

#### 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LCD Ultra-Flat Cup-Shaped Flexspline Strain Wave Gear Product Introduction Manual



Leader Harmonious Drive Systems Co., Ltd TEL:0086-512-66362298/66560692

FAX:0086-512-66362325 E-mail:sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code: 215101 http://www.leaderdrive.c



NO LD2019-1 Y

# **LCD** series



With a flexible gear in ultra-thin cup-shaped structure, LCD series are designed with an ultra-flat structure, with small volume and light weight, and are therefore can be used as the end joint of robot and client reducer.

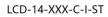


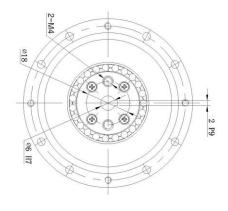
#### **Parameter Table**

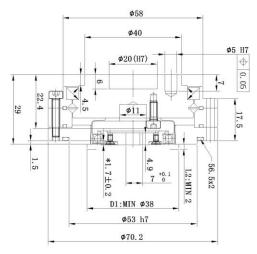
Item	Reduction Ratio	Reted Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Welght	Design Life	
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour	
	50	3.5	11.4	4. 6	23			≤20		9000	
14	80	5.1	15	6. 2	29	8000	3500	€20	0. 56	10000	
	100	5.1	18	7.3	33			≤20		10000	
	50	10. 4	22	17	46			≤20		9000	
17	80	14	29	21	54	7000	3500	≤20	0. 48	10000	
	100	15	35	26	67			≤20	ie.	10000	
	50	16	37	23	66			≤20	0. 68		9000
20	80	23	49	28	78	6000	3500	€20		10000	
	100	27	54	32	90			€20		10000	
	50	26	66	36	121			€20	i)	9000	
25	80	42	91	62	157	5500	3500	≤20	1, 3	10000	
20	100	45	104	71	175	3300	3300	≤20	1.3	10000	
	120	45	111	71	187			≤20		10000	
	50	50	143	71	255			≤20		9000	
32	80	79	202	126	350	4500	3500	≤20	2.5	10000	
0.00	100	91	221	144	399	4500	3300	≤20	2.5	10000	
	120	91	235	144	423			≤20		10000	
	50	91	267	130	456			€20		9000	
40*	100	176	378	247	665	4000	3000	€20	3.8	10000	
	160	196	430	300	727			≤20		10000	

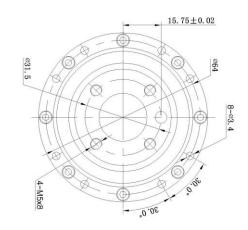
\* Consult factory

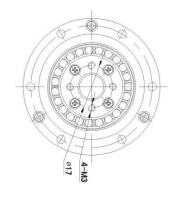
LCD-14-XXX-C-I

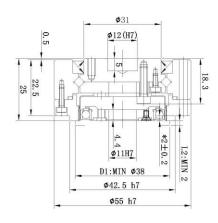


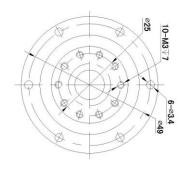






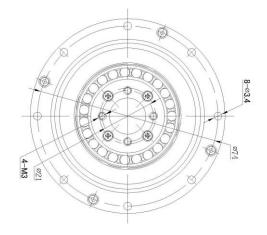


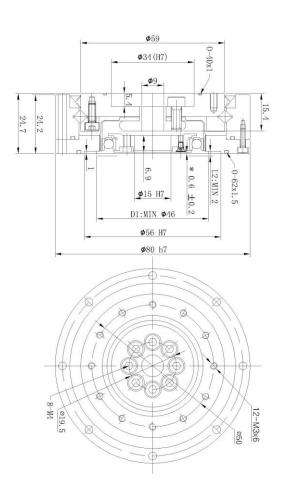




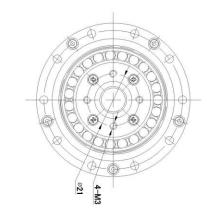
# **LCD Series Drawings**

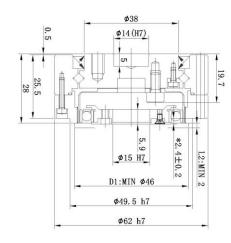
LCD-17-XXX-C-I

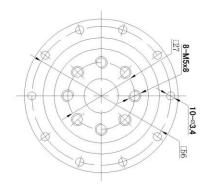




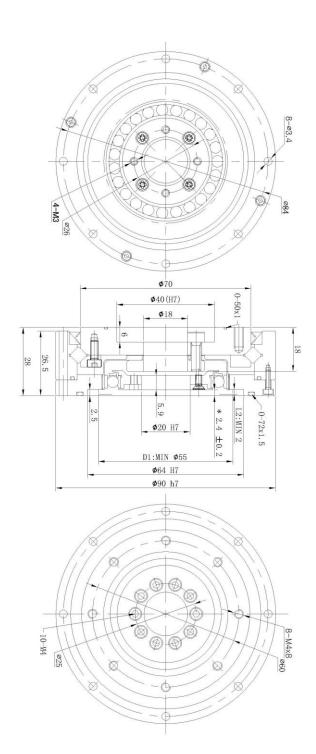
LCD-17-XXX-C-I-ST



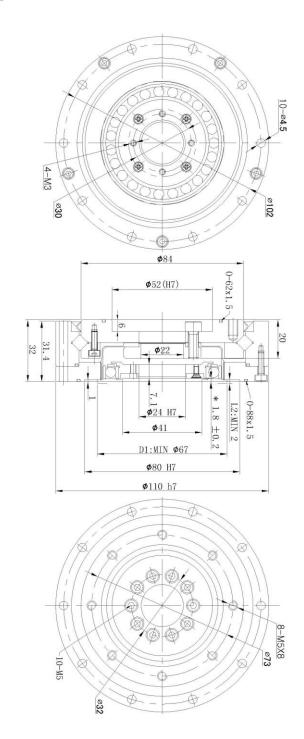




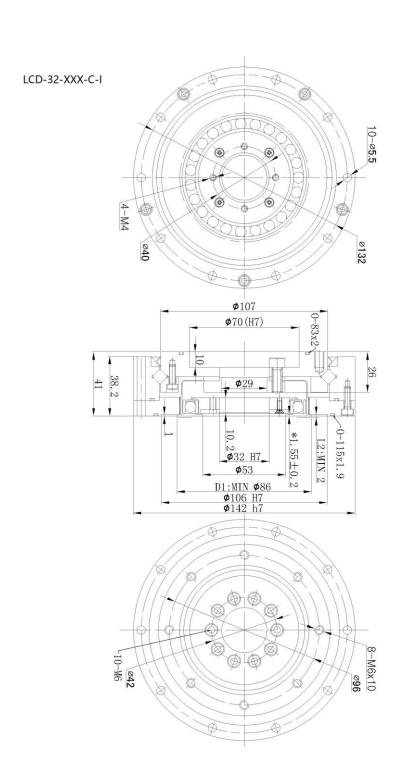
LCD-20-XXX-C-I



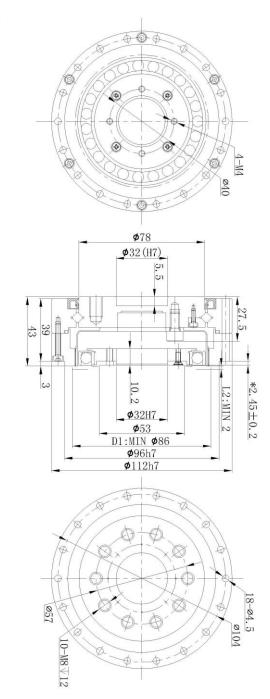
LCD-25-XXX-C-I

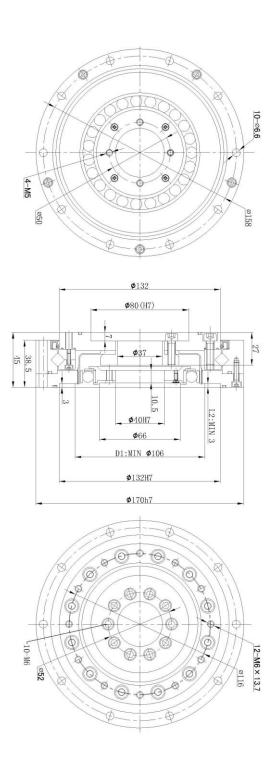


## **LCD Series Drawings**



LCD-32-XXX-C-I-ST







#### 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LCS Standard Cup-Shaped Flexspline Strain Wave Gear Product Introduction Manual



Leader Harmonious Drive Systems Co., Ltd TEL:0086-512-66362298/66560692 FAX:0086-512-66362325

E-mail:sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code : 215101 http://www.leaderdrive.com



10. LD2019-1 Y

# **LCS-I series**



For LCS-I series, their flexible gear is of standard cup-shaped tube structure. Their input shaft matches with the inner hole of wave transformer directly and are connected by flat key. In general, the series are used with the rigid gear end fixed and flexible gear outputting.

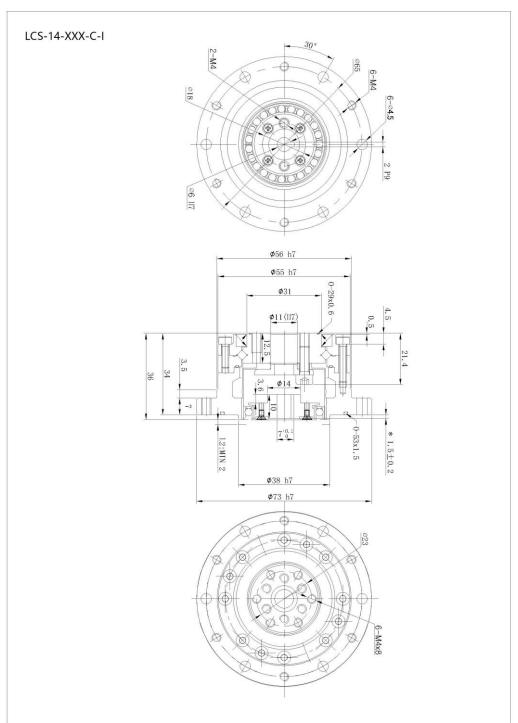
LCS-I series

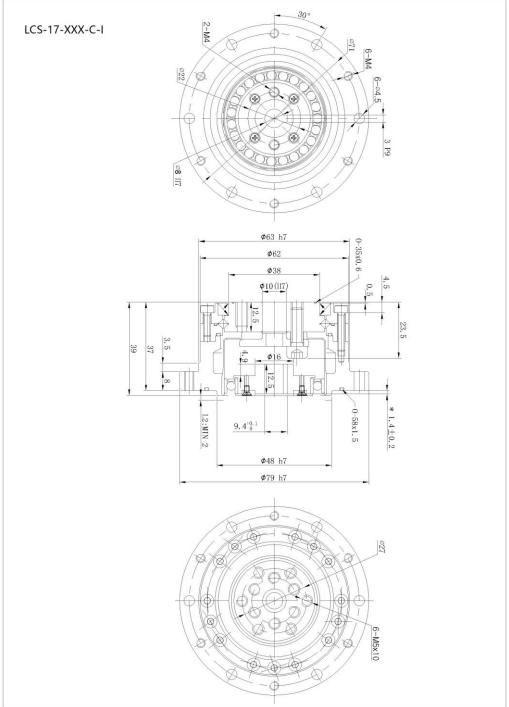
#### **Parameter Table**

Item	Reduction Ratio	Rated Torque at 2000r/mln	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life		
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour		
	30	3.8	8.5	6.5	16			€20		10000		
14	50	5. 1	17. 1	6.6	33	8000	3500	≤20	0.51	10000		
1.3	80	7.4	22	10. 5	44			≤10		15000		
	100	7.4	26	10.5	51			€10		15000		
	30	8.4	15	11.5	28			≤20		10000		
	50	15. 2	32	25	66			≤20	10 0.68	10000		
17	80	21	41	26	83	7000	3500	≤10		15000		
	100	23	51	37	103	-		≤10		15000		
	120	23	51	37	82			≤10		15000		
	30	14	26	19	48	-			≤20	-	10000	
	50	24	53	32	93			≤20	-		10000	
20	80	32	70	45	121	6000	3500	≤10	0. 98	15000		
	100	38	78	47	140			≤10	-	15000		
	120	38	83	47	140			<b>≤10</b>	-	15000		
	160	38 26	87 48	47 36	140 90			≤10 ≤20	1. 47	15000		
	50	37	93	52	177			<20 ≤20		10000		
	80	60	130	83	242			≈20 ≤10		15000		
25	100	64	149	103	270	5500	3500	≪10 ≪10		15000		
	120	64	159	103	289			≤10		15000		
	160	64	167	103	298			≤10	1	15000		
	30	51	95	71	190			≤20	-			10000
	50	72	205	103	363			€20	1	10000		
-	80	112	289	159	540		-	≤10		15000		
32	100	130	316	205	615	4500	3500	≤10	3. 19	15000		
	120	130	335	205	652			≤10		15000		
	160	130	353	205	652			≤10		15000		
	50	130	382	186	652			€20		10000		
	80	196	493	270	931			€10		15000		
40	100	252	540	353	1026	4000	3000	≤10	5.0	15000		
	120	279	586	429	1121			≤10		15000		
	160	279	615	429	1121			≤10		15000		
	50	233	679	333	1358			≤20		10000		
	80	353	894	493	1767			€10		15000		
50*	100	446	931	633	1957	3000	2500	≤10	9. 8	15000		
	120	503	1026	772	1957			€10	-	15000		
	160	503	1121	801	2327			≤10		15000		
	80	522	1406	732	2328			€10		15000		
58*	100	661	1511	1007	3021	3000	2200	≤10	14.8	15000		
	120	708	1634	1131	3164			≤10	-	15000		
	160	708	1748	1150	3259			≤10		15000		

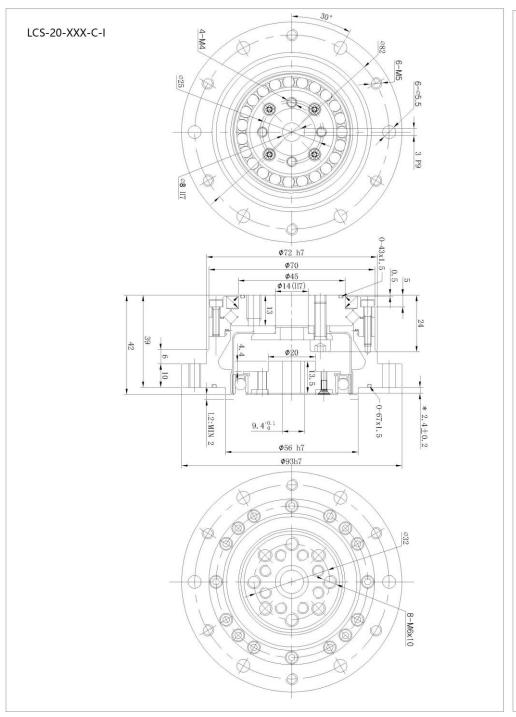
\* Consult factory

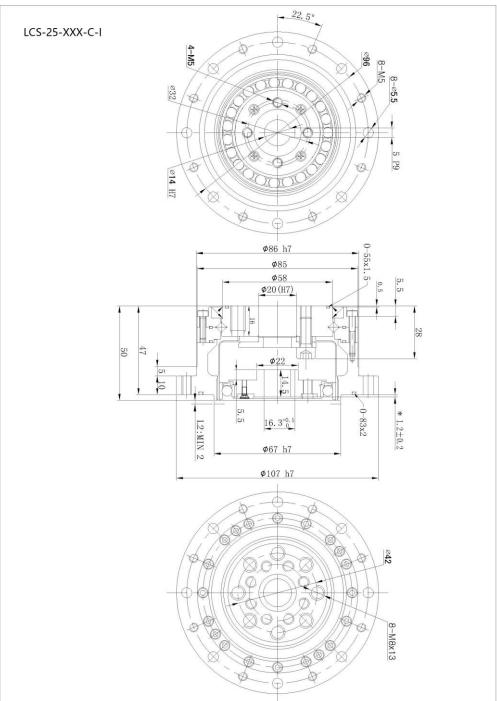
# **LCS-I Series Drawings**



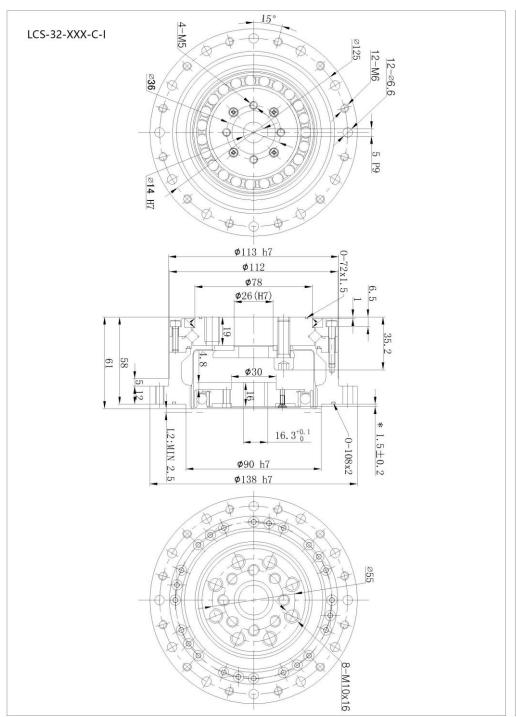


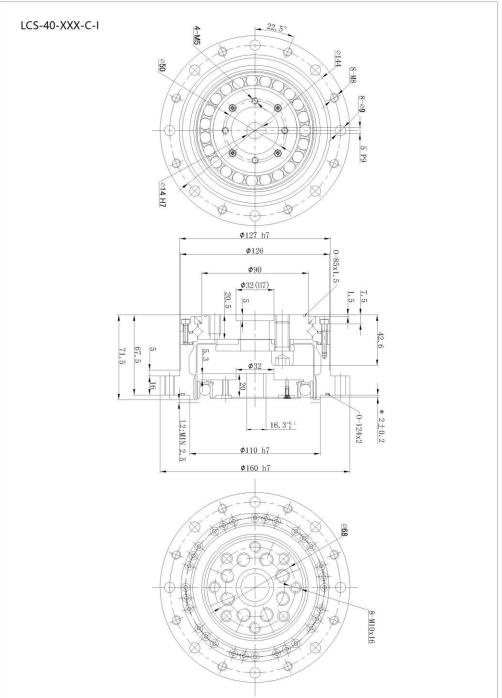
## **LCS-I Series Drawings**





## **LCS-I Series Drawings**





# **LCS-II** series



For LCS-II series, their input shaft is connected with the inner hole of wave generator by double slider coupling.

