

Pinflex Couplings



RENOLD
Superior Coupling Technology

www.renold.com

RENOLD

Strength through Service

Renold Gears has been manufacturing high quality, high specification gear units for over 100 years and has always been at the leading edge of gear technology with innovative products and power transmission solutions.

Interchangeability

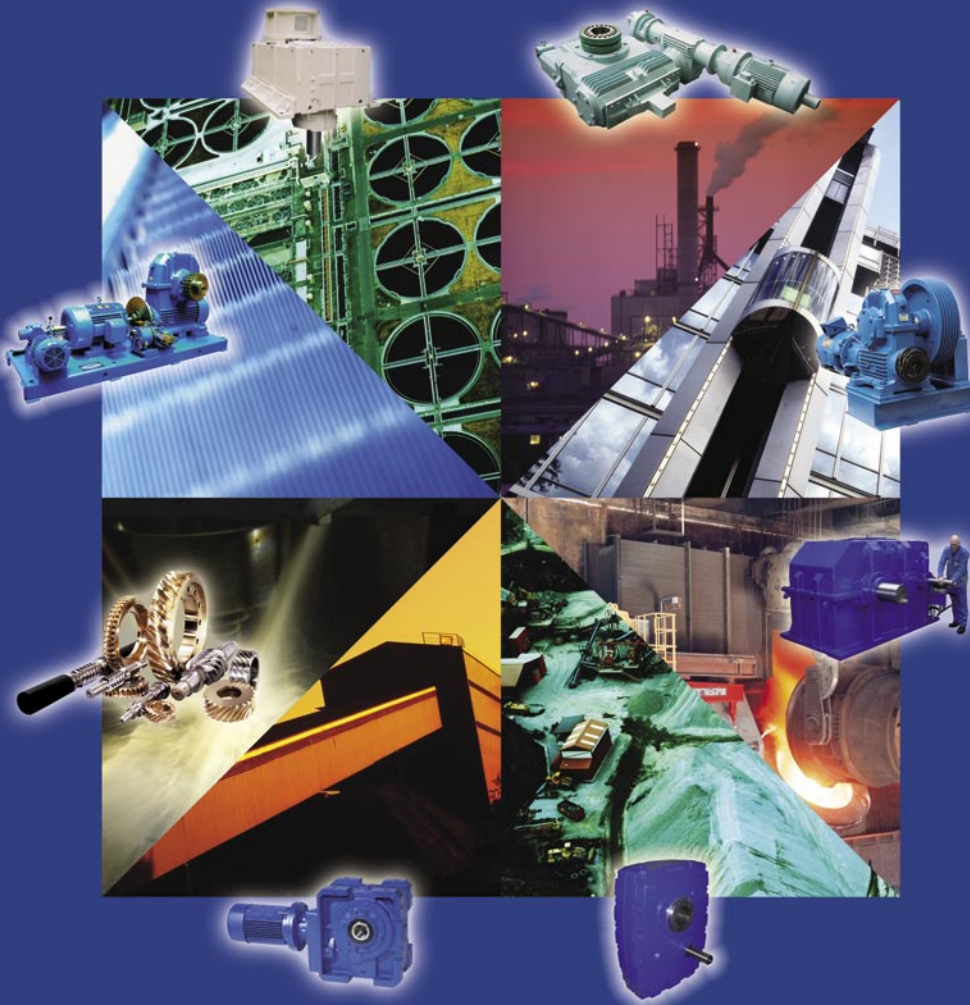
Many of the products from Renold Gears are dimensionally interchangeable with other manufacturers gear units, allowing a trouble free replacement of gearboxes, in most cases upgrading the capacity through state of the art technology and materials.

Custom Made

Renold Gears is unique in it's ability to offer custom made products designed to meet customers exacting requirements without compromise on availability and cost. From complete package solutions to individual precision replacement gears, all can be tailor made to meet specific applicational requirements.

Available

The most popular ranges of gearboxes are available from local distribution stock, backed up by extensive stocks from our manufacturing plant in the UK.



RENOLD

Superior Gear Technology

www.renold.com

Contents

	<i>Page No</i>
Renold Gears	inside front cover
The Renold Collection	02
Coupling Selection Guide	04
Load Classification by Application	05
Service Factors and Selection	06
Key and Keyway Dimensions	07
Pinflex	08
Pinflex Brakedrum Coupling	11
Pinflex Shearpin Coupling	12
Renold Chain	inside back cover

The **RENOLD** Collection

Spiderflex Coupling



Max power / 100 rpm (kW)	33 kW
Max weight	63 kg
Max shaft size	115 mm
Max speed (rpm)	7,700 rpm
Max outer diameter	275 mm
Max torque (Nm)	3,150 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

SpiderJaw Coupling



Max power / 100 rpm (kW)	45 kW
Max weight	84 kg
Max shaft size	115 mm
Max speed (rpm)	31,000 rpm
Max outer diameter	305 mm
Max torque (Nm)	4,308 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

SpiderWrap Coupling



Max power / 100 rpm (kW)	45 kW
Max weight	84 kg
Max shaft size	115 mm
Max speed (rpm)	9,000 rpm
Max outer diameter	323 mm
Max torque (Nm)	4,308 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Pinflex Coupling



Max power / 100 rpm (kW)	340 kW
Max weight	423 kg
Max shaft size	260 mm
Max speed (rpm)	6,800 rpm
Max outer diameter	490 mm
Max torque (Nm)	32,500 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Crownpin Coupling



Max power / 100 rpm (kW)	2,607 kW
Max weight	2,250 kg
Max shaft size	300 mm
Max speed (rpm)	6,210 rpm
Max outer diameter	1,220 mm
Max torque (Nm)	249,400 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Tyreflex Coupling



