

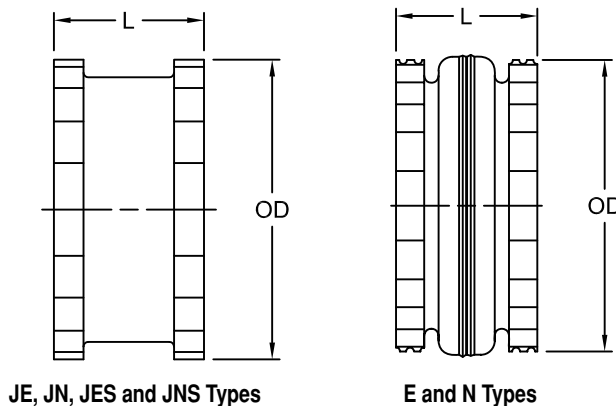
S-Flex Sleeve Types

S-Flex Sleeves

- Flexible sleeves for Lovejoy S-Flex couplings are available in three materials (EPDM, Neoprene, and Hytrel®) and in three basic designs: one piece solid, one-piece split, or two piece

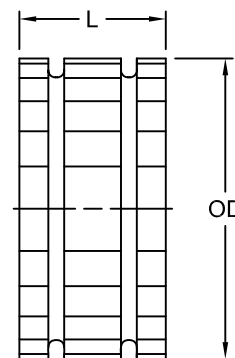
JE, JN, JES and JNS Types

- JE and JN Type sleeves feature a one-piece solid design
- JES and JNS Type sleeves feature a one-piece split design
- JE and JES Type sleeves are molded in EPDM material
- JN and JNS Type sleeves are molded in Neoprene material



E and N Types

- E and N Type sleeves feature a two-piece design with retaining ring
- E Type sleeves are made from EPDM material and are available in sizes 5-16
- N Type sleeves are made from Neoprene material and are available in sizes 5-14
- Two piece sleeves are ideal for applications where small shaft separations inhibit the installation of a one piece sleeve



H and HS Types

H and HS Types

- H and HS Type sleeves are designed for high torque applications, transmitting about 4 times as much power as an equivalent EPDM or Neoprene sleeve
- Hytrel sleeves are available in a one-piece solid (H) or two-piece split (HS) construction
- Hytrel sleeves can be used only with S or SC flanges and can not be used with J or B flanges
- Hytrel sleeves should not be used as direct replacements for EPDM or Neoprene applications
- H and HS Type sleeves are available for sizes 6-14 (sizes 13 and 14 are available in HS only)

Sleeve Dimensional Data

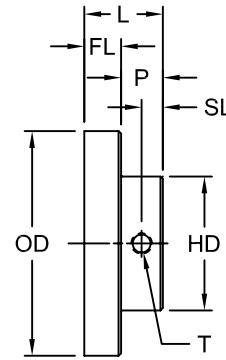
Size	Types JE, JES, JN & JNS			Types E & N			Types H & HS		
	EPDM & Neoprene			EPDM & Neoprene			Hytrel		
	L in	OD in	Weight lbs	L in	OD in	Weight lbs	L in	OD in	Weight lbs
3	1.00	1.88	0.06	—	—	—	—	—	—
4	1.25	2.31	0.10	—	—	—	—	—	—
5	1.56	2.94	0.20	1.56	2.94	0.25	—	—	—
6	1.88	3.75	0.40	1.88	3.75	0.49	1.88	3.75	0.44
7	2.19	4.34	0.62	2.19	4.34	0.77	2.19	4.34	0.69
8	2.50	5.06	1.13	2.50	5.06	1.40	2.50	5.06	1.40
9	3.00	6.00	1.46	3.00	6.00	2.00	3.00	6.00	1.80
10	3.44	7.06	2.32	3.44	7.06	3.20	3.44	7.06	2.90
11	—	—	—	4.00	8.19	5.10	4.00	8.19	4.50
12	—	—	—	4.69	9.56	8.10	4.69	8.56	7.30
13	—	—	—	5.50	11.19	13.00	5.50	11.19	11.80
14	—	—	—	6.50	13.09	21.10	6.50	13.09	19.30
16	—	—	—	8.75	17.91	45.30	—	—	—

Note: ■ See page SF-12 for Performance Data.

