



Main Features

- Pressure range: 0...50 bar to 0...700 bar
- Precision class: 0,15% FSO
- Voltage/Current output signal
- Protection class: IP65/IP67
- Materials in contact with fluid 17-4PH
- Permitted temperature range -30...+105°C

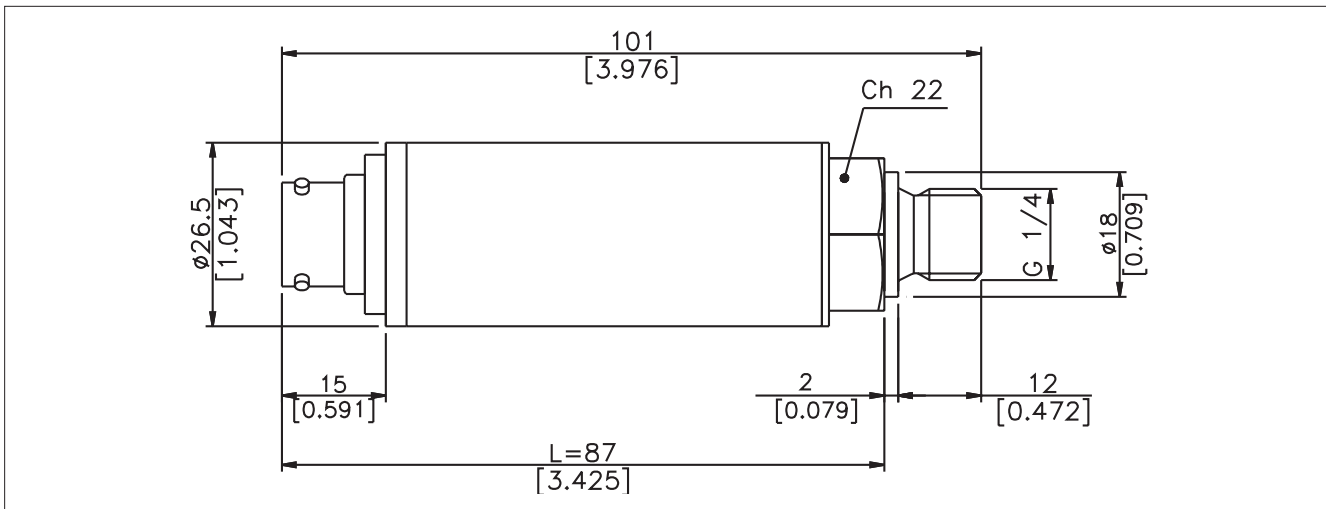
Series TPSA transmitters are based on the extensimetric measurement principle. An innovative mechanical structure makes the transducer completely insensitive to tightening. This transducer is suitable for all those applications where along with the robustness an elevated accuracy is required.

