

Model TSA12M

None-Contact Angle Position Sensor

- Hall effective
- Absolute Position
- Linearity $<\pm 0.2\%$
- Long life
- Single turn
- Penal Mount
- None-Standard Features and Specifications Available



MECHANICAL

Total Mechanical Travel	360(± 5)° None-stop
Starting Torque	0.5Ncm
Max Rotating Speed	120rpm
Max Permitted Axial Shaft Load	10N
Max Permitted Radial Shaft Load	10N
Weight	13g

ELECTRICAL

Measuring Range	360° (Find more options in ORDER INFO)
Independent Linearity	$< \pm 0.2\%$
Resolution	12 bit
Refresh Rate	290 (± 15) μ s
Max. Hysteresis	0.1°
Max. Repeatability	0.1°
Supply Voltage	5 ($\pm 10\%$) VDD (Find more options in ORDER INFO)
Supply Current	< 12 mA
Output Load Analog	10k Ω
Load Output Capacity	10 to 330nF

ENVIRONMENTAL

Protection Class	IP54/IP65
Life	$> 10 \times 10^5$
Operation Temperature Range	-40°C ~ +150°C (Find more options in ORDER INFO)
Shock	50g, 11m
Storage Temperature	-40°C ~ +85°C

CE-CONFORMITY

RF noise field strength EN 55011, class B
ESD EN 61000-4-2
Radiated immunity EN 61000-4-3
Burst EN 61000-4-4
Conducted disturbances induced by RF fields EN 61000-4-6

ACCESSORY

Length of wires / ribbon cable	Standard	AWG24 15cm
Length of wires / ribbon cable	Optional	AWG24 20cm
Length of wires / ribbon cable	Optional	Other Length

ORDERING INFORMATION

Effective Electronic Travel
360° Standard **360**
Other Angle Request Optional **XXX**

Shaft Type

D Standard D Type
I Standard I Type
R Standard Round Type
X Optional Other Type Request

Shaft Length

1 Standard 16mm
X Optional Other Length Request

Operation Temperature

E Standard -40°C ~ +85°C
K Standard -40°C ~ +125°C
L Optional -40°C ~ +150°C

TSA12M

1

1

3

6

0

D

1

E

Output Signal

1 Standard 10% - 90%
2 Standard 0% - 100%
3 Optional 4 - 20 mA
X Optional X% - Y%

Output Characteristic

1 Standard Positive gradient CW
2 Standard Positive gradient CCW
X Optional Other Request

OUTLINE DRAWING

