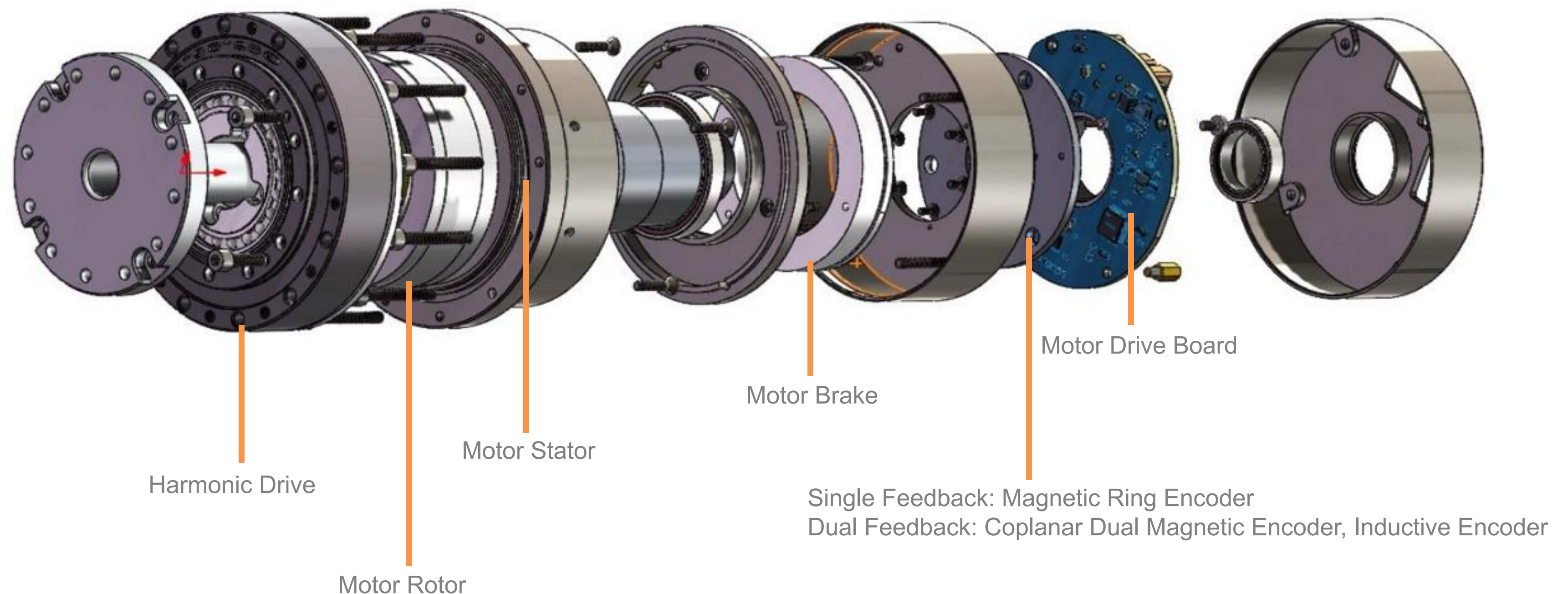


Suzhou Honpine Precision Industry Co., Ltd.

Integrated Joint Module Selection Guide



The information contained herein is a general product overview and is subject to change without notice as part of ongoing product improvement. Thank you for your understanding.

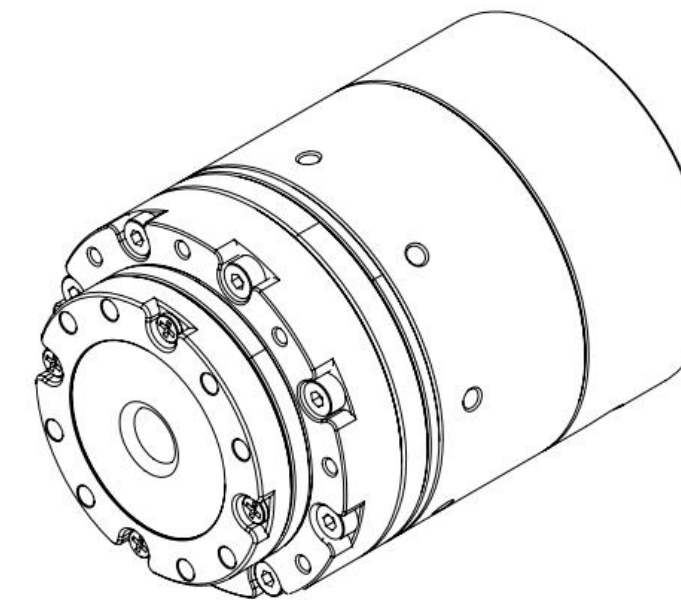
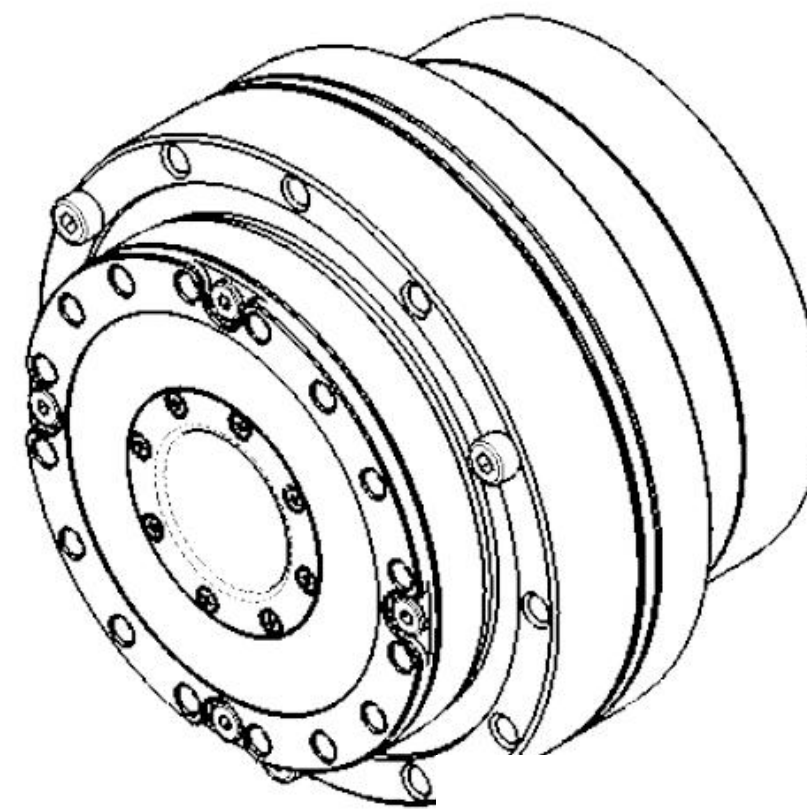
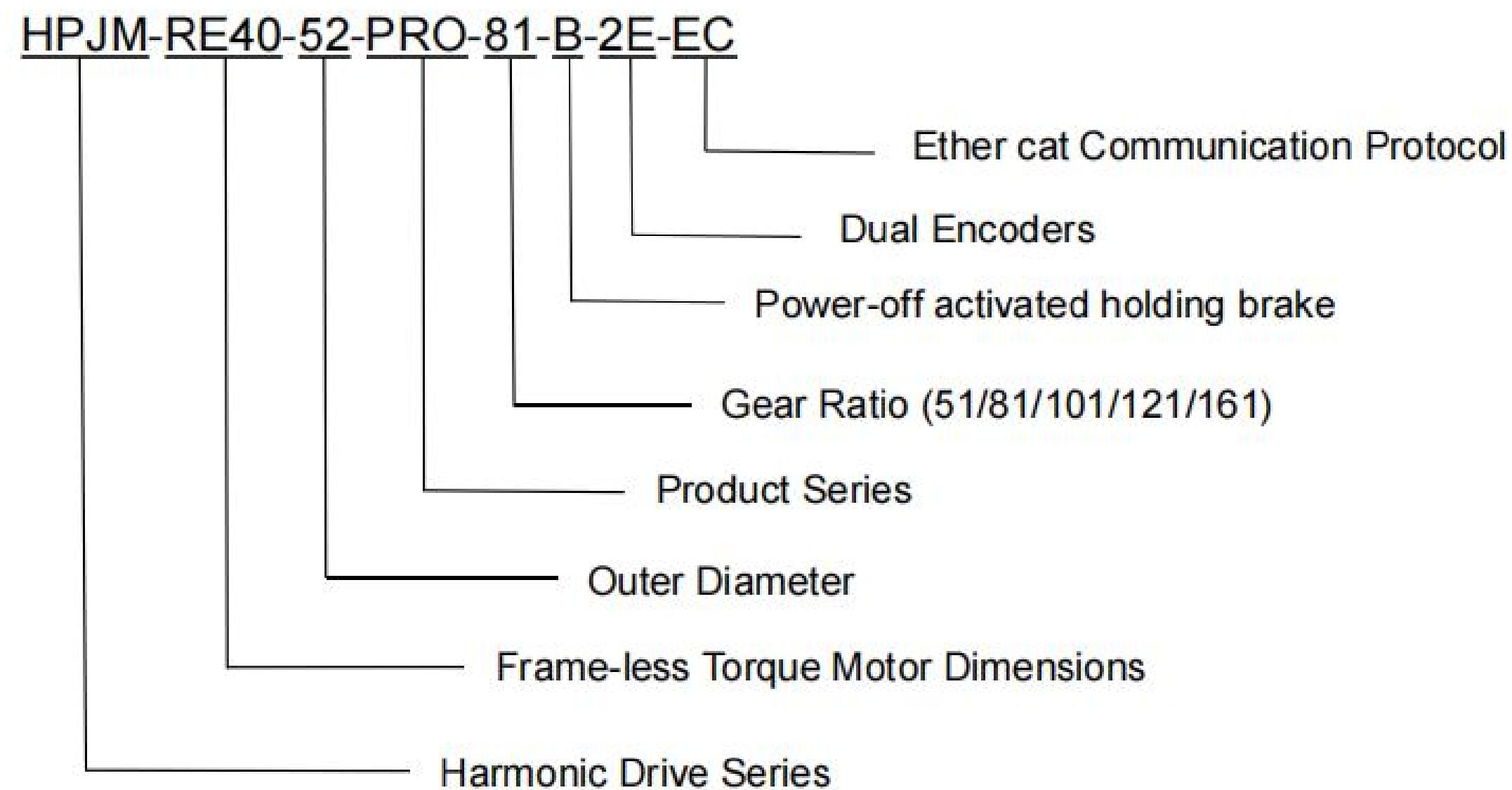
Product Catalog

1. Specifications			---Page 01
2.HPJM-RE30-40-PRO-XXX-B-2E-EC	Dimension: ø 40x80	Torque: 1.8~3.3N·m	---Page 02
3.HPJM-RE40-52-PRO-XXX-B-2E-EC	Dimension: ø 52x85	Torque: 3.5~8.9N·m	---Page 03
4.HPJM-RE50-60-PRO-XXX-B-2E-EC	Dimension: ø 60x85	Torque: 6.6~13.5N·m	---Page 04
5.HPJM-RE50-70-PRO-XXX-B-2E-EC	Dimension: ø 70x95	Torque: 6.6~13.5N·m	---Page 05
6.HPJM-RE60-70-PRO-XXX-B-2E-EC	Dimension: ø 70x95	Torque: 19.8~49N·m	---Page 06
7.HPJM-RE60-80-PRO-XXX-B-2E-EC	Dimension: ø 80x95	Torque: 19.8~49N·m	---Page 07
8.HPJM-RE70-80-PRO-XXX-B-2E-EC	Dimension: ø 80x95	Torque: 32~61N·m	---Page 08
9.HPJM-RE70-90-PRO-XXX-B-2E-EC	Dimension: ø 90x95	Torque: 32~61N·m	---Page 09
10.HPJM-RE80-97-PRO-XXX-B-2E-EC	Dimension: ø 97x110	Torque: 48~133N·m	---Page 10
11.HPJM-RE80-110-PRO-XXX-B-2E-EC	Dimension: ø 110x110	Torque: 48~133N·m	---Page 11
12.HPJM-RE100-120-PRO-XXX-B-2E-EC	Dimension: ø 120x130	Torque: 94~267N·m	---Page 12
13.HPJM-RE100-142-PRO-XXX-B-2E-EC	Dimension: ø 142x130	Torque: 94~267N·m	---Page 13
14.HPJM-RE100-145-PRO-XXX-B-2E-EC	Dimension: ø 145x160	Torque: 169~557N·m	---Page 14
15.HPJM-RE110-170-PRO-XXX-B-2E-EC	Dimension: ø 170x160	Torque: 169~557N·m	---Page 15
16.Brake Torque and Main Bearing Load Parameters Table			---Page 16

P/N Interpretation

The standard communication protocol is CAN bus (supporting both CANopen and proprietary CAN). The brake (B), dual feedback (2E), and EtherCAT (EC) communication are optional features.

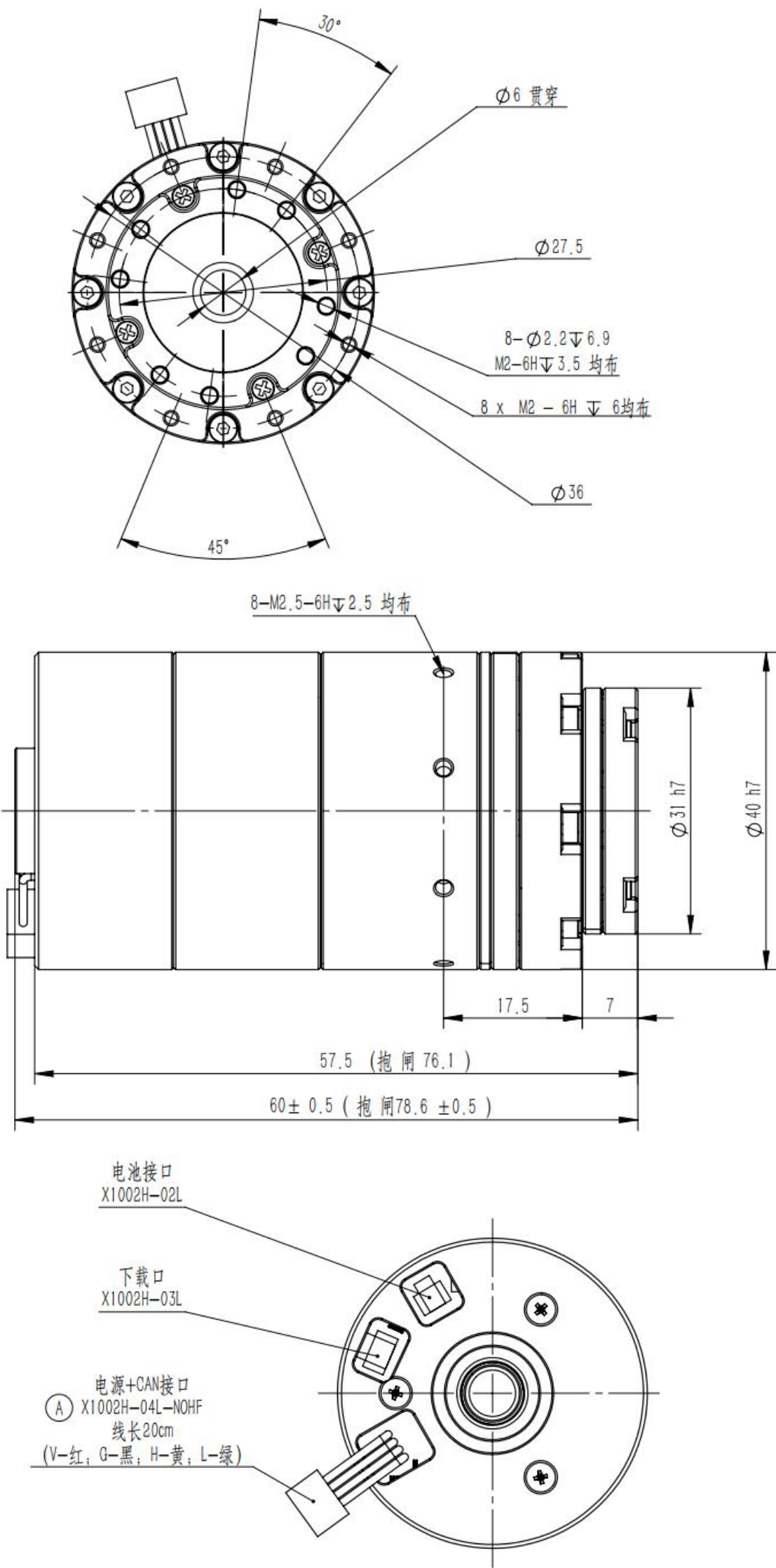
Take model HPJM-RE40-52-PRO-81-B-2E-EC as an example



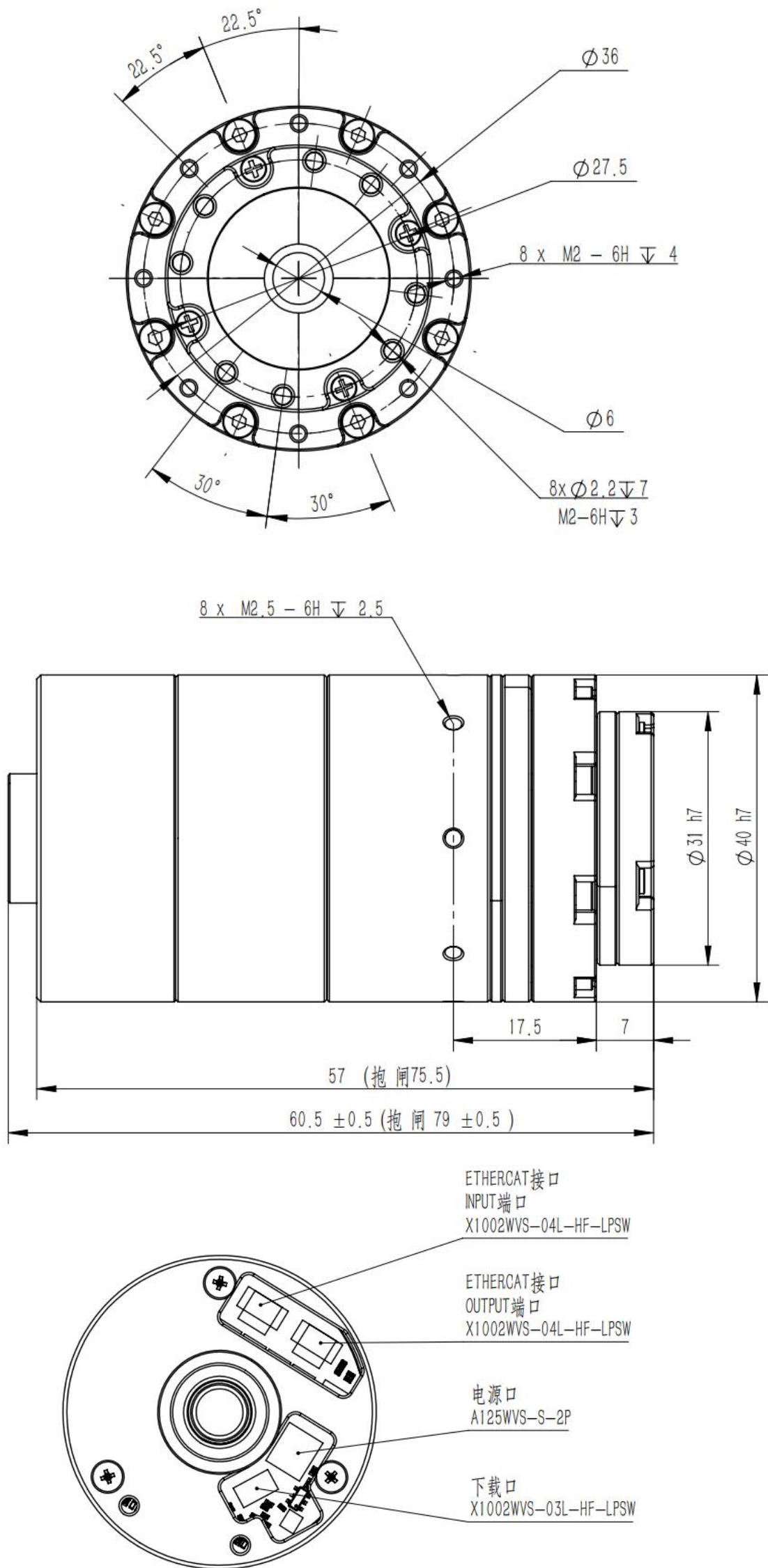
Important Precautions:

- ① Never operate with overvoltage or overload.
- ② Never disassemble the motor without authorization.
- ③ Ensure installation within the effective thread depth.
- ④ Avoid stalling or emergency braking at high speeds.
- ⑤ Do not hot-plug the motor while it is powered.

