



Main characteristics

- Pressure ranges:
from 0...0,25bar to 0...60bar
- Precision: 0,20% FSO
- Current output signal
- Protection: IP65/IP67
- Material in contact: AISI 304 and AISI 316

The XSA transducers are based on the piezoresistive measurement principle. The mechanical structure makes the transducer insensitive during the tightening phase. This transducer is suitable for all those applications which require robustness as well as a high accuracy. The series can be used in applications characterized by the presence of explosive atmosphere. For this reason the probes are designed and manufactured according to the ATEX 94/9/CE directive with protection measures in compliance with: EN50014/EN60079-0/EN50020/EN50280.

	Eex ia IIC T6	Eex ia IIC T5
Maximum voltage	30Vdc	30Vdc
Maximum current	100mA	100mA
Maximum power	0,75W	0,75W
Equivalent inductance (*)	0,25 mH	0,25 mH
Equivalent capacity (*)	26nF	26nF
Temperature of the fluid	-20...+60°C	-20...+70°C
Ambient temperature	-20...+60°C	-20...+70°C

Main intrinsic safety characteristics

Transmitter designed and produced in compliance with Directive 94/9/CE ATEX and according to European standards EN50014 / EN60079-0 / EN50020 for the second group (II-surfaces), category 1, explosive atmosphere with presence of gases, fumes or mists (G) protection mode Eex ia T6, T5.

(*) includes inductance levels and capacity of a cable:
(typical L 1microH/m and typical C 100pF/m) with maximum length 15mt



EC-Type Examination Certificate number:
CESI 04 ATEX 075

TECHNICAL DATA

Output signal	CURRENT
Sensor class (1) (included linearity and Hysteresis)	H 0,2% FSO
Pressure ranges	from 0...0,25bar to 0...60bar
Maximum applicable pressure (without decay) (2)	See table
Resistance to bursting (3)	See table
Isolation resistance at 50Vdc	> 1000MΩ at 50Vdc
Maximum load	See diagram
Response time (10...90% FSO)	1msec
Power supply	10...30Vdc
Output short circuit protection and reverse power polarity	YES
Compensated temperature range	0...70°C
Admitted field of temperature ambient	-20...+70°C
Admitted field of temperature fluid	-20...+70°C
Thermal drift in compensated range (zero - sens.)	typical 0,2% FSO / 10°K (0,4%FSO/10°K for pressure ≤ 1bar)
Materials in contact with measurement fluid	AISI 304 and AISI 316
Outer case materials	AISI 304 stainless steel, nylon 66F35VO
Protection level	IP65 / IP67
Mechanical shock	IEC 68-2-6 100g/1ms
Resistance to the vibrations	IEC 68-2-6 20g max. at 15-2000Hz

FSO = Full Scale Output (output signal at rated pressure)

