

WIRE WINDING

SYNCHRO DESIGN

PW1023d

Robust precision Potentiometer with wire winding

- · Robust design in protection IP65
- · High-resolution resistance element with ring winding
- · Optional with plug or cable connection









TECHNICAL DATA

Housing material	aluminum, anodized
Housing diameter	60 mm
Model	synchro size 23
IP code	IP65
Shaft diameter	6 / 10 mm
Adjustment speed	max. 360 U/min
Torque	2.5 Ncm
Wiper without limit stops	yes
Multiple execution	twice
Bearing	2x ball-bearing
Connection	plug / cable
Fastening	clamp fixing with synchro flange and 3x M4 to TK 42 mm
Resistance element	ring
Active angle	max. 360°

Resistance values	to 20 kΩ
Resistance tolerance	2%
Linearity tolerance	±0.2 %
Resolution	max. 2321 turns
Capacity	2.5 W
Temperature range	-30 °C to +80 °C
Temperature coefficient	0.0017 % / °C
Lifetime The lifetime depends on the application	typical 10–50 Mio. Cycles and environmental conditions.
Vibration*	5-200 Hz, 10 g
Shock*	50 g, 6 ms

Specific features

Stainless steel housing on request

*Depending on customer specifications.

Article master number 5720Z53

Typical

APPLICATION AREAS













Optionally available

PROTECTIVE HOUSING

Due to its extremely robust design, there is no need for a protective housing for the PW1023 potentiometer series.



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



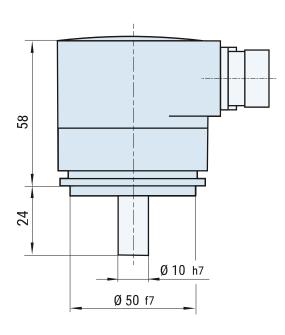


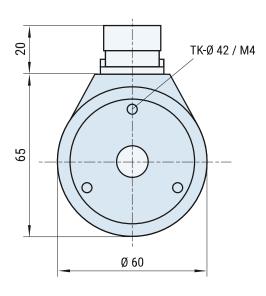
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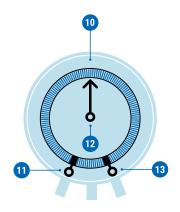
PW1023d

DIMENSIONAL DRAWINGS





CONNECTION



Standard

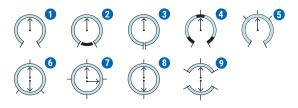
- 11 Resistance start
- 12 Wiper
- 13 Resistance end

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.



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