

FA 415 / FA 416 dew point sensor (-20 ... +50 °C)

Dew point sensor and dew point switch



FA 415

Dew point sensor ideal for refrigerant dryers. Loop powered 4...20 mA output.

The CS dew point sensors FA 415 / 416 provides reliable and long term stable dew point monitoring in industrial applications. With these new models dew point measurement in refrigerant dryers becomes affordable and can replace traditional temperature measurement which often couldn't tell the real dew point. FA 415 outputs the measurement value through the loop powered 4 - 20 mA signal.

The model FA 416 is designed as a dew point switch, featuring a dew point distance monitoring, triggering an alarm when the dew point distance (ambient temperature dew point temperature) is below a programmed limit. Alternatively this sensor can be programmed to monitor a dew point level (e.g. +6 °C for refrigerant dryers) or the relative humidity.

An alarm will activate the internal solid state relays of the sensor and the bright LED will switch on permanently.

FA 416

Dew point switch with relays and LED indication.

Features

- Affordable dew point sensor for mid range applications such as refrigerant dryer monitoring
- Long term stability
- IP65 casing provides robust protection in rough industrial environment
- Very fast response time ensures safe and reliable indication whenever dew points are out of valid ranges
- Can be installed directly into dryers through G 1/2" thread
- High accuracy of ± 2 °C dew point

Technical data FA 415 / FA 416

Measuring range	
Dew point	-20 ... +50 °C
Relative humidity	0 ... 99.9%
Temperature	-30 ... 70 °C
Power supply	10 ... 30 VDC
Response time t90	0 ... -20 °C : 30 sec -20 ... 0 °C : 10 sec
Accuracy	± 2 °C dew point
Pressure range	-0.1 ... 5.0 MPa
Ambient conditions	0 ... 50 °C
Output signal	4 ... 20 mA, 2-wire
Connection	M12, 5 pole
Casing	Zinc alloy
Classification	IP65
Process connection	G 1/2" thread (ISO 228/1) UNF 5/8" thread (on request)



Application of FA 416:

Simple monitoring of a refrigerant dryer:

Red LED → Alarm

Order no.	Description
0699 0415	FA 415, dew point sensor including M12 connector (straight type) -20 ... +50 °C, G 1/2" thread
0699 0416	FA 416, dew point sensor including M12 connector (straight type), -20 ... +50 °C, G 1/2" thread (alarm pre-programmed ex factory)
0699 4003	High pressure option 35 MPa (350 bar)