

WIRE WINDING

SYNCHRO DESIGN

PW613-18d

Wire wound precision Potentiometer

- High-resolution resistive element with ring winding
- Short-circuit distances, additional taps, and custom windings are available upon request.
- Resistance value and active angle can be customized as desired



TECHNICAL DATA

Housing material	aluminum, anodized	Resistance values	to 20 kΩ
Housing diameter	36.5 mm	Resistance tolerance	2%
Model	synchro size 13	Linearity tolerance	±0.2 %
IP code	IP30	Resolution	1851 turns
Shaft diameter	6 mm	Capacity	1 W
Adjustment speed	max. 360 U/min	Temperature range	-30 °C to +80 °C
Torque	0.05 Ncm	Temperature coefficient	0.0017 % / °C
Wiper without limit stops	yes	Lifetime	typical 10–50 Mio. Cycles <i>The lifetime depends on the application and environmental conditions.</i>
Multiple execution	sixfold	Vibration*	5–200 Hz, 10 g
Bearing	ball-bearing	Shock*	50 g, 6 ms
Connection	faston plug / solder-type terminals		
Fastening	clamp fixing		
Resistance element	ring		
Active angle	max. 360°		

*Depending on customer specifications.

Article master number 1560Z10

Typical

APPLICATION AREAS



Ship



Rails



Automation



Logistics



Medicine



Industry

Optionally available

PROTECTIVE HOUSING

To protect against mechanical damage and extreme environmental conditions, as well as for necessary adaptation gears and additional switches, suitable housings are available in various designs.



For more information on protective housings, click here: www.fsg-sensors.de

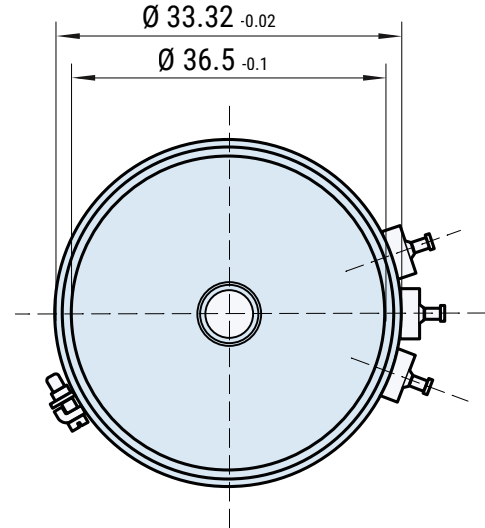
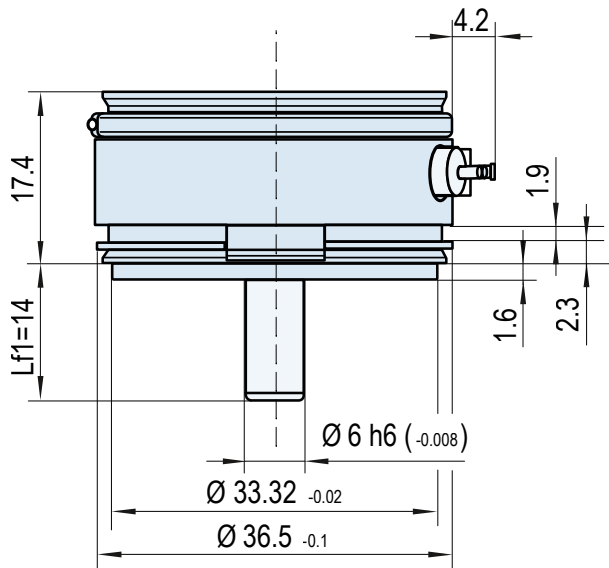


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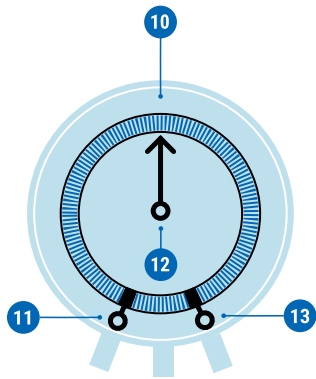
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DIMENSIONAL DRAWINGS



CONNECTION



Standard

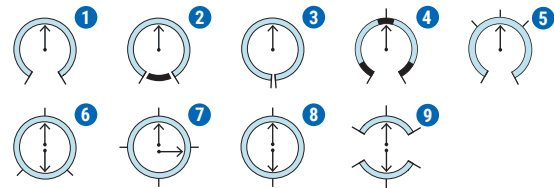
- 11 Resistance start
- 12 Wiper
- 13 Resistance end

Optional

- 10 Additional tap

CIRCUIT VARIATIONS

Wire-wound resistive elements as **ring winding** on an anodized aluminum ring body can be executed in various circuit configurations, angle ranges, and resistance values.



- 1 Wiper limited by stops
- 2 Wiper continues rotation over 360° with dummy winding
- 3 Wiper continues rotation over 360° without reactive winding (sawtooth curve)
- 4 Free arrangement of shorted sections
- 5 Free arrangement of taps
- 6/7/8 Special windings with linear or sin/cos characteristic curves
- 9 Two electrically isolated windings on a winding body, angle $\leq 175^\circ$

CONTACT

If you have any questions about this or any other FSG product, please do not hesitate to contact us.

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