J Type Flanges and J Type Couplings

J Type Flanges

- The J Type flanges in sizes 3J and 4J are made from die cast of high strength zinc alloy (tensile strength of 41,000 psi) and are furnished bore-to-size
- Size 5J is provided in either zinc alloy or cast iron depending on the bore size
- Size 6J is made from cast iron
- J flanges are compatible with EPDM or Neoprene sleeves
- Each flange has a keyway and two set screws (one set screw over the key and one at 90° to the keyway)

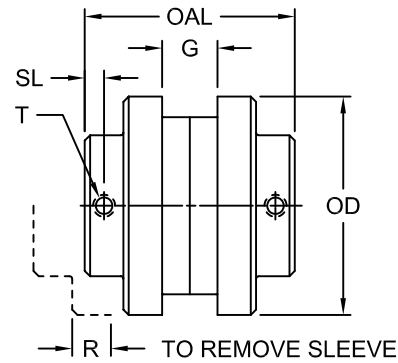


J Type Flange

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J Type Coupling

- Complete S-Flex couplings, with J Type flanges described above, are normally supplied with the one-piece JE sleeve or the one-piece split JES sleeve. An optional JN (Neoprene, one-piece) sleeve or the one-piece split JNS sleeve
- Sizes 5J and 6J couplings are also available with E and N two piece sleeves



J Type Coupling

J Type Dimensional Data

Size	Max Bore with Standard Keyway	L	FL	P	SL	OD	T	HD	OAL	G'	R	Weight	
												Flange	Coupling
		in	in	in	in	in	in	in	in	in	in	lbs	lbs
3J	0.875	0.81	0.38	0.44	0.25	2.062	1/4-20	1.50	2.00	0.44	0.56	0.30	0.68
4J	1.000	0.88	0.44	0.44	0.25	2.460	1/4-20	1.63	2.38	0.63	0.75	0.40	0.89
5J	1.125	1.06	0.59	0.47	0.29	3.250	1/4-20	1.88	2.88	0.75	0.97	1.10	2.40
6J	1.375	1.31	0.78	0.53	0.29	4.000	5/16-18	2.50	3.50	0.88	1.09	1.90	4.36

Notes: ■ 1 indicates: Spacing between shafts should be greater than 1/8 inch and less than OAL minus the sum of the two bore dimensions.
 ■ See page SF-12 for Performance Data.

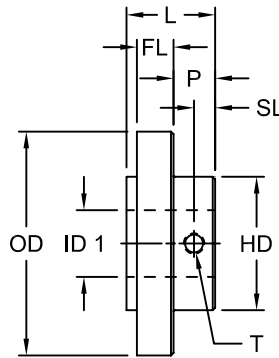
S Type Flanges and S Type Couplings

S Type Flanges

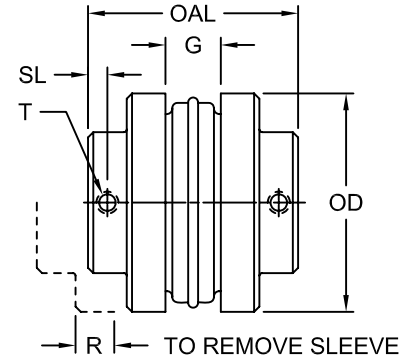
- S flanges are made of high strength cast iron and are bored-to-size for a slip fit on standard shafts
- S flanges are easy to install, are readily available from stock in a wide range of popular bore sizes, and are supplied with two set screws at 90°

S Type Couplings

- S Type couplings, normally supplied with the two-piece E sleeve, can be used with any JE, JN, N, H, or HS sleeves



