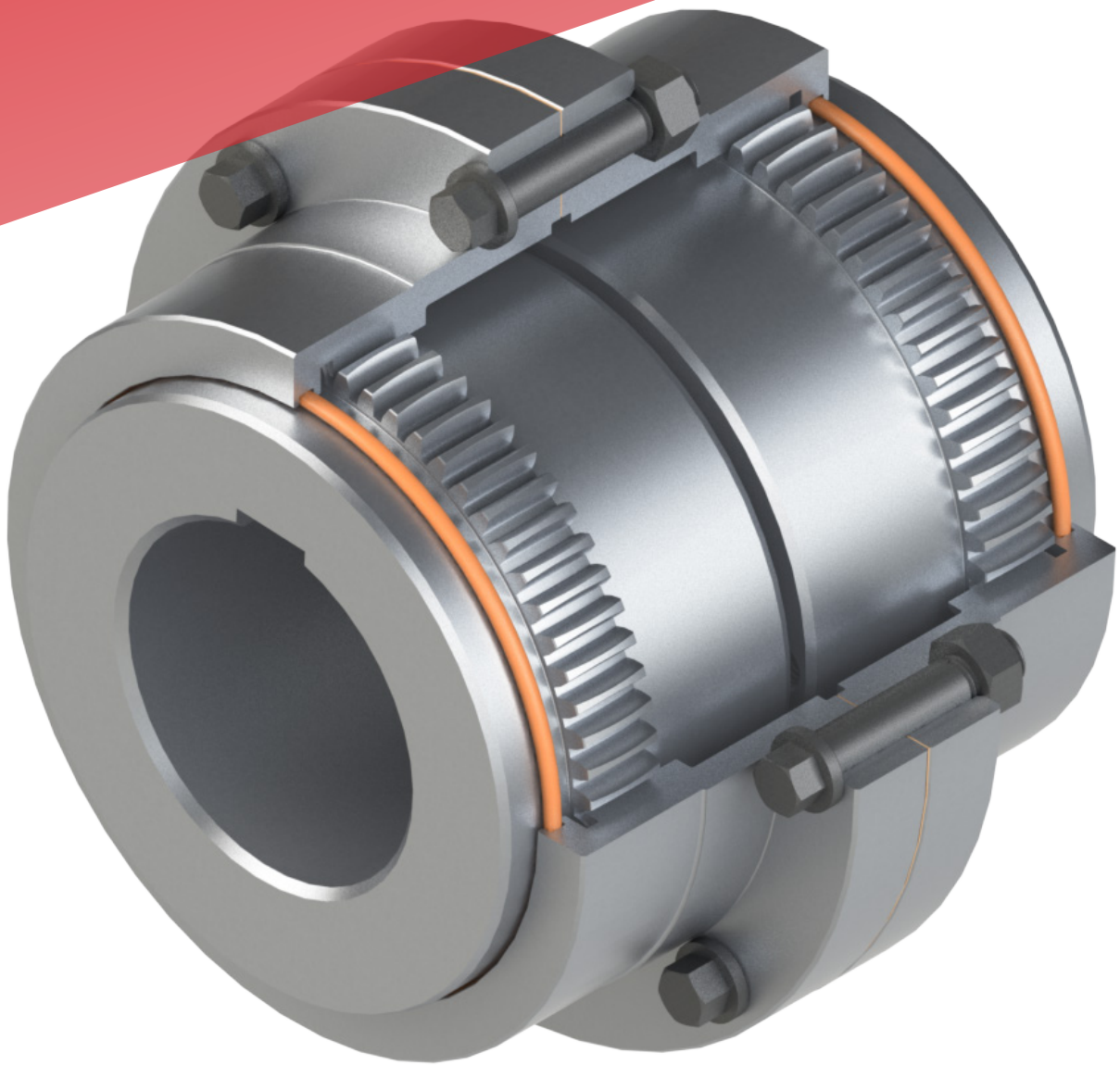


FENNER GEAR COUPLING



WHO WE ARE.

Motion delivers a world-class customer-first approach to everything we do. This has firmly established our business as the leader in the market, providing excellence and expertise in industrial products, solutions and services.

For more than 100 years we have been a feature in the Australian industrial landscape giving customers unmatched products and service through an integrated network of branches, workshops and service centres.

We have an ongoing commitment to invest in our people, facilities, IT and systems to ensure we can continue to offer a broad ranging and premium level of engineering design, servicing and turnkey projects to our customers across Australia.

We are committed and proud to keep our customers in motion, every day of the year.

“WE KEEP THE WORLD MOVING”



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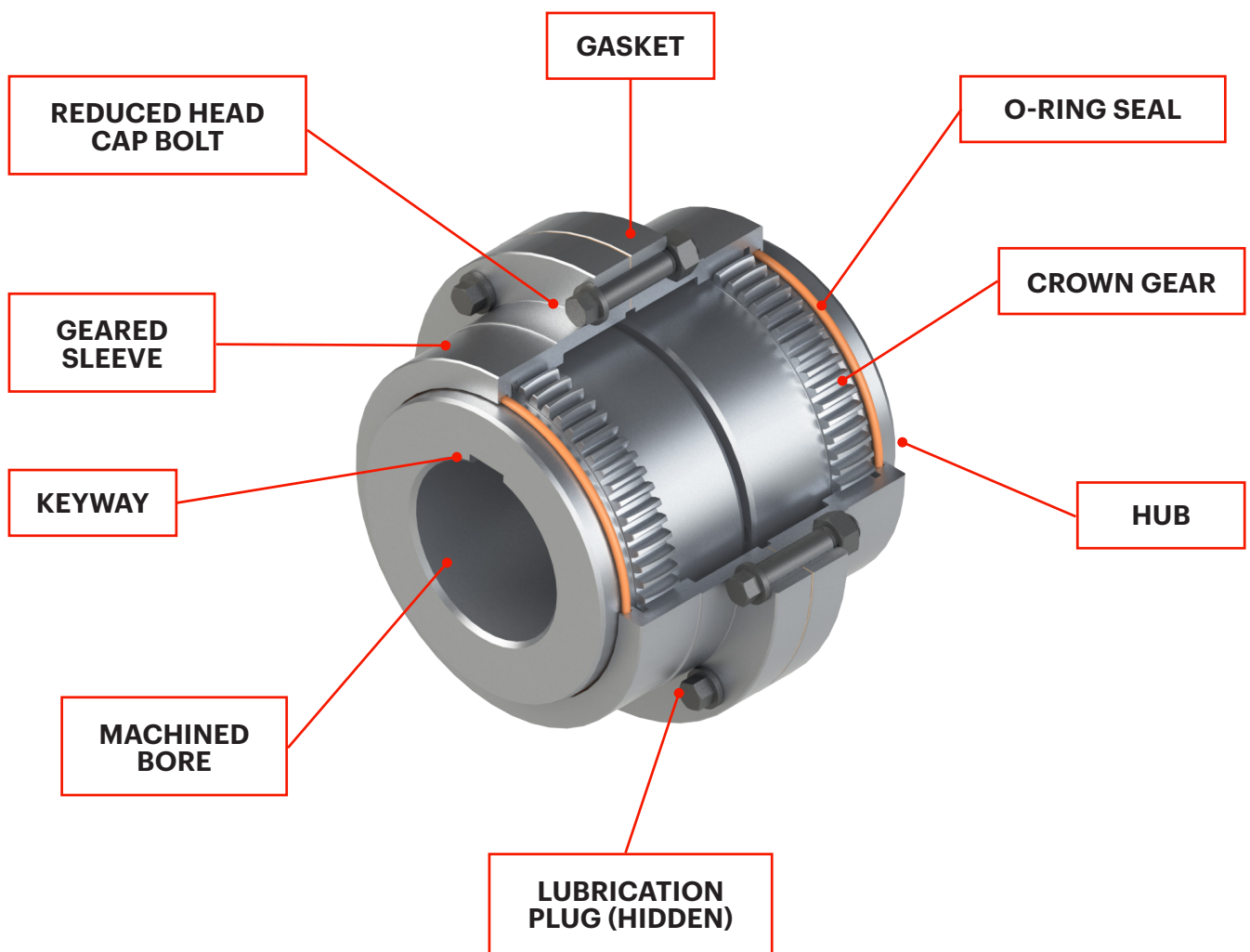
All the items included are aftermarket products for the replacement of existing parts.
Motion Australia is not an original equipment manufacturer of these products.

