

DX 210 / DX 240



Digital pressure probes with hose connection



- Interchangeable, precise
- for PRO D01/D05
- Low power
- robust hose connector for standard $\varnothing 6$ mm hoses
- Compact and rigid stainless-steel body
- Fast and accurate measuring: up to 1000 /s
- Temperature compensated
- Optional DAkKS/ACCREDIA certificates

DESCRIPTION

DX 210 and DX 240 are series of miniature digital absolute and differential pressure probes for the PRO D01 / PRO D05 handheld meters.

Different ranges available:

- DX 210-2.5hPa: ± 2.5 hPa differential
- DX 210-20hPa: ± 20 hPa differential
- DX 210-500hPa: ± 500 hPa differential
- DX 210-200kPa: ± 200 kPa differential
- DX 210-700kPa: ± 700 kPa differential
- DX 240-200kPa: 0...200 kPa absolute

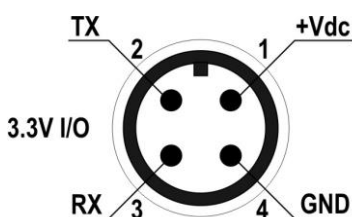
The measurement is temperature compensated for enhanced accuracy.

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 4-pin M12 connector "DX-Sensor standard", connectable to PRO-D0x multifunctional meters.



M12 DX 210/240 sensor pin out
(a connection-cable is required)



DX 210-20hPa-00-L1: incl. connection-cable

TECHNICAL SPECIFICATIONS

Sensor type	MEMS
Measuring range	from ± 2.5 hPa to ± 700 kPa differential or 0...200 kPa absolute
Resolution	Depending on sensor model
Measuring rate *)	Normal: 1 /s Fast: Internally 1000 /s (update for min/max envelope curve visualization and average)
Accuracy	Depending on sensor model
Compensated temperature	0...+50 °C
Operating conditions	-20...+85 °C / 0...95% RH non-condensing
Storage temperature	-20...+85 °C
Output	DX-Sensor interface M12
Connection (to meter)	5-pole M12
Power consumption	Normal: 3.5 mA Fast: 5.5 mA
Connection (to process)	stainless-steel ports for $\varnothing 6 \times 1$ mm (int. $\varnothing 4$ mm) hoses DX 210: 2 ports for differential probes DX 240: 1 port for absolute probes
Dimensions	$\varnothing 21.7 \times 62$ mm
Weight	ca. 130 g
Material	Stainless steel
Protection degree	IP65 (Keep measuring input dry for precise measurement)
Applications	Only air and non-aggressive dry gases

*) Switching between "Normal" and "Fast" is done in the instrument menu under the respective connection in the "Measuring speed" parameter. The hand-held measuring devices support switching the measuring speed from firmware version V1.3.0.0.

SENSOR-MEASURING CHANNELS

Displayed name		Description
DX 210	DX 240	
Pdif	Pabs	Last measuring value
MinP	MinP	Minimum value of last second *)
AvgP	AvgP	Average of last second *)
MaxP	MaxP	Maximum value of last second *)

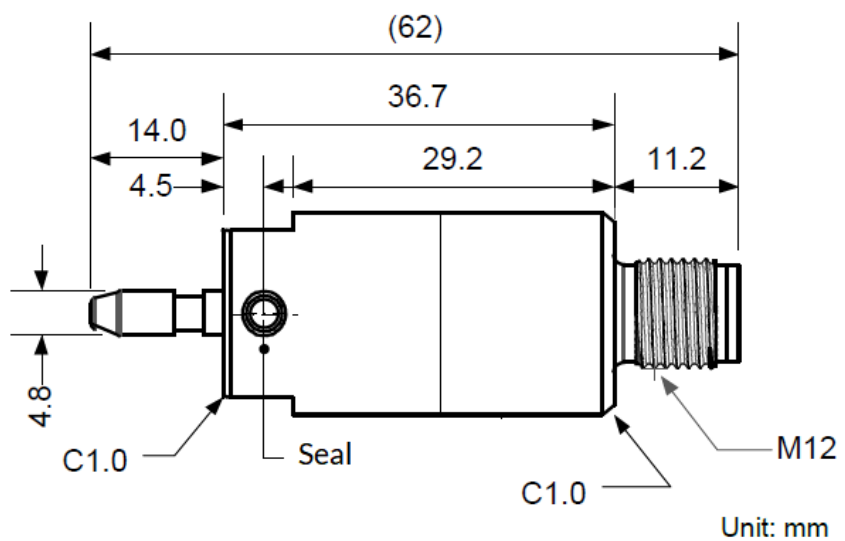
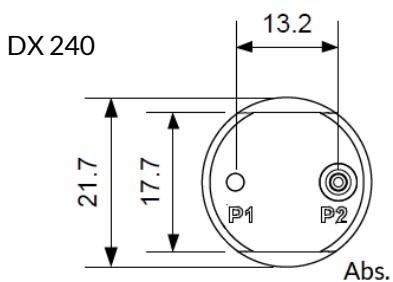
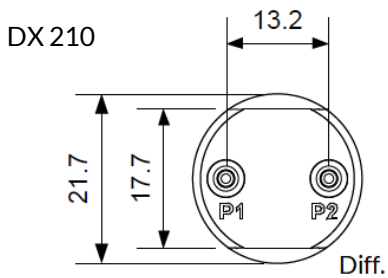
*) The measuring channels of the sensor are not to be confused with the min/max/ \varnothing values of the hand-held measuring devices. These values are provided for each of the sensor measuring channels.

