

# ROTARY POTENTIOMETER

“6mm Shaft, 52.8mm Body Diameter,  
Multiple Potentiometric Output”

**ERP 53**



## GENERAL FEATURES

- 60°, 90°, 345°, 350°, 355° electrical angle
- 6 mm shaft diameter
- 52.8 mm body diameter
- Multiple potentiometric output : 2 or 3 output (connected to the same shaft and have the same angle values)
- High linearity up to  $\pm 0.5\%$
- Long life up to 10 million movements
- IP40 protection class
- No mechanical rotation limitation

## APPLICATIONS

- Automation
- Ships
- Rails
- Logistics
- Industry

## TECHNICAL FEATURES

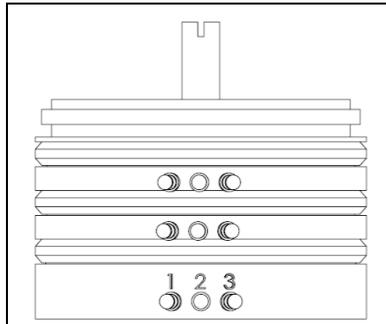
### Electrical Data

Bağımsız Linearite	$\pm 0.5\%$
Repeatability	0.1° max.
Output Type	<b>Potentiometric</b> ERP 53 D : 2 pot outputs (connected to the same shaft and have the same angle values) ERP 53 T : 3 pot outputs (connected to the same shaft and have the same angle values)
Electrical Angle	60°, 90°, 345°, 350°, 355°
Supply Voltage	42V max.
Resistance Values	1K, 2K, 5K, 10K
Resistance Tolerance	$\pm 20\%$
Resistance Element	Conductive Plastic
Resolution	Infinite
Recommended Wiper Current	100 $\mu$ A max.
Minimum Life (electrical)	10 million movements
Electrical Connection	3 brass pins for each output

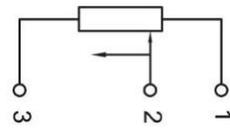
### Mechanical Data

Dimensions	See mechanical dimensions table
Mounting	ERP 53 D - 2 clamps for 2 pot output model ERP 53 T - 3 clamps for 3 pot output model
Size	Synchro size 20
Mechanical Angle	360°, continuous
Torque	0.5 Ncm max.
Maximum Operational Speed	1000 RPM
Body Material	Aluminum
Shaft Material	Stainless Steel
Operating Temperature	-25°C ... +75°C
Storage Temperature	-25°C ... +105°C
Protection Class	IP40
Weight	ERP 53 D - ~85gr for 2 pot output model ERP 53 T - ~110gr for 3 pot output model

## ELECTRICAL CONNECTIONS



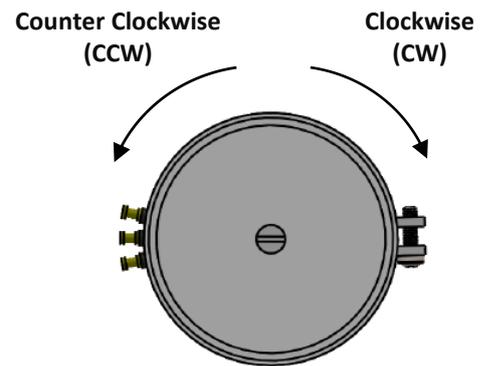
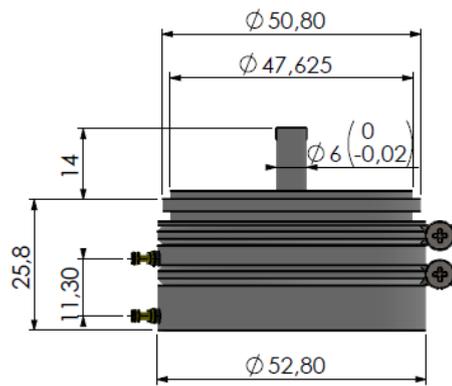
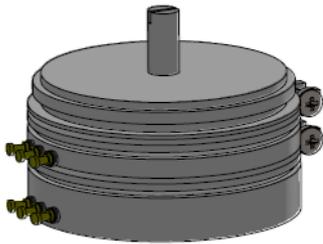
SIGNAL	PIN NO
+V	1
Output Signal	2
-V	3



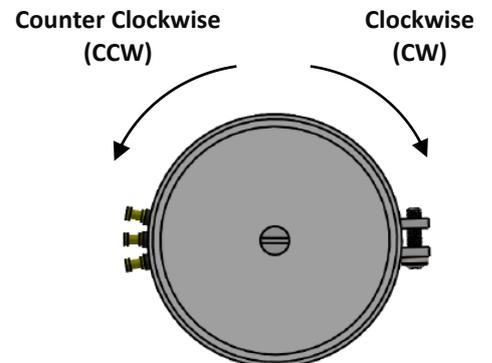
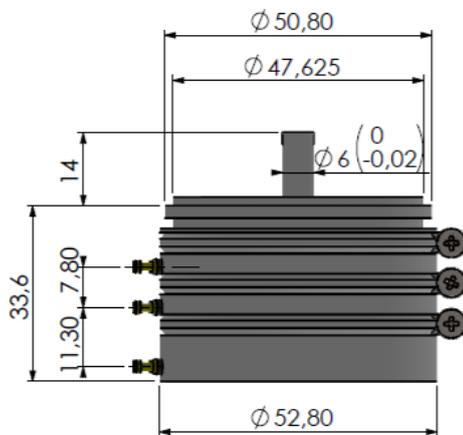
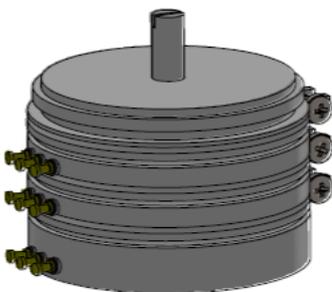
Potentiometer connection  
(voltage divider)

## MECHANICAL DIMENSIONS (mm)

### ERP 53 D (2 POT OUTPUT)



### ERP 53 T (3 POT OUTPUT)



## ORDER CODE

Model		Number of Pot Outputs		Resistance Value						
ERP	-	XXX	-	XXX	-	XX	-	XXX	-	X
<b>Body Diameter</b>		<b>Electrical Angle</b>		<b>Shaft Diameter</b>						
053: 52.8 mm		60 : 60° 90 : 90° 345 : 345° 350 : 350° 355 : 355°		6: 6mm *Please ask for other options						

**Sample Order Code:**  
ERP 053-D-355-5K-6