



Main Features

- Ranges: from 1 to 1000 bar
- Nominal Output Signal:
0...10V (3 wires) / 4...20 mA (2 wires)
- Compact size
- Wetted parts: Stainless Steel

KS transmitters are based on film sensing element deposited on stainless steel diaphragm. Thanks to highly stable electronic and compact design these transducers can be used in applications requiring long-distance signal transmission or in smart control systems. KS pressure transmitters are designed mainly to measure pressure in oil, air, and hydraulic circuits. They can also be used in the technical and process measurement application as well as for compressors, presses and mobile hydraulic.

TECHNICAL DATA

	VOLTAGE	CURRENT
Output signal		
Accuracy (1)	< ±0.5% FSO	
Pressure ranges (2)	From 1 bar to 1000 bar (see table)	
Resolution	Infinite	
Overpressure (without degrading performance)	see table below	
Pressure containment (burst test)	see table below	
Pressure Media	Fluids compatible with Stainless Steel AISI 430F and 17-4PH	
Housing	Stainless Steel AISI 304	
Power supply	15...30Vdc	10...30Vdc
Dielectric strenght	250 Vdc	
Zero output signal	0 V (nominal)	4 mA (nominal)
Full scale output signal	10 V (nominal)	20 mA (nominal)
Max allowed load	2 mA	see load diagram
Long term stability	< 0.2% FSO/per year	
Operating temperature range (process)	-40...+125°C (-40...+257°F)	
Operating temperature range (ambient)	-40...+105°C (-40...+221°F)	
Compensated temperature range	-20...+85°C (-4...+185°F)	
Storage temperature range	-40...+125°C (-40...+257°F)	
Temperature effects over compensated range (zero-span)	± 0.015% FSO/°C typical (± 0.02% FSO/°C max.)	
Response time (10...90%FSO)	< 1 msec.	
Warm-up time (3)	< 30 sec.	
Mounting position effects	Negligible	
Humidity	Up to 100%RH non-condensing	
Weight	80-120 gr. nominal	
Mechanical shock	100g/11 msec according to IEC 60068-2-27	
Vibrations	20g max at 10...2000 Hz according to IEC 60068-2-6	
Ingress protection	sealed to IP65/IP67	
Output short circuit and reverse polarity protection	YES	
CE Conformity	EC Directive 2004/108/CE	

FSO = Full Scale Output

1 Incl. Non-Linearity, Hysteresis, Repeatability, Zero-offset and Final-offset (acc. to IEC 61298-2)

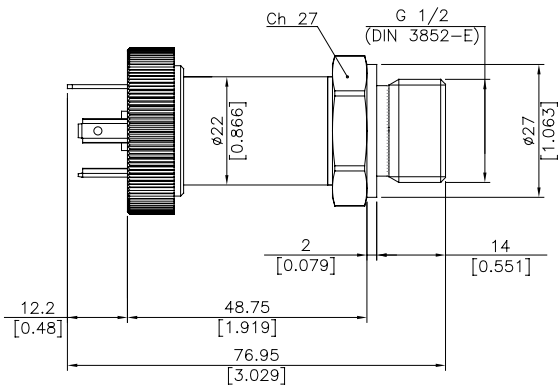
2 The operating pressure range is intended from 0.5% to 100% FS

3 Time within which the rated performance is achieved

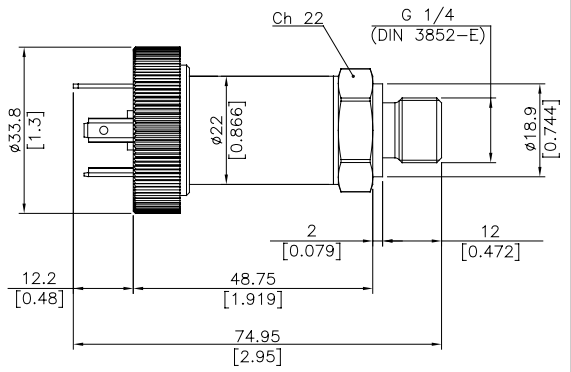
RANGE (Bar)	1	1.6	2	2.5	4	6	10	16	20	25	40	60	100	160	200	250	400	600	1000
Overpressure (Bar)	6	6	6	10	10	20	20	32	40	50	80	120	200	320	400	500	800	1200	1200
Burst pressure (Bar)	9	9	9	15	15	30	40	64	80	100	160	240	400	640	800	1000	1500	1500	1500

