



**Main features:**

- Fast and easy strain measurement on cylinders (magnetic or not)
- Very easy installation (need only 2 screw's)
- 0.5% accuracy
- Without calibration
- All parts of the sensor are made in stainless materials.
- Ideal for cyclical applications, e.g. clamping force measurements on presses

The strain ring AN1068 is based on the proven press-on technology of strain gages. The strain ring presses strain gages under the stainless protective foil that strongly onto the surface to measured the friction. It replaces the bonding normally used to fix strain gages, without calibration necessary.

Mounting: Clamp the strain ring with 2 screw's (torque of 3Nm) around the tie bar. Connect the cable for measurements. The surface at the measuring location should be free of any loose material (e.g. rust, paint etc). The measuring location does not need to be chemically clean, just clean it with some solving agent.

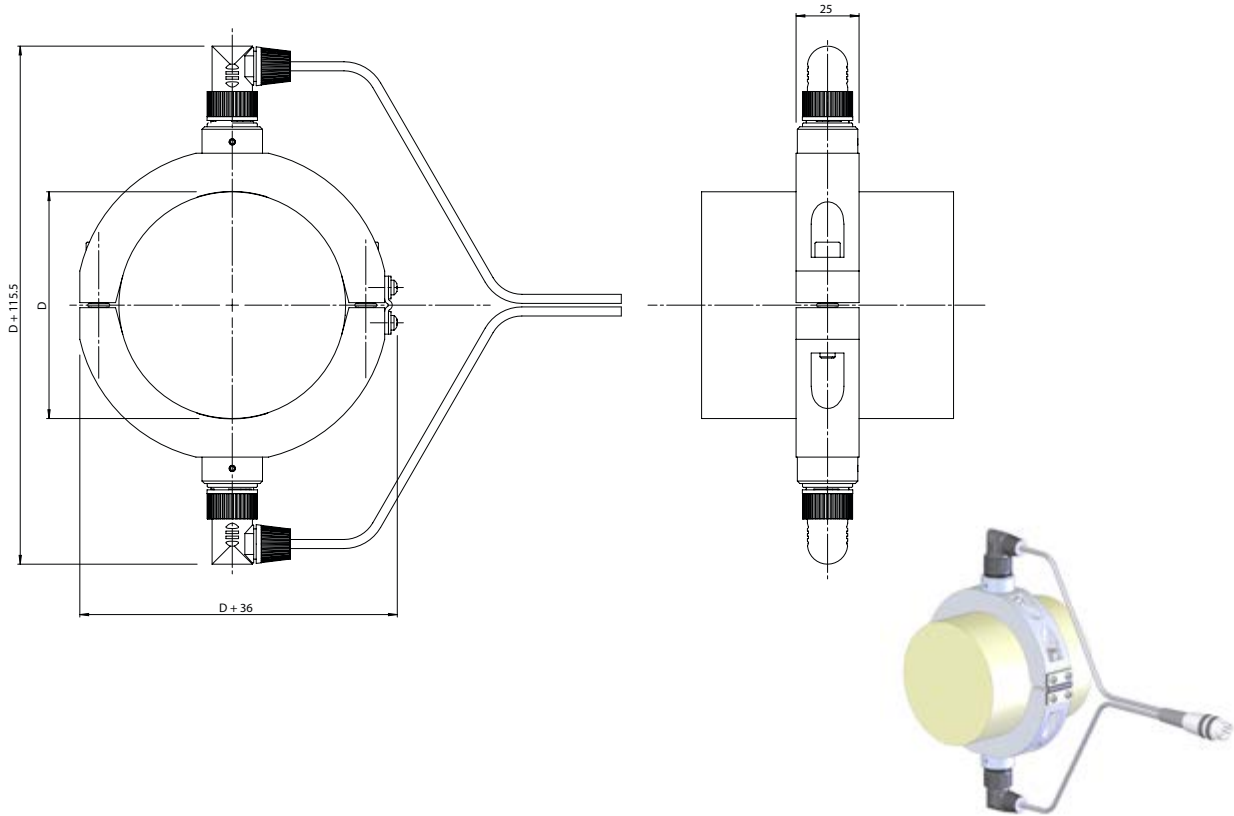
The zero-offset of the pressed on strain gages after mounting is usually high. Our amplifiers are able to handle this reset by the simple push of a button or a reset signal.

