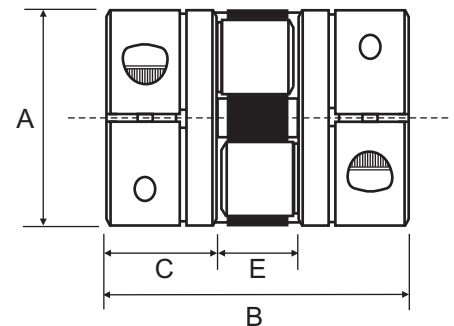
### PERFORMANCE DATA



Part No.		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
Clamp	Set Screw			92 Shore A	98 Shore A	
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

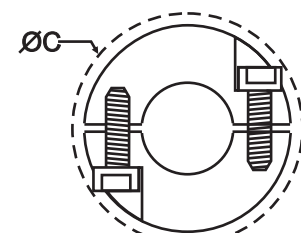
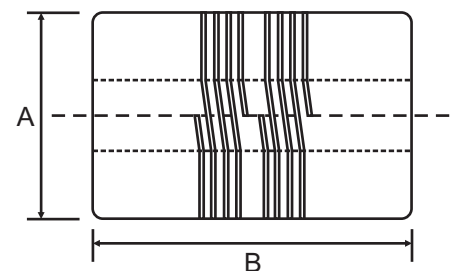
Part No.		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
Clamp	Set Screw			Min Bore	Max Bore	
<b>Flexbeam-3 Beam Coupling</b>						
MFC20	MFS20	8.0	0.008	1.45	1.15	6000
MFC25	MFS25	12.0	0.010	2.00	1.40	6000
MFC30	MFS30	14.0	0.019	3.65	2.35	6000
MFC40	MFS40	16.0	0.032	6.20	5.35	6000
<b>Flexbeam-2 Beam Coupling</b>						
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		MFC	MFS	MFC
<b>Flexbeam-3 Beam Coupling</b>							
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
<b>Flexbeam-2 Beam Coupling</b>							
					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



## 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

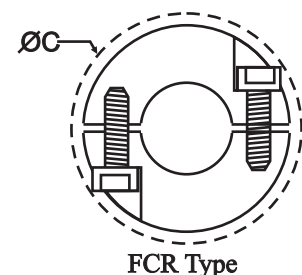
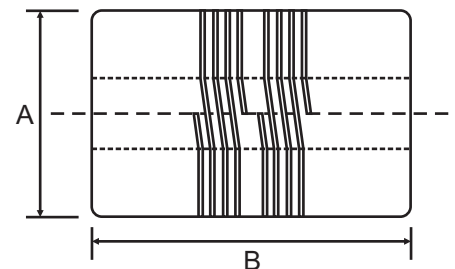


Clamp	Part No.		Max Bore	100 RPM* kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
	Set Screw				Min Bore	Max Bore	
<b>Flexbeam-3 Beam Coupling</b>							
FCR10	FSR10		6.4	0.004	0.73	0.73	6000
FCR12	FSR12		7.9	0.008	1.47	1.13	6000
FCR16	FSR16		9.5	0.010	1.98	1.86	6000
FCR20	FSR20		12.7	0.021	3.95	2.82	6000
FCR24	FSR24		19.1	0.035	6.78	4.52	6000
<b>Flexbeam-2 Beam Coupling</b>							
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

Clamp	Part No.		Bore		A	B	B	C
	Set Screw		Min	Max				
<b>Flexbeam-3 Beam Coupling</b>								
						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
<b>Flexbeam-2 Beam Coupling</b>								
						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	





## BELLOWS COUPLING - METRIC

### RULAND BELFLEX BELLOWS COUPLING

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.

### PERFORMANCE DATA

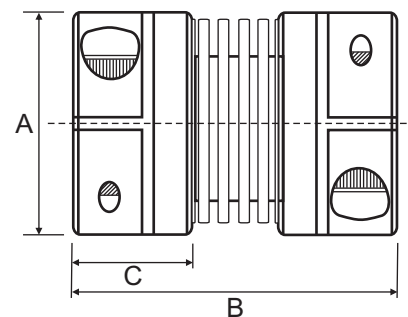
Part No.		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Clamp	Set Screw				
MBC15	MBS15	6.0	0.007	1.25	10000
MBC19	MBS19	8.0	0.012	2.25	10000
MBC25	MBS25	12.0	0.018	3.40	10000
MBC33	MBS33	16.0	0.036	6.80	10000
MBC41	MBS41	20.0	0.073	14.00	10000
MBC51	MBS51	25.0	0.118	22.60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

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.

### PERFORMANCE DATA

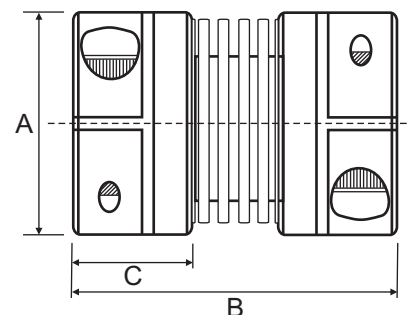
Part No.		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Clamp	Set Screw				
BC10	BS10	6.4	0.007	1.24	10000
BC12	BS12	7.9	0.012	2.26	10000
BC16	BS16	12.7	0.018	3.39	10000
BC21	BS21	15.9	0.035	6.78	10000
BC26	BS26	19.1	0.074	14.12	10000
BC32	BS32	25.4	0.118	22.60	10000



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

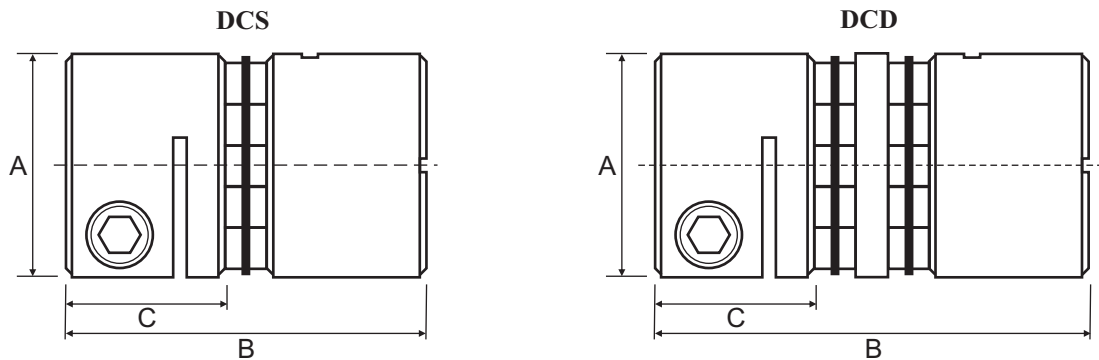
DCS



Part No		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
Single	Double				
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



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

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..

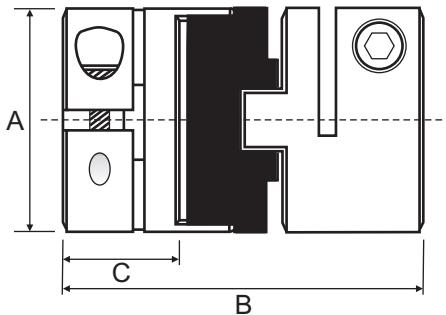
## PERFORMANCE DATA



Part No. Clamp	Set Screw	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)		Normal Maximum Speed (RPM)
				Acetal	Nylon	
	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. Clamp	Set Screw	Bore		A	B OCT	B OST	C OCT	C OST
		Min	Max					
	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

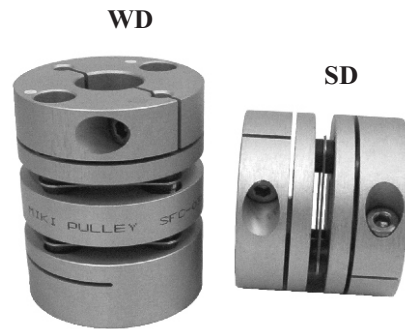
## SERVOCLASS

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.

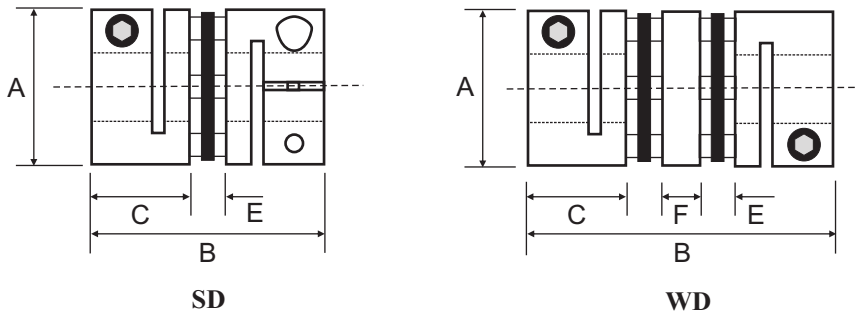
ServoClass Couplings feature zero-backlash flexible metal discs and zero-backlash "keyless" clamp-type mounting hubs. This high-performance coupling has high torsional stiffness and low inertia to avoid system resonance. Yet it is remarkably flexible as a result of its double-flex-disc design, which provides exceptional misalignment capacity. This flexibility reduces reaction loads, thereby extending the operating life of the connected components while providing smoother system performance.

