

DPI 705E Series

Pressure Ranges

Internal and remote sensors are fitted with pressure connectors as detailed below:

- 25 mbar – 200 bar (10 inH₂O – 3000 psi / 2.5 kPa – 20 MPa): G1/8 BSP female
- Differential reference port: Legris 4 mm tubing adaptor
- ≥350 bar (5000 psi / 35 MPa): Autoclave 9/16 x 18 UNF Male

DPI 705E Internal Pressure Sensors

The DPI705E includes an internal Absolute, Gauge or Differential sensor.

Available ranges as per table:

Internal Pressure Sensor Availability					
Pressure Range	Abs	Gauge	Differential	Standard Accuracy	High Accuracy
25 mbar / 10 inH ₂ O / 2.5 kPa	-	✓	✓	✓	-
70 mbar / 1 psi / 7 kPa	-	✓	✓	✓	-
200 mbar / 3 psi / 20 kPa	-	✓	✓	✓	-
350 mbar / 5 psi / 35 kPa	✓	✓	✓	✓	✓
700 mbar / 10 psi / 70 kPa	✓	✓	✓	✓	✓
1 bar / 15 psi / 100 kPa	✓	✓	✓	✓	✓
2 bar / 30 psi / 200 kPa	✓	✓	✓	✓	✓
3.5 bar / 50 psi / 350 kPa	✓	✓	-	✓	✓
7 bar / 100 psi / 700 kPa	✓	✓	-	✓	✓
10 bar / 150 psi / 1000 kPa	✓	✓	-	✓	✓
20 bar / 300 psi / 2 MPa	✓	✓	-	✓	✓
35 bar / 500 psi / 3.5 MPa	✓	✓	-	✓	✓
70 bar / 1000 psi / 7 MPa	✓	✓	-	✓	✓
100 bar / 1500 psi / 10 MPa	✓	✓	-	✓	✓
135 bar / 2000 psi / 13.5 MPa	✓	✓	-	✓	✓
200 bar / 3000 psi / 20 MPa	✓	✓	-	✓	✓
350 bar / 5000 psi / 35 MPa	✓	-	-	✓	✓
700 bar / 10000 psi / 70MPa	✓	-	-	✓	✓

Note: Do not apply pressure greater than 1 bar (16 psi) absolute to the negative port of differential pressure indicators.

PM 700E External Remote Pressure Sensors

Any number of remote sensors can be used with a single DPI705E as all sensors hold their own calibration data and are supplied with a 2.9m (9.5 feet) cable

Available ranges as per table:

External Remote Pressure Sensor Availability					
Pressure Range	Abs	Gauge	Differential	Standard Accuracy	High Accuracy
25 mbar / 10 inH ₂ O / 2.5 kPa	-	✓	✓	✓	-
70 mbar / 1 psi / 7 kPa	-	✓	✓	✓	-
200 mbar / 3 psi / 20 kPa	-	✓	✓	✓	-
350 mbar / 5 psi / 35 kPa	✓	✓	✓	✓	✓
700 mbar / 10 psi / 70 kPa	✓	✓	✓	✓	✓
1 bar / 15 psi / 100 kPa	✓	✓	✓	✓	✓
2 bar / 30 psi / 200 kPa	✓	✓	✓	✓	✓
3.5 bar / 50 psi / 350 kPa	✓	✓	-	✓	✓
7 bar / 100 psi / 700 kPa	✓	✓	-	✓	✓
10 bar / 150 psi / 1000 kPa	✓	✓	-	✓	✓
20 bar / 300 psi / 2 MPa	✓	✓	-	✓	✓
35 bar / 500 psi / 3.5 MPa	✓	✓	-	✓	✓
70 bar / 1000 psi / 7 MPa	✓	✓	-	✓	✓
100 bar / 1500 psi / 10 MPa	✓	✓	-	✓	✓
135 bar / 2000 psi / 13.5 MPa	✓	✓	-	✓	✓
200 bar / 3000 psi / 20 MPa	✓	✓	-	✓	✓
350 bar / 5000 psi / 35 MPa	✓	-	-	✓	✓
700 bar / 10000 psi / 70 MPa	✓	-	-	✓	✓
1000 bar / 15000 psi / 100 MPa	✓	-	-	✓	✓
1400 bar / 20000 psi / 140 MPa	✓	-	-	✓	✓



PM700E (Gauge, Absolute)



PM700E (Differential)

Accuracy Levels

Total Uncertainty includes 1-year drift for both Standard and High accuracy levels.

- 1-Standard ±0.1% FS NLH&R over temperature, including non-linearity, hysteresis and repeatability.
- 2-High ±0.05% FS NLH&R over temperature, including non-linearity, hysteresis and repeatability.

Ordering Information for PM700E External Remote Pressure Sensors

The PM 700E and PM 700E-IS are supplied with a user guide and calibration certificate as standard.

