

Product Description

Portable Force Measurement Instrument FCS

Special Features

- Extremely flat design
- 4 Sizes are available
- Nominal force ratings from 100 N to 2 kN
- Combined error 0,5 %

Scope of Supply

Force sensor with fixed cable (PVC), 5 m in length with straight receptacle.

In combination with PAD the FCS is supplied with connecting plug

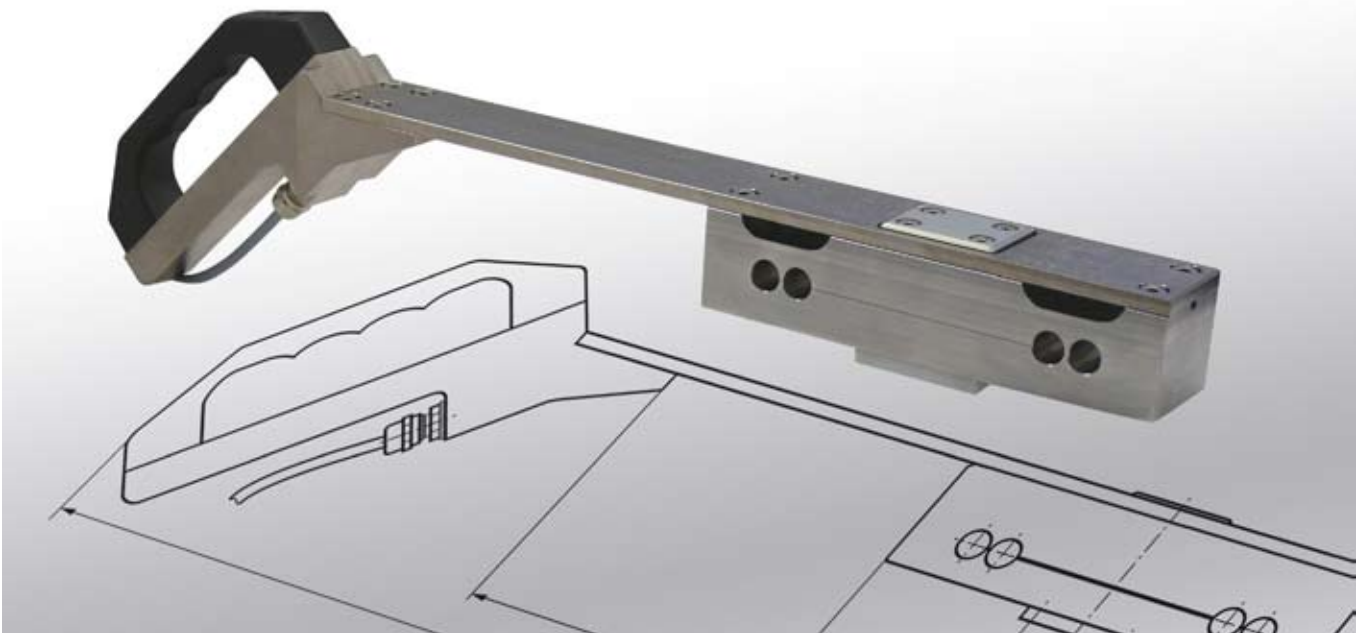
Additional Accessories

- Portable Strain Gauge Amplifier PAD

- For Size 3 and 4:

options D1 and D2

prism for transmission of force



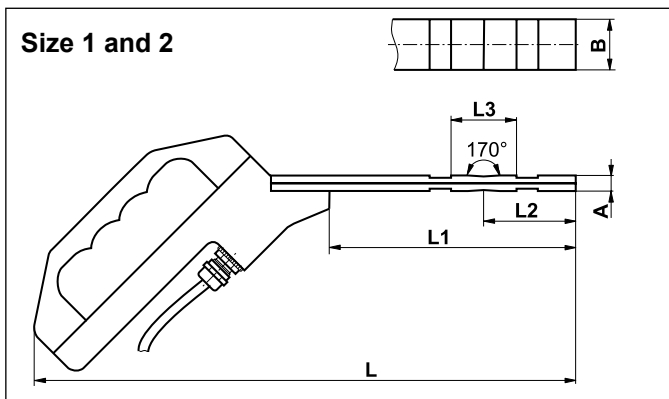
Application

The portable system FCS was designed for the measurement of compression forces in confined spaces and in narrow gaps, specially for the nip forces between rolls.

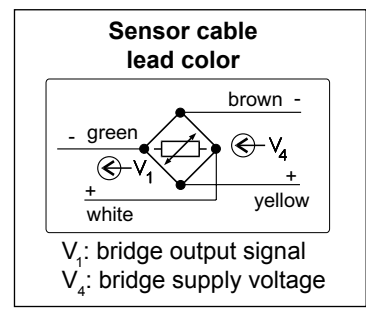
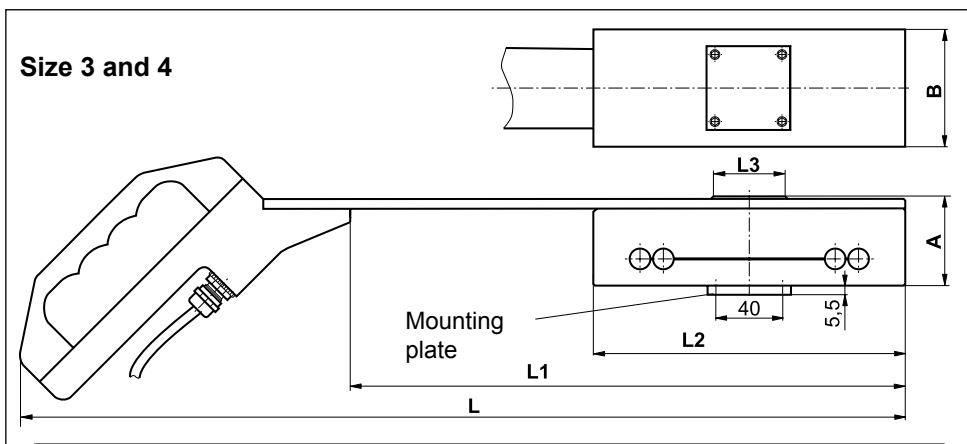
The special design of the sensor element with strain gauges in full bridge circuit is the core of the force sensor.

The amplification of the measurement signal to standardized levels is accomplished with amplifiers of the HAEHNE product programm. This enables stationary solutions with DIN rail or field enclosures, as well as portable systems, e. g. PAD.

Technical Data	Values (%) based on nominal force			
	FCS1	FCS2	FCS3	FCS4
Nominal force (measuring range)	100; 200; 300; 500 N	1; 2 kN	5; 10 kN	20; 50; 100** kN
Max. operating force	120 %	160 %	160 %	
Absolute max. force	200 %		200 %	
Nominal rating	1,5 mV / V		1 mV / V	
Combined error	0,5 %		0,5 %	
*Nominal ambient temperature	+ 10 ... +60° C			
*Operational temperature range	- 10 ... +70° C			
Nom. resistance of strain gauge bridge	700 Ω			
Bridge supply voltage	10 V DC			
*) Reduction to 50° C in case of moving cable.			**) Max. operating force 100 %	



Size	A	B	L	L1	L2	L3
1	6	20	340	160	51	32
2	10	30	340	160	56	40
3	47,5	50	531	332,7	187	43
4	53,5	70	531	332,7	187	43



With the sizes 3 and 4 can be ordered in place of the pressure plate also the prisms D1 and D2.