### TECHNICAL DATA

Strain gauge type	Foil (GF = 2.0)
Bridge resistance	350Ω
Measuring range	±1000µε
Sensitivity tolerance	± 0.2%
Transverse sensitivity	0.9 ± 0.2%
Accuracy	< ± 0.5% FS
Linearity	< ± 0.5% FS
Hysteresis	< ± 0.2% FS)
Repeatability	< ± 0.1% FS
Nominal input resistance	350Ω
Supply voltage	5VDC (max 8VDC)
Supply current	< 15mA
Operating temperatur range	0...55°C
Storage temperatur range	0...55°C
Overload capability	indefinite (offset occurs)
Protection class	IP66 (connection C) IP40 (connection D)
Case material Anodised	aluminium
Cover material	Stainless steel

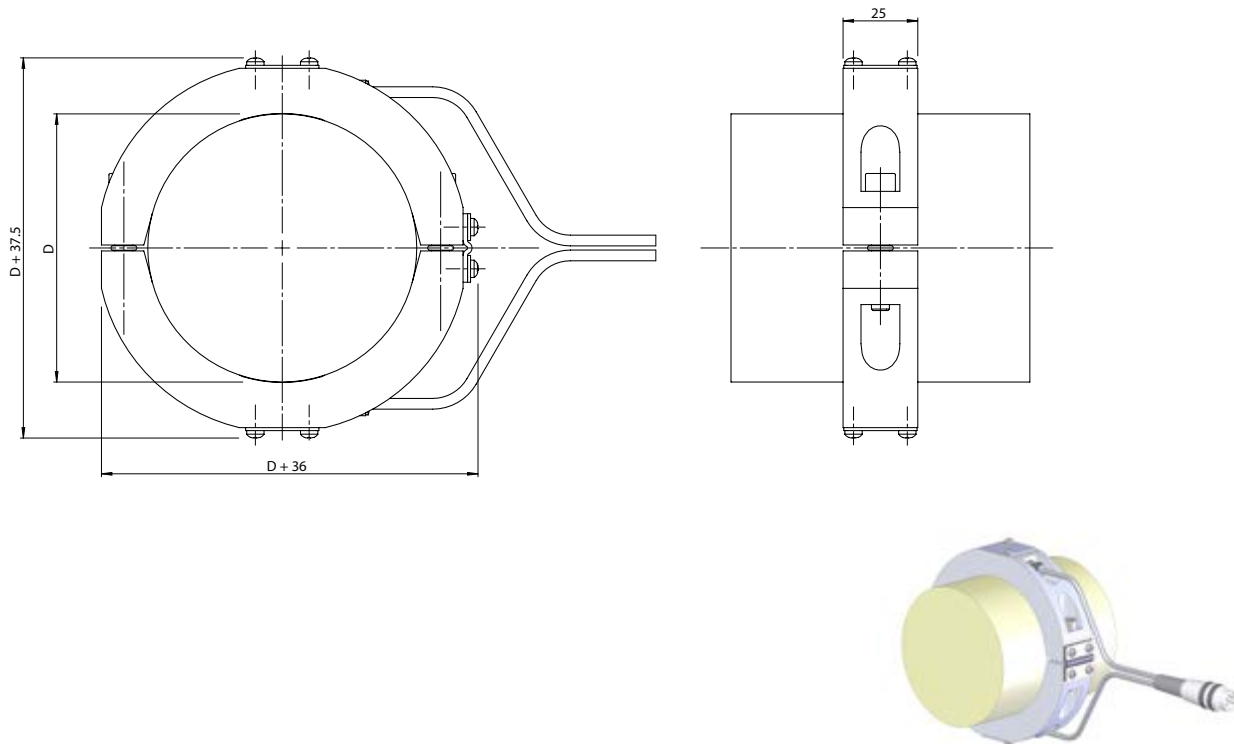
## DIMENSION

### AN1068 with connection D, with accessorie: Y-Cable



Dimensions in mm

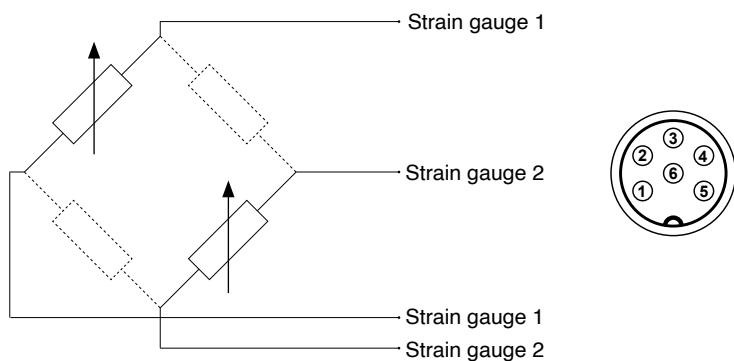
### AN1068 with connection C



Dimensions in mm

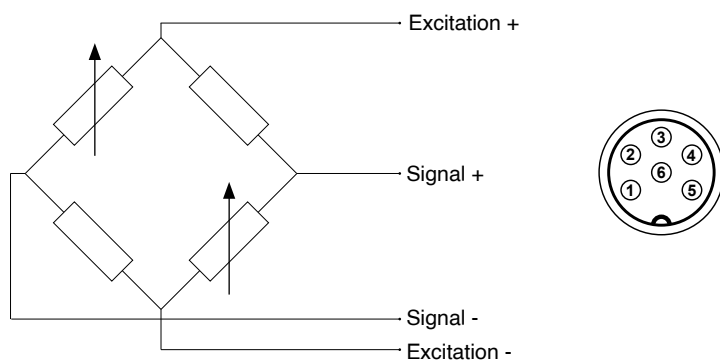
# ELECTRICAL CONNECTIONS

## Version 2/4 bridge



Connector PIN	Function
1	Strain gauge 1
2	Strain gauge 1
3	n.a.
4	Strain gauge 2
5	Strain gauge 2
6	n.a.

## Version 4/4 bridge (only available with Option C, Cable and Connector)



Connector PIN	Function
1	Excitation +
2	Excitation +
3	Excitation -
4	Signal +
5	Signal -
6	Excitation -

## ORDER CODE

Strain ring      **AN1068** -    -  -  -

Bar diameter	
