

ABOUT **MOTOR**

TECHNOLOGY

Electrical Machinery Manufacturer

钛虎机器人
Ti5 ROBOT

轻量化关节模组
Light Joint Module

钛虎轻量化关节模组

快速选型表

产品系列	关节型号 (模组外径红标)	减速比	启停峰值扭矩 (N.m)	平均负载转矩容许最大值 (N.m)	2000rpm/ 时额定转矩 (N.m)	额定转速 (RPM) (带1/2额定扭矩)
PRO系列	CRA-RI30-40-PRO-XX	51/101	3.3/4.8	2.3/3.3	1.8/2.8	90/45
	CRA-RI40-52-PRO-XX	51/101	8.3/11	5.5/8.9	4/6.5	80/40
	CRA-RI50-70-PRO-XX	51/81/101	23/29/34	8.6/13.5/13.5	6.6/9.6/9.6	75/46/37
	CRA-RI60-80-PRO-XX	51/81/101/121	42/53/66/66	32/33/49/49	19.8/27.5/30/30	68/43/34/24
	CRA-RI70-90-PRO-XX	51/81/101/121	63/91/102/108	42/58/61/61	32/42/50/50	61/38/30/25
	CRA-RI80-110-PRO-XX	51/81/101/121/161	121/169/194/207/217	68.5/107/133/133/133	48/78/84/84/84	54/35/27/23/17
	CRA-RI100-142-PRO-XX	51/81/101/121/161	267/376/411/436/459	120/185/267/267/267	94/146/169/169/169	44/29/22/18/12
	CRA-RI110-170-PRO-XX	51/121/161	523/802/841	255/586/586	169/363/363	22/12/7
PRO-S 系列	CRA-RI50-60-PRO-XX	51/81/101	23/29/34	8.6/13.5/13.5	6.6/9.6/9.6	75/46/37
	CRA-RI60-70-PRO-XX	51/81/101/121	42/53/66/66	32/33/49/49	19.8/27.5/30/30	68/43/34/24
	CRA-RI70-80-PRO-XX	51/81/101/121	63/91/102/108	42/58/61/61	32/42/50/50	61/38/30/25
	CRA-RI80-97-PRO-XX	51/81/101/121/161	121/169/194/207/217	68.5/107/133/133/133	48/78/84/84/84	65/43/36/30/22
	CRA-RI100-120-PRO-XX	51/81/101/121/161	267/376/411/436/459	133/206/267/267/267	94/146/169/169/169	55/37/29/24/18
NH系列	CRA-RI50-70-NH-XX	51/101	6/9	4.5/7.5	3.6/6	80/40
	CRA-RI40-52-NH-XX	51/81/101	12/23/27	7/11/11	5.5/8/8	75/46/37
	CRA-RI60-80-NH-XX	51/81/101/121	33/41/48/48	25/27/34/34	17/24/35/35	38/24/20/16
	CRA-RI70-90-NH-XX	51/81/101/121	49/71/80/84	29/41/43/43	26/36/40/40	61/38/30/25
	CRA-RI80-110-NH-XX	51/81/101/121/161	94/132/151/161/171	55/90/105/105/105	48/78/84/84/84	54/35/27/23/17

*数据仅供参考



型号说明:

P/N Interpretation:

CRA - RIXX-XX - (PRO) - XX - (B, T, 2E, IPXX)

刹车, 扭矩传感器, 双编码器, 防水等级
Brake, Torque Sensor, Bi-encoder, Waterproof Rating

减速比
Gear Ratio

一体化关节系列型号
Product Series

外径
Outer Diameter

电机型号
P/N

PRO系列

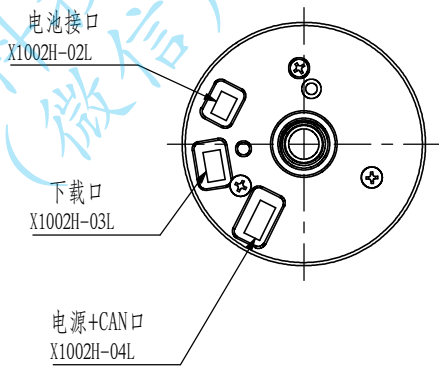
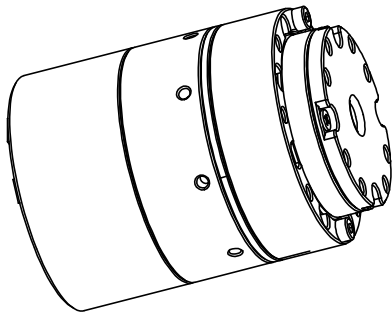
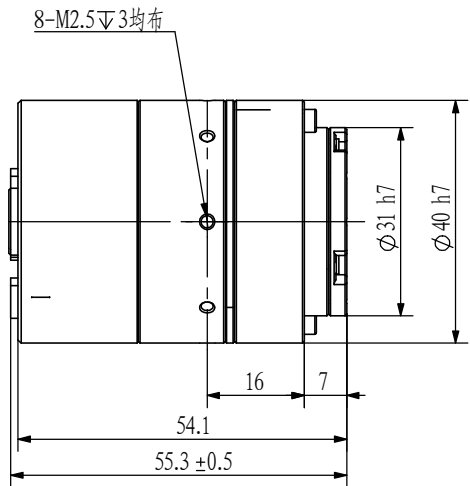
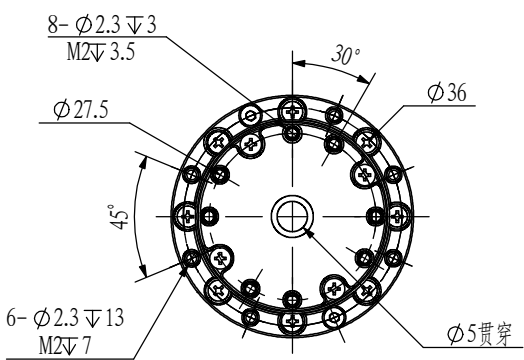
PRO Series

适合人形机器人, 外骨骼,
协作机器人, 汽车、AGV
等多种应用场景

Suitable for humanoid robots, exoskeletons,
collaborative robots, automobiles, AGVs
and other application scenarios



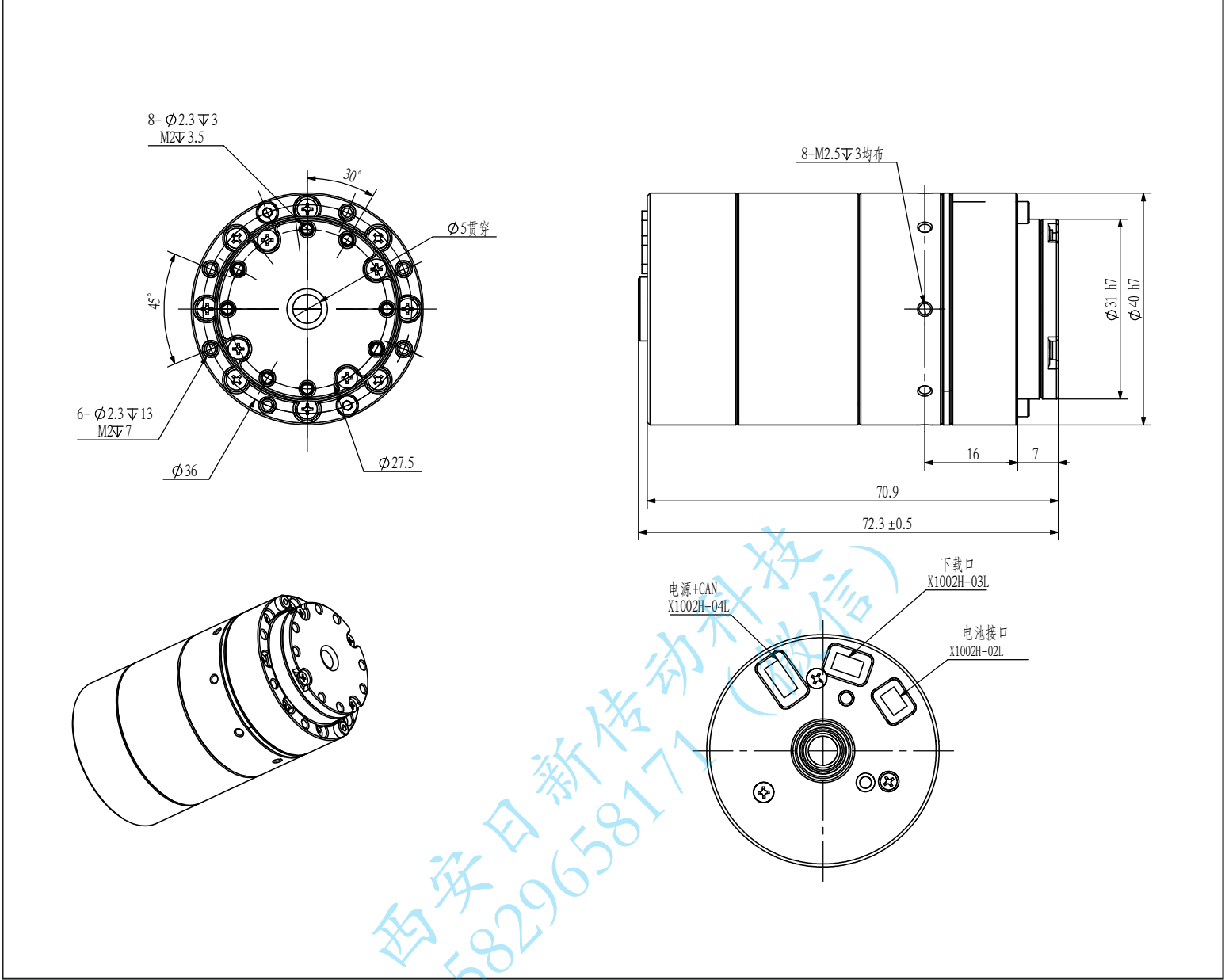
- 可靠性高, 寿命长 Robustness & High-cycle Life
- 高扭矩密度, 低齿槽转矩 High Torque Density, Low Cogging Torque
- 防水防尘防爆 Waterproof, Dustproof, Explosion-proof
- 噪音小, 精度高 Low Noise & High Precision
- 中空轴设计 Hollow Shaft



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	3.3	2.3	1.8	118	90	40
101	4.8	3.3	2.8	59	45	40

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
36	24-48	2	1	2.08	17	CAN

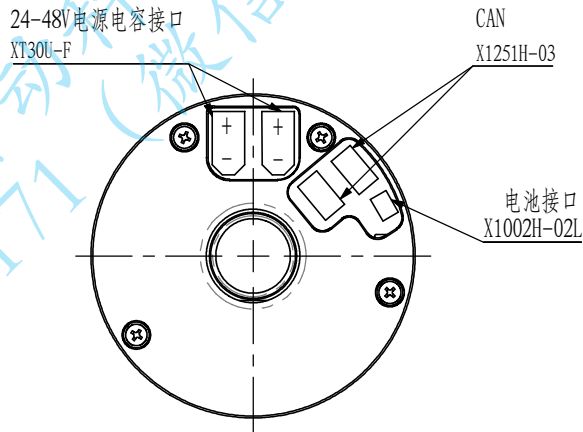
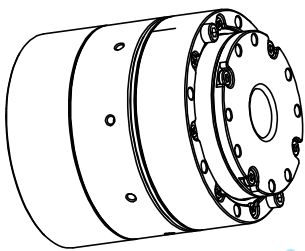
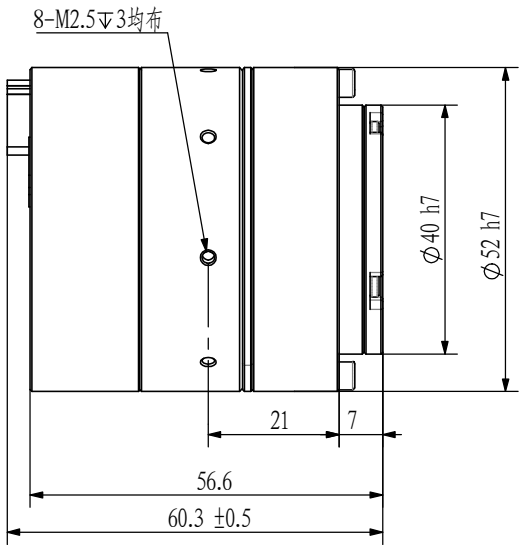
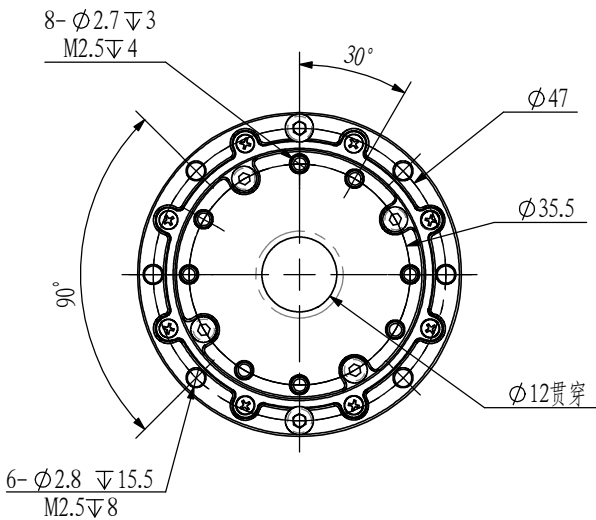
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia ($g \cdot cm^2$)
0.024	0.409	7	5	55.3 ± 0.5	0.18	24



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	3.3	2.3	1.8	118	90	40
101	4.8	3.3	2.8	59	45	40

