

Mechanical Power Transmission Systems

GEAR COUPLING



■ GDE TYPE



■ GDEL TYPE



■ GSCD TYPE



■ GSE TYPE



■ GSEL TYPE



■ GDBW TYPE



■ GHD TYPE



■ GHS TYPE



■ GFS-R TYPE



■ GFS-O TYPE



■ SS TYPE



■ CCTYPE



02 GEAR COUPLING

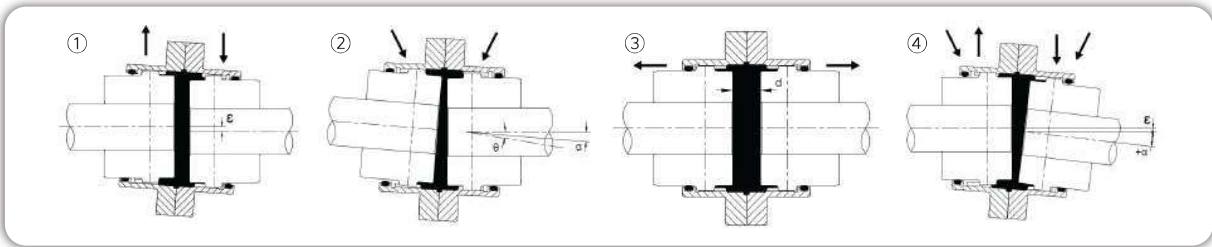
Characteristic & Advantages

The WCC Gear Coupling is a shaft coupling powered by sleeves and hubs (crowned tooth gear). It conforms to the AGMA standard of the USA and the JIS standard of Japan and is produced in South Korea.

- I. The coupling has been reduced in size and weight to prolong its service life and loss of transmission power is minimized.
- II. A gasket is used at the joint to prevent lubricant leakage.
- III. The teeth of the hub are machined into crown gears with three equal sides allowing the coupling to tolerate parallel, angular, and axial misalignment by transmitting power through contact points along a curve (instead of constant surface contact).

Misalignment

- ① Parallel misalignment : The drive shaft and the driven shaft are parallel to each other, but their centers are offset.
- ② Angular misalignment : The drive shaft and the driven shaft are at an angle to each other.
- ③ Axial misalignment : The drive shaft and the driven shaft move in their respective axial direction.
- ④ Composite misalignment : In the actual operating state, the above three misalignments are mixed.



Allowable Misalignment (S)

Size	10G	15G	20G	25G	30G	35G	40G	45G	50G	55G	60G	70G	80G	90G	100G	110G	120G
ϵ (mm)	1.2	1.3	1.7	2.1	2.4	2.9	3.2	3.6	4.1	4.5	5.0	5.9	6.7	7.4	8.2	12.7	12.7
θ (α)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	3(1.5)	2(1)	2(1)	2(1)	2(1)	2(1)	2(1)

※ Allowable misalignment for double gear

- The coupling incorporates SM45C steel to maximize durability during high speed rotation and high load operation.
- Custom couplings can be produced to meet client specifications.

Application

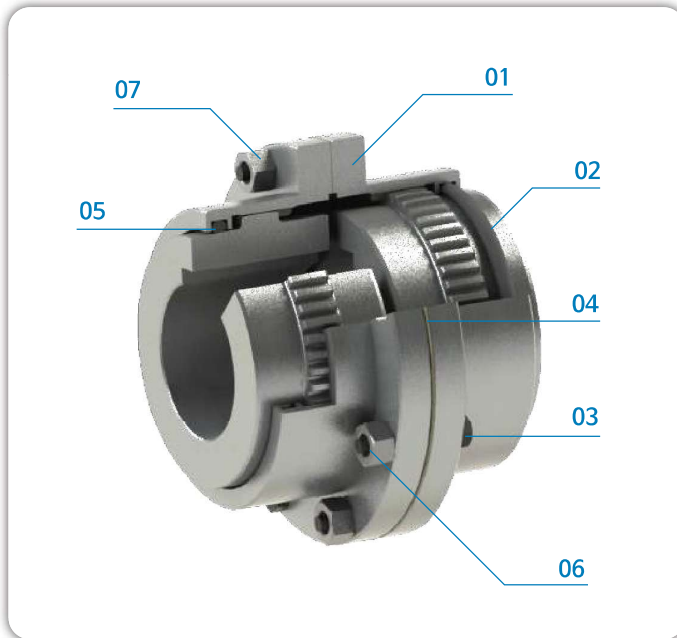
- For heavy loads
- For high speed operation
- For rotation rates below 100rpm and requiring strong torque
- For rotation with sliding operation
- When the distance between shafts is large and connected with a spacer
- Not suitable for low horsepower applications.

Standard Material

SLEEVE	CROWN HUB	FLANGE (RIGID)	Bolt	O-Ring
	SM45C		SM45C-H	NBR

※ Special materials and/or special treatments are required for unusual applications, such as high speed, high or low temperature, chemically corrosive environments, or extreme load stress.

