

DATASHEET

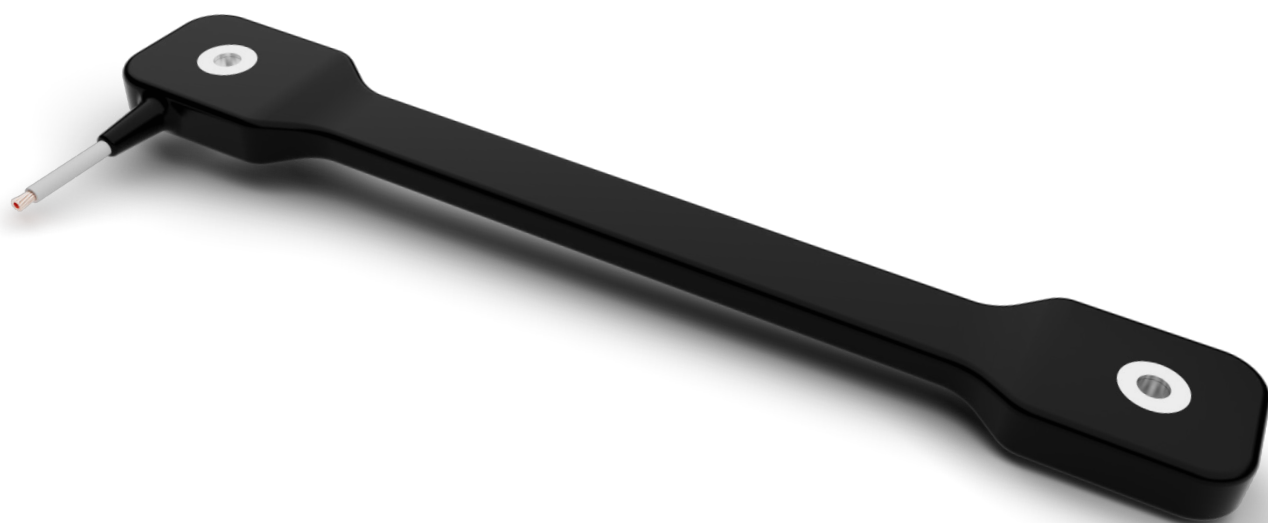
| DISPLACEMENT SENSORS FOR INDUSTRIAL APPLICATIONS

DS-Series



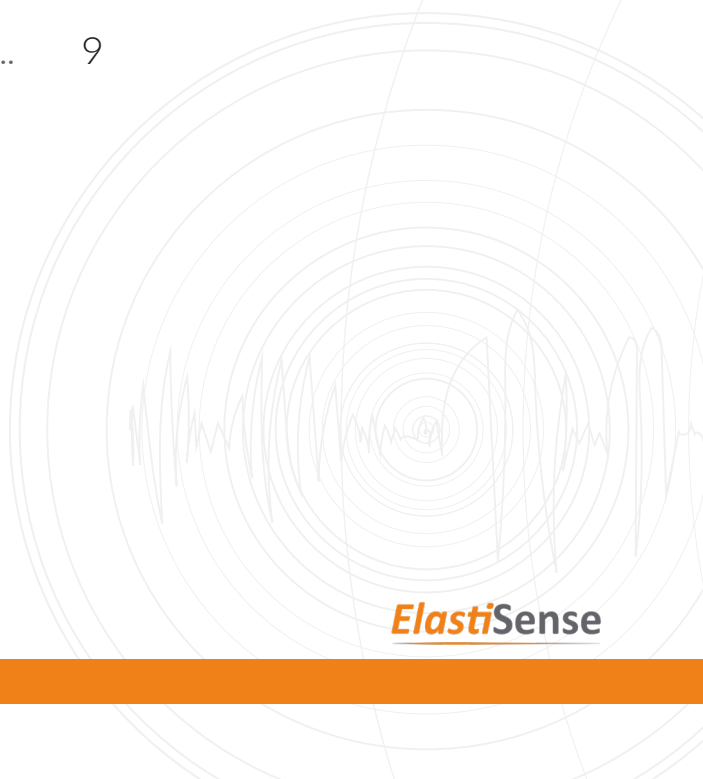
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| DS - Series Displacement Sensors

PRODUCT DESCRIPTION

Displacement sensing, especially in aggressive applications, can be a real challenge. The choice between non-contact sensors requiring a clean and predictable environment, and cylinder-based sensors being sensitive to vibration and misalignment, can make the choice difficult. The DS series sensor combines the robustness of non-contact sensors by being solid-state while enabling measurement in “dirty” and unpredictable applications.

Your installation, operation, maintenance effort and cost can be substantially reduced as there is no need for special mounting, protection or cleaning of the sensors. DS series sensors add value in a wide variety of applications, including those within structural health monitoring, factory automation and off road vehicles, to mention just a few.

