



M Sense B Magnetic Encoder

✓ Designed for applications requiring high accuracy and feedback positioning

Quickly and accurately upgrade your motor-drive system performance with the new M Sense B magnetic encoder. Put the new magnetic encoder to work and watch your application benefit from accurate positioning and speed control. The new magnetic encoder provides a complete solution for your encoder needs: accuracy up to 1.5 degrees, integrated RS422 line driver, resolution up to 1024 lines, axial and radial cable output, and a compact design.

OUTPUT AND PERFORMANCE

- Integral Non Linearity (INL): 1.5 degree
- Integrated RS422 Line Driver
- Resolution up to 1024
- Cable output flexibility (axial and radial both options available)
- Maximum speed @ 1024ppr:30,000 rpm

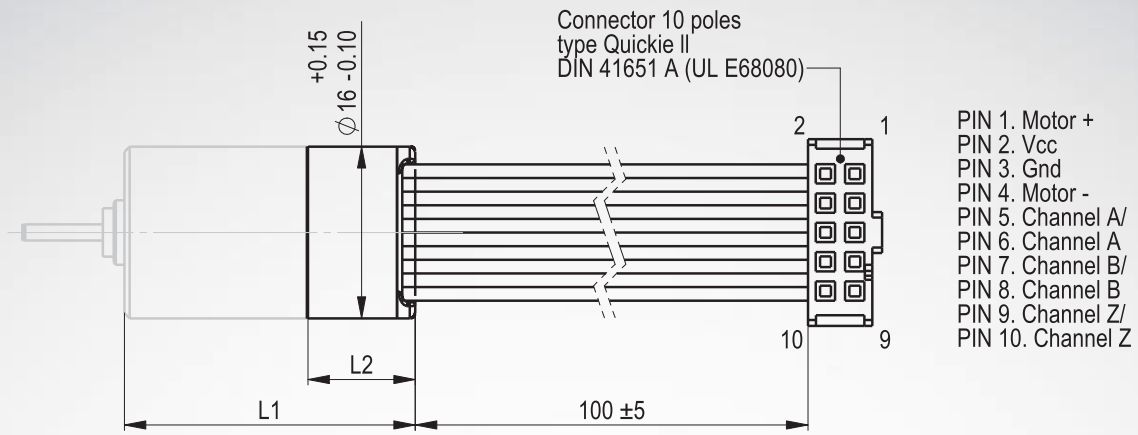
KEY FEATURES

- Accurate positioning and speed control
- Long communication lines can be handled between encoder and the driver
- More accuracy on angular measurements
- Compact mechanical design
- Can be used with medium speed BLDC motors along with wide usage in Brush DC motors

CUSTOMIZATION AVAILABLE

- Axial and radial cable output available
- Output cables direction
- Cables and connectors output





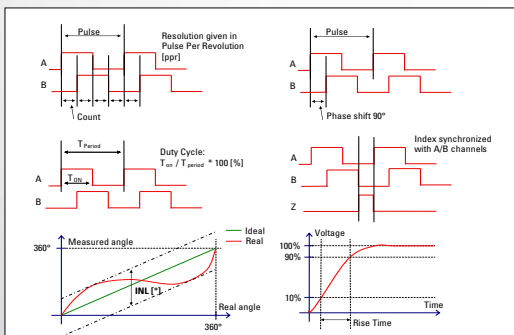
Characteristics @ 22°C / 5,000 rpm

1	Number of lines available		1024, 512, 256, 128..1	LPR
2	Supply voltage		4.5 / 5.5	Volt
3	Supply current	Typical / Max	16/23	mA
4	Rise/Fall time (CL=50pF)	Max	60	ns
5	Output frequency		0.5	MHz
6	Electrical phase shift		90 ± 45 up to 256 ppr ± 75 for 512 & 1024 ppr	degree
7	Duty cycle		50 ± 15 up to 256 ppr ± 25 for 512 & 1024 ppr	%
8	INL (Integral Non Linearity)	Max	1.5	degree
9	Maximum speed @ 1024ppr	Max	30,000	rpm
10	Line driver parameters		4mA / 10MHz (default configuration)	
11	Cable Type		AWG28 Ribbon cable pitch 1.27mm	
12	Operating Temperature Range	Min / Max	-40 to +100	°C
13	Weight		Varies by motor size. Contact us.	g (oz)

Available on motor types	16S78	16N48	16N98	17N78	22S48	22N48	22N98
L1 Length with motor - mm (in)	27.1 (1.07)	27.1 (1.07)	27.1 (1.07)	27.1 (1.07)	36.6 (1.44)	46.4 (1.83)	46.4 (1.83)
L2 Length of encoder - mm (in)	10 (0.39)	10 (0.39)	10 (0.39)	10 (0.39)	9.45 (0.38)	13.1 (0.52)	13.1 (0.52)

Available on motor types	30GT	P110	23GST	25GST	35NT	35GLT
L1 Length with motor - mm (in)	79.2 (3.12)	32.4 (1.28)	On request. Please contact portescap application engineering team			
L2 Length of encoder - mm (in)	10.5 (0.41)	13.6 (0.54)				

Available on motor types	16ECP36	16ECP52
L1 Length with motor - mm (in)	47.4 (1.87)	63.4 (2.50)
L2 Length of encoder - mm (in)	11.4 (0.45)	11.4 (0.45)



Encoder performance option available on request (contact us):

Optional Line driver type: 4mA-10MHz (default) / 50mA-10MHz / 50mA-300kHz / 20mA-3MHz. 4mA-10MHz is recommended for use as single ended outputs. Other options are dedicated for use of differential outputs.

Other parameters can be customized: Index synchronization mode, minimal edge distance, direction of rotation, low current mode and other.