InPro-C Temperature/humidity sensor

connectable exclusively to transmitters **InCos-D** for measuring of temperature and/or humidity
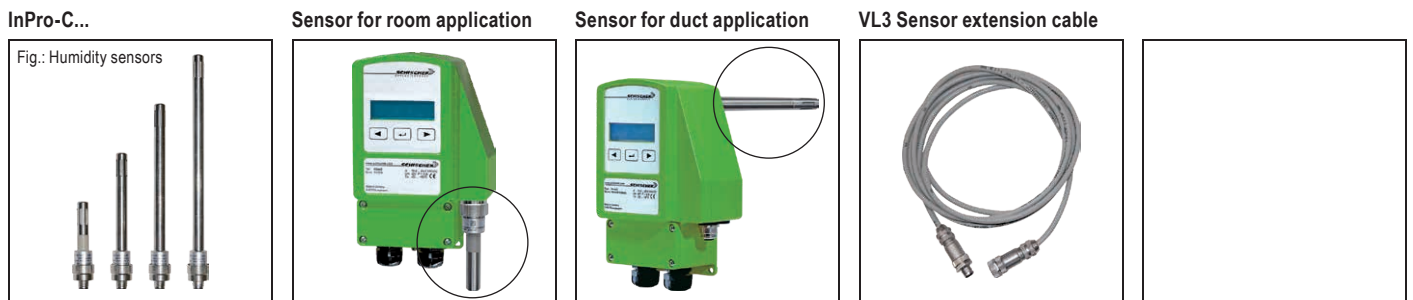
Subject to change!

Type	Function	Range	Sensor length	Connectable to	Connection	Installation area sensor
InPro-CT-...	Temperature sensor	−40...+125 °C*	50 / 100 / 150 / 200 mm	InCos-D...	Plug and socket	Safe area
InPro-CF-...	Humidity sensor	0...100 % rH**	50 / 100 / 150 / 200 mm	InCos-D...	Plug and socket	Safe area
InPro-CTF-...	Combination sensor	−40...+125 °C* / 0...100 % rH**	50 / 100 / 150 / 200 mm	InCos-D...	Plug and socket	Safe area

Sensor length   * at 50 mm length −40...**+80** °C

** Measurement of humidity only possible at a temperature of > 0°C!

Product views and applications

InPro-C...

Fig.: Humidity sensors

Sensor for room application

Sensor for duct application

VL3 Sensor extension cable

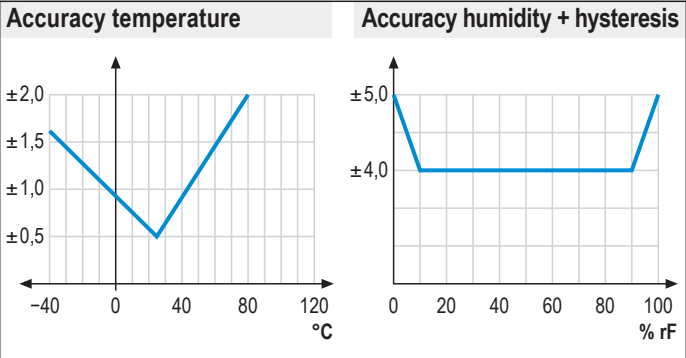| Technical data	InPro- CT -...	InPro- CF -...	InPro- CTF -...
	Temperature sensor	**Humidity sensor**	**Temperature / humidity sensor**
Measuring range	−40...+125 °C *	0...100 % rH	−40...+125 °C * / 0...100 % rH
	* −40...+80 °C at 50 mm length		* −40...+80 °C at 50 mm length
Sensor length	InPro-CT-50 = 50 mm	InPro-CF-50 = 50 mm	InPro-CTF-50 = 50 mm
	InPro-CT-100 = 100 mm	InPro-CF-100 = 100 mm	InPro-CTF-100 = 100 mm
	InPro-CT-150 = 150 mm	InPro-CF-150 = 150 mm	InPro-CTF-150 = 150 mm
	InPro-CT-200 = 200 mm	InPro-CF-200 = 200 mm	InPro-CTF-200 = 200 mm
Response time sensor	T90 / 20 s	T90 / 4 s	T90 / 20 s, T90 / 4 s
Accuracy temperature	±0,5 °C at 25 °C ±0,025 °C/°C		
Accuracy humidity	±4 % at 10...90 % rH / ±5 % at < 10 % rH and > 90 % rH (narrower tolerance on request)		
	Measurement of humidity only possible at a temperature of > 0°C		
Housing protection	IP66 acc. to EN 60529, except for temperature/humidity sensor Pro-C		
Material **Adapter**	Stainless steel № 1.4305, length 50 mm in plastic PEEK-GF30 (max. room temperature +80 °C)		
Protection sleeve	Stainless steel № 1.4301 / AISI 304		
End cap	AISI 316		
Plug-in connector	Zinc die-cast nickel-plated, screw sleeve brass nickel-plated		
Filter element humidity sensor	Mesh size 100 µm		
Ambient temperature / humidity	−40...+125 °C (−40...+80 °C at 50 mm length) / 0...100 % rH		
Storage temperature	−40...+125 °C (−40...+80 °C at 50 mm length)		
Installation area sensor	Safe areas		
Scope of delivery	InPro-C... sensor with plug connector and gasket (EPDM) for duct installation		

Description

InPro-C... sensor is a measuring element which is in combination with an ...Cos-D... transmitter for temperature, humidity or combination of temperature and humidity measuring. **InPro-C... sensors are only for use with InCos-D... transmitters.** The electromechanical connection is done with a socket on the front resp. on the back side of the transmitter, but only 1 InPro-C... per module is allowed and can be used.
Caution: The sensors shall only be used in non-condensing (humidity < 95% RT) and dust-free environment without aggressive media, e.g. acid, alkalis and salt water. In case of contact with water, use the TH-VA stainless steel immersion sleeve.

