

**W30**



The rigid stem configuration makes installation fast and easy

**W31**



The flexible configuration is designed for applications requiring further thermal isolation or where installation would be otherwise difficult or impractical

**W32**



The pressure / temperature configuration requires only one mounting hole for the measurement of both process values

**W33**



The exposed capillary configuration is ideal to fit in space restricted locations

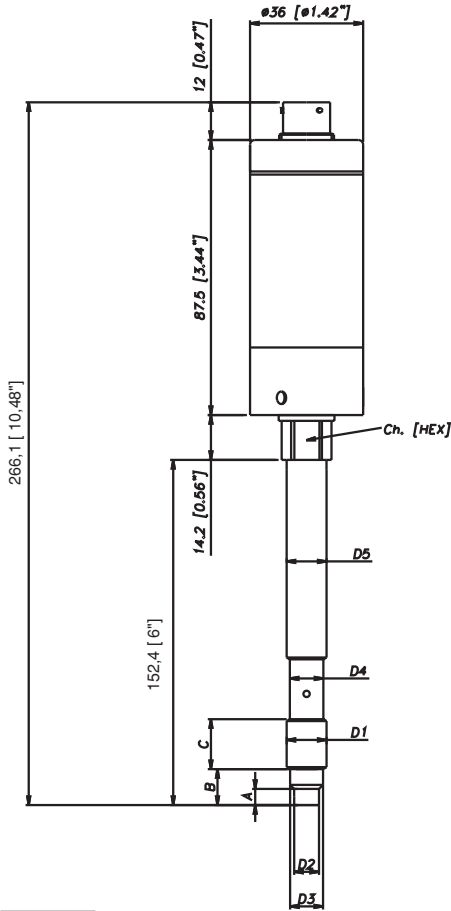
### Main features

- Pressure ranges from:  
0-35 to 0-1000 bar / 0-500 to 0-15000 psi
- Strain gage Wheatstone bridge
- Accuracy :  
<math>\pm 0.25\%</math> FSO (H); <math>\pm 0.5\%</math> FSO (M)
- Internally generated 80% calibration signal (R-Cal)
- Fluid-filled system for temperature stability
- Oil filling meets FDA requirements  
CFR 178.3620 and CFR 172.878
- Fully interchangeable with all existing brands
- Grade of protection: IP65 (6-pin connector version)
- 1/2-20UNF , M18x1.5 standard threads ; other types available on request
- Standard diaphragm is a 17-7 PH stainless steel  
TiN (Titanium Nitride) coated corrugated diaphragm

### TECHNICAL SPECIFICATIONS

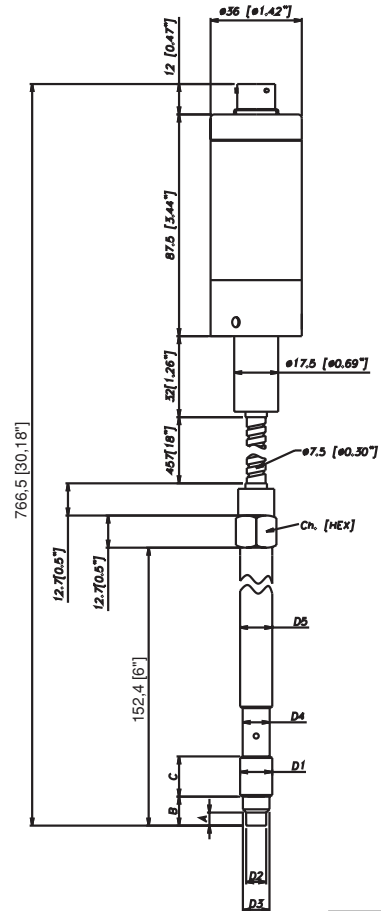
Nominal accuracy including Linearity, Repeatability, Hysteresis	<b>H</b> <math>\pm 0.25\%</math>FSO (350...1000 bar) <b>M</b> <math>\pm 0.5\%</math>FSO (35...1000 bar)
Resolution	Infinite
Measurement range	0..35 to 0..1000bar 0..500 to 0..15000psi
Maximum overpressure	2 x FS 1.5 x FS above 500bar/7500psi
Measurement principle	Strain gage Wheatstone bridge
Supply voltage	6..12Vdc (10Vdc typical)
Strain gage bridge resistance	350 Ohm (550 Ohm below 100bar - 1500psi)
Isolation resistance (at 50Vdc)	>1000 MOhm
Full Scale Output (FSO)	2.5 mV/V (option 2) 3.33 mV/V (option 3)
Zero balance	$\pm 5\%$
Calibration signal	80% FSO
Strain gauge housing compensated temperature range	0...+100°C 32...212°F
Maximum housing temperature range	-30...+120°C -22...250°F
Thermal drift in compensated range Zero/Calibr./Sens.	<math>< 0.02\%</math> FSO/°C <math>< 0.01\%</math> FSO/°F
Diaphragm maximum temperature	315°C 600°F
Zero drift due to change in process temperature	0.04 bar/°C 30 psi/100°F
Material in contact with process medium	- Standard 17-7PH corrugated diaphragm with Titanium Nitride coating  - Optional 17-7PH corrugated diaphragm with Chromium Nitride coating
Thermocouple (model W32)	STD : type "J" (isolated junction)
Protection degree (with 6-pin mating connector)	IP65
Electrical connections	6-pin Conn. VPT07RA10-6PT (PT02A-10-6P) 8-pin Conn. PC02E-12-8P

