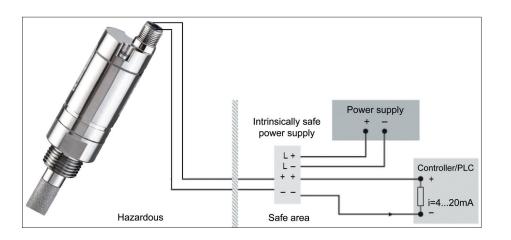
# FA 515 Ex Dew point sensor - For residual moisture measurement in potentially explosive atmospheres



The FA 515 Ex measures dew point or pressure dew point in potentially explosive atmospheres and can be used in many nonaggressive gases.

## **Typical applications:**

- Air/Compressed air
- Argon
- Nitrogen •
- Biogas
- Natural gas
- Hydrogen
- etc...

### **Approvals:**

Zone 1, gas, intrinsically safe, temp. 135 °C

KX ATEX Ex ATEX II 2D Ex ib IIIC T80°C Db

II 2G Ex ib IIC T4 Gb

Zone 21, dust, intrinsically safe, temp. 80 °C

FA 515 Ex may only be used in connection with approved Ex-rated power supplies or safety barriers or galvanic separating elements with max .:

Ui = 28 V max.

- li = 95 mA max.
- Pi = 0.65 W max.

DESCRIPTION	ORDER NO.
FA 515 Ex pressure dew point meter	0699 5515
High pressure measuring chamber for compressed air up to 350 bar	0699 3590
Stainless steel bypass measuring chamber for dew point measurement in gases under pressure	0699 3290
Special scaling, analogue output to other humidity parameters: % RH, g/ $m^{3},mg/m^{3},ppm$ V/V, g/kg	Z699 0514
Connection cable FA 515 EX, for laying in intrinsically safe circuits, ends open on both sides (cross-section 4x0.75 mm <sup>2</sup> ), cable length of free choice	0553 5126
Shielded connection cable FA 515 EX, for laying in intrinsically safe circuits, ends open on both sides (cross-section $4x0.75$ mm <sup>2</sup> ), cable length of free choice	0553 5136
Intrinsically safe power supply, safety barrier	0554 3071

#### **Special features:**

- Robust design
- Pressure-tight up to 500 bar
- Humidity sensor with long-term stability, tried-and-tested for years
- 4...20 mA analogue output in 2-wire technology
- NEW: Higher resolution of sensor signal due to the improved evaluation electronics

### **TECHNICAL DATA FA 515 EX**

Measuring range:	-8020 °Ctd = 420 mA	
Pressure range:	-1500 bar	
Power supply:	24 VDC (1828 VDC)	
Accuracy:	± 1 °C at -20+20 °Ctd ± 2 °C at -5020 °Ctd ± 3 °C at -8050 °Ctd	
Output:	420 mA in 2-wire technol- ogy	
Protection class:	IP 65	
EMC:	In acc. with DIN EN 61326-1	
Operating tem- perature:	-2050 °C for II 2D Ex ib IIIC T80°C Db -2070 °C for II 2G Ex ib IIC T4 Gb	
Storage tempera- ture:	-40+80 °C	
Burden for ana- logue output:	< 500 Ω at 24 V	
Screw-in thread:	Stainless steel 1.4404: G 1/2", optional: UNF 5/8", NPT 1/2"	
Connection:	M12, 4-pin	
Sensor protection:	NPT 1/2" M12, 4-pin Sinter filter 50 µm stainless steel	