

# Sure-Flex Plus® Elastomeric Couplings

**F1**



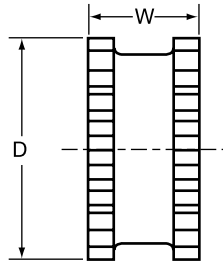
- **30% Higher Rating**
- **Quick, Easy Installation**
- **Clean, Quiet Performance**
- **No Lubrication, No Maintenance**

## Selection

Flexible sleeves for Wood's Sure-Flex Plus couplings are available in four materials (EPDM, Neoprene, Hytrel and Urethane) and in three basic constructions. Characteristics of the materials are given on page F1—4 and the various types are shown and described here.



JE, JN



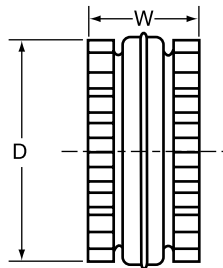
Types JES, JNS

### JE-JES-JN-JNS

J sleeves are molded EPDM rubber (E) or Neoprene (N). They are available in one-piece solid construction (JE, JN) or one-piece split construction (JES, JNS). These sleeves may be used in any Sure-Flex Plus flange within a given size.



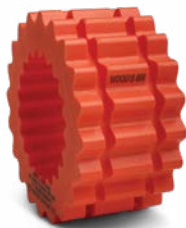
E and N  
(Assembled)



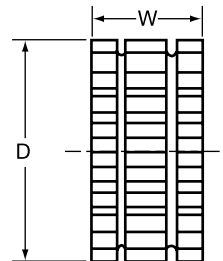
Types E and N  
(Disassembled)

### E-N

These sleeves are of two-piece design with a retaining ring. They are available in either EPDM (E) or Neoprene (N). They may be used with any flange within a given size. Sleeves are shown here assembled and disassembled.



H or U



HS

### H-HS-U

H (Hytrel) and U (Urethane) sleeves, designed for high-torque applications, transmit four times as much power as an equivalent EPDM or Neoprene sleeve. Available in one-piece solid construction (H or U) or two-piece split construction (HS), these can be used only with S, C and SC flanges. They cannot be used with J or B flanges or as direct replacements for EPDM or Neoprene sleeves.

## DIMENSIONS (in.)

Coupling Size	JE, JES, JN & JNS Sleeves EPDM & Neoprene			E and N Sleeves EPDM & Neoprene			H, U & HS Sleeves Hytrel & Urethane		
	D	W	Weight (lbs.)	D	W	Weight (lbs.)	D	W	Weight (lbs.)
3	1-7/8	1	.06						
4	2-5/16	1-1/4	.10	2-5/16	1-1/4	.11			
5	2-15/16	1-9/16	.20	2-15/16	1-9/16	.25			
6	3-3/4	1-7/8	.40	3-3/4	1-7/8	.49	3-3/4	1-7/8	.44
7	4-11/32	2-3/16	.62	4-11/32	2-3/16	.77	4-11/32	2-3/16	.69
8	5-1/16	2-1/2	1.13	5-1/16	2-1/2	1.4	5-1/16	2-1/2	1.4
9*	6	3	1.46	6	3	2.0	6	3	1.8
10*	7-1/16	3-7/16	2.32	7-1/16	3-7/16	3.2	7-1/16	3-7/16	2.9
11				8-3/16	4	5.1	8-3/16	4	4.5
12				9-9/16	4-11/16	8.1	9-9/16	4-11/16	7.3
13				11-3/16	5-1/2	13.0	11-3/16	5-1/2	11.8
14				13-3/32	6-1/2	21.1	13-3/32	6-1/2	19.3
16				17-29/32	8-3/4	45.3			

Sizes 13 and 14 Hytrel available with HS sleeves only.

\*All 9J and 10J sleeves available in EPDM only. Only sizes available in Urethane.

# Type J Sure-Flex Plus® BTS

## Selection For Close Coupled Applications

### FLANGES

Type J flanges sizes 3, 4 and 5 are manufactured of sintered carbon steel. The powdered metal manufacturing process provides high dimensional accuracy and uniform material properties for high strength. Size 6 is made of high strength cast iron.

Flanges are bored-to-size for a slip fit on standard shafts. The outside face of the flange is precision machined, allowing the surface to be used to align the coupling without special tools.

Type J flanges can be used with EPDM and Neoprene sleeves. Each flange has a standard keyway, one setscrew over the keyway and one setscrew at 90° from the keyway.

### COUPLINGS

Spacing between internal flange hubs equals G. Spacing between shafts should be greater than 1/8 in. and less than L minus .85 times the sum of the two bore diameters.