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
36	24-48	2	1	2.08	17	CAN

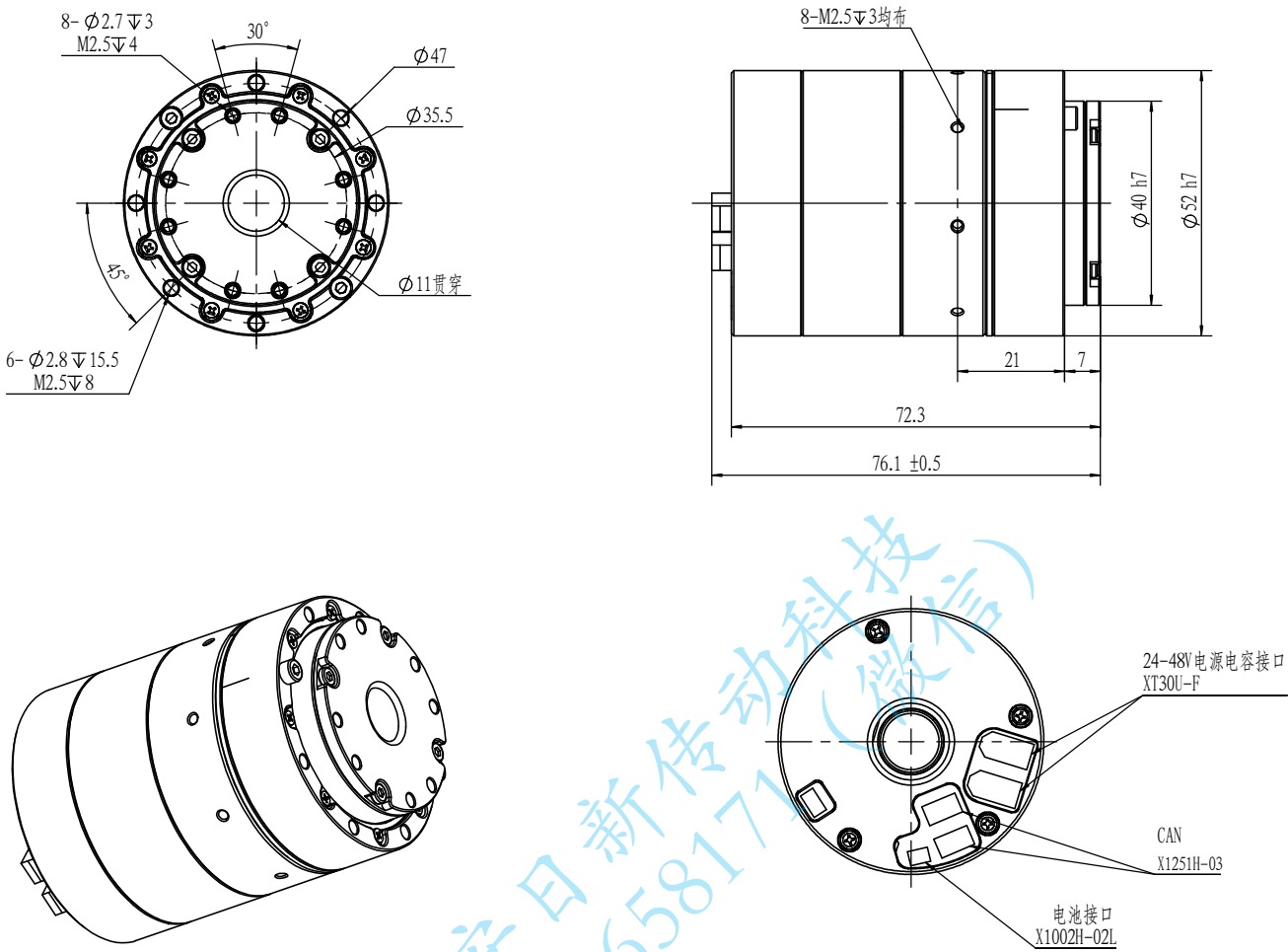
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0.024	0.409	7	5	72.3±0.5	0.23	45



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	8.3	5.5	4	118	80	40
101	11	8.9	6.5	59	40	30

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
90	24-48	3	2	1.96	17	CAN

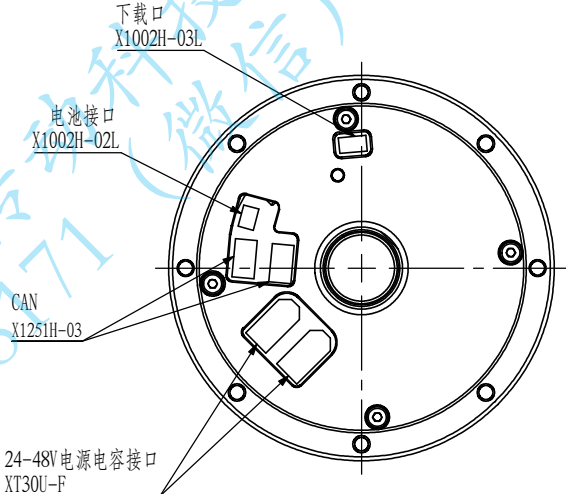
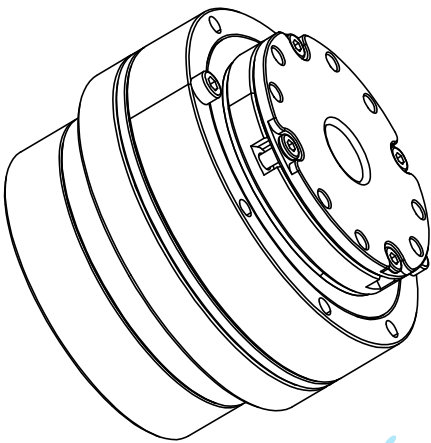
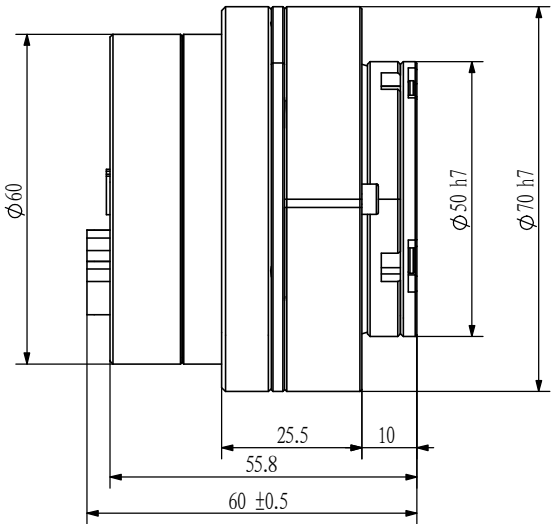
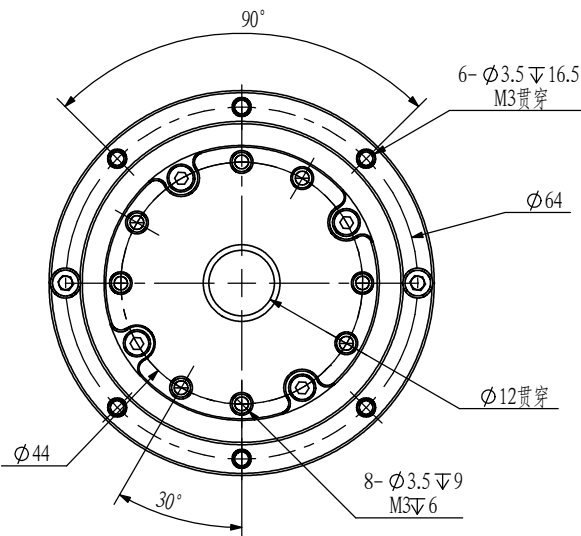
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.05	0.788	7	12	60.3±0.5	0.3	82



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	8.3	5.5	4	118	80	40
101	11	8.9	6.5	59	40	30

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
90	24-48	3	2	1.96	17	CAN

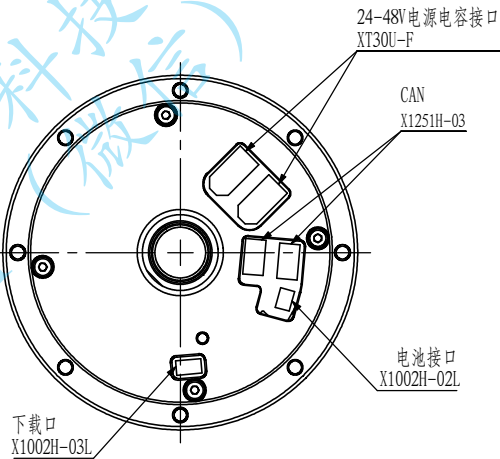
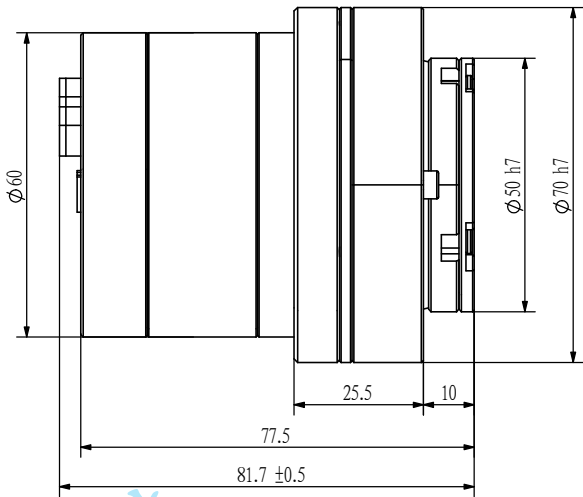
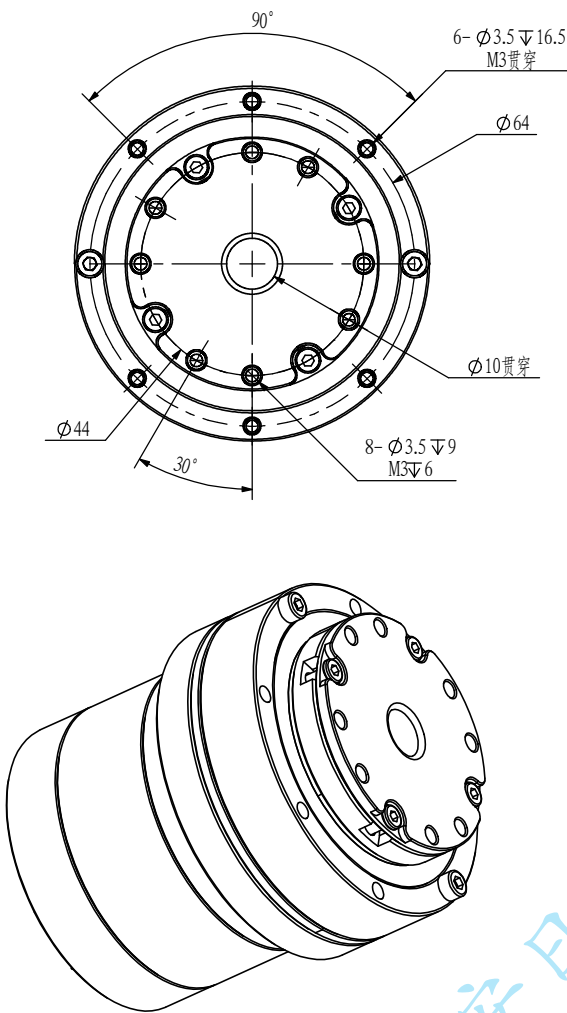
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.05	0.788	7	11	76.1±0.5	0.38	127



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	23	8.6	6.6	97	75	20
81	29	13.5	9.6	61	46	20
101	34	13.5	9.6	49	37	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

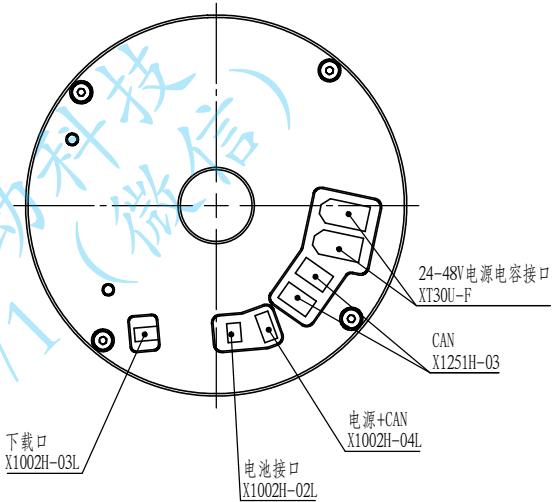
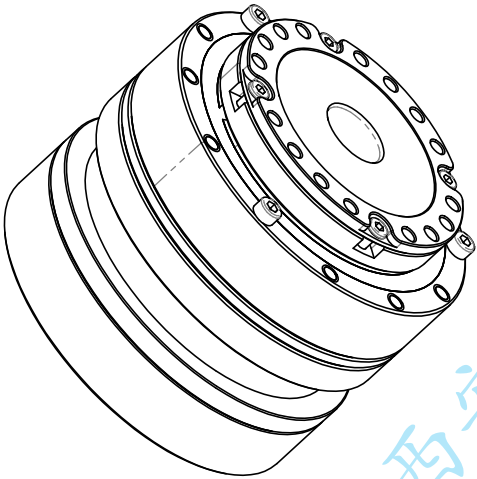
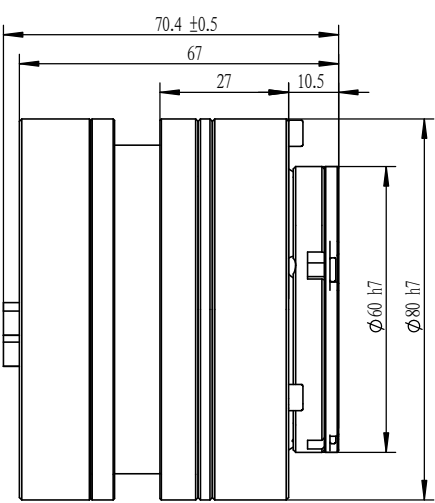
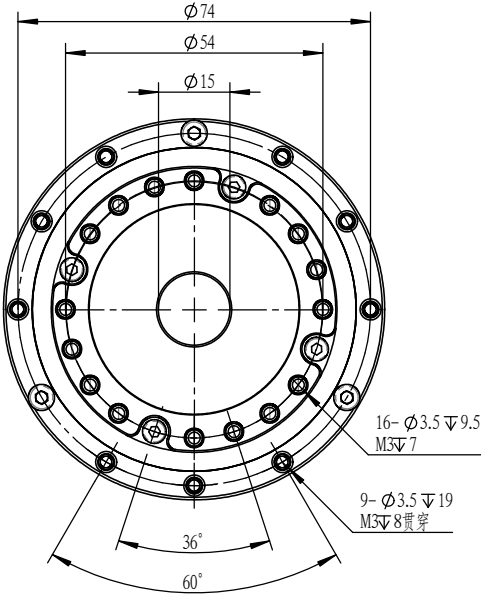
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.089	0.215	10	12	60±0.5	0.63	124



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	23	8.6	6.6	97	75	20
81	29	13.5	9.6	61	46	20
101	34	13.5	9.6	49	37	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

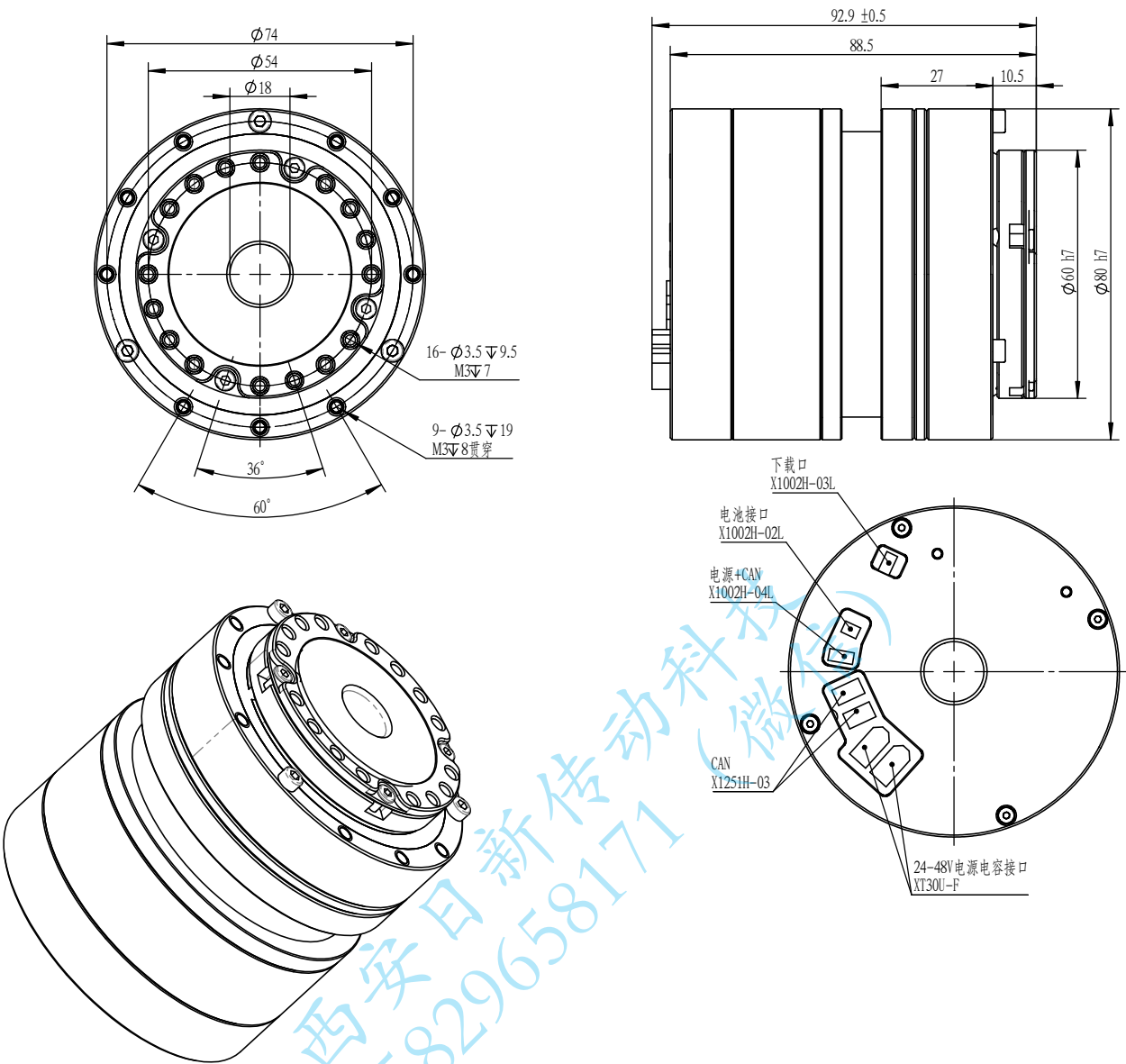
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.089	0.215	10	10	81.7±0.5	0.8	147



