

Portable Force Measurement Instrument FCS

Scope of Supply

Portable Force Measurement Instrument with 5 m cable (PVC) and connection variant T: cable gland, straight

In combination with PAD2 the FCS is supplied with connection plug

Additional Options

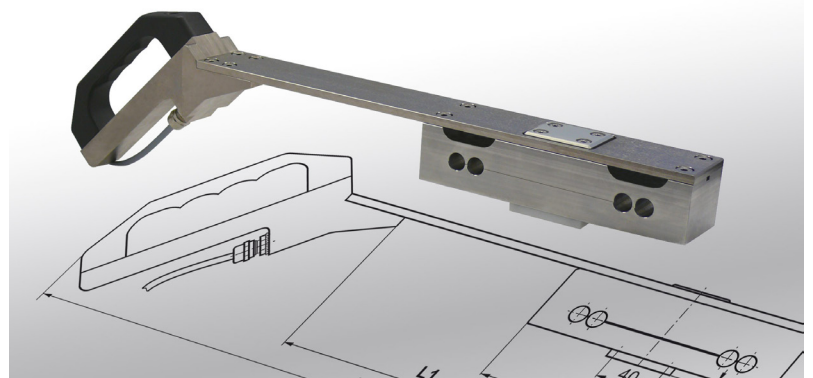
For size 3 and 4:

Option D1 Prism for force transmission for rolls up to \varnothing 200 mm

Option D2 Prism for force transmission for rolls up to \varnothing 480 mm

Additional Accessories

Portable amplifier PAD2



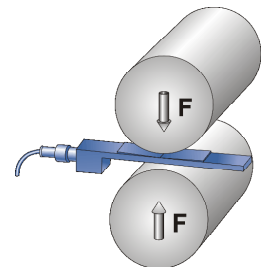
Special Features

- Extremely flat design
- 4 Sizes are available
- Nominal force ratings from 100 N to 2 kN

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.

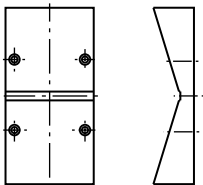
The special design of the sensor element with strain gauges in full bridge circuit is the core of the force sensor. The amplification of the measurement signal to standardized levels is accomplished with amplifiers of the HAEHNE product programm.

This enables stationary solutions with DIN rail or field enclosures, as well as portable systems, e. g. PAD2.

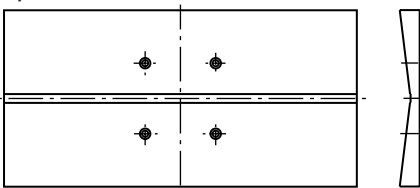


Options

Option D1



Option D2



The PAD2 is a universally applicable force measuring amplifier including display. In conjunction with all HAEHNE sensors a mobile force measuring system, for applications as

- Roller pressure measurement
- Calibration of strip tension measurements
- System monitoring and optimization

- Peak value memory
- Overload display (also in the minus range)
- Display can be tared

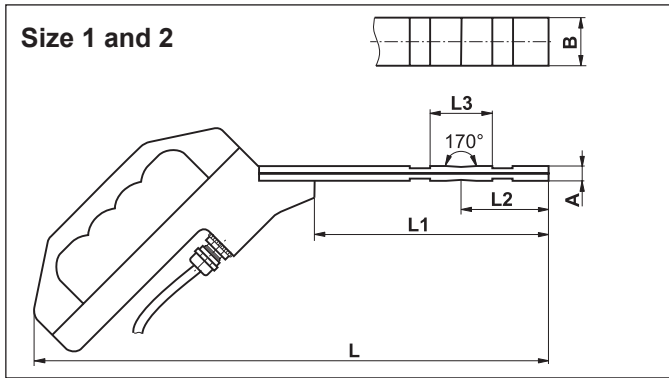


Ordering example

FCS3-10k-TD1

Type	
Size	
Nominal force	
Options	

Technical Data	Values (%) based on nominal force				
	FCS1	FCS2		FCS3	FCS4
Nominal force (measuring range)	500 N	1 kN	2 kN	5; 10 kN	20; 50; 100** kN
Nominal rating	1 mV / V	1 mV / V	1,5 mV / V	1 mV / V	
Max. operating force	120 %	140 %		140 %	140 %
Absolute max. force	200 %			200 %	
Combined error	1,5 %			0,5 %	
	Higher accuracy on request				
*Nominal ambient temperature	+ 10 ... +60° C (+50...+140° F)				
*Operational temperature range	- 10 ... +70° C (14... 158°)				
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	8	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

Dimensions in mm (1 mm = 0.03937 inches)

