



Features

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





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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)

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, 5000Nominal sensitivity2mV/V at rated loadSensitivity tolerance $<\pm 0.2\%$ of rated loadTemperature effect on zero $\pm 0.003\%$ per °CTemperature effect on sensitivity $<\pm 0.0025\%$ per °CLinearity $<\pm 0.2\%$ of rated loadHysteresis $<\pm 0.2\%$ of rated loadRepeatability $<\pm 0.05\%$ of rated loadInput resistance $400\Omega \pm 20\Omega$
Sensitivity tolerance $\pm 0.2\%$ of rated loadTemperature effect on zero $\pm 0.003\%$ per °CTemperature effect on sensitivity $\pm 0.0025\%$ per °CLinearity $\pm 0.2\%$ of rated loadHysteresis $\pm 0.2\%$ of rated loadRepeatability $\pm 0.05\%$ of rated loadInput resistance $400\Omega \pm 20\Omega$
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Linearity<±0.2% of rated loadHysteresis<±0.2% of rated load
Hysteresis<±0.2% of rated loadRepeatability<±0.05% of rated load
Repeatability<±0.05% of rated loadInput resistance400Ω ±20Ω
Input resistance 400Ω ±20Ω
•
2502.420
Output resistance $350\Omega \pm 2\Omega$
Insulation resistance >5GΩ
Zero balance ≤±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)



TYPE: CDIT-1

CDIT-1 Stainless Steel Low Profile Compression Load Cell

Dimensions

50kg to 2500kg



All dimensions are in mm

Solutions in Load Cell Technology

3500kg and 5000kg



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



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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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(unapproved if printed)