

Schmidt Flexible Coupling

Installation Instructions For Schmidt Flexible Couplings

TOOLS REQUIRED

- · Calibrated torque wrench
- · Hex socket set
- · Shaft alignment tools
- · Cleaning cloth
- Caliper
- These instructions are for standard series Schmidt Flexible Couplings with normal running conditions. Special couplings may have different instructions or drawings.
- Inspect hub bores, shafts, and keyways making sure there are no burrs. Clean hub bores and shafts. Standard coupling hubs are supplied with slight clearance fit (see catalog).
- Install the coupling onto the shafts. It is recommended that the ends of both shafts be flush with the inside face of each hub. If the shaft extends inward beyond the hub face, verify there is enough clearance between shaft and flexible element so the shaft will not contact the flexible element during operation. Tighten the set screw in one hub to lock the hub onto the shaft. See Table 1 on page 2 for the proper tightening torque. If access is limited for checking misalignment, do not tighten set screw and see Alignment Note.
- Adjust hub separation to dimension "C" specified in Table 1 on page 2. Tighten the second hub's set screw to lock the hub onto the shaft. See Table 1 on page 2 for the proper tightening torque.
- Align the shafts within the limits for parallel and angular misalignment specified 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.



Alignment Note: If access to the coupling does not allow for checking of misalignment, use the following process: With the set screws loose, move the coupling slightly back and forth axially and rotate on shafts back and forth. The coupling should move smoothly with little resistance. If it does not move smoothly, realign the shafts. After the shafts are aligned, tighten one set screw to lock the hub onto the shaft. See the Table 1 for the proper tightening torque. Adjust hub separation to dimension "C" specified in the Table 1. Tighten the second hub's set screw to lock the hub onto the shaft.



Aligning a Coupling with Limited Access Detail

Note: When installing the coupling, shaft alignment is critical. Proper shaft alignment will improve the performance of the coupling. When properly aligned, the coupling has the extra capacity for misalignment and loads which will occur due to machine settling and equipment wear. Installing the coupling at higher degrees of misalignment is possible (see catalog ratings), but may reduce the operational life of the coupling flex disc.

Note: Coupling and shaft misalignment should be check periodically due to foundation settling, equipment shifting, etc. Alignment should be rechecked 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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Table 1: Alignment and Assembly Specifications for Schmidt Flexible Couplings.

SINGLE DISC	COUPLING ALIGNMENT	SPECIFICATIONS
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	Maximum Separation and Misalignments							Set Screw Specs			
Model	C See Diagram 1		R See Diagram 2		A See Diagram 3		Screw	Hex	Tightening Torque		
	Inch	mm	Inch	mm	Inch	mm	3126	3126	(ury values)		
F008A	0.250 + 0.008	6.35 ± 0.2	0.005	0.13	0.013	0.33	#8-32	5/64	20 in-lb	2.2 Nm	
F011A	0.375 ± 0.011	9.52 ± 0.28	0.008	0.20	0.020	0.50	#10-32	3/32	36 in-lb	4.1 Nm	
F019A	0.750 ± 0.019	19.05 ± 0.48	0.010	0.25	0.033	0.84	1/4"-20	1/8"	87 in-lb	9.8 Nm	
F028A	0.812 ± 0.025	20.62 ± 0.64	0.010	0.25	0.049	1.25	3/8"-16	3/16"	290 in-lb	33 Nm	

DOUBLE DISC COUPLING ALIGNMENT SPECIFICATIONS

	Maximum Separation and Misalignments						Set Screw Specs			
Model	C See Diagram 1		R See Diagram 2		A See Diagram 3		Screw	Hex	Tightening Torque	
	Inch	mm	Inch	mm	Inch	mm	Size	Size	(ury values)	
F008B	0.390 ± 0.008	9.91 ± 0.2	0.005	0.13	0.013	0.33	#8-32	5/64	20 in-lb	2.2 Nm
F011B	0.688 ± 0.011	17.48 ± 0.28	0.008	0.20	0.020	0.50	#10-32	3/32	36 in-lb	4.1 Nm
F019B	1.375 ± 0.019	34.93 ± 0.48	0.010	0.25	0.033	0.84	1/4"-20	1/8"	87 in-lb	9.8 Nm
F028B	1.375 ± 0.025	34.93 ± 0.64	0.010	0.25	0.049	1.25	3/8"-16	3/16"	290 in-lb	33 Nm

DOUBLE DISC SPACER COUPLING ALIGNMENT SPECIFICATIONS

Model	Maximum Separation and Misalignments							Set Screw Specs			
	C See Diagram 1		R See Diagram 2		A See Diagram 3		Screw Size	Hex	Tightening Torque		
	Inch	mm	Inch	mm	Inch	mm	3126	3126	(ury values)		
F011C	1.125 ± 0.011	28.57 ± 0.28	0.016	0.41	0.040	1.0	#10-32	3/32	36 in-lb	4.1 Nm	
F019C	2.000 <u>+</u> 0.019	50.80 <u>+</u> 0.48	0.020	0.50	0.066	1.68	1/4"-20	1/8"	87 in-lb	9.8 Nm	

