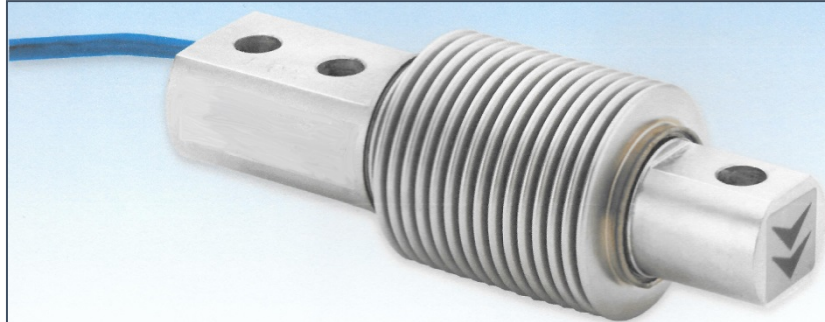




Procon Engineering

(A Division of National Oilwell Varco UK Limited)



Type LP20 cantilever beam load cell for harsh industrial environments Capacities 5kg to 500kg

IP68/69K Protection

Hermetically sealed, fully welded construction

Available in high temperature version

Available with ATEX certification

Stainless steel load sensor

3000 divisions OIML R60 Class C

Option: 6000 divisions OIML R60 Class C

4 wire option available according to order

This fully welded stainless steel bending beam load cell is hermetically sealed to IP68 /IP69K and can be used in the harshest industrial environments. It is suitable for weighing platforms, bag fillers, belt weighers and tank weighing in the food processing, chemical, pharmaceutical and general bulk handling industries.

OIML C3 or C6 approved versions are available. A 6 wire cable (with sense wires) is supplied as standard.

LP20 load cells are available with ATEX certification for all gas and dust zones. ATEX certification for dust zones 20, 21 and 22 does not require safety barriers, saving substantial cost.

For applications in aggressive environments where stress corrosion or acid attack is an issue, a special parylene coating can be specified as an option. High temperature variants for continuous operation in environments up to 150°C are also available.

All Procon Engineering load cells come with a 3 year warranty.



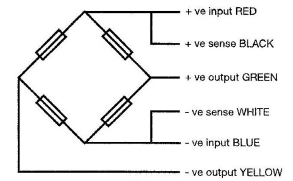
LP20 cantilever beam load cell

Technical Specification Sheet

ATEX Certification

Code	Temperature Class	Parameters	Application
II 1 GD Ex ia II CT4.T6 Ga IP68 T85°C EX ia IIIICT135°C T85°C Da EX ta IIIC T85°C Da	T4	Pi = 2.50W	Gas zones 0, 1, 2 with safety barriers
	T5	Pi = 2.50W	
	T6	Pi = 1.69W	
			Dust Zones 20, 21, 22 without safety barriers

6 Wire Connection (C3 or C6)

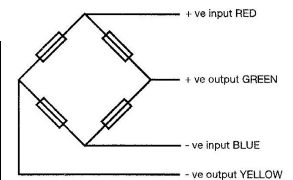


LP20 Load Cell

Load Cell Specification		Units	
Accuracy Class	3000*	6000	n. OIML
Load Cell Capacity (E_{max})	5, 10, 20, 30, 50, 75, 100, 150, 200, 50, 300, 500	50, 75, 100, 150, 200, 250	kg
Rated Output (S_n)	2		mV/V \pm 0.1 % **
Combined Error	$< \pm 0.017$	$< \pm 0.008$	% S_n
Non-repeatability	$< \pm 0.015$	$< \pm 0.01$	% S_n
Minimum load cell verification interval (V_{min}) = E_{min}/Y	$E_{max}/10000$	$E_{max}/18000$	kg
Creep (30 minutes)	$< \pm 0.016$	$< \pm 0.008$	% S_n
Temperature Effect on Zero Balance	$< \pm 0.002$	$< \pm 0.001$	% $S_n / ^\circ C$
Temperature Effect on Span	$< \pm 0.0012$	$< \pm 0.0006$	% $S_n / ^\circ C$
Compensated Temperature Range	- 10 to + 40		$^\circ C$
Operating Temperature Range	- 30 to + 70		$^\circ C$
Safe Overload	200		% E_{max}
Ultimate Overload	300		% E_{max}
Zero Balance	$< \pm 2$		% S_n
Input Resistance	400		$\Omega \pm 20$
Output Resistance	350		$\Omega \pm 3$
Insulation Resistance	> 5000		M Ω @ 100V
Recommended Supply Voltage	5 -15		V
Maximum Supply Voltage	15		V
Environmental Protection	IP68 / IP69K		
Maximum Deflection at E_{max}	0.2 – 0.4		mm
Cable Length	3		M
Cable Material	Polyurethane		
Nominal Shipping Weight	0.5		Kg

Procon Engineering's load cells are supplied with a 3 year warranty

4 Wire Connection (C3 only) – available on request



Electrical Connections

Via 6 wire, 5.7mm diameter screened polyurethane cable. C3 version is available with 4 wire cable on request.
Screen not connected electronically to load cell

Construction

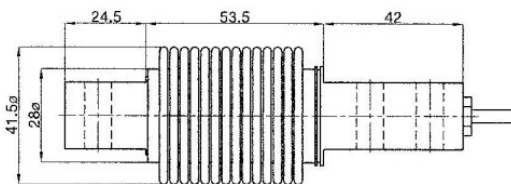
Load cell manufactured from stainless steel

Mounting Options

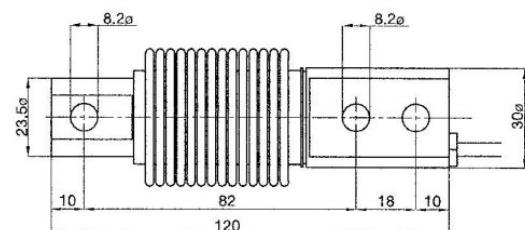
- Stainless steel baseplate
- Anti-vibration assembly
- LeverMount® Lite mounting accessory
- Tension accessory

OIML C3 (300 division) approval from 10 – 300kg

** For 5 – 20kg capacity range, rated output (S_n) tolerance is $\pm 0.2\%$



All dimensions in mm



Procon Engineering's policy is one of continuous product enhancement.

We therefore reserve the right to incorporate technical modifications without prior notification. E&OE.

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