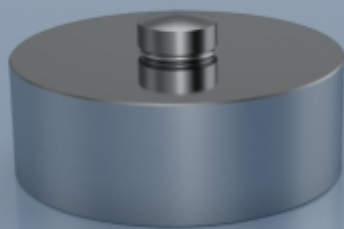




CDIT-1



CDIT-1 Stainless Steel Low Profile Compression Load Cell

Description

The CDIT-1 series of load cells has been designed for a wide range of force measurement and weighing applications where space is limited. The CDIT-1 is constructed from stainless steel and has a fully welded construction, offering a high level of corrosion resistance making it suitable for use in harsh environments.

Available in ranges covering 50kg to 5000kg, there are many applications ideally suited to the CDIT-1, including restricted height weighing applications, general force measurement and press calibration.

LCM Systems can provide the CDIT-1 on its own or combined with any of our instrumentation range, to offer a more complete package. Please consult our technical department for any advice required on suitable instrumentation solutions.

Specification

Rated load (kg)	50, 100, 250, 500, 1000, 2500, 3500, 5000	
Nominal sensitivity	2mV/V at rated load	
Sensitivity tolerance	$\pm 0.2\%$ of rated load	
Temperature effect on zero	$\pm 0.003\%$ per °C	
Temperature effect on sensitivity	$\pm 0.0025\%$ per °C	
Linearity	$\pm 0.2\%$ of rated load	
Hysteresis	$\pm 0.2\%$ of rated load	
Repeatability	$\pm 0.05\%$ of rated load	
Input resistance	400 Ω \pm 20 Ω	
Output resistance	350 Ω \pm 2 Ω	
Insulation resistance	>5G Ω	
Zero balance	$\pm 1\%$ of rated load	
Recommended supply voltage	10V (1-15V nominal, 18V maximum)	
Overload range	150%	
Breaking load	>300%	
Maximum transverse load	50%	
Maximum permissible dynamic load	50%	
Displacement at nominal load	~0.2mm	
Temperature nominal range	-10 to +40°C	
Service temperature	-20 to +70°C	
Storage temperature	-20 to +80°C	
Environmental protection level	IP67	
Connection type	3 metres PVC screened cable, via gland cable	
Wiring connections	+supply: Red	-supply: Black
	+signal: White	-signal: Yellow

Available Options

- TEDS option (when used with TR150 handheld display)

Features

- Ranges: 50 to 5000kg
- Low height/profile
- Stainless steel construction
- Environmentally sealed to IP67

Typical Applications

- Process measurement & control
- Automotive testing
- Low profile weighing systems

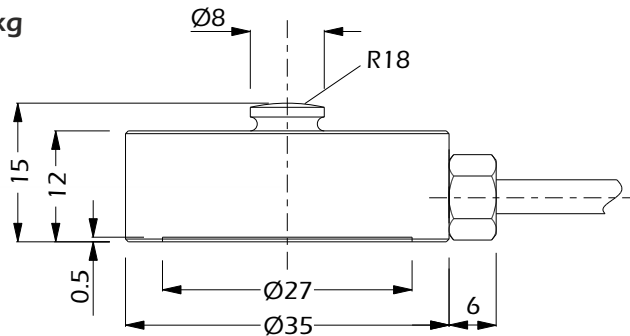
AVAILABLE TO BUY ONLINE

Visit our website www.lcmsystems.com
(In-stock items usually ship within 48 hours)

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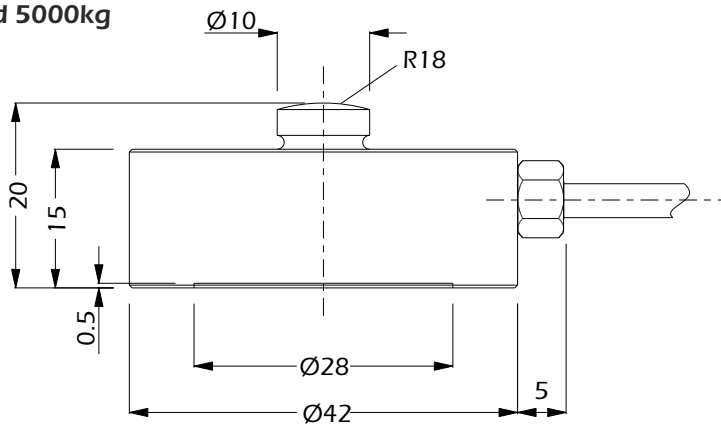
Dimensions

50kg to 2500kg

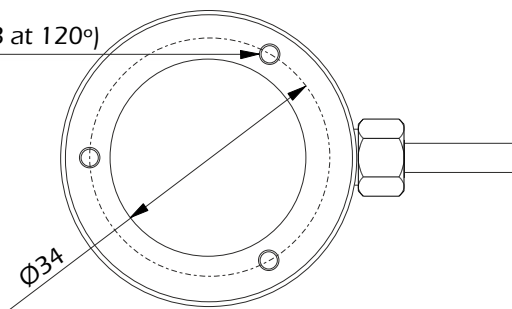


All dimensions are in mm

3500kg and 5000kg

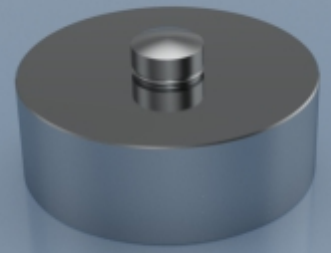


3x holes (M3 at 120°)



Rating (kg)	Part Number	Weight (g)	Resolution (kg)
50	CDIT-1-50	130	0.1
100	CDIT-1-100	130	0.1
250	CDIT-1-250	130	0.2
500	CDIT-1-500	130	0.5
1000	CDIT-1-1000	130	1
2500	CDIT-1-2500	130	2
3500	CDIT-1-3500	200	2
5000	CDIT-1-5T	200	5

Note: When paired with instrumentation, accuracy figures may become subject to system inaccuracies. Please refer to calibration certificate for actual performance.



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Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

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APPROVED

(unapproved if printed)