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# HMT360 Series Intrinsically Safe Humidity and Temperature Transmitters



The Vaisala HUMICAP® Humidity and Temperature Transmitter HMT361 wall mount transmitter, shown with six probe options, is designed specifically for hazardous and explosive environments.

#### Features/Benefits

- Measures humidity and temperature, outputs also dewpoint, mixing ratio, absolute humidity and wet bulb temperature
- Safe operation with the entire transmitter in hazardous areas: Division 1 and 2 (USA, Canada), Categories 1G / Zone 0 and 1D / Zone 20 with protection cover (EU)
- Intrinsically safe
- Designed for harsh conditions
- Vaisala HUMICAP® Sensor features high accuracy, excellent long-term stability, and negligible hysteresis
- Six probe options
- Temperature range between -40 ... +180°C (-40 ... +356°F) depending on the probe option
- NIST traceable (certificate included)

The Vaisala HUMICAP® Humidity and Temperature Transmitter Series HMT360 are the ideal solution for measuring humidity in hazardous areas. They operate safely and reliably even in the most hazardous classifications. The HMT360 transmitters' proven performance and technology conform with rigorous international standards.

### Intrinsically safe

The entire HMT360 transmitter can be installed directly in explosive areas. It can withstand continuous exposure to potentially explosive environments that contain flammable gases or dust.

#### **Customized configuration**

Due to the microprocessor based electronics, options and accessories, the HMT360 series is truly flexible.

Customers may specify the transmitter configuration when ordering the instrument, however changes in configuration can also easily be made in the field.

#### Interchangeable probes

The HMT360 offers six probe options for various applications:

HMP361 - wall mount
HMP363 - confined spaces
HMP364 - pressurized spaces
HMP365 - high temperature
HMP367 - high humidity
HMP368 - pressurized
pipelines

The interchangeable probes enable fast and easy removal or re-installation when required. Calibration, for example, is easy to perform due to the modular structure. All calibration coefficients are included in the probe unit itself, which means that probes can be switched between transmitter bodies without losing the accuracy.

#### **Optimized sensors**

In addition to the standard Vaisala HUMICAP® Sensor, an application specific, very chemically durable sensor is also available.

#### Long-term solution

The HMT360 transmitters are an investment; their rugged design, combined with trouble-free operation, ensure a long-term solution for monitoring humidity and dewpoint in explosive environments.

Customized calibration and maintenance contracts for the HMT360 series are available on request.



## Interchangeable Probes for HMT360 Intrinsically Safe Humidity and Temperature Transmitter



The HMP361 probe in this picture has a stainless steel netting filter.

#### **HMP361 for wall mounting**

TECHNICAL DATA	
Temperature range	-40 +60 °C
	(-40 +140 °F)
Probe diameter	12 mm



The HMP363 probe is small and fits into tight spaces. This one is connected with a teflon cable

#### **HMP363** for confined spaces

TECHNICAL DATA

Temperature range with

teflon cable -40 ... +120 °C (-40 ... +248 °F)

rubber cable -40 ... +80 °C (-40 ... +176 °F)

Probe cable length 2, 5 or 10 meters

12 mm



The HMP364 probe is designed for measurement in pressurized spaces or vacuum chambers.

#### HMP364 for high pressure

TECHNICAL DATA	
Temperature range	-40 +180 °C
	(-40 +356 °F)
Pressure range	0 10 MPa
Probe cable length	2, 5 or 10 meters
Probe diameter	12 mm



The HMP365 probe is designed for high temperature environments.

#### **HMP365** for high temperature

TECHNICAL DATA	
Temperature range	-40 +180 °C
	(-40 +356 °F)
Probe cable length	2, 5 or 10 meters
Probe diameter	13.5 mm



Probe diameter

The HMP367 probe is constructed to be installed in environments with high humidities.

#### **HMP367** for high humidities

TECHNICAL DATA	
Temperature range	-40 +180 °C
	(-40+356 °F)
Probe cable length	2, 5 or 10 meters
Probe diameter	12 mm



The HMP368 probe enables flexible installation in pressurized pipelines.

#### **HMP368** for pressurized pipelines

TECHNICAL DATA	
Temperature range	-40 +180 °C
	(-40 +356 °F)
Pressure range	0 4 MPa
Probe cable length	2, 5 or 10 meters
Probe diameter	13.5 mm/12 mm
Two probe lenghts available	le.

#### **Accessories**

		HMT361	HMT363	HMT364	HMT365	HMT367	HMT368
Accessory	part number						
Ball valve ISO 1/2 with welding joint	BALLVALVE-1						$\sqrt{}$
Cable Gland M20 x 1.5 with splitting seal	HMP247CG		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	
Duct installation kit	210697		$\sqrt{}$			$\sqrt{}$	
Fitting body ISO1/2 solid structure	DRW212076SP						$\checkmark$
Fitting body M22 x 1.5	17223			$\sqrt{}$			
Fitting body NPT1/2	17225			$\sqrt{}$			
Fitting body NPT1/2 solid structure	NPTFITBODASP						$\sqrt{}$
Mounting flange	210696				$\sqrt{}$		
Swagelok for 12mm probe, 1/2" NPT thread	SWG12NPT12		$\sqrt{}$			$\sqrt{}$	
Swagelok for 12mm probe, 3/8" ISO thread	SWG12ISO38		$\sqrt{}$			$\sqrt{}$	



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