Elastomeric Coupling Catalog

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Falk Wrapflex Elastomeric Couplings

(Inch)

Table Of Contents

Falk Wrapflex Elastomeric Couplings

A Simple Way to Increase Productivity

- 9 sizes
- Torque range: 133,000 lb-in (15,028 Nm)
- Bore capacity: 7¼" (186 mm)
- "Replace in place"
- Non-lubricated/low maintenance

Quick, easy installation and replacement set new standards for reduced downtime. Because motors or drives don't need to be moved, our "replace in place" elements even eliminate the need for time-consuming realignment.

Available in close-coupled and spacer designs, Wrapflex couplings accommodate up to 7¼" (186 mm) shafts and torque loads up to 133,000 lb-in (15,028 Nm).

For simplicity and cost-effectiveness over the life of your coupling, it doesn't get any easier than Wrapflex couplings from Rexnord.

Low Initial Cost

- Advanced manufacturing methods and innovative material allow us to offer higher capacity ratings at a more competitive price than ever before possible.

Easy to Install

- The compound root radius in the element teeth (patent #6,342,011) increases flexibility for easier and quicker assembly.
- The coupling can be blind assembled from either direction.

Replace in Place

- Design allows quick and easy element replacement.
- There's no need to remove hubs or realign motors or drives, so downtime is reduced.

No Maintenance Needed

- Non-lubricated design of the tough, flexible polyurethane element lowers periodic maintenance costs.

Protects Equipment

- Compound root radius on inner corners of flex element (patent #6,342,011) acts as a stress relief for longer element life.
- Special hub feature reduces reaction loads transferred to connected equipment (patent #6,648,763).

Tough, Long-Lasting

- Polyurethane element has excellent wear and chemical resistance, and an operating temperature of -40°C (-40°F) to 95°C (200°F).
- Weather-resistant, high-grade nylon cover is standard.
- Optional carbon steel covers with black epoxy coating are suitable for highly-corrosive, severe-duty applications. (Standard for sizes 60-80.)
- Optional stainless steel hubs are available for Type R10 when required in the food industry or corrosive environments.

Safety First

- Two stainless steel button head cap screws, positioned 180° apart, prevent relative motion between cover and element and provide a positive means of retaining the cover to the element.
- Flexible element is retained after failure, helping minimize the potential for damage or personal injury.

Quick and Easy Retrofits

- Compact design eliminates the need for coupling guard redesign on existing applications.
- Stock finished bores in popular sizes. Taper bores for QD and Taper-Lock bushings are available off-the-shelf from our worldwide distribution network.

Falk Wrapflex Coupling Selection

Wrapflex Quick Selection Method

1. Determine Service Factor — Refer to **Table 1**or **4** for motor or turbine driven applications. See **Table 5** for engine drives.
2. Determine Equivalent Horsepower:
   Refer to **Table 2** — Under the actual hp required and opposite the service factor, read the equivalent hp.
3. Determine Coupling Size:
   A. Refer to **Table 3** — Trace horizontally from the required speed to a hp value equal to or larger than the equivalent hp determined in Step 2. Read the coupling size at the top of the column.
   B. Check shaft diameters against coupling maximum bores shown in **Table 3** and on **page 7** thru **11** for the correct coupling size selected.
   C. In **Table 3**, check the required speed against the allowable speed shown below the correct coupling size selected.
4. Determine Coupling Dimensional Requirements:
   A. Determine application/design shaft spacing and check application dimension requirements against selected coupling type dimensions shown on **page 7** thru **11**. Confirm sufficient clearances for coupling.
5. Confirm that application ambient operating temperatures are between -40°C (-40°F) to 95°C (200°F). For applications requiring Service Factor above 1.5 and temperatures above 79°C (175°F), consult Rexnord Engineering for selection assistance or optional high temperature elements.

Service Factors are a guide, based on experience, of the ratio between coupling catalog rating and system characteristics. The system characteristics are best measured with a torque meter.

Table 1 — Service Factors

Torque Demands Driven Machine	Typical applications for electric motor or turbine driven equipment	Typical Service Factor
	Constant torque such as Centrifugal Pumps, Blowers and Compressors.	1.0
	Continuous duty with some torque variations including Plastic Extruders, Forced Draft Fans.	1.5
	Light shock loads from Metal Extuders, Cooling Towers, Cane Knife, Log Haul.	2.0
	Moderate shock loading as expected from a Car Dumper, Stone Crusher, Vibrating Screen.	2.5
	Heavy shock load with some negative torques from Roughing Mills, Reciprocating Pumps, Compressors, Reversing Runout Tables.	3.0
	Applications like Reciprocating Compressors with frequent torque reversals, which do not necessarily cause reverse rotations.	Refer to Factory

Table 2 — Equivalent Horsepower = (Actual HP x Service Factor)

Service Factor ①	Actual HP																										
	3/4	1	1½	2	3	5	7½	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	450	500
1.0	0.75	1.0	1.5	2.0	3.0	5.0	7.5	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	450	500
1.25	0.94	1.25	1.9	2.5	3.8	6.3	9.4	12.5	19	25	31	38	50	63	75	94	125	156	188	250	312	375	438	500	563	625
1.5	1.1	1.5	2.3	3.0	4.5	7.5	11.3	15	23	30	38	45	60	75	90	113	150	188	225	300	375	450	525	600	675	750
1.75	1.3	1.8	2.6	3.5	5.3	8.8	13.1	18	26	35	44	53	70	88	105	131	175	219	262	350	438	525	613	700	787	875
2.0	1.5	2.0	3.0	4.0	6.0	10.0	15.0	20	30	40	50	60	80	100	120	150	200	250	300	400	500	600	700	800	900	1000
2.5	1.9	2.5	3.8	5.0	7.5	12.5	18.8	25	38	50	63	75	100	125	150	187	250	312	375	500	625	750	875	1000	1125	1250
3.0	2.3	3.0	4.5	6.0	9.0	15.0	22.5	30	45	60	75	90	120	150	180	225	300	375	450	600	750	900	1050	1200	1350	1500
3.5	2.6	3.5	5.3	7.0	10.5	17.5	26.2	35	52	70	87	105	140	175	210	262	350	437	525	700	875	1050	1225	1400	1575	1750

① For service factors not listed, Equivalent HP = Actual HP x Service Factor.

Falk Wrapflex Coupling Selection

Table 3 — Falk Wrapflex Coupling Quick Selection Chart

Size	5R	10R	20R	30R	40R	50R	60R	70R	80R
Max Bore (in)	1.625	1.875	2.375	2.875	3.375	4.125	5.250	6.125	7.250
Max Speed	4500 RPM	4500 RPM	4500 RPM	4500 RPM	3600 RPM	3000 RPM	2500 RPM	2100 RPM	1800 RPM
Torque (lb-in)	550	1,150	2,800	4,600	9,100	22,200	35,500	70,900	133,000
HP/100 RPM	0.873	1.82	4.44	7.30	14.4	35.2	56.3	112	211
RPM	HP Ratings								
4500	39.3	82.1	200	328	–	–	–	–	–
3600	31.4	65.7	160	263	520	–	–	–	–
3000	26.2	54.7	133	219	433	1057	–	–	–
2500	21.8	45.6	111	182	361	881	1408	–	–
2100	18.3	38.3	93.3	153	303	740	1183	2362	–
1800	15.7	32.8	80.0	131	260	634	1014	2025	3798
1750	15.3	31.9	77.7	128	253	616	986	1969	3693
1450	12.7	26.5	64.4	106	209	511	817	1631	3060
1170	10.2	21.3	52.0	85.4	169	412	659	1316	2469
1000	8.73	18.2	44.4	73.0	144	352	563	1125	2110
870	7.59	15.9	38.7	63.5	126	306	490	979	1836
720	6.28	13.1	32.0	52.6	104	254	406	810	1519
650	5.67	11.9	28.9	47.4	93.9	229	366	731	1372
580	5.06	10.6	25.8	42.3	83.7	204	327	652	1224
520	4.54	9.49	23.1	38.0	75.1	183	293	585	1097
420	3.67	7.66	18.7	30.7	60.6	148	237	472	886
350	3.05	6.39	15.5	25.5	50.5	123	197	394	739
280	2.44	5.11	12.4	20.4	40.4	98.6	158	315	591
230	2.01	4.20	10.2	16.8	33.2	81.0	130	259	485
190	1.66	3.47	8.44	13.9	27.4	66.9	107	214	401
155	1.35	2.83	6.89	11.3	22.4	54.6	87.3	174	327
125	1.09	2.28	5.55	9.12	18.0	44.0	70.4	141	264
100	0.873	1.82	4.44	7.30	14.4	35.2	56.3	112	211
84	0.733	1.53	3.73	6.13	12.1	29.6	47.3	94.5	177
68	0.593	1.24	3.02	4.96	9.82	24.0	38.3	76.5	143
56	0.489	1.02	2.49	4.09	8.09	19.7	31.5	63.0	118
45	0.393	0.821	2.00	3.28	6.50	15.9	25.3	50.6	95.0
37	0.323	0.675	1.64	2.70	5.34	13.0	20.8	41.6	78.1
30	0.262	0.547	1.33	2.19	4.33	10.6	16.9	33.7	63.3
25	0.218	0.456	1.11	1.82	3.61	8.81	14.1	28.1	52.8
20	0.175	0.365	0.889	1.46	2.89	7.04	11.3	22.5	42.2
16.5	0.144	0.301	0.733	1.20	2.38	5.81	9.29	18.6	34.8
13.5	0.118	0.246	0.600	0.985	1.95	4.76	7.60	15.2	28.5
11	0.096	0.201	0.489	0.803	1.59	3.87	6.20	12.4	23.2
9	0.079	0.164	0.400	0.657	1.30	3.17	5.07	10.1	19.0
7.5	0.065	0.137	0.333	0.547	1.08	2.64	4.22	8.44	15.8
5	0.044	0.091	0.222	0.365	0.722	1.76	2.82	5.62	10.6

