

## DX 225 / DX 245



### DX Digital pressure probes relative and absolute with G ½ B thread



- Interchangeable DX sensor
- highly accurate 0.1 % FS
- for PRO Line meters PRO D01/D05/925/595
- Low power consumption
- robust manometer connection G ½"
- rigid stainless-steel body
- Fast: internal measuring speed 50 /s
- Temperature compensated
- Optional DAkkS/ACCREDIA certificates

#### DESCRIPTION

DX 225 and DX 245 are series of high-class robust and very accurate reference sensors for operation with PRO D01/D05/925/595 handheld meters. The G ½ manometer connection is designed for pressures of 1000 bar.

Different ranges available as standard:

|                 |        |                  |                |
|-----------------|--------|------------------|----------------|
| relative        | 489188 | DX225-M1/3bar-00 | -1 ... 3 bar   |
|                 | 486801 | DX225-1bar-00    | 0 ... 1 bar    |
|                 | 486812 | DX225-4bar-00    | 0 ... 4 bar    |
|                 | 486809 | DX225-10bar-00   | 0 ... 10 bar   |
|                 | 486810 | DX225-100bar-00  | 0 ... 100 bar  |
|                 | ...    |                  |                |
|                 | 489182 | DX225-1000bar-00 | 0 ... 1000 bar |
| absolute/vacuum | 486802 | DX245-1bar-00    | 0 ... 1 bar    |
|                 | 486811 | DX245-2.5bar-00  | 0 ... 2.5 bar  |
|                 | 489178 | DX245-4bar-00    | 0 ... 4 bar    |
|                 | 489179 | DX245-6bar-00    | 0 ... 6 bar    |
|                 | 486813 | DX245-10bar-00   | 0 ... 10 bar   |
|                 | 489180 | DX245-25bar-00   | 0 ... 25 bar   |

many other ranges can be delivered on request!

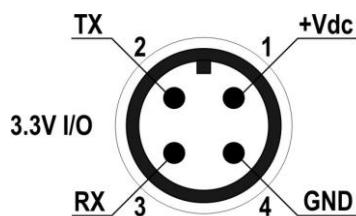
The measurement is temperature compensated over a wide range for enhanced accuracy.

The probes are supplied factory-calibrated, and they are ready to use.

They can be optionally supplied with an ISO 9001 factory calibration or DIN EN ISO/IEC 17025 DAkkS/ACCREDIA calibration certificate.

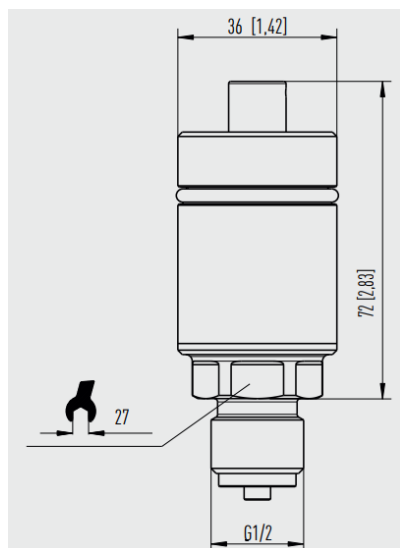
The calibration data are stored in the probe, allowing for interchangeability without the need for recalibration.

Equipped with 5-pin M12 connector “DX-Sensor standard”, connectable to PRO-D0x and PRO 925/595 multifunctional meters.