50 mm	<b>050</b>
55 mm	<b>055</b>
60 mm	<b>060</b>
65 mm	<b>065</b>
70 mm	<b>070</b>
75 mm	<b>075</b>
80 mm	<b>080</b>
85 mm	<b>085</b>
90 mm	<b>090</b>
95 mm	<b>095</b>
100 mm	<b>100</b>
110 mm	<b>110</b>
115 mm	<b>115</b>
120 mm	<b>120</b>
125 mm	<b>125</b>
130 mm	<b>130</b>
135 mm	<b>135</b>
140 mm	<b>140</b>
145 mm	<b>145</b>
150 mm	<b>150</b>
155 mm	<b>155</b>
160 mm	<b>160</b>
170 mm	<b>170</b>
180 mm	<b>180</b>
190 mm	<b>190</b>
200 mm	<b>200</b>
230 mm	<b>230</b>
250 mm	<b>250</b>
280 mm	<b>280</b>
300 mm	<b>300</b>
310 mm	<b>310</b>
340 mm	<b>340</b>
350 mm	<b>350</b>
400 mm	<b>400</b>

Cable length for connection C	
<b>005</b>	0.5 m
<b>030</b>	3 m
<b>050</b>	5 m
<b>100</b>	10 m

Connection	
<b>D</b>	Direct (without cable)
<b>C</b>	Cable with connector

Bridge	
<b>2</b>	2/4 Bridge
<b>4</b>	Full bridge (only available with connection C)

Example: AN1068-080-2-C-050

Strain ring, Bar diameter 80mm, 2/4 Bridge, Connection C, Cable length 5m

## ACCESSORIES

Description		Order code	Code
Y - Cable with connection D	3 m	C - 678 - 030 - 680 - Y	F061939
	5 m	C - 678 - 050 - 680 - Y	F060629
	10 m	C - 678 - 100 - 680 - Y	F060630

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.



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