INTRODUCTION

Fenner Curved Tooth Flexible Gear Couplings are the result of many years of experience in the field of Mechanical Power Transmission.

These Gear Couplings are distinguished by their mechanical flexibility and compensation of Angular, Parallel and Axial misalignments

of the connected shafts. They are made for extensive use in Metal Rolling Mills, Paper Machinery, Cranes, Dredgers, Rubber and Plastic Industries, Cement Plants, Conveyors, Elevators, Compressors, Fans and Blowers, Screens, and other general industries.



DESCRIPTION

Flexible Gear Couplings basically consist of two hubs, with crowned external teeth and two outer sleeves with internal spur teeth. Gear Hubs and the outer sleeves are manufactured from

carbon steel and are hardened to the required degree. They are machined to fine tolerances for proper meshing of the gears as well as for interchangeability.

HUBS: The teeth of Gear Hubs are crowned and are generated by an involute system. The amount of crowning and backlash values are so chosen as to ensure the best results in torque transmission, greater flexibility, and smooth operations.

SERVICE FACTOR: Generally, for medium duty use a service factor of 1.5. For heavy duty use a factor of 2 and for extra heavy duty a factor of 3 should be used. For special applications please contact Fenner with full details.

SLEEVES: The internal teeth of the sleeves are generated to ensure correct profile. The coupling sleeves are joined together with high tensile steel bolts (class 8.8 IS: 1367) fitted using a gasket in between them.

LUBRICATION: The coupling must be filled with grease or oil. It is recommended to use grease where the maximum temperature is within 80 C and for temperature above 80 C, oil should be used. When using grease, it is suggested to fill the coupling completely with Lithium based grease with EP additives (NLGI-No.1 consistency). When the coupling is to be filled with oil, fill half the coupling with EP Gear Oil.

'O' RINGS: The setting of special 'O' Rings at the ends of coupling hubs prevents leakage of lubricants and entry of dust. The 'O' rings can also withstand high degree of temperature up to 120 C.

RECOMMENDATION FOR GREASE & OIL:

Grease: Shell Gadus S3 High Speed Coupling Grease or Shell Gadus S2 V220 1
Oil: Shell Omala S2 GX 680

POWER RATINGS: The normal power ratings are given in the Table. For selection of the correct size of couplings, proper service factor depending on the type of machines and the peak load should be considered.

COUPLING SECTION - HOW TO SELECT

The Standard Selection may be used for engine driven, motor, or turbine applications. The following information is required:

- Application or equipment type (motor to pump, reducer to conveyor, etc.)
- Shaft diameters (mm)
- Gaps between shafts (mm)
- Speed (rpm)
- Kilowatts (kW) or torque (Nm)

1. **Rating:** Determine system torque. Torque is calculated as follows:
 $\text{Torque (Nm)} = \text{kW} \times 9550 / \text{rpm}$
2. **Service Factor:** Determine appropriate service factor from page 8-10.
3. **Minimum Coupling Rating:** Determine the required minimum coupling rating as follows: $\text{Minimum Coupling Rating} = \text{Service Factor} \times \text{Torque (Nm)}$
4. **Select the appropriate coupling type.**
5. **Trace the Torque column** to find the value that is equal or greater than value from Step 3.
6. **Confirm:** Check speed (rpm), bore & gap dimensions and the envelope.



FORMULA SELECTION

The Standard Selection should be used for most coupling selections.

The Formula Selection procedure below should be used for:

- High Peak Loads.
- Brake Applications (Brake disc or brake wheel is an integral part of coupling)

Using the Formula Selection and providing system peak torque and frequency, duty cycle, and brake torque rating will allow for a more refined selection.

1. High Peak Loads: Use formula A or B for applications which involve motors with higher-than-normal torque characteristics. Applications should also be those with intermittent operations, including shock loading, inertia effects due to starting and stopping, system-induced repetitive high peak torques. System Peak Torque is the maximum torque that can exist in the system. Select a coupling with a Torque Rating equal or greater than the Selection Torque calculated below:

A. Non-Reversing High Peak Torque:

Selection torque (Nm) = System Peak Torque

or

System Torque (Nm) = System Peak kW x 9550 / rpm

B. Reversing High Peak Torque:

Selection Torque (Nm) = 2 x System Peak Torque

or

System Torque (Nm) = (2 x System Peak kW) x 9550 / rpm

2. Brake Applications: If the torque rating of the brake exceeds the motor torque, use brake rating as below:

Selection Torque (Nm) = Brake Torque Rating x Service Factor

SERVICE FACTORS FOR OPERATION OF DRIVE SYSTEM (BY APPLICATION)

