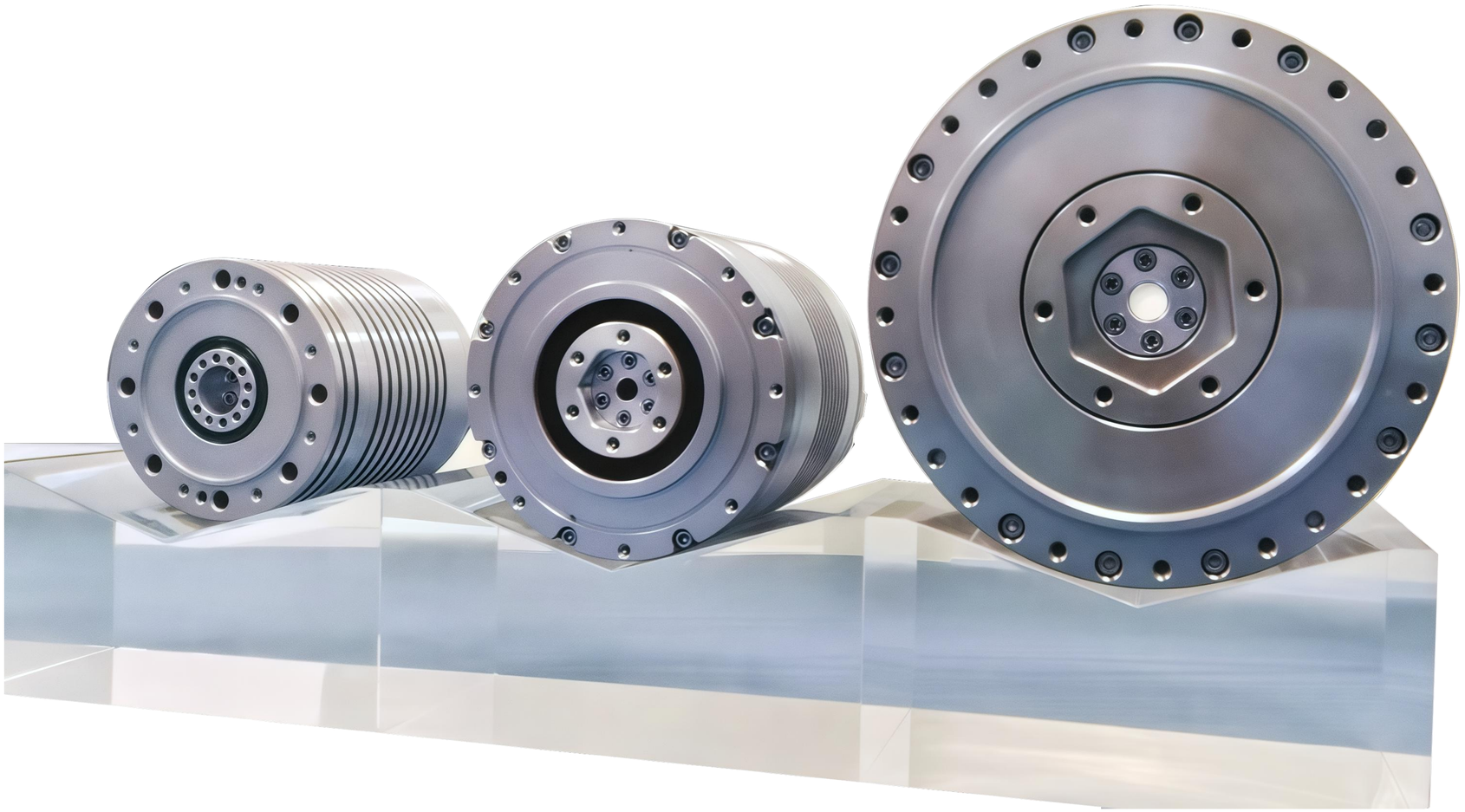
HONPINE



Integrated Planetary Module Selection Catalog

www.honpine.com

SUZHOU HONPINE PRECISION INDUSTRY CO., LTD.

PRODUCT CATALOG

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Planetary Joint Motor

P/N Interpretation

Standard configuration adopts CAN-FD bus communication protocol (planetary models do not include brakes)
For EtherCAT and other protocols, please contact our sales team for customization options.



JRM-C 5070-006

006: Reducer Reduction Ratio

5070: 50 refers to the joint diameter, 70 indicates the length from the joint installation surface to the rear cover. These values may be non-integer.

C: Planetary Reducer Series

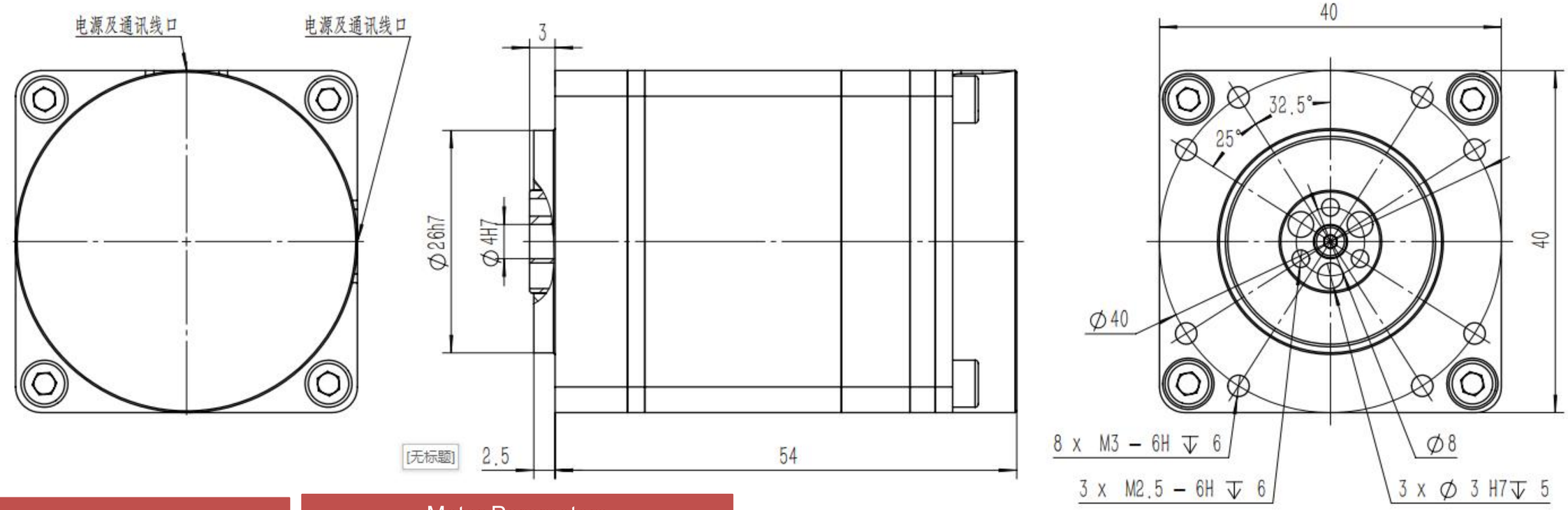
JRM: Joint Robot Module

Precautions:

①Operation under overvoltage or overload conditions is strictly prohibited.
②Unauthorized disassembly of the motor is forbidden.
③Ensure the motor is installed within the valid thread depth.
④During high-speed operation, blocked rotation or emergency braking is prohibited.
⑤Hot-plugging (connecting/disconnecting under power) is not supported during motor operation.

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.

JRM-C4054-006

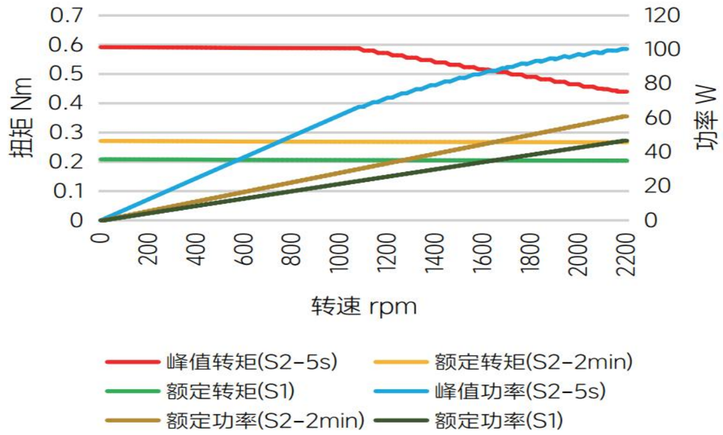


Integrated Module Parameters	
Reduction Ratio	006
Rated Torque(N·m)	1N·m
Peak Torque(N·m)	3N·m
Rated Speed(RPM)	350RPM
Peak Speed(RPM)	350RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈0.25kg
Hollow Diameter(mm)	/

Motor Parameters	
Rated Speed/Max. Speed(RPM)	2200/2200RPM
Rated Power(KW)	0.047KW
Rated Torque(N·m)	0.2N·m
Rated Current(A)	3.4A
Peak Power(KW)	0.1KW
Peak Torque(N·m)	0.59N·m
Peak Current(A)	6.8A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	3.05Ω (2.75Ω~3.36Ω)
★Wire Resistance Inductance(μH)	872μH (697.6μH-1046.4μH)
Back EMF Constant(V/RPM)	6V/1000RPM
Torque Constant(mN·m/A)	99.4mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.028x10^{-4}$
★Cogging Torque Ripple	≤3%
Number of Motor Poles	20-pole