INSTALLATION DRAWINGS

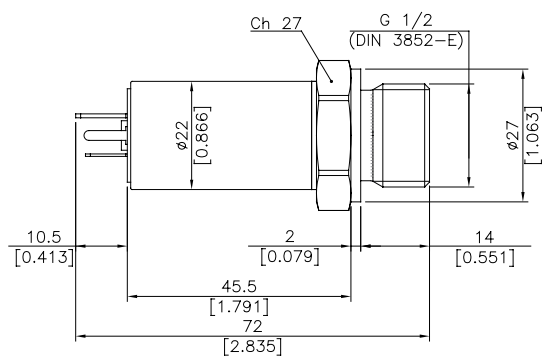
Connector EN 175301-803 Form A



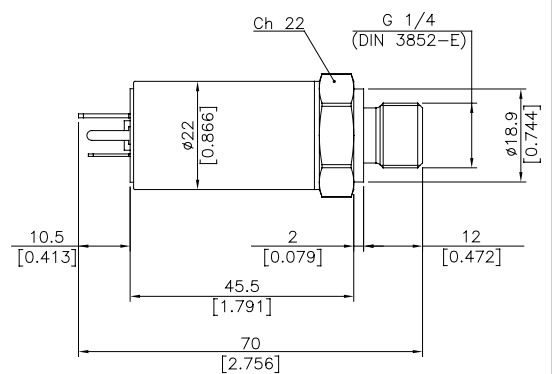
Connector EN 175301-803 Form A



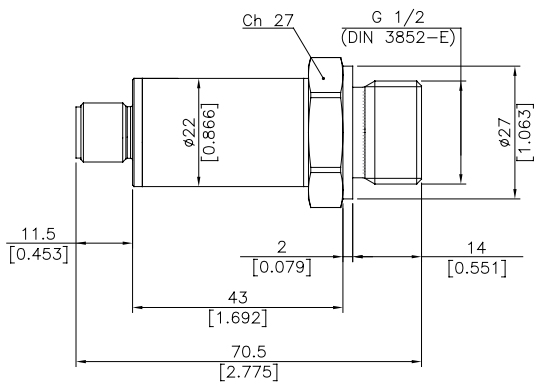
Connector EN 175301-803 Form C



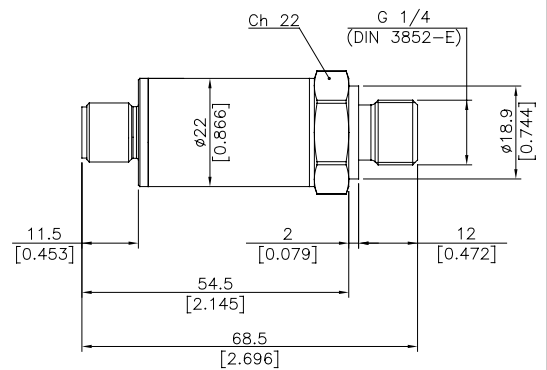
Connector EN 175301-803 Form C



Connector M12x1



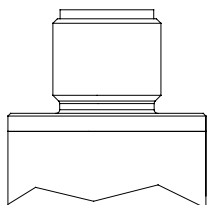
Connector M12x1



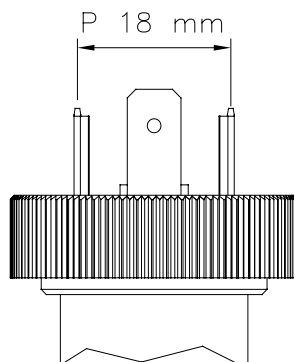
Dimensions mm. [inches]

