

Standard Coupling Type EE with Finished Straight Bores

Standard Couplings Type EE are generally used on close-connected equipment and may be mounted for either wide or close shaft separations, at the user's option. This permits ready installation on existing shaft separations and eliminates moving the connected equipment to suit the coupling.

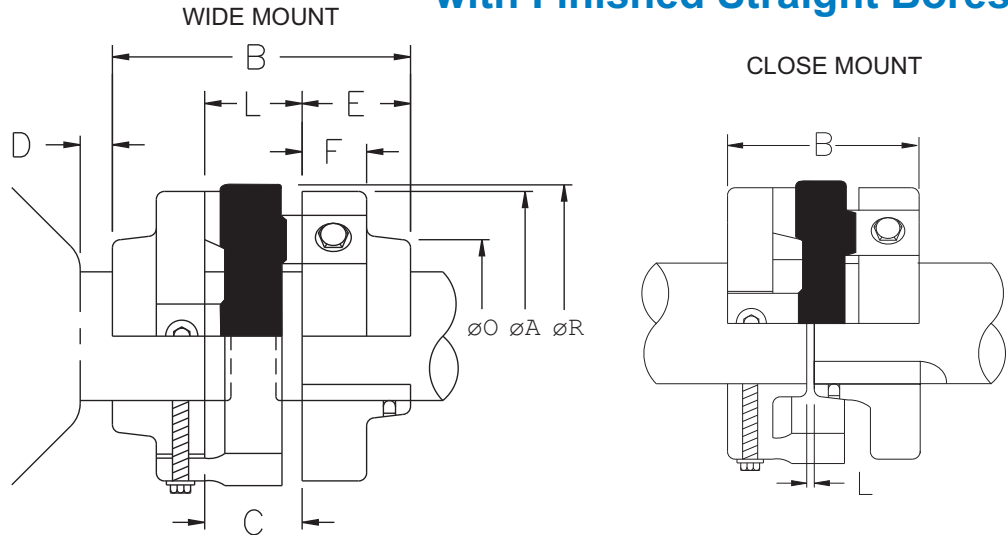


TABLE 1

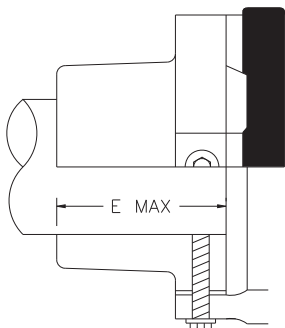
Coupling Size	WIDE MOUNT												CLOSE MOUNT			
	Bore with Standard Keyway		Stock Rough Bore	Hub Sep. L	Shaft Separation C		ø A	B	D	E	F	ø O	ø R	Coupling Size	Hub & Shaft Separation L	B
	Max.	Min.			Min.	Max.										
20	1 1/8	1/2	3/8	1	1/8	1	3 11/16	3 1/8	1/8	1 1/16	5/8	1 7/8	4	20	1/8	2 1/4
30	1 1/2	1/2	3/8	1 1/2	1/8	1 1/2	4 3/8	4 1/8	1/8	1 5/16	5/8	2 7/16	4 5/8	30	1/8	2 3/4
40	1 7/8	1/2	3/8	1 5/8	1/8	1 5/8	5 3/8	5 1/8	1/8	1 3/4	1	2 3/4	5 11/16	40	1/8	3 5/8
*50	2 1/8	3/4	5/8	2 1/8	1/8	2 1/8	6 1/16	6 1/8	1/8	2	1	3 1/8	6 3/4	50	1/8	4 1/8
*60	2 7/8	1 1/8	15/16	2 1/8	1/8	2 1/8	7	6 1/8	1/8	2	1	4 7/32	7 5/8	60	1/8	4 1/8
70	3	1 1/4	1 1/16	2 3/8	1/8	2 3/8	8	6 5/8	1/8	2 1/8	1	4 7/16	8 11/16	70	1/8	4 3/8
*80	3 3/4	1 1/2	1 1/4	3	1/8	3	9 7/16	8 3/8	1/8	2 11/16	1 1/4	5 5/16	10 1/2	80	1/8	5 1/2
90	4 3/4	1 3/4	1 1/2	4 1/8	1/8	4 1/8	12 1/8	11 1/8	1/8	3 1/2	1 1/2	6 5/8	13 1/16	90	1/8	7 1/8
100	5 3/8	2 1/4	2	4 1/8	1/8	4 1/8	13 7/8	12 1/8	1/8	4	2	7 3/8	15 1/8	100	1/8	8 1/8

