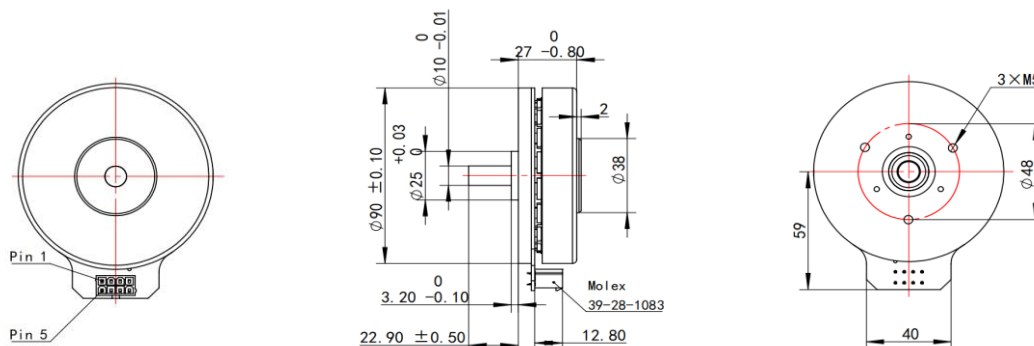


Motor Data	1006002702	1006002712	1006002715				
<b>Values at nominal voltage</b>							
1 Nominal voltage	$U_N$	24	48	24			V
2 No load speed	$n_o$	3190	2080	2000			rpm
3 No load current	$I_o$	610	195	350			mA
4 Stall torque	$M_H$	4984.1	4553.8	5208.9			mNm
5 Stall current	$M_I$	70.6	21.1	46.2			A
6 Max. efficiency	$\eta_{max}$	83	85	83			%
7 Nominal power	$W_N$	111.4	86.0	59.2			W
8 Nominal speed	$n_N$	2620	1664	1600			rpm
9 Nominal torque (max.continuous torque)	$M_N$	425	517	370			mNm
10 Nominal current (max.continuous current)	$I_N$	5.84	2.21	3.2			A
<b>Characteristics</b>							
11 Terminal resistance phase to phase	$R$	0.34	2.28	0.52			$\Omega$
12 Terminal inductance phase to phase	$L$	0.23	0.21	0.56			mH
13 Back-EMF constant	$K_E$	7.46	22.86	11.91			mV/rpm
14 Torque constant	$K_M$	71.22	218.33	113.72			mNm/A
15 Speed constant	$K_n$	134	44	84			rpm/V
16 Current constant	$K_I$	0.014	0.005	0.009			A/mNm
17 Speed / torque gradient	$\Delta n/\Delta M$	0.64	0.46	0.38			rpm/mNm
18 Mechanical time constant	$\tau_m$	43.4	42.6	39.8			ms
19 Rotor inertia	$J$	3060.0	3060.0	3060.0			gcm <sup>2</sup>
<b>Specifications</b>							
20 Operating temperature range:							
-Motor				-20.....+100			°C
-winding, max permissible				+125			°C
21 Direction of rotation				electronically reversible			
22 Max. speed	$n_{max}$			5000			rpm
23 Number of pole pairs				12			
24 Number of phases				3			
25 Magnet material				NdFeB			
26 Hall sensors				digital			
<b>Mechanical data</b>							
27 Bearing type				ball bearings, preloaded			
28 Axial play				0 - 0.3			mm
29 Max. axial load (dynamic)				12			N
30 Max. force for press fits (static)				183			N
(static, shaft supported)				8000			N
31 Max. radial loading, 7.5mm from flange				60			N
<b>Product</b>							
32 Weight of motor		600	600	600			g

**Dimensional drawing**



**Option, cable and connection information**

**Connector Molex 39-28-1083**

Hall sensors A	Pin 1	Hall sensors C	Pin 5
Hall sensors B	Pin 2	GND	Pin 6
$V_{hall}$ 4.5V.....24V	Pin 3	Motor winding A	Pin 7
Motor winding C	Pin 4	Motor winding B	Pin 8

Note:About the torque curves,please contact us for more information.  
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