



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.

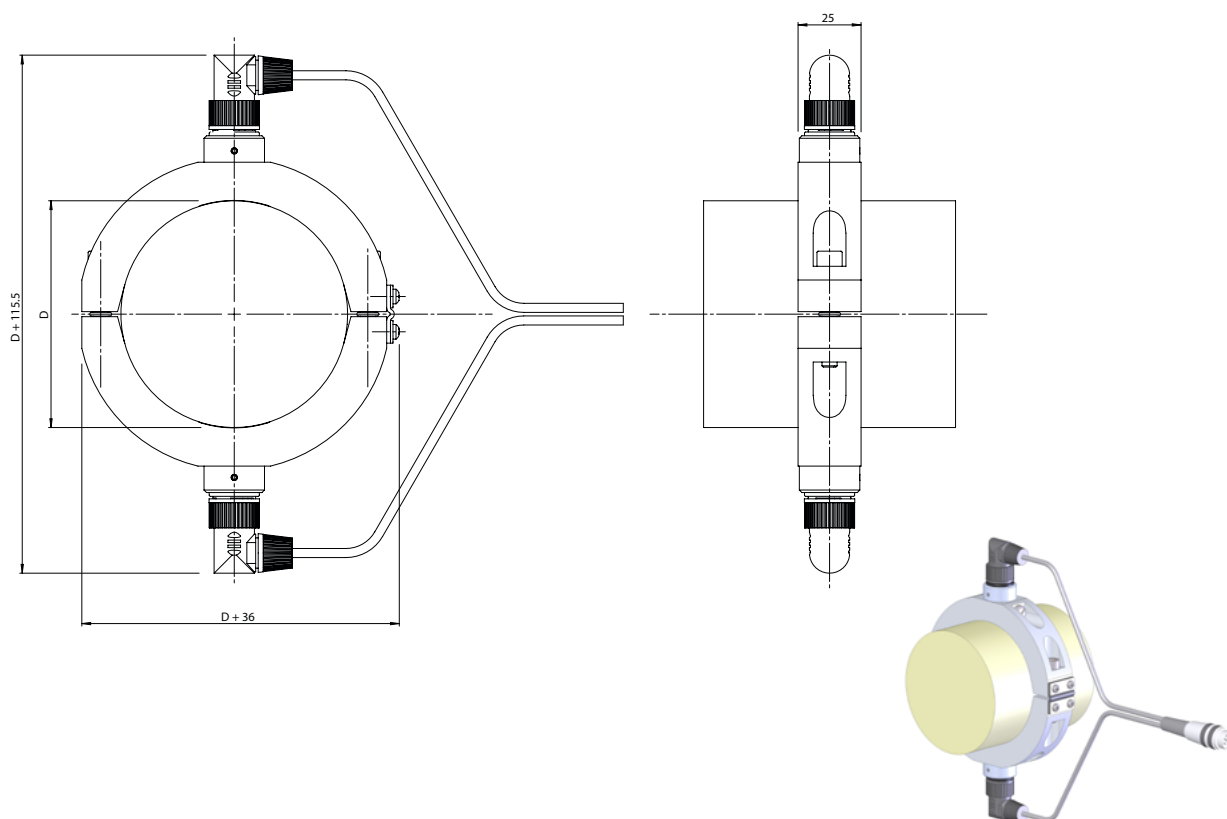
The zero-offset of the pressed on strain gages after mounting is usually high. Our amplifiers are able to handle this reset by the simple push of a button or a reset signal.