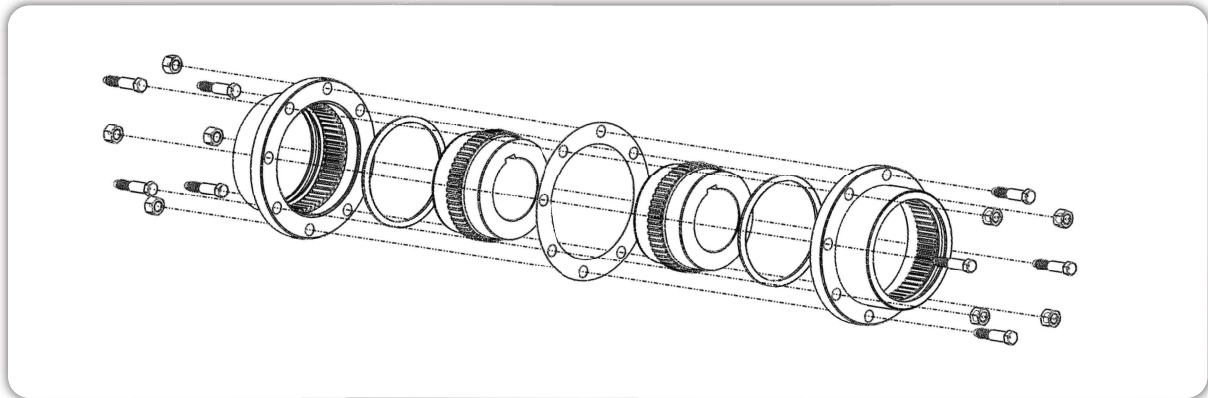
Structure



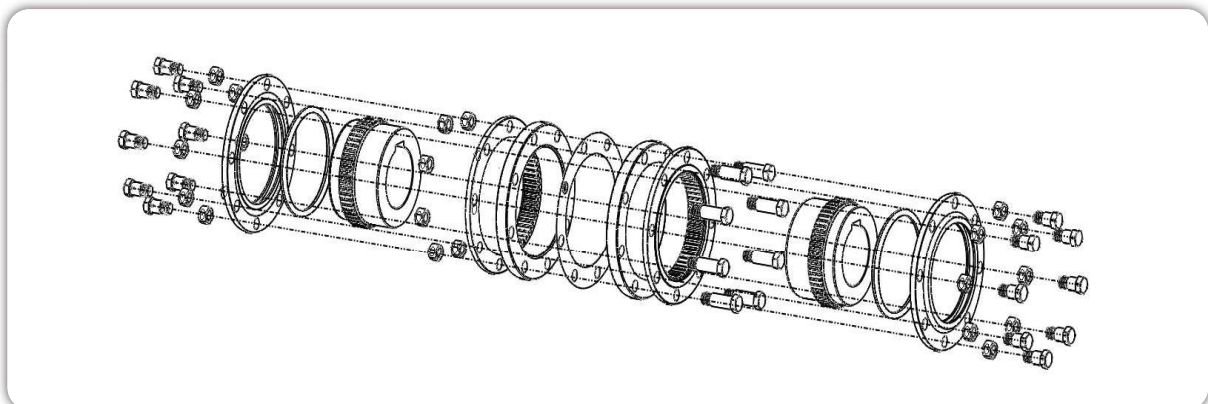
PART

- 01 Sleeve
- 02 Hub (crowned tooth gear)
- 03 Bolt
- 04 Gasket
- 05 O-ring
- 06 Agma Type : Lock Nut
S/D Type : Hex. Nut

Design features of Gear Coupling (GDE)



Design features of Gear Coupling (GDEL)



Instruction for Installation

Make sure that the inner diameter of the crown hub is machined correctly, and then select a shrinkage fitting or key fitting. Refer to page 61 for a shrinkage fitting. In the case of key fitting, ensure that there are no lubricant leaks around the keyway.

10G – 70G



STEP 01

After cleaning all parts, apply grease to the gear teeth and O-rings and put the O-rings on the shafts.

STEP 02

Insert the sleeves on the shafts and assemble the crown hub on both shafts. (Align the standard marks on the exterior of the hubs.)



STEP 03

Adjust the allowable normal gap and angular misalignment using a thickness gauge.



STEP 04

As shown in the figure, adjust for parallel errors every 90° of circumference using a straight-edge ruler to ensure it does not exceed the error limit. Use the dial gauge to align the axis exactly.



STEP 05

Place the gasket between the sleeves, apply grease to the crown and lock the bolt with the injection port at 90°.

STEP 06

Fill with grease until it overflow from the opposite inlet.

80G – 200G



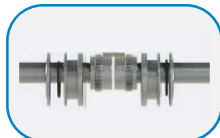
STEP 01

After cleaning all parts, apply grease to the gear teeth and O-rings and put the O-rings on the shaft.



STEP 02

Insert the side cover into the shaft and assemble the crown hub. (Align the standard marks on the exterior of the hubs.) Then assemble the gasket and sleeve.



STEP 03

Adjust the spacing and angular misalignment of the four circumferences by using a gap gauge. Do not exceed the angular misalignment limit.



STEP 04

Adjust the parallel misalignment of the four circumferences with a straight-edge ruler so that they do not exceed the limit of misalignment. Use a dial gauge to precisely adjust the axis.



STEP 05

Make sure that the lubrication inlet in the sleeve is at 90°, then tighten the bolt evenly as shown in the figure. When assembling the side cover, make sure that the lubrication inlet of the side cover and the lubrication inlet of the sleeve are at 90°.

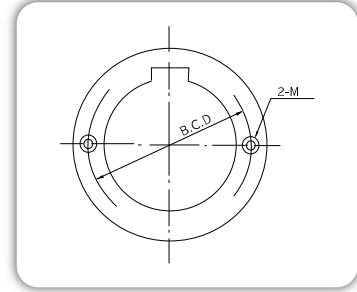


STEP 06

After opening the lubrication inlet, use a lubricant injector to inject grease until it overflows, then lock the injection port.

Selection Of Puller Holes

SIZE	10G	15G	20G	25G	30G	35G	40G	45G	50G	55G	60G	70G
BCD(mm)	NONE	NONE	NONE	113	129	152	181	200	216	238	264	311
BOLT SIZE	NONE	NONE	NONE	M12	M12	M12	M16	M16	M20	M20	M20	M24
SIZE	80G	90G	100G	110G	120G	130G	140G	150G	160G	180G	200G	
BCD(mm)	318	356	394	445	495	533	584	635	686	775	864	
BOLT SIZE	M24	M30	M36	M36	M36	M36	M36	M36	M36	M36	M48	



Misalignment Capacity

(Unit:mm)

Size	Double Engagement				Size	Single Engagement Angular Maximum Millimeters	
	Recommended Installation Maximum		Maximum Operating			Recommended Installation (0.125°)	Maximum Operating (0.75°)
	Parallel	Angular (0.0625°)	Parallel	Angular (0.75°)			
10GDE	0.05	0.15	0.66	1.80	10GSE	0.15	0.89
15GDE	0.08	0.18	0.86	2.26	15GSE	0.18	1.14
20GDE	0.08	0.23	1.02	2.74	20GSE	0.23	1.37
25GDE	0.10	0.28	1.27	3.43	25GSE	0.28	1.70
30GDE	0.13	0.33	1.52	3.99	30GSE	0.33	2.01
35GDE	0.15	0.38	1.83	4.65	35GSE	0.38	2.34
40GDE	0.18	0.46	2.13	5.49	40GSE	0.46	2.74
45GDE	0.20	0.51	2.39	6.15	45GSE	0.51	3.07
50GDE	0.23	0.56	2.72	6.65	50GSE	0.56	3.33
55GDE	0.28	0.61	3.12	7.32	55GSE	0.61	3.66
60GDE	0.28	0.66	3.35	7.98	60GSE	0.66	3.99
70GDE	0.33	0.79	3.94	9.32	70GSE	0.79	4.65
80GDEL	0.41	0.81	4.90	9.65	80GSEL	0.81	4.83
90GDEL	0.43	0.91	5.23	10.97	90GSEL	0.91	5.49
100GDEL	0.48	1.02	5.94	12.29	100GSEL	1.02	6.15
110GDEL	0.56	1.14	6.58	13.64	110GSEL	1.14	6.81
120GDEL	0.58	1.24	7.04	14.99	120GSEL	1.24	7.49
130GDEL	0.61	1.32	7.24	15.95	130GSEL	1.32	7.98
140GDEL	0.64	1.45	7.59	17.30	140GSEL	1.45	8.64
150GDEL	0.69	1.55	8.33	18.62	150GSEL	1.55	9.32
160GDEL	0.71	1.60	8.41	19.28	160GSEL	1.60	9.65
180GDEL	0.74	1.83	8.74	21.95	180GSEL	1.83	10.97
200GDEL	0.89	2.03	10.57	24.28	200GSEL	2.03	12.14

※ Do not allow the combined values of the parallel and angular misalignments to exceed 0.75°.