INDUSTRIAL INTERNET OF THINGS

- Condition monitoring
- Predictive maintenance
- Damage prevention
- Feedback control

FEATURES AND OPTIONS

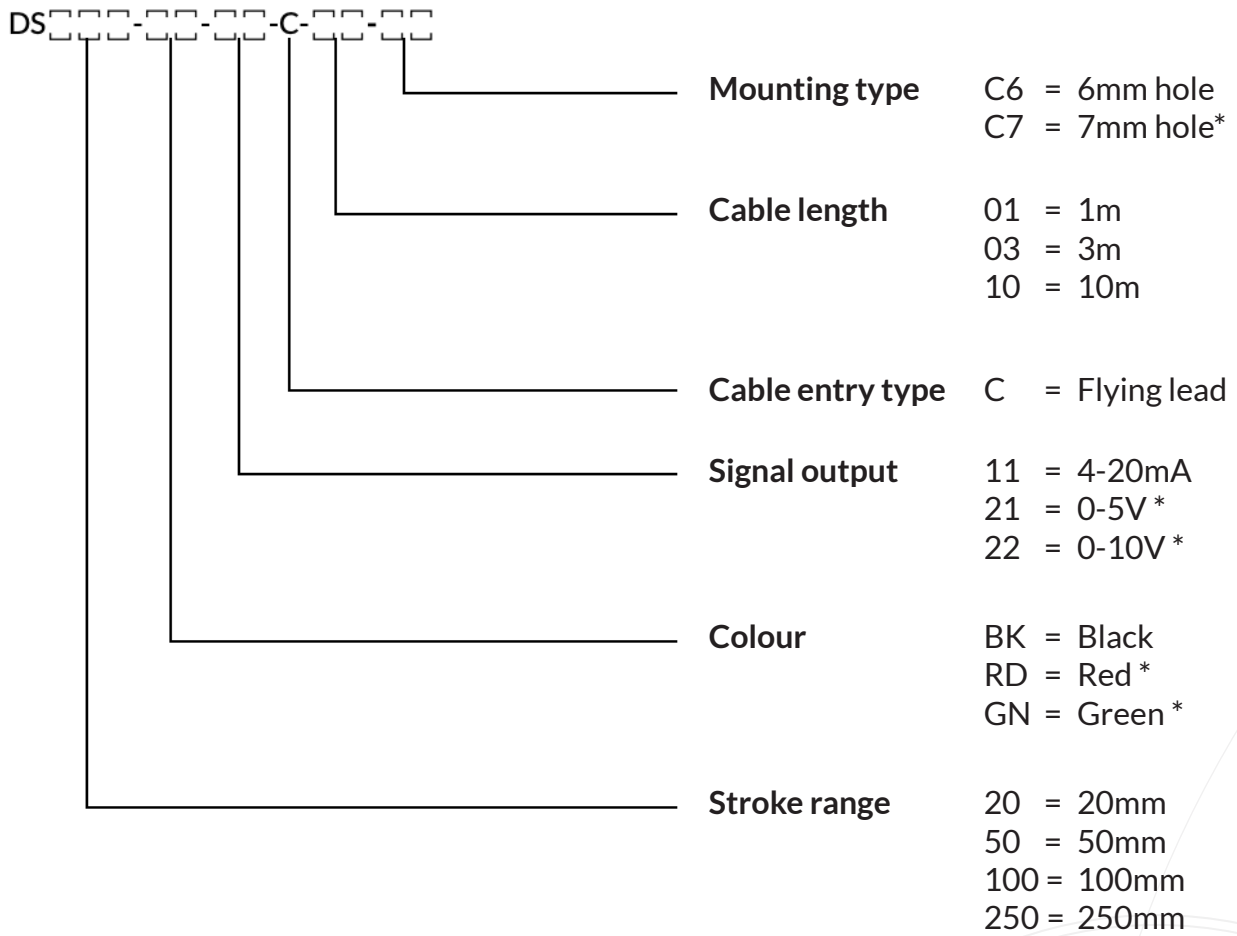
- Overstroke and misalignment tolerant
- Continuous encapsulation in high grade silicone rubber (IP68)
- Built-in environmental compensation
- Tolerates aggressive use
- Withstands harsh environments
- Weather (incl. UV) resistant coating
- No moving parts
- No maintenance
- Choice of signal outputs
- Multitude of customisation possibilities



