

Load Cells

SIWAREX WL500A

Overview



The load cell is suitable for small to medium platform scales with one load cell (max. platform size 600 x 600 mm) as well as for use in medium accuracy weighing machines of Class III with a max. load cell verification interval number $n_{max} = 3000$ d.

Design

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

Technical specifications

SIWAREX WL500A

Possible applications

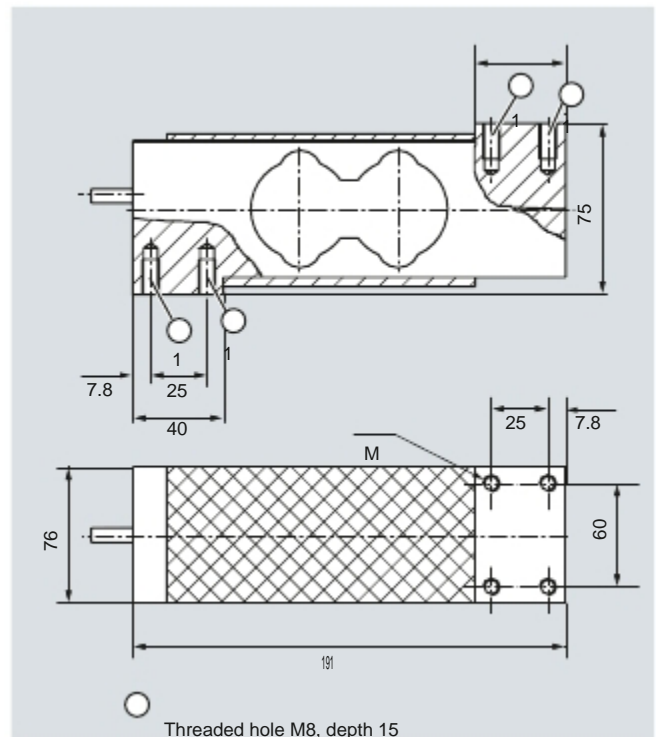
Possible applications	Platform scales, conveyor scales Platform load cell
Model	
Rated load E_{max}	50, 100, 200, 500 kg
Accuracy class according to OIML R60	1)
Max. load cell verification interval n_c	3 000
Min. load cell verification interval V_{min}	$E_{max}/10\ 000$
Combined error F_{comb}	$\pm 0.02\% C_n$
Repeatability F_v	$\pm 0.017\% C_n$
Creep error F_{cr}	
· 30 min	$\pm 0.02\% C_n$
Temperature effect	
· Zero signal T_{K0}	$0.017\% C_n/5\ K$
· Characteristic value T_{Kc}	$0.014\% C_n/5\ K$
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_{lq}	100 % E_{max}
Rated measuring path h_m at E_{max}	< 1.22 mm
Recommended supply voltage	5 ... 12 V DC
Rated characteristic value C_n	$2.0 \pm 0.2\ mV/V$
Tolerance D_0 of zero signal	$< \pm 2\% C_n$
Input resistance R_e	409 ± 6
Output resistance R_a	350 ± 3
Insulation resistance R_{is}	5 000 M at 50 V DC
Rated temperature range B_n	-10 ... +40 °C
Operating temperature range B_{tu}	-35 ... +65 °C
Storage temperature range B_{ts}	-35 ... +65 °C
Sensor material (DIN)	Aluminum
Degree of protection to EN 60529	IP65
Max. tightening torque of the fixing screws	35 ... 40 Nm

Cable connection

Function	Color
· EXC + (supply +)	· Red
· EXC - (supply -)	· Black
· SIG + (measured signal +)	· Green
· SIG - (measured signal -)	· White
· Sense + (sensor line +)	· Blue
· Sense - (sensor line -)	· Brown
· Shield	· Transparent

1) OIML type approval for SIWAREX WL500A available soon

Dimensional drawings



Load cell SIWAREX WL500A, dimensions in mm