※ Single engagement couplings are not adequate to compensate for parallel offset misalignment.

Operating Alignment Limits (Mm)

SIZE	10	15	20	25	30	35	40	45	50	55	60	70	80	90	100
GAP (Exclude vertical)	3	3	3	4.5	4.5	6	6	8	8	8	8	9.5	10	13	13
Flange Bolt Torque (kg·cm)	96	320	480	960	960	1,650	1,650	1,650	2,070	2,070	2,070	2,980			

※ If there is more than the maximum misalignment, the life of the coupling will be shortened.

SELECTION METHOD

Selection Process

a. Use the following formula to determine the torque.

$$T = 974 \frac{H'}{N} \times S \cdot F \text{ or } T = 716.2 \frac{H}{N} \times S \cdot F$$

T = Design torque(kg·m) · H' = Power(kw) · H = Power(HP) · N = Working revolutions(rpm) · $S \cdot F$ = Recommended Service Factor

b. Compare the calculated torque with the torque rating for each model and select the one with the same or larger rating.
c. Compare the maximum inner diameter of the shaft and coupling of the machine to be used and select the appropriate model.

Precaution for selection

① If end float movement occurs more than five times per hour in the Sliding Gear Coupling, add 0.5 to the safety factor.

Select equipment with a maximum torque rating 1.5 times the peak torque (as calculated by the maximum horsepower of the equipment used) if the motor is used in the following ways: continuous reverse rotation, intermittent

③ operation, frequent operation at peak load, repeated magnetic induction, or a high-inertia system.

④ For GFS-R and GFS-O, please contact us for the thickness and maximum length of the intermediate shaft.

Since the torque values for the gear coupling of styles GDBW and GSBW are the same as those of styles GDE and GSE, they are selected by comparing the ratings for the brakes. Brake power should be selected when the power of the brake is greater than the power of the motor.

Example

You want to connect a 450HP, 1,170 rpm motor with a shaft diameter of 90 mm to the high-speed shaft of a reducer with a diameter of 80mm. The maximum parallel misalignment of the shaft is 1.5mm.

① Select the GDE style because it allows for the parallel misalignment of 1.5mm.

② The safety factor is 2.0.

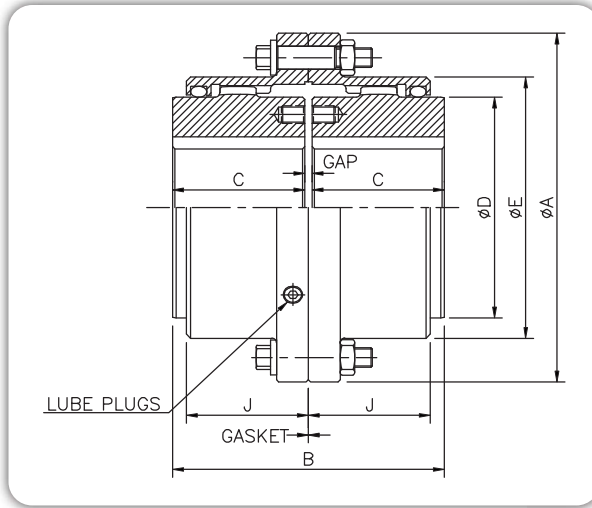
③ By formula

$$\text{Torque(Kg} \cdot \text{m)} = \frac{450 \times 716.2 \times 2.0}{1,170} = 550.93$$

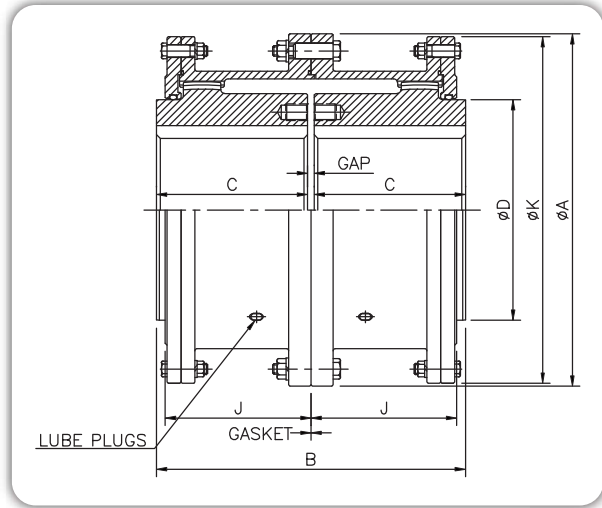
④ The transmission torque is 550.93 kg·m therefore, select 25GDE with an allowable transmission torque of 644.58kg·m.

⑤ Since the shaft diameter is 90mm, select 25GDE because it has a maximum bore capacity of 92mm.

Type GDE (Double Engagement)



GDEL (Double Engagement Large)

