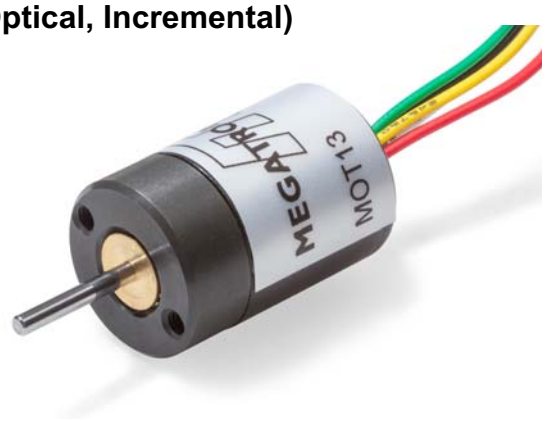
MOT13 Series

Single Turn Encoder
(Optical, Incremental)



- Ø13mm housing
- Resolution: 100...16000 p.p.r
- 2 channels + index
- TTL, Open Collector or Line Driver Output
- 5V Supply voltage
- Ball bearings

The MOT13 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	TTL	Open Collector	Line Driver
Resolution (ppr)	100, 200, 256, 300 360, 500, 1000, 1024	100, 200, 256, 300, 360, 500, 1000 1024, 2000, 4000, 8000, 16000	
Output voltage low	≤0.5V; IOL = + 10mA; $V_{Pull\ Up}$ = 5 VDC		sink not possible
Max. output current	IOL = + 4mA		sink not possible
Supply voltage	5 VDC ±0.1 V		
Limit frequency	100 kHz		
Current consumption (no load)	≤ 40 mA		
Insulation resistance	20 Mohm @ 100 VDC		
Dielectric strength	100 VAC, 1 minute		

Mechanical and Environmental Data	
Max rotational speed	6000 rpm
Maximum radial shaft load	1 N
Maximum axial shaft load	1 N
Protection grade	IP40
Operating temperature	0°C..+60°C
Storage temperature	-20°C..+80°C
Shock	490 m/s²f (50 G), 3 times in X, Y, Z
Vibration	55 Hz; 1.5 mm; 2 h each in X, Y, Z
Humidity	90% RH
Bearing	Ball bearings
Shaft material	Stainless steel
Weight	approx. 5 g

P3 America, Inc.
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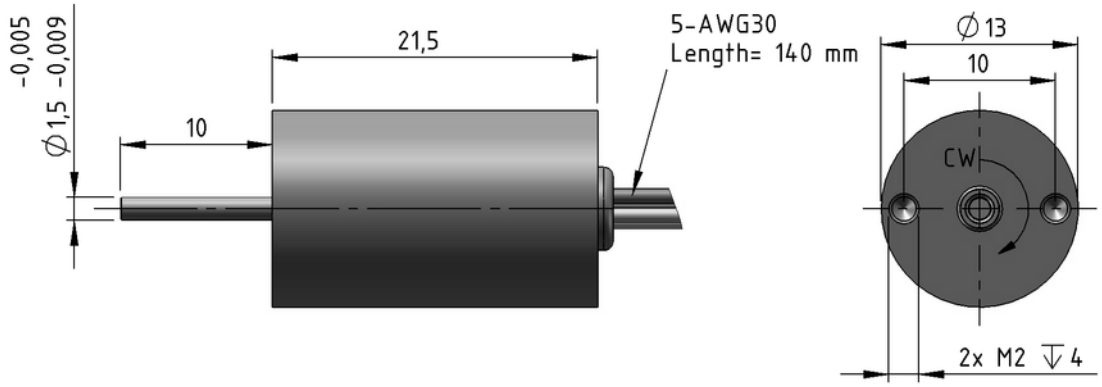
P3 AMERICA
PRECISION SENSORS & JOYSTICKS

Dimensions (mm)



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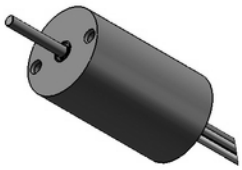
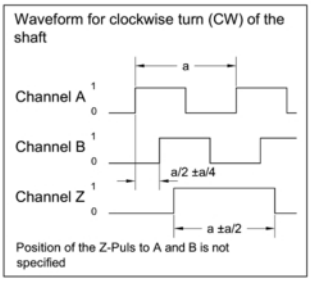


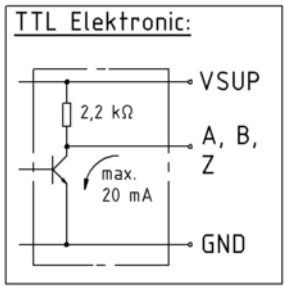
Cable assignment

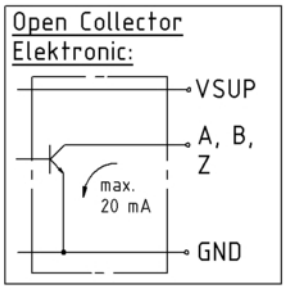
Open Collector and Voltage output	
red	VSUP +5 V
black	0 V
white	Channel A
green	Channel B
yellow	Channel Z

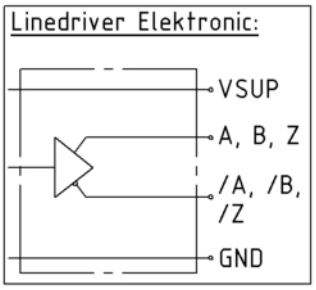
Linedriver	
red	VSUP +5 V
black	0 V
white	Channel A
green	Channel B
yellow	Channel Z
brown	Channel /A
blue	Channel /B
orange	Channel /Z

Interface Electronics









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