HercuFlex® by Lovejoy

FX Series

CX Series

FXL Series

RA/RAHS Series

HercuFlex Gear Couplings

The Reinvention of the Gear Coupling

Safety Warning

When using Lovejoy products, you must follow these instructions and take the following precautions. Failure to do so may cause the power transmission product to break and parts to be thrown with sufficient force to cause severe injury or death.

Refer to this Lovejoy Catalog for proper selection, sizing, horsepower, torque range, and speed range of power transmission products, including elastomeric elements for couplings. Follow the installation instructions included with the product, and in the individual product catalogs for proper installation of power transmission products. Do not exceed catalog ratings.

During start up and operation of power transmission product, avoid sudden shock loads. Coupling assembly should operate quietly and smoothly. If coupling assembly vibrates or makes beating sound, shut down immediately, and recheck alignment. Shortly after initial operation and periodically thereafter, where applicable, inspect coupling assembly for: alignment, wear of elastomeric element, bolt torques, and flexing elements for signs of fatigue. Do not operate coupling assembly if alignment is improper, or where applicable, if elastomeric element is damaged, or worn to less than 75% of its original thickness.

Do not use any of these power transmission products for elevators, man lifts, or other devices that carry people. If the power transmission product fails, the lift device could fall resulting in severe injury or death.

For all power transmission products, you must install suitable guards in accordance with OSHA and American Society of Mechanical Engineers Standards. Do not start power transmission product before suitable guards are in place. Failure to properly guard these products may result in severe injury or death from personnel contacting moving parts or from parts being thrown from assembly in the event the power transmission product fails.

If you have any questions, contact the Lovejoy Engineering Department at 1-630-852-0500.

Disclaimer

This catalog is provided solely to give you analysis tools and data to assist you in your product selection. Product performance is affected by many factors beyond the control of Timken. Therefore, you must validate the suitability and feasibility of all product selections for your applications.

Lovejoy products are sold subject to Timken terms and conditions of sale, which include our limited warranty and remedy. Please consult with your Lovejoy engineer for more information and assistance.

Every reasonable effort has been made to ensure the accuracy of the information in this writing, but no liability is accepted for errors, omissions or for any other reason.

⚠ WARNING
Failure to observe the following warnings could create a risk of death or serious injury.

Proper maintenance and handling practices are critical. Failure to follow selection recommendations and installation instructions and to maintain proper lubrication can result in equipment failure.

HercuFlex® by Lovejoy

Table of Contents

Factors Affecting Selection

The following is a list of the information necessary to assist in making a coupling selection. Not all of these items will come into play in all selection processes. These items include, but are not limited to:

- Application details
- Type of motor and driven equipment
- Motor horsepower or KW
- Operating/coupling speed
- Shaft sizes and separation
- Space and size constraints
- Environment (temperature, chemicals, etc)
- Balance requirements
- Special modifications

Steps In Selecting A Gear Coupling

Refer to the gear coupling specifications charts displayed with each type of coupling throughout this catalog. The pictures and charts provide visualization, specifications, and dimensional data for Lovejoy's HercuFlex gear coupling products. Typically start with an FX Type flanged gear coupling or a CX Type continuous sleeve gear coupling and proceed from there.

Step 1: Review the gear coupling series and type as selected to ensure the selection meets application requirements.

Step 2: Determine the nominal application torque in in–lbs by using the following formula:

$$\text{Application Torque (in–lb)} = \frac{(HP \times 63025)}{RPM}$$

or

$$Nm = \frac{(KW \times 9550)}{RPM}$$

Step 3: Review the Application Service Factor chart for the service factor number associated with the application where this coupling will be used. Multiply the application torque by the application service factor to determine the total torque required for the coupling selection.

Step 4: Compare the required total torque value with the nominal torque capacity listed in the Gear Coupling Selection chart for the desired coupling type.

Step 5: Check that the maximum bore size and the maximum RPM of the coupling type selected to ensure the coupling will meet these application requirements.

Step 6: Note any special requirements including the BSE dimension for floating shaft and spacer types, shear pin torque, slide coupling details, mill motor tapered shaft data, and any other pertinent information.

Consult with Lovejoy for any unique applications.

Application Service Factors

Agitators	
Pure Liquids	1.0
Liquids—Variable Density	1.0
Blowers	
Centrifugal	1.0
Lobe	1.2
Can Filling Machines	1.0
Car Dumpers	2.0
Car Pullers, Intermittent Duty	1.5
Compressors	
Centrifugal	1.0
Reciprocating	2.2
Multi-Cylinder	2.0
Single Cylinder	2.0
Conveyors, Uniformly Loaded or Fed	
Assembly	1.2
Belt	1.2
Screw	1.2
Conveyors, Heavy Duty	
Not Uniformly Fed Assembly	1.5
Belt	1.5
Oven	1.5
Reciprocating	2.0
Screw	1.5
Shaker	1.5
Cranes and Hoists[1]	
Main Hoists	2.0
Reversing	2.0
Skip Hoists	2.0
Trolley Drive	2.0
Bridge Drive	2.0
Crushers	
Ore	3.0
Stone	3.0
Dredges	
Conveyors	2.0
Cutter Head Drives	2.0
Maneuvering Winches	2.0
Pumps	2.0
Fans	
Centrifugal	1.0
Cooling Towers Forced Draft	1.5
Feeders	
Screw	1.5
Generators	
Not Welding	1.0
Welding	1.5
Hammer Mills	2.0
Laundry Washers	
Reversing	1.5
Lumber Industry	
Barkers—Drum Type	2.0
Edger Feed	2.0
Live Rolls	2.0
Log Haul—Incline	2.0
Log Haul—Well Type	2.0
Off Bearing Rolls	2.0
Planer Feed Chains	1.75
Planer Tilting Hoist	1.75
Planer Floor Chains	1.75
Slab Conveyor	1.5
Sorting Table	1.5
Trimmer Feed	1.5
Machine Tools	
Bending Roll	2.0
Punch Press, Gear Driven	2.0
Tapping Machines	2.0
Main Drives	1.5
Auxiliary Drives	1.5
Metal Mills	
Draw Bench—Carriage	2.0
Draw Bench—Main Drive	2.0
Forming Machines	2.0
Slitters	1.5
Table Conveyors	
Non-Reversing	2.25
Reversing	2.5
Wire Drawing & Flattening Machine	2.0
Wire Winding Machine	1.75
Metal Rolling Mills	
Blooming Mills	2.5
Coilers, hot mill	2.0
Coilers, cold mill	1.5
Cold Mills	2.0
Cooling Beds	1.75
Door Openers	2.0
Draw Benches	2.0
Edger Drives	1.75
Feed Rolls, Reversing Mills	3.5
Furnace Pushers	2.5
Hot Mills	3.0
Ingot Cars	2.5
Kick-outs	2.5
Manipulators	3.0
Merchant Mills	3.0
Piercers	3.0
Pusher Rams	2.5
Reel Drives	1.75
Reel Drums	2.0
Reelers	3.0
Rod and Bar Mills	3.0
Roughing Mill Delivery Table	3.0
Runout Tables	2.5
Saws, hot & cold	2.5
Screwdown Drives	3.0
Skelp Mills	3.0
Slitters	3.0
Slabing Mills	1.75
Soaking Pit Cover Drives	3.0
Straighteners	2.5
Tables, transfer & runout	2.5
Thrust Block	3.0
Traction Drive	3.0
Tube Conveyor Rolls	2.5
Unscramblers	2.5
Wire Drawing	1.75
Mills, Rotary Type	
Ball	2.25
Dryers & Coolers	2.0
Hammer	1.75
Kilns	2.0
Pebble & Rod	2.0
Pug	1.75
Tumbling Barrels	2.0
Mixers	
Concrete Mixers, Continuous	1.5
Concrete Mixers, Intermittent	2.0
Oil Industry	
Oil Well Pumping	2.0
Rotary Kilns	2.0
Paper Mills	
Agitators, Mixers	1.5
Barker Auxiliaries, Hydraulic	2.0
Barker Mechanical	2.0
Barking Drum Spur Gear Only	2.0
Beater & Pulper	1.75
Bleacher	1.0
Calenders	2.0
Calenders, Super	1.5
Chippers	2.5
Coaters	1.0
Converting Machines, except Cutters, Platers	1.5
Conveyors	1.5
Couch Roll	1.75
Cutters, Platters	2.0
Cylinders	1.75
Disc Refiners	1.75
Dryers	1.75
Felt Stretcher	1.25
Felt Whipper	2.0
Jordans	1.75
Line Shaft	1.5
Log Haul	2.0
Pulp Grinder	1.75
Press Roll	2.0
Reel	1.5
Stock Chests	1.5
Suction Roll	1.75
Washers & Thickeners	1.5
Winders	1.5
Printing Presses	1.5
Pumps	
Centrifugal	1.0
Reciprocating Single Acting 3 or more Cylinders	1.5
Double Acting 2 or more Cylinders	2.0
Rotary, Gear Type, Lobe Vane	1.5
Rubber Industry	
Mixer	2.0
Rubber Calender	2.0
Screens	
Rotary, Stone or Gravel	1.5
Steering Gear	1.0
Stokers	1.0
Textile Industry	
Dryers	1.5
Dyeing Machinery	1.5
Windlass	2.0

Notes:
- 1 indicates: If people are transported, Lovejoy does not recommend and will not warranty the use of the coupling.
- Values contained in the table should be used as a general guide and are to be applied to smooth power sources such as electric motors and steam turbines.
- For drives involving internal combustion engines add 1.0 to the values listed.