Max power / 100 rpm (kW)	66 kW
Max weight	49 kg
Max shaft size	150 mm
Max speed (rpm)	4,500 rpm
Max outer diameter	470 mm
Max torque (Nm)	6,270 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Discflex Coupling



Max power / 100 rpm (kW)	45 kW
Max weight	67 kg
Max shaft size	110 mm
Max speed (rpm)	2,900 rpm
Max outer diameter	324 mm
Max torque (Nm)	4,298 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Chainflex Coupling



Max power / 100 rpm (kW)	90 kW
Max weight	85 kg
Max shaft size	140 mm
Max speed (rpm)	3,500 rpm
Max outer diameter	357 mm
Max torque (Nm)	8,595 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

The **RENOLD** Collection

Rigid Coupling



Max power / 100 rpm (kW)	1,640 kW
Max weight	501 kg
Max shaft size	290 mm
Max speed (rpm)	7,100 rpm
Max outer diameter	527 mm
Max torque (Nm)	156,620 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Renoldflex



Max power / 100 rpm (kW)	482 kW
Max weight	N/A
Max shaft size	180 mm
Max speed (rpm)	1,200 rpm
Max outer diameter	345 mm
Max torque (Nm)	46,000 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

A Series Gear Coupling



Max power / 100 rpm (kW)	1,640 kW
Max weight	443 kg
Max shaft size	260 mm
Max speed (rpm)	7,100 rpm
Max outer diameter	527 mm
Max torque (Nm)	156,620 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

D Series Gear Coupling



Max power / 100 rpm (kW)	2,209 kW
Max weight	374 kg
Max shaft size	197 mm
Max speed (rpm)	N/A
Max outer diameter	518 mm
Max torque (Nm)	211,000 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Croft MB Gear Coupling



Max power / 100 rpm (kW)	565 kW
Max weight	560 kg
Max shaft size	220 mm
Max speed (rpm)	3,730 rpm
Max outer diameter	930 mm
Max torque (Nm)	54,000 Nm

www.renold.com **RENOLD**
Superior Coupling Technology

Hydrastart Coupling



Max power / 100 rpm (kW)	39.1 kW
Max weight	207 kg
Max shaft size	127 mm
Max speed (rpm)	3,500 rpm
Max outer diameter	751 mm
Max torque (Nm)	N/A

www.renold.com **RENOLD**
Superior Coupling Technology

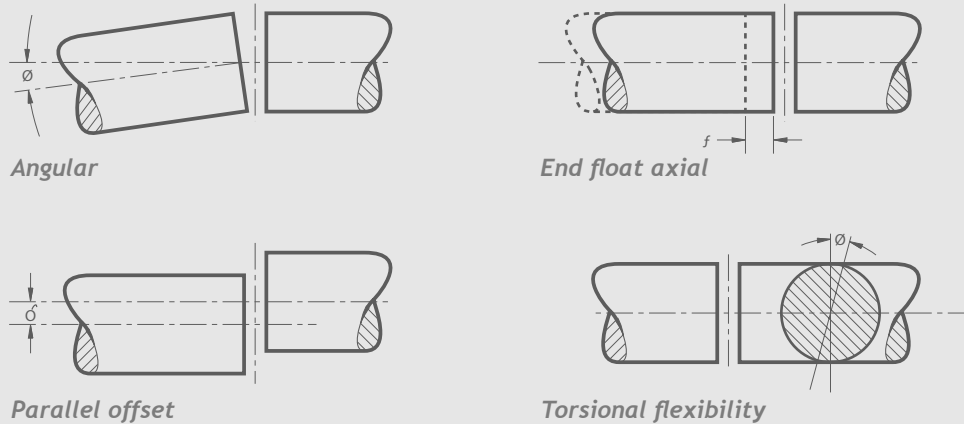
Hydrastart Drop-in Coupling



Max power / 100 rpm (kW)	39.1 kW
Max weight	N/A
Max shaft size	110 mm
Max speed (rpm)	2,500 rpm
Max outer diameter	751 mm
Max torque (Nm)	N/A

www.renold.com **RENOLD**
Superior Coupling Technology

Coupling Selection Guide



Flexible Couplings should be used to accommodate any combination of misalignment conditions described below.

At installation all couplings should be aligned as near to perfect as possible.

1. Angular

Angular misalignment is present when the shaft axes are inclined one to the other. Its magnitude can be measured at the coupling faces.

2. Parallel Offset

Parallel misalignment is present when the axes of the driving and driven shafts are parallel but laterally displaced.

3. End float (axial)

End float is the ability to accommodate a relative axial displacement of the connected shafts; achieved by sliding members or flexing of resilient components.

4. Torsional flexibility

Torsional flexibility is a design feature necessary to permit shock and impulsive loadings to be suitably dampened. It is achieved by the provision of a flexible medium such as rubber, springs, etc., between the two halves of the coupling.

Selection

In order to select the correct type and size of coupling, the following basic information should be known:

Power to be transmitted

- Normal.
- Maximum.
- Whether continuous or intermittent.

Characteristics of the drive

- Type of prime mover and associated equipment.
- Degree of impulsiveness of driven load.

Speed in revolutions per minute

- At which normal power is transmitted.
- At which maximum power is transmitted.
- Maximum speed.

Dimensions of shafts to be connected

- Actual diameter.
- Length of shaft extension.
- Full keyway particulars.

Selection

When the input drive is not steady (i.e. not from an electric motor), and/or the driven load is impulsive, the actual power is multiplied by a Service Factor from the Table 2 (page 13).

Selection Procedure

- Nominal power in kW to be transmitted = K .
- Select appropriate load classification from Table 1, denoted as either S, M or H.
- From Table 2, establish Service Factor(s) to be applied, taking into account hours of operation/day and prime mover = fD .
- From Table 3 select factor for the required frequency of starts/hr = fS .
- Selection Power $K_s = K \times fD \times fS$
- Equivalent power at 100 RPM = $\frac{K_s \times 100}{\text{RPM}}$
- Check that coupling selected will accept the required shaft diameters. Should shaft diameter exceed maximum permissible, then re-select using next larger size of coupling.

