

Introduction of BLDC Motors

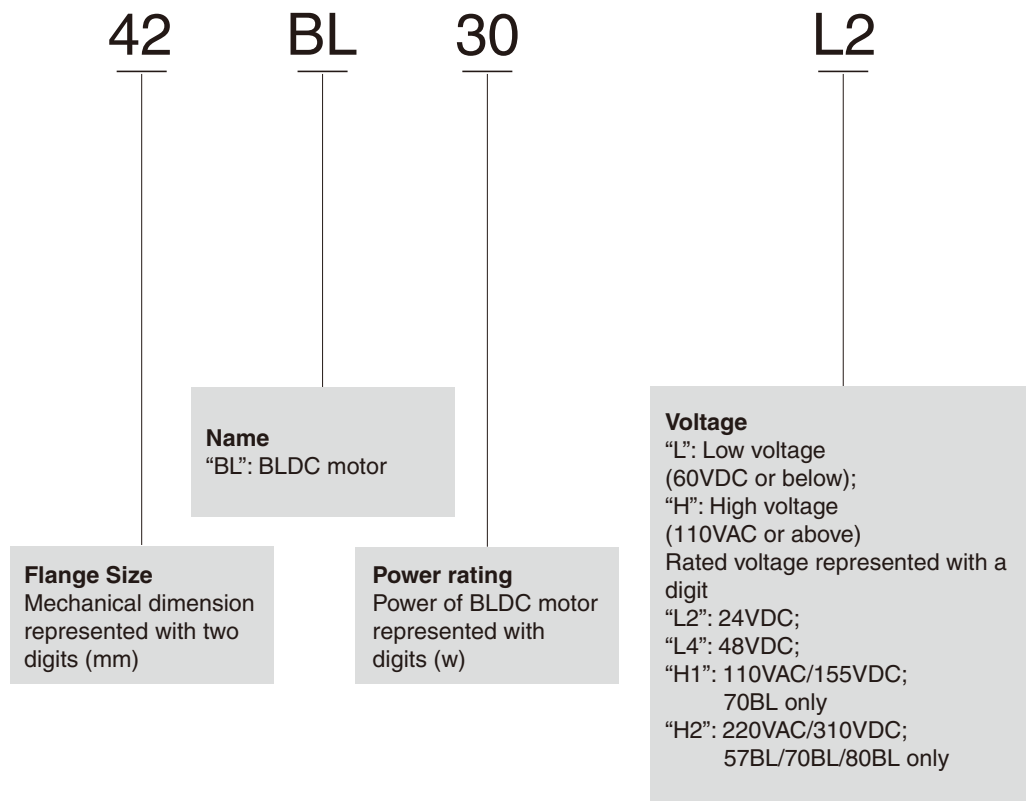
Characteristics

- Wide range of speed control and smooth torque output
- Excellent speed stability
- Small size, high power
- Low temperature rise, low noise, low vibration
- Long life, low maintenance costs
- Low positioning torque
- Energy efficient

Applications

- Mechanical automation (textile machines)
- Financial automation (ATM)
- Office equipment (printer)
- Solar energy equipment
- Drive system
- Speed setting and regulation devices in various industries
- Automotive On-board equipment
- Pump (metering pump)
- Food industry
- Sorting equipment

Model Numbering System



80BLDC Motors

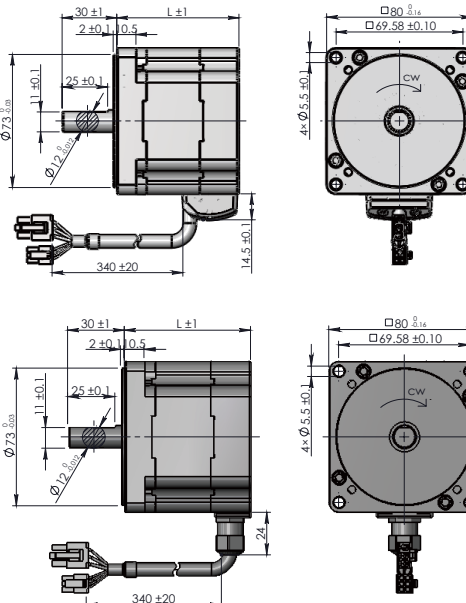
Technical Specification

	Units	Type								
		80BL100L2	80BL100L4	80BL100H2	80BL200L2	80BL200L4	80BL200H2	80BL300L2	80BL300L4	80BL300H2
Length	mm	50	50	50	67	67	67	84	84	84
Input power	VDC	24	48	310	24	48	310	24	48	310
Rated power	W	100	100	100	200	200	200	300	300	300
Pole-pair number		4								
Phase number		3								
Rated speed	RPM	4000	4000	4000	4000	4000	4000	3000	4000	4000
Max. speed	RPM	4500	4500	4500	4500	4500	4500	4000	4500	4500
Rated torque	Nm	0.24	0.24	0.24	0.48	0.48	0.48	0.72	0.72	0.72
Max. torque	Nm	0.48	0.48	0.48	0.96	0.96	0.96	1.20	1.44	1.44
Rated current	A	5.00	2.43	0.37	10.10	5.06	1.83	12.00	7.49	1.16
Max. current	A	10.00	4.86	0.75	20.20	10.12	3.66	19.00	14.98	2.32
Voltage constant	Vrms/Krpm	3.44	6.88	44.40	3.38	6.76	38.70	4.53	7.03	45.40
Torque constant	Nm/Arms	0.048	0.099	0.640	0.048	0.095	0.260	0.060	0.096	0.620
Moment of inertia	10 ⁻⁴ kgm ²	0.38	0.38	0.38	0.74	0.74	0.74	1.08	1.08	1.08
Resistance	Ω	0.18	0.71	29.60	0.08	0.32	2.60	0.07	0.20	8.32
Inductance	mH	0.34	1.35	56.30	0.18	0.70	12.70	0.19	0.47	19.58
Sensor		Hall								
Ins.class		E								
Protective rating		IP40/IP65								
Operating temperature		0~+50°C								
Storage temperature		-25~+70°C								
Operating RH		85%RH or below (non-condensing)								
Operating environment		Outdoor (no direct sunlight), no corrosive gas, no flammable gas, no oil mist, no dust								
Altitude		1000 m or below								

Mechanical Dimension Unit: mm

Series	L
	mm
80BL100	50
80BL200	67
80BL300	84

Series	L
	mm
80BL100	60
80BL200	77
80BL300	94



High-voltage 80BL series motor: 80BL100H2, 80BL200H2 and 80BL300H2 will be put into mass production after March 2018. 80BL series motor products conforming to IP65 protective rating will be put into mass production after December 2017.

Introduction of BLDC Motors

42 BLDC Motors

57 BLDC Motors

70 BLDC Motors

80 BLDC Motors

Round BLDC Motors

R42BL

R57BL

Connector Specification

Torque - Speed Features

