



The CN series of Gefran, are pressure transmitters 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: $< \pm 0.5\%$ FSO (M)
- Fluid-filled system for temperature stability
- Mercury filling volume:
CN0 (30mm³); CN1, CN2 (40mm³)
- 1/2-20UNF standard threads
- Other diaphragms available on request
- Autozero function on board
- Standard diaphragm is 15-5 PH stainless steel with TiN coating

AUTOZERO FUNCTION

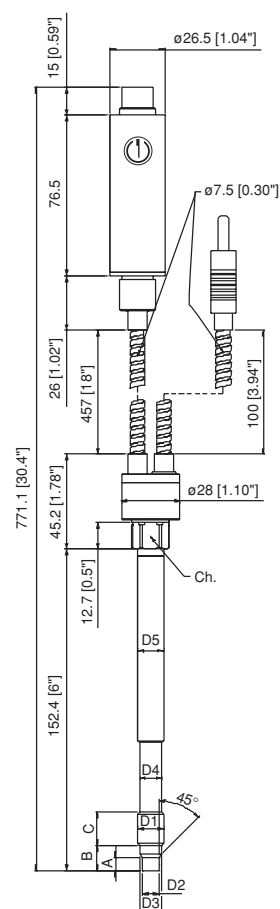
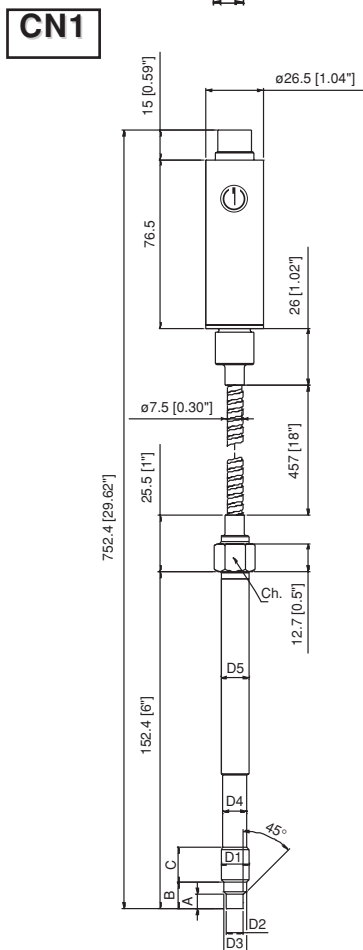
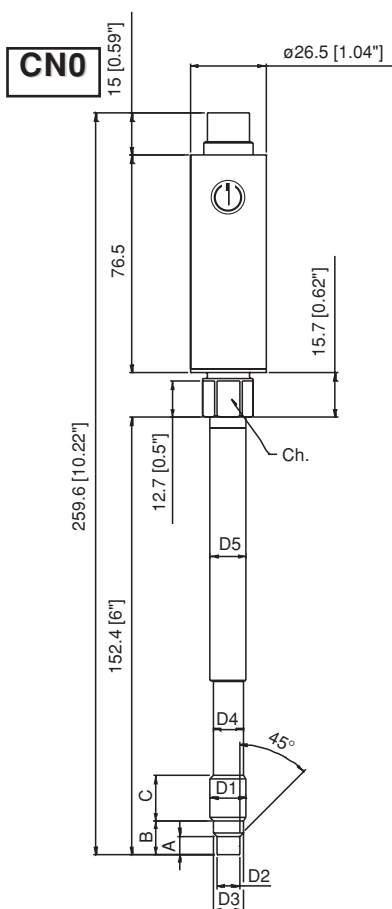
All signal variations in the absence of pressure can be eliminated by using the Autozero function. This function is activated by closing a magnetic contact located on the transmitter housing. The procedure is permitted only with pressure at zero.

TECHNICAL SPECIFICATIONS

Accuracy (1)	M $< \pm 0.5\%$ FSO (100...1000 bar)
Resolution	Infinite
Measurement range	0..100 to 0..1000bar 0..1500 to 0..15000psi
Maximum overpressure (without degrading performances)	1.5 x FS above
Measurement principle	Extensimetric
Power supply	15...30Vdc
Maximum current absorption	25mA
Insulation resistance (at 50Vdc)	> 1000 MOhm
Output signal Full Scale (FSO)	10Vdc
Zero balance (tolerance $\pm 0.25\%$ FSO)	0Vdc
Zero signals adjustment (tolerance $\pm 0.25\%$ FSO)	"Autozero" function
Span adjustment within $\pm 5\%$ FSO	See Manual
Maximum allowed load	1mA
Response time (10...90% FSO)	~ 1 ms
Output noise (RMS 10-400Hz)	$< 0.025\%$ FSO
Calibration signal	80% FSO
Output short circuit ingress and reverse polarity protection	YES
Compensated temperature range	0...+85°C
Operating temperature range	-30...+105°C
Storage temperature range	-40...+125°C
Thermal drift in compensated range: Zero / Calibration / Sensibility	$< 0.02\%$ FSO/°C
Diaphragm maximum temperature	400°C / 750°F
Zero drift due to change in process temperature (zero)	0.04 bar/°C
Standard material in contact with process medium	Diaphragm: • 15-5 PH with TiN coating Stem: • 17-4 PH
Thermocouple (model CN2)	STD: type "J" (isolated junction)
Protection degree (6-pole female connect)	IP62

