



SCX 50



SCX 12

High Precision

Sine / Sine - Cosine Function

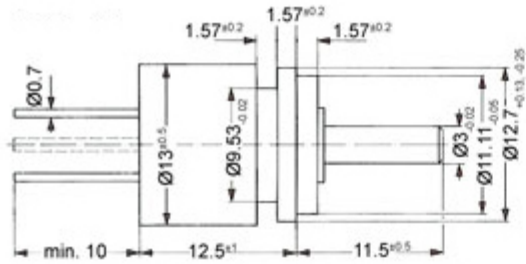
Special Functions

Long Life

High precision detection of sine only, sine-cosine and other non linear functions through the potentiometers shaft rotation. Conductive plastic element for long life and high speed tracking ability. Special functions are available.

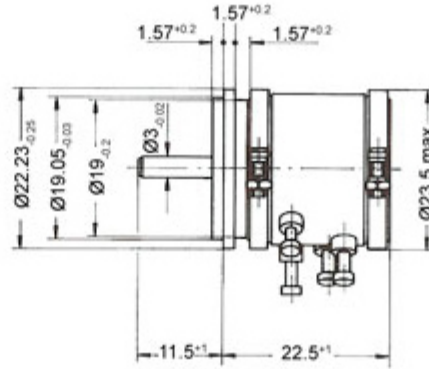
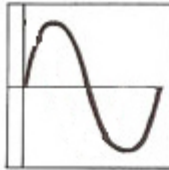
Electrical Specifications	SCX 50	SCX 30	SCX 22	SCX 12	Other Function Curves
Output Function	Sine - Cosine			Sine only	consult factory
Resistance Values (kohms))	1, 2, 5, 10, 50		1, 2, 5, 10		consult factory
Resistance Tolerance (std.)	±15%			±20%	consult factory
Resistance Tolerance (best)	±10%				consult factory
Conformity Tolerance (standard)	±0.5%	±1%	±2%	±7%	consult factory
Conformity Tolerance (best)	±0.25%	±0.7%	±1%	±5%	consult factory
Power @ 40°C (W)	1.25	0.75	0.5	0.2	consult factory
Electrical Angle	360° (continuous)				
Resolution	Essentially infinite				
Output Smoothness	<0.1%				
Mechanical Specifications					
Mechanical Angle	360° (continuous)				
Operating Torque Max. (Ncm)	0.5	0.4		0.3	0.5 or less
Axial Play of Shaft (max.)	0.2				
Radial Play of Shaft (max.)	0.05				
Typical Life Span (turns)	50 million			10 million	10 ~ 50 million
Mass (g)	150	80	50	15	15 to 50
Shaft Bearing	Ball Bearings (2 sets. front and rear shaft support)				
Rotational Speed max. (rpm)	400				
Environmental Specifications					
Operating Temperature	-55°C to +105°C				
Dielectric Strength	500 VAC, 1 minute				
Insulation Resistance	1000 Mohms, 1000VDC				
Shock	50 G, 11ms				
Vibration	5 G, 0 to 2000 Hz				
Standards	MIL-R-12934				
Materials					
Housing	Aluminum				
Servo Flange	Aluminum				
Shaft	Stainless steel				
Terminals	Gold plated				

Dimensions (mm)

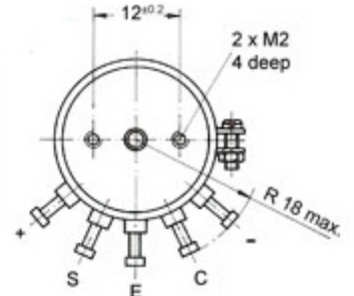


SCX12

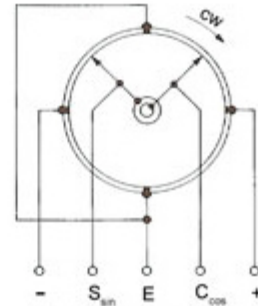
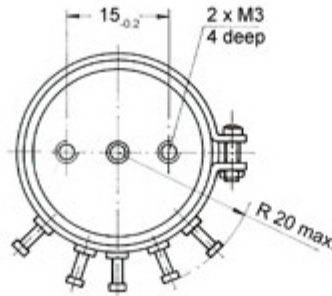
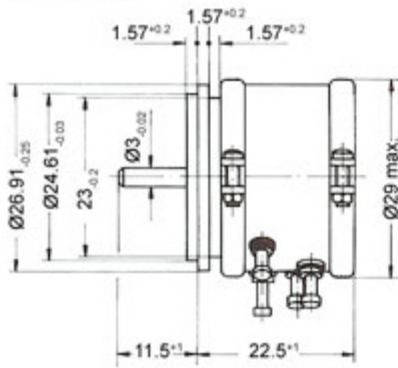
Sin - 360°



SCX 22



SCX 30

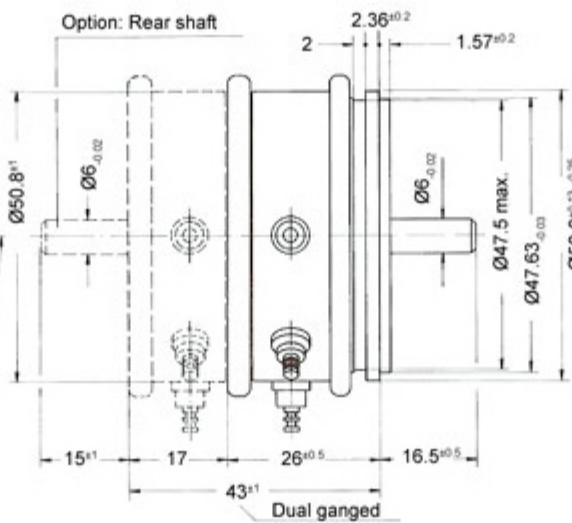


sin - cos 360°

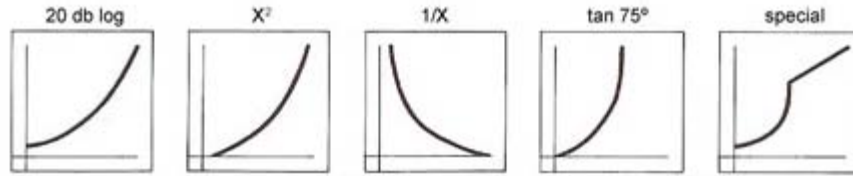


SCX22
SCX30
SCX50

SCX 50



Other Available Functions



Options

- | | | |
|---------------------|---------------------------|-----------------------|
| - Special functions | - Spring return mechanism | - Shaft modifications |
| - Bushing mount | - Tighter tolerances | - Multiple gangs |
| - Extra taps | - Rear shaft extension | - Other |

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