Electronic Force Transducer Model SM

- *Strain Gauge Force Transducer with "S" Profile*
- *Application in all Areas of Force Measuring Techniques*
- *Suitable in Combination with Force Measuring Device KMG*

General Information:

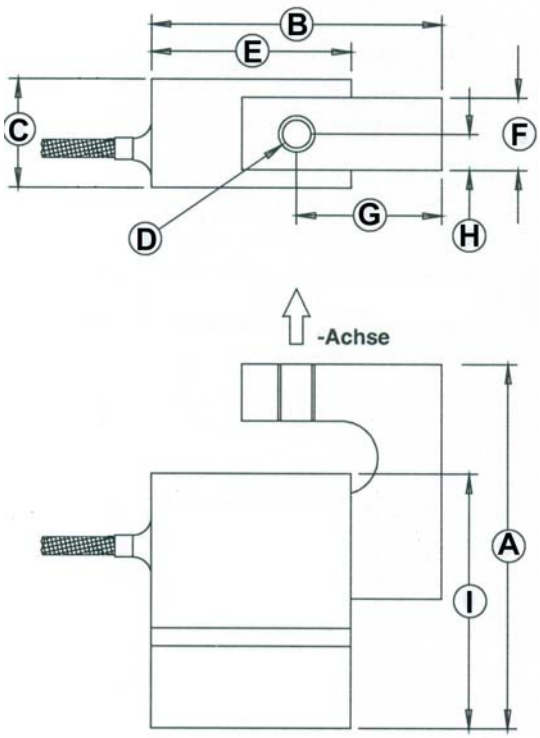
The load cells of the model series SM can be used for tension and compression measurements. They are suitable for various force measuring applications. In combination with a force gauge KMG or DKS-USB an efficient measuring system is provided.

The strain gauge load cells use standard „S" beam design with threaded holes at top and bottom to mount in either tension or compression applications. Load cells are electromechanical systems. These systems generate a rated output signal which is exact proportional to the applied load. The structure of the load cell body has a high stiffness and stability. The precise manufactured internal construction ensures that the applied forces are concentrated into defined areas. The load cells contain no movable mechanical components. The resulting deflection of the basic form is measured by strain gages which are mounted on the „S" beam. The strain gages within a load cell are connected to a Wheatstone bridge. The precise placement of the gages ensures that predominant loads are measured which are applied through the axis of the load cell whereas errors caused by side forces or bend moments are minimized. Nevertheless to achieve measurements with highest possible accuracy a fundamental requirement is that there is only one load path and that this load path must be through the load axis of the load cell. Loads not being perfectly aligned must be avoided.
During the use of load cells a suited overload protection must be installed

Load Cell Model SM

Technical Specifications:

Model Name: SM



Capacities and Dimensions:

Modell	Nominal range [N]	A [mm]	B [mm]	C [mm]	D
SM 50 N	50	63,5	51	19	M6
SM 100 N	100	63,5	51	19	M6
SM 200 N	200	63,5	51	19	M6
SM 500 N	500	63,5	51	19	M6
SM 1000 N	1000	63,5	51	19	M6
SM 2000 N	2000	76,2	51	32	M12
SM 5000 N	5000	76,2	51	32	M12
SM 10000 N	10000	76,2	51	32	M12

Specifications

Capacity [N]:	accord. to chart tabulates
Rated Output::	3 mV/V (nominal)
Bridge Resistance:	350 ± 3,5 Ω
Absolute Zero Balance%:	± 1,0 output
Supply Voltage:	15 V DC max.
Measurement Range by Nominal Load:	0,076-0,127 mm (depending on type)
Weight:	ca. 200-300 g (depending on type)
Connection Cable:	4-Conductor with shield, 1 m long
Overload Protection:	± 150 % of the nominal range
Breaking Load:	± 500 % of the nominal range
Linearity in% of Nominal Load:	± 0,03-0,06 %
Zero Signal:	± 1 % of the nominal range

MAV PRÜFTECHNIK GmbH D - 12047 Berlin

Sanderstr. 28 * Telefon (030) 693 10 53 * Telefax (030) 693 10 69 * eMail: info@mav-germany.de