

DATASHEET

# **DISPLACEMENT SENSORS FOR INDUSTRIAL APPLICATIONS**

DS-Series



**ElastiSense**

[elastisense.com](http://elastisense.com)

**DM-SENSORS**

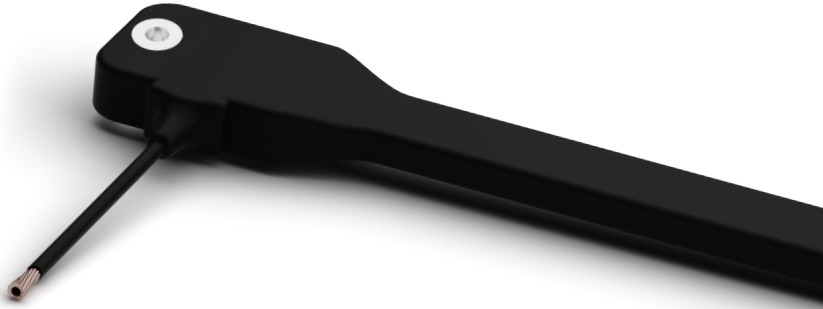
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# **CONTENTS**

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Product description	.....	3
Features and options	.....	4
Specifications	.....	5
Part number	.....	6
Product dimensions	.....	7
Electrical connections	.....	8
Terms of use	.....	9



# 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

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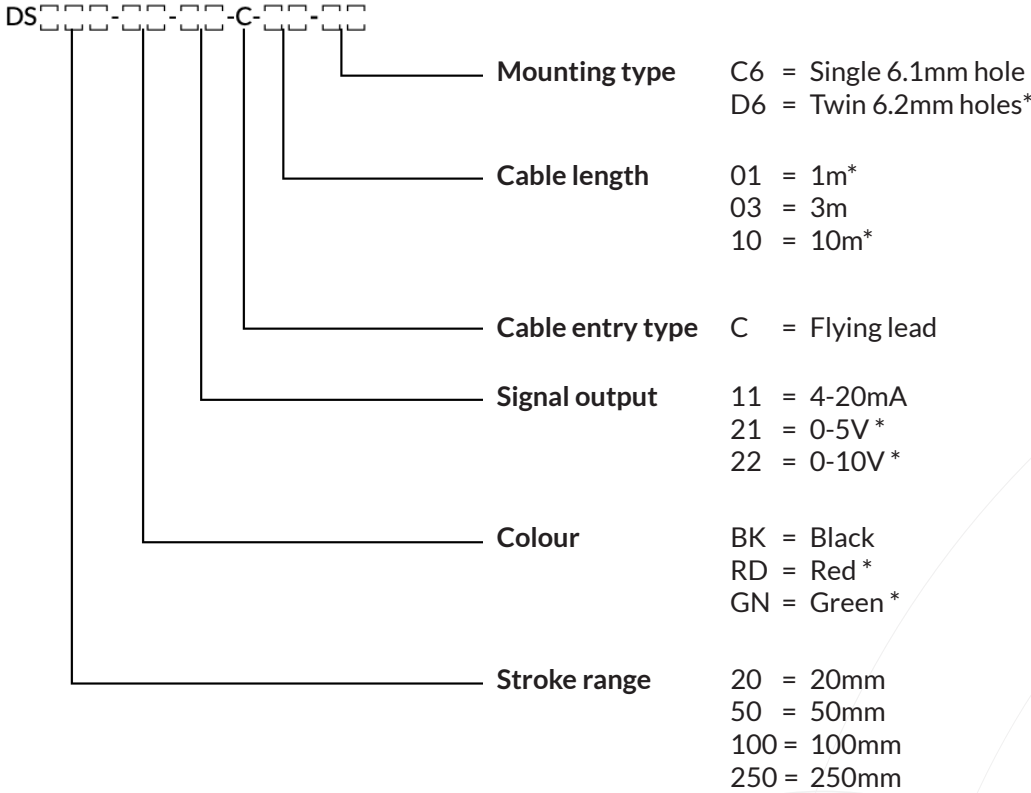
- Misalignment and overstroke tolerant
- Water-proof and submersible (IP68)
- Built-in environmental compensation
- Tolerates aggressive use
- Withstands harsh environments
- Weather (including UV) resistant coating
- No moving parts
- No maintenance
- Choice of signal outputs
- Multitude of customisation possibilities



# SPECIFICATIONS

	<b>DS20</b>	<b>DS50</b>	<b>DS100</b>	<b>DS250</b>
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.			
Output signal update rate	1000 updates/second			
Temperature Coefficient	<0.01% F.S. / °C			
Approx. force at max. displacement	120N			
Operating temperature	-40 to 85°C			
Protection rating	IP68 Equivalent			
Colour	Black (standard), Green, Red			
Approximate weight	76g	84g	97g	136g

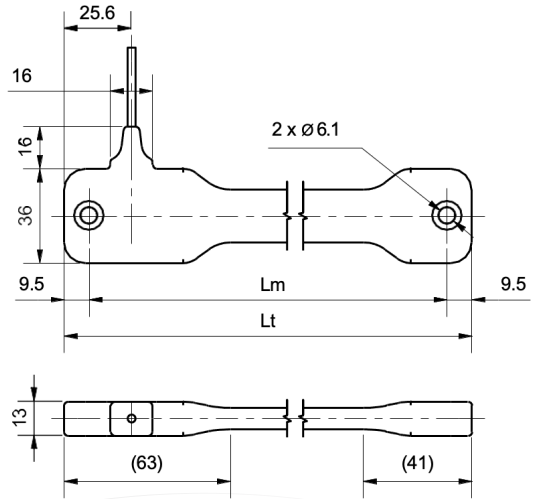
# PART NUMBER



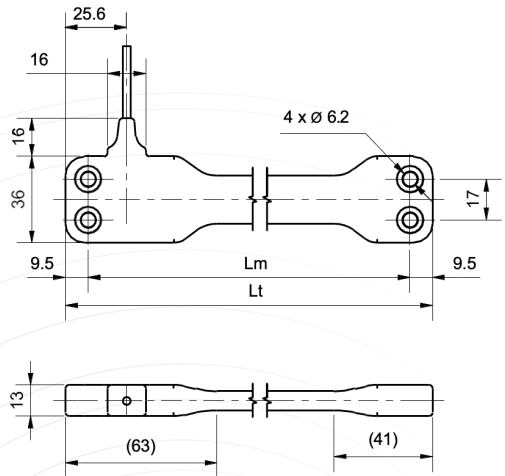
\* Made to order

# PRODUCT DIMENSIONS

## SINGLE HOLE TYPE



## TWIN HOLE TYPE



### ZERO STROKE INSTALLATION DIMENSIONS - All dimensions in mm.

Model	Lt	Lm
<b>DS20</b>	116	97
<b>DS50</b>	159	140

Model	Lt	Lm
<b>DS100</b>	244	225
<b>DS250</b>	474	455

# ELECTRICAL CONNECTIONS

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<b>Colour</b>	<b>Signal</b>
Black	Ground
Red	Power Supply (12-24V)
White	Analogue Output
Blue	Analogue Output Ground



# TERMS OF USE

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