



Document/File name DATAPOT5KE.doc	Document Type External	Revision 1
First Revision, Sign and Date Lan 2003-06-20	Updated Revision, Sign and Date	Document Status and Sign Approved by Bln
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Document and Product Description

Mechanical and Electrical specification for Pot 5K
308 degr. and 345degr. Plastic case

Description

Case	High grade, temperature-resistant plastic
Shaft	Stainless steel
Bearings	Plastic friction bearings
Resistance element	Conductive plastic
Wiper assembly	Precious metal multi-finger wiper
Mounting position	Any optional position
Electrical connection	Three conductors, PTE-PEE-insulation



Environmental Data

Temperature range	-40...+125	C°
Vibration	5...2000 $A_{max} = 0.75$ $a_{max} = 20$	Hz mm g
Life	$>50 \times 10^6$	movement
Protection class	IP 65	

Mechanical Data

Mounting	with 2 M4 fillister-head screws + washer	
Mechanical travel	360°, continuous	
Permitted shaft loading (axial and radial)	20	N
Torque	0.5	Ncm
Maximum operational speed	120	min ⁻¹
Weight	32	g

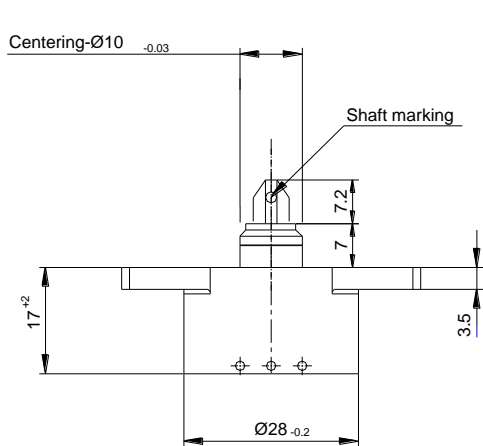
Electrical Data

Measurement range	308° , 345°	±2°
Nominal resistance	5	kΩ
Resistance tolerance	±20	%
Repeatability	≤0.01	%
Effective temperature coefficient of the output-to-applied voltage	typical 5	ppm/K
Independent linearity	±0.3	%
Max voltage	42	V
Recommended operating wiper current	≤1	μA
Max wiper current in case of malfunction	10	mA
Insulation resistance (500 VDC, 1 bar, 2 s)	≥10	MΩ
Dielectric strength (50 Hz, 2 s, 1 bar, 500 VAC)	≤100	μA
Conductor length	approx. 300	mm
Conductor diameter	approx. 1	mm ²



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Mechanical drawing



When the shaft marking is pointing to terminal 2 (red), the wiper is located in an electrical center position.

