

## **FEATURES**

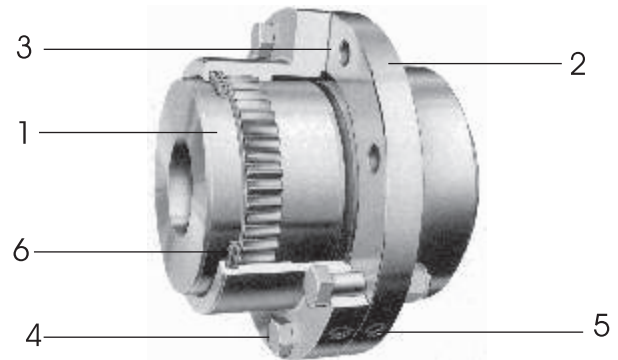
- Less Backlash.
- Compact Assembly.
- Larger Bore Capacities.
- High Power To Weight Ratio.
- Accommodates Angular, Parallel & Axial Misalignments.
- Generally used upto 120°C. Can be used for higher temperatures by using proper grade of grease or oil.

### CONSTRUCTION

Full gear type LFG Lovejoy Flexible Gear Coupling consists of two identical toothed hubs, two identical flanged sleeves with internal teeth, a gasket, a set of bolts, nuts and lock washers, lube plugs and two oil / grease retaining seals over the hubs.

### NOMENCLATURE

- 1 FORGED HUBS WITH EXTERNAL TEETH
- 2 FORGED SLEEVES WITH INTERNAL TEETH
- 3 FLANGE GASKET
- 4 CLOSE TOLERANCE CONNECTING BOLTS
- 5 LUBRICATION PLUG
- 6 'O' RING



### SELECTION PROCEDURE

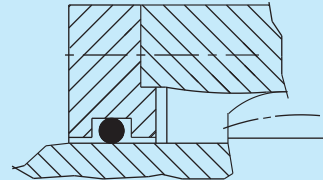
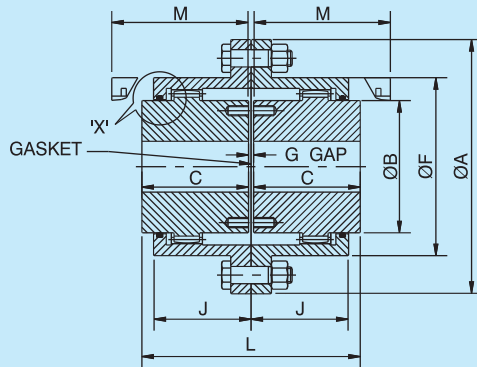
1. Select an appropriate **SERVICE FACTOR** from table given below.
2. Multiply the rated running power by the service factor. This gives **DESIGN POWER** at rated speed (rpm). Convert this to design power at 100 rpm. This is used as a basis for coupling selection.
3. Refer to the rating column and read until the power greater than or equal to the design power at 100 rpm is found. The size of the gear coupling is given in the corresponding first column. Check the max. bore capacities. If required bore size is greater than the max. bore of selected coupling size, then go for higher size to meet the required bore.

### SERVICE FACTORS

LOAD	DRIVEN EQUIPMENT	TYPE OF DRIVE	
		Motor or Turbine	Reciprocating Engine
Uniform	Centrifugal Pumps, Conveyors - Even Loaded, Exciters, Fans and Blowers - Light Duty, Generators - Even Loaded & Mixers - Liquid.	1	1.5
Light	Centrifugal Pumps, Generators - Pulsating Load, Grinders, Hydraulic Pumps, Kilns, Line Shafting, Machine Tools, Oscillating Pumps, Textile Machinery & Woodworking Machinery.	1.5	2
Medium	Air compressors - Multi - Cylinder, Ball and Rod Mills, Cranes, Elevators, Hoists, Punch Presses, Reciprocating pumps, Shears, Ship Drives & Welding Generators.	2	2.5
Heavy	Air Compressors - Single Cylinder, Dredges, Drilling Rigs, Mine Machinery, Rolling Mill Drives & Rubber Mixers.	2.5	3
Extreme	Ore Crushers, Bar Stock Shears & Vibrating Conveyors.	3	4

### FEATURES

Standard full flexible gear coupling TYPE LFG accommodates angular & parallel misalignments or a combination of both as well as axial misalignment (end float). Ideal for all horizontal, close coupled applications including fans, overhead cranes, conveyors, steel & paper mill equipments. One or both the hubs can be easily reversed for more than normal shafts separation applications.



