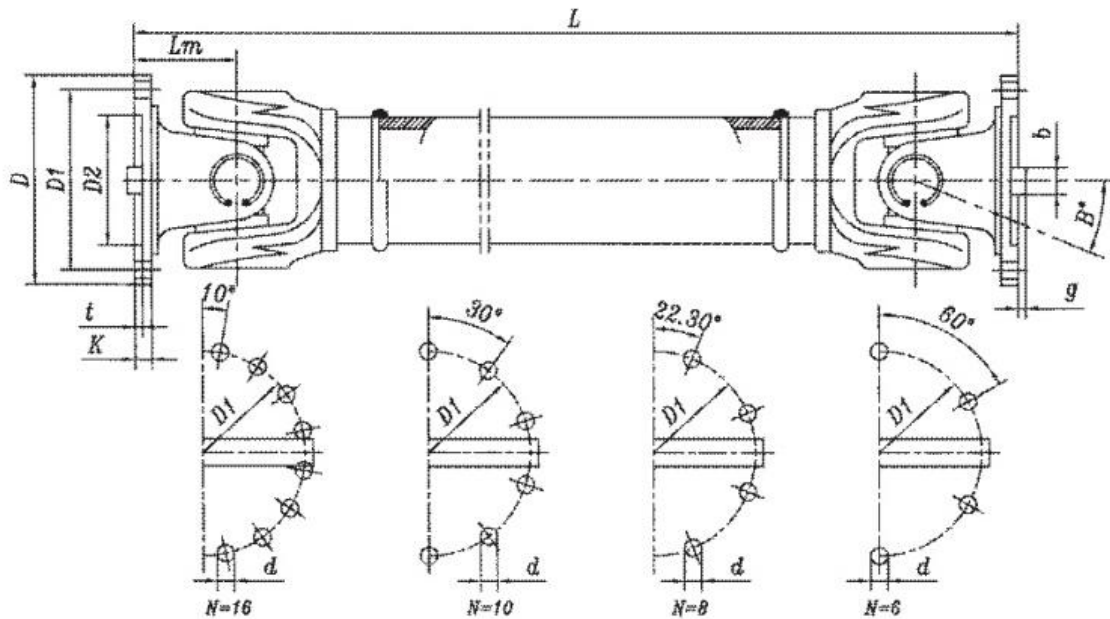


# SWC-BH Cardan Shaft with length compensation



## SWC-BH Cardan Shaft with length compensation

### Parameter and Dimensionsof SWC - BH Retractility Welding Gimbal Coupling

Model	swing diameter D (mm)	Nominal torque Tm (KN.m)	Fatigue torque Tm (KN.m)	Axis turning angle $\beta(0)$	length compensation Lv(mm)	Measurement (mm)										Moment of inertia I (kg.m <sup>2</sup> )		Mass (kg)	
						Lmin	D1 (js11)	D2 (H7)	D3	Lm	n-d	k	t	b (h9)	g	Lmin	add 100mm	Lmin	add 100mm
SWC100BH	100	1.25	0.63	$\cong 25$	55	390	84	57	60	55	6-9	7	2.5	-	-	0.0044	0.00019	6.1	0.35
SWC120BH	120	2.5	1.25	$\cong 25$	80	485	102	75	70	65	8-11	8	2.5	-	-	0.0109	0.00044	10.8	0.55
SWC150BH	150	5	2.5	$\cong 25$	80	590	130	90	89	80	8-13	10	3	-	-	0.0423	0.00157	24.5	0.85
SWC180BH	180	12.5	6.3	$\cong 25$	100	810	155	105	114	110	8-17	17	5	-	-	0.1750	0.0070	70	2.8
SWC225BH	225	40	20	$\cong 15$	140	920	196	135	152	120	8-17	20	5	32	9	0.5380	0.0234	122	4.9
SWC250BH	250	63	31.5	$\cong 15$	140	1035	218	150	168	140	8-19	25	6	40	12.5	0.9660	0.0277	172	5.3
SWC285BH	285	90	45	$\cong 15$	140	1190	245	170	194	160	8-21	27	7	40	15.0	2.0110	0.0510	263	6.3
SWC315BH	315	125	63	$\cong 15$	140	1315	280	185	219	180	10-23	32	8	40	15.0	3.6050	0.0795	382	8.0
SWC350BH	350	180	90	$\cong 15$	150	1410	310	210	267	194	10-23	35	8	50	16.0	7.0530	0.2219	582	15.0
SWC390BH	390	250	125	$\cong 15$	170	1590	345	235	267	215	10-25	40	8	70	18.0	12.164	0.2219	738	15.0
SWC440BH	440	355	180	$\cong 15$	190	1875	390	255	325	260	16-28	42	10	80	20.0	21.420	0.4744	1190	21.7
SWC490BH	490	500	250	$\cong 15$	190	1985	435	275	325	270	16-31	47	12	90	22.5	32.860	0.4744	1452	21.7
SWC550BH	550	710	335	$\cong 15$	240	2300	492	320	426	305	16-31	50	12	100	22.5	68.920	1.3570	2380	34.0