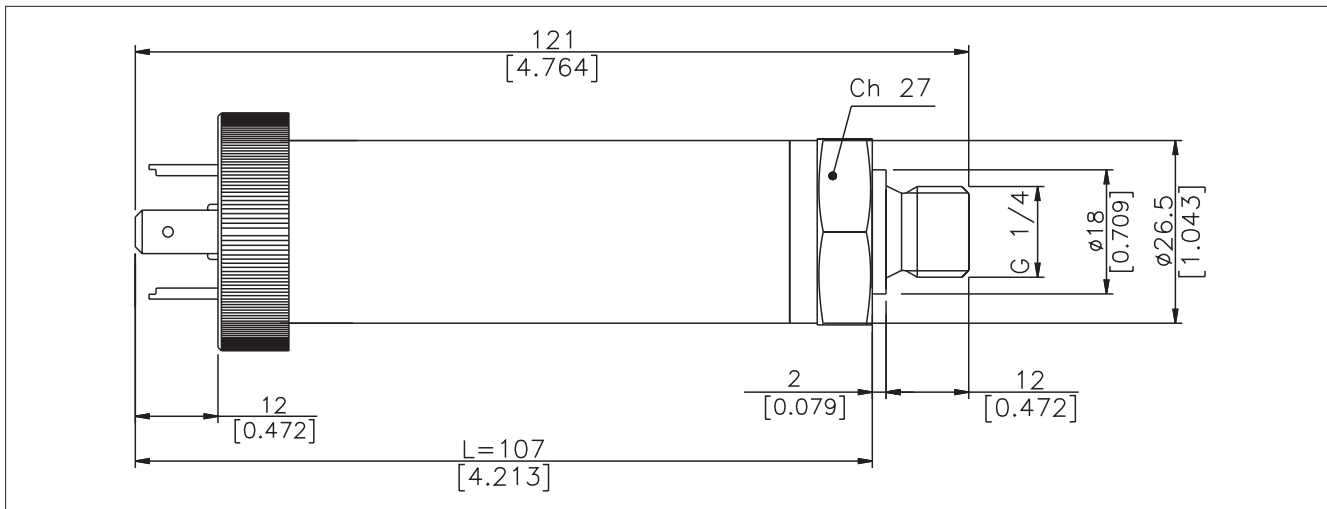
1 BFSL (Best Fit Straight Line) method

2 tested for more than 1000 strokes with single duration < 2msec.

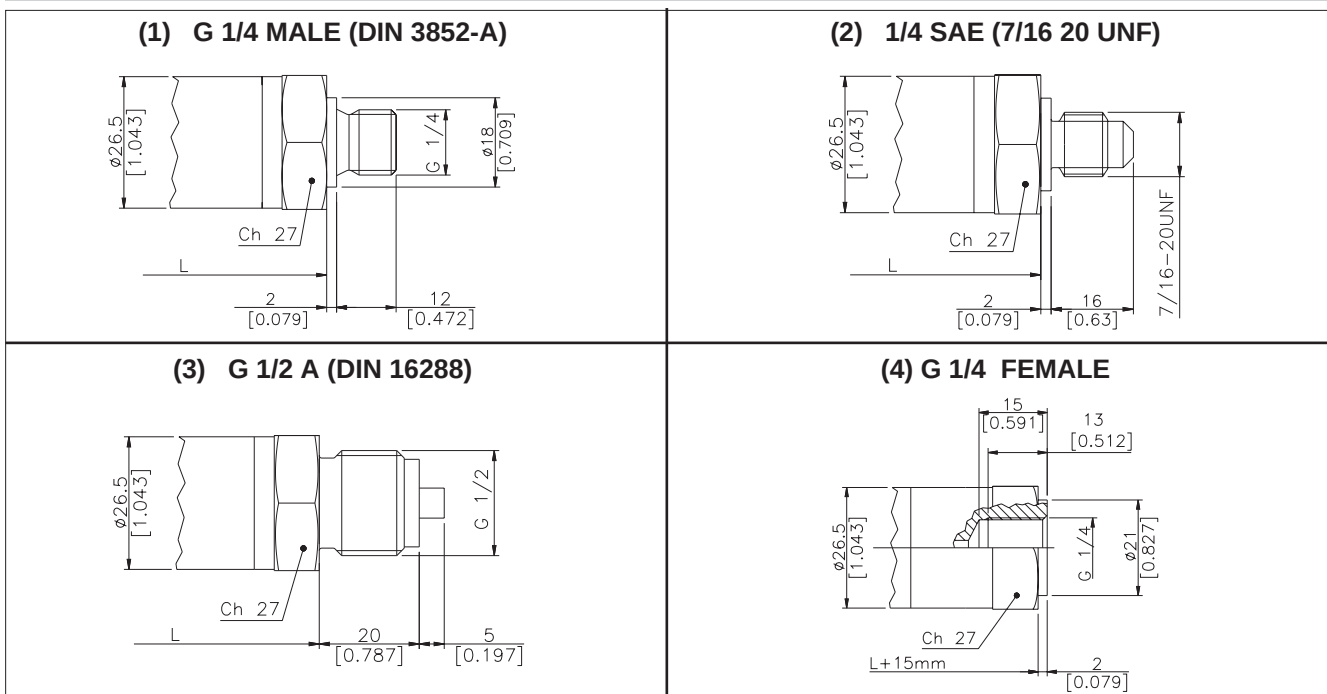
3 tested for more than 100 strokes with single duration < 2msec.