Single Encoder Version



Dual Encoders Version

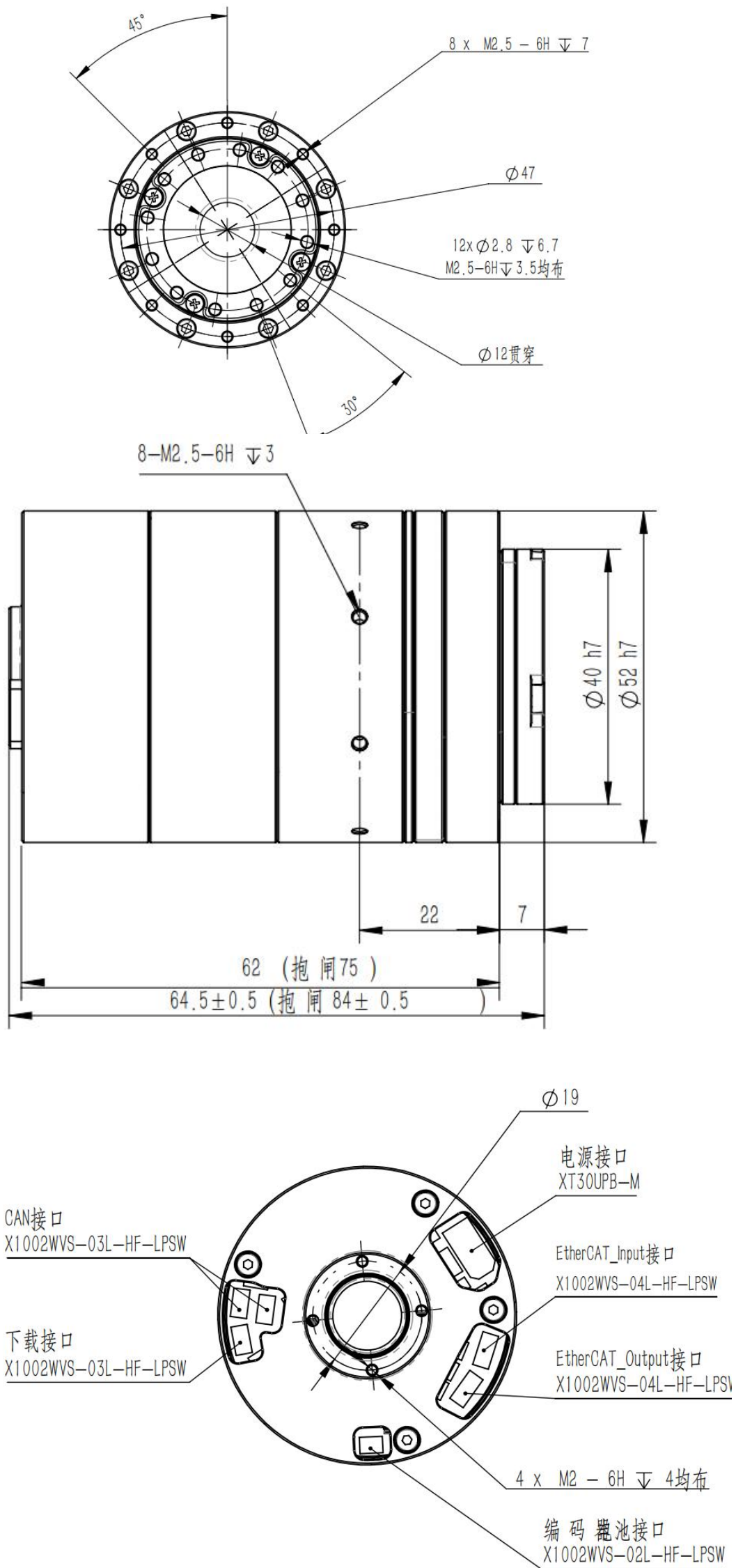
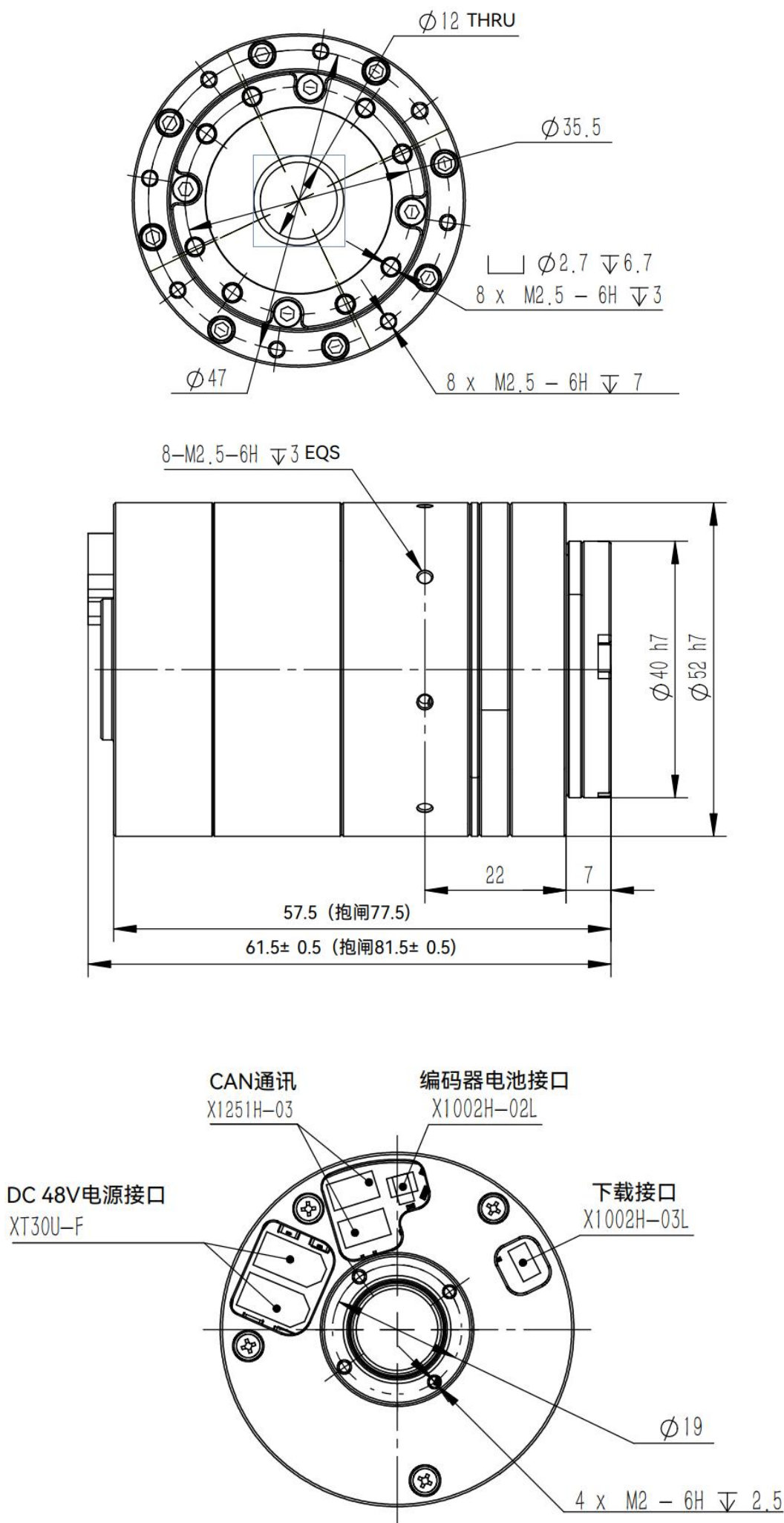


Parameters

Reduction Ratio	51	101
Peak Torque (start/stop) N·M	3.3	4.8
Max. Allowable Average Load Torque N·M	2.3	3.3
Rated Torque N·M	1.8	2.4
Peak Speed RPM	118	59
Rated Speed RPM	90	45
Backlash Arcsec	40	40
Motor Power W	36W	
Max. Continuous Current A	3A	
Rated Current A	1A	
Motor Torque Constant N·m/A	0.024 N·m/A	
Communication Protocol	Single Encoder CAN/CANopen	Dual Encoders CAN/Ethercat
Through Hole $\varnothing$ (mm)	6	6
Rotor Inertia $g \cdot cm^2$	27.4	23.73
Rotor Inertia (with Brake) $g \cdot cm^2$	45.1	28.15

Single Encoder Version

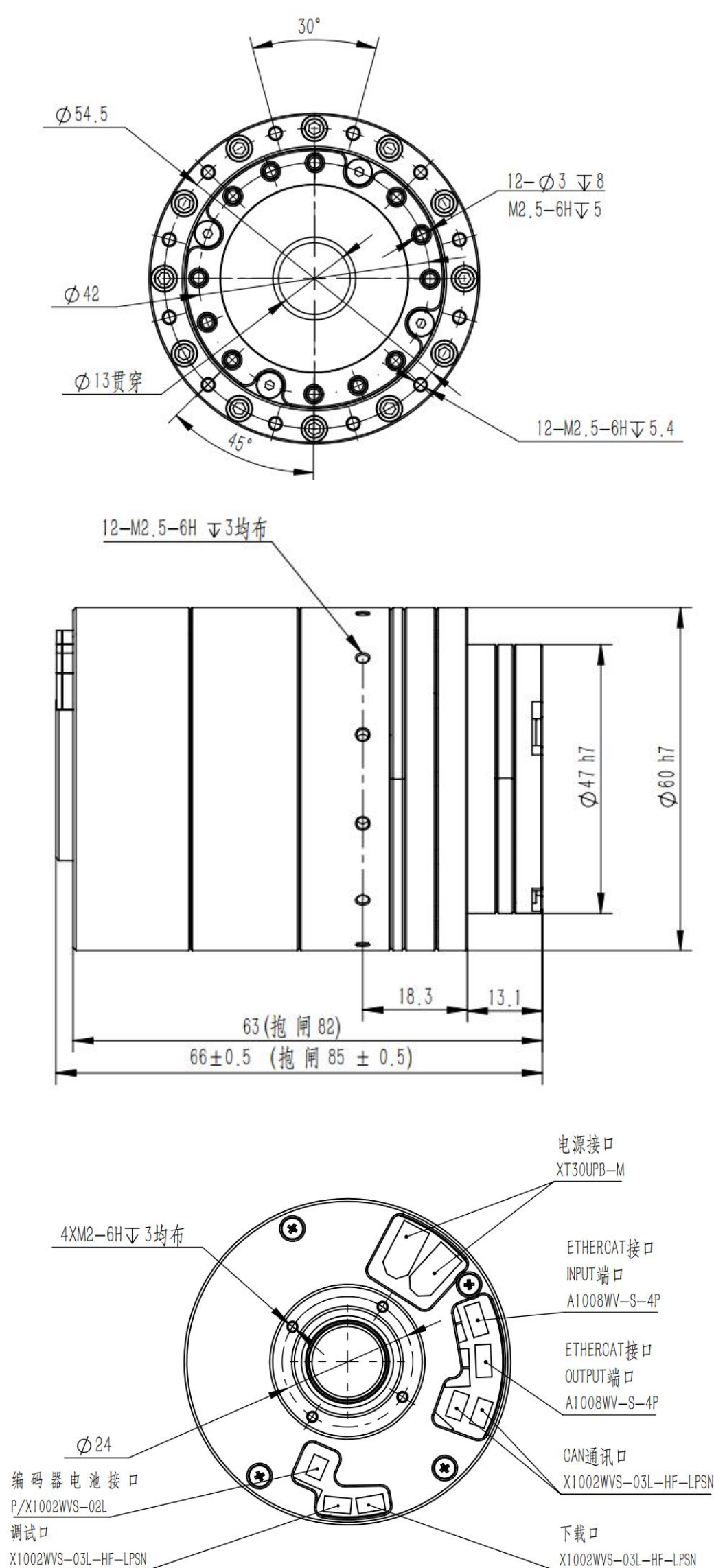
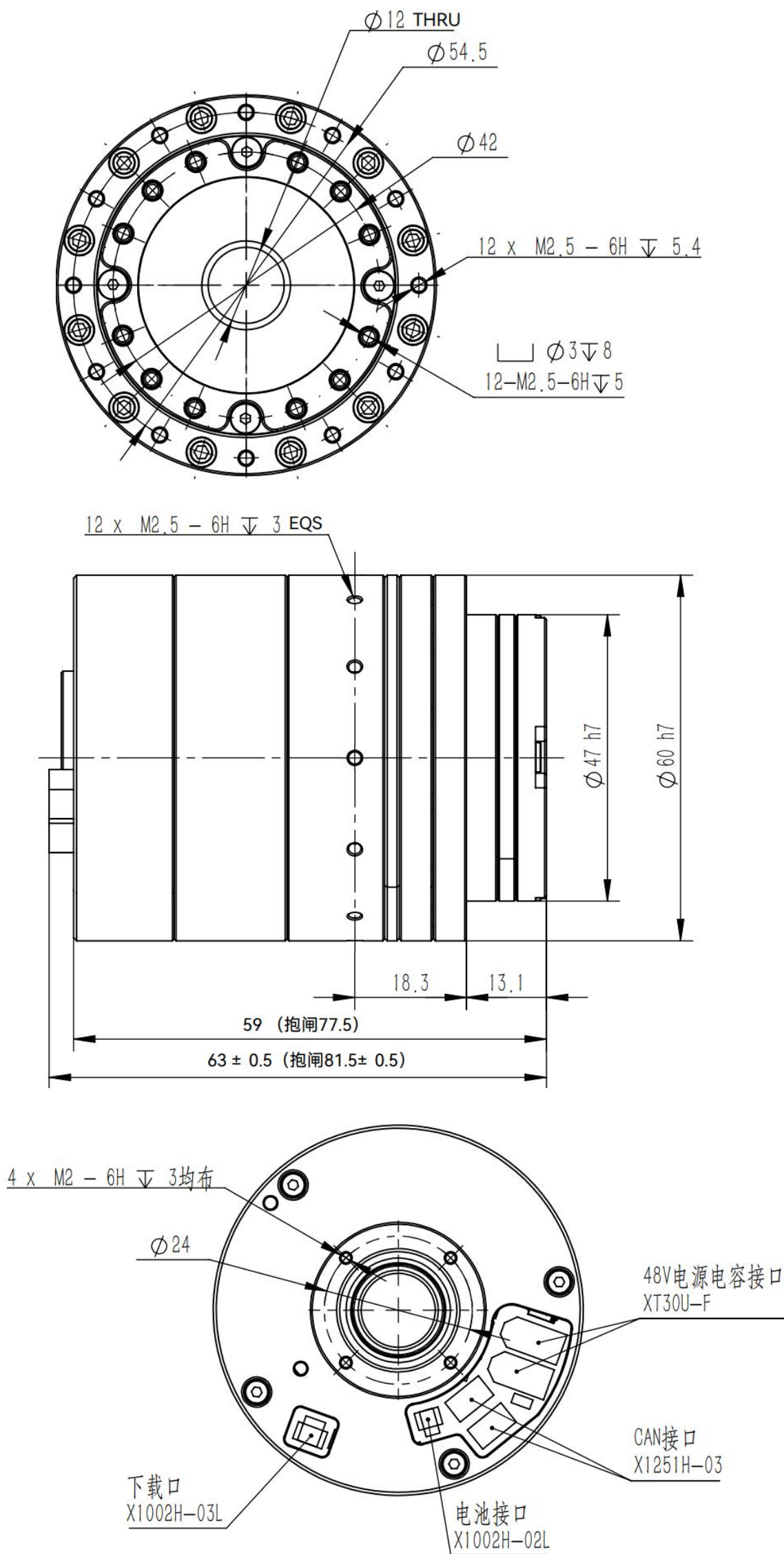
Dual Encoders Version



Parameters		
Reduction Ratio	51	101
Peak Torque (start/stop) N·M	8.3	11
Max. Allowable Average Load Torque N·M	5.5	8.9
Rated Torque N·M	3.5	5
Peak Speed RPM	118	59
Rated Speed RPM	80	40
Backlash Arcsec	40	30
Motor Power W	90W	
Max. Continuous Current A	3A	
Rated Current A	2A	
Motor Torque Constant N·m/A	0.05 N·m/A	
Communication Protocol	Single Encoder CAN/CANopen	Dual Encoders CAN/Ethercat
Through Hole ϕ (mm)	12	12
Rotor Inertia g * cm ²	73	85.14
Rotor Inertia (with Brake) g * cm ²	116.2	94.52

