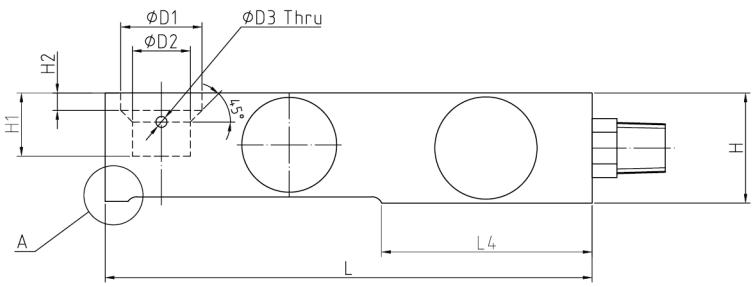
Main Features:

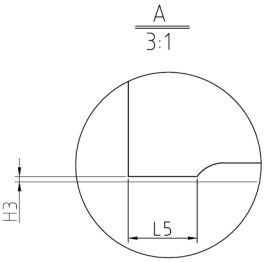
- Material: high-quality stainless steel
- Rated Capacities: 550kg~4.4t
- CPA C8, CE and RoHS certified
- IP Rating: IP68, IP69K
- Suitable for platform scales, dosing system and process control in chemical, food, pharmaceutical and other industries.
- Built-in real-time self-compensation microprocessor, high accuracy up to OIML R60 C10 and high reliability
- B750S with 17-4PH material and PEEK strain gauge from HBK.

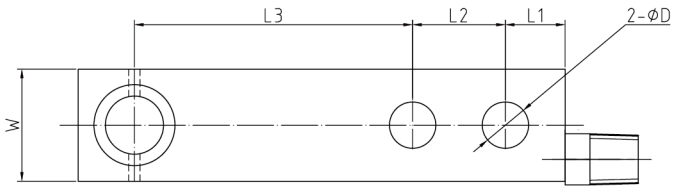
Product description:

The B550SD series is a digital single-ended shear beam load cell with a precision of C10. They can be daisy-connected and does not require a junction box. The built-in microprocessor actively monitors environmental changes, continuously compensates for various performances in real time, and indicate the parameter status of each load cells, ensuring the weighing results more accurate and stable. The hermetically sealing process ensures high sealing performance and can work normally in harsh industrial environments.

Dimensions (mm&inch):







Rated Cap.	L	L1	L2	L3	L4	L5	W	H	H1	H2	H3	D	D1	D2	D3
t/mm															
0.22t-1.1t	133.4	16.4	25.4	76.2	57.7	6.4	30.7	30.2	17.3	4.8	0.38	13.0	22.2	15.9	3.1
2.2t	136.6	16.6	25.4	76.2	57.7	-	36.8	36.6	22.9	9.5	-	13.0	22.2	15.9	3.1
4.4t	171.5	16.7	38.1	95.2	73.8	-	42.9	42.9	29.4	11.0	-	19.5	34.9	22.2	3.1

B550SD Digital Single-ended Shear beam Load Cell

Parameter		Units	Specification				
Model No.			B550SD				
Rated capacity (R.C.)[4]		t	0.22	0.55	1.1	2.2	4.4
Sensitivity at R.C.		d @ R.C.	440,000	550,000	550,000	440,000	440,000
Accuracy class [1)2)]			C3		C6	C10	
Min. dead load		kg	0				
Zero balance		% of Emax	± 1				
Y-value			10000		15000	22000	
Repeatability error		% of AL [3)]	< ± 0.010		< ± 0.005	< ± 0.003	
Creep; 30 minute		% of AL	< ± 0.0167		< ± 0.0083	< ± 0.0050	
Min. dead load output return (DR); 30 min		% of AL	< ± 0.0167		< ± 0.0083	< ± 0.0050	
Temp. effect on	Min. dead load output	% of Emax/°C	< ± 0.0016		< ± 0.00107	< ± 0.0007	
	Rated output [1)2)]	% of AL/°C	< ± 0.00133		< ± 0.00066	< ± 0.0004	
Temperature range	Compensated	°C(°F)	-10 to +40 [+14 to +104]				
	Operating		-20 to +65 [-4 to +149]				
	Safe storage		-40 to +80 [-40 to +176]				
Effect of Cable Length on System Accuracy		kg	0 (digital signal)				
Communication	Mode		CAN		RS485		
	Protocol		CANopen		Modbus RTU		
	Transmittion rate		125 / 250 kbps		9600bps / 57600 bps		
Effective system update rate		HZ	40 (4pcs digital load cell,125kbps)		20 (4pcs digital load cell,9600bps)		
Excitation voltage	Recommended	V DC	12 or 24				
	Minimum / Maximum		7.5 / 28				
Excitation current	Typical value	mA	20				
	Max. value		150				
Warm-up time		mins	15				
Surge protective device			Integral (GDT + TVS)				
Insulation resistance @50VDC		MΩ	> 5000				
Breakdown voltage		V AC	> 500				
Protection	Type		Hermetically sealing (submersible)				
	IP rating		IP68/69K				
Load limit	Safe dynamic load	% of Emax	70				
	Safe		150				
	Ultimate		300				
Material	Spring element		Stainless steel				
	Enclosure		316 stainless steel, hermeticaly sealing				
	Connectors		Quick-Connect with bayonet lock, 5 Pins,Glass-to-Metal seal				
	Strain gauge		PEEK				
	Cable construction		fireretardant and cold-resistant PVC, 6mm O.D. ; 5 Conductors triple shielded wires				
Cable length	Cell to cell	m	2.5 / 5 (standard configuration)				
	Network		No Junction box				
Weight; approx		kg	0.22-1.1t			2.2t	4.4t
			1.0			1.4	1.2
Fatigue life		times @Emax	> 1,000,000				
Deflection at Emax; approx		mm	< 0.5				
Barometric pressure effect on Zero Output		Vmin/kPa	< 1.0				
Fixing bolts	Size / class		M12 / A2-70				M18 / A2-70
	Tightening torque	N.m	98			120	275

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
Mettler-Toledo	SLB615D