

Parts List and Engineering Data

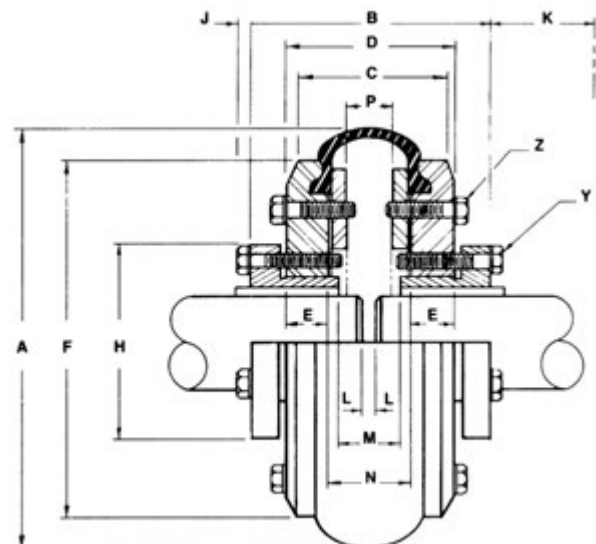
Coupling Size	QD Bushing (2 Required Per Coupling)*	Steel Flange Assembly (2 Required Per Coupling)		Rubber Element (1 Required Per Coupling)		Max RPM	Horsepower @ 100 RPM (1.0 Factor)	Torque (1.0 Service Factor)		Average Static Torsional Stiffness Coefficient (K)		Approx. WR** (LB - Ft)
		Flange No.	Weight Each	Element No.	Weight			LB - In	LB - Ft	LB - In/DEG	LB - In/RAD	
5	JA	F5JA	3.0	E5	.6	4500	1.03	649	54.1	244	12,850	.08
6	JA	F6JA	4.0	E6	.9	4000	1.80	1134	94.5	414	23,700	.22
7	SH	F7SH	7.0	E7	1.3	3600	3.12	1966	163.8	544	31,200	.40
8	SDS	F8SDS	8.0	E8	1.7	3100	4.68	2950	245.8	876	50,200	.70
9	SK	F9SK	13.0	E9	2.0	2800	6.90	4349	362.4	1088	62,400	1.33
10	SF	F10SF	17.0	E10	2.0	2600	8.33	5250	437.5	1530	87,700	2.10
11	SF	F11SF	18.0	E11	3.0	2300	9.92	6252	521.0	2420	138,700	2.90
12	E	F12E	31.0	E12	3.8	2100	14.40	9076	756.3	4014	217,000	5.80

* See page B5 for QD bushing bore sizes and dimensions.

** Coupling plus QD bushing.

Weight in pounds.

Rubber tire element also available in Neoprene.



Dimensions

Coupling Size	A	B	C	D	E	F	H	J	K*	L	M	N	P	Z Clamp Ring Bolts			
														Y B.C. Dia.	B.C. Dia.	No. and Size*** Capscrews	Torque In Lbs.
5	5 1/4	3 1/16	2 1/16	2 3/16	5/8	4	2	5/32	1 1/4	..	1 1/16	1 1/16	3/8	1.66	2 1/16	(5) 1/4 - 20x1 1/8	125
6	6 1/2	3 3/16	2 3/16	2 11/16	5/8	4 1/16	2	3/32	1 1/4	..	1 1/16	1 1/16	1/2	1.66	3 3/16	(5) 5/16 - 18x1 1/8	200
7	7 3/8	4 3/16	2 11/16	3 3/16	1 1/8	5 5/8	2 11/16	7/32	1 1/2	..	1 11/16	1 1/16	3/4	2 1/4	3 3/16	(5) 5/16 - 18x1 1/4	300
8	8 3/8	4 7/16	2 13/16	3 3/16	1 1/8	6 1/2	3 3/16	7/32	1 1/2	..	1 13/16	1 1/16	7/8	2 11/16	4 3/16	(6) 5/16 - 18x1 1/2	300
9	9 1/4	5 3/16	3 3/16	3 3/16	1 1/8	7 3/8	3 3/8	3/32	2 1/4	..	1 7/8	1 1/16	7/8	3 3/16	5 1/16	(6) 3/8 - 16x1 3/4	400
10	10	5 13/16	3 3/8	4 1/16	1 1/8	8 1/16	4 3/8	5/16	2 3/4	..	1 1/8	1 1/16	1	3 3/8	6	(6) 3/8 - 16x1 3/4	400
11	11	5 3/8	3 3/8	3 3/8	1 1/8	9	4 3/8	5/16	2 3/4	..	1 1/8	1 1/8	1 1/16	3 3/8	6 1/2	(6) 3/8 - 16x1 3/4	400
12	12 3/4	7 1/4	4	4 3/4	1 1/8	10 1/16	6	7/16	3 3/4	..	1 1/4	1 1/4	3/4	5	7 1/4	(6) 1/2 - 13x2 1/4	900

