



The C3 series of Gefran, are pressure transducers for using in High temperature environment.
The main characteristic of this series is the capability to read temperature of the media up to 400°C.
The constructive principle is based on the hydraulic transmission of the pressure.
The fluid-filled system assures the temperature stability.
The physical measure is transformed in a electrical measure by means the strain-gauge technology.

MAIN FEATURES

- Pressure ranges from:
0-100 to 0-1000 bar / 0-1500 to 0-15000 psi
- Accuracy: $\leq \pm 0.5\%$ FSO (M)
- Fluid-filled system for temperature stability
- Mercury filling volume:
C30 (30mm³), C31-C32 (40mm³)
- 1/2-20UNF standard threads, other types available on request
- Standard diaphragm is 15-5 PH stainless steel with TiN coating

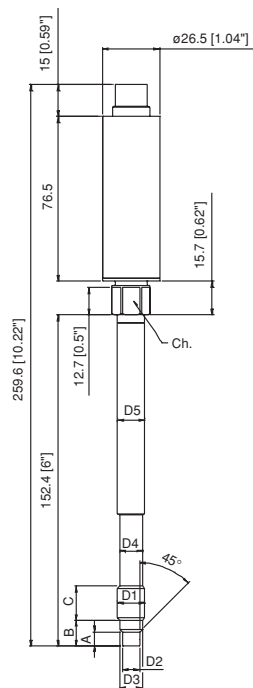
TECHNICAL SPECIFICATIONS

Accuracy (1)	M $\leq \pm 0.5\%$ FSO (100...1000 bar)
Resolution	Infinite
Measurement range	0..100 to 0..1000bar 0..1500 to 0..15000psi
Maximum overpressure	1.5 x FS above
Measurement principle	Strain gage Wheatstone bridge
Supply voltage	6..12Vdc (10Vdc typical) 350 Ohm
Strain gage bridge resistance	(550Ohm below 100bar - 1500psi)
Isolation resistance (at 50Vdc)	>1000 MOhm
Full Scale Output (FSO)	
(toll. ± 0.5 FSO)	3.33 mV/V (option 3)
Zero balance	$\pm 0.5\%$ FSO
Calibration signal	80% FSO
Compensated temperature range	0...+100°C 32...212°F
Maximum temperature range	-30...+120°C -22...250°F
Thermal drift in compensated range Zero/Calibr./Sens.	< 0.02% FSO/°C < 0.01% FSO/°F
Diaphragm maximum temperature	400°C 750°F
Zero drift due to change in process temperature	0.04 bar/°C
Standard material in contact with process medium	Diaphragm: • 15-5 PH with TiN coating Stem: • 17-4 PH
Thermocouple (model C32)	STD : type "J" (isolated junction)
Protection degree (with 6-pin mating connector)	IP62
Electrical connections	6-pin Conn. VPT07RA10-6PT (PT02A-10-6P)

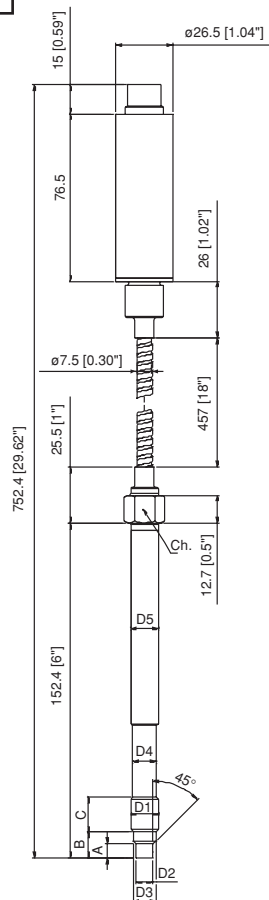
FSO = Full Scale Output
(1) BFSL method (Best Fit Straight Line): includes combined effects of Non-Linearity, Hysteresis and Repeatability