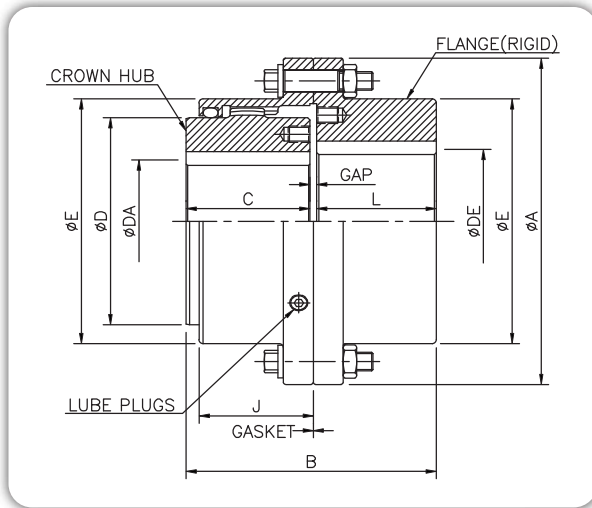


Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)						Gap (mm)	Cplg wt (kg)	Lube wt (kg)
		kg·m	Nm	Max.	Min.	A	B	C	D	E	J			
10GDE	8,000	116	1,140	50	13	116	89	43	69	84	39	3	5	0.04
15GDE	6,500	239	2,350	65	20	152	101	49	86	105	48	3	9	0.07
20GDE	5,600	435	4,270	78	26	178	127	62	105	126	59	3	16	0.11
25GDE	5,000	761	7,470	98	32	213	159	77	131	155	72	5	27	0.23
30GDE	4,400	1,233	12,100	111	39	240	187	91	152	180	84	5	41	0.36
35GDE	3,900	1,886	18,500	134	51	279	218	106	178	211	98	6	66	0.54
40GDE	3,600	3,120	30,600	160	64	318	248	121	210	245	111	6	97	0.91
45GDE	3,200	4,282	42,000	183	77	346	278	135	235	274	123	8	123	1.04
50GDE	2,900	5,771	56,600	200	89	389	314	153	254	306	141	8	178	1.77
55GDE	2,650	7,545	74,000	220	102	425	344	168	279	334	158	8	233	2.22
60GDE	2,450	9,218	90,400	244	115	457	384	188	305	366	169	8	291	3.18
70GDE	2,150	13,766	135,000	289	127	527	451.5	221	355	425	196	9.5	445	4.35

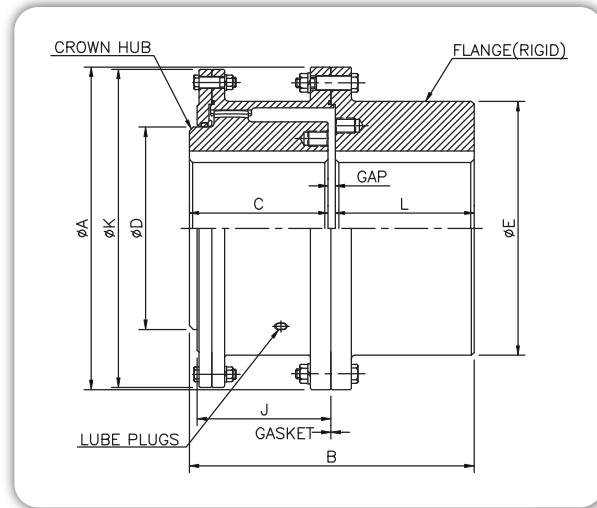
Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)						Gap (mm)	Cplg wt (kg)	Lube wt (kg)
		kg·m	Nm	Max.	Min.	A	B	C	D	J	K			
80GDEL	1,750	17,335	170,000	266	102	591	507.5	249	356	243	572	9.5	703.1	9.53
90GDEL	1,550	23,045	226,000	290	114	660	565	276	394	265	641	13	984.3	12.25
100GDEL	1,450	31,611	310,000	320	127	711	623	305	445	294	699	13	1,302.0	14.97
110GDEL	1,330	42,114	413,000	373	140	775	679	333	495	322	749	13	1,678.3	17.69
120GDEL	1,200	56,594	555,000	400	152	838	719	353	546	341	826	13	2,113.8	20.87
130GDEL	1,075	73,317	719,000	440	165	911	761	371	584	362	886	19	2,594.5	32.66
140GDEL	920	92,896	911,000	460	178	965	805	393	635	378	940	19	3,107.1	33.11
150GDEL	770	112,168	1,100,000	490	190	1,029	857	419	686	408	1,003	19	3,764.8	40.82
160GDEL	650	133,582	1,310,000	525	254	1,111	907	441	737	419	1,086	25	4,708.3	43.09
180GDEL	480	169,272	1,660,000	600	286	1,219	939	457	838	435	1,194	25	6,259.6	49.90
200GDEL	370	218,219	2,140,000	660	318	1,359	1,099	537	927	514	1,308	25	8,582.0	68.00

※ Coupling weight, without bore machining.

Type GSE (Single Engagement)



GSEL (Single Engagement Large)

