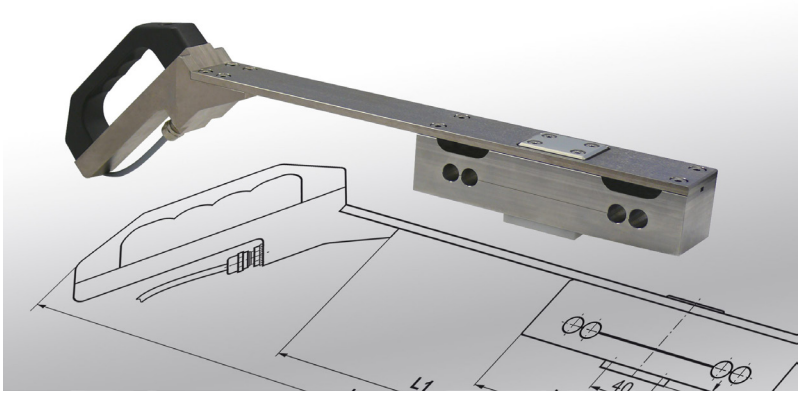
Portable Force Measurement Instrument FCS

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 ø 200 mm
Option D2 Prism for force transmission for rolls up to ø 480 mm

Additional Accessories
Portable amplifier PAD2

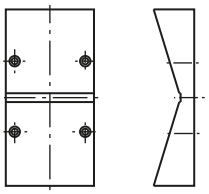


Special Faetures

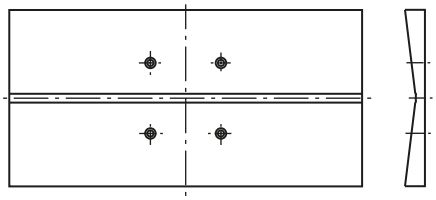
- Extremely flat design
- 4 Sizes are available
- Nominal force ratings from 100 N to 2 kN

Options

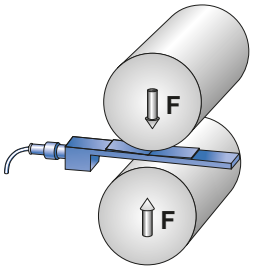
Option D1



Option D2



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.



Ordering example

FCS3-10k-TD1
Type
Size
Nominal force
Options

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http://www.haehne.de Email: info@haehne.de

FCS

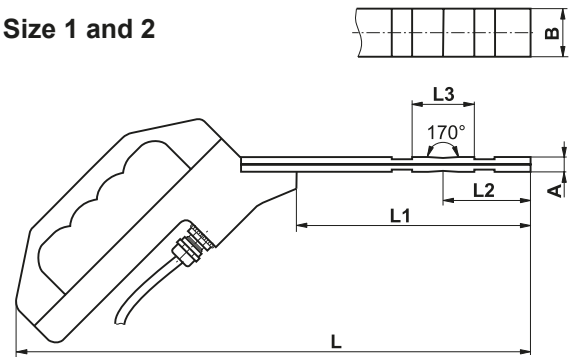
HAEHNE

Technical Data	Values (%) based on nomial force			
	FCS1	FCS2	FCS3	FCS4
Nominal force (measuring range)	500 N	1; 2 kN	5; 10 kN	20; 50; 100** kN
Max. operating force	120 %	140 %	140 %	140 %
Absolute max. force	200 %		200 %	
Nominal rating	1,5 mV / V		1 mV / V	
Combined error	1 %		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 brigde	700 Ω			
Bridge supply voltage	10 V DC			

*) Reduction to 50° C in case of moving cable.

**) Max. operating force 100 %

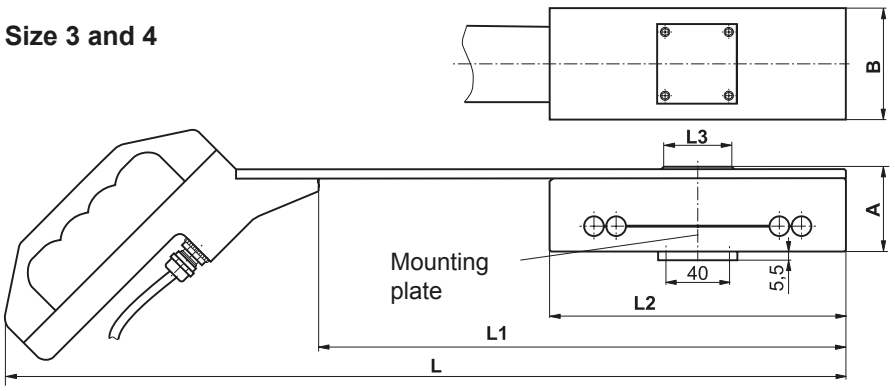
Size 1 and 2



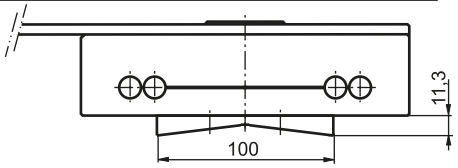
Size	A	B	L	L1	L2	L3
1	8	20	340	160	51	32
2	10	30	340	160	56	40
3	47,5	50	531	332,7	187	43
4	53,5	70	531	332,7	187	43

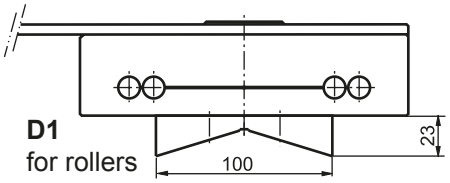
Dimensions in mm (1 mm = 0.03937 inches)

Size 3 and 4

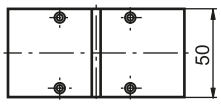


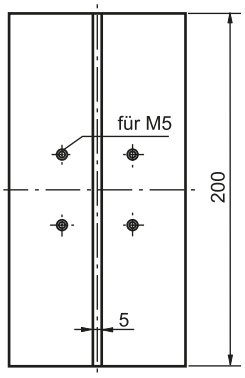
With the sizes 3 and 4 can be ordered in place of the pressure plate also the prisms D1 and D2.





D1
for rollers
up to ø 200





D2
for rollers
up to ø 480

Technical modifcations reserved.

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