NOTES: Finished Bored E Hubs can be ordered by specific Bore size.
 Complete coupling consists of 2 E Hubs and 1 Replaceable Element.
 * 50, 60 and 80 EE hubs are also stocked in steel. Consult KOP-FLEX.

Coupling Size	Complete Coupling No Bore		E Hub No Bore		Element W/ Fastener	
	Part No.	Wt.	Part No.	Wt.	Part No.	Wt.
20	20 EE	2	20 EHUB	1	20 ELEMENT	1
30	30 EE	3	30 EHUB	1	30 ELEMENT	1
40	40 EE	6	40 EHUB	2	40 ELEMENT	1
50	50 EE	9	50 EHUB	3	50 ELEMENT	2
60	60 EE	12	60 EHUB	3	60 ELEMENT	3
70	70 EE	17	70 EHUB	4	70 ELEMENT	5
80	80 EE	31	80 EHUB	8	80 ELEMENT	9
90	90 EE	59	90 EHUB	15	90 ELEMENT	16
100	100 EE	96	100 EHUB	29	100 ELEMENT	18

Standard Hubs are Available From Stock, in Aluminum, Steel and Stainless Steel.

Long Hub Type L



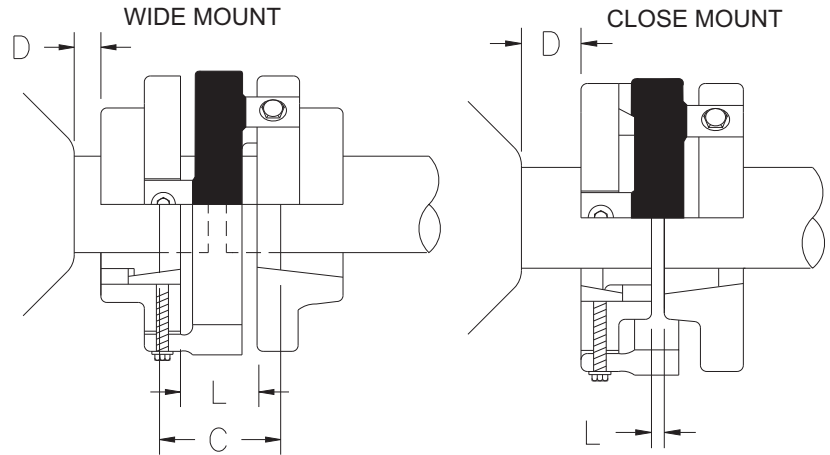
LONG HUB—TYPE L
 Available for Wide Mount only

ELASTOMERIC L Hub Rough Bored

Coupling Size	Part No.	EMAX	Bore with Standard Keyway (in.)		Stock Rough Bore
			Min.	Max.	
60	60 LHUB	3 9/16	1 3/8	3	1 1/4
70	70 LHUB	4	1 3/8	3 1/8	1 1/4
80	80 LHUB	4 11/16	1 3/8	4 1/8	1 1/4
90	90 LHUB	4 15/16	1 9/16	4 3/4	1 7/16
100	100 LHUB	5 7/16	2	5 3/8	1 7/8

Standard Coupling for Taper-Lock* Bushings

1. See opposite table for dimensions not listed.
2. Space is required to remove bushing using shortened hex key cut to minimum usable length for sizes 30 to 80. Sizes 90 and 100 use open end wrench.
3. Maximum bore is the maximum obtained when the bushing is supplied with a reduced shallow keyway. Flat keys are then supplied with the bushing.
4. Intermediate hub separations (L) are obtained by reversing one hub only from the Wide Mount arrangement, giving intermediate maximum hub and shaft separations.



