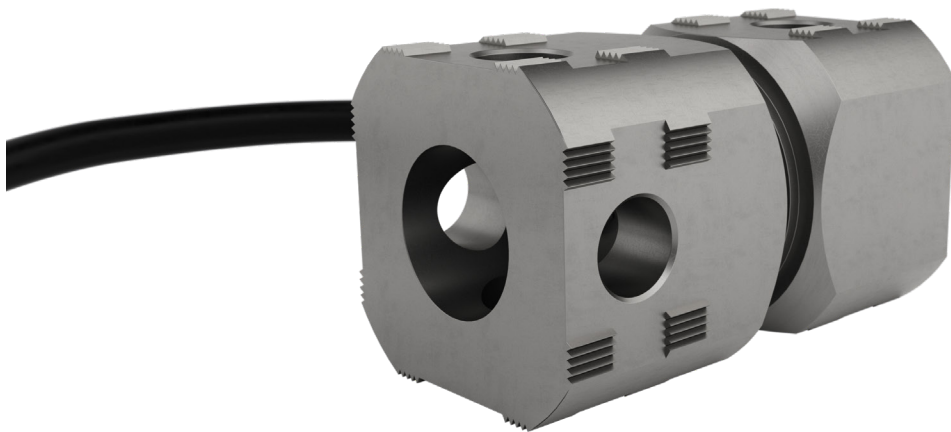


XT50 extensometer



product description

The XT50 is a fully welded, stainless steel bolt-on extensometer characterised by having a very low activation force – ideal for measuring force in particularly stiff structures. It gives an output signal proportional to the elastic deformation of the structural part upon which it is mounted. No structural adhesive is required during installation.

applications

Load and stress monitoring in structural parts, overload sensing and stability control on mobile and stationary construction and agricultural equipment.

key features

Stainless steel construction

Environmental protection IP68 with complete hermetic sealing

High resolution

Low activation force

Easy bolt installation, no adhesives required

Shielded cable

options

mV/V output

$\pm 10V$ output

accessories

Compatible on-board load moment indication electronics

approvals

FM approval for the base XT50 model only. Does not apply to the XT50-A20-B10 model.



