DT722

Benefits

- Relative humidity, temperature measurement and dew point
- Designed for accurate measurement in a harsh environment
- Stainless steel housing
- Long term stability: ±1 %rh over 12 months
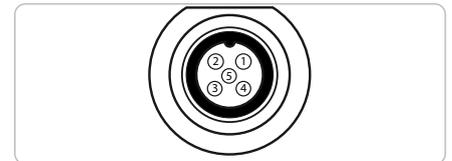- Withstands temperatures up to 150 °C (300 °F)

Applications

- HVAC
- Heating, ventilation, air conditioning
- Food industry
- Pharmaceutical industry
- Printing and paper industries

Electrical Connections

Connections		
Cable	Pin	
White	Pin 1	Supply + 8…32 VDC
Yellow	Pin 2	Output 2 = Temp 4…20 mA (max. 500 Ω)
Brown	Pin 3	Not connected (for calibration only)
Green	Pin 4	Output 1 = RH 4…20 mA (max. 500 Ω)
	Pin 5	Not connected (for calibration only)

Note: Both RH and T need to be connected in order for the T output to work.

Note: Even though the DT722 has a 5 pin connector, the standard connection cable (A000031) only has four pins/wires. However, only three pins (1, 2 and 4) are needed to connect the DT722.

Accessories and Spare Parts

Order Code	Description
Protection cap	
A000002	19 mm (0.75") Slotted protection cap black
Filter	
A000014	19 mm (0.75") PVDF filter
A000015	19 mm (0.75") PVDF filter w/ protection cap black
A000021	19 mm (0.75") Mesh filter w/ protection cap black
A000025	19 mm (0.75") Arrow 5 µm SS sintered filter
A000027	19 mm (0.75") connector, no cable, w/screw terminal
Cable	
A000030	Single plug, without cable
A000030-XX	19 mm (0.75") connector / cable (price per meter)
A000031	19 mm (0.75") connector with 2 m (6.5') cable
A000032	19 mm (0.75") connector with 5 m (16') cable
A000040	Metal foil filter 2 µm with protective cap, black
A000042	Oleophobic foil filter 0.7 µm with black protective cap
Mounting	
A000110	3/4" NPT SS adj. fitting for SS probes
A000100	Al mounting flange for Ø19 mm (0.75") SS probes (outside Ø80 mm (3.15"))

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Order Code

To get an order code that contains all the important information, the relevant features should be selected from the tables below and the ordered in sequence (starting with the basic model): "Feature A" + "Feature B" + "Feature C" + "Feature D" + "Feature E" + "Feature F" + "Feature G"

Example: DT722 + SX + A + T0 + 03 + CA + F02
Relative humidity and temperature transmitter without digital display. Output signals for absolute humidity and temperature (0...100 °C). Probe length is 300 mm. Without mating connector and without cable. 19 mm open protective cap in black.

DT722	SX	A	T0	03	CA	F02

Base Unit {Feature A}	
Relative humidity and temperature	DT722

Display {Feature B}	
Display	SD
No display	SX

Moisture Signal {Feature C}	
Relative humidity	H
Calculated dp temp (range (Td) -40...60 °C (-40...140 °F)	D
Calculated absolute humidity (Abs) (range Abs from 0...200 g/m³)	A
Calculated wetbulb temp (range (Tw) - 40...60 °C (-40...140 °F)	W

Temperature {Feature D}	
0...100 °C (32...212 °F)	T0
-40...150 °C (-40...302 °F)	TS
Other output scaling available on request	TX

Length {Feature E}	
200 mm (7.87") probe	02
300 mm (11.81") probe	03
500 mm (19.69") probe	05
900 mm (35.43") probe	09

Filter {Feature G}	
19 mm (0.75") slotted protection cap black	F02
19 mm (0.75") PVDF filter with protection cap	F15
19 mm (0.75") mesh filter with protection cap	F21
19 mm (0.75") arrow SS sintered filter 5 µm	F25
19 mm (0.75") arrow SS sintered filter 20 µm	F27
19 mm (0.75") foil filter 2 µm with protection cap, black	F40
Oleophobic foil filter 0.7 µm with protection cap, black	F42

Cable {Feature F}	
No Cable	CA
19 mm (0.75") connector, no cable, w/screw terminal	CB
19 mm (0.75") connector with 2 m (6.5') cable	CC
19 mm (0.75") connector with 5 m (16') cable	CD

Compatibility

- DT722 Transmitters are **not** compatible with Rotronic HC2A probes
- The only compatible accessories and spare parts like filters, protection caps, mounting clips etc. are listed here.
- In case of insecurity, please contact your local Rotronic partner.

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Technical Information

Performance	
Measurement range (RH)	0...100 %rh
Measurement range (T)	-40...150 °C (-40...302 °F)
Accuracy @ 25 °C (77 °F) humidity	‹ ±2 %rh (5...95 %rh)
Accuracy @ 25 °C (77 °F) temperature	±0.2 °C (±0.36 °F) typical
Stability – RH sensor	±1 %rh/year
Response time – RH sensor	‹10 sec typical (for 90 % of the step change)
Electrical specifications	
Output signal	4...20 mA
Supply voltage	8...32 V DC
Supply voltage influence	±0.01 %rh/V typical
Operating humidity	
Operating humidity probe, housing, storage	10...95 %rh (non-condensing)
Operating temperatures	
Probe	-40...150 °C (-40...302 °F)
Housing	-20...70 °C (-4...158 °F)
Storage	-30...75 °C (-22...167 °F)
Mechanical specifications	
Ingress protection	IP65 (NEMA 4 level)
Housing material	Stainless steel
Weight	200 mm/800 g (7.87"/28.22 oz) 300 mm/900 g (11.81"/31.75 oz) 500mm/1040 g (19.69"/36.68 oz) 900 mm/1412 g (35.43"/49.80 oz)
Electrical connections	5 pin, M12

Subject to technical change without notice. Printing and other errors reserved.

80.0mm (3.15")
68.0mm (2.68")
68.0mm (2.68")
80.0mm (3.15")
4 x HOLE Ø 5.5 mm (0.21")
722

12.0mm (0.47")
Ø78mm (3.07")
38.0mm (1.49")
200.0 mm (7.87")
300.0 mm (11.81")
500.0 mm (19.68")
900.0 mm (35.43")
Ø19.05mm (0.75")
Ø18.5mm (0.73")

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