To order couplings, refer to the part number examples on page F1-3. When specifying Type J flanges, the coupling and bore sizes accompany the flange symbol "J". For example, 3J x 1/2 is 3J12.

### DIMENSIONS (in.)

Size	Dimensions								Wt. (lbs.) ■	STOCK BORES*																					
										Inches										Max Bore	Millimeters										
	C	D	E	G	H	L	T	X		3/8	1/2	5/8	3/4	7/8	15/16	1	1-1/8	1-3/16	1-1/4		1-3/8	9	11	12	14	15	16	19	20	24	25
3J	51/64	2.062	13/32	3/8	1-1/2	1-31/32	25/64	5/8	0.3	X	X	X	X	X							7/8	-	X	X	X	X	X	X	-	-	-
4J	55/64	2.500	27/64	43/64	1-5/8	2-25/64	7/16	5/8	0.4		X	X	X	X	X	X					1	-	-	-	X	X	X	X	X	X	X
5J	1-3/64	3.250	29/64	3/4	1-7/8	2-27/32	19/32	59/64	0.9		X	X	X	X	X	X	X				1-1/8	-	-	-	-	-	-	-	-	-	-
6J	1-5/16	4.000	9/16	7/8	2-1/2	3-1/2	3/4	1-3/32	1.2			X	X	X	X	X	X	X	X	X	1-3/8	-	-	-	-	-	-	-	-	-	-

■ Approximate weight for each flange.

\* See page F1-10 for bore tolerances and page F1-13 for standard keyway dimensions.

## Selection For Close Coupled Applications



Flanges are easy to install and remove, and are stocked in a wide range of bore sizes. All sleeve materials may be used with Type S flanges.

### Bore Tolerances for Types J and S Flanges, SC Hubs

**These bores provide a slip fit.**

Bore (in.)	Tolerance (in.)
Up to and including 2"	+ .0005 to + .0015
Over 2"	+ .0005 to +.0020

### DIMENSIONS (in.)

Size	DIMENSIONS								Wt. (lbs.) ■	STOCK BORES																																		
										Inches																																		
										1/2	5/8	3/4	13/16	7/8	15/16	1	1-1/16	1-1/8	1-3/16	1-1/4	1-5/16	1-3/8	1-7/16	1-1/2	1-9/16	1-5/8	1-11/16	1-3/4	1-7/8	1-15/16	2	2-1/16	2-1/8	2-3/16	2-3/8	2-7/16	2-1/2	2-5/8	2-3/4	2-7/8	3	3-3/8	3-7/16	3-5/8
5S	1-11/32	3.250	29/64	23/32	1-7/8	2-13/16	19/32	31/32	1.1	0	X	X	X	X	X	X	X	X	X																									
6S	1-5/8	4.000	17/32	7/8	2-1/2	3-1/2	25/32	1-3/32	1.9	0	X		X	X	X	X	X	X	X																									
	1-5/16	4.000	17/32	7/8	2-1/2	3-1/2	25/32	1-3/32	1.8									X		X																								
	1-9/16	4.000	25/32	7/8	2-13/16	4	25/32	1-3/32	1.8												X																							
7S	1-27/32	4.625	11/16	1	2-13/16	3-15/16	25/32	1-5/16	2.6	0	X		X	X	X	X	X	X	X	X	X		X		X																			
8S	2-3/32	5.450	3/4	1-1/8	3-1/4	4-7/16	29/32	1-1/2	4.4		0		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																	
	1-15/16	5.450	1-1/32	1-1/8	3-1/4	5	29/32	1-1/2	3.7																			X																
9S	2-13/32	6.350	25/32	1-7/16	3-7/8	5-1/16	1-1/32	1-3/4	6.8				0	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X															
	2-9/32	6.350	1-1/4	1-7/16	4-1/8	6	1-1/32	1-3/4	6.2																											X								
10S	2-23/32	7.500	13/16	1-5/8	4-3/8	5-11/16	1-7/32	2	10.5						0		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
	2-11/16	7.500	1-15/32	1-5/8	4-3/4	7	1-7/32	2	9.8																												X							
11S	3-7/16	8.625	1-1/8	1-7/8	5-1/4	7-1/8	1-1/2	2-3/8	16.6						0		X	X	X		X	X	X		X	X	X			X	X	X	X	X	X	X	X							
	3-1/16	8.625	1-9/16	1-7/8	5-5/8	8	1-1/2	2-3/8	16.4																																	X		
12S	4	10.000	1-9/32	2-5/16	5-3/4	8-1/4	1-11/16	2-11/16	26.6																X	X			X	X			X	X	X	X	X	X	X					
13S	4-3/8	11.750	1-5/16	2-11/16	6-3/4	9-1/4	1-31/32	3-1/16	45.2																0	X		X						X	X	X						X		
14S	4-1/2	13.875	1-1/16	3-1/4	7-1/2	9-7/8	2-1/4	3-1/2	69.1																										X				X					
16S	6	18.875	2	4-3/4	8	14-1/4	2-3/4	4-1/4	125.3																											0								

■ Approximate weight for each flange.