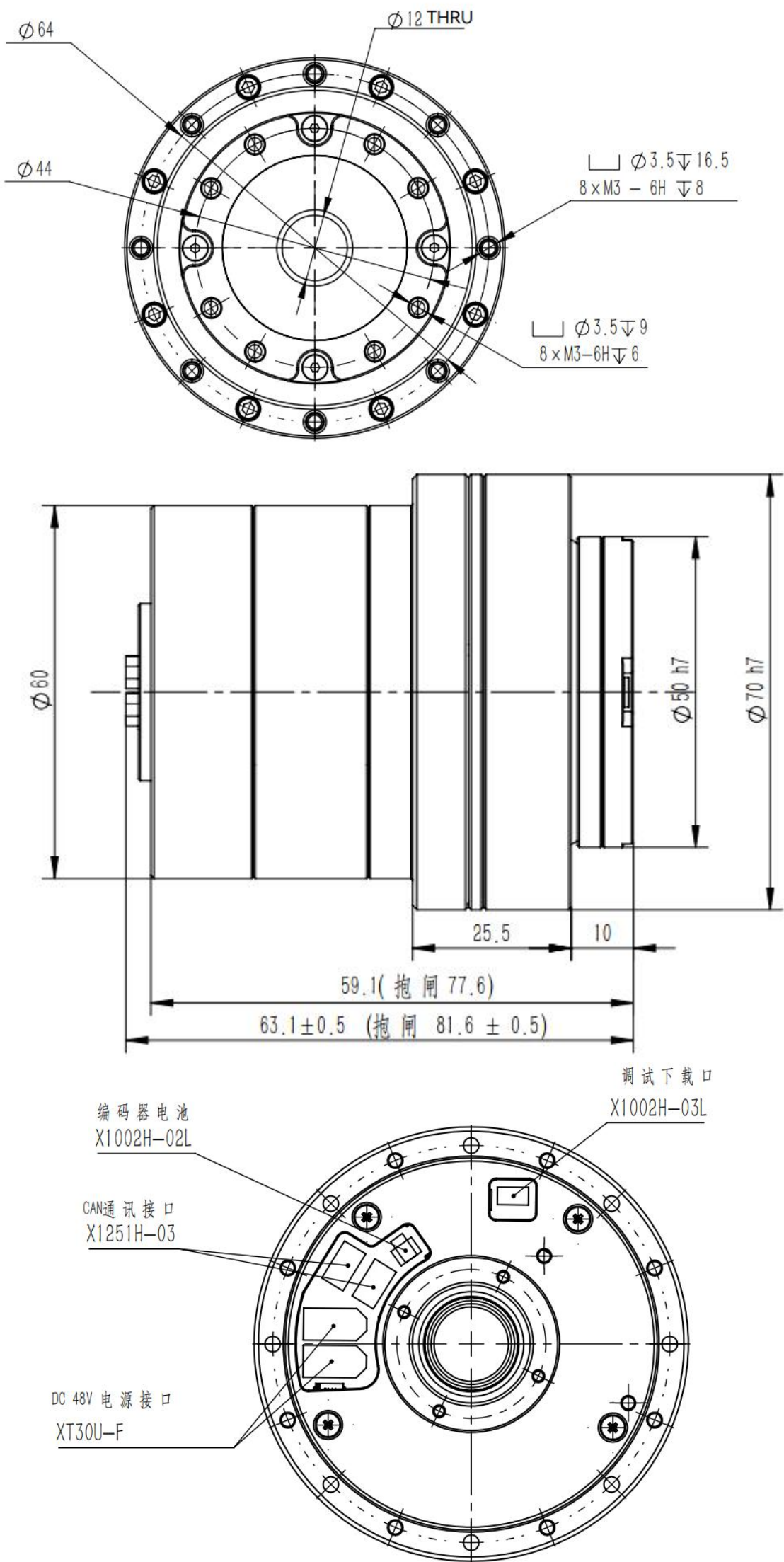
Single Encoder Version

Dual Encoders Version

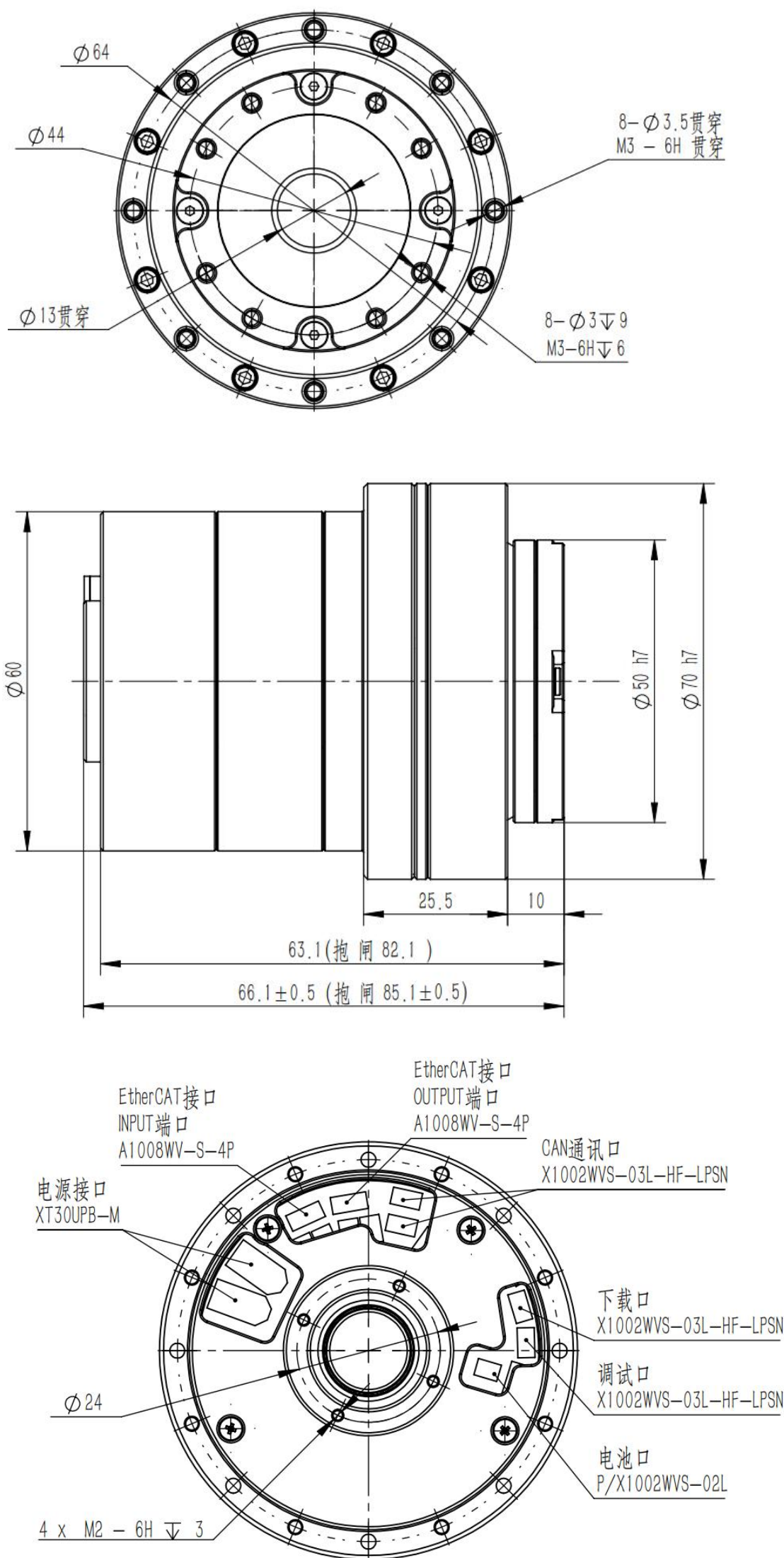


Parameters			
Reduction Ratio	51	81	101
Peak Torque (start/stop) N·M	23	29	34
Max. Allowable Average Load Torque N·M	8.6	13.5	13.5
Rated Torque N·M	6.6	9.6	9.6
Peak Speed RPM	97	61	49
Rated Speed RPM	75	46	37
Backlash Arcsec	20	20	10
Motor Power W	150W		
Max. Continuous Current A	5A		
Rated Current A	3.6A		
Motor Torque Constant N·m/A	0.089 N·m/A		
Communication Protocol	Single Encoder CAN/CANopen	Dual Encoders CAN/Ethercat	
Through Hole ø (mm)	12	13	
Rotor Inertia g * cm ²	158.8	170.46	
Rotor Inertia (with Brake) g * cm ²	228.8	216.37	

Single Encoder Version

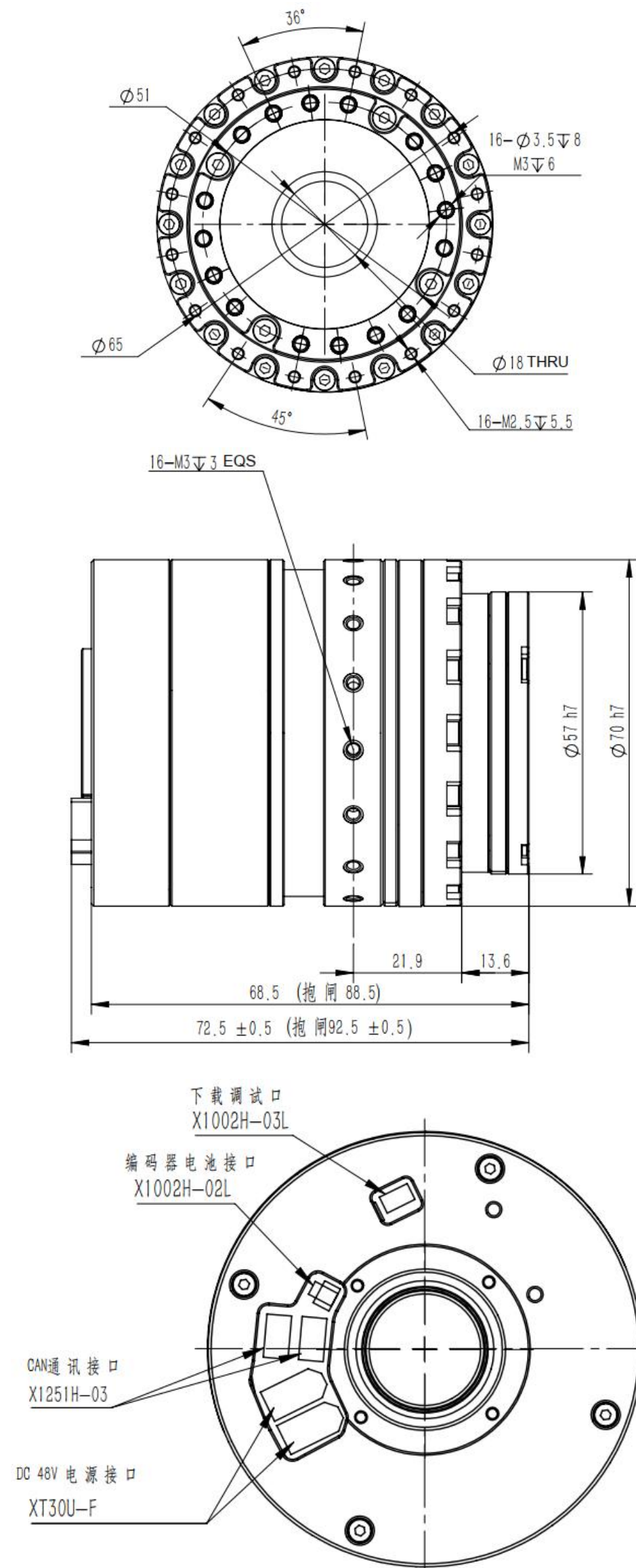


Dual Encoders Version

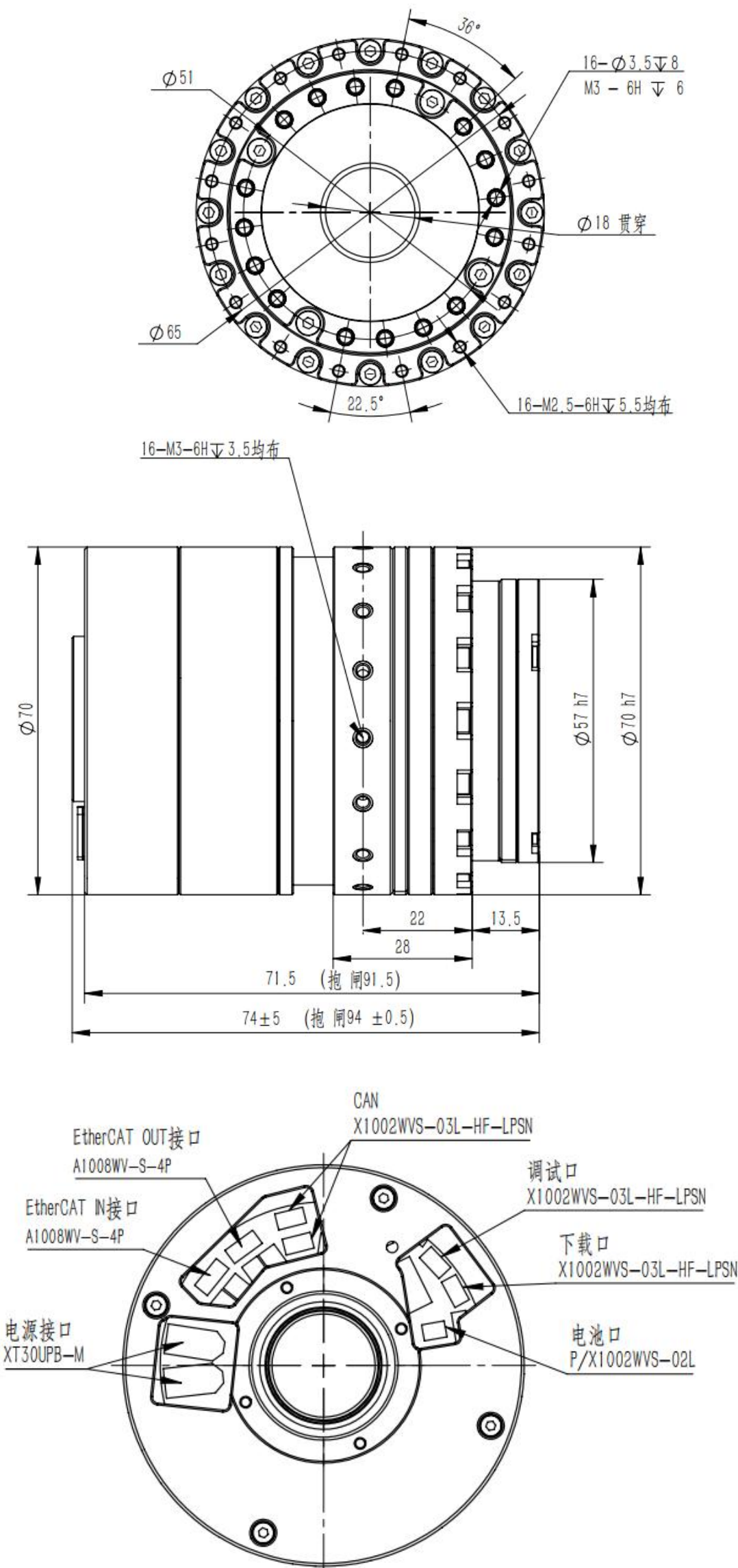


Parameters			
Reduction Ratio	51	81	101
Peak Torque (start/stop) N·M	23	29	34
Max. Allowable Average Load Torque N·M	8.6	13.5	13.5
Rated Torque N·M	6.6	9.6	9.6
Peak Speed RPM	97	61	49
Rated Speed RPM	75	46	37
Backlash Arcsec	20	20	10
Motor Power W	150W		
Max. Continuous Current A	5A		
Rated Current A	3.6A		
Motor Torque Constant N·m/A	0.089 N·m/A		
Communication Protocol	Single Encoder CAN/CANopen	Dual Encoders CAN/Ethercat	
Through Hole $\varnothing$ (mm)	12	13	
Rotor Inertia g * cm ²	158.8	170.47	
Rotor Inertia (with Brake) g * cm ²	228.8	216.37	

Single Encoder Version



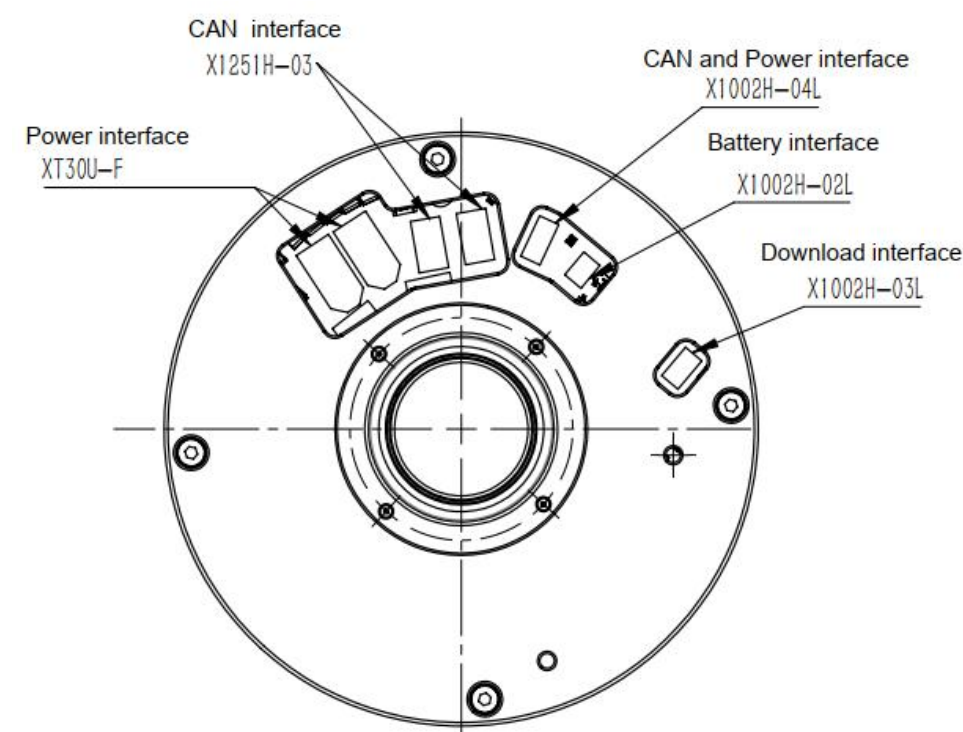
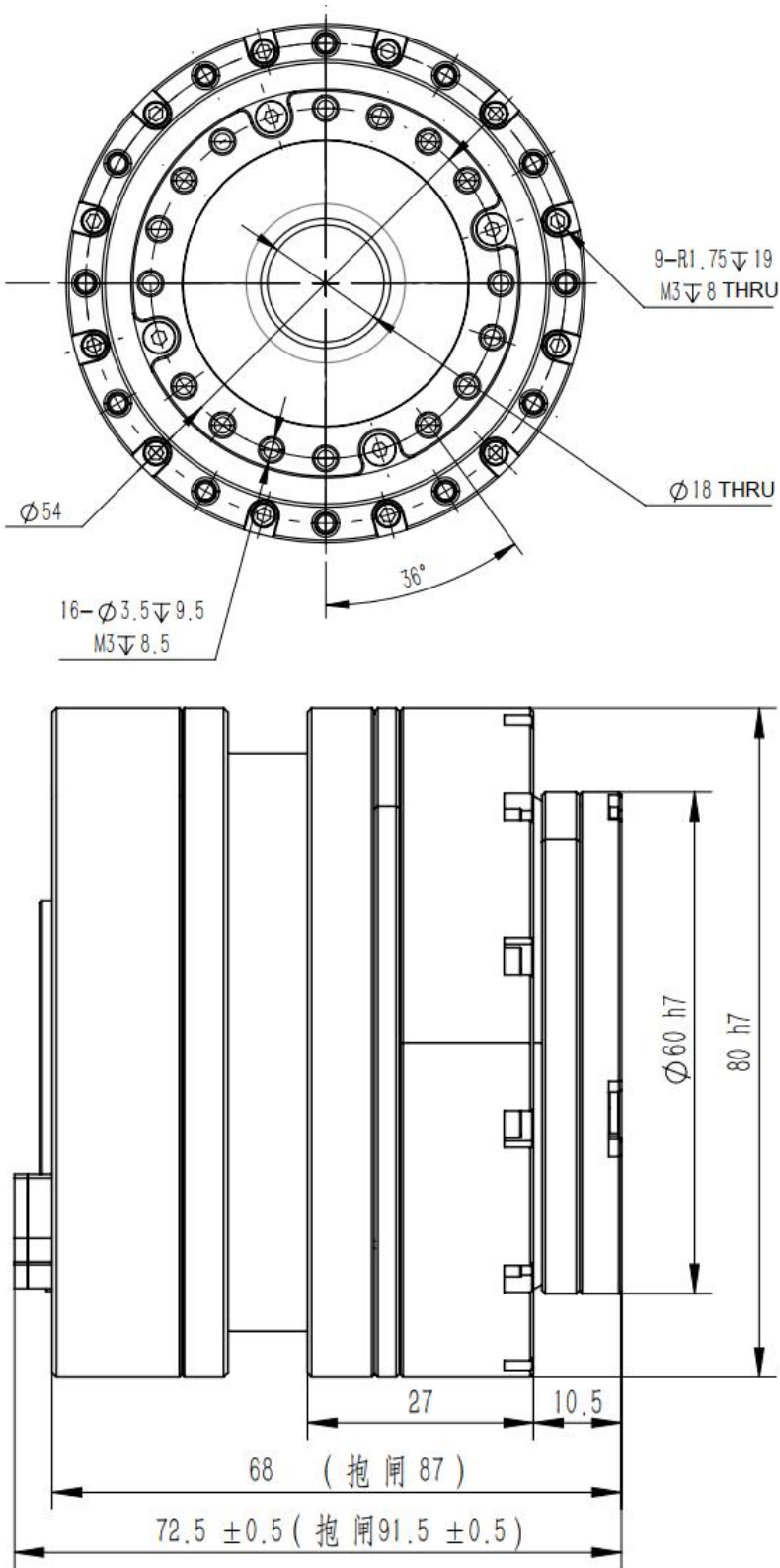
Dual Encoders Version