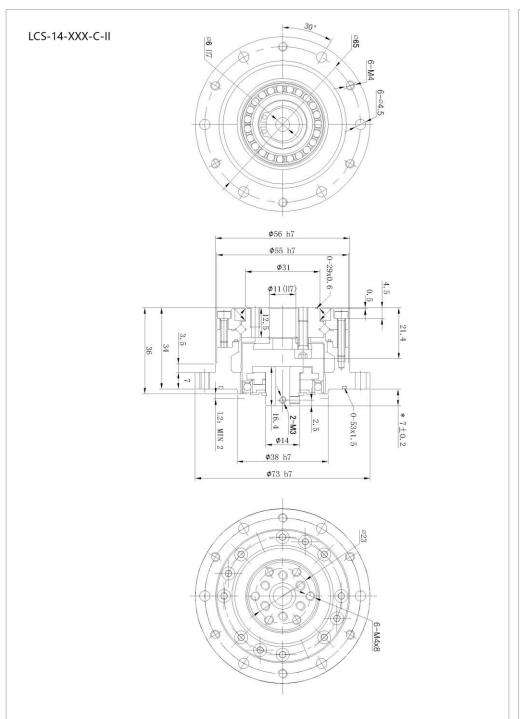


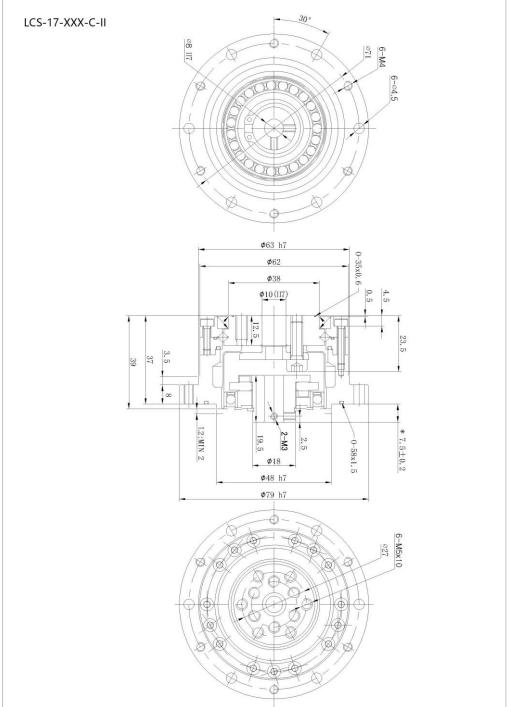
#### **Parameter Table**

item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life	
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour	
	30	3. 8	8.5	6.5	16			≤20		10000	
14	50	5. 1	17. 1	6.6	33	8000	3500	≤20	0. 52	10000	
170	80	7.4	22	10.5	44	5000	3300	≤20	0. 32	15000	
	100	7.4	26	10.5	51			≤20		15000	
	30	8. 4	15	11.5	28			≤20		10000	
	50	15. 2	32	25	66	025504005		≤20		10000	
17	80	21	41	26	83	7000	3500	≤20	0. 69	15000	
	100	23	51	37	103			€20		15000	
	120	23	51	37	82			≤20		15000	
	30	14	26	19	48			≤20		10000	
	50	24	53	32	93			≤20			10000
20	80	32	70	45	121	6000	3500	3500	≤20	0.99	15000
	100	38	78	47	140	(2000)		≤20		15000	
	120	38	83	47	140			€20		15000	
	160	38	87	47	140			≤20		15000	
	30	26	48	36	90			≤20		10000	
	50	37	93	52	177			≤20	1.48	10000	
25	80	60	130	83	242	5500	3500	≤20		15000	
23	100	64	149	103	270		0000	≤20		15000	
	120	64	159	103	289			≤20		15000	
	160	64	167	103	298			≤20		15000	
	30	51	95	71	190			≤20		10000	
	50	72	205	103	363			≤20		10000	
32	80	112	289	159	540	4500	3500	€20	3, 2	15000	
32	100	130	316	205	615	4000	3000	≤20	5. 2	15000	
	120	130	335	205	652			≤20		15000	
	160	130	353	205	652			≤20		15000	
	50	130	382	186	652			€20		10000	
	80	196	493	270	931			€20		15000	
40	100	252	540	353	1026	4000	3000	≤20	5. 0	15000	
	120	279	586	429	1121			€20		15000	
	160	279	615	429	1121			≤20		15000	
	50	233	679	333	1358			≤20		10000	
	80	353	894	493	1767			€20		15000	
50*	100	446	931	633	1957	3000	2500	≤20	9.0	15000	
	120	503	1026	772	1957			≤20		15000	
	160	503	1121	801	2327			≤20		15000	
	80	522	1406	732	2328			€10		15000	
58*	100	661	1511	1007	3021	3000	2200	≤10	14, 8	15000	
J07	120	708	1634	1131	3164	SOUU	2200	≤10	14. 0	15000	
	160	708	1748	1150	3259			≤10		15000	

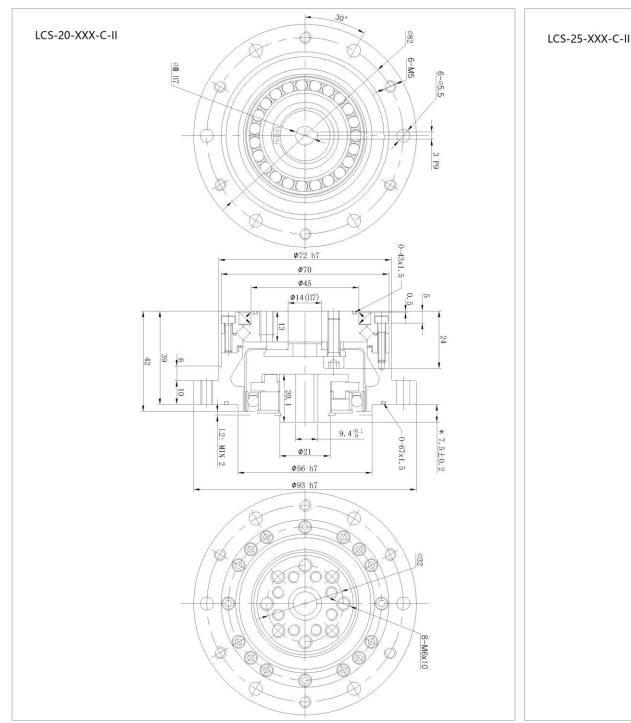
<sup>\*</sup> Consult factory

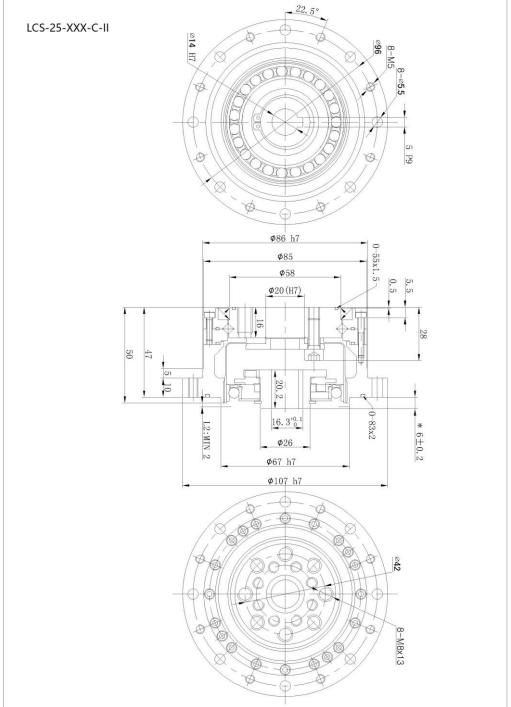
# **LCS-II Series Drawings**



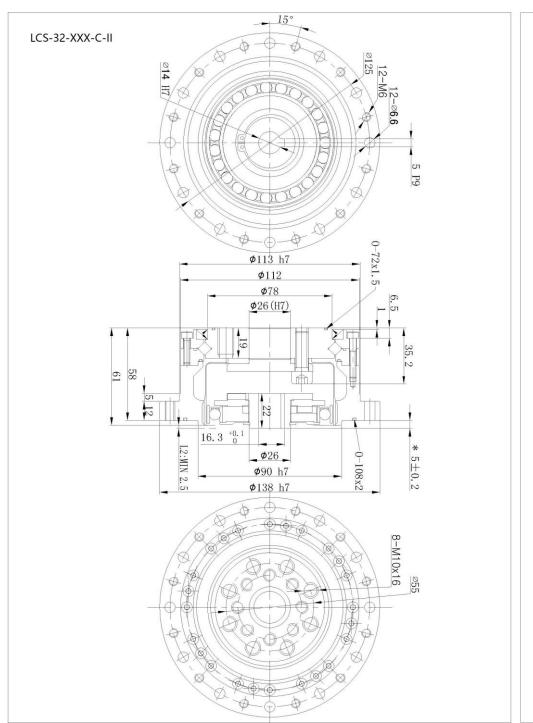


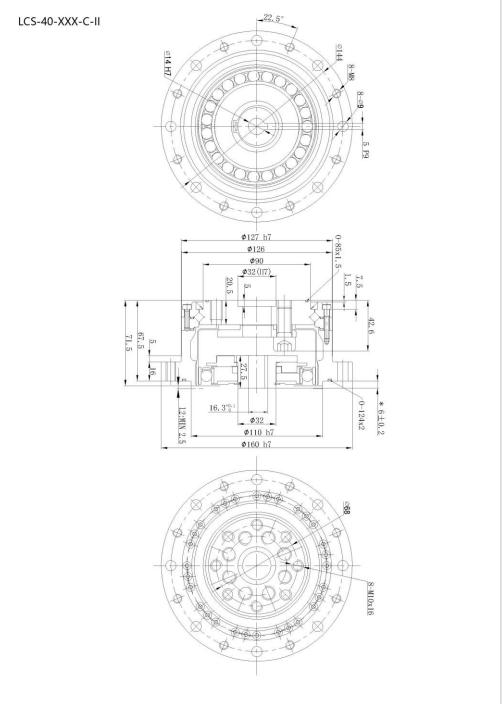
## **LCS-II Series Drawings**





## **LCS-II Series Drawings**







#### 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LCSG High-Torque Cup-Shaped Flexspline Strain Wave Gear Product Introduction Manual



Leader Harmonious Drive Systems Co.,Ltd TEL:0086-512-66362298/66560692 FAX:0086-512-66362325

E-mail:sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code : 215101 http://www.leaderdrive.com



10. LD2019-1 Y

# **LCSG-I series**



LCSG-I series are high-torque models which have the same structure, with LCS-I series. However, their torque bearing capacity is improved by 30% compared with LCS series.

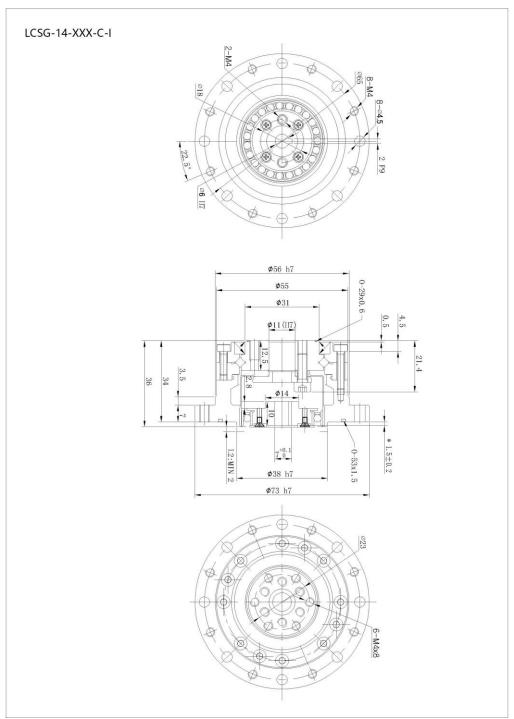


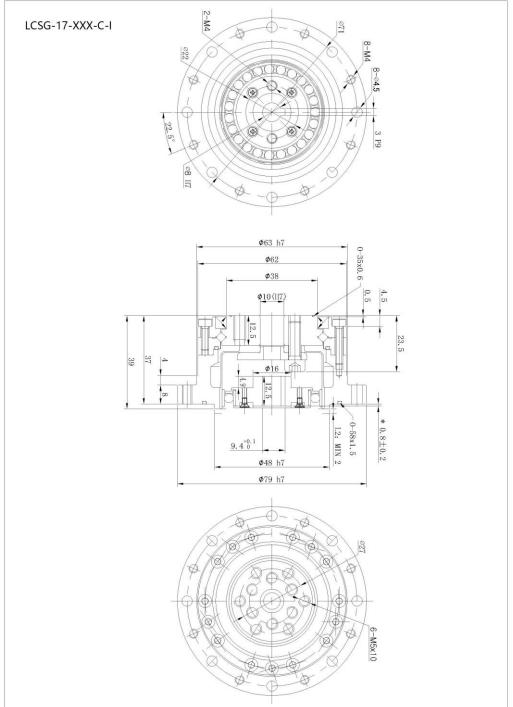
#### **Parameter Table**

	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Welght	Design Life	
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour	
	50	6. 6	23	8. 6	43			≤10		10000	
14	80	9. 6	29	13.5	57	8000	3500	≤10	0. 51	15000	
	100	9. 6	34	13.5	66			≤10		15000	
	50	19. 8	42	32. 5	86			≤10		10000	
17	80	27. 5	53	33. 5	108	7000	3500	≤10		15000	
	100	30	66	48. 5	134	7000		≤10	0.68	15000	
	120	30	66	48. 5	107			≤10		15000	
	50	32	69	42	121			≤10		10000	
	80	42	91	58	158			≤10		15000	
20	100	50	102	61	182	6000	3500	≤10	0. 98	15000	
	120	50	108	61	182			≤10	≤10		15000
	160	50	113	61	182			≤10		15000	
	50	48	121	68. 5	230			≤10		10000	
	80	78	169	107.5	315			≤10	1.47	15000	
25	100	84	194	133	351	5500	3500	≤10		15000	
	120	84	207	133	376	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3	≤10		15000	
	160	84	217	133	388			≤10		15000	
	50	94	267	133	472			≤10		10000	
	80	146	376	206	702			≤10		15000	
32	100	169	411	267	800	4500	3500	≤10	3. 19	15000	
	120	169	436	267	848		20/0/09/00	≤10		15000	
	160	169	459	267	848			≤10		15000	
	50	169	497	242	847			≤10		10000	
	80	255	641	351	1210			≤10	ĺ	15000	
40	100	328	702	460	1334	4000	3000	≤10	5. 0	15000	
	120	363	762	557	1458		Ì	≤10		15000	
	160	363	800	557	1458		· ·	≤10		15000	
	80	459	1163	642	2297			≤10		15000	
50#	100	580	1211	823	2545	3000	2500	≤10	0.0	15000	
OUT	120	654	1334	1005	2545	2000	2000	≤10	9.0	15000	
	160	654	1458	1042	3025			≤10		15000	
	80	678	1828	951	3026			≤10		15000	
58*	100	860	1964	1309	3927	3000	2200	≤10	14.8	15000	
254	120	921	2124	1470	4113	3000	2200	≤10	14. 5	15000	
	160	921	2272	1494	4236			≤10		15000	

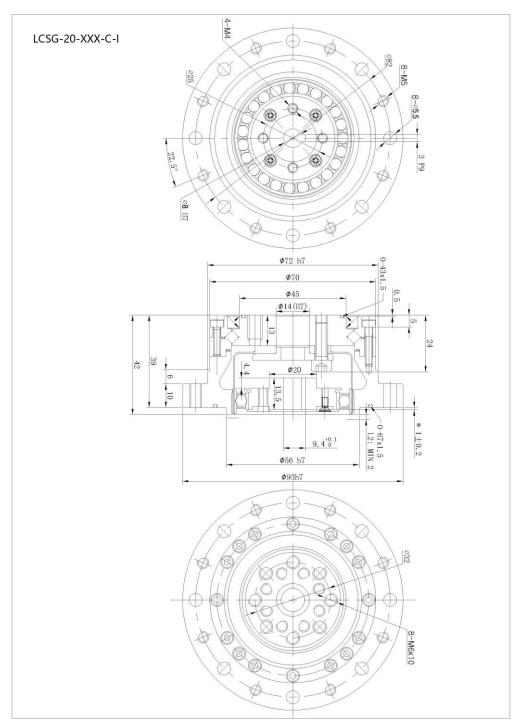


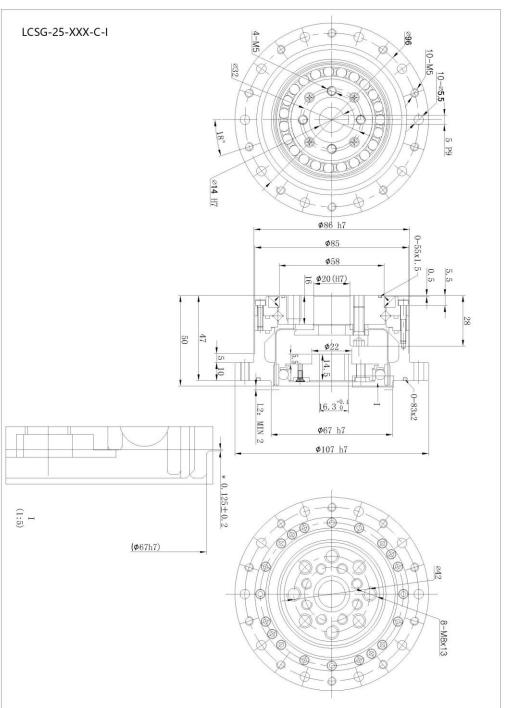
# **LCSG-I Series Drawings**



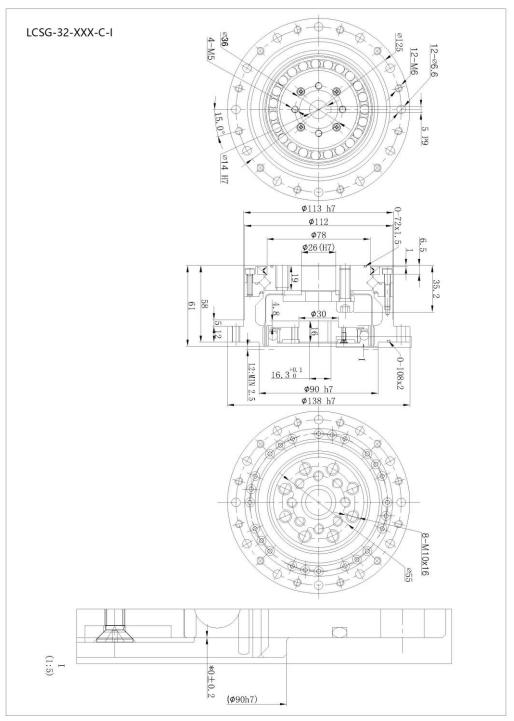


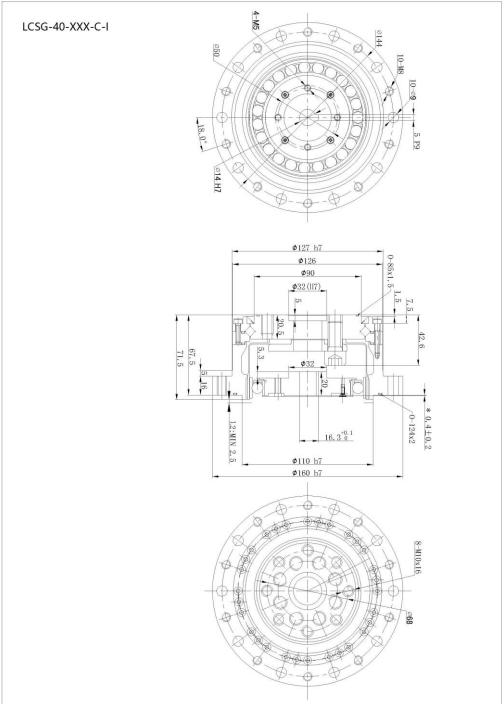
# **LCSG-I Series Drawings**





# **LCSG-I Series Drawings**





## **LCSG-II** series



LCSG-II series are high-torque models which have the same structure, with LCS-II series. However, their torque bearing capacity is improved by 30% compared with LCS series.

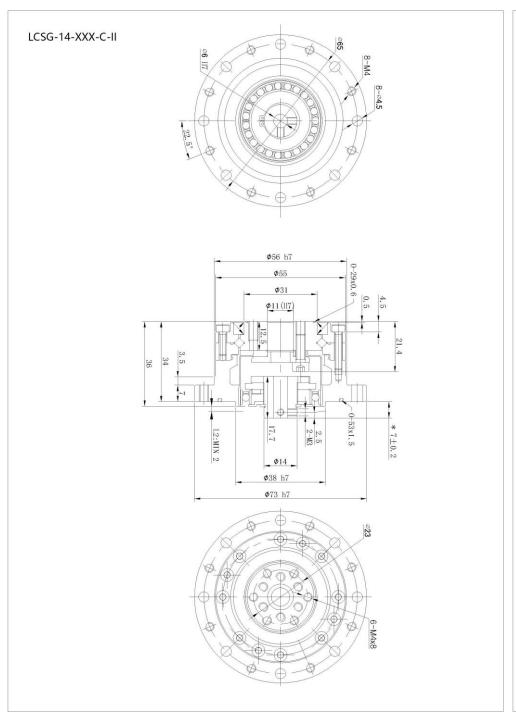


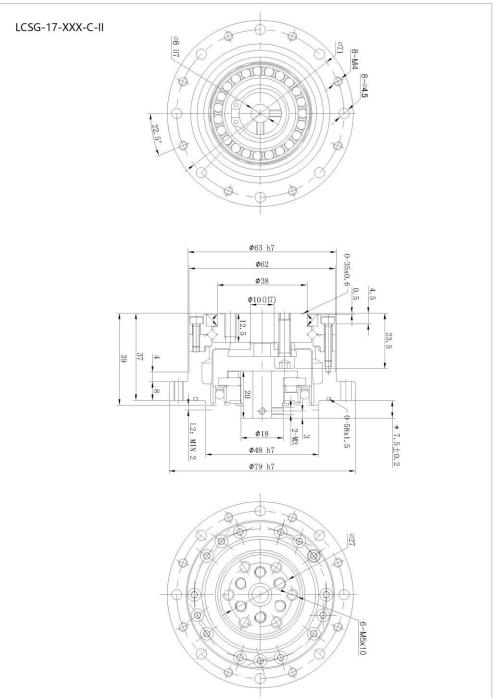
#### **Parameter Table**

Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Meximum Input Speed	Allowable Average Input Speed	Back lash	Welght	Design Life
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour
	50	6.6	23	8. 6	43			≤20		10000
14	80	9.6	29	13. 5	57	8000	3500	≤20	0, 52	15000
	100	9.6	34	13.5	66	in a second	Nativa satu	≤20	2.000,000	15000
	50	19.8	42	32. 5	86			≤20		10000
17	80	27.5	53	33. 5	108	E		≤20		15000
17	100	30	66	48. 5	134	7000	3500	€20	0. <del>69</del>	15000
	120	30	66	48. 5	107			€20		15000
	50	32	69	42	121			≤20	3	10000
	80	42	91	58	158	6		≤20		15000
20	100	50	102	61	182	6000	3500	€20	0. 99	15000
	120	50	108	61	182		SALSTANA .	≤20	10.20.20.40	15000
	160	50	113	61	182	8		≤20		15000
	50	48	121	68. 5	230			≤20		10000
	80	78	169	107. 5	315			≤20	1	15000
25	100	84	194	133	351	5500	3500	≤20	1.48	15000
1.00	120	84	207	133	376	22	Manufacture (	≤20	1.40	15000
	160	84	217	133	388			€20		15000
	50	94	267	133	472		-	≤20		10000
	80	146	376	206	702			≤20		15000
32	100	169	411	267	800	4500	3500	≤20	3, 2	15000
	120	169	436	267	848			≤20		15000
	160	169	459	267	848			≤20		15000
	50	169	497	242	847			≤20		10000
	80	255	641	351	1210			≤20		15000
40	100	328	702	460	1334	4000	3000	≤20	5.0	15000
335	120	363	762	557	1458	1	5000	≤20	5. 0	15000
	160	363	800	557	1458	C		≤20		15000
	80	459	1163	642	2297			≤20		15000
	100	580	1211	823	2545	8		≤20	9.0	15000
50*	120	654	1334	1005	2545	3000	2500	≤20		15000
	160	654	1458	1042	3025			≤20		15000
	80	678	1828	951	3026			≤10		15000
	100	860	1964	1309	3927	El .		≤10		15000
58*	120	921	2124	1470	4113	3000	2200	≤10 ≤10	14.8	15000
	160	921	2124	1494	4236			≤10 ≤10		15000