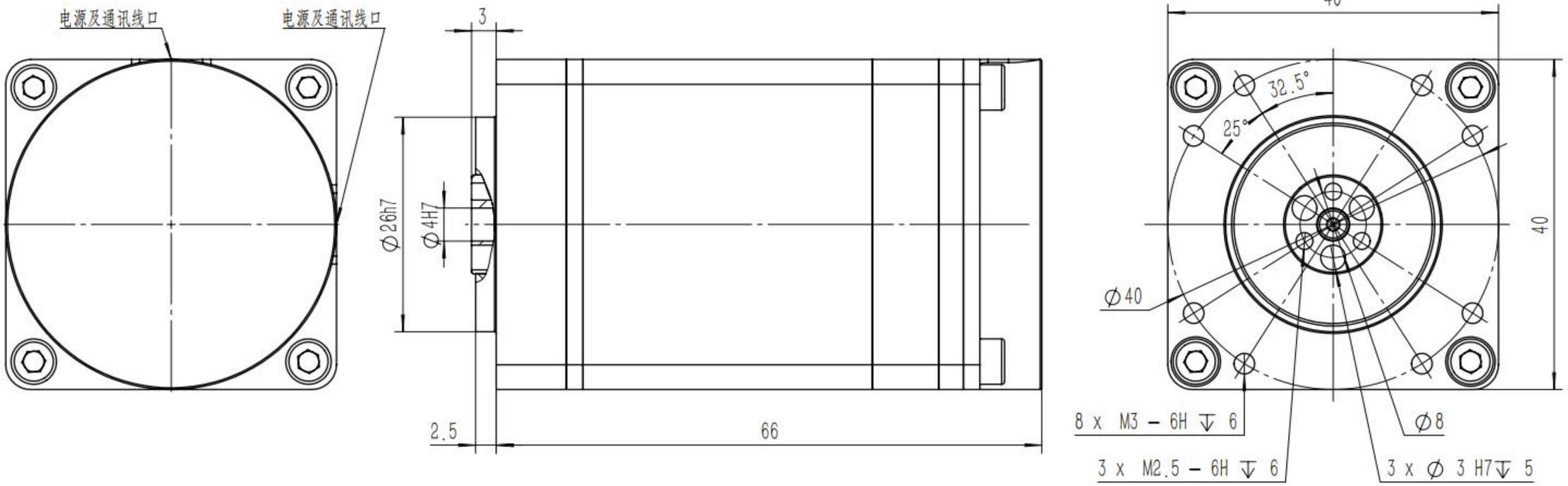
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	1.3N·m
Motor-Side Power(kw)	0.061kw
Motor-Side Current(A)	4.4A
Motor-Side Torque(N·m)	0.27N·m

Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L



Motor Torque Curve

JRM-C4066-036

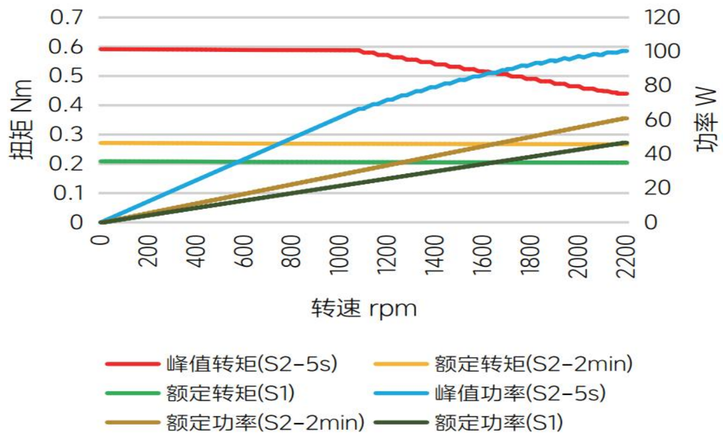


Integrated Module Parameters	
Reduction Ratio	036
Rated Torque(N·m)	6N·m
Peak Torque(N·m)	18N·m
Rated Speed(RPM)	50RPM
Peak Speed(RPM)	50RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈0.35kg
Hollow Diameter(mm)	/

Motor Parameters	
Rated Speed/Max. Speed(RPM)	2200/2200RPM
Rated Power(KW)	0.047KW
Rated Torque(N·m)	0.2N·m
Rated Current(A)	3.4A
Peak Power(KW)	0.1KW
Peak Torque(N·m)	0.59N·m
Peak Current(A)	6.8A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	3.05Ω (2.75Ω~3.36Ω)
★Wire Resistance Inductance(μH)	872μH (697.6μH-1046.4μH)
Back EMF Constant(V/RPM)	6V/1000RPM
Torque Constant(mN·m/A)	99.4mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.028x10^{-4}$
★Cogging Torque Ripple	≤3%
Number of Motor Poles	20-pole

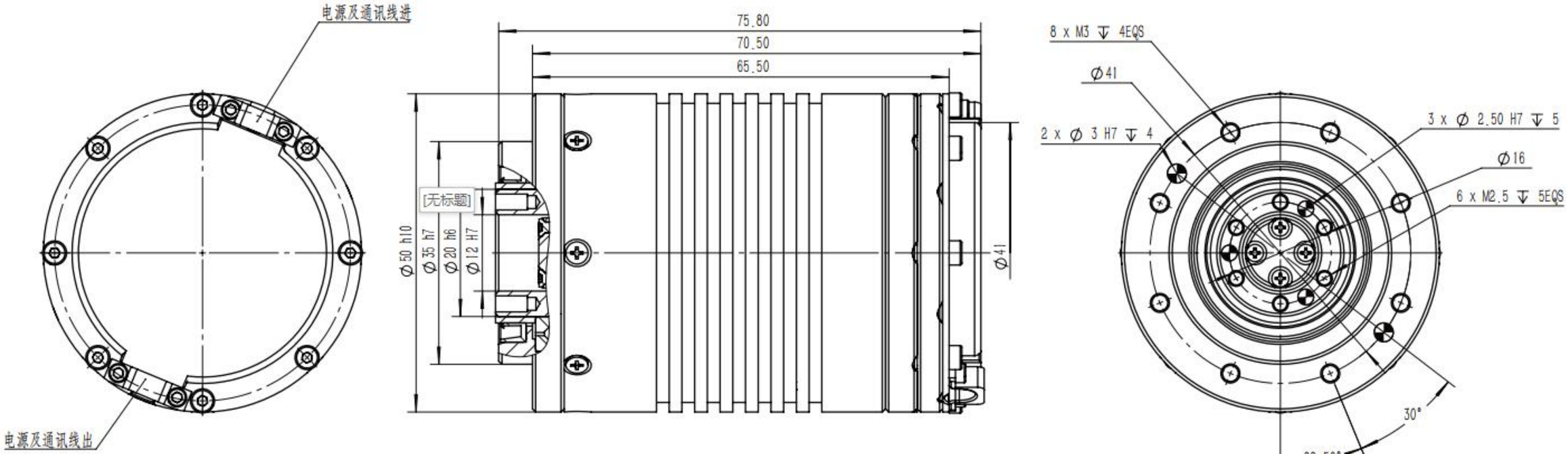
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	7.8N·m
Motor-Side Power(kw)	0.061Kw
Motor-Side Current(A)	4.4A
Motor-Side Torque(N·m)	0.27N·m

Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L



Motor Torque Curve

JRM-C5070-020

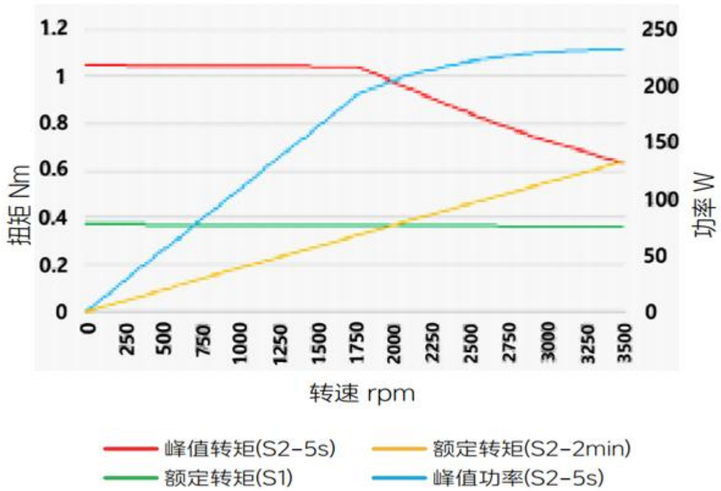


Integrated Module Parameters	
Reduction Ratio	020
Rated Torque(N·m)	6N·m
Peak Torque(N·m)	19N·m
Rated Speed(RPM)	170RPM
Peak Speed(RPM)	170RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈0.43kg
Hollow Diameter(mm)	/

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3500/3500RPM
Rated Power(KW)	0.134KW
Rated Torque(N·m)	0.36N·m
Rated Current(A)	3.9A
Peak Power(KW)	0.232KW
Peak Torque(N·m)	1.04N·m
Peak Current(A)	11.5A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	1.48Ω
★Wire Resistance Inductance(μH)	215.93μH (192.55μH)
Back EMF Constant(V/RPM)	6.24V/1000RPM
Torque Constant(mN·m/A)	103.27mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.045x10^{-4}$
★Cogging Torque Ripple	3≤%
Number of Motor Poles	20-pole

