

MP23 - SERIES



POTENTIOMETER, CONTACTLESS Ø 22 MM

Potentiometer with programmable active angle

- High ingress protection class IP68
- Contactless measuring principle
- No wearing parts and long useable life
- Small dimensions & flat design

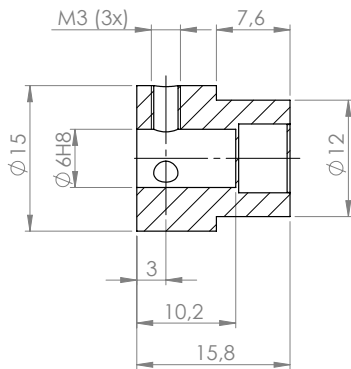
Standard: 5 Vdc or 9-30 Vdc Power Supply
Analog voltage output 0..5 Vdc or 0.5 - 4.5 Vdc

Options: Programmable active angle (20° to 360°)
Programmable direction

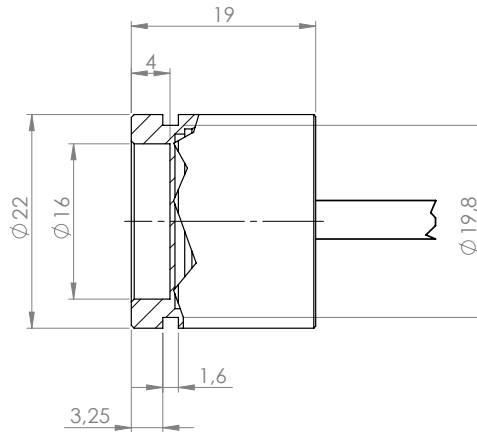


*Flexible and durable
encoder for demanding
applications*

MAGNET CARRIER UNIT (ROTATING ACCESSORY)



PICK-UP UNIT (STATIONARY)



MOUNTING TOLERANCES

dX ±1 mm
dY ±1 mm
dZ +4 mm ± 2 mm

MOUNTING CLEARANCE BETWEEN MAGNET & PICK-UP

Z = 2 mm

ELECTRICAL SPECIFICATION

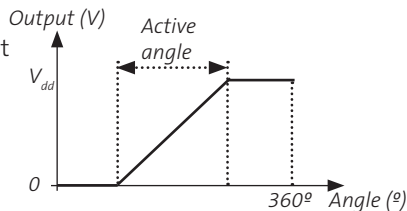
Power supply $V_{dd} = 5 \text{ Vdc} \pm 10\%$ or 9-30Vdc
Current consumption Max 20 mA
Output circuit Analogue voltage
Output resistive load $R_{min} = 100 \text{ k}\Omega$ (0 to V_{dd} output)
 $R_{min} = 10 \text{ k}\Omega$ (10% to 90% V_{dd} output)
Output capacitance load $C_{max} = 1 \text{ nF}$
Short circuit protected Yes

OUTPUT SIGNAL & DIRECTION

Rotation seen from PICK-UP unit front



R = CW OR L = CCW



OUTPUT CIRCUIT & PERFORMANCE

Resolution 12 bit
Direction Increasing voltage
Active angle 20° to 360° (set upon manufacturing)

POWER SUPPLY & OUTPUT VOLTAGE PERFORMANCE

MP23A $V_{dd} = 5 \text{ Vdc}, 0 \dots 5 \text{ V over active angle}$
MP23B $V_{dd} = 5 \text{ Vdc}, 0.5 \dots 4.5 \text{ V over active angle}$
MP23C $V_{dd} = 9-30 \text{ Vdc}, 0 \dots 5 \text{ V over active angle}$
MP23D $V_{dd} = 9-30 \text{ Vdc}, 0.5 \dots 4.5 \text{ V over active angle}$

MECHANICAL SPECIFICATION

Housing material Aluminum, electrically conductive for increased interference protection
Encapsulation class IP68 (IEC 60529)
Max. rotational speed 3000 rpm
Operating temperature -40° to +70°C
Storage temperature -40° to +70°C
Vibration 50g 20-2000 Hz (IEC 60068-2-6)
Chock 200g at 11 ms (IEC 60068-2-27)
Weight Approx. 30 g (without cable)

CONNECTION TYPE

1 Axial cable, 1 m
1X Axial cable, free cable length

FUNCTION

Model **MP23X**
Output CCW Green
Output CW Yellow
+V Brown
0V White

ORDERING CODE

MP23X - 0X - L360 - 1X
Model
Direction (R/L)
Active angle
Connection
X = meter cable

ACCESSORIES

Magnet carrier unit Part no. 106001