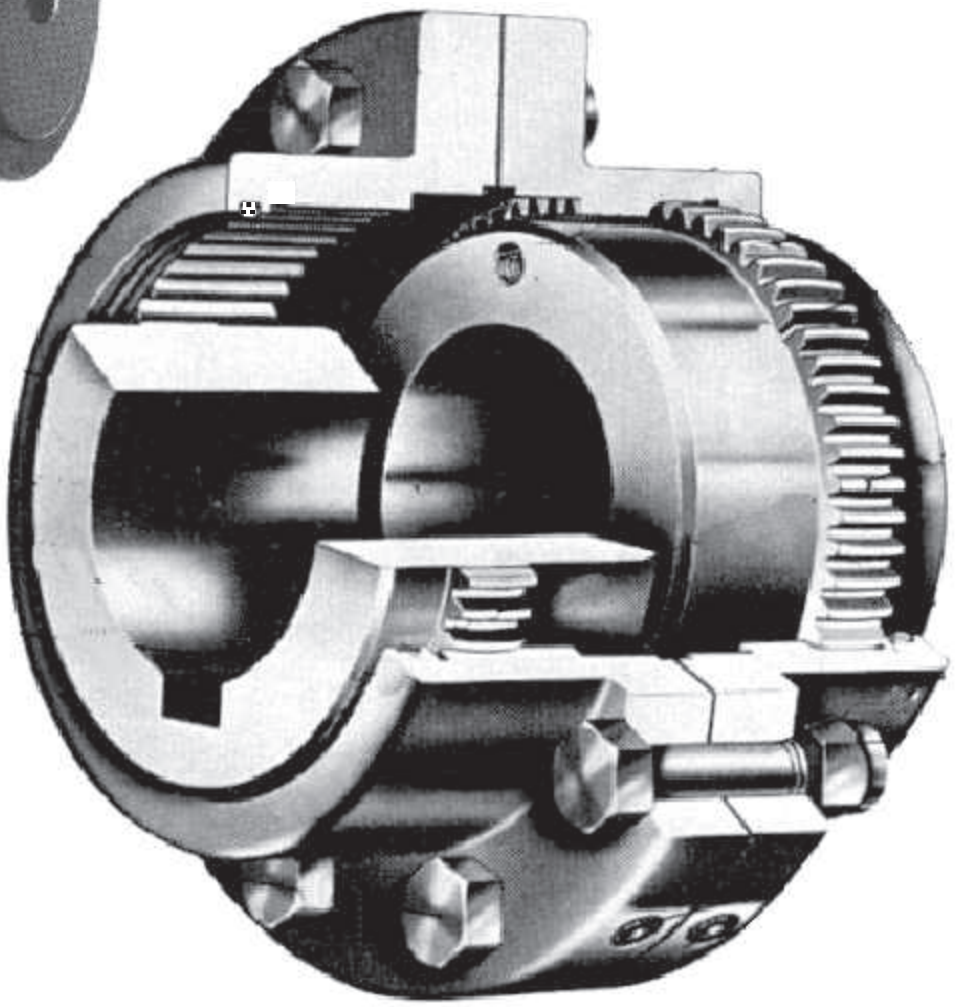
GEAR-*flex* COUPLINGS
TYPE - LFG / LHG



FEATURES

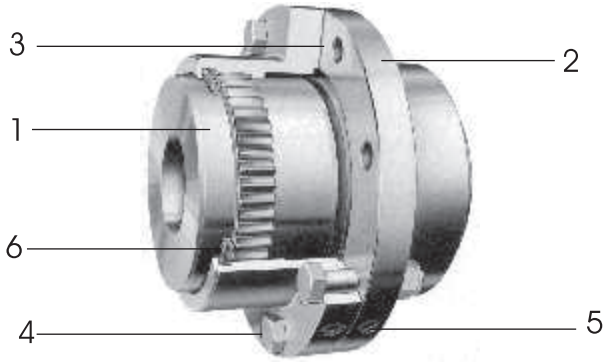
- Less Backlash.
- Compact Assembly.
- Larger Bore Capacities.
- High Power To Weight Ratio.
- Accommodates Angular, Parallel & Axial Misalignments.
- Generally used upto 120°C. Can be used for higher temperatures by using proper grade of grease or oil.

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

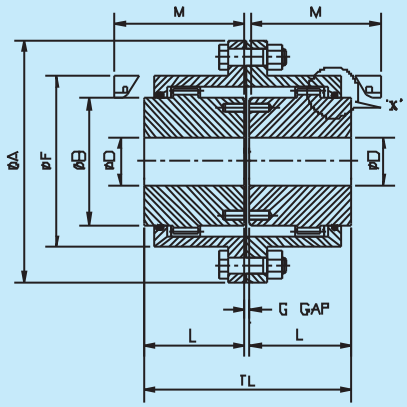
1. Select an appropriate SERVICE FACTOR from table given below.
2. Multiply the rated running power by the service factor. This gives DESIGN POWER at rated speed (rpm). Convert this to design power at 100 rpm. This is used as a basis for coupling selection.
3. Refer to the rating column and read until 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.

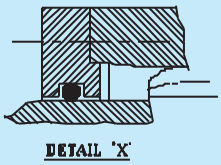
SERVICE FACTORS

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.





THIS COVERPLATE CONSTRUCTION FOR SIZES LFG-111 ONWARDS.