MODEL SPECIFIC SPECIFICATIONS: DIFFERENTIAL

Model	DX 210-2.5hPa	DX 210-20hPa	DX 210-500hPa	DX 210-200kPa	DX 210-700kPa
Measuring range	±2.5 hPa diff	±20 hPa diff	±500 hPa diff	±200 kPa diff	±700 kPa diff
Resolution	0.0001 hPa /0.01Pa	0.001 hPa /0.1Pa	0.1 hPa	0.1 kPa	0.1 kPa
Proof Pressure	10x FS	10x FS	3x FS	3x FS	3x FS
Burst Pressure	20x FS	20x FS	6x FS	6x FS	5x FS
Accuracy typ. @25°C	1.0 % FS	0.5 % FS	0.25 % FS	0.25 % FS	0.25 % FS
max @25°C	2.5 % FS	1.5 % FS	1.0 % FS	1.0 % FS	1.0 % FS
Total error band	3.0 % FS	2.0 % FS	2.0 % FS	2.0 % FS	1.0 % FS

MODEL SPECIFIC SPECIFICATIONS: ABSOLUTE / VACUUM

Model	DX 240-200kPa	
Measuring range	0...200 kPa abs	
Resolution	0.01 hPa/ 0.1hPa	
Proof Pressure	3x FS	
Burst Pressure	6x FS	
Accuracy typ. @25°C	0.5 % FS	
max @25°C	1.5 % FS	
Total error band	1.5 % FS	



STANDARD ARTICLES

DX 210-2.5hPa-00-L1-00	Digital differential pressure probe. Measuring range: ± 2.5 hPa. Incl. 1 m M12 connection cable.	Art no. 486674
DX 210-20hPa-00-L1-00	Digital differential pressure probe. Measuring range: ± 20 hPa. Incl. 1 m M12 connection cable.	Art no. 486675
DX 210-500hPa-00-L1-00	Digital differential pressure probe. Measuring range: ± 500 hPa. Incl. 1 m M12 connection cable.	Art no. 486676
DX 210-200kPa-00-L1-00	Digital differential pressure probe. Measuring range: ± 200 kPa. Incl. 1 m M12 connection cable.	Art no. 486677
DX 210-700kPa-00-L1-00	Digital differential pressure probe. Measuring range: ± 700 kPa. Incl. 1 m M12 connection cable.	Art no. 486678
DX 240-200kPa-00-L1-00	Digital absolute pressure probe. Measuring range: 0...200 kPa. Incl. 1 m M12 connection cable.	Art no. 486679

ACCESSORIES

GDZ-01	PVC hose 6/4 (6 mm outside- \emptyset , 4 mm inside- \emptyset , 5 bar at 23 °C)	Art no. 601541
GDZ-31	Rubber tube 8/5 (8 mm outside- \emptyset , 5 mm inside- \emptyset , 2 bar at 23 °C, max. 200 °C)	Art no. 606070
CABLE-M12-L01	Connection cable M12 5 pole, 1 m	Art no. 487020
CABLE-M12-L02	Connection cable M12 5 pole, 2 m	Art no. 487021
CABLE-M12-L05	Connection cable M12 5 pole, 5 m	Art no. 487022

SUITABLE INSTRUMENTS

PRO D01	1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries.	Art no. 486134
PRO D05.2	2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.	Art no. 486136
PRO D05.3	3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.	Art no. 486137