



Main Features

- Pressure range: from 0...50 bar to 0...1000 bar
- Precision class: 0,15% FSO
- Voltage/Current output signal
- Protection class: IP65/IP67
- Materials in contact with fluid 17-4PH
- Permitted temperature range -40...+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)	See table		
Resistance to bursting (3)	See table		
Ambient pressure signal: ± 0,20%	B/C 0,1Vdc P/Q/R 1Vdc	M/N 0Vdc	E 4mA
Rated pressure signal: ± 0,20%	B 5,1Vdc M/P 5Vdc R 6Vdc	C 10,1Vdc N/Q 10Vdc	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	-10...85°C		
Permitted temperature range fluid	-40...+105°C		
Storage temperature range	-55...+125°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

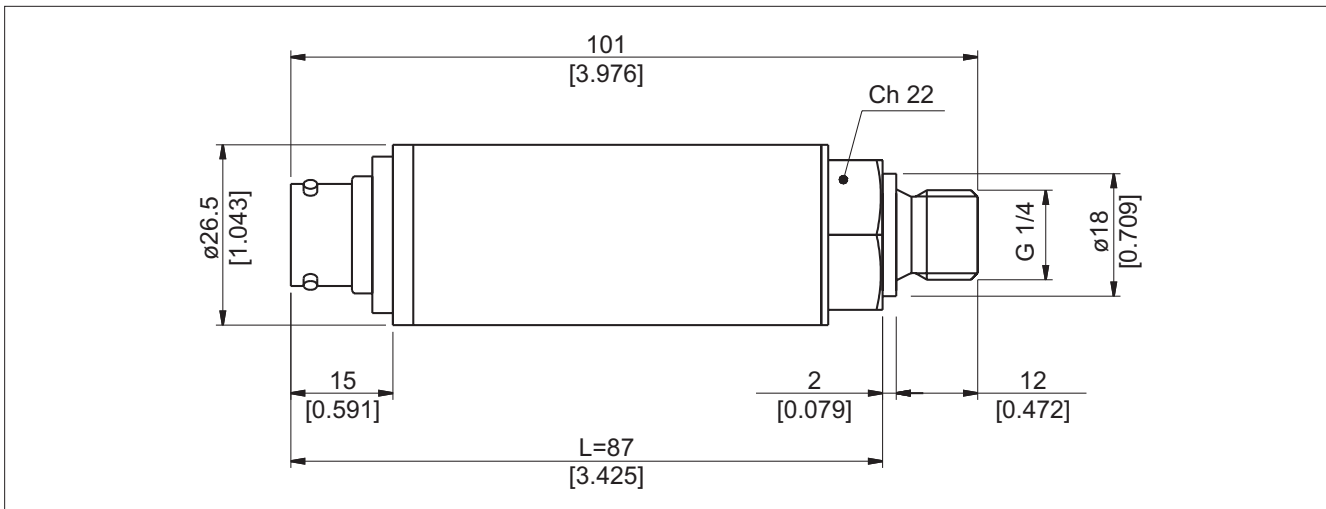
1 BFSL (Best Fit Straight Line) method

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

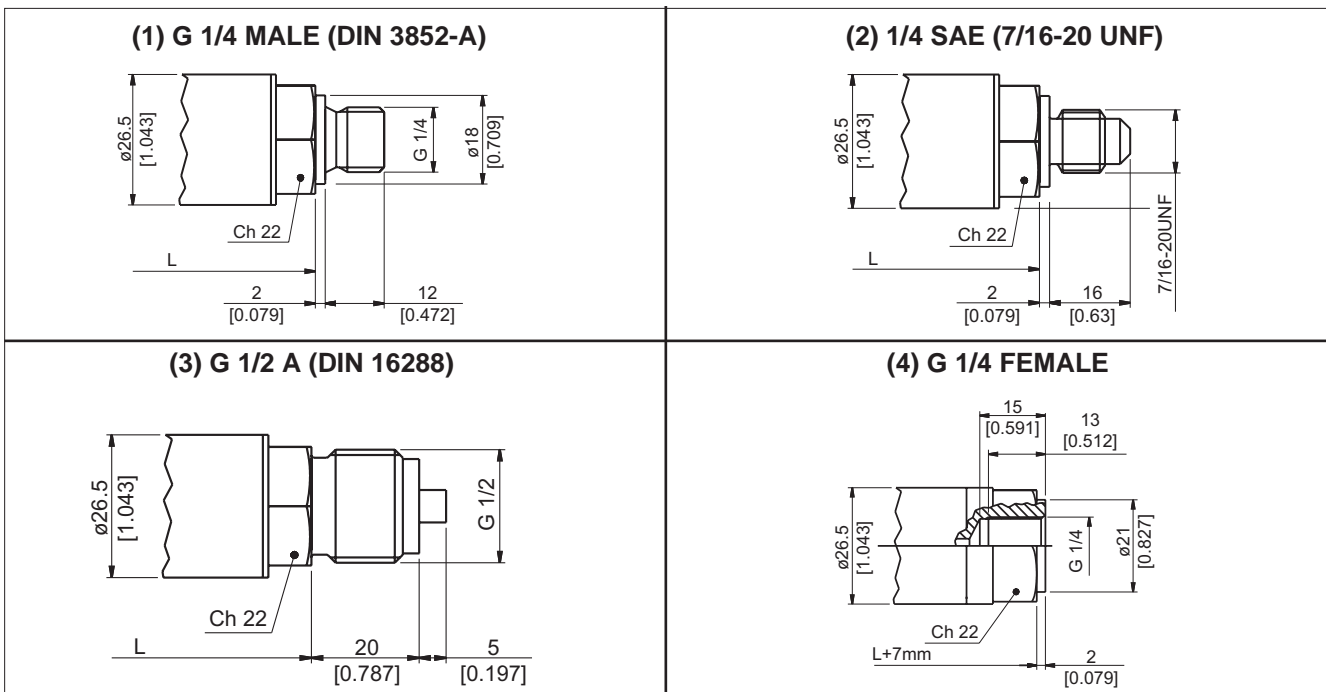
3 tested for more than 100 strokes with single duration <2msec.