Please consult us for customization regarding length, length compensation and Flange connections.

For Example :

SWC - I - A - 590

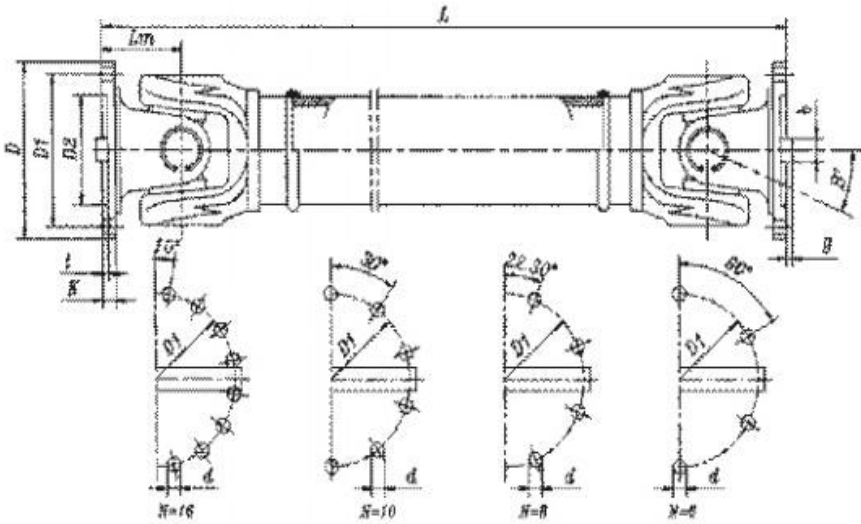
SWC - the Type of Universal Coupling

I - Flange diameter (mm)

A - Product Structure type

590 - Minimum length (mm)

# SWC-WH Cardan Shaft without length compensation



## SWC-BH Cardan Shaft without length compensation

### Parameter and Dimensionsof SWC - WH NON-Retractility Welding Gimbal Coupling

Model	swing diameter D (mm)	Nominal torque Tm (KN.m)	Fatigue torque Tm (KN.m)	Axis turning angle $\beta(0)$	Measurement (mm)										Moment of inertia I (kg.m <sup>2</sup> )		Mass (kg)	
					Lmin	D1 (js11)	D2 (H7)	D3	Lm	n-d	k	t	b (h9)	g	Lmin	add 100mm	Lmin	add 100mm
SWC100WH	100	1.25	0.6	$\leq 25$	243	84	57	60	55	6-9	7	2.5	-	-	0.003	0.00019	4.5	0.35
SWC120WH	120	2.5	1.3	$\leq 25$	307	102	75	70	65	8-11	8	2.5	-	-	0.009	0.00044	7.7	0.55
SWC150WH	150	5	2.5	$\leq 25$	350	130	90	89	80	8-13	10	3	-	-	0.037	0.00157	18	0.85
SWC180WH	180	12.5	6.3	$\leq 25$	480	155	105	114	110	8-17	17	5	-	-	0.150	0.0070	48	2.8
SWC225WH	225	40	20	$\leq 15$	520	196	135	152	120	8-17	20	5	32	9	0.365	0.0234	78	4.9
SWC250WH	250	63	32	$\leq 15$	620	218	150	168	140	8-19	25	6	40	12.5	0.847	0.0277	124	5.3
SWC285WH	285	90	45	$\leq 15$	720	245	170	194	160	8-21	27	7	40	15.0	1.756	0.0510	185	6.3
SWC315WH	315	125	63	$\leq 15$	805	280	185	219	180	10-23	32	8	40	15.0	2.893	0.0795	262	8.0
SWC350WH	350	180	90	$\leq 15$	875	310	210	267	194	10-23	35	8	50	16.0	5.013	0.2219	374	15.0
SWC390WH	390	250	125	$\leq 15$	955	345	235	267	215	10-25	40	8	70	18.0	8.406	0.2219	500	15.0
SWC440WH	440	355	180	$\leq 15$	1155	390	255	325	260	16-28	42	10	80	20.0	15.79	0.4744	790	21.7
SWC490WH	490	500	250	$\leq 15$	1205	435	275	325	270	16-31	47	12	90	22.5	26.54	0.4744	1014	21.7
SWC550WH	550	710	335	$\leq 15$	1355	492	320	426	305	16-31	50	12	100	22.5	48.32	1.3570	1526	34.0

