## 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.

## **Technical data**

| Overload capacity           | Maximum three times final value    |  |  |
|-----------------------------|------------------------------------|--|--|
| Max. common mode pressure   | 700 mbar                           |  |  |
| Accuracy (zero-pt adjusted) | ±0.5% of final value               |  |  |
|                             | in range 0 to positive final value |  |  |
| Nominal temperature         | 25 °C                              |  |  |
| Temperature drift           | $<\pm1.5$ % of final value         |  |  |
| Compensated temp. range     | 0 to +70 °C                        |  |  |

| Operating range | -10 to +60 °C, 10 to 90% RH, non-condensing |  |
|-----------------|---|--|
| Dimensions      | 74 x 20 x 8.8 mm                            |  |
| Hose terminals  | Ø 5 mm, 12 mm long                          |  |
| Sensor material | aluminum, nylon, silicone,                  |  |
|                 | silica gel, brass                           |  |

Advisory note when used in conjunction with ALMEMO® 2890, 5690, 5790, 8590, 8690, 500, 809: 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.

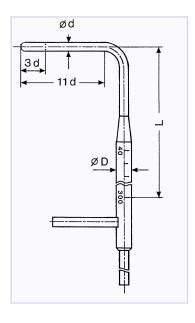
On ALMEMO® devices to obtain precise measured results in m/s the wind tunnel temperature can be entered in the -50 to +700 °C range for compensation purposes.

| Accessories  | Order no. |
|--|-----------|
| ALMEMO® pressure measuring connector for barometric pressure 700 to 1100 mbar, without pressure terminal sleeve  | FDAD12SA  |
| Technical data see page 11.12 including programming for automatic atmospheric pressure compensation (comment *P) | OA9000PK  |
| (variant with pressure terminal sleeve, see page 10.10)  |           |
| Connecting cable, 0.2 meters   | ZA9060AK1 |
| Extension cable, 2 meters  | ZA9060VK2 |
| 1 set of silicone hoses  |           |
| black / colorless, 2 meters  | ZB2295S   |
| Silicone hose, black, per meter  | ZB2295SSL |
| Silicone hose, colorless, per meter  | ZB2295SFL |

| Variants (including manufacturer's test certificate)  | Order no. |
|---|-----------|
| (including one set of silicone hoses, 2 meters)   |           |
| Measuring ranges ±1250 Pa, Differential pressure (1 to 40 m/s), Measured variables: m/s, Pa, Measuring connector, independent of position | FDA602S1K |
| Measuring ranges ±6800 Pa Differential pressure (2 to 90 m/s) Measured variables m/s, Pa,   |           |
| Measuring connector, independent of position  | FDA602S6K |

DAkkS or factory calibration KV90xx, air flow, and KD90xx, pressure, for sensor or measuring chain (sensor + device) (see chapter "Calibration certificates"). DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.





- 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 Ø have been arranged at a distance of 3d.

Mit 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.

| Order no. |
|-----------|
| ZB9912KMx |
| ZB9912KVx |
|           |

| Types and Tech  | nnical Data:       |         |       |               |                     |             |  |
|---|--------------------|---------|-------|---------------|---------------------|-------------|--|
| Head Diameter (d)   | Shaft Diameter (D) | Length  | Tmax  | Permiss. Dust | Material            | Order no.   |  |
| 3 mm  | 6 mm               | 300 mm  | 150°C | none          | Nickel-plated brass | FD991233MS  |  |
| 3 mm  | 6 mm               | 300 mm  | 300°C | none          | Chrome-nickel steel | FD991233VA  |  |
| 5 mm  | 8 mm               | 400 mm  | 350°C | none          | Nickel-plated brass | FD991254MS  |  |
| 5 mm  | 8 mm               | 400 mm  | 500°C | none          | Chrome-nickel steel | FD991254VA  |  |
| 5 mm  | 8 mm               | 600 mm  | 350°C | none          | Nickel-plated brass | FD991256MS  |  |
| 5 mm  | 8 mm               | 600 mm  | 500°C | none          | Chrome-nickel steel | FD991256VA  |  |
| 8 mm  | 8 mm               | 400 mm  | 350°C | low           | Nickel-plated brass | FD991284MS  |  |
| 8 mm  | 8 mm               | 400 mm  | 500°C | low           | Chrome-nickel steel | FD991284VA  |  |
| 8 mm  | 8 mm               | 800 mm  | 350°C | low           | Nickel-plated brass | FD991288MS  |  |
| 8 mm  | 8 mm               | 800 mm  | 600°C | low           | Chrome-nickel steel | FD991288VA  |  |
| 10 mm   | 10 mm              | 800 mm  | 350°C | some          | Nickel-plated brass | FD991296MS  |  |
| 10 mm   | 10 mm              | 800 mm  | 600°C | some          | Chrome-nickel steel | FD991296VA* |  |
| 10 mm   | 10 mm              | 1000 mm | 350°C | some          | Nickel-plated brass | FD991297MS  |  |
| 10 mm   | 10 mm              | 1000 mm | 600°C | some          | Chrome-nickel steel | FD991297VA* |  |
| 10 mm   | 20 mm              | 1500 mm | 350°C | some          | Nickel-plated brass | FD991298MS  |  |
| 10 mm   | 20 mm              | 1500 mm | 600°C | some          | Chrome-nickel steel | FD991298VA* |  |
| 20 mm   | 20 mm              | 2000 mm | 350°C | more          | Nickel-plated brass | FD991299MS  |  |
| 20 mm   | 20 mm              | 2000 mm | 600°C | more          | Chrome-nickel steel | FD991299VA* |  |
| □*) all VA Pitot tubes can be operated up to 700°C for a short period |                    |         |       |               |                     |             |  |