

Connector:	GH1.25-F-8P	Pin definition(left to right):
Cable :	GH8P-M-28AWG-15cm	1.HW 2.HV 3.HU 4.GND 5.VCC 6.W 7.V 8.U

### General Characteristics

Motor Configuration	Unit		Unit
Mechanical structure		outrunner	Ingress protection
Number of pole pairs		7	IP 54
Number of phases		3	Speed constant
Winding connection		star	KV
Total weight	g	52	Torque constant
Rotor inertia	uNm*s <sup>2</sup>	0.75	mNm/A
			23
			Single phase resistance
			mOhm
			750
			DQ inductance
			uH
			100
			Friction
			uN*m*s
			0.5

### Thermal Data

Thermal resistance housing -ambient	6.1K/W
Thermal resistance winding-housing	9.4K/W
Ambient temperature	-20 °C - 70 °C
Maximal winding temperature	120 °C

### Sensoric

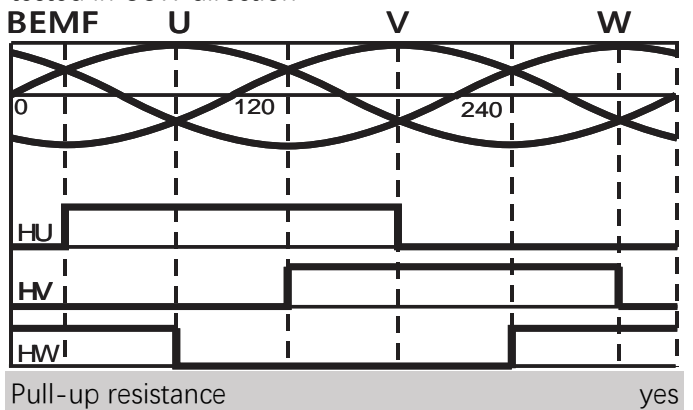
Sensor type	bipolar self-locking hall
Number of halls	3
Supply voltage	5V
Electrical angle	120 degrees

### Nominal & Stall

	Unit		
Nominal voltage	V	12	24
No load speed	rpm	4300	8600
No load current	mA	150	260
Nominal speed	rpm	3300	7200
Nominal torque	mNm	33	45
Nominal current	A	1.3	1.7
Maximal power	W	15	45
Maximal efficiency		83%	84%
Stall torque	mNm	105	210
Stall current	A	4.5	8

### Hall sequence regards to back EMF

tested in CCW direction



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.