

ME0



The rigid stem configuration makes installation fast and easy

ME1



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

ME2



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

ME3



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

Main features

- Pressure ranges from:
0-35 to 0-2000 bar / 0-500 to 0-30000 psi
- Strain gage Wheatstone bridge
- Accuracy :
$\pm 0.25\%$ FSO (H); $\pm 0.5\%$ FSO (M)
- Internally generated 80% calibration signal (R-Cal)
- Fluid-filled system for temperature stability
- 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 15-5 PH stainless steel with Armoloy coating
- 17-7 PH corrugated diaphragm with TiN coating (Titanium Nitride) for ranges below 100bar-1500psi
- Other diaphragms available on request

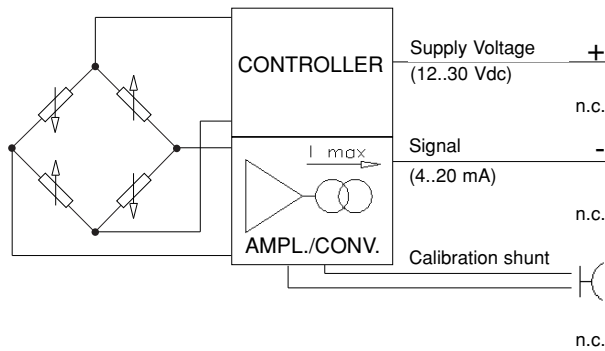
TECHNICAL SPECIFICATIONS

| | |
|---|--|
| Nominal accuracy including Linearity, Repeatability, Hysteresis | H $\pm 0.25\%$FSO (100...2000 bar) M $\pm 0.5\%$FSO (35...2000 bar) |
| Resolution | Infinite |
| Measurement range | 0..35 to 0..2000bar 0..500 to 0..30000psi |
| Maximum overpressure | 2 x FS 1.5 x FS above 1000bar/15000psi |
| Measurement principle | Strain gage Wheatstone bridge |
| Supply voltage | 12-30Vdc |
| Maximum current consumption | 20mA |
| Isolation resistance (at 50Vdc) | >1000 MOhm |
| Full Scale Output (FSO) | 20mA |
| Zero balance | 4mA |
| Signals adjustment : Nominal pressure Ambient pressure | 5% FSO min. 10 bar (150psi) |
| Maximum load | see diagram (page 3) |
| Response time (10 to 90% FSO) | ~ 8ms |
| Output noise (RMS 10-400Hz) | <math>< 0.05\%</math> FSO |
| Calibration signal | 80% FSO |
| Protection against output shortcircuit and supply voltage inverted polarity | YES |
| Protection against output voltage spikes | YES according to 89/336/EEC |
| Strain gauge housing compensated temperature range | 0...+76°C 32...170°F |
| Maximum housing temperature range | -30...+85°C -22...185°F |
| Thermal drift in compensated range Zero/Calibr./Sens. | <math>< 0.02\%</math>FSO/°C <math>< 0.01\%</math>FSO/°F |
| Diaphragm maximum temperature | 400°C 750°F |
| Zero drift due to change in process temperature | 0.02 bar/°C 15 psi/100°F |
| Material in contact with process medium | - Standard 15-5 PH with Armoloy coating 17-7 PH corrugated diaphragm with Titanium Nitride coating for ranges <math>< 100</math> bar (1500psi) |
| Thermocouple (model ME2) | 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 |

FSO = Full Scale Output (output signal at nominal pressure)

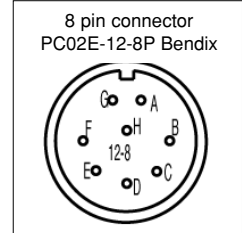
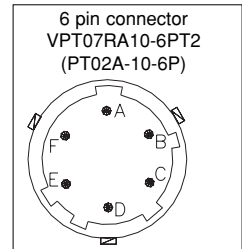
ELECTRICAL CONNECTIONS

