testo 6721 Pressure Dewpoint Guard
Ideal for compressed air cooling driers

-30 to +30 °C$_{tpd}$
-22 to +86 °F$_{tpd}$

NEW!

°C$_{tpd}$

°F$_{tpd}$
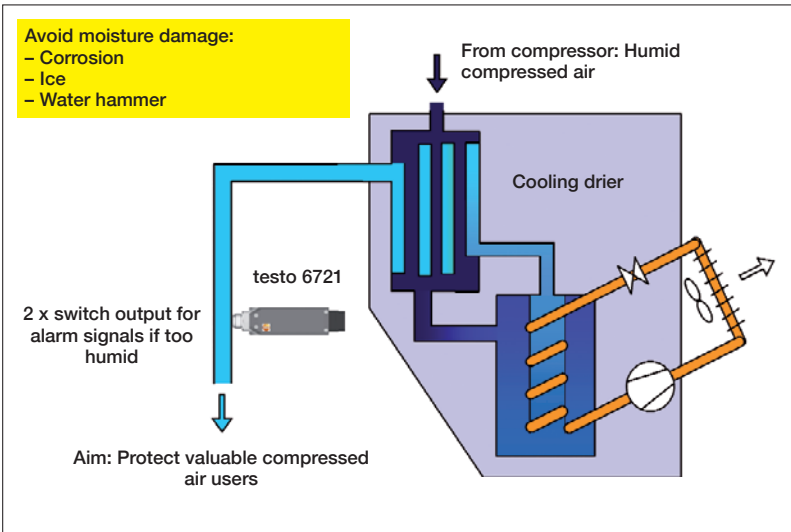
testo 6721 – The pressure dewpoint guard for everyone

Avoid moisture damage:
– Corrosion
– Ice
– Water hammer

From compressor: Humid compressed air

Cooling drier

testo 6721

2 x switch output for alarm signals if too humid

Aim: Protect valuable compressed air users

P2A

P2A software = **P** arameterisation
A djustment
A nalysis

Avoid moisture damage by monitoring the cooling drier

Excessive moisture in compressed air results in expensive damage: ice, corrosion, material sticking together, water hammer (mechanical damage caused by accelerated water build-up), etc. A good reason for using compressed air driers.

Up to now, monitoring a "simple" compressed air cooling drier continuously was often not economical. This safety gap is now finally closed thanks to testo 6721: The pressure dewpoint guard for everyone! Whether integrated as a component in a cooling drier or pneumatics machine or built-in by the customer, testo 6721 helps you avoid moisture damage!

Parameterisation, adjustment and analysis software (P2A software): optimum operations and time-saving during initial operation and maintenance

Regardless of whether you are at the measurement site, in your office or lab, your notebook or PC can communicate with testo 6721 through the external interface and a USB adapter (included with P2A package 0554 6020).

The parameterisation, adjustment and analysis software (P2A software) offers clarity and supports all information and options with graphics:

– Unit parameterisation ($°C_{tpd}$ / $°F_{tpd}$)

– Sets two limit values as well as hysteresis

– Adjustment (1-point): accurate reference required

– Reset to factory setting

– Test switch outputs

– Call up min/max values

– Parameterisation and adjustment history (all P2A software procedures are recorded on PC, without saving in instrument)

– Serial number and firmware version can be called up

You can also save entire parameter files; parameterisation of spare pressure dewpoint guards is thus possible with minimum time spent.
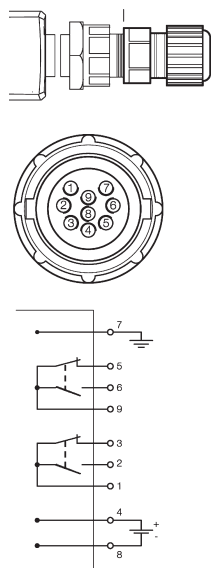
testo 6721 – Long-term stable and reliable

Humidity sensor

Testo's humidity sensor: long-term stable, unaffected by condensation and traceable to international humidity standards (ILAC / PTB / NIST etc.). It is adjusted using a highly accurate dewpoint mirror.