Please consult us for customization regarding length, length compensation and Flange connections.

For Example :

SWC – I – A – 590

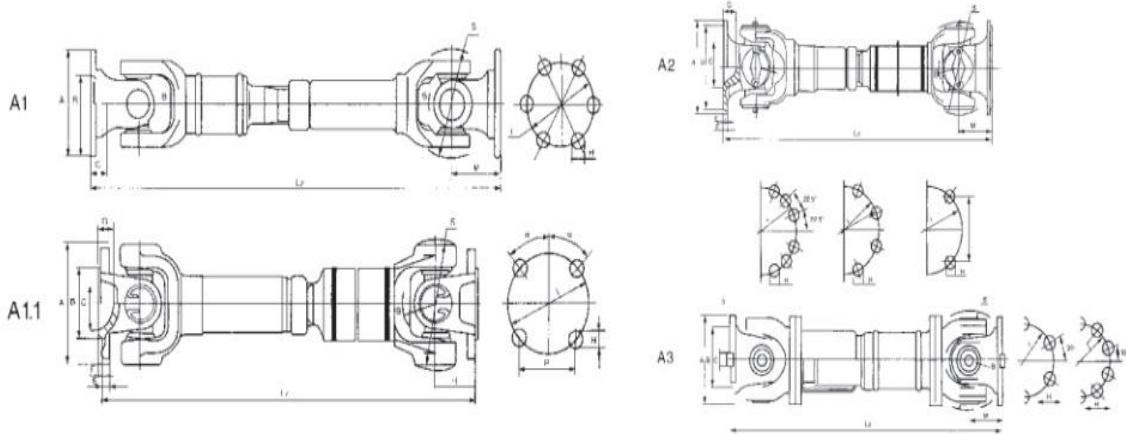
SWC – the Type of Universal Coupling

I —Flange diameter (mm )

A — Product Structure type

590 — Minimum length ( mm )

# A Seris Cardan Shaft



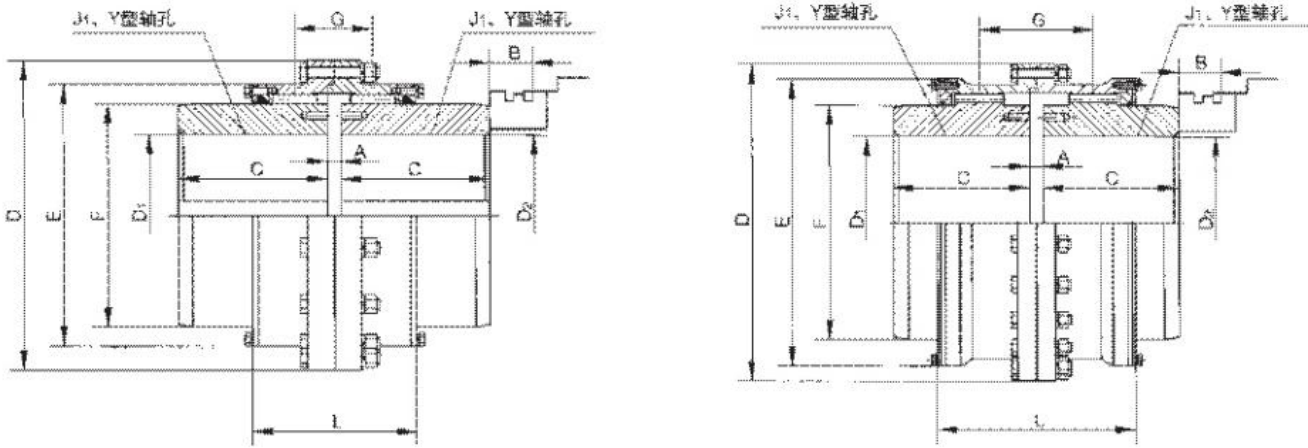
**A Seris Cardan Shaft  
Parameter and Dimensionsof A Seris Cardan Shaft**

