

WDO



Rigid rod configuration allows quick and easy installation.

WD1



Flexible rod configuration is suitable for applications requiring additional thermal insulation or where installation would otherwise be difficult.

WD2



This configuration lets you measure process pressure and temperature at the same point

WD3 (*)



Configuration with exposed capillary is ideal for applications where space is limited.

Main characteristics

- Digital output signal with DP404 CAN OPEN communication protocol
- Transmission frequency (Baud rate): 10 Kbaud to 1 Mbaud (default 500 Kbaud)
- Software / Hardware selection of Baud rate and ID nodes
- Operation with 1 or 2 settable alarm limits
- "Autozero" for temperature compensation
- Zero and span drift compensation
- 80% FSO calibration signal
- Pressure ranges: 0-35 to 0-2000 bar / 0-500 to 0-15000 psi
- Extensimetric measurement principle with Wheatstone jumper
- Precision: $< \pm 0.25\%$ FSO (H); $< \pm 0.5\%$ FSO (M)
- Hydraulic transmission system to guarantee temperature stability.
- Protection level: IP65
- Standard threading: 1/2-20 UNF, M18x1.5; other versions on request
- Stainless steel 17-7 PH diaphragm with TiN (titanium nitride) coating
- Other types of diaphragm on request

TECHNICAL SPECIFICATIONS

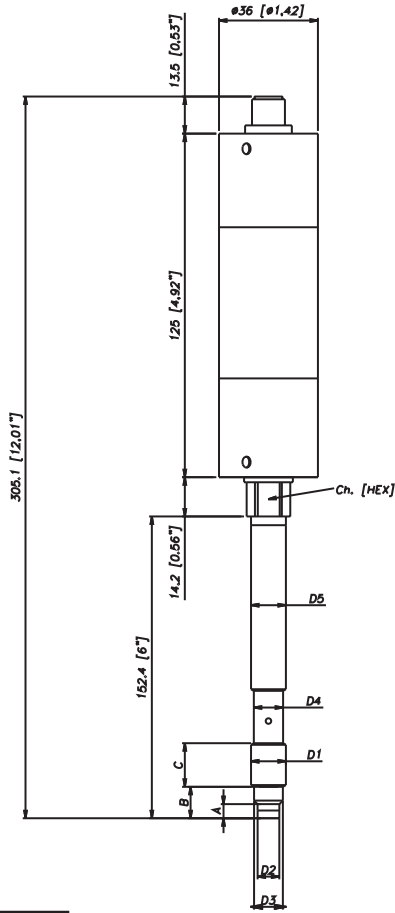
Rated precision, including effects of linearity, repeatability and hysteresis	H $< \pm 0.25\%$ FSO (100...2000 bar) M $< \pm 0.5\%$ FSO (35...2000 bar)
Sampling	16 bit (1)
Pressure ranges	0-500 to 0-15.000 psi 0-35 to 0-1000 bar
Maximum applicable pressure	2 x FSO
Measurement principle	Strain gauge
Power supply	12...40 Vdc
Typical input	40 mA (2)
Insulation resistance (at 50Vdc)	> 1000 MOhm
Signal at rated pressure (FSO)	Depends on FSO
Signal at ambient pressure	0
Calibration of ambient pressure	Insertion of an offset
Signal protocol	DP404 CAN OPEN, with baud rate selectable from 10K to 1M baud (default 500 Kbaud)
Response time (10 at 90% FSO)	20 ms
Calibration signal	80% FSO
Protection against overvoltage and reverse polarity of power supply	YES
Compensated temperature range of strain Gauge Housing	0...+76°C 32...170°F
Maximum temperature range of strain Gauge Housing	-30...+85°C -22...185°F
Thermal drift in compensated range; Zero Calibration Sensitivity	$< 0.02\%$ FSO/°C $< 0.01\%$ FSO/°F $< 0.01\%$ FSO/°F
Max. diaphragm temperature	315°C (600°F)
Influence due to variation of fluid temperature (zero)	0.04bar/°C 30 Psi/100°F
Standard contact diaphragm with process	17-7 PH with TiN (titanium nitride) coating
Thermocouple (model MD2)	STD: Type * J (isolated coupling)
Protection level	IP65
Electrical connections	M12 DIN EN 50044 5-pin connector

