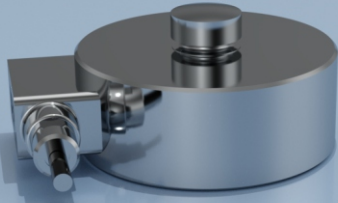




CDIT-3 Stainless Steel Low Profile Compression Load Cell



Features

- Ranges: 100kg to 200te
- High Stability
- Fully welded stainless steel construction
- Low height
- Environmentally sealed to IP68
- Accuracy $\leq \pm 0.023\%$



SCIGATE AUTOMATION (S) PTE LTD

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Typical Applications

- Vessel weighing
- Press force monitoring
- Centre of gravity systems

AVAILABLE TO BUY ONLINE

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

Description

The CDIT-3 series of load cells has been designed for a wide range of force measurement and weighing applications where space is limited. The CDIT-3 is constructed from stainless steel and has a fully welded construction, offering a high level of corrosion resistance for use in harsh environments, with environmental sealing to IP68.

Available in ranges covering 0-100kg to 0-200te, there are many applications ideally suited to the CDIT-3, including restricted height weighing applications, general force measurement and press calibration.

LCM Systems can provide the CDIT-3 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/tonne)	100, 250, 500, 1000kg 2.5, 5, 7.5, 10, 20, 30, 50, 75, 100, 150, 200te
Accuracy Class	OIML R60 C2
Legal Divisions	2000
Minimum Verification Interval	$E_{max} / 10,000$
Combined error	$\leq \pm 0.023\%$ FSO
Non-repeatability	$\leq \pm 0.01\%$ FSO
Zero return over 30 minutes	$\leq \pm 0.026\%$ FSO
Creep at nominal load	$\leq \pm 0.028\%$ over 30 mins / $\leq \pm 0.008\%$ over 20 & 30 mins
Temperature effect on zero	$\leq \pm 0.0024\%$ per °C
Temperature effect on sensitivity	$\leq \pm 0.0017\%$ per °C
Nominal sensitivity	2mV/V
Calibration tolerance	$\leq \pm 0.1\%$ FSO
Input resistance	700Ω $\pm 2\Omega$
Output resistance	700Ω $\pm 2\Omega$
Insulation resistance	>5GΩ @ 50VDC
Zero balance	$\leq \pm 1\%$ FSO
Recommended supply voltage	10V (1-15V nominal, 18V maximum)
Minimum load	0%
Service load	120%
Maximum permissible load	150%
Breaking load	>300%
Maximum transverse load	50%
Maximum permissible dynamic load	50%
Displacement at nominal load	100kg - 10te 20te - 30te 50te - 100te 150te - 200te ~0.06mm ~0.16mm ~0.23mm ~0.36mm
Temperature nominal range	-10 to +40°C
Service temperature	-20 to +70°C
Storage temperature	-20 to +80°C
ATEX certification details	II 2G Ex ib IIC T5 Gb II 2G Ex ib IIIC T115°C Db
Environmental protection level	IP68 (100 hours in 1 metre of water)
Electrical connections	5 metres PVC cable via special cable gland
Wiring connections	+ve supply: Red -ve supply: Black +ve signal: White -ve signal: Yellow

Available Options

- Hazardous Area certified - Intrinsically Safe (Ex i)
- TEDS option when used with TR150 handheld display (Not available with Hazardous Area versions)
- Load cap
- Weighing assembly (up to 100te). See CDIT-3-WMOUNT data sheet
- Mounting plate (up to 10te)
- Integral connector (M12 or MIL spec) (Not available with Hazardous Area versions)

ATEX approval pending



Technical drawing of the 1000 Series Ball Valve showing front and top views with dimensions.

Front View Dimensions:

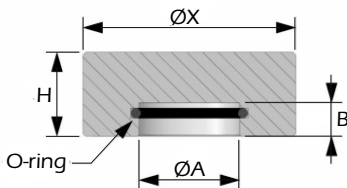
- $\varnothing E$: Top flange diameter
- R : Top flange radius
- H : Total height
- B : Height of top flange
- A : Height of main body
- C : Height of ball
- M : Distance from center to ball
- $\varnothing G$: Ball diameter
- $\varnothing D$: Main body diameter
- I : Total length
- T : Thickness of side flange
- U : Height of side flange

Top View Dimensions:

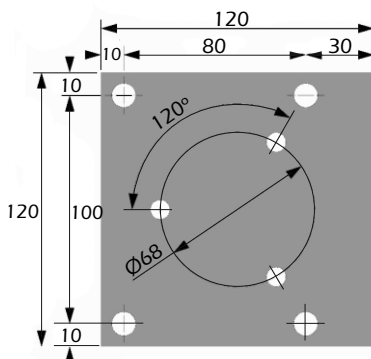
- 120° : Angle between ball positions
- $\varnothing F$: Outer diameter of top flange
- $\varnothing S$: Inner diameter of top flange
- 40 : Distance from center to side flange
- 10 : Distance from center to ball
- 13 : Distance from center to side flange
- $G1/4"$: Thread size of side flange

Fixing Screws	100kg to 30te	50te to 200te
Diameter	M8	M16
Resistance Class	12.9	12.9
Tightening Torque	80Nm	230Nm

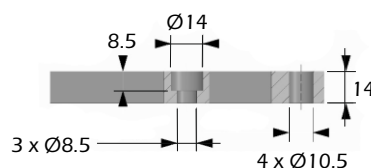
Optional Loading Cap



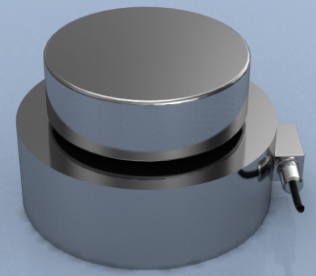
Optional Mounting Plate



NOTE:- Optional mounting plate is only available for load cells rated between 100kg and 10te



ATEX approval pending



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(unapproved if printed)