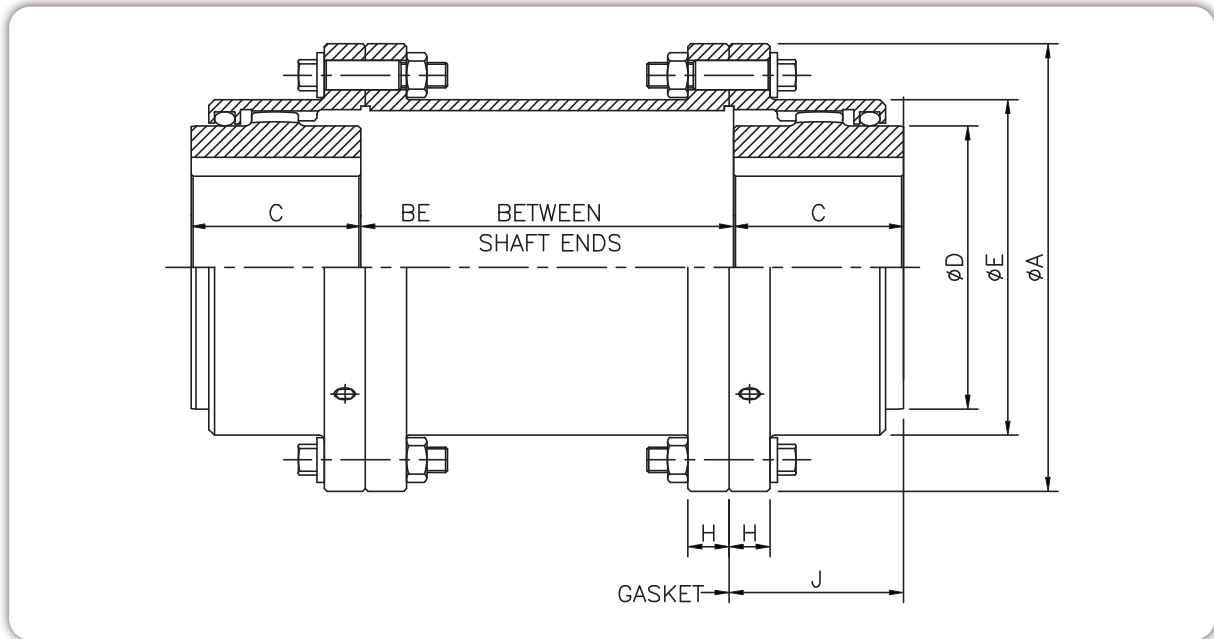


Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)							Gap (mm)	Cplg wt (kg)	Lube wt (kg)	
		kg·m	Nm	Max.		Min.	A	B	C	D	E	J				L
				CR	FL											
10GSE	8,000	116	1,140	50	65	13	116	87	43	69	84	39	40	4	5	0.02
15GSE	6,500	239	2,350	65	80	20	152	99	49	86	105	48	46	4	10	0.04
20GSE	5,600	435	4,270	78	98	26	178	124	62	105	126	59	58	4	16	0.07
25GSE	5,000	761	7,470	98	118	32	213	156	77	131	155	72	74	5	28	0.12
30GSE	4,400	1,233	12,100	111	140	39	240	184	91	152	180	84	88	5	42	0.18
35GSE	3,900	1,886	18,500	134	163	51	279	213.5	106	178	211	98	102	5.5	69	0.27
40GSE	3,600	3,120	30,600	160	196	64	318	243	121	210	245	111	115	7	99	0.47
45GSE	3,200	4,282	42,000	183	216	77	346	274	135	235	274	123	131	8	129	0.57
50GSE	2,900	5,771	56,600	200	235	89	389	309	153	254	306	141	147	9	189	0.91
55GSE	2,650	7,545	74,000	220	266	102	425	350	168	279	334	158	173	9	254	1.13
60GSE	2,450	9,218	90,400	244	290	115	457	384	188	305	366	169	186	10	312	1.70
70GSE	2,150	13,766	135,000	289	340	127	527	454	221	355	425	196	220	13	488	2.27

Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)							Gap (mm)	Cplg wt (kg)	Lube wt (kg)	
		kg·m	Nm	Max.		Min.	A	B	C	D	J	L				K
				CR	FL											
80GSEL	1,750	17,335	170,000	266	340	102	591	511	249	356	243	249	572	13	698.5	4.99
90GSEL	1,550	23,045	226,000	290	380	114	660	566	276	394	265	276	641	14	984.3	6.35
100GSEL	1,450	31,611	310,000	320	400	127	711	626	305	445	294	305	699	16	1,251.9	7.71
110GSEL	1,330	42,114	413,000	373	440	140	775	682	333	495	322	333	749	16	1,637.5	9.07
120GSEL	1,200	56,594	555,000	400	483	152	838	722	353	546	341	353	826	16	2,077.5	10.89
130GSEL	1,075	73,317	719,000	440	500	165	911	761	371	584	362	371	886	19	2,571.9	16.78
140GSEL	920	92,896	911,000	460	535	178	965	806	393	635	378	394	940	19	3,061.7	17.24
150GSEL	770	112,168	1,100,000	490	580	190	1,029	857	419	686	408	419	1,003	19	3,751.2	20.87
160GSEL	650	133,582	1,310,000	525	630	254	1,111	907	441	737	419	441	1,086	25	4,631.2	21.77
180GSEL	480	169,272	1,660,000	600	710	286	1,219	939	457	838	435	457	1,194	25	6,069.1	25.40
200GSEL	370	218,219	2,140,000	660	780	318	1,359	1,099	537	927	514	537	1,308	25	8,482.0	34.00

※ Coupling weight, without bore machining.

■ Type GSCD (Spacer Double Engagement)



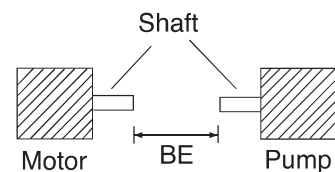
Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)								Lube wt (kg)
						A	BE		C	D	E	H	J	
							Min.	Max.						
kg·m	Nm	Max.	Min.											
10GSCD	7,000	116	1,140	50	13	116	83	311	43	69	84	14	39	0.04
15GSCD	5,500	239	2,350	65	20	152	83	311	49	86	105	19	48	0.07
20GSCD	4,600	435	4,270	78	26	178	83	311	62	105	126	19	59	0.11
25GSCD	4,000	761	7,470	98	32	213	95	311	77	131	155	22	72	0.23
30GSCD	3,600	1,233	12,100	111	39	240	95	311	91	152	180	22	84	0.36
35GSCD	3,100	1,886	18,500	134	51	279	120	311	106	178	211	28	98	0.54
40GSCD	2,800	3,120	30,600	160	64	318	120	311	121	210	245	28	111	0.91
45GSCD	2,600	4,282	42,000	183	77	346	120	311	135	235	274	28	123	1.04
50GSCD	2,400	5,771	56,600	200	89	389	146	311	153	254	306	38	141	1.77
55GSCD	2,200	7,545	74,000	220	102	425	146	311	168	279	334	38	158	2.22
60GSCD	2,100	9,218	90,400	244	115	457	146	311	188	305	366	25	169	3.18
70GSCD	1,800	13,766	135,000	289	127	527	146	311	221	355	425	28	196	4.35

※ Application of spacer

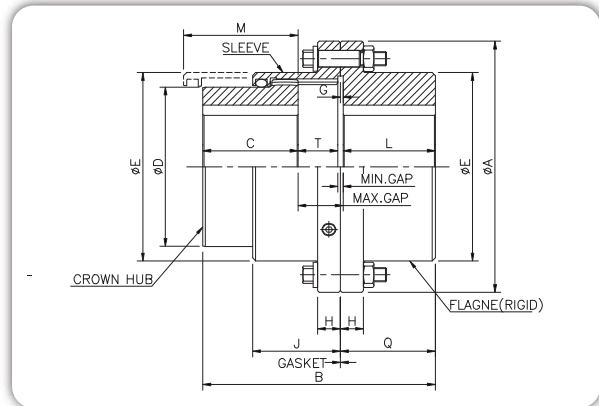
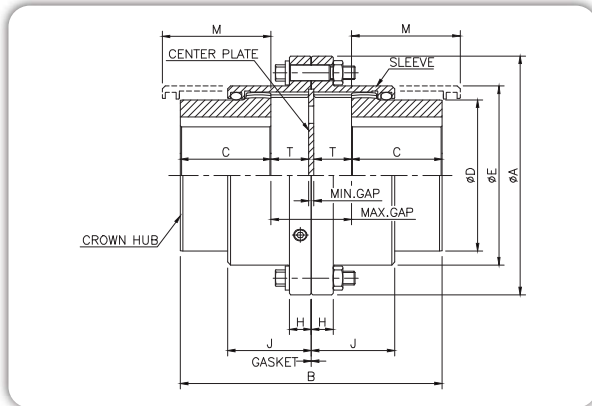
① When it is impossible to connect the hubs due to the distance of a wide gap between shaft ends.

② When it is necessary to prevent transmitting heat and electric current.

※ 'BE' is the distance between the shaft ends. State the exact 'BE' number when you order.