# MECHANICAL DIMENSIONS



**W30**

D1	<b>1/2 - 20UNF</b>
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	16
[Hex]	[ $5/8$ " ]

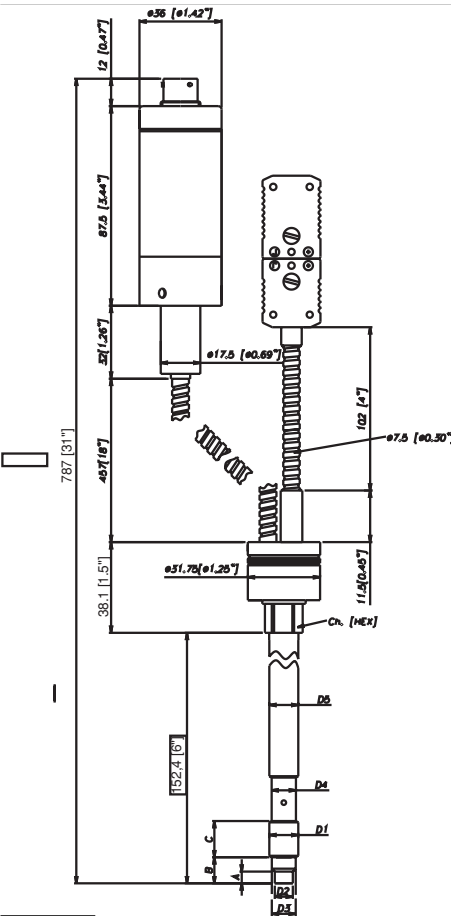


**W31**

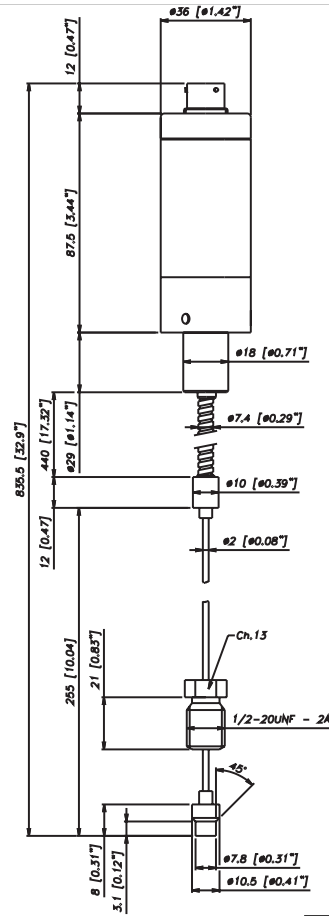
D1	<b>M18x1,5</b>
D2	$\phi 10 - 0.05$ [ $\phi 0.394$ " - 0.002"]
D3	$\phi 16 - 0.08$ [ $\phi 0.63$ " - 0.003"]
D4	$\phi 16 - 0.4$ [ $\phi 0.63$ " - 0.016"]
D5	$\phi 18$ [ $\phi 0.71$ " ]
A	$6 - 0.26$ [ $0.24$ " - 0.01"]
B	$14.8 - 0.4$ [ $0.58$ " - 0.016"]
C	19 [ $0.75$ " ]
Ch	19
[Hex]	[ $3/4$ " ]

