

SP8...

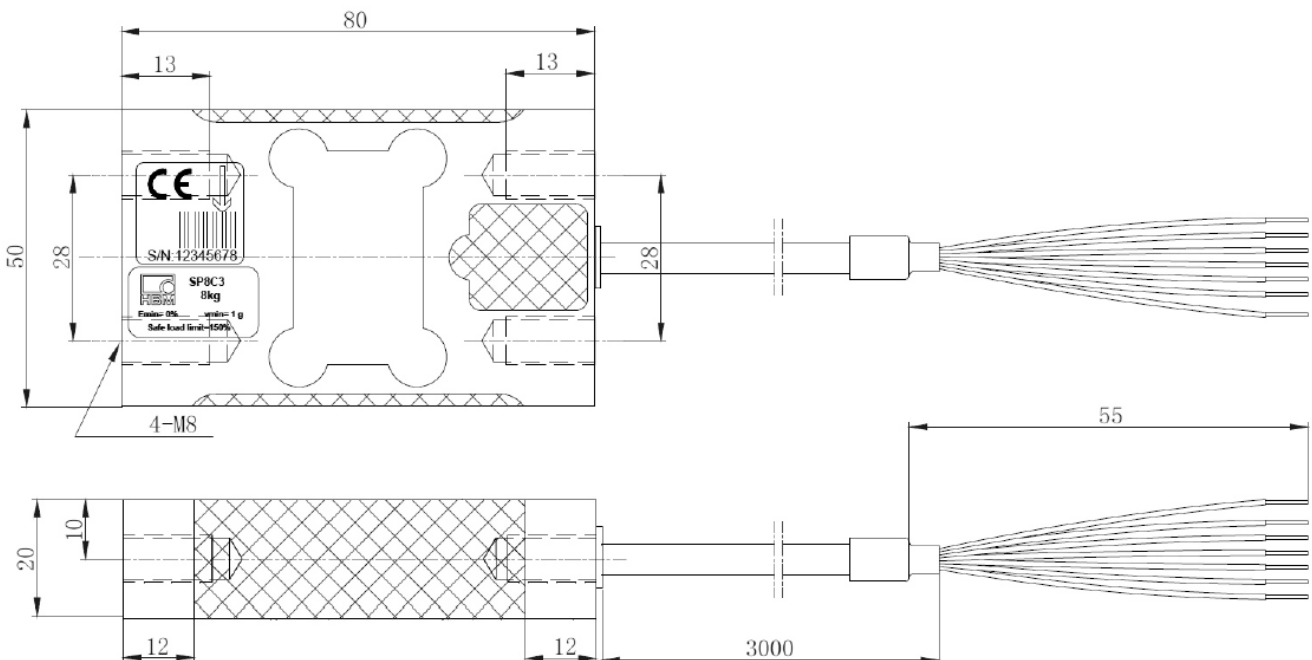
Single point load cell

Special features

- Maximum capacities 5 kg ... 100 kg
- Aluminum
- High ratio of minimum verification interval Y
- Off-center load compensation
- Shielded connection cable



Dimensions in mm (1 mm = 0.03937 inches)



Type			SP8...					
Accuracy class ¹⁾			C3					
Number of load cell verification intervals	n_{LC}		3000					
Maximum capacity	E_{max}	kg	5	8	15	30	50	100
Minimum load cell verification interval	v_{min}	g	0.5	1	2	5	5	10
Temperature coefficient of zero signal per 10 K	TC_0	% of C_n	±0.0140	±0.0175	±0.0186	±0.0233	±0.0140	
Ratio of minimum verification interval Y	Y		10,000	8,000	7,500	6,000	10,000	
Maximum platform size		mm	360 x 360			380 x 380		
Nominal sensitivity	C_n	mV/V	2.0 ±0.2					
Zero signal (without initial load)		mV/V	0 ±0.2					
Temperature coefficient of sensitivity +20 ... +40 °C -10 ... +20 °C	TC_S	% of C_n /10 K	±0.0175 ±0.0117					
Relative reversibility error	d_{hy}	% of C_n	±0.0150					
Non-linearity	d_{lin}		±0.0150					
Load creep in 30 minutes	d_{cr}		±0.0166					
Off-center load error			±0.0233					
Input resistance	R_{LC}	Ω	300 ... 500					
Output resistance	R_0		300 ... 500					
Reference excitation voltage	U_{ref}	V	5					
Nominal (rated) range of the excitation voltage	B_U		1 .. 12					
Maximum excitation voltage			15					
Insulation resistance at 100 V _{DC}	R_{is}	GΩ	>2					
Nominal (rated) range of the ambient temperature	B_T	°C	-10 ... +50					
Operating temperature range	B_{tu}		-10 ... +60					
Storage temperature range	B_{tl}		-25 ... +70					
Service load	E_{lq}	% of E_{max}	150					
Breaking load	E_d		300					
Rated displacement at E_{max} , approx.	s_{nom}	mm	<0.2					
Resonance frequency, approx.		Hz	330	420	620	920	1220	1720
Degree of protection ²⁾			IP67					
Material			Aluminum					

1) Not certified to OIML R60

2) Per EN 60 529 (IEC529)

Cable assignment

Shielded 6-core round cable (6 x 0.14mm²), free ends

Pin 1	Signal (+)	white
Pin 2	Signal (-)	red
Pin 3	Excitation voltage (-)	black
Pin 4	Excitation voltage (+)	blue
Pin 5	Sense line (+)	green
Pin 6	Sense line (-)	grey
	Shield	yellow, connected to load cell

Ordering codes (overview)

Type	SP8
Accuracy class	C3
Comments	Cable length 3 m (6-wire, free ends)
Capacity [kg]	Bestell-Nr.
5	1-SP8C3/5KG-1
8	1-SP8C3/8KG-1
15	1-SP8C3/15KG-1
30	1-SP8C3/30KG-1
50	1-SP8C3/50KG-1
100	1-SP8C3/100KG-1

Subject to modifications.
All product descriptions are for general information
only. They are not to be understood as a guarantee
of quality or durability.

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