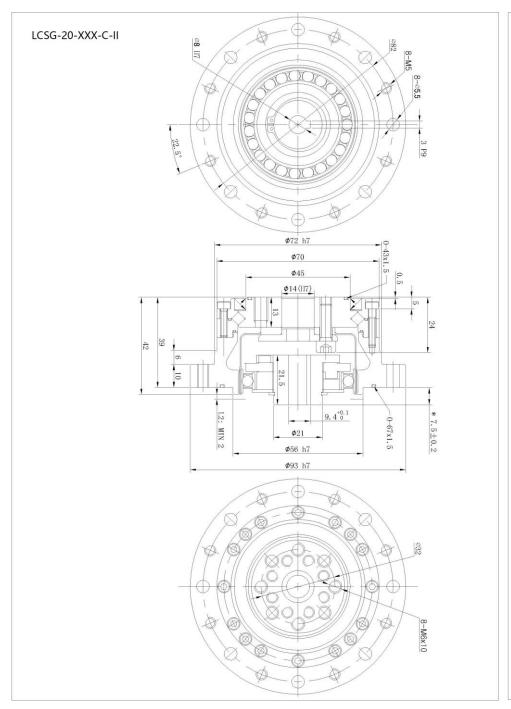
\* Consult factory

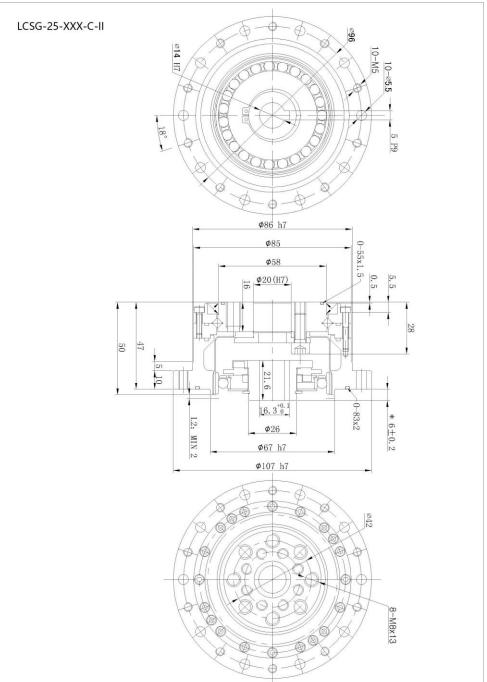
# **LCSG-II Series Drawings**



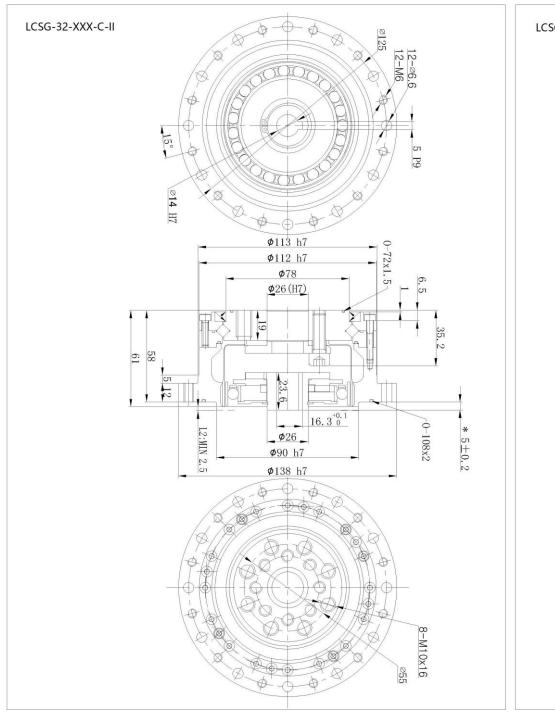


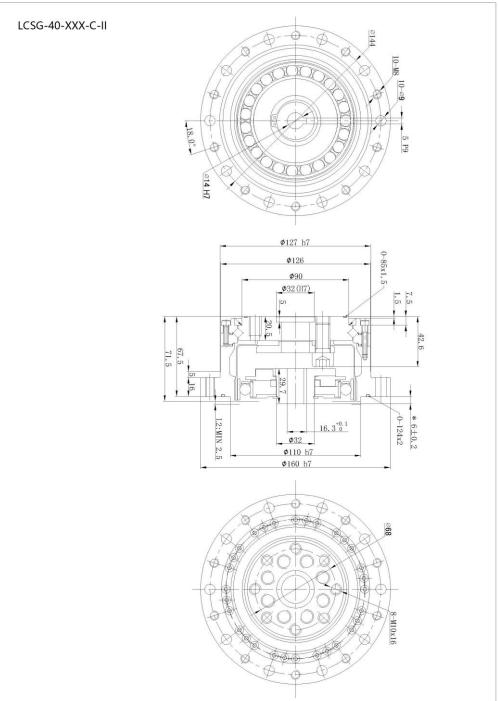
# **LCSG-II Series Drawings**





## **LCSG-II Series Drawings**







#### 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LHD Ultra-Flat Hollow-Shaft Flexspline Strain Wave Gear Product Introduction Manual



TEL:0086-512-66362298/66560692

FAX:0086-512-66362325 E-mail:sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code: 215101



## **LHD-I series**



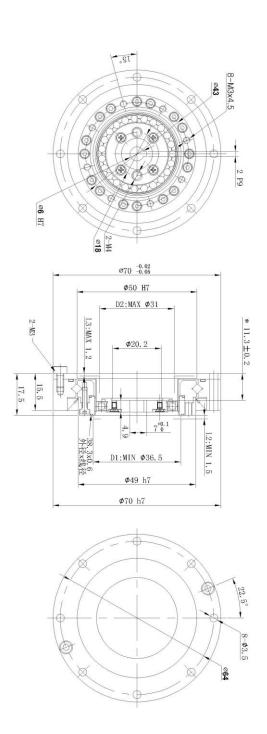
With a flexible gear in ultra-thin hollow and flange structure, the LHD series are designed as flat as possible, and are therefore very suitable for the occasions where harsh thickness requirements for reducers are posed.



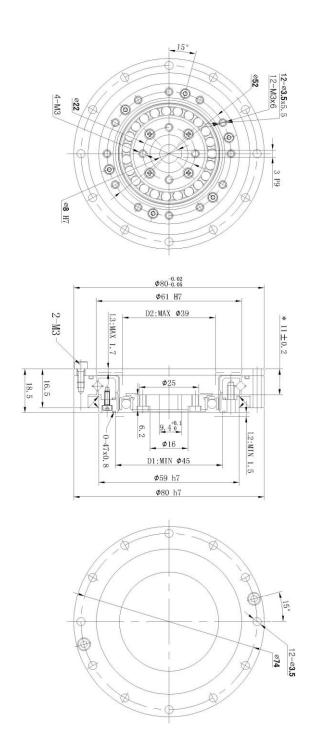
#### **Parameter Table**

Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Meximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life					
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour					
	50	3.5	11.4	4.6	23		Ĩ	≤20	No.	9000					
14	80	5.1	15	6.2	29	8000	3500	€20	0. 35	10000					
	100	5.1	18	7.3	33	25.000000	5.57.57.57.50	≤20		10000					
	50	10.4	22	17	46								≪20	-	9000
17	80	14	29	21	54	7000	3500	≤20	0. 45	10000					
	100	15. 2	35	26	67			≤20		10000					
	50	16.1	37	23	66			€20	0. 55			9000			
20	80	23	49	28	78	6000	3500	€20		10000					
	100	27	54	32	90			≤20		10000					
	50	26	66	36	121			≤20		9000					
25	80	42	91	62	157	5500	3500	€20	0. 95	10000					
	100	45	105	71	175	3300	3000	≤20	0. 70	10000					
	120	45	111	71	187			€20		10000					
	50	50	143	71	255			≤20		9000					
32	80	79	202	126	350	4500	3500	≤20	1. 92	10000					
32	100	91	221	144	399	-000	3300	≤20		10000					
	120	91	235	144	423			€20		10000					
	50	91	267	130	456			€20		9000					
40	100	176	378	247	665	4000	3000	≤20	3. 15	10000					
	160	196	430	300	727			€20		10000					

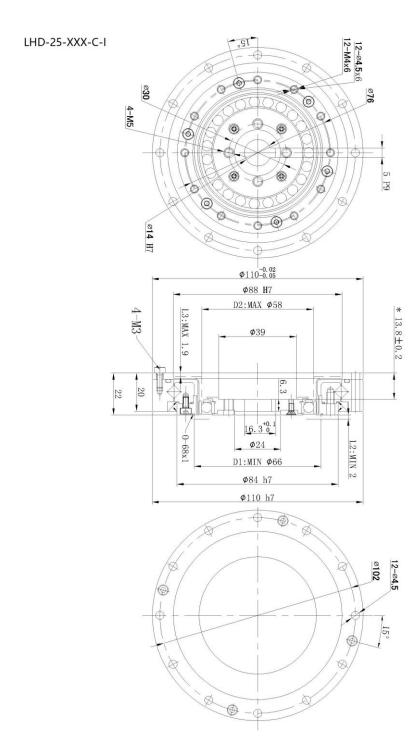
LHD-14-XXX-C-I

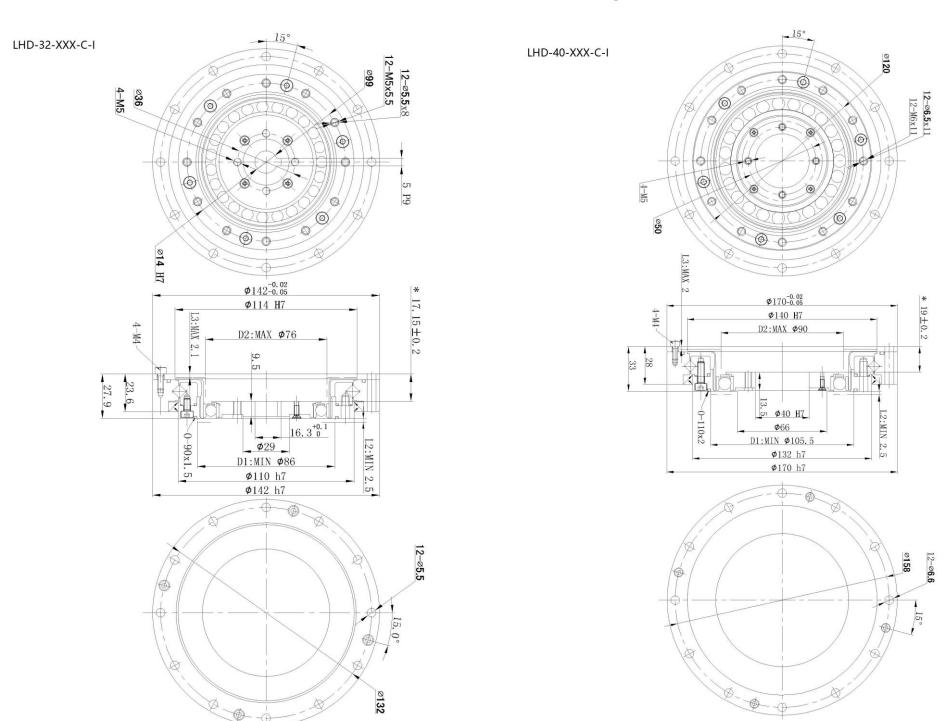


LHD-17-XXX-C-I



LHD-20-XXX-C-I 90 0  $\phi 90^{-0.02}_{-0.05}$ **Ø**71 H7 1.3:MAX 1.7 D2:MAX Ø47 **Ø**30 9.4 0 1 1.2:MIN 1.5 D1:MIN Ø53 **Ø**69 h7 **Ø**90 h7





#### LHD-III series

# **LHD-III** series



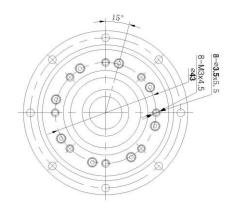
For LHD-III series, there is a large-aperture hollow shaft hole in the middle of the cam of their wave generator with a flexible gear in ultra-thin hollow and flange struc ture, the LHD series are designed as possible, and are therefore very suitable for the occasions where harsh thick ness requirements for reducers are posed.

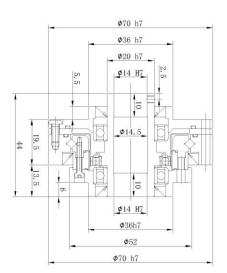
#### **Parameter Table**

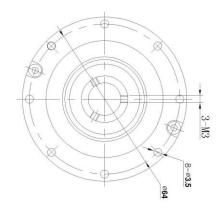
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life		
Model No		Nm	Nm	Nm	Nm	r/min	r/mlin	Arc sec	Kg	Hour		
	50	3.5	11.4	4. 6	23		ĺ	≤20		9000		
14	80	5.1	15	6. 2	29	8000	3500	€20	0. 35	10000		
	100	5, 1	18	7, 3	33			≤20		10000		
	50	10.4	22	17	46					≤20		9000
17	90	14	29	21	54	7000	3500	≤20	0. 45	10000		
-10	100	15. 2	35	26	67			≤20		10000		
	50	16.1	37	23	66			≤20	0. 55		9000	
20	80	23	49	28	78	6000	3500	≤20		10000		
	100	27	54	32	90			≤20		10000		
	50	26	66	36	121			≤20		9000		
25	80	42	91	62	157	5500	3500	≤20	0. 95	10000		
14	100	45	105	71	175	3300	3000	≤20	0. 90	10000		
	120	45	111	71	187			≤20		10000		
	50	50	143	71	255			≤20		9000		
32	80	79	202	126	350	4500	3500	≤20	1. 92	10000		
34	100	91	221	144	399	7000	2.55	≤20		10000		
	120	91	235	144	423			≤20		10000		
	50	91	267	130	456			≤20		9000		
40*	100	176	378	247	665	4000	3000	≤20	3. 15	10000		
	160	196	430	300	727			≤20		10000		