ELECTRICAL CONNECTION

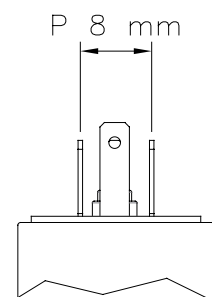
**Z - 4 pin connector
M12 x 1**



**E - EN 175301-803
4 pin DIN Form A**

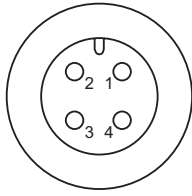


**C - EN 175301-803
4 pin MicroDIN Form C**



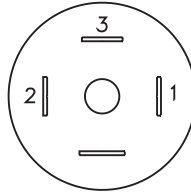
ELECTRICAL CONNECTION - Connectors

**Z – 4 pin male connector
M12 x 1**



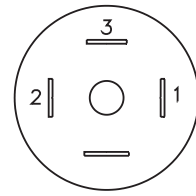
4 pin series 713
male connector
Protection IP67

E - EN 175301-803



4 pin DIN Form A
Protection IP65

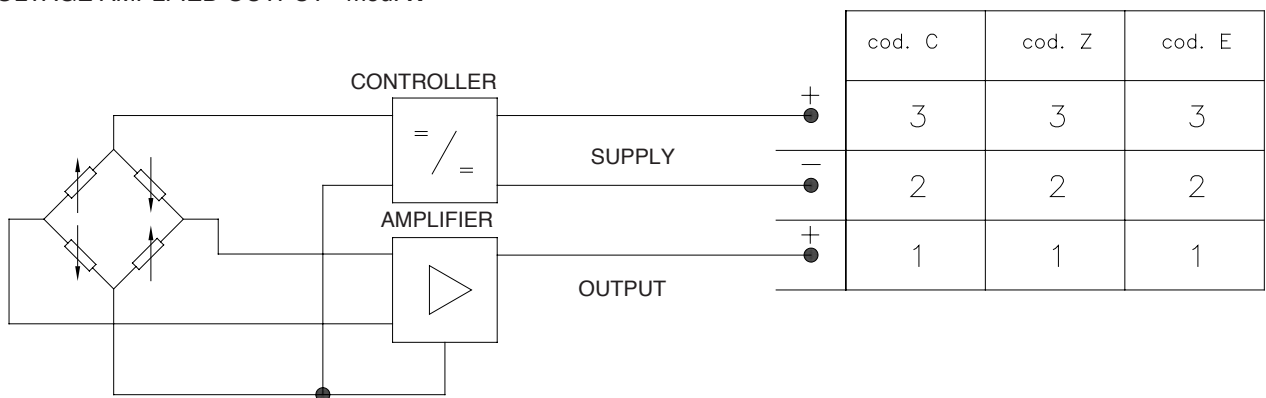
C – EN 175301-803



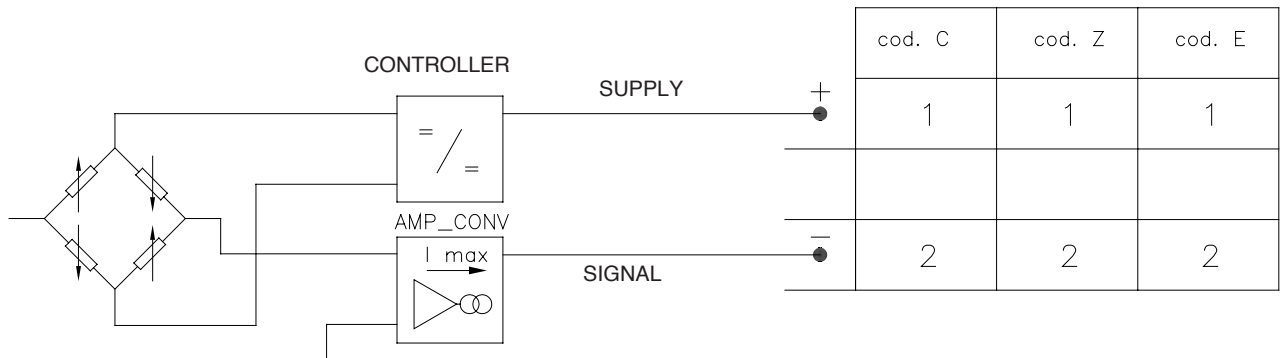
4 pin MicroDIN
Form C
Protection IP65

ELECTRICAL CONNECTION - connection diagrams

VOLTAGE AMPLIFIED OUTPUT - mod. N

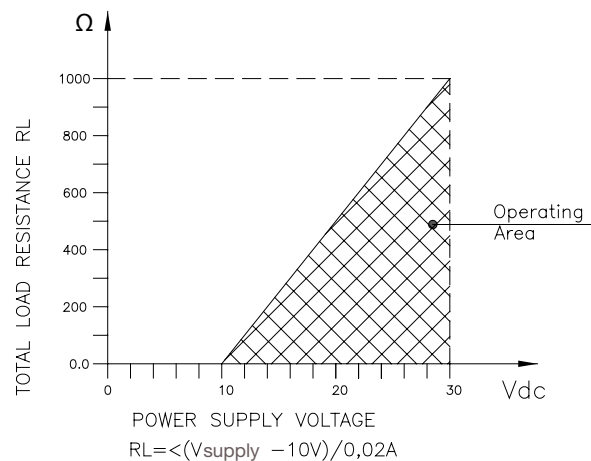


CURRENT AMPLIFIED OUTPUT - mod. E



LOAD DIAGRAM

Current output



ACCESSORIES ON REQUEST

Connectors Plugs

Connection E

EN 175301-803 4 pin DIN Form A (P 18) - Prot. IP65

CON 006

Connection Z

4 pin connector M12 x 1 - Prot. IP67

CON 293

Connection C

EN 175301-803 4 pin MicroDIN Form C (P 8) - Prot. IP65

CON 047

EXTENSION CABLES

IP67 female connector M12 x 1 + 2 m of cable

CAV011

IP67 female connector M12 x 1 + 5 m of cable

CAV012

IP67 female connector M12 x 1 +10 m of cable

CAV013

IP67 female connector M12 x 1 +15 m of cable

CAV015

Cable color code

Pin	Wire
1	Brown
2	White
3	Blue
4	Black

ORDERING INFORMATION

Pressure transmitter

KS

OUTPUT SIGNAL	
