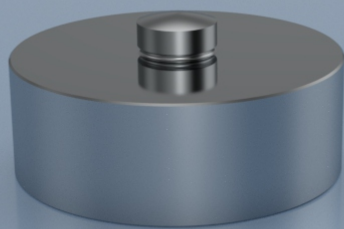




## CDIT-1



# 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	<math>\pm 0.2\%</math> of rated load	
Temperature effect on zero	$\pm 0.003\%$ per °C	
Temperature effect on sensitivity	$\pm 0.0025\%$ per °C	
Linearity	<math>\pm 0.2\%</math> of rated load	
Hysteresis	<math>\pm 0.2\%</math> of rated load	
Repeatability	<math>\pm 0.05\%</math> of rated load	
Input resistance	400 $\Omega$ $\pm$ 20 $\Omega$	
Output resistance	350 $\Omega$ $\pm$ 2 $\Omega$	
Insulation resistance	>5G $\Omega$	
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

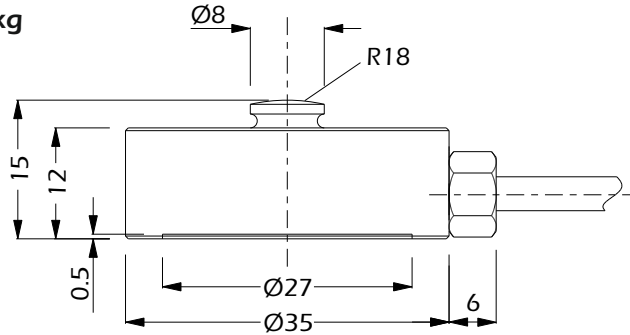
AVAILABLE TO BUY ONLINE

Visit our website [www.lcmsystems.com](http://www.lcmsystems.com)  
(In-stock items usually ship within 48 hours)

# CDIT-1 Stainless Steel Low Profile Compression Load Cell

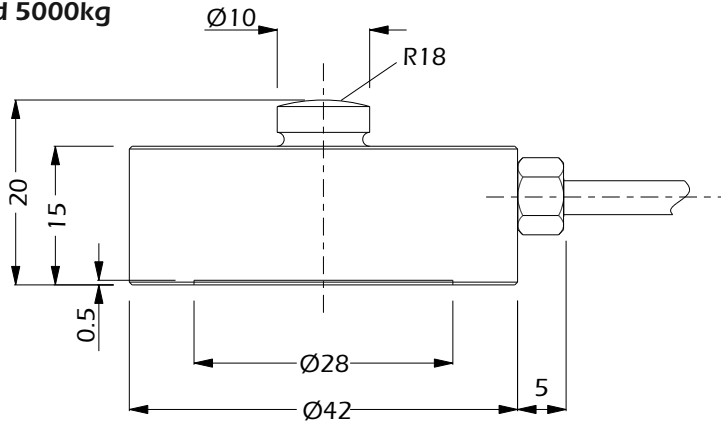
## Dimensions

50kg to 2500kg

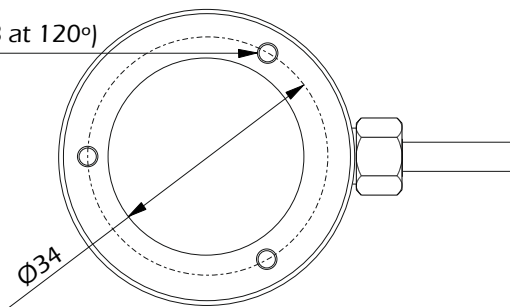


All dimensions are in mm

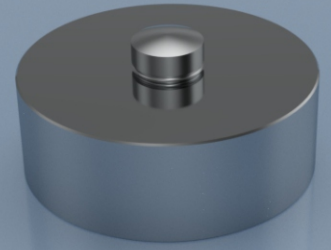
3500kg and 5000kg



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



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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

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