AERATOR	2
AGITATORS	
Vertical and Horizontal Screw, Propeller, Paddle	1
BARGE HAUL PULLER	1.5
BLOWERS	
Centrifugal	1
Lobe or Vane	1.25
CAR DUMPERS	2.5
CAR PULLERS	1.5
CLARIFIER or CLASSIFIER	1
COMPRESSORS	
Centrifugal	1
Rotary, Lobe or Vane	1.25
Rotary, Screw	1
Flywheel Compressor	
1 Cylinder, single acting	3
1 Cylinder, double acting	3
2 Cylinders, single acting	3
2 Cylinders, double acting	3
3 Cylinders, single acting	3
3 Cylinders, double acting	2
4 or more cylinders, single acting	1.75
4 or more cylinders, double acting	1.75
CONVEYORS	
Apron, Assembly, Belt, Chain, Flight, Screw	1
Bucket	1.25
Live Roll, Shaker and Reciprocating	3
CRANES and HOIST	
Main Hoist	1.75
Skip Hoist	1.75
Slope	1.5
Bridge, Travel or Trolley	1.75
DYNAMOMETER	1
ELEVATORS	
Bucket, Centrifugal Discharge	1.25
Gravity Discharge	1.25
EXCITER, GENERATOR	1
EXTRUDER, PLASTIC	1.5
FANS	
Centrifugal	1
Cooling Tower	2
Forced Draft-Across the Line start	1.5
Forced Draft Motor driven thru fluid or electric clutch	1
Gas Recirculating	1.5
Induced Draft with damper control or blade cleaner	1.25
Welder Load	2
HAMMERMILL	1.75
LAUNDRY WASHER or TUMBLER	2
LINE SHAFTS	
Any Processing Machinery	1.5
MACHINE TOOLS	
Auxiliary and Traverse Drive	1
Bending Roll, Notching Press, Punch Press,	1.75
Planer, Plate Reversing	1.5
Main Drive	1.5
METAL FORMING MACHINES	
Continuous Caster	1.75
Draw Bench Carriage and Main Drive	2
Extruder	2
Farming Machine and Forming Mills	2
Slitters	1
Wire Drawing or Flattening	1.75
Wire Winder	1.5
Coilers and Uncoilers	1.5
MIXERS	
Concrete	1.75
Muller	1.5
PRESS, PRINTING	1.5
PUG MILL	1.75
PULVERIZERS	
Hammermill and Hog	1.75
Roller	1.5
PUMPS	
Boiler Feed	1.5
Centrifugal-Constant Speed	1
Frequent Speed Changes under Load	1.25
Descaling with accumulators	1.25
Gear, Rotary, or Vane	1.25
Reciprocating, Plunger Piston	
1 Cylinder, single or double acting	3
2 Cylinders, single acting	2
2 Cylinders, double acting	1.75
3 or more cylinders	1.5
Screw Pump, Progressing Cavity	1.25
Vacuum Pump	1.25
SCREENS	
Air Washing	1
Grizzly	2
Rotary Coal or Sand	1.5
Vibrating	2.5

Induced Draft without controls	2
FEEDERS	
Apron, Belt, Disc, Screw	1
Reciprocating	2.5
GENERATORS	
Even Load	1
Hoist or Railway Service	1.5
Welder Load	2
Hoist or Railway Service	1.5

Water	1
STEERING GEAR	1
STOKER	1
TIRE SHREDDER	1.5
TUMBLING BARREL	1.75
WINCH, MANEUVERING	
Dredge, Marine	1.5
WINDLASS	1.5
WOODWORKING MACHINERY	1

Fenner Gear Coupling

SERVICE FACTORS FOR OPERATION OF DRIVE SYSTEM (BY INDUSTRY)

AGGREGATE PROCESSING, CEMENT, MINING KILNS, TUBE & ROD MILLS	
Direct or on L.S. shaft of Reducer, with final drive Machined Spur Gears	2
Single Helical or Herringbone Gears	1.75
Crushers, Ore or Stone	2.5
Dryer, Rotary	1.75
Grizzly	2
Hammermill or Hog	1.75
Tumbling Mill or Barrel	1.75
BREWING and DISTILLING	
Bottle and Can Filling Machines	1
Brew Kettle	1
Cookers, Continuous Duty	1.25
Lauter Tub	1.5
Mash Tub	1.25
Scale Hopper, Frequent Peaks	1.75
CLAY WORKING INDUSTRY	
Brick Press, Briquette Machine, Clay Working Machine, Pug Mill	1.75
DREDGES	
Cable Reel	1.75
Conveyors	1.25
Cutter head, Jig Drive	2
Manoeuvring Winch	1.5
Pumps (Uniform load)	1.5
Screen Drive, Stacker	1.75
Utility Winch	1.5
FOOD INDUSTRY	
Beet Slicer	1.75
Botting, Can Filling Machine	1
Cereal Cooker	1.25
Dough Mixer, Meat Grinder	1
LUMBER	
Band Resaw	1.5
Circular Resaw, Cut-off	1
Edger, Head Rig, Hog	2
Log Haul	2
Planer	1.75

Slitters, Steel Mill only	1.75
Lift	1
Travel	2
Straighteners	2
Unscramblers (Billet Bundle Busters)	2
Wire Drawing Machinery	1.75
OIL INDUSTRY	
Chiller	1.25
Oilwell Pumping (not over 150% peak torque)	2
Paraffin Filter Press	1.5
Rotary Kiln	2
PAPER MILLS	
Barker Auxiliary, Hydraulic	2
Barker, Mechanical	2
Barking Drum	
L.S. shaft of reducer with final drive-Helical or	
Herringbone Gear	2
Machined Spur Gear	2.5
Cast Tooth Spur Gear	3
Beater & Pulper	1.75
Bleachers, Coaters	1
calendar & Super calendar	1.75
Chipper	2.5
Converting Machine	1.25
Couch	1.75
Cutter, Felt Whipper	2
Dryer	1.75
Cylinder	1.75
Felt Stretcher	1.25
Fourdrinier	1.75
Jordan	2
Log Haul	2
Line Shaft	1.5
Press	1.75
Pulp Grinder	1.75
Reel, Rewinder, Winder	1.5
Stock Chest, Washer, Thickener	1.5

SERVICE FACTORS FOR OPERATION OF DRIVE SYSTEM (BY INDUSTRY)

Rolls, non-reversing	1
Rolls, Reversing	2
Sawdust Conveyor	1.25
Slab Conveyor	1.75
Sorting Table	1.5
Trimmer	1.75
METAL ROLLING MILLS	
Coilers (Up or Down) Cold Mills only	1.5
Coilers (Up or Down) Hot Mills only	2
Coke Plants	
Pusher Ram Drive	2.5
Door Opener	2
Pusher or Larry Car Traction Drive	3
Continuous Caster	1.75
Colling Beds	1.5
Drawbench	2
Feed Rolls-Blooming Mills	3
Furnace Pushers	2
Hot and Cold Saws	2
Ingot Cars	2
Manipulators	3
Mill Tables	
Roughing Breakdown Mills	3
Hot Bed or Transfer, non-reversing	1
Runout, reversing	3
Runout, non-reversing, non-plugging	2
Reel Drives	1.75
Screw down	2
Seamless Tube Mills	
Piercer	3
Thrust Block	2
Tube Conveyor Rolls	2
Reeler	2
Kick Out	2
Sideguards	3