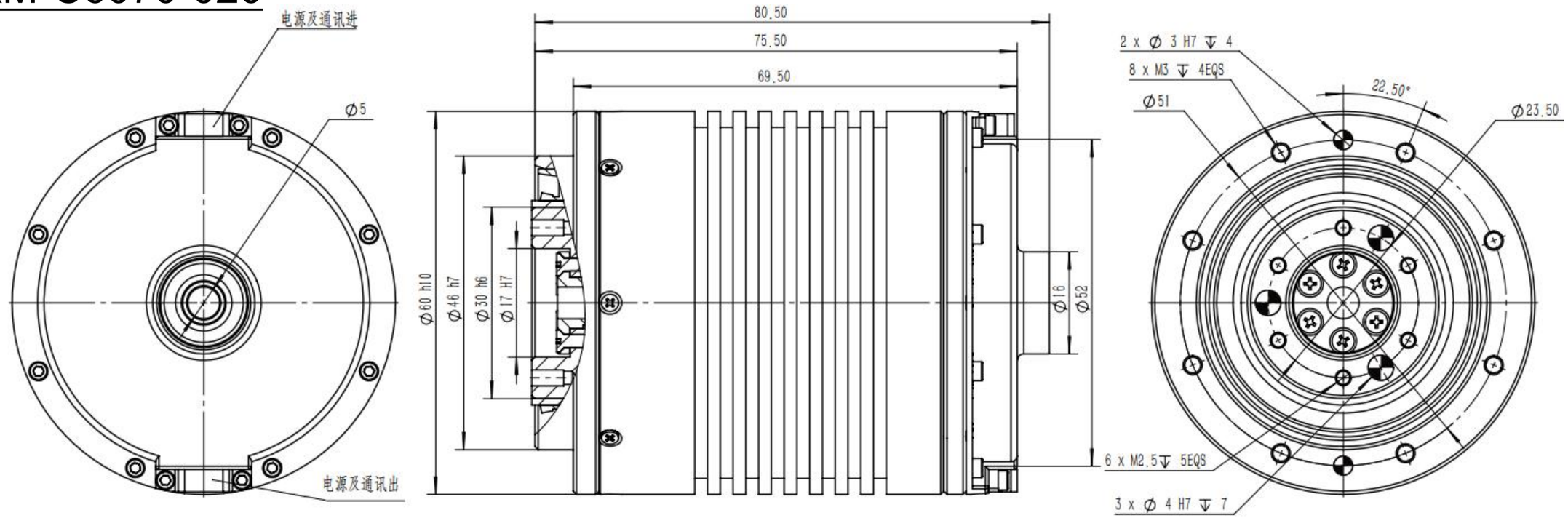
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	N·m
Motor-Side Power(kw)	Kw
Motor-Side Current(A)	A
Motor-Side Torque(N·m)	N·m

Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L



Motor Torque Curve

JRM-C6070-020

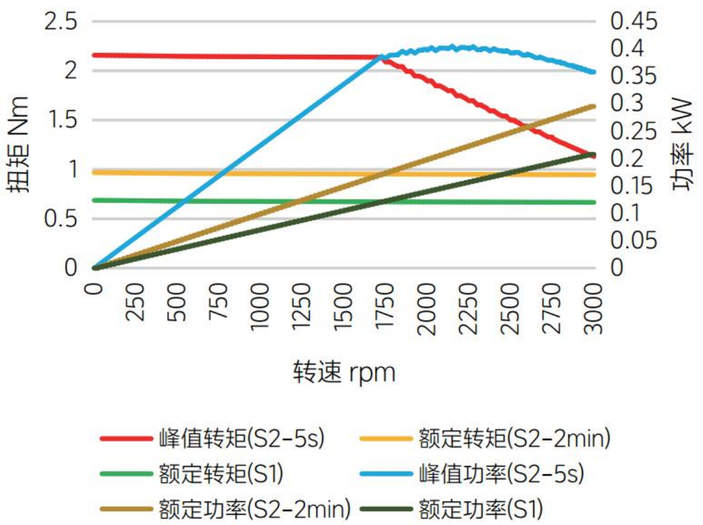


Integrated Module Parameters	
Reduction Ratio	020
Rated Torque(N·m)	12N·m
Peak Torque(N·m)	40N·m
Rated Speed(RPM)	150RPM
Peak Speed(RPM)	150RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈0.6kg
Hollow Diameter(mm)	ø5

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3000/3000RPM
Rated Power(KW)	0.21KW
Rated Torque(N·m)	0.67N·m
Rated Current(A)	6A
Peak Power(KW)	0.38KW
Peak Torque(N·m)	2.14N·m
Peak Current(A)	20A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	815mΩ (733.5mΩ~896.5mΩ)
★Wire Resistance Inductance(μH)	402μH (321.6μH-482.4μH)
Back EMF Constant(V/RPM)	7.5V/1000RPM
Torque Constant(mN·m/A)	124.5mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.12x10^{-4}$
★Cogging Torque Ripple	≤2%
Number of Motor Poles	30-pole

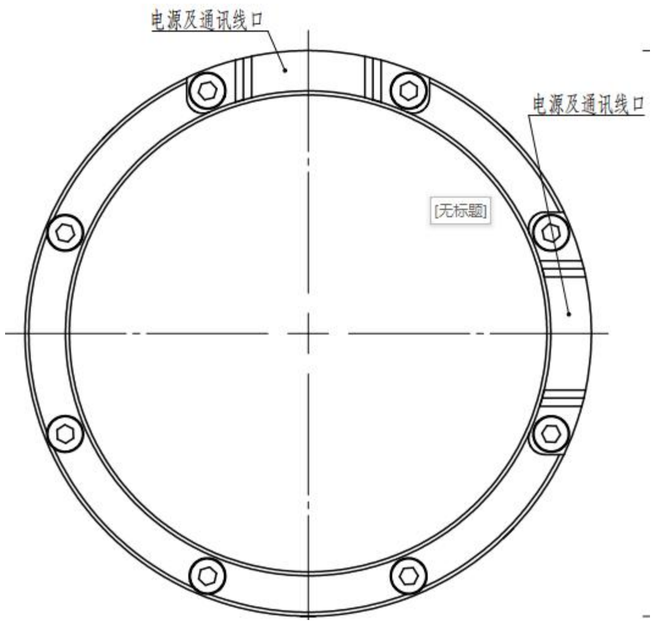
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	≈16N·m
Motor-Side Power(kw)	0.3Kw
Motor-Side Current(A)	8.5A
Motor-Side Torque(N·m)	0.95N·m

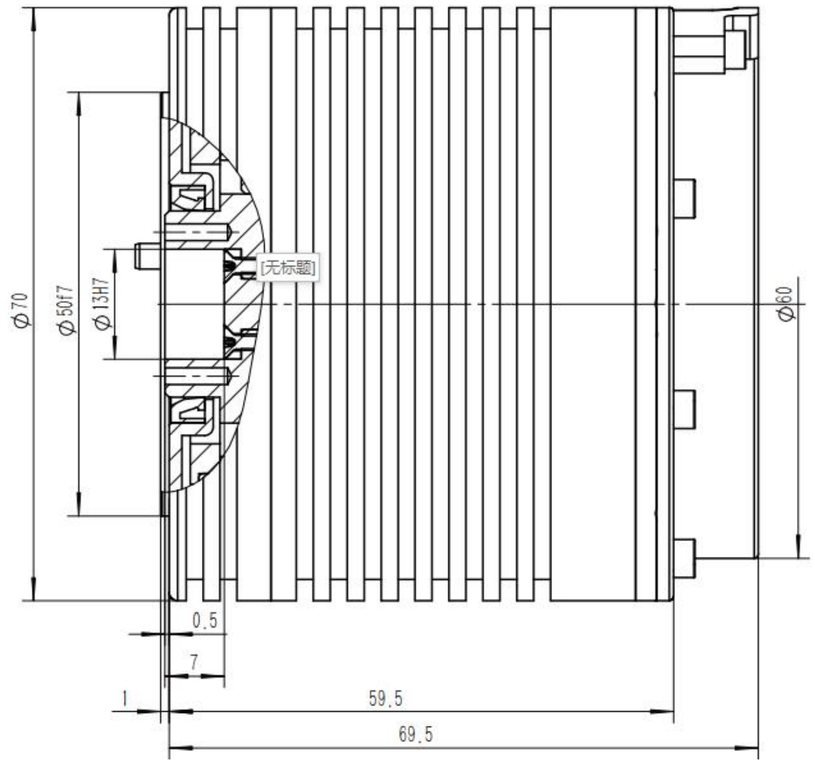
Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L

