

WIRE WINDING

SYNCHRO DESIGN

# PW613-18

## 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

CE – konform



## TECHNICAL DATA

### Mechanical specifications

Housing material	aluminum, anodized
Housing diameter	36.5 mm
IP code of housing up to	IP30
Shaft diameter	6 mm
Adjustment speed	max. 360 U/min
Torque	0.05 Ncm
Wiper without limit stops	no
Multiple execution	sixfold
Resistance to compression	5–200 Hz, 10 g
Shock resistance	50 g, 6 ms
Bearing	ball-bearing
Connection	faston plug / solder-type terminals
Fastening	clamp fixing

### Electrical specifications

Resistance element	ring
Active angle	max. 345°
Resistance values	to 20 kΩ
Resistance tolerance	±0.2 %
Linearity tolerance	±0.2 %
Resolution in turns	1851
Capacity	1 W
Temperature coefficient	0.0017 % / °C
Temperature range	-30 °C to +80 °C
Lifetime	typical 10–50 Mio. Cycles*

\* The lifetime depends on the application and environmental conditions.

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](http://www.fsg-sensors.de)

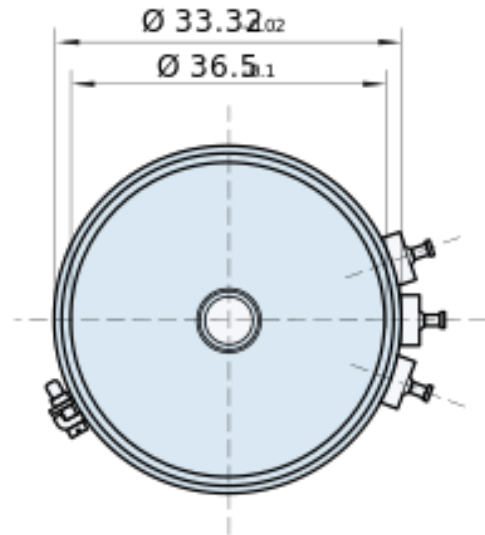
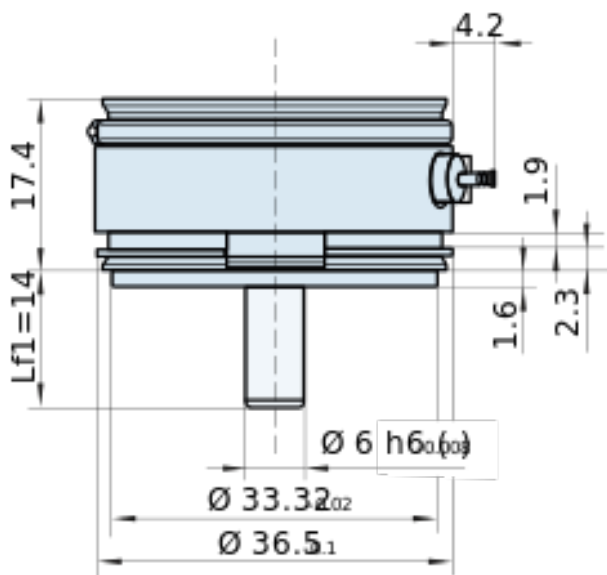


WIRE WINDING

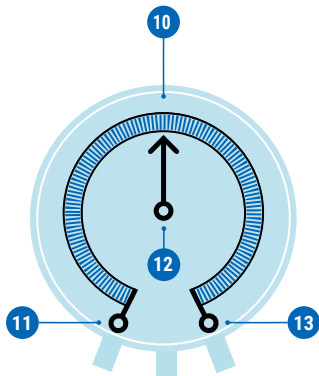
SYNCHRO DESIGN

# PW613-18

## DIMENSIONAL DRAWINGS



## CONNECTION



**Standard**

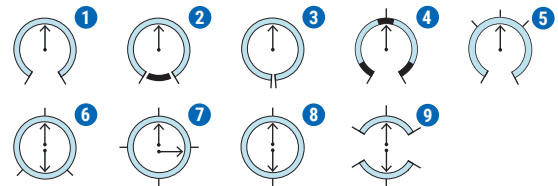
- 11 Resistance start
- 12 Wiper
- 13 Resistance end

**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 ≤175°

## CONTACT

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

**BERLIN (HQ)**  
Fernsteuergeräte Kurt Oelsch GmbH  
Jahnstraße 68 + 70  
12347 Berlin

✉ info@fsg-sensors.de  
🌐 www.fsg-sensors.de  
☎ +49 30 6291-1  
📠 +49 30 6291-277

© Fernsteuergeräte Kurt Oelsch GmbH  
No guarantee for the correctness, completeness of the contents. The product illustration may differ from original.