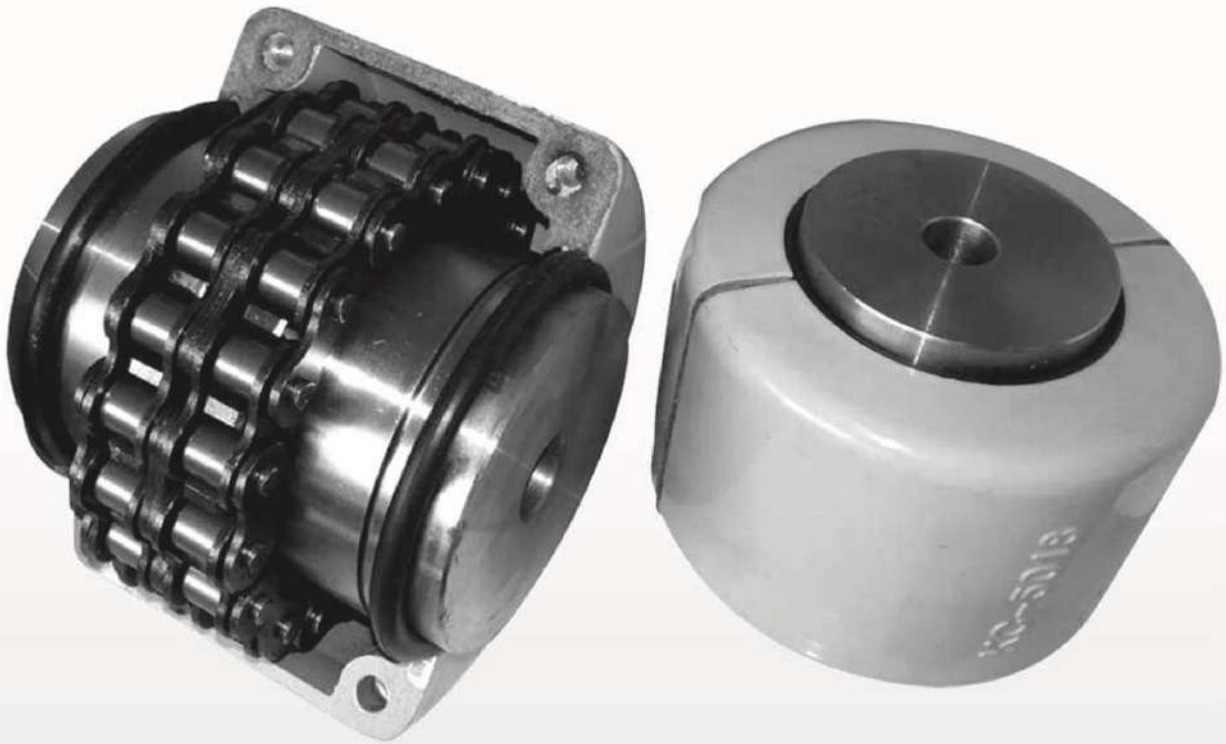




CHAIN COUPLINGS

Coupling Cover

Covers are recommended for use with all couplings because the lubrication so provided materially extends the coupling life. Under the following condition covers are especially recommended for use with couplings.

- 1) Abrasive or corrosive atmosphere.
- 2) High revolution to the right of the dotted line shown on KW rating table.

Description

Roller chain couplings give high efficiency in connecting directly two shafts for the transmission of power. As chain couplings consist of three major parts two hardened teeth sprockets and one double standard roller chain, they offer the following characteristics.

- Easy installation against shaft maintenance
- Protection against shaft misalignment
- Long Service Life

You can obtain the most suitable chain coupling easily from wide varieties of stock standard chain couplings in stock.

Coupling Casings

Revolving casings are made of strong aluminum alloy and are light in weight.

Casings are recommended for use with all couplings because they prevent lubricant from scattering and extend the service life.

Under the following conditions, casings are especially recommended for use with couplings.