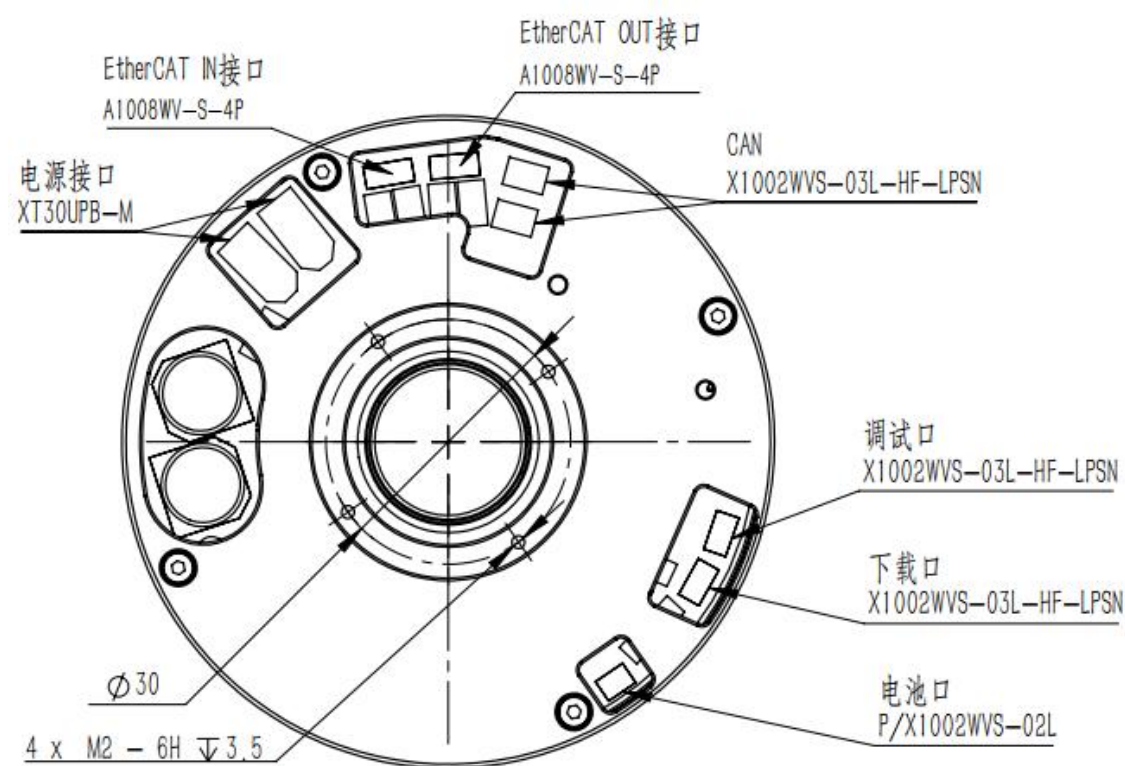
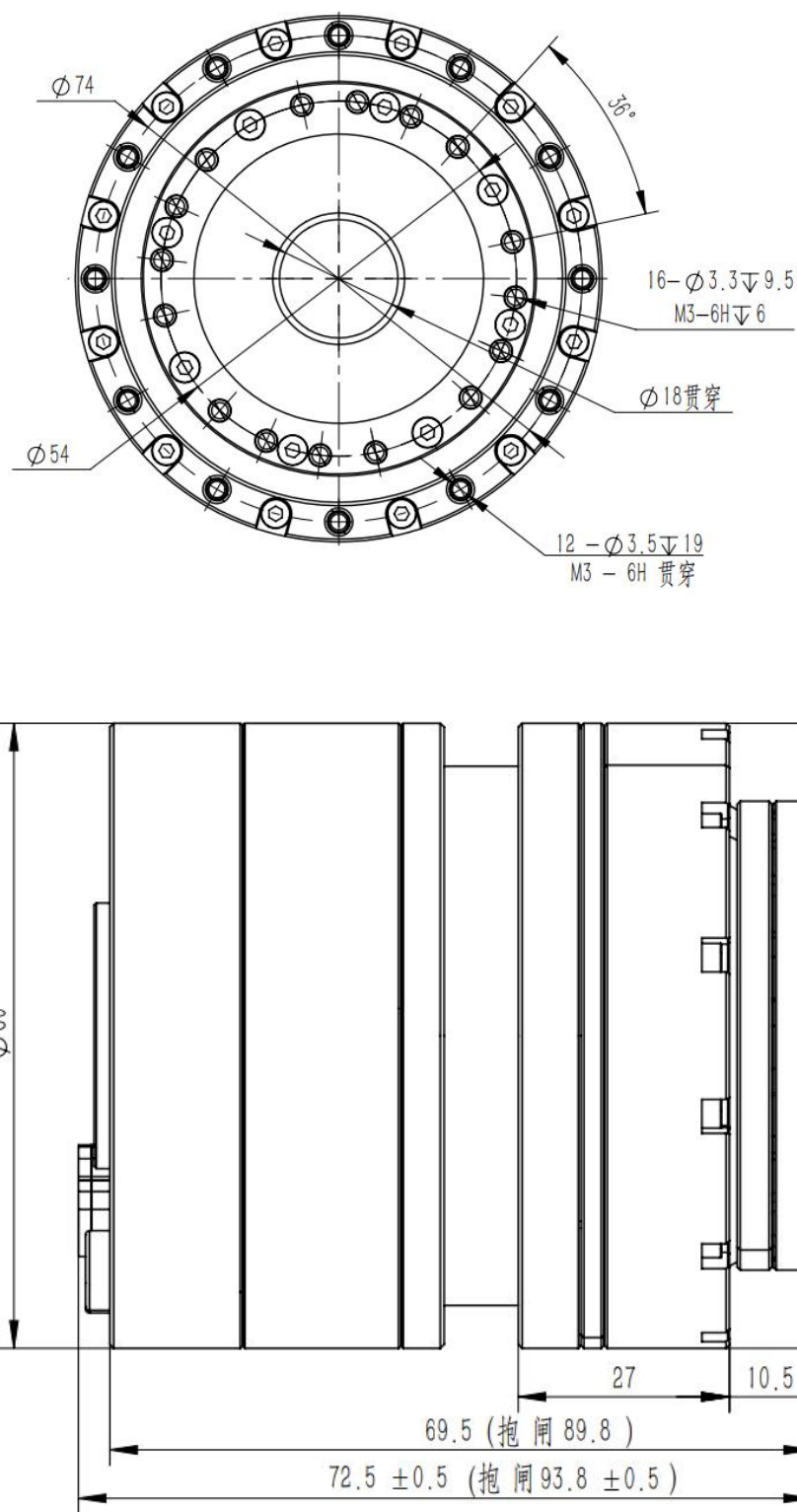
Parameters

Reduction Ratio	51	81	101	121
Peak Torque (start/stop) N·M	42	53	66	66
Max. Allowable Average Load Torque N·M	32	33	49	49
Rated Torque N·M	19.8	27.5	30	30
Peak Speed RPM	82	51	41	32
Rated Speed RPM	68	43	34	24
Backlash Arcsec	20	20	10	10
Motor Power W	300W			
Max. Continuous Current A	6.7A			
Rated Current A	5A			
Motor Torque Constant N·m/A	0.096 N·m/A			
Communication Protocol	Single Encoder CAN/CANopen	Dual Encoders CAN/Ethercat		
Through Hole ø (mm)	18	18		
Rotor Inertia g * cm ²	394.8	452.3		
Rotor Inertia (with Brake) g * cm ²	492	542.87		

Single Encoder Version



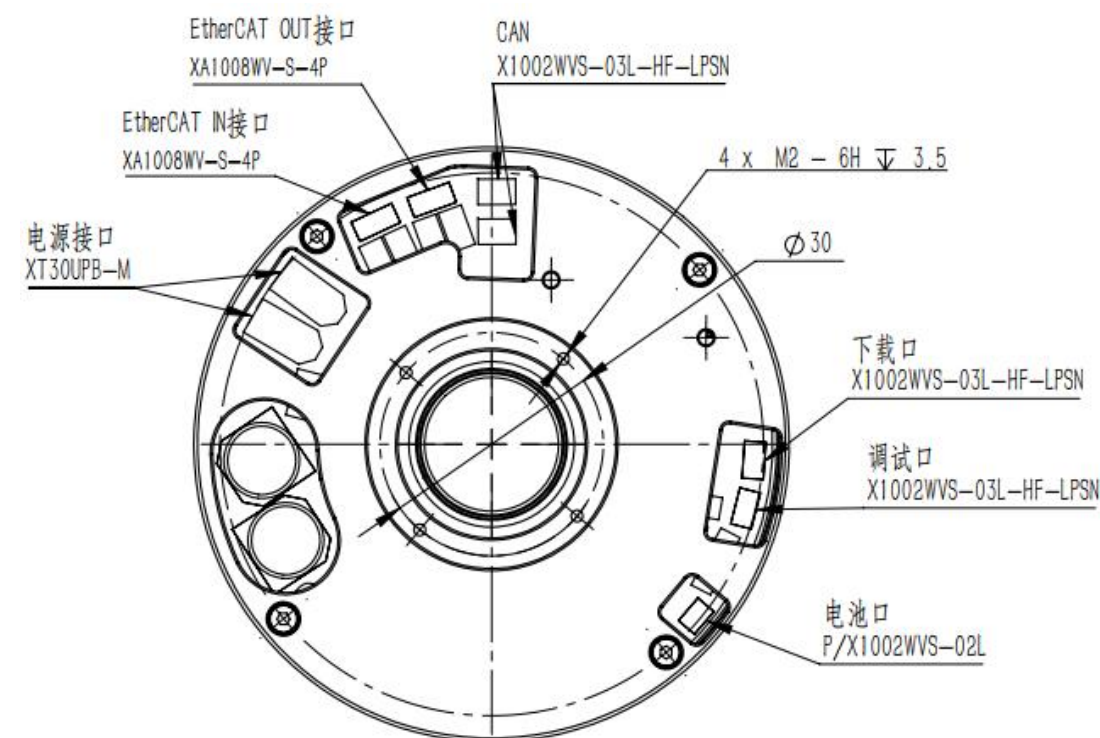
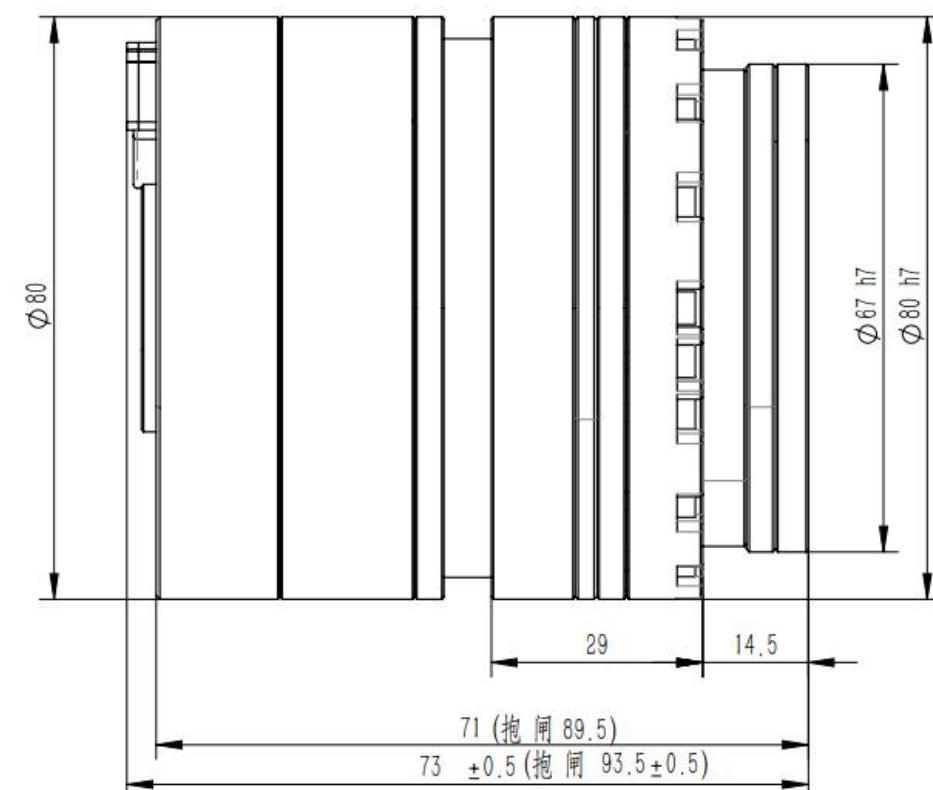
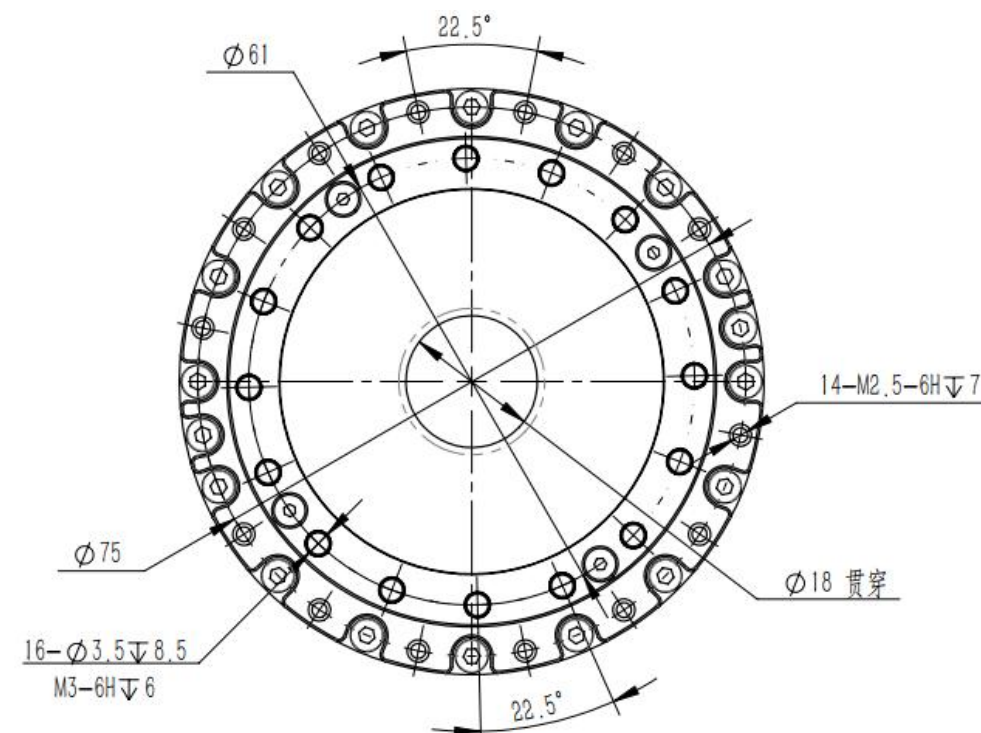
Dual Encoders Version



Parameters

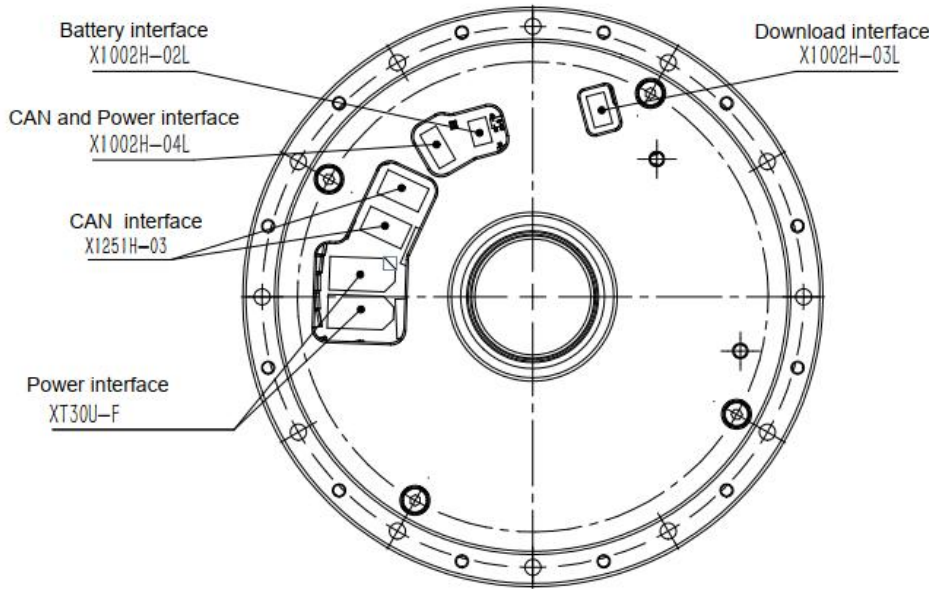
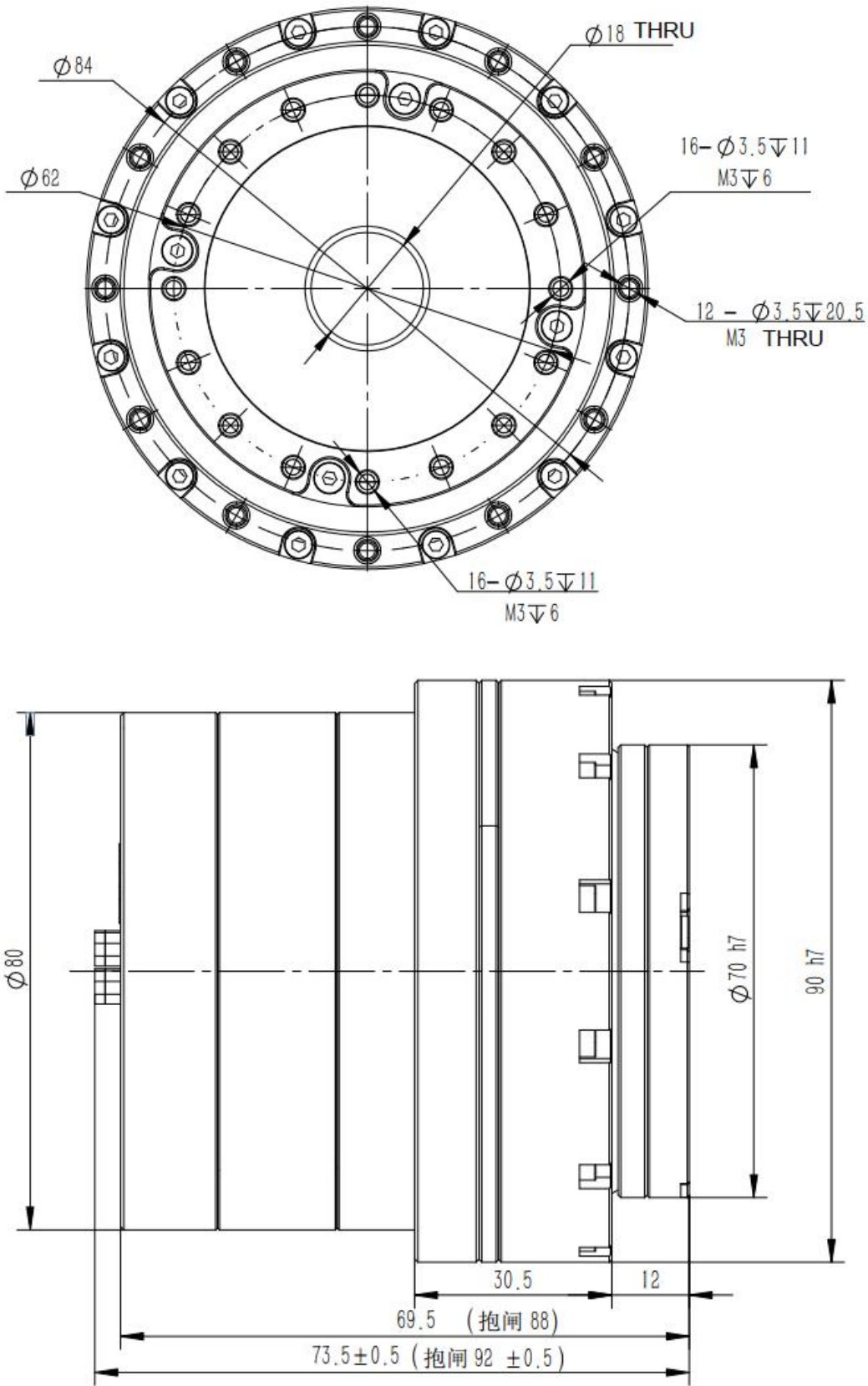
Reduction Ratio	51	81	101	121
Peak Torque (start/stop) N·M	42	53	66	66
Max. Allowable Average Load Torque N·M	32	33	49	49
Rated Torque N·M	19.8	27.5	30	30
Peak Speed RPM	82	51	41	32
Rated Speed RPM	68	43	34	24
Backlash Arcsec	20	20	10	10
Motor Power W	300W			
Max. Continuous Current A	6.7A			
Rated Current A	5A			
Motor Torque Constant N·m/A	0.096 N·m/A			
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat	
Through Hole ϕ (mm)	18		18	
Rotor Inertia g * cm ²	394.8		479.96	
Rotor Inertia (with Brake) g * cm ²	492		571.15	