■ Type GHD (Double Slide Engagement) ■ GHS (Single Slide Engagement)



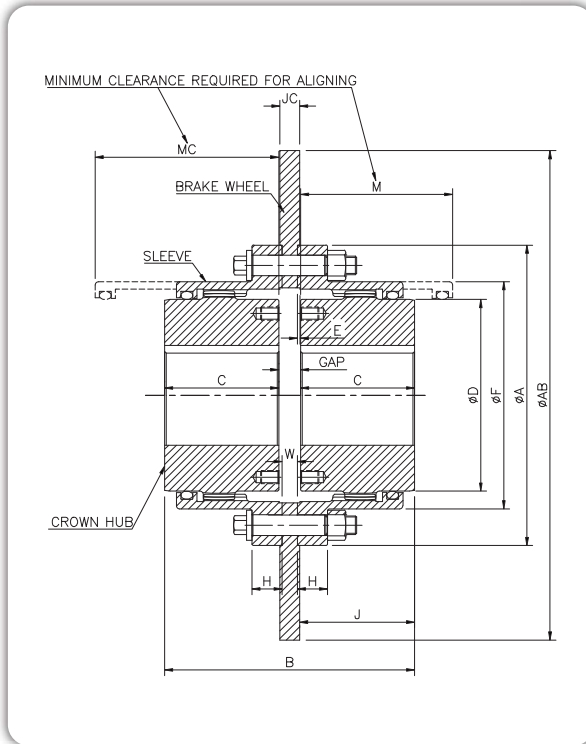
Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)			Dimensions (mm)									
				Max.		Min	A	C	D	G	E	H	J	L	Q	M
		kg·m	Nm	CR	FL											
10GH	5,300	116	1,140	50	65	13	116	43	69	2.5	84	14	39	40	42	53
15GH	4,300	239	2,350	65	80	20	152	49	86	2.5	105	19	48	46	49	69
20GH	3,700	435	4,270	78	98	26	178	62	105	2.5	126	19	59	58	61	84
25GH	3,300	761	7,470	98	118	32	213	77	131	2.5	155	22	72	74	76	102
30GH	2,900	1,233	12,100	111	140	39	240	91	152	2.5	180	22	84	88	90	118
35GH	2,600	1,886	18,500	134	163	51	279	106	178	2.5	211	28	98	102	105	135
40GH	2,400	3,120	30,600	160	196	64	318	121	210	4	245	28	111	115	119	155
45GH	2,100	4,282	42,000	183	216	77	346	135	235	4	274	28	123	131	135	163
50GH	1,900	5,771	56,600	200	235	89	389	153	254	5	306	38	141	147	152	189
55GH	1,800	7,545	74,000	220	266	102	425	168	279	5	334	38	158	173	178	221
60GH	1,600	9,218	90,400	244	290	115	457	188	305	6.6	366	25	169	186	193	227
70GH	1,400	13,766	135,000	289	340	127	527	221	355	8.4	425	28	196	220	229	235

※ 'M' is variable according to the sliding distance

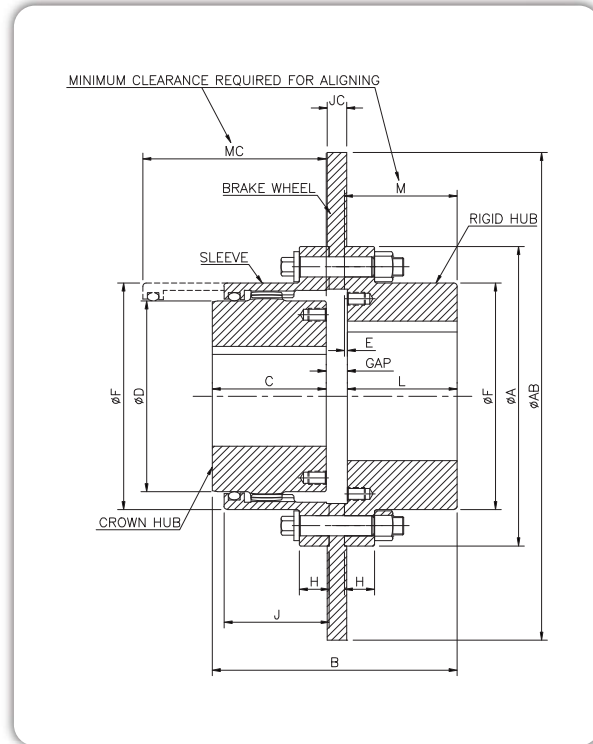
Size	GHD (Double Engagement)							GHS (Single Engagement)						Size
	B. Max.	T Max.		Gap		Cplg wt (kg)	Lube wt (kg)	B Max.	T Max.	GAP		Cplg wt (kg)	Lube wt (kg)	
		Half	Total	Max.	Min.					Min.	Max.			
10GH	126	16	32	40	8	5	0.02	106	19	23	4	5	0.01	10GH
15GH	152	23	46	54	8	9	0.04	124	25	29	4	10	0.02	15GH
20GH	186	27	54	62	8	17	0.06	153	29	33	4	16	0.04	20GH
25GH	231	34	68	77	9	28	0.11	192	36	41	5	28	0.06	25GH
30GH	263	36	72	81	9	42	0.18	222	38	43	5	42	0.11	30GH
35GH	313	45	90	101	11	68	0.27	262	48	54	6	69	0.18	35GH
40GH	364	54	108	122	14	100	0.45	300	57	64	7	99	0.27	40GH
45GH	406	60	120	136	16	127	0.51	338	64	72	8	129	0.34	45GH
50GH	460	68	136	154	18	183	0.91	382	73	82	9	189	0.54	50GH
55GH	510	78	156	174	18	239	1.13	433	83	91	9	254	0.73	55GH
60GH	563	83	166	187	21	300	1.19	473	89	99	10	312	0.96	60GH
70GH	669	99	198	224	26	461	2.18	561	107	120	13	488	1.36	70GH

※ Coupling weight, without bore machining.

TYPE GDBW (Disc Brake Wheel Double Engagemet)

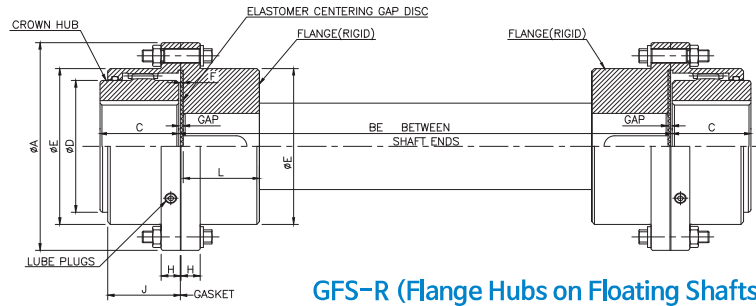


GSBW (Disc Brake Wheel Single Engagemet)

