Avery Weigh-Tronix





Technical Specification

DESCRIPTION

The T202X Load Cell is a high accuracy, low profile canister cell, ideal for heavy industrial applications. With an IP68 rating and integrated surge protection, the T202X Load Cell is engineered to withstand the world's most extreme operating conditions.

Manufactured and tested to the highest industry and quality standards, the T202X Load Cell ensures outstanding reliability and precision in its class.

Available Capacities

- > 22.5 tonnes
- > 45 tonnes
- > OIML R60 approved for accuracy class C4

INDUSTRY APPLICATIONS

The T202X Load Cell offers extensive flexibility for heavy capacity weighing applications across various industries, thanks to its superior accuracy and low profile.

Simplifying installation and seamlessly integrating into existing systems, the T202X maximises performance and profitability while ensuring compliance with the strictest legislative requirements.

SPECIAL FEATURES

- > IP68 submersible 1 m 7 days
- > 100% stainless steel enclosure
- > Aircraft-quality spring element
- > Built-in lightning protection
- > Accurate to 4000 divisions (OIML)
- > Self-aligning, rocker column design
- > Low profile design, only 156 mm height
- > Pre-assembled, anti-rotation load buttons

BENEFITS

High accuracy, low profile - The T202X Load Cell combines precise measurements with a low-profile design, making it ideal for applications where performance and height is crucial. This OIML approved canister cell, standing at just 156 mm tall, aids to enhance system stability by reducing the leverage effect of vibrations on measurement accuracy during operation.

The T202X self-aligning rocker column, along with pre-assembled anti-rotation load buttons, ensures ease of installation and outstanding weighing performance approved to 4000 divisions.

Built to last - The 2.35 mm thick stainless-steel wall shields the internal weighing elements from harm, while built-in surge arrestors help neutralise the effects of lightning and other surge incidents.

The enclosure and cell-cable entry are hermetically sealed, providing IP68 rated protection against dust and water ingress into the load cell.

Additionally, the 20 m long cable features an extra electrically - mechanically - chemically tough polyurethane sheath for maximum abrasion resistance, flexibility and immunity to electromagnetic interference.

Quality assured - With a proven track record spanning over 30 years of manufacturing canister load cells, Avery Weigh-Tronix prides itself on manufacturing the low profile T202X Load Cell to the highest industry and quality standards (ISO 9001 and ISO 14001).

Utilising the latest state-of-the-art load cell manufacturing and testing equipment, Avery Weigh-Tronix employs rigorous quality control measures at every stage of production. From initial design to final assembly, each T202X Load Cell undergoes meticulous scrutiny to ensure superior performance and reliability.

T202X LOAD CELL Technical Specification

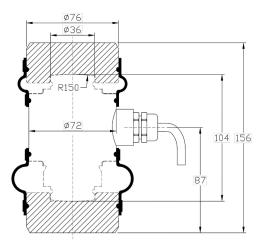
SPECIFICATIONS

GENERAL

GENERAL	
Model Name	T202X
Load Cell Type	Analogue, single column compression, 4 pairs of strain gauges
Rated Capacity (R.C.)	22.5 t / 45 t
Approval, Accuracy Class	OIML R60, C4
WEIGHING PERFORMANCE	
Temperature Range	Compensated (OIML): -10 °C to +40 °C Operating: -20 °C to +60 °C Safe Storage: -30 °C to +85 °C
Warm-Up Time	5 minutes
Max Working Angle	±3° from axis of gravity
Combined Error	<±130 ppm R.C.
Repeatability	<±130 ppm R.C.
Zero Balance	<±1000 ppm R.C.
Zero Return (+30 min)	<±120 ppm R.C.
Creep (10 s to 30 min)	<±120 ppm R.C.
Temperature Effect (range -10 to +40°C)	On Zero Balance: ±15 ppm R.C./°C On Span: ±10 ppm R.C./°C
METROLOGICAL APPROVALS	
Standard	OIML R60, Certificate 2000-A-GB1-22.01
Accuracy Class nLC	C4, 4000 verification intervals
Additional Marking	CH (Hermetic seal)
Rated Output	1.75±0.1% mV/V at Rated Capacity
Vmin Interval 22.5t / 45 t	2 kg / 4 kg
Fraction PLC	0.7
Min Dead Load	0 kg
ELECTRICAL	
Excitation Voltage Range	5 to 15 VDC, OIML approved 10 to 15 VDC
Input Resistance	590±30 Ω
Output Resistance	480±5 Ω
Insulation Resistance	>5000 MΩ
Lightning Protection	Integral (all lines), 4x50 G Ω surge suppressors, earth stud
Cell Cable Entry	Sealed by Teflon header
Cable Type	6 core cable (each core 0.22 mm ²) foil shielded with screen, blue Polyurethane sheath
Cable Length	20 m
MECHANICAL	
Materials	<i>Encsloure</i> : 2.35mm thick, 304 stainless steel outer wall <i>Spring Element</i> : ±Aircraft quality, 17-4 PH stainless steel <i>Load Buttons</i> : EN24 high strength steel alloy, hardened and tempered
IP Protection	Fully submersible, IP68 (1 m - 7 days submersion)
Load Limit	Safe: 150 %R.C. Ultimate: 225 %R.C. Fatigue Life at R.C.: 1,000,000 cycles
Anti-Rotation Measures	Integral, double-camber load bearing surfaces with specially designed end radiuses. Low-friction and grease-sealed load buttons. Top and bottom rubber gaiter bellows as standard.

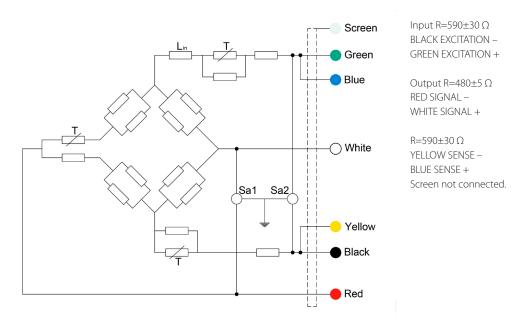
DIMENSIONS

T202X Load Cell with pre-assembled load buttons. 20 m cable not shown



WIRING

T202X Load Cell with built-in surge arrestors and 6 core, 20 m long PUR cable



PACKAGING

Shipping Weight	5.3 kg including load buttons
Packaging Dimension (L x W x H)	50 mm x 250 mm x 200 mm

APPROVALS

Agencies

OIML R60 Class C4 4,000d IP68 (1 m - 7 days) tested in accordance with IEC



T202X LOAD CELL Technical Specification

Avery Weigh-Tronix

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company

Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works Inc ("Illinois Tool Works"). Copyright © 2024 Illinois Tool Works. All rights reserved. This publication is issued to provide outline information only and may not be regarded as a representation relating to the products or services concerned. This publication was correct at the time of going to print, however Avery Weigh-Tronix reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.