## PERFORMANCE DATA

Part No.		Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
SD	WD				
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



## DIMENSIONAL DATA



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

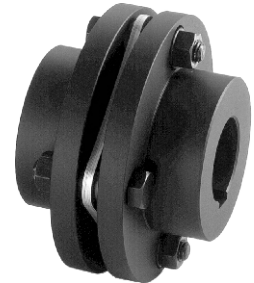


# SERVOFLEX SFS COUPLING

## SERVOCLASS

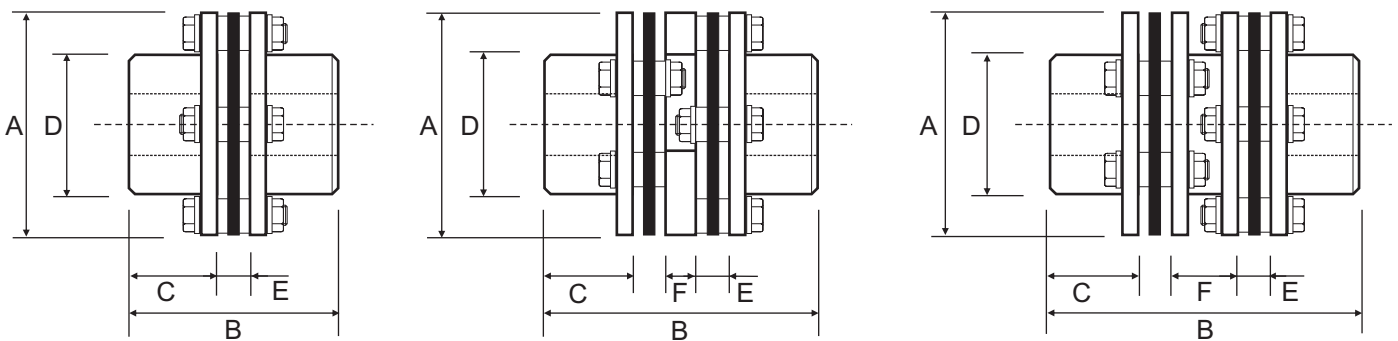
The SFS ServoClass Couplings are also designed to meet the precision positioning requirements and high reverse-load characteristics. With higher torque ratings this coupling suits larger applications. ServoClass Couplings feature zero-backlash flexible metal discs. This high-performance coupling has 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 kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)		
S	W	G				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	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



# TRASCO 'ES' CURVED JAW COUPLING

## CURVED JAW BACKLASH FREE

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.

## PERFORMANCE DATA



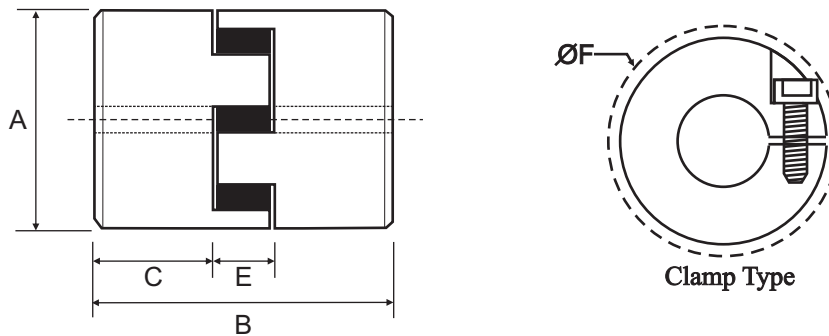
Part No.	Max Bore		Power at 100 RPM kW	Nominal Torque (Nm)				Normal Maximum Speed (RPM)
	Set Screw	Clamp		Shore 80 A	Shore 92 A	Shore 98 A	Shore 65 D	
7	7.0	7.0	0.013	-	1.2	2.0	2.4	40000
9	9.0	9.0	0.031	-	3.0	5.0	6.0	28000
14	16.0	16.0	0.079	-	7.5	12.5	16.0	19000
19/24	24.0	20.0	0.105	5.0	10.0	17.0	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

Torque ratings based on Set Screw Style Only.

Power at 100 RPM based on Shore 92 A Set Screw Style.

For torque ratings on Clamp Style please contact Naismith Engineering.

## DIMENSIONAL DATA



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		55.0		95.0	126.0	50.0	26.0	-
48*	20.0		60.0		105.0	140.0	56.0	28.0	-

\*Not available in Clamp Style



# 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.

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

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

## 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.

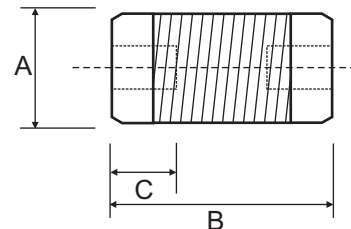
### CHP

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.

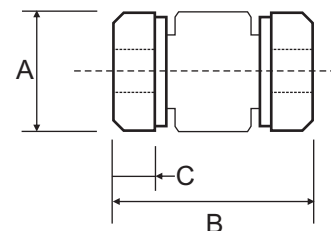


ZG Type

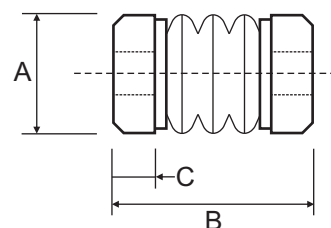
## DIMENSIONAL DATA



TYPE LM & ZG



TYPE BLS



TYPE CHP



## BAUMANN COUPLING

### BAUMANN

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.

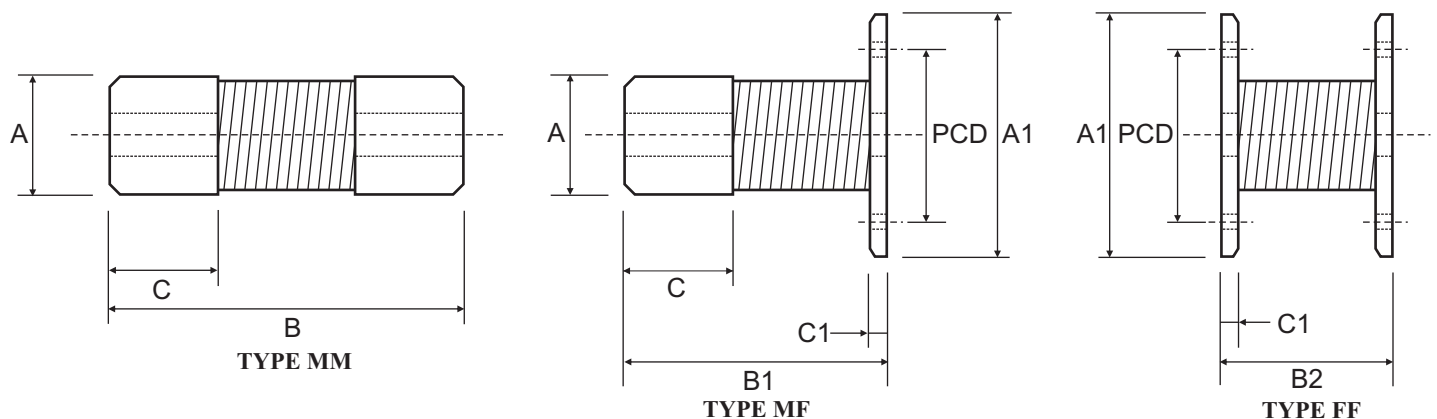
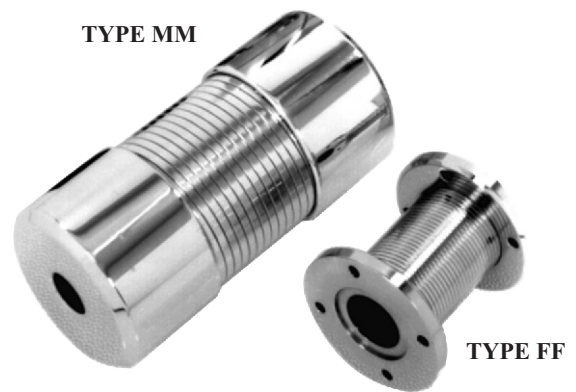
Its effectiveness is largely independent of the direction of rotation, as in one direction the outer and middle counter-coiled spring layers work together to transmit the load, while in the other direction, the middle and inner layers come into operation.

Coupling Type MM and MF are also available with clamping style hubs in sizes 6 through to 28.

### PERFORMANCE DATA

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.



Other types available, contact Naismith Engineering.



