

excel[®]

GEAR COUPLINGS



SMA

STANDARD MATERIALS AGENCIES PVT. LTD.

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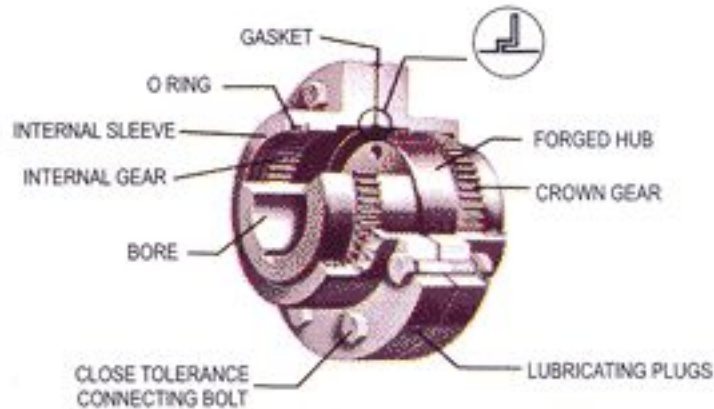
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Construction of EXCEL Gear Couplings

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

STRUCTURE



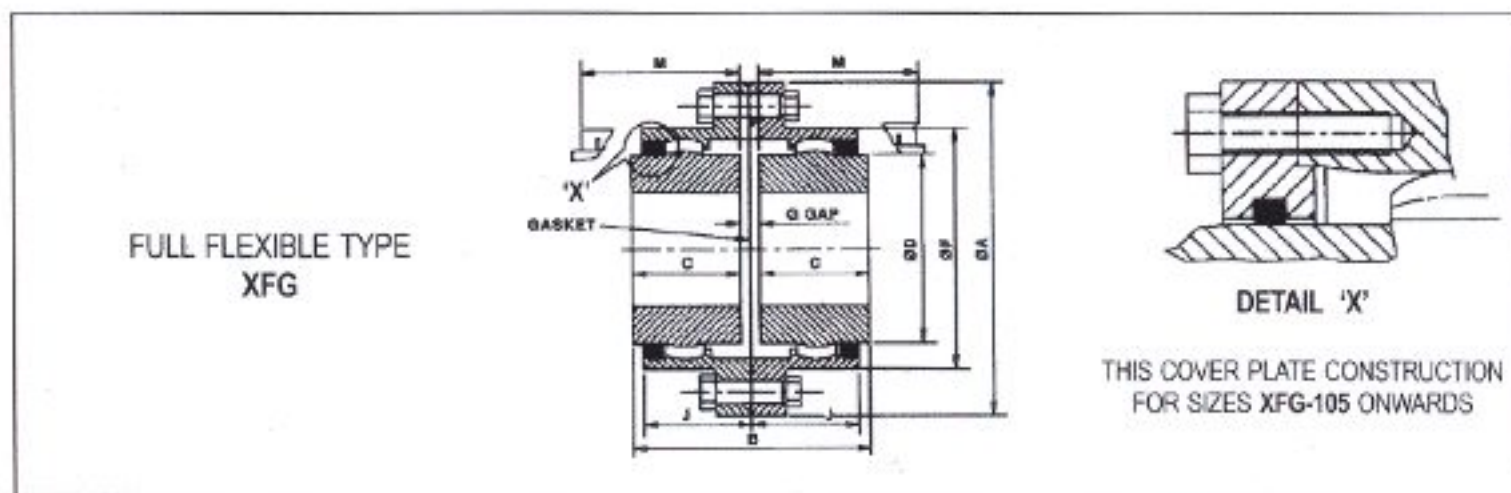
SELECTION PROCEDURE

1. Select an appropriate Service Factor from table given below.
2. Multiply the rates running power by the service factor. This give design power at rates speed (RPM). Now convert this to design power at 100 RPM. This is used as basis of 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, than go for higher size to meet the required bore.

