Hygrotest 650 HP -20/120 for high humidity



The industrial transmitter hygrotest 650

Optionally the transmitters of the hygrotest 650 series are available with a precision of ±1 %RH. The very robust, easy-to-clean metal housing optimally protects the transmitter from environmental influences. The length of the cables and probes can be adapted to suit customer requirements. Probes and sensors are heat resistant up to temperatures of +180 °C. Various humidity variables such as dew point, absolute humidity, relative humidity or psychrometer humidity temperature can be calculated and displayed with the help of the integrated Mollier diagram.



Constant humidity and temperature in cleanrooms guarantee optimum product quality.

	Channel 1	Channel 2	
Parameter	%RH	Т	
Range	°Ctd, g/kg, g/m ³ , FK	Т	
Output	% RH	°Ctd, g/kg, g/m ³ , FK	
	0/4 to 20 mA	0/4 to 20 mA	
	0 to 1/10 V	0 to 1/10 V	
	Freely scalable	Freely scalable	

The three possible combinations

Housing: Material/Colour: Dimensions: Screw connections: Electrical connections: Protection class: Operating temperature: Elektronics (Housing): Display: Amblent conditions: Probe operating pressure rar Storage temperature: Probe flow resistance: Sensor: -tumidity: Response time: Temperature: Measuring range: -tumidity: -	Die-cast z 130 X 140 2 x M 16x 2 x 4-pole IP 65 -20 to +77 -20 to +67 -20 to +60 -20 to +80 30 m/s, w -20 to +80 -20 to +90 -20 to +80 -20 to +80 -20 to +90 -20 to +80 -20 to +90 -20 to +80 -20 to +90 -20 to +90 -20 to +80 -20 to +90 -20 to +90 -2	inc, nickel-platec) X 54 mm 1.5 stainless ste- screw connector 0 °C 0 °C bar 0 °C ith sintered stain idity sensor 20 sec	I, burnished, varnish el screw connection r in housing less steel filter					
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Humidity: Response time: Temperature: Measuring range: -lumidity: -lumidity: -lumidity calibration points: Temperature:	Testo hum t90 10 to Pt 1000 C	hidity sensor						
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Temperature: Measuring range: Humidity: Humidity calibration points: Temperature:	Pt 1000 C	t90 10 to 20 sec.						
Measuring range: Humidity: Humidity calibration points: Temperature:		Pt 1000 Class A						
Humidity: Humidity calibration points: Femperature:								
Humidity calibration points: Temperature:	0 to 100%	5 RH						
Temperature:	11.3 %RH	I, 75.3 %RH at 2	5 °C					
	hygrotest	650 WHT	-40 to +80 °C	2				
	hygrotest	650 DHT	-40 to +120°	С				
	hygrotest	650 PHT	-40 to +180 °	<u>'C</u>				
A	hygrotest	650 HP	-20 to +120 \$	́С				
ACCURACY:	. 2.0/ DU	optional + 1.9/	DLL (bothy 10 to 00)	9/ DI Lip the rapped in 15 to 120 °C				
lumuity.	In 650 HP	· + 2.5% PH	KIT (Detw. 10 to 90	76KTT IIT III e falige + 15 to +50 C				
Temp_coefficient humdity:	+ 0.03 %	± 0.03 %RH / K; (at temperatures deviating from 25 °C)						
Temperature:	+0.2 °C to	±0.2 °C to DIN EN 60751 Class A						
Resolution:	0.1 %RH	and 0.1 °C						
Outputs:		· · · ·						
Analog output:	4 to 20 m	A (2-wire system)					
	0 to 20 m	A, (4-wire system	1)					
	0 to 1 V, (4	4-wire system)						
	0 to 10 V,	(4-wire system)						
	4 to 20 m	4 to 20 mA (4-wire system, only with HP)						
Resolution:	5 µA (0 to	5 μA (0 to 20 mA; 4 to 20 mA)						
	250 μV (C	to 1 V)						
	2.5 mV (0	2.5 mV (0 to 10 V)						
Drift (analog):	0.35 µA /	0.35 µA / K (0 to 20 mA; 4 to 20 mA)						
	17.5 μV /	K (U (U T V)						
Zaro shift:	30 µA (0 1	to 20 mA) as wel	Las HD versions (/ t	o 20 mA / 0 to 20 mA)				
	1.5 mV (0	15 mV (0 to 1\)						
analog)	15 mV (0	to 10V)						
2 x 2 switch outputs:	Optional in	n combination wi	th display H5 or H6					
Digital output:	RS232 ou	RS232 output						
	RS485 ou	tput, optional in	connection with disp	olay H3, H4 or H5				
Power:	24 VDC (1	2 to 30 VDC)						
Max. load without or	500 Ohm	(0 to 20 mA);						
with display H2/H4/H5/H6	500 Ohm	500 Ohm (4 to 20 mA)						
Max. load with display	50 Ohm (0	50 Ohm (0 to 20 mA); 50 Ohm (4 to 20 mA)						
41	Power su	Power supply min. 20 VDC						
Power consumption:	Max. 2 x 2	Max. 2 x 21 mA (4 to 20 mA)						
	Max. 2 x 2	22 mA (0 to 20 m	A; 0 to 1 V; 0 to 10	/)				
EMC:	In accorda	ance with guideli	ne 89/336 EWG					
All data relate to a nominal te	mperature of +2	5 °C.						
Probes:	Matarlal	Diamatas	l an aith in ai	Concernational and				
ver51011	waterial	Diameter	Length Incl.	sensor protection cap				
650 W/HT -20/70	Stainless stool	12 mm	65 mm	Open stainless protoctive cor				
650 DHT -20/120	Stainless steel	12 mm	200 mm	Sintered stainless steel filter				
650 PHT -20/120	Stainless steel	12 mm	200 mm	Sintered stainless steel filter				
650 PHT -40/120	Stainless steel	12 mm	210 mm	Sintered stainless steel filter				
650 PHT -20/120	Stainless steel	12 mm	210 mm	Sintered stainless steel filter				
650 HP -20/120	Stainless steel	12 mm	210 mm	Teflon filter				
Temperature probe with hygr	otest 650 HP: St	ainless steel 1.45	71 blank, 210 mm l	ong, Ø 3 mm,				
Probe cable length, 2 m stan	dard or special c	able length, 0.8 t	o 10 m					