Accessories

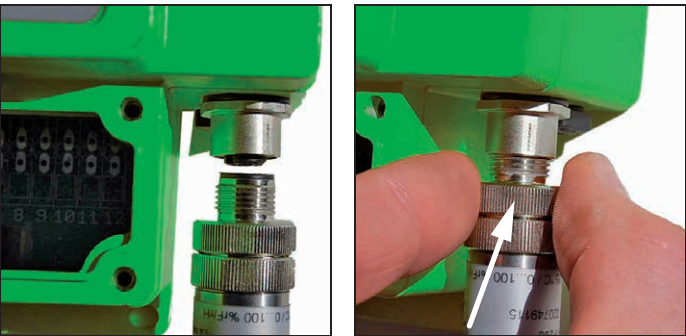|	
MFK	Mounting flange for duct mounting for variable immersion depth in ducts
MKR	Mounting bracket for round ducts up to Ø 600 mm
TH-VA	Immersion sleeve in stainless steel V4A / DIN EN 1.4571, length 120 mm. Other length on request.
Kit-FA-VA	Stainless steel sinter filter cap for humidity sensors, pore size 10 µm. **Not for high humidity measurements!**
Kit-FA-PTFE	PTFE sintered filter for humidity sensors, pore size 20 µm. **Not for high humidity measurements!**
VL3	Sensor extension cable, 3 m, PVC

SCHISCHEK
EXPLOSIONPROOF

Accuracy temperature and humidity incl. hysteresis

Accuracy temperature

Accuracy humidity + hysteresis

Important information for installation and operation

A. InPro-C... sensor
The power for InPro-C... sensor is supplied with the transmitter's circuit. Unused sensor entries have to be closed with the black caps.

B. Temperature flow
When measuring temperature over the max. allowed environmental temperature of the transmitter of +50 °C regard that no temperature flow over the sensor takes place. The mounting of the sensor has to ensure that errors due to heat dissipation are within the tolerance limits and the max. allowed environmental temperature is not exceeded.

C. Mounting
Screw the sensor into the socket of the transmitter. The sensor cannot be opened as parts of the element are moulded. A small distance tolerance between transmitter and sensor has to be accepted due to production conditions.

Max. Medium temperature (surface temperature)

Max. medium temperature	125 °C	(for sensor length 100–200 mm)
	80 °C	(for sensor length 50 mm)

Electric characteristics (max.)
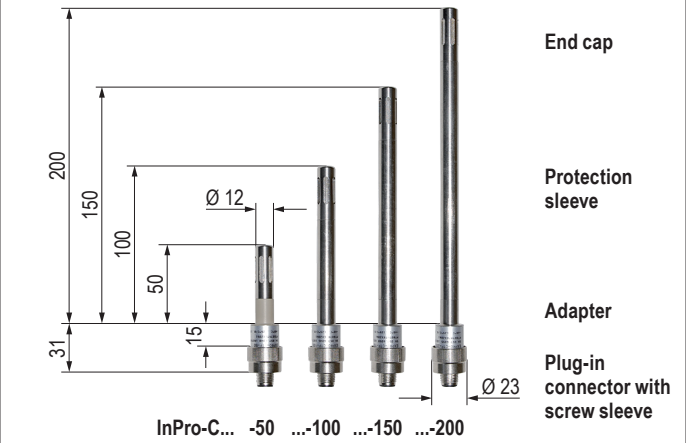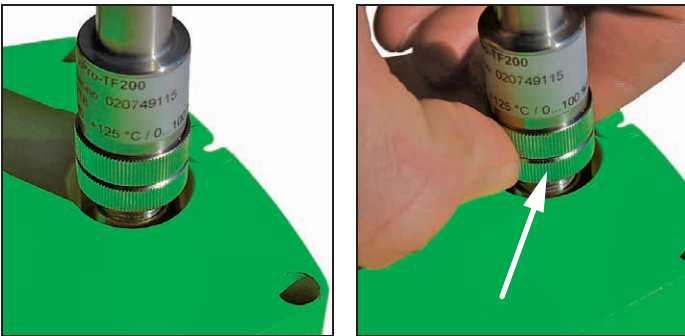
$U \leq 5\,V$
$I < 0,5\,mA$

Mounting room sensor (at terminal box side)

For mounting the sensor must be plugged into the socket and screwed on the sensor by turning the lower knurled screw clockwise. Tighten hand-screwed only.
A small clearance between transmitter and sensor has to be accepted due to production conditions.

Mounting duct sensor (back side)

For mounting the sensor must be plugged into the socket and screwed on the sensor by turning the lower knurled screw clockwise. Tighten hand-screwed only.
A small clearance between transmitter and sensor has to be accepted due to production conditions.

MFK mounting flange for duct installation

The flange is to be moved over the sensor and fixed with the adjusting screw on the side. The flange can be mounted with 4 screws directly to the duct.

Bottom side

Height variably adjustable

Dimensions [mm]

End cap

Protection sleeve

Adapter

Plug-in connector with screw sleeve

Ø 12
Ø 23

InPro-C... -50 ...-100 ...-150 ...-200