\* Consult factory

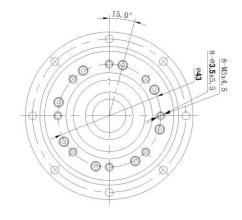
LHD-14-XXX-C-III

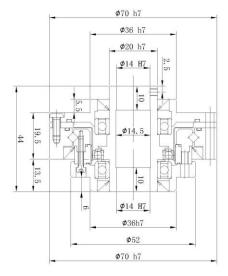


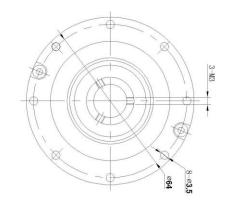


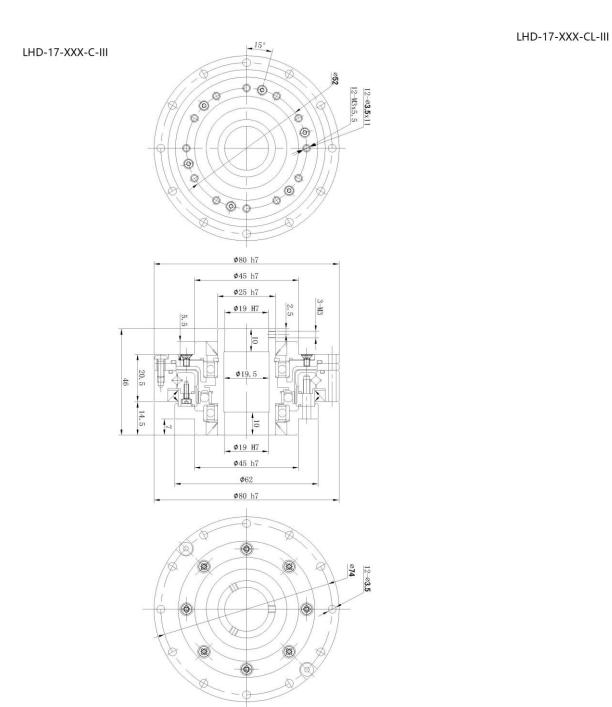


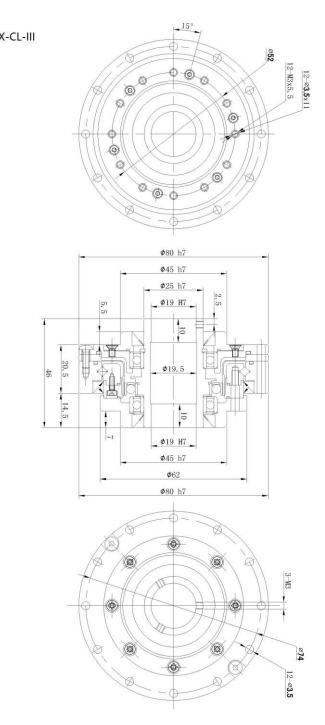
LHD-14-XXX-CL-III

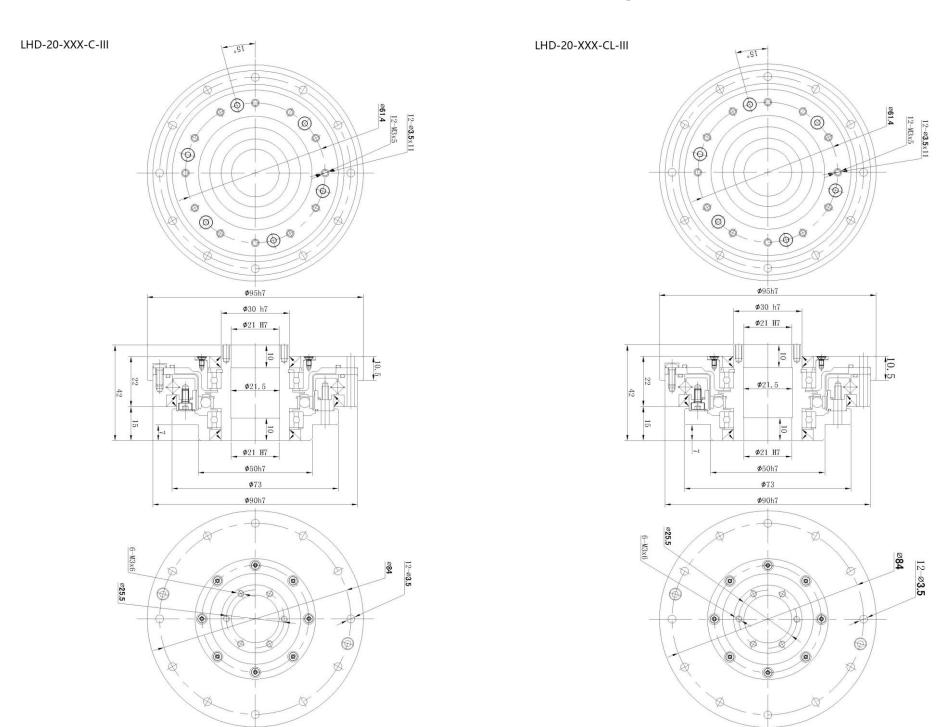


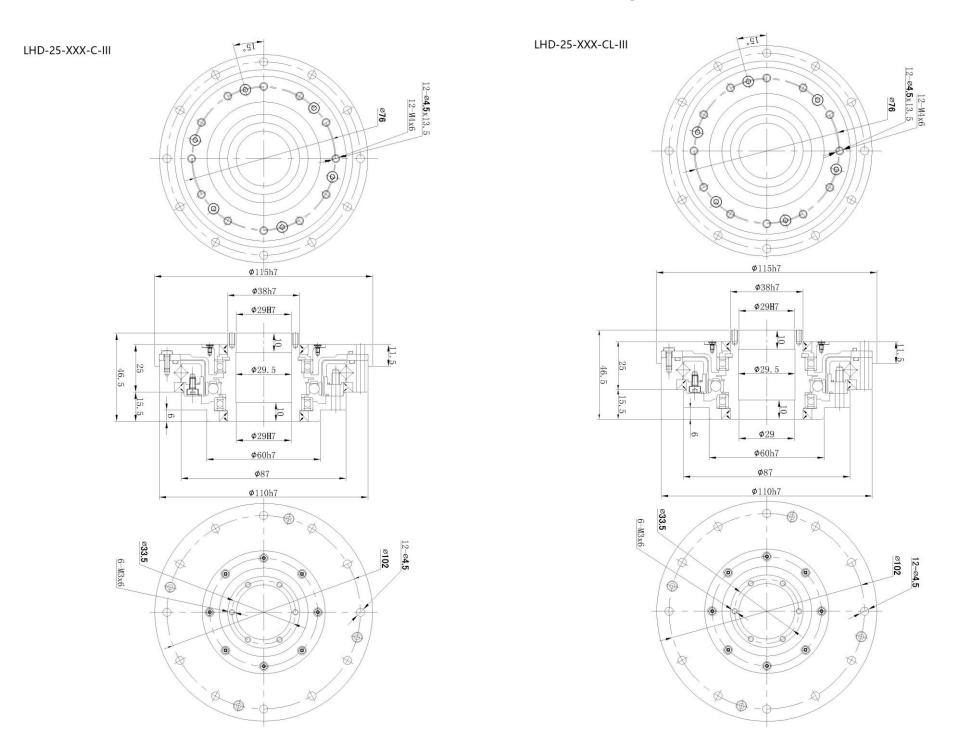


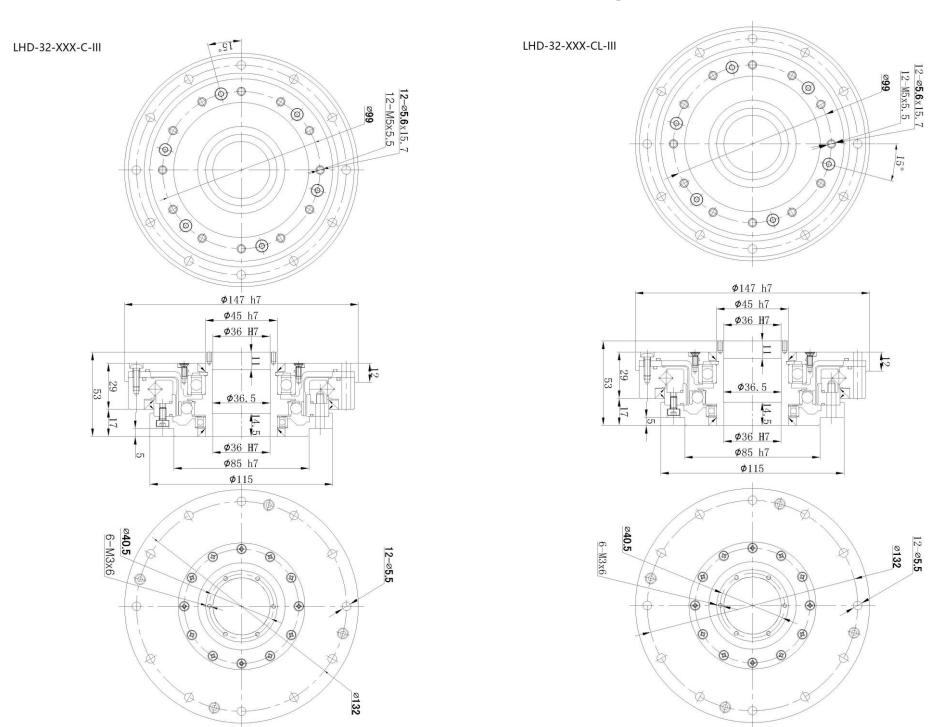


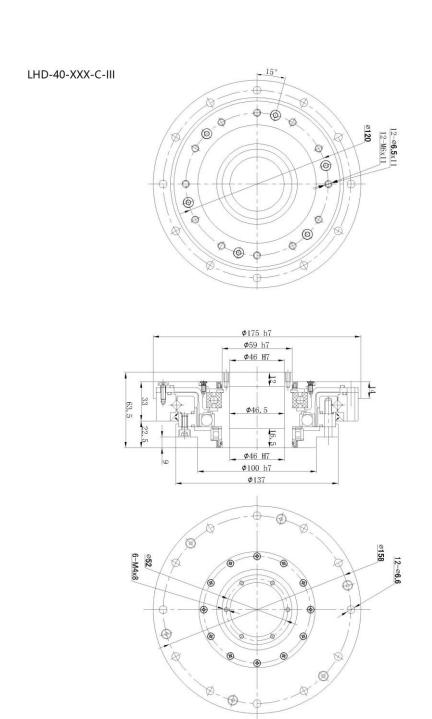


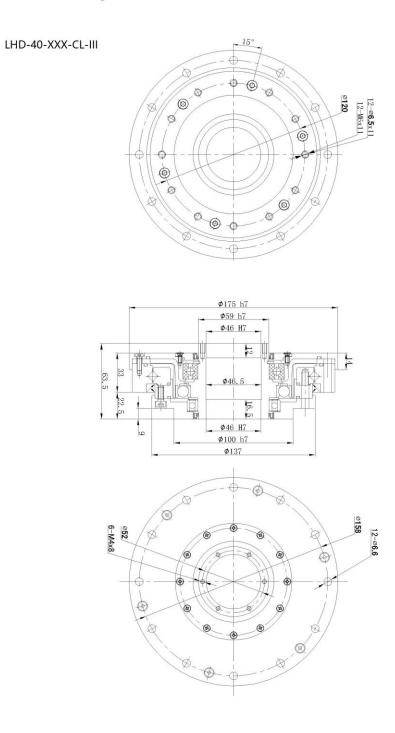














## 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LHS Standard Hollow-Shaft Flexspline Strain Wave Gear

Product Introduction Manual



Leader Harmonious Drive Systems Co., Ltd TEL:0086-512-66362298/66560692

FAX :0086- 512-66362325 E-mail : sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code: 215101 http://www.leaderdrive.com



NO. LD2019-1 Y

## **LHS-I series**



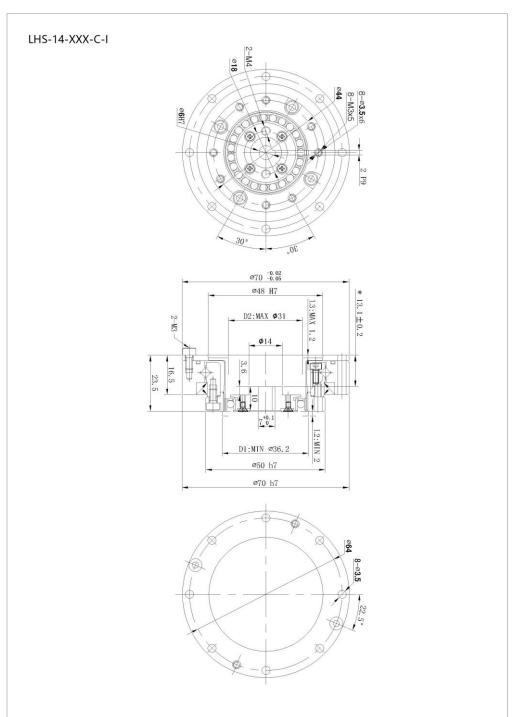
LHS-I series, which have a standard hollow and flange-shaped tube structure, are tight in structure. Their input shaft matches with the inner hole of wave transformer directly and are connected by flat key. Alternatively, they can be used with the rigid gear end fixed and the flexible gear end outputting, or with the flexible gear end fixed and the rigid gear end outputting.

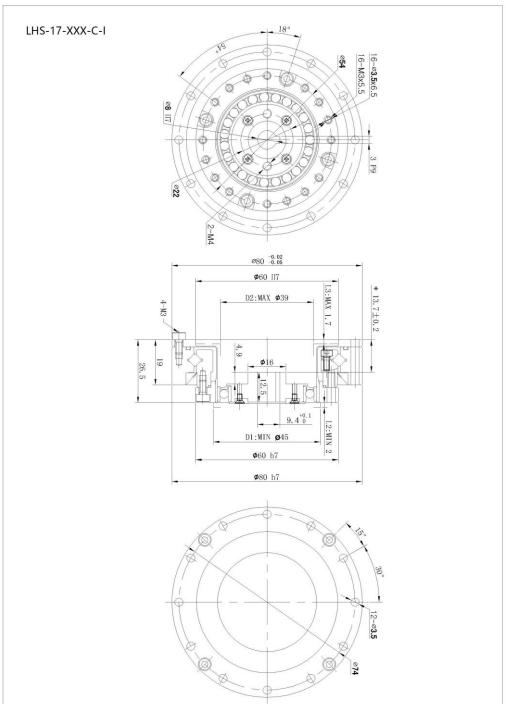


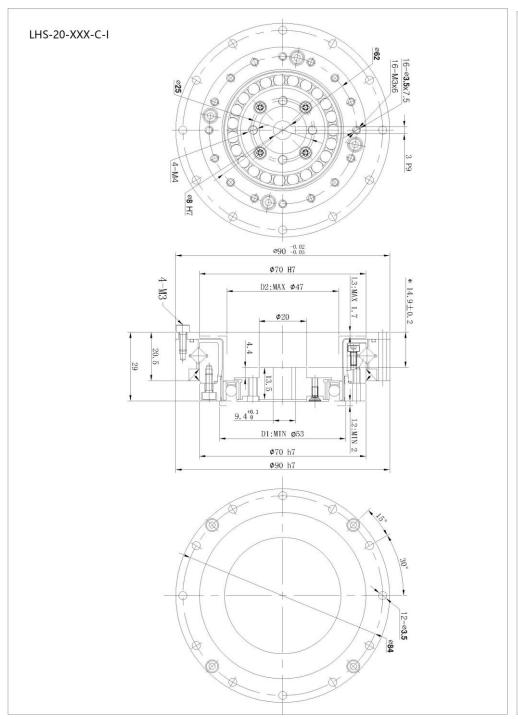
#### **Parameter Table**

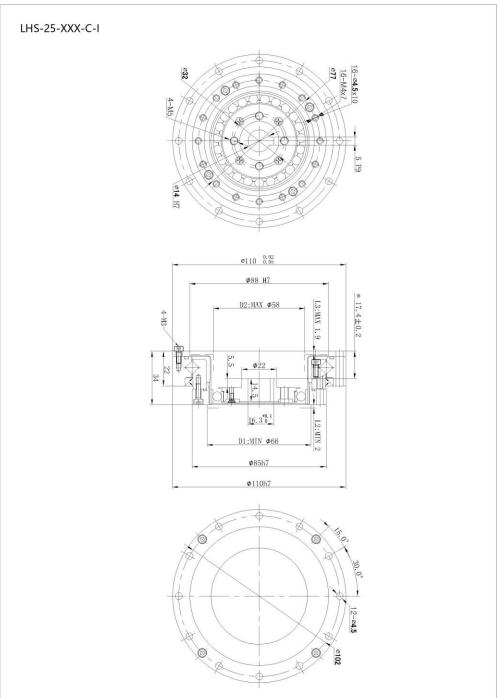
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life
Model No		Nm	Nm	Nm	Nm	r/min	r/mln	Arc sec	Kg	Hour
	30	3. 8	8. 6	7.8	16			≤20		10000
14	50	5. 1	17	6.6	33	8000	3500	≤20	0.38	10000
	80	7.4	22	10.5	45	3000	3300	€10	0.50	15000
	100	7.4	27	10.5	51			€10		15000
	30	8. 4	15. 2	11.5	29			≤20		10000
	50	15. 2	32	25	66			≤20		10000
17	80	21	41	26	83	7000	3500	≤10	0. 56	15000
	100	23	51	37	104			≤10		15000
	120	23	51	37	82			≤10		15000
	30	14	26	19	48			≤20		10000
	50	24	53	32	93			≤20		10000
20	80	32	70	45	121	6000	3500	≤10	0.76	15000
	100	38	78	47	140			≤10		15000
	120	38	83	47	140			≤10		15000
	160	38	87	47	140			€10		15000
	30	26	48	36	90			≤20	1. 24	10000
	50	37	93	52	177			≤20		10000
25	80	60	130	83	242	5500	3500	≤10		15000
	100	64	149	103	270			≤10		15000
	120	64	159	103	289			≤10		15000
	160	64	167	103	298			€10		15000
	30	51	95	71	190			≤20		10000
	50	72	205	103	363			≤20		10000
32	80	112	289	159	540	4500	3500	≤10	2. 6	15000
	100	130	316	205	615	4000	0000	≤10		15000
	120	130	335	205	652			≤10		15000
	160	130	353	205	652			≤10		15000
	50	130	382	186	652			€20		10000
	80	196	493	270	931			≤10		15000
40	100	252	540	353	1026	4000	3000	≤10	5. 0	15000
	120	279	586	428	1121			≤10		15000
	160	279	615	428	1121			≤10		15000
	50	233	679	333	1358			€20		10000
	80	353	894	493	1767	3000 2		≤10		15000
50*	100	446	931	633	1957		2500	≤10	9. 5	15000
	120	502	1026	772	1957			≤10		15000
	160	502	1121	801	2328			≤10		15000
	80	522	1406	732	2328			€10		15000
58*	100	661	1511	1007	3021	3000	2200	≤10	13. 6	15000
30	120	708	1634	1131	3164	5000	2200	≤10	13.0	15000
	160	708	1748	1150	3259			≤10		15000

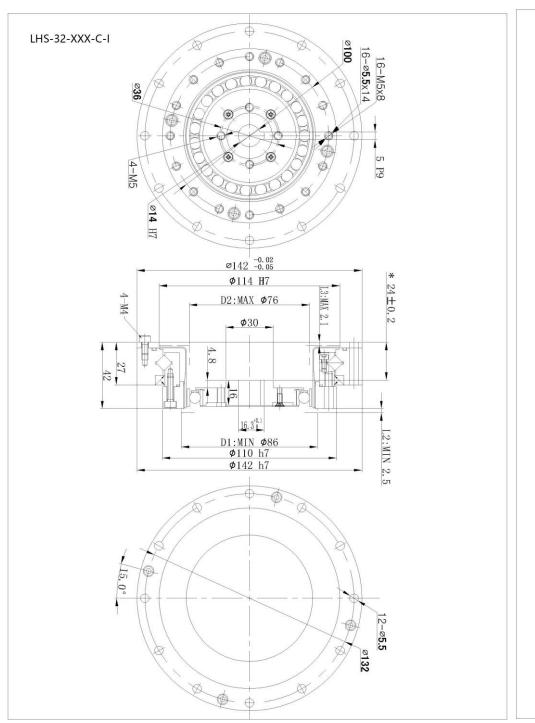
<sup>\*</sup> Consult factory

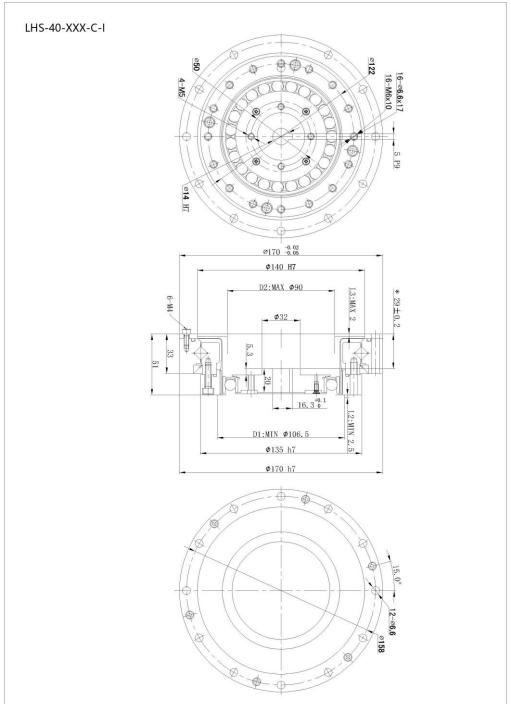












# **LHS-II series**



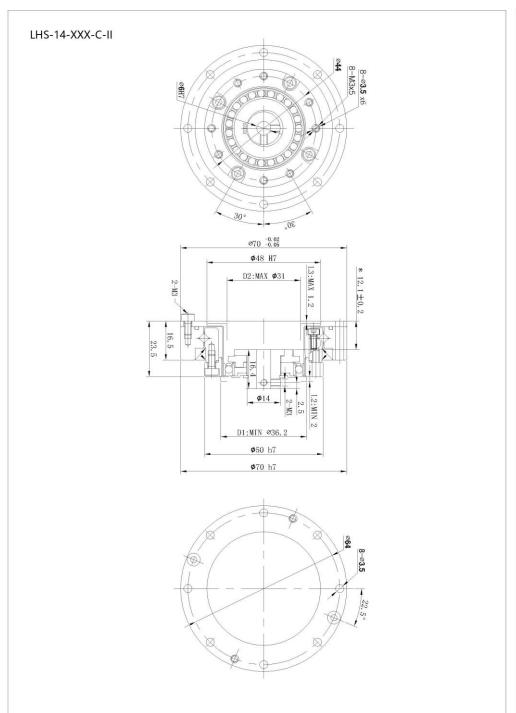
For LHS-II, their input shaft is connected with the inner hole of wave transformer through a double slider coupling.

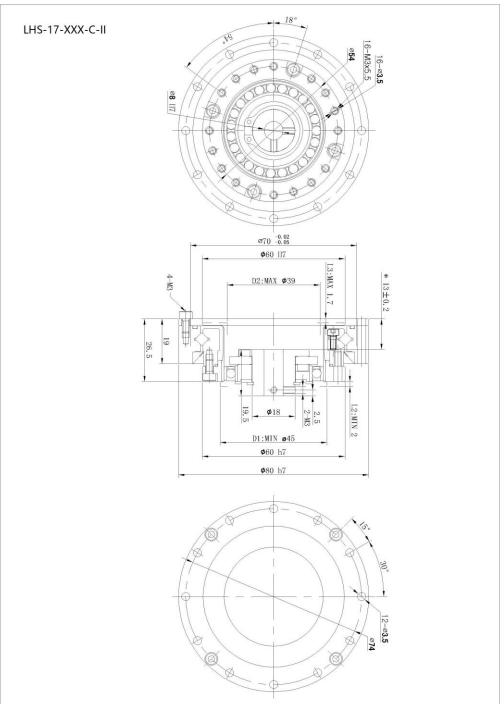


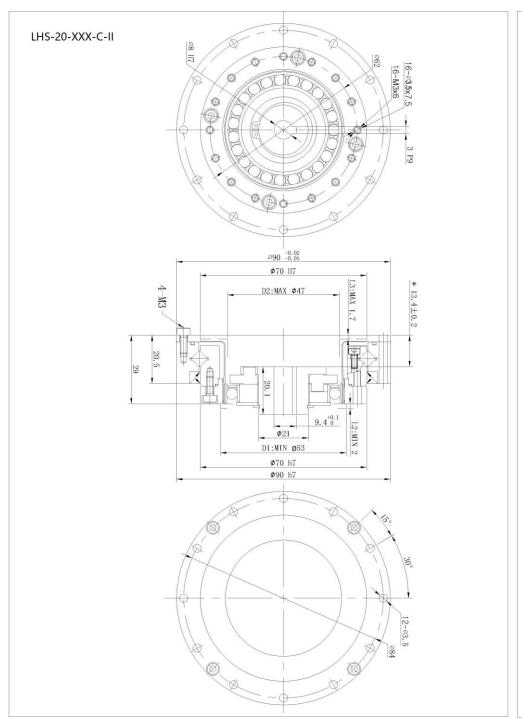
#### **Parameter Table**

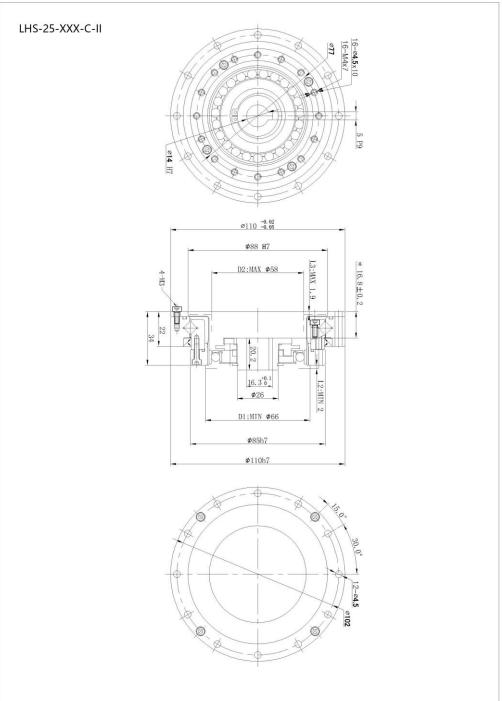
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Desigi Life		
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour		
	30	3.8	8. 6	7. 8	16			€20		10000		
14	50	5.1	17	6. 6	33	8000	3500	≤20	0.38	10000		
	80	7.4	22	10. 5	45			≤20		15000		
	100	7.4	27	10. 5	51			≤20		15000		
	30	8.4	15. 2	11.5	29			≤20		10000		
	50	15. 2	32	25	66			≤20		10000		
17	80	21	41	26	83	7000	3500	≤20	0.56	15000		
	100	23	51	37	104			€20		15000		
	120	23	51	37	82			≤20		15000		
	30	14	26	19	48			€20		10000		
	50	24	53	32	93			≤20		10000		
20	80	32	70	45	121	6000	3500	≤20	0. 76	15000		
20	100	38	78	47	140	2000	3000	3333	3000	≤20	0.70	15000
	120	38	83	47	140			≤20		15000		
	160	38	87	47	140			€20		15000		
	30	26	48	36	90			≤20		10000		
	50	37	93	52	177			≤20		10000		
25	80	60	130	83	242	5500	3500	€20	1. 24	15000		
20	100	64	149	103	270	5500	3300	≤20		1500		
	120	64	159	103	289			≤20		15000		
	160	64	167	103	298			≤20		1500		
	30	51	95	71	190			≤20		10000		
	50	72	205	103	363			€20		10000		
1221	80	112	289	159	540		2200	€20		15000		
32	100	130	316	205	615	4500	3500	€20	2.6	1500		
	120	130	335	205	652			≤20		15000		
	160	130	353	205	652			≤20		15000		
	50	130	382	186	652			≤20		10000		
	80	196	493	270	931			≤20		1500		
40	100	252	540	353	1026	4000	3000	≤20	5.0	15000		
	120	279	586	428	1121			€20		1500		
	160	279	615	428	1121			≤20		1500		
	50	233	679	333	1358			≤20		1000		
	80	353	894	493	1767			≤20		1500		
50*	100	446	931	633	1957	3000	2500	€20	9.5	1500		
1000	120	502	1026	772	1957		=0.000	≤20	7.0	1500		
	160	502	1121	801	2328					15000		
	80	522	1406	732	2328			≤20 ≤10		1500		
	100	661	1511	1007	3021			≤10	1	1500		
58*	120	708	1634	1131	3164	3000	2200	≤10 ≤10	13. 6	15000		
	160	708	1748	1150	3164			≤10 ≤10		15000		