Load Classification by Application

Table 1

Agitators		Dry dock cranes		Planer feed chains	M	Presses	M
Pure liquids	S	Main hoist	(2)	Planer floor chains	M	Pulp machine reel	M
Liquids and solids	M	Auxiliary hoist	(2)	Planer tilting hoist	M	Stock chest	M
Liquids - variable density	M	Boom, luffing	(2)	Re-saw merry-go-round conveyor	M	Suction roll	M
Blowers		Rotating, swing or slew	(3)	Roll cases	H	Washers and thickeners	M
Centrifugal	S	Tracking, drive wheels	(4)	Slab conveyor	H	Winders	M
Lobe	M	Elevators		Small waste conveyor-belt	S	Printing presses	*
Vane	S	Bucket - uniform load	S	Small waste conveyor-chain	M	Pullers	
Brewing and distilling		Bucket - heavy load	M	Sorting table	M	Barge haul	H
Bottling machinery	S	Bucket - continuous	S	Tipple hoist conveyor	M	Pumps	
Brew kettles - continuous duty	S	Centrifugal discharge	S	Tipple hoist drive	M	Centrifugal	S
Cookers - continuous duty	S	Escalators	S	Transfer conveyors	M	Proportioning	M
Mash tubs - continuous duty	S	Freight	M	Transfer rolls	M	Reciprocating	
Scale hopper - frequent starts	M	Gravity discharge	S	Tray drive	M	single acting: 3 or more cylinders	M
Can filling machines	S	Man lifts	*	Trimmer feed	M	double acting: 2 or more cylinders	M
Cane knives (1)	M	Passenger	*	Waste conveyor	M	single acting: 1 or 2 cylinders	*
Car dumpers	H	Extruders (plastic)		Machine tools		double acting: single cylinder	*
Car pullers	M	Film	S	Bending roll	M	Rotary - gear type	S
Clarifiers	S	Sheet	S	Punch press - gear driven	H	Rotary - lobe, vane	S
Classifiers	M	Coating	S	Notching press - belt drive	*	Rubber and plastics industries	
Clay working machinery		Rods	S	Plate planners	H	Crackers (1)	H
Brick press	H	Tubing	S	Tapping machine	H	Laboratory equipment	M
Briquette machine	H	Blow moulders	M	Other machine tools		Mixed mills (1)	H
Clay working machinery	M	Pre-plasticizers	M	Main drives	M	Refiners (1)	M
Pug mill	M	Fans		Auxiliary drives	S	Rubber calenders (1)	M
Compressors		Centrifugal	S	Metal mills		Rubber mill, 2 on line (1)	M
Centrifugal	S	Cooling towers		Drawn bench carriage and main drive	M	Rubber mill, 3 on line (1)	S
Lobe	M	Induced draft	*	Pinch, dryer and scrubber rolls, reversing	*	Sheeter (1)	M
Reciprocating - multi-cylinder	M	Forced draft	*	Slitters	M	Tyre building machines	*
Reciprocating - single cylinder	H	Induced draft	M	Table conveyors nonreversing group drives	M	Tyre and tube press openers	*
Conveyors - uniformly loaded or fed		Large, mine etc.	M	Individual drives	H	Tubers and strainers (1)	M
Apron	S	Large, industrial	M	Reversing	*	Warming mills (1)	M
Assembly	S	Light, small diameter	S	Wire drawing and flattening machine	M	Sand muller	M
Belt	S	Feeders		Wire winding machine	M	Screens	
Bucket	S	Apron	M	Mills, rotary type		Air washing	S
Chain	S	Belt	M	Ball (1)	M	Rotary, stone or gravel	M
Flight	S	Disc	S	Cement kilns (1)	M	Travelling water intake	S
Oven	S	Reciprocating	H	Dryers and coolers (1)	M	Sewage disposal equipment	
Screw	S	Screw	M	Kilns other than cement	M	Bar screens	S
Conveyors - heavy duty not uniformly fed		Food industry		Pebble (1)	M	Chemical feeders	S
Apron	M	Beef slicer	M	Rod, plain & wedge bar (1)	M	Collectors	S
Assembly	M	Cereal cooker	S	Tumbling barrels	H	Dewatering screws	M
Belt	M	Dough mixer	M	Mixers		Scum breakers	M
Bucket	M	Meat grinder	M	Concrete mixers continuous	M	Slow or rapid mixers	M
Chain	M	Generators - not welding	S	Concrete mixers intermittent	M	Thickeners	M
Flight	M	Hammer mills	H	Constant density	S	Vacuum filters	M
Live roll	*	Hoists		Variable density	M	Slab pushers	M
Oven	M	Heavy duty	H	Oil industry		Steering gear	*
Reciprocating	H	Medium duty	M	Chillers	M	Stokers	S
Screw	M	Skip hoist	M	Oil well pumping	*	Sugar industry	
Shaker	H	Laundry		Paraffin filter press	M	Cane knives (1)	M
Crane Drives - not dry dock		Washers - reversing	M	Rotary kilns	M	Crushers (1)	M
Main hoists	S	Tumblers	M	Paper mills		Mills (1)	M
Bridge travel	*	Line shafts		Agitators (mixers)	M	Textile industry	
Trolley travel	*	Driving processing equipment	M	Barker - auxiliaries hydraulic	M	Batchers	M
Crushers		Light	S	Barker - mechanical	H	Calenders	M
Ore	H	Other line shafts	S	Barking drum	H	Cards	M
Stone	H	Lumber industry		Beater and pulper	M	Dry cans	M
Sugar (1)	M	Barkers, hydraulic, mechanical	M	Bleacher	S	Dryers	M
Dredges		Burner conveyor	M	Calenders	M	Dyeing machinery	M
Cable reels	M	Chain saw and drag saw	H	Calenders - super	H	Looms	M
Conveyors	M	Chain transfer	H	Converting machine except cutters, platers	M	Mangles	M
Cutter head drives	H	Craneway transfer	H	Conveyors	S	Nappers	M
Jig drives	H	De-barking drum	H	Couch	M	Pads	M
Manoeuvring winches	M	Edger feed	M	Cutters, platers	H	Range drives	*
Pumps	M	Gang feed	M	Cylinders	M	Slashers	M
Screen drive	H	Green chain	M	Dryers	M	Soapers	M
Stackers	M	Live rolls	H	Fell stretchers	M	Spinners	M
Utility winches	M	Log deck	H	Fell whipper	H	Tenter frames	M
		Log haul - incline	H	Jordans	M	Washers	M
		Log haul - well type	H	Log haul	H	Winders	M
		Log turning device	H			Windlass	*
		Main log conveyor	H				
		Off bearing rolls	M				

