

Lovejoy / Sier-Bath Flanged Sleeve Gear Couplings

FFS – Floating Shaft Gear Coupling

The FFS Type coupling consists of two flex-rigid couplings and one floating shaft. This coupling is supplied with rigid hubs outboard unless otherwise specified. Exposed bolts are standard. Shrouded bolts are available upon request tru sizes 5.5.



Features

- Patented Vari-Crown® tooth form on Flex Hubs for long life
- Standard 20° pressure angle
- Heat treated bolts for greater strength
- Corrosion resistant bolts and nuts for ease of maintenance
- Accommodates angular, parallel, and axial misalignment
- Removal of center assembly allows for ease of maintenance without repositioning machinery
- Rigid hubs outboard allows for larger shaft diameters

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FFS Type Performance Data

Size	Nominal Torque		Maximum Speed ¹		ID1 - ID2		ID1 - ID2		ID1 - ID2		ID1 - ID2		Weight		Angular Misalignment Max Degrees
	in-lb	Nm	Unbal RPM	Bal RPM	Rigid Hubs Max Bore		Rigid Hubs Rough Stock Bore		Flex Hubs Max Bore		Flex Hubs Rough Stock Bore		lbs	kg	
					in	mm	in	mm	in	mm	in	mm			
1	7,600	850	6,000	9,000	2.125	56	Solid w/Center		1.625	42	0.44	11	9	4	1.5° Per Gear Mesh
1.5	18,900	2 140	5,500	8,250	2.813	76		2.125	56	0.69	18	19	9		
2	31,500	3 560	5,000	7,500	3.500	95		2.750	73	0.94	24	34	15		
2.5	56,700	6 410	4,400	6,600	4.250	114		3.250	85	1.44	37	54	25		
3	94,500	10 700	4,000	6,000	4.875	134		4.000	107	1.44	37	80	36		
3.5	151,200	17 100	3,500	5,250	5.625	150		4.625	125	1.81	46	130	59		
4	220,500	24 900	3,000	4,500	6.500	176		5.375	145	2.44	62	190	86		
4.5	302,400	34 200	2,700	4,050	7.625	202		6.000	165	3.00	76	250	114		
5	434,700	49 100	2,500	3,750	8.750	231	4.000	101	6.500	180	3.00	76	380	173	
5.5	573,300	64 800	2,200	3,300	9.500	260	4.500	114	7.500	200	4.00	101	520	236	
6	749,700	84 700	2,100	3,150	10.500	288	5.500	127	8.250	225	4.00	101	650	295	
7	1,008,000	113 900	2,000	3,000	12.000	318	5.750	139	9.500	255	5.00	127	950	431	
8	1,323,000	149 500	1,900	2,850	14.000	380	6.500	165	11.500	310	6.00	152	1,560	708	
9	1,827,000	206 400	1,800	2,700	15.500	418	7.500	190	12.500	340	7.00	177	2,015	915	

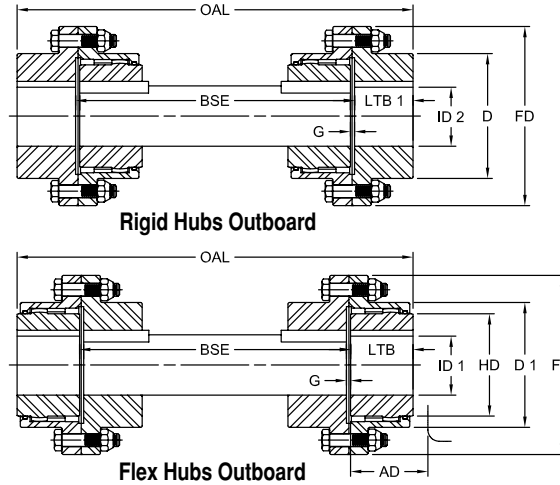
Note: ■ 1 indicates: Maximum RPM of floating shaft set determined by critical speed of floating shaft.

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).
- Equipment shaft sizes.
- Specify which hubs are to be used on the equipment (Rigid or Flex).
- Rigid hubs will be used on the equipment unless otherwise specified.

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Maximum RPM of floating shaft set determined by critical speed of floating shaft

FFS Type Dimensional Data

Size	OAL Min in	BSE Min in	ID1 - ID2				ID1 - ID2				LTB 1 in	LTB in	G in	AD in	FD in	D in	D 1 in	HD in		
			Rigid Hubs Max Bore		Rigid Hubs Rough Stock Bore		Flex Hubs Max Bore		Flex Hubs Rough Stock Bore											
			in	mm	in	mm	in	mm	in	mm										
1	8.07	4.94	2.125	56	Solid w/Center				1.56	1.69	0.16	2.06	4.56	3.06	3.06	2.31				
1.5	9.19	5.50	2.813	76					1.625	42	0.44	11	1.84	1.94	0.16	2.37	6.00	3.97	3.97	3.00
2	12.06	7.50	3.500	95					2.750	73	0.94	24	2.28	2.44	0.16	2.94	7.00	4.84	4.91	4.00
2.5	14.37	8.56	4.250	114					3.250	85	1.44	37	2.91	3.03	0.19	3.53	8.38	5.84	5.91	4.63
3	16.69	9.88	4.875	134					4.000	107	1.44	37	3.41	3.59	0.19	3.97	9.44	6.84	6.91	5.63
3.5	19.25	11.31	5.625	150					4.625	125	1.81	46	3.97	4.19	0.22	4.56	11.00	7.91	7.91	6.50
4	21.82	12.94	6.500	176					5.375	145	2.44	62	4.44	4.75	0.31	5.00	12.50	9.25	9.25	7.50
4.5	24.69	14.63	7.625	202					6.000	165	3.00	76	5.03	5.31	0.34	5.69	13.63	10.38	10.38	8.50
5	28.07	16.69	8.750	231	4.000	101	6.500	180	3.00	76	5.69	6.03	0.34	6.35	15.31	11.56	11.56	9.50		
5.5	30.87	18.56	9.500	260	4.500	114	7.500	200	4.00	101	6.16	6.91	0.34	6.59	16.75	12.72	12.81	10.50		
6	35.37	20.56	10.500	288	5.500	127	8.250	225	4.00	101	7.41	7.41	0.41	8.78	18.00	14.00	14.00	11.50		
7	40.63	23.25	12.000	318	5.750	139	9.500	255	5.00	127	8.69	8.69	0.50	10.31	20.75	15.75	15.75	13.00		
8	49.63	27.63	14.000	380	6.500	165	11.500	310	6.00	152	11.00	11.00	0.50	12.81	23.25	18.34	18.50	15.50		
9	52.13	29.13	15.500	418	7.500	190	12.500	340	7.00	177	11.50	11.50	0.56	13.56	26.00	20.38	20.38	17.00		

- Notes:
- Exposed Bolt Design is standard.
 - Shrouded Bolt Design available upon request for sizes 1 through 5.5.
 - Puller Holes are standard on sizes 4 through 9.
 - 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.
 - Bore and keyway tolerances conform to ANSI / AGMA 9002-B04.
 - For metric bores and keyway tolerances, consult Lovejoy Engineering Section.