Stock Pumps, Centrifugal	
Constant Speed	1
Frequent Speed Changes Under load	1.25
Suction Roll	1.75
Vacuum Pumps	1.25
RUBBER INDUSTRY	
calendar	2
Cracker, Plasticator	2.5
Extruder	1.75
Intensive or Banbury Mixer	2.5
Mixing Mill, Refiner or Sheeter	
One or two in line	2.5
Three or four in line	2
Five or more in line	1.75
Tire Building Machine	2.5
Tire & Tube Press Opener (Peak Torque)	1
Tuber, Strainer, Pelletizer	1.75
Warming Mill - One or two Mills in line	2
Warming Mill - Three or more Mills in line	1.75
Washer	2.5
SEWAGE DISPOSAL EQUIPMENT	
Bar Screen, Chemical feeders, Collectors,	
Dewatering Screen, Grit Collector	
SUGAR INDUSTRY	
Cane Carrier & Leveller	1.75
Cane Knife & Crusher	2
Mill Stands, Turbine Driver with all Helical or Herringbone, or Spur Gears with any Prime Mover	1.75
TEXTILE INDUSTRY	
Batcher	1.25
calendar, Card Machine	1.5
Cloth Finishing Machine	1.5
Dry Can, Loom	1.5
Dyeing Machinery	1.25
Mangle, Napper, Soaper	1.25
Spinner, Tenter Frame, Winder	1.5







SERVICE FACTORS FOR COMBUSTION ENGINES

Service Factors for engine drives are required for applications where good flywheel regulation prevents torque fluctuations greater than $\pm 20\%$. For drives where torque fluctuations are greater or where the operation is near a serious critical or torsional vibration, a mass elastic study is necessary.

Number of Cylinders	4 of 5					6 or more				
Service of Factor	1.5	1.75	2	2.25	2.5	1.5	1.75	2	2.25	2.5
Engine Service Factor	2.5	2.75	3	3.35	3.5	2.5	2.75	3	3.25	3.5

To use Engine Drive Service Factors, first determine application Service Factor from page 8-10. When Service Factor is greater than 2.0, or where 1, 2 or 3 cylinder engines are involved, refer complete application details to Motion for engineering review.

Service Factors are a guide, based on experience, of the ratio between coupling catalogue rating and system characteristics. The system characteristics are best measured with a torque meter.

Torque Demands Driven Machine	Typical applications for Driven Equipment	Typical Service Factor
	Constant torque such as Centrifugal Pumps, Blowers and Compressors	1
	Continuous duty with some torque variations including Plastic Extruders, Forced Draft Fans	1.5
	Light shock loads from Metal Extruders, Cooling Towers, Cane Knife, Log Haul	2
	Moderate shock loading as expected from a Car Dumper, Stone Crusher, Vibrating Screen	2.5
	Heavy shock load with some negative torques from Roughing Mills, Reciprocating Pumps, Compressors, Reversing, Runout Tables	3
	Applications like Reciprocating Compressors with frequent torque reversals, which do not necessarily cause reverse rotations.	Refer to Motion

FENNER GEAR COUPLING PURPOSE

FENNER Gear Couplings serve as a mechanical device which connect the shafts of two distinct machines and can accommodate large axial moments as well as small amounts of shaft misalignment. Commercial Gear Couplings transmit more torque than other types of couplings of similar physical size. Because of this superior load transmitting capability, Gear Couplings have become widely used for higher speed applications, as well as for applications that require a combination of high torque capacity and a low inertia of the drive system.

Gear Couplings are torsionally rigid and couple two designs, one of which is completely flexible

and one of which is rigid. Gear Couplings consist of two shaft hubs with external teeth, which are then connected by means of a sleeve, usually two pieces, containing internal teeth. A flexible spline with the hubs and sleeves rotating together is the working action of a Gear

Coupling. The proper type of lubrication, applied frequently and adequately, is essential for the successful operation of this system. This coupling is made up of one flexible geared half and a rigid half. A flexible & rigid coupling such as this is primarily used for "floating shaft" applications. The coupling accommodates angular misalignment but does not accommodate parallel displacement of shafts.

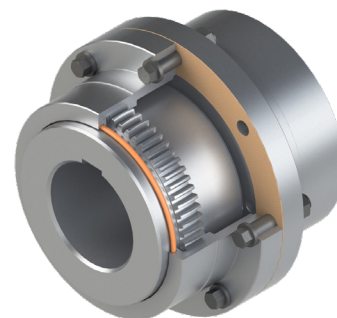
FENNER GEAR COUPLING TYPES



G20 - Double Engagement



G32 - Spacer



G52 - Single Engagement

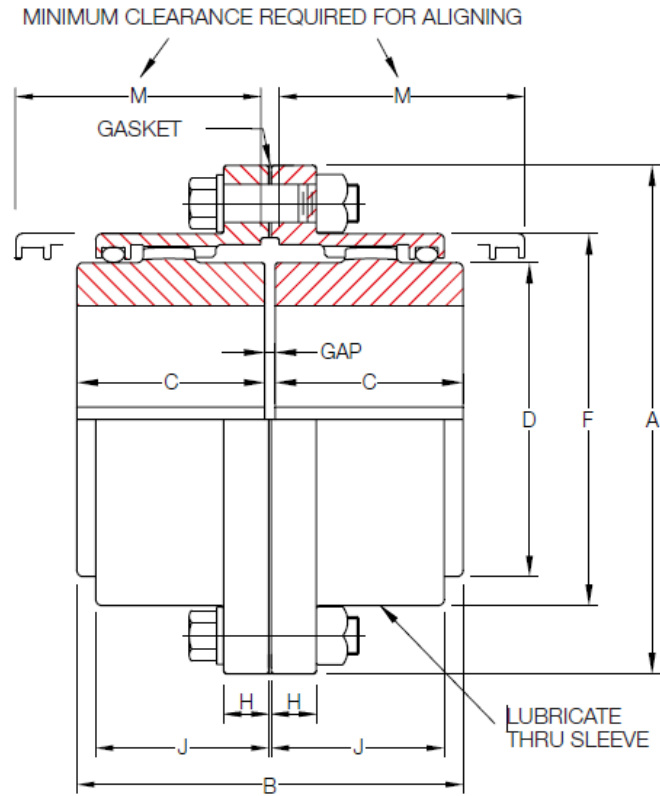


G52 - Floating Shaft Assembly (RFFR & FRRF)

Fenner Gear Coupling

G20 TYPE

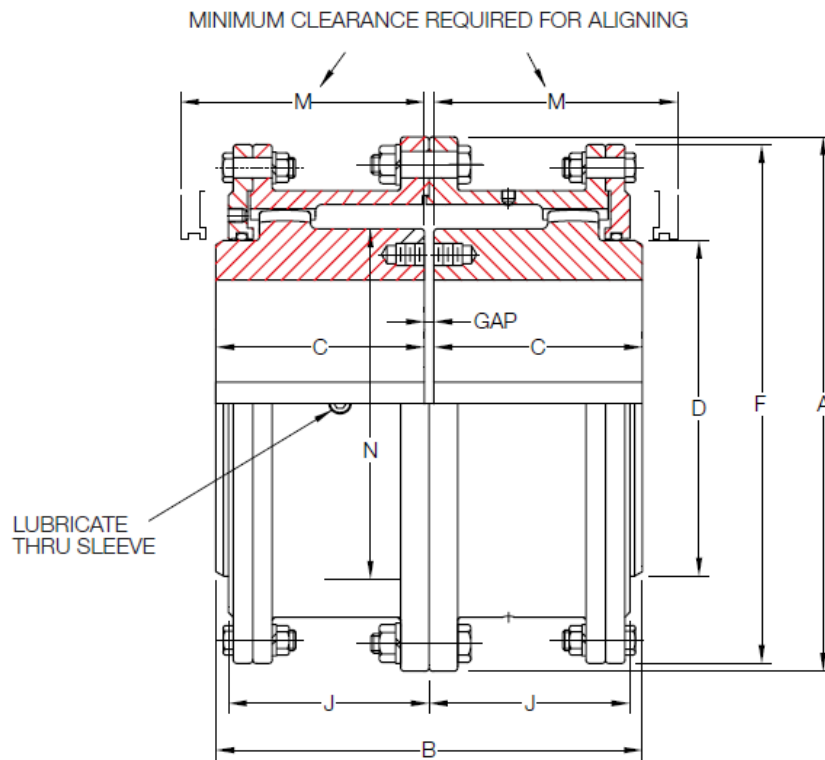
Standard Flanged Sleeve Double Engagement