FX Series

Flange Style Gear Coupling

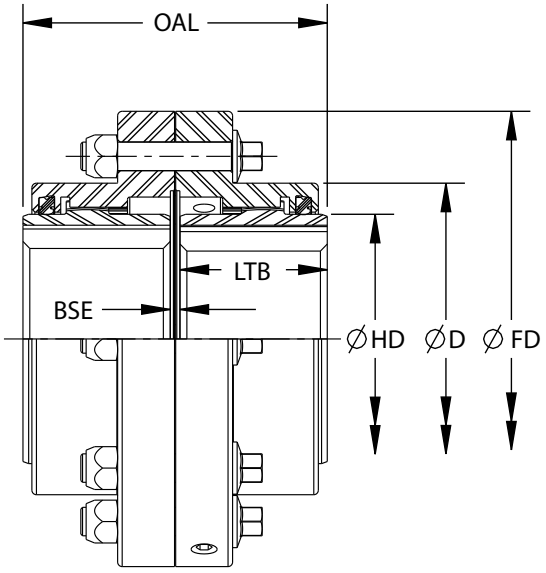
By incorporating the latest advances in Finite Element Analysis technology, Lovejoy has revolutionized the Gear Coupling. Increased nominal torque, larger maximum bore size and longer service life are just a few of the many advantages of the HercuFlex coupling. Despite the advanced nature of these improvements, the HercuFlex Gear Coupling still utilizes the standard AGMA flange interface to ensure field interchangeability.

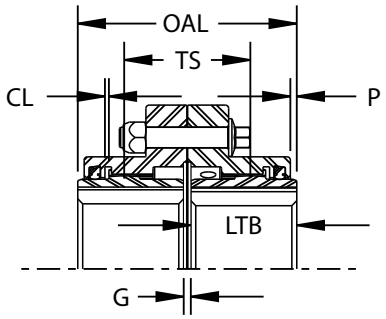
Key Features

- Unequaled bore and torque capacity
- 1.5° of misalignment per gear mesh
- Improved fastener corrosion resistance
- Advanced seal design intensifying contamination resistance
- Interchangeable with standard AGMA flange interface

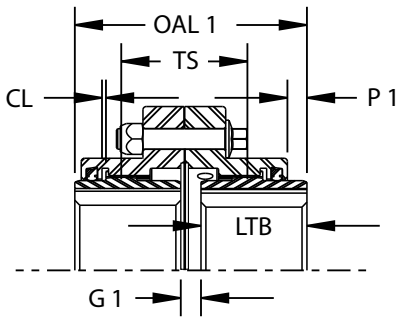
Size	Nominal Torque in-lb	Nominal Torque N-m	Max Bore in	Max Bore mm	Max Running Speed (RPM)	
					Unbal	Bal
1	11,300	1,277	1.875	48	6,000	9,000
1.5	26,100	2,949	2.438	62	5,500	8,250
2	44,850	5,067	3.063	78	5,000	7,500
2.5	79,700	9,005	3.625	92	4,400	6,600
3	135,700	15,332	4.250	108	4,000	6,000
3.5	203,550	22,998	5.000	127	3,500	5,250
4	311,540	35,199	5.875	149	3,000	4,500
4.5	427,460	48,296	6.750	171	2,700	4,050
5	584,890	66,084	7.750	197	2,500	3,750
5.5	771,300	87,145	8.625	220	2,200	3,300
6	1,207,500	136,429	9.500	241	2,100	3,150
7	1,638,750	185,154	11.250	287	2,000	3,000

FX Series
Dimensional Data





Normal Hub Arrangement



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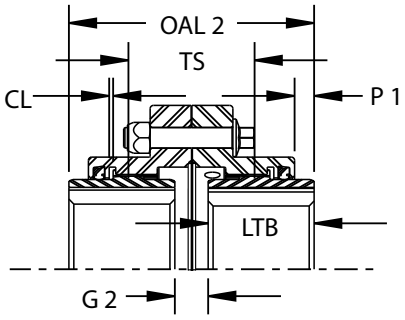


2 Hubs Reversed

FX Dimensions (Standard Hubs)

Size	OAL in	OAL mm	OAL 1 in	OAL 1 mm	OAL 2 in	OAL 2 mm	LTB in	LTB mm	BSE in	BSE mm	HD in	HD mm	D in	D mm
1	3.51	89.2	3.82	97.0	4.13	104.9	1.69	42.9	0.13	3.3	2.49	63.3	3.26	82.8
1.5	4.01	101.9	4.25	108.0	4.49	114.0	1.94	49.3	0.13	3.3	3.29	83.5	4.11	104.3
2	5.01	127.3	5.69	144.5	6.37	161.8	2.44	62.0	0.13	3.3	4.21	106.9	5.10	129.6
2.5	6.25	158.8	7.03	178.6	7.81	198.4	3.03	77.0	0.19	4.8	4.97	126.4	6.17	156.6
3	7.37	187.2	8.04	204.2	8.71	221.2	3.59	91.2	0.19	4.8	5.88	149.4	7.17	182.0
3.5	8.63	219.2	9.20	233.7	9.77	248.2	4.19	106.4	0.25	6.4	6.87	174.5	8.35	212.2
4	9.75	247.7	10.44	265.2	11.13	282.7	4.75	120.7	0.25	6.4	8.10	205.7	9.83	249.8
4.5	10.93	277.6	11.99	304.5	13.05	331.5	5.31	134.9	0.31	7.9	9.09	230.9	10.81	274.7
5	12.37	314.2	13.72	348.5	15.07	382.8	6.03	153.2	0.31	7.9	10.24	260.0	12.13	308.0
5.5	14.13	358.9	15.35	389.9	16.57	420.9	6.91	175.5	0.31	7.9	11.28	286.5	13.13	333.4
6	15.13	384.3	16.54	420.1	17.95	455.9	7.41	188.2	0.31	7.9	12.29	312.2	14.38	365.2
7	17.76	451.1	19.07	484.4	20.38	517.7	8.69	220.7	0.38	9.7	14.30	363.3	16.69	423.9

Size	FD in	FD mm	TS in	TS mm	CL in	CL mm	P in	P mm	P 1 in	P 1 mm	G in	G mm	G 1 in	G 1 mm	G 2 in	G 2 mm
1	4.56	115.8	2.13	54.1	0.07	1.7	0.01	0.3	0.32	8.1	0.13	3.3	0.44	11.2	0.75	19.1
1.5	6.00	152.4	2.31	58.7	0.07	1.8	0.12	3.0	0.36	9.1	0.13	3.3	0.37	9.4	0.61	15.5
2	7.00	177.8	3.25	82.6	0.07	1.8	0.12	3.0	0.80	20.3	0.13	3.3	0.81	20.6	1.49	37.8
2.5	8.38	212.9	4.00	101.6	0.10	2.6	0.18	4.6	0.96	24.4	0.19	4.8	0.97	24.6	1.75	44.5
3	9.44	239.8	4.45	113.0	0.09	2.3	0.37	9.4	1.04	26.4	0.19	4.8	0.86	21.8	1.53	38.9
3.5	11.00	279.4	5.01	127.3	0.10	2.4	0.50	12.7	1.07	27.2	0.25	6.4	0.82	20.8	1.39	35.3
4	12.50	317.5	5.69	144.5	0.13	3.4	0.62	15.7	1.31	33.3	0.25	6.4	0.94	23.9	1.63	41.4
4.5	13.63	346.2	6.68	169.7	0.14	3.5	0.65	16.5	1.71	43.4	0.31	7.9	1.37	34.8	2.43	61.7
5	15.31	388.9	7.69	195.3	0.20	5.0	0.65	16.5	2.00	50.7	0.31	7.9	1.66	42.2	3.01	76.5
5.5	16.75	425.5	8.44	214.4	0.19	4.9	1.06	26.9	2.28	57.9	0.31	7.9	1.53	38.9	2.75	69.8
6	18.00	457.2	9.13	231.9	0.16	4.0	0.90	22.9	2.31	58.7	0.31	7.9	1.72	43.7	3.13	79.5
7	20.75	527.1	10.38	263.7	0.19	4.8	1.50	38.0	2.81	71.2	0.38	9.7	1.69	42.9	3.00	76.2

CX Series

Continuous Sleeve Style Gear Coupling

The HercuFlex coupling family has expanded to include the continuous sleeve gear coupling. Utilizing the same industry leading design expertise as seen in the FX style, Lovejoy has incorporated multiple innovations to yield previously unseen bore and torque capacity in the Continuous Sleeve gear coupling segment.

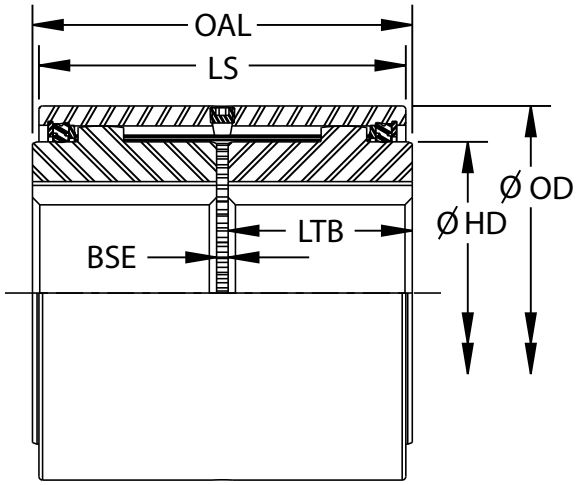
Key Features

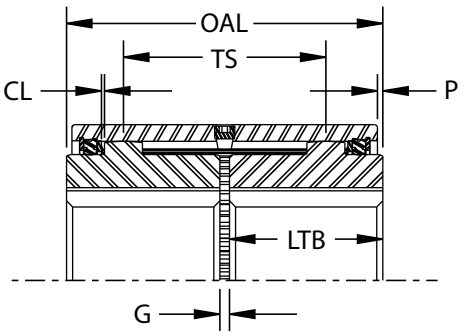
- Unequaled bore and torque capacity
- 1.5° of misalignment per gear mesh
- Improved hardware corrosion resistance
- Advanced seal design intensifying contamination resistance

