

BN12-Series

ø 30.8mm, brushless
15 to 50 Watts



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

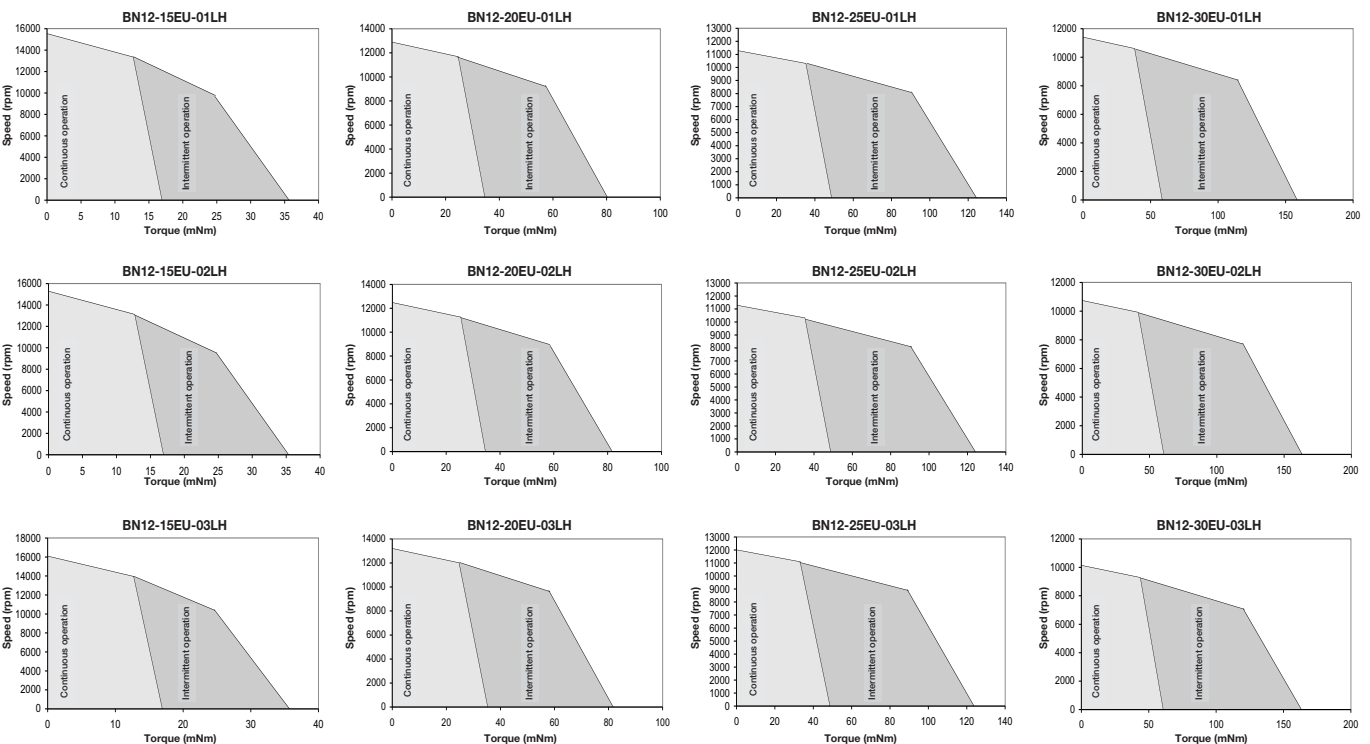


Motor Data

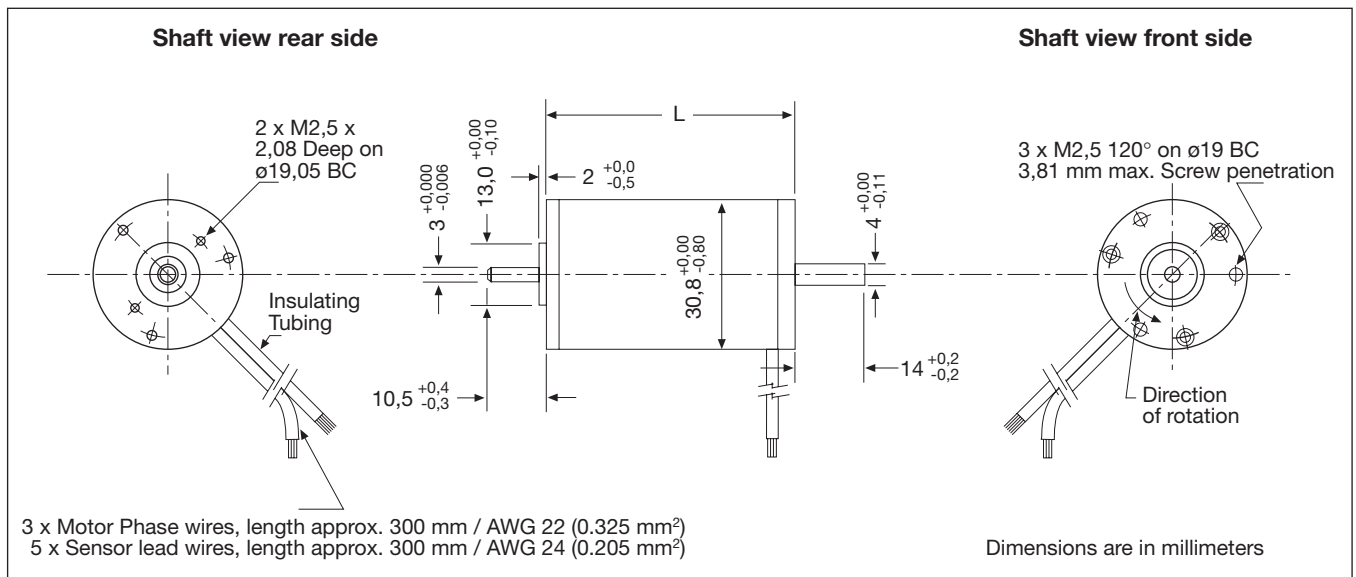
Series		BN12-15EU □□LH			BN12-20EU □□LH			BN12-25EU □□LH			BN12-30EU □□LH		
		01	02	03	01	02	03	01	02	03	01	02	03
Winding Code		01	02	03	01	02	03	01	02	03	01	02	03
Rated Power (P_r)	Watts	17.3	17.0	18.3	30.9	30.5	31.9	39.2	39.2	39.9	44.1	44.7	43.7
Terminal Voltage (V_t)	VDC	12	24	36	12	24	36	12	24	36	12	24	36
Rated Speed (N_B)	RPM	13027	12736	13753	11928	11448	12320	10604	10601	11489	11036	10253	9529
Rated Current (I_c)	A	2.26	1.13	0.77	3.49	1.76	1.20	4.32	2.16	1.46	4.81	2.46	1.61
Rated Torque (T_c)	mNm	12.7	12.7	12.7	24.8	25.5	24.8	35.4	35.4	33.2	38.2	41.7	43.8
Peak Torque (T_{pk})	mNm	91.8	91.8	98.9	262.0	262.0	276.0	410.0	410.0	431.0	544.0	544.0	509.0
Torque Sensitivity (K_t)	Nm/A	0.0072	0.0146	0.0209	0.0088	0.0180	0.0257	0.0101	0.0201	0.0284	0.0100	0.0212	0.0336
Continuous Stall Torque (T_{CS})	mNm	17.0	17.0	17.0	34.6	35.4	35.4	48.8	48.8	48.8	58.7	58.7	58.7