Model	Mmax	A		B	C	E	F	G	M	S	I		n-H	Lz	La
A1-1	500	75	30°	42	38	5.5	2	16	52	83	62		6-6	430	30
A1-3	530	90	30°	47	36	6	4		48	83	75		6-8.5	430	30
A1.1-4	1100	100	25°	60	50	7	2	13	41	93	80	50	4-10.2	370	30
A1.1-5	2000	148	25°	95	86	11	2.5	31	78	130	120	40°	4-14.5	580	40
A2-1A	1300	120	20°	70	60	8	2.5	22	50	114	96	62	4-12	500	40
A2-2	1940	148	20°	95	86	11	2.5	31	62	139	20	40°	4-14.5	550	40
A2-4A	3900	205	20°	198		11	2	35	77	187	185		8-11	615	40
A2-5A	7800	205	20°	198		11	2	35	86	205	185		12-11	700	45
A2-6	12700	250	15°	240	180	18	4	24	94	235	220		8-14.3	770	45
A3-1T	25000	225	10°	135	30	18	7	9	125		196		6-19	1165	120
A3-1	25000	265	10°	160	30	20	7	9	116	265	230		6-21	1150	115
A3-2	50000	290	10°	168	32	30	7	9	150	290	250		10-23	1420	100
A3-3	35000	315	10°	190	32	35	7	9	160	310	280		10-23	1500	100
A3-4	40000	380	10°	220	32	30	8	9	175	354	340		10-23	1500	100
A3-5	60000	380	10°	220	40	30	8	15	175	354	340		10-23	1500	100
A3-6	80000	380	10°	220	40	30	8	15	185	380	340		10-23	NOT	
A3-7	1E+05	380	10°	220	40	30	7	15	175	380	340		10-23	1590	100
A3-8	2E+05	400	10°	235	70	40	10	18	205	400	355		10-25	1650	100
A3-9	3E+05	450	10°	310	80	42	10	20	215	420	400			1640	100

## Marks:

- 1, Mmax= The max work torque
  - 2, Lz = Min length after compression
  - 3, La = Length compensation
  - 4, Lz+La = The max work length
  - 5, B = Schneider precision
  - 6, n = number of flange holes
  - 7, The A3 series allows the middle without flange connection,use a fork and a welded pipe to weld
  - 8, If you have other requirements (big flange, big compensation etc.), please contact our design dept
- A3-9 The size and quantity of flange hole need to discuss together.

# G<sub>II</sub>CL Type Drum Teeth Cardan Shaft



## G<sub>II</sub>CL Type Drum Teeth Cardan Shaft

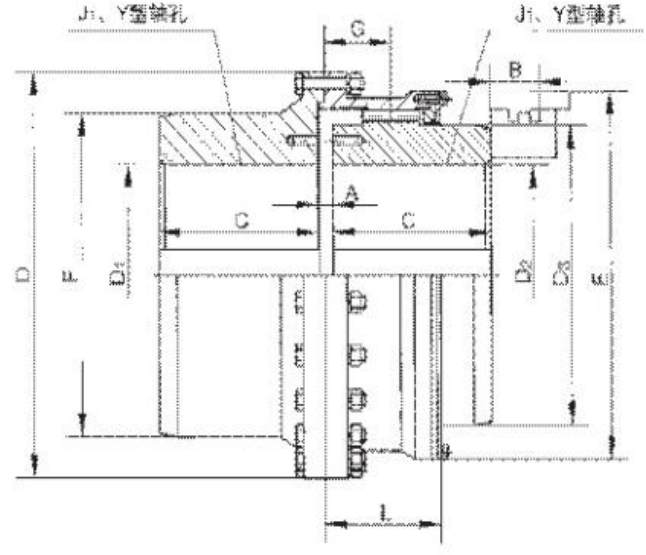
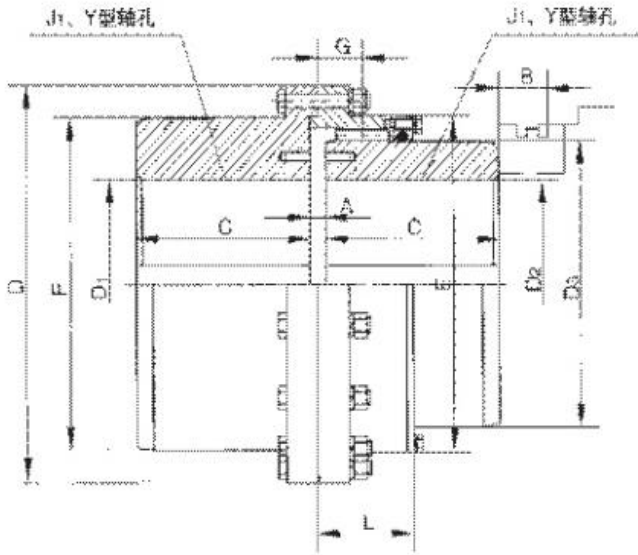
### Parameter and Dimensions of G<sub>II</sub>CL Type Drum Teeth Cardan Shaft

