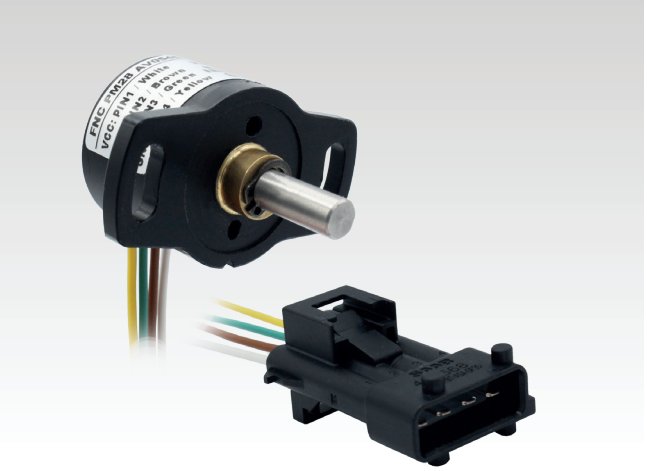
Absolute Rotary Encoder

FNC PM28 Analog



Features

- **Non-Contact Magnetic Sensing Technology**
- **360° Rotary Angle Measurement**
- **Multiple Analog Output Options**
- **Contactless Operation**
- **Multiple Shaft Configurations**
- **Designed for Motor Feedback Applications**

Applications

- Electric Motor Position Feedback
- Industrial Automation
- Rotary Actuators
- Valve Position Control
- Robotics
- Mobile Machinery
- Mechanical Positioning Systems

Technical data - electrical ratings

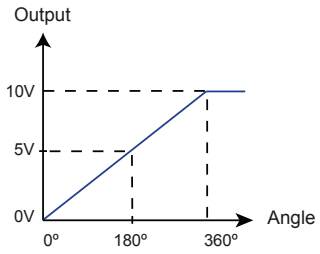
Measurement Range	0…360°
Resolution	0.1°
Accuracy	<±0.5°
Repeatability	≤ ±0.1°
Response Frequency	≥100 Hz
Maximum Speed	Up to 3,000 rpm
Operating Temperature	-20…+85 °C
Protection Rating	IP54
Supply Voltage	5-30 VDC
Startup Time	≤100 ms
Reverse Polarity Protection	Yes
Overvoltage Protection	Yes
Short-Circuit Protection	Yes

Technical data - mechanical design

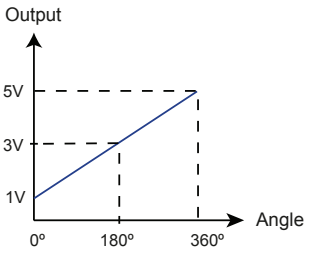
Dimensions	ø28 mm
Mount Diameter	38 mm
Materials	Housing: ABS (plastic) Shaft : Stainless Steel