**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)



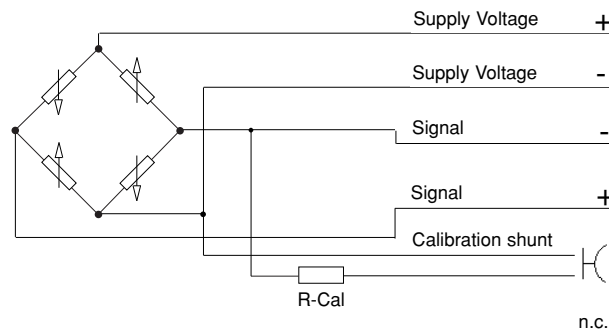
**W32**



**W33**

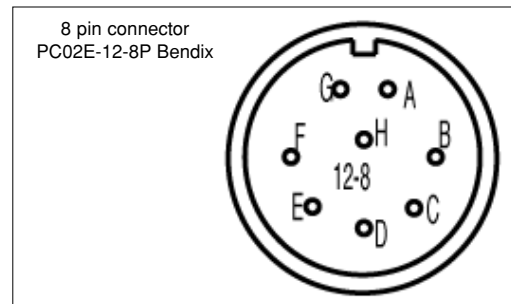
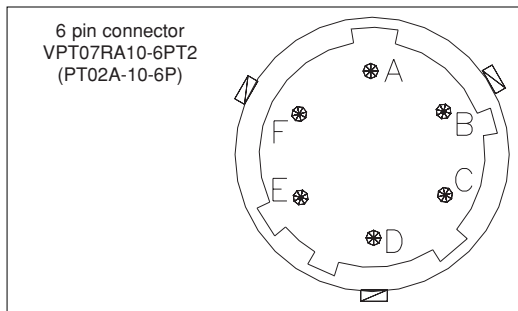
## ELECTRICAL CONNECTIONS

### mV/V OUTPUT



6-pin	8-pin
C	A
D	C
B	B
A	D
E - F	E - F
	G - H

Shield drain wire is tied to connector via cable clamp



## ACCESSORIES

### Connectors

6-pin mating connector (IP65 protection degree)  
8-pin mating connector

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

### Accessories

Mounting bracket  
Dummy plug for 1/2-20UNF  
Dummy plug for M18x1.5  
Drill kit for 1/2-20UNF  
Drill kit for M18x1.5  
Cleaning kit for 1/2-20UNF  
Cleaning kit for M18x1.5

### Thermocouple for W32 model

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

CON300  
CON307

C08WLS  
C15WLS  
C25WLS  
C30WLS  
E08WLS  
E15WLS  
E25WLS  
E30WLS  
consult factory

SF18  
SC12  
SC18  
KF12  
KF18  
CT12  
CT18

TTER 718

### 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

W - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - 000

OUTPUT SIGNAL	
2.5 mV/V	2
3.33 mV/V	3

VERSION	
Rigid stem	0
Rigid stem + flexible	1
With thermocouple	2
Exposed capillary	3

CONNECTOR	
<b>Standard</b>	
6 pin	6
8 pin	8
<b>Available on request</b>	
Cannon WK 6-32S/1	G
Cannon WK 6-32S/2	B

ACCURACY CLASS	
0.25% FSO (ranges ≥ 350 bar/5000 psi)	H
0.5% FSO	M

RANGE			
bar		psi	
35	B35U	500	P05C
50	B05D	750	P75D
70	B07D	1000	P01M
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

FLEXIBLE LENGTH (*) (mm / inches)	
<b>Standard (W30)</b>	
0	none
<b>Standard (W31, W32)</b>	
D	457mm 18"
E	610mm 24"
F	760mm 30"
<b>Standard (W33)</b>	
L	711mm 28"
<b>Available on request</b>	
A	76mm 3"
B	152mm 6"
C	300mm 12"

RIGID STEM LENGTH (*) (mm / inches)	
<b>Standard (W30, W31, W32)</b>	
4	153mm 6"
5	318mm 12.5"
<b>Standard (W33)</b>	
0	none
<b>Available on request</b>	
1	38mm 1.5"
2	50mm 2"
3	76mm 3"
6	350mm 14"
7	400mm 16"
8	456mm 18"

(\*) Note : maximum combined stem/flex length is 914mm - 36"

THREAD	
<b>Standard</b>	
1	1/2 - 20 UNF
4	M18 x 1.5

## Examples

### W32-6-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.

### W20-8-M-P03M-1-4-0-000

Melt pressure transducer, rigid stem, 2.5 mV/V output, 8-pin connector, 1/2-20UNF thread, 3000psi full scale, 0.5 % accuracy class, 153 mm (6") rigid stem

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



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cod. 85719 - 09/01