Service Factors

Table 4 — Flexible Coupling Service Factors for Motor ① and Turbine Drives

Service factors listed are typical values based on normal operation of the drive systems.

Application	Service Factor
AERATOR	2.0
AGITATORS	
Vertical and Horizontal Screw, Propeller, Paddle	1.0
BARGE HAUL PULLER	1.5
BLOWERS	
Centrifugal	1.0
Lobe or Vane	1.25
CAR DUMPERS	2.5
CAR PULLERS	1.5
CLARIFIER OR CLASSIFIER	1.0
COMPRESSORS	
Centrifugal	1.0
Rotary, Lobe or Vane	1.25
Rotary, Screw	1.0
Reciprocating	
Direct Connected	Refer to Factory
Without Flywheel	Refer to Factory
② With Flywheel and Gear between Compressor and Prime Mover	
1 cylinder, single acting	3.0
1 cylinder, double acting	3.0
2 cylinders, single acting	3.0
2 cylinders, double acting	3.0
3 cylinders, single acting	3.0
3 cylinders, double acting	2.0
4 or more cly., single act.	1.75
4 or more cyl., double act.	1.75
③ **CONVEYORS**	
Apron, Assembly, Belt, Chain, Flight, Screw	1.0
Bucket	1.25
Live Roll, Shaker and Reciprocating	3.0
③④ **CRANES AND HOIST**	
Main Hoist	1.7 ③
Skip Hoist	1.75 ③
Slope	1.5
Bridge, Travel or Trolley	1.75
DYNAMOMETER	1.0
ELEVATORS	
Bucket, Centrifugal Discharge	1.25
Freight or Passenger	**Not Approved**
Gravity Discharge	1.25
ESCALATORS	**Not Approved**
EXCITER, GENERATOR	1.0
EXTRUDER, PLASTIC	1.5
FANS	
Centrifugal	1.0
Cooling Tower	2.0
Forced Draft — Across the Line start	1.5
Forced Draft Motor driven thru fluid or electric slip clutch	1.0
Gas Recirculating	1.5
Induced Draft with damper control or blade cleaner	1.25
Induced Draft without controls	2.0
FEEDERS	
Apron, Belt, Disc, Screw	1.0
Reciprocating	2.5
GENERATORS	
Even Load	1.0
Hoist or Railway Service	1.5
Welder Load	2.0
HAMMERMILL	1.75
LAUNDRY WASHER OR TUMBLER	2.0
LINE SHAFTS	
Any Processing Machinery	1.5
MACHINE TOOLS	
Auxiliary and Traverse Drive	1.0
Bending Roll, Notching Press, Punch Press, Planer, Plate Reversing	1.75
Main Drive	1.5
MAN LIFTS	**Not Approved**
METAL FORMING MACHINES	
Continuous Caster	1.75
Draw Bench Carriage and Main Drive	2.0
Extruder	2.0
Farming Machine and Forming Mills	2.0
Slitters	1.0
Wire Drawing or Flattening	1.75
Wire Winder	1.5
Coilers and Uncoilers	1.5
MIXERS (see Agitators)	
Concrete	1.75
Muller	1.5
PRESS, PRINTING	1.5
PUG MILL	1.75
PULVERIZERS	
Hammermill and Hog	1.75
Roller	1.5
PUMPS	
Boiler Feed	1.5
Centrifugal — Constant Speed	1.0
Frequent Speed Changes under Load	1.25
Descaling, with accumulators	1.25
Gear, Rotary, or Vane	1.25
Reciprocating, Plunger Piston	
1 cyl., single or double act.	3.0
2 cyl., single acting	2.0
2 cyl., double acting	1.75
3 or more cylinders	1.5
Screw Pump, Progressing Cavity	1.25
Vacuum Pump	1.25
SCREENS	
Air Washing	1.0
Grizzly	2.0
Rotary Coal or Sand	1.5
Vibrating	2.5
Water	1.0
SKI TOWS & LIFTS	**Not Approved**
STEERING GEAR	1.0
STOKER	1.0
TIRE SHREDDER	1.50
TUMBLING BARREL	1.75
WINCH, MANEUVERING	
Dredge, Marine	1.5
WINDLASS	1.5
WOODWORKING MACHINERY	1.0
WORK LIFT PLATFORMS	**Not Approved**

① For engine drives, refer to **Table 5**. Electric motors, generators, engines, compressors and other machines fitted with sleeves or straight roller bearings usually require limited end float couplings. If in doubt, provide axial clearances and centering forces to the Factory for a recommendation.

② For balanced opposed design, refer to the Factory.

③ If people are occasionally transported, refer to the Factory for the selection of the proper size coupling.

④ For high peak load applications (such as Metal Rolling Mills) refer to the Factory.

Table 5 — Engine Drive Service Factors ⑤

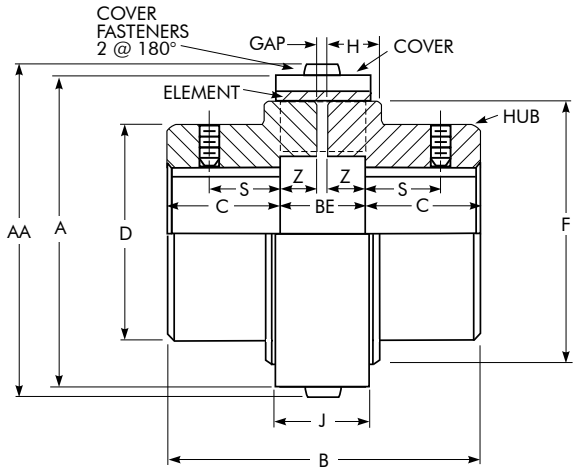
Service Factors (S.F.) for engine drives are those required for applications where good flywheel regulation prevents torque fluctuations greater than ±20%. For drives where torque fluctuations are greater or where the operation is near a serious critical or torsional vibration, a mass elastic study is necessary.

No. of Cylinders	4 or 5 ⑤					6 or more ⑤				
Table 4 S.F.	1.0	1.25	1.5	1.75	2.0	1.0	1.25	1.5	1.75	2.0
Engine S.F.	2.0	2.25	2.5	2.75	3.0	1.5	1.75	2.0	2.25	2.5

⑤ To use **Table 5**, first determine application service factor from **Table 4**. Use that factor to determine Engine S.F. from **Table 5**. When service factor from **Table 4** is greater than 2.0, or where 1, 2, or 3 cylinder engines are involved, refer complete application details to Rexnord Engineering.

