

Shear beam for compression forces up to 10.197 kg



Description

tecsis load cells are designed to meet the most stringent accuracy requirements.

F3271 load cell are available in the capacities 5 kN to 100 kN (510 kg to 10197 kg)

They offer total stainless steel construction and complete hermetic sealing, making them suitable for use in the toughest industrial environments.

The unique “blind” loading hole combined with the available tectsis loading hardware provides an excellent price performance ratio. It allows very low profile platform design and offers advantages in all kinds of weighing applications.

The tectsis calibration technique (in $mV/V/\Omega$) eliminates time consuming corner calibration in multiple load cell systems.

Features

- Robust design, High long term stability
- Ease of assembly
- Low-profile design
- High input resistance: 1100 Ω

Measuring ranges

- 510 kg ... 10197 kg

Applications

- Weighing & dosing applications, force measurement
- Plattform scales
- Production lines
- Testing and manufacturing plants

Specific information

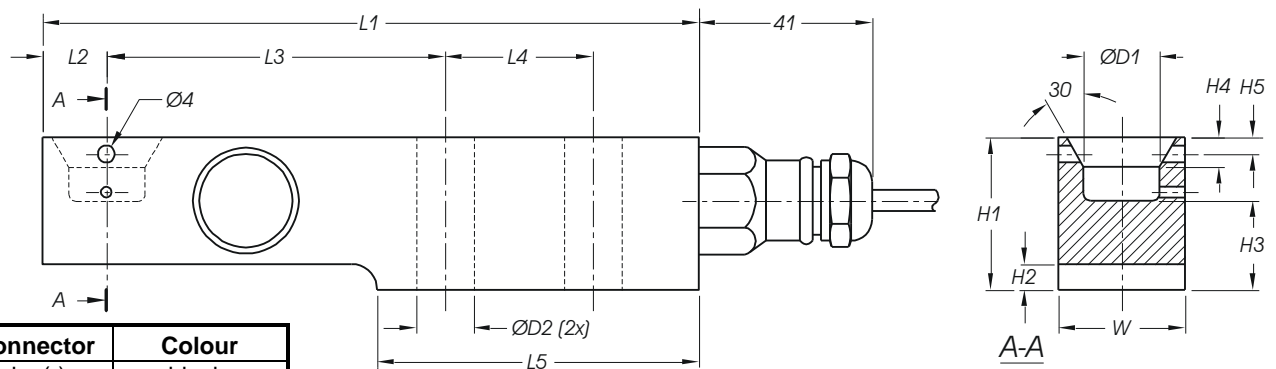
- Load input elements available (option)

Model: F3271

Technical data

Model	F3271	Option
Maximum capacity kN kg	5, 10, 20, 50, 100 510, 1020, 2039, 5099, 10197	
Limit load	200% F_{nom}	
Breaking load	> 300% F_{nom}	
Combined error	$\leq \pm 0,04\%$ of F.S.	$\leq \pm 0.02\%$ of F.S.
Creep (30 min. at F_{nom})	$\leq \pm 0.06\%$ of F.S.	$\leq \pm 0.016\%$ of F.S.
Nominal deflection	< 0,8 mm	
Nominal temperature range	-10 ... +40°C	
Service temperature range	-40 ... +80°C	
Storage temperature range	-40 ... +80°C	
Reference temperature	23°C	
Temperature effect-span -zero	$< \pm 0.02\%$ of F.S. /10 K $< \pm 0.04\%$ of F.S. /10 K	$< \pm 0.011\%$ of F.S. /10 K $< \pm 0.011\%$ of F.S. /10 K
Protection type (acc. to EN 60 529 / IEC 529)	IP 68	
Insulation resistance	> 5 G Ω / 50 V	
Analogue output <ul style="list-style-type: none"> - Output signal - Bridge resistance - Tolerance of span - Zero - Excitation voltage - Electrical connection 	2 mV/V Input: 1100 \pm 50 Ω ; Output: 1000 \pm 2 Ω $\leq \pm 0.1\%$ of F.S. $\leq \pm 1\%$ of F.S. 10 V (max. 15 V) Cable, 4-wire, shielded cable length 3 m (50kN+100kN = 4,5m)	
Sealing	complete hermetic sealing; cable entry sealed by glass to metal header	
Mounting momentum	see chart below	
Material of measuring device	Stainless steel	

of F.S. = full scale value



E-connector	Colour
Supply. (-)	black
Supply. (+)	green
Sign. (+)	white
Sign.(-)	red
Shield	yellow

Nominal load [kN]	L1	L2	L3	L4	L5	H1	H2	H3	H4	H5	W	D1	D2	Mounting bolts	Screw Torgue*
5kN/10kN/20kN	155	15	80	35	76	36	6	21	7	4	30	18	13	M12 8.8	90 Nm
50kN	190	21	105	40	93	49	8	28.5	6	8	43	25	21	M20 8.8	400 Nm
100kN	245	30	135	50	120	73	12.5	42	10	n.a.	60	30	27	M24 8.8	700 Nm

All dimensions in mm. Dimensions and specifications are subject to change without notice.

* Torque values assume oiled threads.

Subject to technical changes