S Type Flange



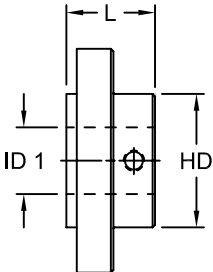
S Type Coupling

S Type Dimensional Data

Size	ID1		L	FL	P	SL	OD	T	HD	OAL	G	R	Weight Flange lbs
	Max Bore Standard Keyway in	Max Bore Shallow Keyway in											
5S	1.188	1.250	1.34	0.59	0.45	0.29	3.250	1/4-20	1.88	2.81	0.75	0.97	1.1
6S	1.438	1.500	1.64	0.78	0.53	0.29	4.000	5/16-18	2.50	3.50	0.88	1.09	1.9
	—	1.750	1.64	0.78	0.53	—	4.000	—	2.50	3.50	0.88	1.09	1.8
7S	1.625	1.875	1.84	0.80	0.67	0.35	4.625	3/8-16	2.81	3.94	1.00	1.31	2.6
8S	1.938	2.250	2.10	0.88	0.75	0.38	5.450	3/8-16	3.25	4.39	1.13	1.50	4.4
	—	2.375	1.94	0.88	1.03	—	5.450	—	3.25	4.95	1.13	1.50	3.7
9S	2.375	2.500	2.41	1.03	0.78	0.41	6.350	1/2-13	3.63	5.06	1.44	1.75	6.5
	—	2.875	2.28	1.03	1.25	—	6.350	—	4.13	6.00	1.44	1.75	6.2
10S	2.750	3.125	2.70	1.22	0.81	0.41	7.500	1/2-13	4.38	5.69	1.63	2.00	10.5
	—	3.375	2.70	1.22	0.81	—	7.500	—	4.75	5.69	1.63	2.00	9.8
11S	3.375	3.625	3.44	1.50	1.13	0.56	8.625	1/2-13	5.25	7.13	1.88	2.38	16.6
	—	3.875	3.06	1.50	1.56	—	8.625	—	5.63	8.00	1.88	2.38	16.4
12S	2.875	—	4.00	1.69	1.28	0.63	10.000	1/2-13	4.88	8.25	2.31	2.69	27.5
	3.875	3.938	4.00	1.69	1.28	—	10.000	—	5.75	8.25	2.31	2.69	26.6
13S	4.500	—	4.38	1.97	1.31	0.81	11.750	5/8-11	6.75	9.25	2.69	3.06	45.0
14S	5.000	—	4.50	2.25	1.06	0.62	13.875	5/8-11	7.50	9.88	3.25	3.50	69.0
16S	5.500	6.000	6.00	2.75	2.00	1.00	18.875	5/8-11	8.00	14.50	4.75	4.25	125.0

- Notes:
- Spacing between shafts should be greater than 1/8 inch and less than OAL minus the sum of the two bore dimensions.
 - See page SF-12 for Performance Data.
 - The sizes with two dimensions listed indicate measurements for standard flanges (1st Line) and modified spacer flanges (2nd Line). See page SF-20.
 - To determine shaft separation (BSE), use the formula $BSE = OAL - (2 \times L)$.

