Model 208



1³/₄" (44.5 mm) Single Turn Conductive Plastic Precision Potentiometer



www.vishay.com

VISHAY

QUICK REFERENCE DATA		
Sensor type	ROTATIONAL, conductive plastic	
Output type	Output by turrets	
Market appliance	Professional	
Dimensions	1 ¾" (44.5 mm)	

FEATURES

- Rotational life exceeds 20 million shaft revolutions
- Virtually infinite resolution
- Designed for high reliability applications
- Co-molded track and multi-finger wiper provide low noise signal
- Bushing or servo types available up to 6 sections
- Ohmic value range: 1 k Ω to 50 k Ω
- Material categorization: For definitions of compliance please see <u>www.vishay.com/doc?99912</u>

ELECTRICAL SPECIFICATIONS			
PARAMETER			
Total resistance tolerance	STANDARD 1 kΩ to 50 kΩ ± 10 %	SPECIAL ± 5 %	
Linearity (independent)	STANDARD ± 0.3 %	SPECIAL ± 0.1 %	
Electrical angle	350° ± 3°		
Power rating: Section 1: Additional sections	1.75 W at 70 °C ambient derated to zero at 125 °C 75 % of the rating of section 1		
Output smoothness	0.1 % maximum		
Insulation resistance	1000 M Ω minimum, 500 V _{DC}		
Dielectric strength	1000 V _{RMS} , 60 Hz		
Taps (extra)	Extra taps available as special		
Phasing	Points at which output ratio is 0.5 aligned \pm 1° (ref. to section 1)		
Temperature coefficient of resistance	± 600 ppm/°C maximum		

he Model 208 ca our order, please		s datasheet with a variety of alt	ernate characteristics, as shown above. For mo	st rapid service on
208	В	1	10K	BO1
MODEL	MOUNTING	NUMBER OF SECTIONS	TOTAL RESISTANCE OF EACH SECTION	PACKAGING
	B: Bushing S: Servo	Up to 6	Beginning with the section nearest the mounting end	Box of 1 piece

SAP PART NUMBERING GUIDELINES					
208	S	2	103	502	B01
MODEL	STYLE	GANG NUMBERS	OHMIC VALUE GANG N° 1	OHMIC VALUE GANG N° 2	PACKAGING
	B: Bushing S: Servo	From 1 up to 6	10K	5K	
	S: Servo				

Revision: 06-Aug-12

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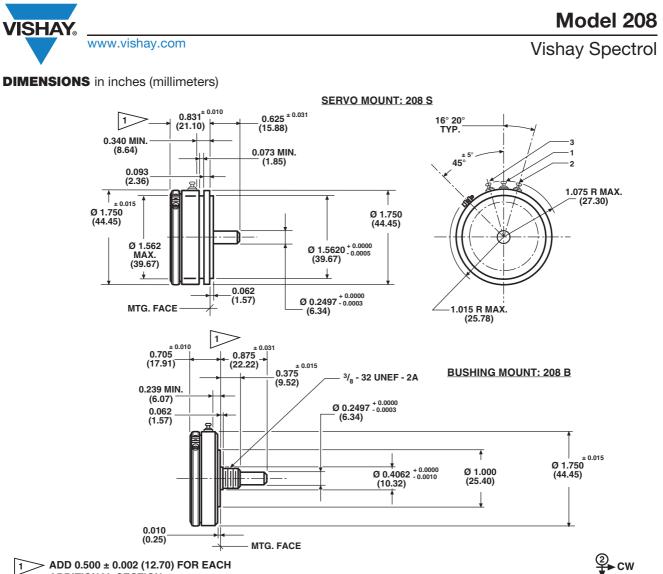
Document Number: 57053

For technical questions, contact: sferprecisionpot@vishay.com

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COMPLIANT



ADDITIONAL SECTION

TOLERANCES: UNLESS OTHERWISE NOTED. DECIMALS ± 0.005 ANGLES ± 2°

MECHANICAL SPECIFICATIO	NS		
PARAMETER			
Rotation	360° continuous		
Bearing type	SERVO MOUNT Ball bearing	BUSHING MOUNT Sleeve bearing	
Ganging	6 sections maximum terminal alignment, added sections within ± 10° of section 1 terminals		
Torque (maximums) Servo section 1 Bushing section 1 Each additional section	STARTING 0.7 oz in (50.40 g - cm) 1.0 oz in (72.0 g - cm) 0.4 oz in (28.80 g - cm)	RUNNING 0.4 oz in (28.80 g - cm) 0.7 oz in (50.40 g - cm) 0.3 oz in (21.60 g - cm)	
Mechanical runouts (maximums): Shaft (TIR/in) Pilot dia. (TIR) Lateral (TIR) Shaft end play Shaft radial play	SERVO 0.002" (0.05 cm) 0.002" (0.05 cm) 0.003" (0.08 cm) 0.005" (0.13 cm) 0.002" (0.05 cm)	BUSHING 0.002" (0.05 cm) 0.002" (0.05 cm) 0.005" (0.13 cm) 0.005" (0.13 cm) 0.003" (0.08 cm)	
Moment of inertia	1.0 g - cm ² per section maximum		
Weight: Single section Each additional section	3.0 oz. (85.05 g) 1.0 oz. (28.35 g)		

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