- 1) Abrasive or corrosive atmosphere
- 2) High revolution to the right of the dotted line shown on rating power table

Table 1. Power rating (kw)

Coupling No.	Max Bore Dia (mm)	Torque rating (Nm)	Revolution per minute																		
			1	5	10	25	50	100	200	300	400	500	600	800	1000	1200	1500	1800	2000	2500	3000
4012	22	222	0.02	0.11	0.22	0.58	1.15	1.73	26.3	3.46	4.15	4.96	5.67	7.01	8.53	9.68	11.6	13.7	14.8	17.9	20.7
4014	28	300	0.03	0.15	0.32	0.78	1.57	3.15	6.28	9.42	12.56	15.70	18.14	25.13	31.41	37.70	47.12	56.5	62.82	78.53	94.24
4016	32	395	0.04	0.21	0.41	1.03	2.06	3.09	4.69	6.17	7.41	8.85	10.1	12.5	15.3	17.3	2.0	24.4	26.3	31.9	37.0
5014	35	850	0.09	0.44	0.89	2.22	4.45	8.90	17.8	26.7	35.6	44.50	53.40	71.20	89	106.80	133.5	160.2	178.9	222.50	267
5016	40	750	0.08	0.39	0.78	1.95	3.91	5.86	8.92	11.7	14.1	16.8	19.2	23.8	28.9	32.9	39.9	46.4	50.0	60.6	70.4
5018	45	950	0.10	0.50	0.99	2.48	4.95	7.43	11.3	14.9	17.8	21.3	24.4	30.1	36.6	41.6	50.5	58.8	63.4	76.8	89.2
6018	56	1,800	0.18	0.93	1.87	4.67	9.30	14.0	21.3	28.0	33.6	40.1	45.9	56.8	69.1	78.4	95.2	111	120	145	
6020	60	2,000	0.20	1.04	2.09	5.23	10.47	20.94	41.88	62.82	83.76	104.71	125.65	167.40	210	251.30	315	377	419	524	
6022	71	2,420	0.25	1.25	2.51	6.31	12.5	18.8	28.6	37.7	45.3	54.1	61.9	76.5	93.1	105	128	149	161	195	
8018	80	3,960	0.41	2.07	4.14	10.3	20.7	31.0	47.2	62.1	74.5	89.0	101	112	153	174	211	246	265		
8020	90	4,800	0.50	2.51	5.02	12.56	25.13	50.26	100.52	150.78	201	251.30	302	402	503	603	754	905	1,005		
8022	100	5,700	0.59	2.96	5.93	14.8	29.6	44.5	67.2	89.0	106	127	146	180	219	249	302	352	379		
10020	110	8,960	0.93	4.66	9.33	23.3	46.6	70.0	106	140	168	200	229	283	345	392	476	554			
12018	125	13,500	1.40	7.02	14.0	35.1	70.2	105	160	210	252	302	345	426	519	590	716				
12022	140	17,500	1.81	9.07	18.1	45.3	90.7	136	206	272	326	390	446	551	671	762					
16018	160	29,200	3.03	15.1	30.3	75.8	151	227	345	455	546	652	746	922	1122						
16022	200	42,600	4.43	22.1	44.3	110	221	333	506	665	799	954	1090	1350	1640						
20018	205	58,200	6.06	30.3	60.6	151	303	454	691	909	1090	1300	1490	1840							
20022	260	76,400	7.63	38.2	76.3	191	382	572	871	1140	1370	1640	1880								
Type of lubrication			I			II			III												

