ZERO-MAX

CD® Power-Series Composite Disc Coupling

Installation Instructions For Single-Flex Flange Mount Couplings

Tools Required

- Calibrated torque wrench
- Hex socket set
- Shaft alignment tools
- Cleaning cloth
- Caliper

- These instructions are for standard series couplings with normal running conditions. Special couplings may have different instructions or drawings.

- CD Power-Series Flange Couplings are for applications where the equipment designer supplies their own hubs or flanges to connect the CD Coupling Flange Hubs. Pilots are highly recommended for concentricity. Customer pilots to be H6 / H7 / G6 when piloting on the OD of the Flange Hub or h6/ h7 / g6 when piloting on the ID of the Flange Hub. Consult catalog for flange dimensions.

- When initially mounting the coupling, the misalignment may be one and one half times the maximum permissible misalignment shown in the catalog. Inspect flange and mounting surfaces making sure there are no burrs. Clean flange bores and mounting faces, for both coupling flange and the mating flange on equipment.

- Adjust the separation of the mating flanges on the equipment to dimension “OAL” specified in the Table on page 2.

- Install CD Coupling Flange(s) to the mating equipment’s Flange(s). Flange faces to be flush to each other and bolt holes in mating flange to be lined up with the threaded mounting holes in the Coupling Flange before installing fasteners.

- Install fasteners hand tightening initially. **Do not apply lubricant to the screw threads.** Tighten fasteners half turn in a continuous “star” or “crisscross” sequence until fasteners reach tightening torque. After each fastener has been tightened to the proper torque, repeat tightening sequence at the specified tightening torque.

- Repeat this procedure for the second flange of the coupling.

- Align the Flanges on the equipment within the limits for axial, parallel, and angular misalignment specified on the Table on page 2. For best alignment results, use a laser alignment tool or dial indicator. If not available, a straight edge and feeler gauges can be used.

Note: Aligning the shafts as closely as possible at the time of initial installation will reduce noise and allow the coupling extra capacity for misalignments and loads which will occur during operation over the life of the connected equipment. Installing and operating coupling at higher degrees of misalignment is possible (see catalog ratings), but will generally reduce the life of the composite disc pack.

Note: Coupling and shaft alignment should be checked periodically due to foundation settling, equipment shifting, etc. Alignment should be re-checked after the first several hours of operation.

⚠ **Caution: Rotating equipment is potentially dangerous and should be properly guarded. It is the responsibility of the machine builder, user, or operator to follow all applicable safety codes and provide a suitable guard. Make sure the machine is “locked out” and cannot be accidently started during installation or maintenance of coupling.**

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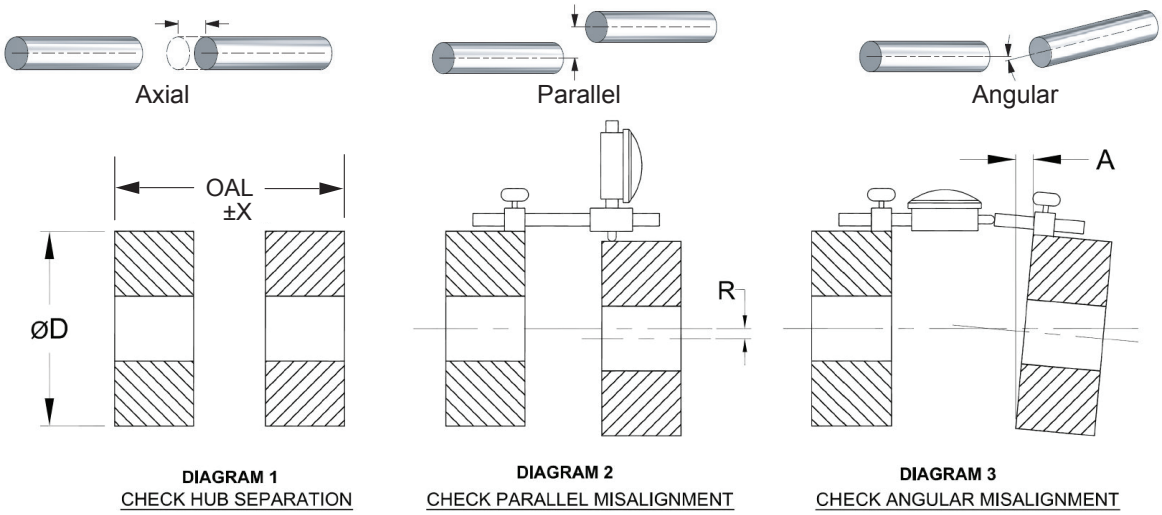