# BAUMANN COUPLING

## DIMENSIONAL DATA

Part No.	Bore			A	A1	Length Code	B	B1	B2	C	C1	PCD
	Min	Max With Key	Max No Key									
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

**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.

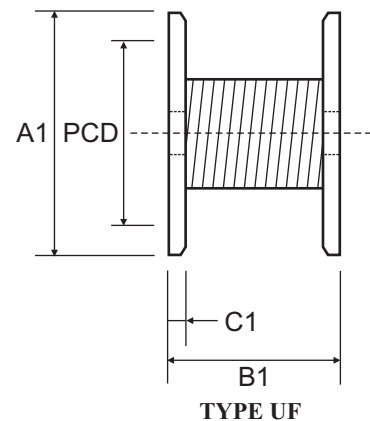
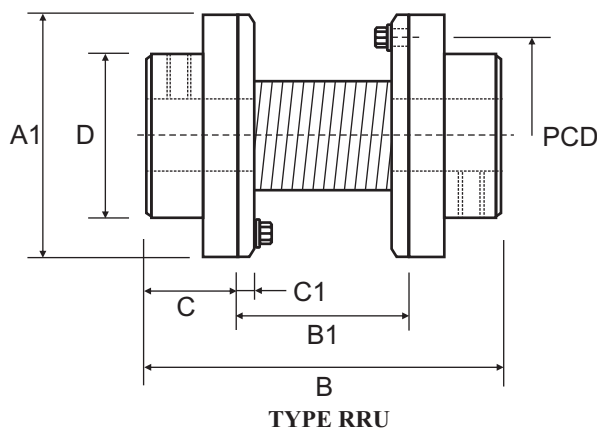
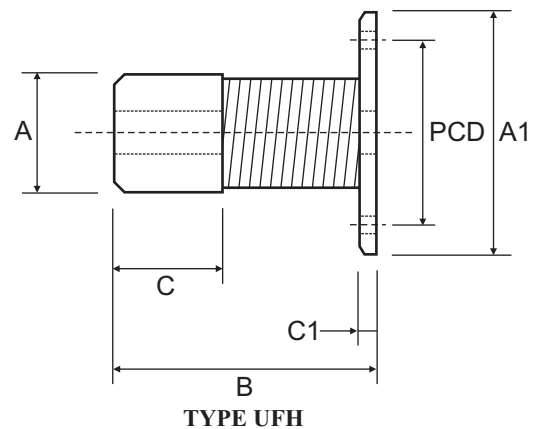
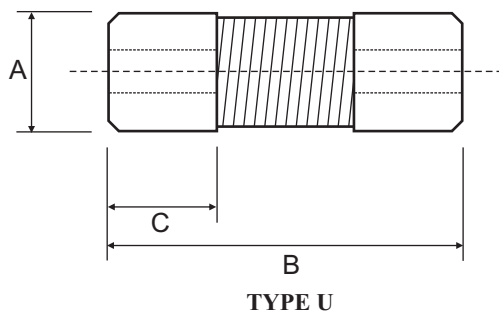
## PERFORMANCE DATA

**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 kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
	U, UFH	RRU, UF			
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







# UNIFLEX COUPLING

## DIMENSIONAL DATA

Part No.	Bore			Style Code	A	A1	B Reg	B Short	B1	C Reg	C Short	C1	D	PCD
	Min	Max U, UFH	Max RRU, UF											
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

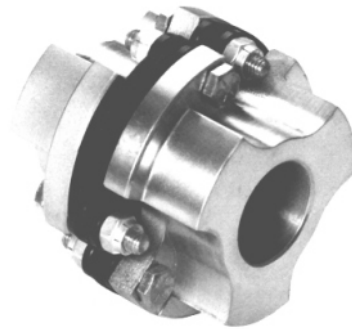
### COMPOSITE DISC

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 also providing zero backlash. 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.

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

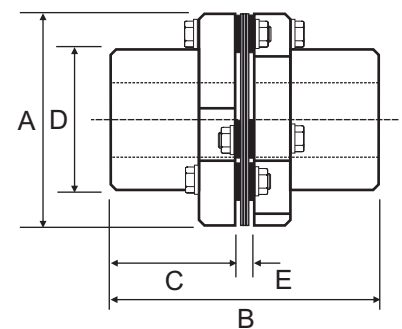
\* Round boss on hub

### PERFORMANCE DATA



### 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



# ////// ZERO-MAX

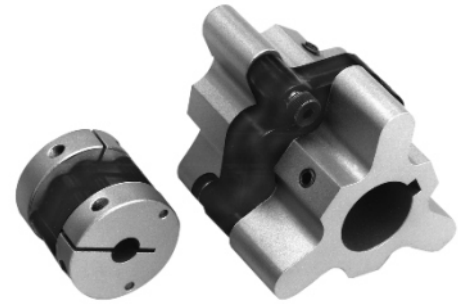
## CONTROL FLEX COUPLING

### 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 zero backlash 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)
<i>Type 1 Single Flex Disc</i>				
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
<i>Type 2 Single Flex Disc</i>				
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
<i>Type 2A Double Flex Discs</i>				
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

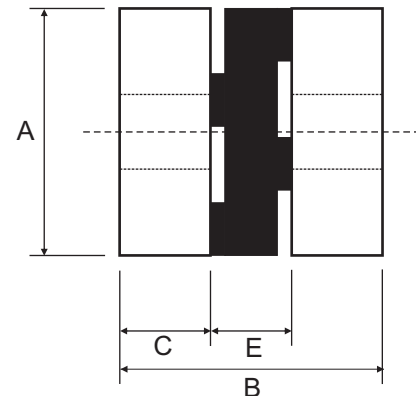


TYPE 2/2A

TYPE 1

### DIMENSIONAL DATA

Part No.	Bore		A	B	C	E
	Min	Max				
<i>Type 1 Single Flex Disc</i>						
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
<i>Type 2 Single Flex Disc</i>						
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
<i>Type 2A Double Flex Discs</i>						
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

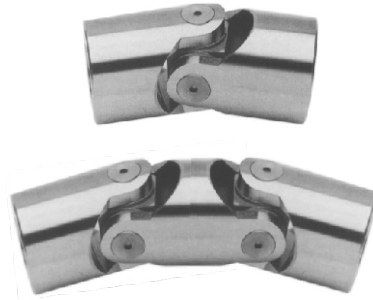


# UNIVERSAL JOINT

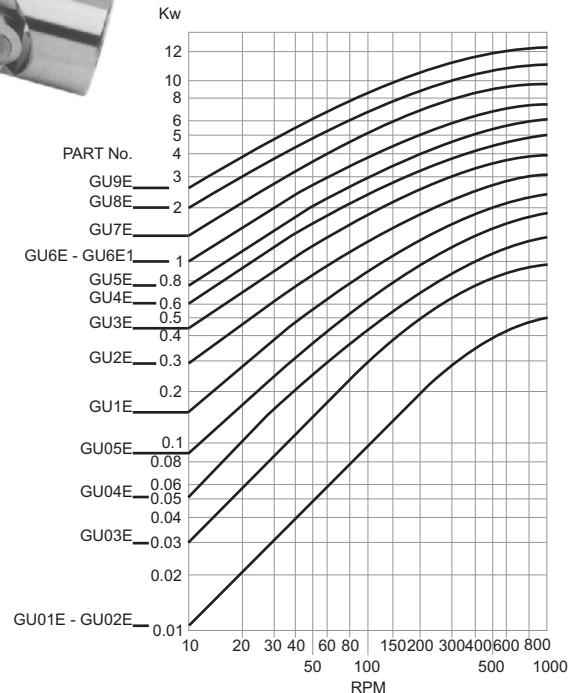
## STANDARD

The Mario Ferri universal joint is a very versatile universal joint with a maximum speed of 1000RPM and a maximum angle 45° with the E type and 90° 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

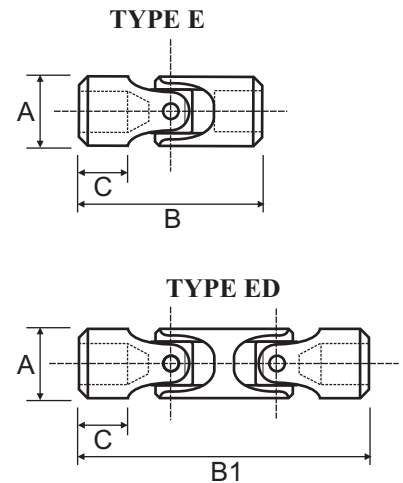


- Step 1** Determine the speed of the application.
- Step 2** Divide the Kw by the correction factor according to the chart.
- Step 3** Refer to the running curves that apply to the desired U-Joint E and ED. The required universal joint size can be determined by establishing the point of intersection 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	5°	10°	15°	20°	25°	30°	35°	40°	45°
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			A	B	B1	C
	Std	Max & Key	Max No Key				
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



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

NAISMITH Engineering & Manufacturing Co. Pty. Ltd.

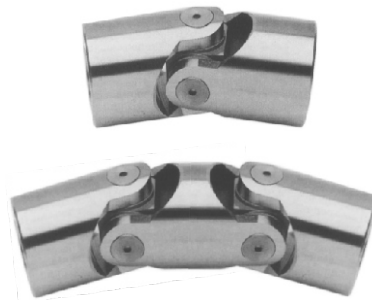


# NEEDLE BEARING UNIVERSAL JOINT

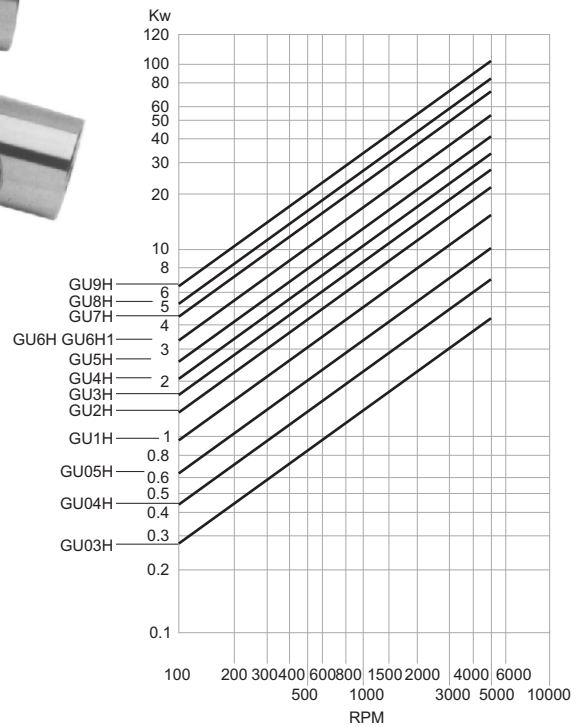
## NEEDLE BEARING

The Mario Ferri universal joint is a very versatile universal joint with a maximum speed of 4000RPM and a maximum angle 45° with the H type and 90° 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.