Size	Nominal Torque in-lb	Nominal Torque N-m	Max Bore in	Max Bore mm	Max Running Speed (RPM)	
					Unbal	Bal
1	11,300	1,277	1.875	48	6,000	9,000
1.5	26,100	2,949	2.438	62	5,500	8,250
2	44,850	5,067	3.063	78	5,000	7,500
2.5	79,700	9,005	3.625	92	4,400	6,600
3	135,700	15,332	4.250	108	4,000	6,000
3.5	203,550	22,998	5.000	127	3,500	5,250
4	311,540	35,199	5.875	149	3,000	4,500
4.5	427,460	48,296	6.750	171	2,700	4,050
5	584,890	66,084	7.750	197	2,500	3,750
5.5	771,300	87,145	8.625	220	2,200	3,300
6	1,207,500	136,429	9.500	241	2,100	3,150
7	1,638,750	185,154	11.250	287	2,000	3,000

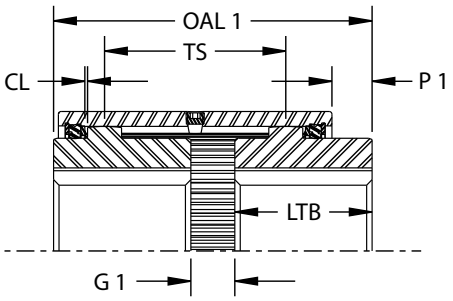
CX Series

Dimensional Data

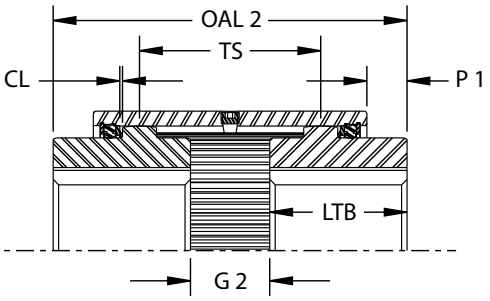




Normal Hub Arrangement



1 Hub Reversed



2 Hubs Reversed

CX Dimensions (Standard Hubs)

Size	OAL in	OAL mm	OAL 1 in	OAL 1 mm	OAL 2 in	OAL 2 mm	LTB in	LTB mm	BSE in	BSE mm	HD in	HD mm	OD in	OD mm	TS in	TS mm
1	3.63	92.2	3.94	100.1	4.25	108.0	1.69	42.9	0.13	3.3	2.49	63.3	3.26	82.8	2.13	54.1
1.5	4.01	101.9	4.25	108.0	4.49	114.0	1.94	49.3	0.13	3.3	3.29	83.5	4.11	104.3	2.31	58.7
2	5.01	127.3	5.69	144.5	6.37	161.8	2.44	62.0	0.13	3.3	4.21	106.9	5.10	129.6	3.25	82.6
2.5	6.25	158.8	7.03	178.6	7.81	198.4	3.03	77.0	0.19	4.8	4.97	126.4	6.17	156.6	4.00	101.6
3	7.37	187.2	8.04	204.2	8.71	221.2	3.59	91.2	0.19	4.8	5.88	149.4	7.17	182.0	4.45	113.0
3.5	8.63	219.2	9.20	233.7	9.77	248.2	4.19	106.4	0.25	6.4	6.87	174.5	8.35	212.2	5.01	127.3
4	9.75	247.7	10.44	265.2	11.13	282.7	4.75	120.7	0.25	6.4	8.10	205.7	9.83	249.8	5.69	144.5
4.5	10.93	277.6	11.99	304.5	13.05	331.5	5.31	134.9	0.31	7.9	9.09	230.9	10.81	274.7	6.68	169.7
5	12.37	314.2	13.72	348.5	15.07	382.8	6.03	153.2	0.31	7.9	10.24	260.0	12.13	308.0	7.69	195.3
5.5	14.13	358.9	15.35	389.9	16.57	420.9	6.91	175.5	0.31	7.9	11.28	286.5	13.13	333.4	8.44	214.4
6	15.13	384.3	16.54	420.1	17.95	455.9	7.41	188.2	0.31	7.9	12.29	312.2	14.38	365.2	9.13	231.9
7	17.76	451.1	19.07	484.4	20.38	517.7	8.69	220.7	0.38	9.7	14.30	363.3	16.69	423.9	10.38	263.7

Size	P in	P mm	P 1 in	P 1 mm	G in	G mm	G 1 in	G 1 mm	G 2 in	G 2 mm	LS in	LS mm	CL in	CL mm
1	-0.12	-3.0	0.19	4.8	0.13	3.3	0.44	11.2	0.75	19.1	3.63	92.2	0.06	1.5
1.5	0.05	1.3	0.29	7.4	0.13	3.3	0.37	9.4	0.61	15.5	3.90	98.9	0.06	1.5
2	0.00	0.0	0.68	17.3	0.13	3.3	0.81	20.6	1.49	37.8	5.00	126.9	0.06	1.5
2.5	0.10	2.6	0.88	22.4	0.19	4.8	0.97	24.6	1.75	44.5	6.04	153.3	0.06	1.5
3	0.37	9.3	1.04	26.3	0.19	4.8	0.86	21.8	1.53	38.9	6.63	168.3	0.06	1.5
3.5	0.66	16.7	1.23	31.2	0.25	6.4	0.82	20.8	1.39	35.3	7.31	185.6	0.09	2.3
4	0.77	19.5	1.46	37.0	0.25	6.4	0.94	23.9	1.63	41.4	8.21	208.5	0.09	2.3
4.5	0.68	17.3	1.74	44.2	0.31	7.9	1.37	34.8	2.43	61.7	9.56	242.7	0.09	2.3
5	0.60	15.3	1.95	49.6	0.31	7.9	1.66	42.2	3.01	76.5	11.16	283.3	0.13	3.2
5.5	0.98	25.0	2.20	55.9	0.31	7.9	1.53	38.9	2.75	69.8	12.16	308.7	0.13	3.2
6	0.82	20.9	2.23	56.7	0.31	7.9	1.72	43.7	3.13	79.5	13.48	342.3	0.13	3.2
7	1.46	37.0	2.77	70.3	0.38	9.7	1.69	42.9	3.00	76.2	14.84	376.8	0.13	3.2

FXL Series

Labyrinth Seal Flanged Gear Coupling

In extreme high contamination environments, Lovejoy has transformed the HercuFlex coupling to integrate an advanced seal design when performance degradation is not tolerable. This advanced gear coupling still encompasses the torque and misalignment capacities that make the HercuFlex coupling an industry leader.

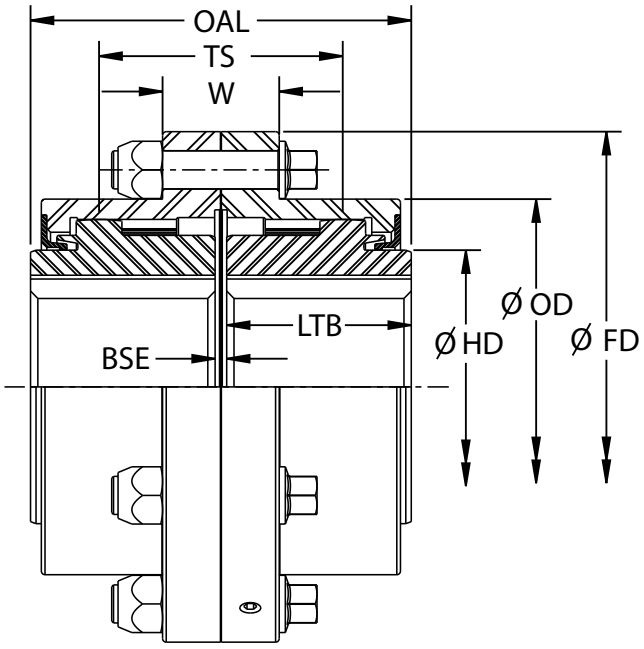
Key Features

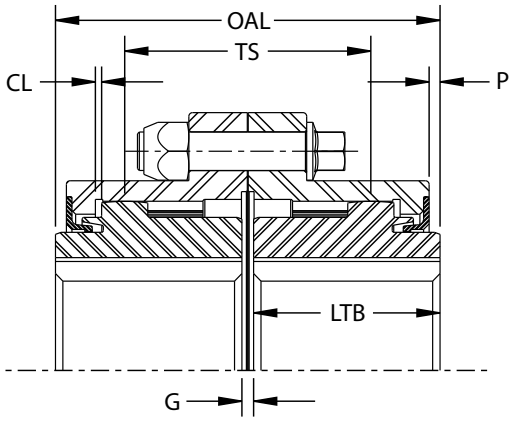
- Unequaled bore and torque capacity
- 1.5° of misalignment per gear mesh
- Improved fastener corrosion resistance
- Advanced seal design intensifying contamination resistance
- Interchangeable with standard AGMA flange interface

Size	Nominal Torque in-lb	Nominal Torque N-m	Max Bore in	Max Bore mm	Max Running Speed (RPM)	
					Unbal	Bal
1	8,000	904	1.563	40	6,000	9,000
1.5	15,000	1,695	2.125	55	5,500	8,250
2	39,000	4,406	2.813	71	5,000	7,500
2.5	69,300	7,830	3.370	85	4,400	6,600
3	118,000	13,332	4.063	100	4,000	6,000
3.5	177,000	19,998	4.750	120	3,500	5,250
4	270,900	30,608	5.675	145	3,000	4,500
4.5	370,700	41,883	6.375	167	2,700	4,050
5	508,600	57,464	7.500	190	2,500	3,750
5.5	670,700	75,779	8.375	212	2,200	3,300
6	1,050,000	118,634	9.375	238	2,100	3,150
7	1,425,000	161,003	11.000	280	2,000	3,000

FXL Series

Dimensional Data





Normal Hub Arrangement

FXL Dimensions (Standard Hubs)