Dual Encoders Version

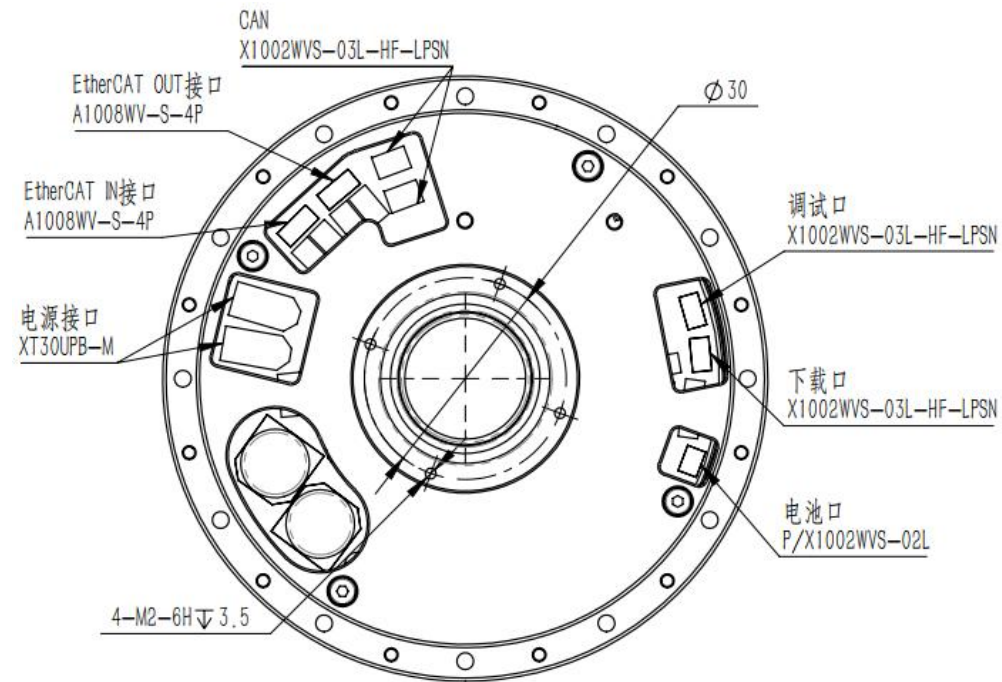
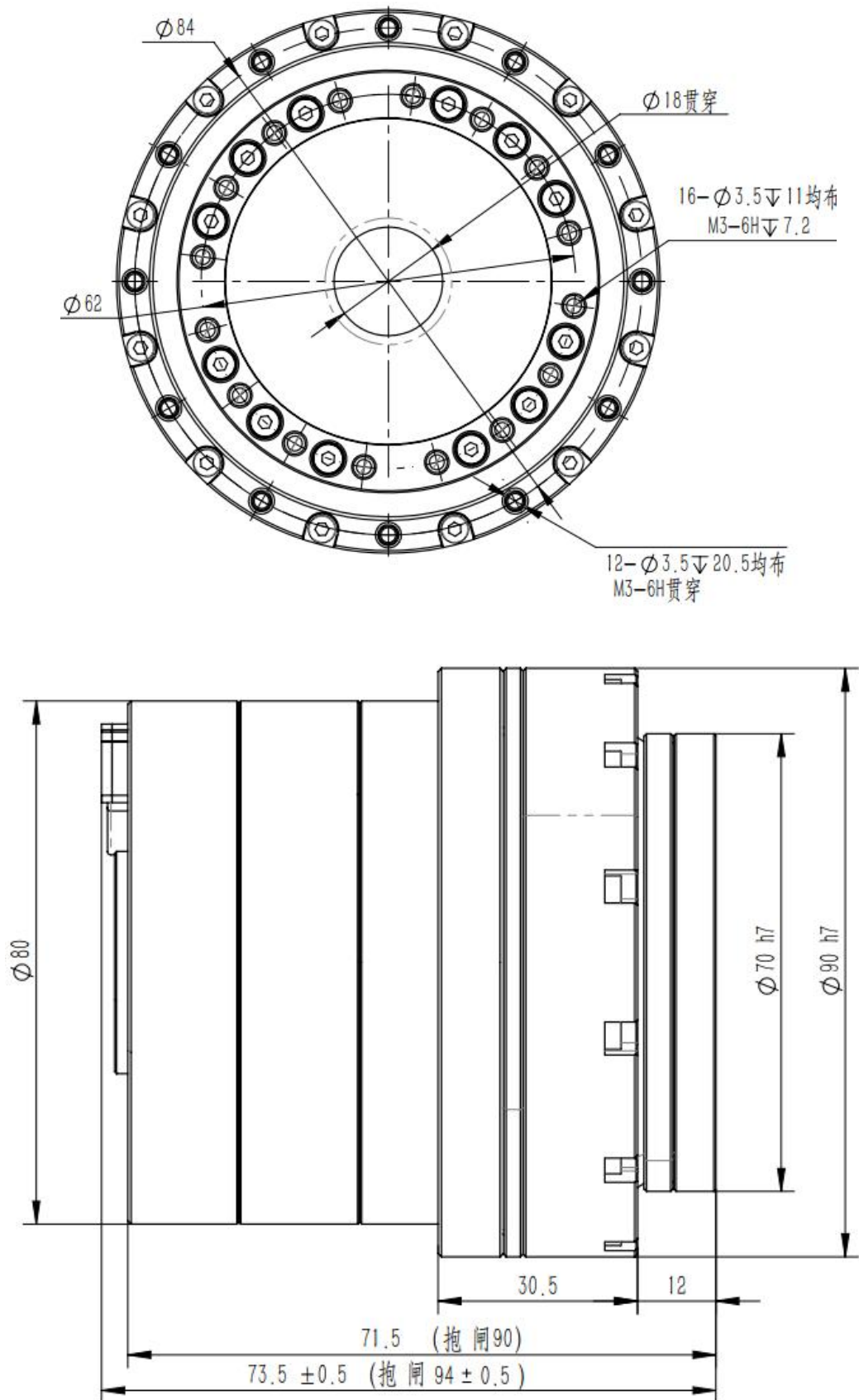


Parameters				
Reduction Ratio	51	81	101	121
Peak Torque (start/stop) N·M	69	91	102	108
Max. Allowable Average Load Torque N·M	42	58	61	61
Rated Torque N·M	32	42	50	50
Peak Speed RPM	77	48	40	30
Rated Speed RPM	61	38	30	25
Backlash Arcsec	20	20	10	10
Motor Power W	500W			
Max. Continuous Current A	8.4A			
Rated Current A	6.1A			
Motor Torque Constant N·m/A	0.118 N·m/A			
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat	
Through Hole ø (mm)	18		18	
Rotor Inertia g * cm ²	596.4		624.19	
Rotor Inertia (with Brake) g * cm ²	746.7		784.5	

Single Encoder Version



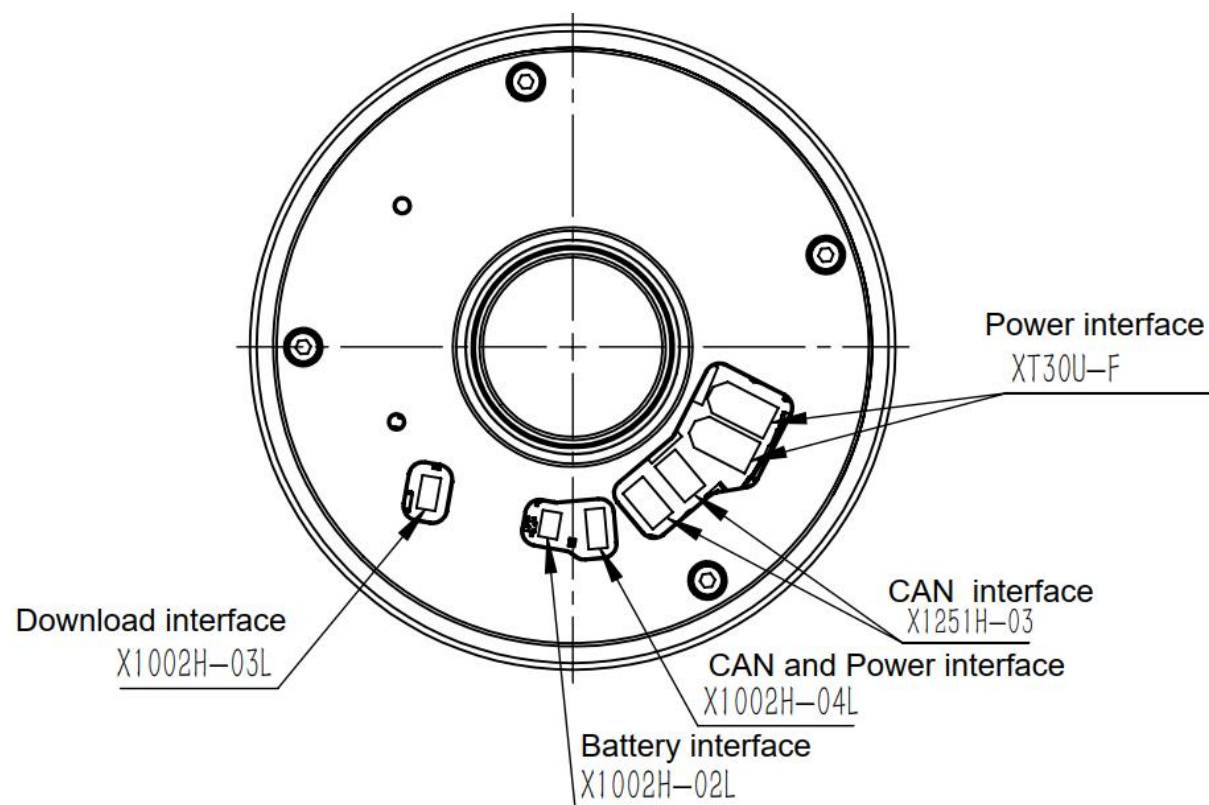
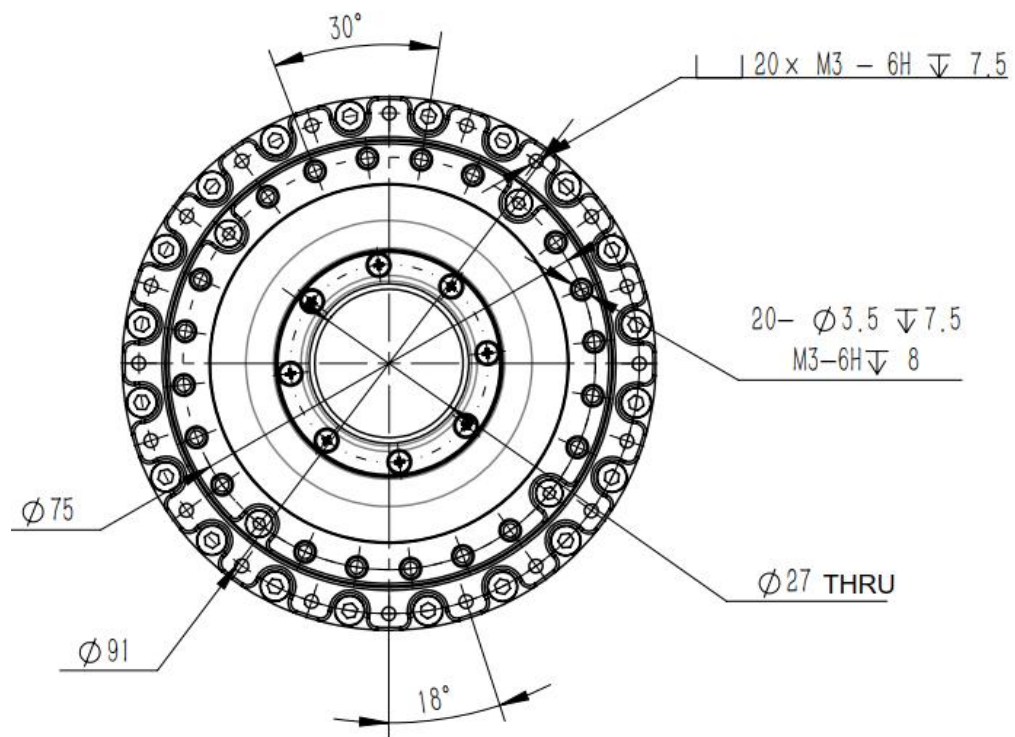
Dual Encoders Version



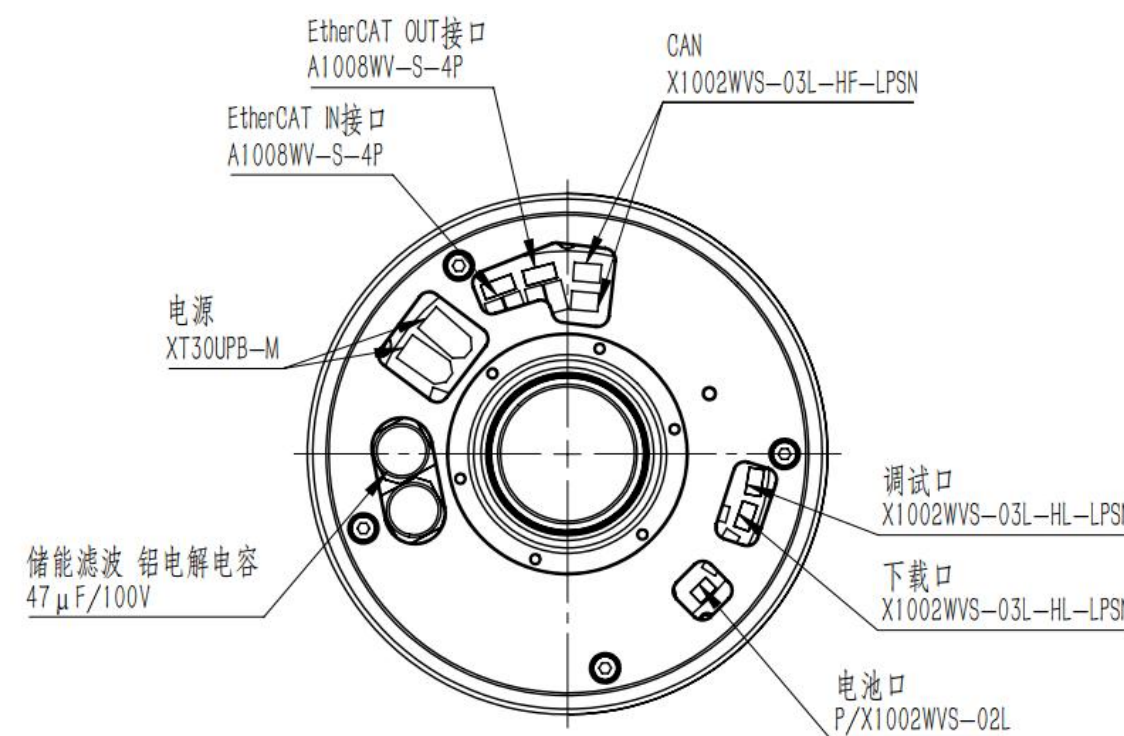
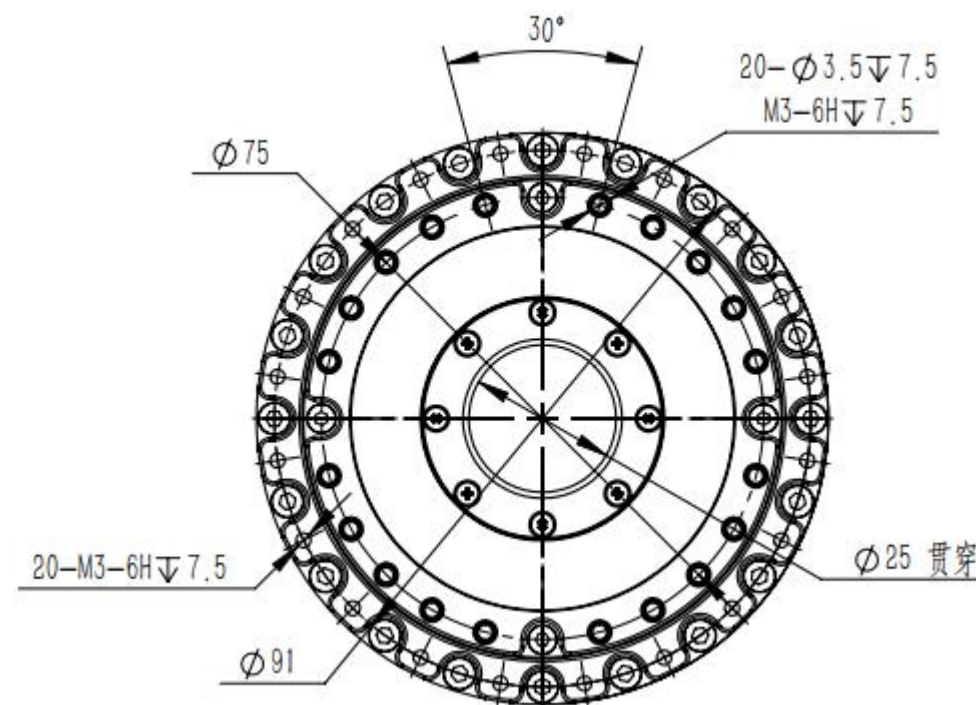
Parameters

Reduction Ratio	51	81	101	121
Peak Torque (start/stop) N·M	69	91	102	108
Max. Allowable Average Load Torque N·M	42	58	61	61
Rated Torque N·M	32	42	50	50
Peak Speed RPM	77	48	40	30
Rated Speed RPM	61	38	30	25
Backlash Arcsec	20	20	10	10
Motor Power W	500W			
Max. Continuous Current A	8.4A			
Rated Current A	6.1A			
Motor Torque Constant N·m/A	0.111 N·m/A			
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat	
Through Hole ϕ (mm)	18		18	
Rotor Inertia g * cm ²	596.4		622.79	
Rotor Inertia (with Brake) g * cm ²	746.7		783.02	