Key

S = Steady
M = Medium Impulsive
H = Highly Impulsive
* = Refer to Renold

(1) = Select on 24 hours per day service factor only.
(2) = Use service factor of 1.00 for any duration of service.
(3) = Use service factor of 1.25 for any duration of service.
(4) = Use service factor of 1.50 for any duration of service.

Note

Machinery characteristics and service factors listed in this catalogue are a guide only. Some applications (e.g. constant power) may require special considerations. Please consult Renold.

Service Factors and Selection

Table 2 Service Factor (f_D)

Prime mover (Drive input)	Driven machinery characteristics			
	Duration service hours/day	Steady load	Medium impulsive	Highly impulsive
Electric, air & hydraulic Motors or steam turbine (Steady input)	Intermittent - 3hrs/day max	0.90	1.00	1.50
	3 - 10	1.00	1.25	1.75
	over 10	1.25	1.50	2.00
Multi-cylinder I.C. engine (Medium impulsive input)	Intermittent - 3hrs/day max	1.00	1.25	1.75
	3 - 10	1.25	1.50	2.00
	over 10	1.50	1.75	2.25
Single-cylinder I.C. engine (Highly impulsive input)	Intermittent - 3hrs/day max	1.25	1.50	2.00
	3 - 10	1.50	1.75	2.25
	over 10	1.75	2.00	2.50

Table 3 Factor for Starts/Hour(f_S)

No of starts per hour	0-1	1-30	30-60	60-
Factor	1,0	1,2	1,3	1,5

Example of Selection

Coupling is required to transmit 7.5kW at 1440 RPM to connect an electric motor to a gear box driving a chain conveyor running for 18 hours/day and starting 15 times/hour. Shaft diameters /55mm respectively.

$$K = 7.5kW$$

From Table 1 Load Classification = M (medium impulsive)

From Table 2 Service Factor $f_D = 1.5$

From Table 3 $f_S = 1.2$

Therefore selection kW is:-

$$\begin{aligned} K_s &= K \times f_D \times f_S \\ &= 7.5 \times 1.5 \times 1.2 \\ &= 13.5 \text{ kW} \end{aligned}$$

$$\begin{aligned} \text{Equivalent power at 100 RPM} &= \frac{K_s \times 100}{\text{RPM}} \\ &= \frac{13.5 \times 100}{1440} \\ &= 0.9375kW @ 100RPM \end{aligned}$$

From page 17 selection is RSC110 (644911)
(maximum bore 55 mm).

Key Stress

1. Permissible key stress = 70N/mm²
2. Nominal torque $T_{KM} = K \times 9550 / \text{RPM Nm}$
3. Force at key $F = T_{KM} / r$
4. Shaft Rad r. metres
5. Key area $A = J \times \text{HUB length mm}$
(Obtain from relevant catalogue page).
6. Key stress $f_k = F/A \text{ N/mm}^2$
7. If resultant stress is less than 70 N/mm² key stress is acceptable.
If resultant f_k is greater than 70, consider either two keyways or extending hub length.
8. Example:

$$T_{KM} = 7.5 \times 9550/1440 = 49.7Nm$$

$$r = 55/2 = 27.5mm \div 1000 = 0.0275m$$

$$F = 49.7/0.0275 = 1741N$$

$$A = 16 \times 45 = 720mm^2$$

$$f_k = 1741/720 = N/mm^2$$
 Selection is therefore good.

For operation above 80% of the declared maximum coupling speed it is recommended that the coupling is dynamically balanced.