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

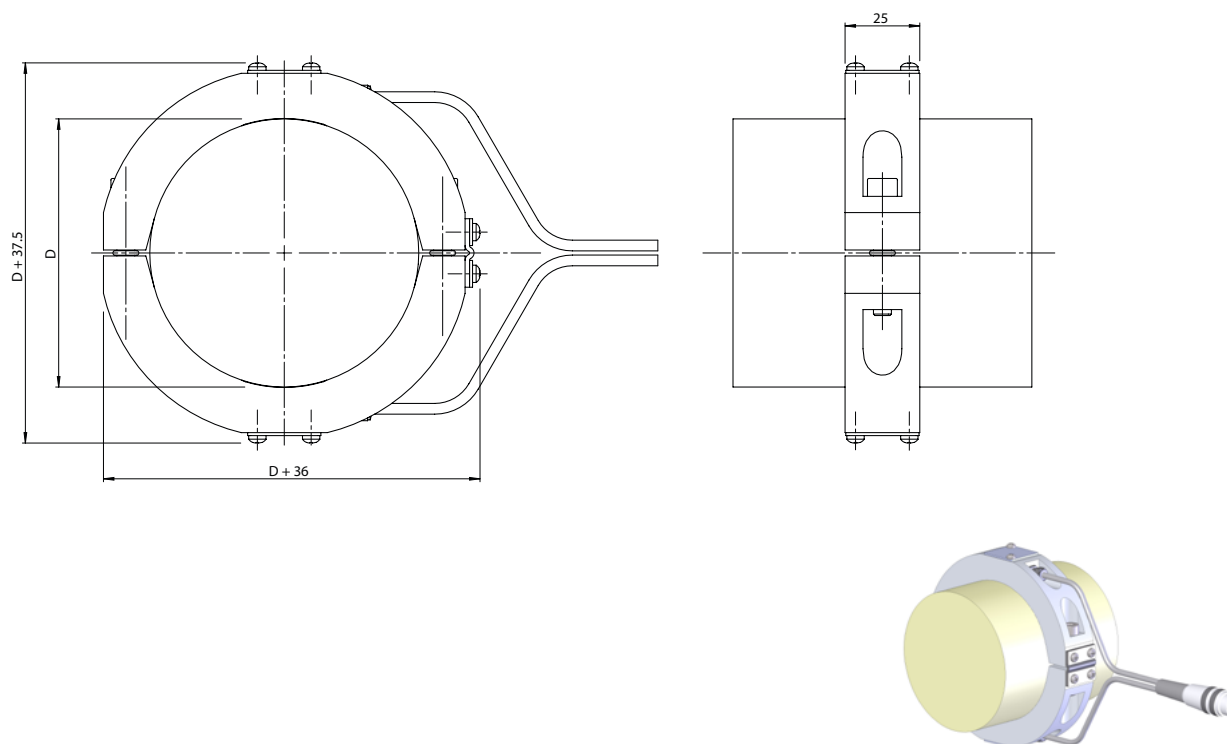
DIMENSION

AN1068 with connection D, with accessorie: Y-Cable



Dimensions in mm

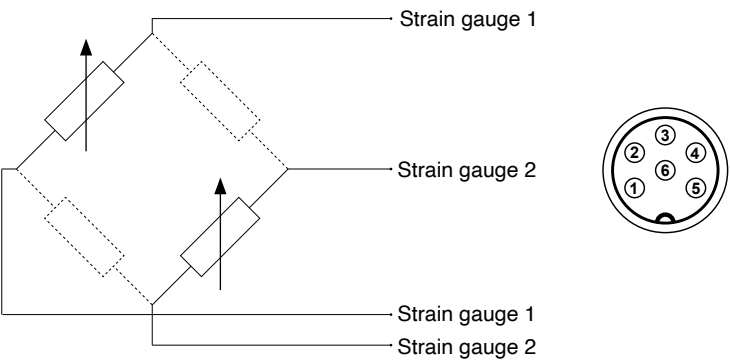
AN1068 with connection C



Dimensions in mm

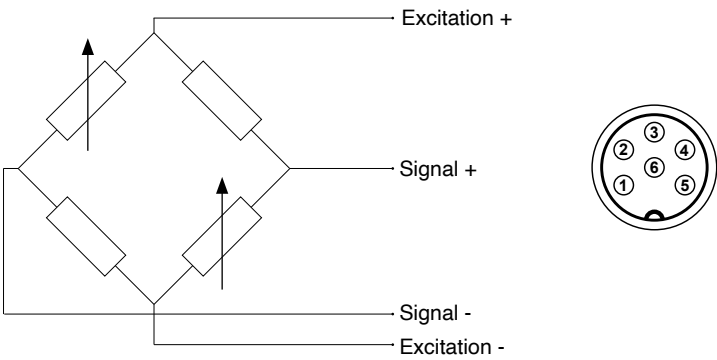
ELECTRICAL CONNECTIONS

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

Cable length for connection C

005	0.5 m
030	3 m
050	5 m
100	10 m

Connection

D	Direct (without cable)
C	Cable with connector

Bridge

2	2/4 Bridge
4	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.

GEFRAN

GEFRAN spa

via Sebina, 74 - 25050 Provaglio d'Iseo
(BS) - ITALIEN
Tel.: +39 030 9888.1 - Fax: +39 030 9839063
Internet: www.gefran.com

Gefran Schweiz AG

Steigweg 8, - CH-8355 Aadorf, Schweiz
Tel.: +41 52 523 25 00
Fax: +41(0)52-3661884
Internet: www.gefran.com

DTS_AN1068_06-20250_ENG