Single Encoder Version



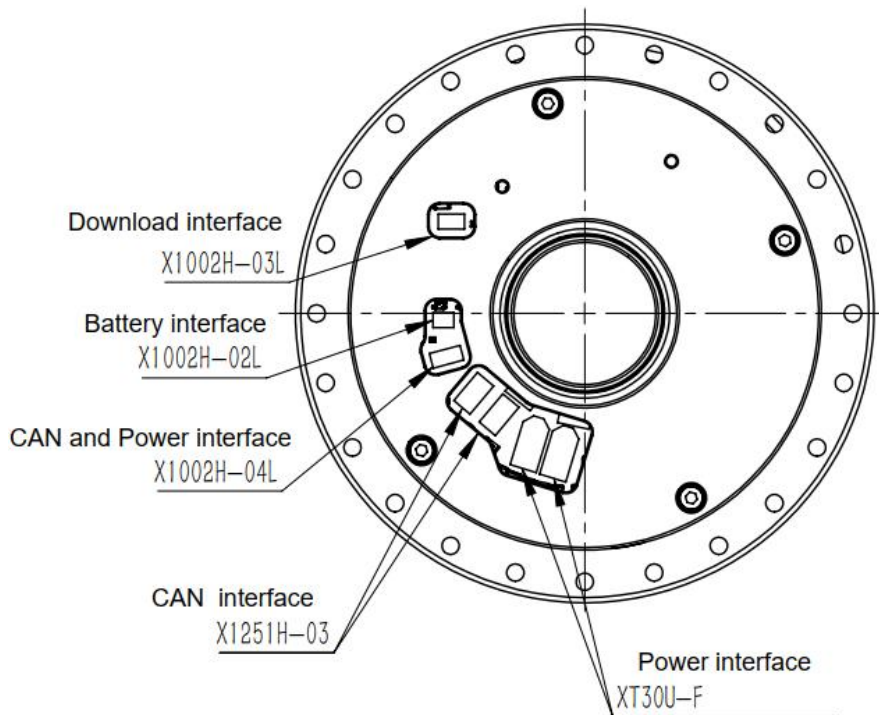
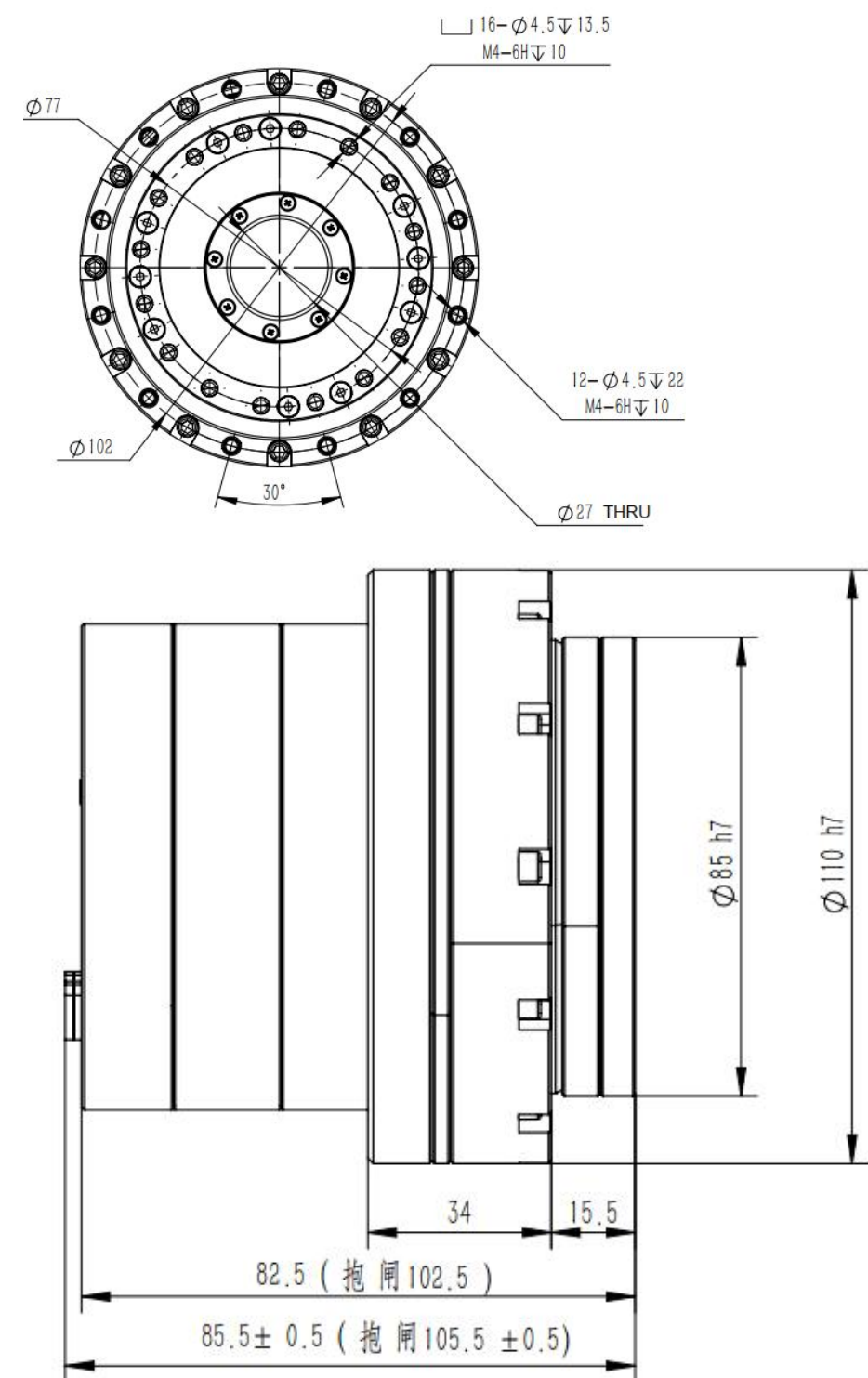
Dual Encoders Version



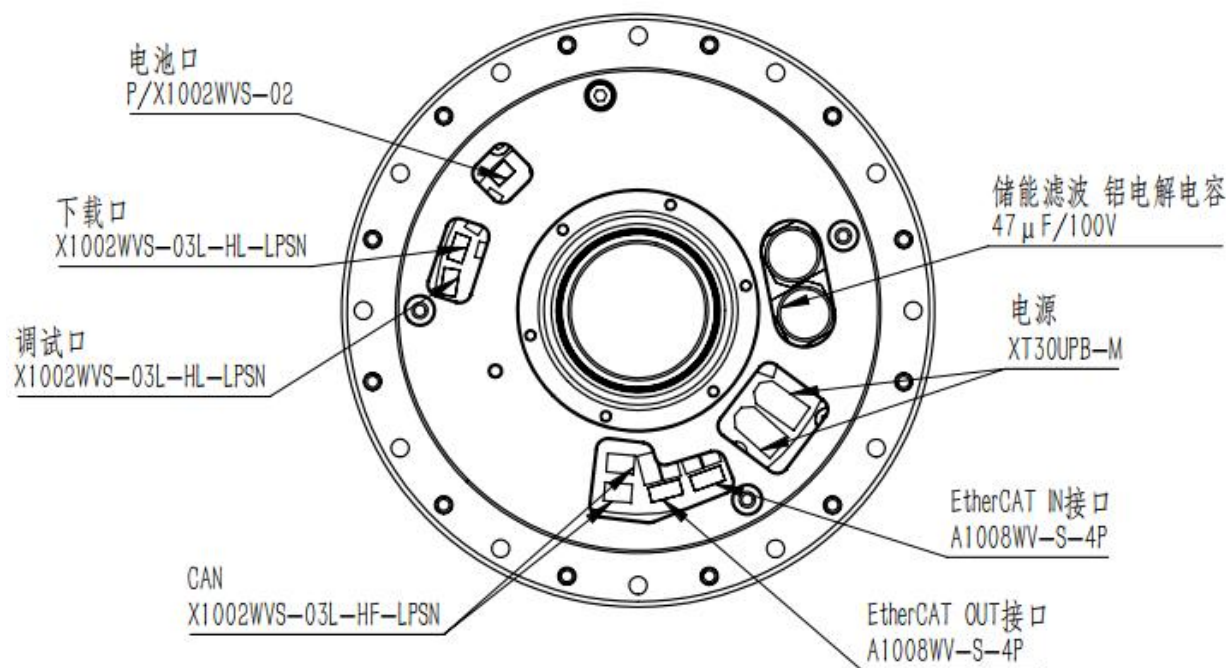
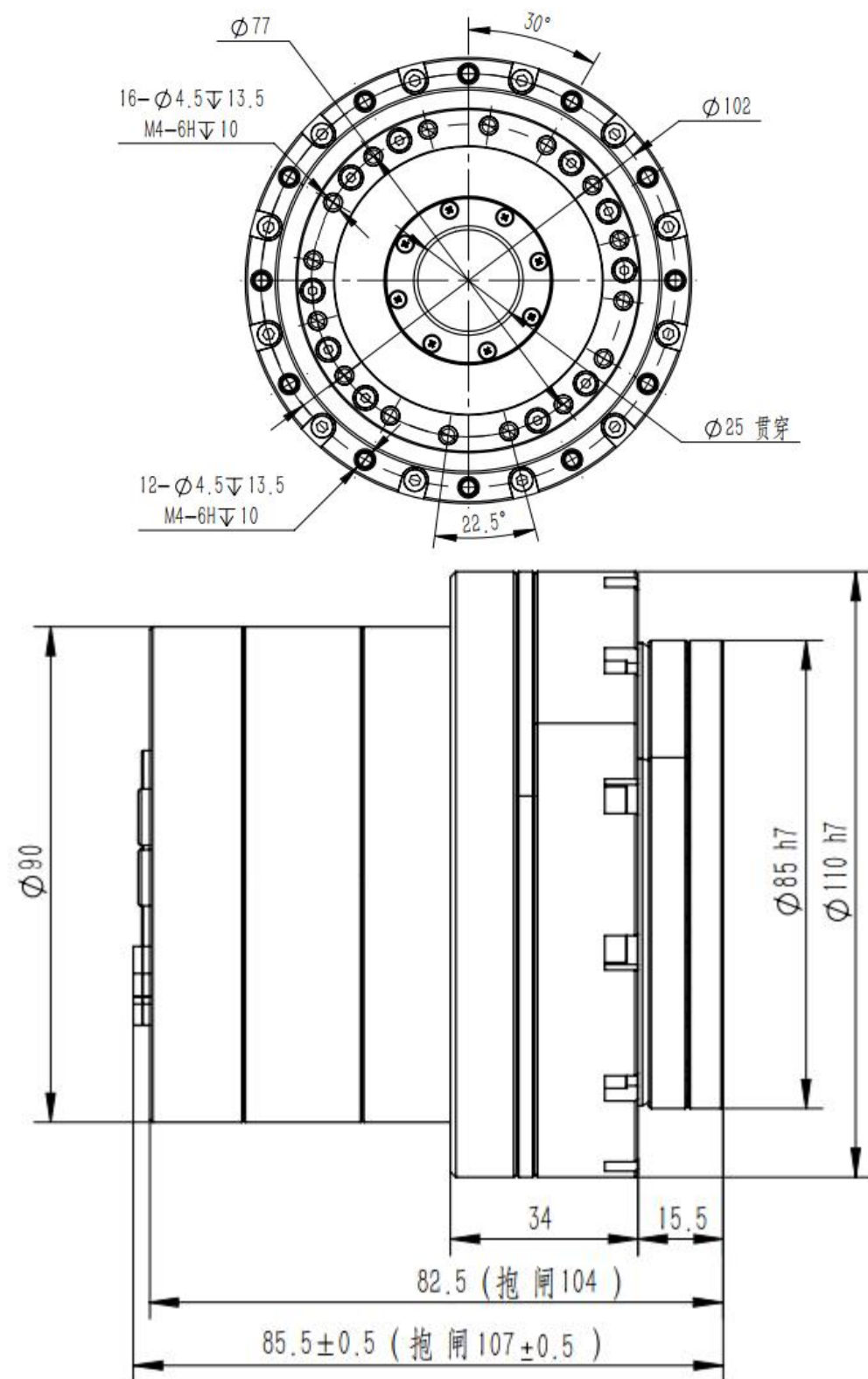
Parameters

Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	121	169	194	207	217
Max. Allowable Average Load Torque N·M	68.5	107	133	133	133
Rated Torque N·M	48	78	84	84	84
Peak Speed RPM	65	43	36	30	22
Rated Speed RPM	54	35	27	23	17
Backlash Arcsec	20	20	10	10	10
Motor Power W	750W				
Max. Continuous Current A	11.1A				
Rated Current A	9.6A				
Motor Torque Constant N·m/A	0.143 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole ϕ (mm)	27		25		
Rotor Inertia g * cm ²	1477.6		1532.07		
Rotor Inertia (with Brake) g * cm ²	1761.1		1700.15		

Single Encoder Version



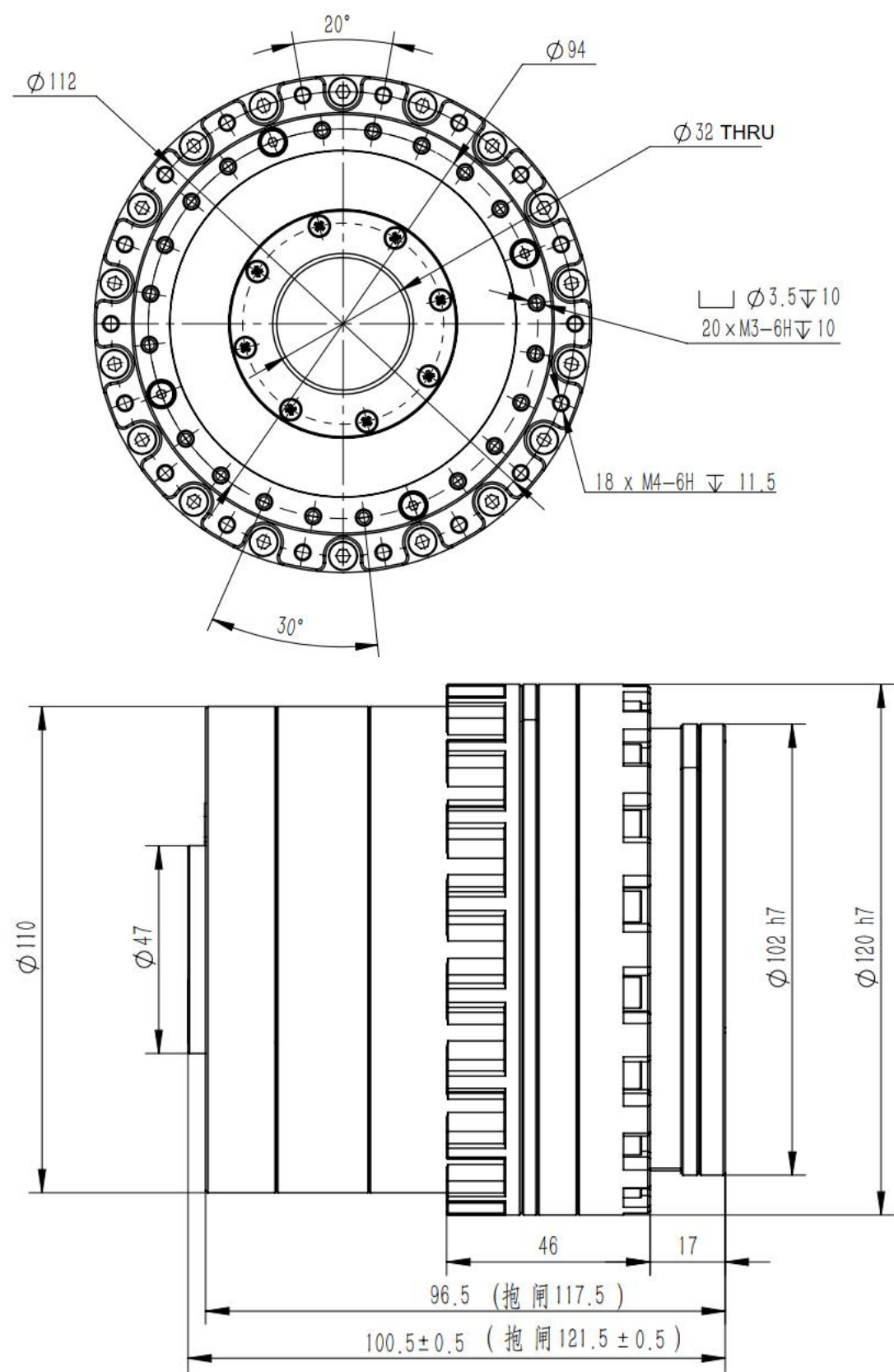
Dual Encoders Version



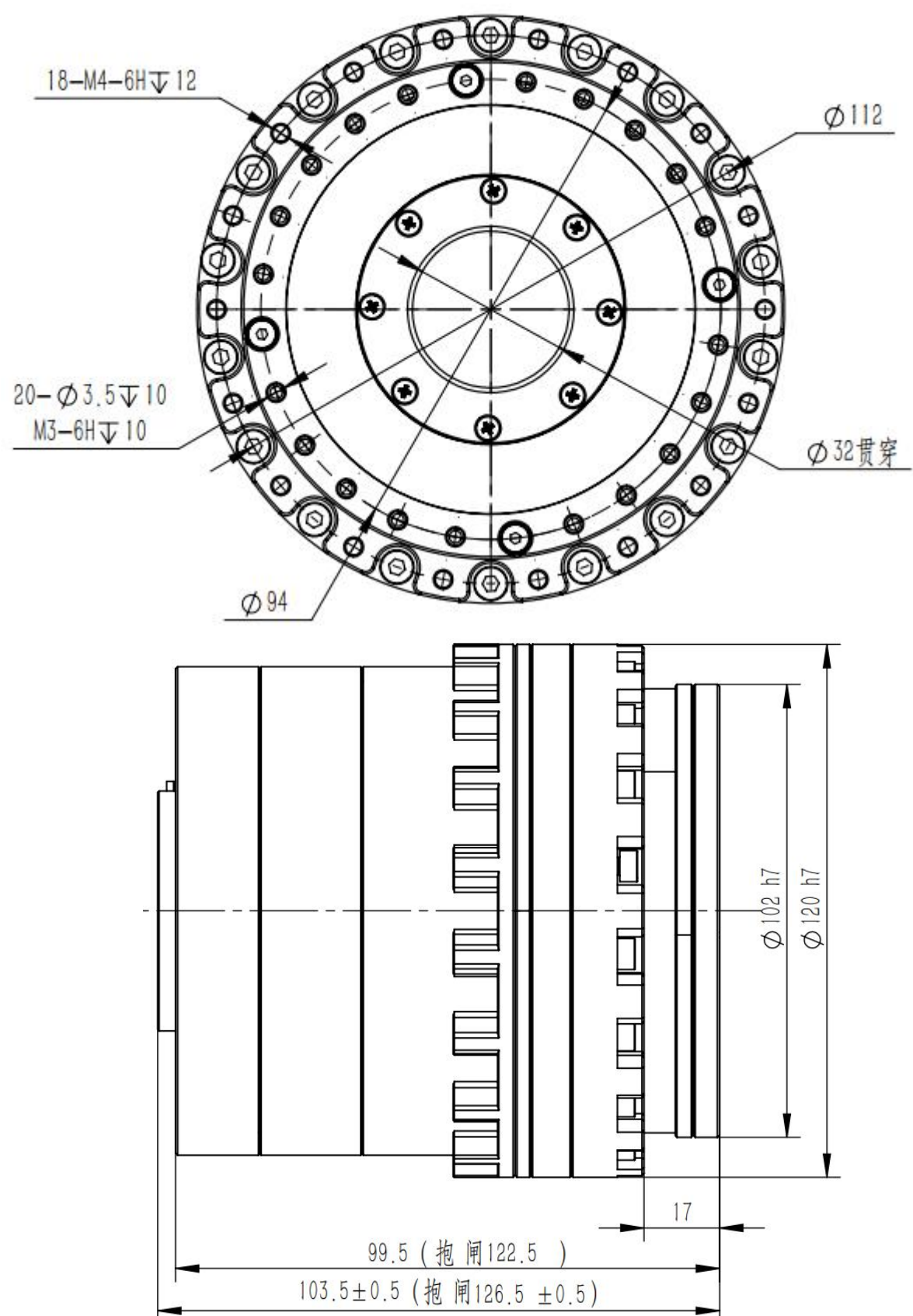
Parameters

Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	121	169	194	207	217
Max. Allowable Average Load Torque N·M	68.5	107	133	133	133
Rated Torque N·M	48	78	84	84	84
Peak Speed RPM	65	43	36	30	22
Rated Speed RPM	54	35	27	23	17
Backlash Arcsec	20	20	10	10	10
Motor Power W	750W				
Max. Continuous Current A	11.1A				
Rated Current A	9.6A				
Motor Torque Constant N·m/A	0.143 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole $\varnothing$ (mm)	27		25		
Rotor Inertia g * cm ²	1477.6		1532.07		
Rotor Inertia (with Brake) g * cm ²	1761.1		1612.04		