Pulse Diagram

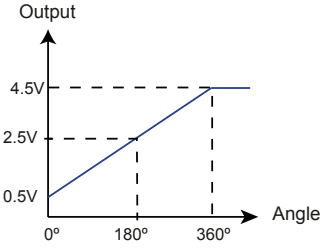
0-10 VDC Output Graph



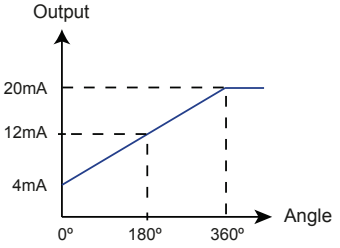
0-5 VDC Output Graph



Ratiometric Output Graph



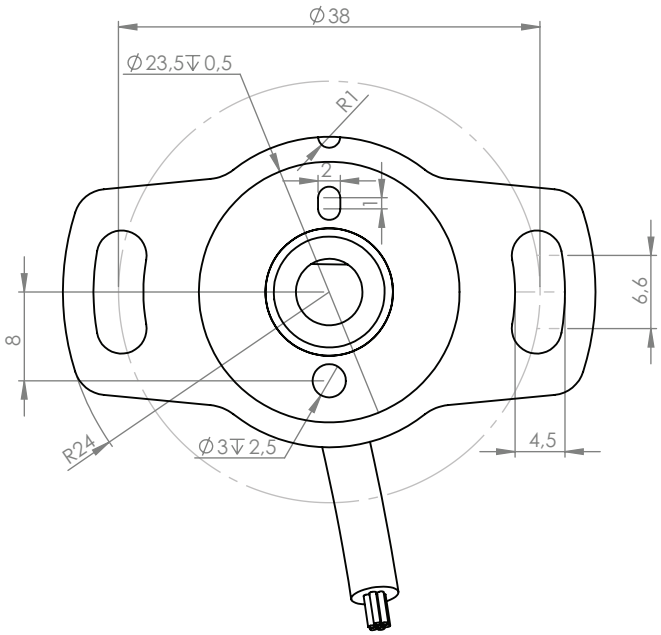
4-20 mA Output Graph

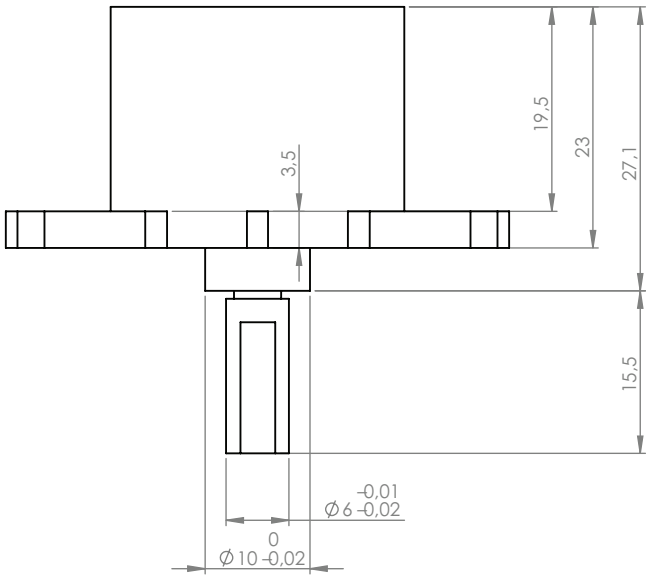


FNC PM28 Analog

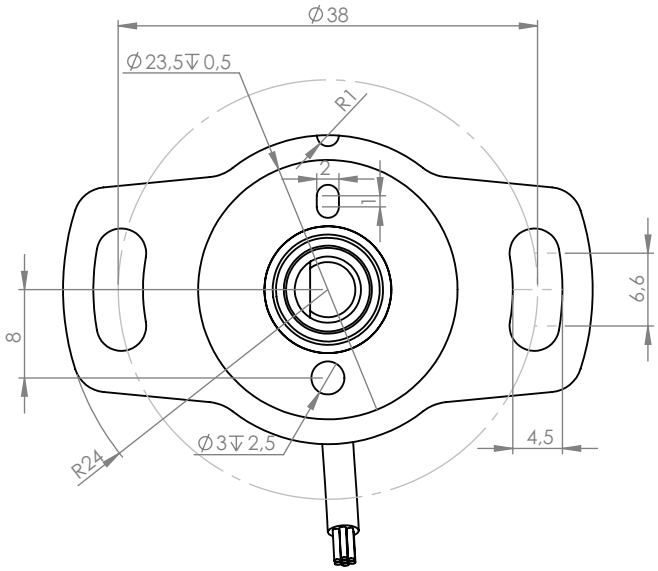
Mechanical Dimensions

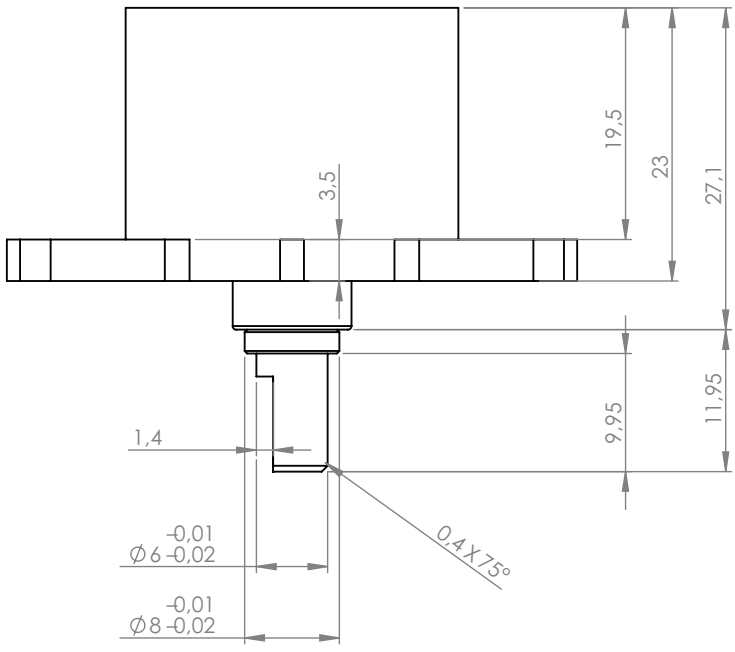
1 6 mm D form shaft version





2 6 mm shaft, 8 mm notch version 6L12

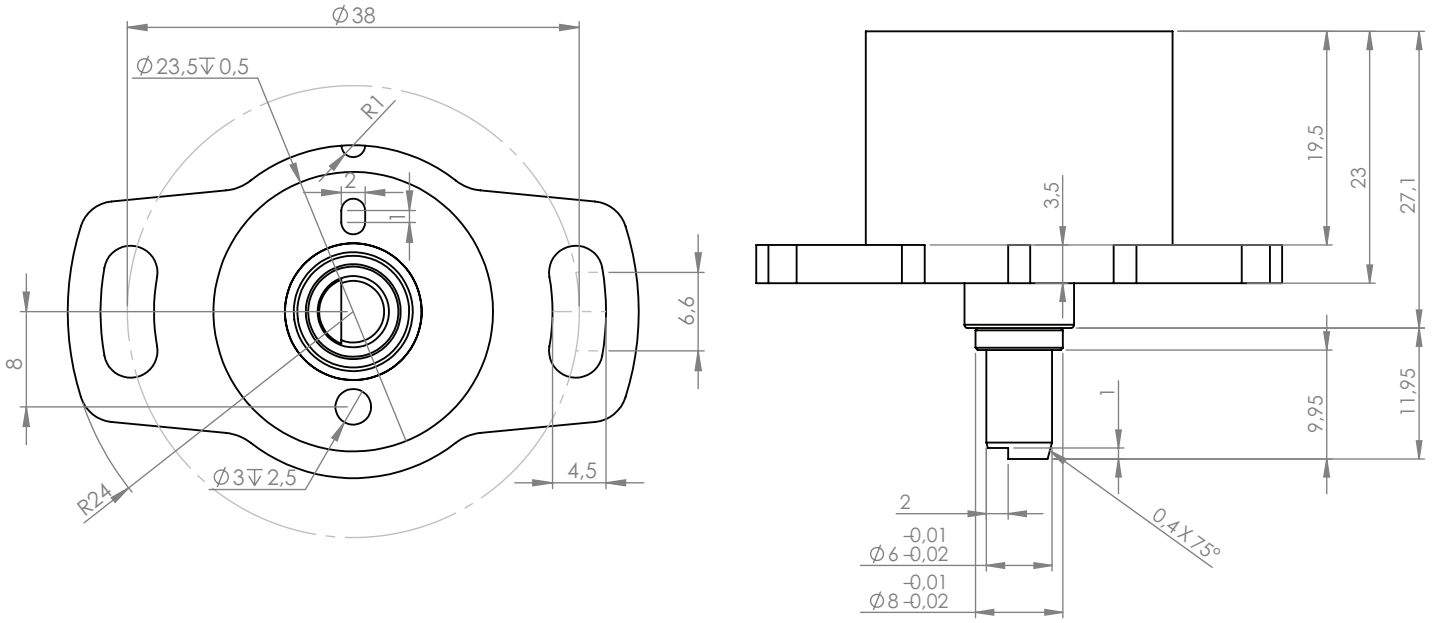




FNC PM28 Analog

Mechanical Dimensions

3 6 mm shaft, 1 mm notch version 6L12

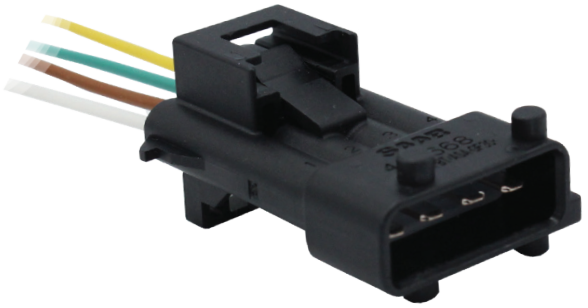


Absolute Rotary Encoder

FNC PM28 Analog

Cable Connection

Function	Color	Pin
Supply	White	pin 1
Out 2	Brown	pin 2
Out 1	Green	pin 3
GND	Yellow	pin 4



Part Number

FNC | PM | 28 | 1 | A | 360 | C1 | 5V | C | – | R08

Housing
28 : 28 mm

Shaft version
1 : 6 mm D type version
2 : 6 mm shaft, 8 mm notch version
3 : 6 mm shaft, 1 mm notch version

Interface
A : Analog

Measuring Range
360 : 360° standard
xxx : optional 5° to 350° measuring range (please select)

Electrical Connections:
R08 : 8 cm cable
R08SCK : 8 cm cable with socket
(TE connectivity AMP connector 1-9622340-1)

Direction of Rotation
C : Clockwise
CC : Counter clockwise

Supply Voltage
30V : 5-30 V
(For V1 and VD1 output VCC should be over 10 V.)
5V : 5 V
(Only for V2, V3, C1, VD2 outputs.)

Output Type
C1 : 4 - 20 mA
V1 : 0 - 10 V
V2 : 1 - 5 V
V3 : 0.5 - 5 V
V4 : 0.5 - 4.5 V (Ratiometric)
VD1 : 0 - 10 V dual out
VD2 : 1 - 5 V dual out