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S Type



S Type with E Sleeve

S Type Shallow Keyway Dimensional Data

Size	L in	ID1		HD in	Shallow Keyway Dimensions									
		Max Bore Standard Keyway in	Max Bore Shallow Keyway in		Bore in	Keyway in	Key in	Bore in	Keyway in	Key in	Bore in	Keyway in	Key in	
5S	1.34	1.188	1.250	1.88	1.25	.25 x .06	.25 x .19 x 1.38	—	—	—	—	—	—	—
6S	1.63	1.438	1.500	2.50	1.50	.38 x .13	.38 x .31 x 1.5	—	—	—	—	—	—	
	1.31	—	1.750	2.50	1.56-1.63	.38 x .13	.38 x .31 x 1.31	1.69-1.75	.38 x .06	.38 x .25 x 1.25	—	—	—	
7S	1.84	1.625	1.875	2.81	1.69-1.75	.38 x .13	.38 x .31 x 1.81	1.81-1.88	.5 x .13	.5 x .38 x 1.81	—	—	—	
8S	2.09	1.938	2.250	3.25	2-2.25	.5 x .19	.5 x .44 x 2.06	—	—	—	—	—	—	
	1.94	—	2.375	3.25	—	—	—	2.31-2.38	.63 x .13	.63 x .44 x 1.88	—	—	—	
9S	2.41	2.375	2.500	3.63	2.44-2.5	.63 x .19	.63 x .5 x 2.38	—	—	—	—	—	—	
	2.28	—	2.875	4.13	—	—	—	2.56-2.75	.63 x .19	.63 x .5 x 2.25	2.81-2.88	.75 x .13	.75 x .5 x 2.25	
10S	2.72	2.750	3.125	4.38	2.81-3.13	.75 x .13	.75 x .5 x 2.75	—	—	—	—	—	—	
	2.69	—	3.375	4.75	—	—	—	3.18-3.25	.75 x .13	.75 x .5 x 2.63	3.31-3.38	.88 x .19	.88 x .63 x 2.63	
11S	3.44	3.375	3.625	5.25	3.44-3.63	.88 x .19	.88 x .63 x 3.44	—	—	—	—	—	—	
	3.06	—	3.875	5.63	—	—	—	3.69-3.75	.88 x .19	.88 x .63 x .3	3.88	1 x .25	1 x .75 x 3	
12S	4.00	2.875	—	4.88	—	—	—	—	—	—	—	—	—	
	4.00	3.875	3.938	5.75	3.94	1 x .13	1 x .63 x 4	—	—	—	—	—	—	
13S	4.38	4.500	—	6.75	—	—	—	—	—	—	—	—	—	
14S	4.50	5.000	—	7.50	—	—	—	—	—	—	—	—	—	
16S	6.00	5.500	6.000	8.00	5.56-6	1.5 x .25	1.5 x 1 x 6	—	—	—	—	—	—	

Notes: ■ Some large bore S Type flanges are supplied with shallow keyways as standard. Rectangular keystock is provided for stock bores only.
 ■ See page SF-12 for Performance Data.

B Type Flanges For Use With Bushings

B Type Flange

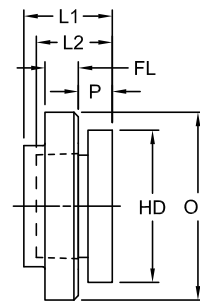
- Model B (bushed) flanges are made of the same high-strength cast iron as the S flanges
- B flanges are designed to accommodate the industry standard bushing for easy installation and removal
- B flanges are available in sizes 6 through 16

Couplings

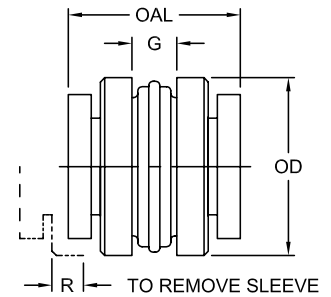
- S-Flex couplings with B flanges (for use with bushings) are normally supplied with the two-piece E sleeve
- The B style flanges can be used with any of the sleeves pictured on SF-5, with the exception of the Hytre[®] sleeve
- B flanges can be used in combination with S Type flanges

Bushings

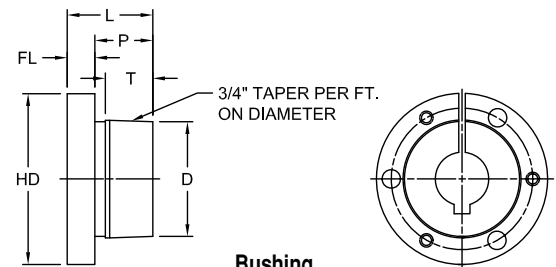
- Bushings have a split design that allow for a compression fit for secure mounting of the flange to the shaft without set screws
- The bushing's clamp like fit creates a one-piece assembly to eliminate wobble, vibration, and fretting corrosion
- Slightly oversized or undersized shafts can be accommodated with the same secure grip
- The design prevents potentially hazardous key drift on applications subject to pulsation or vibration
- B flanges are bored to accept a bushing accommodating many bore sizes, thus reducing inventory and increasing coupling versatility
- Bushing bore availability can be found in current Lovejoy list price books or from your Customer Service Representative