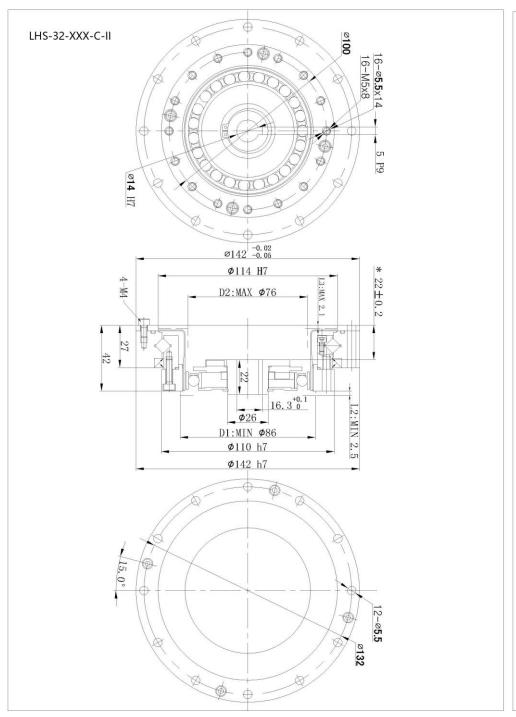
\* Consult factory

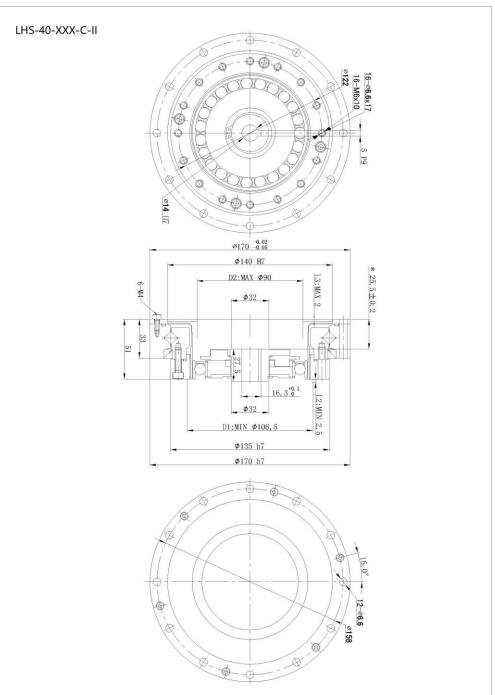












## **LHS-III** series



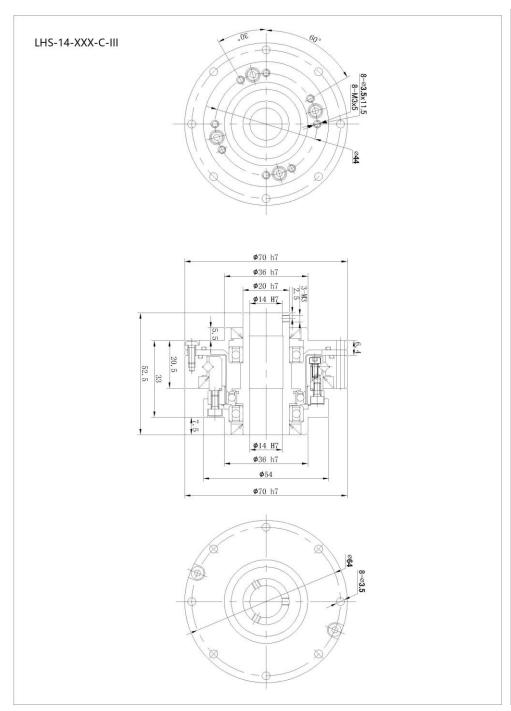
For LHS-III series, there is a large-aperture hollow shaft hole in the middle of the cam of their wave generator, and a supporting bearing designed inside reducer. Characterized by full-sealing structure and easy installation, the series are very suitable for the occasions where threading needs running through the center of reducer.

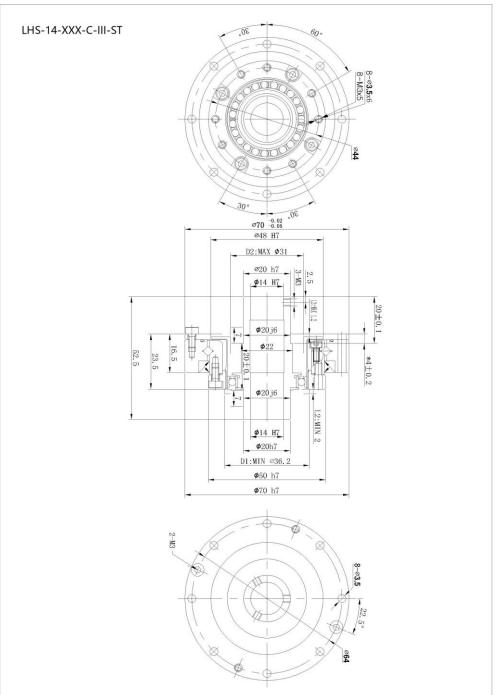


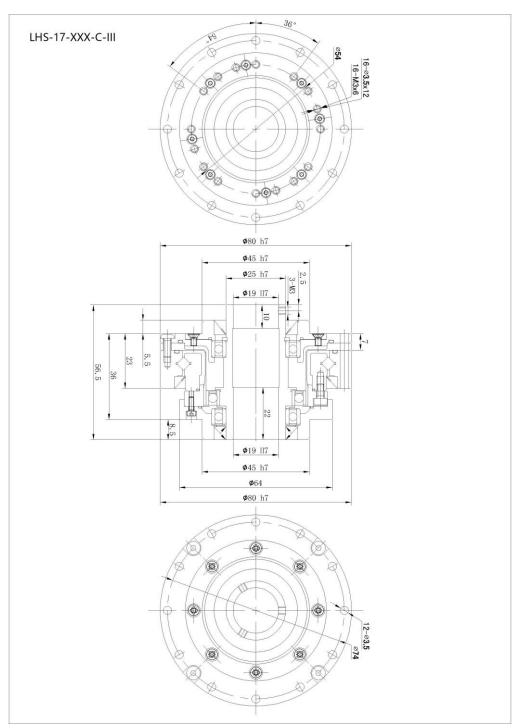
#### **Parameter Table**

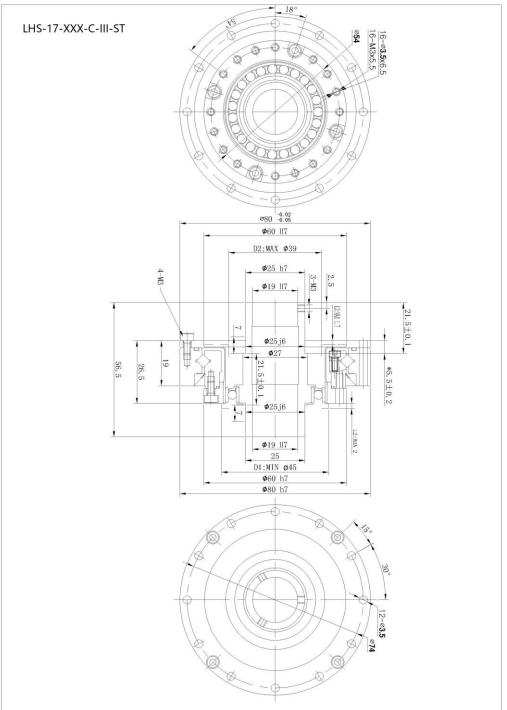
Model No	30 50 80	Nm	Nm				Input Speed		Tension		
14	50			Nm	Nm	r/min	r/min	Arc sec	N	Kg	Hour
14	0.000	3. 8	8. 6	7. 8	16			≤20			10000
-	DO.	5.1	17	6. 6	33	8000	3500	€20	≤77	0. 72	10000
	80	7. 4	22	10. 5	45			≤10	*		15000
	100	7.4	27	10. 5	51			≤10			15000
_	30	8. 4	15. 2	11.5	29			≤20			10000
	50	15. 2	32	25	66	-		≤20		1000000	10000
17	80	21	41	26	83	7000	3500	≤10	≤92	1.0	15000
-	100	23	51	37	104	-		≤10			15000
	120	23	51	37	82			≤10		1	15000
-	30	14	26	19	48	-		≤20	-		10000
_	50	24	53	32	93			≤20			10000
20 —	80	32	70	45	121	6000	3500	≤10	≤136	1.38	15000
-	100	38	78	47	140			≤10			15000
_	120	38	83	47	140			≤10	2		15000
	160	38	87	47	140			≤10			15000
-	30	26	48	36	90			€20			10000
-	50	37	93	52	177		3500	€20			10000
25	80	60	130	83	242	5500		≤10	≤147	2. 15	15000
-	100	64	149	103	270			≤10			15000
-	120	64	159	103	289	-		≤10			15000
-	160	64	167	103	298			≤10			15000
-	30	51	95	71	190			€20			10000
-	50	72	205	103	363	-		≤20			10000
32	80	112	289	159	540	4500	3500	≤10	≤154	4, 3	15000
-	100	130	316	205	615			≤10	-		15000
-	120	130	335	205	652	-		€10			15000
	160	130	353	205	652			≤10 <===			15000
_	50	130	382	186	652			≤20	-		10000
	80	196	493	270	931		2000	≤10	≤294	7. B	15000
40	100	252	540	353	1026	4000	3000	<b>≤10</b>	₹274	7.0	15000
_	120	279	586	428	1121			<b>≤10</b>			15000
	160	279	615	428	1121			≤10 <00			15000
-	50	233	679	333	1358	-		≤20			10000
50*	80	353	894	493	1767	3000	0.00	≤10	≤373	14. 5	15000
30*	100	446	931	633	1957		2500	<b>≤10</b>	₹3/3	14.0	15000
-	120	502	1026	772	1957			<b>≤10</b>	-		15000
	160	502	1121	801	2328			≤10 <10			15000
_	80	678	1828	951	3026			≤10 <40			15000
58*	100	860	1964	1309	3927	3000	2200	≤10	≤1300	20. 0	15000
-	120	921 921	2124	1470	4113 4236	-		≤10 ≤10			15000

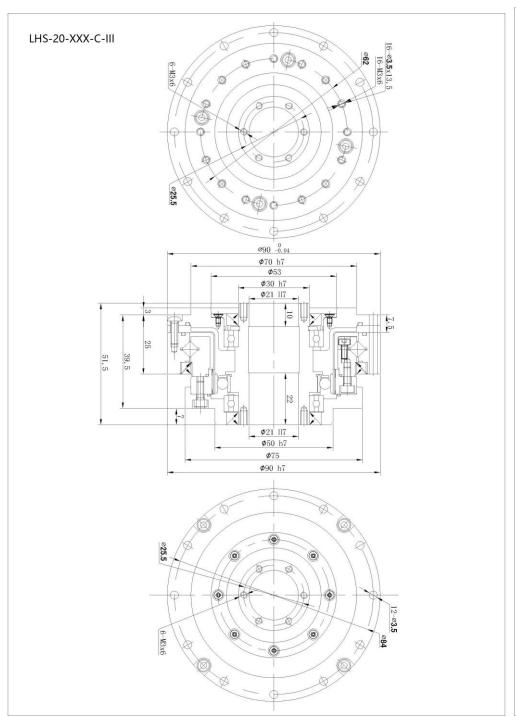
\* Consult factory

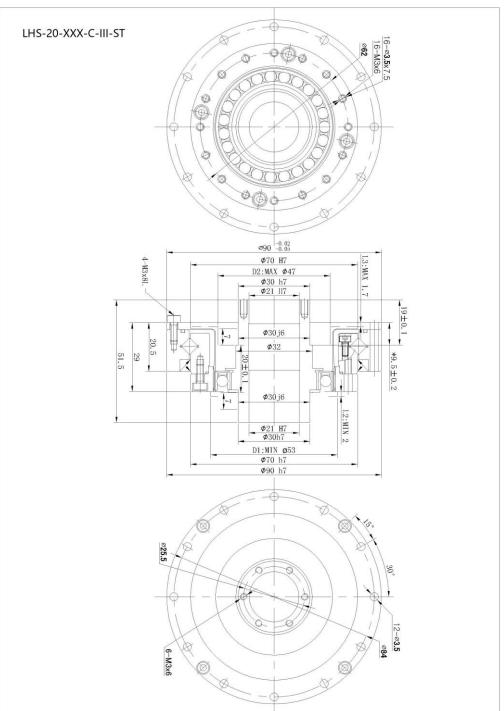


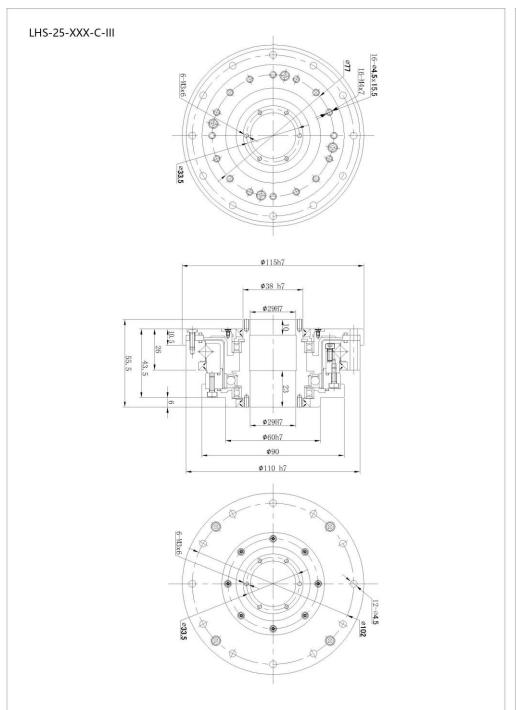


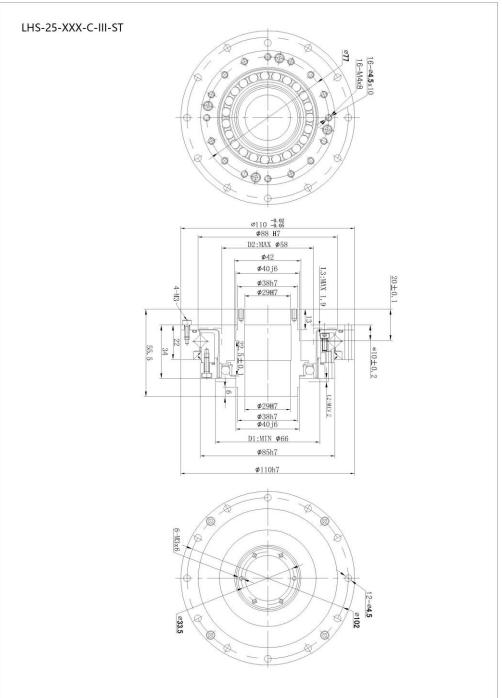


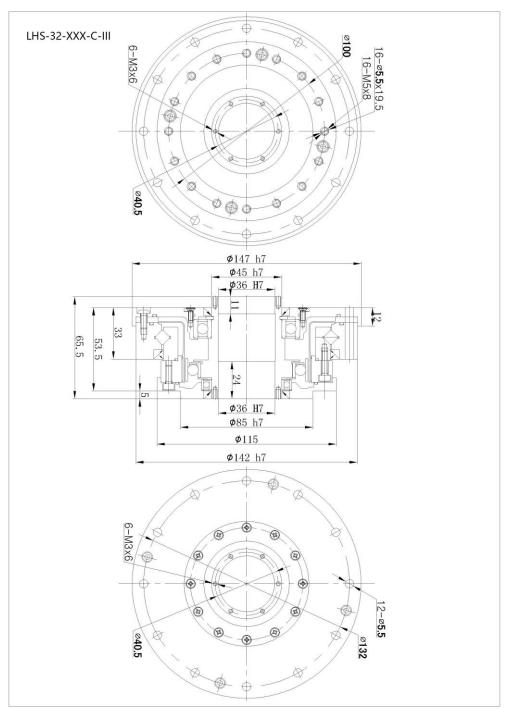


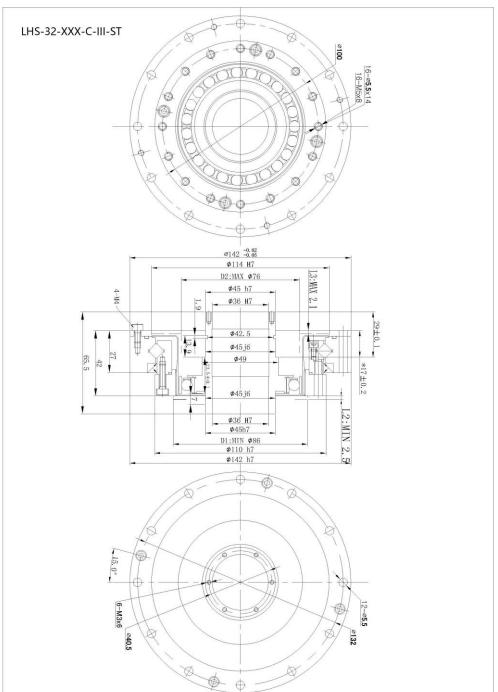


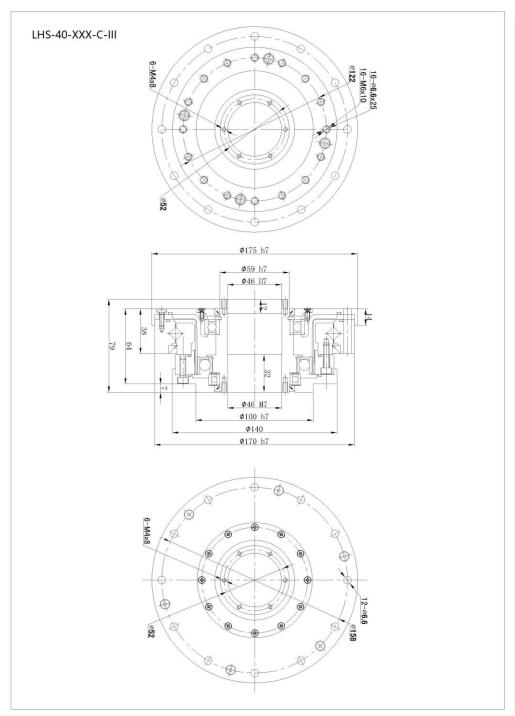


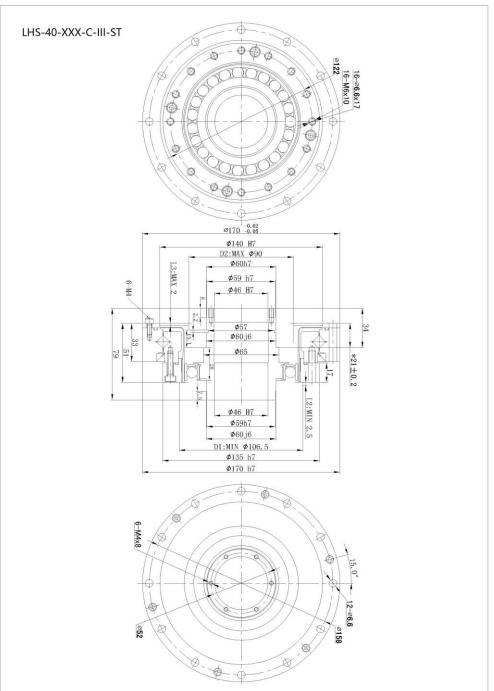












## **LHS-CL-III** series



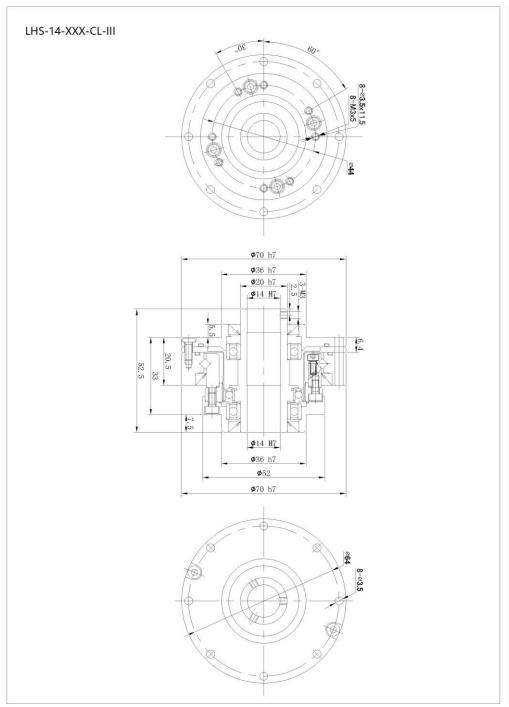
For LHS-CL-III series, there is a large-aperture hollow shaft hole in the middle of the cam of their wave generator, and a supporting bearing designed inside reducer. Characterized by full-sealing structure and easy installation, the series are very suitable for the occasions where threading needs running through the center of reducer.