TECHNICAL DATA

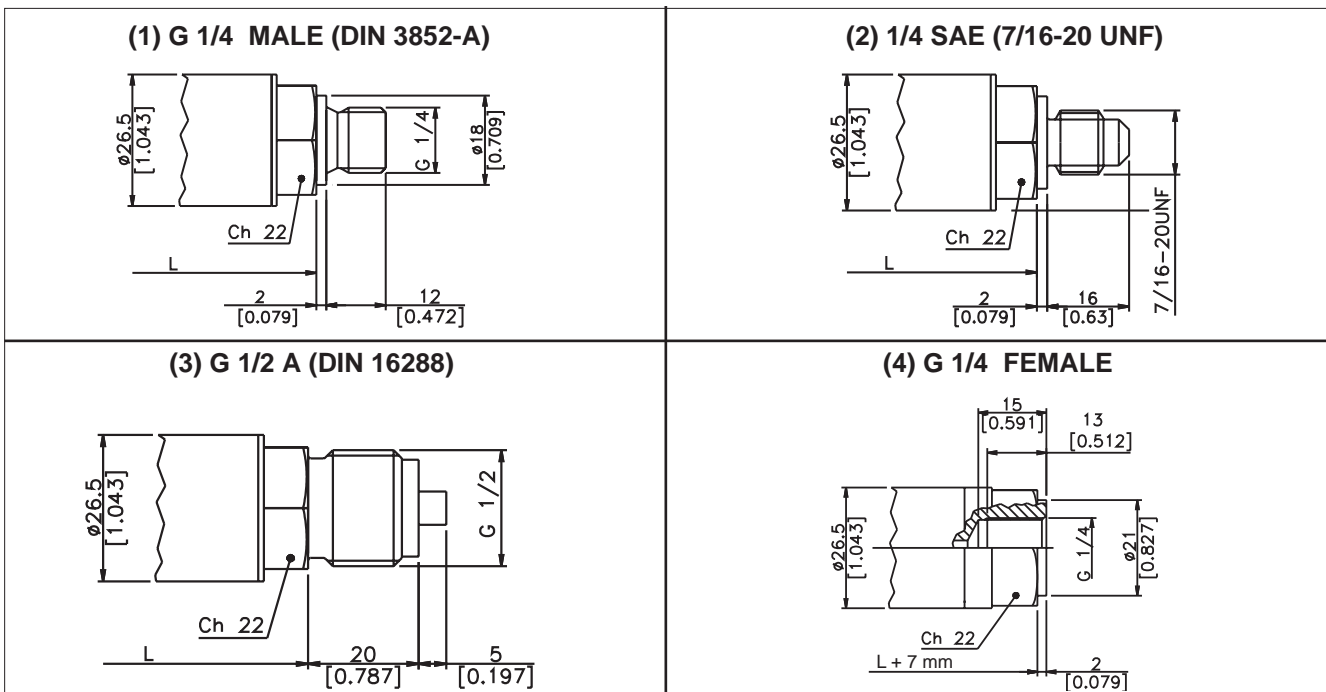
	VOLTAGE	CURRENT
Output signal		
Sensor CLASS (1) (linearity + Hysteresys)	< 0,15% FSO	
Repeatability	± 0,1% FSO	
Resolution	Infinite	
Max. applicable pressure (without decay) (2)	3 times Full Scale	
Resistance to bursting (3)	5 times Full Scale (max. 2500 bar)	
Ambient pressure signal: ± 0,20%	B/C 0,1Vdc M/N 0Vdc P/Q/R 1Vdc	E 4mA
Rated pressure signal: ± 0,20%	B 5,1Vdc C 10,1Vdc M/P 5Vdc N/Q 10Vdc R 6Vdc	E 20mA
Power supply	C/N/Q 18...32Vdc B/M/P/R 12...32Vdc	E 10...30Vdc
Max. input on power supply	< 30mA	<32mA
Maximum rise time	< 1 ms	
Compensated temperature range	0...85°C	
Permitted temperature range	-30...105°C	
Storage temperature range	-55...110°C	
Zero drift	Typical 0,1% FSO/10°C (max. 0,15)	
Sensibility drift	Typical 0,1% FSO/10°C (max. 0,15)	
Isolation resistance	> 1000 Mohm at 50Volt	
Protection	IP65/IP67	

FSO = Full Scale Output
 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.

