

BOLT-ON STRAIN TRANSDUCER



- 200, 500, 1000 OR 1500 $\mu\epsilon$
- STAINLESS STEEL · IP65
- BOLTED ON WITH FOUR SCREWS



NOMINAL STRAIN (FS)

$\mu\epsilon$	Rated Output (mV/V)	Net weight (kg)	Combined error	ISO 17025	High temperature -40 ... 250 °C
200	1.0 $\pm$ 15 %	0.5	$\leq \pm 1.41$ %	optional	optional
500	1.0 $\pm$ 15 %	0.5	$\leq \pm 1.41$ %	optional	optional
1000	1.0 $\pm$ 15 %	0.5	$\leq \pm 1.41$ %	optional	optional
1500	1.0 $\pm$ 15 %	0.5	$\leq \pm 1.41$ %	optional	optional

The body is 6.4 mm thick up to 1000 $\mu\epsilon$ and 14 mm at 1500 $\mu\epsilon$. Cable 6 m as standard; factory calibration included.



OVERVIEW

Where no load cell fits, the structure itself becomes the sensor: the DSGA is bolted to the machine through four holes of $\varnothing$ 6.6 mm and reads the strain of the part it sits on. That makes it the instrument for large equipment — presses, frames, columns, cranes — and for every place where cutting a load cell into the force path is out of the question. The measuring element is a full bridge on a stainless steel body of 89 x 25.4 mm, rated at 1.0 mV/V and available for 200, 500, 1000 or 1500 $\mu\epsilon$ — the strongest of the four is the thick one, 14 mm instead of 6.4. It takes 5 to 10 V DC, tolerates 120 % of its range without harm and 150 % before it is destroyed, and it carries six metres of fixed cable, sealed to IP65. Mounting and replacing are a matter of four screws, and nothing in the force path has to be opened to do it.

MEASUREMENT

- Reads the strain of the structure directly
- Capacities 200, 500, 1000 and 1500 $\mu\epsilon$
- Rated output $1.0 \pm 15 \%$ mV/V
- Non-linearity, hysteresis, repeatability $\pm 1 \%$ of RO
- Full bridge, 5 ... 10 V DC excitation
- Combined error $\leq \pm 1.41 \%$ of RO
- Safe overload 120 %, ultimate 150 % of RO
- Temperature effect $\pm 0.5 \%$ of RO per 10 °C
- Passive: no amplifier inside

MOUNTING AND USE

- Bolted on through four holes of $\varnothing$ 6.6 mm
- Easy to install and to replace
- For large equipment and for confined force paths
- Stainless steel body, 89 x 25.4 x 6.4 mm
- IP65 · cable $\varnothing$ 3 mm, 6 m, fixed
- Body 6.4 mm thick, 14 mm at 1500 $\mu\epsilon$
- Operating temperature $-20 \dots +80$ °C
- Weight 0.5 kg
- CE and RoHS



TECHNICAL DATA

PRECISION

Rated output	1.0 ± 15 % mV/V
Zero balance	± 2 % of RO
Combined error	≤ ± 1.41 % of RO
Non-linearity	± 1 % of RO
Hysteresis	± 1 % of RO
Repeatability	± 1 % of RO
Temperature effect on zero	± 0.5 % of RO per 10 °C
Temperature effect on output	± 0.5 % of RO per 10 °C
Compensated temperature range	-10 ... +40 °C
Operating temperature range	-20 ... +80 °C

MECHANICAL PROPERTIES

Material	stainless steel
Weight	0.5 kg
Dimensions	89 × 25.4 × 6.4 mm · 14 mm thick at 1500 µε

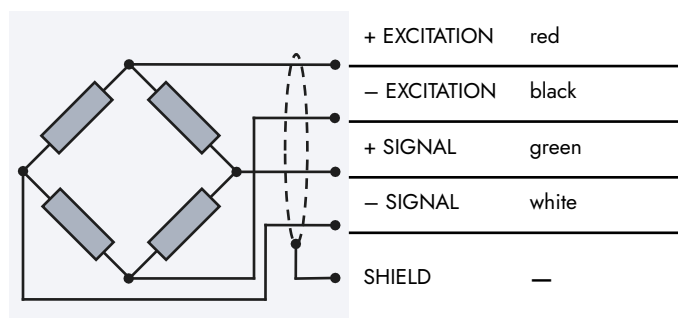
ELECTRICAL PROPERTIES

Bridge configuration	full bridge
Input resistance	1000 ± 10 Ω
Output resistance	1005 ± 3 Ω
Insulation resistance	≥ 2000 MΩ at 100 V DC
Recommended excitation voltage	5 ... 10 V DC
Maximum excitation voltage	15 V DC
Cable diameter	3 mm
Cable length	6 m, fixed
Shield	not connected to the element

