

ROTARY POTENTIOMETER

“13 mm Small Body Diameter, Servo Flange Mounting”

ERP 13



GENERAL FEATURES

- 300°±5° electrical angle
- 13 mm ultra small body for confined spaces
- 3 mm shaft diameter
- Servo flange mounting
- Linearity up to ±2%
- Lifetime up to 10 million movements
- IP40 protection
- No mechanical rotation limitation
- Optional rear shaft
- Optional center tap

APPLICATIONS

- Electronics, automation, textile, printing industries
- Angle position feedback
- Welding and soldering machines
- Servo systems

TECHNICAL FEATURES

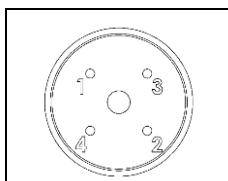
Electrical Data

Electrical Angle	300°±5°
Resistance Values	5K, 10K
Resistance Tolerance	±20%
Resistance Element	Conductive Plastic
Supply Voltage	42V max.
Independent Linearity	±2%
Repeatability	0.1° max.
Resolution	Infinite
Hysteresis	≤ 0,5°
Recommended Wiper Current	100 µA max.
Power rating @70° (0W @105°)	0,2W
Insulation Voltage	500 VAC, 1min
Insulation Resistance	1000 MOhm @ 500 VDC
Electrical Connection	Gold plated pins

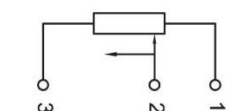
Mechanical Data

Mechanical Angle	360°, continuous
Lifetime	10 million movements
Body Diameter	13 mm
Shaft Diameter	3 mm
Torque	1 Nmm
Maximum Operational Speed	400 RPM
Bearing	2 x ball bearing
Body Material	Aluminum
Shaft Material	Stainless steel
Operating Temperature	-55°C ... +75°C
Storage Temperature	-55°C ... +105°C
Maximum radial & axial load	≤1 N
Mounting Type	Servo flange
Protection	IP40
Weight	~5gr

ELECTRICAL CONNECTIONS



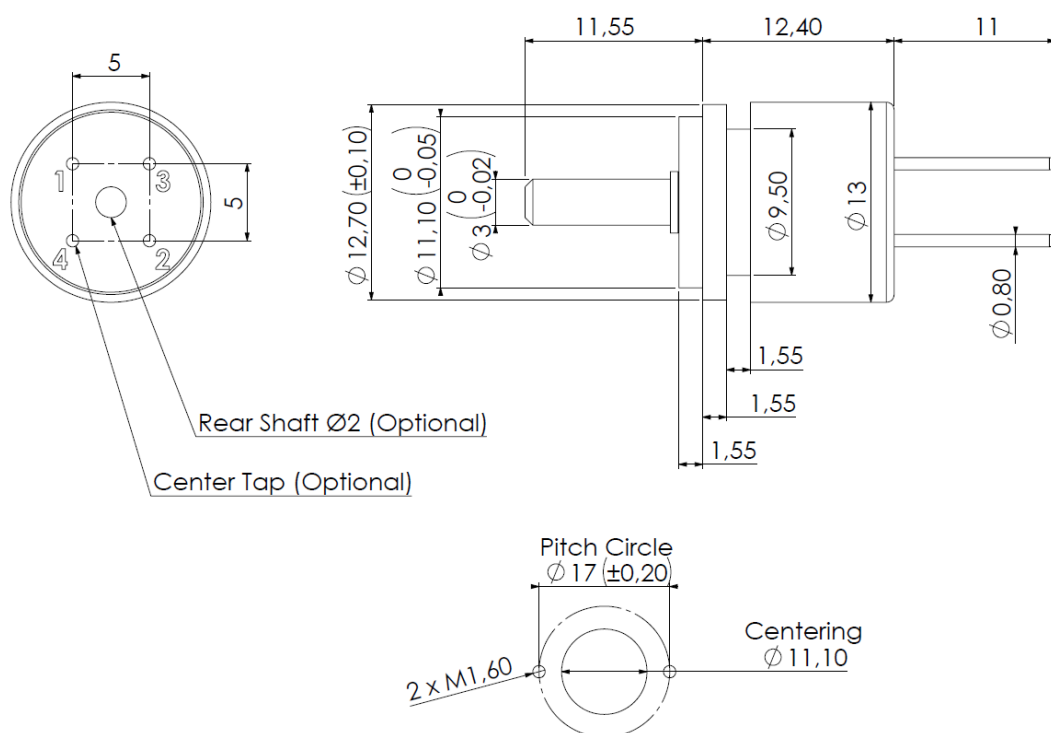
SIGNAL	PIN NO
+V	1
Output Signal	2
-V	3
Center Tap (optional)	4



Potentiometer connection
(voltage divider)

Note: The standard electrical connection is with 3 pins.
If optionally "center tap" is requested, the electrical connection is with 4 pins.

MECHANICAL DIMENSIONS (mm)



ORDER CODE

Model		Electrical Angle		Shaft Direction		Center Tap ⁽¹⁾	
300 : 300°		F: Front R: Rear (Optional)		No code: No center tap CT: Center tap (optional)			
ERP	-	XX	-	XXX	-	XX	-
Body Diameter		Resistance Value		Shaft Diameter			
13 : 13 mm		5K: 5K 10K: 10K		3: 3 mm			

(1) The standard electrical connection is with 3 pins.
If optionally "center tap" is requested, the electrical connection is with 4 pins.