

The Series 44 is an all-steel fully machined flywheel adapter style coupling. It is used in heavy-duty applications where high starting torque, shock loads, torque reversals or alternating torques are present. This coupling is similar to the type CMR, but with the following benefits:

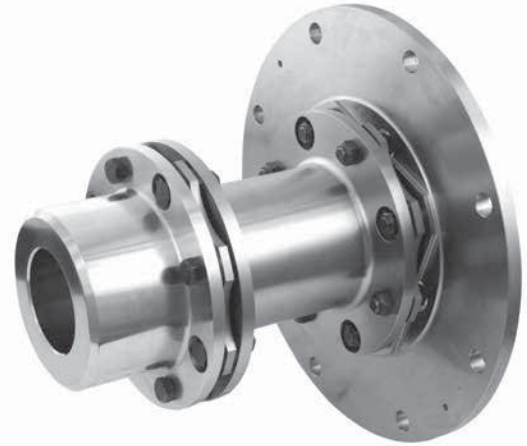
Dimension "C" and spool are adjustable to meet specific spacing requirements and/or to make adjustment to torsional characteristics.

The all-steel design provides a higher maximum continuous and peak overload torque rating. Fully-machined components offer a higher operating speed and balancing level.

Construction

- Hubs and Center Assembly: Carbon Steel
- Bolts: Alloy Steel
- Disc Packs: Tomaloy Tpack (225-750 Size)
- Coatings Available: Black Oxide, Zinc, Cadmium
- Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.
- Misalignment: 1/3° per disc pack

When specified, Series 44 couplings meet all requirements of API 610 or API 671. If application requires API specification, please consult Rexnord.



Flywheel to Adapter Bolt Patterns

Standard A Diameter (in)	Light-Duty SAE Bolting			Heavy-Duty Thomas Bolting		
	Bolt Circle	No. Holes	Size (Dia.)	Bolt Circle	No. Holes	Size (Dia.)
12.375	11.62	8	0.41	11.50	8	0.53
13.875	13.12	8	0.41	12.50	8	0.66
16.000	N/A	N/A	N/A	14.37	8	0.78
18.375	17.25	8	0.53	16.75	8	0.78
20.375	19.25	8	0.53	18.50	8	0.91
22.500	21.38	6	0.66	20.50	8	1.03
26.500	25.25	12	0.66	24.50	12	1.03
28.875	27.25	12	0.78	26.88	12	1.03

All dimensions listed are in inches and bolt holes are equally spaced.

Flywheel Adapter Information*

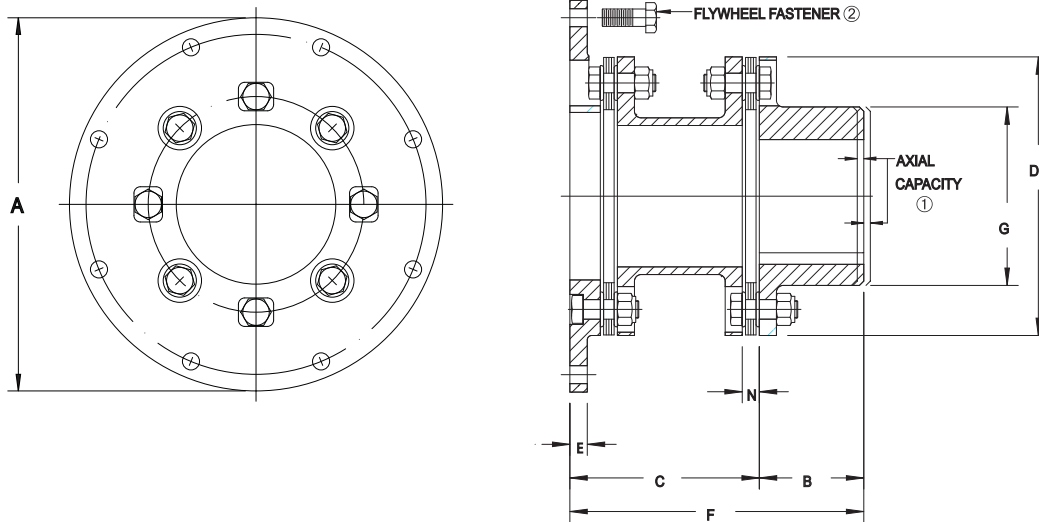
Adapters can be furnished to accommodate most flange designs. Where possible, the user should select dimensions from the tables shown, as these represent industry standards that are more economical and readily available. Note that most sizes can be supplied with either SAE light-duty bolting or Thomas heavy-duty bolting. Please contact Rexnord for custom designs.