Model Type

PM700E	Safe Area External remote pressure sensor
PM700EIS	Hazardous Area External remote pressure sensor

Accuracy (Now offering two levels of accuracy – see page 3 for availability by pressure range)

- 1** Standard
- 2** High

Pressure Range and Reference type; (Mandatory to select only one e.g. 008A for each configuration)

	Gauge (G)	Absolute (A)	Differential (L)
25 mbar / 10 inH2O / 2.5 kPa	008G	-	008L
70 mbar / 1 psi / 7 kPa	01G	-	01L
200 mbar / 3 psi / 20 kPa	02G	-	02L
350 mbar / 5 psi / 35 kPa	03G	03A	03L
700 mbar / 10 psi / 70 kPa	04G	04A	04L
1 bar / 15 psi / 100 kPa	05G	05A	05L
2 bar / 30 psi / 200 kPa	07G	07A	07L
3.5 bar / 50 psi / 350 kPa	08G	08A	-
7 bar / 100 psi / 700 kPa	10G	10A	-
10 bar / 150 psi / 1000 kPa	11G	11A	-
20 bar / 300 psi / 2 MPa	13G	13A	-
35 bar / 500 psi / 3.5 MPa	14G	14A	-
70 bar / 1000 psi / 7 MPa	16G	16A	-
100 bar / 1500 psi / 10 MPa	165G	165A	-
135 bar / 2000 psi / 13.5 MPa	17G	17A	-
200 bar / 3000 psi / 20 MPa	18G	18A	-
350 bar / 5000 psi / 35 MPa	-	20A	-
700 bar / 10000 psi / 70 MPa	-	22A	-
1000 bar / 15000 psi / 100 MPa	-	23A	-
1400 bar / 20000 psi / 140 MPa	-	24A	-

Pressure fitting

P1	G1/8 BSP Female	For ranges less than 350 bar
P2	G1/4 BSP Female Adaptor	For ranges less than 350 bar
P3	1/8 NPT Female Adaptor	For ranges less than 350 bar
P4	1/4 NPT Female Adaptor	For ranges less than 350 bar
P5	Quick-Fit Adaptor	For ranges less than 350 bar
P6	9/16 x 18 UNF Male	Mandatory for ranges greater than/equal to 350 bar

Hazardous Area Approval (Mandatory to select one)

H0	No Hazardous Area Approval (Default if PM700E selected)
H1	ATEX/IECEX
H2	INMETRO (Brazil)

Options (Mandatory to select one)

OP0	No option required
OP1	Negative calibration for gauge ranges less than 35 bar (If selected, the calibration certificate includes values down to -1 bar g.)

PM700E - 1 - 07G - P2 - H0 - OP0 (Example Part Number)

Ordering Information for DPI705E Handheld Pressure indicator

The DPI 705E and DPI 705E-IS are supplied with a user guide and calibration certificate as standard.

Model Type

DPI705E Safe Area pressure indicator
DPI705EIS Hazardous Area pressure indicator

Accuracy (Now offering two levels of accuracy – see page 3 for availability by pressure range)

- 1 Standard
- 2 High

Pressure Range and Reference type; (Mandatory to select only one e.g. 008A for each configuration)

	Gauge (G)	Absolute (A)	Differential (L)
25 mbar / 10 inH2O / 2.5 kPa	008G	-	008L
70 mbar / 1 psi / 7 kPa	01G	-	01L
200 mbar / 3 psi / 20 kPa	02G	-	02L
350 mbar / 5 psi / 35 kPa	03G	03A	03L
700 mbar / 10 psi / 70 kPa	04G	04A	04L
1 bar / 15 psi / 100 kPa	05G	05A	05L
2 bar / 30 psi / 200 kPa	07G	07A	07L
3.5 bar / 50 psi / 350 kPa	08G	08A	-
7 bar / 100 psi / 700 kPa	10G	10A	-
10 bar / 150 psi / 1000 kPa	11G	11A	-
20 bar / 300 psi / 2 MPa	13G	13A	-
35 bar / 500 psi / 3.5 MPa	14G	14A	-
70 bar / 1000 psi / 7 MPa	16G	16A	-
100 bar / 1500 psi / 10 MPa	165G	165A	-
135 bar / 2000 psi / 13.5 MPa	17G	17A	-
200 bar / 3000 psi / 20 MPa	18G	18A	-
350 bar / 5000 psi / 35 MPa	-	20A	-
700 bar / 10000 psi / 70 MPa	-	22A	-

Pressure fitting

P1	G1/8 BSP Female	For ranges less than 350 bar
P2	G1/4 BSP Female Adaptor	For ranges less than 350 bar
P3	1/8 NPT Female Adaptor	For ranges less than 350 bar
P4	1/4 NPT Female Adaptor	For ranges less than 350 bar
P5	Quick-Fit Adaptor	For ranges less than 350 bar
P6	9/16 x 18 UNF Male	Mandatory for ranges greater than/equal to 350 bar

Hazardous Area Approvals (Mandatory to select one)

H0	No Hazardous Area Approval (Default if DPI705E selected)
H1	ATEX/IECEX
H2	INMETRO (Brazil)

Pressure Units

U0	All Pressure units (Default selection)
U1	Pa (Si) Pressure units only

Options (Mandatory to select one)

OP0	No option required
OP1	Negative calibration for gauge ranges less than 35 bar (If selected, the calibration certificate includes values down to -1 bar g.)

DPI705EIS - 1 - 07G - P2 - H1 - U0 - OP1 (Example Part Number)