E Hubs Bored for TAPER-LOCK* Bushing

Size	Part No.
30	30 EHUBTLX1108
40	40 EHUBTLX1215
50	50 EHUBTLX1615
60	60 EHUBTLX2012
70	70 EHUBTLX2517
80	80 EHUBTLX3020
90	90 EHUBTLX3535
100	100 EHUBTLX3535

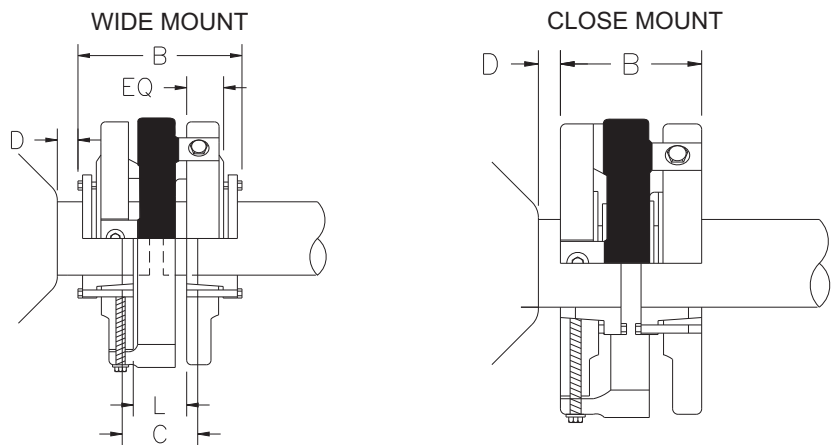
Coupling Size	WIDE MOUNT							Coupling Size	CLOSE MOUNT	
	TAPER-LOCK* Bushing			Hub Sep. L	Shaft Separation C		D		Hub and Shaft Separation L	D
	Number	Bore Min. (in.)	Bore Max. (in.)		Min.	Max.				
30	1108	1/2	1 1/8	1 1/2	1/8	2 3/8	3/4	30	1/8	1/8
40	1215	1/2	1 1/8	1 5/8	1/8	3 1/8	1 1/16	40	1/8	1/8
50	1615	1/2	1 5/8	2 1/8	1/8	3 1/8	1 1/16	50	1/8	1/8
60	2012	1/2	2	2 1/8	1/8	3 5/8	1 3/8	60	1/8	1/8
70	2517	1/2	2 1/2	2 3/8	1/8	3 1/8	1 5/8	70	1/8	1/8
80	3020	15/16	3	3	1/8	4 3/8	2 1/16	80	1/8	1/8
90	3535	1 3/16	3 1/2	4 1/8	1/8	4 1/8	1 3/4	90	1/8	1/8
100	3535	1 3/16	3 1/2	4 1/8	1/8	4 1/8	2	100	1/8	1/8

Standard Coupling for Q-D® Bushings

1. Bushing screws may be inserted from direction opposite to that shown, eliminating need for axial clearance D.

E Hubs Bored for Q-D® Bushing

Size	Part No.
30	30 EHUBQDXJA
40	40 EHUBQDXJA
50	50 EHUBQDXSH
60	60 EHUBQDXSDS
70	70 EHUBQDXSK
80	80 EHUBQDXSF
90	90 EHUBQDXE
100	100 EHUBQDXF



NET WT. LBS.—STANDARD COUPLINGS

Coupling Size	With Solid Hubs	With Max. Bore and Standard Keyway	With TAPER-LOCK* Bushing (Max. Bore)	With Q-D® Bushing (Max. Bore)
20	1.7	1.6	-	-
30	2.8	2.3	2.7	3.0
40	6.0	5.0	6.2	6.1
50	8.8	7.3	8.4	9.4
60	12.2	9.2	11.8	13.0
70	17.0	13.6	17.1	18.8
80	30.5	23.1	30.8	32.6
90	59.4	45.4	62.0	67.3
100	96.0	76.0	102.0	106