(1) resolution: 0.01 bar from 35...500bar; 0.1 bar from 700...1000bar;
0.1 psi from 5000...350psi; 1 psi from 7500...15000psi
(2) Conditions. Power supply 24 Vdc

FSO= Full Scale Output (Signal at rated pressure)

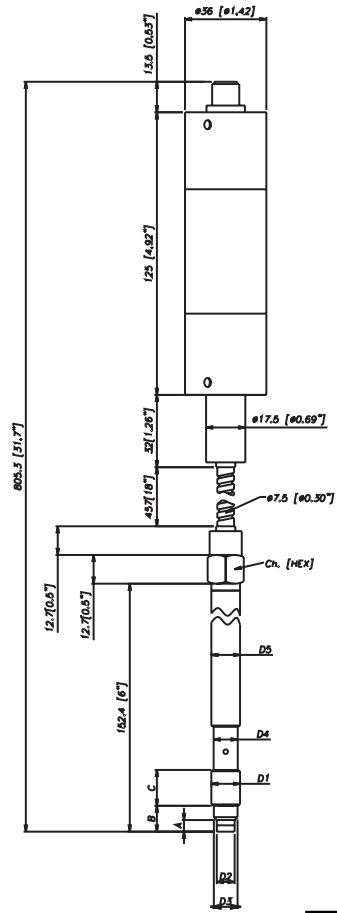
(*) Contact the Gefran Sales Department for availability of this model.

MECHANICAL DIMENSIONS



WD0

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 [$5/8''$]

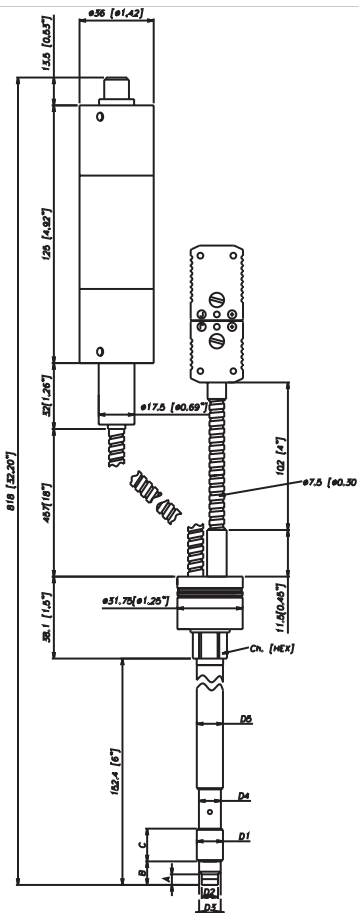


WD1

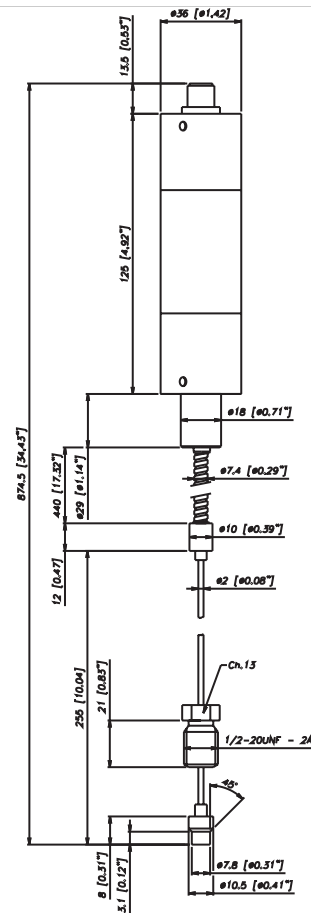
D1	M18x1,5
D2	$\varnothing 10 - 0.05$ [$\varnothing 0.394'' - 0.002$]
D3	$\varnothing 16 - 0.08$ [$\varnothing 0.63'' - 0.003$]
D4	$\varnothing 16 - 0.4$ [$\varnothing 0.63'' - 0.016$]
D5	$\varnothing 18$ [$\varnothing 0.71''$]
A	$6 - 0.26$ [$0.24'' - 0.01$]
B	$14.8 - 0.4$ [$0.58'' - 0.016$]
C	19 [$0.75''$]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