Size	Torque Rating (Nm)	Allow Speed RPM	Max Bore (mm)	Min Bore (mm)	Cplg Weight (Kg)	Lube Weight (Kg)	Dimensions (Millimeters)								
							A	B	C	D	F	H	J	M	GAP
1010G	1 140	8000	50	13	4,54	0,0408	115,9	88,9	42,9	68,6	83,8	14,0	38,9	51	3
1015G	2 350	6500	65	20	9,07	0,0726	152,4	101,6	49,3	86,4	105,2	19,0	47,8	61	3
1020G	4 270	5600	78	26	15,9	0,113	177,8	127,0	62,0	105,2	126,5	19,0	59,4	77	3
1025G	7 470	5000	98	32	29,5	0,2127	212,7	158,9	77,0	130,6	154,9	21,8	71,6	92	5
1030G	12 100	4400	111	39	43,1	0,363	239,7	187,4	91,2	152,4	180,3	21,8	83,8	107	5
1035G	18 500	3900	134	51	68,0	0,544	279,4	218,9	106,4	177,8	211,3	28,4	97,5	130	6
1040G	30 600	3600	160	64	97,5	0,907	317,5	247,3	120,6	209,6	245,4	28,4	111,3	145	6
1045G	42 000	3200	183	77	136	1,04	346,1	277,7	134,9	235,0	274,1	28,4	122,9	166	8
1050G	56 600	2900	200	89	191	1,77	388,9	314,3	153,2	254,0	305,8	38,1	140,7	183	8
1055G	74 000	2650	220	102	249	2,22	425,4	344,3	168,1	279,4	334,3	38,1	158,0	204	8
1060G	90 400	2450	244	115	306	3,18	457,2	384,4	188,2	304,8	366,0	25,4	169,2	229	8
1070G	135 000	2150	289	127	485	4,35	527,0	451,5	220,7	355,6	424,9	28,4	195,6	267	10

G20 LARGE TYPE

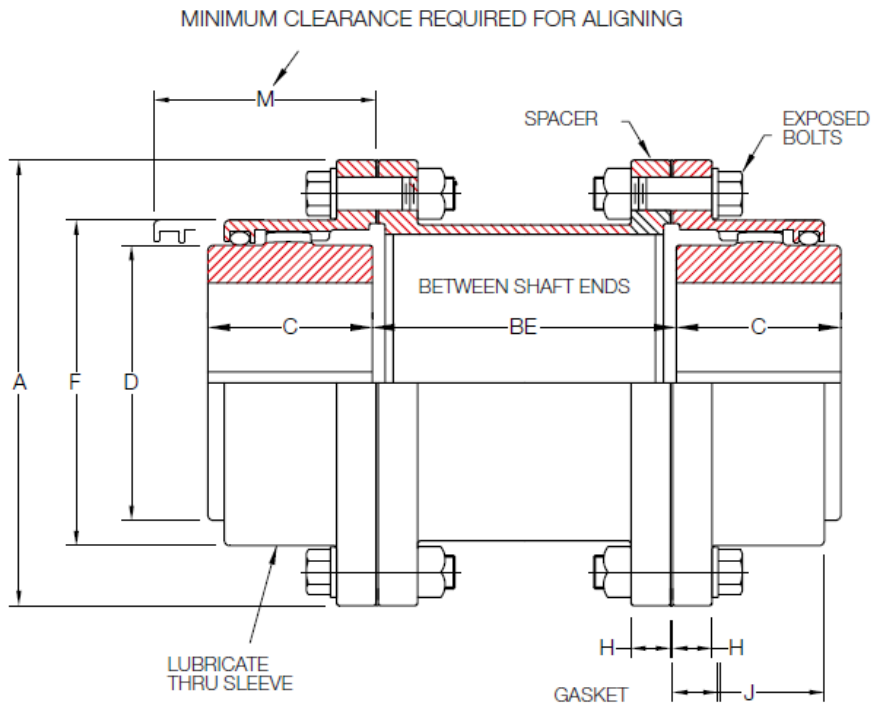
Large Flanged Sleeve Double Engagement



Size	Torque Rating (Nm)	Allow Speed RPM	Max Bore (mm)	Min Bore (mm)	Cplg Weight (Kg)	Lube Weight (Kg)	Dimensions (Millimeters)								
							A	B	C	D	F	J	M	N	GAP
1080	170,000	1,750	266	101.60	703	9.5	590.6	508.5	249.2	355.6	571.5	242.8	300.0	368.3	10
1090	226,000	1,550	290	114.30	964	12.2	660.4	565.4	276.4	393.7	641.4	265.2	327.2	419.1	13
1100	310,000	1,450	320	127.00	1,302	15	711.2	622.3	304.8	444.5	698.5	293.6	355.6	469.9	13
1100	413,000	1,330	373	139.70	1,678	17.7	774.7	679.2	333.2	495.3	479.3	322.3	380	520	13
1120	555,000	1,200	400	152.40	2,114	20.9	838.2	717.8	352.6	546.1	825.5	341.4	403.4	571.5	13
1130	719,000	1,075	440	165.10	2,595	32.7	911.4	761.7	371.3	584.2	886	362	434.8	609.6	19
1140	911,000	920	460	177.8	3,107	33.1	965.2	806.4	393.2	635	939.8	378	457.2	660.4	19
1150	1,100,000	770	490	190.50	3,765	40.8	1,028.7	857.2	419.1	685.8	1,003.8	407.9	482.6	711.2	19
1160	1,310,000	650	525	254	4,708	43.1	1,111.2	908	441.3	786.6	1,085.9	419.1	504.6	762	25
1180	1,660,000	480	600	287.75	6,260	49.9	1,121.9	939.8	457.2	828.2	1,193.8	434.8	520.7	836.6	25
1200	2,140,000	370	660	317.50	8,582	68	1,358.9	1,098.6	536.6	927.1	1,308.1	514.1	635	965.2	25
1220	2,720,000	290	725	349.25	11,685	107	1,511.3	1,193.8	584.2	1,016	1,473.2	565.2	685.8	1,066.8	25

