

# Precision - Multi-Turn - Potentiometer DMG23 Ze

Central fixing M10 x 0,75, synchro flange 13, maintenance-free sliding bearing, for mechanical adjustment, hybrid element



The series DMG23 is equipped with a maintenance-free sliding bearing.

The Multi-Turn - Potentiometer is a precise, highly accurate setpoint- and actual value transmitter for rough industrial conditions.

With the optional protection class IP65 the DMG23 is especially well suited for the use under adverse environmental conditions.

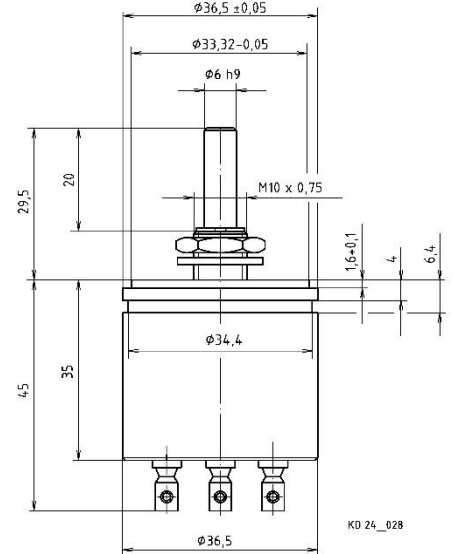


### Mechanical data

- 1.1 Housing..... : Aluminium
- 1.2 Shaft..... : Stainless steel  $\phi 6^{h9}$
- 1.3 Bearing..... : Maintenance-free sliding bearing
- 1.4 Resistor element..... : Precision wire winding or hybrid element
- 1.5 Slider tap / wiper tap..... : Noble metal
- 1.6 Protection class..... : IP62
- 1.7 Type of connection..... : see illustration
- 1.8 Mounted by..... : Central fixing M10x0,75
- 1.9 Mechanical rotation angle..... : see table +10°
- 1.10 Electrical rotation angle..... : see table
- 1.11 Rotation speed..... : max. 120 rpm
- 1.12 Torque..... : max. 0,8 Ncm (at IP65 max. 1,5 Ncm)
- 1.13 Rotation load life..... :  $1 \times 10^6$  (Hy =  $5 \times 10^6$ ) slider path

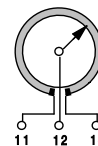
### Electrical data

- 2.1 Resistance values, standard..... : 1, 2, 5, 10 K-Ohm
- 2.2 Resistance range..... : 1K ... 100 K-Ohm
- 2.3 Resistance tolerance..... :  $\pm 5\%$  precision wire,  $\pm 10\%$  hybrid
- 2.4 Linearity tolerance..... :  $\pm 0,25\%$
- 2.5 Insulation resistance..... : 1000 M-Ohm
- 2.6 Test voltage..... : 1000 V
- 2.7 Power rating..... : max. 2 Watt
- 2.8 Slider load current..... : Precision wire max. 20 mA, hybrid element max. 10 mA
- 2.9 Temperature range..... : -25 °C ... +125 °C
- 2.10 Temperature coefficient..... : 150 ppm/°C



Type		Turn (rotation angle)	Watt
DMG23 / 10 Ze	Precision wire	10 – turn (3600°)	2,0
DMG23 / 10 Ze Hy	hybrid element		
DMG23 / 05 Ze	Precision wire	5 – turn (1800°)	1,5
DMG23 / 03 Ze	Precision wire	3 – turn (1080°)	1,0

### Terminal plan

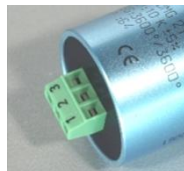


Point	Function	Colour
11	winding	brown
12	slider	white
13	winding	green

### Option – type of connection



Solder connection  
DMG23



Terminal block  
DMG23



Cable connection 3 m  
DMG23

### Options

- Protection class IP65
- Protection class IP67
- Shaft and central fixing in inch
- Terminal wires

### For your information!

Please note that because of missing material availability the wiper could be C7521 material instead of C7701. 25.08.22

Hy = Resistor element hybrid (not available in 2 K-Ohm)