

Parts List and Engineering Data

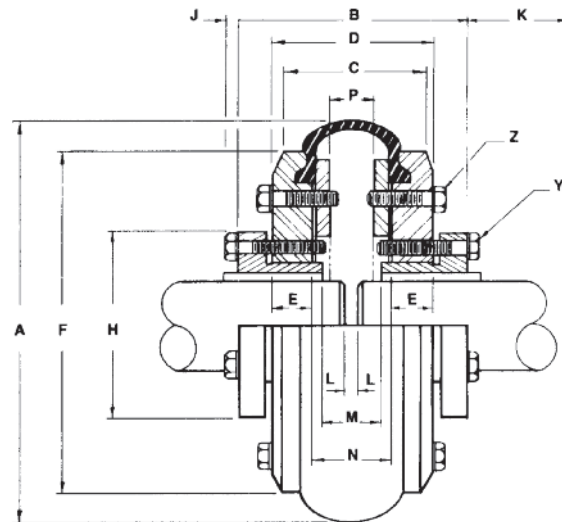
Coupling Size	*QD Bushing (2 Required Per Coupling)	Steel Flange Assembly (2 Required Per Coupling)		Rubber Element (1 Required Per Coupling)		Max RPM	Horsepower @ 100 RPM (1.0 Factor)	Torque (1.0 Service Factor)		Average Static Torsional Stiffness Coefficient (K)		Approx. WR2** (LB - Ft ²)
		Flange 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	5¼	3⅞	2⅛	2⅞	⅝	4	2	⅞	1¼	..	1⅞	1⅞	⅜	1.66	2⅞	(5) ¼ - 20x1⅞	125
6	6½	3⅞	2⅞	2⅞	⅝	4⅞	2	⅞	1¼	..	1⅞	1⅞	½	1.66	3⅞	(5) ⅝ - 18x1⅞	200
7	7⅞	4⅞	2⅞	3⅞	⅞	5⅞	2⅞	⅞	1⅞	..	1⅞	1⅞	⅜	2¼	3⅞	(5) ⅞ - 18x1¼	300
8	8⅞	4⅞	2⅞	3⅞	⅞	6⅞	3⅞	⅞	1⅞	..	1⅞	1⅞	⅞	2⅞	4⅞	(6) ⅞ - 18x1½	300
9	9⅞	5⅞	3⅞	3⅞	1⅞	7⅞	3⅞	⅞	2¼	..	1⅞	1⅞	⅞	3⅞	5⅞	(6) ⅞ - 16x1⅞	400
10	10	5⅞	3⅞	4⅞	1⅞	8⅞	4⅞	⅞	2¼	..	1⅞	1⅞	1	3⅞	6	(6) ⅞ - 16x1⅞	400
11	11	5⅞	3⅞	3⅞	1⅞	9	4⅞	⅞	2¼	..	1⅞	1⅞	⅞	3⅞	6⅞	(6) ⅞ - 16x1⅞	400
12	12⅞	7⅞	4	4⅞	1⅞	10⅞	6	⅞	3¼	..	1¼	1¼	⅞	5	7⅞	(6) ½ - 13x2¼	900

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

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

*** 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.

COUPLINGS

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

