

# BN34-Series

ø 86,3 mm, brushless  
150 to 600 Watts



- Standard of the shelf unit
- High reliability / Long life
- Very quiet operation
- High power to size ratio
- Very high speed capability

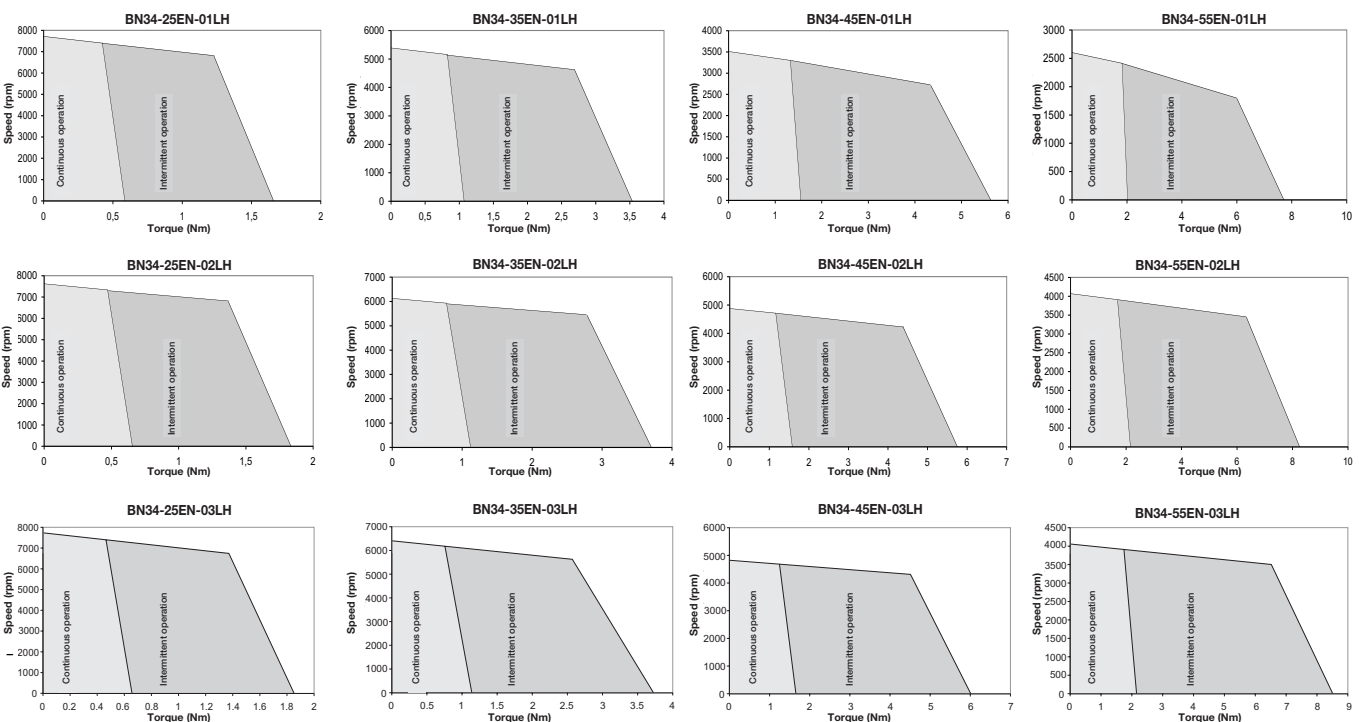


## Motor Data

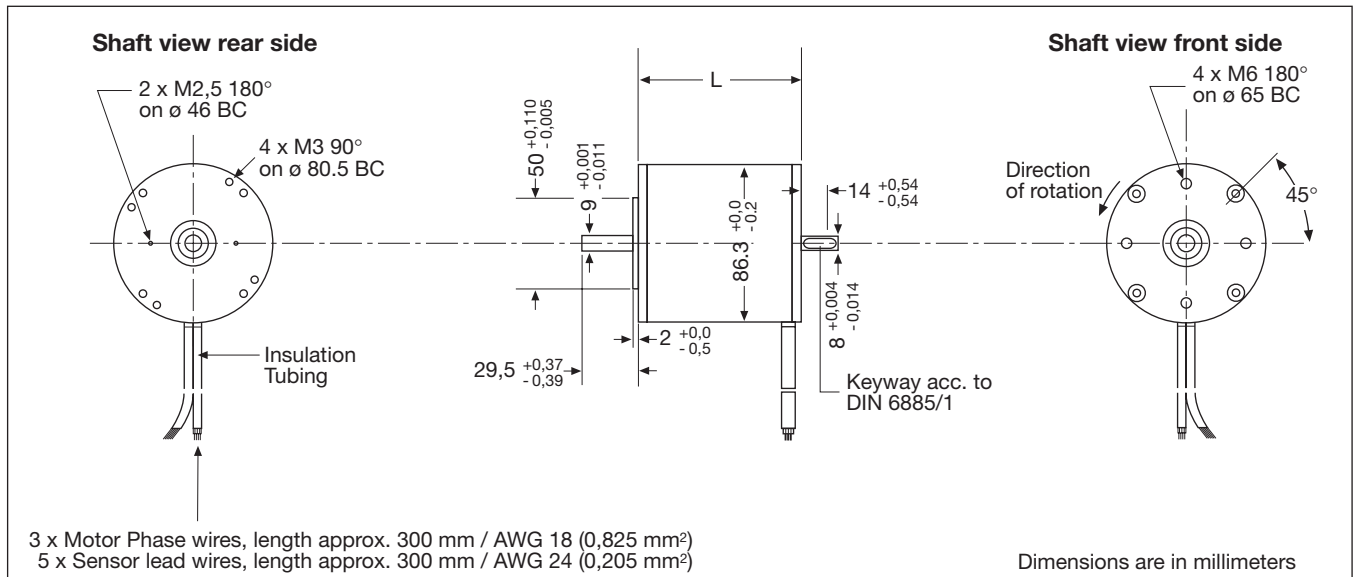
Series		BN34-25EN □□LH			BN34-35EN □□LH			BN34-45EN □□LH			BN34-55EN □□LH						
		01	02	03	01	02	03	01	02	03	01	02	03				
Winding Code		01	02	03	01	02	03	01	02	03	01	02	03				
Rated Power (P <sub>r</sub> )	Watts	328	363	368	446	482	489	459	575	592	460	694	696				
Terminal Voltage (V <sub>T</sub> )	VDC	24	50	100	24	50	100	24	50	100	24	50	100				
Rated Speed (N <sub>B</sub> )	RPM	7400	7330	7550	5160	5930	6240	3300	4710	4710	2410	3910	3920				
Rated Current (I <sub>B</sub> )	A	16.4	8.7	4.4	22.3	11.5	5.8	23.0	13.7	7.0	23.3	16.5	8.2				
Rated Torque (T <sub>C</sub> )	Nm	0.424	0.474	0.467	0.827	0.777	0.749	1.330	1.17	1.20	1.83	1.70	1.70				
Peak Torque (T <sub>PK</sub> )	Nm	2.31	2.31	2.31	4.93	4.93	4.93	7.56	7.56	7.56	10.21	10.21	10.21				
Torque Sensitivity (K <sub>t</sub> )	Nm/A	0.0296	0.0621	0.1230	0.0424	0.0774	0.1483	0.0653	0.0974	0.1956	0.0879	0.1172	0.2344				
Continuous Stall Torque (T <sub>CS</sub> )	Nm	0.587	0.657	0.657	1.074	1.13	1.13	1.54	1.59	1.64	2.02	2.17	2.18				
Back EMF (K <sub>e</sub> )	V/KRPM	3.10	6.50	12.80	4.44	8.10	15.50	6.83	10.20	20.50	9.20	12.30	24.50				