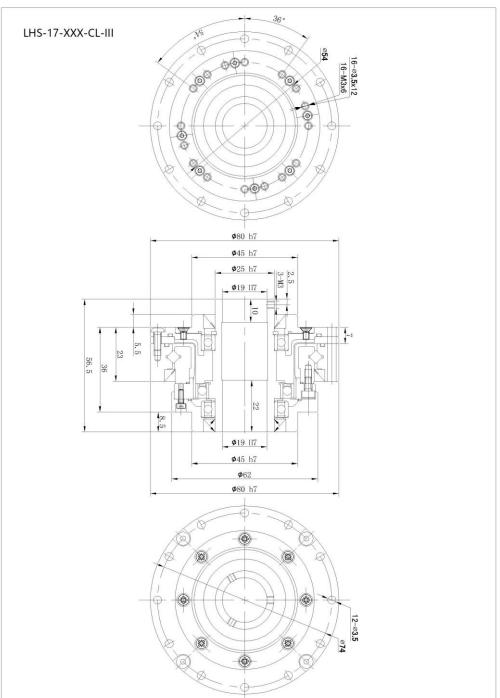


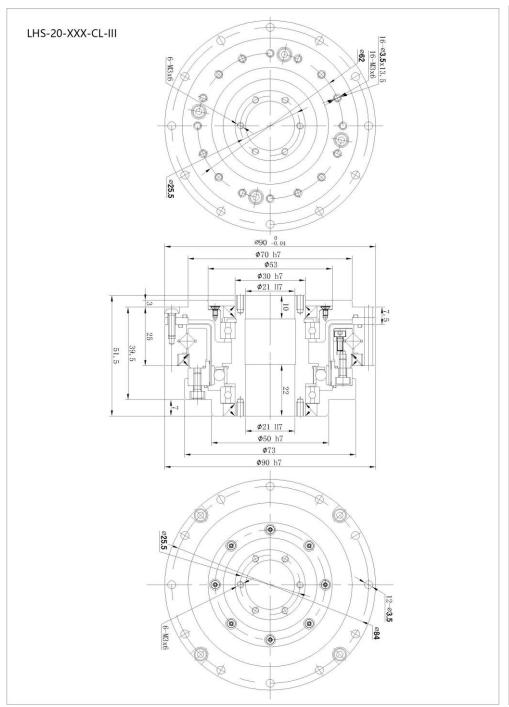
#### **Parameter Table**

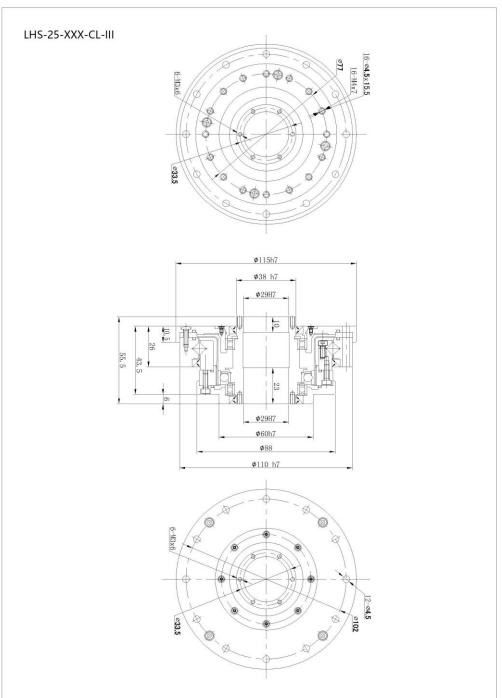
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	With Maximum Tension	Weight	Design Life
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	N	Kg	Hour
	30	3.8	8. 6	7.8	16			≤20			10000
14	50	5.1	17	6. 6	33	8000	3500	€20	≤77	0, 56	10000
	80	7.4	22	10.5	45			≤10		0.00	15000
	100	7. 4	27	10.5	51			≤10			15000
	30	8. 4	15. 2	11.5	29			≤20			10000
	50	15. 2	32	25	66			€20			10000
17	80	21	41	26	83	7000	3500	≤10	≤92	0.80	15000
	100	23	51	37	104			≤10			15000
	120	23	51	37	82			≪10			15000
	30	14	26	19	48			≤20			10000
	50	24	53	32	93			≤20			10000
20	80	32	70	45	121	6000	3500	≤10	≤136	1. 09	15000
20	100	38	78	47	140	0000	3500	≤10	~130	0.000	15000
	120	38	83	47	140			≤10			15000
	160	38	87	47	140			≤10			15000
	30	26	48	36	90			€20			10000
	50	37	93	52	177			≤20			10000
25	80	60	130	83	242	5500	3500	≤10		1, 70	15000
25	100	64	149	103	270	5500		≤10	<b>Q147</b>		15000
	120	64	159	103	289			≤10			15000
	160	64	167	103	298			≤10			15000
	30	51	95	71	190			≤20			10000
	50	72	205	103	363			≤20			10000
	80	112	289	159	540			≤10	≤154	3. 50	15000
32	100	130	316	205	615	4500	3500	≤10			15000
	120	130	335	205	652			≤10			15000
	160	130	353	205	652			≤10	-		15000
	50	130	382	186	652			€20			10000
	80	196	493	270	931			≤10			15000
40	100	252	540	353	1026	4000	3000	≤10	≤294	6. 35	15000
20.00	120	279	586	428	1121	3555		≤10			15000
	160	279	615	428	1121			≤10			15000
	50	233	679	333	1358			≤20			10000
	80	353	894	493	1767	3000 2500	<10 ≤10			15000	
50*	100	446	931	633	1957		2500	≤10	≤373	12.0	15000
50	120	502	1026	772	1957		(manna	≤10	(1/5555)	10000000000	15000
	160	502	1121	801	2328			≤10 ≤10			15000
	80	678	1828	951	3026			≪10 ≪10			15000
	100	860	1964	1309	3927			≪10 ≪10	-		15000
58*	120	921	2124	1470	4113	3000	2200	≪10 ≪10	≤1300	16. 5	15000
	160	921	2124	1470	4113			≤10 ≤10			15000

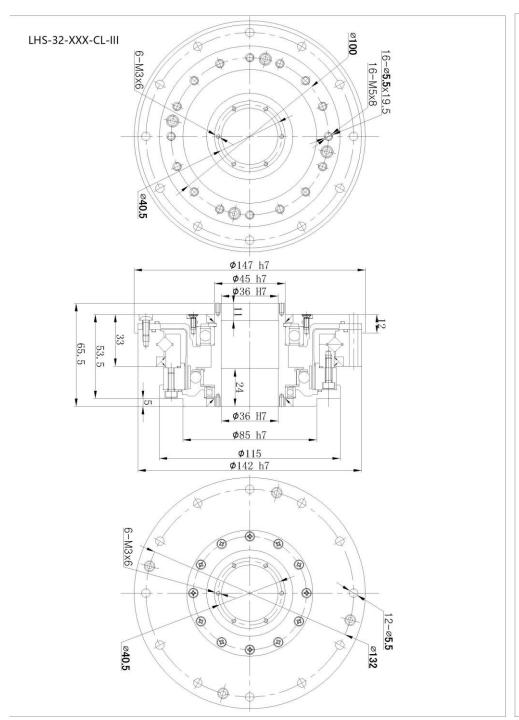
\* Consult factory

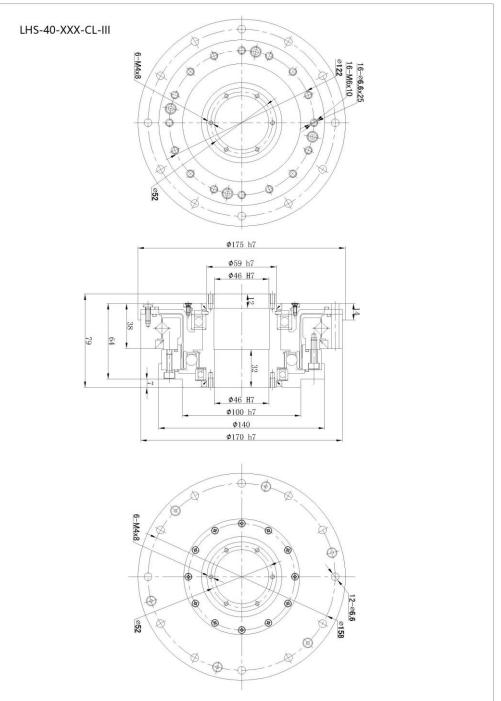












# **LHS-IV** series

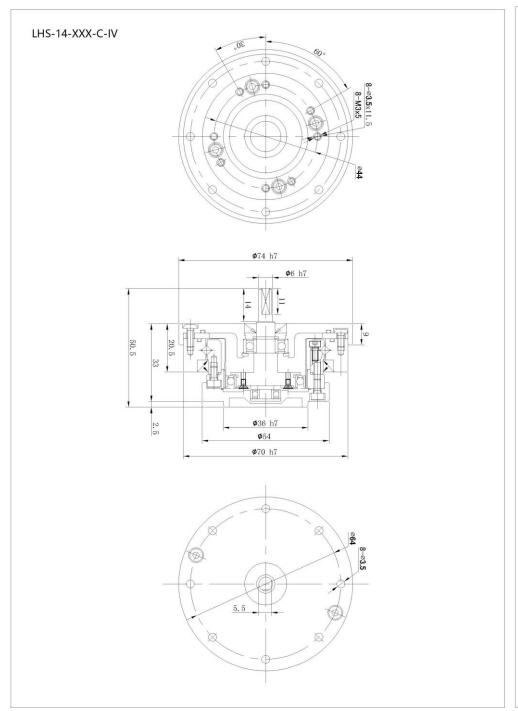


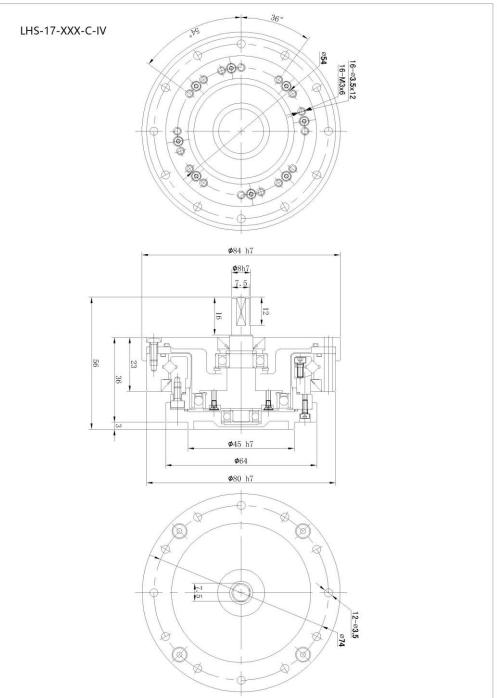
For LHS-IV series, the cam of their wave generator is provided with an input shaft; therefore, the series are very suitable for occasions where bevel gear or synchronous belt drive is needed at the input end.

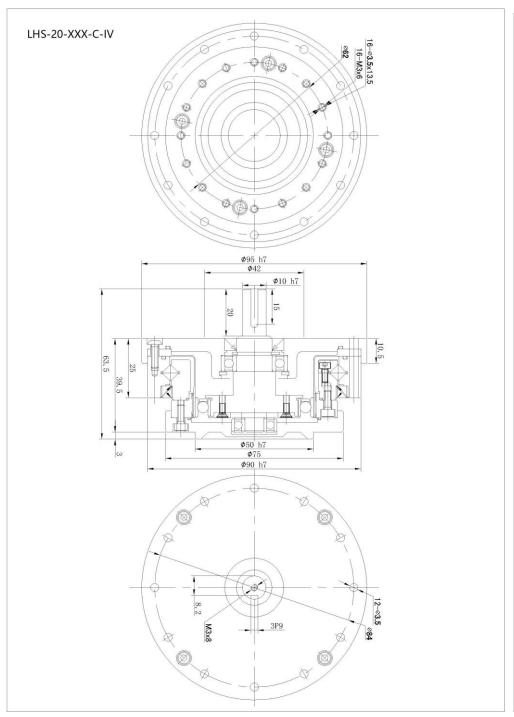


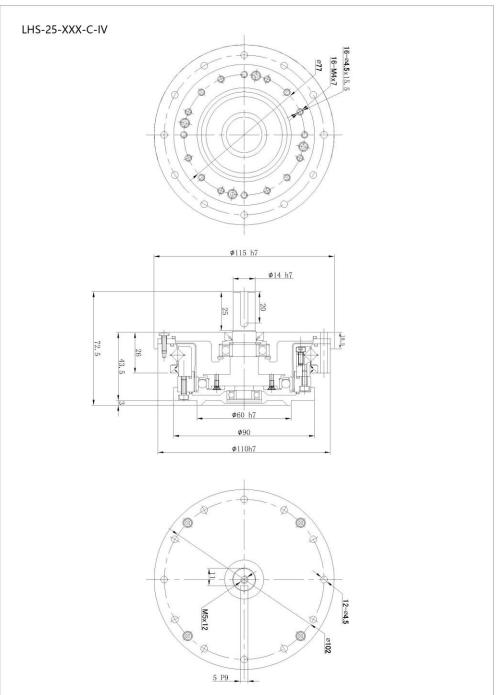
#### **Parameter Table**

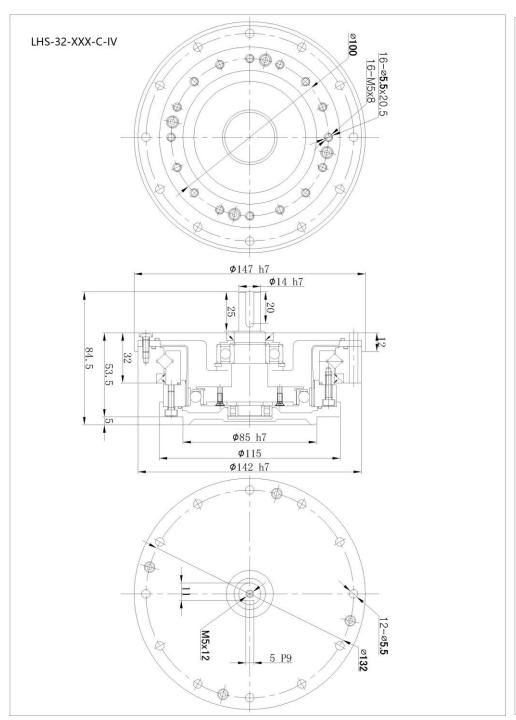
Ratio	Reduction Ratio	Rated Torque at 2000 <del>r/</del> min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	With Maximum Tension	Weight	Design Life
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	N	Kg	Hour
	30	3.8	8. 6	7. 8	16			≤20			10000
14	50	5. 1	17	6.6	33	8000	3500	≤20	≤26	0.65	10000
16031	80	7.4	22	10. 5	45			€10	175750	40.00	15000
	100	7.4	27	10. 5	51	ra .		≤10			15000
	30	8.4	15. 2	11.5	29			≤20			10000
	50	15. 2	32	25	66			≤20			10000
17	80	21	41	26	83	7000	3500	≤10	≤32	0. 92	15000
	100	23	51	37	104			≤10			15000
	120	23	51	37	82			≤10			15000
	30	14	26	19	48			≤20			10000
	50	24	53	32	93			≤20			10000
20	80	32	70	45	121	7000	0500	≤10 ≤10		1, 36	15000
ZU	100	38	78	47	140	6000	3500		≤58	1. 30	1500
	120	38	83	47	140			€10			1500
	160	38	87	47	140			≤10			15000
	30	26	48	36	90			≤20	≤71	2. 05	10000
	50	37	93	52	177			≤20			10000
25	80	60	130	83	242	5500	3500	€10			1500
25	100	64	149	103	270	5500	3300	≤10			15000
	120	64	159	103	289			≤10			1500
	160	64	167	103	298			≤10			15000
	30	51	95	71	190			≤20			10000
	50	72	205	103	363			≤20			1000
	80	112	289	159	540	0240200	2000	≤10			15000
32	100	130	316	205	615	4500	3500	≤10	≤114	4. 35	1500
	120	130	335	205	652			≤10	1		15000
	160	130	353	205	652			€10			15000
	50	130	382	186	652		≤20			10000	
	80	196	493	270	931			≤10	1		15000
40	100	252	540	353	1026	4000	3000	≤10	≤294	6. 45	1500
	120	279	586	428	1121			€10			15000
	160	279	615	428	1121	1		≤10	1		15000

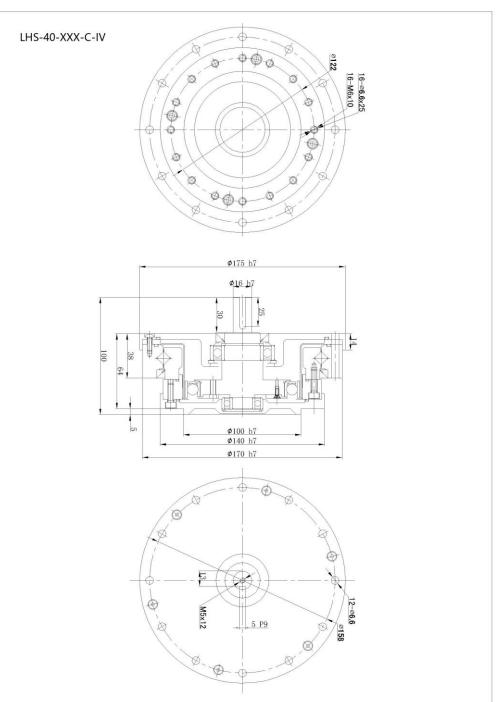














#### 苏州绿的谐波传动科技股份有限公司

Leader Harmonious Drive Systems Co.,Ltd

LHSG High-Torque Hollow-Shaft Flexspline
Strain Wave Gear
Product Introduction Manual



Leader Harmonious Drive Systems Co., Ltd TEL:0086-512-66362298/66560692 FAX:0086-512-66362325

E-mail: sales@leaderdrive.com

Add: No. 19 Muxu west Road, Mudu, Suzhou, P.R. China

Postal Code: 215101



# **LHSG-I series**



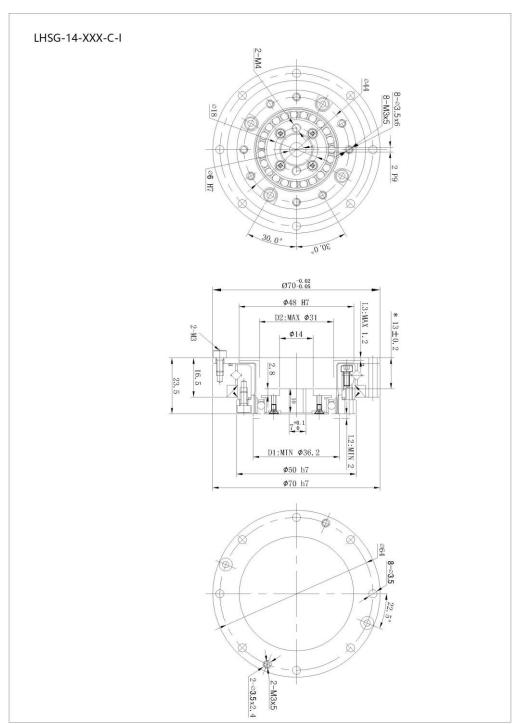
LHSG-I series are high-torque models which have the same structure, with LHS-I series. However, their torque bearing capacity is improved by 30% compared with LHS series.

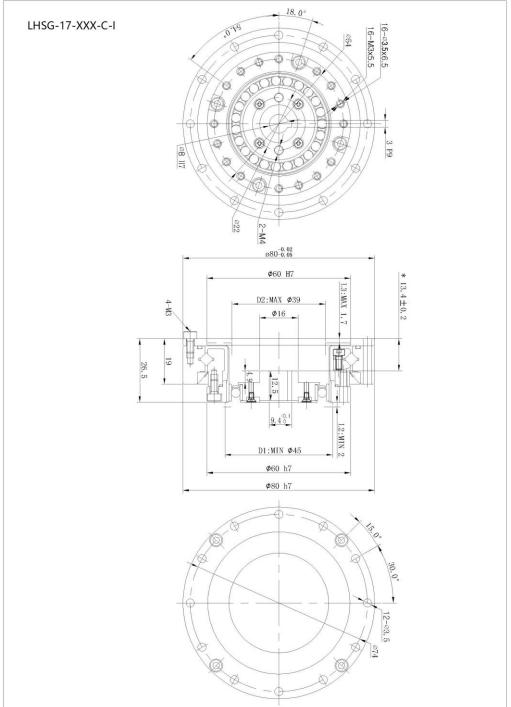


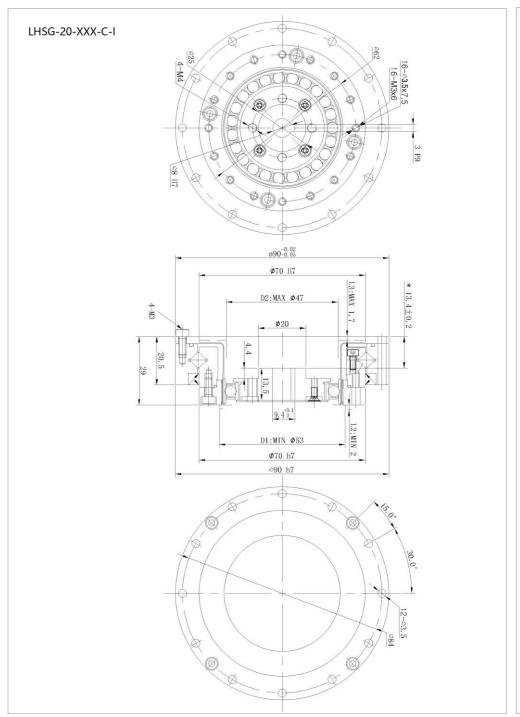
#### **Parameter Table**

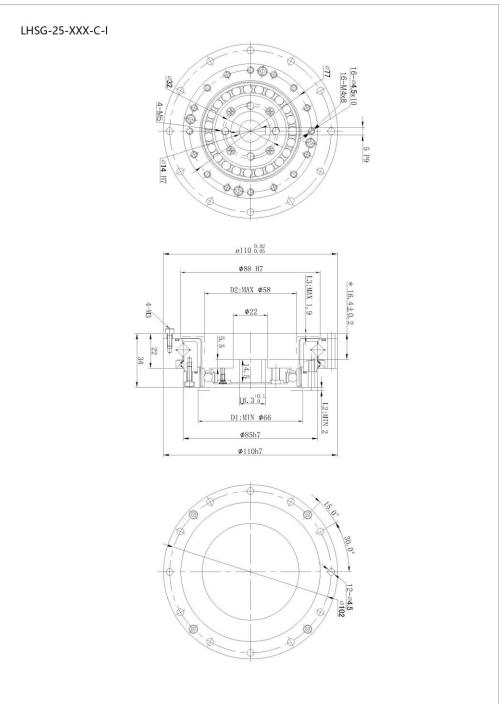
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Welght	Desigr Life
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	Kg	Hour
	50	6.6	23	8. 6	43			≤10		10000
14	80	9.6	29	13.5	57	8000	3500	≤10	0. 38	15000
	100	9.6	34	13.5	66			≤10		15000
	50	19.8	42	32	86			≤10		10000
17	80	27.5	53	33	108			≤10	1000000000	15000
100	100	30	66	49	134	7000	3500	≤10	0.56	15000
	120	30	66	49	107			≤10		15000
	50	32	69	42	121			≤10		10000
	80	42	91	58	158	1		≤10		15000
20	100	50	102	61	182	6000	3500	≤10	0. 76	15000
	120	50	108	61	182			≤10		15000
	160	50	113	61	182			≤10		15000
	50	48	121	68. 5	230			≤10		10000
	80	78	169	107	315			≤10		15000
25	100	84	194	133	351	5500	3500	≤10	1. 24	15000
	120	84	207	133	376			≤10		15000
	160	84	217	133	388			≤10		15000
	50	94	267	133	472			≤10		10000
	80	146	376	206	702			≤10		15000
32	100	169	411	267	800	4500	3500	≤10	2. 6	15000
	120	169	436	267	848			≤10		15000
	160	169	459	267	848			≤10		15000
	50	169	497	242	847			≤10		10000
	80	255	641	351	1210	1		≤10		15000
40	100	328	702	460	1334	4000	3000	≤10	5. 0	15000
	120	363	762	557	1458			≤10		15000
	160	363	800	557	1458	1		≤10		15000
	80	459	1163	642	2297			≤10		15000
	100	580	1211	823	2545	222	10.000	≤10		15000
50*	120	654	1334	1005	2545	3000	2500	≤10	9. 5	15000
	160	654	1458	1042	3025	1		≤10 ≤10		15000
	80	678	1828	951	3026			≤10		15000
880	100	860	1964	1309	3927	1		≤10	1021 2	15000
58*	120	921	2124	1470	4113	3000	2200	≤10	13.6	15000
	160	921	2722	1494	4236	1		≤10		15000

