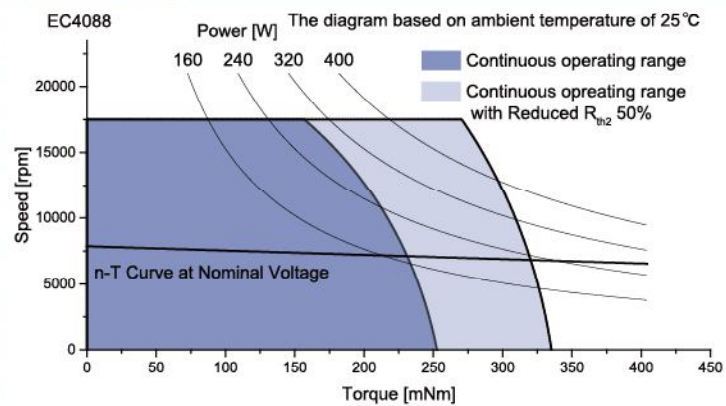


	Sensorless	EC4088L-...	2408	3608	4808				
	With hall sensor	EC4088S-...							

Motor data					
Values at nominal voltage					
1	Nominal voltage	V	24	36	48
2	No load speed	rpm	7921	8032	8081
3	No load current	mA	440	290	200
4	Nominal speed	rpm	7299	7379	7452
5	Nominal torque	mNm	200	200	200
6	Nominal current	A	7.39	4.99	3.74
7	Stall torque	mNm	2546	2460	2570
8	Stall current	A	88.9	58.1	45.7
9	Max. efficiency	%	86.4	86.4	87.2
10	Terminal resistance	$\Omega$	0.27	0.62	1.05
11	Terminal inductance	mH	0.18	0.38	0.78
12	Torque constant	mNm/A	28.8	42.6	56.5
13	Speed constant	rpm/V	332	224	169
14	Speed/torque gradient	rpm/mNm	3.11	3.26	3.14
15	Mechanical time constant	ms	1.8	1.9	1.8
16	Rotor inertia	gcm <sup>2</sup>	54.1	54.1	54.1

17	Thermal resistance housing-ambient	3.0 K/W
18	Thermal resistance winding-housing	0.6 K/W
19	Thermal time constant winding	48 s
20	Thermal time constant motor	996 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	17500 rpm
24	Axial play at axial load <10N	0 mm
	>10N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	9 N
27	Max. force for press fits (static)	170 N
	(static, shaft supported)	4500 N
28	Max. radial loading, 5mm from flange	80 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	571 g