Industry	Service Factor
AGGREGATE PROCESSING, CEMENT, MINING KILNS; TUBE, ROD AND BALL MILLS	
Direct or on L.S. shaft of Reducer, with final drive Machined Spur Gears	2.0
Single Helical or Herringbone Gears	1.75
Conveyors, Feeders, Screens, Elevators	See General Listing
Crushers, Ore or Stone	2.5
Dryer, Rotary	1.75
Grizzly	2.0
Hammermill or Hog	1.75
Tumbling Mill or Barrel	1.75
BREWING AND DISTILLING	
Bottle and Can Filling Machines	1.0
Brew Kettle	1.0
Cookers, Continuous Duty	1.25
Lauter Tub	1.5
Mash Tub	1.25
Scale Hopper, Frequent Peaks	1.75
CLAY WORKING INDUSTRY	
Brick Press, Briquette Machine, Clay Working Machine, Pug Mill	1.75
DREDGES	
Cable Reel	1.75
Conveyors	1.25
Cutter head, Jig Drive	2.0
Maneuvering Winch	1.5
Pumps (uniform load)	1.5
Screen Drive, Stacker	1.75
Utility Winch	1.5
FOOD INDUSTRY	
Beet Slicer	1.75
Bottling, Can Filling Machine	1.0
Cereal Cooker	1.25
Dough Mixer, Meat Grinder	1.75
LUMBER	
Band Resaw	1.5
Circular Resaw, Cut-off	1.75
Edger, Head Rig, Hog	2.0
Gang Saw (Reciprocating)	Refer to Factory
Log Haul	2.0
Planer	1.75
Rolls, Non-Reversing	1.25
Rolls, Reversing	2.0
Sawdust Conveyor	1.25
Slab Conveyor	1.75
Sorting Table	1.5
Trimmer	1.75
④ **METAL ROLLING MILLS**	
Coilers (Up or Down) Cold Mills only	1.5
Coilers (Up or Down) Hot Mills only	2.0
Coke Plants	
Pusher Ram Drive	2.5
Door Opener	2.0
Pusher or Larry Car Traction Drive	3.0
Continuous Caster	1.75
Cold Mills — Strip Mills	Refer to Factory
Temper Mills	Refer to Factory
Cooling Beds	1.5
Drawbench	2.0
Feed Rolls - Blooming Mills	3.0
Furnace Pushers	2.0
Hot and Cold Saws	2.0
Hot Mills —	
Strip or Sheet Mills	Refer to Factory
Reversing Blooming	Refer to Factory
Slabbing Mills	Refer to Factory
Edger Drives	Refer to Factory
Ingot Cars	2.0
Manipulators	3.0
Merchant Mills	Refer to Factory
Mill Tables	
Roughing Breakdown Mills	3.0
Hot Bed or Transfer, non-reversing	1.5
Runout, reversing	3.0
Runout, non-reversing, non-plugging	2.0
Reel Drives	1.75
Rod Mills	Refer to Factory
Screwdown	2.0
Seamless Tube Mills	
Piercer	3.0
Thrust Block	2.0
Tube Conveyor Rolls	2.0
Reeler	2.0
Kick Out	2.0
Shear, Croppers	Refer to Factory
Sideguards	3.0
Skelp Mills	Refer to Factory
Slitters, Steel Mill only	1.75
Soaking Pit Cover Drives —	
Lift	1.0
Travel	2.0
Straighteners	2.0
Unscramblers (Billet Bundle Busters)	2.0
Wire Drawing Machinery	1.75
OIL INDUSTRY	
Chiller	1.25
Oilwell Pumping (not over 150% peak torque)	2.0
Paraffin Filter Press	1.5
Rotary Kiln	2.0
PAPER MILLS	
Barker Auxiliary, Hydraulic	2.0
Barker, Mechanical	2.0
Barking Drum	
L.S. shaft of reducer with final drive - Helical or Herringbone Gear	2.0
Machined Spur Gear	2.5
Cast Tooth Spur Gear	3.0
Beater & Pulper	1.75
Bleachers, Coaters	1.0
Calender & Super Calender	1.75
Chipper	2.5
Converting Machine	1.25
Couch	1.75
Cutter, Felt Whipper	2.0
Cylinder	1.75
Dryer	1.75
Felt Stretcher	1.25
Fourdrinier	1.75
Jordan	2.0
Log Haul	2.0
Line Shaft	1.5
Press	1.75
Pulp Grinder	1.75
Reel, Rewinder, Winder	1.5
Stock Chest, Washer, Thickener	1.5
Stock Pumps, Centrifugal	
Constant Speed	1.0
Frequent Speed Changes Under Load	1.25
Suction Roll	1.75
Vacuum Pumps	1.25
RUBBER INDUSTRY	
Calender	2.0
Cracker, Plasticator	2.5
Extruder	1.75
Intensive or Banbury Mixer	2.5
Mixing Mill, Refiner or Sheeter	
One or two in line	2.5
Three or four in line	2.0
Five or more in line	1.75
Tire Building Machine	2.5
Tire & Tube Press Opener (Peak Torque)	1.0
Tuber, Strainer, Pelletizer	1.75
Warming Mill	
One or two Mills in line	2.0
Three or more Mills in line	1.75
Washer	2.5
SEWAGE DISPOSAL EQUIPMENT	
Bar Screen, Chemical Feeders, Collectors, Dewatering Screen, Grit Collector	1.0
SUGAR INDUSTRY	
Cane Carrier & Leveler	1.75
Cane Knife & Crusher	2.0
Mill Stands, Turbine Driver with all Helical or Herringbone gears	1.5
Electric Drive or Steam Engine Drive with Helical, Herringbone, or Spur Gears with any Prime Mover	1.75
TEXTILE INDUSTRY	
Batcher	1.25
Calender, Card Machine	1.5
Cloth Finishing Machine	1.5
Dry Can, Loom	1.5
Dyeing Machinery	1.25
Knitting Machine	Refer to Factory
Mangle, Napper, Soaper	1.25
Spinner, Tenter Frame, Winder	1.5

Close-Coupled Type R10



Dimensions (in)

Cplg Size ①	Torque Rating (lb-in)	Allow Speed RPM	Min Bore	Max Bore ②	Cplg Wt (lb) ③		A		AA		B	BE ⑤	C	D	F	H	J	S	Z	GAP ⑤	Cover Fasteners ⑥	
					Nylon Cover	Steel Cover ④	Nylon Cover	Steel Cover ④	Nylon Cover	Steel Cover ④											Size	Allen Wrench
5R	550	4500	0.500	1.625	2.96	3.27	3.01	3.01	3.17	3.17	2.83	0.78	1.02	2.36	2.52	0.59	0.91	0.63	0.35	0.078	M4	M2.5
10R	1,150	4500	0.625	1.875	5.48	5.98	3.56	3.56	3.72	3.72	3.62	0.94	1.34	2.84	2.99	0.75	1.10	0.88	0.43	0.078	M4	M2.5
20R	2,800	4500	0.750	2.375	12.4	13.4	4.96	4.88	5.20	5.12	4.80	1.26	1.77	3.62	4.02	0.98	1.46	1.00	0.59	0.078	M6	M4
30R	4,600	4500	1.000	2.875	20.7	22.1	5.77	5.63	6.01	5.87	5.98	1.42	2.28	4.13	4.65	1.14	1.65	1.25	0.67	0.078	M6	M4
40R	9,100	3600	1.125	3.375	37.6	39.8	7.17	6.97	7.48	7.28	7.13	1.85	2.64	5.12	5.91	1.34	2.15	1.63	0.83	0.197	M8	M5
50R	22,200	3000	1.250	4.125	78.8	82.9	9.09	8.82	9.41	9.13	8.46	2.39	3.03	7.01	7.48	1.81	2.74	1.75	1.10	0.197	M8	M5
60R	35,500	2500	2.000	5.250	–	146	–	10.51	–	10.94	10.84	2.97	3.94	8.25	8.98	2.37	2.64	–	1.39	0.197	M10	M6
70R	70,900	2100	2.750	6.125	–	244	–	12.20	–	12.64	12.76	3.31	4.72	9.88	10.63	2.74	2.95	–	1.56	0.197	M10	M6
80R	133,000	1800	3.375	7.250	–	365	–	14.57	–	15.00	14.84	3.82	5.51	10.63	12.91	3.28	3.35	–	1.79	0.236	M10	M6

① Wrapflex is a metric product. Metric to inch conversions may not be direct. Dimensions are for reference only and are subject to change without notice unless certified.

② AGMA Class 1 clearance fit bores are standard for Sizes 5R thru 50R, with two setscrews (one over keyway and one at 90°). Interference fit bores and no setscrews are standard for Sizes 60R thru 80R. Long hubs and interference fits are available and recommended when at or near maximum bore and: a) Number of start/stop cycles exceeds 10 per hour; or b) Application service factor = 2.0 or higher.