Coupling Size	WIDE MOUNT							CLOSE MOUNT						
	Q-D® Bushing			B	Hub Sep. L	Shaft Sep. C		D	EQ	Coupling Size	Hub Sep. L	Shaft Sep. C	B	D
	Size	Bore Min. (in.)	Bore Max. (in.)			Min.	Max.							
30	JA	1/2	1 1/4	4 1/4	1 1/2	1/8	1 7/8	1 1/8	3/4	30	1 1/4	3/8	2 3/4	1/8
40	JA	1/2	1 1/4	5 1/8	1 5/8	1/8	2 3/4	1 1/8	1 1/8	40	1 3/8	1/2	3 5/8	1/8
50	SH	1/2	1 5/8	6 3/16	2 1/8	1/8	3 1/8	1 9/16	1 1/4	50	1 5/8	1/2	4 1/8	1/8
60	SDS	1/2	1 15/16	6 1/16	2 1/8	1/8	3	1 9/16	1 3/16	60	1 3/4	5/8	4 1/8	1/8
70	SK	1/2	2 1/2	6 9/16	2 3/8	1/8	2 1/8	2 1/4	1 1/8	70	2 1/8	3/4	4 3/8	1/8
80	SF	1/2	2 15/16	8 1/16	3	1/8	3 1/4	2 3/8	1 7/16	80	2 5/8	1 1/8	5 1/2	1/8
90	E	7/8	3 7/16	10 1/2	4 1/8	1/8	4 1/8	3 1/16	1 3/4	90	3 5/8	1 5/8	7 1/8	1/8
100	F	1	3 15/16	12 3/4	4 1/8	1/8	4 1/4	4 3/16	2 5/8	100	-	-	-	-

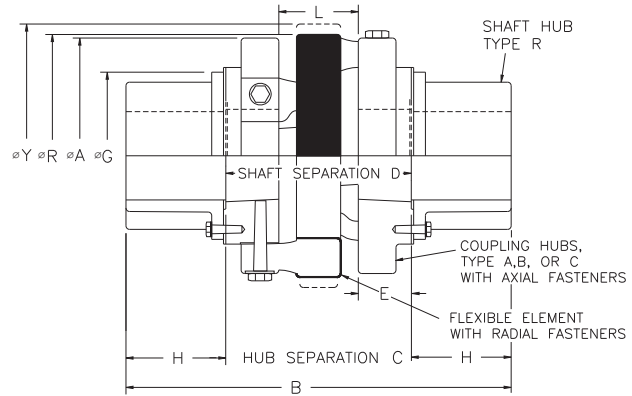
* Taper-Lock is believed to be the trademark and/or trade name of Reliance Electric Company, and is not owned or controlled by Regal Power Transmission Solutions.

Drop-Out Spacer Coupling Type DO

Wherever spacer type couplings are used for motor driven back-pull-out pumps, AVS Pumps, Process Pumps and any application for a Spacer Type coupling. Over 117 shaft separation combinations are available using standard components.

The ELASTOMERIC™ Drop-out coupling provides for easy removal of the pump's back-pull-out section keeping routine pump maintenance and down-time to a minimum.

Upon removal of a few axial fasteners, the flexible coupling center section is easily inserted, or removed to gain pump access.



