

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

**ALTMANN** 

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

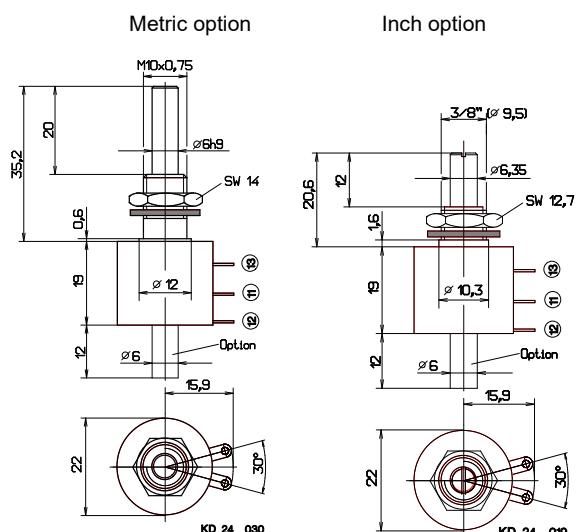
The 3- turn, 5- turn and 10-turn precision potentiometers of the series DMG 18 are characterized by a high resolution and low tolerance resistor elements. These low-cost potentiometers are especially well suited for setpoint devices.

## 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

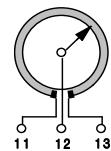
## electrical data

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/ $^{\circ}$ C, hybrid 100 ppm/ $^{\circ}$ 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 M10 x 0,75	DMG18 / 10 Ze Lt me	10 – turn (3600°)	$1 \times 10^6$	2,0
	DMG18 / 05 Ze Lt me	5 – turn (1800°)	$5 \times 10^5$	1,5
	DMG18 / 03 Ze Lt me	3 – turn (1080°)	$3 \times 10^5$	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°)	$1 \times 10^6$	2,0
	DMG18 / 05 Ze Lt zo	5 – turn (1800°)	$5 \times 10^5$	1,5
	DMG18 / 03 Ze Lt zo	3 – turn (1080°)	$3 \times 10^5$	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°)	$5 \times 10^6$	2,0
	DMG19 / 05 Hy Ze Lt me *1	5 – turn (1800°)	$5 \times 10^6$	1,5
	DMG19 / 03 Hy Ze Lt me *1	3 – turn (1080°)	$5 \times 10^6$	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°)	$5 \times 10^6$	2,0
	DMG19 / 05 Hy Ze Lt zo *1	5 – turn (1800°)	$5 \times 10^6$	1,5
	DMG19 / 03 Hy Ze Lt zo *1	3 – turn (1080°)	$5 \times 10^6$	1,0



terminal plan	
point	function
11	winding
12	slider winding
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