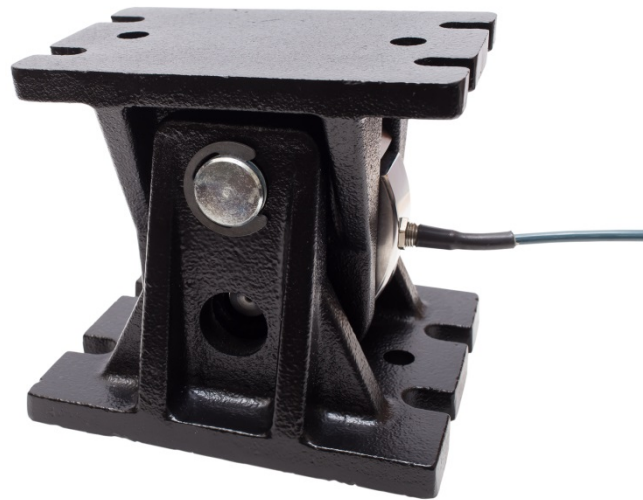




# Procon Engineering

(A Division of National Oilwell Varco UK Limited)



## Type LP95 Folded Shear Beam Weighing Assembly for high accuracy applications

Capacities 2000kg to 20000kg

Fully welded and hermetically sealed construction to IP68/IP69K

OIML C3 (3000 divisions) approval

Stainless steel load sensor

Available with ATEX certification (see table overleaf)

Tough and durable painted mounting accessory with stainless steel option

Parylene coating and high temperature options up to 150°C

Ideal in mixer and vibrating applications

Integral lift-off prevention

The LP95 weighing assembly comprises a stainless steel high accuracy load cell, complete with a tough mounting accessory in painted alloy steel (optionally stainless steel up to 10000Kg). Although the assembly is used in compression, the cell is mounted in a unique pendulum configuration and loaded in tension. This ensures that the load vector is always maintained through the central axis of the load cell, even when the assembly is subjected to considerable movement or misalignment.

The LP95 is most suitable for high accuracy applications where movement or vibration is present, e.g. mixers, agitators, catalyst vessels, weighing platforms, axle weighers and vehicle weight-in-motion (WIM) systems.

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



# Type LP95 Folded Shear Beam Weighing Assembly

## Technical Specification Sheet

### Load Cell ATEX and IECEx Certification

Cert	Code	Safety Parameters	Key Points
ATEX	II 1 GD Ex ia IIC T6 Ga Ex ia IIIC T70°C Da	Ui =30V, Pi = 1.3W Ci = 2.4nF, :l = 8μH	Suitable for all dust and gas zones but requires safety barriers
	IECEx		
ATEX	II 3 G Ex nA IIC T6 Gc -20°C C ≤ +60°C	Ui =30V, Pi = 1.3W Ci = 2.4nF, :l = 8μH	Suitable for gas zone 2 only. No safety barriers are required. Refer to certificate for further details.
ATEX	II 1 D Ex ta IIC T80°C Da IP6X -20°C ≤Ta + 60°C	Um – 18V	Suitable for all dust zones, 20, 21 and 22. No safety barriers are required. Excitation voltage must be below 18V. Safe ambient temperature range is from -20°C to +60°C.

LP95 Load cell specification			Units
Load Cell Capacities	2000, 5000, 10000	20000	kg
Accuracy Class	3000	-	n.OIML
Rated Output	2		mV/V ±0.1%
Combined Error	< ± 0.017	< ± 0.05	%*
Non-repeatability	< ± 0.015	< ± 0.02	%*
Temperature Effect on Zero Balance	< ± 0.002	< ± 0.0025	%* / °C
Temperature Effect on Span	< ± 0.0012	< ± 0.0035	%* / °C
Compensated Temperature Range	-10 to +40		°C
Operating Temperature Range	-40 to +80		°C
Safe Overload	150		%*
Ultimate Overload	300		%*
Zero Balance	< ± 2		%*
Input Resistance	380		Ω ± 5
Output Resistance	350		Ω ± 5
Insulation Resistance	> 5000		MΩ @ 100V
Recommended Supply Voltage	5 - 15		V
Maximum Supply Voltage	15		V
Environmental Protection	IP68 / IP69K		
Cable Length	10	20	m
Cable Material	Polyurethane		
Nominal Shipping Weight - load cell	4	11.5	kg
Nominal Shipping Weight - accessory	14	38.5	kg

\* With respect to rated output

### Dimensions

Range (kg)	2000 - 1000	20000
A	137	187
B	65.3	86
C	34.3	46
D	34.2	47.5
E	32.6	48.1
F	26.1	36.1
G	15	22
H	174	245
J	40	57
K	182	252
L	135	186
M	200	260
N	135	185
P	16	20
Q	168	218
R	16	21
S	70	100
T	35	50

Dimensions in mm

### Electrical Connections

Via 6-core, 5.7mm outer diameter screened Polyurethane cable (halogen free)

Screen not connected electrically to load cell.

### Construction

#### Load Cell element:

High strength stainless steel, type 17-4PH

#### Mounting Accessory – 2 Options

- **Alloy steel, durable painted finish (black)**
  - Loading shafts: zinc plated alloy steel / corrosion resisting hardened stainless steel, type 17-4PH.
  - Screws and circlips: zinc plated alloy steel
- **Stainless Steel**
  - Loading shafts, both corrosion resisting hardened stainless steel, type 17-4PH

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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