Electrical connection

Order codes

0555 6721 Axx Fxx Kxx

A01	Process connection G½
A02	Process connection NPT ½"

F01	Pressure dewpoint °C$_{tpd}$ / GW 1 / GW2 / hysteresis
F02	Pressure dewpoint °F$_{tpd}$ / GW 1 / GW2 / hysteresis

K01	IM German-English	
K02	IM French-English	
K03	IM Spanish-English	Language versions
K04	IM Italian-English	of Instruction
K05	IM Dutch-English	manuals
K06	IM Japanese-English	
K07	IM Chinese-English	

Order example: Pressure dewpoint monitor with G½ thread, pressure dewpoint in °C$_{tpd}$, lower limit value at 5 °C$_{tpd}$, upper limit value at 14 °C$_{tpd}$, hysteresis = 1 K, German-English Instruction Manual
→ 0555 6721 / A01 / F01 / 5 / 14 / 1 / K01

Limit values: Without specification, default limit values are +5 °C$_{tpd}$ / +10 °C$_{tpd}$, at 1 Kelvin hysteresis (for unit °F: 45 °F$_{tpd}$ / 55 °F$_{tpd}$ / 2 °F hysteresis). They can be set to customer requirements with the help of the Order code, cf. Order example.
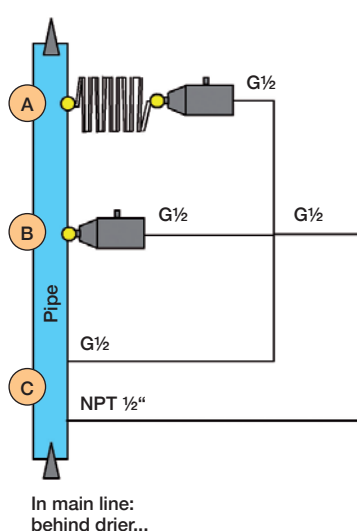
Accessories for process integration

A For **process temperatures < 10 °C or > 35 °C** (to 200 °C): use cooling coil (0554 3304) and measurement chamber (0554 3303)

B Use measurement chamber (0554 3303) for **fast mounting** (no depressurisation prior to installation) and **better response time** of sensor

A+B For **oily/contaminated media:** add prefilter (0554 3311)

C If neither A nor B is needed: simply screw directly into the G½ or NPT½" thread **Depressurized pipe is required during installation.**

...or decentrally in front of critical consumer

In main line: behind drier...

Pipe

Pressure dewpoint guard

testo 6721 / A01

testo 6721 / A02

0554 6720 cable (5 m), with special plug on instrument side

Other on-site alarm devices (light, horn etc.)

PLC digital inputs (digital messages)

Alarm box 0554 6722

90 x 118 mm

With terminal for mains cable and 5 m cable, 2 alarm lights (with colours green/red), 2 x cable screw-in connection M16 x 1.5

● = Compressed air quick-release device, diameter 7.2 (can be replaced by other types in measurement chamber, inner thread G1/4")

Prefilter

0554 3311 for oily, contaminated compressed air (for measurement chamber)

Cooling coil
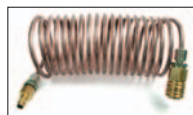
0554 3304 for process temperatures > 35 °C (always with measurement chamber)
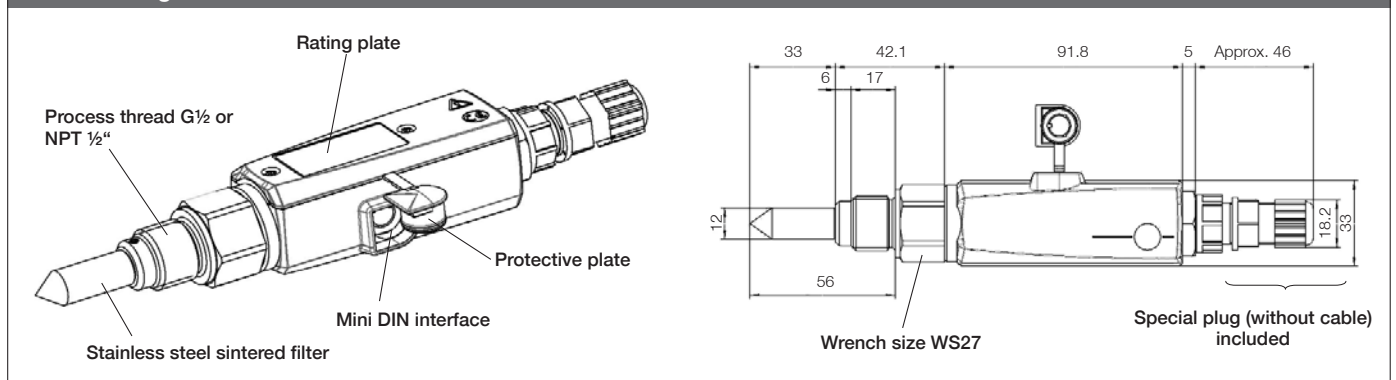
Measurement chamber