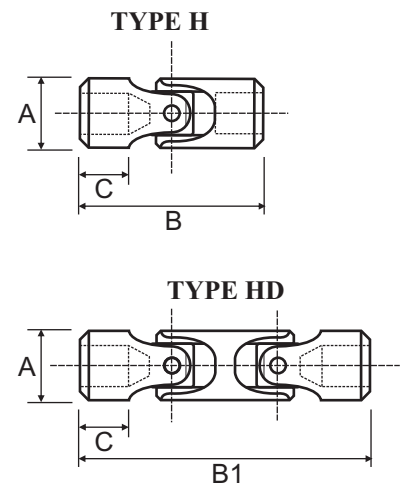
**Step 2** Divide the Kw by the correction factor according to the chart.

**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	5°	10°	15°	20°	25°	30°	35°	40°	45°
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			A	B	B1	C
	Std	Max & Key	Max No Key				
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



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



# 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.

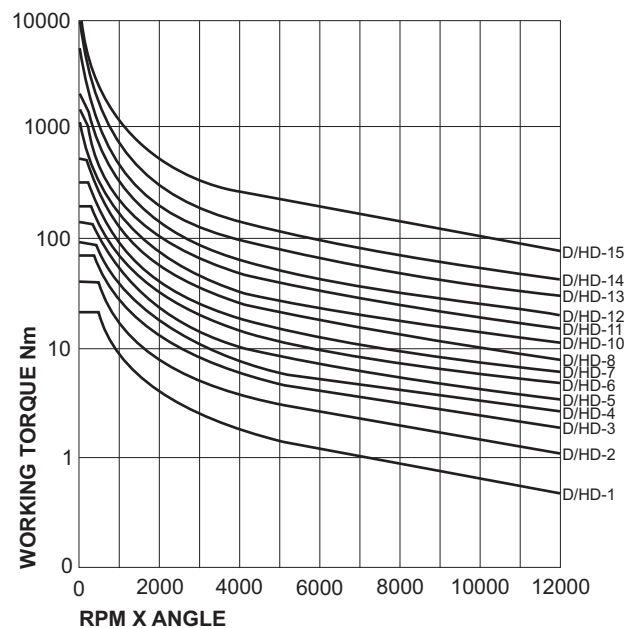
### 'HD' TYPE

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.

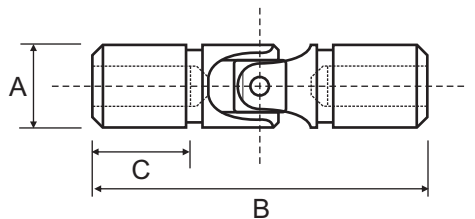
## PERFORMANCE DATA



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



## 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

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

Part No.	Bore			A	B	C
	Std	Max & Key	Max No Key			
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



## UNIVERSAL JOINT NEEDLE BEARING

### NEEDLE BEARING TYPE

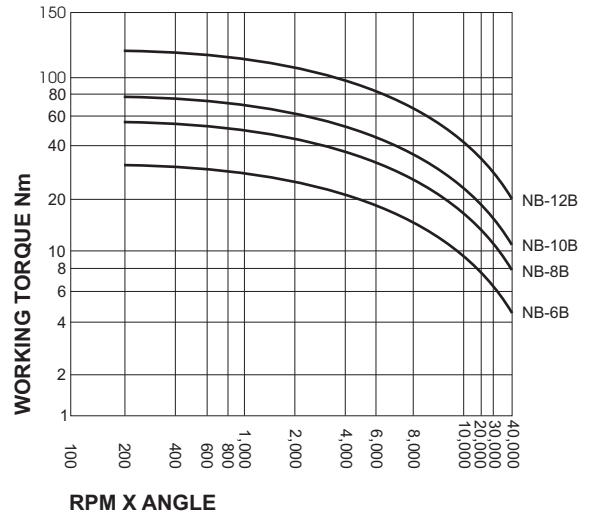
Designed with high quality, pre-lubricated and sealed needle bearings, this universal joint provides the reliability necessary for speeds up to 6000 RPM, and operating angles up to 25°

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.

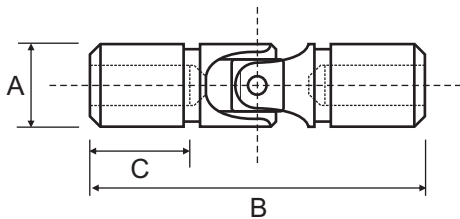
Part No.	Max Bore & Key	Max Bore No Key	Normal Maximum Speed (RPM)
NB-6	14.2	19.1	6000
NB-8	19.1	25.4	6000
NB10	22.4	28.4	6000
NB12	30.2	38.1	6000

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

### PERFORMANCE DATA



### DIMENSIONAL DATA



Part No.	Bore			A	B	C
	Std	Max & Key	Max No Key			
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.



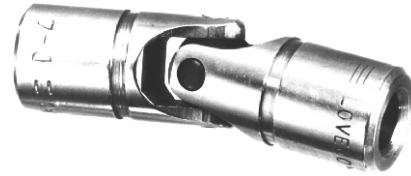
## UNIVERSAL JOINT 303 STAINLESS STEEL

### STAINLESS STEEL

'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 68

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.

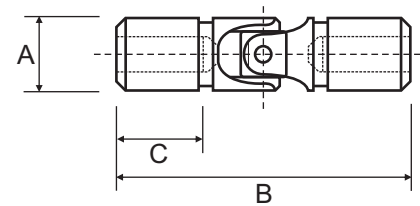


### PERFORMANCE DATA

### DIMENSIONAL DATA

Part No.	Bore			A	B	C
	Std	Max & Key	Max No Key			
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

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

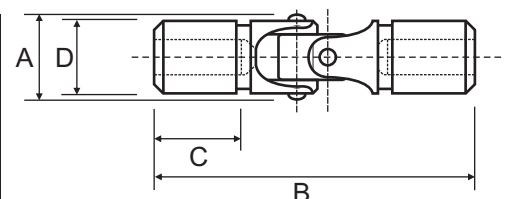


### PERFORMANCE DATA

### DIMENSIONAL DATA

Part No.	Bore			A	B	C	D
	Std	Max & Key	Max No Key				
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







## RIGID SLEEVE COUPLING - INCH

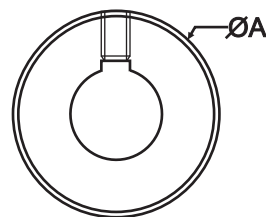
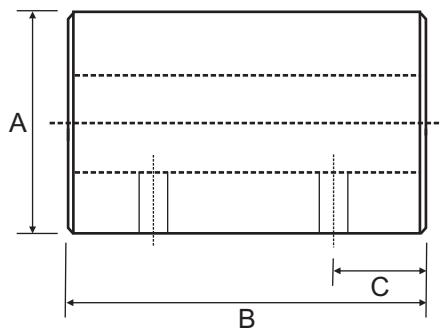
### RIGID SLEEVE

Lovejoy Rigid Sleeve couplings 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.

### DIMENSIONAL DATA

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





## RIGID COUPLING - METRIC

### RULAND NOMAR® RIGID COUPLING

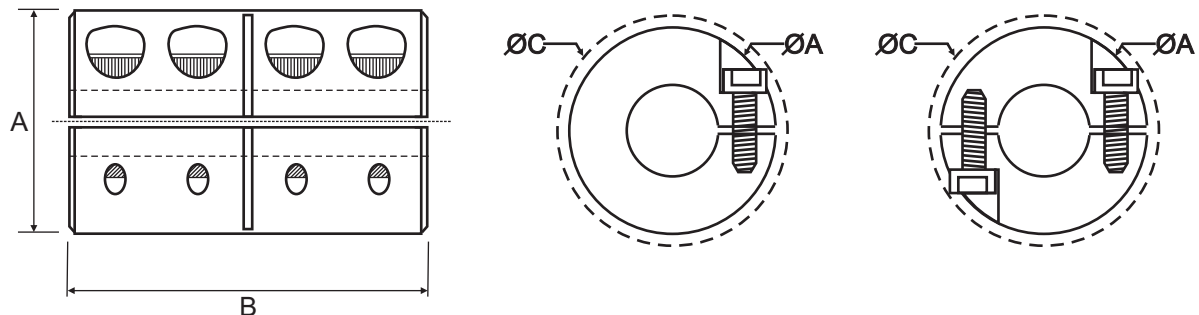
Ruland's rigid couplings are available in one and two piece clamp designs, with and without keyways in steel or stainless steel. Clamp style rigid couplings wrap around the shaft, providing high torsional holding power without the shaft damage and fretting that occurs when set screw style couplings are 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.

### DIMENSIONAL DATA

Part No.		Bore	A	B	C
One Piece Split	Two Piece Split				
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.		Bore	A	B	C
One Piece	Two Piece				
Split	Split				
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

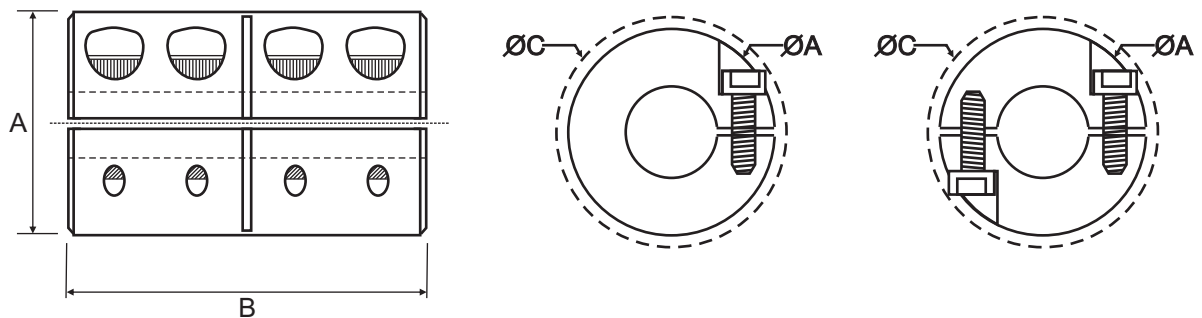


Bore sizes are in inches

Part number with no keyway.

