

D-FLEX COUPLINGS INSTALLATION INSTRUCTIONS

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see www.dodge-pt.com for updated instruction manuals.

WARNING: To ensure that drive is not unexpectedly started, turn off and lock out power source before proceeding. Failure to observe these precautions could result in bodily injury.

WARNING: All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.

This manual encompasses the standard sizes and types of the DODGE D-FLEX® coupling. Determine the size and type from the markings on the components. Remove all components from their boxes, and loosely assemble the coupling on a convenient surface. (Do not attempt to install the wire ring on two-piece sleeves at this time.) Also check maximum RPM values in Table 1 against operating speed. All rubber sleeves (EPDM and Neoprene) have the same ratings for a given size and may be used interchangeably. However, because rubber and Hytrel sleeves have completely different ratings, they should never be used interchangeably.

NOTE: For spacer assemblies, center adapter is torqued and match marked to spacer flange. If bolt position is modified, contact Dodge Engineering.

1. Inspect all coupling components and remove any protective coatings or lubricants from bores, mating surfaces, and fasteners. Remove any existing burrs, etc. from the shafts.
2. Slide one coupling flange, if spacers are used slide spacer hub onto each shaft using snug-fitting keys where required. With the type B flange, install QD bushing per DODGE instruction manual MN4049 which is available from www.dodge-pt.com
3. Position the flanges to dimension "B" shown in Table 1, (for spacer flange position to dimension "BSE"). For close-coupled D-Flex couplings (Type J, Type S and Type B), position flanges to dimension "B" (Figure 1) as shown in Table 1. For Type SC spacer couplings, position to desired between shaft end, or "BSE" dimension (Figure 2).
4. Slide the loose flange on the shaft until the sleeve is completely seated in the teeth of each flange. (The "B" dimension is for reference and not critical.) If spacer flanges are used, compress element between shaft hubs and slide into position between shaft ends. Secure the flange to the shaft using the torque values from Table 2.

Different coupling sleeves require different degrees of alignment precision. Locate the alignment values for your sleeve size and type in Table 1.

WARNING: Because of the possible danger to persons(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided and are neither provided by Baldor Electric Company nor are the responsibility of Baldor Electric Company. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

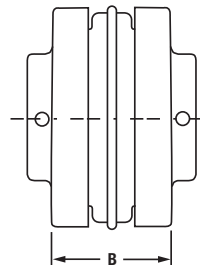


Figure 1 - B Dimension

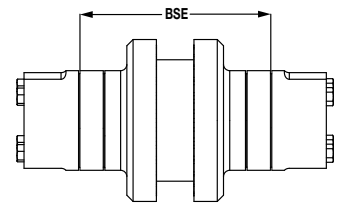


Figure 2 - BSE Dimension

NOTE: Check the parallel offset by laying a straight edge across the OD of the flanges (Figure 3) in four places 90° apart without rotating the coupling. If the gap between the flange and straight edge exceeds the value shown under "Parallel" in Table 1, realign the shafts.

NOTE: Check angular alignment by measuring dimension "B" (Figure 4) at four places 90° apart without rotating the coupling. Adjust the equipment until the four measurements do not vary more than the value given under "Angular" in Table 1. If a correction is necessary, recheck the parallel alignment after the correction is made.

5. If the coupling employs the two-piece sleeve with the wire ring, force the ring into its groove in the center of the sleeve. It may be necessary to pry the ring into position with a blunt screwdriver.
6. Install coupling guards per OSHA or applicable requirements. Guarding should be designed so that coupling sleeve will be contained within the guard in the event that the coupling sleeve is thrown from the coupling assembly.