0554 3303 for ideal flow onto sensor (up to 15 bar, POM material)

Technical data/Ordering data

Technical data

Technical data	
Sensor	Testo humidity sensor (with special trace humidity adjustment) and NTC temperature sensor
Output parameter	Pressure dewpoint (°C$_{tpd}$ or °F$_{tpd}$) over two switch outputs
Measurement range/Pressure dewpoint	-30 to +30 °C$_{tpd}$ (-22 to +86 °F$_{tpd}$)
Process conditions (measurement medium, temperature, pressure)	Compressed air (filtered and dry, ISO 8573 Classes 2-4-2), process temperature: 0 to 50 °C (-4 to +122 °F), ideal between 10 and 35 °C, pressure: max. 20 bar (abs.)
Switch outputs	2 x potential-free, switch voltage 24 VDC / VAC, switch current 0.5 A, optional wiring as NC contact or NO contact, resolution 0.1 °C$_{tpd}$ or 0.1 °F$_{tpd}$, measuring rate 1/s
Limit values (2x) and switch hysteresis (1x)	Free selection within measurement range through Order code, or set using P2A software
Power supply	24 VAC / VDC (20 to 30 VAC / VDC max.), power consumption 50 mA
Measurement inaccuracy	±3 K at -30 °C$_{tpd}$ (-22 °F$_{tpd}$) / ±2 K at 0 °C$_{tpd}$ (-4 °F$_{tpd}$) / ±1 K at 10 °C$_{tpd}$ (50 °F$_{tpd}$)
Interface	Mini DIN interface (serial) for parameterisation/adjustment/analysis through P2A software
Sensor protection (filter)	Stainless steel sintered filter (12 mm)
Process connection	G½ thread (Order code A01) or NPT½" thread (Order code A02)
Housing material, dimensions, IP protection, weight	Plastic PAA GF30, 167 x 33 x 33 mm, IP 65 (with adapter attached or with protective plate at interface), 240 g in weight
Ambient temperature	0 to +50 °C (-4 to +122 °F)
Storage temperature	-40 to +70 °C (-40 to +158 °F)
EMC	In accordance with EU guideline 89/336/EEC

Scale drawing

Rating plate

Process thread G½ or NPT ½"

Protective plate

Mini DIN interface

Stainless steel sintered filter

Wrench size WS27

Special plug (without cable) included

Accessories Ordering data

Accessories Ordering data	Part no.	
5 m cable with special plug for testo 6721 as well as open line ends	0554 6720	
P2A software (parameterisation, adjustment and analysis software for PC), with USB cable (for PC) to mini DIN (instrument)	0554 6020	
Prefilter, protects measurement chamber and sensor from dirt particles	0554 3311	
Measurement chamber for optimum flow on humidity sensor (standard compressed air connection / G ½), up to 15 bar	0554 3303	
Cooling coil, for process media below 10 °C or above 35 °C (to be added to measurement chamber)	0554 3304	
Alarm box for testo 6721 pressure dewpoint monitor, without cable (cf. page 3)	0554 6722	
Stainless steel sintered cap, Ø 12 mm, is screwed onto humidity probe	0554 0647	
Mains unit (desk-top) 110 to 240 VAC/24 VDC (350mA)	0554 1748	
Mains unit (rail mounting) 90 to 264 VAC/ 24 VDC (2.5A)	0554 1749	
ISO calibration certificate with freely selectable adjustment point between -30 and 0 °C tpd, at 6 bar	0520 0116	
ISO calibration cert./humidity Calibration points freely selectable: +15 °C/-24.4 °C$_{tpd}$ or +25 °C/-7.49 °C$_{tpd}$ or +25 °C/+20.26 °C$_{tpd}$	0520 0106	

· 50 YEARS OF TESTO
· More innovative than ever
· 50 innovations in the anniversary year

INNOVATION 2007