③ Coupling assembly weight is based on "no bore" hubs. For coupling assembly weight and bored hubs, subtract the following value for each hub: $(0.20)(\text{Bore})^2(\text{C})$ lb. Bore in "inches".

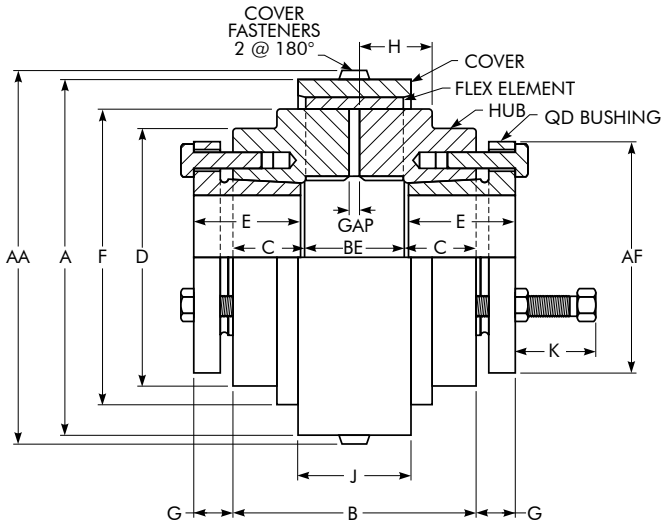
④ Nylon cover is standard on Sizes 5R thru 50R, with an epoxy-coated steel cover as an option. Epoxy-coated steel cover is standard on Sizes 60R thru 80R, with no option for nylon cover.

⑤ "BE" = Standard "Distance Between Shaft Ends" with hubs mounted flush to the shaft ends. "GAP" = Minimum allowable "Distance Between Shaft Ends". Any shaft end spacing between the "GAP" and "BE" dimensions is acceptable. However, if utilizing a shaft end spacing less than the "BE" dimension, the key should not extend beyond the hub face in order to prevent potential interference with the flex element.

⑥ Cover fasteners are stainless steel, socket button head cap screws, per ISO 7380-A2. Two cap screws per coupling assembly.

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

QD Bushings Type R10



Dimensions (in)

Coupling Size	Bushing Size	Torque Rating ① (lb-in)	HP per 100 RPM	Max RPM	Max Bore ①	Min Bore ①	Coupling Weight without Bushing		GAP	BE
							Nylon Cover (lb)	Steel Cover (lb)		
5R	JA	550	0.87	4500	1.250	0.500	2.13	2.43	0.078	0.78
10R	JA	1,150	1.82	4500	1.250	0.500	3.49	3.99	0.078	0.94
20R	SD	2,800	4.44	4500	1.938	0.500	6.73	7.78	0.078	1.26
30R	SD	4,600	7.30	4500	1.938	0.500	10.2	11.6	0.078	1.42
40R	SF	9,100	14.4	3600	2.938	0.500	17.0	19.2	0.197	1.84
50R	E	22,200	35.2	3000	3.500	0.875	38.6	42.7	0.197	2.39
60R	J	35,500	56.3	2500	4.500	1.438	NA	86.3	0.197	2.96
70R	J	70,900	112	2100	4.500	1.438	NA	142	0.197	3.31
80R	M ②	133,000	211	1800	5.500	1.938	NA	254	0.236	3.82

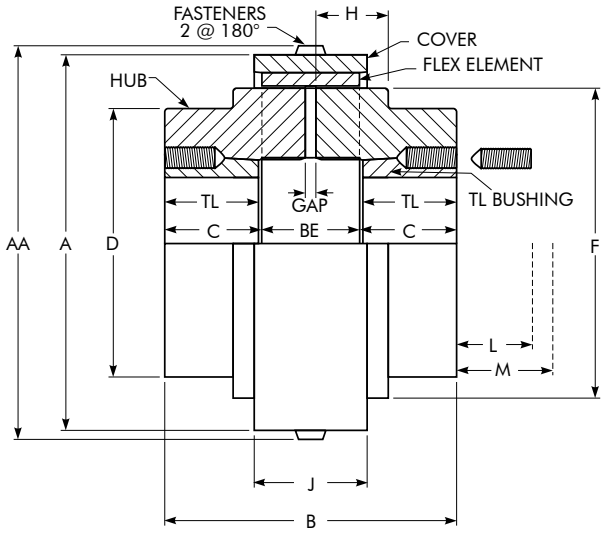
Coupling Size	Cover Fasteners ③		Bushing Fasteners ③ Inch Hardware	AA – Nylon Cover	AA – Steel Cover	A – Nylon Cover	A – Steel Cover	AF ①	B
	Size	Hex Tool							
5R	M4	M2.5	#10-24 x 1.00	3.17	3.17	3.01	3.01	2.00	2.83
10R	M4	M2.5	#10-24 x 1.00	3.72	3.72	3.56	3.56	2.00	2.99
20R	M6	M4	1/4-20 x 1.00	5.20	5.12	4.96	4.88	3.19	3.78
30R	M6	M4	1/4-20 x 1.00	6.01	5.87	5.77	5.63	3.19	3.94
40R	M8	M5	3/8-16 x 1.25	7.48	7.28	7.17	6.97	4.63	4.52
50R	M8	M5	1/2-13 x 1.75	9.41	9.13	9.09	8.82	6.00	5.70
60R	M10	M6	5/8-11 x 2.50	–	10.94	–	10.51	7.25	9.34
70R	M10	M6	5/8-11 x 2.50	–	12.64	–	12.20	7.25	9.69
80R	M10	M6	3/4-10 x 3.00	–	15.00	–	14.57	9.13	14.22

Coupling Size	C	D	E ①	F	G ①	H	J – Nylon Cover	J – Steel Cover	K – Clearance
5R	1.02	2.36	1.00	2.520	0.44	0.59	0.91	0.91	1.16
10R	1.02	2.84	1.00	2.992	0.44	0.75	1.10	1.10	1.16
20R	1.26	3.62	1.81	4.016	0.56	0.98	1.46	1.46	1.19
30R	1.26	4.13	1.81	4.646	0.56	1.14	1.65	1.64	1.19
40R	1.34	5.12	2.00	5.906	0.84	1.34	2.15	2.09	1.50
50R	1.65	7.01	2.63	7.480	1.13	1.81	2.74	2.65	2.13
60R	3.19	8.25	4.50	8.976	1.50	2.37	–	2.64	2.94
70R	3.19	9.88	4.50	10.630	1.50	2.74	–	2.95	2.94
80R	5.20	10.63	6.75	12.913	1.66	3.28	–	3.35	3.50

① Typical – refer to bushing manufacturer for exceptions and service factor limitations.
② 80R requires a special "M" bushing, manufactured for "reverse" mounting. Consult bushing manufacturer.
③ Cover fasteners are ISO 7380, stainless steel, socket button head cap screws. Bushing fasteners are SAE Grade 5 (inch) or ISO 8.8 (metric), hex head cap screws.

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Taper-Lock Bushings Type R10



Dimensions (in)

Coupling Size	Bushing Size	Torque Rating ① (lb-in)	HP per 100 RPM	Max RPM	Max Bore ①	Min Bore ①	Coupling Weight w/o Bushing Nylon Cover (lb)	Coupling Weight w/o Bushing Steel Cover (lb)	GAP
5R	1108	550	0.87	4500	1.125	0.500	1.78	2.08	0.078
10R	1210	1,150	1.82	4500	1.250	0.500	3.44	3.93	0.078
20R	1610	2,800	4.44	4500	1.688	0.500	6.86	7.91	0.078
30R	2012	4,600	7.30	4500	2.125	0.500	10.7	12.1	0.078
40R	2517	9,100	14.4	3600	2.688	0.500	19.4	21.7	0.197
50R	3020	22,200	35.2	3000	3.250	0.875	43.7	47.8	0.197
60R	4040	35,500	56.3	2500	4.438	1.438	–	92.0	0.197
70R	4545	70,900	112	2100	4.938	1.938	–	160	0.197
80R	5050	126,000	200	1800	5.313	2.438	–	238	0.236

