SUNMOON
日月科技

Type SM40F Side Pressure Load Cell

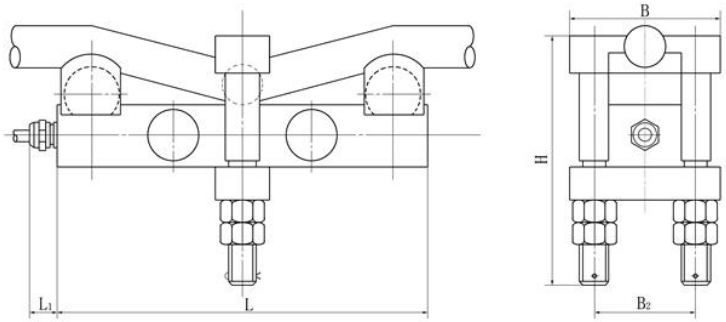
Description

The sensor is made of alloy steel or stainless steel and features a unique side-pressure structure. Its working principle is that the steel wire rope is fixed on the sensor through U-shaped bolts (or pressure blocks + bolts) and slots at both ends. When the steel wire rope is under tension, the force acts on the sensor through the guide wheel. It is applicable to the measurement and control of wire rope tension and is mainly used on lifting equipment such as electric hoists, material hoists and wire rope direct cranes.

Characteristics：

high reliability, good interchangeability, easy to install, simple operation, easy to maintain

Dimensions （In mm. 1mm=0.03937 inches）



CAP./SIZE	Diameter of steel wire	H	L	L1	B	B1
t/mm						
1～2	ø6-14	117	160	18	76	45
3～5	ø16-26	170	260	18	108	68
10～30	ø24-36	175	272	18	112	72
Ib/inches (conversion of above dimensions)						
2204.62～4409.25	ø2.36-5.51	46.06	62.99	7.09	29.92	17.72
6613.87～11023.11	ø6.30-10.24	66.93	102.36	7.09	42.52	26.77
22046.23～66138.68	ø9.45-14.17	68.90	107.09	7.09	44.09	28.35

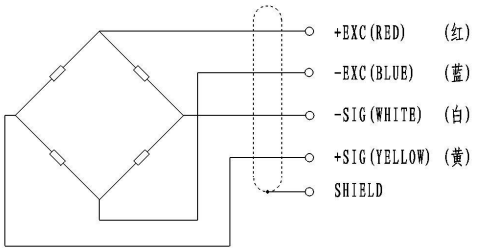
Circuit Diagram:

Red: ＋input

Blue: -input

White: +output

Yellow: -output



Specification:

Type	Technical parameters
Nominal load range	1～10t
Power supply	10~12 VDC
Zero balance	1.0±% of rated output
Analog output	2.0±0.01mV/V
Input resistance（Rlc)	400±20Ω（ohms）
Output resistance（Ro)	350±5Ω（ohms）
Insulation resistance	≥5000 MΩ（Mege-Ohms）
Class precision	0.05%FS
Effect of temperature	0.02%FS/10℃
Operating temperature	-40～+85℃
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