WARNING

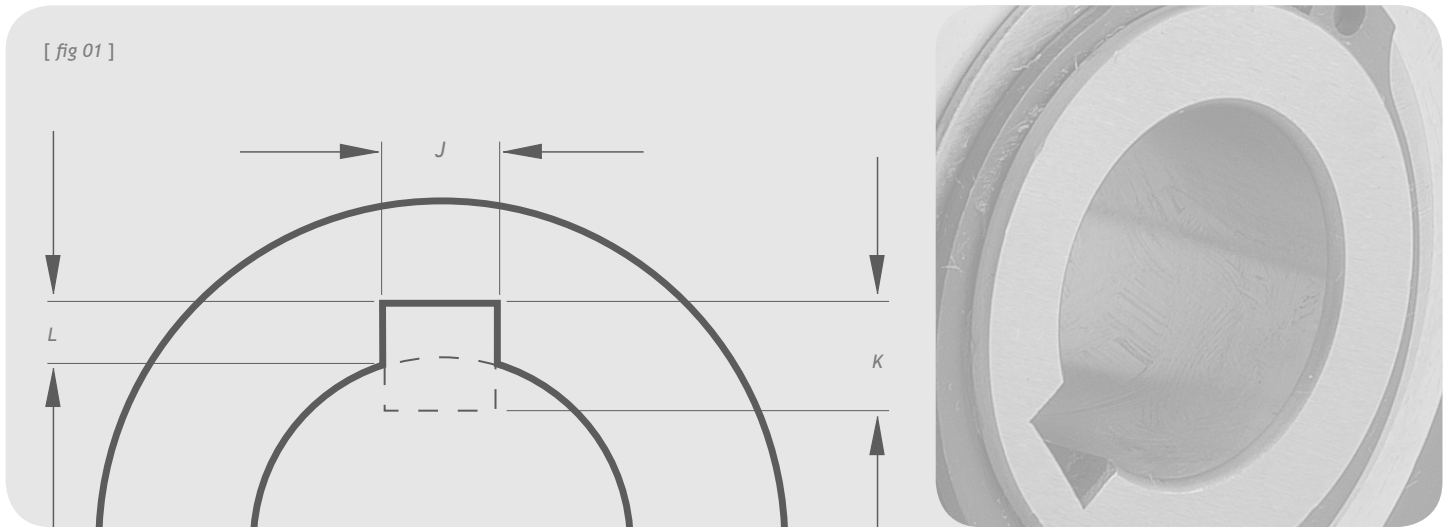
It is the responsibility of the system designer to ensure that the application of the coupling does not endanger the other constituent components in the system. Service factors given are an initial selection guide.



WARNING

Rotating equipment must be provided with a suitable guard before operating or injury may result.

Key and Keyway Dimensions



Metric (mm)

Keyways comply with BS4235: Part 1: 1972

Shaft dia.		Key & keyway		
Over	Incl.	J	K	L
6	8	2	2	1.0
8	10	3	3	1.4
10	12	4	4	1.8
12	17	5	5	2.3
17	22	6	6	2.8
22	30	8	7	3.3
30	38	10	8	3.3
38	44	12	8	3.3
44	50	14	9	3.8
50	58	16	10	4.3
58	65	18	11	4.4
65	75	20	12	4.9
75	85	22	14	5.4
85	95	25	14	5.4
95	110	28	16	6.4
110	130	32	18	7.4
130	150	36	20	8.4
150	170	40	22	9.4
170	200	45	25	10.4
200	230	50	28	11.4

Imperial (inches)

Keyways comply with BS46: Part 1: 1958

Shaft dia.		Key & keyway		
Over	Incl.	J	K	L
0.25	0.05	0.125	0.125	0.060
0.50	0.75	0.187	0.187	0.088
0.75	1.00	0.250	0.250	0.115
1.00	1.25	0.312	0.250	0.112
1.25	1.50	0.375	0.250	0.108
1.50	1.75	0.437	0.312	0.135
1.75	2.00	0.500	0.312	0.131
2.00	2.50	0.625	0.437	0.185
2.50	3.00	0.750	0.500	0.209
3.00	3.50	0.875	0.625	0.264
3.50	4.00	1.000	0.750	0.318
4.00	5.00	1.250	0.875	0.366
5.00	6.00	1.500	1.000	0.412

Keyway dimensions [fig 01]

Parallel keyways are supplied unless customer states otherwise.

Pinflex



A robust, general purpose pin/buffer coupling providing reliable fail safe transmission of torque and misalignment capability.

Coupling capacity

- Maximum power @ 100RPM: 340kW
- Maximum torque: 32500Nm

Features and benefits

- Steel half bodies, strong yet compact.
- Heavy duty pin and buffer coupling - for heavy shock load conditions.
- Torsionally flexible - shock absorbing, extending machine life.
- Maintenance free - minimum number of wearing parts.
- Misalignment capabilities allowing flexibility in installation.
- Common half bodies - minimise stock holding.
- Polyurethane buffers, reliable/flexible and temperature resistant.

- Modular construction - available as coupling, brakedrum and shear pin designs.
- Taper bores available for ease of maintenance.
- Potential energy saving when used to replace older cast iron pin and bush couplings.

Standard range comprises

- Shaft to Shaft
- Shear Pin
- Brake Drum/Disc

Applications

- Conveyors
- Escalators
- Mixers
- Pumps
- General Industrial Applications

Construction details

- Steel Half Bodies
- Urethane Buffer (Blue), Shore hardness 90-95A Temp range; -40°C to +80°C
- Hytrel Buffer (White) Shore hardness 55D Temp range: -50°C to +120°C

General misalignments

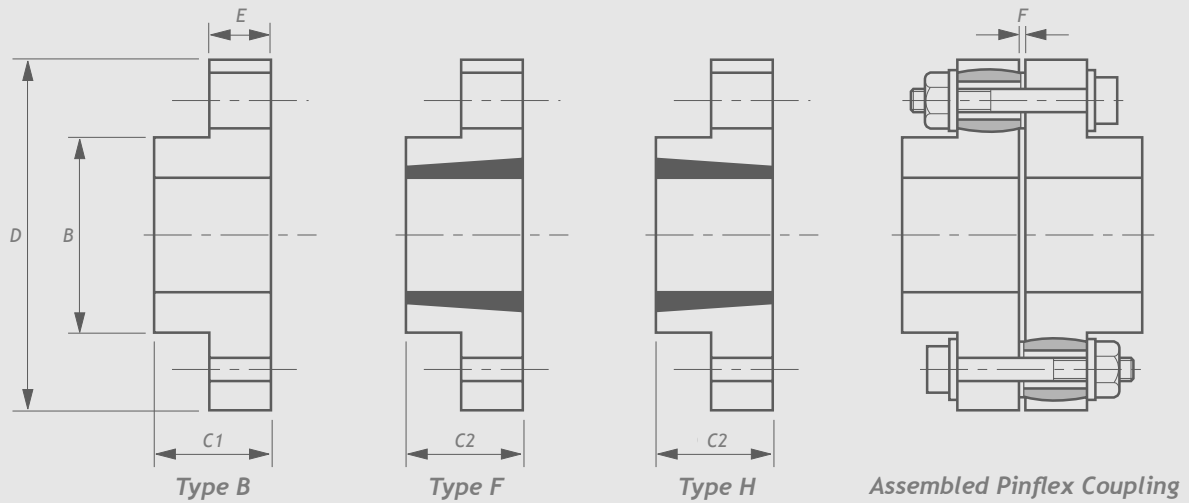
- Parallel Offset
- Max 0.13mm
- Angular
- Max 0.25°



Can be certified for use in potentially explosive atmospheres containing gas or dust, according to ATEX directive 94/9/EC.