SPECIFICATIONS

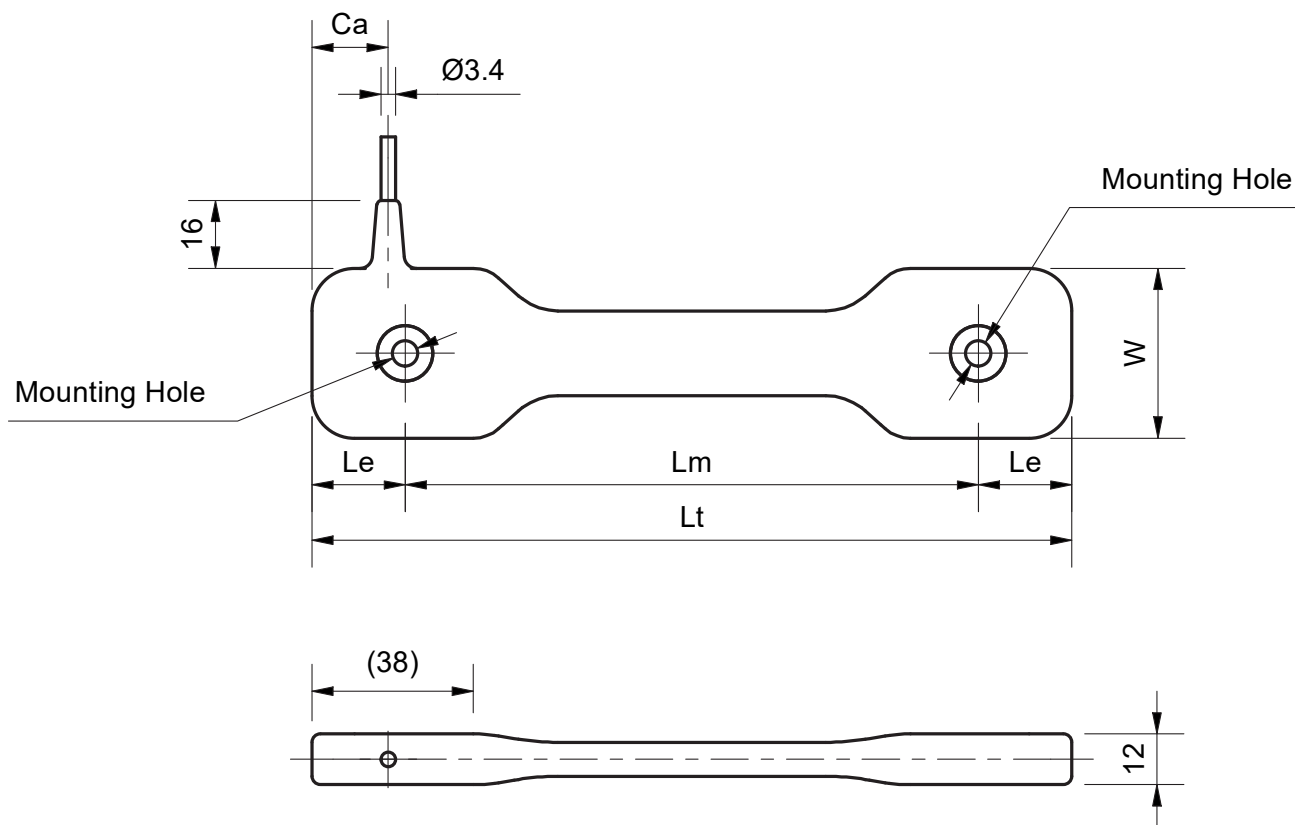
	DS20	DS50	DS100	DS250
Measurement range	20mm	50mm	100mm	250mm
Power supply	12 to 24V			
Output signal	4-20mA (standard), 0-5V, 0-10V			
Accuracy	0.5% F.S.			
Resolution	0.025% F.S.			
Sampling Rate	1000 samples/second			
Temperature Coefficient	<0.01% F.S. / °C			
Approx. force at max. displacement	120N	120N	120N	120N
Operating temperature	-40 to 85°C			
Protection rating	IP68 Equivalent			
Colour	Black (standard), Green, Red			
Approximate weight	76g	84g	97g	136g

PART NUMBER



* Made to order

PRODUCT DIMENSIONS



Model	L_t	L_m	L_e	W	Ca
DS20	131	87	22	40	18.5
DS50	179	135	22	40	18.5
DS100	260	220	20	36	16
DS250	504	460	22	40	18.5

All dimensions in mm.

ELECTRICAL CONNECTIONS

Colour	Signal
White	GND
Black	PS (12-24V)
Red	AOUT
Blue	AGND

TERMS OF USE

ElastiSense accepts no responsibility for possible errors or inaccuracies in catalogues, brochures, and other material. ElastiSense reserves the right to change its products without prior notice. ElastiSense cannot guarantee product availability and reserves the right to discontinue the sale

of any product. The user is responsible for determining the suitability of ElastiSense products for a specific application. All sales are subject to the 'Standard Terms of Sale and Delivery', available on the ElastiSense website.



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