Single Encoder Version

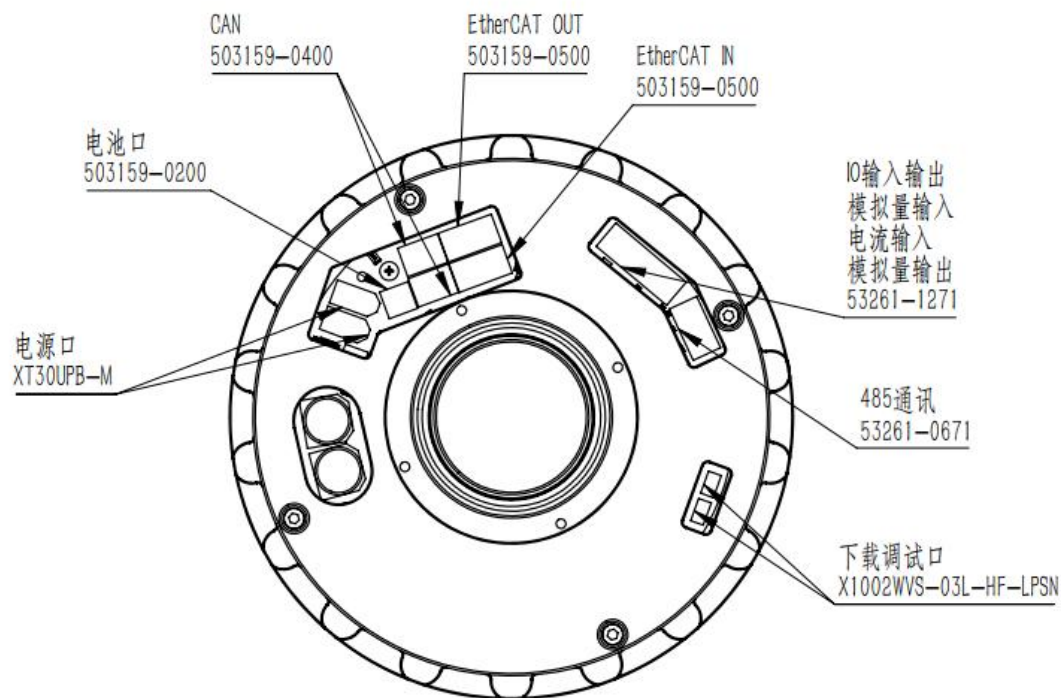
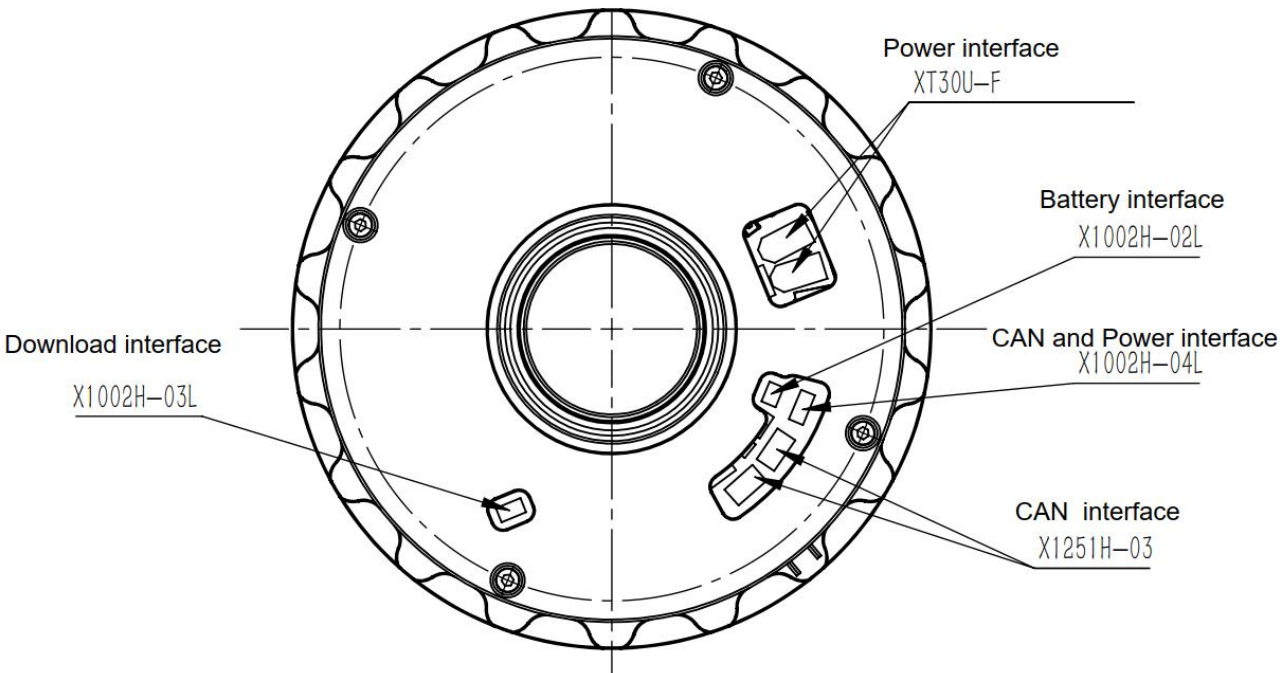


Dual Encoders Version

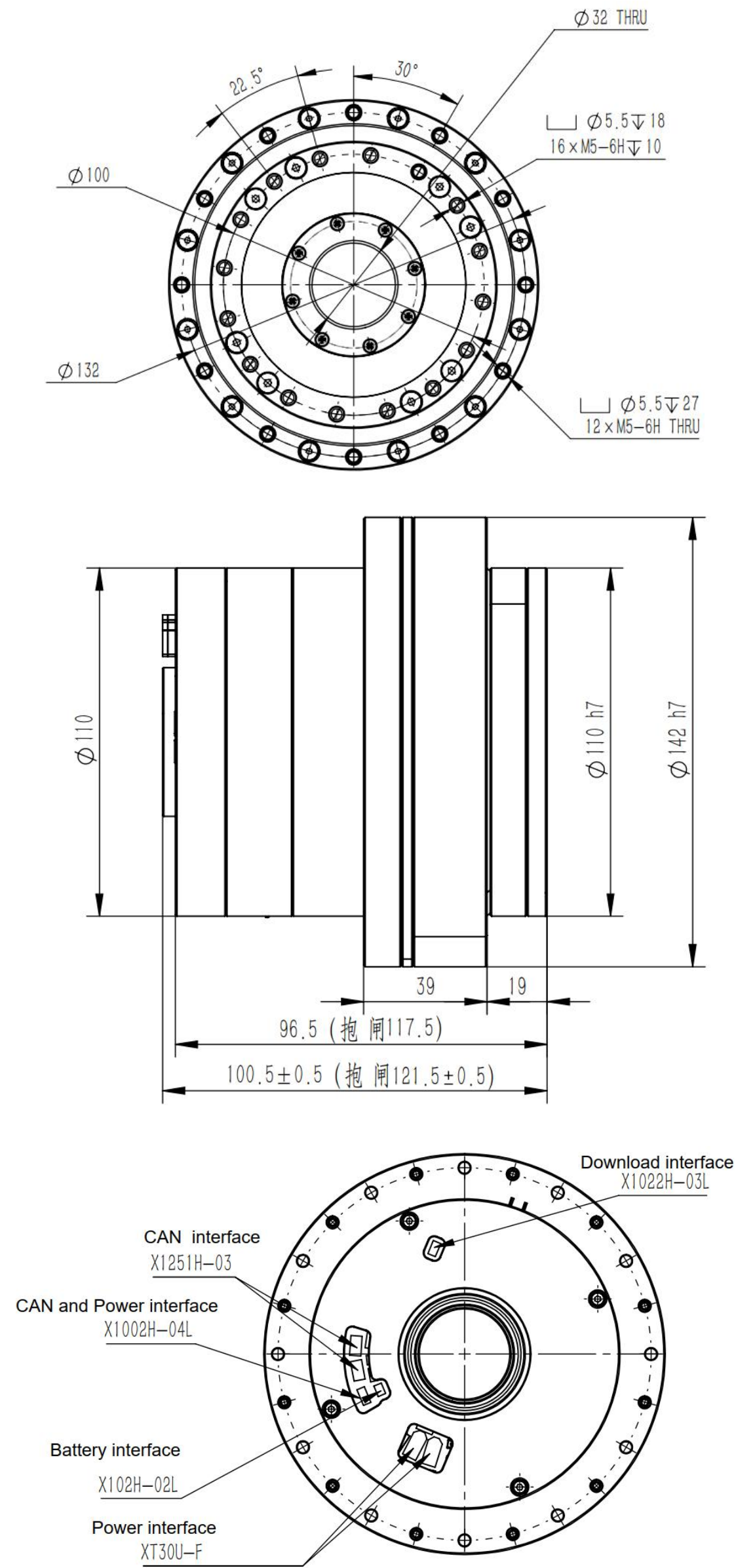


Parameters

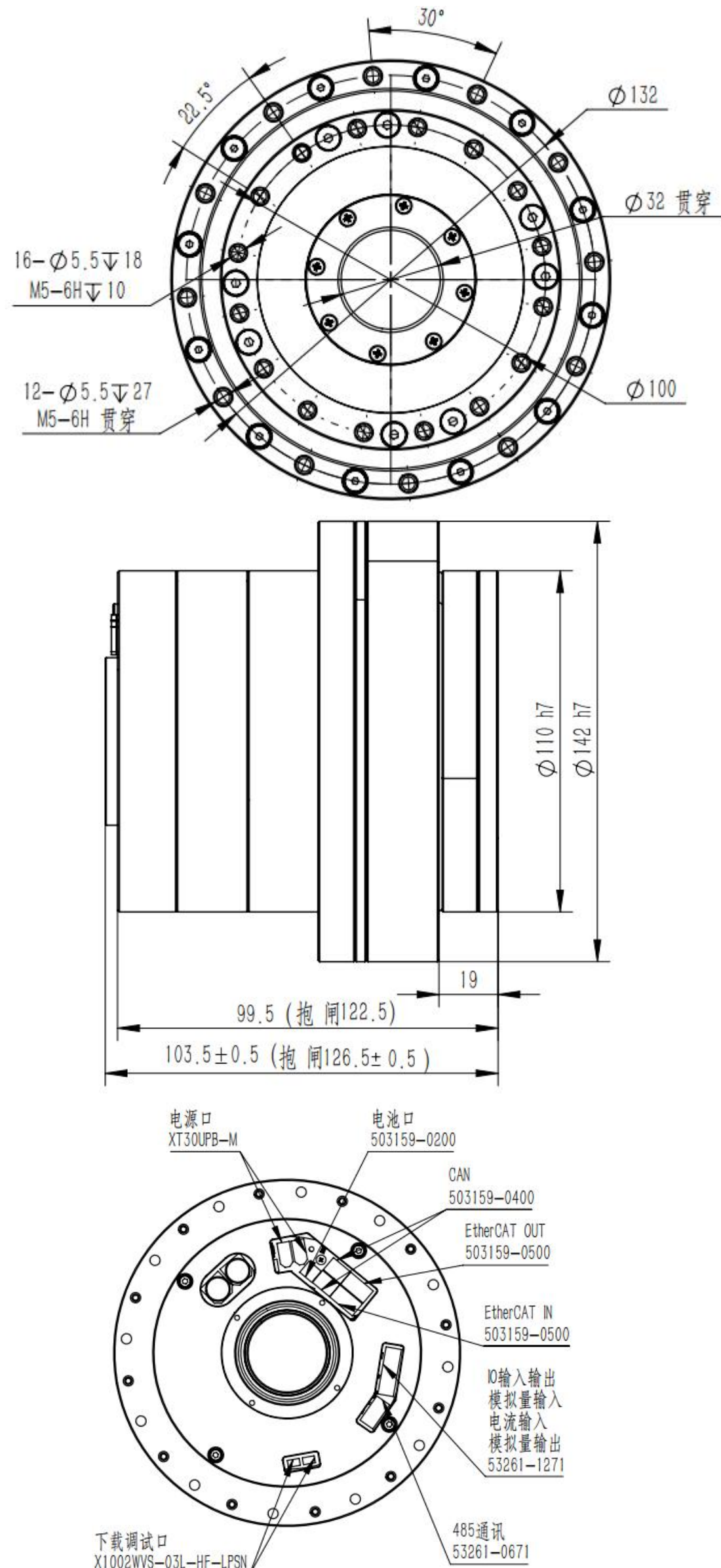
Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	267	376	411	436	459
Max. Allowable Average Load Torque N·M	133	206	267	267	267
Rated Torque N·M	94	146	169	169	169
Peak Speed RPM	55	37	29	24	18
Rated Speed RPM	44	29	22	18	12
Backlash Arcsec	20	20	10	10	10
Motor Power W	1000W				
Max. Continuous Current A	20.2A				
Rated Current A	15.8A				
Motor Torque Constant N·m/A	0.175 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole ϕ (mm)	32		32		
Rotor Inertia $g \cdot cm^2$	3910.2		5965.63		
Rotor Inertia (with Brake) $g \cdot cm^2$	4744.7		7017.1		



Single Encoder Version



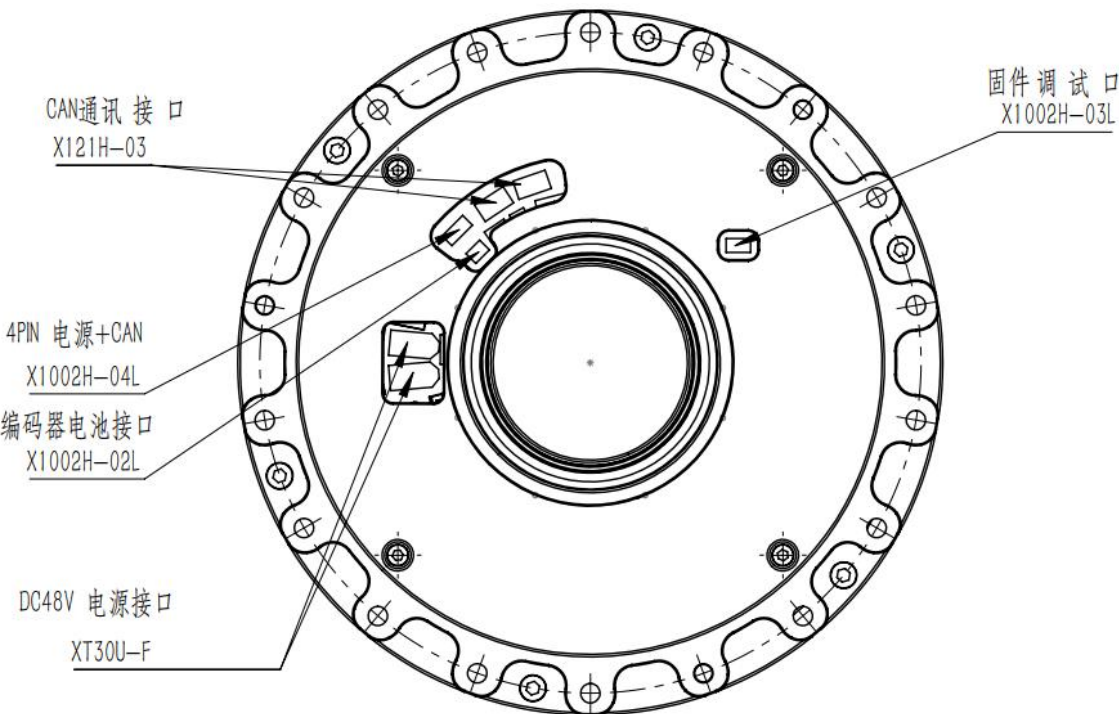
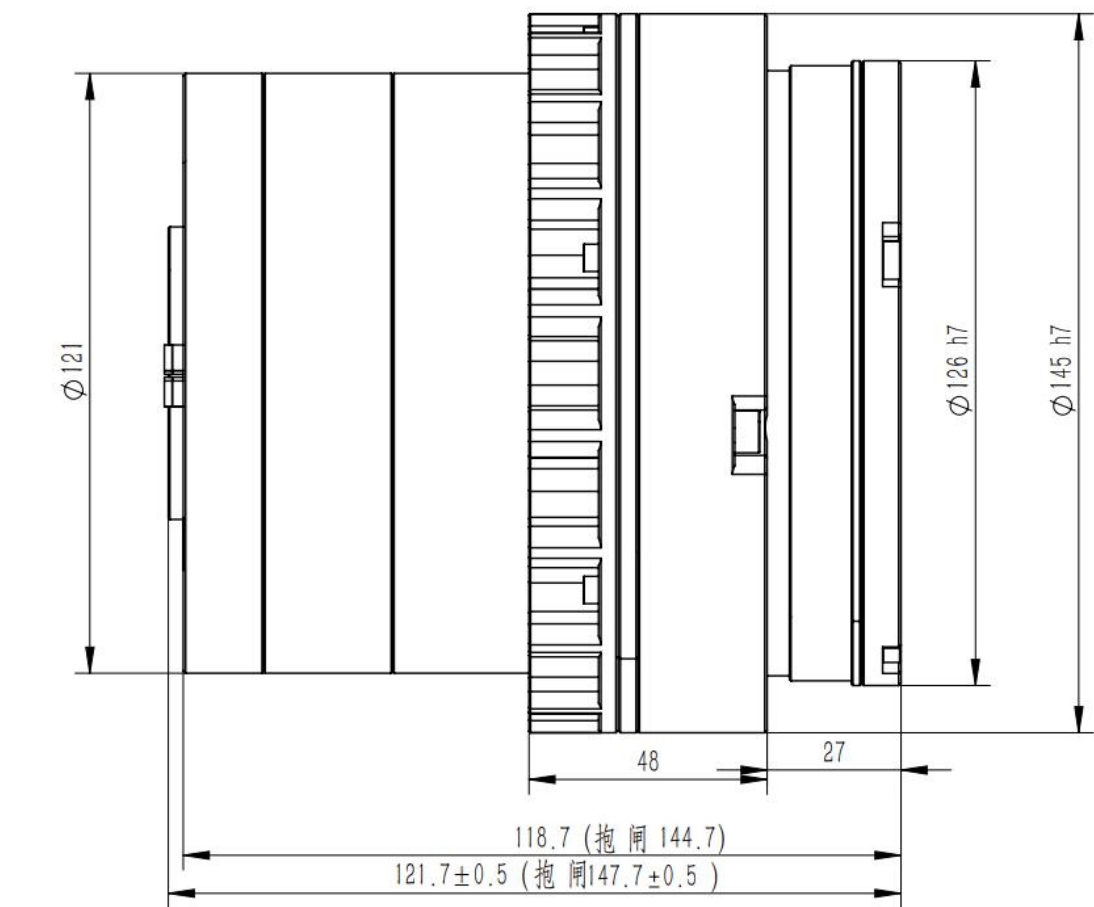
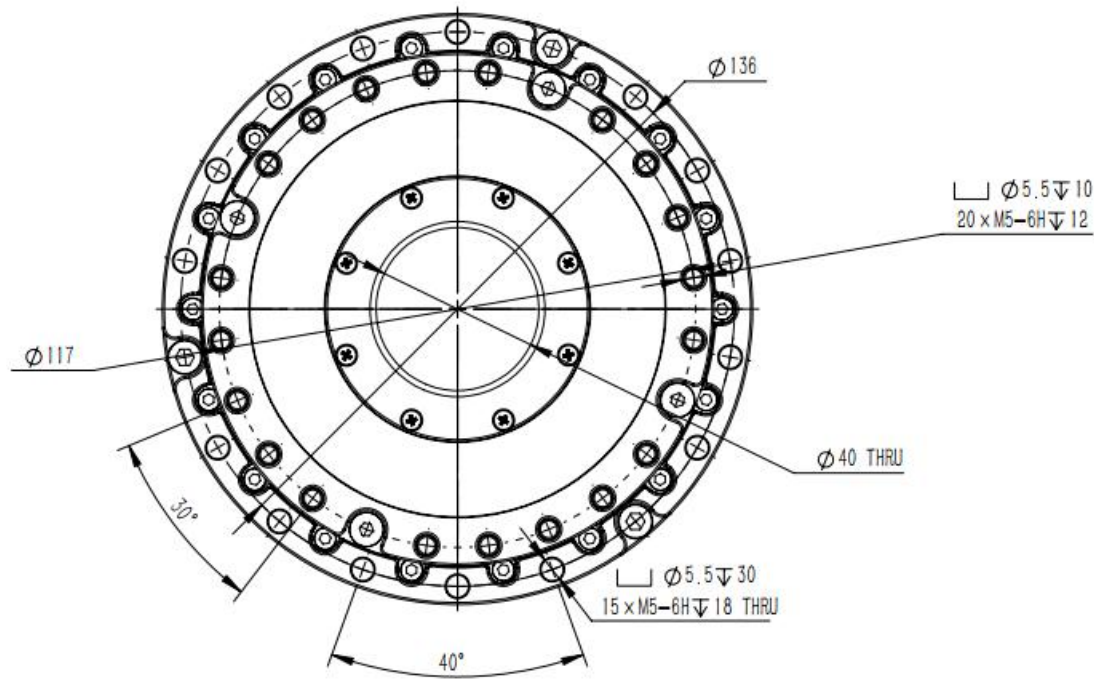
Dual Encoders Version