G32 TYPE

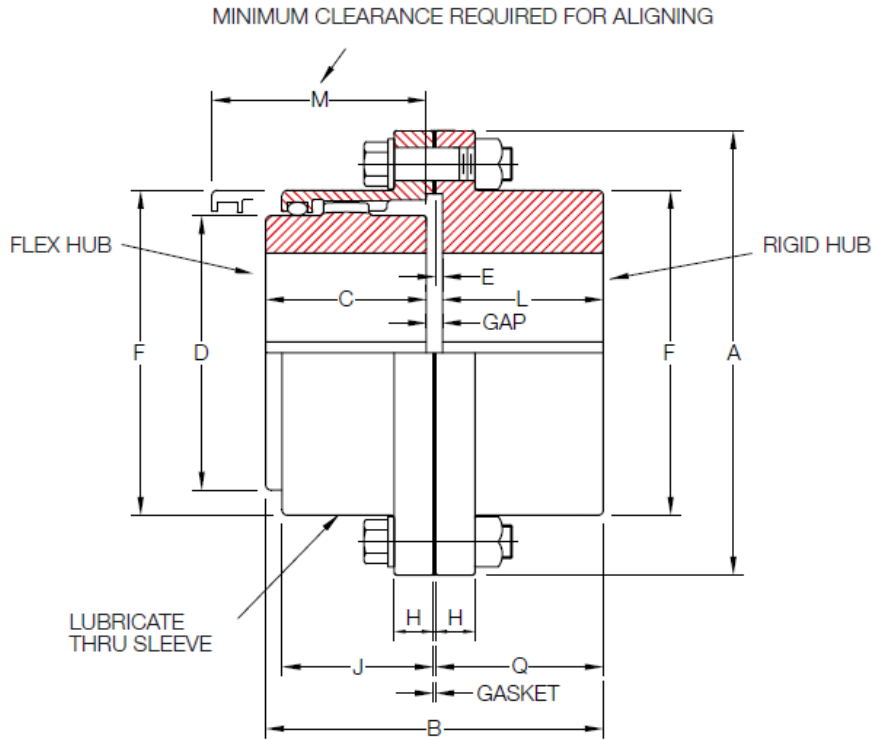
Standard Flanged Sleeve Spacer



Size	Torque Rating (Nm)	Allow Speed RPM	Max Bore (mm)	Min Bore (mm)	Cplg Weight (Kg)		Lube Weight (Kg)		Dimensions (Millimeters)									
					Cplg Wt With No Bore and Min BE	Extra Spacer Wt per mm of Length	Min Wt Less Spacer	Plus per mm of Spacer Length	A	BE Min A		BE Max	C	D	F	H	J	M
										G31	G32							
1010G	1 140	7000	50	13	6,80	0,0120	0,0408	...	115,9	82	82	311	42,9	68,6	83,8	14,0	38,9	48
1015G	2 350	5500	65	20	13,6	0,0127	0,0726	...	152,4	82	82	311	49,3	86,4	105,2	19,0	47,8	56
1020G	4 270	4600	78	26	20,4	0,0166	0,113	0,000536	177,8	82	82	311	62,0	105,2	126,5	19,0	59,4	69
1025G	7 470	4000	98	32	38,6	0,0205	0,227	0,00107	212,7	108	95	311	77,0	130,6	154,9	21,8	71,6	81
1030G	12 100	3600	111	39	54,4	0,0236	0,363	0,00107	239,7	108	95	311	91,2	152,4	180,3	21,8	83,8	94
1035G	18 500	3100	134	51	88,5	0,0359	0,544	0,00214	279,4	130	120	311	106,4	177,8	211,3	28,4	97,5	107
1040G	30 600	2800	160	64	122,5	0,0500	0,907	0,00357	317,5	130	120	311	120,6	209,6	245,4	28,4	111,3	122
1045G	42 000	2600	183	77	166	0,0736	1,04	0,00357	346,1	130	120	311	134,9	235,0	274,1	28,4	122,9	135
1050G	56 600	2400	200	89	238	0,0814	1,77	0,00357	388,9	184	146	311	153,2	254,0	305,8	38,1	140,7	152
1055G	74 000	2200	220	102	306	0,0895	2,22	0,00357	425,4	184	146	311	168,1	279,4	334,3	38,1	158,0	173
1060G	90 400	2100	244	115	358	0,117	3,18	0,00357	457,2	...	146	311	188,2	304,8	366,0	25,4	169,2	183
1070G	135 000	1800	289	127	562	0,141	4,35	0,00357	527,0	...	146	311	220,7	355,6	424,9	28,4	195,6	208

G52 TYPE

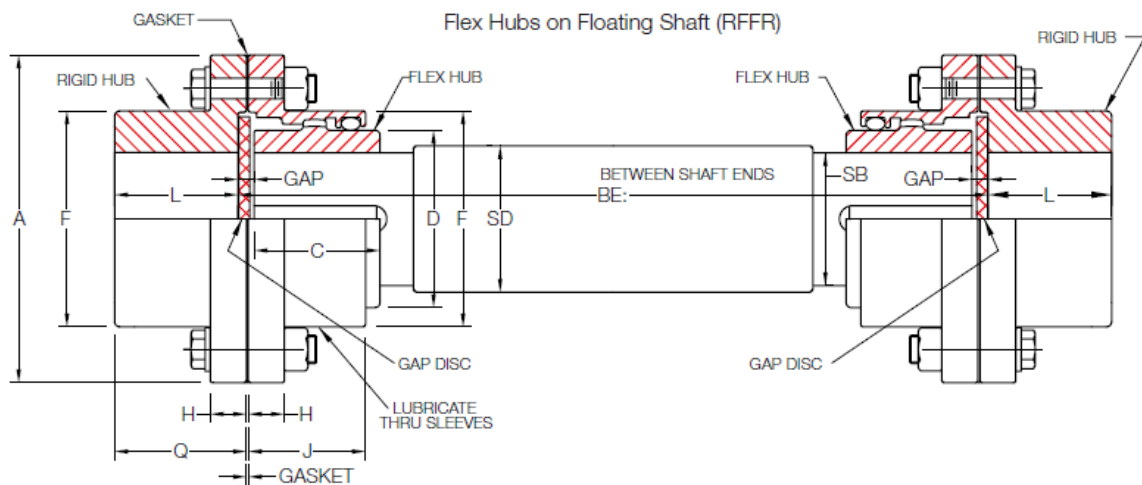
Standard Flanged Sleeve Single Engagement