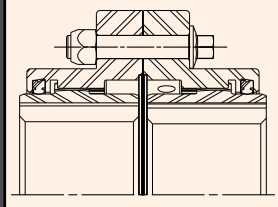
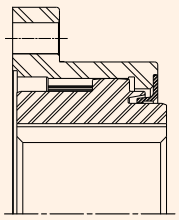
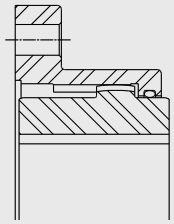
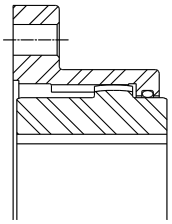
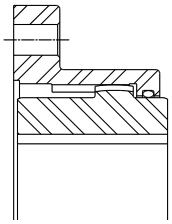
Size	OAL in	OAL mm	LTB in	LTB mm	BSE in	BSE mm	HD in	HD mm	OD in	OD mm	TS in	TS mm
1	3.63	92.2	1.69	42.9	0.13	3.3	2.06	52.3	3.26	82.8	2.13	54.1
1.5	4.01	101.9	1.94	49.3	0.13	3.3	2.85	72.4	4.11	104.3	2.31	58.7
2	5.01	127.3	2.44	62.0	0.13	3.3	3.75	95.2	5.10	129.6	3.25	82.6
2.5	6.25	158.8	3.03	77.0	0.19	4.8	4.49	114.0	6.17	156.6	4.00	101.6
3	7.37	187.2	3.59	91.2	0.19	4.8	5.38	136.6	7.17	182.0	4.45	113.0
3.5	8.63	219.2	4.19	106.4	0.25	6.4	6.34	161.1	8.35	212.2	5.01	127.3
4	9.75	247.7	4.75	120.7	0.25	6.4	7.41	188.3	9.83	249.8	5.69	144.5
4.5	10.93	277.6	5.31	134.9	0.31	7.9	8.38	212.8	10.81	274.7	6.68	169.7
5	12.37	314.2	6.03	153.2	0.31	7.9	9.51	241.5	12.13	308.0	7.69	195.3
5.5	14.13	358.9	6.91	175.5	0.31	7.9	10.52	267.3	13.13	333.4	8.44	214.4
6	15.13	384.3	7.41	188.2	0.31	7.9	11.55	293.5	14.38	365.2	9.13	231.9
7	17.76	451.1	8.69	220.7	0.38	9.7	13.54	343.8	16.69	423.9	10.38	263.7

Size	G in	G mm	FD in	FD mm	TS in	TS mm	CL in	CL mm	P in	P mm
1	0.13	3.3	4.56	115.8	2.13	54.1	0.07	1.7	0.01	0.3
1.5	0.13	3.3	6.00	152.4	2.31	58.7	0.07	1.8	0.12	3.0
2	0.13	3.3	7.00	177.8	3.25	82.6	0.07	1.8	0.12	3.0
2.5	0.19	4.8	8.38	212.9	4.00	101.6	0.10	2.6	0.18	4.6
3	0.19	4.8	9.44	239.8	4.45	113.0	0.09	2.3	0.37	9.4
3.5	0.25	6.4	11.00	279.4	5.01	127.3	0.10	2.4	0.50	12.7
4	0.25	6.4	12.50	317.5	5.69	144.5	0.13	3.4	0.62	15.7
4.5	0.31	7.9	13.63	346.2	6.68	169.7	0.14	3.5	0.65	16.5
5	0.31	7.9	15.31	388.9	7.69	195.3	0.20	5.0	0.65	16.5
5.5	0.31	7.9	16.75	425.5	8.44	214.4	0.19	4.9	1.06	26.9
6	0.31	7.9	18.00	457.2	9.13	231.9	0.16	4.0	0.90	22.9
7	0.38	9.7	20.75	527.1	10.38	263.7	0.19	4.8	1.50	38.0

Flange Interchangeability*

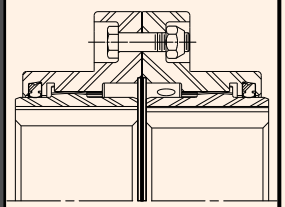
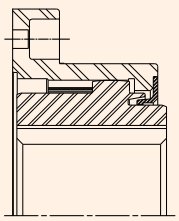
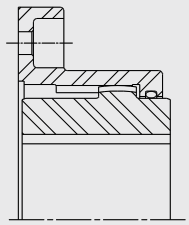
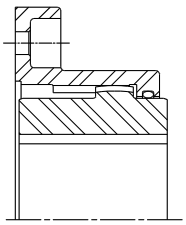
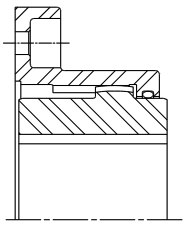
Exposed and Shrouded Bolts

EXPOSED BOLTS

Lovejoy® FX Series				Lovejoy® FXL Series				Lovejoy® F Series				FALK® 1000 Series				FALK® GF Series			
Size	Torque Rating in-lb	Max Bore in	Max Bore mm	Size	Torque Rating in-lb	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm
1	11,300	1.875	48	1	8,000	1.563	40	1	7,600	1.625	42	1010G	10,080	1.875	48	1GF	7,600	1.625	41
1.5	26,100	2.438	62	1.5	15,000	2.125	55	1.5	18,900	2.125	56	1015G	20,790	2.375	60	1-½GF	18,900	2.125	54
2	44,850	3.063	78	2	39,000	2.813	71	2	31,500	2.750	73	1020G	37,800	2.875	73	2GF	31,500	2.750	70
2.5	79,700	3.625	92	2.5	69,300	3.375	85	2.5	56,700	3.250	85	1025G	66,150	3.625	92	2-½GF	56,700	3.250	83
3	135,700	4.250	108	3	118,000	4.063	100	3	94,500	4.000	107	1030G	107,100	4.125	105	3GF	101,000	4.000	102
3.5	203,550	5.000	127	3.5	177,000	4.750	120	3.5	151,200	4.625	125	1035G	163,800	4.875	124	3-½GF	151,300	4.500	114
4	311,540	5.875	149	4	270,900	5.688	145	4	220,500	5.375	145	1040G	270,900	5.750	146	4GF	236,000	5.375	137
4.5	427,460	6.750	171	4.5	370,700	6.375	162	4.5	302,400	6.000	165	1045G	371,700	6.750	171	4-½GF	324,000	6.500	165
5	584,890	7.750	197	5	508,600	7.500	190	5	434,700	6.500	180	1050G	500,900	7.375	187	5GF	441,000	7.000	178
5.5	771,300	8.625	220	5.5	670,700	8.375	212	5.5	573,300	7.500	200	1055G	655,200	8.250	210	5-½GF	580,000	7.750	197
6	1,207,500	9.500	241	6	1,050,000	9.375	238	6	749,700	8.250	225	1060G	800,100	9.125	232	6GF	759,000	8.750	222
7	1,638,750	11.250	287	7	1,425,000	11.000	280	7	1,008,000	9.500	255	1070G	1,197,000	10.000	254				

SHROUDED BOLTS

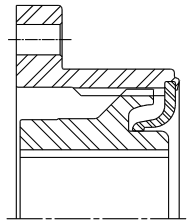






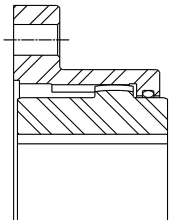
Lovejoy® FX Series				Lovejoy® FXL Series				Lovejoy® F Series				FALK® 1000 Series				FALK® GF Series			
Size	Torque Rating in-lb	Max Bore in	Max Bore mm	Size	Torque Rating in-lb	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm
1	11,300	1.875	48	1	8,000	1.563	40	1	7,600	1.625	42	1010G	10,080	1.875	48	1GF	7,600	1.625	41
1.5	26,100	2.438	62	1.5	15,000	2.125	55	1.5	18,900	2.125	56	1015G	20,790	2.375	60	1-½GF	18,900	2.125	54
2	44,850	3.063	78	2	39,000	2.813	71	2	31,500	2.750	73	1020G	37,800	2.875	73	2GF	31,500	2.750	70
2.5	79,700	3.625	92	2.5	69,300	3.375	85	2.5	56,700	3.250	85	1025G	66,150	3.625	92	2-½GF	56,700	3.250	83
3	135,700	4.250	108	3	118,000	4.063	100	3	94,500	4.000	107	1030G	107,100	4.125	105	3GF	101,000	4.000	102
3.5	203,550	5.000	127	3.5	177,000	4.750	120	3.5	151,200	4.625	125	1035G	163,800	4.875	124	3-½GF	151,300	4.500	114
4	311,540	5.875	149	4	270,900	5.688	145	4	220,500	5.375	145	1040G	270,900	5.750	146	4GF	236,000	5.375	137
4.5	427,460	6.750	171	4.5	370,700	6.375	162	4.5	302,400	6.000	165	1045G	371,700	6.750	171	4-½GF	324,000	6.500	165
5	584,890	7.750	197	5	508,600	7.500	190	5	434,700	6.500	180	1050G	500,900	7.375	187	5GF	441,000	7.000	178
5.5	771,300	8.625	220	5.5	670,700	8.375	212	5.5	573,300	7.500	200	1055G	655,200	8.250	210	5-½GF	580,000	7.750	197

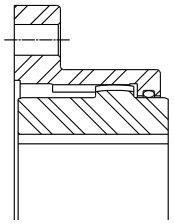
Note: ■ * indicates: Special fasteners may be required.

