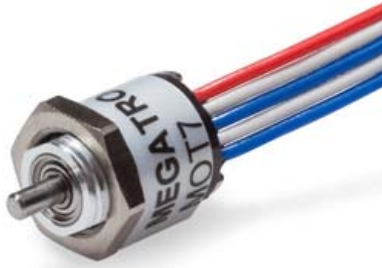


Miniature Optical Encoder

Series MOT7



- Ø7mm housing
- Resolution: 100, 200, 400 p.p.r
- 2 channels + index
- Ball bearings

The MOT7 is distinguished by the extremely small dimensions. It is especially suitable for use in miniaturized devices. Typical applications are medical robots, medical equipment and special robots.

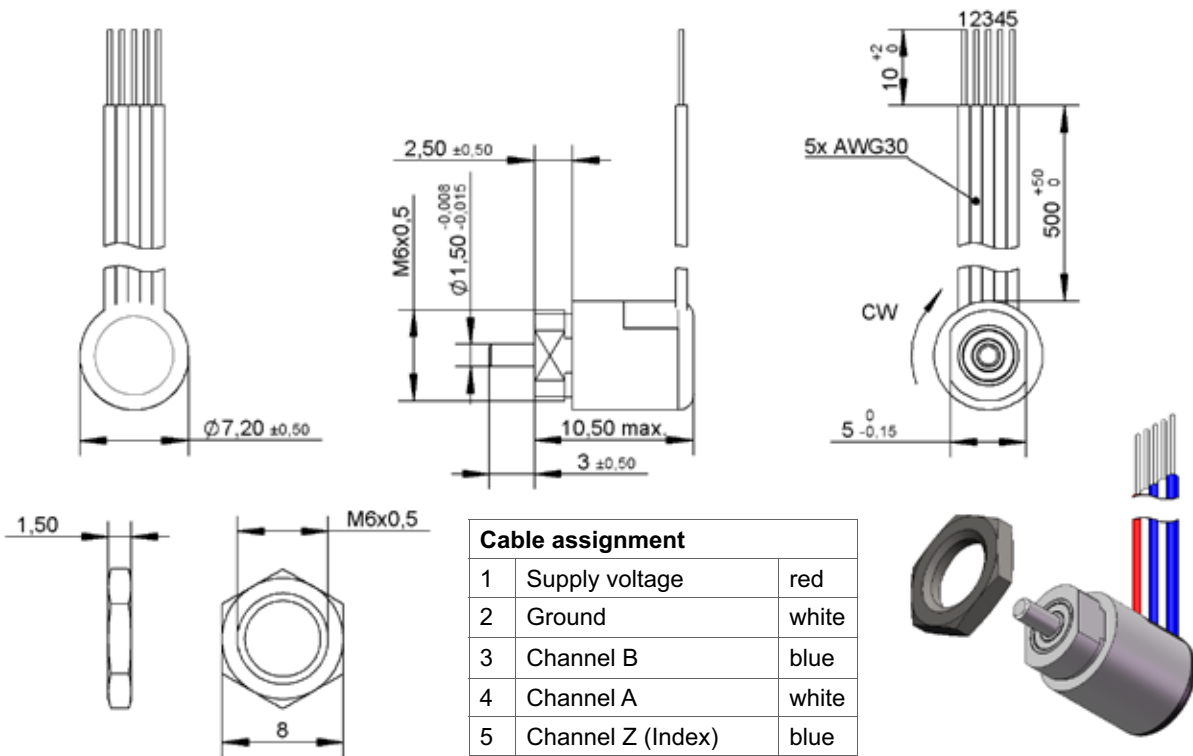
Electrical Data

Resolution	100, 200, 400 p.p.r.
Output channels	A, B, Z
Output electronics	Open collector
Supply voltage	5 VDC ±10%
Current consumption (no load)	≤ 30 mA
Output voltage low @ IOL	≤ 0.4V
Max pull up voltage	13.2V
Limit frequency	100 kHz
Insulation resistance	20 Mohm @ 100 VDC
Dielectric strength	100 VAC, 1 minute

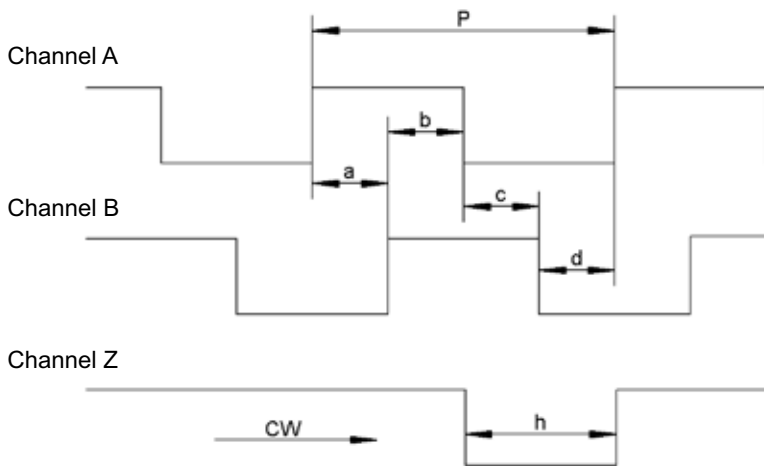
Mechanical and Environmental Data

Max rotational speed	6000 rpm
Starting torque	≤ 0.03 Ncm
Maximum axial shaft load	0.98 N
Maximum radial shaft load	1.9 N
Protection grade	IP50
Operating temperature	-10°C..+80°C
Storage temperature	-20°C..+80°C
Vibration	55 Hz; 1.5 mm; 2 h each in X, Y, Z
Shock	490 m/s², 3 times in X, Y, Z
Bearing	Ball bearings
Shaft material	Stainless steel
Mounting parts (included)	Hex nut
Humidity	90% RF
Weight	approx. 5 g

Dimensions (mm)



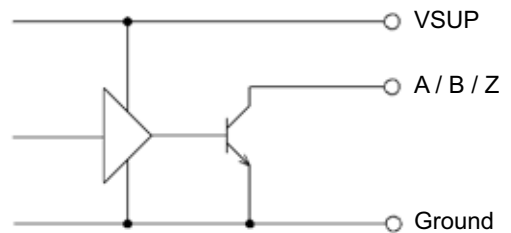
Pulse sequence:



$$a, b, c, d = (P/4) \pm (P/8)$$

$$P/4 \leq h \leq (3P/4)$$

Internal circuit:



22.10.2012