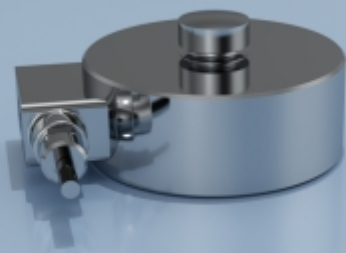




CDIT-3



CDIT-3 Stainless Steel Low Profile Compression Load Cell

Description

CDIT-3 시리즈 로드셀은 공간이 제한된 다양한 힘 측정 및 계량 어플리케이션에 적합하도록 설계되었습니다. CDIT-3는 스테인리스 스틸 소재로 제작되었으며 완전 용접 구조로 열악한 환경에서도 높은 내식성을 제공하며, IP68 등급의 환경 보호 등급을 갖추고 있습니다.

CDIT-3는 0~100kg에서 0~200kg까지의 범위에서 사용 가능하며, 높이 제한 계량 애플리케이션, 일반적인 힘 측정 및 프레스 교정을 포함하여 다양한 애플리케이션에 이상적입니다.

LCM Systems는 CDIT-3를 단독으로 제공하거나 당사의 계측기 제품군과 결합하여 더욱 완벽한 패키지를 제공할 수 있습니다. 적합한 계측 솔루션에 대한 자세한 내용은 기술 부서에 문의하십시오.

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	$\leq \pm 0.023\% \text{ FSO}$
Non-repeatability	$\leq \pm 0.01\% \text{ FSO}$
Zero return over 30 minutes	$\leq \pm 0.026\% \text{ FSO}$
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	$\leq \pm 0.1\% \text{ FSO}$
Input resistance	700Ω ±2Ω
Output resistance	700Ω ±2Ω
Insulation resistance	>5GΩ @ 50VDC
Zero balance	$\leq \pm 1\% \text{ FSO}$
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

Features

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

Typical Applications

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

Available Options

- 위험 지역 인증 - 본질 안전(Ex i)
- TR150 핸드헬드 디스플레이와 함께 사용 시 TEDS 옵션 제공 (위험 지역 버전에는 제공되지 않음)
- 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)

Technical drawing of the 1000 Series End Feed Chuck, showing side and top views with dimensions.

Side 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 base
- M : Distance from base center to clamping screw center
- $\varnothing G$: Distance between clamping screw centers
- $\varnothing D$: Main body diameter
- I : Total length
- T : Distance from main body end to clamping screw center
- U : Height of clamping screw

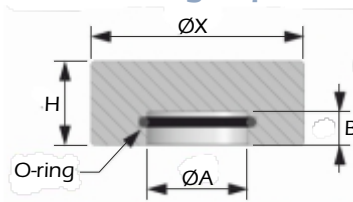
Top View Dimensions:

- 120° : Angle between clamping screw centers
- $\varnothing F$: Outer diameter of clamping ring
- $\varnothing S$: Inner diameter of clamping ring
- 40: Distance from main body center to clamping screw center
- 10: Distance from main body center to clamping screw center (alternative measurement)
- 13: Distance from main body center to clamping screw center (alternative measurement)
- $G1/4"$: Thread specification of clamping screw

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

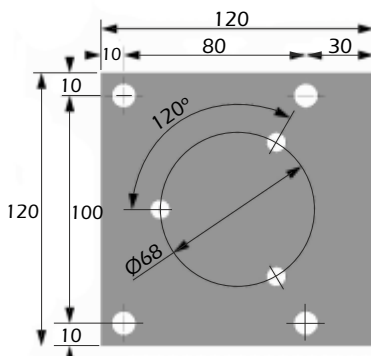
Rating	A	B	C	ØD	ØE	ØF	ØG	H	I	M	R	ØS	T	U	Weight (kg)
100kg - 10te	32	12	11	82	22	68	52.3	44	102	3xM8	50	60	0.3	6	1.3
20te - 30te	50	14	12	126	35	90	77.3	64	148	3xM8	160	93	0.5	15	3.4
50te - 100te	60	20	20	165	60	130	92.3	80	188	4xM16	300	115	1	17	9.4
150 - 200te	80	30	20	200	80	152	107	110	223	4xM16	300	128	1	23	18.2

Optional Loading Cap

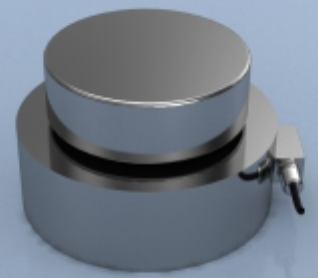
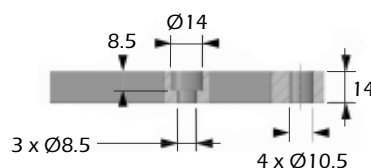


Rating	A	ØX	ØA	B	H
100kg to 10te	59	57	23	9	24
20te to 30te	82	76	36	12	30
50te to 100te	106	126	61	12	38
150te to 200te	157	128	81	21	68

Optional Mounting Plate



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



(unapproved if printed)