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	42	32	19.8	82	68	20
81	53	33	27.5	51	43	20
101	66	49	30	41	34	10
121	66	49	30	32	24	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.33	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.096	0.074	10	15	70.4±0.5	1.01	441

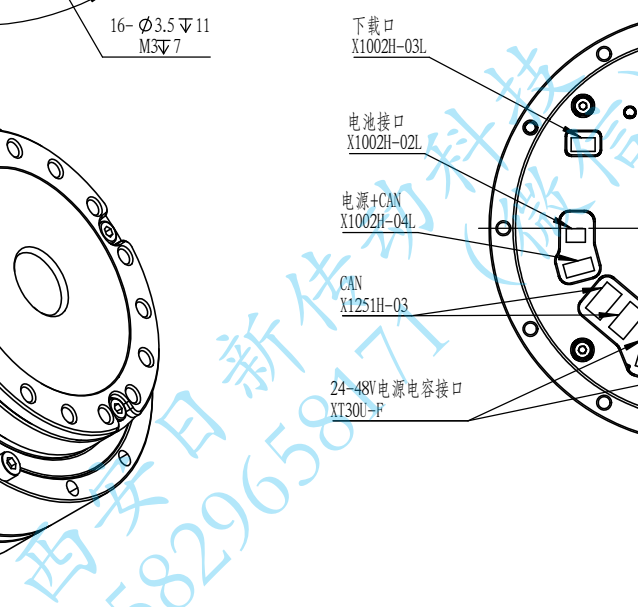


减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值扭矩 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	42	32	19.8	82	68	20
81	53	33	27.5	51	43	20
101	66	49	30	41	34	10
121	66	49	30	32	24	10

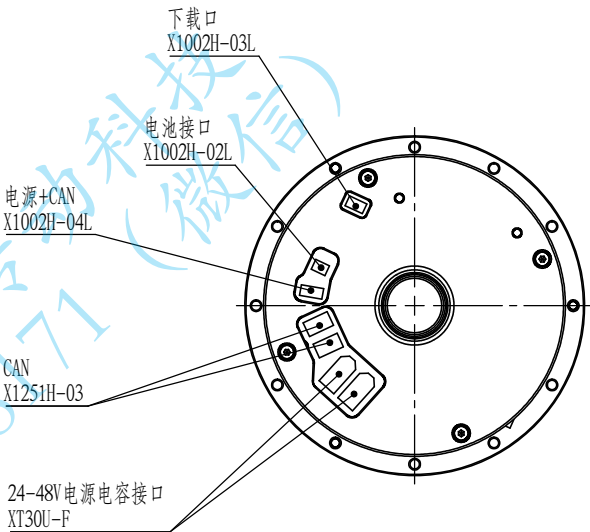
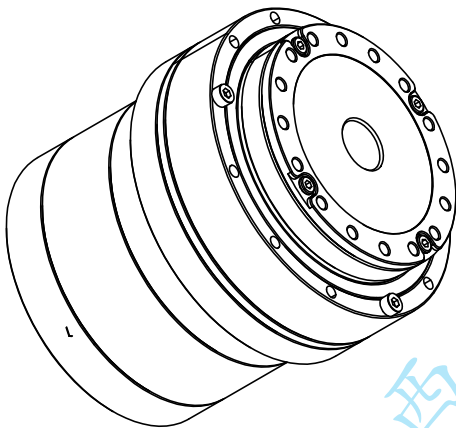
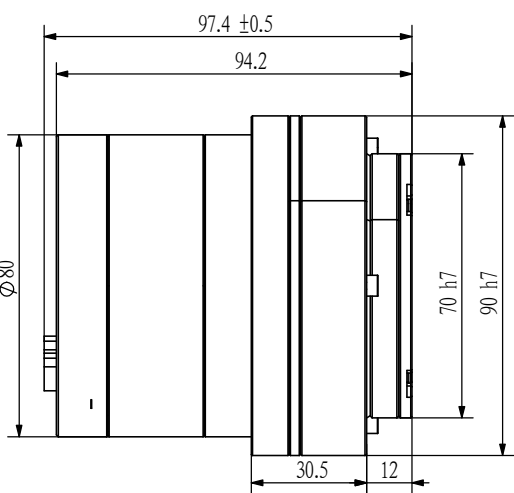
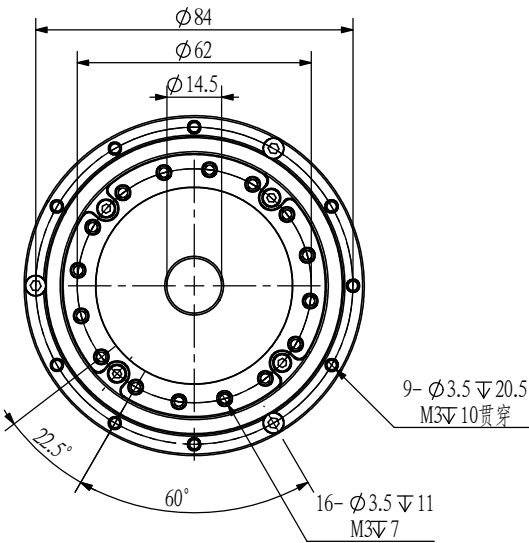
电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.33	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.096	0.074	10	18	92.9±0.5	1.17	595

产品介绍



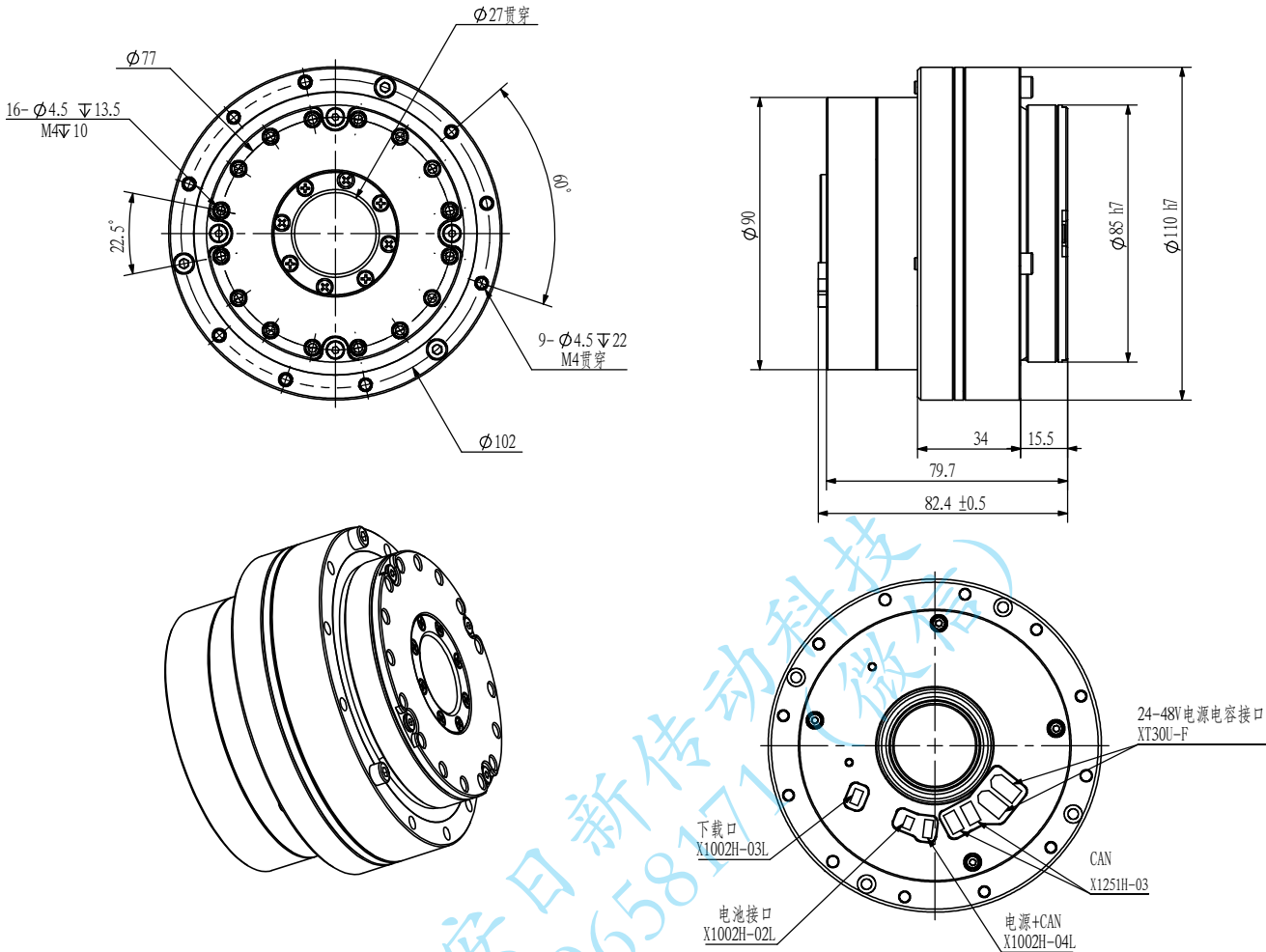
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0.118	0.33	10	14.5	71.9±0.5	1.3	594



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	63	42	32	77	61	20
81	91	58	42	48	38	20
101	102	61	50	40	30	10
121	108	61	50	30	25	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
500	24-48	8.4	6.1	0.38	17	CAN

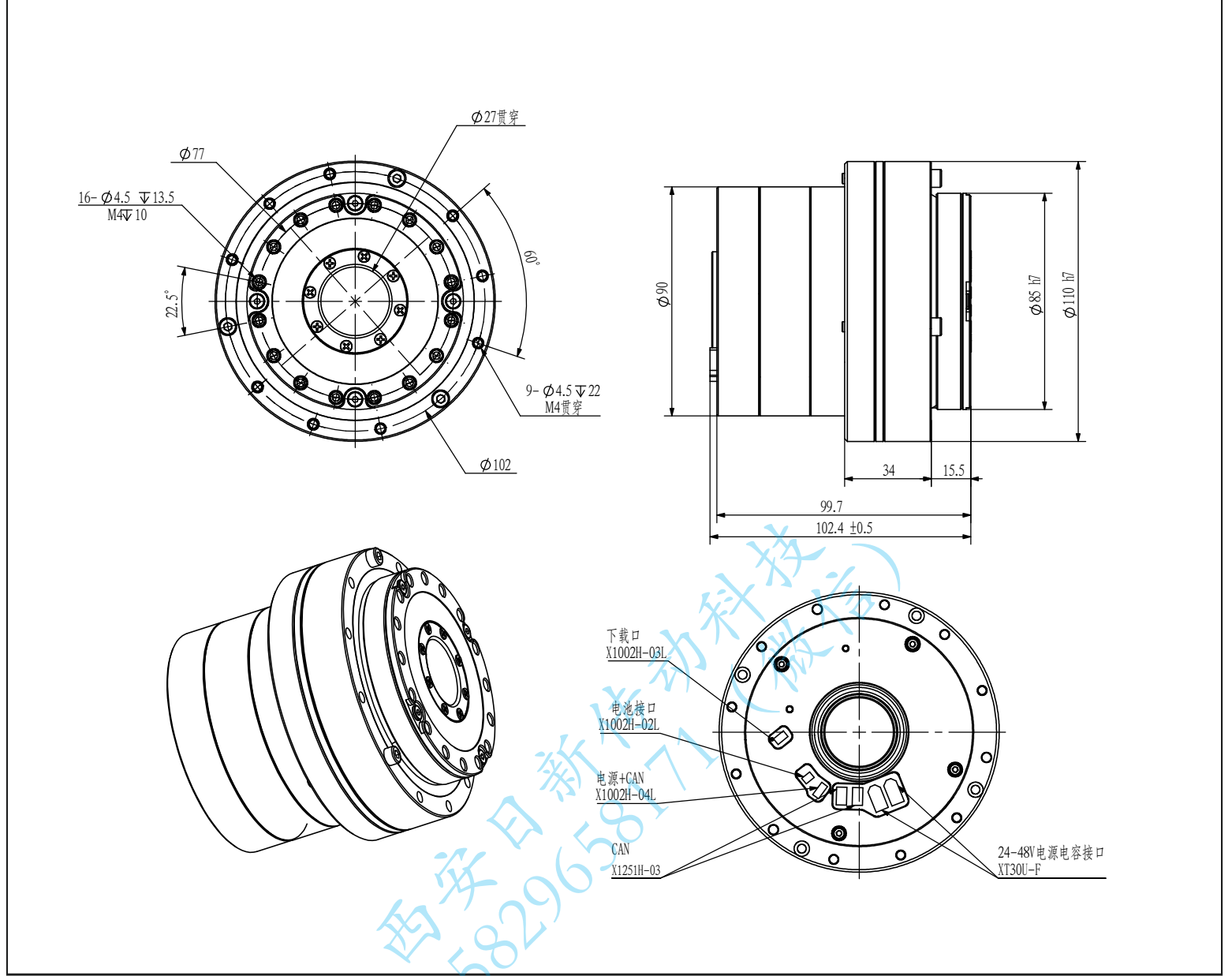
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.118	0.33	10	14.5	97.4±0.5	1.6	682



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	121	68.5	48	65	54	20
81	169	107	78	43	35	20
101	194	133	84	36	27	10
121	207	133	84	30	23	10
161	217	133	84	22	17	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
750	24-48	10.4	9	0.13	17	CAN

