

## DC057HS Brushless Motor Series

### General Features

- NEMA 23 front mounting
- Torques up to 134.00 Oz-in Peak, 44.00 Oz-in continuous
- Speeds up to 12000 RPM
- Voltage rating up to 60 Vdc
- Integrated Hall Effect Commutation
- Class B rated construction
- RoHS and CE compliant

### Available Options

- Encoder - IMS EQM35 & Q Series
- Brake - IMS MPC023 Series
- Connectors and Matting cables
- Custom Shaft ends
- Custom Winding (Voltage or Current)
- Gearbox - IMS EL52 Series
- Round Front Flang Mounting - IEC34-7



### Technical and Performance Data

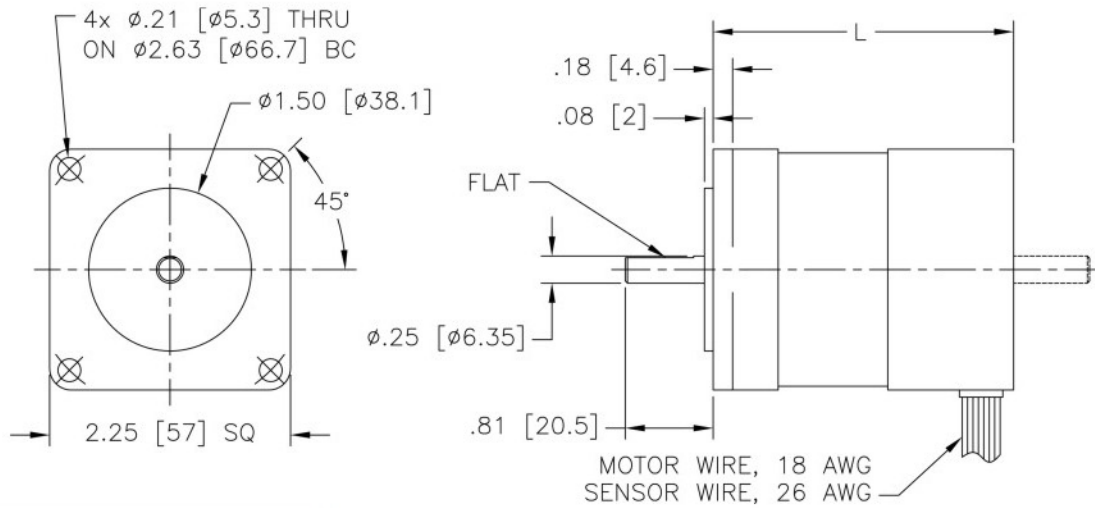
Model Number		DC057HS100	DC057HS200	DC057HS300
<b>General</b>				
	Maximum Terminal Voltage	Vdc	60.00	60.00
	Continuous Stall Torque	Oz-in	16.15	28.50
		Nm	0.11	0.20
	Continuous Current (3)	Amps	5.12	8.98
	Peak Stall Torque	Oz-in	48.44	85.49
		Nm	0.34	0.60
	Peak Current (3)	Amps	14.10	24.83
24 Vdc Bus Rating	Rated Speed	RPM	3800	4500
	Rated Torque @ Rated Speed	Oz-in	15.00	25.00
		Nm	0.11	0.18
	Rated Output Power @ Rated Speed	Watts	42	83
	Maximum Speed (1)	RPM	7600	7500
36Vdc Bus Rating	Rated Speed	RPM	7500	8500
	Rated Torque @ Rated Speed	Oz-in	13.00	21.00
		Nm	0.09	0.15
	Rated Output Power @ Rated Speed	Watts	72	132
	Maximum Speed (1)	RPM	11700	10000
48 Vdc Bus Rating	Rated Speed	RPM	12000	10000
	Rated Torque @ Rated Speed	Oz-in	10.00	20.00
		Nm	0.07	0.14
	Rated Output Power @ Rated Speed	Watts	89	148
	Maximum Speed (1)	RPM	12000	10000
60 Vdc Bus Rating	Rated Speed	RPM	12000	10000
	Rated Torque @ Rated Speed	Oz-in	10.00	20.00
		Nm	0.07	0.14
	Rated Output Power @ Rated Speed	Watts	89	148
	Maximum Speed (1)	RPM	12000	10000
	Thermal Resistance	° C/W	2.8	2.0
<b>Electrical</b>				
	Torque Constant (± 10%), (2)	Oz-in/Amp	4.01	4.01
		Nm/Amp	0.0283	0.0283
		V/KRPM	2.98	2.98
	Voltage Constant (± 10%), (2)	V s/rad	0.0283	0.0283
	Resistance (± 15%), (2)	Ohms	1.58	0.71
	Inductance (± 15%), (2)	mH	1.33	0.70
<b>Mechanical</b>				
	Inertia	Oz-in-Sec <sup>2</sup>	0.000480	0.000950
		kg m <sup>2</sup>	3.39E-06	6.71E-06
	Weight	Oz	16.0	24.0
		gm	453.60	680.40
	Length (L)	Inch	2.37	2.97
		mm	60.20	75.40