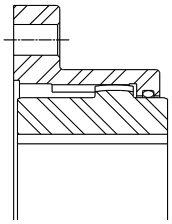
Flange Interchangeability*

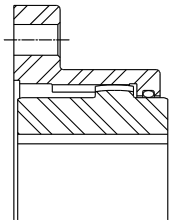
Exposed and Shrouded Bolts



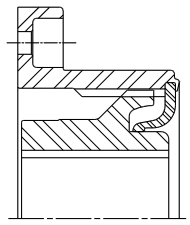


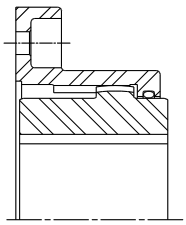


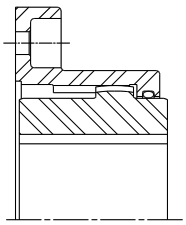


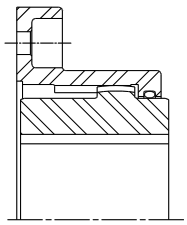


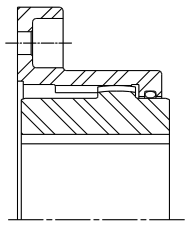
Kop-Flex® FAST				Kop-Flex® H Series				Kop-Flex® Waldron® Series				Renold® Ajax® Series				Ameridrives® Series F			
Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm
				1	7,500	1.625	41	1	6,300	1.625	41	1	12,700	1.630	46	201¼	7,600	1.630	41
1 ½	17,000	1.625	41	1 ½	17,000	2.250	57	1 ½	15,100	2.188	56	1-½	23,800	2.130	57	201½	17,000	2.250	57
2	31,500	2.125	54	2	31,500	2.875	73	2	31,500	2.750	70	2	40,600	2.750	78	202	31,500	2.750	70
2 ½	56,700	2.750	70	2 ½	56,700	3.500	89	2 ½	56,700	3.250	83	2-½	65,700	3.250	90	202½	53,600	3.500	89
3	101,000	3.125	79	3	101,000	4.000	102	3	94,500	4.000	102	3	108,000	4.000	110	203	94,500	4.000	102
3 ½	148,000	3.750	95	3 ½	148,000	4.625	117	3 ½	145,000	4.750	121	3-½	166,000	4.500	127	203½	142,000	4.500	114
4	236,000	4.250	108	4	236,000	5.500	140	4	221,000	5.375	137	4	264,000	5.380	145	204	214,000	5.500	140
4 ½	318,000	4.750	121	4 ½	318,000	6.250	159	4 ½	300,000	6.000	152	4-½	365,000	6.000	165	204½	324,000	6.250	159
5	441,000	5.500	140	5	441,000	7.125	181	5	410,000	6.750	171	5	489,000	6.630	185	205	416,000	6.620	168
5 ½	580,000	5.875	149	5 ½	580,000	8.000	203	5 ½	536,000	7.500	191	5-½	725,000	7.500	205	205½	551,000	7.500	191
6	759,000	6.500	165	6	759,000	8.875	225	6	693,000	8.250	210	6	925,000	8.130	225	206	750,000	8.250	210
7	1,160,000	8.000	203	7	1,160,000	10.375	264	7	1,010,000	9.250	235	7	1,390,000	9.630	260	207	1,033,000	9.620	244





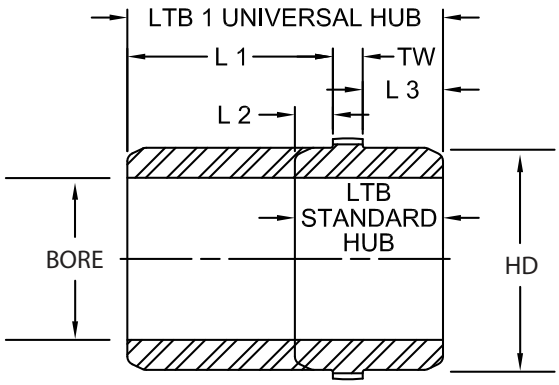






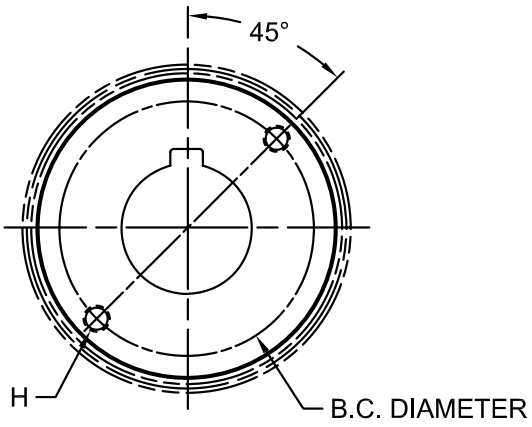
Kop-Flex® FAST				Kop-Flex® H Series				Kop-Flex® Waldron® Series				Renold® Ajax® Series				Ameridrives® Series F			
Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm	Size	Torque Rating in-lbf	Max Bore in	Max Bore mm
				1	7,500	1.625	41	1	6,300	1.625	41	1	12,700	1.630	46	201¼	7,600	1.630	41
1 ½	17,000	1.625	41	1 ½	17,000	2.250	57	1 ½	15,100	2.188	56	1-½	23,800	2.130	57	201½	17,000	2.250	57
2	31,500	2.125	54	2	31,500	2.875	73	2	31,500	2.750	70	2	40,600	2.750	78	202	31,500	2.750	70
2 ½	56,700	2.750	70	2 ½	56,700	3.500	89	2 ½	56,700	3.250	83	2-½	65,700	3.250	90	202½	53,600	3.500	89
3	101,000	3.125	79	3	101,000	4.000	102	3	94,500	4.000	102	3	108,000	4.000	110	203	94,500	4.000	102
3 ½	148,000	3.750	95	3 ½	148,000	4.625	117	3 ½	145,000	4.750	121	3-½	166,000	4.500	127	203½	142,000	4.500	114
4	236,000	4.250	108	4	236,000	5.500	140	4	221,000	5.375	137	4	264,000	5.380	145	204	214,000	5.500	140
4 ½	318,000	4.750	121	4 ½	318,000	6.250	159	4 ½	300,000	6.000	152	4-½	365,000	6.000	165	204½	324,000	6.250	159
5	441,000	5.500	140	5	441,000	7.125	181	5	410,000	6.750	171	5	489,000	6.630	185	205	416,000	6.620	168
5 ½	580,000	5.875	149	5 ½	580,000	8.000	203	5 ½	536,000	7.500	191	5-½	725,000	7.500	205	205½	551,000	7.500	191

Additional Dimensional Data



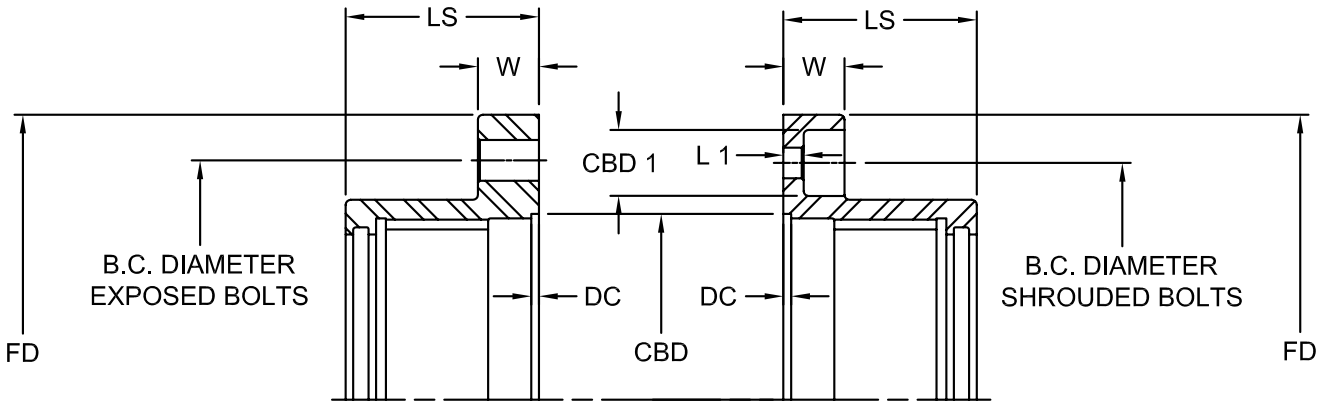
Hub Dimensions

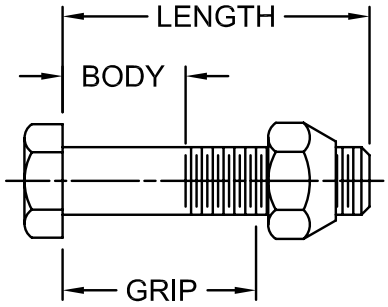
Size	HD in	BORE RSB in	L1 in	L2 in	L3 in	TW in	LTB STD in	LTB 1 UNIV HUB in
1	2.49	Solid	2.75	0.44	0.75	0.50	1.69	4.00
1.5	3.29	Solid	3.13	0.57	0.81	0.56	1.94	4.50
2	4.21	Solid	3.63	0.57	1.25	0.62	2.44	5.50
2.5	4.97	1.47	4.22	0.75	1.53	0.75	3.03	6.50
3	5.88	1.47	4.43	1.02	1.69	0.88	3.59	7.00
3.5	6.87	1.84	4.62	1.31	1.88	1.00	4.19	7.50
4	8.10	2.47	4.97	1.47	2.16	1.12	4.75	8.25
4.5	9.09	3.00	5.19	1.50	2.56	1.25	5.31	9.00
5	10.24	3.00	5.06	1.59	2.94	1.50	6.03	9.50
5.5	11.28	4.00	5.56	1.97	3.19	1.75	6.91	10.50
6	12.29	4.00	5.65	1.81	3.22	2.38	7.41	11.25
7	14.30	5.00	7.00	2.50	3.81	2.38	8.69	13.19



Flex Hub Puller Bolt Holes

Size	B.C. Diameter in	H	
		UNC	Depth
1	None	None	None
1.5	None	None	None
2	3.38	5/16 - 18	0.50
2.5	3.94	3/8 - 16	0.56
3	4.94	1/2 - 13	0.75
3.5	5.56	1/2 - 13	0.75
4	6.44	5/8 - 11	0.94
4.5	7.38	5/8 - 11	0.94
5	8.00	3/4 - 10	1.13
5.5	9.00	1 - 8	1.50
6	9.75	1 - 8	1.50
7	11.63	1 - 8	1.50