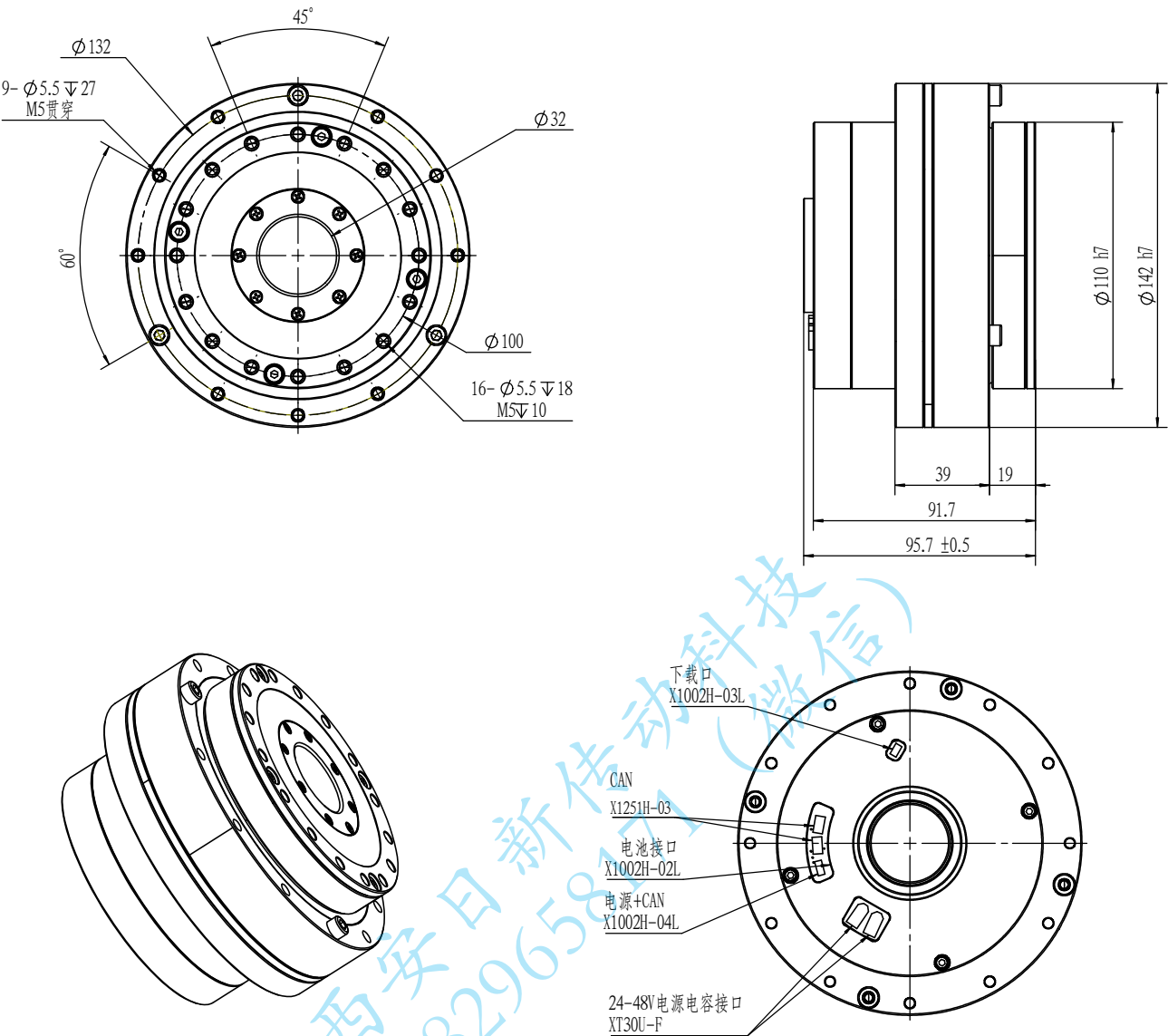
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.143	0.25	8	27	82.4±0.5	2.1	1255



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	121	68.5	48	65	54	20
81	169	107	78	43	35	20
101	194	133	84	36	27	10
121	207	133	84	30	23	10
161	217	133	84	22	17	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
750	24-48	10.4	9	0.13	17	CAN

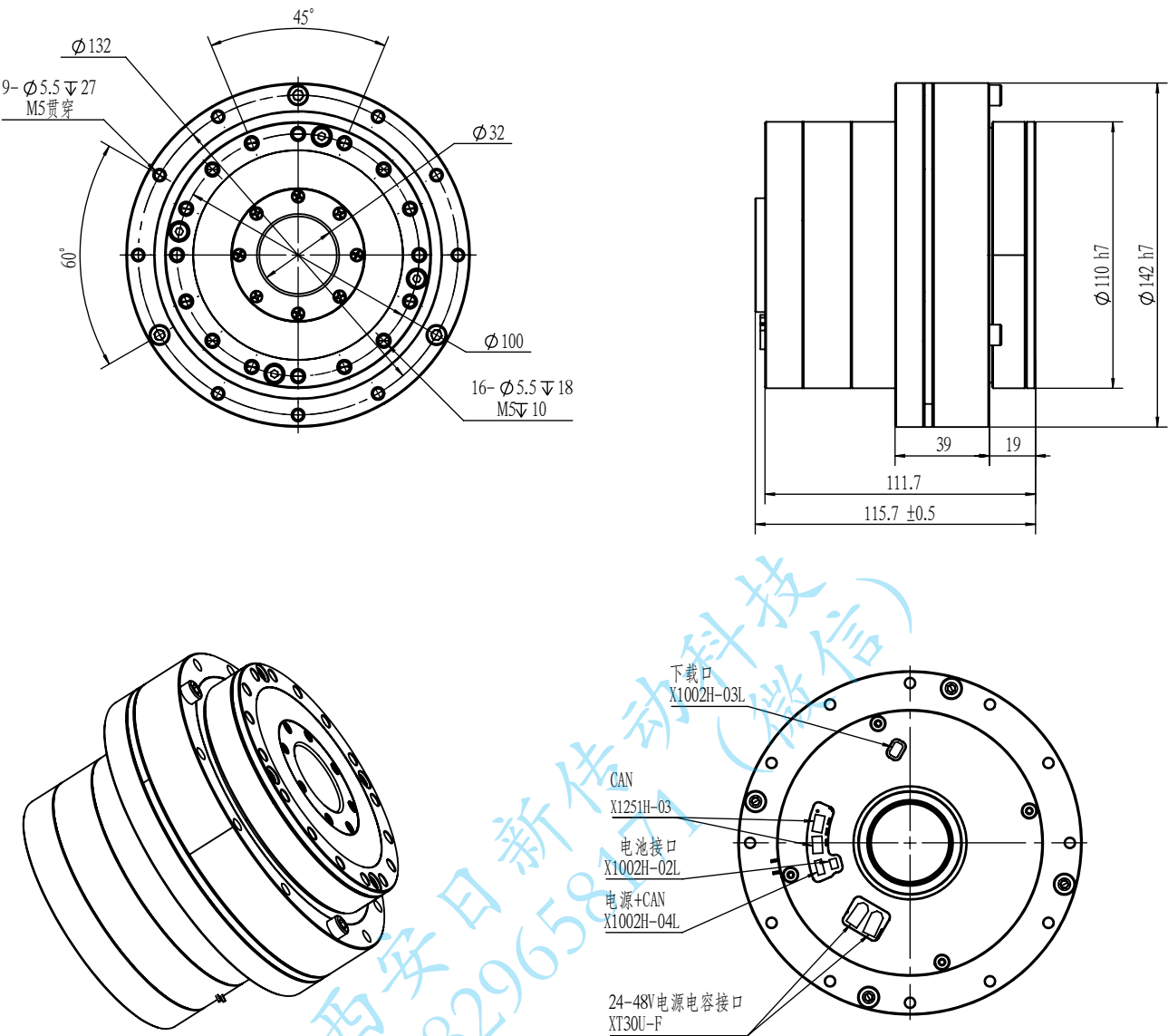
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0.143	0.25	8	27	102.4±0.5	2.6	1484



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	267	120	94	55	44	20
81	376	185	146	37	29	20
101	411	267	169	29	22	10
121	436	267	169	24	18	10
161	459	267	169	18	12	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
1000	24-48	16.9	15.8	0.12	17	CAN

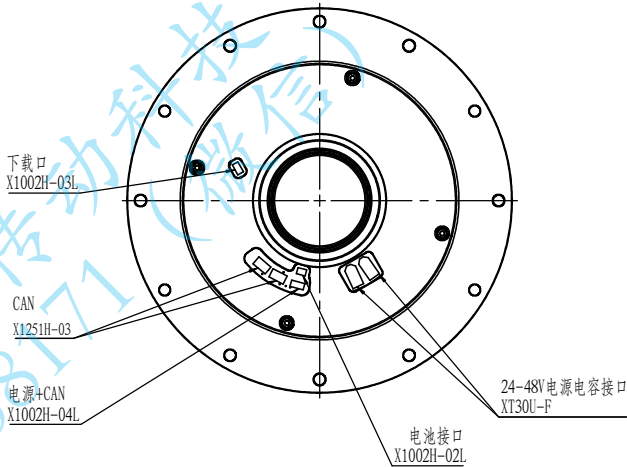
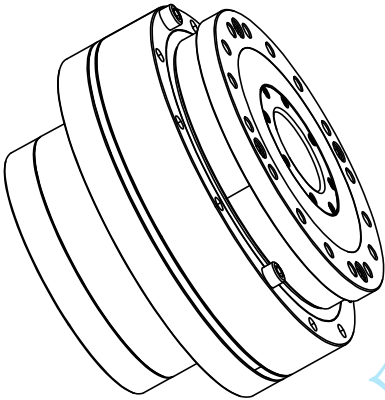
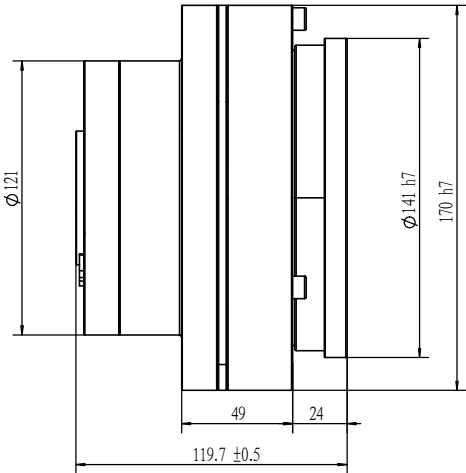
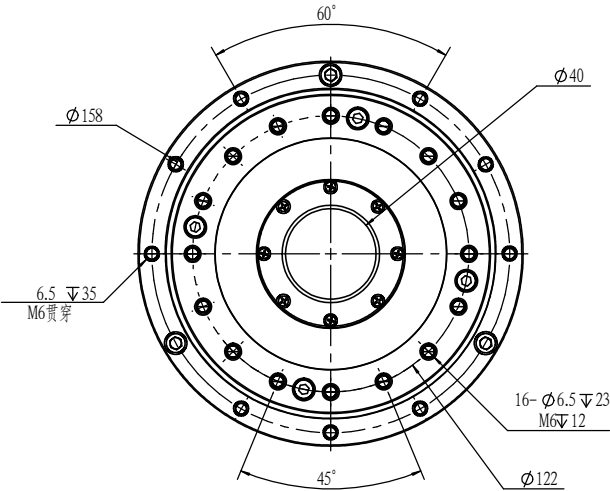
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.175	0.3	8	32	95.7±0.5	3.8	3601



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	267	120	94	55	44	20
81	376	185	146	37	29	20
101	411	267	169	29	22	10
121	436	267	169	24	18	10
161	459	267	169	18	12	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
1000	24-48	16.9	15.8	0.12	17	CAN

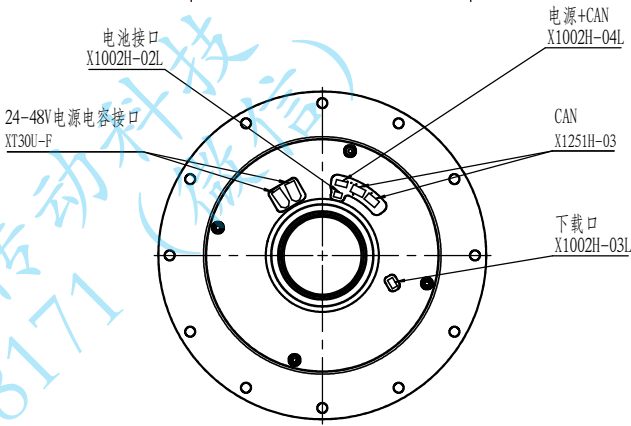
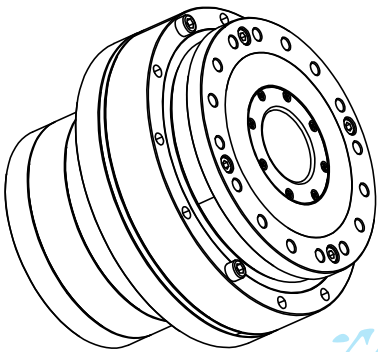
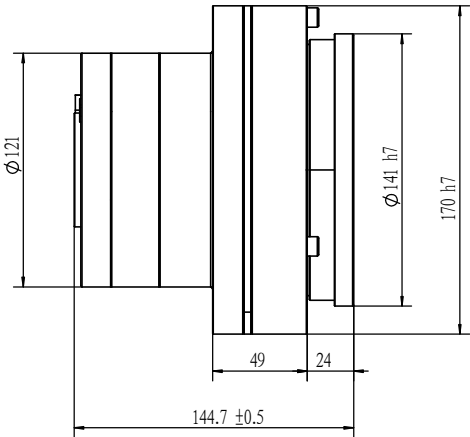
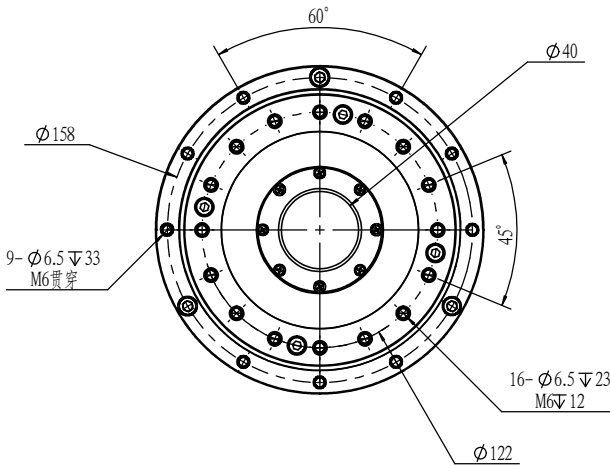
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.175	0.3	8	32	115.7±0.5	4.5	4237



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	523	255	169	34	22	20
121	802	586	363	14	12	20
161	841	586	363	10	7	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
1500	24-48	30.2	14.1	0.23	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.293	0.25	15	40	119.7±0.5	6.85	9242



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	523	255	169	34	22	20
121	802	586	363	14	12	20
161	841	586	363	10	7	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
1500	24-48	30.2	14.1	0.23	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.293	0.25	15	40	144.7 ± 0.5	7.5	11751



型号说明:

P/N Interpretation:

CRA - RIXX-XX - (PRO-S) - XX - (B, T, 2E, IPXX)