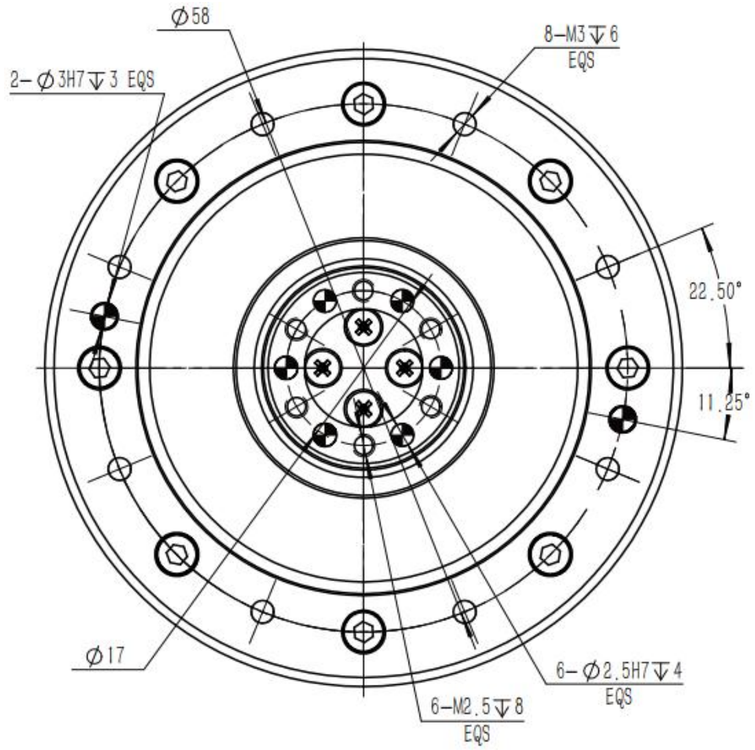


Motor Torque Curve

JRM-C7069-22.5





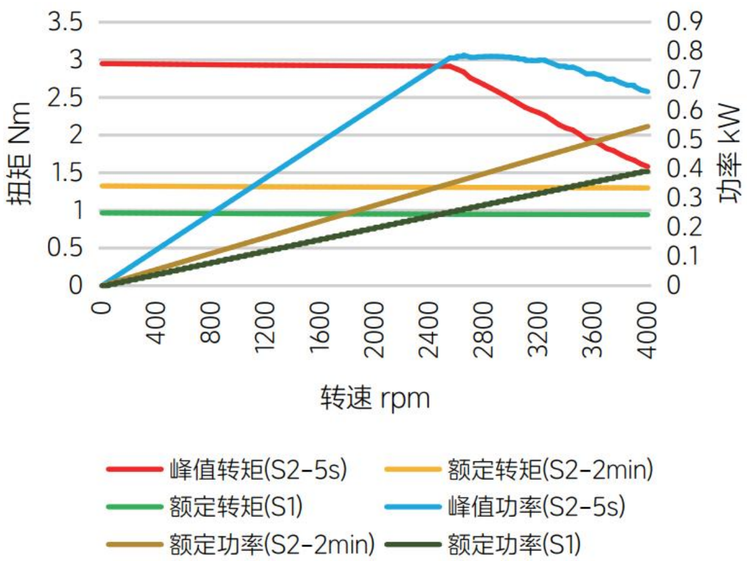


Integrated Module Parameters	
Reduction Ratio	22.5
Rated Torque(N·m)	20N·m
Peak Torque(N·m)	60N·m
Rated Speed(RPM)	170RPM
Peak Speed(RPM)	170RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈0.8kg
Hollow Diameter(mm)	/

Motor Parameters	
Rated Speed/Max. Speed(RPM)	4000/4000RPM
Rated Power(KW)	0.39KW
Rated Torque(N·m)	0.94N·m
Rated Current(A)	11.5A
Peak Power(KW)	0.78KW
Peak Torque(N·m)	2.91N·m
Peak Current(A)	44A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	288mΩ (259.2mΩ~316.8mΩ)
★Wire Resistance Inductance(μH)	267μH (213.6μH-320.4μH)
Back EMF Constant(V/RPM)	5.7V/1000RPM
Torque Constant(mN·m/A)	93.9mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.24x10^{-4}$
★Cogging Torque Ripple	1≤%
Number of Motor Poles	20-pole

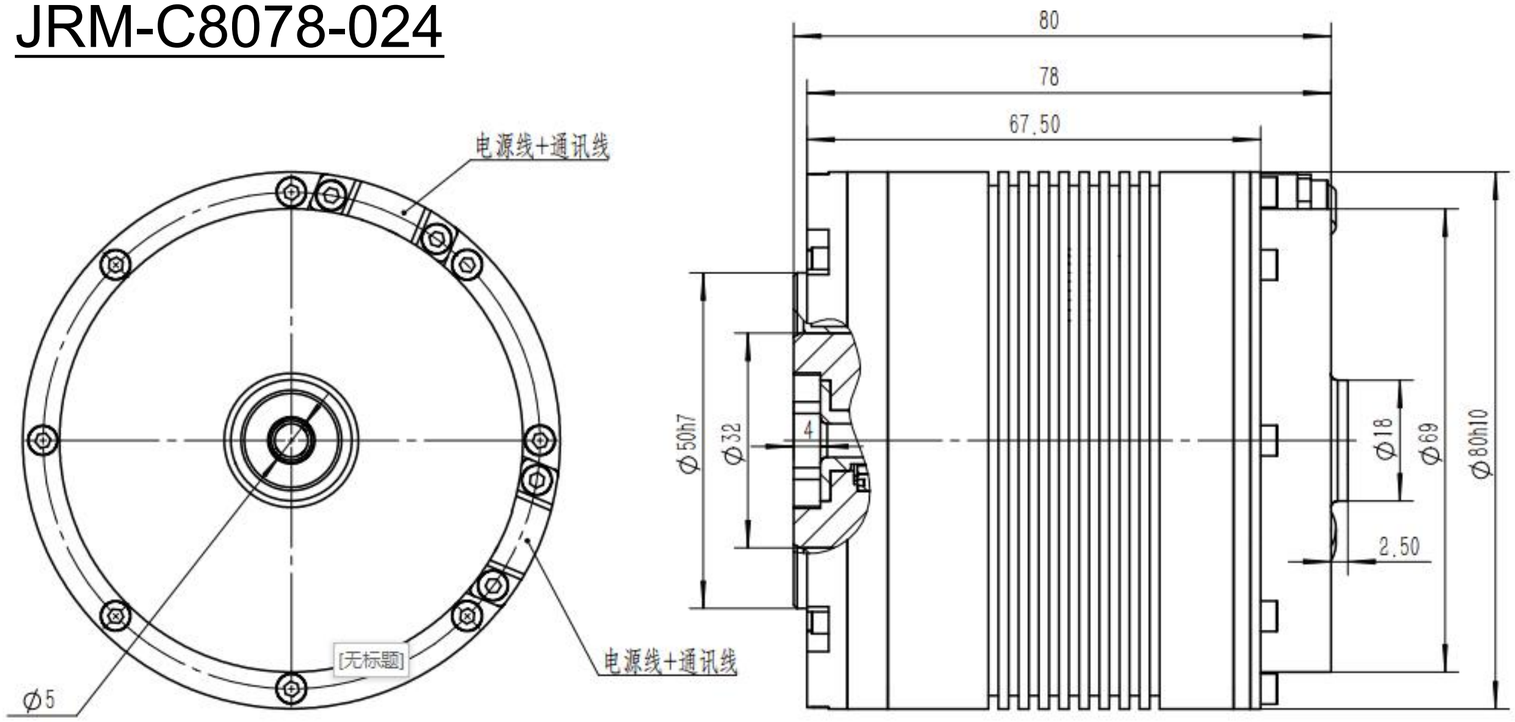
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	≈26N·m
Motor-Side Power(kw)	0.54Kw
Motor-Side Current(A)	16A
Motor-Side Torque(N·m)	1.3N·m

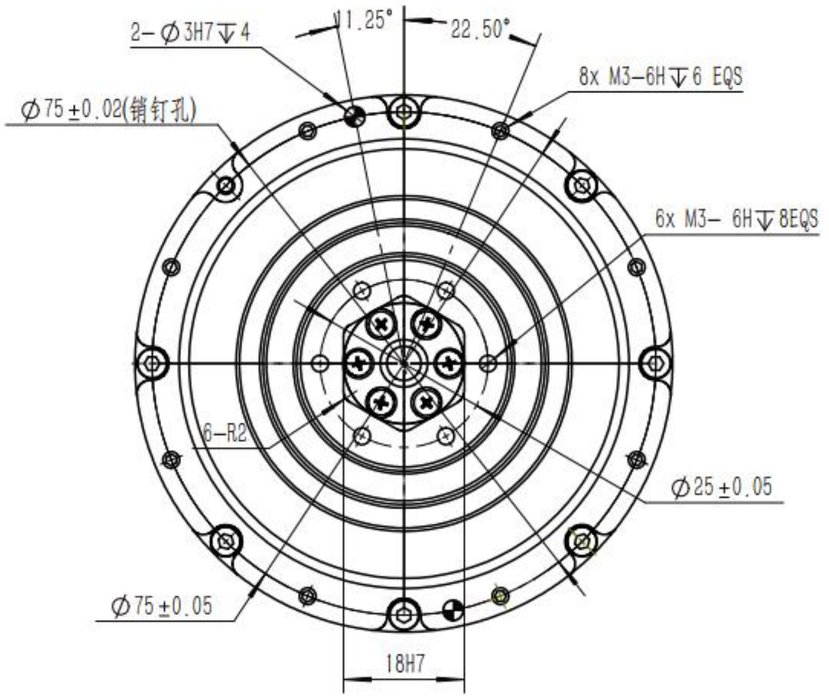
Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L