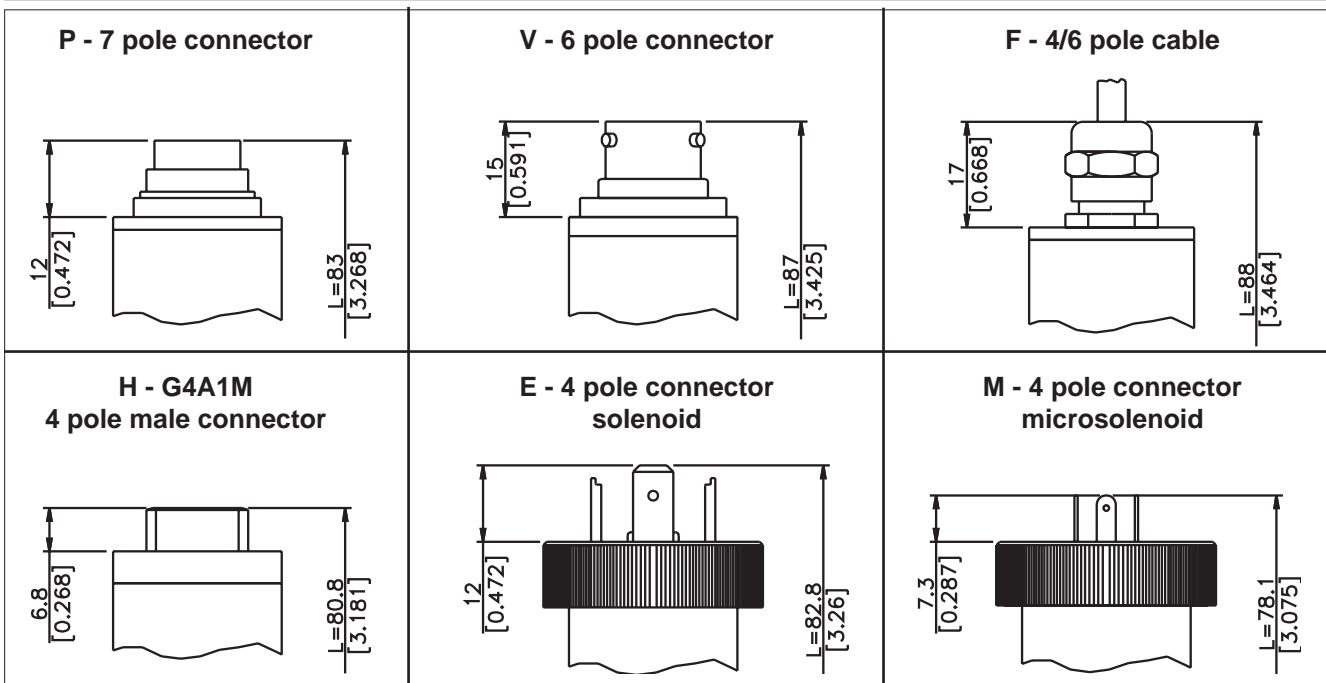
MECHANICAL DIMENSIONS



PROCESS CONNECTIONS

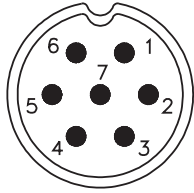


ELECTRICAL CONNECTIONS



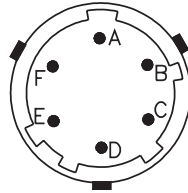
ELECTRICAL CONNECTIONS - Connectors

P - 7-pole connector



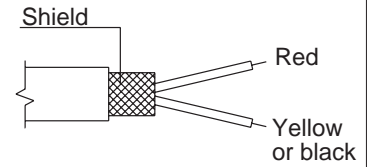
Male connector 09-127-09-07
Protection IP67

V - 6-pole connector



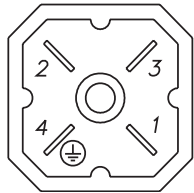
Male connector VPT02A10-6PT2
Protection IP66

F - 2-4 pole cable



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

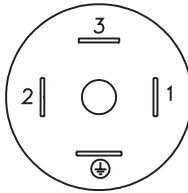
H - 4-pole connector



Male connector G4A1M
Protection IP65

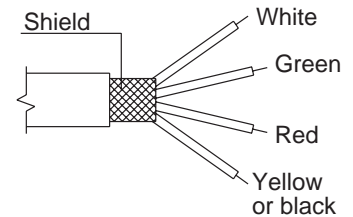
E - 4 pole solenoid connector

M - 4 pole microsolenoid connector



E - Solenoid 400 DIN 46350A - ISO4400
Protection IP65

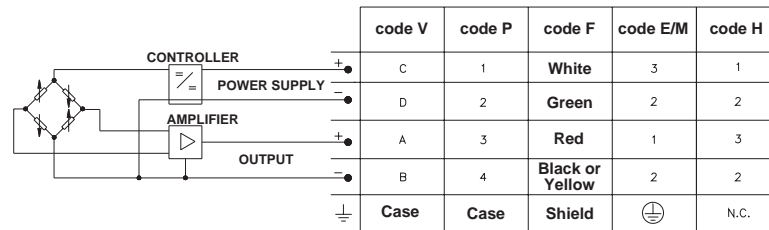
M - Microsolenoid 400 DIN 46350B - ISO4400
Protection IP65



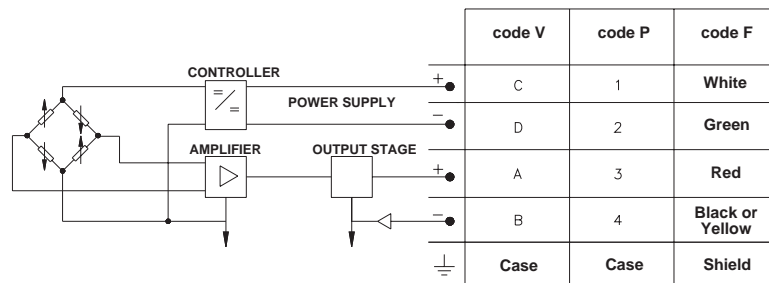
Shielded cable 4x0,25 - 2m
Protection IP65