The couplings are classified for equipment group II, categories 2 and 3.

Contact Renold for further details.



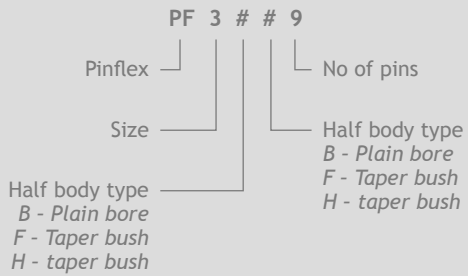
Catalogue number	Product number	Power/ 100rpm kW	Torque nominal Nm	Speed max rpm	Type B		Type F & H			Dimensions						Type B		Type F & H	
					Bore		Bush size	Bore		B mm	C1 mm	C2 mm	D mm	E mm	F mm	Mass* kg	WR ^{2*} kg m ²	Mass* kg	WR ^{2*} kg m ²
					Max	Min		Max	Min										
PF1# #3	8001042/3	2.03	194	6800	50	0	TB1215	32	11	70	44	40	125	20	4	5.2	0.00828	5.0	0.00813
PF1# #6	8001042/6	4.05	387																
PF1BB9	8001042/9	6.08	581																
PF2# #3	8002050/3	3.59	343	5900	55	0	TB1615	42	14	80	50	40	145	25	5	8.3	0.01843	7.6	0.01780
PF2# #6	8002050/6	7.18	685																
PF2BB9	8002050/9	10.76	1028																
PF3# #3	8003060/3	4.24	405	5200	72	0	TB2017	50	18	100	60	47	165	25	5	13.8	0.03335	12.1	0.03143
PF3# #6	8003060/6	8.48	810																
PF3BB9	8003060/9	12.71	1214																
PF4# #3	8004075/3	8.32	795	4400	80	0	TB2525	60	19	113	75	65	195	35	6	22.0	0.08470	20.3	0.08195
PF4# #6	8004075/6	16.65	1590																
PF4BB9	8004075/9	24.97	2384																
PF5# #4	8005090/4	13.94	1331	3600	110	0	TB3030	75	35	150	89	80	235	35	6	37.8	0.19972	35.3	0.19274
PF5# #8	8005090/8	27.88	2662																
PF5# #12	8005090/12	41.82	3994																
PF6# #3	8006110/3	24.70	2359	2900	130	55	TB3535	90	35	180	110	91	290	50	7	73.2	0.61140	65.2	0.58086
PF6# #6	8006110/6	49.40	4717																
PF6# #9	8006110/9	74.10	7076																
PF7# #4	8007130/4	37.18	3550	2600	150	65	TB4040	100	40	210	130	105	320	50	7	103.0	0.99756	88.5	0.92310
PF7# #8	8007130/8	74.35	7100																
PF7# #12	8007130/12	111.53	10650																
PF8# #4	8008150/4	64.70	6179	2200	175	75	TB5050	125	70	245	150	130	380	60	7	168.8	2.33646	154.1	2.22610
PF8# #8	8008150/8	129.40	12357																
PF8# #12	8008150/12	194.10	18536																
PF9# #4	8009240/4	85.00	8130	1700	260	75	N/A	N/A	N/A	355	220	-	490	60	7	423.0	9.19000	N/A	N/A
PF9BB8	8009240/8	170.00	16255																
PF9BB12	8009240/12	255.00	24385																
PF9BB16	8009240/16	340.00	32500																

NOTE: Maximum power and torques for taper bore options are limited by the taper bush capacity.

* Values are for couplings with no bore and a full set of pin assemblies.

