

String Displacement Sensor DSS-100

- String potentiometer style;
- Suitable for harsh environments such as crash test;
- Small size, easy install (mounting block supplied);
- Measurement range 100mm;
- Wire max. tension 9N, Acceleration up to 20g;
- Anti-Shock $\geq 100g$.



DSS-100 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.

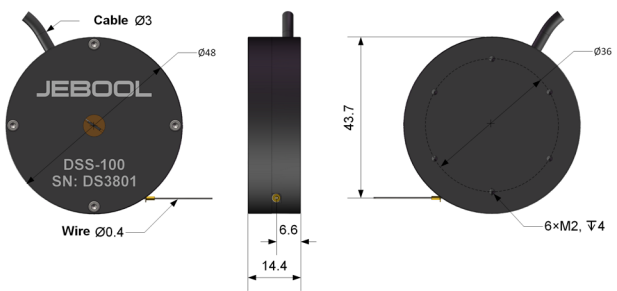
Specification (5V, 25°C)

Name	Unit	Value
Range	mm	100
Tension force	N	9 max.
Wire diameter	mm	0.4
Non-Linearity	%FS	± 1
Signal smoothness	%	0.1
Resistance	Ω	$5k\pm 10\%$
Wire acceleration	g	20 max.
Max. Excitation	VDC	15
Temp. factor	ppm/°C	± 300
Anti-Shock	g	>100
Insolation Res.	M Ω	>100
Opera. Temp.	°C	$-45\sim +105$
Mechanical Life	cycle	1million
Material	/	Al. Alloy
weight	grams	80
Dimension	mm	$\Phi 48\times 14.4$

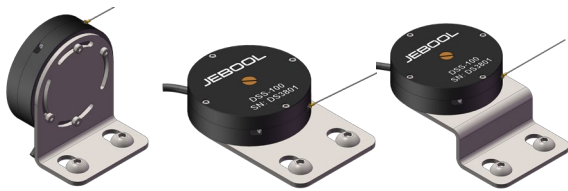
Wire length default 8m;

Including mounting fixture.

Dimension:



Mounting Fixtures:



Cable Define:

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