# FA 410 from -80 to 20 °C$_{td}$

## FA 410 – the ideal dew point sensor for monitoring membrane and adsorption dryers

Typical use in compressed air dryers/granulate dryers at very low dew points down to -80 °C.

**Recommendation:**



Mounting with standard measuring chamber for compressed air up to 16 bar
**Advantage:** Easy installation via fast coupling.

### Special features

- Measuring range -80...20 °C$_{td}$
- Extremely long-term stable
- Analogue output 4...20 mA
- Condensation insensitive
- Quick response time
- Pressure-tight up to 350 bar (special version)



### Technical data FA 410

| | |
|---|---|
| Measuring range: | -80...20 °C$_{td}$ resp. -20...50 °C$_{td}$ |
| Accuracy: | ± 1 °C at 20...-20 °C$_{td}$ <br> ± 2 °C at -20...-50 °C$_{td}$ <br> ± 3 °C at -50...-80 °C$_{td}$ |
| Pressure range: | -1...50 bar <br> special version up to 350 bar |
| Power supply: | 24 VDC (16...30 VDC) |
| Protection class: | IP 65 |
| EMC: | according to DIN EN 61326 |
| Operating temp: | -20...70 °C |
| Connection: | M12, 5-pole |
| PC connection: | SDI interface |
| Analogue output: | 4...20 mA = -80...20 °C$_{td}$ resp. <br> 4...20 mA = -20...50 °C$_{td}$ |
| Burden for analogue output: | < 500 Ohm |
| Screw-in thread: | G1/2" |
| Dimensions: | Ø 30 mm, length approx. 130 mm |
| Via service software: <br> – choose units: <br> <br> – scaling | % RH, °C$_{td}$, g/m$^3$, mg/m$^3$, ppm V/V <br> change 4...20 mA |
| Special version: | 4...20mA, 2-wire technology |

| Description | Order no.. |
|---|---|
| FA 410 dew point sensor, -80°...20°Ctd incl. inspection certificate | 0699 0410 |
| FA 410 dew point sensor, -20°...50°Ctd incl. inspection certificate | 0699 0412 |
| **Connection cables:** | |
| Connection cable, length: 5 m | 0553 0104 |
| Connection cable, length: 10 m | 0553 0105 |
| **Options for FA 410:** | |
| Option special version up to 350 bar | 0699 4003 |
| Option output in mg/m$^3$, g/kg, oder %RH, special scaling 4...20 mA | 0699 4004 |
| **Additional accessories:** | |
| Standard measuring chamber up to 16 bar | 0699 3390 |
| High-pressure measuring chamber up to 350 bar | 0699 3590 |
| Measuring chamber for respiratory air bottles up to 350 bar | 0699 3790 |
| CS Service Software for FA/VA 400 sensors including PC connection set, USB adapter and interface adapter to the sensor as well as CS Soft Professional software for data recording, please see page 11 | 0554 2005 |
| Mains unit in wall housing 230 VAC/24 VDC | 0699 3395 |
| **Calibration:** | |
| Precision calibration at -40 °Ctd including ISO certificate | 0699 3396 |
| Precision calibration at 0 °C and 10 °Ctd including ISO certificate | 3200 0003 |
| Control and calibration set 11.3 % RH | 0554 0002 |
| Control and calibration set 33 % RH | 0554 0004 |
| Control and calibration set 75.3 % RH | 0554 0005 |