

Lovejoy / Sier-Bath Flanged Sleeve Gear Couplings

FLAFR Type Flex-Rigid All-Metal Labyrinth Seal Couplings

The FLAFR Type coupling consists of one special flex hub, one rigid hub, one sleeve and one accessory kit. This coupling is supplied with exposed bolts as standard. Shrouded bolts are available upon request through size 5.5.



Features

- All-metal labyrinth seal
- AISI 4140 alloy steel construction (flex half)
- Patented Vari-Crown® tooth form for long life
- Standard 20° pressure angle
- Heat treated bolts for greater strength
- Corrosion resistant bolts and nuts for ease of maintenance
- Provides angular misalignment only
- Flex Half coupling interchangeable with industry standards

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FLAFR Type Performance Data

Size	Nominal Torque		Maximum Speed		ID1		ID2		ID1		ID2		Weight		Max Angular Misalignment Degrees
					Flex Hubs		Flex Hubs		Rigid Hubs		Rigid Hubs				
					Max Bore	Standard Keyway	Rough Stock Bore	Standard Keyway	Max Bore	Standard Keyway	Rough Stock Bore	Standard Keyway			
in-lb	Nm	Unbal RPM	Bal RPM	in	mm	in	mm	in	mm	in	mm	lbs	kg		
1.5	15,000	1 700	12,000	18,000	1.625	41	0.38	9	2.813	76	0.75	19	19	8	.5° Per Gear Mesh
2	35,500	4 000	9,300	13,950	2.125	53	0.50	12	3.500	95	1.00	25	31	14	
2.5	69,300	7 800	7,900	11,850	2.750	69	0.75	19	4.250	114	1.50	38	55	25	
3	118,900	13 400	6,800	10,200	3.125	79	1.13	28	4.875	134	1.75	44	83	38	
3.5	188,500	21 300	6,000	9,000	3.750	95	1.50	38	5.625	150	2.50	63	131	60	
4	283,800	32 100	5,260	7,890	4.250	107	1.50	38	6.500	176	3.00	76	193	88	
4.5	393,800	44 500	4,770	7,155	4.750	120	1.50	38	7.625	202	3.50	88	258	117	
5	551,300	62 300	4,300	6,450	5.500	139	2.50	63	8.750	230	4.00	101	383	174	
5.5	732,500	82 800	3,880	5,820	5.875	149	3.00	76	9.500	260	4.50	114	436	198	
6	952,500	107 600	3,600	5,400	6.500	165	4.00	101	10.500	285	5.00	127	536	243	
7	1,512,500	170 900	3,000	4,500	8.000 ¹	203	4.50	114	12.000	320	5.50	139	851	386	

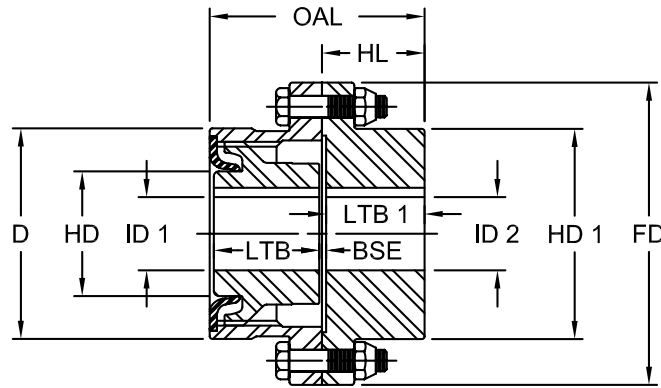
Note: ■ 1 indicates: Maximum bore for square keyway.

Ordering Information

- Application: Driver and Driven.
- Type and size of coupling, horizontal, vertical etc.
- Power: Motor horsepower or torque requirement.
- Speed: Motor RPM or Driven RPM.
- Distance between shaft ends (BSE).
- Shaft sizes.

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FLAFR Type Dimensional Data

Size	OAL in	HL in	ID1		ID2		ID1		ID2		LTB in	LTB1 in	BSE in	FD in	HD1 in	HD in	D in	Puller Holes	
			Flex Hubs		Flex Hubs		Rigid Hubs		Rigid Hubs									Flex Hub in	Rigid Hub in
			Max Bore Standard Keyway	Standard Bore	Max Bore Standard Keyway	Rough Stock Bore	Max Bore Standard Keyway	Rough Stock Bore	in	mm									
1.5	4.03	1.94	1.625	41	0.38	9	2.813	76	0.75	19	1.94	1.84	0.16	6.00	3.97	2.19	3.97	1/4-20	None
2	4.97	2.38	2.125	53	0.50	12	3.500	95	1.00	25	2.44	2.28	0.16	7.00	4.86	2.88	4.91	38-16	5/16-18
2.5	6.22	3.00	2.750	69	0.75	19	4.250	114	1.50	38	3.03	2.91	0.19	8.38	5.84	3.63	5.91	1/2-13	3/8-16
3	7.41	3.50	3.125	79	1.13	28	4.875	134	1.75	44	3.59	3.41	0.19	9.44	6.84	4.25	6.91	5/8-11	1/2-13
3.5	8.56	4.06	3.750	95	1.50	38	5.625	150	2.50	63	4.19	3.97	0.22	11.00	7.91	5.00	7.91	5/8-11	1/2-13
4	9.69	4.63	4.250	107	1.50	38	6.500	176	3.00	76	4.75	4.44	0.31	12.50	9.25	5.75	9.25	7/8-9	5/8-11
4.5	10.91	5.22	4.750	120	1.50	38	7.625	202	3.50	88	5.31	5.03	0.34	13.63	10.38	6.50	10.38	1-8	5/8-11
5	12.19	5.88	5.500	139	2.50	63	8.750	230	4.00	101	6.03	5.69	0.34	15.31	11.56	7.31	11.56	1-8	3/4-10
5.5	13.41	6.34	5.875	149	3.00	76	9.500	260	4.50	114	6.91	6.16	0.34	16.75	12.72	8.00	12.81	1-8	1-8
6	15.22	7.66	6.500	165	4.00	101	10.500	285	5.00	127	7.41	7.41	0.41	18.00	14.00	8.81	14.00	1-8	1-8
7	17.88	9.00	8.000 ¹	203	4.50	114	12.000	320	5.50	139	8.69	8.69	0.50	20.75	15.75	10.31	15.75	1 1/4-7	1-8

- Notes:
- 1 indicates: Maximum bore for square keyway.
 - Exposed Bolt Design is standard.
 - Shrouded Bolt Design available upon request for sizes 1 through 5.
 - Puller Holes are standard on sizes 4 through 7.
 - Puller Holes are available for sizes 1 through 3.5 at an additional charge.
 - Interference bores with no set screws are standard unless otherwise specified.
 - Inch bore and keyway tolerances conform to AGMA 9002-B04.
 - For metric bore and keyway tolerances, consult Lovejoy Engineering Section.