DIAGRAM 1
CHECK HUB SEPARATION

DIAGRAM 2
CHECK PARALLEL MISALIGNMENT

DIAGRAM 3
CHECK ANGULAR MISALIGNMENT

Table 1: Alignment and Assembly Specifications for Single-Flex Flange Mount

	OAL ± X Axial Separation and Misalignment	R Parallel Misalignment	A Angular Misalignment		Disc Pack Socket Head Cap Screw		Flange Fastener Specifications (see note 1)		
Model	**Inch (mm)**	**Inch (mm)**	**Inch (mm)**	**Angle (degrees)**	**Wrench Size**	**Tightening Torque**	**Fastener Size**	**Min Screw-in-depth**	**Tightening Torque**
8A55	0.793 ± 0.003 (20.14 ± 0.075)	0.0002 (0.0051)	0.005 (0.12)	0.125	2.5 mm	13 in lb (148 Ncm)	M4	5 mm 0.20 in	43 in lb (4.8 Nm)
8A67	0.981 ± 0.004 (24.92 ± 0.10)	0.0002 (0.0051)	0.006 (0.15)	0.125	3 mm	28 in lb (320 Ncm)	M6	7 mm 0.27 in	141 in lb (16 Nm)
12A85	1.069 ± 0.003 (27.15 ± 0.075)	0.0003 (0.0076)	0.005 (0.12)	0.084	4 mm	59 in lb (7 Nm)	M8	9 mm 0.35 in	335 in lb (38 Nm)
12A95	1.270 ± 0.003 (32.26 ± 0.075)	0.0004 (0.010)	0.005 (0.14)	0.084	4 mm	71 in lb (8 Nm)	M10	11 mm 0.43 in	56 ft lb (76 Nm)
12A105	1.528 ± 0.004 (38.81 ± 0.10)	0.0004 (0.010)	0.006 (0.15)	0.084	5 mm	119 in lb (13 Nm)	M10	11 mm 0.43 in	56 ft lb (76 Nm)
12A120	1.904 ± 0.004 (48.36 ± 0.10)	0.0004 (0.010)	0.007 (0.18)	0.084	6 mm	188 in lb (21 Nm)	M14	16 mm 0.63 in	150 ft lb (205 Nm)
12A140	2.060 ± 0.005 (52.32 ± 0.13)	0.0005 (0.013)	0.008 (0.21)	0.084	6 mm	298 in lb (34 Nm)	M16	18 mm 0.70 in	228 ft lb (310 Nm)
12A165	2.396 ± 0.006 (60.86 ± 0.15)	0.0006 (0.015)	0.010 (0.24)	0.084	8 mm	48 ft lb (65 Nm)	M18	20 mm 0.79 in	325 ft lb (440 Nm)
12A190	3.068 ± 0.007 (77.93 ± 0.18)	0.0008 (0.020)	0.011 (0.28)	0.084	10 mm	78 ft lb (105 Nm)	M24	27 mm 1.06 in	750 ft lb (1,016 Nm)
12A215	3.326 ± 0.007 (84.48 ± 0.18)	0.001 (0.025)	0.012 (0.32)	0.084	12 mm	118 ft lb (160 Nm)	M27	30 mm 1.18 in	1,095 ft lb (1,485 Nm)

1: Tightening torques for screws in accordance with DIN 13-1 (coefficient of friction = 0.14) for CL10.9 fasteners. CL12.9 may also be used.

Note: The above misalignment specifications are recommended values for installation.They allow for extra capacity from operation over time. Refer to the catalog for maximum allowable misalignment specifications.

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