

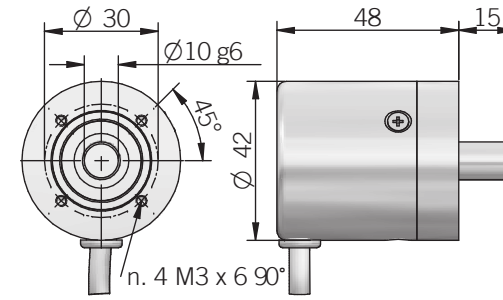
### MAIN FEATURES

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



A



recommended mating shaft tolerance H7 for model A  
dimensions in mm

### ORDERING CODE

EP	A	103/10	P	R	.XXX
<p><b>SERIES</b> rotary potentiometer EP</p> <p><b>MODEL</b> fixing flange screw holes Ø 30 mm A</p> <p><b>RESISTIVE VALUE</b>            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</p> <p><b>OUTPUT TYPE</b>            cable (standard length 1,5 m) P            preferred cable lengths 2 / 3 / 5 / 10 m, to be added after DIRECTION TYPE (eg. PR5)</p> <p><b>DIRECTION TYPE</b>            axial A            radial R</p> <p><b>VARIANT</b>            custom version XXX</p>					

### GENERAL SPECIFICATION

Model	Resistive value (Ohm)	Mech. 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°	conductive plastic	±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	Ø 10 mm
Enclosure rating	IP 54 (IEC 60529)
Shock	50 G, 11 ms
Vibration	see table
Bearing stage material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	PA 66 glass fiber reinforced
Bearings	n.2 ball bearings
Limit stop	automatic clutch (no stop)
Operating temperature <sup>1,2</sup>	0° ... +80°C (+32° ... +176°F)
Storage temperature <sup>2</sup>	-25° ... +85°C (-13° ... +185°F)
RoHS	according to 2011/65/EU (01/09/2020) directive
UL / CSA	certificate n. E212495

<sup>1</sup> measured on the transducer flange  
<sup>2</sup> condensation not allowed

### ELECTRICAL CONNECTIONS