Shaft ends are normally M or N apart; they may project beyond the bushings. In this case allow space for end float and misalignment.

* Clearance required to remove bushing using pull-up capscrews as jackscrews.

** Grade 8.

Dimensions in inches.

Other Sizes Available as Made-to-Order

Martin Flex® flexible couplings smoothly transmit power while compensating for shaft misalignment to 4°, parallel misalignment to 1/8" and end float to 5/16". The two piece flange design provides quick and easy installation and the elastomeric element absorbs shock and torsional vibration through a wide temperature range.

Selection Procedure

1. Select the proper service factor from Chart 1.
2. Determine **Design Horsepower** by multiplying the **Service Factor** and the **Drive Horsepower**.
3. Locate the intercept of **Shaft Speed** and **Design Horsepower** from Chart 2.
4. Order per coupling: (2) bushings, (2) flange assemblies, (1) flexible tire element.

Chart 1 Service Factors

Application	Factor	Application	Factor	Application	Factor	Application	Factor	Application	Factor
AGITATORS		Pump, Screen Drive, Stack, Utility Winch	1.5	METAL FORMING MACHINES		Hog	2.0	Water	1.0
Paddle or Propeller (Vert. or Horiz.), Screw	1.0	DYNAMOMETER	1.0	Draw Bench Carriage, Main Drive, Extruder, Wire Drawing, Flattening Machine	2.0	Roller	1.5	SEWAGE DISPOSAL EQUIPMENT	1.0
BREWING AND DISTILLING		ELEVATORS		MILLS (Rotary Type)		PUMPS		SHOVEL	2.0
Bottling Machinery, Brew Kettle, Cooker (Cont. Duty), Mash Tub	1.0	Bucket, Freight	2.0	Ball or Pebble Direct or on LS Shaft Gear Reducer	2.5	Centrifugal	1.0	SHREDDER	1.5
Scale Hopper — Frequent Starting Peaks	1.5	EXCITER	1.0	Rod or Tube Direct or on LS Shaft Gear Reducer	2.5	Descaling, Gear Type	1.5	STEEL INDUSTRY	
CAN FILLING MACHINE	1.0	FANS		Dryer and Cooler	1.5	Oil Well Pumping (not over 150% peak torque)	2.0	Cold Mills	
CAR DUMPER	1.5	Centrifugal	1.0	Light	1.0	Rotary — other than gear	1.5	Coiler (up or down)	1.5
CAR PULLER	1.5	Cooling Tower	2.0	Propeller (indoor)	1.5	Reciprocating — 1 cyl. — single acting	2.5	Strip, Temper	2.0
CLARIFIER	1.0	Large (Mine, etc.)	1.5	FOOD INDUSTRY		1 cyl. — double acting	2.0	Hot Mills	
CLASSIFIER	1.0	Light	1.0	Beet Slicer	1.5	2 cyl. — single acting	2.0	Coiler (up or down), Edger Drive	1.5
CLAY-WORKING MACHINES		Propeller (indoor)	1.5	Cereal Cooker	1.0	2 cyl. — double acting	1.5	Feed Roll (Blooming), Roughing Mill Delivery (non-reversing), Sheet, Strip	3.0
Brick Press, Briquette Machine, Clay Working Machine, Pug Mill	1.5	GENERATORS		Meat Grinder	1.5	3 cyl. — or more	1.5	Rod Mill	2.5
COMPRESSORS		Even Load	1.0	MIXERS		RUBBER INDUSTRY		Soaking Pit Cover Drive	3.0
Lobe, Rotary	2.0	Hoist or Railway Service	1.5	Concrete (Continuous or intermittent), Muller-Simpson type	1.5	Banbury Mixer	2.5	STEERING GEAR	1.0