刹车, 扭矩传感器, 双编码器, 防水等级
Brake, Torque Sensor, Bi-encoder, Waterproof Rating

减速比
Gear Ratio

一体化关节系列型号
Product Series

外径
Outer Diameter

电机型号
P/N

PRO-S系列

PRO-S Series

适合机械臂、机器人、

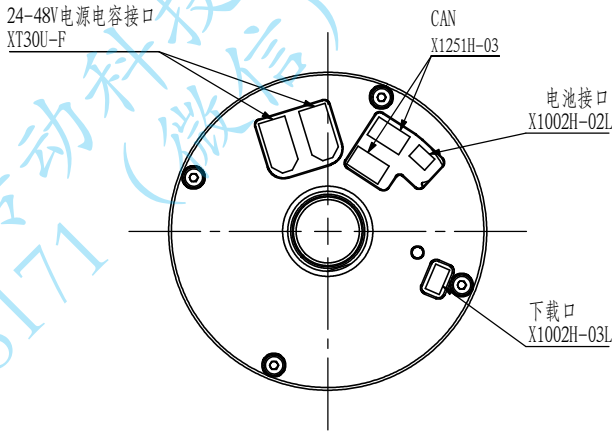
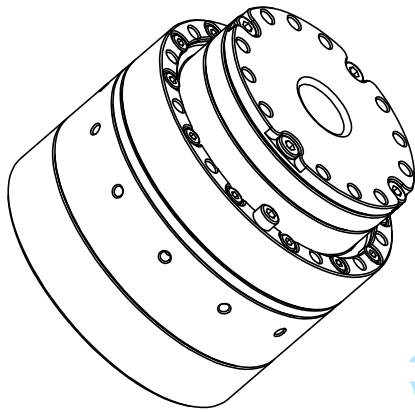
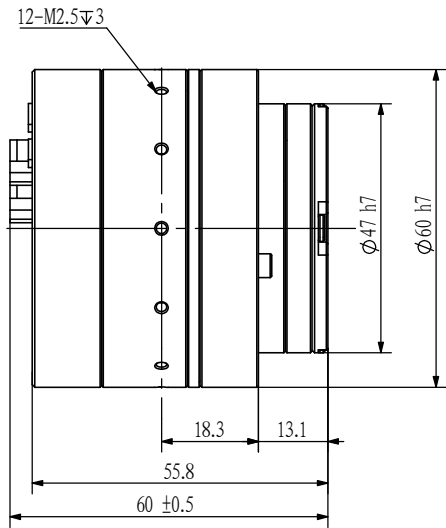
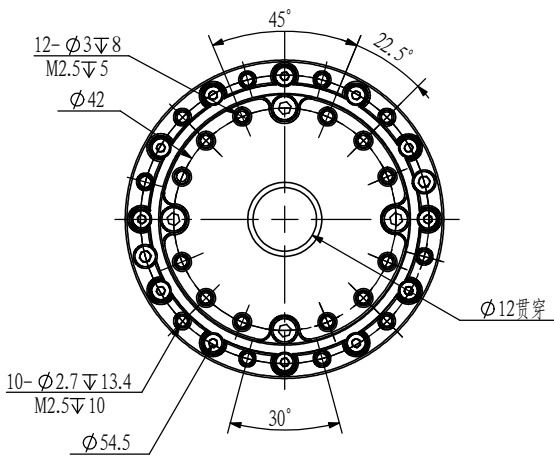
无人机、外骨骼等多种应用场景

Suitable for human robotic arms, robots,
UAVs, exoskeletons and other application scenarios



- 体积小, 重量轻 Miniaturization & Lightweight
- 快速响应 quick response
- 防水防尘防爆 Waterproof, Dustproof, Explosion-proof
- 高负重比 High load to weight ratio
- 中空轴设计 Hollow Shaft

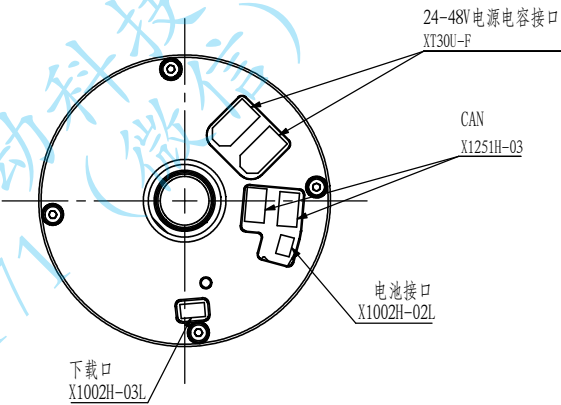
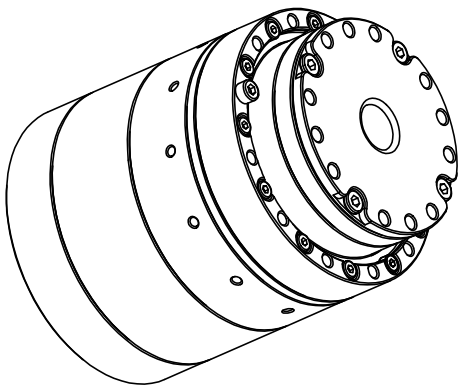
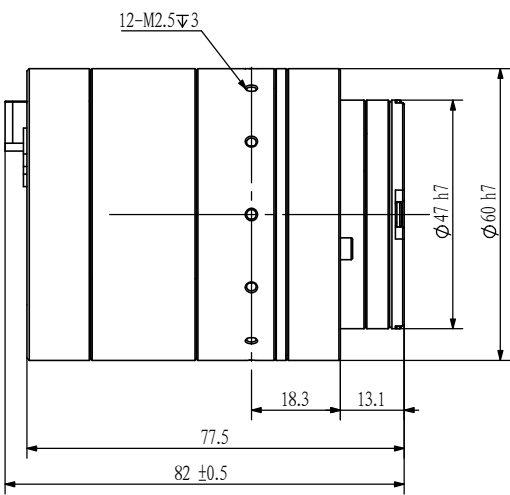
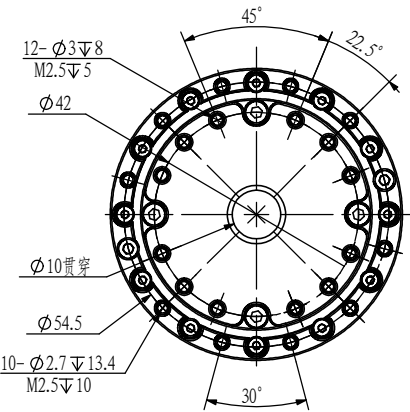




减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	23	8.6	6.6	97	75	20
81	29	13.5	9.6	61	46	20
101	34	13.5	9.6	49	37	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

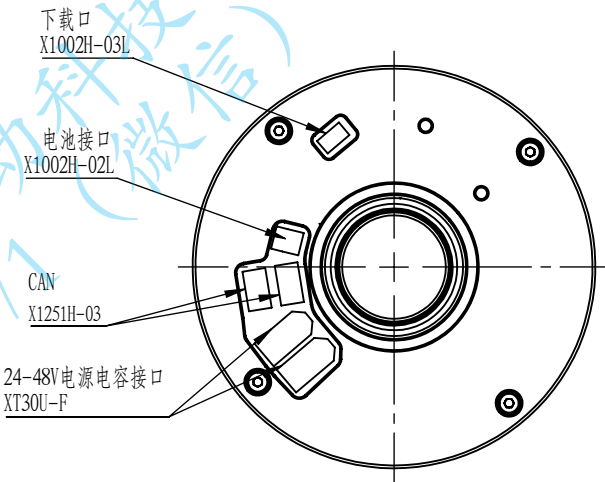
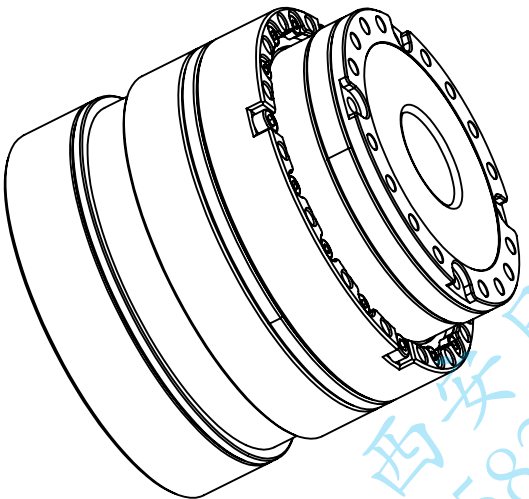
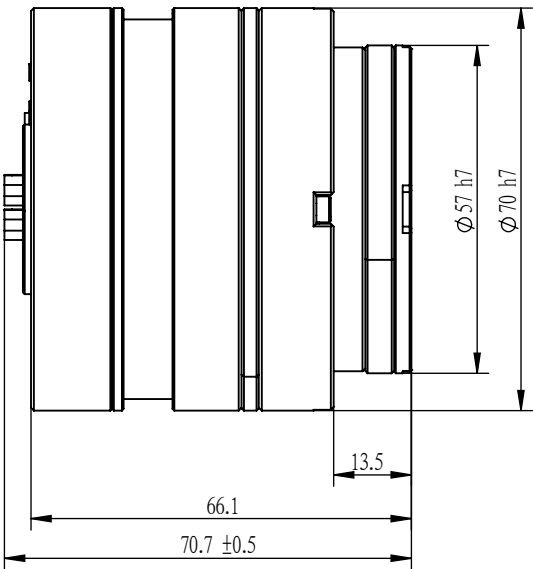
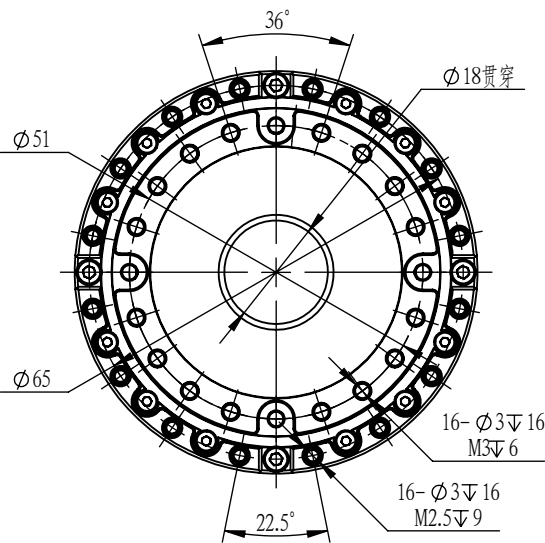
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.089	0.215	10	12	60±0.5	0.42	112



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	23	8.6	6.6	97	75	20
81	29	13.5	9.6	61	46	20
101	34	13.5	9.6	49	37	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

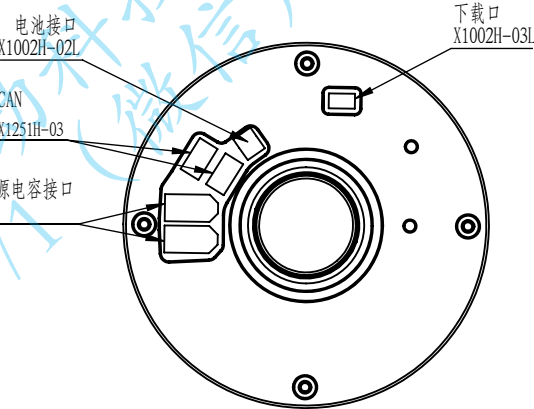
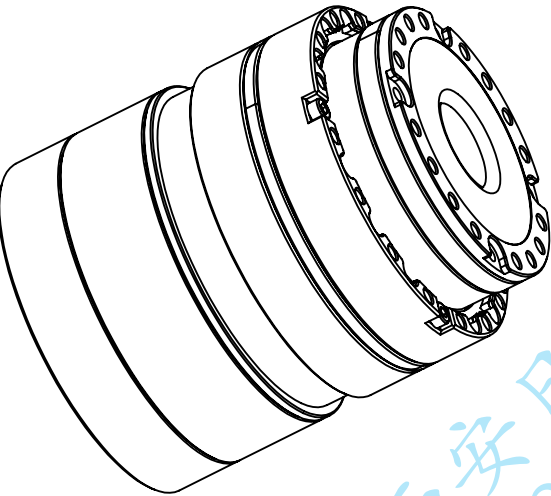
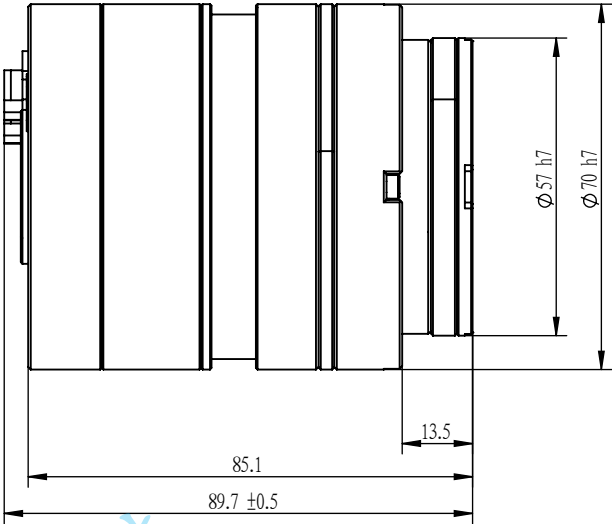
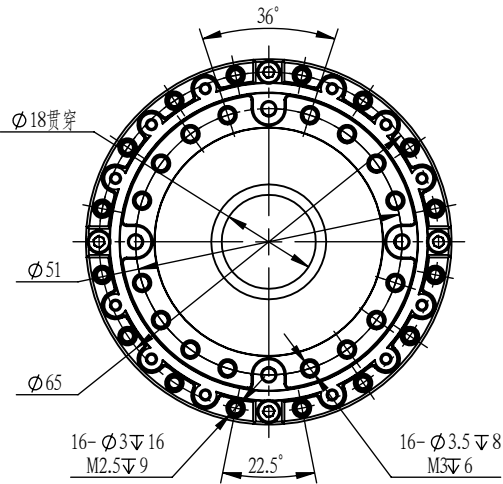
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.089	0.215	10	10	82±0.5	0.59	146



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	42	32	19.8	82	68	20
81	53	33	27.5	51	43	20
101	66	49	30	41	34	10
121	66	49	30	32	24	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.33	17	CAN