PRESSURE RANGE	0,25	0,5	1	2	4	5	6	7	10	16	20	25	30	40	50	60
Maximum applicable pressure (without decay)	2	4	5	10	20	20	35	35	40	80	80	90	90	90	90	90
Resistance to bursting	2,5	5	10	20	40	50	50	70	100	120	120	120	120	120	120	120

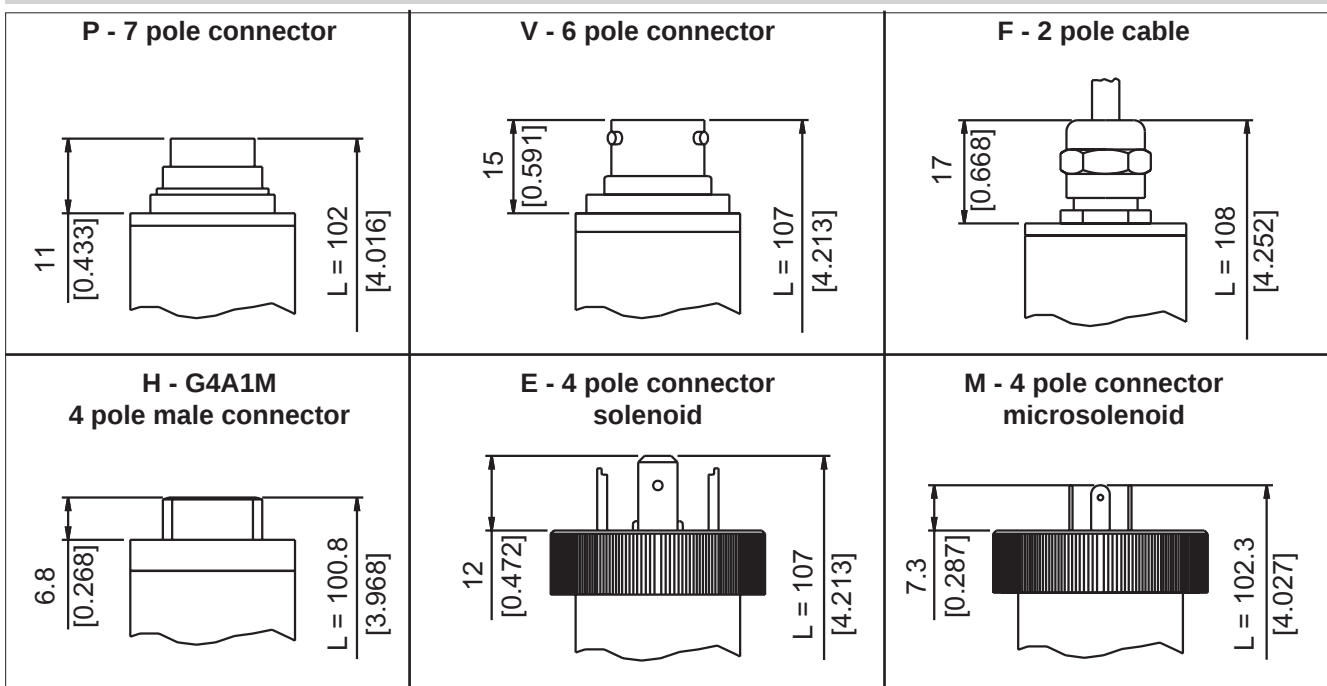
MECHANICAL DIMENSIONS



PROCESS CONNECTIONS

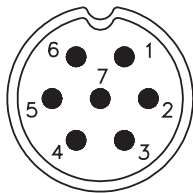


ELECTRICAL CONNECTIONS



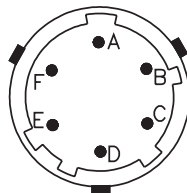
ELECTRICAL CONNECTIONS - Connectors

P - 7-pole connector



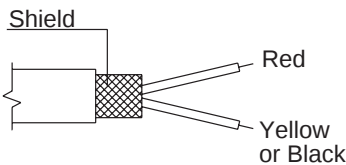
Male connector 09-127-09-07
Protection IP67

