

CMR couplings are used in heavy-duty, slow to medium speed applications, where high-starting torque, shock loads, torque reversals or continuous alternating torque are present. The open lug type center member provides ample clearance for assembly while minimizing the space required for coupling installation.

The CMR couplings are designed with a flywheel adapter plate which bolts directly to the flywheel of an engine or compressor. The adapters are made to fit accurately into the recess in the flywheel, and external strains on the crankshaft resulting from the misalignment of the driven equipment is minimized.

Construction

Hubs: Sizes 162 - 550 are carbon steel with integral washer, sizes 600 and larger are carbon steel with separate grooved washer

Center Section: Sizes 162-750 are cast alloy iron, Sizes 800 and above are cast steel

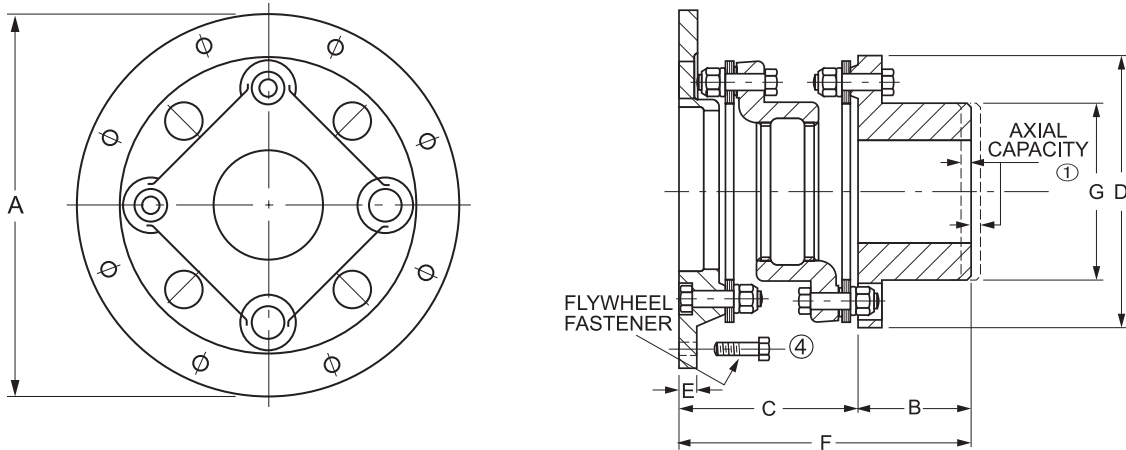
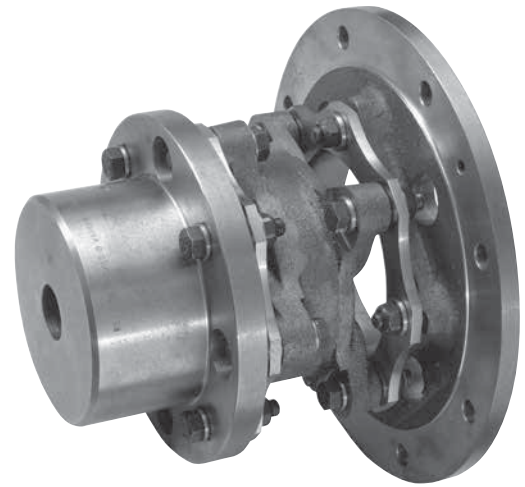
Bolts: Alloy steel

Disc Packs: Tomaloy Tpack (225-750 size)

Coatings: Consult Rexnord

Other disc pack materials such as stainless steel, Monel and Inconel are available; please consult Rexnord.

Misalignment: 1/3° per disc pack



Flywheel Adapter Information

Adapters can be furnished to accommodate virtually any flange design. Where possible, the user should select dimensions from the tables below, as these represent industry standards and thus are the most economical selection. Note that most sizes are available either with SAE bolting or Thomas heavy-duty bolting.

Available Adapters

Coupling Size	Adapters Available in Shaded Sizes (in)										
	8.500	9.500	10.375	12.375	13.875	16.000	18.375	20.375	22.500	26.500	28.875
Adapter Tolerance	8.498	9.498	10.373	12.373	13.873	15.998	18.373	20.372	22.497	26.497	28.872
162											
200											
225											
262											
312											
350											
375											
425											
450											
500											
550											
600											
700											
750											
800											
850											

Available In These Sizes

Sizes 925 to 1550 - Adapting dimensions available upon request.

