







#### 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	055°C
Storage temperatur range	055°C
Overload capability	indefinite (offset occurs)
Protection class	IP66
Case material Anodised	aluminium
Cover material	Stainless steel

### DIMENSION



Dimensions in mm



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### **ELECTRICAL CONNECTIONS**

#### Version 2/4 bridge



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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)



## **ORDER CODE**

	liameter		- T	e length for connection C
50 mm	050	00		0.5 m
55 mm	055	03		3 m
60 mm	060		<b>050</b> 5 m	
65 mm	065	10	0	10 m
70 mm	070			
75 mm	075			
80 mm	080			
85 mm	085			
90 mm	090			Connection
95 mm	095		D	Direct (without cable)
100 mm	100		C	Cable with connector
110 mm	110		C	
115 mm	115			
120 mm	120			
125 mm	125		Bridge	
130 mm	130		2	2/4 Bridge
135 mm	135		4	Full bridge (only available with
140 mm	140		4	connection C)
145 mm	145			· · · · · · · · · · · · · · · · · · ·
150 mm	150			
155 mm	155			
160 mm	160			
170 mm	170			
180 mm	180			
190 mm	190			

# 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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