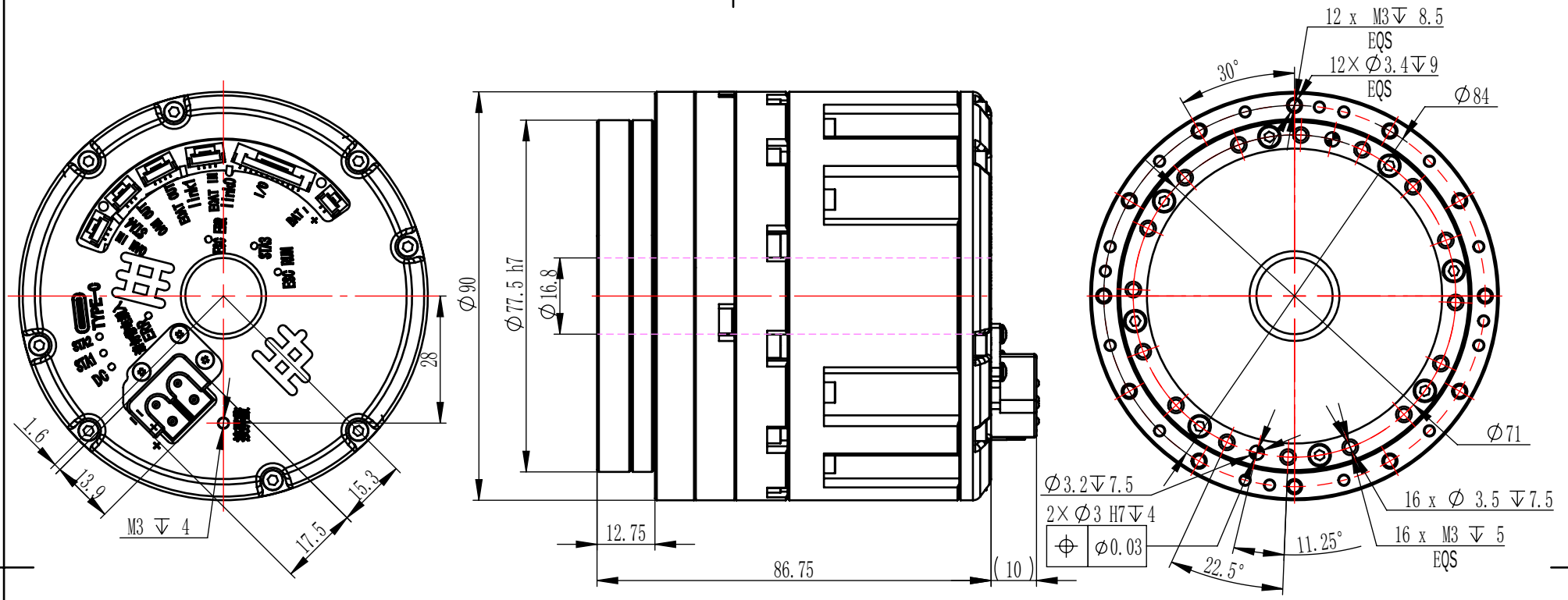


Model Selection HAG			20			
Reduction Ratio			51	81	101	121
48VDC	Peak torque	N.m	66	91	104	111
	Rated torque	N.m	36	62	71	71
	Maximum speed	rpm	78	49	40	33
	Rated speed	rpm	51	32	26	21
	Maximum current	Arms	14.71	12.77	11.7	10.42
	Rated current	Arms	8.02	8.7	7.99	6.67
	Torque constant	N.m/Arms	4.49	7.13	8.89	10.65
	Motor phase resistance	Ohms(20°C)	0.18			
	Motor phase inductance	mH	0.45			
	Motor back EMF constant	Vrms/krpm	7.7			
Absolute Encoder	Encoder Types		Absolute BiSS-C Protocol			
	Encoder Resolution (High-speed End)	bit	Single Turn 2^{20}(1048576)			
	Encoder Resolution (Output End)	bit	Single Turn 2^{19}(524288) Multi-Turn 2^{12}(4096)			
Unidirectional Positioning Accuracy		Arcsec	≤60	≤50	≤50	≤50
Repeatability Accuracy		Arcsec	≤10	≤10	≤10	≤10
Overturning Stiffness		x10^4N.m/ rad	24			
Torsional Stiffness		x10^4N.m/ rad	1.8	2.3		
Rotor Moment of Inertia	Without Brake	kg*m²	9.47*10^{-5}			
Weight	With Brake	Kg	1.63			
Motor Poles		Pole	16			

Note: The torque sensor has a rated measurement range of 140 N·m with a non-linearity of 0.5%.
-B-C indicates with brake, CANopen protocol
-B-E indicates with brake, EtherCAT protocol

HAG-T20-XXX-DC1-D-B-X

Rotary Actuator

Scale: 1:1.3
Date: 2025/11/12
Version: V3.0