



Main Features

- Pressure range:
0-10 to 0-1000 bar / 0-150 to 0-15000 psi
- Entirely in stainless steel
- Internally generated calibration signal
- Protection level: IP65
- Available in intrinsic safety version EEx ia IIC T6

Series TP transducers with internal measurement diaphragm are designed to monitor and control the pressure of fluids or gases compatible with 17-4 PH (AISI 630) stainless steel.

Careful selection and ultrasound checking of materials guarantees the absence of inclusions or defects on the primary reaction mechanics, for high product reliability even in the experimental sector.

For measurement ranges below 50bar / 750psi, we have designed a specific pressure fitting that minimizes zero

error due to tightening.

The selection of highly stable electronic components, availability of three separate precision classes, and numerous adapters for pressure fittings, make series TP transducers suitable and versatile for use in a variety of industrial sectors.

TECHNICAL DATA

	Precision class	T	H
Sensor class (1)		0.15% FSO (1) 0/200 to 0/1000bar 0/3000 to 0/15000psi	0.3% FSO (1) 0.6%FSO (1) for ranges 0/10 to 0/50bar (0/150 to 0/750psi)
Resolution		infinite	
Measurement range		from 0/10 to 0/1000bar / from 0/150 to 0/15000psi	
Max. applicable pressure (20 sec. without decay) (2)		2 times Full Scale	
Resistance to bursting (3)		4 times Full Scale	
Resistance of measurement jumper		350Ω (± 1%)	350Ω (± 2%)
Power supply		10 (max 15)Vdc/ac RMS	
Isolation resistance		>1000 MΩ to 50Vdc	
Rated pressure signal:	10 to 40bar / 150 to 500psi 50 to 160bar / 750 to 1500psi 200 to 1000bar / 3000 to 15000psi	1,5 mV/V 2 mV/V 3 mV/V	
Ambient pressure signal		±0,5%FSO	±1%FSO
Calibration signal		80% ±0,5%	80% ±1%
Compensated temperature range		-20 to +100°C -4 to +212°F	0 to +100°C 32 to +212°F
Permitted temperature range		-30 to +120°C -22 to +248°F	-30 to +120°C -22 to +248°F
F cable option:		-30 to +100°C -22 to +212°F	-30 to +100°C -22 to +212°F
Thermal drift in compensated range (zero - cal. - sens.)		±0,01% FSO/°C ±0,005% FSO/°F	±0,02% FSO/°C (±0,03% FSO/°C for ranges ≤ 50bar) ±0,01% FSO/°F (±0,02% FSO/°F for ranges ≤ 750psi)
Materials in contact with measurement fluid		17- 4 PH stainless steel	
Case material		AISI 304 stainless steel	
Protection level		IP65	
Process connections		G1/4" Female - G1/4" male - G1/2" male; other connectors available on request	
Electrical connections		6-pole connector; other connectors available on request	

FSO = Full Scale Output

1 BFSL (Best Fit Straight Line) method

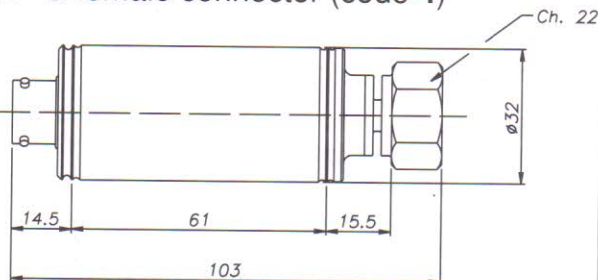
2 tested for more than 1000 strokes with single duration < 2msec.

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

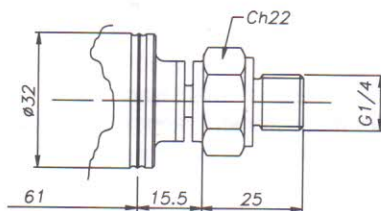
MECHANICAL DIMENSIONS - Process connections

Pressure up to 60bar

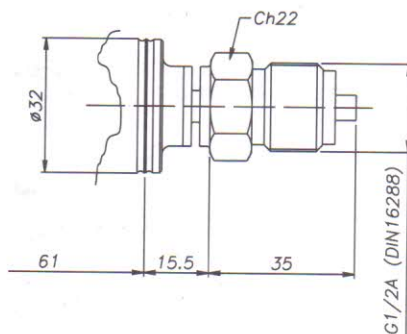
1/4" G female connector (code 4)



