



**APPLIED MEASUREMENTS LTD.**  
Transducer Specialists...

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<https://appmeas.co.uk>

## CCDHA High Accuracy Column/Canister Load Cell

### **Key Features:**

- Capacities 2 tonnes to 1000 tonnes
- $<\pm 0.1\%$  Accuracy
- Sealed to IP65
- Robust Construction
- Submersible Version Available
- Competitively Priced
- 3 Year Warranty

*High accuracy column type compression load/force cell*



The CCDHA 0.1% accuracy series of column compression load cells are designed for use as reference standards for the calibration of other load cells or in high capacity weighing applications, where precise measurement and high accuracy is of utmost performance. Their simple column design and sealed construction assures excellent resistance in the most arduous conditions.

These high accuracy load cells have the option of submersible versions and models with on-board signal conditioning. The CCDHA high accuracy load cells can be supplied with a BS EN ISO 376 calibration certificate issued by a UKAS laboratory if required.

### **Options:**

- Fully Submersible IP67 or IP68 Rated
- Other Ranges Available on Request
- Equivalents to Other Manufacturers
- Full Range of Mounting Options Inc.: Custom/Standard Loading Caps, Custom Mounting Bases
- Calibration to BS EN ISO376
- Versions Available with Integral Signal Amplifiers
- Shunt Calibration
- Different Cable Lengths
- Internal Signal Amplifiers
- TEDS (Transducer Electronic Data Sheet)
- TEDS Allows Plug & Play with TEDS Enabled Instrumentation.
- USB Version (via DSC-USB)
- Vacuum Application Version
- Single or Multi-Channel PC-Based Monitoring & Data Logging System
- Wireless Version (via T24 instrumentation)

### **Applications:**






- Reference Standards
- High Capacity Weighing Applications
- Silo Weighing
- Pile Force Measurement
- Heavy Duty Jack Levelling Systems
- Press Calibration
- Centre of Gravity (CoG) Measurement Systems
- High Capacity Multi-Point Weighing Systems



## Specification:

Rated Capacity (RC)	tonnes	0-2, 0-5, 0-10, 0-25, 0-50, 0-100, 0-200, 0-300, 0-500, 0-1000
Operating Modes	Compression Only	
Sensitivity (RO)	mV/V	2.0 nominal
Zero Balance/Offset	±%/Rated Output	2.0
Non-Linearity	±%/Rated Output	<0.10
Hysteresis	±%/Rated Output	<0.10
Repeatability	±%/Rated Output	<0.04
Total Error	±%/Rated Output	<0.10
Zero Return	±%/Applied Load	<0.040
Temperature Effect on Zero	±%/Applied Load / °C	0.005
Temperature Effect on Output	±%/Applied Load/ °C	0.005
Bridge Resistance	Ohms (nominal)	700 (50te and below), 1400 (100te and above)
Insulation Resistance	Megahms @ 500Vdc	>500
Excitation Voltage	Volts AC or DC	10 recommended (2-15 acceptable)
Operating Temperature Range	°C	-20 to +70
Compensated Temperature Range	°C	+10 to +50
Storage Temperature Range	°C	-20 to +70
Safe Overload	% of Rated Capacity	150
Ultimate Overload	% of Rated Capacity	250
Deflection @ Rated Capacity		See dimensions table
IP Rating (Environmental Protection)		IP65 (IP68 available)
Weight (exc cable)		See dimension table
Fatigue Life		10 <sup>8</sup> cycles typical (10 <sup>9</sup> cycles on fatigue-rated version)
Cable length	metres	4
Cable type		4-core screened, PUR sheath, Ø5 nominal
Construction		Stainless Steel
Electrical Connection		Cable gland (25te and below)
		6-pin bayonet-lock connector inc. mating cable assembly (50te and above)
Resolution		1 part in 250,000 (with appropriate instrumentation)

## Wiring Diagram:

Wire	Designation
 Red	+ve excitation
 Blue	-ve excitation
 Green	+ve signal
 Yellow	-ve signal
 Screen	To ground - not connected to load cell body