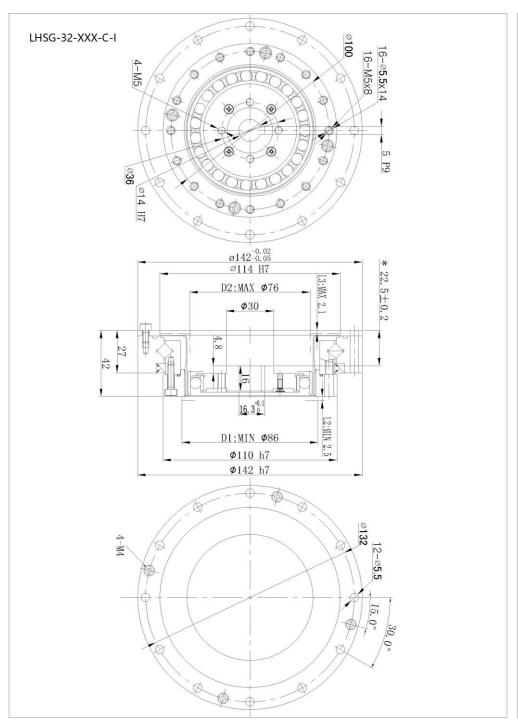
\* Consult factory

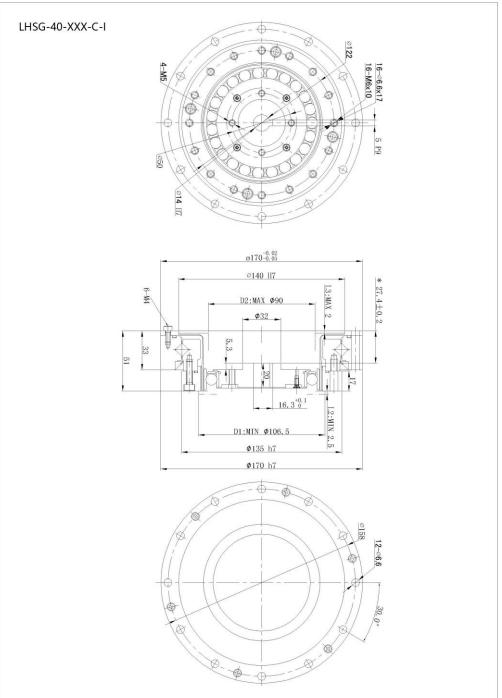












# **LHSG-II** series



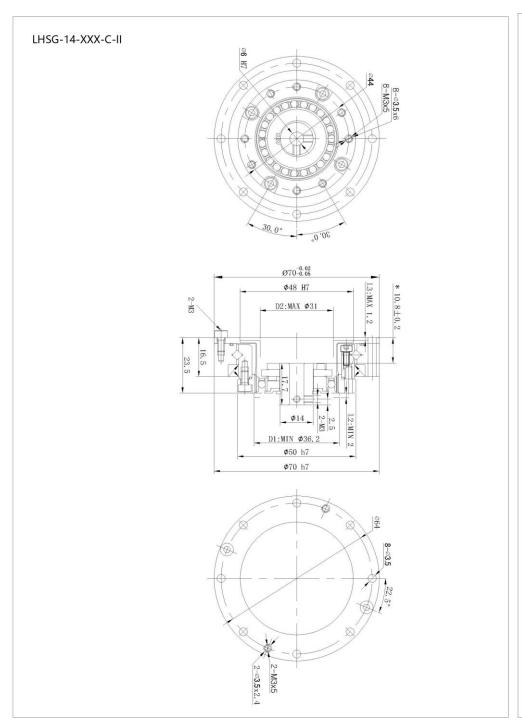
LHSG-II series are high-torque models which have the same structure, with LHS-II series. However, their torque bearing capacity is improved by 30% compared with LHS series.

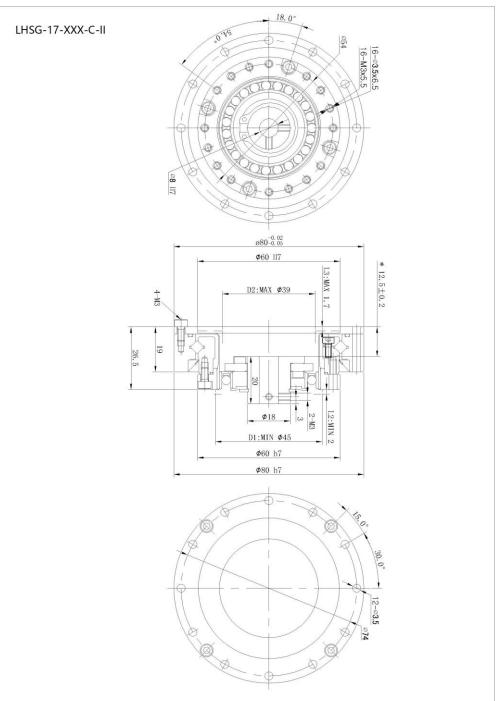


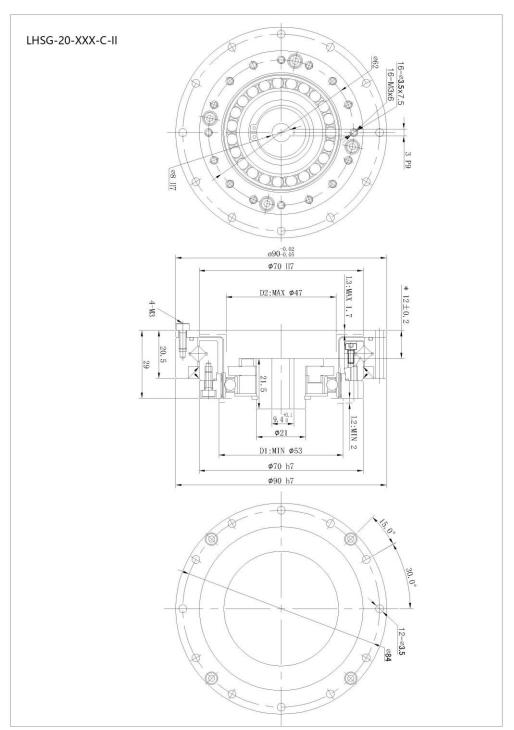
#### **Parameter Table**

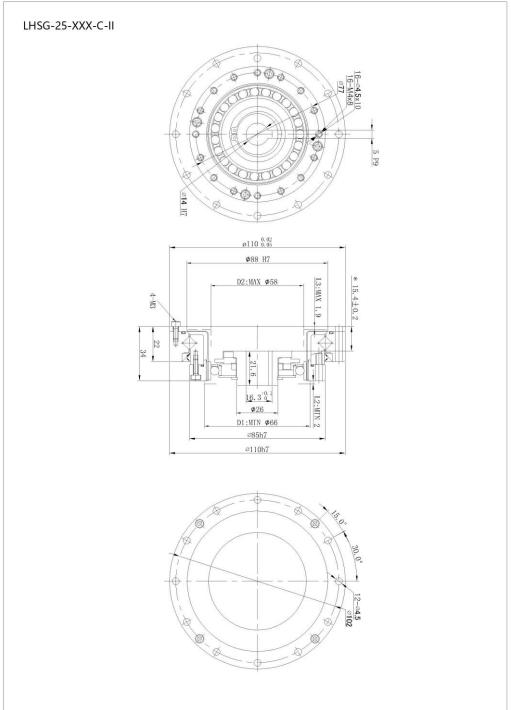
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	Weight	Design Life
Model No		Nm	Nm	Nm	Nm	r/mln	r/min	Arc sec	Kg	Hour
	50	6. 6	23	8.6	43			≤20		10000
14	80	9.6	29	13.5	57	8000	3500	≤20	0.38	15000
	100	9. 6	34	13.5	66			≤20		15000
	50	19. 8	42	32	86			≤20		10000
17	80	27. 5	53	33	108	7000	3500	≤20	0.56	15000
17	100	30	66	49	134	7000	3000	≤20	0.50	15000
	120	30	66	49	107			≤20		15000
	50	32	69	42	121			≤20		10000
	80	42	91	58	158			≤20		15000
20	100	50	102	61	182	6000	3500	≤20	0.76	15000
	120	50	108	61	182			≪20		15000
	160	50	113	61	182			≤20		15000
	50	48	121	68. 5	230			≤20		10000
	80	78	169	107	315			€20		15000
25	100	84	194	133	351	5500	3500	€20	1. 24	15000
	120	84	207	133	376			≤20		15000
	160	84	217	133	388			≤20		15000
	50	94	267	133	472			≤20		10000
	80	146	376	206	702			€20		15000
32	100	169	411	267	800	4500	3500	≤20	2.6	15000
	120	169	436	267	848			≤20		15000
	160	169	459	267	848			≤20		15000
	50	169	497	242	847			≤20		10000
	80	255	641	351	1210			≤20		15000
40	100	328	702	460	1334	4000	3000	≤20	5.0	15000
	120	363	762	557	1458			≤20		15000
	160	363	800	557	1458			≤20		15000
	80	459	1163	642	2297			≤10		15000
50*	100	580	1211	823	2545	2000	2500	≤10	9.5	15000
DUT	120	654	1334	1005	2545	3000	2000	≤10	7. 0	15000
	160	654	1458	1042	3025			≤10		15000
	80	678	1828	951	3026			≤10		15000
FOA	100	860	1964	1309	3927			9		15000
58*	120	921	2124	1470	4113	3000	2200	≤10	13. 6	15000
	160	921	2722	1494	4236			≤10	-	15000

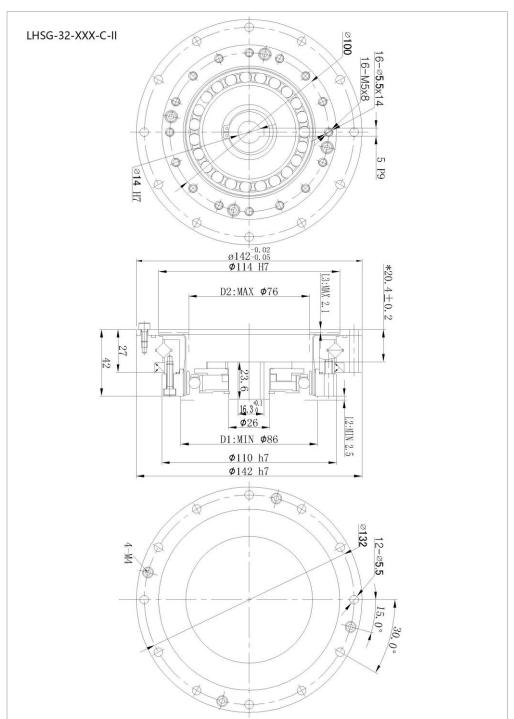
\* Consult factory

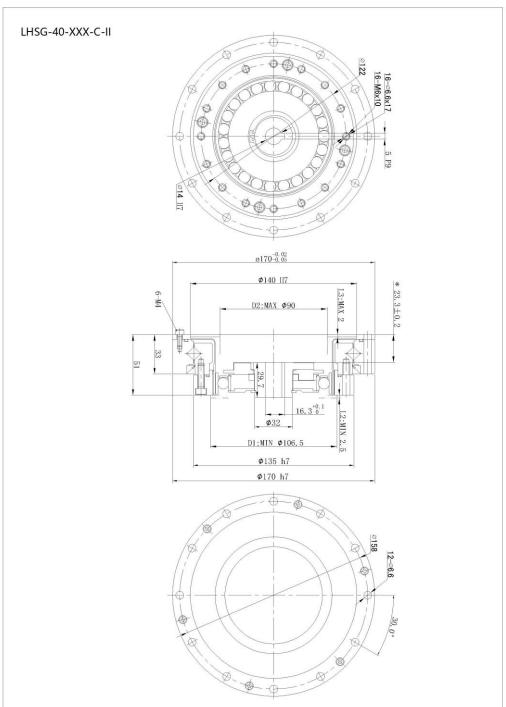












# **LHSG-III** series



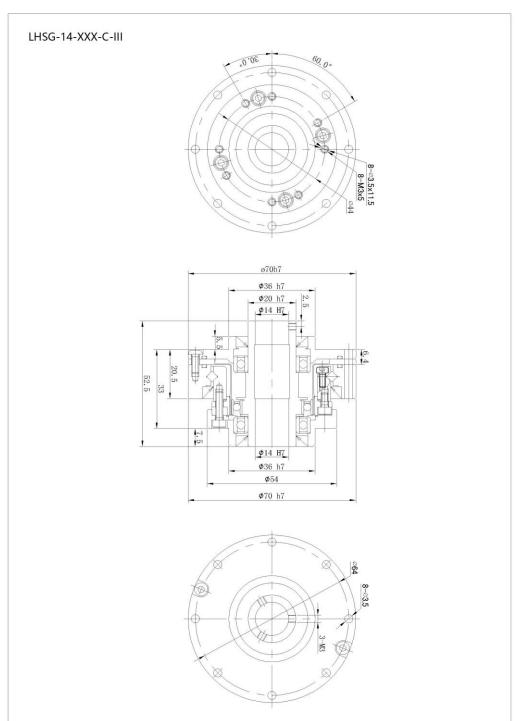
LHSG-III series are high-torque models which have the same structure, with LHS-III series. However, their torque bearing capacity is improved by 30% compared with LHS series.

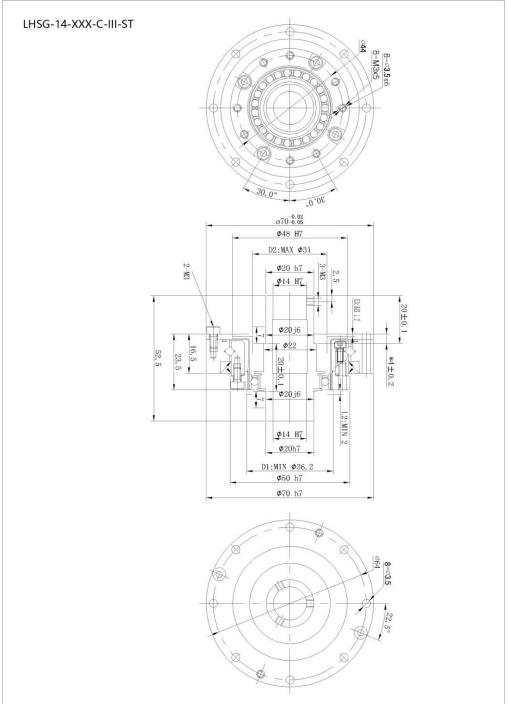


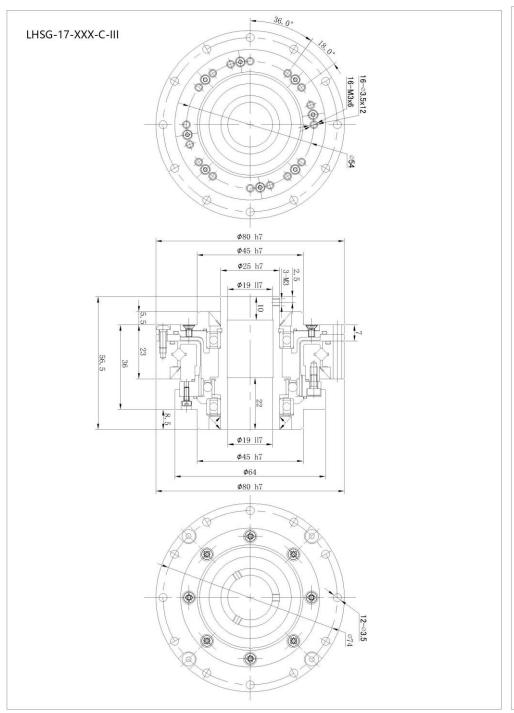
#### **Parameter Table**

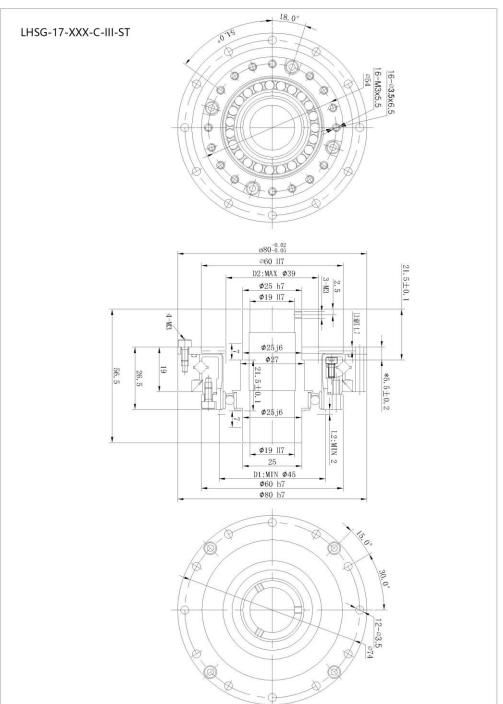
Item	Reduction Ratio	Rated Torque at 2000r/min	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed	Allowable Average Input Speed	Back lash	With Maximum Tension	Weight	Design Life
Model No		Nm	Nm	Nm	Nm	r/min	r/min	Arc sec	N	Kg	Hour
	50	6. 6	23	8. 6	43			≤20			10000
14	80	9. 6	29	13. 5	57	8000	3500	≤10	€77	0. 72	15000
	100	9. 6	34	13. 5	66			≤10			15000
	50	19. 8	42	32	86			€20			10000
17	80	27. 5	53	33	108	7000	3500	≤10	≤92	1.0	15000
	100	30	66	49	134			≤10			15000
	120	30	66	49	107			≤10			15000
	50	32	69	42	121			≤20			10000
	80	42	91	58	158			≤10			15000
20	100	50	102	61	182	6000	3500	≤10	≤136	1. 38	15000
	120	50	108	61	182			≤10			15000
	160	50	113	61	182			≤10			15000
	50	48	121	68. 5	230			≤20			10000
	80	78	169	107	315			≤10			15000
25	100	84	194	133	351	5500	3500	≤10	≤147	2. 15	15000
	120	84	207	133	376		0000	≤10			15000
	160	84	217	133	388			≤10			15000
	50	94	267	133	472			≤20			10000
	80	146	376	206	702	1		≤10			15000
32	100	169	411	267	800	4500	3500	≤10	≤154	4. 3	15000
	120	169	436	267	848	1000000000		≤10			15000
	160	169	459	267	848	1		≤10			15000
	50	169	497	242	847			≤10	7		10000
	80	255	641	351	1210	1		≤10			15000
40	100	328	702	460	1334	4000	3000	≤10	≤294	7.8	15000
	120	363	762	557	1458			≤10			15000
	160	363	800	557	1458			≤10			15000
	80	459	1163	641	2297			≤10			15000
50*	100	580	1211	823	2545	3000	2500	≤10	≤373	14.5	15000
JUT	120	654	1334	1004	2545	0000	2500	≤10	~500	14.5	15000
	160	654	1458	1041	3025			≤10 ≤10			15000
	80	678	1828	951	3026			≤10			15000
58*	100	860	1964	1309	3927	3000	2200	≤10	<b>≤1300</b>	20. 0	15000
00°	120	921	2124	1470	4113	\$000	2200	≤10	≈130U	20, U	15000
	160	921	2272	1494	4236			≤10			15000