MOUNTING

Fixing	4 through holes Ø 6.6 mm
Hole spacing	76.2 mm lengthwise · 14.3 mm across
Replacement	without opening the force path
Use	large equipment, and places where no other force transducer fits

ELECTRICAL CONNECTION

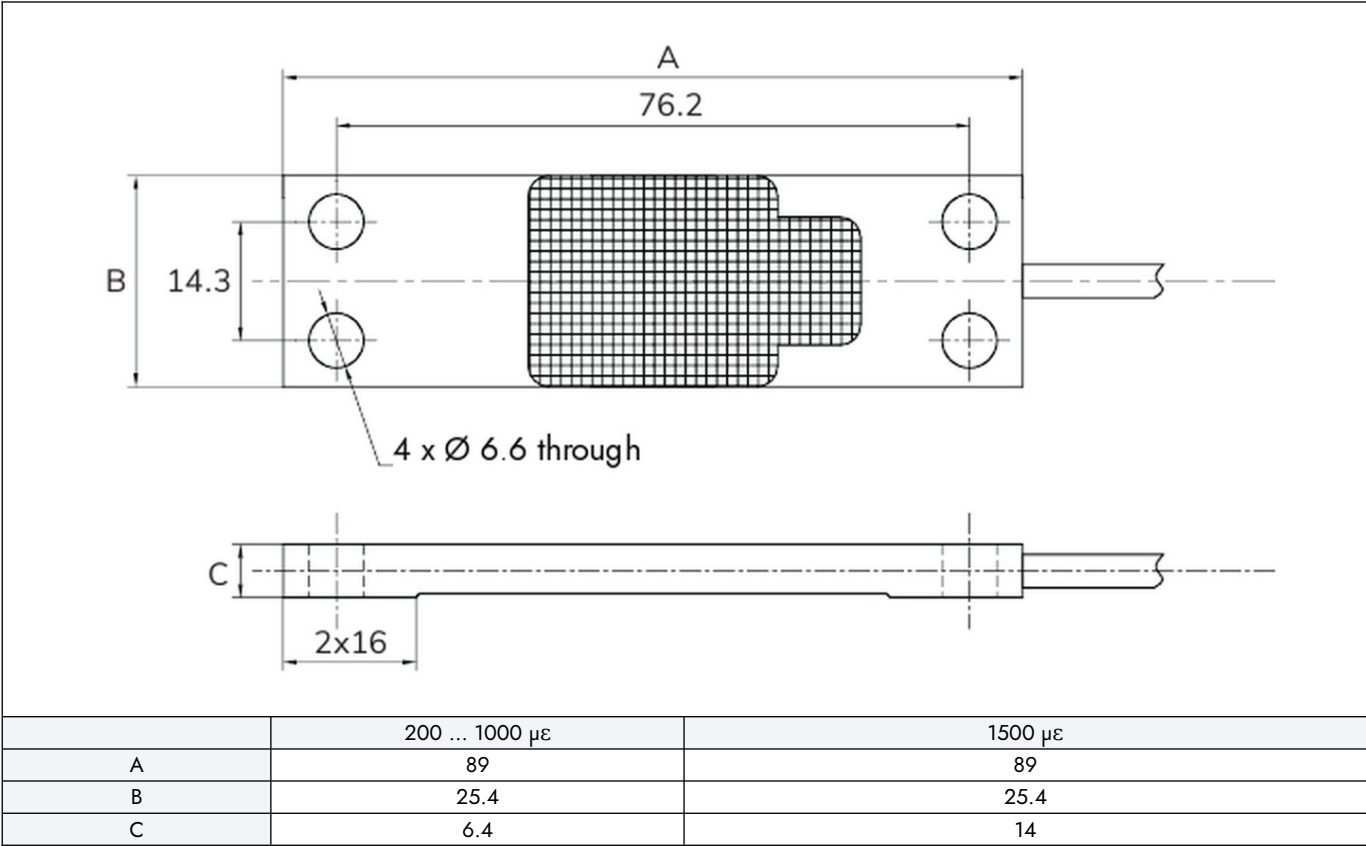


MECHANICAL LIMITS

Safe overload	120 % of RO
Ultimate overload	150 % of RO



DIMENSIONS (mm)



Four through holes $\varnothing$ 6.6 mm; hole spacing 76.2 mm lengthwise and 14.3 mm across. C is the body thickness.

COMPLIANCE AND CERTIFICATION

Protection Rating	IP65	
Compliance	CE · RoHS	
Calibration	factory calibration included · ISO 17025 on request	
Certifications	 2014/35/EU	
	 2011/65/EU	
Certifications (on request)	 calibration to ISO/IEC 17025	