F - indicates steel with black oxide

SS - indicates stainless steel





## RIGID COUPLING

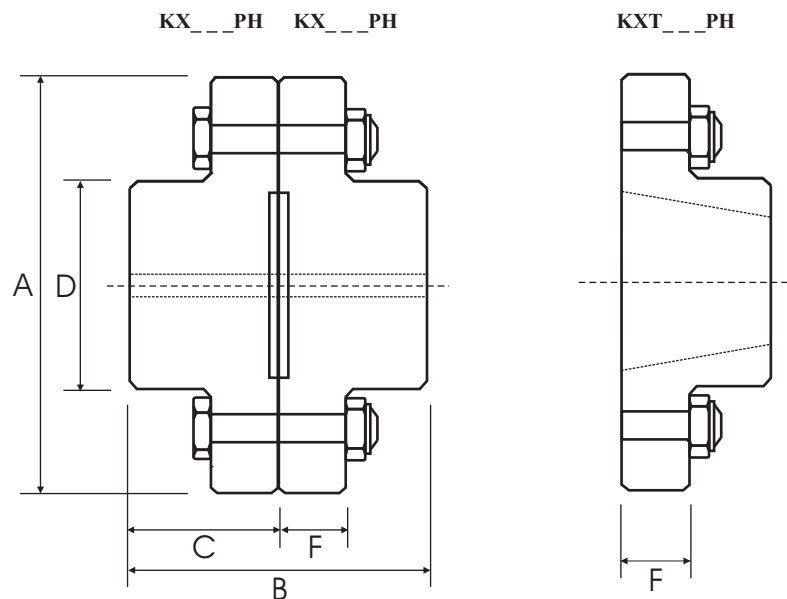
## DIMENSIONAL DATA

### RIGID

This rigid coupling consists of 2 pin half's from the 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 coupling is available in pilot bore and taper bore.



Part No.	Bore		Taper Bush	A	B	C	D	F	Max Speed (RPM)
	Min	Max							
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	1215	146.0	112.0	56.0	83.0	12.0	3900
KXR048	21.0	55.0	1615	171.0	122.0	61.0	90.0	17.0	3300
KXR058	21.0	65.0	2017	193.0	136.0	68.0	106.0	17.0	2900
KXR070	28.0	75.0	2525	216.0	152.0	76.0	128.0	17.0	2600
KXR075	28.0	80.0	2525	254.0	176.0	88.0	145.0	30.0	2200
KXR085	28.0	105.0	3030	279.0	200.0	100.0	166.0	30.0	2000
KXR105	34.0	120.0	3535	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





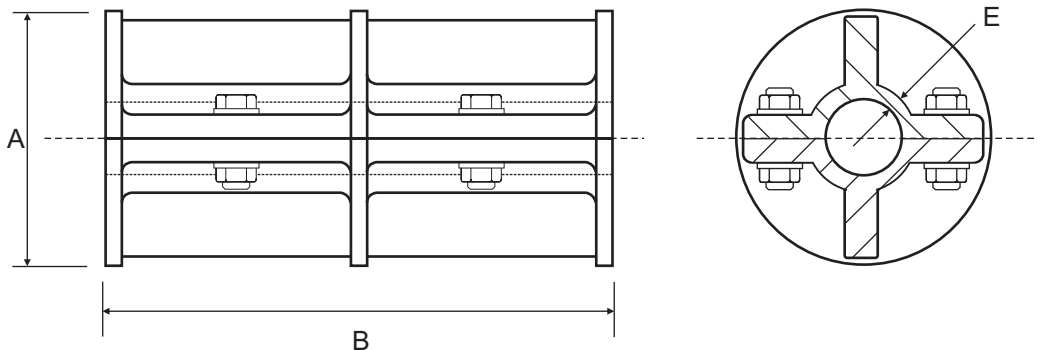
## BOLT COUPLING

### BOLT

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.

### DIMENSIONAL DATA

Part No.	Bore	Norminal Torque (Nm)		A	B	E
		With Key	Without key			
GB20	20.0	25.0	20.0	74.0	110.0	10.0
GB25	25.0	40.0	20.0	72.0	115.0	10.0
GB30	30.0	60.0	35.0	96.0	145.0	10.0
GB35	35.0	80.0	40.0	103.0	158.0	12.0
GB40	40.0	100.0	65.0	116.0	170.0	12.0
GB45	45.0	125.0	75.0	113.0	190.0	12.0
GB50	50.0	150.0	120.0	120.0	205.0	12.0
GB55	55.0	600.0	200.0	140.0	220.0	12.0
GB60	60.0	850.0	215.0	142.0	220.0	13.0
GB65	65.0	1250.0	235.0	150.0	250.0	13.0
GB70	70.0	1700.0	255.0	160.0	260.0	15.0
GB80	80.0	2500.0	290.0	185.0	280.0	20.0
GB90	90.0	3800.0	310.0	210.0	310.0	20.0
GB100	100.0	5400.0	600.0	225.0	343.0	20.0



## RM RIGID COUPLING

### PERFORMANCE DATA

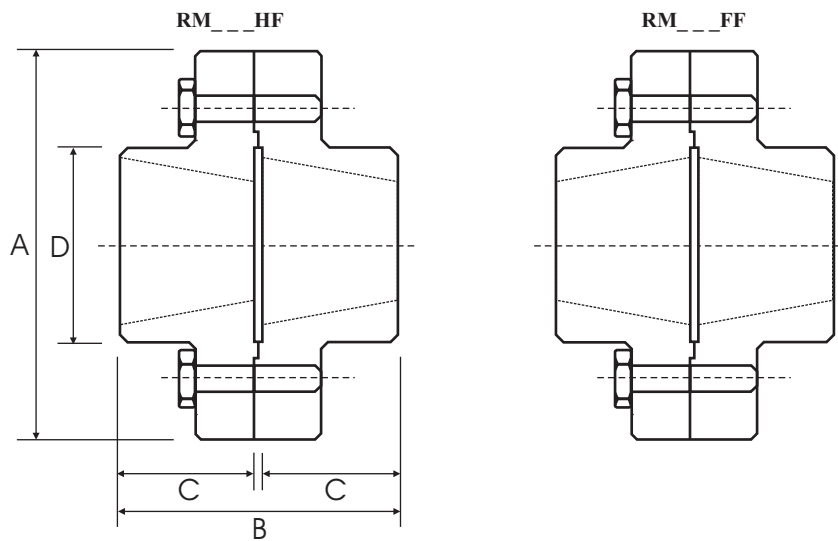
#### RM RIGID

The RM rigid coupling consists of two cast iron taper lock halves, a male & female flange, fully machined. The male hubs are available with taper lock entry from the Hub side **H** or the Flange side **F**. The female hub is available only from the Flange side **F**. This allows two alternative coupling assemblies as drawn below. For vertical applications use **FF** assembly only.

Part No.	Max Bore	Max Torque (Nm)	Normal Maximum Speed (RPM)
RM12	32.0	130	4000
RM16	42.0	220	4000
RM25	60.0	500	3800
RM30	75.0	1000	3150
RM35	90.0	1400	2800
RM40	100.0	2700	2250
RM45	110.0	3200	2100
RM50	125.0	4000	2000



### DIMENSIONAL DATA



Part No.	Bore		Taper Bush	A	B	C	D
	Min	Max					
RM12	12.0	32.0	1210	118.0	57.0	26.0	83.0
RM16	12.0	42.0	1615	127.0	83.0	38.0	80.0
RM25	19.0	60.0	2517	178.0	97.0	45.0	123.0
RM30	32.0	75.0	3030	216.0	159.0	76.0	145.0
RM35	35.0	90.0	3535	248.0	185.0	89.0	178.0
RM40	40.0	100.0	4040	298.0	210.0	102.0	210.0
RM45	60.0	110.0	4545	330.0	235.0	114.0	230.0
RM50	70.0	125.0	5050	362.0	260.0	127.0	260.0

## SM, SMD, SMDX FLUID COUPLINGS

### Shaft Mounted SM / SMD / SM - DX

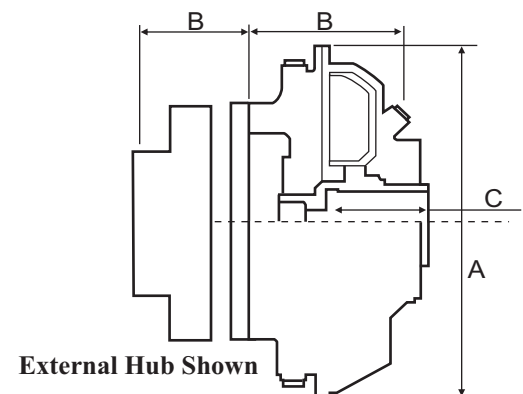
The shaft mounted fluid couplings are axially compact with elastomeric coupling on one end. They give starting torque down to 120% of nominal torque. The SM is a standard coupling; SMD comes with a delayfil chamber and SM-DX with extended delayfil chamber. Standard fusible plug blow off temperature is 130 degrees C.