**Operating Range**



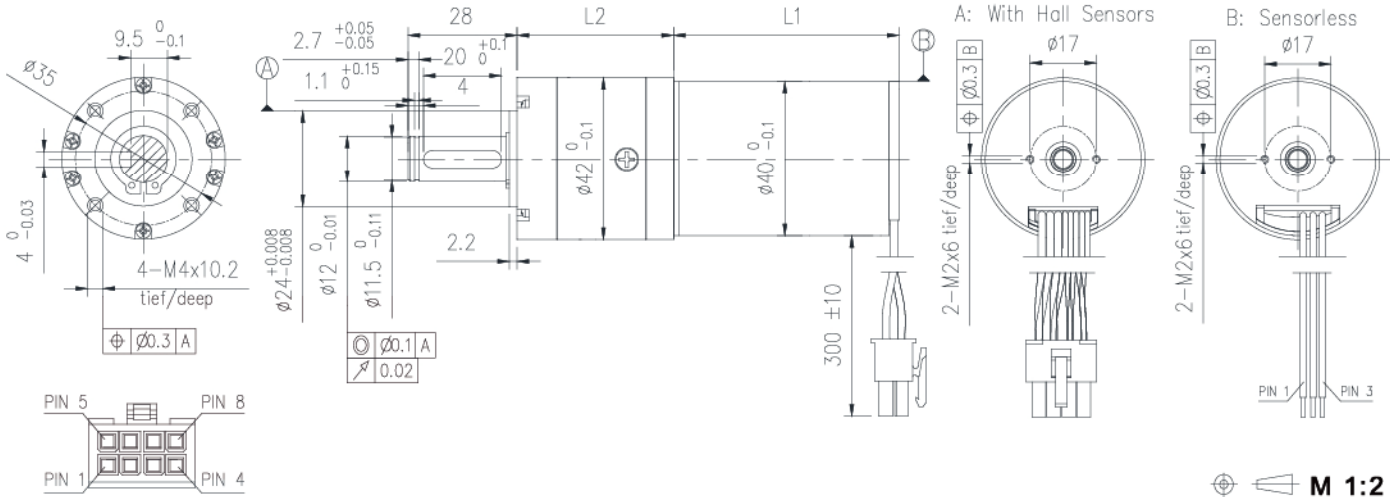
**Connection**

Connection A (Sensor)		PTFE	
Pin 1	Motor winding MB	AWG20	Green
Pin 2	Vhall 3-18 VDC	AWG26	Red
Pin 3	Hall sensor HA	AWG26	Yellow
Pin 4	Hall sensor HC	AWG26	Blue
Pin 5	Motor winding MA	AWG20	Yellow
Pin 6	Motor winding MC	AWG20	Blue
Pin 7	GND	AWG26	Black
Pin 8	Hall sensor HB	AWG26	Green
Connector Molex5557-8P			

Connection B (Sensorless)		PTFE	
Pin 1	Motor winding MA	AWG20	Yellow
Pin 2	Motor winding MB	AWG20	Green
Pin 3	Motor winding MC	AWG20	Blue

**Configuration**

Performance: Customized in the continuous operating range  
 Ball bearing: Preload  
 Flange: Standard frange front&back/customize the frange  
 Shaft: Length/Diameter/Cut face/double shaft/hollow shaft  
 Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length  
 Connector: JST/MOLEX/TE



M 1:2

**ECG40..L**  
**ECG40..S** P42

Motor type				
1 Length of motor L1	ECG4058S/L	mm	58	Motor performance at P24
	ECG4070S/L	mm	70	Motor performance at P25
	ECG4088S/L	mm	88	Motor performance at P26

**Gearhead Data**

2 Housing material		Steel
3 Geartrain material		Steel
4 Bearing type on output shaft		Ball bearing
5 Max. radial load (10mm from flange)	N	196
6 Max. axial load	N	98
7 Radial play of shaft	mm	0.04
8 Thrust play of shaft	mm	0.4
9 Backlash at no load	°	2
10 Max. continuous speed	rpm	30000
11 Operating temperature range	°C	-30..+100
12 Number of stages		1 2 3 4
13 Max continuous torque	Nm	6.5 8.6 10.8 13
14 Max. intermittent torque	Nm	13 17.2 21.6 26
15 Max. efficiency	%	90 83 77 72
16 Gearhead length L2	mm	43.8 54.6 65.4 76
17 Ratio	X:1	4.3,5.1, 6.3, 7.6 14.7,16.3, 18.6,19.2, 21.9,23.9, 25.8, 27.2, 28.9, 32, 38.7, 39.7, 48, 58.1 65.6, 74.6, 81.4, 90.5, 98.5, 109, 112.1, 124.6, 123, 141.8, 150.4, 162.4, 171.2, 182, 196.5, 220.3 243.9, 250.7 277.4, 302.6, 335.8, 351, 382.2, 413.2, 459.3, 500.1, 537.4, 583.5, 620.6, 686.9, 744.7, 824.4, 869, 924.2 1006, 1388, 1680, 3380

**Connection**

**Connection A (Sensor)** PTFE

Pin 1 Motor winding MB	AWG20	Green
Pin 2 Vhall 3-18 VDC	AWG26	Red
Pin 3 Hall sensor HA	AWG26	Yellow
Pin 4 Hall sensor HC	AWG26	Blue
Pin 5 Motor winding MA	AWG20	Yellow
Pin 6 Motor winding MC	AWG20	Blue
Pin 7 GND	AWG26	Black
Pin 8 Hall sensor HB	AWG26	Green

Conector  
Molex5557-8P

**Connection B (Sensorless)** PTFE

Pin 1 Motor winding MA	AWG20	Yellow
Pin 2 Motor winding MB	AWG20	Green
Pin 3 Motor winding MC	AWG20	Blue

**Configuration**

Pinion: Metal/Plastic  
Ball bearing: Preload  
Flange: Standard frange front&back/customize the frange  
Shaft: Length/Diameter/Cut face/double shaft/hollow shaft  
Leadwire: PVC/Silicon/Teflon/UL No/Dimensions/length  
Connector: JST/MOLEX/TE

**More:**  
Special design for high speed/big torque  
ECD series can be chosen in some application  
Details please contact our sales engineer