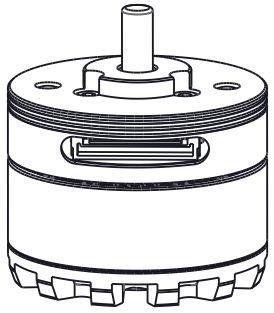
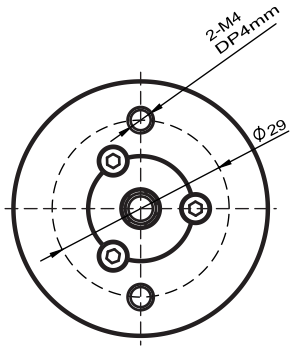
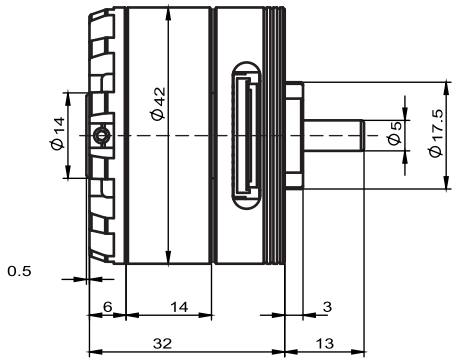
DAMOTO
MOTION MATTERS

MX330K200H







General Characteristics:

Motor Configuration

Mechanical Structure		outrunner			
Number of pole pairs		7	Speed constant	Vms/krpm	4.1
Number of phases		3	Torque constant	mN/A	45
Winding connection		star	Phase resistance	mOhm	630
Total weight	gram	130	DQ inductance	uH	140
Rotor inertia	uNm*s^2	2.7	Friction	uN*m*s	0.5

Thermal Data

Thermal resistance housing-ambient	4.8K/W
Thermal resistance winding-housing	7.1K/W
Ambient temperature	-40~100 ℃
Max. winding temperature	120 ℃

Sensoric

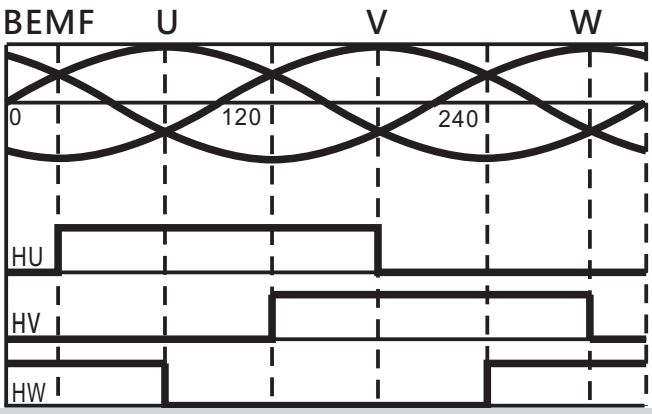
Sensor type	bipolar self-locking hall
Number of halls	3
Supply voltage	5V
Electrical angle	120 degrees

Nominal & Stall

Nominal voltage	V	24
No load speed	rpm	4800
Noload current	mA	250
Nominal speed	rpm	3500
Nominal torque	mNm	160
Nominal current	A	3.4
Nominal power	W	58.6
Efficiency(Max./Nominal)	85% / 72%	
Stall torque	mNm	400
Stall current	A	9

Hall sequence regards to back EMF:

Tested in CCW direction



Wire configuration (Left -Right):

HW	HV	HU	5V	GND	W	V	U
1	2	3	4	5	6,7,8	9,10,11	12,13,14

Pull-up resistance	10k Ohm