Reciprocating* — 1 cyl. — single acting	3.5	Welder Load	2.0	OIL INDUSTRY		Calender	2.0	STOKER	1.0
1 cyl. — double acting	3.0	GRIZZLY	2.0	Chiller	1.0	Cracker, Mixing Mill, Plasticator	2.5	TEXTILE MILLS	
2 cyl. — single acting	3.0	KILN	2.0	Oil Well Pumping (not over 150% peak torque)	2.0	Refiner, Sheeter, Tire Building Machine	2.0	Batcher	1.0
2 cyl. — double acting	2.5	LAUNDRY MACHINES		Paraffin Filter Press	1.5	Tire and Tube Press Opener (Based on Peak Torque)	1.0	Calender, Card	1.5
3 cyl. or more — single acting	2.5	Tumbler, Washer	2.0	PAPER MILLS		Tuber and Strainer	1.5	Machine, Dry Can	1.5
3 cyl. or more — double acting	2.0	LINE SHAFTS		Agitator	1.0	Warming Mill	2.0	Dyeing Machinery	1.0
CONVEYORS		Driving Processing Machinery	1.0	Barking Drum	2.5	Washer	2.5	Loom	1.5
Apron, Assembly, Belt, Chain, Flight, Oven	1.0	Light	1.0	Beater and Pulper	1.5	SCREENS		Mangel, Napper, Soaper	1.0
Reciprocating	2.5	LUMBER INDUSTRY		Bleacher	1.0	Air Washing	1.0	Spinner, Tenter Frame	1.5
Screw	1.0	Band Resaw	1.5	Calender	2.0	Coal and Sand (Rotary)	1.5	WINDLASS	1.5
CRANES AND HOISTS		Edger, Head Rig, Hog, Log Haul	2.0	Chipper	3.0	Vibrating	2.5	WOODWORKING MACHINES ..	1.0
Main Hoist — Medium Duty	1.5	Planer	1.5	Couch, Cylinder, Dryer	1.5				
Main Hoist — Heavy Duty	2.0	Rolls Non-Reversing	1.5	Felt Stretcher	1.0				
Skip Hoist, Travel Motion, Trolley Motion, Slope	1.5	Rolls Reversing	2.0	Fourdrinier	1.5				
CRUSHERS		Sawdust Conveyor	1.0	Jordan	2.0				
Cane	2.0	Slab Conveyor, Sorting Table	1.5	Press	2.0				
Gyratory	2.5	MACHINE TOOLS		Pulp Grinder	2.0				
DREDGES		Auxiliary	1.0	Stock Chest	1.5				
Cable Reel, Conveyor	1.5	Main Drive, Notching Press, Planer (Reversing), Plate Planer, Punch Press	1.5	Stock Pump	2.0				
Cutter Head Drive, Jog Drive	2.5	Traverse	1.0	Reciprocating	2.0				
				Rotary	1.5				
				Suction Roll	2.0				
				Winder	1.5				
				PARAFFIN FILTER PRESS	1.5				
				PRINTING PRESS	1.5				
				PROPELLER (Marine)	1.5				
				PULVERIZERS					
				Hammermill — Light Duty ..	1.5				
				Hammermill — Heavy Duty ..	2.0				

The service factors listed are intended only as a general guide for smooth power sources such as electric motors and steam turbines. Add 0.5 to factor for somewhat rougher power sources such as internal combustion engines of four or more cylinders, steam engines and water turbines. Where substantial shock occurs or starting or stopping is frequent as on some "inching" drives and on some reversing drives or where the power source is an internal combustion engine with less than four cylinders — consult factory. Where torsional vibrations occur as in, for example, internal combustion engines or reciprocating compressors or pump applications, check the coupling for possible development of damaging large amplitude vibrations.

** Add 0.5 to factor if without flywheel.

Chart 2 Size Selection

