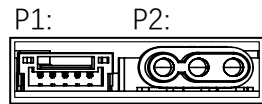


Signal connector: GH1.25-F-5P  
Signal cable : GH5P-M-28AWG-15cm  
Phase connector : MR30PW-F  
Phase cable: MR30-M-18AWG-15cm



Pin definition(left to right):

**P1:** 1.HW 2.HV 3.HU 4.5V 5.GND **P2:** 1.W 2.V 3.U

Unit : mm

### General Characteristics

Motor Configuration	Unit		Unit	
Mechanical structure		outrunner	Ingress protection	IP 54
Number of pole pairs		7	Speed constant	KV 200
Number of phases		3	Torque constant	mNm/A 44
Winding connection		star	Single phase resistance	mOhm 200
Total weight	g	300	DQ inductance	mH 1
Rotor inertia	$\mu\text{Nm}\cdot\text{s}^2$	8.2	Friction	$\mu\text{N}\cdot\text{m}\cdot\text{s}$ 0.6

### Thermal Data

Thermal resistance housing -ambient	3.8K/W
Thermal resistance winding-housing	5.2K/W
Ambient temperature	-10 °C - 60 °C
Maximal winding temperature	120 °C

### Sensoric

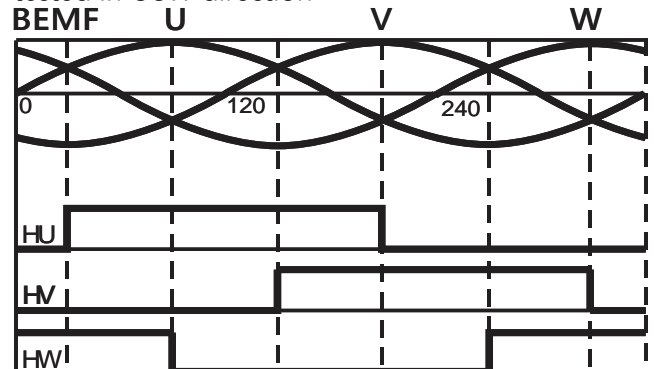
Sensor type	bipolar self-locking hall
Number of halls	3
Supply voltage	5V
Electrical angle	120 degrees

### Nominal & Stall

	Unit	
Nominal voltage	V	24
No load speed	rpm	4800
No load current	mA	550
Nominal speed	rpm	4000
Nominal torque	mNm	280
Nominal current	A	6
Maximal power	W	280
Maximal efficiency		83%
Stall torque	Nm	1.2
Stall current	A	28

### Hall sequence regards to back EMF

tested in CCW direction



Pull-up resistance yes

ATTENTION: Stall operation is not recommended, please do necessary protection to avoid irreparable damage.

\*In case specific shaft, connector, or any other features need to be customized, please visit [www.damoto.tech](http://www.damoto.tech) and contact us.