

# The Foundation of Comfort



## Belimo Sensors, Gas Monitoring Devices, and Meters



Discover the advantages  
[www.belimo.us](http://www.belimo.us)

**BELIMO**<sup>®</sup>

# Gas monitoring devices - the perfect complement to actuators, valves, sensors, and meters



Belimo is a global leader in developing, producing, and marketing damper actuators, control valves, sensors, meters, and gas monitors for heating, ventilation, and air-conditioning (HVAC) systems. Belimo offers superior reliability, easy installation, and seamless integration with major Building Automation Systems (BAS).



# Seamless integration, reliability, and intuitive design

The Belimo range of products results from over four decades of experience, research, and focus on providing value-added technologies to customers throughout the HVAC industry. The unique designs offer easy installation and seamless integration, resulting in reduced costs and optimal system performance.



## Seamless

Compatible with major building automation systems, making them suitable for use in any HVAC application.



## Reliable

Built from the highest quality materials delivering accurate and dependable readings over the building's entire life cycle. Backed with a 5-year warranty and conform to UL and NEMA requirements.



## Intuitive

The compact modular design allows easy installation and commissioning in just a few simple steps to ensure optimal system performance.

“Our installers like the innovative design of Belimo’s sensor range and have told us that using them reduces their installation time compared to competitive products.”

**Brian Dutt, President  
Controls & Equipment, Moncton,  
New Brunswick, Canada**



# Innovation for peace of mind

The simple installation combined with a slim, timeless design provides the latest intelligence to manage modern workspaces and ensure occupant comfort.

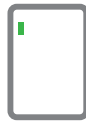
## ePaper Touch Display

High contrast and intuitive operation illustrating current room values with the ability to adjust setpoints.



## CO<sub>2</sub> Traffic Light

The LED shows the CO<sub>2</sub> concentration, not visible in the off position.



## Configurable

Set the display to show only measured values or temperature and fan setpoints.



5-year warranty



**Snap Cover**  
Allows for quick installation and easy commissioning.



**Removable Terminal**  
Spring-loaded terminal block saves wiring time and ensures reliable contact.



**Quick Response Time**  
The sophisticated technology allows the sensor to react very quickly to changes in temperature.



**High Accuracy**  
The low wall coupling factor provides accurate measurement unaffected by the wall temperature.



**Seamless Integration**  
With BACnet, Modbus, and MP-Bus can communicate directly to the BMS.



**Near Field Communication**  
With the Belimo Assistant App and a smartphone, NFC allows quick data access, field adjustments, commissioning, and troubleshooting.

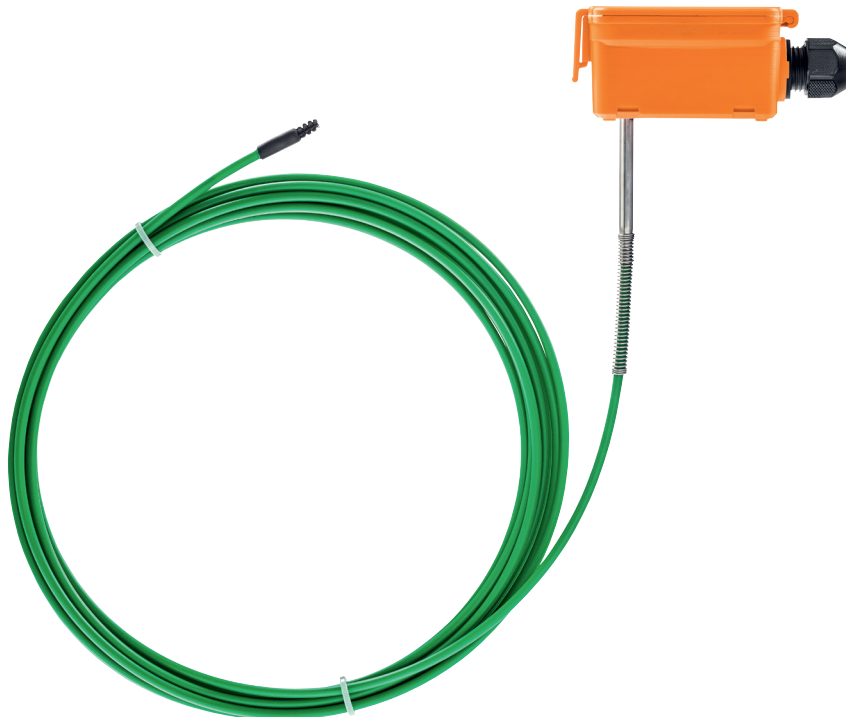


# A comprehensive range of HVAC sensors, monitors, and meters

A complete range of sensors, monitors, and meters offers superior reliability and seamless integration with major Building Automation Systems (BAS). The unique uniform design is easy to install and maintain with various mounting accessories that expedite device setup, saving time, money, and labor.

## Temperature Sensors

Accurate and reliable temperature readings are essential for optimal building comfort and energy efficiency. Duct, pipe, and outdoor air temperature sensors are designed for easy installation and are compatible with all major Building Automation Systems.



## FEATURES

- Up to eight active measurement ranges simplifies field selection and reduces stock storage for maximum flexibility.
- Variety of output signals:  
passive: Ni1000, Pt100, Pt1000, NTC10k2, NTC10k3, NTC20k  
active: 0...5/0...10 V and 4...20 mA
- Sintered moisture protection coating on all duct, immersion, and cable sensors protects against condensation, mechanical stress, and vibrations.