CURRENT OUTPUT (4...20mA two wires)

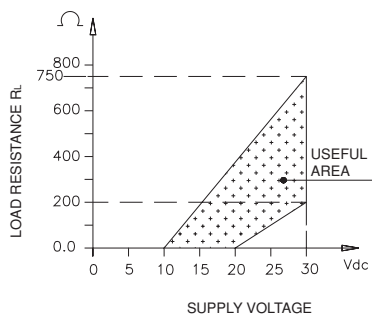


| 6-pin | 8-pin |
|-------|-------|
| A | B |
| C | A |
| B | D |
| D | C |
| E - F | E - F |
| | G - H |

Shield drain wire is tied to connector via cable clamp

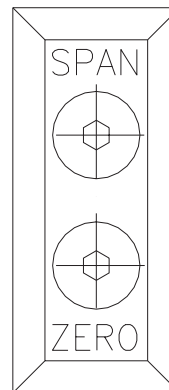


LOAD DIAGRAM FOR CURRENT OUTPUT



The diagram shows the optimum ratio between the load and supply voltage of the 4-20mA transmitter. For a correct use, choose any combination of load resistance and supply voltage, in the shaded area.

ADJUSTMENTS



ZERO and SPAN adjustment can be made by trimpots inside the transmitter body and accessible after removing the two protection screws.

Span is factory set and should not be adjusted.

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 ME2 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 | Brown |
| G | n.c. |
| H | n.c. |

ORDER CODE

M - - - - - - - - - - 000

| OUTPUT SIGNAL | |
|---------------|---|
| 4...20mA | E |

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

| CONNECTOR | |
|----------------------|---|
| Standard | |
| 6 pin | 6 |
| 8 pin | 8 |
| Available on request | |
| NPT | N |

| ACCURACY CLASS | |
|--|---|
| 0.25% FSO (ranges ≥ 100 bar/1500 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 |
| 1400 | B14C | 20000 | P20M |
| 2000 | B02M | 30000 | P30M |

000 = Standard version
Special or customized versions available on request

| FLEXIBLE LENGTH (mm / inches) | |
|----------------------------------|------------|
| Standard (ME0) | |
| 0 | none |
| Standard (ME1, ME2) | |
| D | 457mm 18" |
| E | 610mm 24" |
| F | 760mm 30" |
| Standard (ME3) | |
| L | 711mm 28" |
| Available on request | |
| A | 76mm 3" |
| B | 152mm 6" |
| C | 300mm 12" |
| G | 914mm 36" |
| H | 1067mm 42" |
| I | 1220mm 48" |
| J | 1372mm 54" |
| K | 1520mm 60" |

| RIGID STEM LENGTH (mm / inches) | |
|------------------------------------|-------------|
| Standard (ME0, ME1, ME2) | |
| 4 | 153mm 6" |
| 5 | 318mm 12.5" |
| Standard (ME3) | |
| 0 | none |
| Available on request | |
| 1 | 38mm 1.5" |
| 2 | 50mm 2" |
| 3 | 76mm 3" |
| 6 | 350mm 14" |
| 7 | 400mm 16" |
| 8 | 456mm 18" |

| THREAD | |
|----------------------|--|
| Standard | |
| 1 | 1/2 - 20 UNF |
| 4 | M18 x 1.5 |
| Available on request | |
| 2 | M10 x 1 (ranges ≥ 200 bar/3000 psi) |
| 3 | M14 x 1.5 |

Examples

ME2-6-M-B07C-1-4-D-000

Melt pressure transmitter with type "J" thermocouple, 4..20 mA output, 6-pin connector, 1/2-20UNF thread, 700bar full scale, 0.5 % accuracy class, 153 mm (6") rigid stem, 457mm (18") flexible capillary.

ME0-8-M-P03M-1-4-0-000

Melt pressure transmitter, rigid stem, 4..20 mA 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. 85707 - 10/01