1/4" G male connector (code 1)

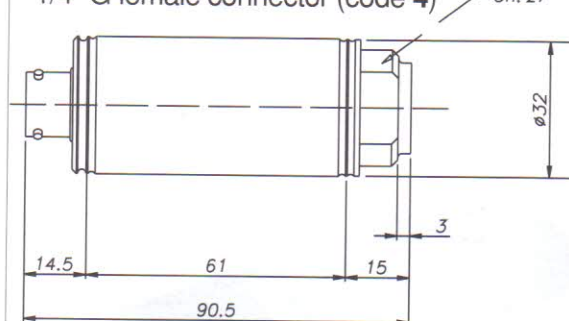


1/2" G male connector (code 3)

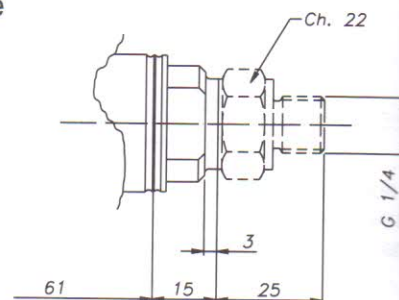


Pressure over 60bar

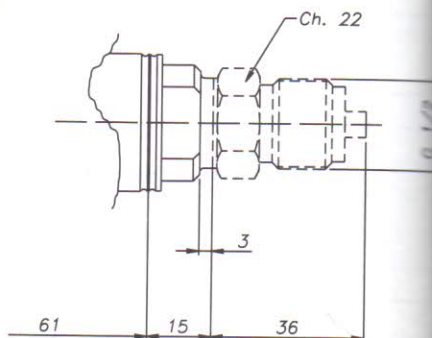
1/4" G female connector (code 4)



1/4" G male connector (code 1)



1/2" G male connector (code 3)



ATTENTION: For installation, use a maximum locking torque of 40Nm.

ADAPTERS AVAILABLE ON REQUEST

From 1/4G female to 1/4G male
From 1/4G female to 1/8-27 NPT male
From 1/4G female to 1/8-27 NPT female
From 1/4G female to M14x1,5 male
From 1/4G female to 1/4-18 NPT male

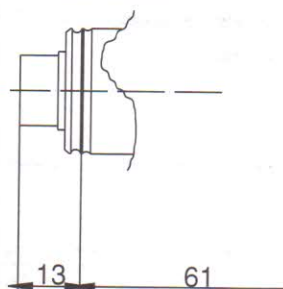
PKIT101
PKIT102
PKIT103
PKIT104
PKIT105

From 1/4G female to M12x1,5 male
From 1/4G female to 7/16-20 UNF male
From 1/4G female to 1/2G male
From 1/4G female to 1/4-18 NPT female
From 1/4G female to 7/16-20 UNF female

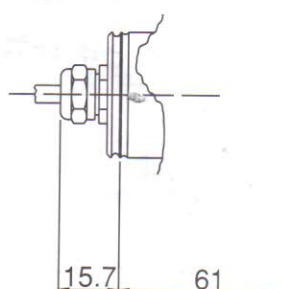
PKIT106
PKIT107
PKIT108
PKIT109
PKIT111

MECHANICAL DIMENSIONS - Connectors

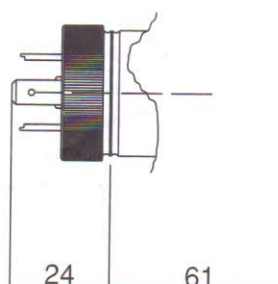
P - 7-pole connector



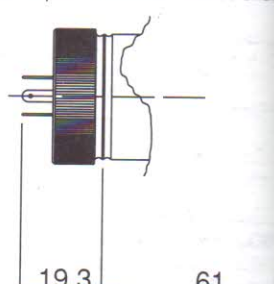
F - 4-6 pole cable



E - 4-pole connector solenoid

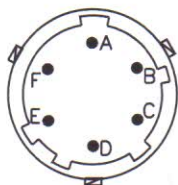


M - 4-pole connector microsolenoid



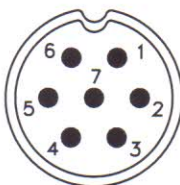
ELECTRICAL CONNECTIONS - Connectors

V - 6-pole connector



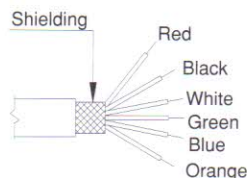
Male connector
VPT02A10-6PT2

P - 7-pole connector



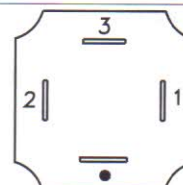
Male connector
09-0127-09-07

F - 6-pole cable



F - Shielded cable 6 x 0,25 - 1m.

