

Lovejoy Grid-*f*lex couplings are lubricated, having high torque capacity like gear couplings & with torsional flexibility of an Elastomer couplings. Grid-*f*lex offers the simplest, most cost effective solution for moderate to high torque application.

## FEATURES :

### SIMPLICITY

Has few components such as Hubs, Grid, Cover, Seal & Fasteners.

- **Hubs** are made from high fatigue strength steel, so that tooth fatigue failures are eliminated. Hubs are accurately machined to permit utilization of any hub surface for measurement of shaft alignment.
- **Grid** is made from high strength spring steel and duly heat treated to get high hardness. So that the stresses developed in the grid by transmitted load are well below the design value. Both straight & taper grids are available.
- **Covers** are made of Graded Cast Iron / Aluminium covers which permit higher running speeds.
- **Seal** is specially “U” shaped and made of synthetic material to withstand oil, dusty atmosphere and prevent leakage of lubricant.
- **Fasteners** are made of High tensile grade materials.

### SIMPLE / EASY MAINTENANCE

As there are fewer & less complicated components, maintenance is less & when regular inspection / lubrication is done the couplings gives good life.

## Service Factor :



### LOW OPERATIONAL COST

The spare required is mainly the grid, which is a low cost component and that also gives substantial life. Hence the operational cost is much low.

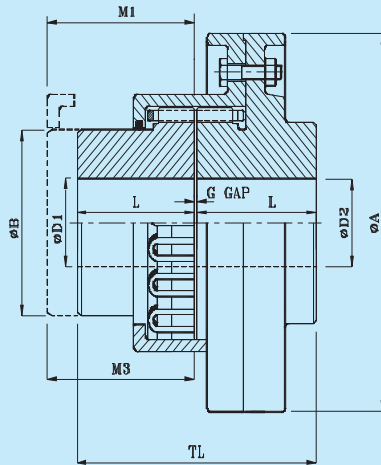
### SMOOTH & QUIET OPERATION

The coupling components except grid to hub have no relative movement. Hence are smooth is operation. In grid & hub also the relative movement is very low & depends on misalignment. Hence the coupling as a whole is smooth & quite in operation.

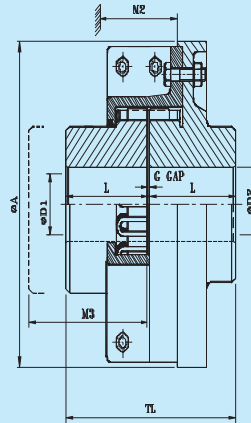
### LUBRICATION

Rathi Special Grease (RSG) is developed to resist separation of base oil & thickener due to centrifugal forces encountered in Grid coupling to avoid wear & tear.

Class of Machine	S.F.	Class of Machine	S.F.
Agitator	2	Fan	2.5
Calender	3	: Cooling tower	2.0
Cement Mill & Kiln	3	: Industrial	2.5
Conveyor		: Mine	3
: Horizontal	1.0	Haulage	2
: Inclined	1.5	Line Shafting	3.0
Couches	2.5	Machine Tool	1.5
Crane motions :-		: Reversing	2~4
a) (Classes 3 & 4)		: Other	1.25
Hoist	4	Pumps	2
Long travel	3	: Centrifugal	3
Cross traverse	3	: Rotary	4
b) (Classes 1 & 2)		: Reciprocating	3
Hoist	3	Rock Crushers	4
Long travel	2.5	Rubber Mill	3
Cross traverse	2.5	Steel Work Drives	2~5
Electric Generator (Steady load)	1.75	Turbine Driven Generators	1.25
		Rolling Mills, Motors Driven	4
		without Flywheel	



TYPE-LGF-VX



TYPE-LGF-HX

### TECHNICAL DATA

Size	kW at 100 rpm	Max. Speed rpm		Bore			ØA	L	TL	M3	G	ØB	Removal Space		Wt. at Max Bore Kg.
		VX	HX	PB	ØD1	ØD2							M1	M2	
LGF-105	0.45	6900	-	10	29	25	105	38	76.85	70	0.85	41.3	80	-	3.5
LGF-120	0.70	5800	-	12	38	30	126	38	76.85	70	0.85	58.5	80	-	4
LGF-144	1.50	5450	3550	16	41	35	152	44.5	89.85	80	0.85	57.5	85	60	5
LGF-172	2.20	4150	2700	16	57	49	178	51	102.9	80	0.85	76	85	60	9
LGF-190	3.40	3750	2550	16	64	56	193	51	102.9	111	0.85	89	87	60	10
LGF-197	4.90	3550	2450	16	64	60	209	57	114.9	114	0.85	95	117	81	14
LGF-222	7.00	3100	2100	25	78	75	228	63.5	127.9	114	0.85	118	117	81	20
LGF-254	9.40	2650	1800	25	92	86	263	70	140.9	114	0.85	134	117	81	29
LGF-276	13.80	2350	1700	25	108	102	285	89	178.9	141	0.85	156	117	81	40
LGF-295	26.50	2250	1550	38	102	102	311	102	205.6	189	1.6	156	187	129	59
LGF-324	33.90	1950	1350	50	122	121	349	101.5	204.6	208	1.6	184	217	149	79
LGF-336	48.90	1850	1300	50	120	123	362	101.5	204.6	208	1.6	188	217	149	84
LGF-375	67.50	1600	1150	50	146	136	400	114	229.6	208	1.6	219	217	149	118
LGF-425	93.60	1450	1050	50	166	162	438	127	255.6	208	1.6	245	217	150	159
LGF-432	179.00	1200	850	75	157	150	521	140	283.2	225	3.2	240	245	170	214
LGF-492	261.00	1050	750	85	176	165	578	152.5	308.2	240	3.2	267	245	170	275

#### Note :-

- All dimensions are in mm unless otherwise specified.
- For vertical installation contact RATHI.
- Speeds specified are with standard material of construction, consult manufacturer for higher speeds.
- Weights specified are with max. bore.
- For Inertia, torsional stiffness and for higher sizes consult manufacturer.
- In view of our constant endeavour to improve quality of our products, we reserve the right to alter or change specification without prior notice.
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