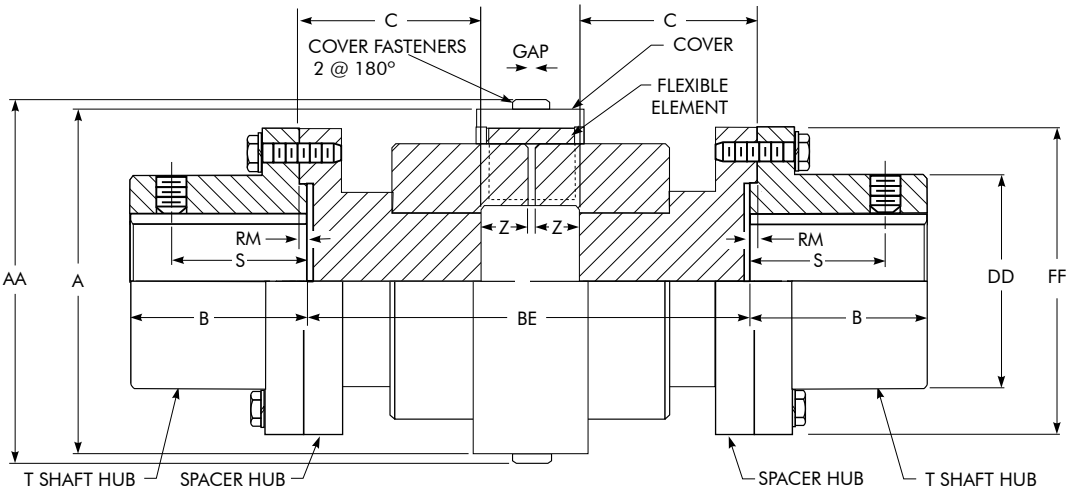
Coupling Size	BE	Cover Fasteners ② Size	Cover Fasteners ② Hex Tool	A – Nylon Cover	A – Steel Cover	AA – Nylon Cover	AA – Steel Cover	B	C
5R	0.78	M4	M2.5	3.01	3.01	3.17	3.17	2.56	0.89
10R	0.94	M4	M2.5	3.56	3.56	3.72	3.72	3.54	1.30
20R	1.26	M6	M4	4.96	4.88	5.20	5.12	3.86	1.30
30R	1.42	M6	M4	5.77	5.63	6.01	5.87	4.72	1.65
40R	1.84	M8	M5	7.17	6.97	7.48	7.28	5.46	1.81
50R	2.39	M8	M5	9.09	8.82	9.41	9.13	6.72	2.17
60R	2.96	M10	M6	–	10.51	–	10.94	10.84	3.94
70R	3.31	M10	M6	–	12.20	–	12.64	12.37	4.53
80R	3.82	M10	M6	–	14.57	–	15.00	13.90	5.04

Coupling Size	D	F	H	J – Nylon Cover	J – Steel Cover	L ③ Standard Hex Key	L ③ Short ⑤ Hex Key	M ④ Standard Hex Key	M ④ Short ⑤ Hex Key	TL
5R	2.36	2.520	0.59	0.91	0.91	1.13	0.63	1.25	0.75	0.875
10R	2.84	2.992	0.75	1.10	1.10	1.38	0.81	1.63	1.06	1.000
20R	3.62	4.016	0.98	1.46	1.46	1.38	0.81	1.63	1.06	1.000
30R	4.13	4.646	1.14	1.65	1.64	1.56	0.94	2.00	1.38	1.250
40R	5.12	5.906	1.34	2.15	2.09	1.63	1.00	2.25	1.63	1.750
50R	7.01	7.480	1.81	2.74	2.65	1.81	1.19	2.69	2.06	2.000
60R	8.25	8.976	2.37	–	2.64	2.38	1.63	4.13	3.38	4.000
70R	9.88	10.630	2.74	–	2.95	2.63	1.94	4.75	4.06	4.500
80R	10.63	12.913	3.28	–	3.35	2.81	2.31	5.25	4.81	5.000

① Typical – refer to bushing manufacturer for exceptions and service factor limitations.
② Cover fasteners are ISO 7380, stainless steel, socket button head cap screws.
③ Space required to tighten bushing. Also, space required to loosen screws to permit removal of hub by puller.
④ Space required to remove bushing using jack screws – no puller required.
⑤ Standard hex key cut to minimum useable length.

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Full Spacer Type R31



Dimensions (in)

Cplg Size ①	NOTE: Distance Between Shaft Ends (BE) = 2(C) + 2(Z) + GAP – 2(RM) Spacer Dimensions																						
	Torque Rating (lb-in)	Allow Speed RPM	Max Bore ⑤	Cplg Wt No Bore – lb		BE		A		AA		B	DD	FF	RM	S	Z	GAP	Cover Fasteners ③		Flange Fasteners ④		T Shaft Hub
				At Min BE (lb)	Per Added BE (lb/in)	Min	Max	Nylon Cover	Steel Cover ②	Nylon Cover	Steel Cover ②								Size	Allen Wrench Tool	Size	No. Per Flange	
5R	550	4500	1.375	8.0	0.79	3.19	9.25	3.01	3.01	3.17	3.17	1.38	2.06	3.39	0.05	1.080	0.35	0.078	M4	M2.5	M6	4	1020T
10R	1,150	4500	1.625	11.0	0.86	3.50	10.00	3.56	3.56	3.72	3.72	1.63	2.34	3.70	0.05	1.240	0.43	0.078	M4	M2.5	M6	8	1030T
20R	2,800	4500	2.125	21.0	1.49	3.50	10.00	4.96	4.88	5.20	5.12	2.13	3.09	4.45	0.05	1.080	0.59	0.078	M6	M4	M6	8	1040T
30R	4,600	4500	2.375	31.0	1.88	4.38	10.00	5.77	5.63	6.01	5.87	2.38	3.44	4.96	0.05	1.600	0.67	0.078	M6	M4	M8	8	1050T
40R	9,100	3600	3.125	57.0	2.23	5.00	12.25	7.17	6.97	7.48	7.28	3.13	4.31	6.02	0.05	1.840	0.83	0.197	M8	M5	M10	12	1070T
50R	22,200	3000	3.500	100.0	3.31	6.50	12.25	9.09	8.82	9.41	9.13	3.50	4.81	7.01	0.05	1.960	1.10	0.197	M8	M5	M12	12	1080T
60R	35,500	2500	4.000	160.0	4.57	7.87	12.25	–	10.51	–	10.94	4.00	5.63	8.27	0.05	–	1.39	0.197	M10	M6	M16	12	1090T
70R	70,900	2100	4.750	225.0	6.59	8.80	14.70	–	12.20	–	12.64	3.56	6.75	9.88	0.06	–	1.56	0.197	M10	M6	M20	12	1100T
70R	70,900	2100	5.500	265.0	6.59	8.80	14.70	–	12.20	–	12.64	4.10	7.75	10.88	0.06	–	1.56	0.197	M10	M6	M20	12	1110T
80R	133,000	1800	6.250	415.0	8.10	9.85	16.69	–	14.57	–	15.00	4.70	8.88	12.56	0.06	–	1.79	0.236	M10	M6	M24	12	1120T
80R	133,000	1800	7.000	505.0	13.60	10.07	16.69	–	14.57	–	15.00	5.30	9.38	13.63	0.06	–	1.79	0.236	M10	M6	M27	12	1130T

① Wrapflex is a metric product. Metric to inch conversions may not be direct. Dimensions are for reference only and are subject to change without notice unless certified.
② 5R-50R nylon cover is standard and epoxy coated steel cover is optional. 60R-80R epoxy coated steel cover is standard (nylon cover not available).
③ Cover fasteners are ISO 7380, stainless steel, socket button head cap screws. Two cover fasteners per coupling.
④ Flange fasteners are ISO Grade 10.9 hex head cap screws for 5R-50R and ISO Grade 8.8 hex head cap screws for 60R.
⑤ Maximum Inch Bore listed is for a standard square key. Larger bores, with a rectangular key, are available. Sizes 5R-50R are standard clearance fit with setscrew over keyway. Size 60R is standard interference fit with keyway, but no setscrew. For interference fit with setscrew over keyway, refer to 427-105.