Note

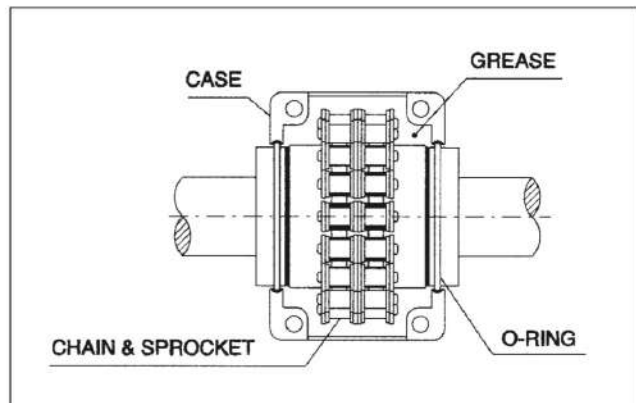
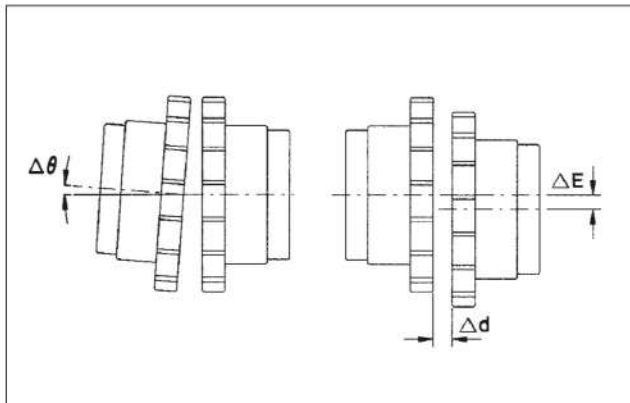
- I. Lubrication interval : Once a month.
- II. Lubrication interval : Once a week, it is recommended to use a casing.
- III. It is imperative to use a casing.

In the high speed zone to the right side of the bold line more accurate installation is necessary.

Table 2. Service Factors (s.f)

Driven Machine		Driven Machine		
		Electric Motor Steam Turbine	Piston Engines	
			4~6 cyl.	1~3 cyl.
Uniform Load	Turbo blowers, Centrifugal fans, Centrifugal pumps, Agitators (liquid), Wood working machines.	1.3	1.7	2.4
Medium Shock Load	Rotary piston blowers, Mixers, Wood machines, Belt conveyors, Cranes, Machine tools, screw pumps, Chain conveyors, Trimming shears.	1.4	2.1	2.8
Heavy Shock Load	Piston compressors, Generators, Mills (ball, pebble and rod), Rubber machines, Vibrators, Press, Hammers.	1.7	2.6	3.3

Mounting

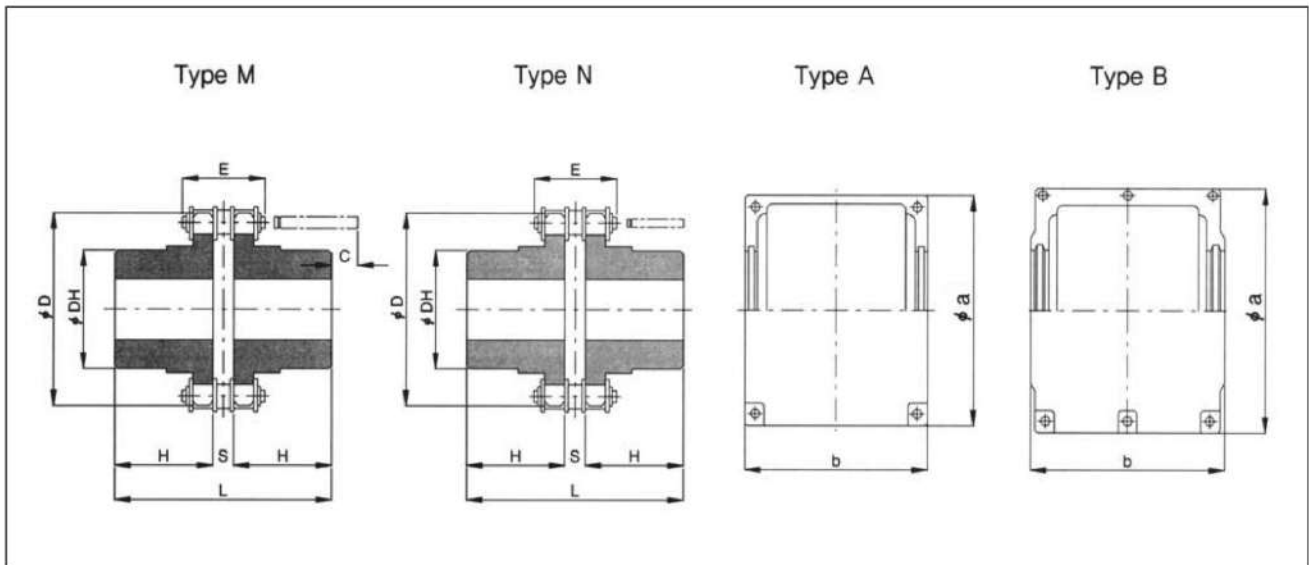


1. The permissible angular displacement (θ) is within 1 degree.
2. The permissible off-set displacement (E) is within 2 percent of the chain pitch.
3. After nishing the alignment of the shafts, move the sprockets to the position where the space between the both faces of the sprockets should be (d) dimension.
4. Fill the grease in the face between the both faces of coupling sprockets, and connect the chain.
5. Put suficient grease in the casing and tighten it by the bolts.
6. Rell the grease according to the following table.