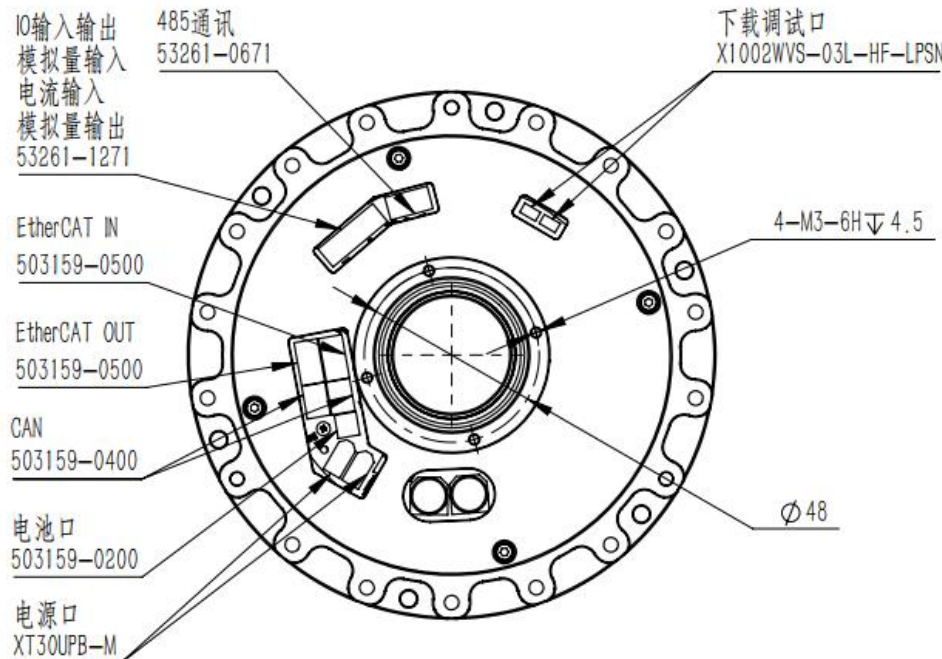
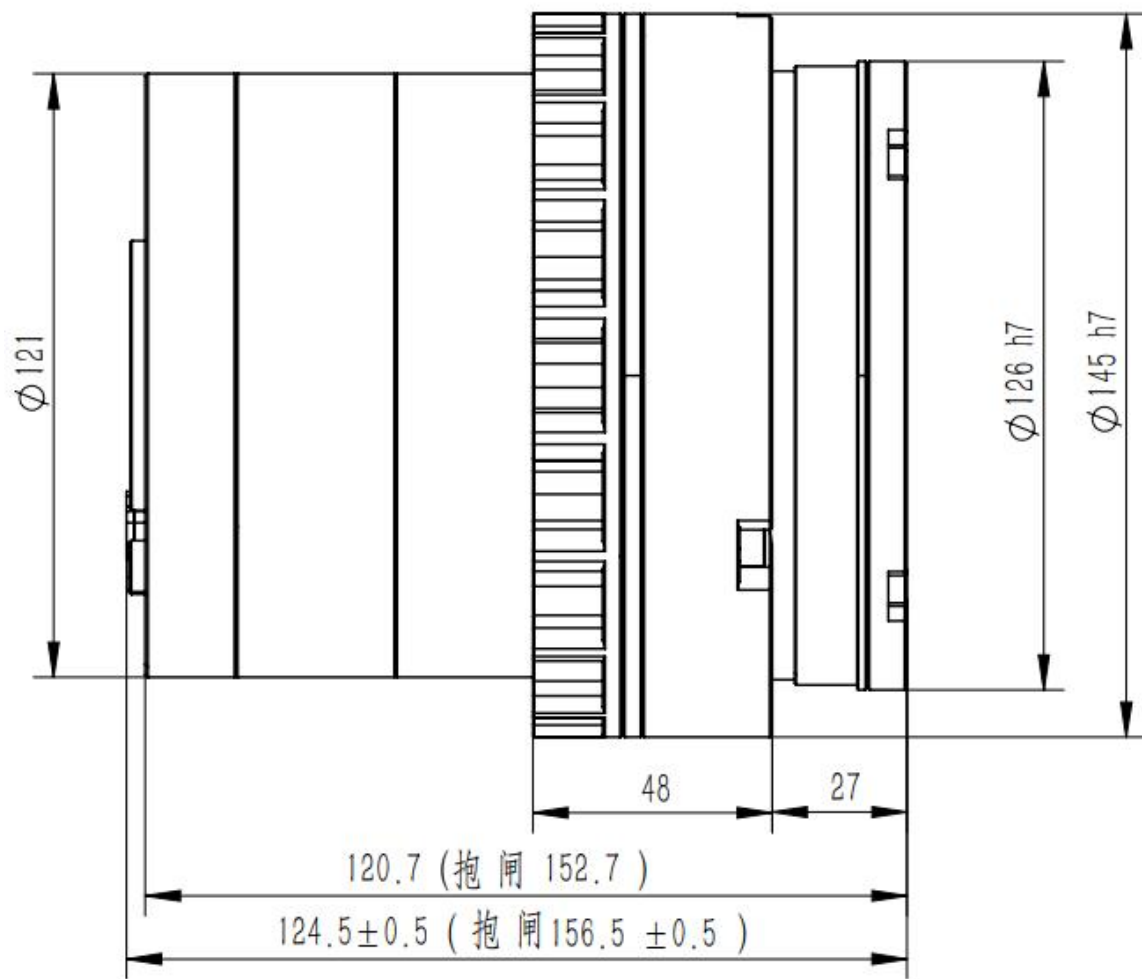
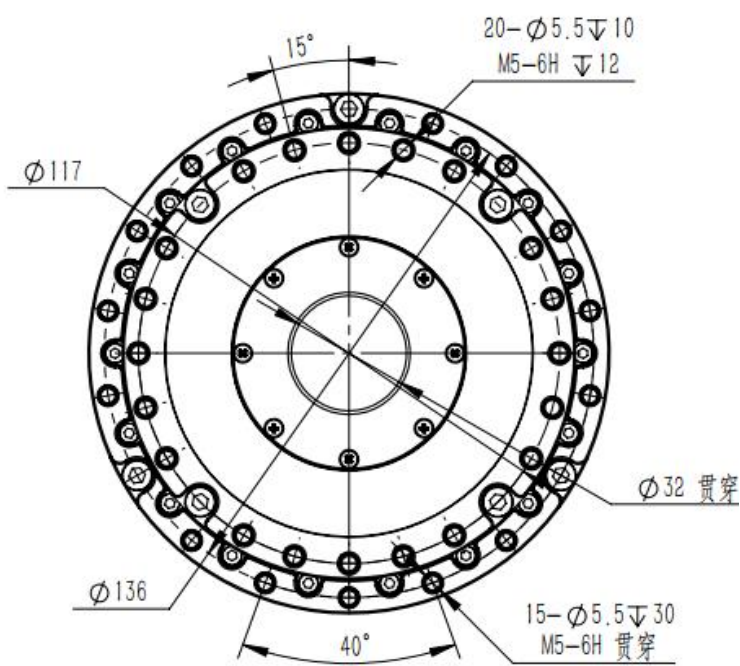
Parameters

Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	267	376	411	436	459
Max. Allowable Average Load Torque N·M	133	206	267	267	267
Rated Torque N·M	94	146	169	169	169
Peak Speed RPM	55	37	29	24	18
Rated Speed RPM	44	29	22	18	12
Backlash Arcsec	20	20	10	10	10
Motor Power W	1000W				
Max. Continuous Current A	19.9A				
Rated Current A	15.8A				
Motor Torque Constant N·m/A	0.175 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole ø (mm)	32		32		
Rotor Inertia g * cm ²	3910.2		5935.35		
Rotor Inertia (with Brake) g * cm ²	4744.7		7854.45		

Single Encoder Version



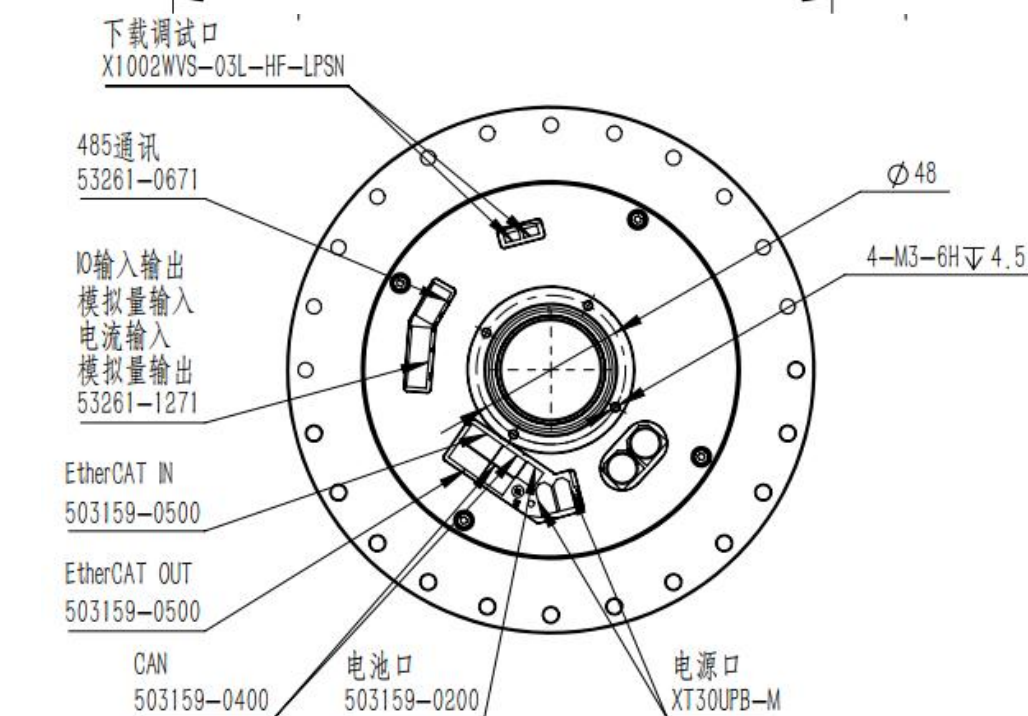
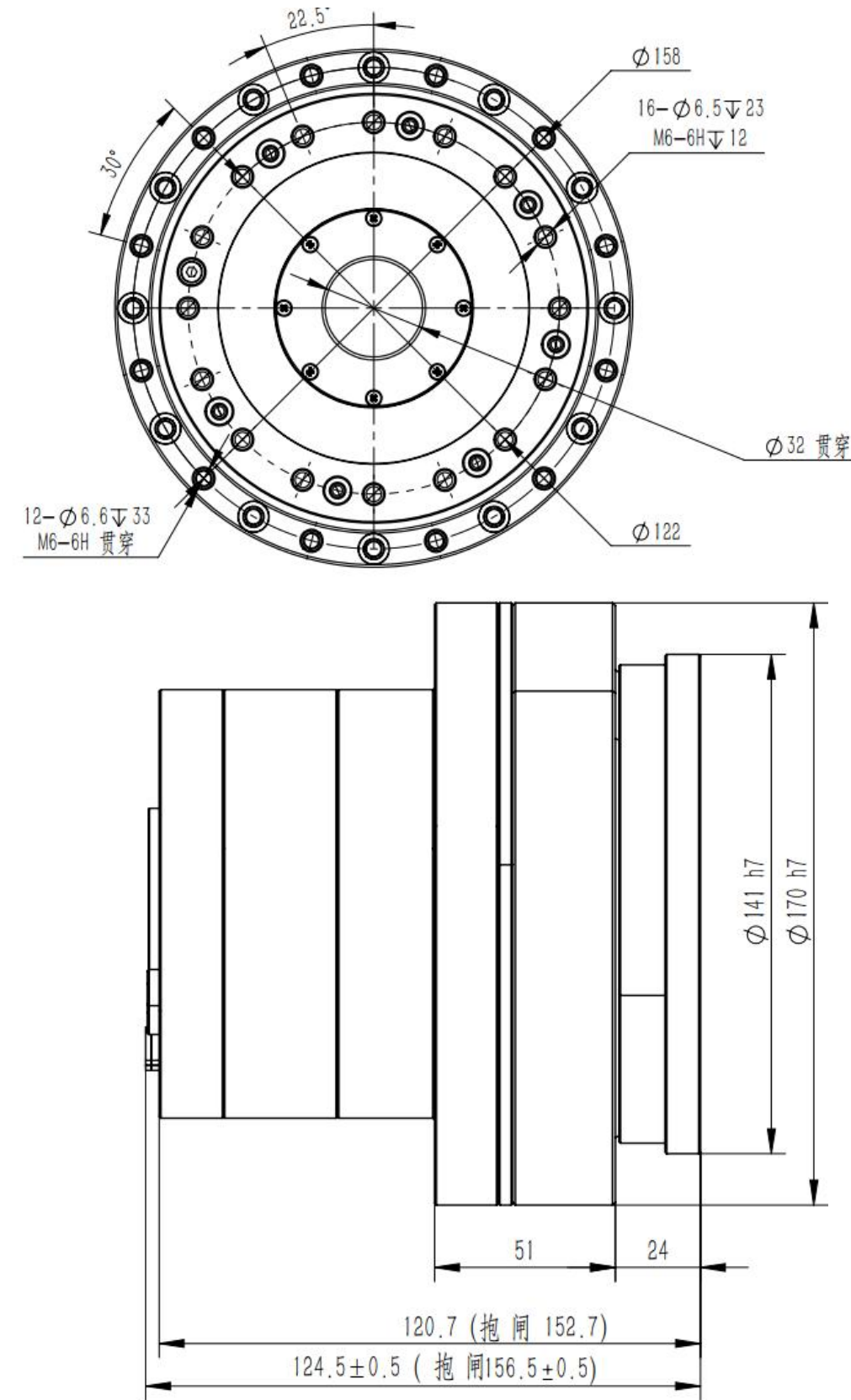
Dual Encoders Version



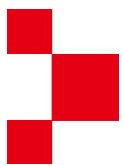
Parameters

Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	497	641	702	762	800
Max. Allowable Average Load Torque N·M	242	351	460	557	557
Rated Torque N·M	169	255	328	363	363
Peak Speed RPM	33	21	16	14	10
Rated Speed RPM	22	15	12	10	7
Backlash Arcsec	20	20	10	10	10
Motor Power W	1500W				
Max. Continuous Current A	30.2A				
Rated Current A	14.1A				
Motor Torque Constant N·m/A	0.293 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole ϕ (mm)	40		32		
Rotor Inertia $g \cdot cm^2$	8333.3		9689.83		
Rotor Inertia (with Brake) $g \cdot cm^2$	10709.2		12630.38		

Dual Encoders Version



Reduction Ratio	51	81	101	121	161
Peak Torque (start/stop) N·M	497	641	702	762	800
Max. Allowable Average Load Torque N·M	242	351	460	557	557
Rated Torque N·M	169	255	328	363	363
Peak Speed RPM	33	21	16	14	10
Rated Speed RPM	22	15	12	10	7
Backlash Arcsec	20	20	10	10	10
Motor Power W	1500W				
Max. Continuous Current A	30.2A				
Rated Current A	14.1A				
Motor Torque Constant N·m/A	0.293 N·m/A				
Communication Protocol	Single Encoder CAN/CANopen		Dual Encoders CAN/Ethercat		
Through Hole ø (mm)	40		32		
Rotor Inertia g * cm ²	8333.3		9689.83		
Rotor Inertia (with Brake) g * cm ²	10709.2		12630.38		



Brake Torque and Main Bearing Load Parameters Table

HPJM系列负载能力表								
HPJM Series Load Capacity Table								
Module Specification	Radial Rated Dynamic Load (Cr)		Radial Rated Static Load (C0r)		Statically Allowable Axial Load (Fa)		Statically Allowable Moment (M0)	
	KN	kgf	KN	kgf	KN	kgf	Nm	kgfm
RE30-40	2.89	294.90	3.19	325.51	6.56	669.39	38	3.88
RE40-52	3.35	341.84	5.31	541.84	10.59	1080.61	82	8.37
RE50-60	4.2	428.57	6.8	693.88	15.4	1571.43	146	14.90
RE50-70	5.8	591.84	8.6	877.55	19.55	1994.90	74	7.55
RE60-70	4.7	479.59	8.4	857.14	19.1	1948.98	218	22.24
RE60-80	10.4	1061.22	16.3	1663.27	37.05	3780.61	124	12.65
RE70-80	9.26	944.90	10.42	1063.27	23.68	2416.33	320	32.65
RE70-90	14.6	1489.80	22	2244.90	50	5102.04	190	19.39
RE80-97	17.09	1743.88	19.34	1973.47	43.95	4484.69	710	72.45
RE80-110	21.8	2224.49	35.8	3653.06	81.36	8302.04	260	26.53
RE100-120	20.76	2118.37	25.11	2562.24	57.06	5822.45	1860	189.80
RE100-142	38.2	3897.96	65.4	6673.47	148.64	15167.35	580	59.18
RE110-170	43.3	4418.37	81.6	8326.53	185.45	18923.47	850	86.73

Module Specification	Brake Torque N.m
RE30-40	0.06
RE40-52	0.15
RE50-60	0.3
RE50-70	0.3
RE60-70	1
RE60-80	1
RE70-80	1
RE70-90	1
RE80-97	2
RE80-110	2
RE100-120	4
RE100-142	4
RE110-142	6