**DETAIL 'X'**  
THIS COVER PLATE CONSTRUCTION FOR  
SIZES LFG - 111 ONWARDS.

**FULL FLEXIBLE TYPE LFG**

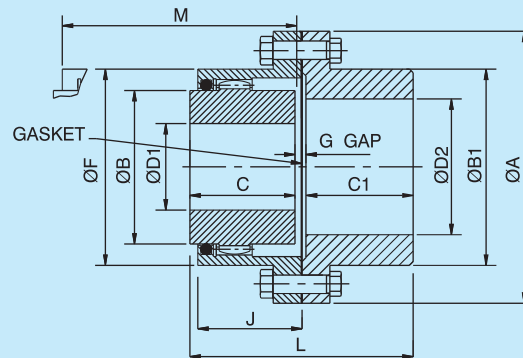
### TECHNICAL DATA

Size	kW at 100 rpm	Rated Torque Nm	Max. rpm	Bore		ØA	C	ØB	ØF	M	G	J	L	Solid Hub	
				PB	Max.									Wt. kg	M.I.(WR <sup>2</sup> ) kg-m <sup>2</sup>
LFG-100	6	559	8000	13	35	120	45	50	75	54	3	39	93	4.2	0.01
LFG-101	13	1127	6700	21	50	170	55	65	110	67	5	49	115	11	0.04
LFG-102	29.4	2803	6100	30	65	185	70	85	125	83	5	62	145	15	0.05
LFG-103	52	5046	5200	40	75	220	85	105	150	103	5	78	175	25	0.12
LFG-104	100	9556	4500	50	95	250	105	130	175	124	5	96	215	39	0.24
LFG-105	153	14604	3950	60	115	290	110	155	200	136	10	106	230	57	0.49
LFG-106	250	22443	3500	75	130	320	125	175	230	152	10	117	260	85	0.75
LFG-107	411	39303	3250	90	145	350	140	205	260	174	10	134	290	103	1.31
LFG-108	528	50472	3000	105	165	380	155	230	290	187	10	147	320	138	2.13
LFG-109	658	62821	2600	125	185	430	165	250	330	196	10	156	340	210	3.75
LFG-110	963	91922	2300	140	230	490	180	310	390	216	10	171	370	277	7.63
LFG-111	1300	123064	2100	160	260	545	200	350	445	245	10	191	410	550	14.5
LFG-112	2100	164515	1900	180	300	590	240	400	490	289	10	230	490	710	22
LFG-113	2900	223792	1550	200	330	680	260	440	555	312	15	241	535	980	34.5
LFG-114	4000	320011	1400	220	370	730	280	500	610	341	15	265	575	1320	72.75
LFG-115	5000	388738	1350	250	415	780	320	540	660	385	15	303	655	1700	88.25
LFG-116	7031	671164	1150	300	455	900	350	625	755	423	20	333	720	2550	172
LFG-117	10001	954664	1050	375	520	1000	400	720	855	489	20	384	820	3620	309
LFG-118	13241	1263937	950	450	620	1100	450	810	950	533	20	428	920	4860	491
LFG-119	17461	1666743	825	520	710	1250	485	910	1050	559	30	444	1000	6380	753

- All dimensions are in mm unless otherwise specified.
- Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.
- Weights & M.I. specified are with solid hubs.
- For vertical installation contact RATHI.

### FEATURES

- Standard half flexible gear coupling TYPE LHG cannot accommodate parallel misalignment.
- Used primarily with floating shaft assemblies. Extensively used for cross traverse and long travel line shaft drives.



HALF FLEXIBLE TYPE LHG

### TECHNICAL DATA

Size	kW at 100 rpm	Rated Torque Nm	Max. rpm	Bore			ØA	C	ØB	ØF	M	G	J	L	C1	ØB1	Solid Hub	
				PB	Max. ØD1	Max. ØD2											Wt. kg	M.I. (WR <sup>2</sup> ) kg-m <sup>2</sup>
LHG-100	6	559	8000	13	35	45	120	45	50	75	54	3	39	93	45	65	4.2	0.01
LHG-101	13	1127	6700	21	50	60	170	55	65	110	67	5	49	115	55	85	11	0.04
LHG-102	29.4	2803	6100	30	65	75	185	70	85	125	83	5	62	145	70	110	15	0.05
LHG-103	52	5046	5200	40	75	90	220	85	105	150	103	5	78	175	85	130	20	0.12
LHG-104	100	9556	4500	50	95	110	250	105	130	175	124	5	96	215	105	160	40	0.25
LHG-105	153	14604	3950	60	115	130	290	110	155	200	136	10	106	230	110	185	60	0.5
LHG-106	250	22443	3500	75	130	150	320	125	175	230	152	10	117	260	125	215	80	0.83
LHG-107	411	39303	3250	90	145	170	350	140	205	260	174	10	134	290	140	240	106	1.45
LHG-108	528	50472	3000	105	165	200	380	155	230	290	187	10	147	320	155	285	149	2.38
LHG-109	658	62821	2600	125	185	220	430	165	250	330	196	10	156	340	165	315	170	4.2
LHG-110	963	91922	2300	140	230	260	490	180	310	390	216	10	171	370	180	370	264	8.75

- All dimensions are in mm unless otherwise specified.
- Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.
- Weights & M.I. specified are with solid hubs.
- For vertical installation contact RATHI.

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### Rathi Transpower Pvt Ltd

Rathi Chambers, 7, Deccan College Road,  
Pune 411 006.(INDIA)  
Phone : 91-20-30517201  
Fax : 91-20-30517212  
E-mail : enquiry@rathigroup.com  
Website : www.rathicouplings.com

### Distributor