

TX16 Analogue Transmitter

Very fast analogue output with high accuracy



Advantages

- Continuous monitoring of the analogue output value from the display
- Easy programming with Alphanumeric display
- Adaptive vibration filter: Stable reading for agitator tanks
- Error-free zero and gain calibration with eCal
- Operation with weight, force and pressure sensors



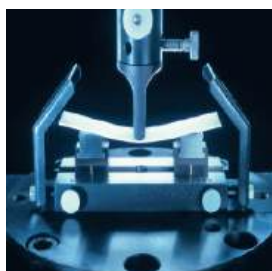
Fast and Accurate Outputs

- Up to 1600 conversion per second
- 40ms Analogue output rate
- 1 000 000 000 steps internal resolution
- 60 000 steps analogue output resolution
- Stable output with programmable filter



For a Wide Range of Applications

- 4 or 6 wires load cell connection
- 3 setpoint outputs , 1 error output and 3 optoisolated inputs for zeroing
- Bipolar signal input and analogue output for force measurements



Widespread Areas of Use

- Tank and silo weighing
- Compression and tensile tests
- Force measurement
- Stress measurement
- Pressure measurement
- Process control applications
- Dosing and alarm systems



TX16 analogue transmitter is a high-tech device developed for industrial applications that require a fast and accurate process. It can be reliably used in all kinds of industrial weighing, force and pressure measurement applications.

You do not need a measuring instrument for adjusting the analogue output, commissioning and servicing the TX16 since it displays the analogue output value in real time with an accuracy of 0.02%. Also, in the factory, TX16 transmitters are adjusted identically, and the difference between the outputs of TX16s after electronic calibration is less than 0.01%.

Analogue output can be set as 4-20 mA, 0-20 mA, 0-10 V, -10 / +10 V, 0-5 V or -5 / +5 V. It can be programmed and adjusted by PLC or PC.

Technical Specifications

Analogue Output (TX16)

Output	Galvanically isolated 0 - 20 mA, 4 - 20 mA, 0-5 VDC, 0-10 VDC, ± 5 VDC or ± 10 VDC
D/A Converter	Up to 1600 conversion per second, 16-bit analogue output with high resolution and long time stability
Display	6-digit alphanumeric LED display. It displays output current and voltage values with 0.02% accuracy.
Analogue output rate	Settling time between 40 ms to 1.5 s

Digital I/O (Only TX16 IO)

Inputs	3 opto-isolated digital inputs for zeroing, 12 - 28 VDC / 10 mA
Outputs	Opto-isolated, 3 outputs for setpoints, 1 output for error, 12 - 28 VDC / max 100 mA

Load Cell Signal Input

Maximum signal measurement range	Unipolar: Between 0 mV to 75 mV / Bipolar: Between -75 mV to +75 mV
Minimum signal measurement range	< 0,5 mV
Linearity	< % 0.001
Temperature effect on output	< 0.005 % FSR / °C
A/D Converter	30 bit Delta-Sigma, high EMC immunity with integral analog and digital filters
Internal resolution	Up to 1 000 000 000 steps

Calibration and Adjustment

Calibration with load	Easy calibration with the instrument buttons and alphanumeric display, without requiring a multimeter.
eCal: Electronic calibration	Highly accurate electronic calibration without test load (Instrument error < % 0.01).
Quick calibration	Automatic zero and gain calibration
Digital filter	7-step adjustable, intelligent and adaptive digital filter
Zeroing	It can be performed using the Zero button on the device or optoisolated zeroing inputs, 12 - 28 VDC opto-isolated
Setpoints	3 programmable setpoint outputs and 1 error output, 12 - 28 VDC opto-isolated

Load cell

Excitation voltage	5 VDC
Number of load cells	Up to 8 load cells 350 Ω or 24 load cells 1100 Ω . Minimum 43 Ω
Load Cell Connection	Connection of 4 or 6-wire load cells to the instrument with 6 wires

Power Requirement

Power supply and consumption	10 - 28 VDC, < 1,5 W (Depends on the number of load cells)
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Enclosure and Environment

Material, type and protection grade	Polyamid, DIN rail mount, IP20
Front panel	4 buttons, and 11 mm high alphanumeric display consisting of 6 LEDs with 14 segments
Dimensions	Width: 30 mm, height: 112 mm, depth: 132 mm.
Operation temperature	-15°C to +55°C
Humidity	Max. 85% RH, without condensation



Specifications are subject to change without notice. 01 - 06 / 2024