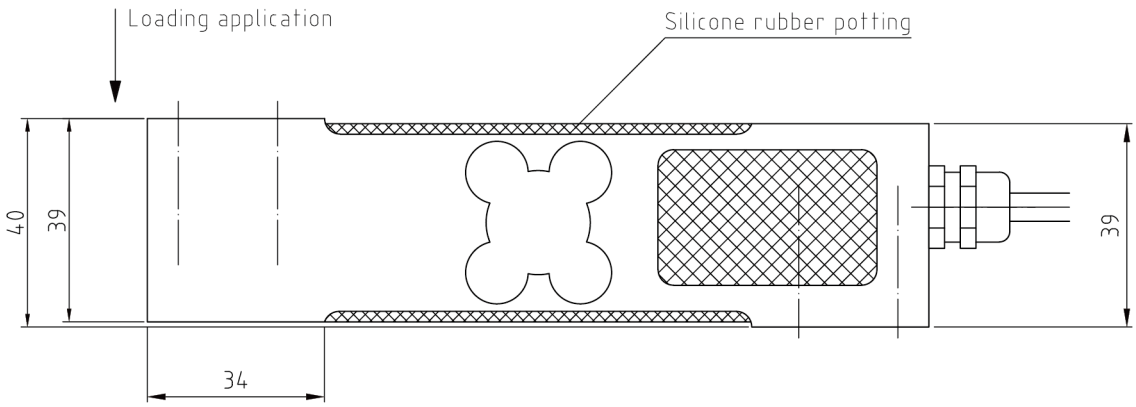
Main Features:

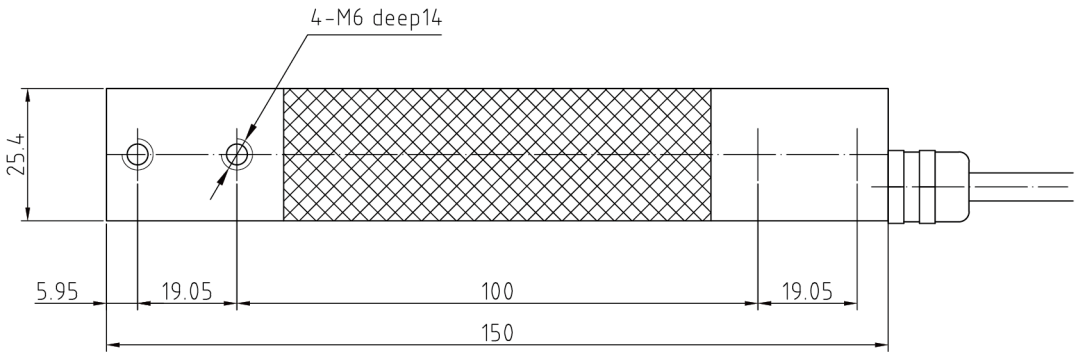
- Material: Aluminum
- Rated Capacities: 10kg~100kg
- OIML R60 C6 (pending), NTEP HB44, CPA C10, CE and RoHS certified
- IP Rating: IP66
- Max. platform size: 400x400mm
- Built-in real-time self-compensation microprocessor, high accuracy up to OIML R60 C10 and high reliability.

Product description:

SP1041D is a true digital single-point load cell with an accuracy of C10. The built-in microprocessor actively monitors environmental changes, continuously compensates for various performances in real time, and indicates the parameter status of each load cell, ensuring the weighing result more accurate and stable. The aluminum single-point load cell is compact, low capacity It is an ideal load cell often used in many weighing equipment. The integrated potting process of glue sealing ensures the reliability and durability of on-site application.

Dimensions (mm&inch):





SP1041D Aluminum Digital single-point Load Cell

Parameter		Units	Specification				
Model No.			SP1041D				
Rated capacity (R.C.)[4]		kg	10	20	30	50	100
Sensitivity at R.C.		d @ R.C.	200,000				
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 [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 / 57600bps		
Effective refresh rate		HZ	50 (1piece load cell,125kbps)		20 (1piece 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		Silicon potting (strain gauge with special coating)				
	IP rating		IP66				
Load limit	Safe dynamic load	% of Emax	70				
	Safe		150				
	Ultimate		300				
Material	Spring element		Aluminum				
	Connectors		N/A				
	Strain gauge		PEEK				
	Cable construction		fireretardant and cold-resistant PVC, 6mm O.D. ; 4 Conductors triple shielded wires				
Max. platform size		mm	400*400				
Eccentric error (OIML R76)		% of AL/cm	< ± 0.0028				
Cable length		m	3 (standard configuration)				
Weight; approx		kg	0.8				
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		M6-8.8				
	Tghtening torque	N.m	10			15	

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	MT1041D
Flintec	PC42D (20 to 150kg)
HBM	SP4D (SP1041 with imperial thread)