Size	Torque Rating (Nm)	Allow Speed RPM	Max Bore (mm)		Min Bore (mm)	Cplg Weight (Kg)		Lube Weight (Kg)	Dimensions (Millimeters)											
			Flex Hub	Rigid Hub		G51	G52		A	B	C	D	E	F	H	J	L	M	Q	GAP
1010G	1 140	8000	50	65	13	4,08	4,54	0,0227	115,9	86,6	42,9	68,6	2,5	83,8	14,0	38,9	39,6	51	42,2	4
1015G	2 350	6500	65	80	20	8,16	9,07	0,0408	152,4	99,6	49,3	86,4	2,5	105,2	19,0	47,8	46,2	61	48,8	4
1020G	4 270	5600	78	98	26	13,6	15,9	0,0680	177,8	124,5	62,0	105,2	2,5	126,5	19,0	59,4	58,4	76	61,0	4
1025G	7 470	5000	98	118	32	24,9	27,2	0,118	212,7	155,4	77,0	130,6	2,5	154,9	21,8	71,6	73,7	91	76,2	5
1030G	12 100	4400	111	140	39	38,6	43,1	0,181	239,7	183,9	91,2	152,4	2,5	180,3	21,8	83,8	87,9	107	90,4	5
1035G	18 500	3900	134	163	51	61,2	68,0	0,272	279,4	214,1	106,4	177,8	2,5	211,3	28,4	97,5	102,1	130	104,6	6
1040G	30 600	3600	160	196	64	90,7	99,8	0,467	317,5	242,8	120,6	209,6	4,1	245,4	28,4	111,3	115,3	145	119,4	7
1045G	42 000	3200	183	216	77	129,3	136	0,557	346,1	273,1	134,9	235,0	4,1	274,1	28,4	122,9	130,6	165	134,6	8
1050G	56 600	2900	200	235	89	181,4	195	0,907	388,9	309,1	153,2	254,0	5,1	305,8	38,1	140,7	147,3	183	152,4	9
1055G	74 000	2650	220	266	102	251,7	263	1,13	425,4	349,5	168,1	279,4	5,1	334,3	38,1	158,0	172,7	203	177,8	9
1060G	90 400	2450	244	290	115	...	324	1,70	457,2	385,1	188,2	304,8	6,6	366,0	25,4	169,2	186,4	229	193,0	10
1070G	135 000	2150	289	340	127	...	508	2,27	527,0	453,6	220,7	355,6	8,4	424,9	28,4	195,6	220,2	267	228,6	13

G52 TYPE (RIGID, FLOATING, FLOATING, RIGID)

Standard Flanged Sleeve Single Engagement
Floating Shaft

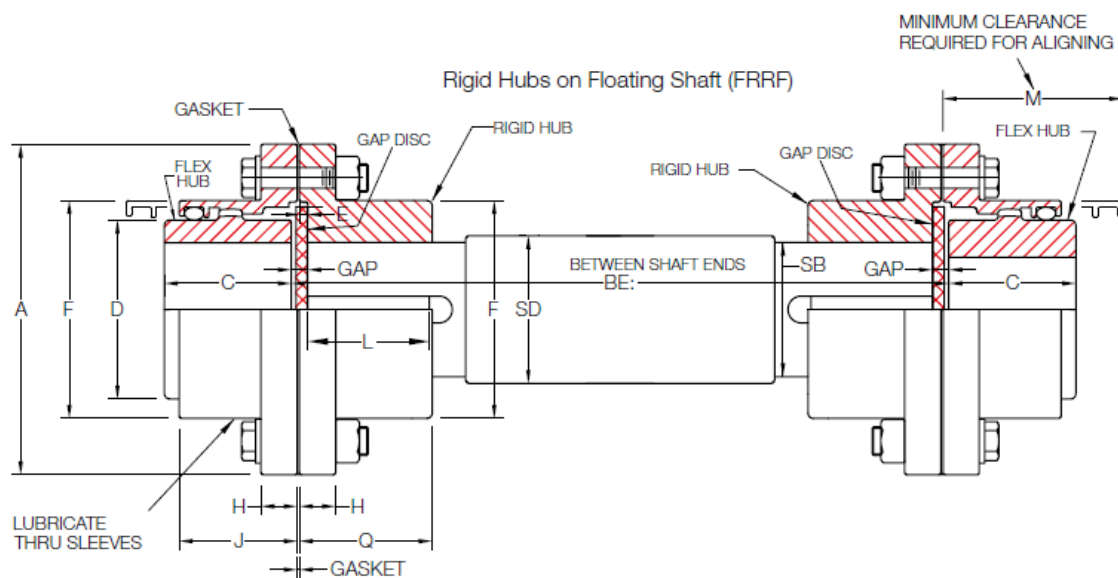


Size	Max Bore (mm)		Min Bore (mm)	Cplg Weight (Kg)		Lube Weight (Kg)	Dimensions (Millimeters)		
	Flex (mm)	Rigid (mm)		G51 (kg)	G52 (kg)		A	B	
								RFFR	FRRF
1010G	50	65	13	4,08	4,54	0,0227	115,9	133	92
1015G	65	80	20	8,16	9,07	0,0408	152,4	159	105
1020G	78	98	26	13,6	15,9	0,0680	177,8	197	129
1025G	98	118	32	24,9	27,2	0,118	212,7	241	162
1030G	111	140	39	38,6	43,1	0,181	239,7	279	189
1035G	134	163	51	61,2	68,0	0,272	279,4	324	219
1040G	160	196	64	90,7	99,8	0,467	317,5	419	248
1045G	183	216	77	129,3	136	0,557	346,1	508	281
1050G	200	235	89	181,4	195	0,907	388,9	533	316
1055G	220	266	102	251,7	263	1,13	425,4	572	367
1060G	244	290	115	...	324	1,70	457,2	597	397
1070G	289	340	127	...	508	2,27	527,0	673	470

All Dimensions found across pages 17 and 18.

G52 TYPE (FLOATING, RIGID, RIGID, FLOATING)

Standard Flanged Sleeve Single Engagement Floating Shaft



Size	Dimensions (Millimeters)									
	C	D	E	F	H	J	L	M	Q	GAP
1010	42,9	68,6	2,5	83,8	14,0	38,9	39,6	48	42,2	4
1015	49,3	86,4	2,5	105,2	19,0	47,8	46,2	56	48,8	4
1020	62,0	105,2	2,5	126,5	19,0	59,4	58,4	69	61,0	4
1025	77,0	130,6	2,5	154,9	21,8	71,6	73,7	81	76,2	5
1030	91,2	152,4	2,5	108,3	21,8	83,8	87,9	94	90,4	5
1035	106,4	177,8	2,5	211,3	28,4	97,5	102,1	107	104,6	6
1040	120,6	209,6	4,1	245,4	28,4	111,3	115,3	122	119,4	7
1045	134,9	235,0	4,1	274,1	28,4	122,9	130,8	135	134,6	8
1050	153,2	254,0	5,1	305,8	38,1	140,7	147,3	152	152,4	9
1055	168,1	279,4	5,1	334,3	38,1	158,0	172,7	173	177,8	9
1060	188,2	304,8	6,6	366,0	25,4	169,2	186,4	183	193,0	10
1070	220,7	355,6	8,4	424,9	28,4	195,6	220,2	208	228,6	13

All Dimensions found across pages 17 and 18.