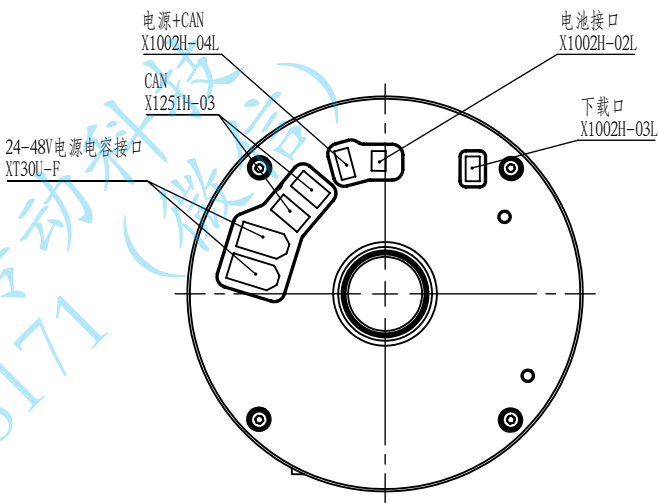
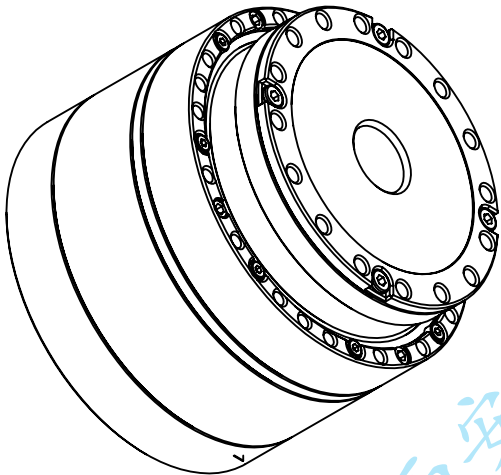
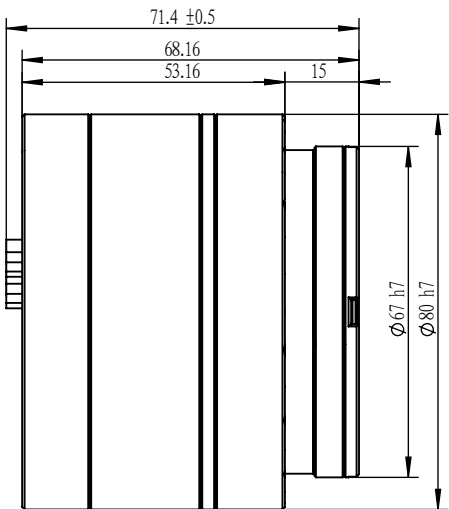
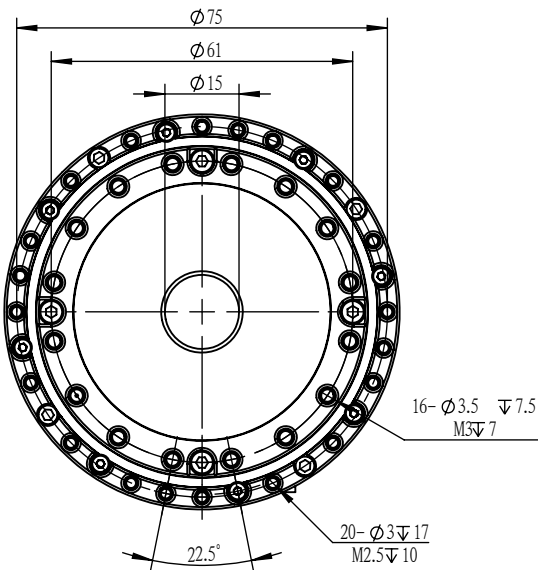
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.096	0.074	10	18	70.7±0.5	0.69	382



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	42	32	19.8	82	68	20
81	53	33	27.5	51	43	20
101	66	49	30	41	34	10
121	66	49	30	32	24	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.33	17	CAN

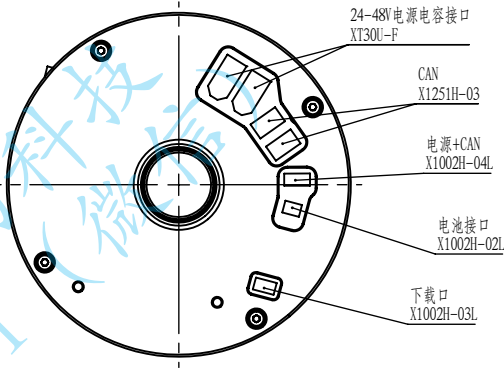
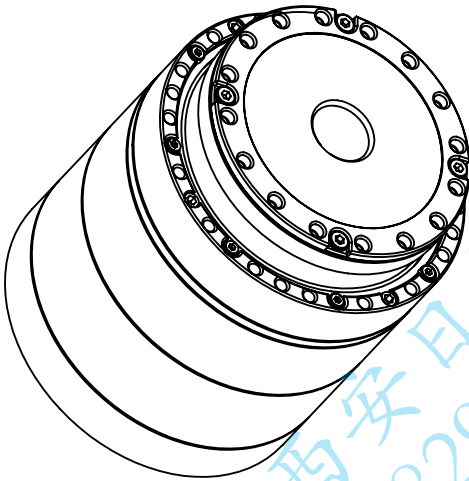
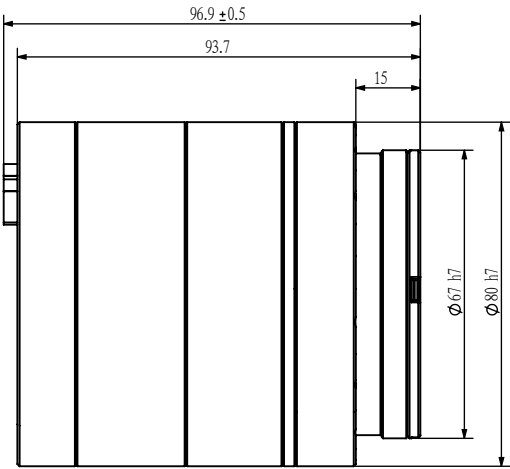
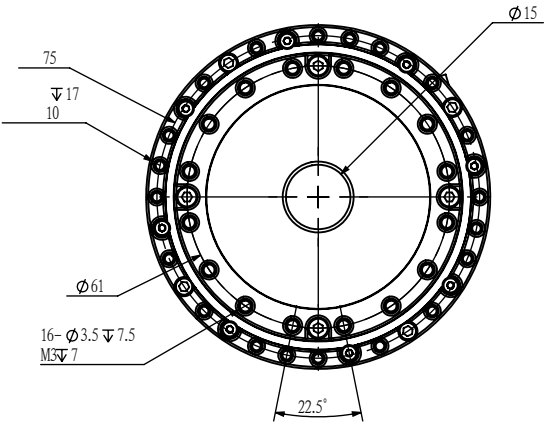
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.096	0.074	10	18	89.7±0.5	0.84	538



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	63	42	32	77	61	20
81	91	58	42	48	38	20
101	102	61	50	40	30	10
121	108	61	50	30	25	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
500	24-48	8.4	6.1	0.38	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.118	0.33	10	15	71.4±0.5	0.95	569



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值扭矩 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	63	42	32	77	61	20
81	91	58	42	48	38	20
101	102	61	50	40	30	10
121	108	61	50	30	25	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
500	24-48	8.4	6.1	0.38	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.118	0.33	10	15	96.9±0.5	1.3	679



型号说明:

P/N Interpretation:

CRA - RIXX-XX - (NH) - XX - (B, T, 2E, IPXX)

刹车, 扭矩传感器, 双编码器, 防水等级
Brake, Torque Sensor, Bi-encoder, Waterproof Rating

减速比
Gear Ratio

一体化关节系列型号
Product Series

外径
Outer Diameter

电机型号
P/N

NH系列

NH Series

核心零件自主研发

产品应用领域广泛

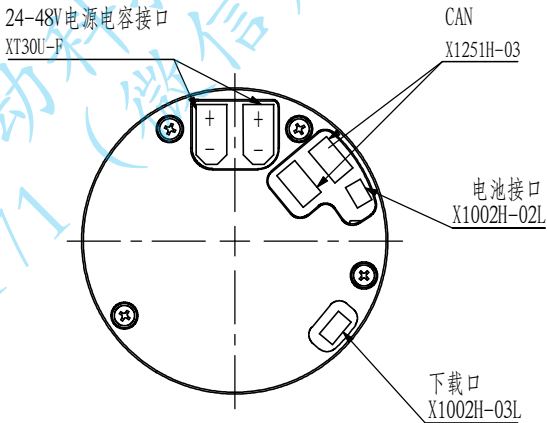
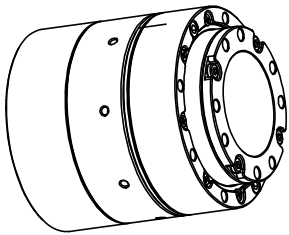
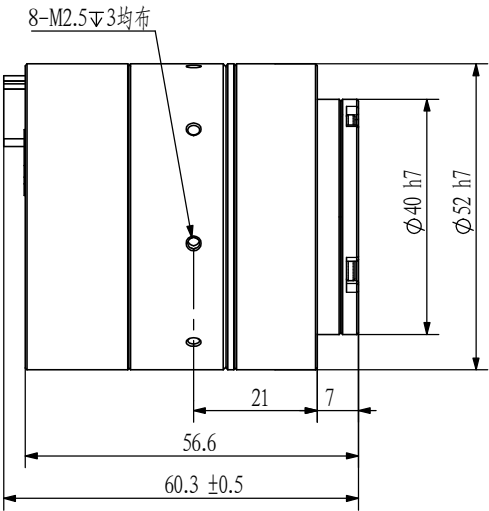
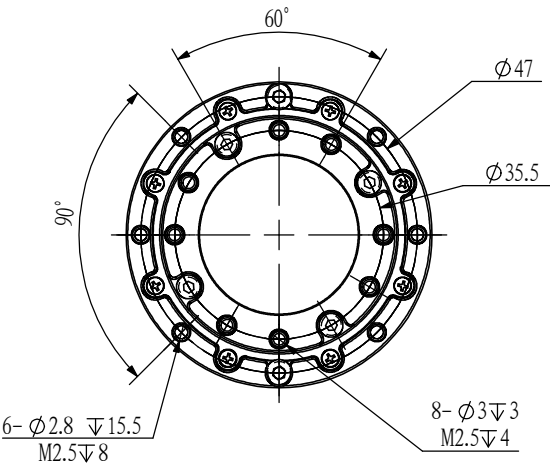
Independent R&P of core components

The application field of products is comprehensive



- 一体化关节集成度高 High integration of integrated joints
- 无刷力矩电机扭矩强劲 Brushless torque motor with strong torque
- 防水防尘 Waterproof, Dustproof
- 功能稳定、可靠性高 Stable functionality and high reliability
- 高性价比 High cost performance ratio

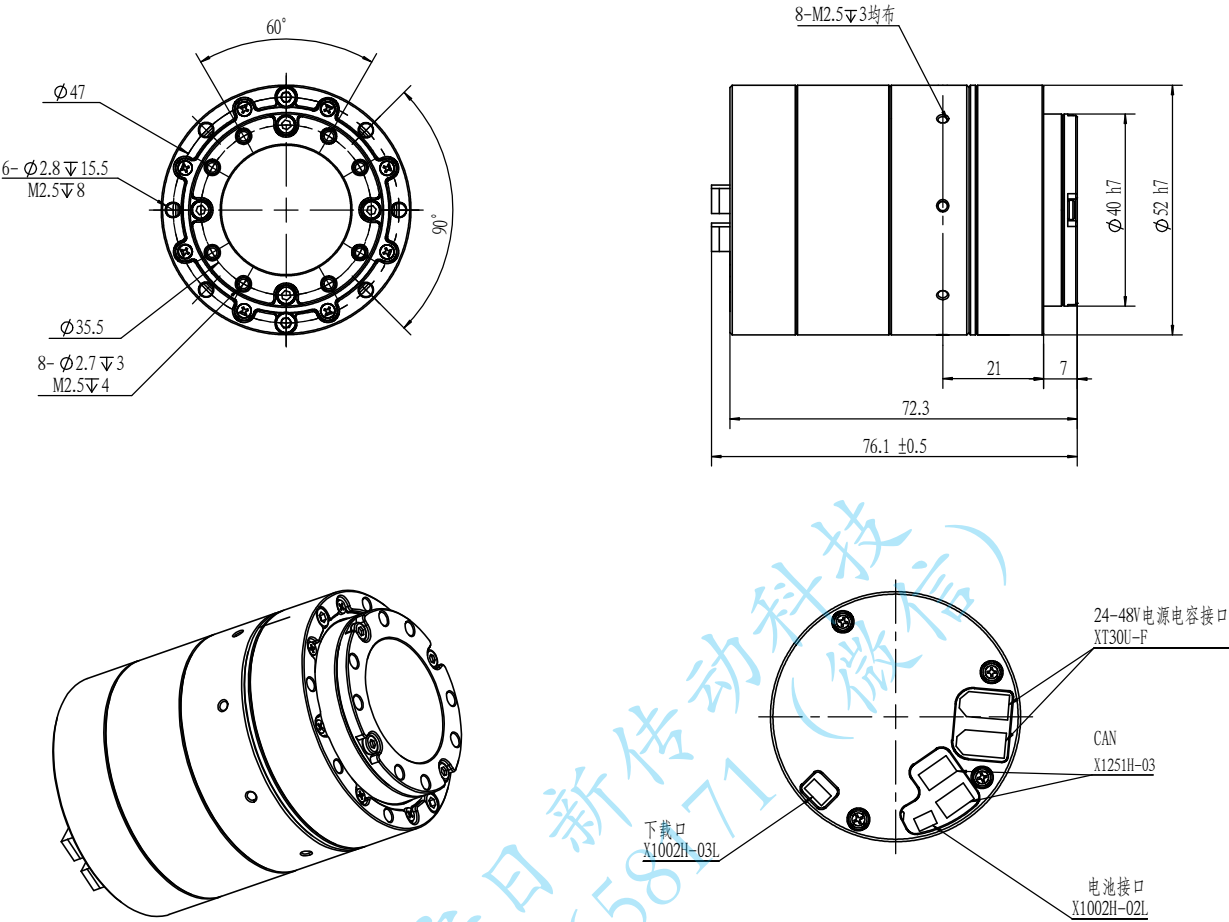




减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	6	4.5	3.6	118	80	60
101	9	7.5	6	59	40	40

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
90	24-48	3	2	1.96	17	CAN

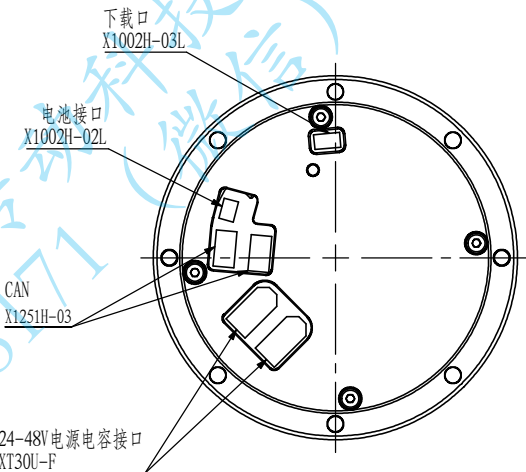
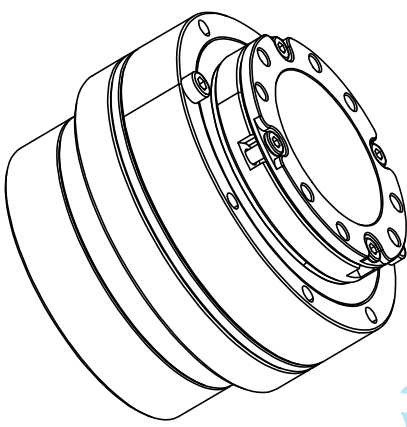
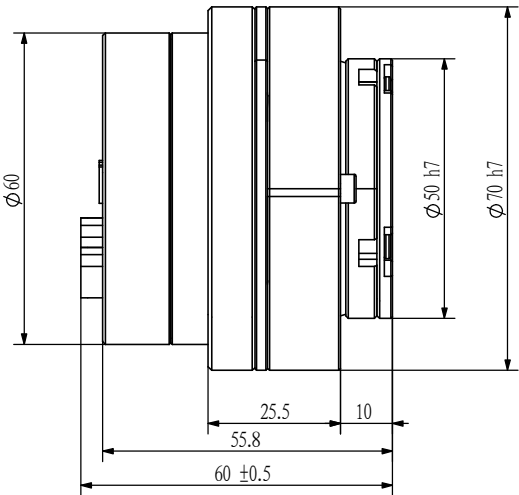
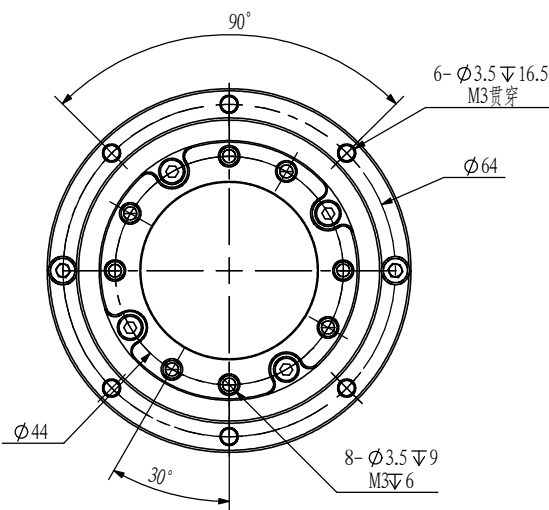
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.05	0.788	7	/	60.3±0.5	0.31	80