Coupling Size	Minimum Adapter "A" Dia.	① Standard Available Adapter Diameters (in) - Actual OD Tolerance as Listed							
		12.375	13.875	16.00	18.375	20.375	22.500	26.500	28.875
		12.373	13.873	15.998	18.373	20.372	22.497	26.497	28.872
350	10.88	Wt. = 3.88 WR ² = 132	Wt. = 8.25 WR ² = 320	Wt. = 15.3 WR ² = 716	Wt. = 24.4 WR ² = 1,391	Wt. = 33 WR ² = 2,200	Wt. = 43.1 WR ² = 3,365		
375	11.88	Wt. = 1.51 WR ² = 56	Wt. = 6.41 WR ² = 267	Wt. = 14.3 WR ² = 710	Wt. = 24.5 WR ² = 1,466	Wt. = 34.1 WR ² = 2,371	Wt. = 45.5 WR ² = 3,681		
425	13.12		Wt. = 2.79 WR ² = 127	Wt. = 11.5 WR ² = 616	Wt. = 22.8 WR ² = 1,453	Wt. = 33.5 WR ² = 2,460	Wt. = 46 WR ² = 3,901		
450	14.75			Wt. = 5.89 WR ² = 349	Wt. = 18.4 WR ² = 1,277	Wt. = 30.3 WR ² = 2,396	Wt. = 44.3 WR ² = 4,008	Wt. = 74.3 WR ² = 8,543	
500	16.00			Wt. = 0 WR ² = 0 ①	Wt. = 13.6 WR ² = 1,009	Wt. = 26.5 WR ² = 2,223	Wt. = 41.7 WR ² = 3,973	Wt. = 74.4 WR ² = 8,912	Wt. = 96.3 WR ² = 13,118
550	18.00				Wt. = 2.67 WR ² = 221	Wt. = 17.8 WR ² = 1,645	Wt. = 35.6 WR ² = 3,695	Wt. = 74 WR ² = 9,493	Wt. = 99.7 WR ² = 14,429
600	18.38				Wt. = 0 WR ² = 0 ①	Wt. = 17.2 WR ² = 1,618	Wt. = 37.5 WR ² = 3,956	Wt. = 81 WR ² = 10,529	Wt. = 110 WR ² = 16,107
700	20.38					Wt. = 0 WR ² = 0 ①	Wt. = 20.3 WR ² = 2,338	Wt. = 63.8 WR ² = 8,911	Wt. = 93 WR ² = 14,519
750	24.00							Wt. = 31.4 WR ² = 5,017	Wt. = 64.2 WR ² = 11,313
800	25.62							Wt. = 12.7 WR ² = 2,157	Wt. = 49.2 WR ² = 9,166
850	27.38								Wt. = 23.4 WR ² = 4,631
925	28.88								Wt. = 0 WR ² = 0 ①
1000	31.62	No industry standards exist for adapters to fit couplings this size or larger. Consult Rexnord.							

* Weight adder values are given in pounds. WR² values are given in lb-in².

① Wt. and WR² is zero if the listed minimum adapter "A" diameter is the same as complete coupling calculated values in general dimension tables on page 18.

NOTE: Add Wt. and WR² values listed in table to the weight and inertia values provided on page 18 for given size to calculate actual values based on selected adapter size.