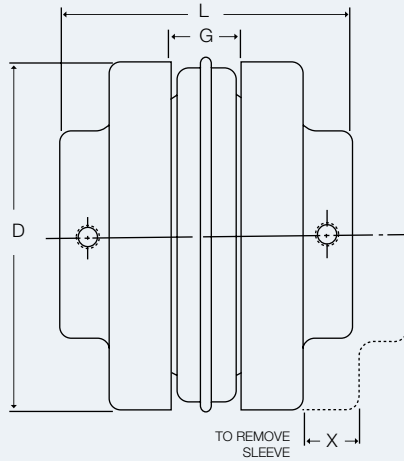
# Type S Sure-Flex Plus® BTS

## Selection For Close Coupled Applications

### COUPLINGS

Spacing between shafts should be greater than 1/8 in. and less than L minus .85 times the sum of the two bore diameters. Spacing between internal flange hubs equals L - 2\*C.

To order couplings, refer to the part number examples on page F1-3.



### DIMENSIONS (in.)

STOCK BORES																				Max Bore		SHALLOW KEYSEAT DIMENSIONS ②											
Millimeters																				①	②	Bore	K.S.	Key	Bore	K.S.	Key	Bore	K.S.	Key			
14	15	16	19	20	24	25	28	30	32	35	38	42	45	48	50	52	55	60	65	70	80										90	Standard Keyseat	Shallow Keyseat
X	X	X	X	X	X	X	X																1-3/16	1-1/4	1-1/4	1/4 X 1/16	1/4 X 3/16 X 1-3/8	-	-	-	-	-	
	X		X	X	X	X	X	X	X	X		X											1-7/16	1-1/2 ④	-	-	-	-	-	-	-	-	
																							-	1-3/4	1-1/2 & 1-5/8	3/8 X 1/8	3/8 x 5/16 X ③	1-3/4	3/8 X 1/16	3/8 X 1/4 X 1-1/4	-	-	
																							-	1-7/8	-	-	-	-	-		1-7/8	1/2 X 1/16	1/2 X 5/16 X 1-9/16
			X	X	X	X	X	X	X	X	X	X											1-5/8	1-7/8	1-7/8	1/2 X 1/8	1/2 X 3/8 X 1-7/8	-		-	-	-	-
				X	X	X	X	X	X	X	X	X	X	X									1-15/16	2-1/4 ④	2-1/8	1/2 X 3/16	1/2 X 7/16 X 2-1/8	-	-	-	-	-	-
																							-	2-3/8	-	-	-	2-3/8	5/8 X 1/8	5/8 X 7/16 X 1-7/8	-	-	-
				X			X	X		X	X	X	X	X									2-1/2	2-3/4 ④	-	-	-	-	-	-	-	-	-
																							-	2-7/8	2-7/8	3-4 X 1/8	3/4 X 1/2 X 2-1/4	-	-	-	-	-	-
							X	X	X	X	X	X	X	X	X	X	X						2-3/4	3-1/8 ④	2-7/8	3/4 X 1/4	3/4 X 5/8 X 2-3/4	-	-	-	-	-	-
																							-	3-3/8	-	-	-	3-3/8	7/8 X 3/16	7/8 X 5/8 X 2-5/8	-	-	-
											X	X	X	X		X			X	X			3-3/8	3-7/16 ④	3-7/16	7/8 X 3/16	7/8 X 5/8 X 3-7/16	-	-	-	-	-	-
																							-	3-7/8	3-7/8	3-7/8	1 X 1/4	1 X 3/4 X 3	-	-	-	-	-
														X			X	X	X	X	X		3-7/8	3-15/16	-	-	-	-	-	-	-	-	-
																							4-1/2	-	-	-	-	-	-	-	-	-	-
																							5	-	-	-	-	-	-	-	-	-	-
																							5-1/2	6	-	-	-	-	-	-	-	-	-

① See charts on page F1—13

② Some large bore Type S flanges are supplied with shallow keyseats. In these cases, a rectangular key is furnished. The bores involved are listed above.

③ 1-5/8 for 1-1/2 bore, 1-5/16 for 1-5/8 bore.

④ Altered bores available only up to this diameter.