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Mechanical Data			
Dimensions	see drawing		
Mounting	nut M10 x 0.75, serrated washer 3/8"		
Mechanical travel	320		°
Permitted shaft loading (axial and radial) static or dynamic force	1		N
Torque	≤ 1		Ncm
Permitted max. torque for mech. stops	100		Ncm
Maximum operational speed	120		RPM
Weight	14		g
Electrical Data			
Actual electrical travel	312 ±3		°
Available resistance values	1	5	10
Resistance tolerance	±5		%
Repeatability	0.24 (=0.75°)	0.13 (=0.4°)	0.11 (=0.35°)
Effective temperature coefficient of the output-to-applied voltage ratio	40 (typical)		ppm/K
Independent linearity	±0.6		%
Max. permissible applied voltage	36		V
Recommended operating wiper current	≤ 10		µA
Max. wiper current in case of malfunction	100		mA
Insulation resistance (500 VDC, 1 bar, 2 s)	≥ 10,000		MΩ
Dielectric strength (AC, 50 Hz, 1 min, 1 bar)	1,500		V
Environmental Data			
Temperature range	-25...+125		°C
Vibration	30...2000		Hz
	A _{max} = 0.75		mm
	a _{max} = 10		g
Life	200 x 10 ³		movements
Shock (DIN IEC 68 T2-27)	50		g
	7		ms
Protection class (DIN 40050)	IP 50		

Order designations /**Abbreviations**

4A: connecting pin, radial

MB: bushing M10 x 0.75,

axis Ø 6 mm

Included in delivery

1 nut M10 x 0.75

1 serrated washer 3/8"

Recommended accessories

Fork coupling Z 104 G6, Art. no. 005690;

Fork coupling Z 105 G6 (backlash-free), Art. no. 005691, MAP process-control indicators and display. MUP signal conditioner for standardized output signals.

Important

All values given for this series – including linearity, lifetime, micro-linearity, resistance to external disturbances and temperature coefficient in voltage dividing mode – are quoted for the device operating with the wiper voltage driving an operational amplifier working as a voltage follower where virtually no load is applied to the wiper ($I_e \leq 1 \mu\text{A}$).

Order designations

Type	Art. no.	R in kΩ	Length of shaft mm
PD280 1K0 4A080 MB	78009	1	8
PD280 5K0 4A080 MB	78014	5	8
PD280 10K0 4A080 MB	77729	10	8
PD280 1K0 4A160 MB	78025	1	16
PD280 5K0 4A160 MB	78030	5	16
PD280 10K0 4A160 MB	78031	10	16

Subject to changes

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