INSTALLATION

Fenner Gear Couplings are designed to provide a mechanical connection between the rotating shafts of mechanical equipment, using gear mesh to accommodate inherent misalignment while transmitting the power and torque between the connected shafts.

1) Mount Flanged Sleeves, Seals and Hub

assembly to insure there is no visible damage.
- Clean the hub bores and shafts using lint free cloth. Remove any nicks or burrs. - When assembled, the keys should have a close side to side fit in the keyways in the hub and shaft with a slight clearance over the top of the keys. - Place the flanged sleeves with O rings on shafts before mounting flex hubs.

2) Straight Bore with Clearance / Slip Fit

Install the keys in the shaft. - Check to be sure that the set screws in the hub do not protrude into the keyway or the bore. Remove or back out the set screw to provide clearance during assembly. - Slide the hub up the shaft to the desired axial position. - Assemble and tighten the set screws using a calibrated torque wrench.

3) Straight Bore with Interference Fit

Accurately measure the bore and shaft diameters to assure proper fit. - Install the keys in the shaft. - heat the hub (135 degrees C) in an oven until the bore is sufficiently larger than the shaft. When the hub is expanded, install it on the shaft to the desired axial position.

4) Taper Bore

Check for acceptable contact pattern between the hub and the shaft. - Put the hub on the shaft, keeping the keyways aligned. - Lightly tap the face of the hub with a soft mallet. The resultant position will provide a starting point for the hub axial draw up. - Use a depth micrometer to measure the distance from the shaft end to the hub face and record the dimension. - Mount a dial indicator to read axial hub advancement. Alternatively, the indicator can be positioned to contact the end of the hub. - Remove the hub and install the keys in the shaft. - Heat the hub (177 degrees C) in an oven until the bore is sufficiently

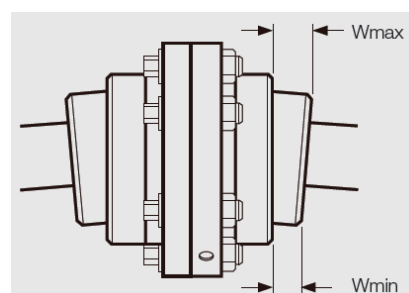
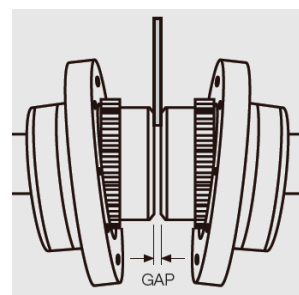
larger than the shaft. Do not exceed 260 degrees C. When the hub expanded, install it quickly on the shaft to the "zero" set point. Continue to advance the hub up the taper to the desired axial position.

5) Shaft Alignment

Use an inside micrometer or a spacer bar equal in thickness and at 90° intervals to measure the distance between hubs to gap. - The "Angular Misalignment" value is the maximum difference

6) Sleeve Installation

Insert gasket between flanges and gap disc into counter bore of each rigid hub for floating shaft assemblies, and bolt flanges together. - Check the alignment of the coupling. Determine "W" by measuring distances "W" max and "W" min between flex hub and sleeve using a depth micrometer or feeler gauges. The difference between "W" max and "W" min must not exceed the "W" value.



ANNUAL MAINTENANCE

1. Check alignment. If the maximum operating misalignment values are exceeded, realign the coupling.
2. Inspect O Ring and gasket to determine if replacement is required.
3. Re-lubricate coupling if using general purpose grease until an excess appears at an open hole.

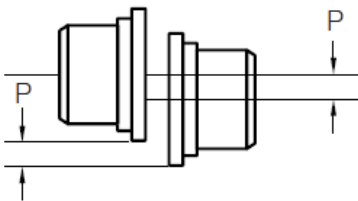
Grease: Shell Gadus S3 High Speed Coupling Grease or Shell Gadus S2 V220 1

Oil: Shell Omala S2 GX 680

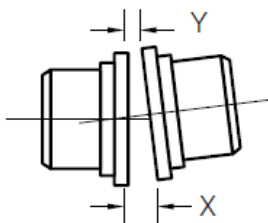
ALIGNMENT DATA

To improve the service life of the coupling, shafts should be aligned to minimize deflection of the flexing elements. Shaft alignment is required in the axial, parallel, and angular directions, with each of these values not to exceed the recommended installation limits. Shaft alignment can be measured using various established methods, including Laser Alignment, Reverse Dial Indicator, and Rim and Face.

Parallel Misalignment



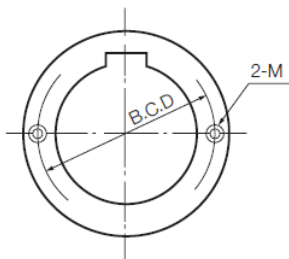
Angular Misalignment



MISALIGNMENT CAPACITY

Size	Recommended Installation		Operating		Fastener Tightening Torque Rating (Nm)
	Parallel Offset-P Max (mm)	Angular (X-Y) Max (mm)	Parallel Offset-P Max (mm)	Angular (X - Y) Max (mm)	
1010G	0.05	0.15	0.66	1.8	12
1015G	0.08	0.18	0.86	2.26	42
1020G	0.08	0.23	1.02	2.74	102
1025G	0.10	0.28	1.27	3.43	203
1030G	0.13	0.33	1.52	3.99	203
1035G	0.15	0.38	1.83	4.65	339
1040G	0.18	0.46	2.13	5.49	339
1045G	0.20	0.51	2.39	6.15	339
1050G	0.23	0.56	2.72	6.65	339
1055G	0.28	0.61	3.12	7.32	339
1060G	0.28	0.66	3.35	9.98	339
1070G	0.33	0.79	3.94	9.32	339
1080G	0.41	0.81	2.46	4.83	-
1090G	0.43	0.91	2.64	5.49	-
1100G	0.48	1.02	2.97	6.15	-
1110G	0.56	1.14	3.30	6.81	-
1120G	0.58	1.24	3.51	7.49	-
1130G	0.61	1.32	3.61	7.98	-
1140G	0.64	1.45	3.81	8.64	-
1150G	0.69	1.55	4.17	9.32	-
1160G	0.71	1.60	4.37	10.97	-
1180G	0.74	1.83	4.22	9.65	-
1200G	0.89	2.03	5.28	12.14	-
1220G	0.99	2.21	5.87	13.31	-

PULLER HOLES



Size	B.C.D (mm)	Bolt
1010	52.32	M10 x 1.5 x 13
1015	69.85	M10 x 1.5 x 13
1020	88.9	M10 x 1.5 x 13
1025	112.78	M10 x 1.5 x 13
1030	128.52	M10 x 1.5 x 13
1035	152.4	M12 x 1.75 x 16
1040	180.98	M16 x 2.0 x 20
1045	200.03	M16 x 2.0 x 20
1050	215.9	M20 x 2.5 x 22
1055	238.13	M20 x 2.5 x 22
1060	263.53	M20 x 2.5 x 22
1070	311.15	M24 x 3.50 x 30



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