

Conductive Plastic Track



Conductive Plastic Substrate Characteristics:

- A. Super long life (100×10^6 cycles run)
- B. Accurate trimming improve the linearity
- C. Linearity 0.1%-0.02% (determined according to the stroke)
- D. Repeatability ≤ 0.01 mm
- E. Operating speed ≤ 10 m/s
- F. Stroke range: 75-2500mm
- G. Smooth and low noise output
- H. Temperature coefficient: 5ppm/k
- I. Operating temperature: -50°C to 150°C

Conductive Plastic Technical Parameters

Resistance range	mm	75—550	600—2500
Resistance	K Ω	5	10
Resistance error	$\pm\%$	20	
Linearity	%	0.1-0.05	0.05-0.02
Repeatability	mm	0.01	
Max. supply voltage	V	42V current signal	
Resolution		Infinite	
Output smoothness	%	0.1	
Insulation resistance	M Ω	≥ 10	
Temperature coefficient (T.C)	Ppm/k	5	
Operating temperature	$^{\circ}\text{C}$	-50 +150	
Operating life		100×10^6	
Operating speed	m/s	≤ 10	

The plastic has many advantages compared to metal, it is easy to manufacture with good corrosion resistance and light weight. The conductive plastic is a solid body what was pressured within the grooves of the insulating substrate with DAP resistance powder thermoplastic. Because of errors and other reasons, such as the uneven thickness and width of conductive plastic, the linearity is not good enough. But MINOR has scraping technique to achieve high linearity. Conductive plastic can be accurately scraping for requested linearity by NC equipment. MINOR not only can provide you good linearity, but also scraping resistance value as you specified, such as 5678 Ω or 8765 Ω .