Model	Nominal torque T <sub>m</sub> (KN.m)	Permissible speed [n] (rpm)	Shaft hole diameter D1,D2	shaft hole length		D	E	F	G	A	L	B	Grease usage	Mass (kg)
				Y	J1									
				C										
mm														
G <sub>II</sub> CL1	0.4	4000	16-35	42-82	38-60	103	71	50	36	8	76	38	51	5.1
G <sub>II</sub> CL2	0.71	4000	20-45	52-112	44-84	115	83	60	42	8	88	42	70	6.7
G <sub>II</sub> CL3	1.12	4000	22-56	52-112	44-84	127	95	75	44	8	90	42	68	9.6
G <sub>II</sub> CL4	1.8	4000	38-65	82-142	60-107	149	116	90	49	8	98	42	87	17.4
G <sub>II</sub> CL5	3.15	4000	40-75	112-142	84-107	167	134	105	55	10	108	42	125	26.6
G <sub>II</sub> CL6	5	4000	45-90	112-172	84-132	187	153	125	56	10	110	42	148	38.7
G <sub>II</sub> CL7	7.1	3750	50-100	112-212	84-167	204	170	140	60	10	118	42	175	58.2
G <sub>II</sub> CL8	10	3300	55-110	112-212	84-167	230	186	155	67	12	142	47	268	73.6
G <sub>II</sub> CL9	16	3000	60-130	142-252	107-202	256	212	180	69	12	146	47	310	117
G <sub>II</sub> CL10	22.4	2650	65-150	142-252	107-202	287	239	200	78	14	164	47	472	144
G <sub>II</sub> CL11	35.5	2350	70-170	142-302	107-242	325	276	235	81	14	170	47	550	300
G <sub>II</sub> CL12	50	2100	75-200	142-352	107-282	362	313	270	89	16	190	49	695	348
G <sub>II</sub> CL13	71	1850	150-220	252-352	202-282	412	350	300	98	18	208	49	1019	440
G <sub>II</sub> CL14	112	1650	170-250	302-410	242-330	462	418	335	172	22	296	63	3900	682
G <sub>II</sub> CL15	180	1500	190-280	352-470	282-380	512	465	380	182	22	316	63	3700	977
G <sub>II</sub> CL16	250	1300	220-320	352-470	282-380	580	522	430	209	28	354	67	4500	1828
G <sub>II</sub> CL17	355	1200	250-360	410-550	330-450	644	582	490	198	28	364	67	4900	2676
G <sub>II</sub> CL18	500	1050	280-400	470-650	380-540	726	654	540	222	28	430	75	7000	3560
G <sub>II</sub> CL19	710	950	300-460	470-650	380-540	818	748	630	232	32	440	75	8900	4975
G <sub>II</sub> CL20	1000	800	360-530	550-800	450-680	928	832	720	247	32	470	75	111000	7159
G <sub>II</sub> CL21	1400	750	400-600	650-800	540-680	1022	924	810	255	40	490	75	13000	8448
G <sub>II</sub> CL22	1800	650	450-670	650-900	540-780	1134	1028	915	262	40	510	75	16000	13401
G <sub>II</sub> CL23	2500	600	530-750	800-900	680-780	1282	1174	1030	299	50	580	80	28000	13401
G <sub>II</sub> CL24	3550	550	560-850	800-1000	680-880	1428	1320	1175	317	50	610	80	33000	18835
G <sub>II</sub> CL25	4500	460	670-1000	900-1000	780-1000	1644	1538	1390	325	50	620	80	43000	27797

