



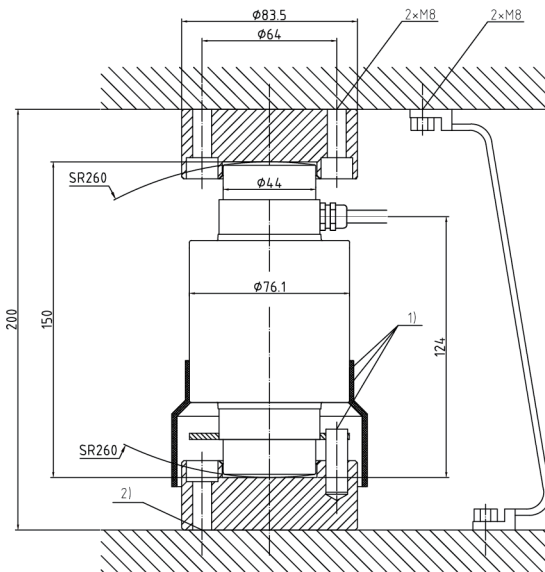
Main Features:

- Material: Stainless steel
- Compensation mode: active compensation for non-linearity, creep, hysteresis, ZTC, STC, etc.
- Advanced quick Protocol CANopen by 125 kbit/sec
- Rated Capacities: 30t~50t
- OIML R60, NTEP HB44, CPA, CE and RoHS certified
- IP Rating: IP68, IP69K
- Suitable for truck scales, heavy duty hopper scales, force measurement equipment.
- High precision by OIML R60 C6, high reliability

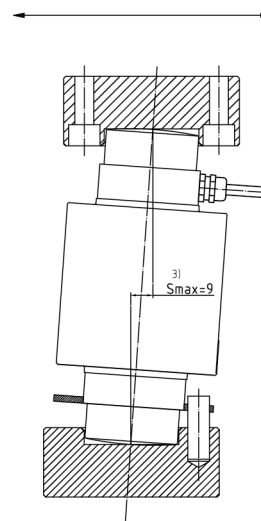
Product description:

The P510SD series is a typical digital cost-efficient canister compression load cell with compact and robust machined canister. The P510SD 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):



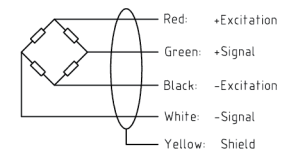
Mandatory main rocking direction



Notes:

- ¹⁾ Dowel pin [Ø10×30; rotation stop]; flexible tube and tube clip enclosed in the packing of the load cell
- ²⁾ Fixing bolt, drawing turned by 90°
- ³⁾ Smax=max. lateral displacement of load introduction. Recommended gap is 3 ... 5mm

Cable Colour Code: (4-wire circuit)



Shield connected to load cell body

P510SD Self-restoring Rockerpin Digital Load Cell Specifications

Parameter		Units	Specification		
Model No.			P510SD		
Load cell type			Column compression (Digital)		
Rated capacity (R.C.) ⁴⁾		t	30	40	50
Sensitivity at R.C.		d @ R.C.	300,000	400,000	500,000
Communication			Controller Area Network (CAN), Encrypted		
Communication rate		kbit/sec	125		
Accuracy class			C3	C4	C6
Min. dead load		kg	50		
Zero balance		% of E _{max}	± 1		
Y-value			10000	12500	20000
Repeatability error		% of AL ³⁾	< ± 0.010	< ± 0.008	< ± 0.005
Creep; 30 minute		% of AL	< ± 0.0167	< ± 0.0125	< ± 0.0083
Min. dead load output return (DR); 30 min		% of AL	< ± 0.0167	< ± 0.0125	< ± 0.0083
Temp.effect on	Min. dead load output	% of E _{max} /°C	< ± 0.0016	< ± 0.00128	< ± 0.0008
	Rated output ¹⁾²⁾	% of AL/°C	< ± 0.00133	< ± 0.0010	< ± 0.00066
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 DC	12 or 24		
	Minimum / Maximum		7.5 / 28		
Lightning protection		A	> 15,000		
Surge protective device			Integral		
Insulation resistance @50VDC		MΩ	> 5000		
Breakdown voltage		V AC	> 500		
Protection	Type		Hermetically welded		
	IP rating		IP68/69K		
Load limit	Safe dynamic load	% of E _{max}	70		
	Safe		200		
	Ultimate		300		
Material	Spring element		Stainless steel		
	Enclosure		304 stainless steel, laser welded		
	Connectors		Integral		
	Strain gauge		PEEK-1000		
Cable construction	Option 1		Fireretardant PVC jacket, 6mm O.D. ; 4 Conductors dual shielded wires		
	Option 2		Exterior braided armor covered with fireretardant PVC; PVC chemically resistant jacket, 7mm O.D. ; 4 Conductors triple shielded wires		
Cable	Cable length	m	16.0		
	Network		Junction boxes		
Weight; approx		kg	6.0		
Fatigue life		cycles @E _{max}	> 1,000,000		
Deflection at E _{max} ; approx		mm	< 0.5	< 0.6	< 0.7
Barometric pressure effect on Zero Output		Vmin/kPa	< 1.0		

Notes:

¹⁾ Error due to the combined effect of non-linearity and hysteresis

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

³⁾ AL = Applied Load

⁴⁾ R.C. = Rated Capacity

Interchangeable Products:

Manufacturer	Model
HBM	C16D