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

MECHANICAL DIMENSIONS



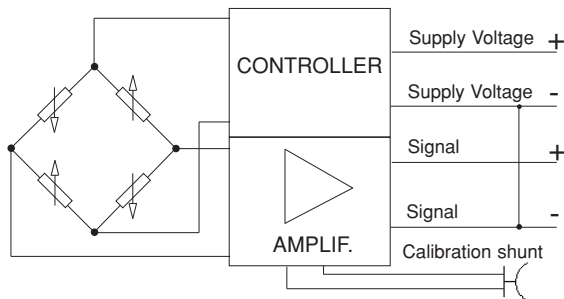
D1	1/2 - 20UNF
D2	$\varnothing 7.8^{-0.05}$ [$\varnothing 0.31'' - 0.002$]
D3	$\varnothing 10.5^{-0.025}$ [$\varnothing 0.41'' - 0.001$]
D4	$\varnothing 10.67$ [$\varnothing 0.42''$]
D5	$\varnothing 12.7$ [$\varnothing 0.5''$]
A	$5.56^{-0.26}$ [$0.22'' - 0.01$]
B	11.2 [$0.44''$]
C	15.74 [$0.62''$]
Ch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

NOTE : dimensions refer to rigid stem length option “4” (153 mm – 6”)

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

ELECTRICAL CONNECTIONS

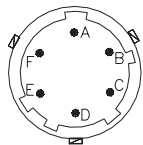
VOLTAGE OUTPUT



MAGNETIC
AUTOZERO

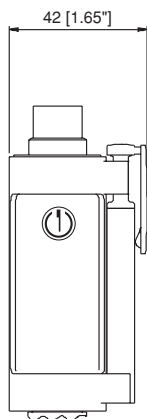
6-pin
C
D
A
B
E - F

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



Shield drain wire is tied to connector via cable clamp

AUTOZERO FUNCTION



The Autozero function is activated through a magnetic contact (external magnet supplied with the sensor).
See the manual for a complete Autozero function explanation.

ACCESSORIES

Connectors

6-pin mating connector (IP62 protection degree)

CON300

Extension cables

- 6-pin connector with 8m (25ft) cable
- 6-pin connector with 15m (50ft) cable
- 6-pin connector with 25m (75ft) cable
- 6-pin connector with 30m (100ft) cable

- C08WLS
- C15WLS
- C25WLS
- C30WLS

Other lengths

consult factory

Accessories

- Mounting bracket
- Dummy plug for 1/2-20UNF
- Drill kit for 1/2-20UNF
- Cleaning kit for 1/2-20UNF
- Fixing pen clip
- Autozero pen

- SF18
- SC12
- KF12
- CT12
- PKIT309
- PKIT312

Thermocouple for CN2 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

ORDER CODE

C - - - - - - - - - - **000**

OUTPUT SIGNAL	
0 .. 10Vdc	N

CONFIGURATION	
Rigid stem	0
Rigid stem + flexible	1
With thermocouple	2

CONNECTOR	
Standard	
6 pin	6

ACCURACY CLASS	
0.5% FSO	M

RANGE			
bar		psi	
100	B01C	1500	P15C
200	B02C	3000	P03M
350	B35D	5000	P05M
500	B05C	7500	P75C
700	B07C	10000	P10M
1000	B01M	15000	P15M

000= Standard version
Special or customized versions
available on request

-	Magnetic autozero
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FLEXIBLE LENGTH (mm / inches)		
Standard (CN0)		
0	none	
Standard (CN1, CN2)		
D	457mm	18"

RIGID STEM LENGTH (mm / inches)		
Standard (CN0, CN1, CN2)		
4	153mm	6"
5	318mm	12.5"

THREAD	
Standard	
1	1/2 - 20 UNF

Examples

CN2-6-M-B07C-1-4-D-000

Melt pressure transmitter with type "J" thermocouple, 0..10Vdc output, 6-pin connector, 1/2-20UNF thread, 700 bar full scale, 0,5% accuracy class, 153 mm (6") rigid stem, 457mm (18") flexible capillary.

Electrical installation requirements and Conformity certificate are available on our web site: www.gefran.com

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

GEFRAN

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