SIZE	4012	5014	6018	8018	10020	12018	16018	20018
	4016	5018	6022	8022		12022	16022	20022
d	7.4	9.7	11.5	15.2	18.8	22.7	30.1	37.5

Operative condition	The interval of relling	
	First relling	Second & over relling
More than half of maximum revolution	1,000 hours	2,000 hours
Less than half of maximum revolution	2,000 hours	4,000 hours

Dimensions



Size	Max. Speed (rpm)	Type	Bore Dia (mm)		Chain		D	DH	L	H	S	C	Coupling wt (kg)	Cover			
					Pitch	Width (Max.)E								Type	a	b	wt (kg)
			min.	max.													
4012	4,800	M	12	22	12.70	33.1	61	35	79.4	36	7.4	10	0.8	A	75	75	0.38
4014	4,800	M	12	28	12.70	33.1	69	43	79.4	36	7.4	10	1.1	A	84	75	0.47
4016	4,800	M	16	32	12.70	33.1	77	50	87.4	40	7.4	6	1.6	A	92	75	0.56
5014	3,600	M	16	35	158.75	41.0	86	53	99.7	45	9.7	12	2.2	A	101	85	0.64
5016	3,600	M	18	40	158.75	41.0	96	60	99.7	45	9.7	12	2.8	A	111	85	0.76
5018	3,000	M	18	45	158.75	41.0	106	70	99.7	45	9.7	12	3.6	A	122	85	0.92
6018	2,500	M	22	56	19.05	51.1	128	85	123.5	56	11.5	15	6.5	A	142	106	1.4
6020	2,500	M	25	60	19.05	51.1	139	110	123.5	56	11.5	15	8.38	A	158	105	1.2
6022	2,500	M	28	71	19.05	51.1	152	110	123.5	56	11.5	15	10.3	A	167	106	1.7
8018	2,000	M	32	80	25.40	65.3	170	115	141.2	63	15.2	30	13.8	A	186	130	2.3
8020	2,000	M	38	90	25.40	65.3	185	125	145	65	15.2	22	16.2	A	210	137	2.5
8022	2,000	M	40	100	25.40	65.3	203	140	157.2	71	15.2	22	21.7	A	220	130	2.7
10020	1,800	M	45	110	31.75	80.3	233	160	178.8	80	18.8	30	32.6	A	250	148	4.0
12018	1,500	M	50	125	38.10	101.1	256	170	202.7	90	22.7	50	43.9	B	307	181	6.8
12022	1,200	M	56	140	38.10	101.1	304	210	222.7	100	22.7	40	69.0	B	357	181	8.4
16018	1,000	M	63	160	50.80	129.7	341	224	254.1	112	30.1	68	96.3	B	406	250	14.7
16022	1,000	M	80	200	50.80	129.7	405	280	314.1	142	30.1	40	166.8	B	472	250	17.2
20018	800	N	88	205	63.50	159.0	426	294	519.5	241	37.5	0	294.4	B	496	280	22.2
20022	600	N	98	260	63.50	159.0	507	374	519.5	241	37.5	0	461.6	B	578	280	26.6
24022	600	N	120	310	76.20	194.9	608	420	751.1	353	45.1						
24026	500	N	150	380	76.20	194.9	705	520	751.1	353	45.1						
32022	400	N	200	430	101.60	263	806	570	860.1	400	60.1						
40020	400	N	250	470	127.0	325	932	640	1,099	512	75.6						
40024	300	N	300	590	127.0	325	1,093	800	1,099	512	75.6						
40028	300	N	350	700	127.0	325	1,255	960	1,099	512	75.6						