

Load Cells

SIWAREX WL10T

Overview



The load cell is ideal for use in tank weighing, hybrid scales or suspended container weighing. It is made of stainless steel and therefore also suitable for use in harsh environments.

Design

The measuring element is hermetically sealed and has a calibrated output current.

Technical specifications

SIWAREX WL10T	
Possible applications	Tension and pressure applications, suspended scales, container weighers, hybrid scales
Model	S-Type
Rated load E_{max}	50, 100, 250, 500 kg 1, 2.5, 5, 10 t
Accuracy class according to OIML R60	C3
Max. load cell verification interval m_c	3 000
Min. load cell verification interval V_{min}	
· $E_{max} = 50, 100 \text{ kg}$	$E_{max}/7000$
· $E_{max} = 0.25, 0.5, 1, 2.5 \text{ t}$	$E_{max}/10\ 000$
· $E_{max} = 5, 10 \text{ t}$	$E_{max}/12\ 000$
Combined error F_{comb}	$\pm 0.02 \% C_n$
Repeatability F_v	$\pm 0.02 \% C_n$
Creep error F_{cr}	
· 30 min	$\pm 0.02 \% C_n$
Temperature effect	
· Zero signal T_{k0}	$0.017 \% C_n/5 \text{ K}$
· Characteristic value T_{kc}	$0.014 \% C_n/5 \text{ K}$
Min. dead load E_{min}	0 kg
Safe load limit L_u	150 % E_{max}
Ultimate load L_d	300 % E_{max}
Safe side load L_{sq}	100 % E_{max}

Rated measuring path h_n	
· $E_{max} = 50, 100 \text{ kg}$	0.18 mm
· $E_{max} = 250, 500 \text{ kg}$	0.24 mm
· $E_{max} = 1 \text{ t}$	0.37 mm
· $E_{max} = 2.5, 5 \text{ t}$	0.8 mm
· $E_{max} = 10 \text{ t}$	0.57 mm
Rated characteristic value C_n	$3.0 \pm 0.008 \text{ mV/V}$
Recommended supply voltage	DC 5 ... 12 V
Tolerance D_0 of zero signal	$\pm 1.0 \% C_n$
Input resistance R_e	430 ± 4
Output resistance R_a	350 ± 3.5
Insulation resistance R_{is}	5 000 M Ω at 50 V DC
Rated temperature range B_n	-10 ... +40 °C
Operating temperature range B_u	-35 ... +65 °C
Storage temperature range B_s	-35 ... +65 °C
Sensor material (DIN)	Stainless steel
Degree of protection to EN 60529	IP67
Cable connection	
Function	Color
· EXC + (supply +)	· Red
· EXC - (supply -)	· Black
· SIG + (measured signal +)	· Green
· SIG - (measured signal -)	· White
· Shield	· Transparent