Sleeve and Bolt Dimensions

Size	LS in	W in	DC in	FD in	CBD in	EXPOSED BOLTS						CBD 1 in	L in	SHROUDED BOLTS					
						B.C. Dia. in	Qty	THD Size	Length in	Min Body in	Max Grip in			B.C. Dia. in	Qty	THD Size	Length in	Min Body in	Max Grip in
1	1.66	0.56	0.09	4.56	3.03	3.750	6	1/4-28	1.50	0.63	1.063	0.64	0.25	3.750	6	1/4-28	0.81	0.281	0.438
1.5	1.88	0.75	0.09	6.00	3.91	4.812	8	3/8-24	2.00	0.88	1.438	0.81	0.25	4.812	8	3/8-24	1.00	0.281	0.438
2	2.38	0.75	0.09	7.00	4.89	5.875	6	1/2-20	2.25	0.88	1.406	0.81	0.25	5.812	10	3/8-24	1.00	0.281	0.438
2.5	2.88	0.88	0.09	8.38	5.81	7.125	6	5/8-18	2.75	1.00	1.656	1.06	0.31	7.000	10	1/2-20	1.25	0.375	0.531
3	3.31	0.88	0.09	9.44	6.73	8.125	8	5/8-18	2.75	1.00	4.656	1.06	0.31	8.000	12	1/2-20	1.25	0.375	0.531
3.5	3.81	1.13	0.09	11.00	7.73	9.500	8	3/4-16	3.25	1.25	2.156	1.31	0.38	9.281	12	5/8-18	1.50	0.438	0.656
4	4.25	1.13	0.19	12.50	9.02	11.000	8	3/4-16	3.25	1.25	2.156	1.31	0.38	10.625	14	5/8-18	1.50	0.438	0.656
4.5	4.81	1.13	0.19	13.63	10.08	12.000	10	3/4-16	3.25	1.25	1.156	1.31	0.38	11.750	14	5/8-18	1.50	0.438	0.656
5	5.50	1.50	0.19	15.31	11.36	13.500	8	7/8-14	4.25	1.69	2.875	1.56	0.56	13.188	14	3/4-16	2.00	0.625	1.031
5.5	6.00	1.50	0.19	16.75	12.58	14.500	14	7/8-14	3.00	1.13	1.750	1.56	0.56	14.437	16	3/4-16	2.00	0.625	1.031
6	6.69	1.00	0.25	18.00	13.75	15.750	14	7/8-14	3.25	1.19	1.875	Exposed Bolts Only							
7	7.38	1.13	0.31	20.75	15.86	18.250	16	1-14	3.50	1.31	2.125								

RA and RAHS Type Rigid Adjustable Couplings

The RA and RAHS couplings are offered in two different styles. Type II coupling consists of two rigid hubs, adjusting nut and split ring and split ring for motor hub. Type IV coupling consists of two rigid hubs, adjusting nut, and split ring for motor hub and spacer.

Key Features

- Axial positioning of the pump impeller in vertical pump applications
- Clearance fit bores allows for easy installation and maintenance for pump and/or motor
- Easily adjustable for vertical clearance
- Removable spacer for easy maintenance
- AISI 1045 Steel
- Stainless Steel coupling also available

RA and RAHS Type Performance Data

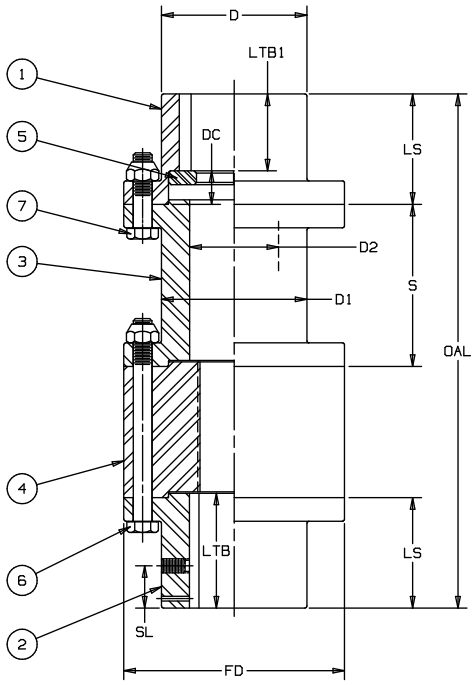
Size	HP/100 RPM	Nominal Torque in-lb	Thrust Capacity lbs	Motor & Pump Hubs Min Bore in	Motor & Pump Hubs Min Bore mm	Motor & Pump Hubs Max Bore in	Motor & Pump Hubs Max Bore mm
1125	2.7	1,702	4,500	0.44	11	1.125	29
1625	8.0	5,042	11,000	0.63	16	1.625	42
2125	17.9	11,282	31,000	0.73	18	2.125	56
2625	33.8	21,302	31,000	0.88	22	2.625	70
2875	44.4	27,983	31,000	0.88	22	2.875	77
3125	57.0	35,924	41,000	1.19	30	3.125	84
3875	109.0	68,697	73,000	1.25	31	3.875	103
5000	310.0	195,378	160,000	2.38	60	5.000	135
6000	404.0	254,621	300,000	2.88	73	6.000	167
7250	712.0	448,738	300,000	4.00	101	7.250	194
8500	1148.0	723,527	350,000	4.00	101	8.500	225
10500	2164.0	1,363,861	400,000	5.00	127	10.500	276

Ordering Information

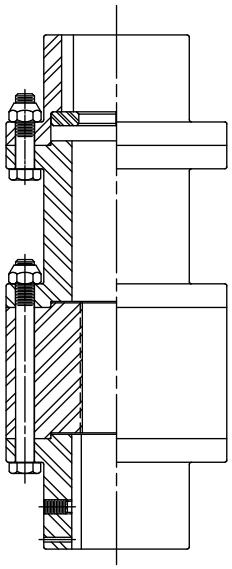
- Application: Driver and Driven.
- Power: Motor horsepower or torque requirement.
- Speed: Motor Speed or Driven RPM.
- Distance between shaft ends (BSE).
- Shaft sizes.
- Adjusting nut threads.
- Amount of trust on either or both shafts.
- Submit drawing if available.

RA and RAHS Type Rigid Couplings

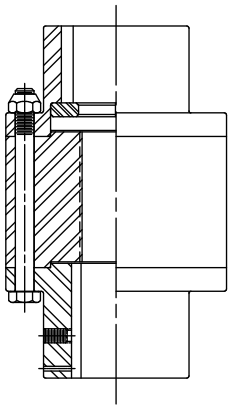
Dimensional Data



RA & RAHS Spacer Coupling
Type IV



RA & RAHS Coupling
Type II



RA and RAHS Type Dimensional Data

Size	STD OAL		FD	D	LTB	LTB1	LS	DC	SL	D1	D2	S		BOLTS		Bolt Circle ⑥&⑦ Diameter
	Type II	Type IV										Std	Min			
	in	in	in	in	in	in	in	in	in	in	in	in	in	Qty	Size	in
1125	5.25	9.56	3.00	1.75	2.13	1.11	2.00	0.89	0.88	1.75	1.25	4.44	1.63	4	1/4 - 28	2.375
1625	6.00	10.31	4.00	2.50	2.38	1.36	2.25	0.89	0.88	2.50	1.75	4.44	1.75	6	5/16 - 24	3.250
2125	7.13	11.44	5.13	3.13	2.81	1.80	2.69	0.89	1.00	3.13	2.25	4.44	2.63	6	1/2 - 20	4.250
2625	9.38	13.69	5.88	3.88	3.06	2.05	2.94	0.89	1.13	3.88	2.75	4.44	2.63	6	1/2 - 20	4.938
2875	10.38	14.69	6.38	4.38	3.56	2.55	3.44	0.89	1.38	4.38	3.00	4.44	2.88	6	1/2 - 20	5.438
3125	11.50	15.81	6.75	4.63	4.13	3.11	4.00	0.89	1.63	4.63	3.25	4.44	2.88	8	1/2 - 20	5.813
3875	12.75	17.06	8.94	5.88	4.50	3.48	4.38	0.89	1.75	5.88	4.00	4.44	3.13	6	3/4 - 16	7.625
5000	15.00	NO STD	11.75	7.50	6.25	4.63	6.00	1.38	2.44	7.50	5.13	NO STD	4.50	8	1 - 14	10.000
6000	20.88	NO STD	13.25	9.00	9.50	7.63	9.25	1.63	4.00	9.00	6.13	NO STD	4.75	10	1 - 14	11.500
7250	25.19	NO STD	15.00	10.75	11.06	8.81	10.75	1.94	4.75	10.75	7.38	NO STD	7.06	14	1 - 14	13.250
7500	33.56	NO STD	17.25	12.50	15.31	13.06	15.00	1.94	6.63	12.50	8.63	NO STD	7.31	12	1-1/8 - 12	15.000
10500	40.94	NO STD	20.50	15.00	18.69	16.44	18.38	1.94	8.13	15.00	10.63	NO STD	8.31	12	1-1/8 - 12	18.000