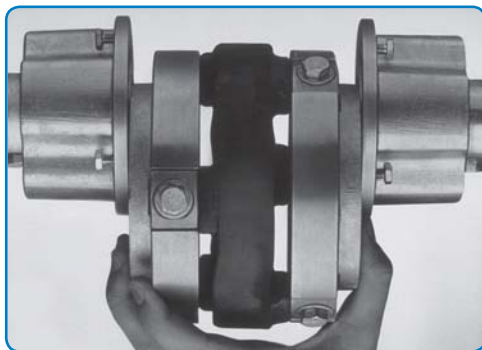
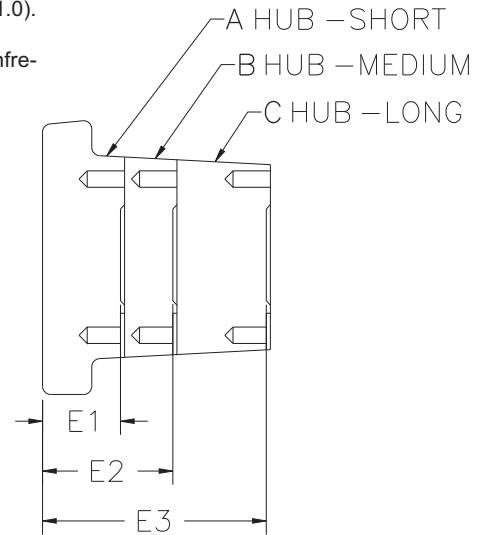
Size	Ratings Centrifugal Pump Service (1)		Max. RPM	Max. Offset	Dimensions (in.)						Rough Bore (in.)
	HP/100 RPM (2)	Torque Lb.-In.			ø A	ø G	H	L	ø R	ø Y	
20	.334	217	4100	.029	3 11/16	3 1/8	1 3/8	1	4	4 1/2	5/8
30	.664	418	4100	.032	4 3/8	3 3/8	1 5/8	1 1/2	4 5/8	5 1/2	5/8
40	1.15	725	4100	.034	5 3/8	3 11/16	1 3/4	1 5/8	5 11/16	6 5/8	5/8
50	2.00	1260	4100	.036	6 1/16	4 7/16	2 3/8	2 1/8	6 3/4	7 3/8	5/8
60	3.05	1920	4100	.038	7	4 15/16	2 5/8	2 1/8	7 5/8	8 3/8	1
70	7.20	4540	3600	.042	8	5 11/16	3	2 3/8	8 11/16	9 3/4	1
80	13.0	8190	2800	.056	9 7/16	7	3 7/8	3	10 1/2	11 3/4	1 1/4
90	22.6	14200	2000	.079	12 1/8	8 1/4	4 1/4	4 1/8	13 1/16	14 3/8	1 1/2

(1) Ratings are for motor driven centrifugal pump and blower service (service factor of 1.0). For other applications, refer to pages 72 & 73 for appropriate service factors and coupling size selection data. Couplings will transmit peak loads of 3 times these values if infrequently applied (not to exceed once per hour).

(2) $HP/100rpm = \frac{HP \text{ to be transmitted}}{\text{Coupling rpm}} \times 100$

Coupling Size	R Hub			Element W/ Fastener	
	No Bore		Finish Bore ^① Part No.	Part No.	Wt.
	Part No.	Wt.			
20	20 RHUB	1	20 RHUB FB	20 ELEMENT	1
30	30 RHUB	1	30 RHUB FB	30 ELEMENT	1
40	40 RHUB	1	40 RHUB FB	40 ELEMENT	1
50	50 RHUB	2	50 RHUB FB	50 ELEMENT	2
60	60 RHUB	3	60 RHUB FB	60 ELEMENT	3
70	70 RHUB	5	70 RHUB FB	70 ELEMENT	5
80	80 RHUB	9	80 RHUB FB	80 ELEMENT	9
90	90 RHUB	15	90 RHUB FB	90 ELEMENT	16

NOTE: ^① Finish bores and keyways per AGMA/ANSI 9112 commercial standard tolerances. Each clearance bore includes one set screw over keyway.



The ELASTOMERIC™ Drop Out Spacer Coupling center section is easily installed as a preassembled unit, or as lightweight component parts. For pump or seal maintenance, the "drop out" center section is easily removed for fast pump access.