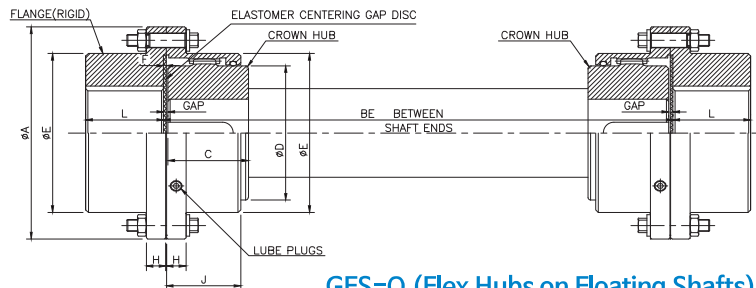


Size	Max.Brake Rating of Cplg		Brake DiscSize Dia. (Min) AB(mm)	Bore(mm)			Dimensions(mm)													LUBE wt (kg)		
	kg·m	Nm		Max.		Min	A	B		C	D	E	F	H	J	L	M	W	GAP		GD	GS
				CR	FL			GD	GS										GD	GS		
10GDBW	25	251	178	50	65	13	116	99	97	43	69	2.5	84	14	39	40	51	10	13	14	0.04	0.02
15GDBW	58	569	203	65	80	20	152	114	112	49	86	2.5	105	19	48	46	61	13	16	17	0.07	0.04
20GDBW	107	1,050	244	78	98	26	178	140	137	62	105	2.5	126	19	59	58	76	13	16	17	0.11	0.07
25GDBW	193	1,897	289	98	118	32	213	173	170	77	131	2.5	155	22	72	74	91	14	19	19	0.23	0.12
30GDBW	317	3,117	320	111	140	39	240	201	198	91	152	2.5	180	22	84	88	107	14	19	19	0.36	0.18
35GDBW	490	4,810	371	134	163	51	279	237	233	106	178	2.5	211	28	98	102	130	19	25	25	0.54	0.27
40GDBW	746	7,317	429	160	196	64	318	267	262	121	210	4.1	245	28	111	115	145	19	25	26	0.91	0.47
45GDBW	1,022	10,027	457	183	216	77	346	297	293	135	235	4.1	274	28	123	131	165	19	27	27	1.04	0.57
50GDBW	1,382	13,550	492	200	235	89	389	339	334	153	254	5.1	306	38	141	147	183	25	33	34	1.77	0.91
55GDBW	1,813	17,784	430	220	266	102	425	369	375	168	279	5.1	334	38	158	173	203	25	33	34	2.22	1.13
60GDBW	2,349	23,035	584	244	290	115	457	409	410	188	305	6.6	366	25	169	186	229	25	33	36	3.18	1.70
70GDBW	3,413	33,469	660	289	340	127	527	447	479	221	355	8.4	425	28	196	220	267	25	35	38	4.35	2.27

Type GFS (Single Engagement with Floating Shafts)



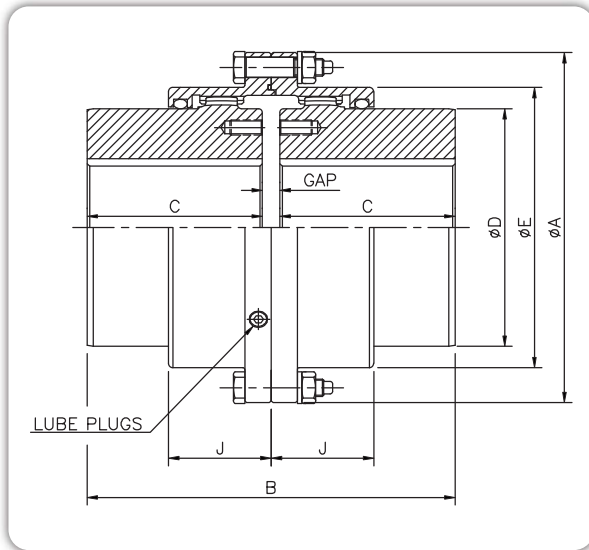
GFS-R (Flange Hubs on Floating Shafts)



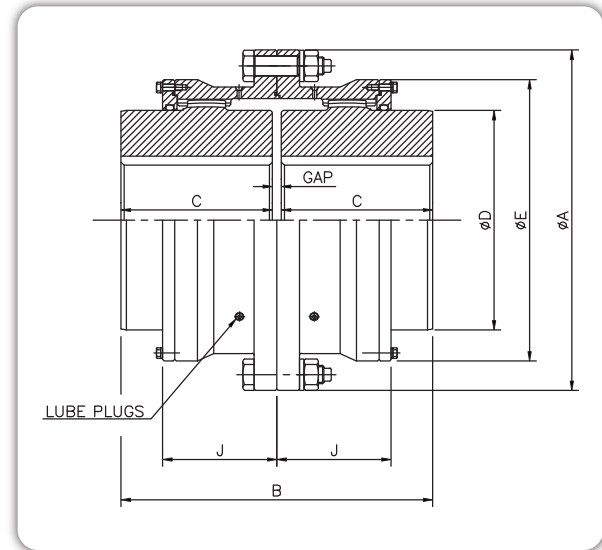
GFS-O (Flex Hubs on Floating Shafts)

Size	Torque Rating		Bore Dia (mm)				Dimensions (mm)										Gap (mm)	Lube wt (kg)
			Max.		Min	A	BE Min.		C	D	F	E	H	J	L			
	CR	FL	GFS-R	GFS-O														
10GFS	116	1,140	50	65	13	116	92	133	43	69	2.5	84	14	39	40	4	0.02	
15GFS	239	2,350	65	80	20	152	105	159	49	86	2.5	105	19	48	46	4	0.04	
20GFS	435	4,270	78	98	26	178	129	197	62	105	2.5	126	19	59	58	4	0.07	
25GFS	761	7,470	98	118	32	213	162	241	77	131	2.5	155	22	72	74	5	0.12	
30GFS	1,233	12,100	111	140	39	240	189	279	91	152	2.5	180	22	84	88	5	0.18	
35GFS	1,886	18,500	134	163	51	279	219	324	106	178	2.5	211	28	98	102	5.5	0.27	
40GFS	3,120	30,600	160	196	64	318	248	419	121	210	4.1	245	28	111	115	7	0.47	
45GFS	4,282	42,000	183	216	77	346	281	508	135	235	4.1	274	28	123	131	8	0.57	
50GFS	5,771	56,600	200	235	89	389	316	533	153	254	5.1	306	38	141	147	9	0.91	
55GFS	7,545	74,000	220	266	102	425	367	572	168	279	5.1	334	38	158	173	9	1.13	
60GFS	9,218	90,400	244	290	115	457	397	597	188	305	6.6	366	25	169	186	10	1.70	
70GFS	13,766	135,000	289	340	127	527	470	673	221	355	8.4	425	28	196	220	13	2.27	

■ Type SS (Double Engagement)