General Dimensions (in)

Coupling Size	Max. Bore	Min. "A" Dia.	B	Std. C	Min. C	D	E	F (Ref.)	G	N
350	4.00	10.88	3.75	5.88	5.15	8.69	0.50	9.63	5.88	0.54
375	4.50	11.88	4.00	6.62	5.71	9.69	0.56	10.62	6.50	0.59
425	4.75	13.12	4.25	7.18	6.15	10.50	0.62	11.43	7.00	0.62
450	5.13	14.75	4.50	7.62	6.71	11.31	0.69	12.12	7.44	0.71
500	5.38	16.00	5.00	8.75	7.53	12.88	0.75	13.75	8.38	0.78
550	6.00	18.00	5.50	9.88	8.53	14.44	0.88	15.38	9.44	0.91
600	6.50	18.38	6.00	10.88	9.36	16.00	1.00	16.88	10.25	0.98
700	7.50	20.38	7.00	12.44	10.68	18.25	1.00	19.44	11.75	1.20
750	8.00	24.00	7.50	13.50	11.58	19.81	1.12	21.00	12.62	1.27
800	8.75	25.62	8.25	14.75	12.68	21.50	1.25	23.00	13.62	1.34
850	9.25	27.38	8.75	15.75	13.59	23.00	1.25	24.50	14.50	1.40
925	10.12	28.88	9.50	17.25	14.56	25.00	1.38	26.75	15.75	1.50
1000	11.00	31.62	10.50	18.56	16.91	27.50	1.62	29.06	17.25	1.69

Coupling Size	Max. Horsepower Per 100 Service Factor 1.0	Max. RPM ^③		Max. Continuous Torque (lb-in)	Peak Overload Torque (lb-in) ^④	Weight (lb) ^⑤	Weight Change Per Inch of "C" (lb)	WR ² (lb-in ²) ^⑤	WR ² Change Per Inch of "C" (lb-in ²)	Axial Capacity (in) ^①
		Not Balanced	Balanced							
350	92.2	3,200	10,500	58,080	116,160	51	0.83	588	4.82	± 0.056
375	135	3,000	9,400	85,000	170,000	70	1.03	994	7.21	± 0.062
425	150	2,800	8,700	94,500	189,000	93	1.42	1,560	11.68	± 0.067
450	216	2,700	8,100	136,125	272,250	120	1.47	2,450	13.72	± 0.072
500	319	2,500	7,100	200,750	401,500	177	2.29	4,340	27.17	± 0.082
550	494	2,300	6,300	311,430	622,860	259	2.88	8,090	42.75	± 0.092
600	624	2,150	5,700	393,325	786,650	325	3.35	11,835	61.50	± 0.102
700	793	1,950	5,000	499,870	999,740	490	4.86	22,435	108	± 0.115
750	1037	1,850	4,600	653,725	1,307,450	642	5.37	36,510	146	± 0.125
800	1387	1,750	4,300	874,000	1,748,000	803	5.54	54,155	199	± 0.136
850	1782	1,600	3,900	1,123,375	2,246,750	975	6.67	74,430	284	± 0.144
925	2450	1,500	3,600	1,544,400	3,088,800	1,289	8.49	113,780	413	± 0.156
1000	2813	1,500	3,250	1,773,200	3,546,400	1,655	8.54	173,840	506	± 0.172

- ① Thomas disc couplings meet NEMA MG1-14.37, 1-20.81, & 1-21.81 specifications without the addition of end-float restricting devices.
- ② Flywheel fasteners are not supplied with this coupling. Contact equipment manufacturer for this hardware and tightening instructions.
- ③ Maximum speeds are based on use with all standard available adapters. For larger sizes or higher speeds, please consult Rexnord.
- ④ The peak overload torque rating is an infrequent torque overload limit and not an alternating or vibratory torque limit.
- ⑤ Weight and WR² values are based on maximum bores and minimum adapter diameters listed above.