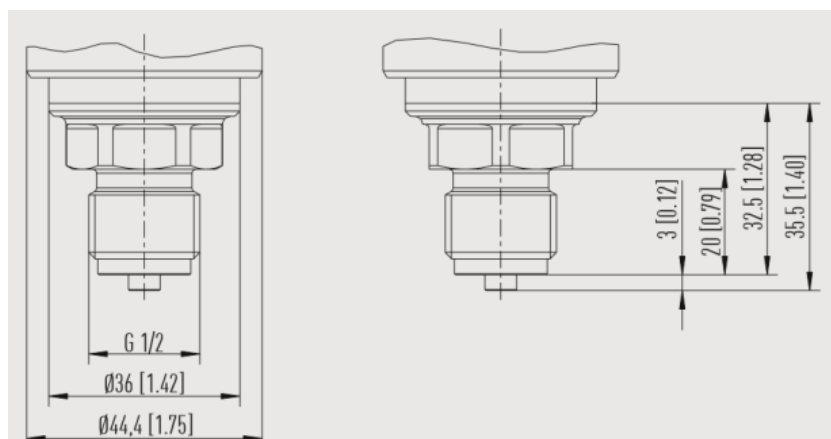


**M12 DX 225/245 sensor pin out**  
(a connection-cable is required)

**DX 225/245-L01: incl. connection-cable**



**Dimensional drawing**



**Thread connection G 1/2"**

## TECHNICAL SPECIFICATIONS

|                                       |                                                                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Sensor type                           | <=40 bar: piezoresistive<br>>40 bar: thin film cell                                                                                        |
| Measuring range                       | relative: 1 ... 1000 bar rel.<br>absolute/vacuum: 1 ... 25 bar abs.                                                                        |
| Resolution                            | Depending on sensor model, <0.01% full scale                                                                                               |
| Overpressure limit                    | < 25 bar                      3-fold<br>> 25 ... ≤ 600 bar        2-fold<br>> 600 bar                    1.5-fold                          |
| Measuring rate                        | Internally 50 /s (update for min/max envelope curve visualization and average, display is updated once per second)                         |
| Accuracy<br>(10 ... 60°C, 45...75%RH) | 0.1 % FS<br>(for sensors <1.6bar: periodic zero-point correction required)                                                                 |
| Compensated temperature               | -20...+60 °C                                                                                                                               |
| Operating conditions                  | -20...+60 °C / 0...95% RH non-condensing                                                                                                   |
| Storage temperature                   | -20...+80 °C                                                                                                                               |
| Output                                | DX-Sensor interface M12                                                                                                                    |
| Connection (to meter)                 | 4-pole M12                                                                                                                                 |
| Power consumption                     | Ca. 2 mA                                                                                                                                   |
| Connection (to process)               | G ½ manometer thread                                                                                                                       |
| Dimensions                            | Ø36 x 94 mm (without thread connection: 72 mm)                                                                                             |
| Best orientation                      | Vertical, thread pointing downwards                                                                                                        |
| Weight                                | Ca. 300 g                                                                                                                                  |
| Material                              | Stainless steel,<br><= 40 bar: 1.4404/316L process connection and sensor<br>>40 bar: 1.4404/316L process connection, sensor Elgiloy 2.4711 |
| Protection degree                     | IP67                                                                                                                                       |

## SENSOR-MEASURING CHANNELS

| Displayed name |        | Description                     |
|----------------|--------|---------------------------------|
| DX 225         | DX 245 |                                 |
| Prel           | Pabs   | Last measuring value            |
| MinP           | MinP   | Minimum value of last second *) |
| AvgP           | AvgP   | Average of last second *)       |
| MaxP           | MaxP   | Maximum value of last second *) |
| ---            | SLP    | value corrected to sea level    |

\*) The measuring channels of the sensor are not to be confused with the min/max/Ø values of the hand-held measuring devices. These values are provided for each of the sensor measuring channels.

## STANDARD ARTICLES

Digital relative pressure sensor with gauge connection thread G½B (eg. for PRO D0x)

Incl. 1 m M12 connection cable:

