

MKV Series Standard Precision Potentiometers Servo or Bushing Mount



For more information about this product, visit our website at:
www.potentiometers.com



Position Measurement Potentiometer *F78S, F78C, F78B, F78E*

Standard Precision MKV Potentiometers provide high accuracy, long life position feedback. A cost-effective solution for Commercial, Industrial, Military, and Aerospace applications. Available with Servo Mount, 3/8" Bushing Mount, or 1/4" Bushing Mount

Electrical Specifications

Total Resistance : 500 to 100k ohms
Resistance Tolerance: $\pm 10\%$ (Standard)
Independent Linearity: $\pm 1.0\%$, $\pm 0.5\%$, $\pm 0.25\%*$
Electrical Travel: 340°
Power Rating @ 70°C : 1.0 watts
Output Smoothness: 0.5%, 0.25%, 0.15%
per MIL-R-39023
End Voltage: 1.0% of total applied voltage max
Dielectric Withstanding Voltage: 750V RMS
Insulation Resistance: 1000 megohms min
Resolution: Virtually infinite

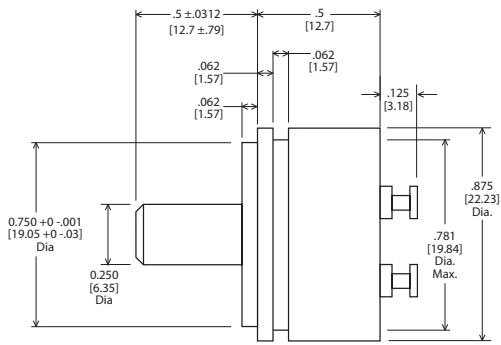
Mechanical Specifications

Mechanical Travel: 360° continuous
Mounting Type: Bushing, Servo
Bearing Type: Sleeve, Ball
Mounting Thread: 3/8-32NEF, 1/4-32NEF
Stop Strength: n/a
Life Expectancy: sleeve bearing: 10 million cycles
ball bearing: 30 million cycles
Torque: sleeve bearing: 1.0 oz-in max
ball bearing: 0.5 oz-in max
End Play: 0.005" max
Shaft Diameter: 1/8" or 1/4"
Weight: 16 grams max.

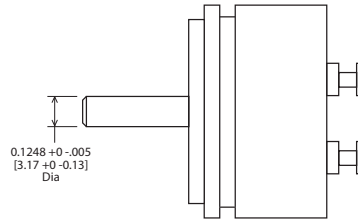
Environmental Specifications

Temperature Range:
(operational): -65°C to $+125^\circ\text{C}$
(storage): -65°C to $+125^\circ\text{C}$
Shock: per MIL-STD-202
Vibration: per MIL-STD-202

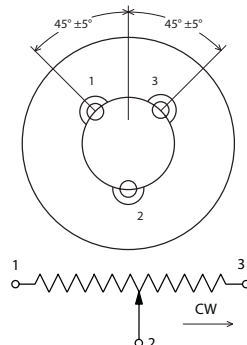
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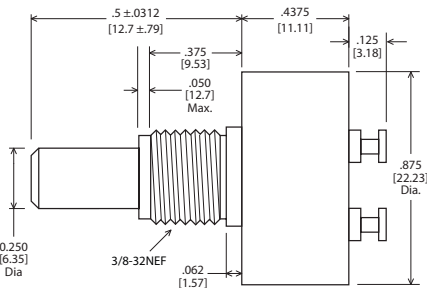
1/4" Shaft Servo



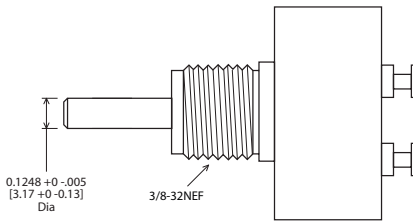
1/8" Shaft Servo



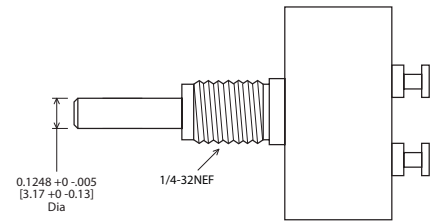
Schematic



1/4" Shaft; 3/8-32 Bushing



1/8" Shaft; 3/8-32 Bushing



1/8" Shaft; 1/4-32 Bushing

Ordering Information

Example Part Number: **F78S-A-103-B1**

F78S

Model

- F78S** = Servo w/Ball bearing
- F78C** = Servo w/Sleeve bearing
- F78B** = 3/8-32 Bushing, Sleeve bearing
- F78E** = 1/4-32 Bushing, Sleeve bearing

A

Linearity:

- A** = ±1.0%
- B** = ±0.5%
- C** = ±0.25%

103

Standard Resistances

- 501** = 500
- 102** = 1,000
- 202** = 2,000
- 502** = 5,000
- 103** = 10,000
- 203** = 20,000
- 503** = 50,000
- 104** = 100,000

B1

Shaft Diameter

- Blank** = 1/8"
- B1** = 1/4"

Available Model Numbers

F78S-A-102	F78S-B-102	F78CA102	F78BA102	F78EA102
F78S-A-102-B1	F78S-B-103	F78CA103	F78BA102-B1	F78EA502
F78S-A-103	F78S-B-202	F78CA502	F78BA103	F78EA505
F78S-A-103-B1	F78S-B-502	F78CB102	F78BA202	F78EB102
F78S-A-203-B1	F78S-B-502-B1	F78CB502	F78BA502	F78EB103
F78S-A-501-B1	F78S-C-102	F78CC202	F78BA502-B1	F78EB501
F78S-A-502	F78S-C-102-B1	F78CC203	F78BB102	F78EC103
F78S-A-502-B1	F78S-C-103		F78BB102-B1	
F78S-AT-103	F78S-C-203		F78BB103	
	F78S-C-502		F78BB103-B1	
	F78S-C-502-B1		F78BB502-B1	
			F78BC102-B1	
			F78BC103	



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