Standard	
4...20 mA	E
0...10 Vdc	N

PRESSURE CONNECTION	
Standard	
G 1/4 gas male (DIN 3852-E)	E
On Request	
G 1/2 gas male (DIN 3852-E)	3

Other Option On Request

ELECTRICAL CONNECTIONS	
Standard	
4-pin connector microDIN (P 8)	C
4 pin connector M12x1	Z
On Request	
4-pin connector DIN (P 18)	E

Other Option On Request

Es: KS - E - E - C - B04C - M - V

Pressure transmitter KS with 4 to 20 mA output signal, G1/4 male (DIN 3852-E) pressure connection, microDIN electrical connector, 0...400 bar pressure range, $\pm 0.50\%$ FSO accuracy, 1 msec response time.

Sensors are manufactured in compliance with: - EMC2004/108/CE compatibility directive
- RoHS 2002/95/CE directive

Electrical installation requirements and Conformity certificate are available on our web site: www.gefran.com

Mechanical and/or electrical characteristics differing from standard may be arranged on request.

RESPONSE TIME

V Fast (< 1 msec)

ACCURACY

M $\pm 0.5\%$ FSO Typical

MEASUREMENT RANGE

bar		bar	
B01U	1	B04D	40
B1V6	1,6	B06D	60
B02U	2	B01C	100
B2V5	2,5	B16D	160
B04U	4	B02C	200
B06U	6	B25D	250
B01D	10	B04C	400
B16U	16	B06C	600
B02D	20	B01M	1000
B25U	25		

CALIBRATION STANDARD

Instruments manufactured by Gefran are calibrated against precision pressure calibration equipment which is traceable to International Standards.

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

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