


# AIR FLOW

## Differential pressure and Pitot tube measurement Measuring connector FDA 602 S1K / S6K



Measuring connector FDA602S1K / S6K

- ▶ Pressure measuring connector in compact design for flow measurement with Pitot tubes
- ▶ Fitting for connecting hose between Pitot tube and pressure measuring connector
- ▶ Pressure measuring connector can be plugged directly onto the measuring instrument.

 Advisory note when used in conjunction with ALMEMO® 2890, 5690, 5790, 8590, 8690 :  
The new ALMEMO® pressure measuring connector is very slightly higher (8.8 mm). As a result adjacent input sockets on the ALMEMO® device may be partly covered. However, the 1st input socket can always be used without restriction. Or, alternatively, the ALMEMO® pressure measuring connector can be plugged in at any input socket using connecting cable ZA9060AK1.

### Accessories

**New** ALMEMO® pressure measuring connector for barometric pressure 700 to 1100 mbar, without pressure terminal sleeve including programming for automatic atmospheric pressure compensation (Designation \*P)

Technical data see page 11.12                      Order no. FDAD12SAP  
(variant with pressure terminal sleeve, see page 11.12)

- |  |                     |
|--|---------------------|
| Connecting cable, 0.2 meters                           | Order no. ZA9060AK1 |
| Extension cable, 2 meters                              | Order no. ZA9060VK2 |
| 1 set of silicone hoses<br>black / colorless, 2 meters | Order no. ZB2295S   |
| Silicone hose, black, per meter                        | Order no. ZB2295SSL |
| Silicone hose, colorless, per meter                    | Order no. ZB2295SFL |

### Variants (including manufacturer's test certificate)

(including one set of silicone hoses, 2 meters)

Measuring ranges  $\pm 1250$  Pa ,  
Differential pressure (1 to 40 m/s),  
Measured variables: m/s, Pa  
Measuring connector, independent of position

**Order no. FDA602S1K**

Measuring ranges  $\pm 6800$  Pa  
Differential pressure (2 to 90 m/s)  
Measured variables m/s, Pa  
Measuring connector, independent of position

**Order no. FDA602S6K**

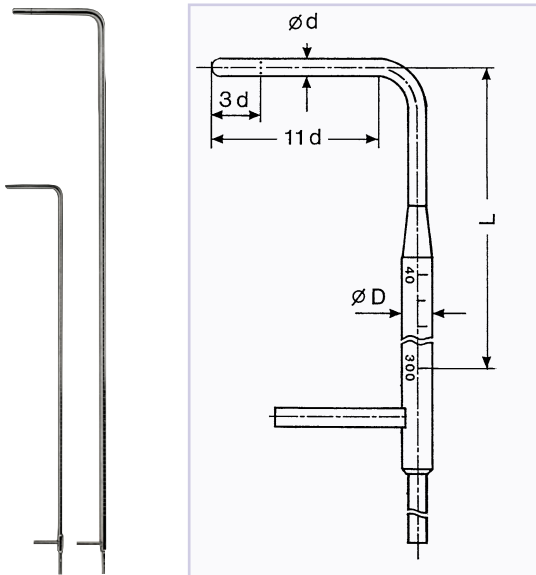


On ALMEMO® devices to obtain precise measured results in m/s the wind tunnel temperature can be entered in the -50 to +700 °C range for compensation purposes.

### Technical data

Overload capacity	Max. - three times final value
Max. common mode pressure	700 mbar
Accuracy (zero-pt adjusted)	$\pm 0.5\%$ of final value in range 0 to positive final value
Nominal temperature	25 °C
Temperature drift	$< \pm 1.5\%$ of final value
Compensated temp. range	0 to +70 °C
Operating range	-10 to +60 °C, 10 to 90% RH, non-condensing
Dimensions	<b>New</b> 74 x 20 x 8.8 mm
Hose terminals	$\varnothing$ 5 mm, 12 mm long
Sensor material	aluminum, nylon, silicone, silica gel, brass

## Pitot Tubes for Differential Pressure Sensors FDA602



- ▶ Prandtl Pitot tubes with hemispheric head.
- ▶ For measuring the dynamic pressure, the tip of the Pitot tube has an opening of  $0.3d$ .
- ▶ For measuring the static pressure, a total of 12 holes with  $0.1d$   $\varnothing$  have been arranged at a distance of  $3d$ .



ALMEMO® devices that have an option for entering factors can also be used to perform wind velocity measurements with cylindrical probes, according to VDEH. The cylindrical Pitot tubes have a probe-related coefficient of 1.7. By entering a factor of 0.767 in the range m/s this coefficient will be considered during the measurement.

01/2011 We reserve the right to make technical changes.

### Types and Technical Data:

Head Diameter (d)	Shaft Diameter (D)	Length	Tmax	Permiss. Dust	Material	Order no.
3mm	6mm	300mm	150°C	none	nickel-plated brass	<b>FD991233MS</b>
3mm	6mm	300mm	300°C	none	chrome-nickel steel	<b>FD991233VA</b>
5mm	8mm	400mm	350°C	none	nickel-plated brass	<b>FD991254MS</b>
5mm	8mm	400mm	500°C	none	chrome-nickel steel	<b>FD991254VA</b>
5mm	8mm	600mm	350°C	none	nickel-plated brass	<b>FD991256MS</b>
5mm	8mm	600mm	500°C	none	chrome-nickel steel	<b>FD991256VA</b>
8mm	8mm	400mm	350°C	none	nickel-plated brass	<b>FD991284MS</b>
8mm	8mm	400mm	500°C	none	chrome-nickel steel	<b>FD991284VA</b>
8mm	8mm	800mm	350°C	low	nickel-plated brass	<b>FD991288MS</b>
8mm	8mm	800mm	600°C	low	chrome-nickel steel	<b>FD991288VA</b>
10mm	10mm	800mm	350°C	some	nickel-plated brass	<b>FD991296MS</b>
10mm	10mm	800mm	600°C	some	chrome-nickel steel	<b>FD991296VA*</b>
10mm	10mm	1000mm	350°C	some	nickel-plated brass	<b>FD991297MS</b>
10mm	10mm	1000mm	600°C	some	chrome-nickel steel	<b>FD991297VA*</b>
10mm	20mm	1500mm	350°C	some	nickel-plated brass	<b>FD991298MS</b>
10mm	20mm	1500mm	600°C	some	chrome-nickel steel	<b>FD991298VA*</b>
20mm	20mm	2000mm	350°C	more	nickel-plated brass	<b>FD991299MS</b>
20mm	20mm	2000mm	600°C	more	chrome-nickel steel	<b>FD991299VA*</b>

### Option:

Movable screw connection  
for brass Pitot tubes with shaft diameter x (6; 8; 10; 20mm) ZB9912KMx  
for steel Pitot tubes with shaft diameter x (6; 8; 10; 20mm) ZB9912KVx



\*) all VA Pitot tubes  
can be operated up to  
700°C for a short period