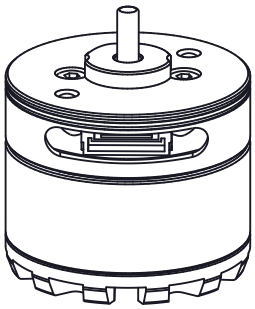
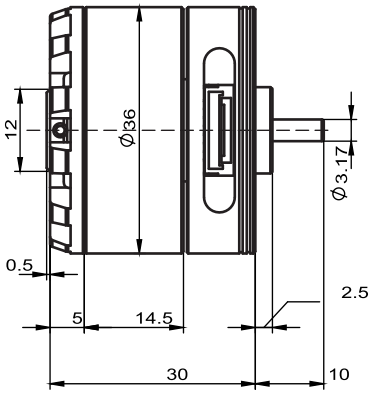
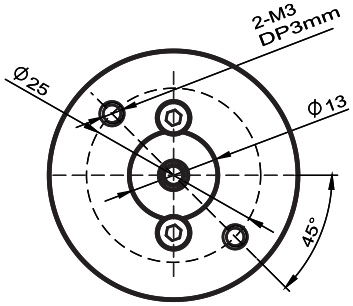
DAMOTO
MOTION MATTERS

MX280K200H







General Characteristics:

Motor Configuration

Mechanical Structure		outrunner			
Number of pole pairs		7	Speed constant	Vms/krpm	3.95
Number of phases		3	Torque constant	mN/A	44
Winding connection		star	Phase resistance	Ohm	1.3
Total weight	gram	90	DQ inductance	uH	400
Rotor inertia	$uNm*s^2$	1.6	Friction	uN*m*s	0.5

Thermal Data

Thermal resistance housing-ambient	5K/W
Thermal resistance winding-housing	7.9K/W
Ambient temperature	-40~100 °C
Max. winding temperature	120 °C

Sensoric

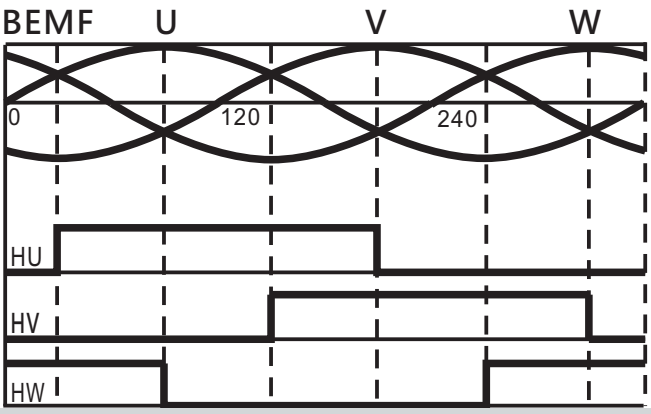
Sensor type	bipolar self-locking hall
Number of halls	3
Supply voltage	5V
Electrical angle	120 degrees

Nominal & Stall

Nominal voltage	V	24
No load speed	rpm	4800
Noload current	mA	180
Nominal speed	rpm	3400
Nominal torque	mNm	92
Nominal current	A	1.9
Nominal power	W	32.5
Efficiency(Max./Nominal)	86% / 73%	
Stall torque	mNm	230
Stall current	A	5.5

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

Pull-up resistance 10k Ohm