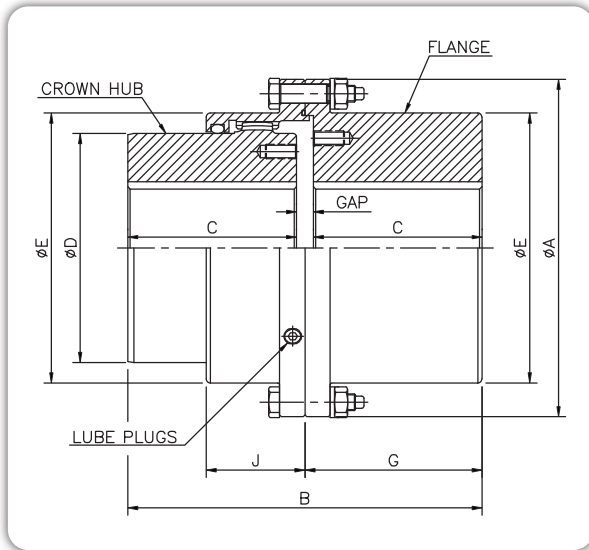
■ CC (Double Engagement Large)



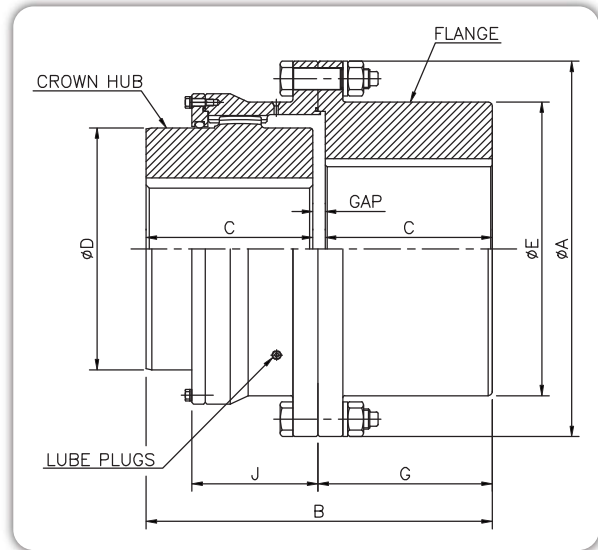
Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)		Dimensions (mm)						Gap (mm)	Clpg wt (kg)	Lube wt (kg)
		kg·m	Nm	Max.	Min.	A	B	C	D	E	J			
SS100	3,600	42	421	32	17	100	88	40	46	67	34	8	3	0.03
SS112	3,600	80	788	40	17	112	108	50	58	79	39	8	5	0.04
SS125	3,600	142	1,400	50	22	125	134	63	70	92	44	8	7	0.05
SS140	3,600	204	2,010	56	22	140	150	71	80	107	47	8	9	0.07
SS160	3,600	314	3,080	65	22	160	170	80	95	120	52	10	14	0.09
SS180	3,600	482	4,730	75	32	180	190	90	105	134	56	10	19	0.12
SS200	3,600	688	6,750	85	32	200	210	100	120	149	61	10	26	0.15
SS224	3,080	1,000	9,810	100	42	224	236	112	145	174	65	12	38	0.25
SS250	2,650	1,468	14,400	115	42	250	262	125	165	200	74	12	56	0.35
SS280	2,340	2,335	22,900	135	42	280	294	140	190	224	82	14	83	0.48
SS315	1,980	3,681	36,100	160	100	315	356	170	225	260	98	16	135	0.77
SS355	1,800	5,547	54,400	180	125	355	396	190	250	288	108	16	184	0.94
SS400	1,570	7,790	76,400	200	140	400	418	200	285	329	114	18	261	1.36
CC450	1,540	9,483	93,000	205	140	450	418	200	290	372	151	18	304	1.79
CC500	1,320	12,950	127,000	236	170	500	494	236	335	425	168	22	453	2.64
CC560	1,170	20,802	204,000	275	190	560	552	265	385	475	187	22	664	3.23
CC630	990	31,509	390,000	325	224	630	658	315	455	548	213	28	1,020	4.93
CC710	970	45,887	450,000	360	250	710	738	355	510	622	242	28	1,460	6.63
CC800	780	65,567	643,000	405	280	800	832	400	570	690	267	32	2,090	9.35

※ Coupling weight, without bore machining

■ Type SE (Single Engagement)



■ CE (Single Engagement Large)



Size	Max. Speed RPM	Torque Rating		Bore Dia (mm)			Dimensions (mm)							Gap (mm)	Clpg wt (kg)	Lube wt (kg)
		kg · m	Nm	Max.		Min.	A	B	C	D	E	G	J			
				CR	FL											
SE100	3,600	42	421	32	40	17	100	88	40	46	67	44	34	8	3	0.03
SE112	3,600	80	788	40	50	17	112	108	50	58	79	54	39	8	5	0.04
SE125	3,600	142	1,400	50	56	22	125	134	63	70	92	67	44	8	7	0.05
SE140	3,600	204	2,010	56	63	22	140	150	71	80	107	75	47	8	9	0.07
SE160	3,600	314	3,080	65	75	22	160	170	80	95	120	85	52	10	14	0.09
SE180	3,600	482	4,730	75	80	32	180	190	90	105	134	95	56	10	19	0.12
SE200	3,600	688	6,750	85	95	32	200	210	100	120	149	105	61	10	26	0.15
SE224	3,080	1,000	9,810	100	105	42	224	236	112	145	174	118	65	12	38	0.25
SE250	2,650	1,468	14,400	115	125	42	250	262	125	165	200	131	74	12	56	0.35
SE280	2,340	2,335	22,900	135	150	42	280	294	140	190	224	147	82	14	83	0.48
SE315	1,980	3,681	36,100	160	180	100	315	356	170	225	260	178	98	16	135	0.77
SE355	1,800	5,547	54,400	180	200	125	355	396	190	250	288	198	108	16	184	0.94
SE400	1,570	7,790	76,400	200	236	140	400	418	200	285	329	209	114	18	261	1.36
CE450	1,540	9,483	93,000	205	225	140	450	418	200	290	372	209	151	18	304	1.79
CE500	1,320	12,950	127,000	236	270	170	500	494	236	335	425	247	168	22	453	2.64
CE560	1,170	20,802	204,000	275	305	190	560	552	265	385	475	276	187	22	664	3.23
CE630	990	31,509	309,000	325	355	224	630	658	315	455	548	329	213	28	1,020	4.93
CE710	970	45,887	450,000	360	400	250	710	738	355	510	622	369	242	28	1,460	6.63
CE800	780	65,567	643,000	405	450	280	800	832	400	570	690	416	267	32	2,090	9.35

※ Coupling weight, without bore machining