Coupling Hubs Type A, B and C

Size	E DIMENSION (in.)			AXIAL FASTENERS	
	A Hub	B Hub	C Hub	No. Per Hub	Size
	E1	E2	E3		
20	—	1 1/4	2 3/4	4	1/4-20
30	—	1	2 1/2	4	1/4-20
40	1	1 11/16	3 15/16	4	1/4-20
50	1	1 7/16	3 11/16	4	1/4-20
60	1	1 7/16	3 11/16	4	5/16-18
70	1	1 5/16	3 9/16	4	3/8-16
80	1 7/32	2 1/8	4 5/8	6	1/2-13
90	—	1 9/16	4 1/16	6	5/8-11

Type DO Dimensional and Assembly Data

Coupling Size	No Bore Part Description	Weight (lbs.)	Shaft Hub Type R				Shaft Separation			Quantities Per Assembly								
			Min. Bore	Max. Bore With Std. Kwy (a)	Std. Kwy Size	Dim. B	Min. (2)	Std. (3) Dim. C	Max. (4)	Coupling Hub			Shaft Hub	Flex Elem.				
										Hub A	Hub B	Hub C						
20	20 DOBB	2.0	3/4	1 3/8	5/16 x 5/32	6 1/4	3 7/16	3 1/2	3 3/4	2	1	2	2	1				
	20 DOBC	2.3				7 3/4	4 15/16	5	5 1/4						1	1	2	1
	20 DOCC	2.5				9 1/4	6 7/16	6 1/2	6 3/4						2	2	2	1
30	30 DOBB	2.8	3/4	1 5/8	3/8 x 3/16	6 3/4	3 5/16	3 1/2	3 3/4	2	1	2	2	1				
	30 DOBC	3.2				8 1/4	4 13/16	5	5 1/4						1	1	2	1
	30 DOCC	3.4				9 3/4	6 5/16	6 1/2	6 3/4						2	2	2	1
40	40 DOAA	5.4	3/4	1 3/4	3/8 x 3/16	7 1/8	3 1/2	3 5/8	3 3/4	2	1	2	2	1				
	40 DOAB	5.6				7 13/16	4 3/16	4 5/16	4 1/2						1	1	2	1
	40 DOBB	5.8				8 1/2	4 7/8	5	5 1/4						2	2	2	1
	40 DOAC	6.3				10 1/16	6 7/16	6 9/16	6 7/8						1	1	2	1
	40 DOBC	6.5				10 3/4	7 1/8	7 1/4	7 1/2						1	1	2	1
	40 DOCC	7.1				13	9 3/8	9 1/2	10						2	2	2	1
50	50 DOAA	8.2	3/4	2 3/8	5/8 x 5/16	8 7/8	3 7/8	4 1/8	4 3/8	2	1	2	2	1				
	50 DOAB	8.4				9 5/16	4 9/16	4 5/16	4 13/16						1	1	2	1
	50 DOBB	8.6				9 3/4	4 3/4	5	5 1/4						2	2	2	1
	50 DOAC	9.2				11 9/16	6 9/16	6 13/16	7 1/16						1	1	2	1
	50 DOBC	9.4				12	7	7 1/4	7 1/2						1	1	2	1
	50 DOCC	10.2				14 1/4	9 1/4	9 1/2	10						2	2	2	1
60	60 DOAA	10.0	1 1/8	2 5/8	5/8 x 5/16	9 3/8	3 7/8	4 1/8	4 3/8	2	1	2	2	1				
	60 DOAB	10.2				9 13/16	4 5/16	4 9/16	4 13/16						1	1	2	1
	60 DOBB	10.4				10 1/4	4 3/4	5	5 1/4						2	2	2	1
	60 DOAC	11.2				12 1/16	6 9/16	6 13/16	7 1/16						1	1	2	1
	60 DOBC	11.4				12 1/2	7	7 1/4	7 1/2						1	1	2	1
	60 DOCC	12.3				14 3/4	9 1/4	9 1/2	10						2	2	2	1
70	70 DOAA	15.2	1 1/8	3	3/4 x 3/8	10 3/8	4 5/16	4 3/8	4 5/8	2	1	2	2	1				
	70 DOAB	15.4				10 11/16	4 5/8	4 11/16	4 15/16						1	1	2	1
	70 DOBB	15.6				11	4 15/16	5	5 1/4						2	2	2	1
	70 DOAC	16.6				12 15/16	6 7/8	6 15/16	7 3/16						1	1	2	1
	70 DOBC	16.8				13 1/4	7 3/16	7 1/4	7 1/2						1	1	2	1
	70 DOCC	18.0				15 1/2	9 7/16	9 1/2	10						2	2	2	1
80	80 DOAA	26.3	1 3/8	3 3/4	7/8 x 7/16	13 3/16	5 1/4	5 7/16	5 3/4	2	1	2	2	1				
	80 DOAB	26.9				14 3/32	6 5/32	6 21/32	6 13/16						1	1	2	1
	80 DOBB	27.6				15	7 1/16	7 1/4	7 1/2						2	2	2	1
	80 DOAC	28.9				16 19/32	8 21/32	8 27/32	9 3/32						1	1	2	1
	80 DOBC	29.6				17 1/2	9 9/16	9 3/4	10						1	1	2	1
	80 DOCC	31.7				20	12 1/16	12 1/4	12 1/2						2	2	2	1
90	90 DOBB	51.0	1 5/8	4 1/4	1 x 1/2	16 1/4	6 5/8	7 1/4	7 1/2	2	1	2	2	1				
	90 DOBC	53.8				18 3/4	9 1/8	9 3/4	10						1	1	2	1
	90 DOCC	56.6				21 1/4	11 5/8	12 1/4	12 1/2						2	2	2	1