### Marks:

- 1, Mass = The weight of the solid shaft
- 2, Moment of inertia is often calculated based on the actual selection of shaft hole size

# G<sub>II</sub>CLZ Type Drum Teeth Cardan Shaft



## G<sub>II</sub>CLZ Type Drum Teeth Cardan Shaft

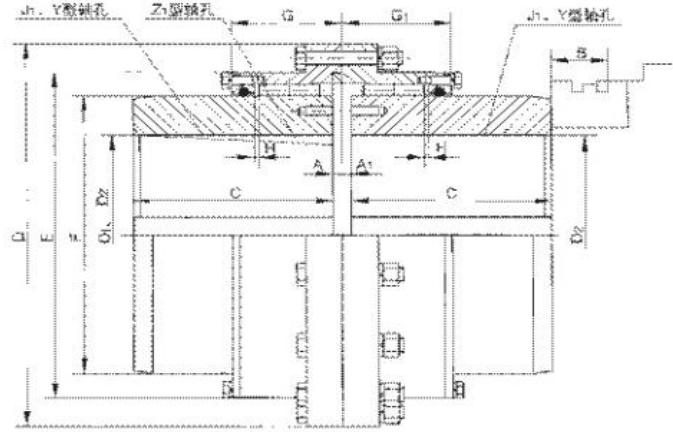
### Parameter and Dimensions of G<sub>II</sub>CL Type Drum Teeth Cardan Shaft

Model	Nominal torque T <sub>m</sub> (KN.m)	Permissible speed [n] (rpm)	Shaft hole diameter D1,D2	shaft hole length		D	D3	F	G	A	L	E	B	Grease usage ml	Mass (kg)
				Y	J1										
				C											
				mm											
G <sub>II</sub> CLZ1	0.4	4000	16-35	42-112	38-84	103	50	71	8	8	38	71	38	31	7
G <sub>II</sub> CLZ2	0.71	4000	20-45	52-142	44-107	115	60	83	8	8	45	83	42	42	7
G <sub>II</sub> CLZ3	1.12	4000	22-56	52-142	44-107	127	75	95	8	8	45	95	42	42	11
G <sub>II</sub> CLZ4	1.8	4000	38-65	82-172	60-132	149	90	116	8	8	49	116	42	53	18
G <sub>II</sub> CLZ5	3.15	4000	40-75	112-172	84-132	167	105	134	10	10	54	134	42	77	24
G <sub>II</sub> CLZ6	5	4000	45-90	112-212	84-167	187	125	153	10	10	55	153	42	91	39
G <sub>II</sub> CLZ7	7.1	3750	50-100	112-212	84-167	204	140	170	10	10	59	170	42	108	58
G <sub>II</sub> CLZ8	10	3300	55-110	112-212	84-167	230	155	186	12	12	71	186	47	161	74
G <sub>II</sub> CLZ9	16	3000	60-130	142-252	107-202	256	180	212	12	12	73	212	47	184	116
G <sub>II</sub> CLZ10	22.4	2650	65-150	142-252	107-202	287	200	239	14	14	82	239	47	276	144
G <sub>II</sub> CLZ11	35.5	2350	110-170	212-302	167-242	325	235	250	14	14	85	276	47	322	230
G <sub>II</sub> CLZ12	50	2100	130-200	252-352	202-282	362	270	286	16	16	95	313	49	404	348
G <sub>II</sub> CLZ13	71	1850	150-220	252-352	202-282	412	300	322	18	18	104	350	49	585	438
G <sub>II</sub> CLZ14	112	1650	170-250	302-410	242-330	462	-	420	22	22	148	335	63	1600	655
G <sub>II</sub> CLZ15	180	1500	190-280	352-470	282-380	512	-	465	22	22	158	380	63	2100	946
G <sub>II</sub> CLZ16	250	1300	220-320	352-470	282-380	580	-	522	28	28	177	430	67	2500	1232
G <sub>II</sub> CLZ17	355	1200	250-360	410-550	330-450	644	-	582	28	28	182	490	67	2700	1828
G <sub>II</sub> CLZ18	500	1050	280-400	470-650	380-540	726	-	658	28	28	215	540	75	3900	2674
G <sub>II</sub> CLZ19	710	950	300-460	470-650	380-540	818	-	748	32	32	220	630	75	5000	3565
G <sub>II</sub> CLZ20	1000	800	360-530	550-800	450-680	928	-	838	32	32	235	720	75	6200	5198
G <sub>II</sub> CLZ21	1400	750	400-600	650-800	540-680	1022	-	928	40	40	245	810	75	7000	7124
G <sub>II</sub> CLZ22	1800	650	450-670	650-900	540-780	1134	-	1036	40	40	255	915	75	8700	8978
G <sub>II</sub> CLZ23	2500	600	530-750	800-900	680-780	1282	-	1178	50	50	290	1030	80	15000	13124
G <sub>II</sub> CLZ24	3550	550	560-850	800-1000	680-880	1428	-	1322	50	50	305	1175	80	18000	18659
G <sub>II</sub> CLZ25	4500	460	670-1000	900-1000	780-1000	1644	-	1538	50	50	310	1390	80	23000	27797