|                      | Measuring range         | Resolution         |                |
|----------------------|-------------------------|--------------------|----------------|
| DX 225-M1/3bar-00-L1 | -1000 ... 3000 hPa rel. | 1 hPa / 1 mbar     | Art no. 489424 |
| DX 225-400mbar-00-L1 | 0.0 ... 400.0 hPa rel.  | 0.1 hPa / 0.1 mbar | Art no. 489367 |
| DX 225-1bar-00-L1    | 0.0 ... 1000.0 hPa rel. | 0.1 hPa / 0.1 mbar | Art no. 489425 |
| DX 225-2.5bar-00-L1  | 0 ... 2500 hPa rel.     | 1 hPa / 1 mbar     | Art no. 489426 |
| DX 225-4bar-00-L1    | 0 ... 4000 hPa rel.     | 1 hPa / 1 mbar     | Art no. 489427 |
| DX 225-6bar-00-L1    | 0 ... 6000 hPa rel.     | 1 hPa / 1 mbar     | Art no. 489428 |
| DX 225-10bar-00-L1   | 0 ... 10 bar rel.       | 1 hPa / 1 mbar     | Art no. 489429 |
| DX 225-25bar-00-L1   | 0 ... 25 bar rel.       | 1 hPa / 1 mbar     | Art no. 489430 |
| DX 225-40bar-00-L1   | 0 ... 40 bar rel.       | 1 hPa / 1 mbar     | Art no. 489431 |
| DX 225-60bar-00-L1   | 0 ... 60 bar rel.       | 1 hPa / 1 mbar     | Art no. 489432 |
| DX 225-100bar-00-L1  | 0 ... 100 bar rel.      | 10 hPa / 0.01 bar  | Art no. 489433 |
| DX 225-250bar-00-L1  | 0 ... 250 bar rel.      | 10 hPa / 0.01 bar  | Art no. 489434 |
| DX 225-400bar-00-L1  | 0 ... 400 bar rel.      | 10 hPa / 0.01 bar  | Art no. 489435 |
| DX 225-600bar-00-L1  | 0 ... 600 bar rel.      | 10 hPa / 0.01 bar  | Art no. 489436 |
| DX 225-1000bar-00-L1 | 0 ... 1000 bar rel.     | 10 hPa / 0.01 bar  | Art no. 489438 |

Digital absolute pressure sensor with gauge connection thread G½B (eg. for PRO D0x)

Incl. 1 m M12 connection cable:

|                     | Measuring range      | Resolution         |                |
|---------------------|----------------------|--------------------|----------------|
| DX 245-1bar-00-L1   | 0 ... 1000 hPa abs   | 0.1 hPa / 0.1 mbar | Art no. 489361 |
| DX 245-2.5bar-00-L1 | 0 ... 2500 hPa abs.  | 1 hPa / 1 mbar     | Art no. 489365 |
| DX 245-4bar-00-L1   | 0 ... 4000 hPa abs.  | 1 hPa / 1 mbar     | Art no. 489362 |
| DX 245-6bar-00-L1   | 0 ... 6000 hPa abs.  | 1 hPa / 1 mbar     | Art no. 489363 |
| DX 245-10bar-00-L1  | 0 ... 10.00 bar abs. | 1 hPa / 1 mbar     | Art no. 489364 |
| DX 245-25bar-00-L1  | 0 ... 25.00 bar abs. | 1 hPa / 1 mbar     | Art no. 489366 |

(Sensors are available without cable as well, to be combined with other connection cable lengths than standard 1 m)

## ACCESSORIES

|               |                                                                   |                       |
|---------------|-------------------------------------------------------------------|-----------------------|
| <b>GDZ-28</b> | metal sealing, manometer profile gasket for thread G ½            | <b>Art no. 601597</b> |
| <b>GDZ-23</b> | Adapter G ¼ A outer diameter, G ½ inner brass                     | <b>Art no. 601586</b> |
| <b>GDZ-09</b> | Coupling adapter (nominal diameter 5) with male thread G ¼, brass | <b>Art no. 601557</b> |

Other adapters are available on request

|                      |                                  |                       |
|----------------------|----------------------------------|-----------------------|
| <b>CABLE-M12-L01</b> | Connection cable M12 5 pole, 1 m | <b>Art no. 487020</b> |
| <b>CABLE-M12-L02</b> | Connection cable M12 5 pole, 2 m | <b>Art no. 487021</b> |
| <b>CABLE-M12-L05</b> | Connection cable M12 5 pole, 5 m | <b>Art no. 487022</b> |

## SUITABLE INSTRUMENTS

|                  |                                                                                                                                                                                          |                       |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>PRO D01</b>   | 1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries.                                                                                                    | <b>Art no. 486134</b> |
| <b>PRO D05.2</b> | 2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.                                | <b>Art no. 486136</b> |
| <b>PRO D05.3</b> | 3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.                                | <b>Art no. 486137</b> |
| <b>PRO 921</b>   | Multifunctional instrument for DX - sensors and 2 thermocouples type K. Supplied with 4 x AA alkaline batteries.                                                                         | <b>Art no. 488743</b> |
| <b>PRO 925</b>   | Multifunctional handheld data logger for DX - sensors and 2 thermocouples type K. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website. | <b>Art no. 488744</b> |

More on [www.senseca.com](http://www.senseca.com)