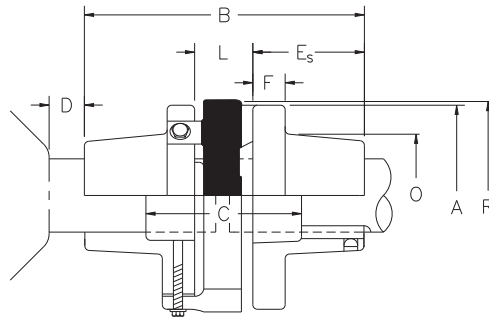
Two shaft hubs (type R) will always be supplied unless ordered "LESS SHAFT HUBS".

- (1) All finish bores will be for clearance fit with set screw over the keyway unless ordered otherwise.
- (2) Minimum shaft separation is obtained by allowing the shafts to protrude slightly beyond the faces of the type R shaft hubs. Hub separation C and dimension L must be maintained as listed.
- (3) Standard shaft separations are obtained when type R shaft hubs are mounted flush with shaft ends. In this case the shaft separation is the same as the hub separation, dimension C.
- (4) Maximum shaft separation is obtained by allowing type R shaft hubs to slightly overhang their shafts. Maximum hub separations tabulated, are based on an overhang of 1/4" or less per hub. Excessive shaft hub overhang increases hub and key stresses.
- (5) Interference fits up to .0005"/in. of shaft diameter are permissible providing maximum bore with interference fit is 1/4" less than maximum clearance fit bore indicated by note (a).
- (6) Weight shown is total coupling weight based on maximum bore.

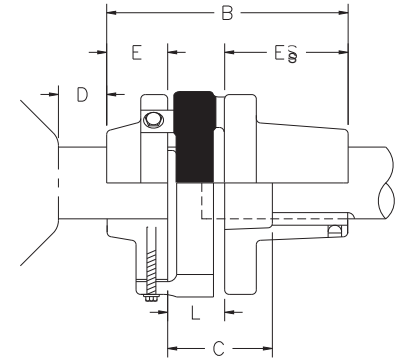
Double Spacer Coupling Type SS Single Spacer Coupling Type ES

Spacer Couplings are commonly used where a larger-than-normal shaft separation is desired. This permits servicing of impellers, packing glands, seals, bearing, etc. without disturbing the connected equipment. The two types of spacer couplings—Double Spacer and Single Spacer—vary only in the number of spacer hubs used and offer the user a wide variety of possible shaft separations.