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

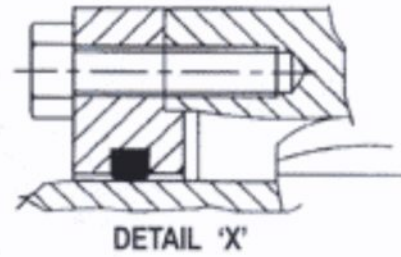
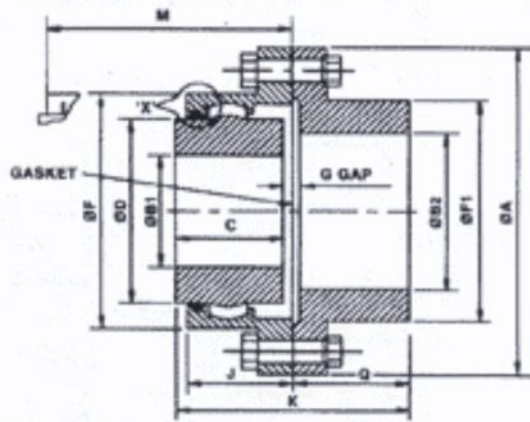
Standard full flexible gear coupling TYPE XFG accommodates angular & parallel misalignments or a combination of both as well as axial misalignment (end float). Ideal for horizontal, closed coupled application including fans, overhead cranes, conveyors, steel & paper mill equipments. One or both the hubs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



SIZE	TORQUE	kW AT 100 RPM	MAX RPM	BORE		ØA	C	ØD	ØF	M	G	J	B	WT Kg.	M.L.(WR ²) Kg.M ²
				MIN.	MAX.										
XFG-101	1002	10.5	6300	20	50	170	55	65	110	65	5	49	115	11	0.035
XFG-102	2492	26.1	5000	30	60	185	70	85	125	80	5	62	145	15	0.05
XFG-103	4486	47	4000	40	75	220	85	105	150	150	5	76	175	25	0.12
XFG-104	8495	89	3350	50	90	250	105	130	175	125	5	96	215	39	0.238
XFG-105	12982	136	2800	60	110	290	110	155	200	140	10	106	230	57	0.488
XFG-106	18950	209	2500	75	125	320	125	175	230	155	10	117	260	85	0.75
XFG-107	34936	366	2100	90	140	350	140	205	260	175	10	134	290	103	1.313
XFG-108	44864	470	1900	105	160	380	155	230	290	190	10	147	320	138	2.125
XFG-109	55841	585	1700	125	180	430	165	250	330	205	10	156	340	210	3.75
XFG-110	81709	856	1400	140	220	490	180	310	390	220	10	171	370	277	7.625
XFG-111	109391	1146	1250	180	260	545	200	350	445	240	10	192	410	550	14.5
XFG-112	146236	1532	1120	180	300	590	240	400	490	280	10	231	490	710	22.0
XFG-113	198927	208	1000	200	330	680	260	440	555	310	15	242	535	900	34.5
XFG-114	284455	2980	900	220	370	730	280	500	610	330	15	266	575	1320	72.75
XFG-115	345545	3620	800	250	410	780	320	540	660	370	15	305	655	1700	88.25
XFG-116	596591	6250	710	300	455	900	350	625	755	423	20	335	720	2550	172.0
XFG-117	848591	8890	630	375	520	1000	400	720	855	490	20	386	820	3620	309.0
XFG-118	1123500	11770	560	450	610	1100	450	810	950	533	20	430	920	4860	491.0
XFG-119	1481550	15521	500	520	710	1250	485	910	1050	558	30	446	1000	6380	753.0

FEATURES

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



THIS COVER PLATE CONSTRUCTION
FOR SIZES XHG-105 ONWARDS

EXCEL HALF GEAR FLEXIBLE TYPE

SIZE	TORQUE	KW AT 100 RPM	MAX RPM	BORE			ØA	C	ØD	ØF	M	G	J	K	Q	ØF1	WT Kg.	M.I.(WR) ³ Kg.M ³
				MIN.	MAX.													
					ØB1	ØB2												
XHG-101	1002	10.5	6300	20	50	60	170	55	65	110	65	5	49	115	57.5	85	11	0.0375
XHG-102	2492	26.1	5000	30	60	75	185	70	85	125	80	5	62	145	72.5	110	15	0.06
XHG-103	4486	47	4000	40	75	90	220	85	105	150	150	5	76	175	87.5	130	20	0.1275
XHG-104	8495	89	3350	50	90	110	250	105	130	175	125	5	96	215	107.5	160	40	0.25
XHG-105	12982	136	2800	60	110	130	290	110	155	200	140	10	106	230	115	185	60	0.5
XHG-106	19950	209	2500	75	125	150	320	125	175	230	155	10	117	260	130	215	80	0.825
XHG-107	34936	366	2100	90	140	170	350	140	205	260	175	10	134	290	145	240	106	1.45
XHG-108	44864	470	1900	105	160	200	380	155	230	290	190	10	147	320	160	285	149	2.375
XHG-109	55841	585	1700	125	180	220	430	165	250	330	205	10	156	340	170	315	170	4.2
XHG-110	81709	856	1400	140	220	260	490	180	310	390	220	10	171	370	185	370	264	8.75



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for more details please contact:

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