S-Type Stainless Steel Load Cell

FEATURES

- Capacity range: 500–5000 kg
- Stainless steel construction
- Sealed by welding to IP68
- S-type design for use in tension and compression
- OIML approved to 3000d (500–5000 kg)
- NTEP approved to 5000d (500–5000 kg)
- Choice of mounting threads metric or unified systems
- 6-Wire cable (sense circuit)
- **Optional**
  - Ex ia IIC T6-ATEX hazardous area approval
  - Class I, II, III Division 1 – FM hazardous area approval
  - IECEx approval available

APPLICATIONS

- Hopper (tank Weighing)
- Hybrid scales
- Belt weighing
- Lever arm conversions
- Material testing machines
- Vibrations filling equipment
- Dynamometers

DESCRIPTION

The Model 620 is a stainless steel S-type load cell. Its welded sealing combined with high accuracy, make this load cell ideally suited for a wide range of applications of process weighing and force measurements.

Approvals include OIML C3 (3000d); NTEP 3000d single and NTEP 5000d multiple.

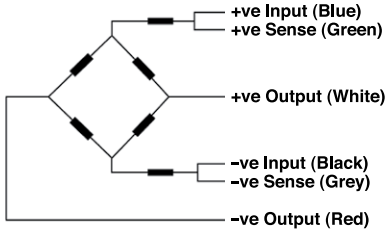
Also available are versions approved for hazardous areas—ATEX II 1 GD Ex ia T6 for Europe and FM I, II, III Division 1 for the USA.

The six-wire cable includes two sense wires that compensate for changes in lead resistance due to temperature changes and cable extension.

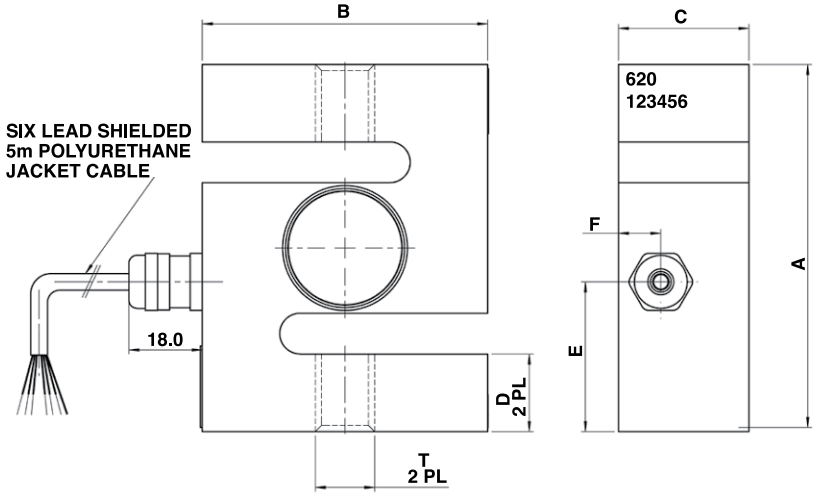
The Model 620 offers a choice of bolt threads in metric or unified systems; see table below.

OUTLINE DIMENSIONS in millimeters

Wiring Schematic Diagram



Thread Type "T" by Capacity		
Capacity	Metric	Unified
500 kg	M12 x 1.75	1/2-20 UNF
1000 kg	M16 x 2.0	1/2-20 UNF
2000 kg	M16 x 2.0	3/4-16 UNF
5000 kg	M24 x 2.0	1 - 12 UNF



Optional rod end bearings for use with all VPG Transducers S-type load cells are available—consult the sales office.

Capacity	A	B	C	D	E	F
500, 1000, 2000 kg	90	70	32	19	36.6	10.4
5000 kg	120	100	45	26	60	13.8

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SPECIFICATIONS					
PARAMETER	**VALUE**				**UNIT**
Rated capacity—R.C. (E_{max})	500, 1000, 2000, 5000				kg
NTEP/OIML	NTEP	Non-Approved	C2/50	C3/50	
Maximum no. of intervals (n)	Class III	1000	2000*	OIML 3000	
Y = E_{max}/V_{min}	5000	2000	4000	6000	
Rated output—R.O.	2.0				mV/V
Rated output tolerance	0.002				±mV/V
Zero balance	0.04	0.06	0.04	0.04	±mV/V
Total error (per OIML R60)	0.0200	0.0500	0.0300	0.0200	±% of R.O.
Zero return, 30 min.	0.010	0.0500	0.0250	0.0170	±% of applied load
Temperature effect on zero	0.00112 (0.00062)	0.0070	0.0035	0.0023	±% of R.O./°C (/°F)
Temperature effect on output	0.0018 (0.0010)	0.0400	0.0014	0.0012	±% of applied load/°C (/°F)
Temperature range, compensated	–10 to +40				°C
Temperature range, safe	–30 to +90				°C
Maximum safe static overload	150				% of R.C.
Excitation, recommended	10				VDC or VAC RMS
Excitation, maximum	15				VDC or VAC RMS
Input impedance	400±20				Ω
Output impedance	350±3				Ω
Insulation resistance	>1000	>2000	>2000	>2000	MΩ
Construction	Stainless steel				
Environmental protection	IP68				

All specifications subject to change without notice.

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