### PERFORMANCE DATA

Part No. SM, SMD, SMDX	Max Bore Fluid Coupling	Max Bore Flex side	Max Kw rating at input speed		Max * Speed
			900	1470	
3	42.0	60.0	2	10	1800
4	50.0	60.0	4	15	1800
5	65.0	75.0	7	30	1800
6	70.0	90.0	9	40	1800
7	85.0	90.0	15	62	1800
8	85.0	100.0	21	90	1800
8B	95.0	100.0	29	125	1800
9	95.0	100.0	41	172	1800
9B	95.0	125.0	54	228	1800
10	110.0	125.0	73	275	1800
10B	110.0	120.0	107	373	1800
11	120.0	120.0	158	475	1470
12	130.0	140.0	278	750	1470
13	150.0	160.0	550	1100	1470
14	160.0	160.0	758	-	1200
15	160.0	180.0	1148	-	970
16	180.0	180.0	1400	-	970
16DC	180.0	-	1862	-	970



### DIMENSIONAL DATA



Part No. SM, SMD, SMDX	Max Bore Fluid Coupling	Max Bore Flex side	A	B			C	B1 Internal	B1 External	B1 Pad
				SM	SMD	SMDX				
3	42.0	60.0 - E	342.0	158.0	213.0	247.0	80.0	67.0	130.0	-
4	50.0	60.0 - E	367.0	160.0	215.0	249.0	90.0	67.0	130.0	-
5	65.0	75.0 - E	406.0	190.0	220.0	280.0	110.0	72.0	150.0	-
6	70.0	90.0 - E	435.0	213.0	239.0	310.0	120.0	72.0	170.0	-
7	85.0	90.0 - E	471.0	218.0	263.0	333.0	135.0	72.0	170.0	-
8	85.0	100.0 - E	505.0	238.0	279.0	359.0	140.0	87.0	195.0	-
8B	95.0	100.0 - E	553.0	250.0	290.0	380.0	155.0	87.0	195.0	-
9	95.0	100.0 - E	584.0	255.0	305.0	385.0	155.0	87.0	195.0	-
9B	95.0	125.0 - E	637.0	270.0	335.0	430.0	160.0	-	230.0	120.0
10	110.0	125.0 - E	644.0	280.0	329.0	424.0	170.0	-	230.0	120.0
10B	110.0	120.0 - P	714.0	310.0	355.0	451.0	190.0	-	-	151.0
11	120.0	120.0 - P	751.0	320.0	375.0	471.0	200.0	-	-	151.0
12	130.0	140.0 - P	845.0	359.0	435.0	555.0	240.0	-	-	167.0
13	150.0	160.0 - P	960.0	441.0	489.0	619.0	270.0	-	-	179.0
14	160.0	160.0 - P	1104.0	451.0	494.0	624.0	275.0	-	-	194.0
15	160.0	180.0 - P	1230.0	485.0	594.0	724.0	275.0	-	-	214.0
16	180.0	180.0 - P	1330.0	-	571.0	-	320.0	-	-	214.0
16DC	180.0	-	1330.0	-	830.0	-	320.0	-	-	-

\* Higher speeds available on request

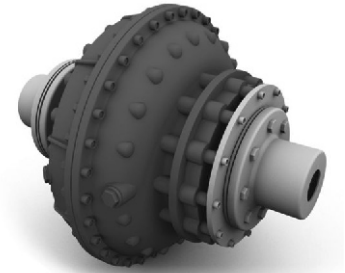
## HF, HFD, HFDX FLUID COUPLINGS

### Radially Displaceable HF / HFD / HF-DX

These couplings are radially displaceable, enabling prealignment of driving and driven shafts prior to assembly. A metallic flexible disc coupling is fitted to both ends. They give starting torque down to 120% of nominal torque. The HF is a standard coupling; HFD comes with a delayfil chamber and HF-DX with extended delayfil chamber. Standard fusible plug blow off temperature is 130 degrees C.

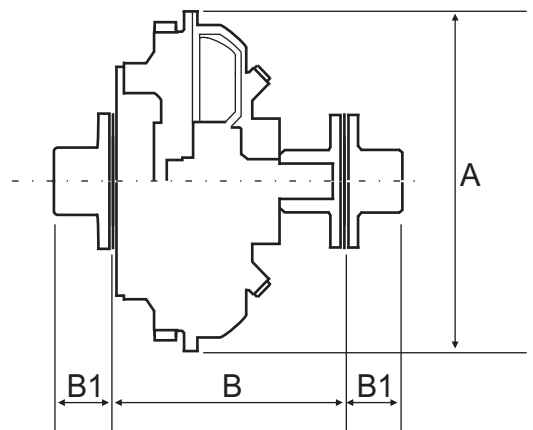
### PERFORMANCE DATA

Part No. HF, HFD, HFDX	Max Bore	Max kW at input speed		Max speed *
		900	1470	
3	55.0	2	10	1800
4	60.0	4	15	1800
5	60.0	7	30	1800
6	75.0	9	40	1800
7	75.0	15	62	1800
8	90.0	21	90	1800
8B	90.0	29	125	1800
9	90.0	41	172	1800
9B	110.0	54	228	1800
10	110.0	73	275	1800
10B	110.0	107	373	1800
11	112.0	158	475	1470
12	145.0	278	750	1470
13	145.0	550	1100	1470
14	180.0	758	-	1200
15	180.0	1148	-	970



### DIMENSIONAL DATA

Part No.	Max Bore	A	B			B1
			HF	HFD	HFDX	
3	55.0	342.0	239.0	295.0	329.0	70
4	60.0	367.0	267.0	323.0	357.0	70
5	60.0	406.0	285.0	315.0	375.0	70
6	75.0	435.0	332.0	358.0	429.0	95
7	75.0	471.0	345.0	390.0	460.0	95
8	90.0	505.0	366.0	407.0	487.0	95
8B	90.0	553.0	405.0	445.0	535.0	95
9	90.0	584.0	395.0	445.0	526.0	95
9B	110.0	637.0	446.0	511.0	589.0	125
10	110.0	644.0	468.0	517.0	611.0	125
10B	110.0	714.0	491.0	537.0	632.0	125
11	112.0	751.0	511.0	566.0	661.0	125
12	145.0	845.0	614.0	700.0	820.0	200
13	145.0	960.0	734.0	782.0	912.0	200
14	180.0	1104.0	770.0	813.0	943.0	200
15	180.0	1230.0	-	901.0	1031.0	200



\* Higher speeds available on request



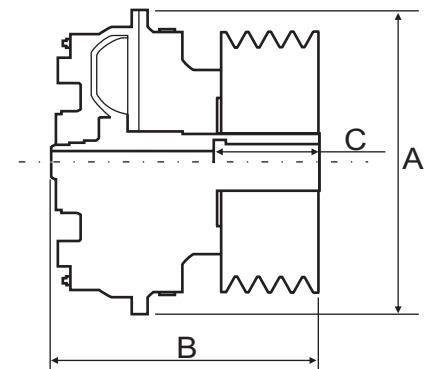
### HDP, HDPX, HD - PDX FLUID COUPLINGS

#### Pulley type HD-P fluid couplings

HD-P fluid couplings are for belt drive and are offered in different executions with and without delayfill chamber. These couplings can be supplied without pulley or with pulley within specified range tabulated below. This provides flexibility for use of pulleys of different specification on the same coupling. Standard fusible plug blow off temperature is 130 degrees C.



## DIMENSIONAL DATA



Part No. HD-P / HD-PX / HD-PDX	Max Bore Fluid Coupling	A	B			C	Min Pulley	Max Pulley
			HD-P	HD-PD	HD-PDX			
3	42.0	342.0	281.0	343.0	382.0	110.0	SPA 115mm X 5 SPB120mm X 4 SPC130mm X 3	SPA 320mm X 5 SPB320mm x 4 SPC320mm x 3
4	50.0	367.0	285.0	353.0	382.0	110.0	SPA 115mm X 5 SPB120mm X 4 SPC130mm X 3	SPA 320mm X 5 SPB320mm x 4 SPC320mm x 3
5	65.0	406.0	356.0	413.0	463.0	142.0	SPA 130mm X 7 SPB135mm X 6 SPC145mm X 4	SPA 350mm X 8 SPB350mm x 7 SPC350mm x 5
6	65.0	435.0	395.0	456.0	522.0	142.0	SPA 150mm X 9 SPB160mm X 7 SPC170mm X 5	SPA 400mm X 10 SPB400mm x 8 SPC400mm x 6
7	75.0	471.0	405.0	464.0	541.0	142.0	SPA 150mm X 9 SPB160mm X 7 SPC170mm X 5	SPA 400mm X 10 SPB400mm x 8 SPC400mm x 6

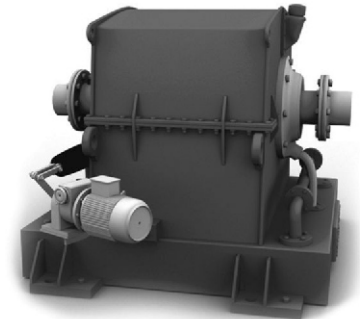
HD - P = Standard Coupling  
 HD - PD = Delay Fill Chamber  
 HD - PDX = Extended Delay Fill Chamber

## SCOOP CONTROLLED

### Scoop Controlled

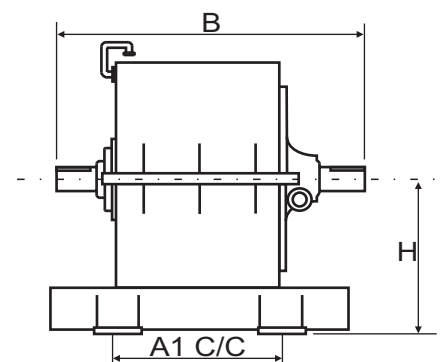
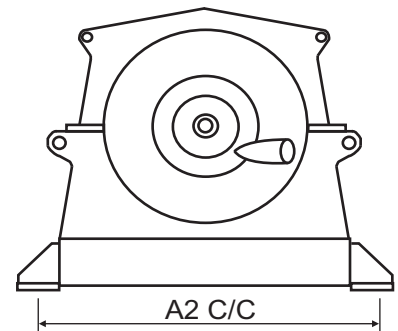
These fluid couplings are housed in self-supported stationary housing providing no load starting of motor, stepless speed variation and continuous declutching. They are compatible with all types of controllers like pneumatic, hydraulic, electronic or manual. Controllers and oil coolers are fitted at the factory to your specifications.