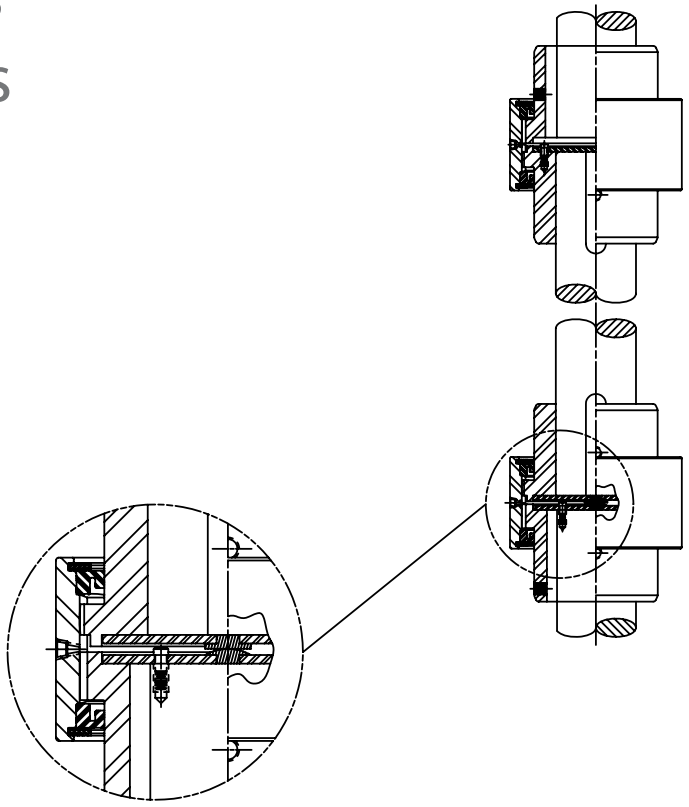
Ordering Information

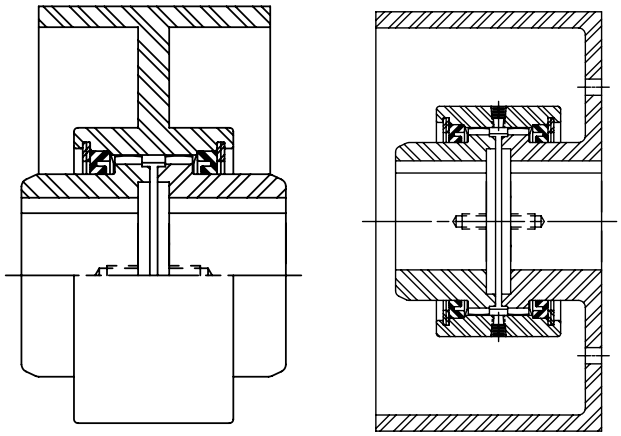
- Clearance fit bores with set screw are standard.
- RA couplings meet standard tolerances.
- Inch bore and keyway tolerances conform to AINSI / AGMA 9002-B04.
- For metric bore and keyway tolerances, consult Lovejoy Application Engineering.
- RAHS couplings conform to API 610.

HercuFlex Continuous Sleeve Gear Couplings

Vertical Floating Shaft Type

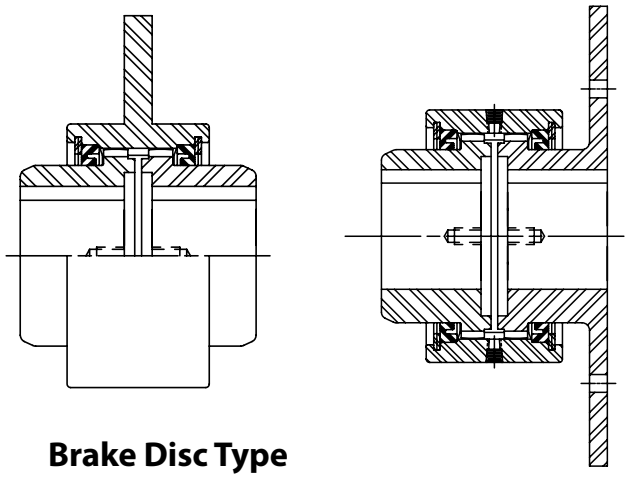
The upper coupling is a Standard Vertical Type coupling. The lower coupling has a hardened crowned button inserted in the plate of the lower hub and a hardened flat button inserted in the plate of the upper hub. The entire floating assembly rests on these two buttons which carry the weight of the floating assembly thus maintaining the spacing between the two lower hubs allowing for flexibility. The hubs on the floating shaft are flexible and the hubs of the driver and driven shafts are rigid.





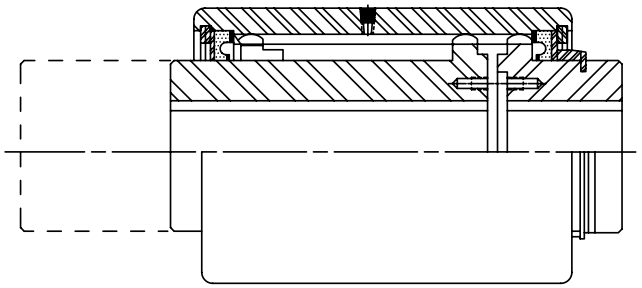
Brakedrum Type

Two different designs of brakedrum couplings are illustrated. One shows the brakedrum as an integral part of the sleeve and the two hubs are standard. The other design utilizes one standard hub and a standard sleeve with the brakedrum as part of a special hub.



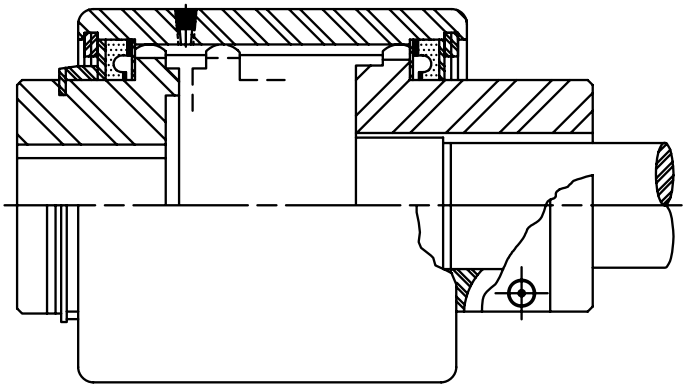
Brake Disc Type

Two different designs of brake disc couplings are illustrated. One shows the brake disc as an integral part of the sleeve and the two hubs are standard. The other design utilizes one standard hub and a standard sleeve with the brakedrum as part of a special hub.



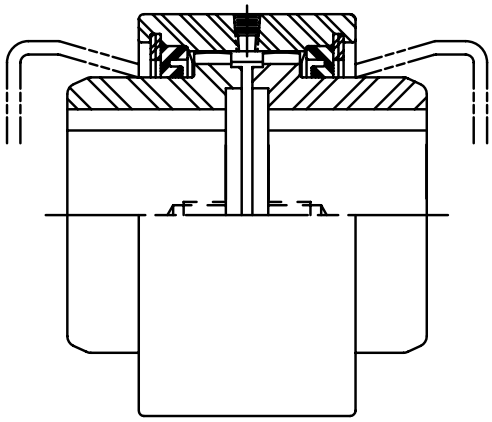
Sliding Hub Type

The sleeve is longer than standard and is designed to allow for a predetermined amount of axial travel on one shaft. The short hub is secured to the sleeve by means of a spacer washer and snap ring which prevents travel. This type is also manufactured to allow for travel of both hubs in the sleeve. This coupling is also available with a rigid type short hub.



Jordan Type

Used on Jordan machines and refiners, this design is similar to the Sliding Hub Type coupling except the long hub is split and secured to the shaft with a bolt. This permits for quick axial adjustment of the Jordan shafts in the hub.



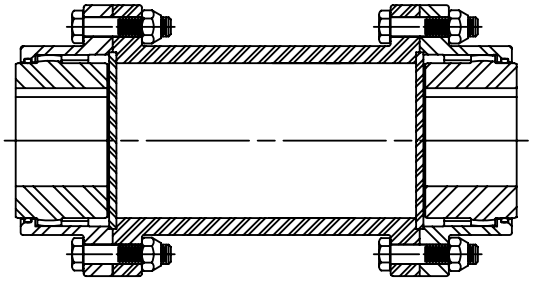
Continuous Lubricated Type

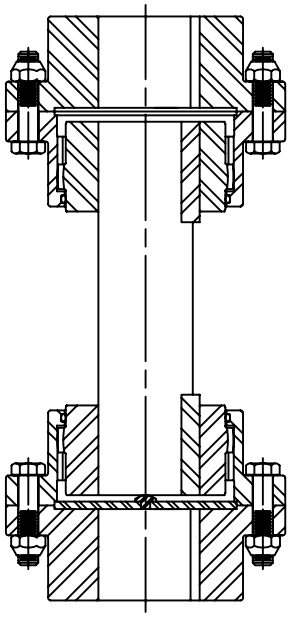
This coupling is adapted from our Standard Type coupling, except the standard seals have been replaced with the special spacer washers. These washers have a snug fit in the sleeve with sufficient clearance on the hub OD to allow for injection of a continuous stream of lubricant.

HercuFlex Flanged Sleeve Gear Couplings

Limited End Float Spacer Type

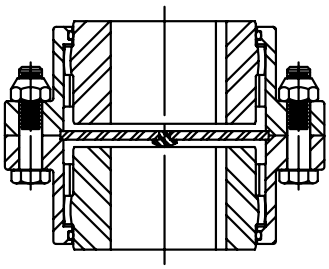
The addition of plates restricts axial travel to the drive or driven shaft. The spacer makes it possible to remove the hubs from either shaft without disturbing the connected units.





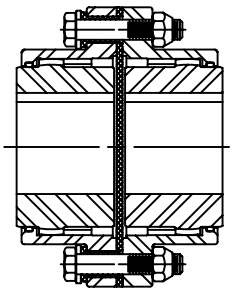
Vertical Floating Shaft Type

The lower coupling has a hardened crowned button inserted in the plate of the lower hub. The entire floating assembly rest on the button. Optional construction of the upper coupling would be a rigid hub on the floating shaft with a flex half on the top.



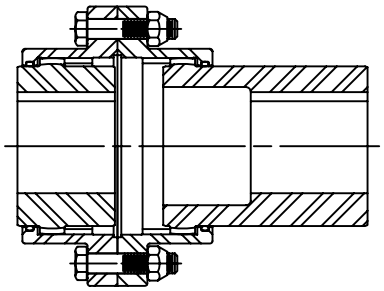
Vertical Type

This coupling has the same horsepower, RPM and misalignment capabilities as the standard couplings of corresponding sizes. A plate with a hardened crowned button rests on the lower shaft which supports the weight of the sleeve.



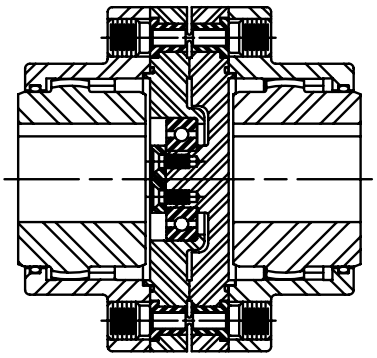
Insulated Type

Use of a non-metallic material between flanges and around the bolts prevents any stray currents from one shaft to the other.