Bolting

Standard A Diameter (in)	Light-Duty SAE Bolting			Heavy-Duty Thomas Bolting		
	Bolt Circle	No. Holes	Size (Dia.)	Bolt Circle	No. Holes	Size (Dia.)
8.5	7.88	6	0.34	7.50	8	0.41
9.5	8.75	8	0.34	8.62	8	0.47
10.38	9.62	6	0.41	9.50	8	0.47
12.38	11.62	8	0.41	11.50	8	0.53
13.88	13.12	8	0.41	12.50	8	0.66
16	-	-	-	14.38	8	0.78
18.38	17.25	8	0.53	16.75	8	0.78
20.38	19.25	8	0.53	18.50	8	0.91
22.5	21.38	6	0.66	20.50	8	1.03
26.5	25.25	12	0.66	24.50	12	1.03
28.88	27.25	12	0.78	26.88	12	1.03

General Dimensions (in)

Coupling Size	⑦ Rough Bore	② Max. Bore	Min. "A" Dia.	B	C	D	E	F	G
162	—	1.88	6.25	1.75	3.32	4.56	0.31	5.07	2.75
200	—	2.25	7.38	2.12	3.87	5.75	0.38	5.99	3.62
225	—	2.63	7.62	2.50	3.87	6.00	0.38	6.37	3.88
262	—	3.13	8.50	2.88	4.47	6.88	0.44	7.35	4.50
312	—	3.63	9.50	3.38	5.34	8.12	0.50	8.72	5.44
350	—	4.00	10.88	3.75	5.89	9.12	0.50	9.64	6.00
375	—	4.50	11.88	4.00	6.62	10.06	0.56	10.62	6.50
425	—	4.75	13.12	4.25	7.18	11.00	0.62	11.43	7.00
450	—	5.13	14.75	4.50	7.68	11.88	0.69	12.18	7.44
500	2.69	5.38	16.00	5.00	8.75	13.44	0.75	13.75	8.38
550	2.69	6.00	18.00	5.50	9.89	15.00	0.88	15.39	9.44
600	3.69	6.50	18.38	6.00	10.89	16.75	1.00	16.89	10.31
700	4.25	7.50	20.38	7.00	12.48	18.94	1.00	19.48	11.75
750	4.94	8.00	24.00	7.25	13.54	20.62	1.12	20.79	12.62
800	5.19	8.75	25.62	7.75	14.74	22.38	1.25	22.49	13.75
850	5.44	9.25	27.38	8.25	15.86	23.75	1.25	24.11	14.50
925	5.94	10.12	28.88	9.00	17.24	25.75	1.38	26.24	15.88
1000	6.50	11.00	31.62	9.50	18.57	28.25	1.62	28.07	17.50
1100	7.00	12.00	33.38	10.25	19.81	30.25	1.75	30.06	18.50
1200	7.50	13.00	37.50	11.00	21.56	33.88	2.00	32.56	20.25
1300	8.00	14.00	39.88	12.00	23.31	36.00	2.12	35.31	22.12
1550	8.50	15.50	43.62	14.50	23.75	39.25	2.12	38.25	26.00

Coupling Size	Max. Horsepower per 100 RPM	③ Max. RPM	Max. Continuous Torque (lb-in)	⑧ Peak Overload Torque (lb-in)	⑤ ⑥ Weight (lb)	⑤ WR ² (lb-in ²)	① Axial Capacity
	Service Factor 1.0						
162	9.1	2,500	5,740	6,888	8	27	±0.036
200	17.5	2,500	11,030	13,236	12	68	±0.036
225	24.7	2,500	15,575	18,690	16	83	±0.036
262	33.4	2,500	21,038	25,245	25	178	±0.043
312	37.5	2,500	23,650	28,380	39	367	±0.051
350	83.8	2,300	52,800	63,360	56	630	±0.056
375	126	2,200	79,442	95,330	77	1,040	±0.062
425	140	2,200	88,000	105,600	101	1,780	±0.067
450	216	1,900	136,125	163,350	126	2,470	±0.072
500	319	1,800	200,750	240,900	178	4,310	±0.082
550	436	1,800	275,055	330,066	245	7,700	±0.092
600	569	1,800	358,875	430,650	321	11,500	±0.102
700	724	1,500	456,500	547,800	481	21,200	±0.115
750	1,023	1,500	644,930	773,916	610	34,300	±0.125
800	1,291	1,200	813,780	976,536	800	58,700	±0.136
850	1,426	1,100	898,700	1,078,440	975	73,300	±0.144
925	2,033	1,000	1,281,280	1,537,536	1,180	107,000	±0.156
1000	2,360	900	1,487,200	1,784,640	1,650	156,000	±0.172
1100	3,246	800	2,046,000	2,455,200	1,950	247,000	±0.183
1200	3,494	650	2,202,200	2,642,640	2,550	407,000	±0.203
1300	3,787	600	2,387,000	2,864,400	3,320	567,000	±0.218
1550	4,957	600	3,124,000	3,748,800	4,100	840,000	±0.242

- ① All Thomas disc couplings meet NEMA frame sleeve bearing motor specifications without modification or the addition of end-float restricting devices.
- ② Straight bores with no keyway require special material.
- ③ Maximum speeds are based on smallest available adapter O.D. For higher speeds, consult Rexnord.
- ④ Flywheel bolts are not supplied with coupling.
- ⑤ Weight and WR² at maximum bores and minimum adapter diameter.
- ⑥ Special hub available for size 600 with 6.75 in. max. bore. Consult Rexnord.
- ⑦ Consult Rexnord for minimum rough bore on sizes 162-450.
- ⑧ The peak overload torque is not an alternating torque limit.