Motor Torque Curve

JRM-C8078-024



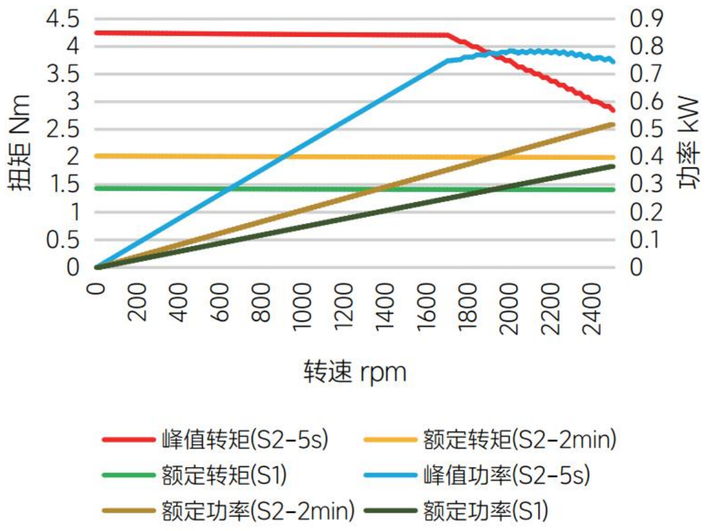


Integrated Module Parameters	
Reduction Ratio	24
Rated Torque(N·m)	30N·m
Peak Torque(N·m)	95N·m
Rated Speed(RPM)	100RPM
Peak Speed(RPM)	100RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈1.1kg
Hollow Diameter(mm)	/

Motor Parameters	
Rated Speed/Max. Speed(RPM)	2500/2500RPM
Rated Power(KW)	0.37KW
Rated Torque(N·m)	1.4N·m
Rated Current(A)	12.5A
Peak Power(KW)	0.78KW
Peak Torque(N·m)	4.2N·m
Peak Current(A)	50A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	289.3mΩ (260.4mΩ~318.2Ω)
★Wire Resistance Inductance(μH)	339μH (271.2μH-406.8μH)
Back EMF Constant(V/RPM)	7.8V/1000RPM
Torque Constant(mN·m/A)	128.5mN·m/A
Rotor Moment of Inertia(kg·m²)	$0.44x10^{-4}$
★Cogging Torque Ripple	≤1%
Number of Motor Poles	20-pole

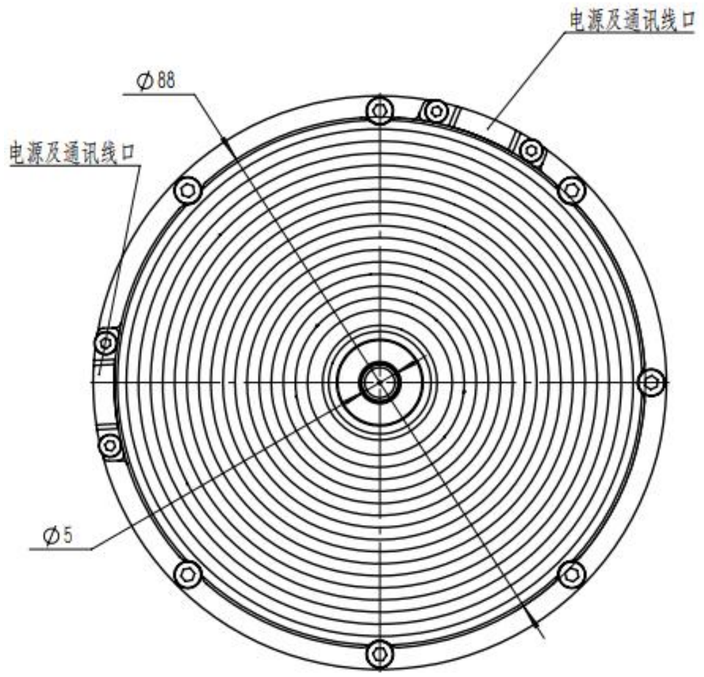
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	45N·m
Motor-Side Power(kw)	0.52Kw
Motor-Side Current(A)	18A
Motor-Side Torque(N·m)	2N·m

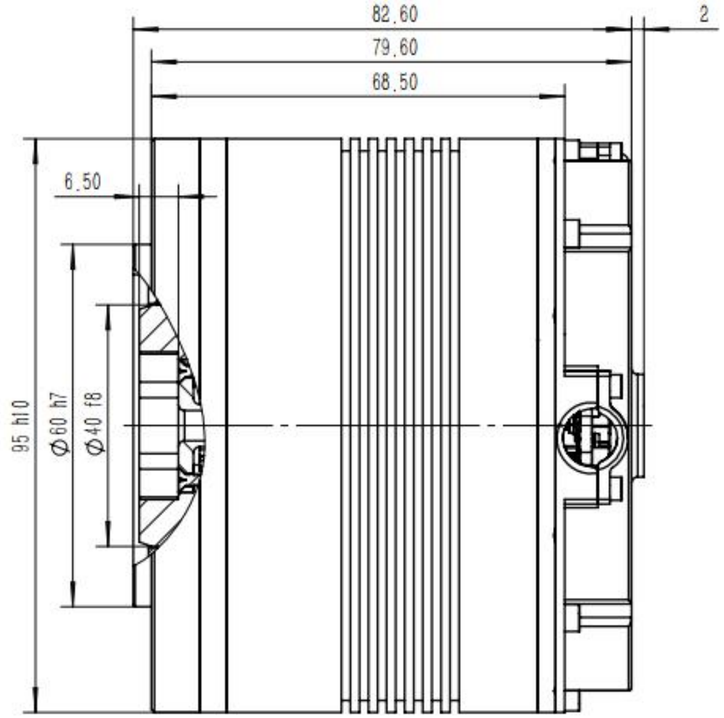
Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L

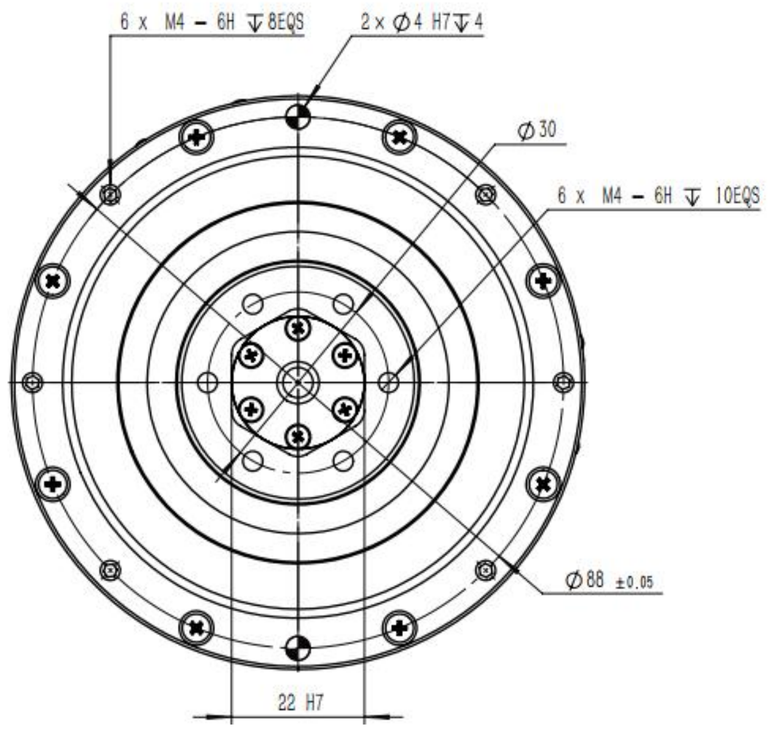


Motor Torque Curve

JRM-C9579.6-008





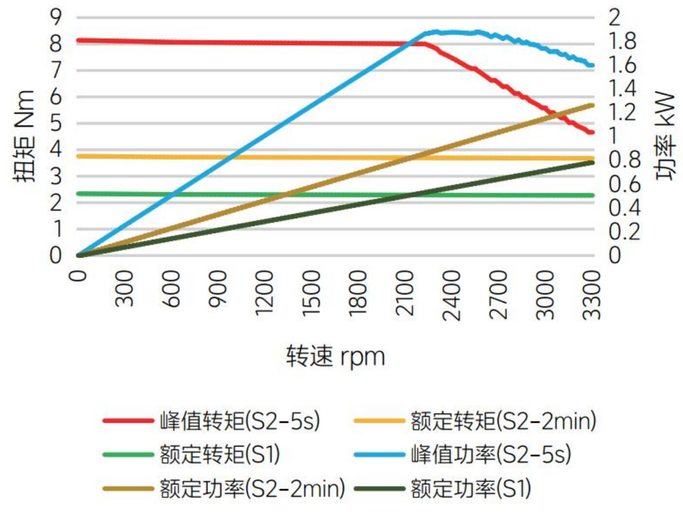


Integrated Module Parameters	
Reduction Ratio	8
Rated Torque(N·m)	18N·m
Peak Torque(N·m)	60N·m
Rated Speed(RPM)	400RPM
Peak Speed(RPM)	400RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈1.6kg
Hollow Diameter(mm)	Ø5

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3300/3300RPM
Rated Power(KW)	0.79KW
Rated Torque(N·m)	2.3N·m
Rated Current(A)	23A
Peak Power(KW)	1.88KW
Peak Torque(N·m)	8.3N·m
Peak Current(A)	125A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	82.3mΩ (74.1mΩ~90.5mΩ)
★Wire Resistance Inductance(μH)	163.8μH (131.0μH-196.6μH)
Back EMF Constant(V/RPM)	6.9V/1000RPM
Torque Constant(mN·m/A)	113mN·m/A
Rotor Moment of Inertia(kg·m²)	$1.25x10^{-4}$
★Cogging Torque Ripple	≤1%
Number of Motor Poles	20-pole

