

Overview



The SIWAREX WL260 SP-S SB platform load cell is excellently suited for use in platform scales with dimensions up to and including 350 × 350 mm (13.78 × 13.78 inch). It is approved for use in Class III weighing machines with maximum divisions of n_{\max} to 3 000d.

Design

The load cell is made of stainless steel and is hermetically sealed. The load cell meets the IP68 degree of protection.

Selection and ordering data

Load cell, type WL260 SP-S SB Legal-for-trade according to OIML R60 up to 3 000d, connecting cable 6 m (19.69 ft)	Article No. 7MH5117-				
	●	●	D	0	●
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.					
Rated load					
• 6 kg (13.23 lb)	1	Q			
• 12 kg (26.45 lb)	2	B			
• 30 kg (66.14 lb)	2	K			
• 60 kg (132.28 lb)	2	Q			
Explosion protection					
Without					0
Explosion protection					1

Technical specifications

SIWAREX WL260 SP-S SB	
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"> 6 kg (13.23 lb) 12 kg (26.46 lb) 30 kg (66.14 lb) 60 kg (132.28 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	
Rated displacement h_n at E_{\max}	
• $E_{\max} = 6$ kg (13.23 lb)	0.24 ± 0.02 mm (0.009 ± 0.0008 in)
• $E_{\max} = 12$ kg (26.46 lb)	0.19 ± 0.01 mm (0.008 ± 0.0004 in)
• $E_{\max} = 30$ kg (66.14 lb)	0.15 ± 0.01 mm (0.006 ± 0.0004 in)
• $E_{\max} = 60$ kg (132.28 lb)	0.22 ± 0.03 mm (0.009 ± 0.0011 in)
Rated characteristic value C_n	2.0 ± 0.2 mV/V

Technical specifications (Continued)

SIWAREX WL260 SP-S SB	
Tolerance D_0 of zero signal	< ± 2.0% C_n
Maximum scale interval n_{LC}	3 000
Minimum scale interval V_{\min}	
• At $E_{\max} = 6 \dots 60$ kg (13.23 ... 132.28 lb)	$E_{\max}/15\ 000$
Combined error F_{comb}	≤ ± 0.02% C_n
Repeatability F_v	≤ ± 0.02% C_n
Creep error F_{cr}	
• 30 min	≤ ± 0.025% C_n
Temperature coefficient	
• Zero signal T_{K0}	0.009% $C_n/10$ K
• Characteristic value T_{Kc}	0.009% $C_n/10$ K
Electrical characteristic values	
Recommended reference voltage U_{ref}	5 ... 12 V DC
Input resistance R_e	400 Ω ± 20 Ω
Output resistance R_a	350 Ω ± 3.5 Ω
Insulation resistance R_{is}	5 000 MΩ at 50 V DC
Connection and environmental conditions	
Sensor material (DIN)	Stainless steel EN 1.4542
Maximum tightening torque of the fixing screws	10 Nm

Load Cells

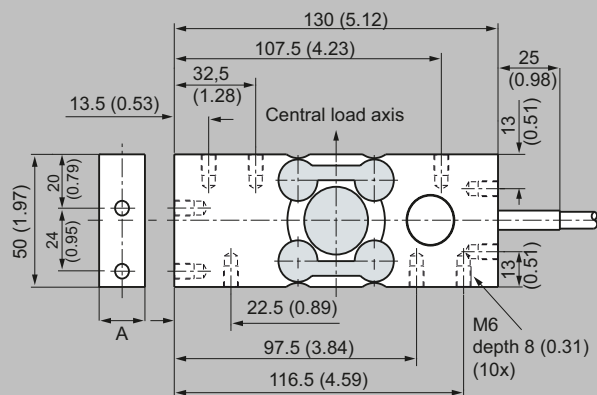
Single point load cells

SIWAREX WL260 SP-S SB Load cell

Technical specifications (Continued)

SIWAREX WL260 SP-S SB	
Cable connection	
Function	Color
• EXC + (supply +)	Green
• EXC – (supply -)	Black
• SIG + (measured signal +)	White
• SIG – (measured signal -)	Red
• Sense + (sensor cable +)	Yellow
• Sense - (sensor cable -)	Blue
• Shield (not connected to the load cell body)	Transparent
Rated temperature range B_{rn}	-10 ... +40 °C (+14 ... +104 °F)
Operating temperature range B_{tu}	-35 ... +65 °C (-31 ... +149 °F)
Storage temperature range B_{ts}	-35 ... +65 °C (-31 ... +149 °F)
Degree of protection according to EN 60529; IEC 60529	IP68
Certificates and approvals	
Accuracy class according to OIML R60	C3
Explosion protection	<ul style="list-style-type: none"> • EU/UK: <ul style="list-style-type: none"> - ATEX/UKEX II 1 G Ex ia IIC T4 - ATEX/UKEX II 1 D Ex ia IIIC T200 135°C - Da - ATEX/UKEX II 3 G Ex ic IIC T4 Gc - ATEX/UKEX II 3 D Ex tc IIIC T73°C Dc - ATEX/UKEX II 3 G Ex ec T4 IIC Gc • USA: <ul style="list-style-type: none"> - IS CL I, II, III, DIV 1, GP A, B, C, D, E, F, G; T4 - IS CL I, ZN 0, AEx ia IIC T4 Ga - Zone 20, AEx ia IIIC T135°C Da - CL I, II, III, DIV 2, GP A, B, C, D, E, F, G; T4 - CL 1, ZN 2, GP IIC T4 - IS CL I, ZN 2, AEx ic IIC T4 Gc • Canada: <ul style="list-style-type: none"> - IS CL I, II, III, DIV 1, GP A, B, C, D, E, F, G; T4 - IS CL I, ZN 0, Ex ia IIC T4 Ga - Ex ia IIIC T135°C Da - CL I, II, III, DIV 2, GP A, B, C, D, E, F, G; T4 - CL 1, ZN 2, GP IIC T4 - Ex ic IIC T4 Gc • China: <ul style="list-style-type: none"> - NEPSI Ex ia IIC T6 Ga; Ex iaD 20 T80

Dimensional drawings



Rated load [kg (lb)]	6 (13.23)	12 (26.46)	30 (66.14)	60 (132.28)
A [mm (inch)]	18.5 (0.73)	18.5 (0.73)	18.5 (0.73)	23.5 (0.93)

SIWAREX WL260 SP-S SB load cell, dimensions in mm (inch)