PP22 SA



Vishay MCB

High Reliable Sensor Dedicated to Aeronautic Applications



FΕ	AT	'UF	RES

• Conductive plastic potentiometer technology



- Very robust version
- Precious metal contacts, stainless steel shaft and bearings, anodized light alloy flange
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

QUICK REFERENCE DATA			
Sensor type	ROTATIONAL, conductive plastic		
Output type	Output by wires		
Market appliance	Industrial, avionics		
Dimensions	22.1 mm		

ELECTRICAL SPECIFICATIONS			
PARAMETER			
Number of cup	1		
Total electrical travel	90° ± 3° (more on request)		
Useful electrical travel	\geq 70° (more on request)		
Electrical continuity	≥ 340°		
Rated resistance	5 kΩ ± 20 % (± 10 % on request)		
Independent linearity standard	±1%		
Independent linearity optional	± 0.5 % (± 0.4 % on request)		
Rated power dissipation	0.25 W at 70 °C		
Output smoothness	≤ 0.1 %		
Resolution	Infinite		
Insulation resistance	\geq 1 G Ω at 500 V _{DC}		
Dielectric strength	Leakage current \leq 1 mA under conditions 750 V _{AC} , 50 Hz, 1 min		
Wiper current	≤ 1 mA		
Output voltage hysteresis	\leq 0.08 % of U _{supply}		

MECHANICAL SPECIFICATIONS			
PARAMETER			
Mechanical travel	360° (continuous rotation)		
Running torque	≤ 20 cN cm		
Recommended mounting	Flexible coupling between customer motor element and potentiometer shaft		

PERFORMANCE		
PARAMETER		
Life	25M cycles	

Note

• Nothing stated herein shall be construed as a guarantee of quality or durability.

ENVIRONMENTAL SPECIFICATIONS			
PARAMETER			
Operating temperature	-55 °C to +125 °C		
Operational shocks	50 g - 11 ms - 1/2 sinus (on each direction of the three major axis)		
Vibration	1.5 mm peak to peak between 10 Hz to 60 Hz (on the three major axis)		
VIDIALION	20 g between 60 Hz to 2000 Hz (on the three major axis)		
Applicable specification	NFC 93-255 / MIL R 39023		

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SAP PART NUMBERING GUIDELINES						
MODEL	MOUNTING	TYPE	VALUE	LINEARITY	ANGLE	PACKAGING
PP22	S = servo	A = aeronautic (including ball bearing)	502 = 05K	A = 1 % B = 0.5 %	090	B = box



DIMENSIONS in millimeters



OPTIONS (on request)

- Other ohmic value and tolerances on this ohmic value
- Other linearity and absolute function
- Other total and useful electrical travel
- Other shaft designs
- Mechanical phasing
- Electrical reference: 0.5 U \pm 0.1 % U (at middle of electrical travel)

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