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# CC1 / CC1B compression load cell



## product description

The type CC1 & CC1B is a stainless steel compression type load cell with complete hermetic sealing, commonly used as a POC/polished rod load cell within the oil pumping industry. Both are designed to withstand harsh industrial environments. Outputs include mV/V and 4-20mA with various cable connector options available. The range services capacity at 30 klb & 50 klb.

## applications

Pump monitoring systems (POC / polished rod load cell).

## accessories

Compatible range of electronics

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Various interconnecting cables

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Spherical washers

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## key features

Capacity of 30 klb (13.6 t) & 50 klb (22.7 t)

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Stainless steel construction

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Environmental Protection IP68 with complete hermetic sealing

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Traceable calibration in accordance with NIST (National Institute of Standards and Technology)

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CC1 - mV/V output with standard 6-pin MOLEX connector

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CC1B - 4-20mA output with optional Amphenol Connector Type MIL-DTL-5015 type connector

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RoHS compliant



OIML valid for standard CC1 variant only. Not yet available for CC1B.



## specifications

Maximum capacity ( $E_{max}$ )	klb	30	50
Metric equivalents (1 klb=0.45359 t)	t	13.6	22.7
Packed weight	Kg	2.45	2.54
Temperature effect on zero output ( $TC_0$ )	%*RO/°C	$\leq \pm 0.027$ ( $\leq \pm 0.0015$ %*RO/°F)	
Temperature effect on sensitivity ( $TC_{RO}$ )	%*RO/°C	$\leq \pm 0.036$ ( $\leq \pm 0.002$ %*RO/°F)	
Non-linearity	%*RO	$\leq \pm 0.05$	
Hysteresis	%*RO	$\leq \pm 0.05$	
Repeatability	%*RO	$\leq \pm 0.02$	
Insulation resistance (100 V DC)	M $\Omega$	$\geq 500$	
Zero balance	%*RO	$\leq \pm 1$	
Input resistance ( $R_{LC}$ )	$\Omega$	800 $\pm$ 50	
Output resistance ( $R_{out}$ )	$\Omega$	700 $\pm$ 0.5%	
Safe load limit ( $E_{lim}$ )	%* $E_{max}$	200	
Compensated temperature range	°C	-25...+65 (-14...+150 °F)	
Operating temperature range	°C	-55...+80 (-70...+190 °F)	
Load cell material		Stainless steel 17-4 PH (1.4548)	
Sealing		Complete hermetic sealing; cable entry sealed by glass to metal header	
Protection according EN 60 529		IP68 (up to 2 m water depth) / IP69K	

### CC1 Specific Specifications

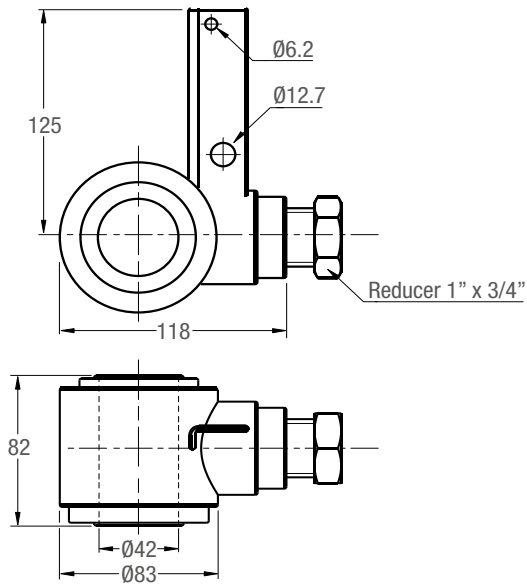
Rated output (RO)	mV/V	2 $\pm$ 0.5%
Excitation voltage	V	5...15

### CC1B Specific Specifications

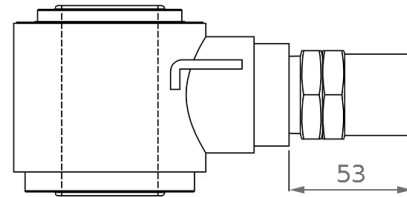
Rated output (RO)	mA	4-20
Supply voltage	V	15 - 24



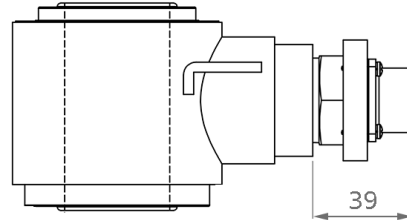
## product dimensions (mm)



MOLEX 6-pin male connector

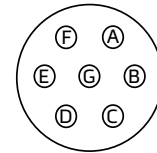
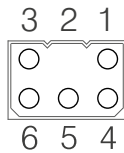


Amphenol Connector Type MIL-DTL-5015



## wiring

As standard the CC1 & CC1B are provided with a MOLEX 6-pin male connector and a threaded connector shell. The CC1B is available with the Amphenol Connector Type MIL-DTL-5015.



Connector pin	Function CC1	Function CC1B
1	- Excitation	Output / TX -
2	Not connected	Not connected
3	-Signal	Supply / TX +
4	+ Excitation	Not connected
5	Ground	Shield
6	+ Signal	Not connected

Connector pin	Function CC1B
A	Not connected
B	Shield
C	Not connected
D	Output / TX -
E	Not connected
F	Supply / TX +
G	Not connected

Specifications and dimensions are subject to change without notice.