

Load Cells

Single point load cells
SIWAREX WL260 SP-S SA

Load cell

Overview



The load cell is suitable for small to medium platform scales with one load cell and platform size up to 400 x 400 mm (15.75 x 15.75 inch) as well as for use in medium accuracy weighing machines of Class III with a max. division $n_{\max} = 3\ 000d$.

It is made of stainless steel and therefore also suitable for use in harsh environments.

Design

The load cell is hermetically sealed.

Technical specifications

SIWAREX WL260 SP-S SA	
Possible applications	<ul style="list-style-type: none"> Platform scales Small belt scales
Type of construction	Single point load cell
Loads	
Rated load E_{\max}	<ul style="list-style-type: none"> 5 kg (11.02 lb) 10 kg (22.05 lb) 20 kg (44.09 lb) 50 kg (110.23 lb) 100 kg (220.46 lb) 200 kg (440.92 lb)
Minimum initial loading E_{\min}	0% E_{\max}
Maximum working load L_u	150% E_{\max}
Breaking load L_d	300% E_{\max}
Safe side load L_{lq}	100% E_{\max}
Measurement characteristic values	
Deflection h_n at E_{\max}	0.27 ± 0.05 mm (0.01 ± 0.002 inch)
Rated characteristic value C_n	2.0 ± 0.2 mV/V
Tolerance D_0 of zero signal	$< \pm 1\%$ C_n
Maximum scale interval n_{lc}	3 000
Minimum scale interval V_{\min}	$E_{\max}/9\ 000$
Combined error F_{comb}	$\pm 0.02\%$ C_n
Repeatability F_v	$\pm 0.01\%$ C_n
Creep error F_{cr}	$\pm 0.02\%$ C_n
<ul style="list-style-type: none"> 30 min 	
Temperature coefficient	
<ul style="list-style-type: none"> Zero signal T_{K0} Characteristic value T_{Kc} 	<ul style="list-style-type: none"> 0.017% $C_n/5$ K 0.014% $C_n/5$ K
Electrical characteristic values	
Recommended input voltage	5 ... 12 V DC
Input resistance R_e	$383 \Omega \pm 6 \Omega$
Output resistance R_a	$351 \Omega \pm 3 \Omega$
Insulation resistance R_{is}	5 000 M Ω at 50 V DC
Connection and ambient conditions	
Sensor material (DIN)	Stainless steel EN 1.4542

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Maximum tightening torque of the fixing screws	
<ul style="list-style-type: none"> $E_{\max} = 3 \dots 100$ kg (6.61 ... 220.46 lb) $E_{\max} = 200$ kg (440.92 lb) 	14 Nm
Rated temperature range B_{Tn}	-10 ... +40 °C (14 ... 104 °F)
Operating temperature range B_{Tu}	-35 ... +65 °C (-31 ... +149 °F)
Storage temperature range B_{Ts}	-40 ... +70 °C (-40 ... +158 °F)
Degree of protection according to EN 60529, IEC 60529	IP67

Cable connection

Function	Color
• EXC + (supply +)	Green
• EXC - (supply -)	Black
• SIG + (measured signal +)	White
• SIG - (measured signal -)	Red
• Sense + (sensor cable +)	Blue
• Sense - (sensor cable -)	Yellow
• Shield (not connected to the load cell body)	Transparent

Certificates and approvals

Accuracy class according to OIML R-60	C3 ¹⁾
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¹⁾ SIWAREX WL260 SP-S SA 5 kg (11.02 lb) is not approved for legal-for-trade operation.

Selection and ordering data

Article No.

Load cell, type WL260 SP-S SA

7MH5104-

Legal-for-trade according to OIML R-60 up to 3 000d, 1 m connecting cable (3.28 ft)

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Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Rated load

- 5 kg (11.02 lb)
- 10 kg (22.05 lb)
- 20 kg (44.09 lb)
- 50 kg (110.23 lb)
- 100 kg (220.46 lb)
- 200 kg (440.92 lb)

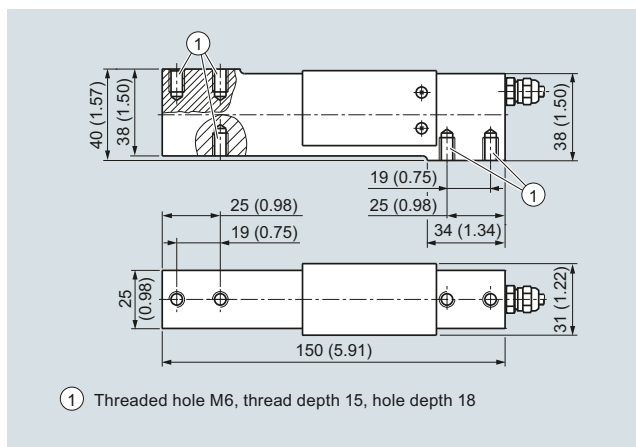
1 P
2 A
2 G
2 P
3 A
3 G

Explosion protection

Without
Explosion protection for zones 0, 1, 2, 20, 21, 22

0
1

Dimensional drawings



SIWAREX WL 260 SP-S SA load cell, dimensions in mm (inch)