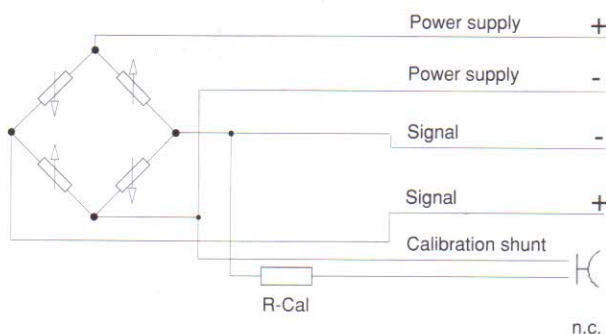
E - 4-pole connector solenoid
M - 4-pole conn. microsolenoid



E Solenoid 400DIN
46350A-ISO 4400
M Microsolenoid 400 DIN
46350B-ISO 4400

ELECTRICAL CONNECTIONS - connection diagrams

mV/V output



Code V	Code P	Code F	Code E/M
C	1	White	3
D	2	Green	
B	4	Black	2
A	3	Red	1
E - F	5 - 6	Blue/Orange	Not available
	7		

The cable sheathing is connected to the transducer body.

ACCESSORIES ON REQUEST

Connectors

Connection V

Female cable connector Prot. IP66

CON 300

Connection P

Female cable connector Prot. IP40

CON 320

Female cable connector 90° Prot. IP40

CON 322

Female cable connector Prot. IP67

CON 321

Connection E

3-pole connector + ground DIN43650A ISO4400 Prot. IP65

CON 006

Connection M

3-pole connector + ground DIN43650B ISO4400 Prot. IP65

CON 008

ORDER CODE

Pressure Transducer

TP

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PROCESS CONNECTIONS

Standard	
G1/4 male	1
G 1/2 A (DIN 16288)	3
G 1/4 female	4
On request	
1/4" SAE (7/16-20UNF)	2
1/8-27 NPT female	5
1/4-18 NPT female	6
1/4-18 NPT male	7
M14x1,5 male	8
1/8-27 NPT male	9
M12x1,5 male	R
7/16-20UNF female	S

ELECTRICAL CONNECTIONS

Standard	
6-pole connector	V
on request	
7-pole connector	P
6-pole shielded cable	F
4-pole connector solenoid	E
4-pole connector microsolenoid	M

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

EXPLOSION-PROOF VERSION

EX Certification EEx ia IIC T6

PRECISION CLASS

H 0.3% FSO (0.6% ranges ≤ 50bar)

T 0.15% FSO (ranges ≥ 200bar / 3000psi)

PRESSURE RANGE

	bar		psi
B01D	0..10	P15D	0..150
B16U	0..16	P03C	0..300
B02D	0..20	P05C	0..500
B25U	0..25	P75D	0..750
B03D	0..30	P15C	0..1500
B35U	0..35	P03M	0..3000
B04D	0..40	P05M	0..5000
B05D	0..50	P75C	0..7500
B06D	0..60	P10M	0..10000
B01C	0..100	P15M	0..15000
B16D	0..160		
B02C	0..200		
B25D	0..250		
B35D	0..350		
B04C	0..400		
B05C	0..500		
B06C	0..600		
B07C	0..700		
B01M	0..1000		

Ex.: **TP - 4 - V - B02C - H**

Transducer: output signal 3 mV/V, pressure fitting G1/4" female, 200bar, 6-pole connector Veam, precision class 0.5% FSO

Ex.: **TP - 1 - V - B01D - H - EX**

Transducer: output signal 1.5 mV/V, pressure fitting G1/4" male, 10bar, 6-pole connector Veam, precision class 0.5% FSO, explosion-proof version

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



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