Back EMF (K_e)	V/KRPM	0.75	1.53	2.18	0.92	1.89	2.69	1.05	2.10	2.96	1.04	2.21	3.51
Speed/Torque Gradient	rpm/KNm	8800.3	8718.3	8622.3	2495.7	2438.5	2424.3	1393.0	1397.9	1404.3	1054.6	998.1	1000.2
Terminal Inductance (L_T)	mH	0.13	0.55	1.13	0.10	0.42	0.84	0.09	0.35	0.69	0.06	0.29	0.73
Terminal Resistance (R_T)	Ohms	0.95	3.89	7.85	0.40	1.67	3.36	0.29	1.18	2.36	0.22	0.93	2.36
Rotor Inertia (J_R)	g-cm ²	2.83	2.83	2.83	5.65	5.65	5.65	8.48	8.48	8.48	11.30	11.30	11.30
Thermal Resistivity (R_{TH})	deg.C/watt	10.7	10.3	11.2	9.5	8.9	9.3	8.3	8.3	8.3	7.7	7.3	7.4
Length (L)	mm		38.1			50.8			63.5			76.2	
Weight (m)	g		102			156			207			261	

Further designs are available, please contact Peromatic GmbH.

Performance Curves (Intermittent operation see page 5)



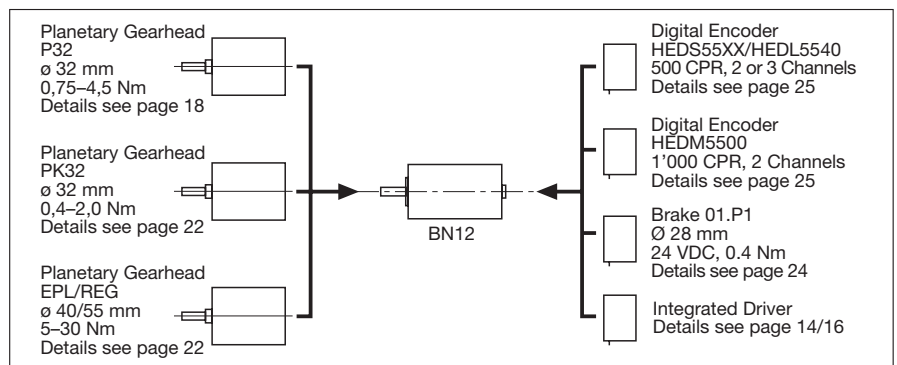
BN12-Series



Lead Wire Color Codes

Connection	Color Code	Connection	Color Code
Vcc	YEL	C Coil	GRN
GND	GRY	S1 out	BRN
A Coil	RED	S2 out	BLU
B Coil	BLK	S3 out	ORN

Modular Configurations



Ordering Information