NOTE:
Dimensions refer to rigid rod option "4"
(153 mm – 6")

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



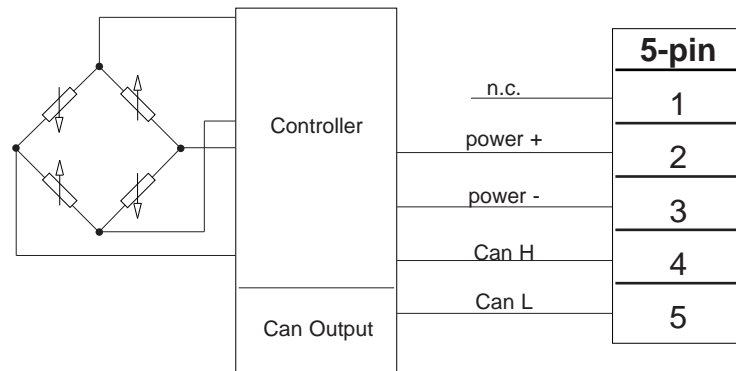
WD2



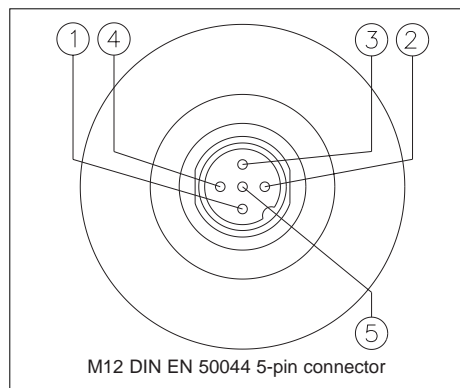
WD3

ELECTRICAL CONNECTIONS

CAN BUS DP404 DIGITAL OUTPUT



Shielding is connected to transducer body. It is advisable to ground it on the instrument side as well.



ACCESSORIES

Connectors

5 pin female connector (IP65 protection)

CON031

Extension cords

5-pin connector with cord length 1 meter (3.3 ft)

5-pin connector with cord length 2 meters (7 ft)

5-pin connector with cord length 5 meters (17 ft)

