

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



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

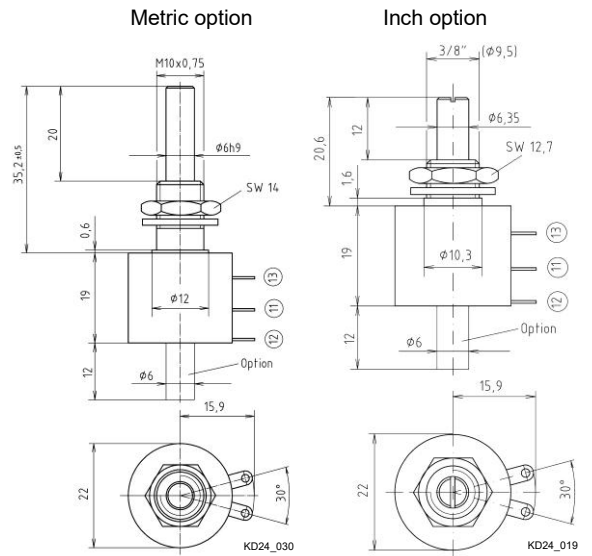
The 3- turn, 5- turn and 10-turn precision potentiometers of the series DMG 18 are characterized by a high resolution and low tolerance resistor elements. These low-cost potentiometers are especially well suited for setpoint devices.

Mechanical data

- 1.1 Housing.....: Reinforced glass fibre plastic
- 1.2 Shaft.....: Metal; \varnothing see table
- 1.3 Bearing.....: Sliding bearing
- 1.4 Resistor element.....: see table
- 1.5 Slider tap / wiper tap.....: Single tap
- 1.6 Protection class.....: IP40
- 1.7 Type of connection.....: Solder connection
- 1.8 Mounted by: see table
- 1.9 Rotation speed.....: max. 60 rpm
- 1.10 Torque.....: max. 0,8 Ncm (IP65 max. 2,5 Ncm)
- 1.11 Rotation load life.....: see table

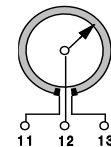
Electrical data

- 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.....: see table
- 2.8 Slider load current.....: Precision wire max. 20 mA, Hybrid element max. 10 mA
- 2.9 Temperature range.....: $-25\text{ }^{\circ}\text{C}$... $+125\text{ }^{\circ}\text{C}$
- 2.10 Temperature coefficient.....: Precision wire 50 ppm/ $^{\circ}\text{C}$, hybrid 100 ppm/ $^{\circ}\text{C}$



*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 M10x0,75	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 M10x0,75	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 2 K-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 ... 2,2 Ncm

*2 full inspection of torque

Sheet #: KE2403

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