



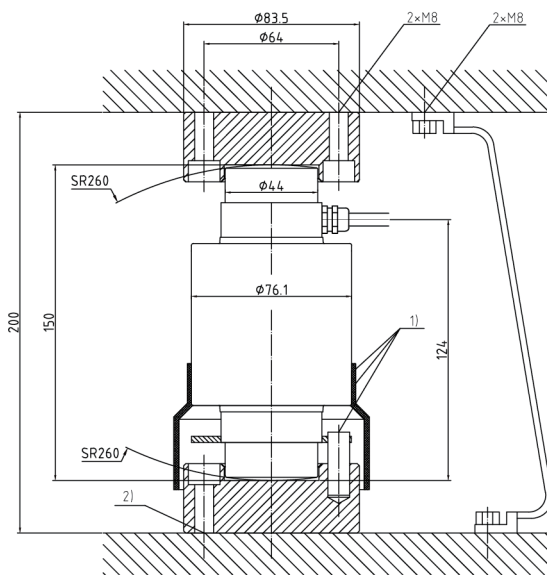
## Main Features:

- Material: Alloy steel, stainless steel optional
- Rated Capacities: 30t~50t
- OIML R60, NTEP HB44, CPA, CE and RoHS certified
- IP Rating: IP68(P510A), IP69K(P510S)
- Suitable for truck scales, heavy duty hopper scales, force measurement equipment.
- High precision by OIML R60 C4, high reliability

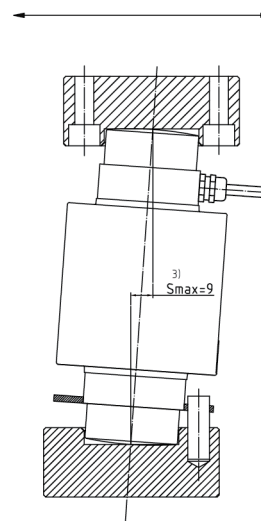
## Product description:

The P510 series is a typical and standard cost-efficient canister compression load cell with compact and robust machined canister. The P510 is fully hermetically sealed with upper and base covers; which enable it to work in the harshest conditions. A rocker column design ensures optimum weighing accuracy when subjected to off-center and side forces when the scale deck is moving back and forth, meanwhile left and right.

## Dimensions (mm&inch):



Mandatory main rocking direction



Notes:

<sup>1)</sup> Dowel pin [Ø10×30; rotation stop]; flexible tube and tube clip enclosed in the packing of the load cell

<sup>2)</sup> Fixing bolt, drawing turned by 90°

<sup>3)</sup> Smax=max. lateral displacement of load introduction. Recommended gap is 3 ... 5mm

## P510 Self-restoring Rockerpin Load Cell Specifications

Parameter		Units	Specifications	
Model No.			P510A / P510S	
Rated capacity (E <sub>max</sub> )		t	30 / 40 / 50	
Accuracy class <sup>1)2)</sup>			C3	C4
Min. dead load		kg	0	
Rated output		mV/V	2.0 ± 0.002	
Zero balance		% of E <sub>max</sub>	± 1	
Repeatability error		% of AL <sup>3)</sup>	< ± 0.010	< ± 0.005
Creep; 30 minute		% of AL	< ± 0.017	< ± 0.0125
Min. dead load output return (DR); 30 min		% of AL	< ± 0.017	< ± 0.0125
Temp. effect on	Min. dead load output	% of E <sub>max</sub> /°C	< ± 0.0020	< ± 0.0014
	Rated output <sup>2)</sup>	% of AL/°C	< ± 0.0012	< ± 0.0009
Temperature range	Compensated	°C(°F)	-10 to +40 [+14 to +104]	
	Operating		-40 to +65 [-40 to +149]	
	Safe storage		-40 to +80 [-40 to +176]	
Excitation voltage	Recommended	V AC/DC	5 ~ 15	
	Maximum		15	
Terminal resistance	Excitation	Ω	766 ± 10	
	Output		700 ± 3	
Insulation resistance @50VDC		MΩ	> 5000	
Breakdown voltage		V AC	> 500	
Seal type / IP rating			Hermetically welded / IP68	
Load limit	Safe	% of E <sub>max</sub>	150	
	Ultimate		300	
Material	Spring element		Alloy steel / Stainless steel	
	Strain gauge		PEEK	
Cable construction	Standard		Fireretardant PVC jacket, 6mm O.D. ; 4 Conductors dual shielded wires	
	Option		Exterior braided armor covered with fireretardant PVC; PVC chemically resistant jacket, 7mm O.D. ; 4 Conductors triple shielded wires	
Cable length		m	16.0	
Weight; approx		kg	6.0	
Fatigue life		cycles @E <sub>max</sub>	> 1,000,000	
Deflection at E <sub>max</sub> ; approx		mm	< 0.6	
Barometric pressure effect on Zero Output		Vmin/kPa	< 1.0	

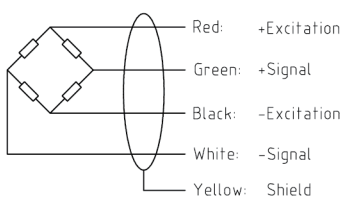
### Notes:

<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

<sup>2)</sup> The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44

<sup>3)</sup> AL = Applied Load

Cable Colour Code: (4-wire circuit)



Shield connected to load cell body

### Interchangeable Products:

Manufacturer	Model
HBM	C16A
Vishay rever	ASC