TYPE SS
DOUBLE SPACER COUPLING



TYPE ES
SINGLE SPACER COUPLING



DOUBLE SPACER COUPLING With Finished Straight Bores

Coupling Size	Bore with Standard Keyway		Stock Rough Bore S Hub	Hub Sep. L	Shaft Separation C		A	B	D	Es	F	O	R
	Min.	Max.			Min.	Max.							
20	3/4	1 1/4	19/32	1	1/8	6	3 11/16	7 7/8	1/8	3 7/16	5/8	2 5/8	4
30	7/8	1 5/8	3/4	1 1/2	1/8	5 1/2	4 3/8	8 3/8	1/8	3 7/16	5/8	2 13/16	4 5/8
40	7/8	2	3/4	1 5/8	1/8	5 3/8	5 3/8	8 1/2	1/8	3 7/16	1	3 3/16	5 11/16
50	7/8	2 1/4	3/4	2 1/8	1/8	5	6 1/16	9	1/8	3 7/16	1	3 3/8	6 3/4
60	1 1/4	3	1 1/8	2 1/8	1/8	5 1/4	7	9 1/4	1/8	3 9/16	1	4 5/16	7 5/8
70	1 5/8	3 1/8	1 1/2	2 3/8	1/8	6 1/8	8	10 3/8	1/8	4	1	4 9/16	8 11/16
80	1 7/8	4 1/8	1 3/4	3	1/8	7	9 7/16	12 3/8	1/8	4 11/16	1 1/4	5 3/4	10 1/2
90	2 5/8	4 3/4	2 1/2	4 1/8	1/8	7	12 1/8	14	1/8	4 15/16	1 1/2	6 3/4	13 1/16
100	2 7/8	5 3/8	2 3/4	4 1/8	1/8	7	13 7/8	15	1/8	5 7/16	2	7 1/2	15 1/8

SINGLE SPACER COUPLING With Finished Straight Bores

Coupling Size	Hub Sep. L	Shaft Separation C		B	E	D
		Min.	Max.			
20	1	1/8	3 1/2	5 1/2	1 1/16	1/8
30	1 1/2	1/8	3 1/2	6 1/4	1 5/16	1/8
40	1 5/8	1/8	3 1/2	6 13/16	1 3/4	1/8
50	2 1/8	1/8	3 9/16	7 9/16	2	1/8
60	2 1/8	1/8	3 11/16	7 11/16	2	1/8
70	2 3/8	1/8	4 1/4	8 1/2	2 1/8	1/8
80	3	1/8	5	10 3/8	2 11/16	1/8
90	4 1/8	1/8	5 9/16	12 9/16	3 1/2	1/8
100	4 1/8	1/8	5 9/16	13 9/16	4	1/8

Coupling Size	S Hub No Bore		E Hub No Bore		Element W/ Fastener	
	Part No.	Wt. (lbs.)	Part No.	Wt. (lbs.)	Part No.	Wt. (lbs.)
20	20 SHUB	1	20 EHUB	1	20 ELEMENT	1
30	30 SHUB	1	30 EHUB	1	30 ELEMENT	1
40	40 SHUB	2	40 EHUB	2	40 ELEMENT	1
50	50 SHUB	3	50 EHUB	3	50 ELEMENT	2
60	60 SHUB	4	60 EHUB	3	60 ELEMENT	3
70	70 SHUB	6	70 EHUB	4	70 ELEMENT	5
80	80 SHUB	11	80 EHUB	8	80 ELEMENT	9
90	90 SHUB	18	90 EHUB	15	90 ELEMENT	16
100	100 SHUB	34	100 EHUB	29	100 ELEMENT	18

