

# HALL POTENTIOMETER POH 120



The POH 120 is small and robust and features a freely programmable rotary angle. The measurement principle is via Hall effect as absolute measuring rotary sensor even after blackout. The POH series is available with a decoupled axis or integrated axis.

## FEATURES

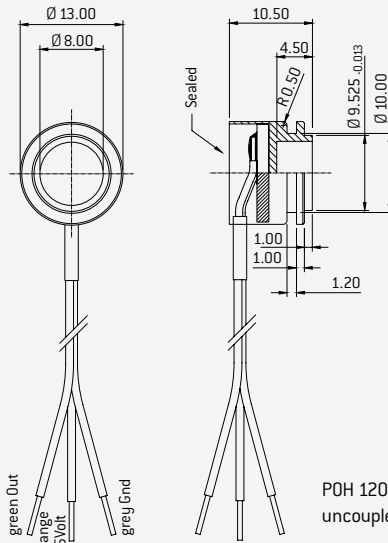
- Long lifetime
- Size  $\varnothing$  13 mm

## APPLICATIONS

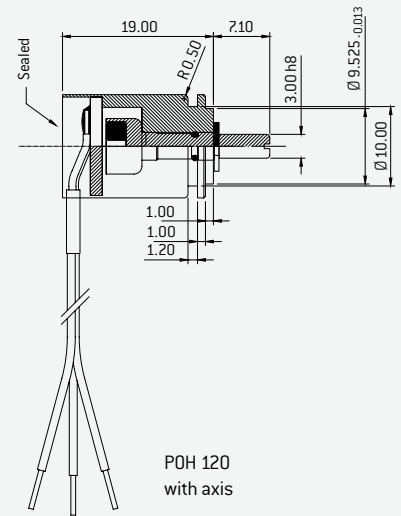
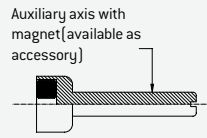
- Valve controls
- Joysticks
- Steering angle measurement
- Servo systems

## SPECIAL FEATURES

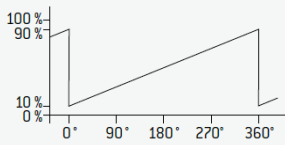
- Hall sensor
- Compensation for play and tolerance by decoupled axis possible
- Freely programmable angles possible
- Load free drive when axis is uncoupled



POH 120  
uncoupled axis



POH 120  
with axis



## ELECTRICAL SPECIFICATIONS

<b>Measuring range</b>	0 – 360° programmable
<b>Independent linearity</b>	± 0.5 %
<b>Resolution</b>	12 bit < 0.1°
<b>Supply voltage (Vs)</b>	5 (± 10 %) VDC
<b>Output signal</b>	10 % ... 90 % of Vs
<b>Current consumption without load (typical)</b>	18 mA
<b>Min. ohmic load at output</b>	10 kOhm
<b>Max. capacitive load at output</b>	10 nF
<b>Electrical connection</b>	Tinned cable wires
<b>Operating temperature</b>	–40°C ... +85°C *

## MECHANICAL SPECIFICATIONS

<b>Mechanical positioning range</b>	360° continuous rotation
<b>Bearing</b>	Slide bearing / uncoupled load free
<b>Min. lifetime (mechanical)</b>	200 million cycles
<b>Protection class</b>	IP 65 with axis / IP 67 uncoupled load free (according to DIN EN 60529)

## MATERIALS

<b>Housing material</b>	Stainless steel
<b>Axis material</b>	Brass (nickel plated)

## AMBIENT CONDITIONS

<b>Operating temperature</b>	–40°C ... +85°C *
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Mechanical and electrical characteristics are customizable. Specifications are subject to change without notice. \* Others on request.

## SAMPLE ORDER

	Part no.	Type series	Elect. measuring range	Elect. connection
POH 120 with axis	E050200120	POH	360°	Wire connection
POH 120 with uncoupled axis	E050200121	POH	360°	Wire connection