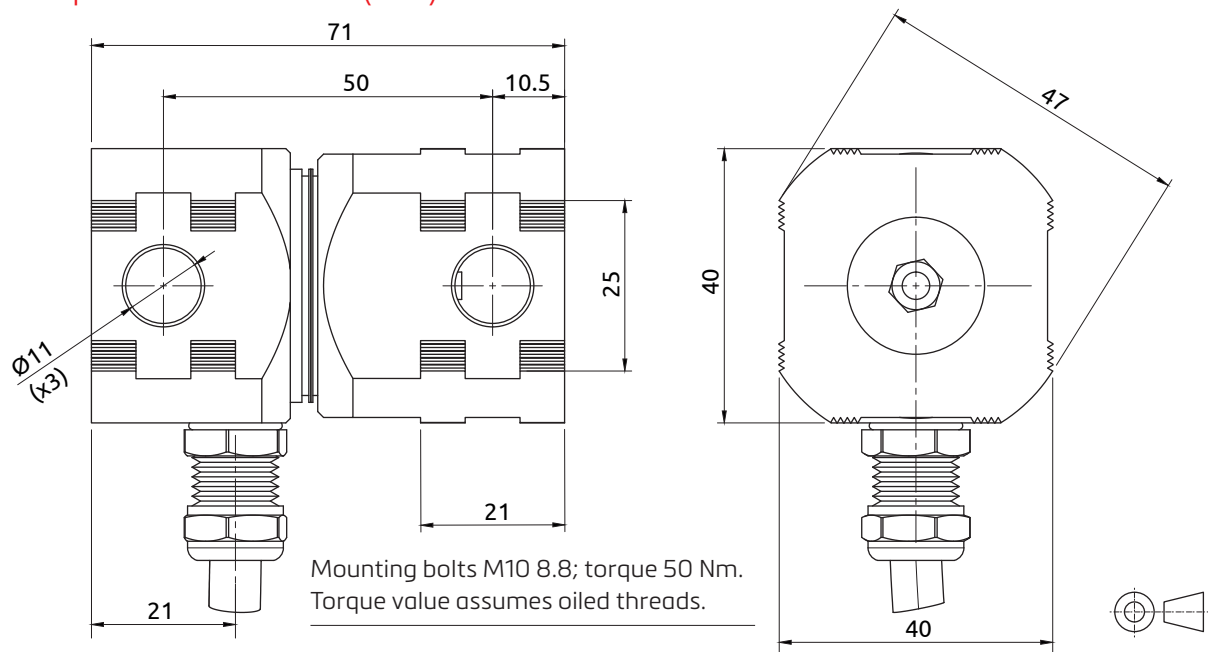
RoHS
compliant



specifications

Model	-	XT50	XT50-A20-B10
Rated Output (RO)	-	1.2 mV/V $\pm$ 10 % at strain of 500 μ m/m	$\pm$ 10v $\pm$ 10% at strain of $\pm$ 400 μ m/m
Output load impedance	k Ω	-	50 (minimum)
Zero reset 'input high' voltage	V	-	3 (min.) , 30 (max.)
Zero reset pulse length	ms	-	10 (minimum duration, active high)
Output after Zero reset	V	-	$\pm$ 0.2
Zero Balance	%RO	$\leq \pm 5$	-
Supply voltage	V	5...10	15 ... 30
Supply current	mA	-	25 (typical)
Input Impedance	Ω	1100 $\pm$ 50	-
Output Impedance	Ω	1000 $\pm$ 2	-
Insulation resistance (100 V DC)	M Ω	$\geq$ 5,000	-
Operating temperature range	$^{\circ}$ C	-30...+70	
Compensated temperature range	$^{\circ}$ C	-10...+40	
Sensor material	-	stainless steel 17-4 PH (1.4548)	
Sealing	-	complete hermetic sealing	
Protection according EN 60 529	-	IP68 (up to 2 m water depth)	
FM approval	-	yes	no
Weight	g	610 (3m cable)	530 (0.5m cable)
EMC radiated emissions	-	-	EN 55011:2016 +A1:2017 Class A Group 1
EMC conducted emissions	-	-	EN 55011:2016 + A2:2021 Class A Group 1
EMC radiated immunity	-	-	EN 61000-4-3 (80 – 2000 MHz) < 0.1V deviation @ 10V/m
EMC conducted immunity	-	-	EN 61000-4-6 (0.15 – 80 MHz) < 0.1V deviation @ 10V

product dimensions (mm)



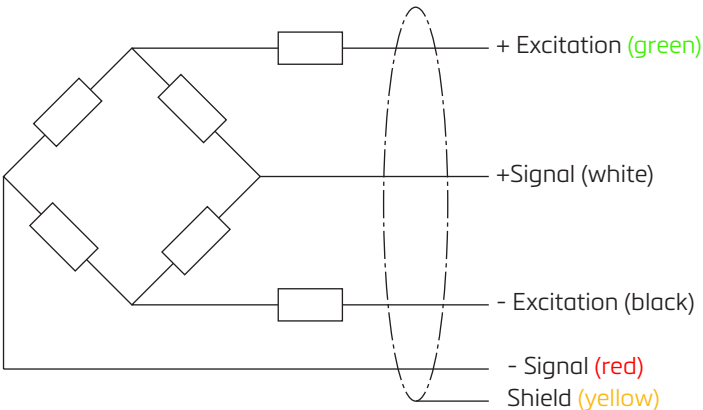
wiring for XT50

The extensometer is provided with a shielded (floating), 4-conductor cable (AWG 24).

Standard cable jacket: PVC

Standard cable length: 3m

Standard cable diameter: 5.5mm



wiring for XT50-A20-B10

The extensometer is provided with a shield connected to sensor body only .

8-conductor cable 28AWG / 8x0.13mm²

Standard cable jacket: PVC

Standard cable length : 0.5m (max. 15m)

Standard cable Diameter : 5.0mm

Signal Description

Wire Colour

Signal +	Grey
Signal 0	Blue
Power +	White
Power 0	Pink
Reset	Green
NC (Clock)	(Red)
NC (Data)	(Yellow)
NC (RxD)	(Brown)

zero reset function

The reset input is active high with an internal pull-down resistance. When open circuit (or connected to 0V) the reset function is inactive. The output voltage is offset to zero on the falling edge of the reset pulse.

Specifications and dimensions are subject to change without notice.