Speed/Torque Gradient	rpm/KNm	37.4	30.3	30.3	19.7	12.7	12.7	7.7	7.0	7.0	5.6	4.9	4.2				
Terminal Inductance (L <sub>T</sub> )	mH	0.13	0.57	2.18	0.13	0.43	1.57	0.20	0.45	1.80	0.27	0.48	1.93				
Terminal Resistance (R <sub>T</sub> )	Ohms	0.07	0.25	0.94	0.05	0.16	0.57	0.07	0.15	0.55	0.09	0.14	0.50				
Rotor Inertia (J <sub>R</sub> )	g-cm <sup>2</sup>	424.0	424.0	424.0	848.0	848.0	848.0	1271.0	1271.0	1271.0	1695.0	1695.0	1695.0				
Thermal Resistivity (R <sub>TH</sub> )	deg.C/watt	1.6	1.5	1.5	2.5	1.1	1.2	1.1	1.0	1.0	1.1	0.8	0.8				
Length (L)	mm		63.5				88.9				114.3				139.7		
Weight (m)	g		1049				1758				2495				3261		

Further designs are available, please contact Peromatic GmbH.

## Performance Curves (Intermittent operation see page 5)



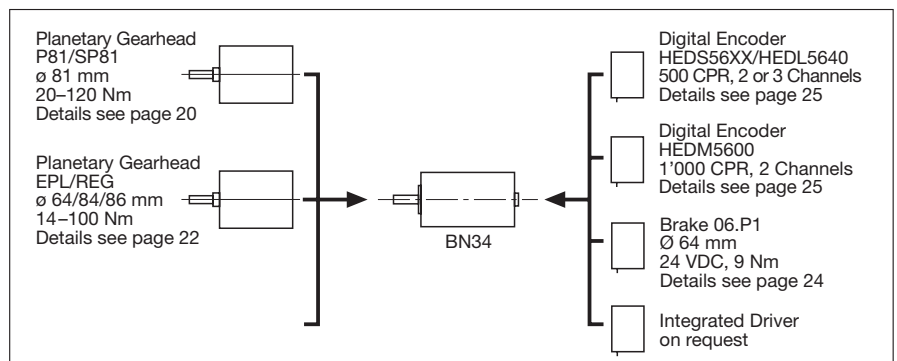
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## Lead Wire Color Codes

Connection	Color Code	Connection	Color Code
Vcc	<span style="background-color: yellow;"> </span> YEL	C Coil	<span style="background-color: green;"> </span> GRN
GND	<span style="background-color: gray;"> </span> GRY	S1 out	<span style="background-color: brown;"> </span> BRN
A Coil	<span style="background-color: red;"> </span> RED	S2 out	<span style="background-color: blue;"> </span> BLU
B Coil	<span style="background-color: black;"> </span> BLK	S3 out	<span style="background-color: orange;"> </span> ORN

## Modular Configurations



## Ordering Information