MECHANICAL DIMENSIONS

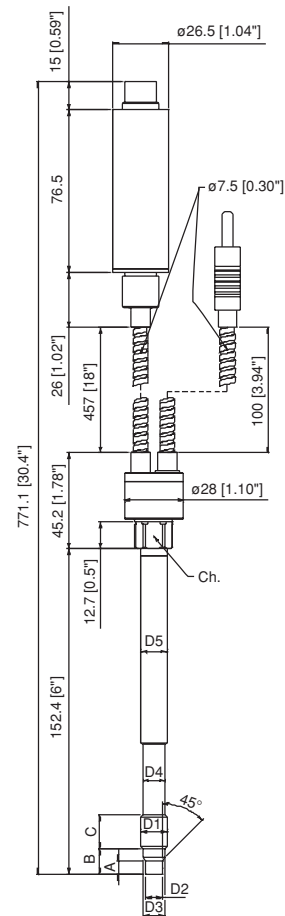
C30



C31



C32



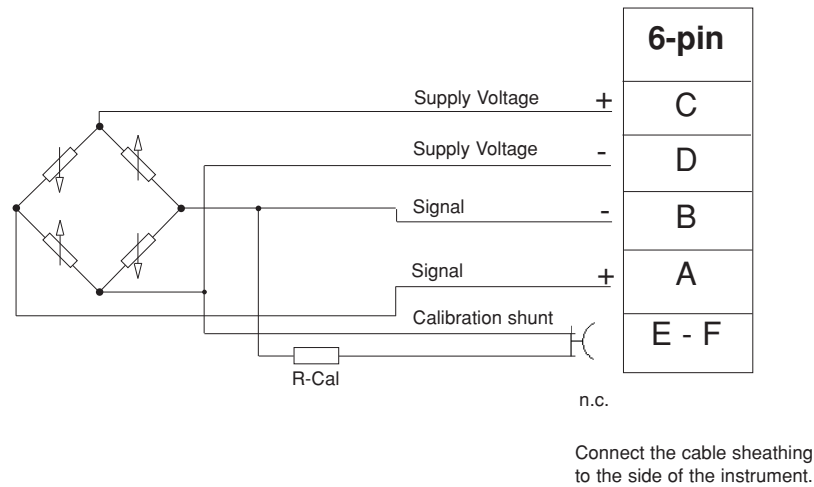
D1	1/2 - 20UNF
D2	$\phi 7.8 -0.05$ [$\phi 0.31'' -0.002$]
D3	$\phi 10.5 -0.025$ [$\phi 0.41'' -0.001$]
D4	$\phi 10.67$ [$\phi 0.42''$]
D5	$\phi 12.7$ [$\phi 0.5''$]
A	5.56 -0.26 [0.22'' -0.01]
B	11.2 [0.44'']
C	15.74 [0.62'']
Ch [Hex]	16 [5/8'']

NOTE : Dimensions refer to rigid stem length option "4" (153mm - 6")

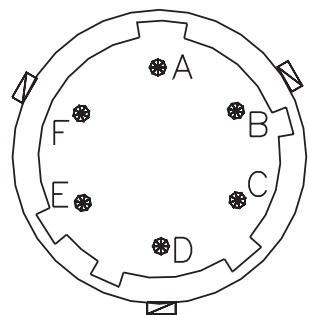
WARNING : For installation use a maximum tightening torque of 56 Nm (500 in-lb)

ELECTRICAL CONNECTIONS

mV/V OUTPUT



6 pin connector
VPT07RA10-6PT2
(PT02A-10-6P)



ACCESSORIES

Connectors

6-pin mating connector (IP62 protection degree)

CON300

Extension cables

6-pin connector with 8m (25ft) cable

C08W

6-pin connector with 15m (50ft) cable

C15W

6-pin connector with 25m (75ft) cable

C25W

6-pin connector with 30m (100ft) cable

C30W

Other lengths

consult factory

Accessories

Mounting bracket

SF18

Dummy plug for 1/2-20UNF

SC12

Drill kit for 1/2-20UNF

KF12

Cleaning kit for 1/2-20UNF

CT12

Thermocouple for C32 model

Type "J" (153mm - 6" stem)

TTER 601

Cable color code

Conn.	Wire
A	Red
B	Black
C	White
D	Green
E	Blue
F	Orange
G	n.c.
H	n.c.

ORDER CODE

C - - - - - - - - - - 000			
OUTPUT SIGNAL		000 = Standard version Special or customized versions available on request	
3.33 mV/V	3		
VERSION		FLEXIBLE LENGTH (mm / inches)	
Rigid stem	0	Standard (C30)	
Rigid stem + flexible	1	0 none	
With thermocouple	2	Standard (C31, C32)	
CONNECTOR		D 457mm 18"	
Standard			
6 pin	6		
ACCURACY CLASS		RIGID STEM LENGTH (mm / inches)	
0.5% FSO	M	Standard (C30, C31, C32)	
RANGE		4 153mm 6"	
bar	psi	5 318mm 12.5"	
100 B01C	1500 P15C		
200 B02C	3000 P03M		
350 B35D	5000 P05M		
500 B05C	7500 P75C		
700 B07C	10000 P10M		
1000 B01M	15000 P15M		
		THREAD	
		Standard	
		1 1/2 - 20 UNF	

Examples

C32-6-M-B07C-1-4-D-000

Melt pressure transducer with type "J" thermocouple, 3.33 mV/V output, 6-pin connector, 1/2-20UNF thread, 700bar full scale, 0.5 % accuracy class, 153 mm (6") rigid stem, 457mm (18") flexible capillary.

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

GEFRAN

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