testo 6740: Measures trace humidity (e.g. in compressed air)

testo 6740

testo 6740 efficiently measures trace humidity in compressed air or dry air/dry gas. Display and control buttons ensure user-friendly menu operation.

Customised combinations

Every measuring point can be optimally configured. With or without a display, with European G 1/2 thread or American NPT 1/2” thread. With or without limit signal output. Directly assembled, with measurement chamber or with cooling coil. All combinations are possible, ensuring your needs are met optimally.

- Efficient measurement of trace humidity
- Calculation of the most important trace humidity variables, also ppm
- The long-term stable testo humidity sensor with protocolled fine adjustment with trace humidity -40 °Ctpd
- 4 to 20 mA in two wire engineering
- Ultra-easy menu operation via buttons: select humidity variable; change scaling; set alarms incl. hysteresis; carry out local 1 point adjustment; test analog signal; call up historic min/max values

Analog output 4 to 20 mA (2 wire), optional with limit signal output (0554 3302)

Convenient operation with bright 7-segment display (optional) (0555 6743/0555 6744)

Monitoring trace humidity: increase safety and cut costs

testo 6741

Pressure dew point transmitter, process connection G ½, without display

Part no. 0555 6741

testo 6743

Pressure dew point transmitter, process connection G½, with display and control menu

Part no. 0555 6743

Ordering data	Part no.
Basic instrument (each with plug for analog signal output)	
Pressure dew point transmitter testo 6741, process connection G ½, without display	0555 6741
Pressure dew point transmitter testo 6742, process connection NPT ½“, without display	0555 6742
Pressure dew point transmitter testo 6743, process connection G ½, with display	0555 6743
Pressure dew point transmitter testo 6744, process connection NPT ½“, with display	0555 6744

Accessories	Part no.
Cable connection plug for power supply/analog output 4 to 20 mA, with 2 floating switch contacts and 2 LEDs	0554 3302
Measurement chamber for optimum flow on humidity sensor (standard pressurised air quick connection / G ½), for 6741/6743	0554 3303
Cooling coil for process temperatures above 50 °C (up to 200 °C)	0554 3304
Scaling adapter for testo 6741/6742 incl. Software	0554 3305
Power supply unit (desk-top) 90 to 264VAC/24VDC (350mA)	0554 1748
Power supply unit (DIN rail mounting) 90 to 264VAC/24VDC (3A)	0554 1749
External testo 54-2 AC display, 2 limit signal outputs (up to 300 VAC, 3 A), 230 VAC	5400 7553
2 m Teflon hose with compressed air connections	0699 2824/4
ISO calibration certificate/Pressure dew point, Two adjustment points -10/-40 °C tpd	0520 0136

Technical data	
Housing	
Dimensions	199.5x37x37 (with standard plug) 203.5x37x37 (with limit signal output plug)
Ambient temperature	-20 to 70 °C
Storage temperature	-40 to 80 °C
Protection class	IP 65
Rotation of housing	By 350° (to align displays)
Sensor and sensor protection	
Humidity sensor	testo humidity sensor with protocolled trace humidity adjustment at -40° Ctpd
Temperature sensor	NTC
Sensor guard	Sintered stainless steel cap
Measuring range	
Pressure dewpoint temp. (trace humidity)	- 60 to +30 °Ctpd
Temperature	0 to 50 °C
Pressure resistance	- 1 bar relative to 50 bar
Meas. range Atmospheric dewpoint	- 80 to - 15 °Ctd (at 30 bar rel.) - 70 to + 10 °Ctd (at 3 bar rel.) - 60 to + 30 °Ctd (at 0 bar rel.)
Meas. uncertainty	
Humidity	+/- 1 K at -10 °Ctpd +/- 4 K at -40 °Ctpd (at 25 °C respectively)
Temp.	+/- 0.5 K (0 to 50 °C)
Analog output	
Signal	4 to 20 mA, two-wire
Scaling	Freely scalable via display/buttons Standard: 4 to 20 mA = -60 to +30 °Ctpd
Output variables	°Ctpd, °Ftpd, °Ctd, °Ftd, %RH, ppmV, mg/m3, °C, °F
Supply	
Voltage	24 VDC (10 to 30 VDC allowed; 20 to 30 VDC with limit signal outputs)
Max. load	10 VDC: 100 Ohm, 30 VDC: 950 Ohm
Limit signal outputs (optional), 0554 3302	
Contacts	2 potential-free contacts, max. 30 VDC/0.5A
EMC	According to directive 89/336 EEC