Pinflex

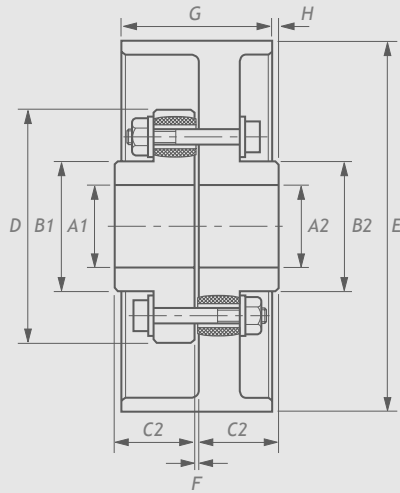
Ordering code



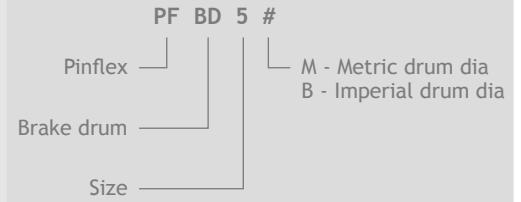
Component Spares

Coupling size	Half body pilot bored		Half body F type		Half body H type		Pin and buffer set		Coupling Size
	Catalogue number	Product number	Catalogue number	Product number	Catalogue number	Product number	Product number	Number per set	
PF1	PF1 B	8001042	PF1 F	8001042/77	PF1 H	8001042/88	800 0008	3	PF1
PF2	PF2 B	8002050	PF2 F	8002050/77	PF2 H	8002050/88	800 0010	3	PF2
PF3	PF3 B	8003060	PF3 F	8003060/77	PF3 H	8003060/88	800 0010	3	PF3
PF4	PF4 B	8004075	PF4 F	8004075/77	PF4 H	8004075/88	800 0012	1	PF4
PF5	PF5 B	8005090	PF5 F	8005090/77	PF5 H	8005090/88	800 0012	1	PF5
PF6	PF6 B	8006110	PF6 F	8006110/77	PF6 H	8006110/88	800 0016	1	PF6
PF7	PF7 B	8007130	PF7 F	8007130/77	PF7 H	8007130/88	800 0016	1	PF7
PF8	PF8 B	8008150	PF8 F	8008150/77	PF8 H	8008150/88	800 0020	1	PF8
PF9	PF9 B	8009240	N/A	N/A	N/A	N/A	800 0020	1	PF9

Pinflex Brakedrum Coupling



Ordering code



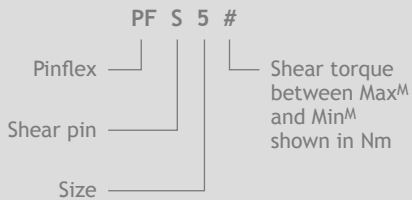
Disc brake version also available
- consult Renold for details

Coupling size	Product number	Power /100rpm kW	Torque nominal Nm	Speed max rpm	Bore		Drum dimensions		
					A1 max mm	A2 max mm	Dia E mm	Width G mm	Dia E inch
PFBD1 #	8101042	8.1	774	3600	50	45	160	92	6
PFBD2 #	8102050	14.35	1370	2850	55	50	200	105	8
PFBD3 #	8103060	16.96	1620	2300	72	60	250	124	10
PFBD4 #	8104075	33.29	3179	1900	80	75	315	140	12
PFBD5 #	8105090	55.76	5325	1400	110	90	400	184	16
PFBD6 #	8106110	98.8	9435	1400	130	110	400	184	16
PFBD7 #	8107130	148.7	14200	1100	150	130	500	241	20
PFBD8 #	8108150	258.8	24714	900	175	150	630	267	24

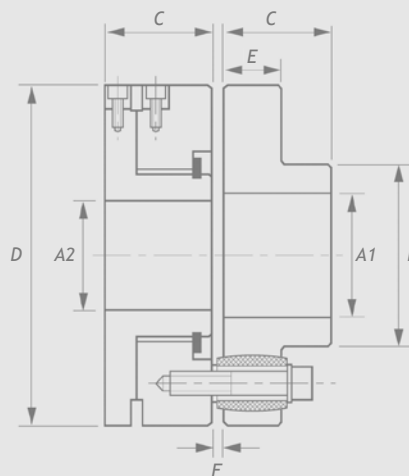
Coupling size	Product number	Dimensions									Number of pins per coupling	Pin & buffer set	
		B1 mm	B2 mm	C1 mm	C2 mm	D mm	F mm	H mm	WR ³ kg m ²	Mass kg		Part number	Number per set
PFBD1 #	8201042	70	70	44	44	125	4	-	0.0277	8.7	12	8000008	3
PFBD2 #	8202050	80	80	50	50	145	5	-	0.0696	14.3	12	8000010	3
PFBD3 #	8203060	100	100	60	60	165	5	-	0.1801	24.2	12	8000010	3
PFBD4 #	8204075	113	113	75	75	195	6	-	0.5487	49.0	12	8000012	1
PFBD5 #	8205090	150	150	90	90	235	6	-	1.6548	82.2	16	8000012	1
PFBD6 #	8206110	180	180	110	110	290	7	22	2.0706	114.1	12	8000016	1
PFBD7 #	8207130	210	210	130	130	320	7	13	5.2192	199.7	16	8000016	1
PFBD8 #	8208150	245	245	150	150	380	7	20	13.566	303.4	16	8000020	1