Taper-Lock Bushings for T Shaft Hubs

Cplg Size	T Shaft Hub	Assembly Torque Rating (lb-in)	HP per 100 RPM	Allow Speed	Bore Range	Bushing Size
5R	1020T	550	0.87	4500	0.500-1.125	1108
10R	1030T	1,150	1.82	4500	0.500-1.125	1108
20R	1040T	2,800	4.44	4500	0.500-1.375	1310
30R	1050T	4,300	6.82	4500	0.500-1.625	1615
40R	1070T	9,100	14.4	3600	0.750-2.500	2525
50R	1080T	11,300	17.9	3000	0.750-2.500	2525
60R	1090T	24,000	38.1	2500	0.938-3.000	3030
70R	1100T	24,000	38.1	2100	0.938-3.000	3030
70R	1110T	44,000	71.1	2100	1.19-3.500	3535
80R	1120T	77,300	122	1800	1.44-4.000	4040
80R	1130T	110,000	174	1800	1.94-4.500	4545

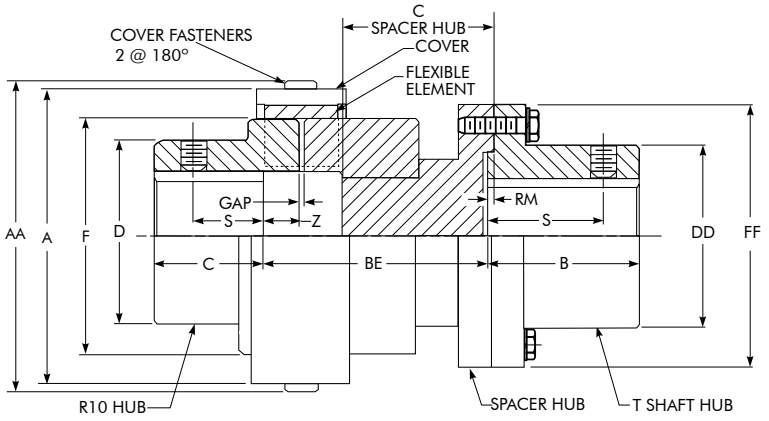
Type R31 Standard Spacer Lengths — Inches

Cplg Size	BE Lengths (Distance Between Shaft Ends)					
	3.50	4.38	5.00	7.25	9.75	10.00
5R	X	X	X	–	–	–
10R	X	X	X	X	–	–
20R	X	X	X	X	–	–
30R	–	X	X	X	–	–
40R	–	–	X	X	X	–
50R	–	–	–	X	X	X
60R	–	–	–	–	X	–

NOTE: Other BE lengths available. Refer to the Factory.

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Half Spacer Type R35



Dimensions (in)

Cplg Size ①	NOTE: Distance Between Shaft Ends (BE) = (C)Spacer Hub + 2(Z) + GAP – RM Spacer Dimensions																								
	Torque Rating (lb-in)	Allow Speed RPM	Max Bore ③		Cplg Wt No Bore (lb)		BE		A		AA		B	C R10 Hub	D	DD	F	FF	RM	S		Z	GAP	T Shaft Hub
			T Shaft Hub	R10 Hub	At Min BE (lb)	Per Added BE (lb/in)	Min	Max	Nylon Cover	Steel Cover ②	Nylon Cover	Steel Cover ②								Shaft Hub ④	R10 Hub ④			
5R	550	4500	1.375	1.625	5.61	0.79	1.99	5.00	3.01	3.01	3.17	3.17	1.38	1.02	2.36	2.06	2.52	3.39	0.05	1.08	0.63	0.35	0.078	1020T
10R	1,150	4500	1.625	1.875	8.73	0.86	2.35	5.51	3.56	3.56	3.72	3.72	1.63	1.34	2.84	2.34	2.99	3.70	0.05	1.24	0.88	0.43	0.078	1030T
20R	2,800	4500	2.125	2.375	18.6	1.49	3.01	5.51	4.96	4.88	5.20	5.12	2.13	1.77	3.62	3.09	4.02	4.45	0.05	1.08	1.00	0.59	0.078	1040T
30R	4,600	4500	2.375	2.875	28.4	1.88	2.33	5.75	5.77	5.63	6.01	5.87	2.38	2.28	4.13	3.44	4.65	4.96	0.05	1.60	1.25	0.67	0.078	1050T
40R	9,100	3600	3.125	3.375	49.4	2.23	3.49	7.25	7.17	6.97	7.48	7.28	3.13	2.64	5.12	4.31	5.91	6.02	0.05	1.84	1.63	0.83	0.197	1070T
50R	22,200	3000	3.500	4.125	90.0	3.31	4.45	7.25	9.09	8.82	9.41	9.13	3.50	3.03	7.01	4.81	7.48	7.01	0.05	1.96	1.75	1.10	0.197	1080T
60R	35,550	2500	4.000	5.250	152	4.57	5.42	8.00	–	10.51	–	10.94	4.00	3.94	8.25	5.63	8.98	8.27	0.05	–	–	1.39	0.197	1090T
70R	70,900	2100	4.750	6.125	234	6.55	6.06	9.01	–	12.20	–	12.64	3.56	4.72	9.88	6.75	10.63	9.88	0.06	–	–	1.56	0.197	1100T
70R	70,900	2100	5.510	6.125	254	6.55	6.06	9.01	–	12.20	–	12.64	4.10	4.72	9.88	7.75	10.63	10.88	0.06	–	–	1.56	0.197	1110T
80R	133,000	1800	6.250	7.250	390	8.04	6.80	10.22	–	14.57	–	15.00	4.70	5.51	10.63	8.88	12.91	12.56	0.06	–	–	1.79	0.236	1120T
80R	133,000	1800	7.000	7.250	425	13.44	6.91	10.22	–	14.57	–	15.00	5.30	5.51	10.63	9.37	12.91	13.62	0.06	–	–	1.79	0.236	1130T

① **IMPORTANT: Upon removal of spacer hub, working clearance available for equipment removal = "BE" – "Z".**
Wrapflex is a metric product. Metric to inch conversions may not be direct. Dimensions are for reference and are subject to change without notice unless certified.

② 5R-50R nylon cover is standard and epoxy coated steel cover is optional. 60R-80R epoxy coated steel cover is standard (nylon cover not available).

③ For R10 hubs see **page 7** for "Max Bore Protruded Shaft" along with the footnote. Maximum Inch Bore listed is for a standard square key. For T shaft hubs only, larger inch bores with a rectangular key are available. Sizes 5R-50R are standard clearance fit with setscrew(s) over keyway. Sizes 60R - 80R are standard interference fit with keyway, but no setscrew. For interference fit with setscrew over keyway, refer to 427-105. For R10 hubs at the Max Bore condition, limit the number of start/stop cycles to 10 per hour unless long hubs are used.

④ Standard for T shaft hub is one setscrew over keyway; standard for R10 hub is two setscrews (one over keyway and one at 90° from keyway), Sizes 5-50R.

R35 Standard Spacer Lengths

Coupling Size	BE	Z	Usable Clearance Gap
5R	2.143	0.35	1.793
	2.362	0.35	2.012
	2.581	0.35	2.231
	2.893	0.35	2.543
	3.500	0.35	3.150
10R	2.004	0.43	1.574
	2.441	0.43	2.011
	2.660	0.43	2.230
	2.973	0.43	2.543
	3.228	0.43	2.798
	3.500	0.43	3.070
	3.937	0.43	3.507
	4.098	0.43	3.668
20R	1.775	0.59	1.185
	2.070	0.59	1.480
	2.510	0.59	1.920
	2.986	0.59	2.396
	3.130	0.59	2.540
	3.386	0.59	2.796
	3.500	0.59	2.910
	3.937	0.59	3.347
	4.255	0.59	3.665

Coupling Size	BE	Z	Usable Clearance Gap
30R	2.332	0.67	1.662
	2.952	0.67	2.282
	3.464	0.67	2.794
	4.333	0.67	3.663
	5.000	0.67	4.330
40R	3.425	0.83	2.595
	3.681	0.83	2.851
	4.468	0.83	3.638
	4.550	0.83	3.720
	5.000	0.83	4.170
	5.800	0.83	4.970
50R	4.745	1.10	3.645
	4.826	1.10	3.726
	6.076	1.10	4.976
	6.201	1.10	5.101
60R	6.359	1.39	4.969

NOTE: Other BE lengths available. Refer to the Factory.

Taper-Lock bushing for R10 hub, see page 9.
QD bushing for R10 hub, see page 8.
Taper-Lock bushing for T shaft hub, see page 10.