Part No. SC	Max Kw at input speed			Max Speed
	900	1500	3000	
6	9.0	40.0	125.0	3000
7	17.0	75.0	300.0	3000
8	24.0	100.0	500.0	3000
9	44.0	205.0	-	1800
10	85.0	350.0	-	1800
11	172.0	725.0	-	1800
12	304.0	1250.0	-	1800
13	432.0	1700.0	-	1800
14	1468.0	-	-	1200
16	2812.0	-	-	1200



## DIMENSIONAL DATA

Part No. SC	B	A1 C / C	A2 C / C	H
SC-6	695.0	295.0	680.0	400
SC-7	855.0	370.0	680.0	425
SC-8	875.0	370.0	915.0	433
SC-9	960.0	440.0	915.0	457
SC-9	960.0	440.0	915.0	500
SC-10	1135.0	560.0	1075.0	560
SC-11	1260.0	590.0	1340.0	630
SC-12	1285.0	590.0	1340.0	695
SC-13	1410.0	590.0	1340.0	695
SC-13	1410.0	750.0	1650.0	765
SC-14	1640.0	850.0	1800.0	1000
SC-16	2100.0	2300.0	2300.0	1100





## JAW IN-SHEAR TYPE COUPLING

### JAW IN-SHEAR

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.

### PERFORMANCE DATA

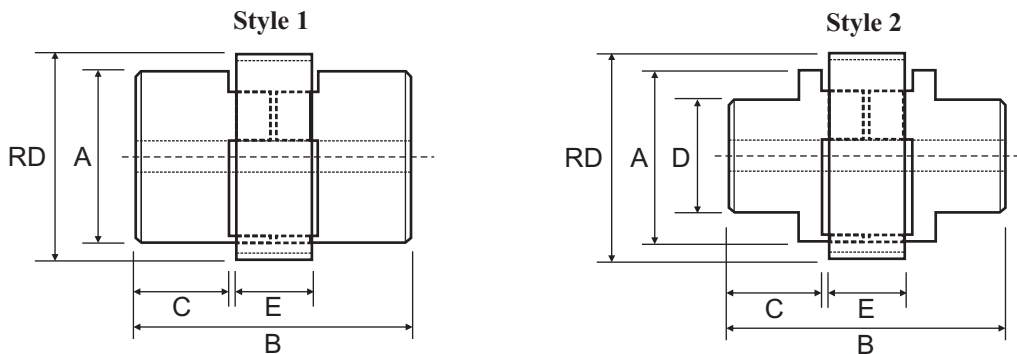


Part No.	Max Bore	Power at 100 RPM kW	Nominal Torque (Nm)	Normal Maximum Speed (RPM)
LS095	28.6	0.398	38.0	9200
LS100	35.0	0.660	63.0	7700
LS110	42.0	1.288	123.0	5900
LS150	48.0	2.147	205.0	5200
LS190	55.0	3.455	330.0	4300
LS225	66.7	4.974	475.0	3900
LS276	73.0	8.827	843.0	3100
CS280	76.2	15.738	1503.0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

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

- 2° angular misalignment capability
- 0.7mm - 1.2mm parallel misalignment capability
- 50D shore Urethane material, max temperature of 93°C (200°F)
- Torsional wind-up of 5° 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



Part No.	StyLSe No.	Bore		A	B	C	D	E	RD
		Min	Max						
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

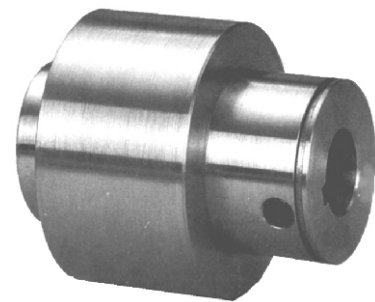
### TORQUE TENDER

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 discs, 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	
<i>Standard</i>					
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
<i>JF Type</i>					
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

### PERFORMANCE DATA



STANDARD UNIT

### SPRING DATA

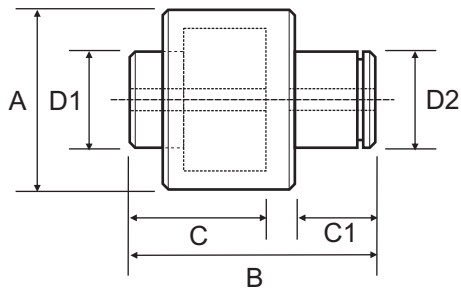
Spring Colour	TT1X Nm	TT2 Nm	TT2X Nm	TT3 Nm	TT3X Nm	TT4X Nm
Garden Green	-	-	-	2.03	-	-
Grey	-	-	2.03	2.71	-	-
Slicker Yellow	-	-	2.71	-	-	-
Purple	-	-	3.16	4.07	-	-
Copper	-	0.45	-	4.52	-	-
Light Blue	0.34	0.90	4.52	5.65	-	-
Gold	0.56	-	5.65	6.78	-	-
Red	0.90	1.36	6.78	9.04	-	-
Brown	1.13	2.03	10.17	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

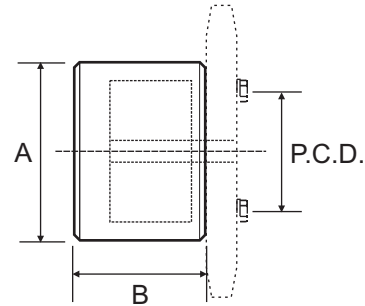
## TORQUE TENDER

### DIMENSIONAL DATA

#### STANDARD



#### JF TYPE SPROCKET NOT INCLUDED

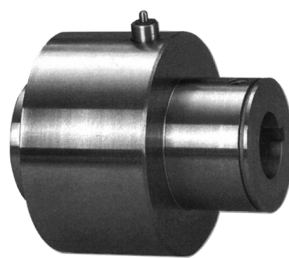


Part No.	Bore		A	B	C	C1	D1	D2
	Min	Max						
TT1X	6.4	12.7	39.7	45.7	29.0	15.2	22.2	25.4
TT2	9.5	15.9	55.0	61.5	39.1	19.1	31.7	34.9
TT2X	12.7	19.1	63.5	75.0	45.8	25.4	38.1	41.3
TT3	15.9	28.6	76.2	88.1	53.3	30.1	44.4	44.4
TT3X	22.2	38.1	92.1	115.6	78.2	31.7	57.1	63.5
TT4X	25.4	44.5	117.5	137.5	94.4	33.8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

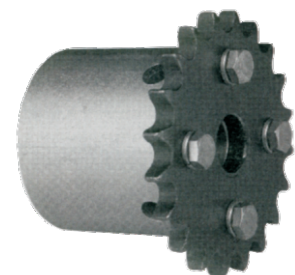
Part No.	Bore		A	B	P.C.D. 4 Bolts
	Min	Max			
TT1XJF	6.4	12.7	39.7	38.1	31.7
TT2JF	9.5	15.9	55.0	47.6	44.4
TT2XJF	12.7	19.1	63.5	57.1	50.8
TT3JF	15.9	28.6	76.2	66.7	60.3
TT3XJF	22.2	38.1	92.1	90.2	76.2
TT4XJF	25.4	44.5	117.5	111.1	101.6



**STANDARD UNIT  
WITH ACTUATING DISC**



**STANDARD UNIT  
WITH ACTUATING PIN**



**JF TYPE UNIT  
SPROCKET NOT INCLUDED**

# //////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.

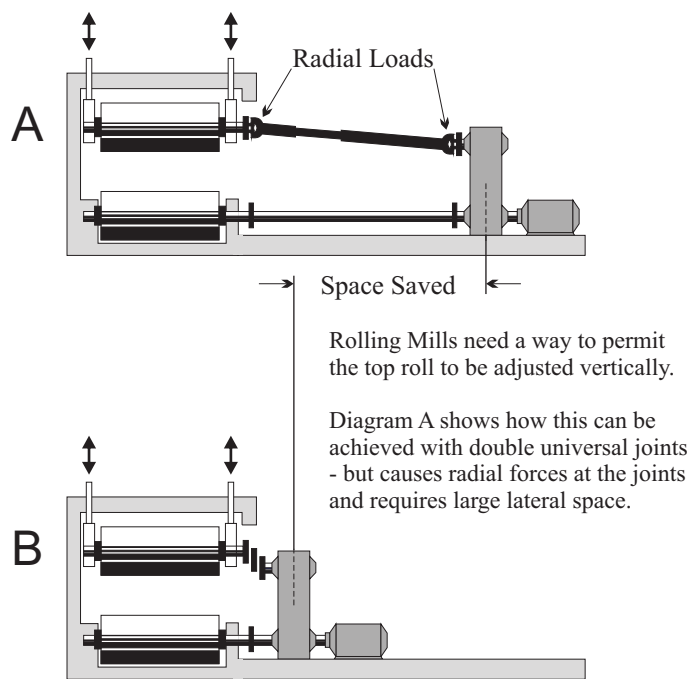
Standard Schmidt Offset Couplings are available for parallel shaft displacement from a minimum of 4 to 440 mm and torque capacities from 6.2 to 51864 Nm. Special coupling sizes can be manufactured for any specific customer requirement.

