

## String Displacement Sensor DSS-35

- String potentiometer style;
- Suitable to vehicle crash test dummy;
- Small size, easy install (mounting block supplied);
- Measurement range 35mm;
- Wire max. tension 4.4N, Acceleration up to 70g;
- Anti-Shock $\geqslant$ 100g.



The displacement sensor DSS-35 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 knee displacement of car collision dummies, knee ligament stretching of car pedestrian protection legs, and status monitoring of aviation airborne equipment.

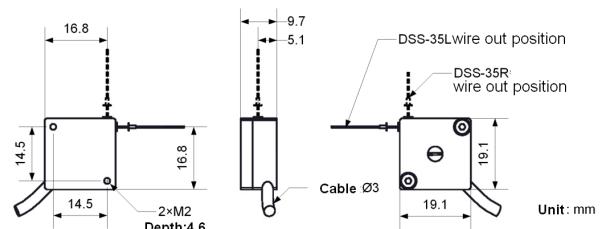
### Specification (5V, 25°C)

Name	Unit	Value
Range	mm	35
Tension force	N	4.4 max.
Wire diameter	mm	0.4
Non-Linearity	%FS	$\pm 1$
Signal smoothness	%	0.1
Resistance	$\Omega$	$5k\pm 10\%$
Wire acceleration	g	70 max.
Excitation	VDC	5~15
Temp. factor	ppm/ $^{\circ}$ C	$\pm 300$
Anti-Shock	g	$>100$
Insulation Res.	$M\Omega$	$>100$
Opera. Temp.	$^{\circ}$ C	-45~+105
Mechanical Life	cycle	1million
Material	/	Al. Alloy
weight	grams	15
Dimension	mm	19.1×19.1×9.7

Wire length default 0.5m;

Including mounting fixture.

### Dimension:



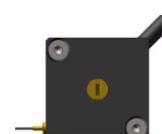
### Different Types are optional:



**DSS-35L**



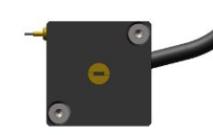
**DSS-35L**



**DSS-35R**



**DSS-35R**



**DSS-35U**



**DSS-35U**