

MAIN FEATURES

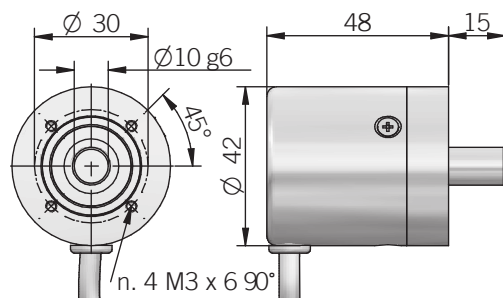
Encoder with potentiometric output signal.
 Rotary potentiometer is fitted in a sturdy housing and it is supported by two ball bearings.
 It assures excellent lifetime, speed and high accuracy.

- Singleturn or multiturn models available
- Cable output, connectors available on cable end
- Mounting by round flange



ORDERING CODE	EP	A	103/10	P	R	.XXX
SERIES rotary potentiometer EP						
MODEL fixing flange screw holes \varnothing 30 mm A						
RESISTIVE VALUE 1k ohm / 1 turn 102/1 5k ohm / 1 turn 502/1 10k ohm / 1 turn 103/1 5k ohm / 3 turns 502/3 10k ohm / 3 turns 103/3 1k ohm / 10 turns 102/10 5k ohm / 10 turns 502/10 10k ohm / 10 turns 103/10						
OUTPUT TYPE cable (standard length 1,5 m) P preferred cable lengths 2 / 3 / 5 / 10 m, to be added after DIRECTION TYPE (eg. PR5)						
DIRECTION TYPE axial A radial R						
VARIANT custom version XXX						

A



recommended mating shaft tolerance H7 for model A
dimensions in mm

GENERAL SPECIFICATION

Model	Resistive value (Ohm)	Mechanical rotation	Electrical rotation	Element technology	Tolerance	Linearity	Minimum resistance (Ohm)	Power rating (70 °C)	Life (shaft revolutions)	Vibration
102/1	1 k	320 ± 5°	same as mech	conductive plastic	10 %	±1 %	0,2 %	1 W	10'000'000	15 G, 10 ... 150 Hz
102/10	1 k	3600 +10° -0°	same as mech	wirewound	5 %	±0,25 %	1	2 W	1'000'000	15 G, 10 ... 2000 Hz
502/1	5 k	320 ± 5°	same as mech	conductive plastic	10 %	±1 %	0,2 %	1 W	10'000'000	15 G, 10 ... 150 Hz
502/3	5 k	1080 +10° -0°	same as mech	wirewound	5 %	±0,25 %	1	1 W	300'000	15 G, 10 ... 2000 Hz
502/10	5 k	3600 +10° -0°	same as mech	wirewound	5 %	±0,25 %	1	2 W	1'000'000	15 G, 10 ... 2000 Hz
103/1	10 k	300 ± 5°	270 ± 10°	cermet	10 %	±5 %	4	1 W	50'000	10 G, 10 ... 150 Hz
103/3	10 k	1080 +10° -0°	same as mech	wirewound	5 %	±0,25 %	1	1 W	300'000	15 G, 10 ... 2000 Hz
103/10	10 k	3600 +10° -0°	same as mech	wirewound	5 %	±0,25 %	1	2 W	1'000'000	15 G, 10 ... 2000 Hz

MECHANICAL SPECIFICATIONS

Shaft diameter	∅ 10 mm
Enclosure rating	IP 54 (IEC 60529)
Shock	50 G, 11 ms
Vibration	see table
Bearing stage material	aluminum
Shaft material	stainless steel
Housing material	PA 66 glass fiber reinforced
Bearings	n.2 ball bearings
Limit stop	automatic clutch (no stop)
Cable type	shielded - fixed installation conductors section 0,22 mm ² /AWG 24 bending radius min 60 mm
Operating temperature ^{1,2}	0° ... +80°C (+32° ... +176°F)
Storage temperature ²	-25° ... +85°C (-13° ... +185°F)
RoHS	according to 2011/65/EU directive
UL / CSA	file n. E212495

¹ measured on the transducer flange

² condensation not allowed

ELECTRICAL CONNECTIONS