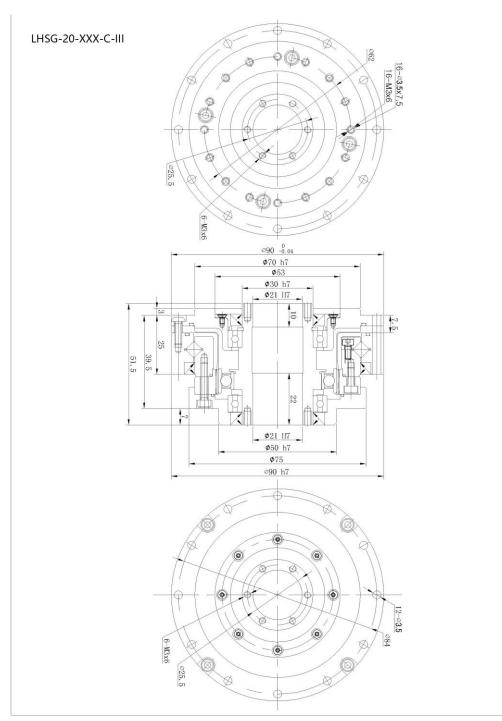
\* Consult factory

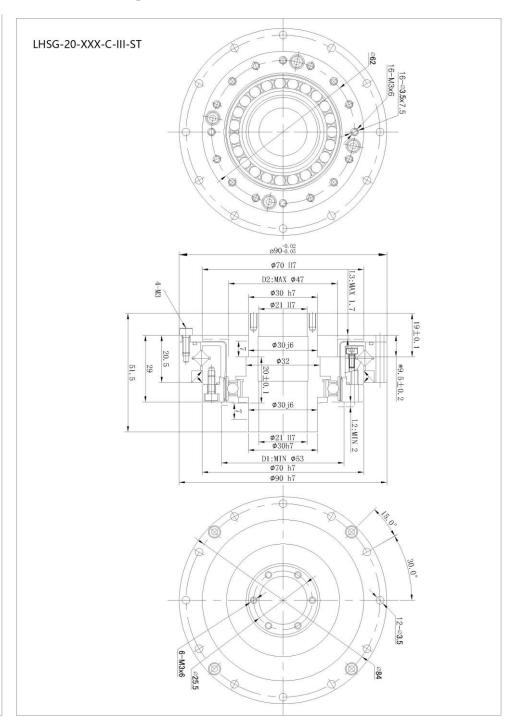


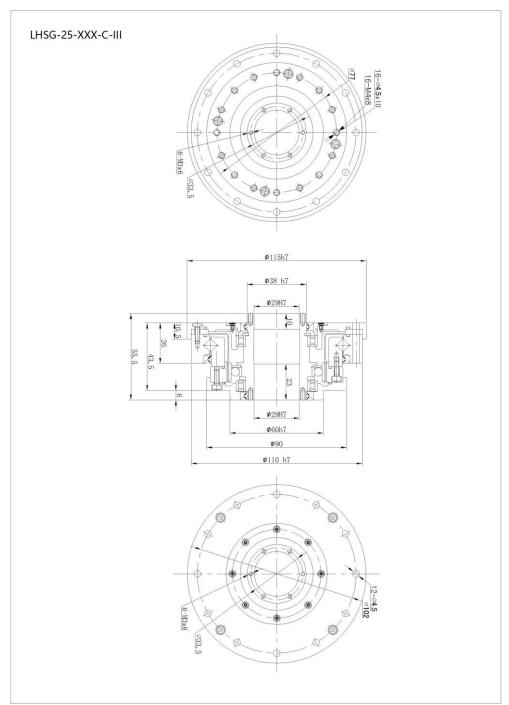


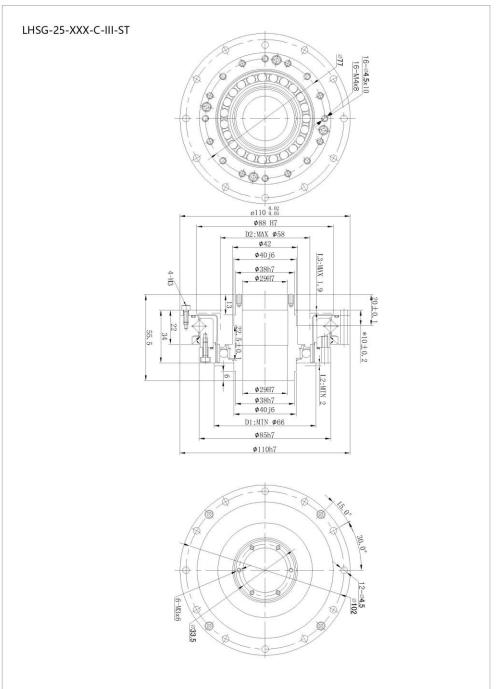


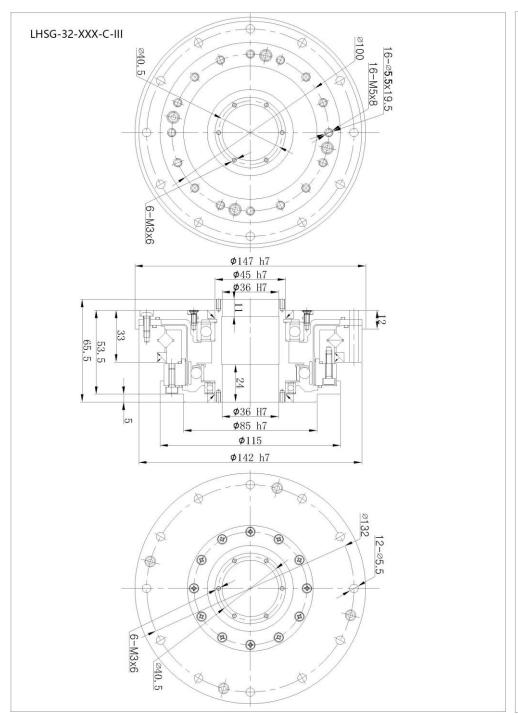


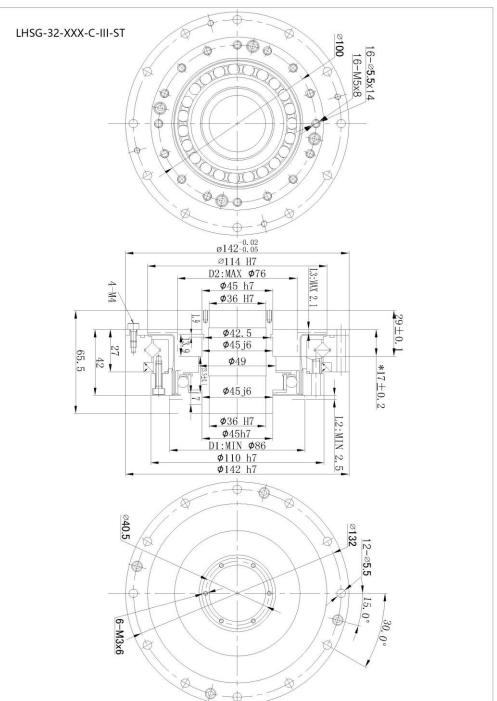


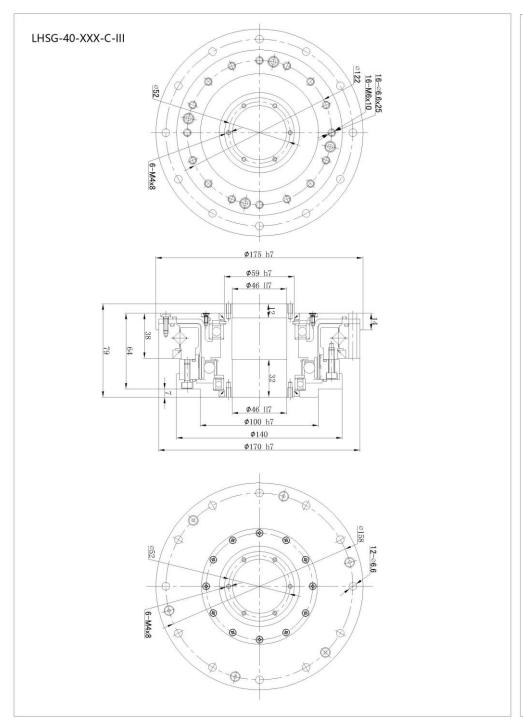


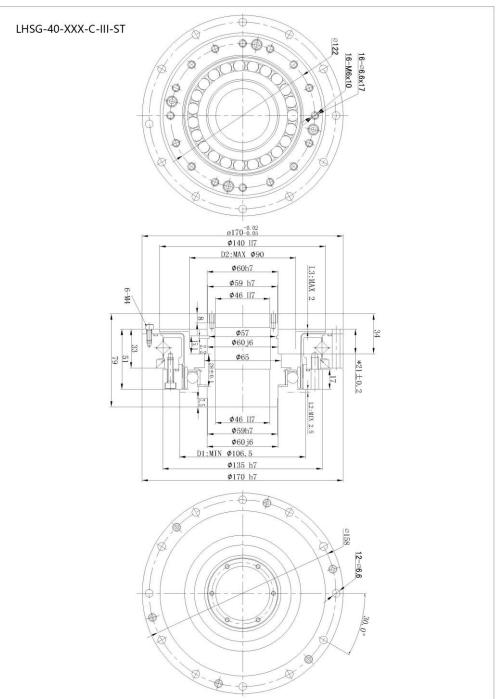


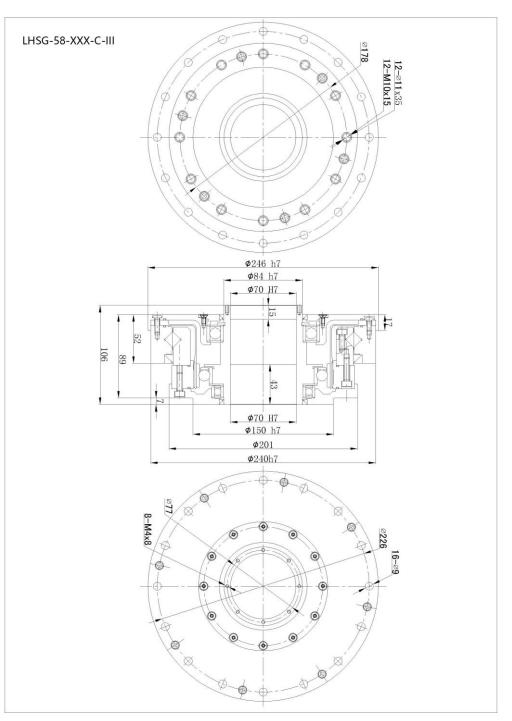












# **LHSG-CL-III** series



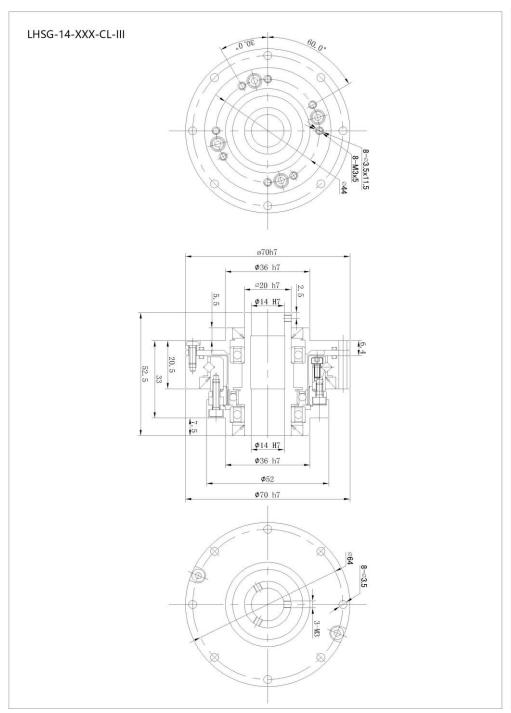
LHSG-CL-III series are high-torque models which have the same structure, with LHS-CL-III series. However, their torque bearing capacity is improved by 30% compared with LHS series.

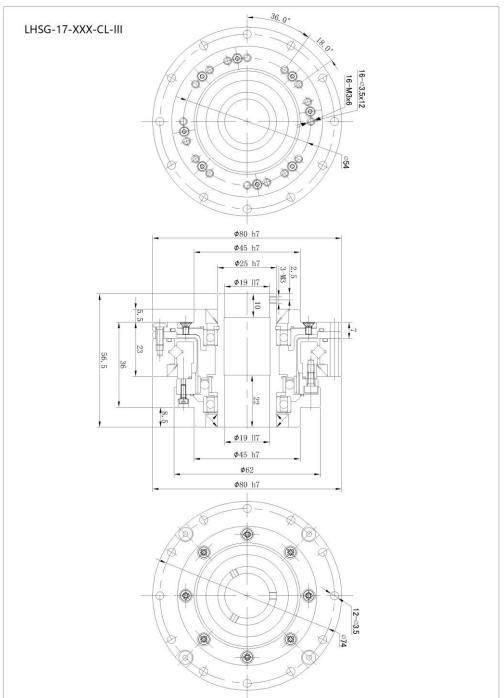


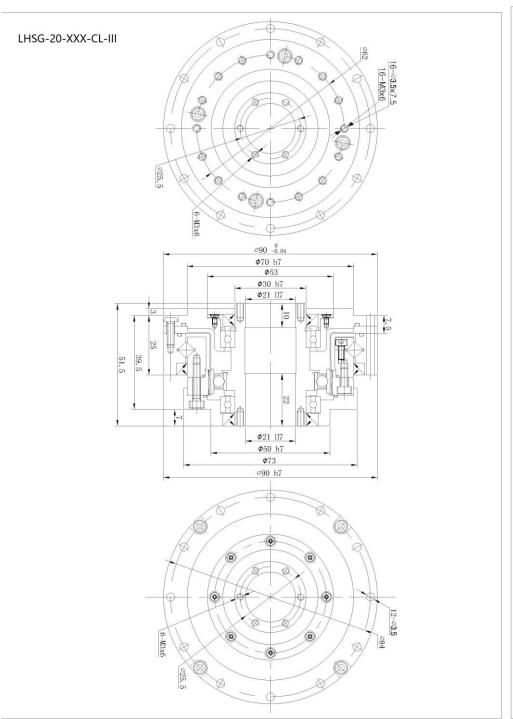
#### **Parameter Table**

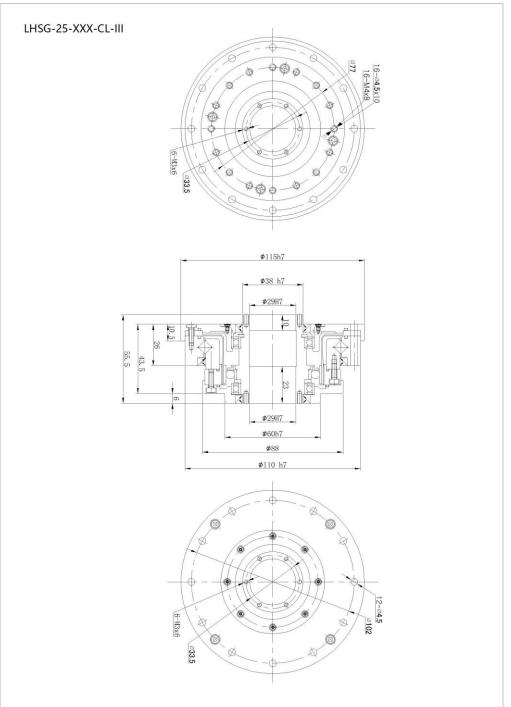
Item  Model No	Reduction Ratio	Rated Torque at 2000r/min Nm	Allowable Peak Torque at Start and Stop	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed r/min	Allowable Average Input Speed	Back lash Arc sec	With Maximum Tension N	Weight Kg	Design Life Hour
80	9. 6	29	13.5	57	≤10	15000					
100	9. 6	34	13.5	66	≤10	15000					
17	50	19.8	42	32	86	7000	3500	≤10	≤92	0. 80	10000
	80	27. 5	53	33	108			≤10			15000
	100	30	66	49	134			≤10			15000
	120	30	66	49	107			≤10			15000
20	50	32	69	42	121	6000	3500	≤10	≤136	1.09	10000
	80	42	91	58	158			≤10			15000
	100	50	102	61	182			≤10			15000
	120	50	108	61	182			≤10			15000
	160	50	113	61	182			≤10			15000
25	50	48	121	68. 5	230	5500	3500	≤10	≤147	1. 70	10000
	80	78	169	107	315			≤10			15000
	100	84	194	133	351			≤10			15000
	120	84	207	133	376			≤10			15000
	160	84	217	133	388			€10			15000
32	50	94	267	133	472	4500	3500	≤10	≤154	3. 50	10000
	80	146	376	206	702			≤10			15000
	100	169	411	267	800			≤10			15000
	120	169	436	267	848			≤10			15000
	160	169	459	267	848			≤10			15000
40	50	169	497	242	847	4000	3000	≤10	≤294	6. 35	10000
	80	255	641	351	1210			≤10			15000
	100	328	702	460	1334			≤10			15000
	120	363	762	557	1458			€10			15000
	160	363	800	557	1458			≤10			15000
50*	80	459	1163	641	2297	3000	2500	≤10	≤373	12. 0	15000
	100	580	1211	823	2545			≤10			15000
	120	654	1334	1004	2545			€10			15000
	160	654	1458	1041	3025			≤10			15000
58*	80	678	1828	951	3026	3000	2200	€10	<b>≤</b> 1300	16.5	15000
	100	860	1964	1309	3927			<b>≤10</b>			15000
	120	921	2124	1470	4113			≤10			15000
	160	921	2272	1494	4236			≤10			15000

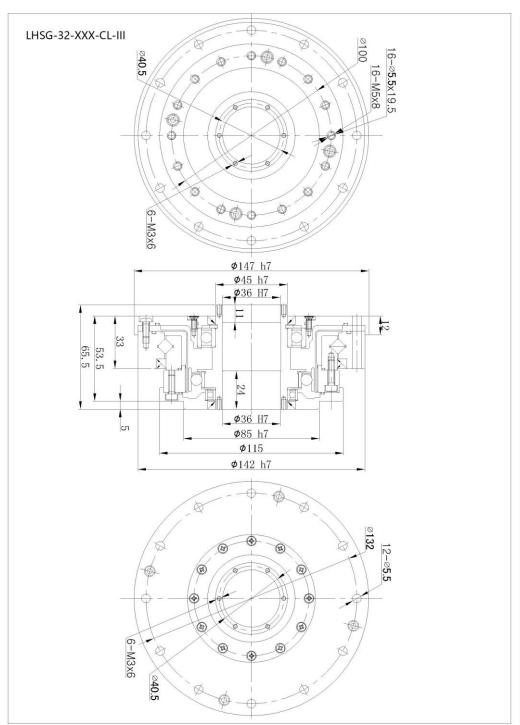
\* Consult factory

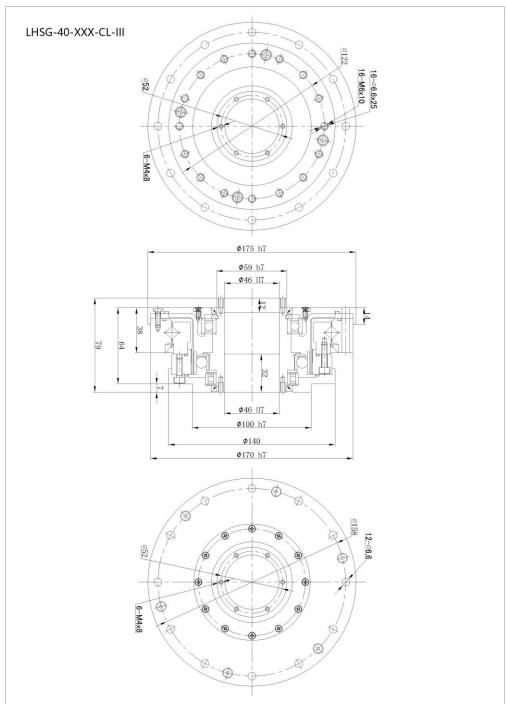












## **LHSG-IV** series



LHSG-IV series are high-torque models which have the same structure, with LHS-IV series. However, their torque bearing capacity is improved by 30% compared with LHS series.



#### **Parameter Table**

Item  Model No	Reduction Ratio	Rated Torque at 2000r/mln Nm	Allowable Peak Torque at Start and Stop  Nm	Allowable Average Torque	Allowable Maximum Momentary Torque	Maximum Input Speed r/min	Allowable Average Input Speed r/mln	Back lash Arc sec	With Maximum Tension	Weight	Design Life Hour
14	80	9. 6	29	13.5	57	≤10	15000				
	100	9.6	34	13.5	66	≤10	15000				
	50	19.8	42	32	86	7000	3500	≤10	<b>≤32</b>	0. 92	10000
17	80	27.5	53	33	108			≤10			15000
	100	30	66	49	134			≤10			15000
	120	30	66	49	107			≤10			15000
	50	32	69	42	121	6000	3500	≤10	≤58	1. 36	10000
	80	42	91	58	158			≤10			15000
20	100	50	102	61	182			≤10			15000
	120	50	108	61	182			≤10			15000
	160	50	113	61	182			≤10			15000
	50	48	121	68. 5	230	5500	3500	≤10	€71	2. 05	10000
25	80	78	169	107	315			≤10			15000
	100	84	194	133	351			≤10			15000
	120	84	207	133	376			≤10			15000
	160	84	217	133	388			≤10			15000
32	50	94	267	133	472	4500	3500	≤10	≤114	4. 35	10000
	80	146	376	206	702			≤10			15000
	100	169	411	267	800			≤10			15000
	120	169	436	267	848			≤10			15000
	160	169	459	267	848			€10			15000
	50	169	497	242	847	4000	3000	≤10	≤294	7.9	10000
40	80	255	641	351	1210			€10			15000
	100	328	702	460	1334			≤10			15000
	120	363	762	557	1458			≤10			15000
	160	363	800	557	1458			≤10			15000

