

Type 51 Series

Key Features

- Choice of Shafts and Edgewheels
- SPST Switch Style
- Available in Distribution
- Automatic Machine Insertable Modules
- Eyelet or PC Terminations
- Linear and Non-Linear Laws
- Multi Gang Versions Available



The Type 51 Series from TE Connectivity offers a small, high quality potentiometer system. You can choose a standalone module or a conventional bush potentiometer with shaft. Advanced carbon polymer element technology potentiometers with or without switches are available to meet your every requirements.

Characteristics - Electrical

Resistance Range	Linear Law:	470 Ohm to 4.7 Megohm
	Log Law:	2.2K Ohm to 470K Ohm
Resistance Values:		1.0, 2.2, 4.7 per decade
Tolerance:		± 20% (tighter by selection)
Power Rating	Linear Law:	0.2 Watt @ 40°C
	Log Law:	0.1 Watt @ 40°C
Operating Voltage	Linear Law:	350 VAC or 500 VDC maximum
	Log Law:	P maximum x R nominal
Long Life:		ΔR < 10% after 1000 hours @ 70°C
Rotational Life:		√ΔR < 10% @ 15,000 cycles
ΔR/R (Linear Law):		ΔR < 1%
Isolation Voltage:		500 V dc
Insulation Resistance:		> 100 Megohm

Characteristics - Mechanical

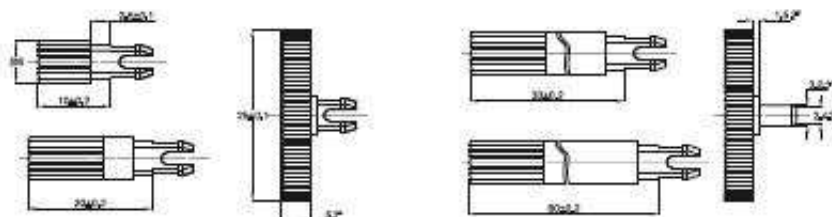
Angle of Rotation:	300° ± 2°
Rotational Torque:	10 mNm maximum
Stop Strength:	400 mNm maximum
Rotational Life:	25,000 cycles

Characteristics - Environmental

Storage Temperature:	- 40°C to 85°C
Operating Temperature:	- 25°C to 70°C
Humidity:	< 15% ΔR RH 75% @ 35°C
Temperature Coefficient:	± 500 PPM/°C @ -25 to 70°C
Climatic Category:	25070/10

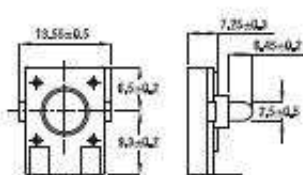
Type 51 Series

Thumbwheel Actuating Devices

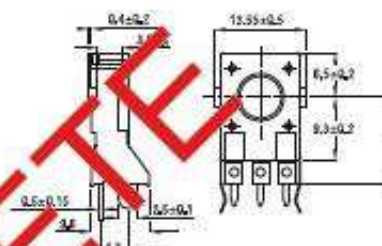


Dimensions - Single Module

Type 51 Horizontal

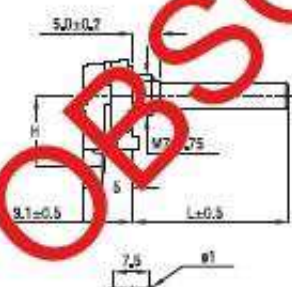


Type 53 Vertical

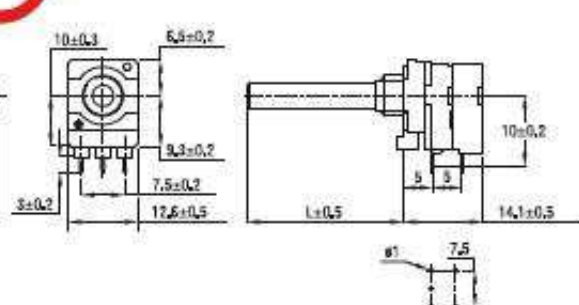


Dimensions - Potentiometer

Type 54 No Switch

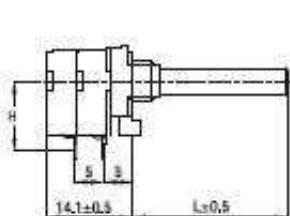


Type 56 with Switch



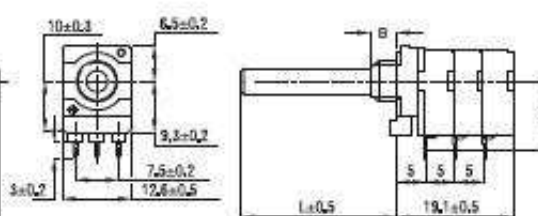
H - 10mm or 12.5mm to choice

Type 55 Dual Section



H - 10mm or 12.5mm to choice

Type 61 Triple Section

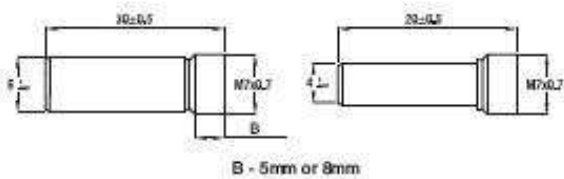


B = 5mm or 8mm

Type 61 has the same general dimensions as Type 55.

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Spindle Options - Potentiometers with Bush



Panel Hole Data - Potentiometers with Bushes
Required Mounting Holes in Chassis

For Single and Dual Gang Potentiometers with Mounting Bush M7 x 0.75mm.
Fix Potentiometer with Mounting Nut Supplied.
Max. Torque for tightening - 1 Nm
Thickness of Mounting Plate - 1mm



How to Order

51	102	A	4	20	PL
Common Part	Value	Resistance Law	Shaft Diameter	Shaft Length	Spindle Style
51 53 54 55 56 61	The first two digits are significant figures of the resistance value and the third one denotes the number of zeros following. e.g. 4K7: 472 47K: 473 470K: 474	A - Linear B - Log C - Super Log	4 - 4mm 6 - 6 mm	20 - 20mm 30 - 30mm	PL - Plain FL - Flatted

Mouser Electronics

Authorized Distributor

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