(1) Maximum Speed can be limited by bus voltage and feedback types

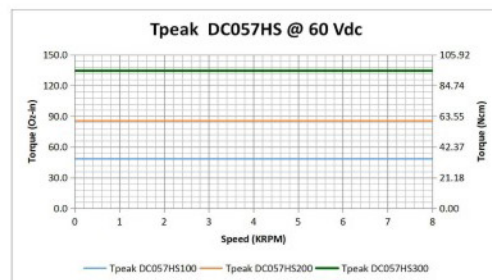
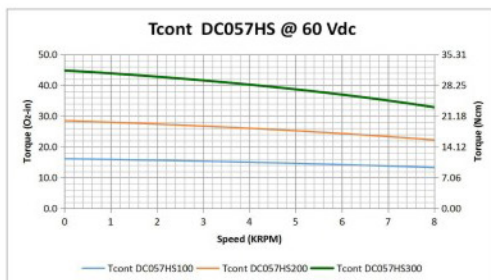
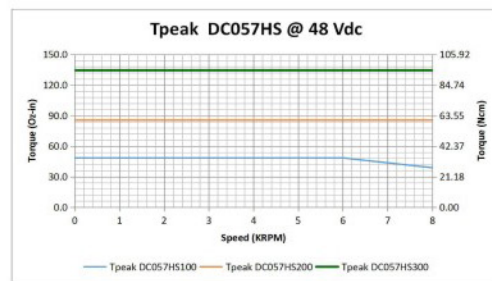
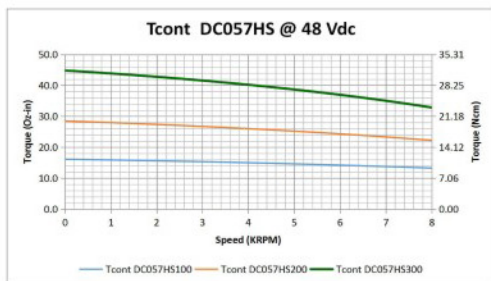
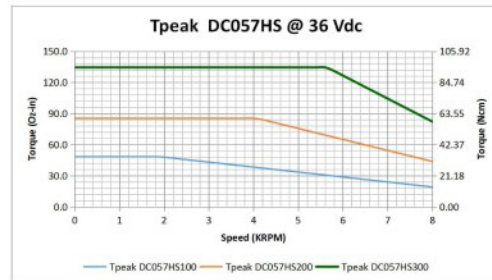
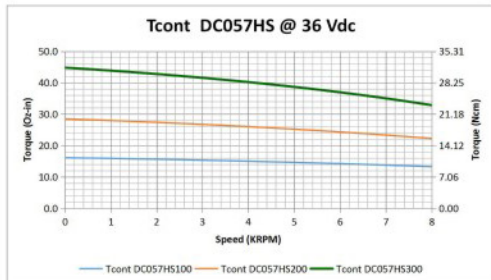
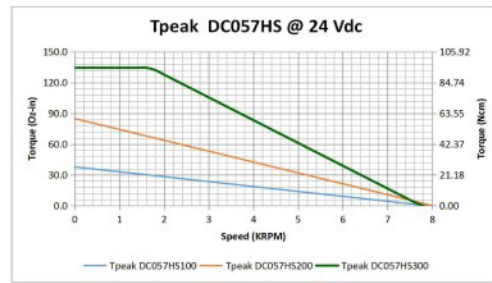
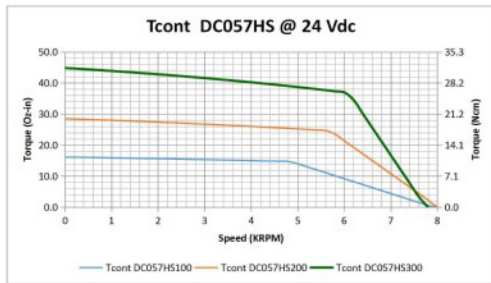
(2) Measure values at 20 °C

(3) Current values are at maximum allowable winding temperature 125 °C

## Outline Drawing and Dimensional Data



## Performance Curves



\* Motor performance curves may vary with the drive technology used

\*\* Motor performance curves may vary based upon the quality of the input voltage