

Precision - Multi-Turn - Wirewound - Potentiometer DMG18 + -19

Inch or metric version, solder connection, 3- turn / 5- turn / 10-turn, for manual adjustment



The 3- turn, 5- turn and 10-turn precision potentiometers of the series DMG 18 are characterized by a high resolution and low tolerance resistor elements. These low-cost potentiometers are especially well suited for setpoint devices.

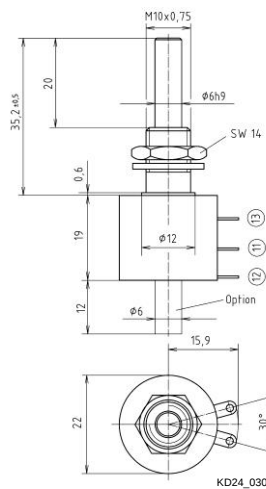
Mechanical data

- 1.1 Housing..... : Reinforced glass fibre plastic
- 1.2 Shaft..... : Metal; $\varnothing$ according to table
- 1.3 Bearing..... : Sliding bearing
- 1.4 Resistor element..... : According to table
- 1.5 Slider tap / wiper tap..... : Single tap
- 1.6 Housing protection class..... : IP 40
- 1.7 Type of connection..... : Solder connection
- 1.8 Mounted by : According to table
- 1.9 Rotation speed..... : Max. 60 rpm
- 1.10 Torque..... : Till 0,8 Ncm (IP65 till 2,5 Ncm)
- 1.11 Rotation load life..... : According to table

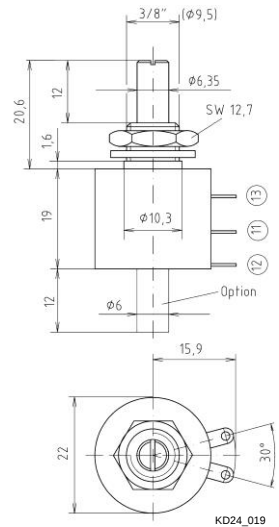
Electrical data

- 2.1 Resistance values (standard)..... : 1, 2, 5, 10 K-Ohm
- 2.2 Resistance range..... : 1 K... 100 K-Ohm
- 2.3 Resistance tolerance..... : Precision wire $\pm 5\%$, hybrid $\pm 10\%$
- 2.4 Linearity tolerance..... : $\pm 0,25\%$
- 2.5 Insulation resistance : 1000 M-Ohm
- 2.6 Test voltage..... : 1000 V
- 2.7 Power rating..... : According to table
- 2.8 Slider load current..... : Precision wire max. 20mA, Hybrid element max.10mA
- 2.9 Temperature range..... : -25°C till +125°C
- 2.10 Temperature coefficient..... : Precision wire 50 ppm/°C, hybrid 100 ppm/°C

Metric option

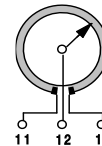


Inch option



*1 Standard resistance with hybrid		
3-turn	5-turn	10-turn
3 K	5 K	10 K
1,5 K	2,5 K	5 K
0,3 K	0,5 K	1 K

Option	Type	Turn (rotation angle)	Rotation load life	Watt
DMG18 Ze me Resistor element precision wire Metric version Maintenance-free sliding bearing shaft $\varnothing$ 6 mm central fixing M10 x 0,75	DMG18 / 10 Ze Lt me	10 – turn (3600°)	1 x 10 ⁶	2,0
	DMG18 / 05 Ze Lt me	5 – turn (1800°)	5 x 10 ⁵	1,5
	DMG18 / 03 Ze Lt me	3 – turn (1080°)	3 x 10 ⁵	1,0
DMG18 Ze Hv zo Resistor element precision wire Inch version shaft $\varnothing$ 6,35 central fixing 3/8"	DMG18 / 10 Ze Lt zo	10 – turn (3600°)	1 x 10 ⁶	2,0
	DMG18 / 05 Ze Lt zo	5 – turn (1800°)	5 x 10 ⁵	1,5
	DMG18 / 03 Ze Lt zo	3 – turn (1080°)	3 x 10 ⁵	1,0
DMG19 Ze me Resistor element Hybrid Metric version Maintenance-free sliding bearing shaft $\varnothing$ 6 mm central fixing M10 x 0,75	DMG19 / 10 Hy Ze Lt me	10 – turn (3600°)	5 x 10 ⁶	2,0
	DMG19 / 05 Hy Ze Lt me *1	5 – turn (1800°)	5 x 10 ⁶	1,5
	DMG19 / 03 Hy Ze Lt me *1	3 – turn (1080°)	5 x 10 ⁶	1,0
DMG19 Ze Hv zo Resistor element Hybrid Inch version shaft $\varnothing$ 6,35 central fixing 3/8"	DMG19 / 10 Hy Ze Lt zo	10 – turn (3600°)	5 x 10 ⁶	2,0
	DMG19 / 05 Hy Ze Lt zo *1	5 – turn (1800°)	5 x 10 ⁶	1,5
	DMG19 / 03 Hy Ze Lt zo *1	3 – turn (1080°)	5 x 10 ⁶	1,0



terminal plan	
point	function
11	winding
12	slider
13	winding

Options

Terminal wires
Protection class IP67 shaft-side
(for metric version only)

For your information!

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

*1 A 10-turn DMG rebuilt to 5- or 3-turn. Due to the rebuilding the total resistance is reduced by the number of turns.

Hv = Manual adjustment

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

me = Thread of central fixing and shaft metric

zo = Thread of central fixing and shaft in inch

Option	slide moment
Internal slip coupling *2	1,8 to 2,2 Ncm

*2 full inspection of torque

Sheet #: KE2403

Amendment/ Print: 22.10.24 / 22.10.24

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Subject to technical
amendments