

Pillar load cells | Available with SmartLoad® technology



V1.0



Scotload's pillar compression load cells are highly adaptable with a robust construction for use in harsh environments.

Manufactured from high tensile stainless steel, each load cell is designed with a domed loading top to greatly reduce the effect of offset loads.

The load cell cable is fitted through an integral connector to allow for on-site mating and removes the need for handling large lengths of cable whilst positioning the load cells.

We provide an in-house calibration service up to 1700 tonnes, traceable to national standards, as well as a customised design service to suit specialised requests. We maintain a range of stock available to buy or hire and ready for immediate dispatch.

Options

- Available with SmartLoad® technology
- Cabled or wireless
- Hazardous area Zone 0, 1 and 2
- Subsea - with ROV / diver mateable connectors
- Bespoke design
- Optional loading cap

Features and benefits

- Robust construction
- Long design life
- Highly accurate
- Fully welded and hermetically sealed
- Compatible with SmartLoad® COG system
- Larger sizes include built in handles for ease of positioning

Typical specifications	mV/V output	mA output	External wireless interface
Rated load		As required	
Proof load		150% of rated load	
Non linearity		< ± 0.15% of full scale	
Non repeatability		< ± 0.05% of full scale	
Zero balance		< ± 0.05% of full scale	
Environmental protection		As required	IP66
Safety factor		As required	
Operating temperature		-20°C to +60°C	
Storage temperature		-30°C to +80°C	
Cable connection		Gland or connector	N/A
Cable length		5m as standard	
Output signal	mV/V	4-20mA	Wireless (Input signal mV/V)
Electrical connection	4 core	2 or 3 wire	N/A
Recommended excitation voltage	10V	N/A	N/A
Maximum excitation voltage	15V	N/A	N/A
Recommended supply voltage	N/A	24V	N/A
Maximum excitation voltage	N/A	30V	N/A
Bridge resistance	700 Ohm	N/A	N/A
Sensitivity	1.5mV/V - 2.0V/V nominal	N/A	N/A
Data logging	N/A	N/A	In interface
Battery type	N/A	N/A	3 x D
Active battery life	N/A	N/A	Up to 500 hours
Standby battery life	N/A	N/A	Up to 1700 hours
Telemetry frequency	N/A	N/A	2.4Ghz ISM
System range	N/A	N/A	Up to 350m
Sampling rate	N/A	N/A	10Hz (500Hz max)



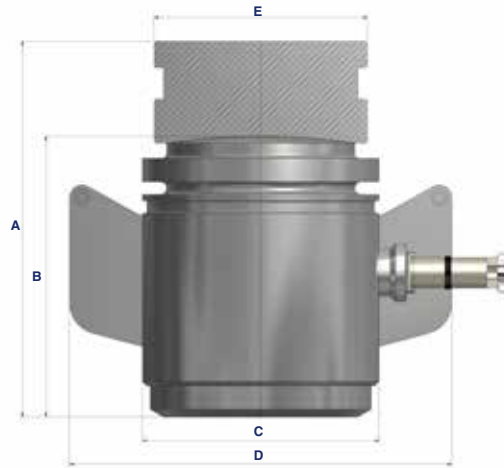
SmartLoad® load cells are available for use in hazardous area Zones 1 and 2



Due to continuous development, Scotload reserves the right to change specifications without notice.

Pillar compression load cell typical dimensions

Pillar compression load cell



Pillar compression load cell typical dimensions

	100	200	300	500	700	1000
Load rating (tonnes)	100	200	300	500	700	1000
Weight (kg)	8.5	18	28	75	86	160
A mm	170	215	240	320	350	400
B mm	127	163	179	248	281	315
C mm	100	126	151	216	216	272
D mm	184	210	244	320	320	246
E mm	86	112	136	196	196	246

A revolution in load measurement

SmartLoad®

Scotload's ground-breaking SmartLoad® monitoring technology provides users with total system control and flexibility.

SmartLoad® uniquely incorporates intelligence and memory directly on the load cell itself, increasing functionality while enhancing the efficiency and safety of your lifting operations.

SmartLoad® delivers a standard technology platform for use across a range of products. Requiring only one handset to connect links, shackles and other load cells, it reduces operational costs. Fully compatible with existing equipment, SmartLoad® can also be retrofitted, removing the need for expensive full system upgrades.

Utilising the latest wireless technology for increased range and improved signal reliability, SmartLoad® provides assurance, improves data accuracy and enhances workplace safety as well as reducing downtime.



Features and benefits of SmartLoad®:

- **Logging function** controlled from handset - no need for on-site laptop
- **Safety assurance** - automated overload monitoring
- Uniquely incorporates intelligence on load cells and handsets giving **total system control and flexibility**
- Significantly **increased range** and **signal reliability** over existing industry standard technology
- No training required - simple '**plug-and-play**' system
- No pairing required - '**select and connect**' technology
- Avoids downtime and unnecessary wastage - built in **system redundancy**
- Easily integrated with existing monitoring systems

We are always happy to help find the appropriate, tailored solutions for your business needs. If you have any requests or suggestions please do not hesitate to contact us.

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