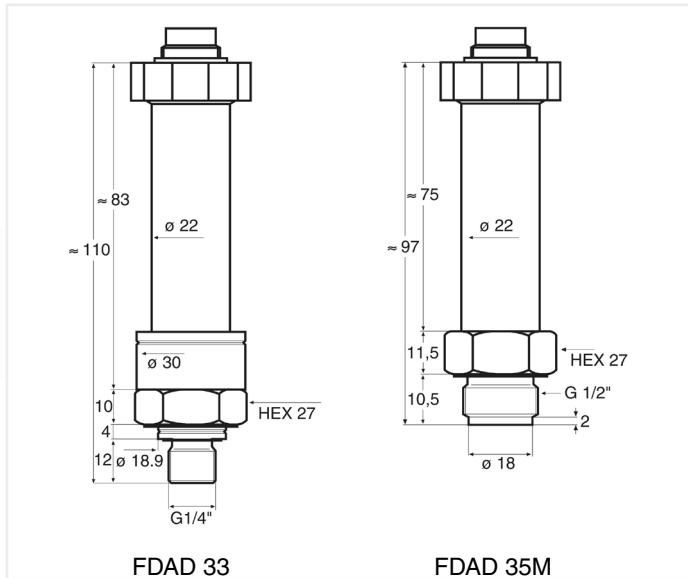


## High-precision pressure sensor FDAD33/35M

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



- 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)		Sampling rate, internal	200 Hz
Pressure range	1 to 1000 bar see under variants	Material in contact with medium	Stainless steel, AISI 316L, Viton
Relative pressure	Zero-point at ambient atmospheric pressure, current	Protection	IP65
Overpressure	Zero-point at ambient atmosph. pressure, production	Dimensions	see dimensional drawings
Absolute pressure	Zero-point, vacuum	Sensor connector	Built-in plug
Pressure connection		ALMEMO® connecting cable	Coupling, 2-meter PVC cable, ALMEMO® D6 plug
FDAD33	Outside thread G 1/4" Diaphragm, internal	ALMEMO® D6 plug	
FDAD35M	Diaphragm, flush with front Outside thread G 1/2" In pressure range 700/1000 bar Outside thread G 3/4"	Refresh time	0.005 seconds for all channels
Storage / operating temperature	-40 to +120 °C	Setting time	0.6 seconds
Accuracy		Delay after sleep mode	1 second
Error margin* at -10 to +40 °C	0.05 % of final value	Supply voltage	6 to 13 VDC
Error margin* at -10 to +80 °C	0.1 % of final value	Current consumption	approx. 11 mA
*Linearity, hysteresis, reproducibility, temperature coefficients, zero-point			

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
<b>Relative pressure</b>				
0 to 1 bar	0.0001 bar	2 bar	<b>FDAD3301R</b>	<b>FDAD35M01R</b>
0 to 3 bar	0.0001 bar	5 bar	<b>FDAD3302R</b>	<b>FDAD35M02R</b>
0 to 10 bar	0.001 bar	20 bar	<b>FDAD3303R</b>	<b>FDAD35M03R</b>
0 to 30 bar	0.001 bar	60 bar	<b>FDAD3304R</b>	<b>FDAD35M04R</b>
Special ranges -1 ... 1 / 3 / 10 bar on request				
<b>Overpressure</b>				
0 to 100 bar	0.01 bar	200 bar	<b>FDAD3305U</b>	<b>FDAD35M05U</b>
0 to 300 bar	0.01 bar	400 bar	<b>FDAD3306U</b>	<b>FDAD35M06U</b>
0 to 700 bar	0.1 bar	1000 bar	<b>FDAD3307U</b>	<b>FDAD35M07U</b>
0 to 1000 bar	0.1 bar	1000 bar	<b>FDAD3308U</b>	<b>FDAD35M08U</b>
<b>Absolute pressure</b>				
0,8 to 1,2 bar	0.0001 bar	2 bar	<b>FDAD3300A</b>	<b>FDAD35M00A</b>
0 to 1 bar	0.0001 bar	2 bar	<b>FDAD3301A</b>	<b>FDAD35M01A</b>
0 to 3 bar	0.0001 bar	5 bar	<b>FDAD3302A</b>	<b>FDAD35M02A</b>
0 to 10 bar	0.001 bar	20 bar	<b>FDAD3303A</b>	<b>FDAD35M03A</b>
0 to 30 bar	0.001 bar	60 bar	<b>FDAD3304A</b>	<b>FDAD35M04A</b>

DAkKS or factory calibration KD9xxx pressure for digital sensor (see chapter Calibration certificates).

DAkKS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.