V - 6-pole connector



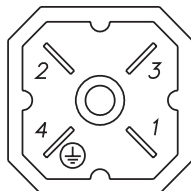
Male connector VPT02A10-6PT2
Protection IP66

F - 2 pole cable



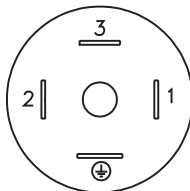
Shielded cable 2x0,25 - 2m. (output E)
Protection IP65

H - 4-pole connector



Male connector G4A1M
Protection IP65

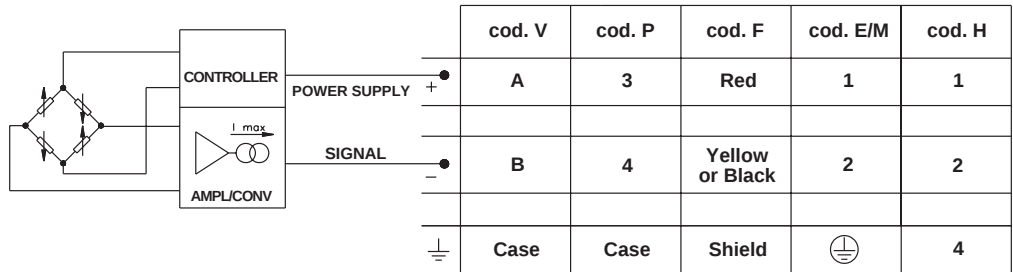
E - 4 pole solenoid connector
M - 4 pole microsolenoid connector



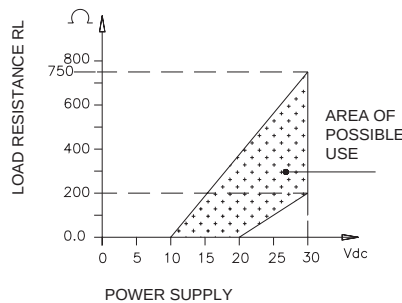
Solenoid 400 DIN 46350A - ISO4400
Protection IP65
Microsolenoid 400 DIN 46350B - ISO4400
Protection IP65

ELECTRICAL CONNECTIONS - connection diagrams

OUTPUT AMPLIFIED IN CURRENT - mod. E



LOAD DIAGRAM
(Current output)



ACCESSORIES ON REQUEST

Connectors

Connection E

Connector 3 poles + ground DIN43650A ISO4400 **CON 006**
Prot. IP65

Connection H

Connector 3 poles + ground G4W1F Prot. IP65 **CON 297**

Connection M

Connector 3 poles + ground DIN43650B ISO4400 **CON 008**
Prot. IP65

Connection P

Female cable connector Prot. IP67

CON 297

Connection V

Female cable connector Prot. IP66

CON 300

ORDER CODE

Pressure transmitter

XSA

OUTPUT SIGNAL	
Standard	
4 .. 20 mA	E

PROCESS CONNECTIONS	
Standard	
G 1/4 gas male	1
On request	
1/4 SAE (7/16-20UNF)	2
G 1/2A (DIN 16288)	3
G 1/4 gas female	4

ELECTRICAL CONNECTIONS	
4-pole connector solenoid	E
Shielded cable	F
4 pole connector	H
4-pole connector microsolenoid	M
7 pole connector	P
6 pole connector	V

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

TEMPERATURE CLASS	
5	T5
6	T6

RESPONSE TIME	
V	Fast

PRECISION CLASS	
T	0,20% FSO

PRESSURE RANGE			
	bar		psi
BV25	0..0,25	P05U	0..05
BV50	0..0,5	P15U	0..15
B01U	0..1	P03D	0..30
B02U	0..2	P05D	0..50
B04U	0..4	P01C	0..100
B05U	0..5	P25D	0..250
B06U	0..6	P03C	0..300
B07U	0..7	P05C	0..500
B01D	0..10	P75D	0..750
B16U	0..16	P01M	0..1000
B02D	0..20		
B25U	0..25		
B03D	0..30		
B04D	0..40		
B05D	0..50		
B06D	0..60		

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

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