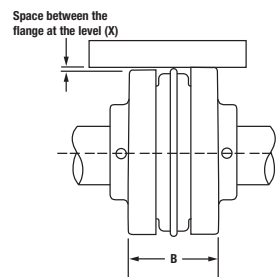


Figure 3 - Parallel Measurement

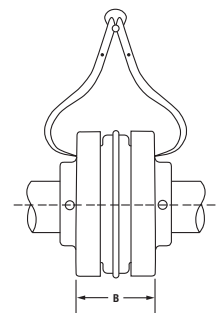


Figure 4 - Angular Measurement

Table 1 - Maximum RPM and Allowable Misalignment ①

Sleeve Size	Maximum RPM	Type E, JE, JES & JN, JNS						Type H & HS ②					
		Parallel (see Figure 2)		Angular		"B" ④		Parallel ④		Angular		"B" ④	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
3	9200	.010	0.25	.035	0.89	1.188	30.18	-	-	-	-	-	-
4	7600	.010	0.25	.043	1.09	1.500	38.10	-	-	-	-	-	-
5	7600	.015	0.38	.056	1.42	1.938	49.23	-	-	-	-	-	-
6	6000	.015	0.38	.070	1.78	2.375 ③	60.33 ③	.010	0.25	.016	0.41	2.375	60.33
7	5250	.020	0.51	.081	2.06	2.563	65.10	.012	0.30	.020	0.51	2.563	65.10
8	4500	.020	0.51	.094	2.39	2.938	74.63	.015	0.38	.025	0.64	2.938	74.63
9	3750	.025	0.64	.109	2.77	3.500	88.90	.017	0.43	.028	0.71	3.500	88.90
10	3600	.025	0.64	.128	3.25	4.063	103.20	.020	0.51	.032	0.81	4.063	103.20
11	3600	.032	0.81	.151	3.84	4.875	123.83	.022	0.56	.037	0.94	4.875	123.83
12	2800	.032	0.81	.175	4.45	5.688	144.48	.025	0.64	.042	1.07	5.688	144.48
13	2400	.040	1.02	.195	4.95	6.625	168.28	.030	0.76	.050	1.27	6.625	168.28
14	2200	.045	1.14	.242	6.15	7.750	196.85	.035	0.89	.060	1.52	7.750	196.85
16	1500	.062	1.57	.330	8.38	10.250	260.35	-	-	-	-	-	-

NOTE:

- ① Values shown above apply if the actual torque transmitted is more than one-fourth the coupling rating. For lesser torque, reduce the above values by one-half.
- ② Hytrel (type H and HS) sleeves should not be used as direct replacements for EPDM (type E, JE & JES) or Neoprene (type N, JN & JNS) sleeves.
- ③ B-Value when using 6J flanges is 2.125.
- ④ To ease assembly of type SC spacer couplings add one-sixteenth inch to the "B" dimension.

Table 2 - Fastener Torque Values

Coupling Size	TYPE J		TYPE S		TYPE B		TYPE SC*					
	2 Setscrews at 65°		2 Setscrews at 65°		3 Hex Head Cap Screws		4 Hex Head Cap Screws Flange to Hub		1 Setscrew over Keyway in Hub		4 Metric Hex Head Cap Screws Flange to Hub	
	ft.-lbs.	Nm	ft.-lbs.	Nm	ft.-lbs.	Nm	ft.-lbs.	Nm	ft.-lbs.	Nm	ft.-lbs.	Nm
3	3	4	-	-	-	-	-	-	-	-	-	-
4	3	4	-	-	-	-	-	-	13	18	-	-
5	7	9	13	18	-	-	4	5	13	18	25	34
6	13	18	13	18	5	7	9	12	13	18	35	48
7	-	-	13	18	5	7	9	12	13	18	64	87
8	-	-	23	31	9	12	18	24	23	31	64	87
9	-	-	23	31	9	12	31	42	23	31	102	138
10	-	-	23	31	15	20	60	81	50	68	148	200
11	-	-	23	31	30	41	75	102	50	68	148	200
12	-	-	50	68	60	81	150	203	100	136	274	372
13	-	-	100	136	75	102	150	203	165	224	429	581
14	-	-	100	136	75	102	150	203	165	224	-	-
16	-	-	100	136	135	183	150	203	165	224	-	-

*Torque values apply to hub size when different than flange size.

ATEX Approved D-FLEX Couplings

These instructions do not cover all details or variations in equipment nor provide every possible contingency or hazard to be met in connection with installation, operation, and maintenance. Should further information be desired, or should particular problems arise which are not covered in this manual, the matter should be referred to your local Baldor•Dodge representative.

DODGE Elastomeric couplings are manufactured under the guidelines of the ATEX directive 94/9/EC.

DODGE Elastomeric couplings are suitable for ATEX category 2 and M2, Group II and I for gas and dust environments and are also suitable for ATEX category 3 for all gas or dust environments with ignition temperatures higher than T5 = 100° C.

A sticker indicating ATEX certification will be attached to the product or on the box containing the product and will be similar to the following:

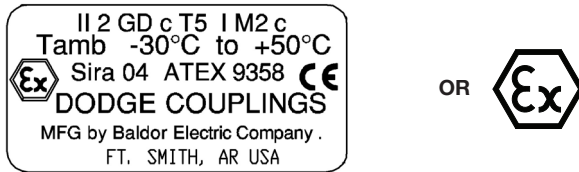


Figure 9 - ATEX Certification

WARNING: These couplings are designed to operate with surface temperatures below 100°C when properly installed and selected. Excessive temperatures greater than 80°C is a result of an abnormal operating condition caused by:

1. **Improper installation - refer to installation manual for proper procedures**
2. **Excessive misalignment - re-align coupling / shafts**
3. **Failure of the coupling element - replace elastomeric**
4. **Excessive speed - re-evaluate application and selection**
5. **Excessive vibration - determine source, re-evaluate application**

If applied in a Division 1 or Zone 1 environment, the excessive temperature may cause ignition of hazardous materials.

In hazardous environments, DODGE elastomeric couplings should not be considered as fail safe or “break-away” power transmission devices. Overloads imposed to these devices could cause irreparable damage, shall be considered an explosive hazard, could create projectiles, and/or could cause torque transmission interruptions. The coupling shall be sized and used to the stated torque capabilities of the unit as published in the DODGE PT Components Engineering Catalog. Any assistance needed in selection shall be referred to a Baldor•Dodge representative.

