



S 11



S 12

High Precision Servo Mount

- 355° Electrical Angle
- 2 Million Turns Life
- All Metal Construction
- Precision Ball Bearings
- Multiple Gangs

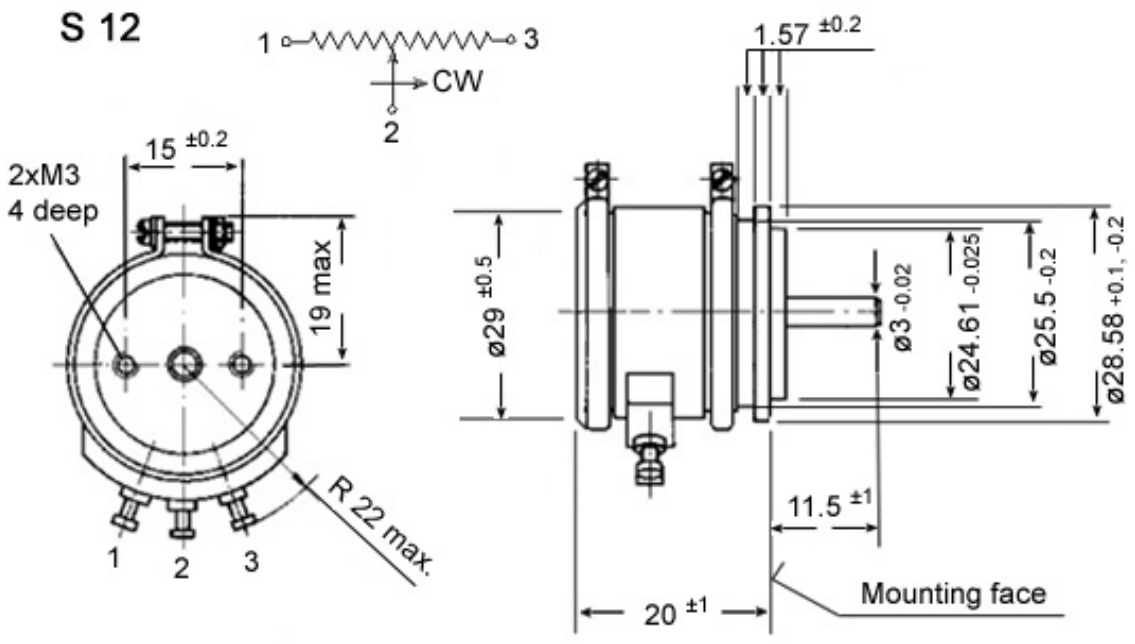
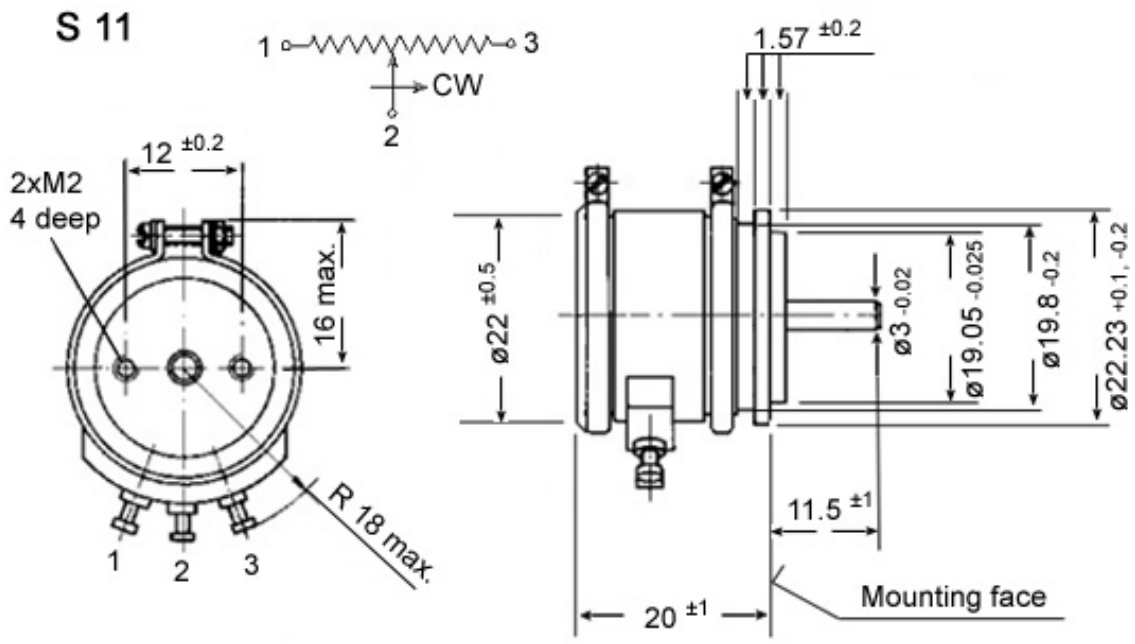
Precision machining and high quality components combine to produce a high precision, long life potentiometer with a wide angle of measurement. Dual precision ball bearings. Many options are available to tailor the potentiometer to a specific application.

Electrical Specifications	S 11	S 12
Resistance Values (ohms)	10 ~ 20K	
Resistance Tolerance	±3% (±1% optional)	
Linearity Tolerance (Independent)	±0.3% (above 1k) (0.15% above 5k available)	
Electrical Angle	355 ±2°/-5°	
Insulation Resistance	1000 Mohms @ 500 VDC	
Dielectric Strength	1000 VAC, 1 minute	
Noise	<100 ohms ENR	
Wiper Current	30mA (max)	
End Resistance	0.05%	
Power @ 40°C	1 Watt	1.5 Watts
Mechanical Specifications		
Mechanical Angle	360° - continuous (no stops)	
Torque (Ncm)	Starting: <0.2 / Operating: <0.05	
Max. Axial Play of Shaft (mm)	0.1	
Max. Radial Play of Shaft (mm)	0.05	
Typical Life (# of turns)	2 million	
Vibration	15G, 10Hz to 2,000Hz	
Shock	50G, 11ms	
Bearing	2 x precision ball bearings	
Weight	20 grams	30 grams
Environmental Specifications		
Operating Temperature	-55°C to +125°C	
IP Protection Grade	IP40 (IP54 optional)	
Standards	MIL-R-12934	
Materials		
Housing	Anodized aluminum	
Servo flange	Aluminum	
Shaft	Stainless steel	
Terminals	Gold plated	

Resolution Chart

Resistance value (ohms)	Resolution (%)		Temperature coefficient of wire (\pm ...ppm/C)
	S 11	S 12	
50	0.333	0.322	20
100	0.270	0.256	
200	0.213	0.200	
500	0.222	0.238	
1k	0.175	0.167	
2k	0.135	0.130	
5k	0.100	0.092	
10k	0.079	0.071	
20k	0.060	0.056	

Dimensions (mm)



Options

- | | | |
|-----------------------------|----------------------------|---------------------------|
| - 1/4" shaft diameter | - Extra taps | - Improved tolerances |
| - Bushing mount | - Multiple gangs (up to 5) | - Special shaft machining |
| - Special resistance values | - Special operating angles | - Rear shaft extension |

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