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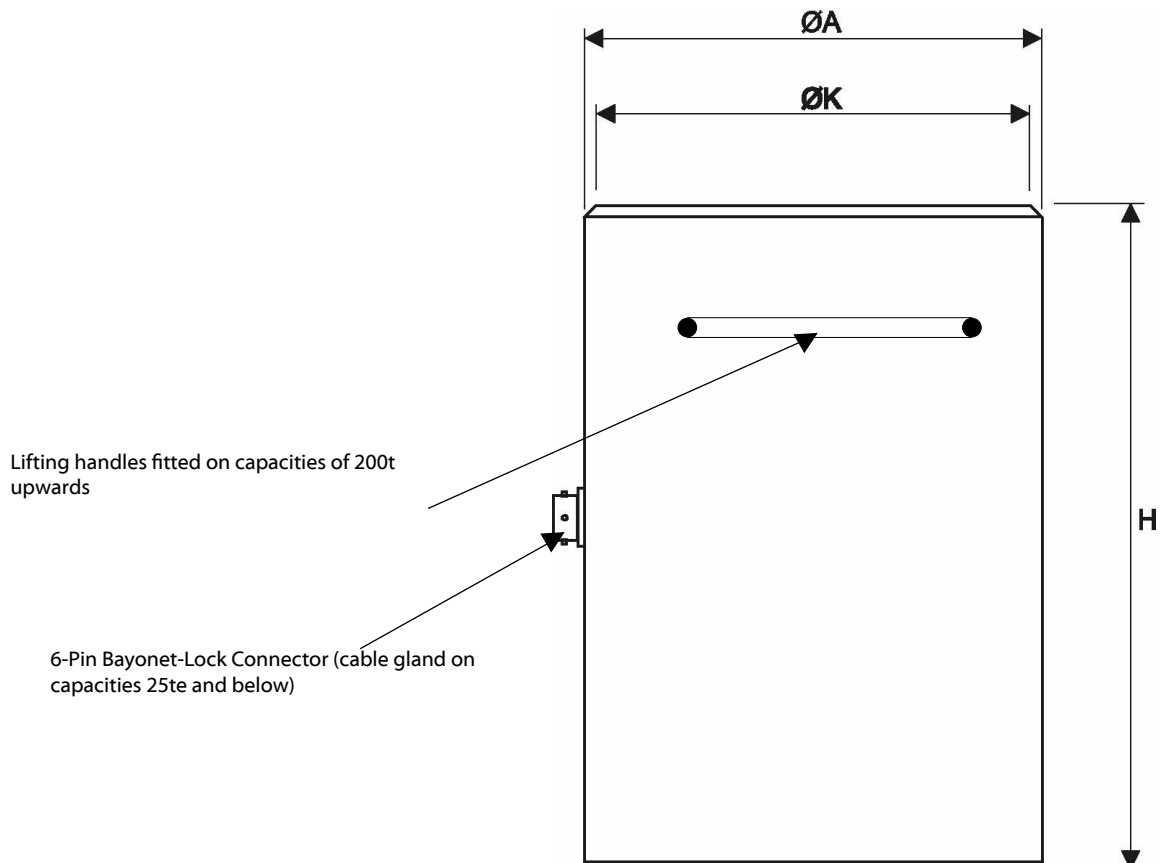
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## Dimensions:

Capacity (t)	H	ØA	ØK	Deflection @ Rated Capacity (nominal)	Weight (kg)
0-2	52	28	19	0.1	0.3
0-5	52	28	19	0.1	0.3
0-10	100	45	36	0.2	1.3
0-25	100	45	36	0.2	1.3
0-50	185	70	58	0.35	6.5
0-100	185	100	88	0.35	12
0-200	300	127	113	0.51	30
0-300	325	145	143	0.55	43
0-500	420	178	166	0.72	84
0-1000	595	300	285	1.01	330





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## Ordering Codes:

Core Product	Capacity (inc Engineering Units)	Cable Length (m)	Specials Code	Example Result
CCDHA	2t	004	000	CCDHA-2t-004-000
CCDHA	5t	004	000	CCDHA-5t-004-000
CCDHA	10t	004	000	CCDHA-10t-004-000
CCDHA	25t	004	000	CCDHA-25t-004-000
CCDHA	50t	004	000	CCDHA-50t-004-000
CCDHA	100t	004	000	CCDHA-100t-004-000
CCDHA	200t	004	000	CCDHA-200t-004-000
CCDHA	300t	004	000	CCDHA-300t-004-000
CCDHA	500t	004	000	CCDHA-500t-004-000
CCDHA	1000t	004	000	CCDHA-1000t-004-000

## Associated Products:



[TR150 Handheld Indicator](#)



[T24 Wireless Telemetry Range](#)



[Intuitive4-L Panel-Mount Indicator](#)



[DSC-USB USB Signal Digitiser](#)



[ICA Miniature Strain Gauge Amplifier](#)



[SGA Signal Conditioner/Amplifier](#)