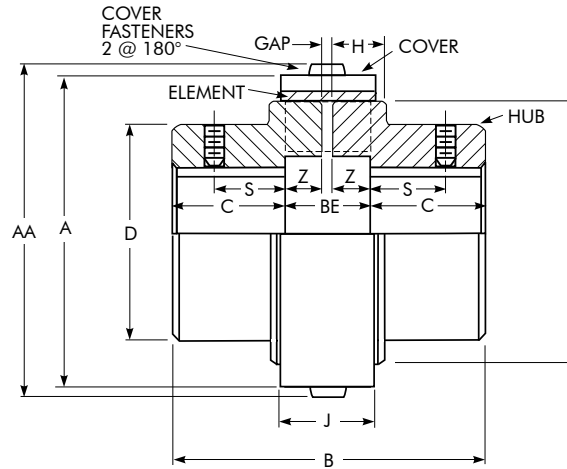


Falk Wrapflex Coupling Selection

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

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: $(0.20)(\text{Bore})^2(C)$ 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.

Bore Specifications and Keyways — All Rexnord Couplings

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

Shaft Dia.	Clearance Fit		Interference Fit		Shaft Dia.	Clearance Fit		Interference Fit		Shaft Dia.	Interference Fit						
	Hub Bore	Clearance	Hub Bore	Interference		Hub Bore	Clearance	Hub Bore	Interference		Hub Bore	Interference					
+0.000	+0.010	.0000	+0.0005	.0000	+0.000	+0.015	.0000	+0.015	.0000	+0.000	+0.015	.0015					
-0.005	-0.000	.0015	-0.0000	.0010	-0.010	-0.000	.0025	-0.0000	.0030	-0.010	-0.000	.0040					
0.5000	0.5000	↓	0.4990	↓	3.0625	3.0625	↓	3.0595	↓	6.7500	6.7460	↓					
0.5625	0.5625		0.5615		3.1250	3.1250		3.1220									
0.625	0.625		0.6240		3.1875	3.1875		3.1845									
0.6875	0.6875		0.6865		3.2500	3.2500		3.2470									
0.7500	0.7500		0.7490		3.3125	3.3125		3.3095									
0.8125	0.8125		0.8115		3.3750	3.3750		3.3720									
0.8750	0.8750		0.8740		3.4375	3.4375		3.4350									
0.9375	0.9375		0.9365		3.5000	3.5000		3.4970									
1.0000	1.0000		0.9990		3.5625	3.5625		3.5595									
1.0625	1.0625		1.0615		3.6250	3.6250		3.6220									
1.1250	1.1250		1.1240		3.6875	3.6875		3.6845									
1.1875	1.1875		1.1865		3.7500	3.7500		3.7470									
1.2500	1.2500		1.2490		3.8125	3.8125		3.8095									
1.3125	1.3125		1.3115		3.8750	3.8750		3.8720									
1.3750	1.3750		1.3740		3.9375	3.9375		3.9345									
1.4375	1.4375	1.4365	4.0000	4.0000	3.9970												
1.5000	1.5000	1.4990															
+0.000	+0.010	.0000	+0.010	.0000	+0.000	+0.015	.0000	+0.015	.0010	10.250	10.2435	.0035					
-0.010	-0.000	.0020	-0.0000	.0020	-0.010	-0.000	.0025	-0.0000	.0035	10.500	10.4935	.0065					
1.5625	1.5625	↓	1.5605	↓	4.0625	4.0625	↓	4.0590	↓	10.750	10.7435	↓					
1.6250	1.6250		1.6230		4.1250	4.1250		4.1215									
1.6875	1.6875		1.6855		4.1875	4.1875		4.1840									
1.7500	1.7500		1.7480		4.2500	4.2500		4.2465									
1.8125	1.8125		1.8105		4.3125	4.3125		4.3090									
1.8750	1.8750		1.8730		4.3750	4.3750		4.3715									
1.9375	1.9375		1.9355		4.5000	4.5000		4.4965									
2.0000	2.0000		1.9980		4.5625	4.5625		4.5590									
+0.000	+0.015		.0000		+0.010	.0000		4.6250		4.6250	↓		4.6215	↓	11.000	10.9935	↓
-0.010	-0.000		.0025		-0.0000	.0020		4.6875		4.6875			4.6840				
2.0625	2.0625		2.0605		4.7500	4.7500		4.7465									
2.1250	2.1250		2.1230		4.8125	4.8125		4.8090									
2.1875	2.1875		2.1855		4.8750	4.8750		4.8715									
2.2500	2.2500		2.2480		4.9375	4.9375		4.9340									
2.3125	2.3125		2.3105		5.0000	5.0000		4.9965									
2.3750	2.3750	2.3730	5.0625	5.0625	5.0585												
2.4375	2.4375	2.4355	5.1250	5.1250	5.1210												
2.5000	2.5000	2.4980	5.1875	5.1875	5.1835												
2.5625	2.5625	2.5605	5.2500	5.2500	5.2460												
2.6250	2.6250	2.6230	5.3125	5.3125	5.3085												
2.6875	2.6875	2.6855	5.3750	5.3750	5.3710												
2.7500	2.7500	2.7480	5.4375	5.4375	5.4335												
2.8125	2.8125	2.8105	5.5000	5.5000	5.4960												
2.8750	2.8750	2.8730	5.5625	5.5625	5.5585												
2.9375	2.9375	2.9355	5.6250	5.6250	5.6210												
3.0000	3.0000	2.9980	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												
						5.0585	.0015			+0.000	+0.025	.0060					
						5.1210	.0040			-0.015	-0.000	.0100					
						5.1835				15.500	15.4900						
						5.2460				16.000	15.9900						
						5.3085				16.500	16.4895	.0065					
						5.3710				17.000	16.9895	.0105					
						5.4335				17.500	17.4890	.0070					
						5.4960				18.000	17.9890	.0110					
						5.5585				18.500	18.4890						
						5.6210				19.000	18.9890						
						5.6835				19.500	19.4880	.0080					
						5.7460				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	Nominal Bore		Keyway Size ①	Width Tolerance ②
Over	Thru			Over	Thru		
0.4375	0.5625	0.125 x 0.062	+0.0020 -0.0000	3.750	4.500	1.000 x 0.500	+0.0030 -0.0000
0.5625	0.875	0.1875 x 0.094	+0.0020 -0.0000	4.500	5.500	1.250 x 0.625	+0.0035 -0.0000
0.875	1.250	0.250 x 0.125	+0.0020 -0.0000	5.500	6.500	1.500 x 0.750	+0.0035 -0.0000
1.250	1.375	0.3125 x 0.156	+0.0020 -0.0000	6.500	7.500	1.750 x 0.750	+0.0040 -0.0000
1.375	1.750	0.375 x 0.188	+0.0025 -0.0000	7.500	9.000	2.000 x 0.750	+0.0040 -0.0000
1.750	2.250	0.500 x 0.250	+0.0025 -0.0000	9.000	11.000	2.500 x 0.875	+0.0045 -0.0000
2.250	2.750	0.625 x 0.312	+0.0030 -0.0000	11.000	13.000	3.000 x 1.000	+0.0045 -0.0000
2.750	3.250	0.750 x 0.375	+0.0030 -0.0000	13.000	15.000	3.500 x 1.250	+0.0050 -0.0000
3.250	3.750	0.875 x 0.438	+0.0030 -0.0000	15.000	18.000	4.000 x 1.500	+0.0050 -0.0000