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	6	4.5	3.6	118	80	60
101	9	7.5	6	59	40	40

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
90	24-48	3	2	1.96	17	CAN

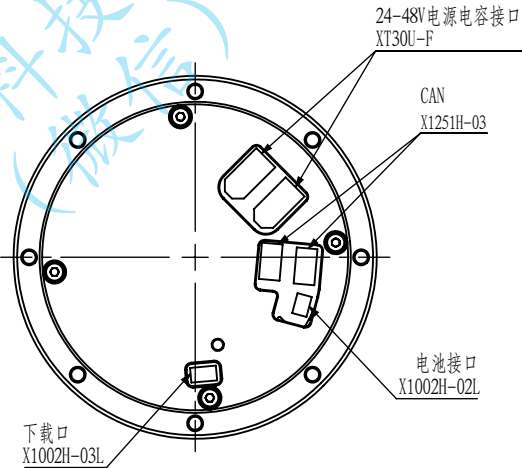
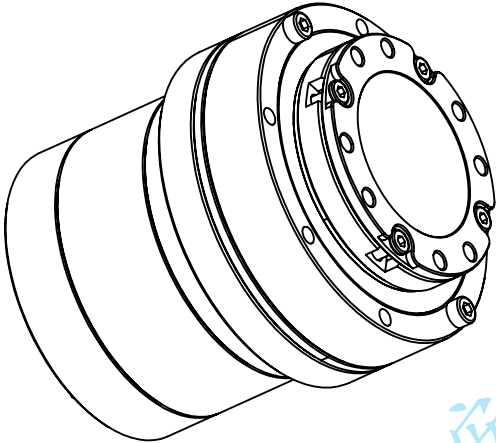
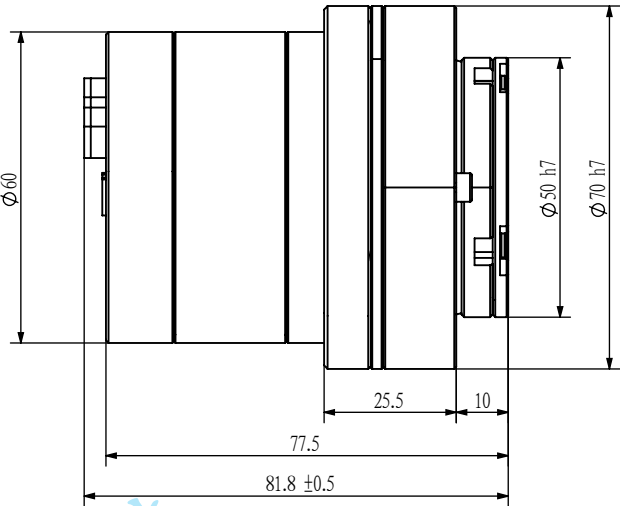
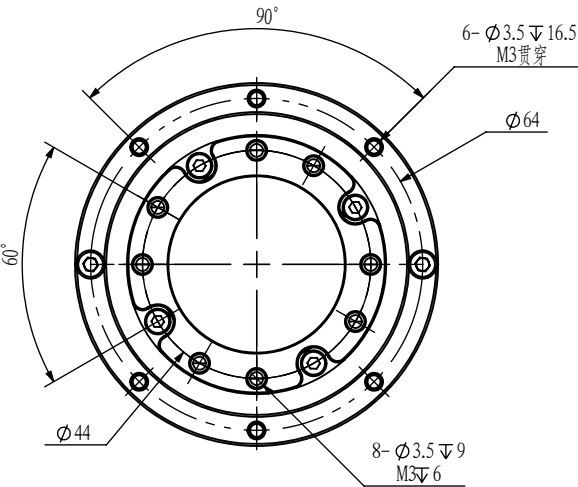
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.05	0.788	7	/	76.1±0.5	0.4	100



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	12	7	5.5	97	75	30
81	23	11	8	61	46	30
101	27	11	8	49	37	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

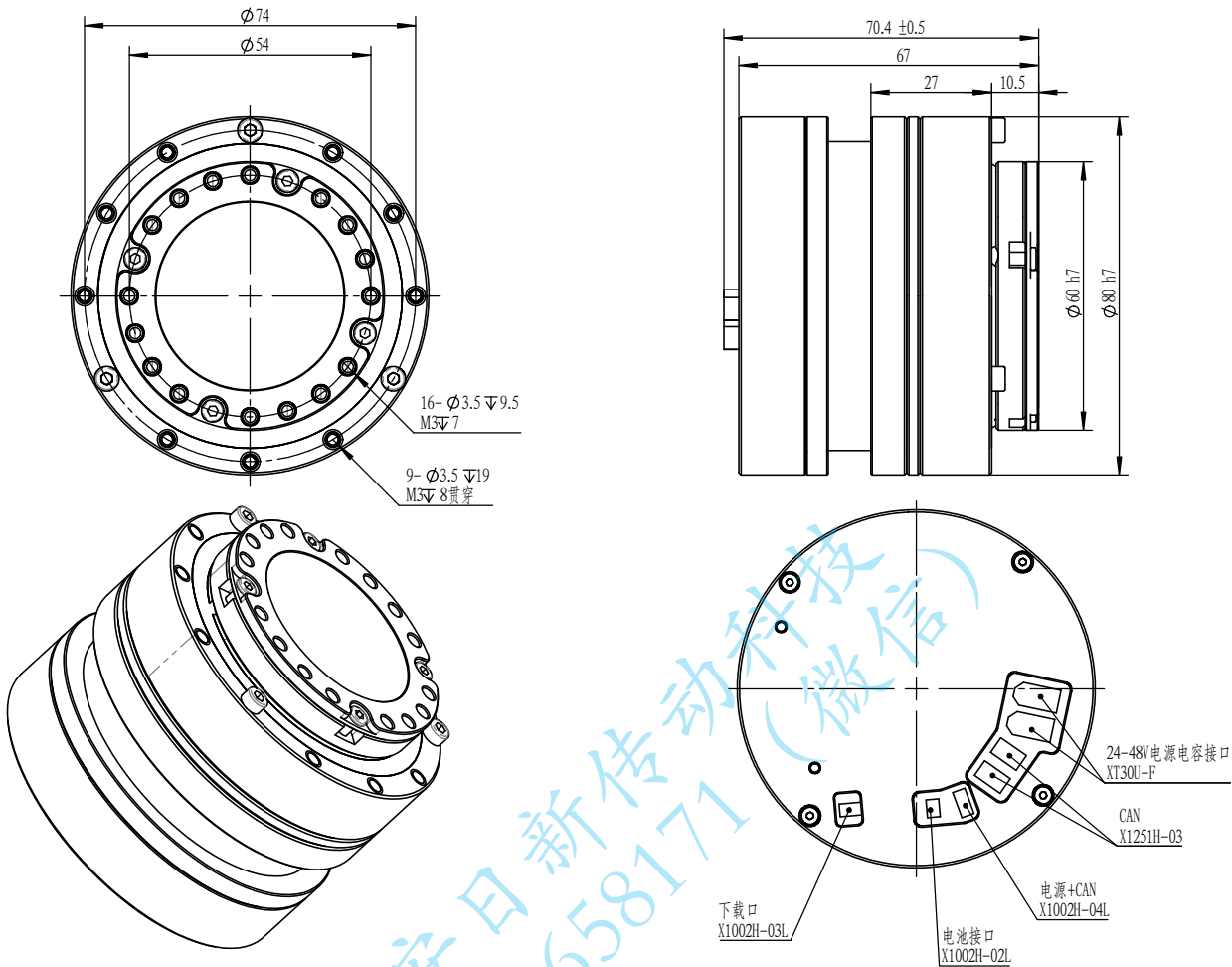
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.089	0.215	10	/	60±0.5	0.63	124



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值扭矩 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	12	7	5.5	97	75	30
81	23	11	8	61	46	30
101	27	11	8	49	37	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
150	24-48	5	3.6	0.47	17	CAN

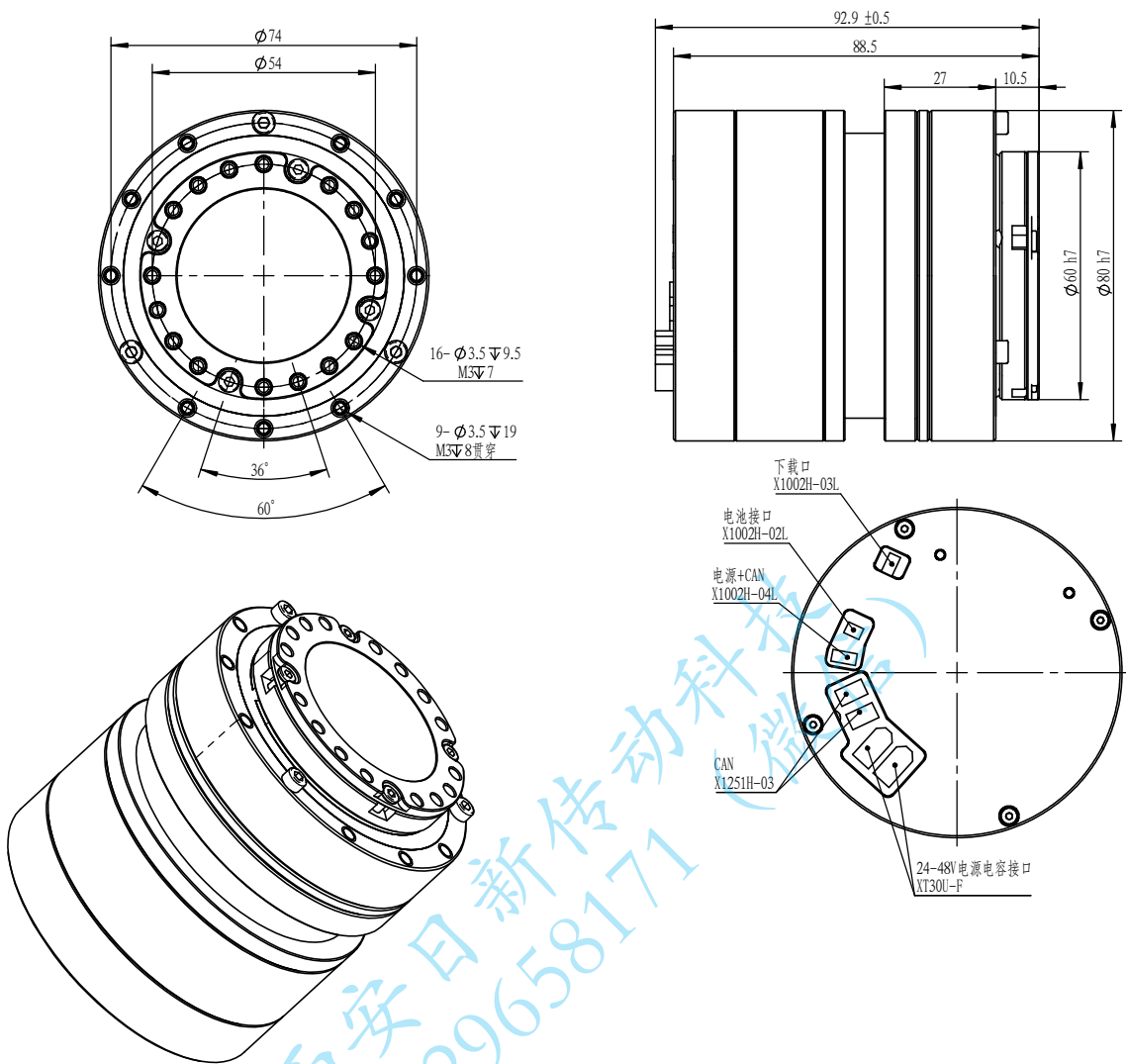
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.089	0.215	10	/	81.8±0.5	0.8	147



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	33	25	17	68	38	30
81	41	27	24	43	24	30
101	48	34	35	34	20	20
121	48	34	35	27	16	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.45	17	CAN

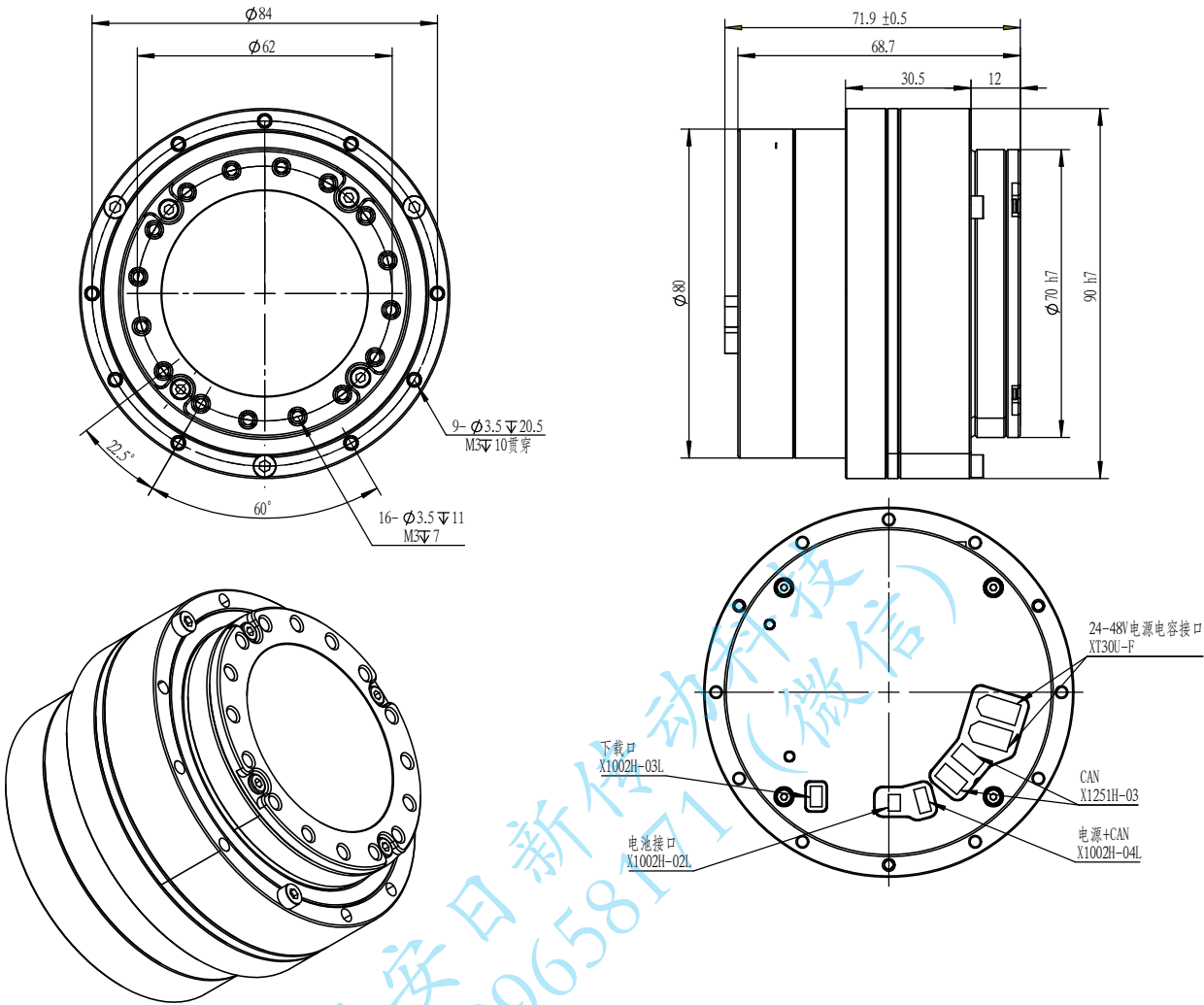
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0.096	0.43	14	/	70.4±0.5	0.95	213