ELECTRICAL CONNECTIONS - connection diagrams

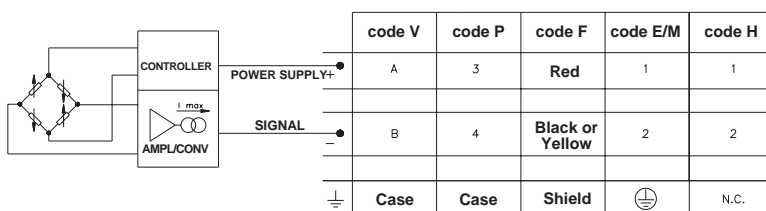
OUTPUT AMPLIFIED IN VOLTAGE - mod. B/C/M/N/P/Q/R



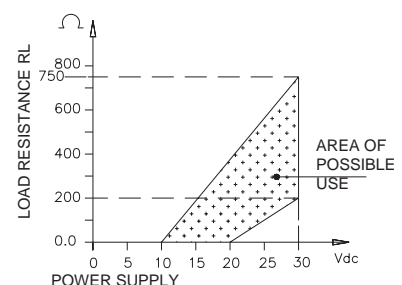
OUTPUT AMPLIFIED IN VOLTAGE ON REQUEST - OPTIONAL - mod. B/C/M/N/P/Q/R



OUTPUT AMPLIFIED IN CURRENT - mod. E



LOAD DIAGRAM



ACCESSORIES ON REQUEST

Connectors		Connection M	
Connection E		Connector 3 poles + ground DIN43650B ISO4400 CON 008	
Connector 3 poles + ground DIN43650A ISO4400 CON 006		Prot. IP65	
Prot. IP65		Connection P	
Connection H		Female cable connector Prot. IP67 CON 321	
Connector 3 poles + ground G4W1F Prot. IP65 CON 297		Connection V	
		Female cable connector Prot. IP66 CON 300	

EXTENSION CABLES

6-pin connector with 8m (25ft) cable	C08WLS	<table border="1"> <thead> <tr> <th colspan="2">Cable color code</th> </tr> <tr> <th>Conn.</th> <th>wire</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Red</td> </tr> <tr> <td>B</td> <td>Yellow/Black</td> </tr> <tr> <td>C</td> <td>White</td> </tr> <tr> <td>D</td> <td>Green</td> </tr> <tr> <td>E</td> <td>Blue</td> </tr> <tr> <td>F</td> <td>Orange</td> </tr> </tbody> </table>	Cable color code		Conn.	wire	A	Red	B	Yellow/Black	C	White	D	Green	E	Blue	F	Orange
Cable color code																		
Conn.	wire																	
A	Red																	
B	Yellow/Black																	
C	White																	
D	Green																	
E	Blue																	
F	Orange																	
6-pin connector with 15m (50ft) cable	C15WLS																	
6-pin connector with 30m (100ft) cable	C30WLS																	
Other lengths	consult factory																	

ORDER CODE

Pressure transmitter **TPSA**

OUTPUT SIGNAL	
Standard	
0.1 .. 10.1 Vdc	C
4 .. 20 mA	E
0 .. 10 Vdc	N
On request	
0.1 .. 5.1 Vdc	B
0 .. 5 Vdc	M
1 .. 5 Vdc	P
1 .. 10 Vdc	Q
1 .. 6 Vdc	R

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

RESPONSE TIME	
V	Fast

PRECISION CLASS	
T	0,15% FSO

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		
1/8 - 27 NPT female	5		
1/4 - 18 NPT male	7		
M14 x 1,5 male	8		
1/8 - 27 NPT male	9		
M12 x 1,5 male	R		

PRESSURE RANGE			
	bar		psi
B05D	0..50	P75D	0..750
B01C	0..100	P15C	0..1500
B16D	0..160	P02M	0..2000
B02C	0..200	P25C	0..2500
B25D	0..250	P03M	0..3000
B35D	0..350	P04M	0..4000
B04C	0..400	P05M	0..5000
B05C	0..500	P75C	0..7500
B06C	0..600	P10M	0..10000
B07C	0..700		

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

Es.: **TPSA - N - 1 - P - B35D - T - V**
 Pressure transmitter TPSA with output signal 0...10Vdc, process connections G 1/4 male, 7 pole connector, pressure range 0...350 bar, precision class 0,15%, 1msec response time.

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



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