Other lengths

PCAV310

PCAV311

PCAV314

on request

Cord color code	
Conn.	Wire
1	n.c.
2	Red
3	Black
4	White
5	Blue

Accessories

Fastening bracket

Protective plug for 1/2 - 20 UNF

Protective plug for M18x1.5

Punch kit for 1/2-20 UNF

Punch kit for M18x1.5

Cleaning kit for 1/2-20 UNF

Cleaning kit for M18x1.5

SF18

SC12

SC18

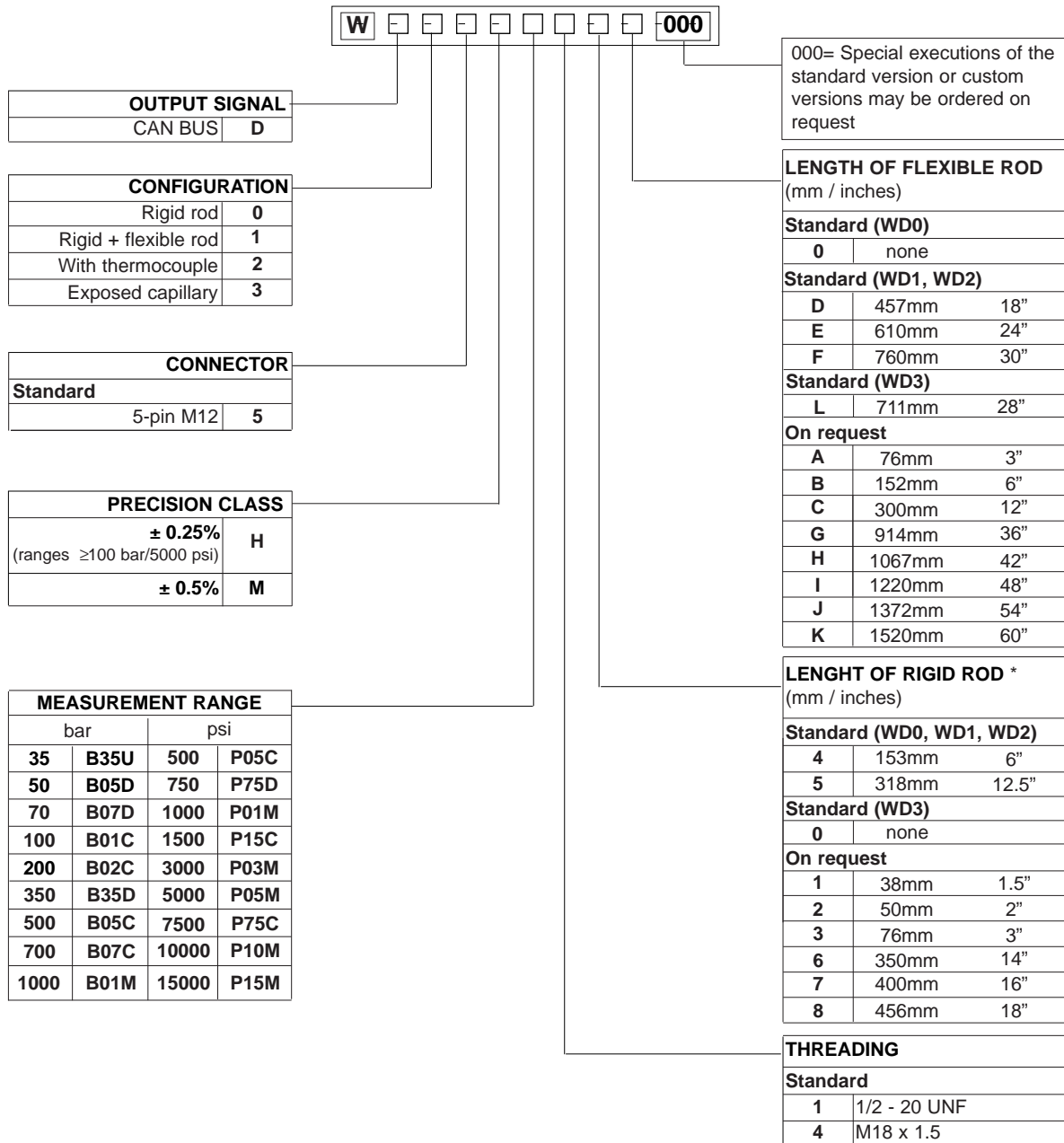
KF12

KF18

CT12

CT18

ORDER CODE



(* note: max. total length of rigid/flexible rod is 914 mm-36)

Example:

WD0-5-M-B07C-1-4-0-000

Oil-filled melt pressure transducer with Can output, 5-pin connector, 1/2 - 20 UNF threading, pressure range 700 bar, precision class 0.5%, 153 mm (6") rigid rod.

WD1-5-M-P03M-1-4-D-000

Oil-filled melt pressure transducer with Can output, 5-pin connector, 1/2 - 20 UNF threading, pressure range 3000 bar, precision class 0.5%, 153 mm (6") rigid rod, 457 mm (18") flexible rod.

GEFRAN spa reserves the right to make aesthetic or functional changes at any time and without notice.