### Marks:

- 1, Mass = The weight of the solid shaft
- 2, Moment of inertia is often calculated based on the actual selection of shaft hole size

# G CLD Type Drum Teeth Cardan Shaft



**G CLD Type Drum Teeth Cardan Shaft**  
**Parameter and Dimensionsof G CLD Type Drum Teeth Cardan Shaft**

Model	Nominal torque Tm (KN.m)	Permissible speed [n] (rpm)	Shaft hole diameter D1,D2	shaft hole length		D	E	F	A	A1	G	G1	H	B	Grease usage ml	Moment of inertia ml	Mass (kg)
				Y	J1												
				C													
mm																	
GCLD1	1.12	4000	22 24	52	38	127	95	75	27	6	66	45	2	42	107	0.041	7.2
			25 28	62	44											0.041	7.2
			30 32 35 38	82	60											0.044	7.8
			40 42 45 48 50 55 56	112	84											0.047	9.6
GCLD2	1.8	4000	38	82	60	149	116	90	30	6.5	70	49	2	42	137	0.085	11.2
			40 42 45 48 50 55 56	112	84											0.097	14
			60 65 63	142	107											0.106	16.4
GCLD3	3.15	4000	40 42 45 48 50 55 56	112	84	167	134	105	35	7	80	54	2.5	42	201	0.16	17.2
			60 70 75 63 71	142	107											0.19	22.4
GCLD4	5	4000	45 48 50 55 56	112	84	187	153	125	34	7.5	81	55	2.5	42	238	0.29	25.2
			60 70 75 63 71	142	107											0.33	26.4
			80 85 90	172	132											0.38	35.6
GCLD5	7.1	3750	50 55 56	112	84	204	170	140	39	7.5	89	59	2.5	42	298	0.45	31.6
			60 65 70 75 63 71	142	107											0.51	38
			80 85 90 95	172	132											0.58	44.6
			100	212	167											0.67	53.9
GCLD6	10	3300	55 56	112	84	230	186	155	44	8.5	106	71	3	47	465	0.75	40.5
			60 65 70 75 63 71	142	107											0.84	49.8
			80 85 90 95	172	132											0.94	56.3
			100 110	212	167											1.07	67.5
GCLD7	16	3000	60 63 65 70 71 75	142	107	256	212	180	48	9	112	73	3	47	561	1.43	63.9
			80 85 90 95	172	132											1.60	74.7
			100 110 120	212	167											1.85	88
			130	252	202											2.11	106.
GCLD8	22.4	2650	65 70 71 75	142	107	287	239	200	42.5	8.5	112	82	3.5	47	734	2.24	81.7
			80 85 90 95	172	132											2.51	95.5
			100 110 120	212	167											2.88	114
			130 140 150	252	202											3.25	123
GCLD9	35.5	2350	70 71 75	142	107	325	276	235	51.5	9.5	125	85	3.5	47	956	4.31	112
			80 85 90 95	172	132											4.82	130
			100 110 120	212	167											5.53	156
			130 140 150	252	202											6.24	181
			160 170	302	242											7.08	212
GCLD10	50	2100	75	142	107	362	313	270	65	11	149	95	4	49	132	7.88	161
			80 85 90 95	172	132											8.29	172
			100 110 120	212	167											9.52	206
			130 140 150	252	202											10.25	239
			160 170 180	302	242											12.22	280
			190 200	352	282											13.69	319

### Marks:

1, Mass = The weight of the solid shaft

2, Moment of inertia is often calculated based on the actual selection of shaft hole size