Pinflex Shearpin Coupling

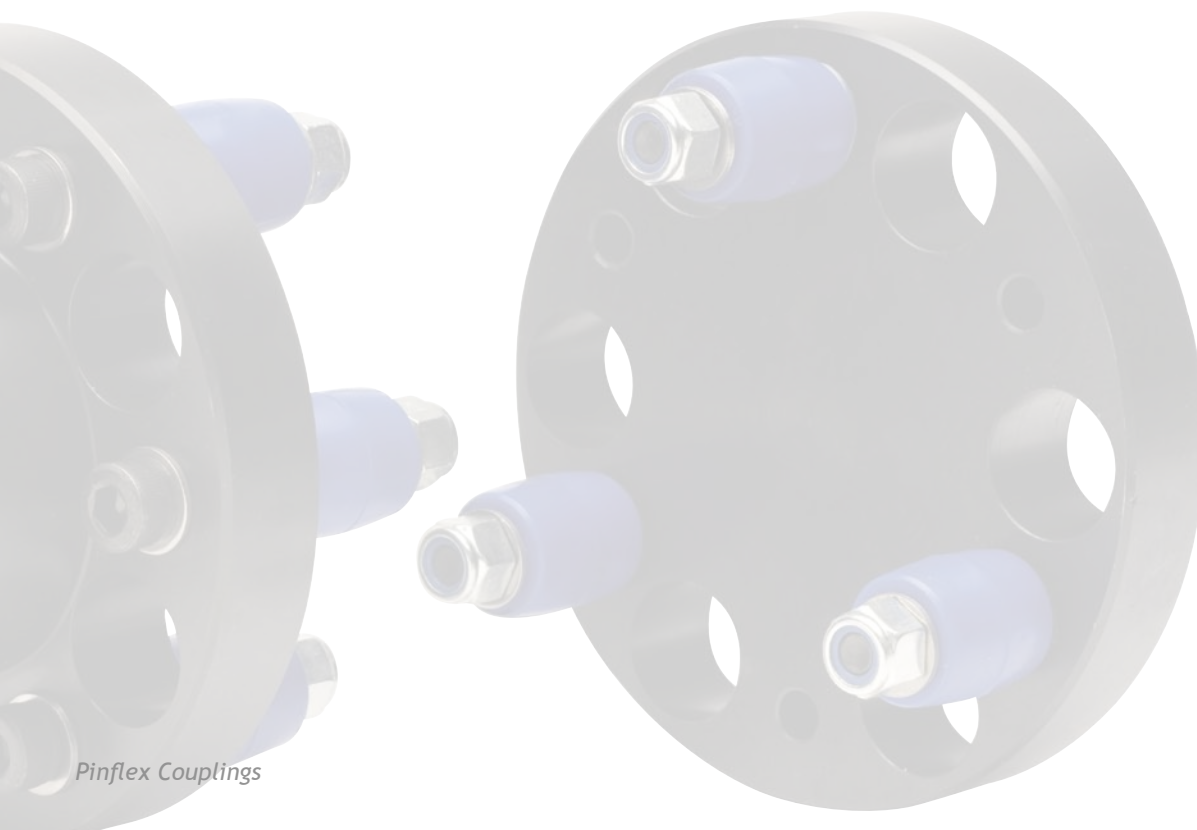
Ordering code



Select coupling based on nominal torque using service factors from page 13. Then select required shear torque from table below.



Coupling size	Nominal torque	Shear torque		Speed max rpm	Bore A1		Bore A2		Dimensions						No. of pins
		Min Nm	Max Nm		Max mm	Min mm	Max mm	Min mm	B mm	C kg	D mm	E mm	F mm	Mass kg	
PFS1 #	387	194	774	6800	50	-	40	-	70	44	125	20	4	6.3	6
PFS2 #	685	220	1370	5900	55	-	47	-	80	50	145	25	5	10.1	6
PFS3 #	810	350	1620	5200	72	-	57	-	100	60	165	25	5	15.3	6
PFS4 #	1590	425	3180	4400	80	-	63	-	113	75	195	35	6	27.3	6
PFS5 #	2662	520	5324	3600	110	-	93	-	150	89	235	35	6	47.3	8
PFS6 #	4717	1100	9434	2900	130	55	107	55	180	110	290	50	7	89.8	6
PFS7 #	7100	2750	14200	2600	150	65	120	65	210	130	320	50	7	129	8
PFS8 #	12357	5900	24714	2200	175	75	147	75	245	150	380	60	7	212	8
PFS9 #	16255	8130	32510	1700	260	75	200	75	355	220	490	60	7	513	8



The best range of solution chain products available anywhere



RENOLD **Synergy**™

- High performance
- Superior wear life
- Outstanding fatigue resistance



RENOLD **Syno**™

- Maintenance free
- Self-lubricating chain
- Food industry-approved lubricant



RENOLD

- Best premium chain
- Leading performance
- Solid bush / solid roller / end softened pin



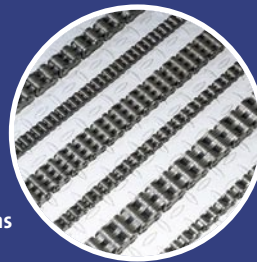
Hydro-Service™

- Superior corrosion resistant coating
- Alternative choice to stainless steel chain
- Will not chip or peel
- Hexavalent chrome-free



Steel Pin **Bush Roller Chain**

- Manufactured to international stds
- Full range of pitch alternatives
- Breaking loads 13 to 900 kN as std
- Attachments to suit varied applications



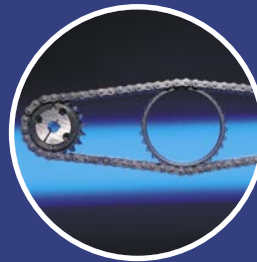
Leaf Chain

- Comprehensive ranges used worldwide for safety critical lifting applications
- 100 years experience in developing and maintaining lifting chain



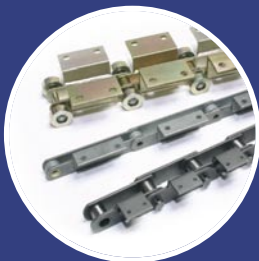
Steel Knuckle Chain

- Heavy duty, detachable elevator chains
- Integral K type attachments
- Breaking loads from 642kN to 1724kN
- Sealed joint to extend chain life



Roll-Ring™

- Revolutionary chain tensioner
- Installed in seconds and self adjusting
- Maintenance free
- Also acts as noise damper



Customised **Engineering Chain**

- Wide range to suit specialised applications using high specification materials and treatment processes
- Designed in close collaboration with customer



Smartlink™

- Load monitoring technology
- Technical reports & data logging

RENOLD
Superior Chain Technology

UK

Renold Clutches & Couplings
Cardiff
Tel + 44 (0) 29 20792737
Fax + 44 (0) 29 20791360
couplings@cc.renold.com

Renold Hi-Tec Couplings
Halifax
Tel + 44 (0) 1422 255000
Fax + 44 (0) 1422 320273
couplings@hi-tec.renold.com

Renold Gears
Milnrow
Tel + 44 (0) 1706 751000
Fax + 44 (0) 1706 751001
gears.sales@renold.com

USA

Renold Ajax
Westfield, New York State
Tel +1 716 326 3121
Fax + 1 716 326 8229
ainfo@renoldajax.com

WEB

www.renold.com

E-MAIL

enquiry@renold.com

For you nearest Renold dedicated specialist or distributor please visit the Renold website - www.renold.com or contact Renold UK

Whilst all reasonable care in compiling the information contained in this brochure is taken, no responsibility is accepted for printing errors. All information contained in this brochure is subject to change after the date of publication.