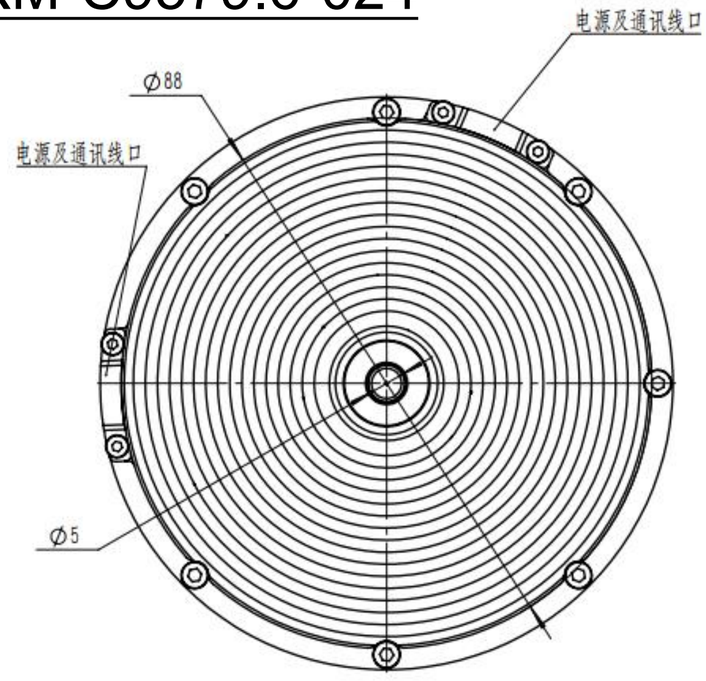
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	28N·m
Motor-Side Power(kw)	1.27Kw
Motor-Side Current(A)	38A
Motor-Side Torque(N·m)	3.7N·m

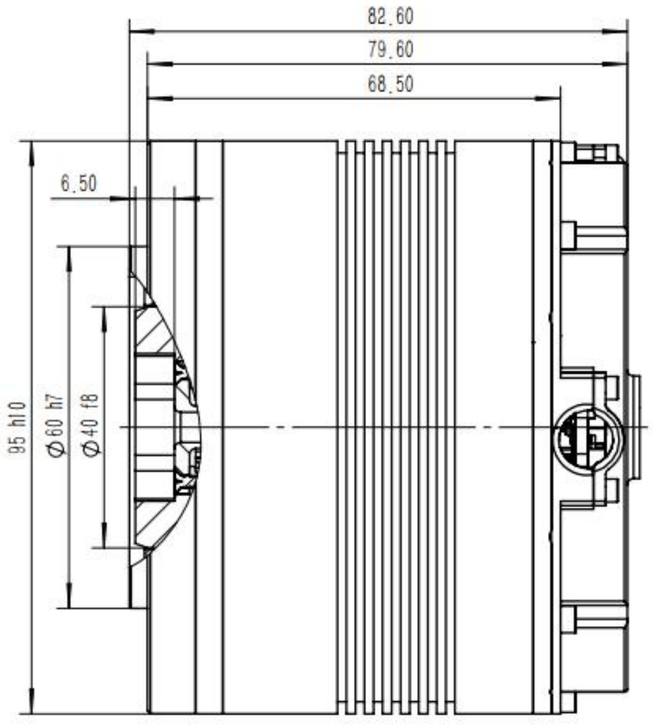
Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L

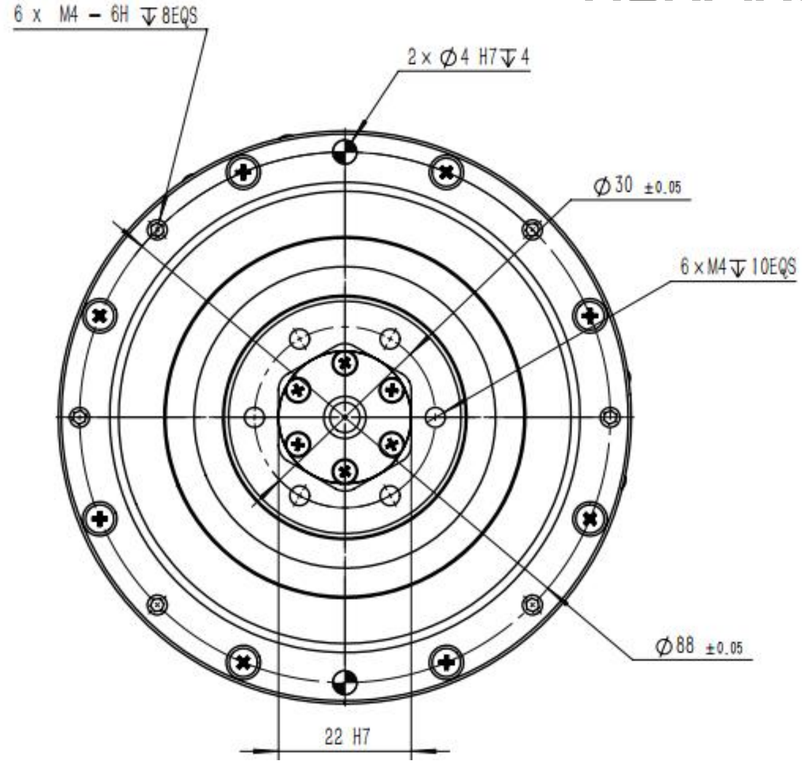


Motor Torque Curve

JRM-C9579.6-024





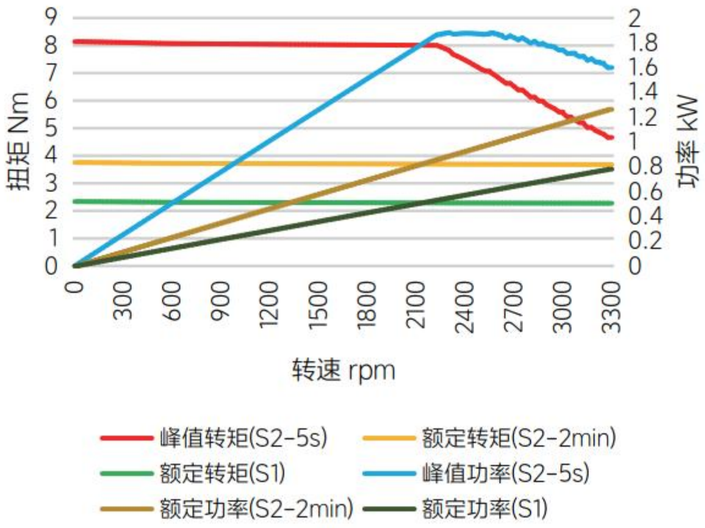


Integrated Module Parameters	
Reduction Ratio	24
Rated Torque(N·m)	50N·m
Peak Torque(N·m)	200N·m
Rated Speed(RPM)	120RPM
Peak Speed(RPM)	120RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈1.6kg
Hollow Diameter(mm)	ø5

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3300/3300RPM
Rated Power(KW)	0.79KW
Rated Torque(N·m)	2.3N·m
Rated Current(A)	23A
Peak Power(KW)	1.88KW
Peak Torque(N·m)	8.3N·m
Peak Current(A)	125A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	82.3mΩ (74.1mΩ~90.5mΩ)
★Wire Resistance Inductance(μH)	163.8μH (131.0μH-196.6μH)
Back EMF Constant(V/RPM)	6.9V/1000RPM
Torque Constant(mN·m/A)	113mN·m/A
Rotor Moment of Inertia(kg·m²)	$1.25x10^{-4}$
★Cogging Torque Ripple	≤1%
Number of Motor Poles	20-pole

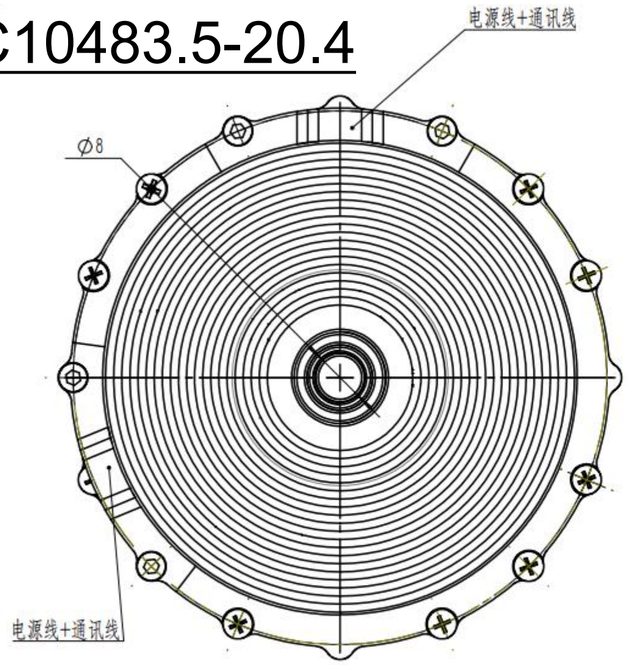
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	80N·m
Motor-Side Power(kw)	1.27Kw
Motor-Side Current(A)	38A
Motor-Side Torque(N·m)	3.7N·m