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Bore Specifications and Keyways — All Rexnord Couplings

Recommended Hub Bores for Clearance & Interference Fit on Keyed Shafting (in)

Shaft Dia.	Clearance Fit		Interference Fit	
	Hub Bore	Clearance	Hub Bore	Interference
+.0000	+.0010	.0000	+.0005	.0000
-.0005	-.0000	.0015	-.0000	.0010
0.5000	0.5000		0.4990	
0.5625	0.5625		0.5615	
0.625	0.625		0.6240	
0.6875	0.6875		0.6865	
0.7500	0.7500		0.7490	
0.8125	0.8125		0.8115	
0.8750	0.8750		0.8740	
0.9375	0.9375		0.9365	
1.0000	1.0000		0.9990	
1.0625	1.0625		1.0615	
1.1250	1.1250		1.1240	
1.1875	1.1875		1.1865	
1.2500	1.2500		1.2490	
1.3125	1.3125		1.3115	
1.3750	1.3750		1.3740	
1.4375	1.4375		1.4365	
1.5000	1.5000		1.4990	
+.0000	+.0010	.0000	+.0010	.0000
-.0010	-.0000	.0020	-.0000	.0020
1.5625	1.5625		1.5605	
1.6250	1.6250		1.6230	
1.6875	1.6875		1.6855	
1.7500	1.7500		1.7480	
1.8125	1.8125		1.8105	
1.8750	1.8750		1.8730	
1.9375	1.9375		1.9355	
2.0000	2.0000		1.9980	
+.0000	+.0015	.0000	+.0010	.0000
-.0010	-.0000	.0025	-.0000	.0020
2.0625	2.0625		2.0605	
2.1250	2.1250		2.1230	
2.1875	2.1875		2.1855	
2.2500	2.2500		2.2480	
2.3125	2.3125		2.3105	
2.3750	2.3750		2.3730	
2.4375	2.4375		2.4355	
2.5000	2.5000		2.4980	
2.5625	2.5625		2.5605	
2.6250	2.6250		2.6230	
2.6875	2.6875		2.6855	
2.7500	2.7500		2.7480	
2.8125	2.8125		2.8105	
2.8750	2.8750		2.8730	
2.9375	2.9375		2.9355	
3.0000	3.0000		2.9980	

Shaft Dia.	Clearance Fit		Interference Fit	
	Hub Bore	Clearance	Hub Bore	Interference
+.0000	+.0015	.0000	+.0015	.0000
-.0010	-.0000	.0025	-.0000	.0030
3.0625	3.0625		3.0595	
3.1250	3.1250		3.1220	
3.1875	3.1875		3.1845	
3.2500	3.2500		3.2470	
3.3125	3.3125		3.3095	
3.3750	3.3750		3.3720	
3.4375	3.4375		3.4350	
3.5000	3.5000		3.4970	
3.5625	3.5625		3.5595	
3.6250	3.6250		3.6220	
3.6875	3.6875		3.6845	
3.7500	3.7500		3.7470	
3.8125	3.8125		3.8095	
3.8750	3.8750		3.8720	
3.9375	3.9375		3.9345	
4.0000	4.0000		3.9970	
+.0000	+.0015	.0000	+.0015	.0010
-.0010	-.0000	.0025	-.0000	.0035
4.0625	4.0625		4.0590	
4.1250	4.1250		4.1215	
4.1875	4.1875		4.1840	
4.2500	4.2500		4.2465	
4.3125	4.3125		4.3090	
4.3750	4.3750		4.3715	
4.5000	4.5000		4.4965	
4.5625	4.5625		4.5590	
4.6250	4.6250		4.6215	
4.6875	4.6875		4.6840	
4.7500	4.7500		4.7465	
4.8125	4.8125		4.8090	
4.8750	4.8750		4.8715	
4.9375	4.9375		4.9340	
5.0000	5.0000		4.9965	
5.0625	5.0625		5.0585	.0015
5.1250	5.1250		5.1210	.0040
5.1875	5.1875		5.1835	
5.2500	5.2500		5.2460	
5.3125	5.3125		5.3085	
5.3750	5.3750		5.3710	
5.4375	5.4375		5.4335	
5.5000	5.5000		5.4960	
5.5625	5.5625		5.5585	
5.6250	5.6250		5.6210	
5.6875	5.6875		5.6835	
5.7500	5.7500		5.7460	
5.8125	5.8125		5.8085	
5.8750	5.8750		5.8710	
5.9375	5.9375		5.9335	
6.0000	6.0000		5.9960	
6.2500	6.2500		6.2460	
6.5000	6.5000		6.4960	

Shaft Dia.	Interference Fit	
	Hub Bore	Interference
+.0000	+.0015	.0015
-.0010	-.0000	.0040
6.7500	6.7460	
7.0000	6.9960	
+.0000	+.0015	.0020
-.0010	-.0000	.0050
7.250	7.2450	
7.500	7.4950	
7.750	7.7450	
8.000	7.9950	
8.250	8.2445	.0025
8.500	8.4945	.0055
8.750	8.7445	
9.000	8.9945	
9.250	9.2440	.0030
9.500	9.4940	.0060
9.750	9.7440	
10.000	9.9940	
10.250	10.2435	.0035
10.500	10.4935	.0065
10.750	10.7435	
11.000	10.9935	
11.250	11.2430	.0040
11.500	11.4930	.0070
11.750	11.7430	
12.000	11.9930	
12.500	12.4925	.0045
13.000	12.9925	.0075
+.0000	+.0020	.0050
-.0015	-.0000	.0085
13.500	13.4915	
14.000	13.9915	
14.500	14.4910	.0055
15.000	14.9910	.0090
+.0000	+.0025	.0060
-.0015	-.0000	.0100
15.500	15.4900	
16.000	15.9900	
16.500	16.4895	.0065
17.000	16.9895	.0105
17.500	17.4890	.0070
18.000	17.9890	.0110
18.500	18.4890	
19.000	18.9890	
19.500	19.4880	.0080
20.000	19.9880	.0120

NOTE: Consult Rexnord for all keyless bore fits.

Recommended Keyways for Hubs with One Keyway (in)

Nominal Bore		Keyway Size ①	Width Tolerance ②
Over	Thru	Width x Depth	
0.4375	0.5625	0.125 x 0.062	+.0020 -.0000
0.5625	0.875	0.1875 x 0.094	+.0020 -.0000
0.875	1.250	0.250 x 0.125	+.0020 -.0000
1.250	1.375	0.3125 x 0.156	+.0020 -.0000
1.375	1.750	0.375 x 0.188	+.0025 -.0000
1.750	2.250	0.500 x 0.250	+.0025 -.0000
2.250	2.750	0.625 x 0.312	+.0030 -.0000
2.750	3.250	0.750 x 0.375	+.0030 -.0000
3.250	3.750	0.875 x 0.438	+.0030 -.0000

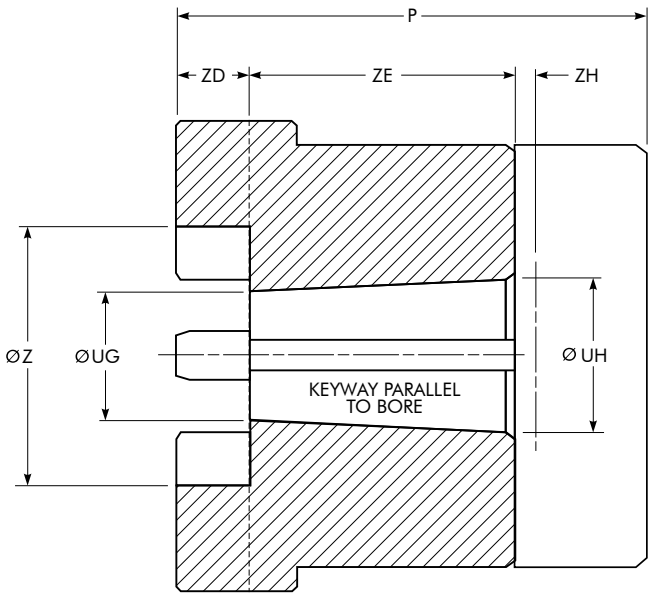
Nominal Bore		Keyway Size ①	Width Tolerance ②
Over	Thru	Width x Depth	
3.750	4.500	1.000 x 0.500	+.0030 -.0000
4.500	5.500	1.250 x 0.625	+.0035 -.0000
5.500	6.500	1.500 x 0.750	+.0035 -.0000
6.500	7.500	1.750 x 0.750	+.0040 -.0000
7.500	9.000	2.000 x 0.750	+.0040 -.0000
9.000	11.000	2.500 x 0.875	+.0045 -.0000
11.000	13.000	3.000 x 1.000	+.0045 -.0000
13.000	15.000	3.500 x 1.250	+.0050 -.0000
15.000	18.000	4.000 x 1.500	+.0050 -.0000

① One square key for bore diameters thru 6.500"; one rectangular key for bore diameters over 6.500".

② Depth tolerance: +.010" to +.020".

NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Mill Motor Selection



Standard AISE AC & DC Mill Motor Coupling Selections (in)

Motor Frame Sizes			Coupling Size	Torque Rating (lb-in)	Ø UG	Ø UH	Ø Z	Keyway	ZD	ZE	ZH +.xxx - .000
602	802 A,B,C	AC 1, 2, 4	40R ①	9,100	1.438	1.750	3.181	0.500 x 0.250	0.83	3.00	0.024
			50R	22,200			4.173	0.500 x 0.250	1.10		
603, 604	803, 804	–	50R	22,200	1.635	2.000	4.173	0.500 x 0.250	1.10	3.50	0.029
			60R	35,500			5.315	0.500 x 0.250	1.39		
606	806	AC 8, 12	50R ①	22,200	2.083	2.500	4.173	0.500 x 0.250	1.10	4.00	0.029
			60R	35,550			5.315	0.500 x 0.250	1.39		
			70R	70,900			6.299	0.500 x 0.250	1.56		
608	808	–	60R	35,550	2.531	3.000	5.315	0.750 x 0.250	1.39	4.50	0.029
			70R	70,900			6.299	0.750 x 0.250	1.56		
			80R	133,000			7.480	0.750 x 0.250	1.79		
610	810	AC 18	70R	70,900	2.781	3.250	6.299	0.750 x 0.250	1.56	4.50	0.034
			80R	133,000			7.480	0.750 x 0.250	1.79		
612	812	AC 25, 30	70R	70,900	3.104	3.625	6.299	0.750 x 0.250	1.56	5.00	0.034
			80R	133,000			7.480	0.750 x 0.250	1.79		
614	814	AC 40, 50	80R	133,000	3.729	4.250	7.480	1.000 x 0.375	1.79	5.00	0.034

Taper & Counter Bore Limitations (in)

Coupling Size	P Max	Ø UG Min	Ø UH Max	Ø Z Max	ZD Max	ZE Min	Keyway ②
5R	2.40	0.500	1.500	1.535	0.362	0.827	0.375 x 0.188
10R	3.11	0.500	1.750	1.811	0.441	1.000	0.375 x 0.188
20R	4.13	0.750	2.250	2.311	0.598	1.063	0.500 x 0.250
30R	5.24	1.000	2.500	2.559	0.677	1.339	0.625 x 0.313
40R	6.10	1.125	3.125	3.181	0.835	1.339	0.750 x 0.375
50R	7.17	1.125	4.125	4.173	1.110	1.811	1.000 x 0.500
60R	7.29	1.250	5.250	5.315	1.394	2.126	1.250 x 0.625
70R	8.65	1.500	6.125	6.299	1.571	2.244	1.500 x 0.750
80R	10.06	1.500	7.250	7.480	1.795	2.618	1.750 x 0.875

① Must use "standard" socket on mill motor nut. "Impact" socket will not fit.
② Keyway shown is for maximum bore with square key.

Type R10 Mill Motor Hubs

Mill Motor Frame Size			R10 Flex Hubs								
			5R	10R	20R	30R	40R	50R	60R	70R	80R
602	802 A, B, C	AC 1, 2 & 4	–	–	–	–	X	X	–	–	–
603 604	803 804		–	–	–	–	Consult Rexnord	X	X	–	–
606	806	AC 8 & 12	–	–	–	–	–	X	X	X	–
608	808		–	–	–	–	–	–	X	X	X
610	810	AC 18	–	–	–	–	–	–	Consult Rexnord	X	X
612	812	AC 25 & 50	–	–	–	–	–	–	–	X	X
614	814	AC 40 & 50	–	–	–	–	–	–	–	X	X

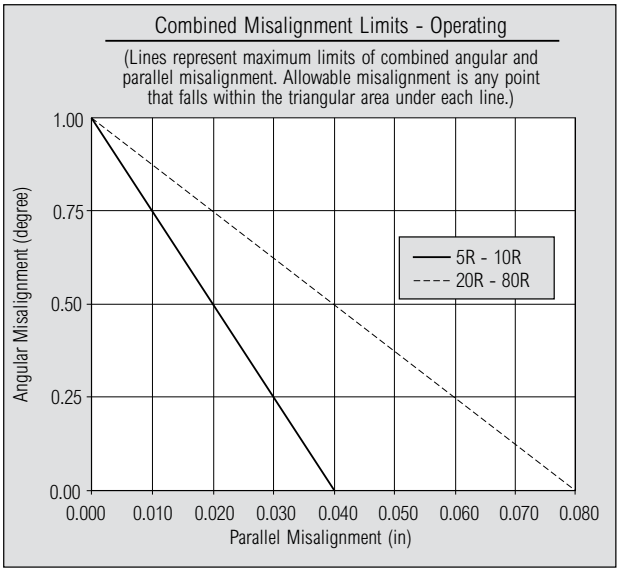
NOTE: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Misalignment Capacity, Mass & WR²

Installation & Operating Misalignment Capacity

Coupling Size	Installation Limits		Operating Limits	
	Parallel Offset (in)	Angular (degree)	Parallel Offset (in)	Angular (degree)
5R	0.020	0.25	0.040	1.00
10R	0.020	0.25	0.040	1.00
20R	0.040	0.25	0.080	1.00
30R	0.040	0.25	0.080	1.00
40R	0.040	0.25	0.080	1.00
50R	0.040	0.25	0.080	1.00
60R	0.040	0.25	0.080	1.00
70R	0.040	0.25	0.080	1.00
80R	0.040	0.25	0.080	1.00

70D Black Insert		
Used With	Torque	Temp (F)
Nylon Cover	+ 25%	225
Steel Cover	+ 35%	250



Mass & WR²

R10 Mass						
Coupling Size	Element (lb)	Nylon Cover (lb)	Steel Cover (lb)	R10 Hub (No Bore) (lb)	Total w/Nylon Cover (lb)	Total w/Steel Cover (lb)
5R	0.070	0.068	0.38	1.41	2.96	3.27
10R	0.13	0.11	0.61	2.62	5.48	5.98
20R	0.41	0.28	1.29	5.84	12.4	13.4
30R	0.63	0.37	1.82	9.83	20.7	22.1
40R	1.30	0.86	3.13	17.7	37.6	39.8
50R	2.70	1.70	5.83	37.2	78.8	82.9
60R	4.08	–	7.29	67.1	–	146
70R	6.17	–	10.2	114	–	244
80R	10.2	–	14.6	170	–	365

R10 WR²						
Coupling Size	Element (lb-in²)	Nylon Cover (lb-in²)	Steel Cover (lb-in²)	R10 Hub (No Bore) (lb-in²)	Total w/Nylon Cover (lb-in²)	Total w/Steel Cover (lb-in²)
5R	0.090	0.14	0.76	1.05	2.33	2.95
10R	0.23	0.32	1.73	2.80	6.15	7.56
20R	1.35	1.57	7.02	10.5	23.9	29.4
30R	2.75	2.80	13.2	23.2	52.0	62.4
40R	8.84	10.1	35.3	65.6	150	175
50R	30.4	31.8	106	245	552	626
60R	67.8	–	188	621	–	1,498
70R	141	–	358	1,500	–	3,499
80R	334	–	740	2,950	–	6,974

R31/R35 WR² Values ①									
Coupling Size	T31 Shaft Hub	R31 Assembly ②				R35 Assembly ③			
		Min BE (in)	WR² at Min BE (lb-in²)		WR² (lb-in²) per Inch	Min BE (in)	WR² at Min BE (lb-in²)		WR² (lb-in²) per Inch
			Nylon Cover	Steel Cover			Nylon Cover	Steel Cover	
5R	1020	3.19	7.53	8.15	0.351	1.99	4.93	5.55	0.351
10R	1030	3.50	13.6	15.0	0.413	2.35	9.61	11.0	0.413
20R	1040	3.50	39.1	44.8	1.253	3.01	33.0	38.4	1.253
30R	1050	4.38	72.4	82.3	1.980	3.45	65.9	75.8	1.980
40R	1070	5.00	217	243	4.164	3.49	184	209	4.164
50R	1080	6.50	579	654	10.78	4.45	565	640	10.78
60R	1090	7.87	–	1500	20.35	5.42	–	1500	20.35
70R	1100	8.80	–	2970	40.58	6.06	–	3230	40.58
70R	1110	8.80	–	3620	40.58	6.06	–	3550	40.58
80R	1120	9.78	–	7670	61.97	6.80	–	7210	61.97
80R	1130	10.00	–	9610	144.8	6.91	–	8190	144.8

① WR² values are based on hubs with no bore.
② For R31 Mass, refer to **page 10**.
③ For R35 Mass, refer to **page 11**.

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