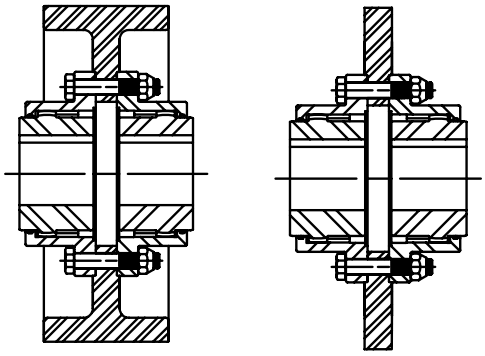
Jordan Type

Used on Jordan machines and refiners, this design is similar to the slide type coupling except the long hub is split and secured to the shaft with a bolt clamp. This permits quick axial adjustment of the Jordan shafts in this hub.



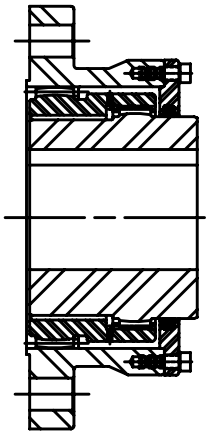
Engineered Shear Pin Type

Shear pin couplings are primarily used to limit transmitted torque to a redetermined load. This in turn disconnects the driver and driven shafts if torque exceeds the specified limits. They are especially suited to protect equipment when jams occur. Components are reusable after pins shear. The coupling will retain lubricant for a short period to allow equipment to be shut down.



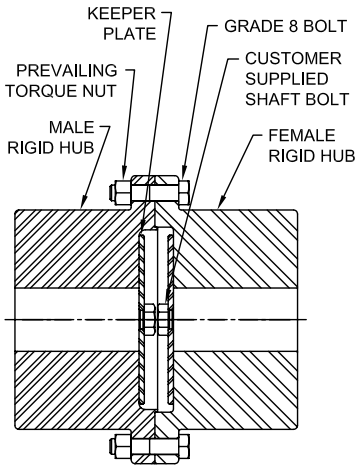
Brakewheel and Brake Disc Type

Replaceable brakewheel and brake disc piloted on the outside diameter of a standard sleeve and/or rigid hub. Offers a choice of applying braking effort to the load or driving motor.



Double Engagement Half Gear Type

Both internal and external teeth in a single sleeve. Can be bolted to a rotating flywheel, shaft or drum to connect driver or driven machine with a shaft extension. This coupling has the same features, ratings and misalignment capability as the standard group of couplings.



Rigid Alloy Steel FARR Type

Male/Female piloted rigid coupling with keeper plates. This coupling is used when a rigid connection is required between the low speed shaft of a gearbox and the head shaft of a conveyor, bucket elevator, mixer or any overhung or suspended load.

Why Coupling Grease?

Adequate lubrication is essential for satisfactory gear coupling operation. Lovejoy Gear Coupling Grease is specifically designed for gear coupling applications to increase coupling life while drastically reducing maintenance time. Its high viscosity base oil and tackifier combine to keep the grease in place and prevent separation and it is in complete compliance with NSI/AGMA 9001-B97 lubrication recommendations.

Lovejoy Coupling Grease is dark brown in color and manufactured with a lithium soap/polymer thickener, which has superior resistance to oil separation when subjected to high centrifugal forces normally found in couplings. Bearing or general purpose greases tend to separate and lose effectiveness due to high centrifugal forces on the various ingredients at high rotational speeds. These high centrifugal forces encountered in couplings separate the base oil from the thickeners. Heavy thickeners, which have no lubrication qualities, accumulate in the gear tooth mesh area resulting in premature coupling failure. Lovejoy Gear Coupling Grease is designed to highly resistant to centrifugal separation of the oil and thickener, which allows the lubricant to be used for a relatively long period of time.

One of the secrets to the success of Lovejoy Gear Coupling Grease is the variable consistency throughout the working cycle of the application. The consistency of our gear coupling grease changes with the operating conditions. Working of the lubricant under actual service conditions causes the grease to become semi-fluid, functionally solash lubricating the wear surfaces of the coupling. As the grease cools, it returns to the original consistency, thereby preventing leakage.

Lovejoy Gear Coupling Grease has a consistency which overlaps the NLGI grades 0 and 1. This grease is specially formulated with a lithium/polymer thickener and fortified with corrosion, oxidation, extreme pressure, and a effective rust inhibitor additive package.

Lovejoy Gear Coupling Grease is available from stock in 14 oz. cartridges, 1 lb. and 5 lb. cans.

Features

- Minimizing of coupling wear
- Resistance to water washing
- Corrosion and rust protection
- High load carrying capabilities
- Extended relubrication frequency
- Use at temperatures up to 325° F
- Staying in place under high speeds
- Resistance to centrifugal separation
- Reduction in down time & maintenance cost

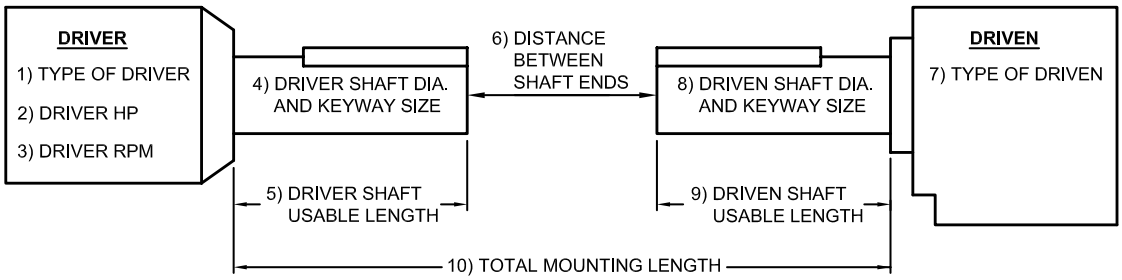
Typical Properties of Lovejoy Gear Coupling Grease

NLGI Grade	0/1
Appearance	Dark Brown, Tacky
Lithium Soap / Polymer, wt%	10.0
Viscosity	
@ 40° C, cST	>3200
@ 100° C, cSt	>50
Penetration. Dmm	
Worked, 60x	350
Worked, 10,000, % Change	10
Dropping Point, ° F	320° (160° C)
Centrifugal Oil Separation, vol%	None
Water Spray-Off, wt%	>3
Rust Protection	Pass
Timken, OK Load, lbs	40+
Four-Bal EP	
Load Wear Index, kgf	68
Weld Point, kgf	400
Four-Ball Wear, mm	
1 hr, 75° C, 1200 RPM, 40 kgf	0.4
Guide to Usable Temperature	
Min, ° F	Below -20° (-29° C)
Continuous Service, Max, ° F	250° (121° C)
Short Exposure, Max, ° F	325° (163° C)

Selection Worksheet

Customer Name:_____ Contact Name: _____

Phone Number:_____ Email Address: _____



1. Type of Driver (Electric Motor, Combustion Engine, Gearbox, etc.) : _____

For combustion engines, define type
Gasoline, Diesel, Natural Gas, etc. : _____ Number of cylinders _____

2. Driver Horse Power : _____ **3.** Driver or Gearbox output RPM : _____

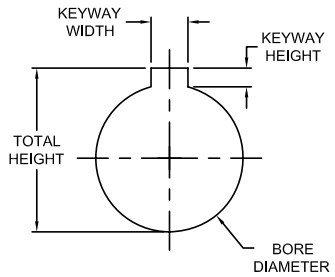
Retrieve the Application Service Factor from page 3 : _____ then

calculate the Selection Torque using the following formula:

Torque (in-lbs) = $\frac{\text{HP} \times 63025}{\text{RPM}}$ x Service Factor = Selection Torque = _____ in-lbs

4. Driver Shaft Diameter : _____ Keyway size : KW Width _____ KW Height _____

Specify Clearance Fit, Interference Fit, Metric (P7, H7, etc), Shaft Locking Device,
and Set Screw or No Set Screw



For additional bore and keyway information, see the Engineering Data Section of the Power Transmission Products Catalog

5. Driver Usable Shaft Length : _____ (Measure from the end of the shaft to any obstruction)

6. Distance between shaft ends (BSE) : _____

7. Type of Driven Equipment : _____

8. Driven Shaft Diameter : _____ Keyway size : KW Weight _____ KW Height _____

Specify Clearance Fit, Interference Fit, Metric (P7, H7, etc), Shaft Locking Device, and Set Screw or No Set Screw

9. Driven Usable Shaft Length : _____ (Measure from the end of the shaft to any obstruction)

10. Total Mounting Length : _____ (Advise of any obstructions, walls, beams, guards, pipes, etc.)

11. For Tapered Shafts specify the following:

Minimum or Maximum Taper diameter: _____

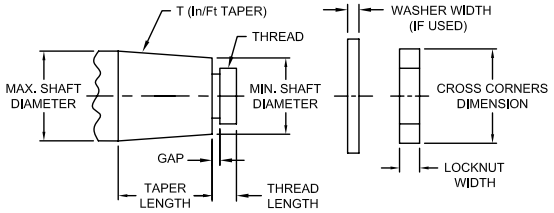
Taper Length: _____ T (Taper Inch per Foot) : _____

Gap or Hub Overhang amount:_____

Locknut Width: _____ Size of nut cross corners: _____

Thread Size: _____ Thread Length: _____

Washer Diameter (if used) : _____ Washer Width: _____



Lovejoy
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or fax to: 800-634-7644

Product Warranty

Lovejoy, Inc. warrants all products it manufactures to be free from defects in material and workmanship at the time of delivery to the purchaser. Defective products may be returned to Lovejoy after inspection by the purchaser and upon receipt from Lovejoy of shipping instructions specific to the defective products authorized by Lovejoy to be returned. Products returned in accordance with the foregoing procedure will be replaced or repaired, at the option of Lovejoy, without charge and returned to the purchaser F.O.B. Downers Grove, Illinois or South Haven, Michigan, depending upon origin of manufacture. In all cases, transportation costs and charges for returned products shall be paid by the purchaser and Lovejoy hereby disclaims all responsibility for any and all such transportation costs and charges.

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Note: Specifications are subject to change without notice, and without liability therefor.

Notes

Notes

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