FULL FLEXIBLE TYPE LFG

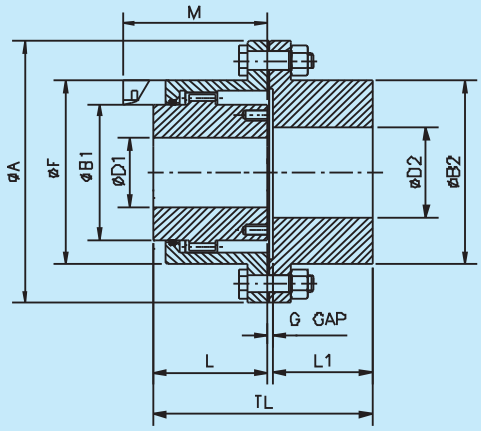
TECHNICAL DATA

Size	kW at 100 rpm	Rated Torque Nm	Max. rpm	Bore ØD		ØA	L	ØB	ØF	M	G	TL	#	
				PB	Max.								Wt. kg	M.I.(WR^2) $kg\text{-}m^2$
LFG-100	6	559	7600	13	35	120	45	50	75	54	3	93	4.1	0.006
LFG-101	12	1127	6730	14	50	170	55	65	110	67	5	115	10.6	0.029
LFG-102	29	2804	6150	20	65	185	70	85	125	83	5	145	15.4	0.046
LFG-103	53	5047	5200	30	80	220	85	105	150	103	5	175	25.6	0.110
LFG-104	100	9557	4580	40	100	250	105	130	175	124	5	215	39.9	0.213
LFG-105	153	14605	3950	46	115	290	110	155	200	136	10	230	59.8	0.445
LFG-106	235	22444	3550	50	125	320	125	175	230	152	10	260	83.7	0.745
LFG-107	412	39303	3270	60	145	350	140	205	260	174	10	290	113	1.21
LFG-108	529	50472	3015	70	165	380	155	230	290	187	10	320	158	2.04
LFG-109	658	62821	2650	80	190	430	165	250	330	196	10	340	210	3.46
LFG-110	963	91923	2330	100	230	490	180	310	390	216	10	370	290	5.55
LFG-111	1289	123065	2100	110	260	545	200	350	445	245	10	410	545	15.25
LFG-112	1723	164516	1940	150	300	590	240	400	490	289	10	490	716	24.30
LFG-113	2908	277694	1600	160	330	680	260	440	555	312	15	535	984	43.21
LFG-114	4019	383786	1500	200	370	730	280	500	610	341	15	575	1218	64.84
LFG-115	4812	459515	1400	230	410	780	320	540	660	385	15	655	1565	97.30
LFG-116	7028	671165	1200	260	455	900	350	625	755	423	20	720	2246	183.66
LFG-117	9997	954665	1100	300	520	1000	400	720	855	489	20	820	3258	338.05
LFG-118	13236	1263938	1000	320	620	1100	450	810	950	533	20	920	4678	600.41
LFG-119	17454	1666744	900	300	710	1250	485	910	1050	559	30	1000	6282	955.96

- *All dimensions are in mm unless otherwise specified.*
- *Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.*
- *LFG Gear couplings are designed for maximum misalignment of 1.5 deg. per gear mesh. recommended intial misalignment is 0.37 deg. per gear mesh.*
- *For vertical installation contact RATHI.*
- *For all max. bore conditions,only single rectangular keyway is applicable.*
- *# Weight & Moment of Inertia are at pilot bore.*

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	L	ØB1	ØF	M	G	TL	L1	ØB2	#	
				PB	Max.											Wt. kg	M.I. (WR^2) kg-m^2
					ØD1	ØD2											
LHG-100	6	559	7600	13	35	45	120	45	50	75	54	3	93	45	65	4.2	0.006
LHG-101	12	1127	6730	14	50	60	170	55	65	110	67	5	115	55	85	10.1	0.027
LHG-102	29	2804	6150	20	65	75	185	70	85	125	83	5	145	70	110	15.2	0.045
LHG-103	53	5047	5200	30	80	90	220	85	105	150	103	5	175	85	130	25.3	0.106
LHG-104	100	9557	4580	40	100	110	250	105	130	175	124	5	215	105	160	40.4	0.211
LHG-105	153	14605	3950	46	115	130	290	110	155	200	136	10	230	110	185	60.4	0.440
LHG-106	235	22444	3550	50	125	150	320	125	175	230	152	10	260	125	215	85.5	0.747
LHG-107	412	39303	3270	60	145	170	350	140	205	260	174	10	290	140	240	115	1.20
LHG-108	529	50472	3015	70	165	200	380	155	230	290	187	10	320	155	285	164	2.10
LHG-109	658	62821	2650	80	190	220	430	165	250	330	196	10	340	165	315	216	3.52
LHG-110	963	91923	2330	100	230	260	490	180	310	390	216	10	370	180	370	317	6.86

- *All dimensions are in mm unless otherwise specified.*
- *Spacer couplings, Brake drum, Brake disc, Shear pin, Floating shaft couplings are available.*
- *LHG Gear couplings are designed for maximum misalignment of 1.5 deg. per gear mesh. recommended intial misalignment is 0.37 deg. per gear mesh.*
- *For vertical installation contact RATHI.*
- *For all max. bore conditions,only single rectangular keyway is applicable.*
- *# Weight & Moment of Inertia are at pilot bore.*

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ISO 9001 BUREAU VERITAS Certification

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