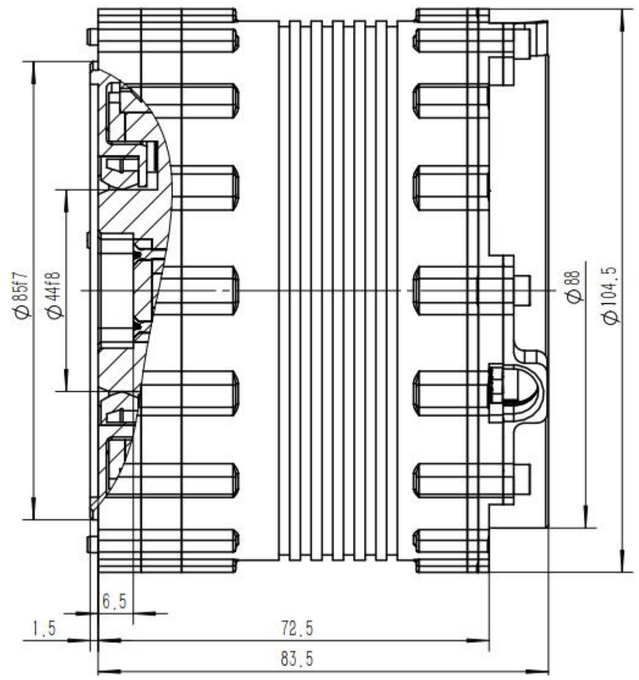
Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L

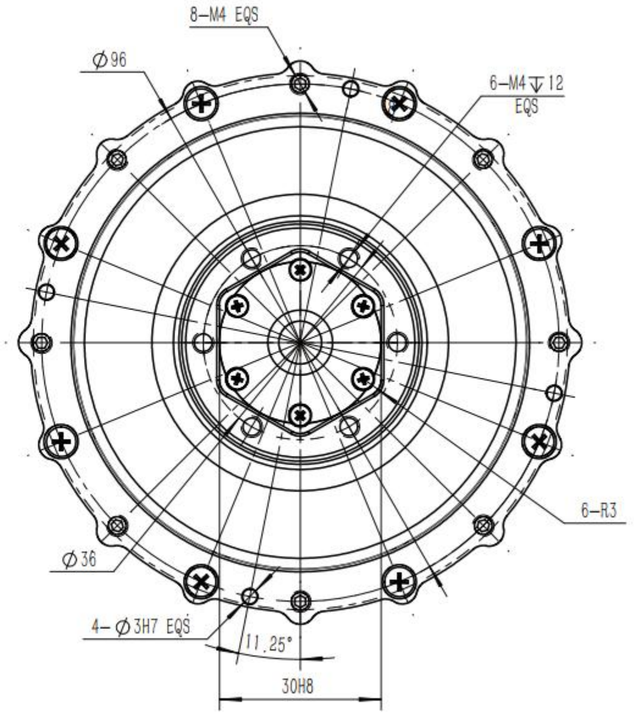


Motor Torque Curve

JRM-C10483.5-20.4





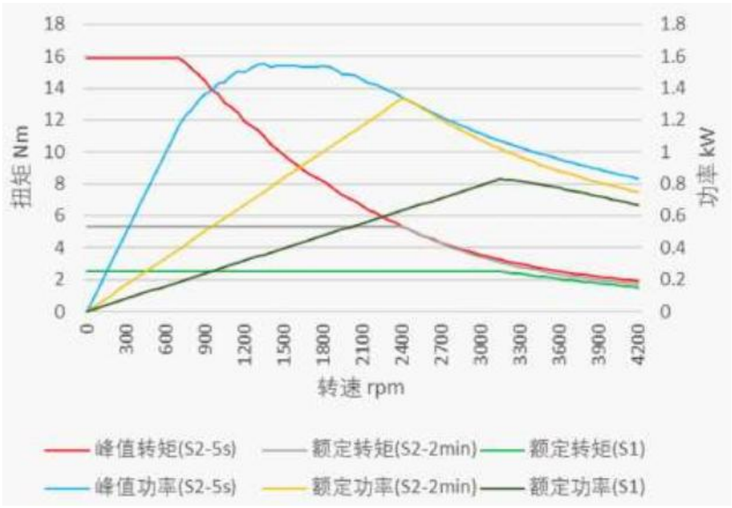


Integrated Module Parameters	
Reduction Ratio	20.4
Rated Torque(N·m)	50N·m
Peak Torque(N·m)	300N·m
Rated Speed(RPM)	150RPM
Peak Speed(RPM)	200RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈1.9kg
Hollow Diameter(mm)	ø8

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3200/4200RPM
Rated Power(KW)	0.82KW
Rated Torque(N·m)	2.5N·m
Rated Current(A)	19A
Peak Power(KW)	1.55KW
Peak Torque(N·m)	15.5N·m
Peak Current(A)	130A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	143.16mΩ (130.5mΩ~159.5mΩ)
★Wire Resistance Inductance(μH)	200μH (160μH/240μH)
Back EMF Constant(V/RPM)	9.04V/1000RPM
Torque Constant(mN·m/A)	149.49mN·m/A
Rotor Moment of Inertia(kg·m²)	1.9×10^{-4}
★Cogging Torque Ripple	≤1%
Number of Motor Poles	20-pole

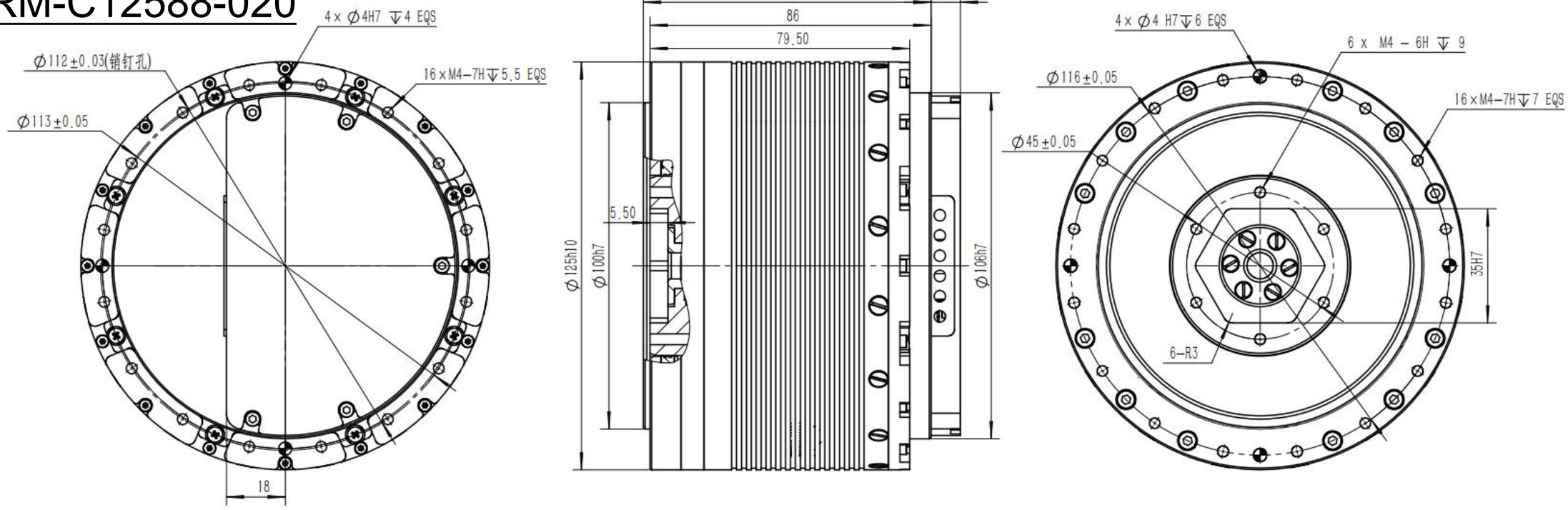
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	100N·m
Motor-Side Power(kw)	1.33Kw
Motor-Side Current(A)	40A
Motor-Side Torque(N·m)	5.3N·m

Wiring Definition for Cable-Outlet Model	
Red	48V
Black	0V
Yellow	CAN_H
Green	CAN_L



Motor Torque Curve

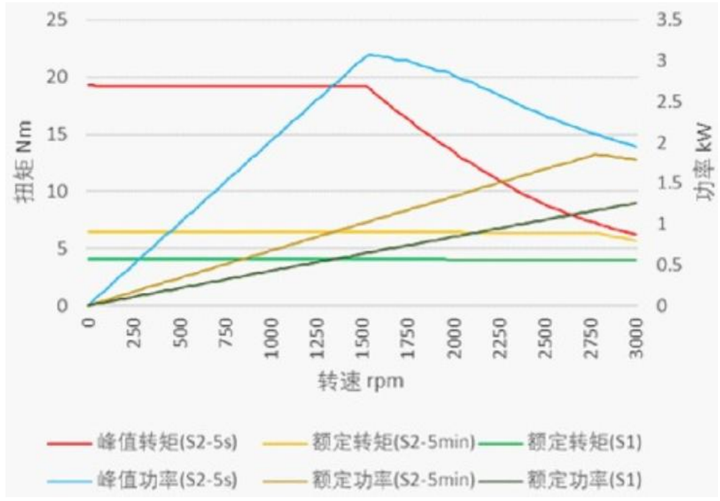
JRM-C12588-020



Integrated Module Parameters	
Reduction Ratio	20
Rated Torque(N·m)	80N·m
Peak Torque(N·m)	360N·m
Rated Speed(RPM)	150RPM
Peak Speed(RPM)	150RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈2.8kg
Hollow Diameter(mm)	Ø8