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	33	25	17	68	38	30
81	41	27	24	43	24	30
101	48	34	35	34	20	20
121	48	34	35	27	16	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
300	24-48	6.7	5	0.45	17	CAN

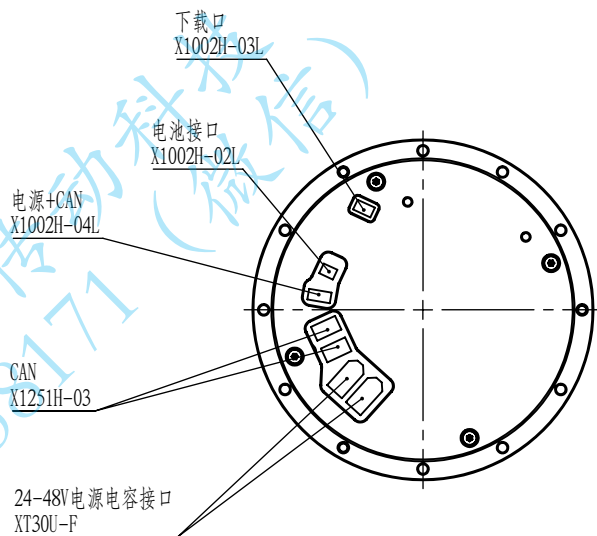
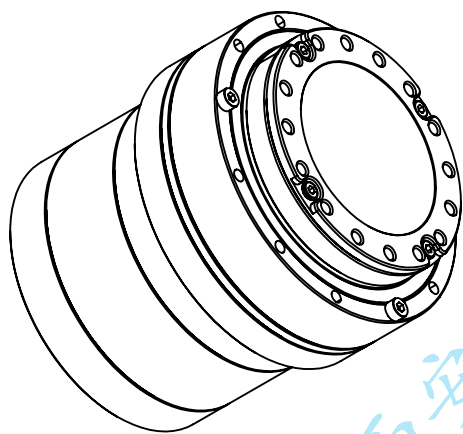
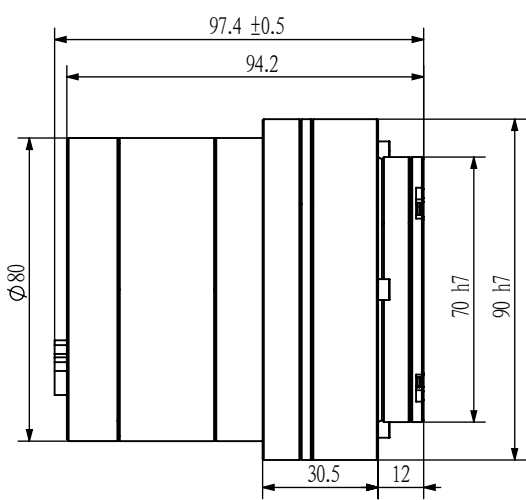
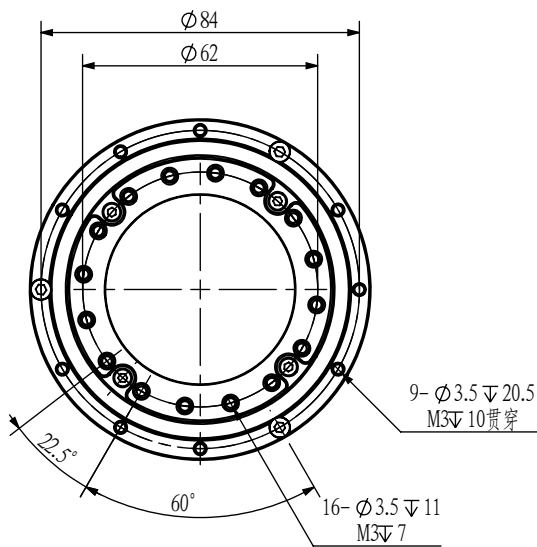
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.096	0.43	14	/	92.9±0.5	1.2	299



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	49	29	26	74	61	30
81	71	41	36	46	38	30
101	80	43	40	37	30	20
121	84	43	40	31	25	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
500	24-48	8.4	6.1	0.38	17	CAN

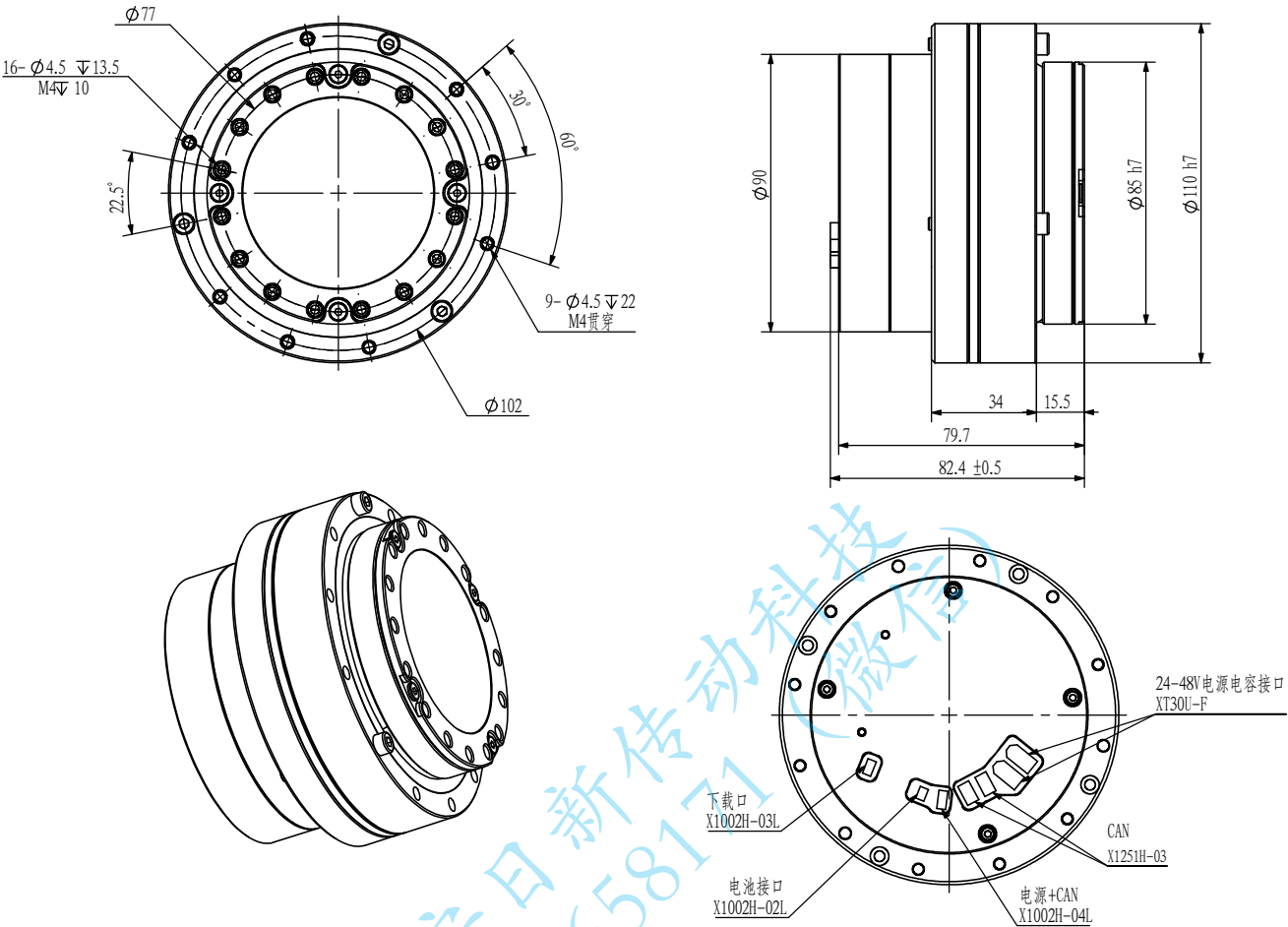
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.118	0.33	10	/	71.9±0.5	1.3	594



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	49	29	26	74	61	30
81	71	41	36	46	38	30
101	80	43	40	37	30	20
121	84	43	40	31	25	20

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
500	24-48	8.4	6.1	0.38	17	CAN

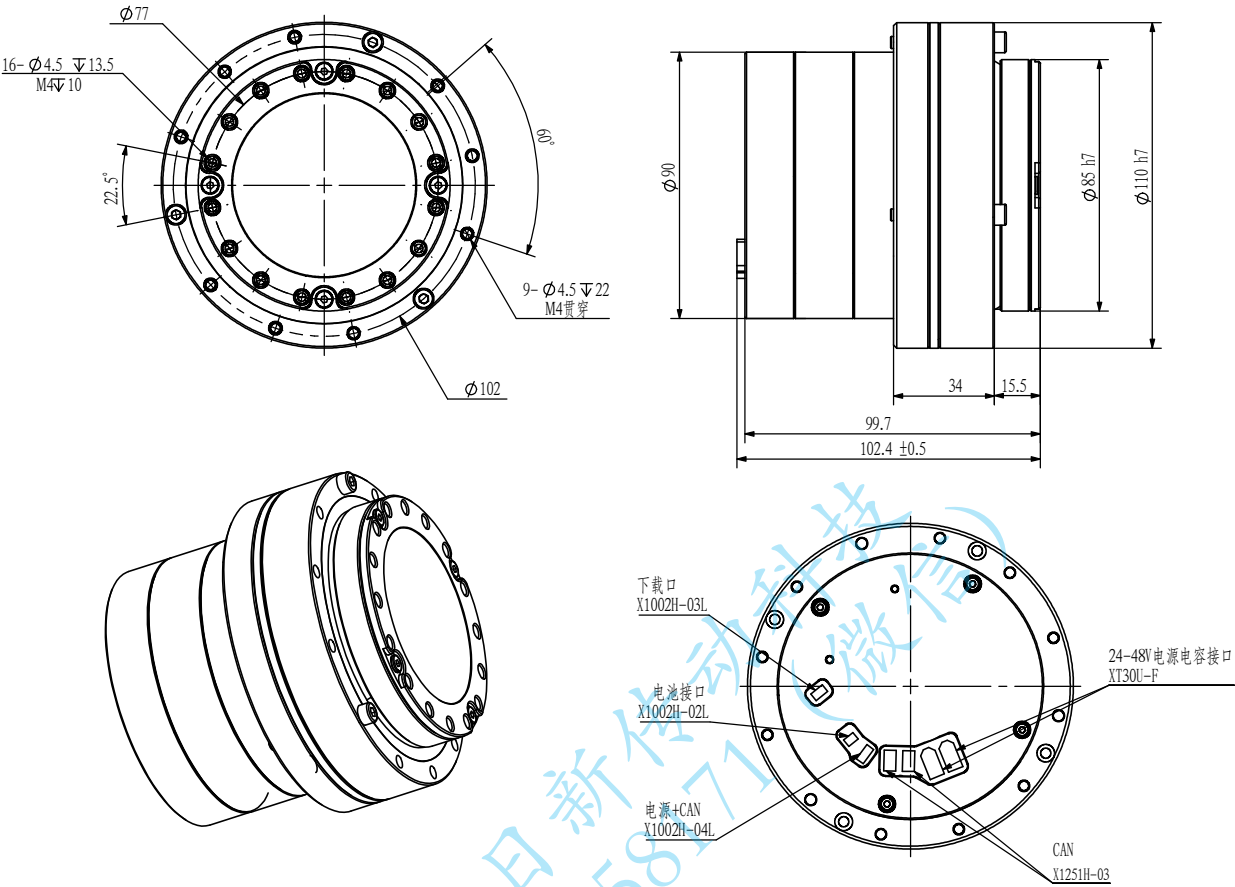
扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm ²)
0.118	0.33	10	/	97.4±0.5	1.6	682



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	94	55	48	65	54	20
81	132	90	78	43	35	20
101	151	105	84	36	27	10
121	161	105	84	30	23	10
161	171	105	84	22	17	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
750	24-48	10.4	9	0.21	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.143	0.3	10	/	82.4±0.5	2.05	1255



减速比 Gear Ratio	启停峰值扭矩 Peak Torque (N.m)	平均负载转矩 容许最大值 Max Allowable Torque At Average Load (N.m)	2000rpm/ (减速比) 时额定转矩 Rated Torque @ 2000RPM (N.m)	输出端峰值转速 Peak Speed (RPM)	额定转速 (带1/2额定扭矩) Rated Speed (With 1/2 Rated Torque) (RPM)	背隙 Gear Backlash (arcsec)
51	94	55	48	65	54	20
81	132	90	78	43	35	20
101	151	105	84	36	27	10
121	161	105	84	30	23	10
161	171	105	84	22	17	10

电机功率 Rated Power (W)	供电电压 Supply Voltage (V)	最大持续电流 Max Continuous Current (A)	额定电流 Rated Current (A)	电阻 Resistance (Ω)	编码器分辨率 Encoder Resolution (bit)	通讯总线 Communication Bus
750	24-48	10.4	9	0.21	17	CAN

扭矩常数 Torque Constant (N.m/A)	电感 Inductance (mH)	极对数 Number of Pole-pairs	通孔 Hollow Shaft (mm)	长度 Length (mm)	重量 Mass (kg)	惯量 Inertia (g * cm²)
0.143	0.3	10	/	102.4±0.5	2.6	1484

APPLICATION FIELDS OF MOTORS

钛虎关节模组应用领域



机器人和无人机 | Robots and Drones



协作机械臂 | Collaborative Robotic Arm



自动化生产线 | Automated Production Lines



工业设备 | Industrial Machines



汽车行业 | Auto Industry



AGV物流 | AGV Logistics



医疗健康 | Medical Health

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