PRESSURE RANGE	50	100	160	200	250	350	400	500	600	700	1000
Maximum applicable pressure (without decay)	150	300	480	600	750	1050	1200	1500	1800	2000	2000
Resistance to bursting	250	500	800	1000	1250	1750	2000	2500	2500	2500	2500

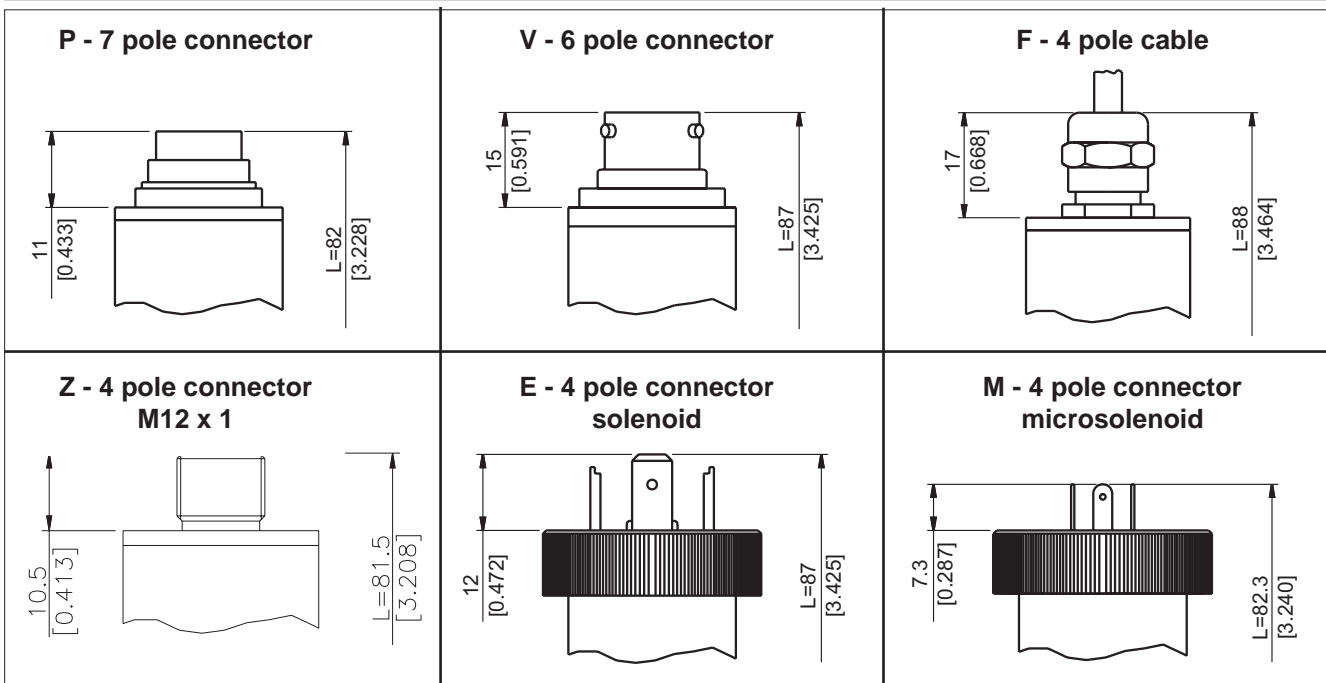
MECHANICAL DIMENSIONS



PROCESS CONNECTIONS

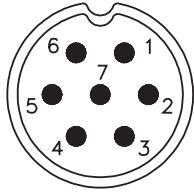


ELECTRICAL CONNECTIONS



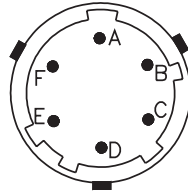
ELECTRICAL CONNECTIONS - Connectors

P - 7-pole connector



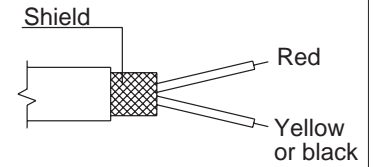
Male connector 09-127-09-07
Protection IP67

