

Load Cells

SIWAREX WL100

Overview



The load cell is suitable for small platform scales with one load cell (max. platform size 400 x 400 mm) as well as for use in medium accuracy weighing machines of Class III with a max. load cell verification interval number $n_{max} = 3000d$.

Design

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

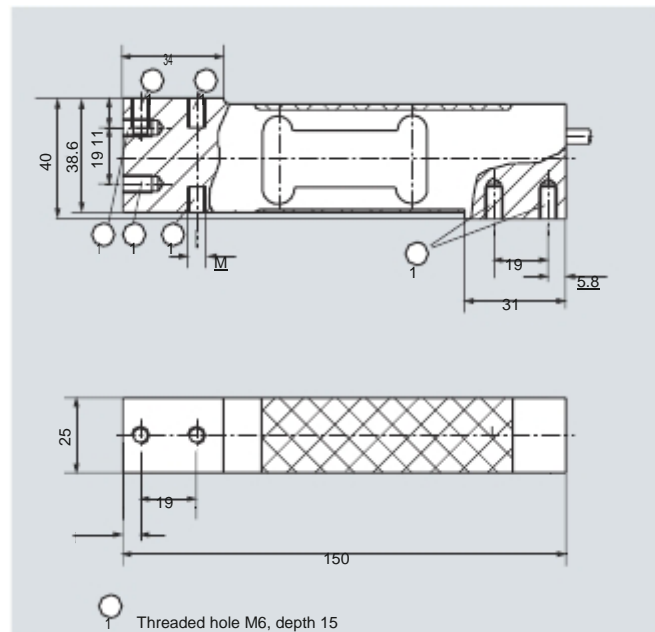
Technical specifications

SIWAREX WL100

Possible applications	Platform scales, small conveyor scales
Model	Platform load cell
Rated load E_{max}	3, 5, 10, 20, 50, 100 kg
Accuracy class according to OIML R60	C3
Max. load cell verification interval n_{lc}	3 000
Min. load cell verification interval V_{min}	
· $E_{max} = 3, 5, 10$ kg	$E_{max}/15\ 000$
· $E_{max} = 20, 50$ kg	$E_{max}/7\ 500$
· $E_{max} = 100$ kg	$E_{max}/12\ 000$
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}	$0.01\ \% E_{max}$
Rated measuring path h_m at E_{max}	$< 0.6\ mm$
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_u	-35 ... +65 °C
Storage temperature range B_s	-35 ... +65 °C

Sensor material (DIN)	Aluminum
Degree of protection to EN 60529	IP65
Max. tightening torque of the fixing screws	15 ... 20 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

Dimensional drawings



Load cell SIWAREX WL100, dimensions in mm