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 non-aggressive gases.

Typical applications:

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

Approvals:

Ex II 2G Ex ib IIC T4 Gb

II 2D Ex ib IIIC T80°C Db

Zone 1, gas, intrinsically safe, temp. 275 °F

Zone 21, dust, intrinsically safe, temp. 176 °F

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.

FA 515 Ex pressure dew point meter	0699 5515
High pressure measuring chamber for compressed air up to 5076 psi	0699 3590
Stainless steel bypass measuring chamber for dew point measurement in gases under pressure	0699 3290
Special scaling, analog output to other humidity parameters: % RH, g/m³, mg/m³, ppm V/V, g/kg	Z699 0514
Connection cable FA 515 EX - for installation in single-safety circuits, open ends on both sides, (cross section 4 x 0.75 mm ²) - cable length freely selectable	0553 5126
Connection cable shielded FA 515 EX - for installation in single-safety circuits, open ends on both sides, (cross section 4 x 0.75 mm^2) - cable length freely selectable	0553 5136
Intrinsically safe power supply, safety barrier	0554 3071

Special features:

- Robust design
- Max pressure up to 7250 psi
- Humidity sensor with long-term stability, 4...20 mA analog output in 2-wire technology
- **NEW**: Higher resolution of sensor signal due to the improved evaluation electronics

TECHNICAL DATA FA 515 EX

Measuring range:	-112 to 68 °Etd = 4 20 mA	
0 0		
Pressure range:	-14…725 psi	
Power supply:	24 VDC (1828 VDC)	
Accuracy:	± 1.8 °F to 1224 °Ftd ± 3.6 °F to -458 °Ftd ± 5.4 °F to -58112 °Ftd	
Output:	420 mA in 2-wire technology	
Protection class:	IP 65	
EMC:	In acc. with DIN EN 61326-1	
Operating tempera- ture:	-4122 °F for II 2D Ex ib IIIC T80°C Db -4158 °F for II 2G Ex ib IIC T4 Gb	
Storage tempera- ture:	-40+176 °F	
Burden for analog output:	< 500 Ω at 24 V	
Screw-in thread:	Stainless steel 1.4404: G 1/2", optional: UNF 5/8", NPT 1/2", NPT 3/8"	
Connection:	M12, 4-pin	ATEX
Sensor protection:	Sinter filter 50 µm stainless steel	FA 515_ATEX_V.01



ORDER NO.