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.

Diagram 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.

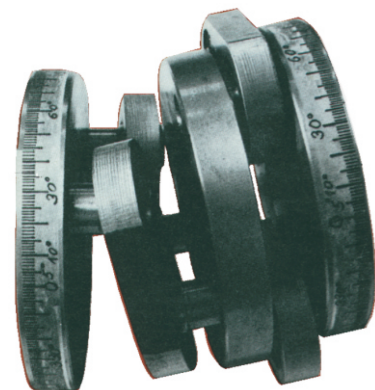
Schmidt Inline Couplings are available for a torque range from 56 to 2824 Nm. Couplings for higher torque requirements are made available on special orders. To select an Inline Coupling contact Naismith Engineering.



## **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



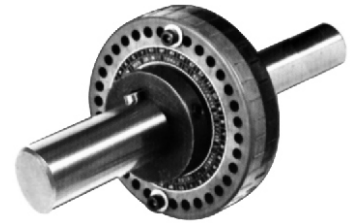
# CANDY TIMING HUB

## TIMING HUB

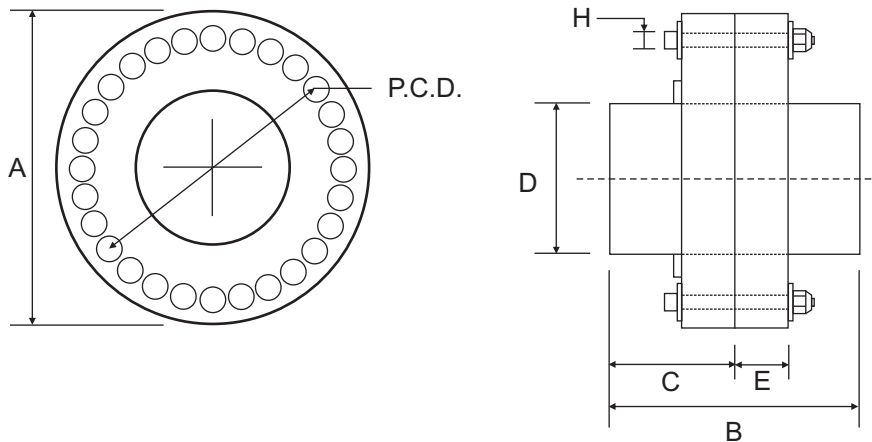
The Candy Timing Hub is the low-cost positioner used to positively lock gears, sprockets, cams and levers to shafts while still providing full adjustable timing control. This precision timing hub allows the use of low-cost plate sprockets and hubless gears, and eliminates the cost of machining special 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.

## PERFORMANCE DATA

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



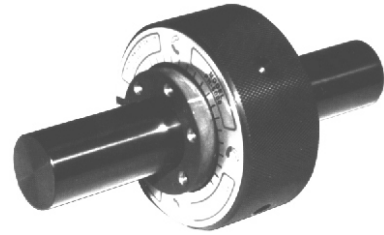
# CANDY PHASING HUB

## PHASING HUB

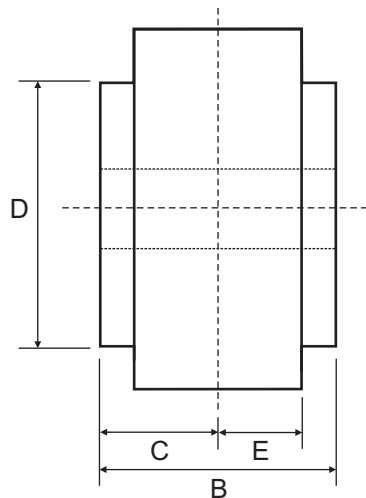
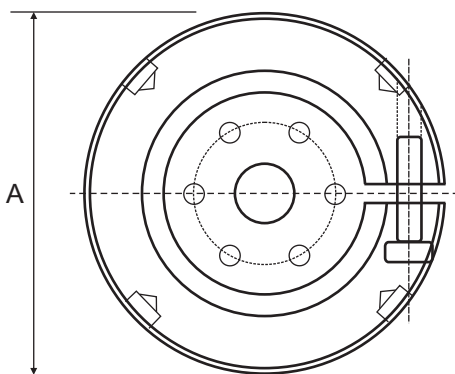
The Phasing Hub is a static phase adjusting coupling designed for precise angular displacements. When in motion, the phasing hub operates as a rigid 1:1 shaft coupling. Phase change of the coupling and connected shafts is accomplished with the drive stopped. By manually turning the adjusting ring, the 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.

## PERFORMANCE DATA

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






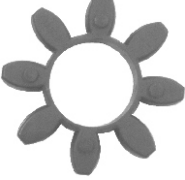


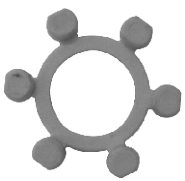


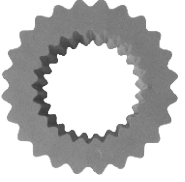
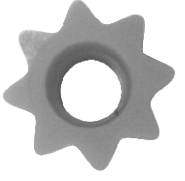



## DIMENSIONAL DATA






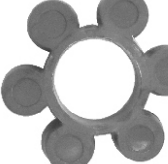




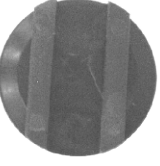





Part No.	Bore		A	B	C	D	E
	Min	Max					
PH-500	6.4	13.0	50.4	36.3	18.1	25.3	23.1
PH-1000	12.7	19.0	60.5	42.9	21.3	35.1	26.9
PH-2500	19.1	25.0	76.2	55.6	27.6	44.5	35.1
PH-5000	25.4	32.0	95.3	60.2	29.9	55.1	41.4
PH-10000	31.8	44.0	120.7	83.6	41.3	74.7	52.3
PH-20000	44.5	64.0	165.1	102.9	50.8	95.3	60.5

**ELEMENT IDENTIFICATION**

	<p><b>Lovejoy</b>          Jaw 'L' &amp; 'AL'          Page 4 - 5</p>		<p><b>Lovejoy</b>          Jaw 'RRS'          Page 6</p>
	<p>Jaw Type 'N'          Page 8</p>		<p>Jaw Type 'SWN'          Page 8</p>
	<p>Jaw Type 'CWN'          Page 10 - 11</p>		<p><b>SIT SpA</b>          Trasco 'GR' &amp; 'ES'          Curved Jaw          Page 14 - 16, 60</p>
	<p><b>SIT SpA</b>          Sitex          Page 17</p>		<p><b>Centa</b>          Centaflex 'A'          Page 18 - 19</p>
	<p><b>Centa</b>          Centaflex 'B'          Page 20</p>		<p><b>Centa</b>          Centaflex 'H'          Page 21</p>
	<p><b>Centa</b>          Centaflex 'D' &amp; 'E'          Page 22, 23</p>		<p><b>Lovejoy</b>          S-Flex          Page 24 - 25</p>
	<p><b>Lovejoy</b>          Mini Soft          Page 26</p>		<p><b>Lovejoy</b>          Oldham          Page 27</p>

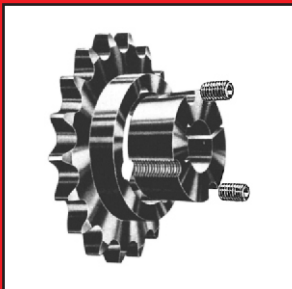
**ELEMENT IDENTIFICATION**

	<p><b>Lovejoy</b> Saga Page 28</p>		<p><b>SIT SpA</b> Juboflex Page 29</p>
	<p><b>Cone Ring</b> Page 30-31</p>		<p><b>Tyre</b> Page 32</p>
	<p><b>HRC</b> Page 33</p>		<p><b>Tschan</b> Tschan-S Page 34</p>
	<p><b>Tschan</b> Normex Page 35</p>		<p><b>OMT</b> Jaw Type Page 38</p>
	<p><b>Lovejoy</b> Jaure Disc Page 39</p>		<p><b>Ruland</b> Jawflex™ Jaw Page 51</p>
	<p><b>Ruland</b> Paradrive™ Oldham Page 57</p>		<p><b>Zeromax</b> Composite Disc Page 66</p>
	<p><b>Zeromax</b> Control Flex Page 67</p>		<p><b>Lovejoy</b> Jaw In-Shear Page 83</p>

# NAISMITH

*Power Transmission is all we do*

2011



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



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.



A large range of shaft locking bushes can be supplied.



A full range of Ruland shaft collars is available.



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

**Naismith Eng & Mfg Co Pty.Ltd**  
A.B.N. 25 004 284 388

149 Heidelberg Rd  
Northcote, Victoria  
Australia, 3070

Ph (03) 9489 9811  
Fax (03) 9482 1474

1/29 Bearing Rd  
Seven Hills, New South Wales  
Australia, 2147

Ph (02) 9838 0050  
Fax (02) 9838 4577