B Type Flange



B Type Coupling



Bushing

B Type Flange and Coupling Dimensional Data

Size	Flange UPC Number	Bushing Required	L1 in	L2 in	FL in	P in	OD in	HD in	OAL in	G in	R Max in	Approx Bore in	Flange Weight lbs
6B	36369	JA	1.53	1.00	0.78	0.44	4.000	2.00	3.31	0.88	1.09	1.19	1.3
7B	36371	JA	1.59	1.00	0.78	0.44	4.625	2.00	3.44	1.00	1.31	1.19	1.9
8B	36373	SH	1.84	1.25	0.91	0.50	5.450	2.69	3.94	1.13	1.50	1.63	2.9
9B	36375	SD	2.19	1.81	1.03	0.56	6.350	3.19	4.63	1.44	1.75	1.94	4.8
10B	35421	SK	1.84	1.88	1.22	0.63	7.500	3.88	5.31	1.63	2.00	2.50	7.8
11B	35432	SF	2.13	2.00	1.50	0.63	8.625	4.63	6.13	1.88	2.38	2.75	12.0
12B	36408	E	2.69	2.63	1.69	0.88	10.000	6.00	7.44	2.31	2.69	3.44	18.0
13B	35444	F	3.69	3.63	1.97	1.00	11.750	6.63	8.63	2.69	3.00	3.94	31.2
14B	35447	F	3.69	3.63	2.25	1.00	13.875	6.63	9.75	3.25	3.50	3.94	51.4
16B	35449	J	4.75	4.50	2.75	1.19	18.875	7.25	12.63	4.75	4.25	4.50	120.0

Note: ■ 1 indicates: Spacing between shafts should be greater than 1/8 inch and less than G. Spacing between internal face of flange should be OAL – (2 x L1).

Bushing Dimensional Data

Size	L in	P in	FL in	T in	HD in	D in	ID1 - ID2			Number & Size of Cap Screws Req Qty	Cap Screw Torque ft-lb	Weight lbs	
							Min Bore in	Max Bore Std Keyway in	Max Bore Shallow Keyway2 in				
JA	1.00	0.69	0.31	0.56	2.00	1.375	0.50	1.00	1.19	3	#10 - 1	5	0.8
SH	1.25	0.88	0.38	0.81	2.68	1.871	0.50	1.38	1.63	3	1/4 - 1-3/8	9	0.9
SD	1.81	1.38	0.44	1.25	3.18	2.187	0.50	1.63	1.94	3	1/4 - 1-13/16	9	1.6
SK	1.87	1.38	0.50	1.25	3.88	2.812	0.50	2.13	2.50	3	5/16 - 2	15	2.8
SF	2.00	1.50	0.50	1.25	4.63	3.125	0.50	2.31	2.81	3	3/8 - 2	30	3.9
E	2.63	1.88	0.75	1.63	6.00	3.834	0.88	2.88	3.50	3	1/2 - 2-3/4	60	8.5
F	3.63	2.81	0.81	2.50	6.63	4.438	1.00	3.25	3.94	3	9/16 - 3-5/8	75	13.9
J	4.50	3.50	1.00	3.19	7.25	5.148	1.44	3.75	4.50	3	5/8 - 4-1/2	135	21.6

Notes: ■ F and J bushings are not available from Lovejoy. F bushings are available commercially in a bore range of 1 inch to 4 inches, J bushings in a range of 1-7/8 inches to 4-1/2 inches.

- Rectangular keys are furnished at no charge when shallow keyway is necessary.
- See page SF-12 for Performance Data.