

# CDIT-4 Stainless Steel Low Profile Compression Load Cell

## Description

The CDIT-4 series of load cells has been designed for a wide range of force measurement and weighing applications where space is limited. The CDIT-4 is constructed from stainless steel, has a fully welded construction and are environmentally and hermetically sealed to IP68, offering a high level of corrosion resistance making it suitable for use in harsh environments. The product is ideally suited for hygienic and wash down weighing applications.

Available in ranges covering 500kg to 30te, The CDIT-4 can be supplied complete with a vessel/tank weighing assembly, which is designed to make installation easier and to provide a means of realising the best accuracy from the product when installed, by eliminating the effects for vessel/tank thermal expansion. More details on the assembly are available on a separate datasheet (CDIT-4-WMOUNT).

We offer a wide range of additional instrumentation products to further enhance the product within a complete system. For vessel weighing applications, there are several displays and signal conditioners that can be offered to provide a complete weighing solution.

## Specification

Rated load (te)	0.5, 1, 2, 5, 10, 20, 30	
Temperature effect on minimum dead load output	≤±0.004 of rated load/°C	
Temperature effect on sensitivity	≤±0.002% of rated load/°C	
Combined error	≤±0.25 % of rated load	
Creep error (30 minutes)	≤±0.06% of rated load	
Minimum dead load output return	±0.05% of rated load	
Rated output	2 ± 0.1mV/V	
Zero balance	≤±5 % of rated load	
Excitation voltage	5-15V	
Input resistance	366 ±10Ω	
Output resistance	351 ± 2Ω	
Insulation resistance (100V DC)	≥5000MΩ	
Safe load limit	200%	
Ultimate load	300%	
Compensated temperature range	-10 to +40°C	
Operating temperature range	-20 to +65°C	
Load cell material	Stainless steel 17-4PH	
Protection according to EN 60 529	IP68 (up to 2m water depth)	
Cable (500kg to 10te)	5m polyurethane shielded, 4 conductor cable	
Cable (20te to 30te)	10m polyurethane shielded, 4 conductor cable	
Electrical connexions	+ve supply: Green	-ve supply: Black
	+ve signal : White	-ve signal: Red
	shield: Yellow	

## Available Options

- Weighing module (see CDIT-4-WMOUNT data sheet)

## Features

- Ranges: 500kg to 30te
- Low height/profile
- Stainless steel construction with electro-polished finish
- Environmentally sealed to IP68 with complete laser welded hermetic sealing

## Typical Applications

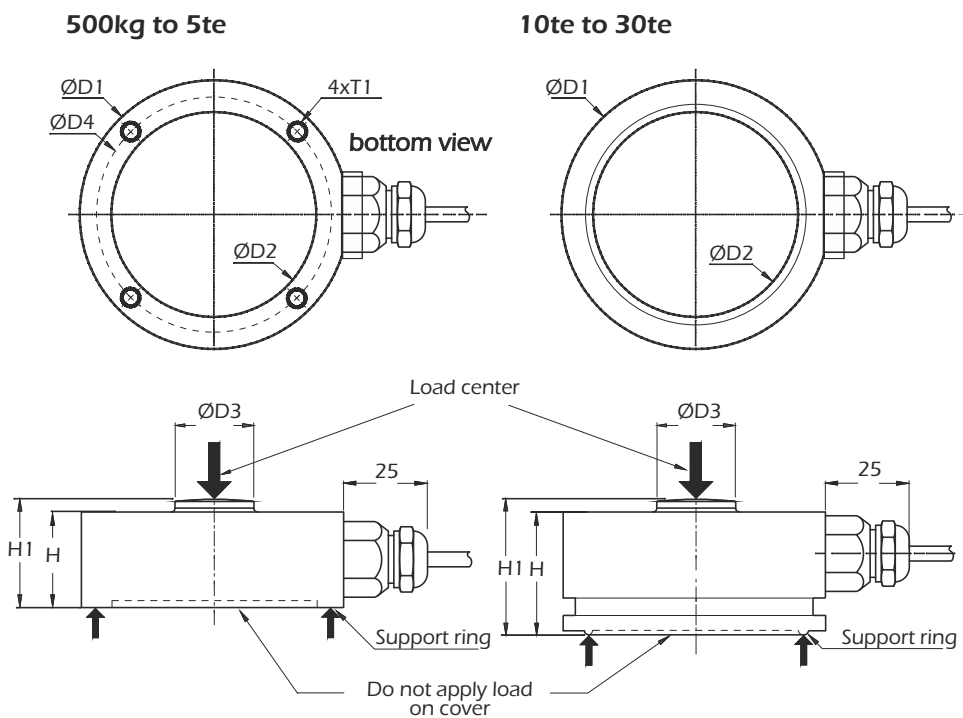
- Hopper, silo and tanks
- General force measurement
- Process weighing & control
- Low profile weighing systems

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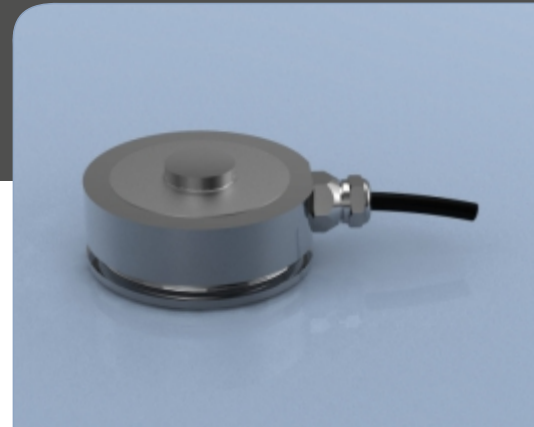
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## Dimensions



All dimensions are in mm

Rating	D1	D2	D3	D4	H	H1	T1	Resolution (kg)	Weight (kg)
500kg	80	62	16	70	29.7	32.5	M6 x 1 x 8 deep	0.05	1.0
1te	80	62	16	70	29.7	32.5	M6 x 1 x 8 deep	0.1	1.0
2te	80	62	16	70	29.7	32.5	M6 x 1 x 8 deep	0.2	1.0
5te	80	61	16	70	29.7	32.5	M6 x 1 x 8 deep	0.5	1.0
10te	95	75	29	-	35.5	42	-	2	1.5
20te to 30te	120	87.5	42.5	-	46.3	54	-	5	3.2



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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)