

# THOMAS® FLEXIBLE DISC COUPLINGS

## CLOSE-COUPLED TYPES DBZ, DBZ-A, DBZ-B

The standard DBZ coupling has two hubs inverted inside the disc pack and is used where overall shaft to shaft spacing is minimal.

DBZ style has both hubs with inverted orientation.

DBZ-A style has one hub extended to permit taper boring.

DBZ-B style has both hubs extended to allow for greater spacing where required.

### Construction

Hubs and Center Assembly: Carbon Steel

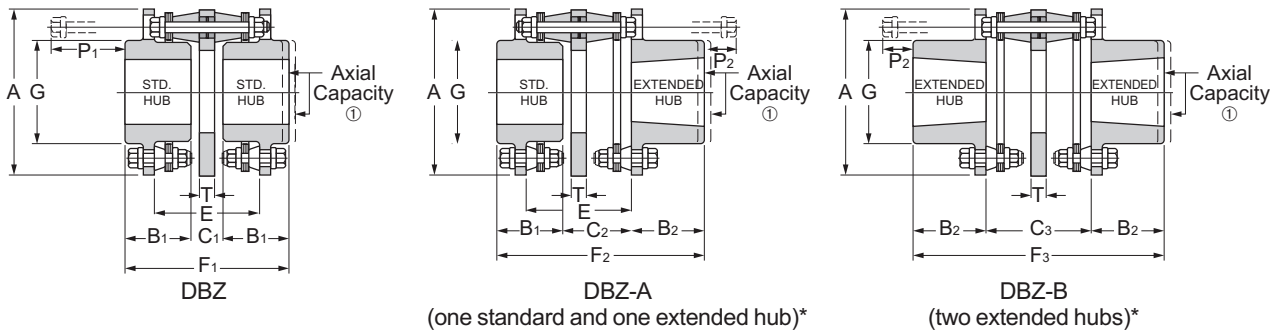
Bolts: Alloy Steel

Disc Packs: Tomaloy

Coatings Available: Black Oxide, Zinc, Cadmium

Other materials such as Stainless Steel, Monel and Inconel are available; please consult Rexnord Industries, Inc.

Misalignment: 1/2° per disc pack



General Dimensions (inch)

Coupling Size	Standard Hub Maximum Bore	Extended Hub Maximum Bore	A	B1	B2	C1	C2	C3	E	F1	F2	F3	G	P1	P2	T
50	0.63	0.63	2.00	0.88	0.88	0.32	0.84	1.36	1.36	2.08	2.60	3.12	1.00	1.25	0.78	0.19
62	0.75	0.75	2.44	1.09	1.09	0.38	1.05	1.72	1.72	2.56	3.23	3.90	1.19	1.56	1.06	0.25
75	0.88	0.88	2.69	1.12	1.12	0.37	1.06	1.75	1.75	2.61	3.30	3.99	1.44	1.56	1.06	0.25
101	1.13	1.16	3.22	1.38	1.38	0.69	1.39	2.08	2.08	3.45	4.15	4.84	1.69	1.69	1.00	0.31
126	1.38	1.38	3.84	1.50	1.62	0.96	1.70	2.45	2.45	3.96	4.82	5.69	2.06	2.00	1.13	0.41
163	1.88	1.88	4.56	1.69	1.88	0.95	1.70	2.45	2.45	4.33	5.27	6.21	2.75	1.81	0.88	0.41
201	2.13	2.25	5.34	1.94	2.12	0.96	1.96	2.96	2.96	4.84	6.02	7.20	3.28	2.31	1.13	0.56
226	2.38	2.63	6.06	2.38	3.62	1.22	2.53	3.84	3.84	5.98	7.53	9.08	3.78	2.69	1.13	0.66
263	2.88	3.00	7.00	2.75	3.00	1.31	2.81	4.31	4.31	6.81	8.56	10.31	4.44	3.00	1.25	0.75
301	3.13	3.50	8.00	3.12	3.44	1.50	3.19	4.88	4.88	7.74	9.75	11.76	5.06	3.56	1.56	0.84
351	3.63	4.00	9.38	3.69	4.06	1.80	3.86	5.92	5.92	9.18	11.61	14.04	5.81	4.50	2.06	1.06
401	4.13	4.50	10.69	4.19	4.62	1.94	4.32	6.70	6.70	10.32	13.13	15.94	6.63	5.13	2.31	1.19
451	4.63	4.75	12.13	4.75	5.25	2.12	4.72	7.28	7.28	11.66	14.72	17.78	7.38	5.44	2.38	1.34

### Engineering Data

Coupling Size	Max. Horsepower Per 100 RPM Service Factor	③ Max. RPM		Max. Continuous Torque (lb.-in.)	Peak Overload Torque (lb.-in.)	④ Weight (lb.)			④ WR <sup>2</sup> (lb.-in.)			① Axial Capacity (in.)
		Not Balanced	Balanced			DBZ	DBZ-A	DBZ-B	DBZ	DBZ-A	DBZ-B	
	1.0											
50	0.23	6,000	9,000	145	220	0.7	0.7	0.7	0.3	0.3	0.3	±0.023
62	0.39	6,000	8,200	246	370	1.5	1.5	1.5	0.7	0.7	0.7	±0.028
75	0.56	6,000	7,800	353	530	1.9	1.9	1.9	1.5	1.5	1.5	±0.032
101	1.10	6,000	7,100	693	1,040	3.3	3.3	3.3	4.5	4.5	4.5	±0.038
126	2.00	5,500	6,500	1,260	1,900	5.5	5.6	5.7	9.9	10.1	10.1	±0.046
163	2.70	5,000	6,000	1,700	2,600	8.4	8.6	8.8	21.0	21.0	22.0	±0.057
201	4.79	4,600	5,500	3,020	4,500	14.4	14.4	15.4	53.0	53.0	54.0	±0.067
226	8.73	4,100	5,200	5,500	8,300	21.0	22.0	23.0	95.0	95.0	105	±0.076
263	13.6	3,700	4,800	8,600	12,900	33.0	34.0	35.0	199	209	209	±0.089
301	20.5	3,300	4,500	12,900	19,400	50.0	52.0	54.0	365	375	385	±0.102
351	35.9	2,900	4,100	22,600	33,900	83.0	87.0	90.0	916	936	965	±0.118
401	52.7	2,700	3,900	33,200	49,800	125	125	135	1,705	1,710	1,710	±0.136
451	68.9	2,600	3,600	43,400	65,100	170	180	180	3,168	3,170	3,270	±0.154

For ordering instructions, see Page 10-11.

① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.

② Popular sized standard hubs bore with keyway and setscrew are stocked. See page 11 for stocked bore sizes.

③ See Page 7 for explanation of RPM limits and balancing recommendations.

④ Weight and WR<sup>2</sup> at maximum bore.

⑤ Hubs furnished without a finished bore will be solid.

\* Extended hubs can be supplied with straight bores or taper bores.

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