

SM11B Pressure Sensor

1. Description

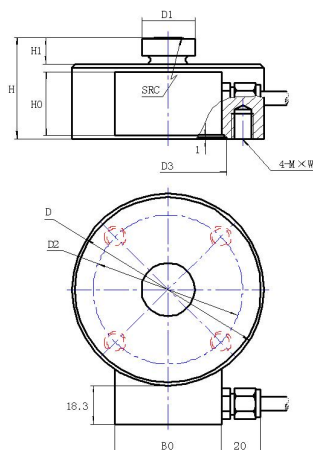
Diaphragm box type load sensor. It adopts a flat diaphragm for pressure sensing, and the housing and diaphragm are of an integrated structure. It is widely applied in various electronic scales, cement mixing silos, dry powder mixers and industrial automation measurement and control systems.

2. Characteristics

- Low profile
- Long-term stability.
- The surface of alloy steel is bright plated.
- Applicable to force testing and process weighing, etc.
- 3-wire system with 24V power supply and 0-10V output.



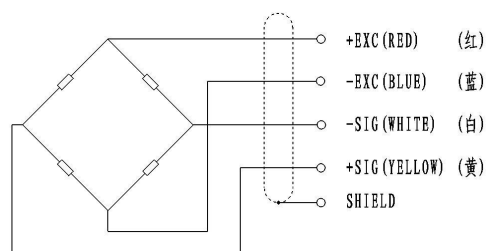
Dimensions (In mm, 1mm=0.03937 inches)



CAP. / SIZE	øD	øD1	øD2	øD3	H	H0	H1	B0	C	M
t/mm										
0.05~1	50	13	42	34	30	20	7	35	60	M5×7
2~5	90	25	70	55	48	30	12.5	50	100	M10×12
10~20	115	32	90	68	60	30	12.5	50	160	M12×16
50	155	44	125	97	90	30	15.5	50	300	M16×20
lb/inches (conversion of above dimensions)										
110.23~2204.62	19.69	5.12	16.54	13.39	11.81	7.87	2.76	13.78	23.62	M5×7
4409.25~11023.11	35.43	9.84	27.56	21.65	18.90	11.81	4.92	19.69	39.37	M10×12
22046.23~44092.45	45.28	12.60	35.43	26.77	23.62	11.81	4.92	19.69	62.99	M12×16
110231.13	61.02	17.32	49.21	38.19	35.43	11.81	6.10	19.69	118.11	M16×20

Circuit Diagram:

Red: +input
Blue: -input
White: +output
Yellow: -output



Specification:

Type	Technical parameters
Nominal load range	5 ~ 50t
Power supply	10~12 VDC
Out put	4~20mA/24VDC(可选)
Drawing current	<100 mA
Zero balance	1.0±% of rated output
Analog output	2.8±0.015mV/V
Input resistance (R _{ic})	380±10Ω (ohms)
Output resistance (R _o)	350±5Ω (ohms)
Insulation resistance	≥5000 MΩ (Mege-Ohms)
Class precision	0.05%FS
Effect of temperature	0.05%FS/10°C
Operating temperature	-40 ~ +85°C
Safe Load Limit	200% FS
Safety margin against yielding	300% FS
Safety margin against breakage	500% FS
Material material	High performance alloy steel or (chromium ratio>15% stainless steel)
Protection type	IP67/IP68