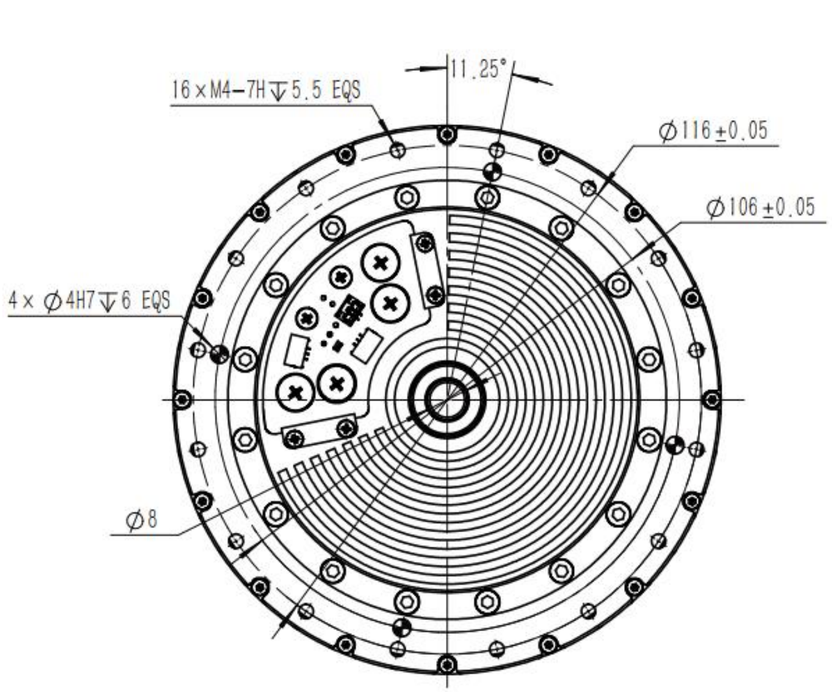
Motor Parameters	
Rated Speed/Max. Speed(RPM)	3000/3000RPM
Rated Power(KW)	1.26KW
Rated Torque(N·m)	4N·m
Rated Current(A)	27A
Peak Power(KW)	3.22KW
Peak Torque(N·m)	19.16N·m
Peak Current(A)	150A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	65.39mΩ (58.85mΩ~71.95mΩ)
★Wire Resistance Inductance(μH)	103μH (82.4μH/123.6μH)
Back EMF Constant(V/RPM)	10.2V/1000RPM
Torque Constant(mN·m/A)	168.64mN·m/A
Rotor Moment of Inertia(kg·m²)	$1.76x10^{-4}$
★Cogging Torque Ripple	≤1%
Number of Motor Poles	30-pole

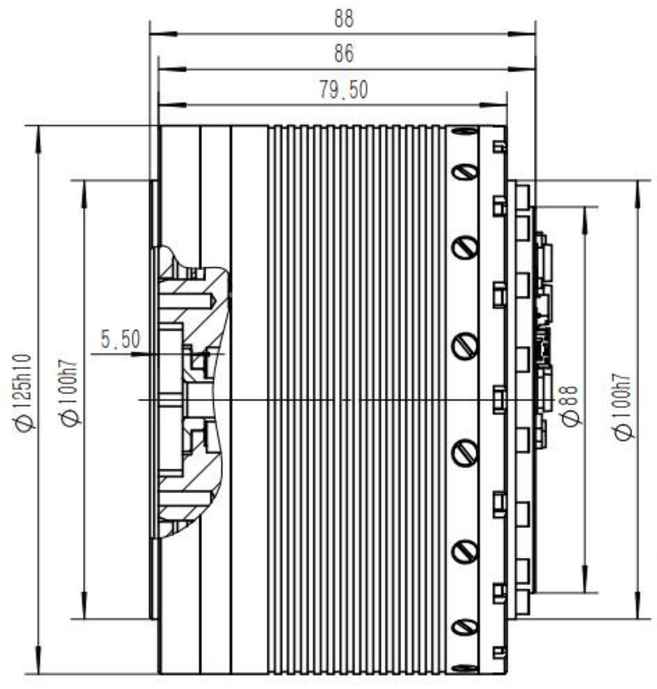
Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	120N·m
Motor-Side Power(kw)	1.8Kw
Motor-Side Current(A)	43A
Motor-Side Torque(N·m)	6.4N·m

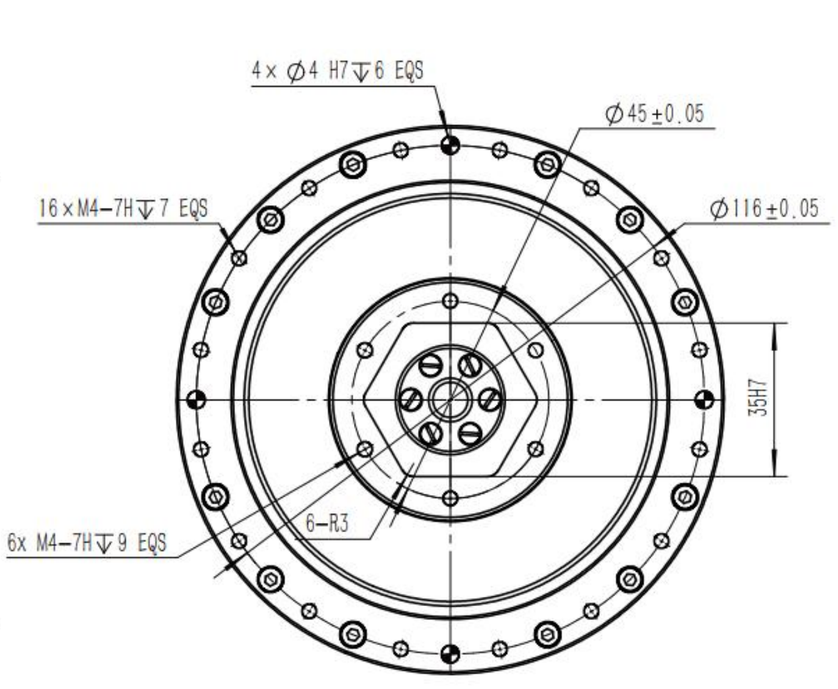


Motor Torque Curve

JRM-C12588-24





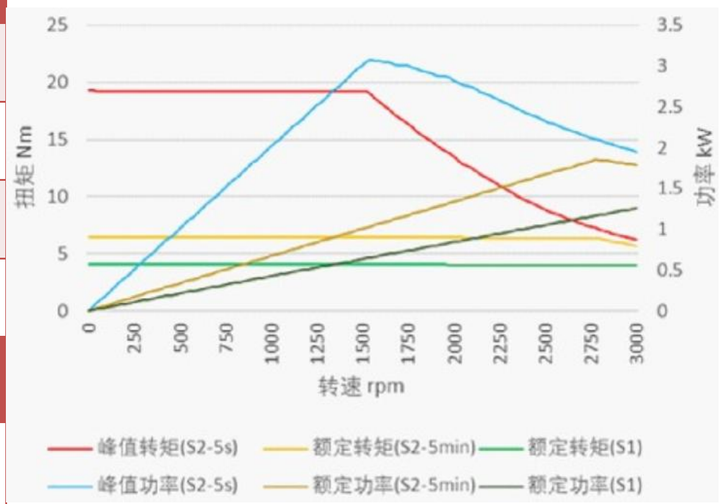


Integrated Module Parameters	
Reduction Ratio	24
Rated Torque(N·m)	90N·m
Peak Torque(N·m)	450N·m
Rated Speed(RPM)	120RPM
Peak Speed(RPM)	120RPM
Resolution (Motor/Reducer)	17 bit（131072bit）
Communication Interface	CAN-FD
Encoder Repeatability	±40 Arcsec
Supply Voltage (V)	48VDC
Mass (kg)	≈2.8kg
Hollow Diameter(mm)	Ø8

Motor Parameters	
Rated Speed/Max. Speed(RPM)	3000/3000RPM
Rated Power(KW)	1.26KW
Rated Torque(N·m)	4N·m
Rated Current(A)	27A
Peak Power(KW)	3.22KW
Peak Torque(N·m)	19.16N·m
Peak Current(A)	150A
Rated Voltage(V)	48VDC
★Wire Resistance(Ω)	65.39mΩ (58.85mΩ~71.95mΩ)
★Wire Resistance Inductance(μH)	103μH (82.4μH/123.6μH)
Back EMF Constant(V/RPM)	10.2V/1000RPM
Torque Constant(mN·m/A)	168.64mN·m/A
Rotor Moment of Inertia(kg·m²)	$1.76x10^{-4}$
★Cogging Torque Ripple	≤1%
Number of Motor Poles	30-pole

Sustained output exceeding the rated torque(2min)	
Reducer Output Torque(N·m)	150N·m
Motor-Side Power(kw)	1.8Kw
Motor-Side Current(A)	43A
Motor-Side Torque(N·m)	6.4N·m

Aviation Connector Pinout Definition	
J1	1--CAN_H 2--CAN_L 3--CAN_GND
J2	1--CAN_H 2--CAN_L 3--CAN_GND
J3	1--RS485_P 2--RS485_N



Motor Torque Curve