

## 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

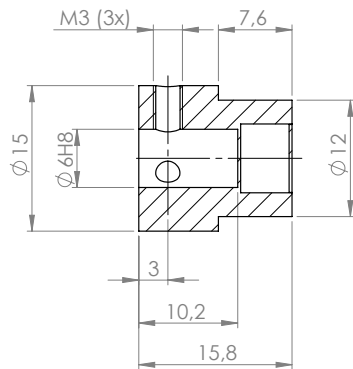
Standard: 5 Vdc or 7-35 Vdc Power Supply  
Analog voltage output 0..5 Vdc or 0.5 - 4.5 Vdc

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

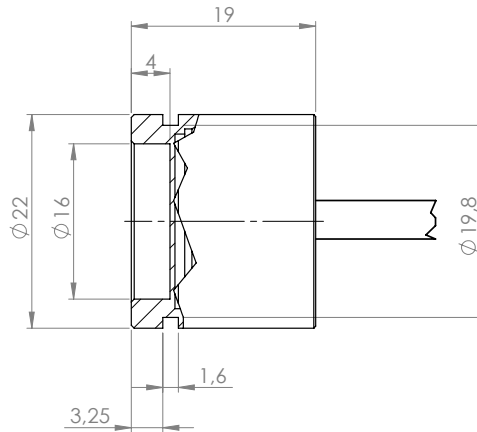


*Flexible and durable  
encoder for demanding  
applications*

## 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

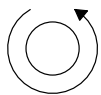
Z = 2 mm

## ELECTRICAL SPECIFICATION

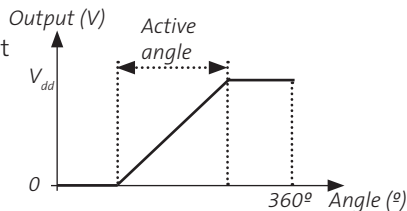
Power supply  $V_{dd} = 5 \text{ Vdc} \pm 10\%$  or 7-35Vdc  
Current consumption Max 20 mA  
Output circuit Analogue voltage  
Output resistive load  $R_{min} = 100 \text{ k}\Omega$  (0 to  $V_{dd}$  output)  
 $R_{min} = 10 \text{ k}\Omega$  (10% to 90%  $V_{dd}$  output)  
Output capacitance load  $C_{max} = 1 \text{ nF}$   
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  $V_{dd} = 7-35 \text{ Vdc}, 0 \dots 5 \text{ V over active angle}$   
MP23D  $V_{dd} = 7-35 \text{ Vdc}, 0.5 \dots 4.5 \text{ V over active angle}$

## 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

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

## ACCESSORIES

Magnet carrier unit Part no. 106001