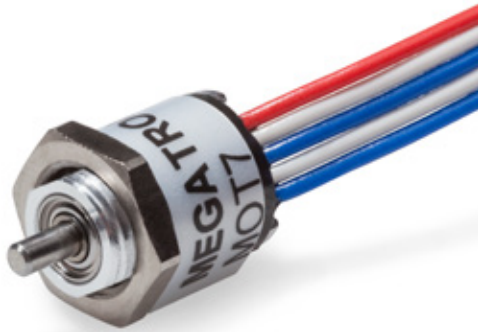


Data Sheet for Angle Sensors

Optical Encoders

Series MOT7



- Ø7 mm miniature housing
- 2 channels and index
- Maximum lifetime due to 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

Number of pulses	100, 200, 400 ppr.
Output channels	A, B, Z
Output electronics	Open Collector
Supply voltage	5 VDC ±10%
Current consumption (no load)	≤ 30 mA
Output voltage low @ IOL	≤ 0,4 V
Max. pull-up-voltage	13,2 V
Max. output current	20 mA
Limit frequency	100 kHz
Insulation resistance	≥ 20 MOhm @ 100 VDC
Dielectric strenght	100 VAC (1 min.)

Mechanical and Environmental Data

Max. rotational speed	6000 rpm.
Starting torque	≤ 0,03 Ncm
Max. axial shaft	0,98 N
Max. radial shaft load	1,90 N
IP-protection	IP50
Operating temperature	-10..+80°C
Storage temperature	-20..+80°C
Bearing	ball bearings
Material shaft	stainless steel
Vibration	55 Hz; 1,5 mm; 2 h each in X, Y, Z
Shock	490 m/s ² , 3 times in X, Y, Z
Humidity	90% RF no dewing
Mounting parts (included)	hexagonal nut
Weight	ca. 5 g

Data Sheet for Angle Sensors

Optical Encoders

Series MOT7

Order Code

Description	Options				
Series MOT7	MOT7				
Number of Pulses [ppr.]		100 200 400			
Supply Voltage 5 VDC (for electronic Linedriver)			5		
2 Channels with Index				BZ	
Output Electronics: Open Collector					K

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/angle-sensors/lagerliste.html>

bold print = standard option

(*) = on request available for projects

For higher quantities or on-going demand, additional options are available as described below

For example:

- Other resolutions
- Cable assembly
- Modified shaft shape
- Special connector

For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us

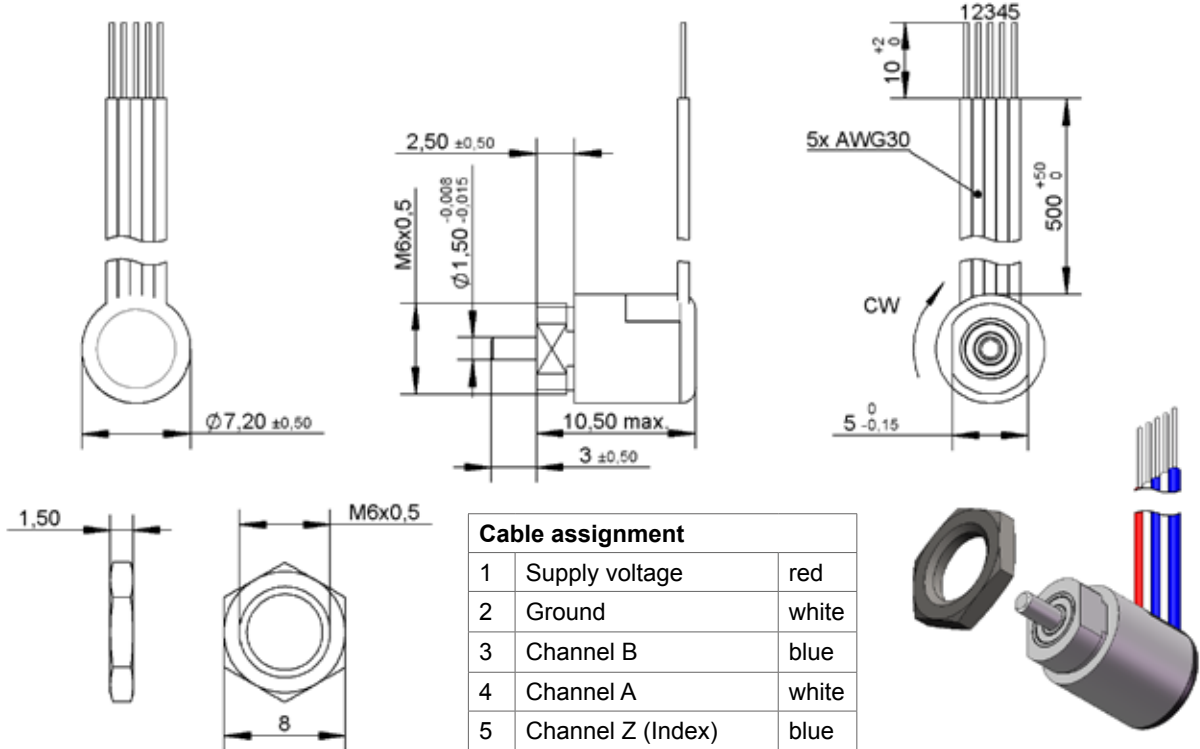
Tel.: +49 89 46094-500
export@megatron.de

Data Sheet for Angle Sensors

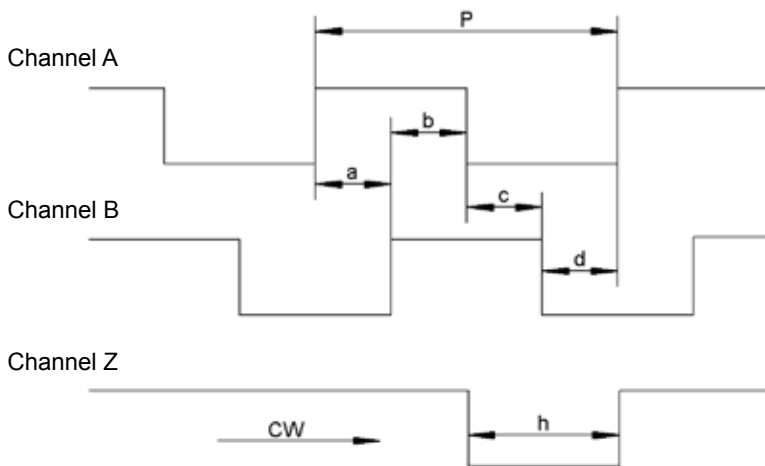
Optical Encoders

Series MOT7

Technical Drawing



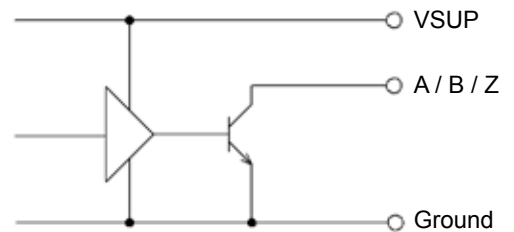
Pulse sequence:



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

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

Internal circuit:



22.10.2012