

## String Displacement Sensor DSS-450

- String potentiometer style;
- Suitable for harsh environments such as crash test;
- Small size, easy install (mounting block supplied);
- Measurement range 450mm;
- Wire max. tension 7~15N; Acceleration up to 60g;
- Anti-Shock  $\geq 100g$ .



DSS-450 contains an adjustable potentiometer inside and a coaxially designed steel wire coil. When the steel wire stretches or contracts, the resistance of the potentiometer changes accordingly. Its unique internal design keeps the displacement and output voltage constant. A good linear relationship is achieved. The steel wire is made of 304 stainless steel and is designed with high tension. It is very suitable for high-speed measurement applications, such as parts moving during car crash test, and status monitoring of aviation airborne equipment.

### Specification (5V, 25°C)

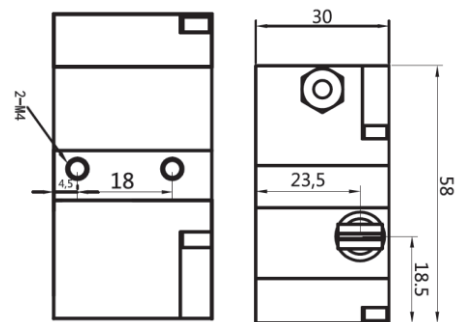
Name	Unit	Value
Range	mm	450
Tension force	N	7~15
Wire diameter	mm	0.6
Non-Linearity	%FS	$\leq \pm 0.25$
Signal smoothness	%	$\leq 0.1$
Resistance	$\Omega$	$5k \pm 10\%$
Wire acceleration	g	60 max.
Max. Excitation	VDC	20
Temp. factor	ppm/°C	$\pm 20$
Anti-Shock	g	$> 100$
Insulation Res.	M $\Omega$	$> 100$
Opera. Temp.	°C	-40~+105
Mechanical Life	cycle	1million
Material	/	Al. Alloy
weight	grams	125
Dimension	mm	58×30×30

Wire length default 8m;

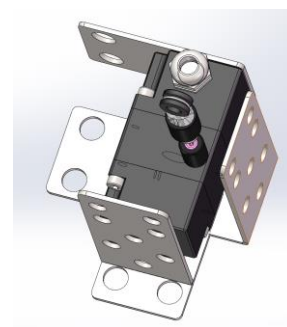
Extend 1m length wire default;

Including mounting fixture: Flat 15gram, L-Shape 30gram

### Dimension:



### Mounting Fixtures:



### Cable Define:

Red	Excitation+
Black	Excitation-
Green	Signal+
White	Signal-
Shield	Connector Case if have