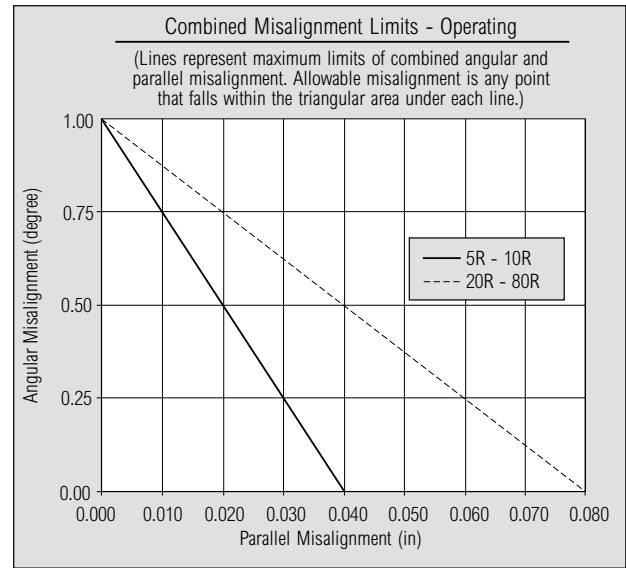
① One square key for bore diameters thru 6.500"; one rectangular key for bore diameters over 6.500".
 ② Depth tolerance: +.010" to +.020".

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 WR ²						
Coupling Size	Element (lb-in ²)	Nylon Cover (lb-in ²)	Steel Cover (lb-in ²)	R10 Hub (No Bore) (lb-in ²)	Total w/Nylon Cover (lb-in ²)	Total w/Steel Cover (lb-in ²)
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 WR ² Values ①									
Coupling Size	T31 Shaft Hub	R31 Assembly ②				R35 Assembly ③			
		Min BE (in)	WR ² at Min BE (lb-in ²)		WR ² (lb-in ²) per Inch	Min BE (in)	WR ² at Min BE (lb-in ²)		WR ² (lb-in ²) 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**.