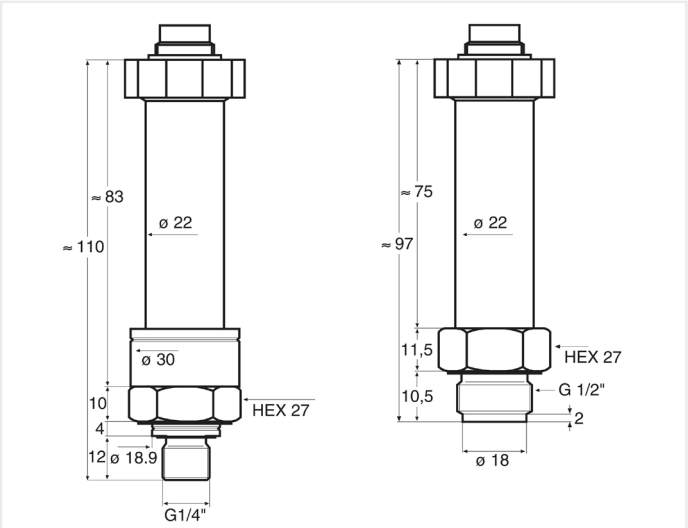
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High-precision pressure sensor FDAD33/35M

Very accurate over a wide temperature range, digital sensor with ALMEMO® D6 plug





FDAD 33 FDAD 35M

- Stable piezo-resistive transducer with integrated A/D converter and signal processor
- Temperature-dependence and non-linearity are eliminated by means of mathematical compensation; this ensures a high level of accuracy.
- Digital output of measured value
- The current value is measured at the sensor's high sampling rate.
- To acquire transitory pressure fluctuations and pressure peaks the maximum value, minimum value, and average value are calculated from the current values in the ALMEMO® D6 plug and output in three function channels.
- One measuring channel is programmed (at our factory) : Pressure (bar, p)
  Up to three function channels can also be activated (via LMEMO® device V6) :
  Maximum value, minimum value, average value. This device can be completely configured directly on a PC via USB adapter cable ZA 1919 AKUV. (see "General accessories for ALMEMO® D6 sensors" page 04.05).

General features and accessories, ALMEMO® D6 sensors:
see page 01.08

Technical data

Digital pressure sensor (including A/D converter)	
Pressure range	1 to 1000 bar see under variants
Relative pressure	Zero-point at ambient atmospheric pressure, current
Overpressure	Zero-point at ambient atmosph. pressure, production
Absolute pressure	Zero-point, vacuum
Pressure connection	
FDAD33	Outside thread G ¼" Diaphragm, internal
FDAD35M	Diaphragm, flush with front Outside thread G 1/2" In pressure range 700/1000 bar Outside thread G 3/4"
Storage / operating temperature	-40 to +120 °C
Accuracy	
Error margin* at -10 to +40 °C	0.05 % of final value
Error margin* at -10 to +80 °C	0.1 % of final value
*Linearity, hysteresis, reproducibility, temperature coefficients, zero-point	

Sampling rate, internal	200 Hz
Material in contact with medium	Stainless steel, AISI 316L, Viton
Protection	IP65
Dimensions	see dimensional drawings
Sensor connector	Built-in plug
ALMEMO® connecting cable	Coupling, 2-meter PVC cable, ALMEMO® D6 plug
ALMEMO® D6 plug	
Refresh time	0.005 seconds for all channels
Setting time	0.6 seconds
Delay after sleep mode	1 second
Supply voltage	6 to 13 VDC
Current consumption	approx. 11 mA

Options

	Order no.
Connecting cable Total length = 5 m	OD0D33L05
Connecting cable Total length = 10 m	OD0D33L10
Greater lengths up to 100 meters on request..	

Variants

Digital pressure sensor, plug connection, 2-meter connecting cable with ALMEMO® D6 plug, factory test certificate

Pressure range	Resolution	Overload	Order no. Diaphragm, internal	Order no. Diaphragm, flush with front
Relative pressure				
0 to 1 bar	0.0001 bar	2 bar	**FDAD3301R**	**FDAD35M01R**
0 to 3 bar	0.0001 bar	5 bar	**FDAD3302R**	**FDAD35M02R**
0 to 10 bar	0.001 bar	20 bar	**FDAD3303R**	**FDAD35M03R**
0 to 30 bar	0.001 bar	60 bar	**FDAD3304R**	**FDAD35M04R**
Special ranges -1 ... 1 / 3 / 10 bar on request				
Overpressure				
0 to 100 bar	0.01 bar	200 bar	**FDAD3305U**	**FDAD35M05U**
0 to 300 bar	0.01 bar	400 bar	**FDAD3306U**	**FDAD35M06U**
0 to 700 bar	0.1 bar	1000 bar	**FDAD3307U**	**FDAD35M07U**
0 to 1000 bar	0.1 bar	1000 bar	**FDAD3308U**	**FDAD35M08U**
Absolute pressure				
0,8 to 1,2 bar	0.0001 bar	2 bar	**FDAD3300A**	**FDAD35M00A**
0 to 1 bar	0.0001 bar	2 bar	**FDAD3301A**	**FDAD35M01A**
0 to 3 bar	0.0001 bar	5 bar	**FDAD3302A**	**FDAD35M02A**
0 to 10 bar	0.001 bar	20 bar	**FDAD3303A**	**FDAD35M03A**
0 to 30 bar	0.001 bar	60 bar	**FDAD3304A**	**FDAD35M04A**

DAkkS / DKD or factory calibration KD9xxx pressure for digital sensor (see chapter Calibration certificates)

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