V - 6-pole connector



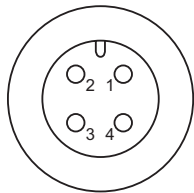
Male connector VPT02A10-6PT2
Protection IP66

F - 2 pole cable



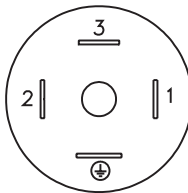
Shielded cable 2x0,25 - 2m. (output E)
Protection IP65

Z - 4 pole male connector M12 x 1



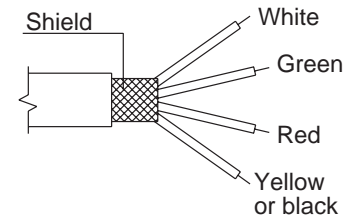
4 pole series 713 male connector
Protection IP67

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



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

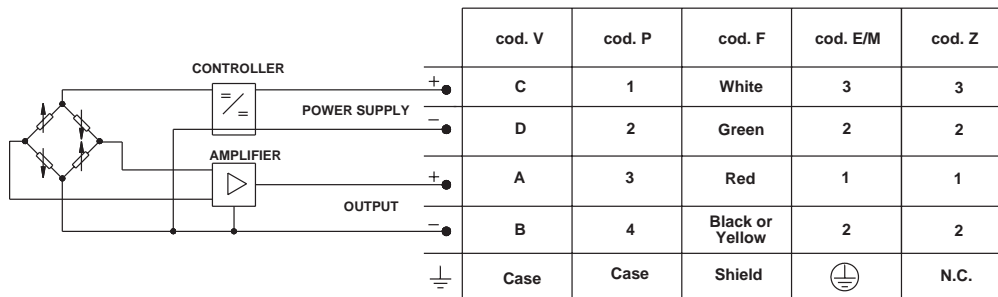
F - 4 pole cable



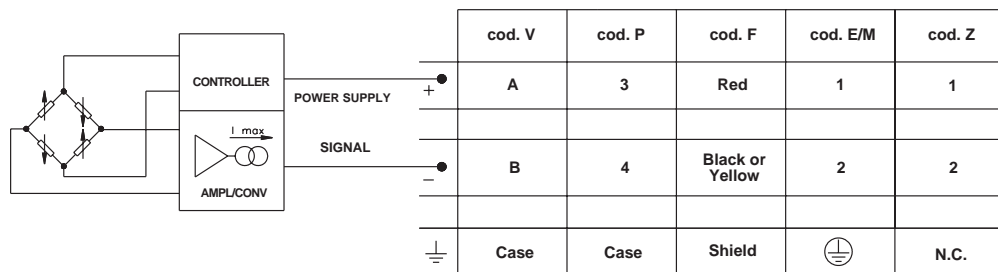
Shielded cable 4x0,25 - 2m
Protection IP65

ELECTRICAL CONNECTIONS - connection diagrams

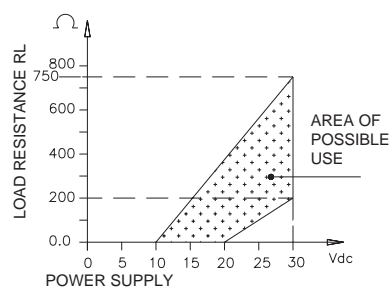
OUTPUT AMPLIFIED IN VOLTAGE - mod. B/C/M/N/P/Q/R



OUTPUT AMPLIFIED IN 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 Z		Female cable connector Prot. IP67	
Connector 4 poles		CON 321	
Prot. IP65		Connection V	
CON xxx		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	P20C	0..2000
B02C	0..200	P25C	0..2500
B25D	0..250	P03M	0..3000
B35D	0..350	P05M	0..5000
B04C	0..400	P75C	0..7500
B05C	0..500	P10M	0..10000
B06C	0..600	P15M	0..15000
B07C	0..700		
B01M	0..1000		

ELECTRICAL CONNECTIONS	
4-pole connector solenoid	E
4 pole shielded cable	F
4-pole connector	Z
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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GEFRAN

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