## PRODUCT SERIES

### Duct

Single Point  
Averaging  
Cable  
Low Limit Detection

### Pipe

Single Point  
Cable  
Strap-on  
Condensation

### Outdoor

Single Point

### Room

Wall-mounted zone measurement

## Humidity Sensors

Controlling humidity in buildings is critical to occupant comfort and in protecting building infrastructure, production processes, stored goods, and museum artwork. Belimo's range of durable duct, outdoor air, and condensation sensors are manufactured using the highest quality materials to ensure superior reliability, accuracy, and repeatability. Combined temperature and humidity sensors provide a flexible and cost-effective solution.



### FEATURES

- Complementary Metal Oxide Semiconductor (CMOS) based polymer-capacitance sensor with an accuracy of  $\pm 2\%$  relative humidity as standard and long-term drift  $< \pm 0.25\%$  not affected by high humidity and contaminants.
- Multi-sensor with selectable output measurement values: relative humidity, absolute humidity, enthalpy, and dew point.
- Up to four active temperature measurement ranges simplifies field selection and reduces stock storage, providing flexibility for change requests during commissioning.
- BACnet and Modbus communication protocols provide superior application data access and enable easy commissioning and configuration.

### PRODUCT SERIES

Duct  
Outdoor Air

## Air Quality Sensors

Air quality sensors provide occupant comfort and energy efficiency. We offer a wide range of combined multi-sensors for CO<sub>2</sub>, humidity, temperature, and VOCs designed to ensure air quality and maximize energy savings over the life cycle of the building.

### FEATURES

- Dual channel CO<sub>2</sub> sensor based on NDIR technology. The additional reference channel, allows effective compensation of long term drift, thus providing precise accuracy and long-term stability.
- Sensors are completely maintenance free.
- Integrated temperature, humidity, CO<sub>2</sub> and VOCs sensors are available for building applications that require sensors with multi-functional capabilities.
- Dual channel self-calibration technology allows the Belimo CO<sub>2</sub> sensors to be used for all types of buildings and applications where ABC logic can not be used.
- BACnet communication protocol provides superior application data access and enables easy commissioning and configuration.

### PRODUCT SERIES

CO<sub>2</sub>  
CO<sub>2</sub> + Temperature  
CO<sub>2</sub> + Humidity + Temperature  
CO<sub>2</sub> + VOCs  
CO<sub>2</sub> + VOCs + Temperature  
CO<sub>2</sub> + VOCs + CO<sub>2</sub>/VOCs + Temperature





## Pressure Sensors

Accurate pressure measurement is important for optimal HVAC system performance. Pressure sensors from Belimo are capable of measuring extremely high and low pressures in air and water applications. The sensors offer precise measurement of pressure, differential pressure, and velocity for reliable monitoring. Selectable measuring ranges are available for application flexibility.



### FEATURES

#### DIFFERENTIAL AIR PRESSURE SENSOR

- Eight field selectable pressure ranges in one unit.
- Excellent zero-point stability and high accuracy.
- Auto-zero or manual calibration option.
- LCD display optional.
- BACnet or Modbus communication protocol provides superior application data access and enables easy commissioning and configuration.

#### DIFFERENTIAL AIR PRESSURE SWITCH

- Field-adjustable switch point.
- Working life of over one million switch operations.

#### DIFFERENTIAL WATER PRESSURE SENSOR

- Highly stable resistive sensor element on ceramic substrate.
- Rugged stainless steel housing.
- All wetted material is made from stainless steel.

#### WATER PRESSURE SENSOR

- Resistive sensor element on stainless steel membrane.
- All wetted material is made from stainless steel.

### PRODUCT SERIES

Air Differential Pressure/Static Pressure Sensor  
 Air Differential Pressure/Static Pressure Switch  
 Water Differential Pressure Sensor  
 Water Static Pressure Sensor

## Room Sensors

Belimo room sensors accurately measure temperature, humidity, dew point, and CO<sub>2</sub> in a surface-mounted streamline design with or without an ePaper touch display. The sensors are maintenance-free and provide long-term reliability for a comfortable room environment. Integrated with Near Field Communication (NFC) and the Belimo Assistant App, room sensors can be set up quickly and easily. The touch display can be displayed or hidden via the App. The App or the touch display allows easy data access, field adjustable commissioning and troubleshooting even without power. For devices without an integral ePaper display, setpoints can be programmed using the new Belimo Room Display App, which turns your smartphone into a remote display. The NFC apps associated with Belimo's room sensors can be password protected for an added layer of security.



## FEATURES

- Near Field Communication (NFC) allows fast programming, commissioning, and troubleshooting.
- A smartphone app to create a remote display with setpoint functionality.
- LED light indicates CO<sub>2</sub> concentrations in rooms for ventilation or air purification
- Snap cover, spring-loaded terminal block allows for quick installation and easy commissioning.
- PC-board cover plate provides additional protection from mechanical damage, dust, and vibration.
- BACnet, Modbus, or MP-Bus integration offering enhanced communication on select models savings on installation, cables, and terminal connections.

## PRODUCT SERIES

- Temperature
- Temperature with Setpoint
- Temperature + Relative Humidity
- Temperature + Relative Humidity + CO<sub>2</sub>

## Gas Monitoring Devices

Commercial grade gas monitoring devices are factory calibrated and can measure up to two different gases simultaneously. All monitors offer CAN bus communication allowing daisy-chain installation of up to 32 devices. These monitors can easily be assigned to sites for ventilation zoning on the same network, significantly reducing control wiring and installation. Enhanced communication enables expanded system integration and BMS control with the addition of BACnet MS/TP on select models.



### FEATURES

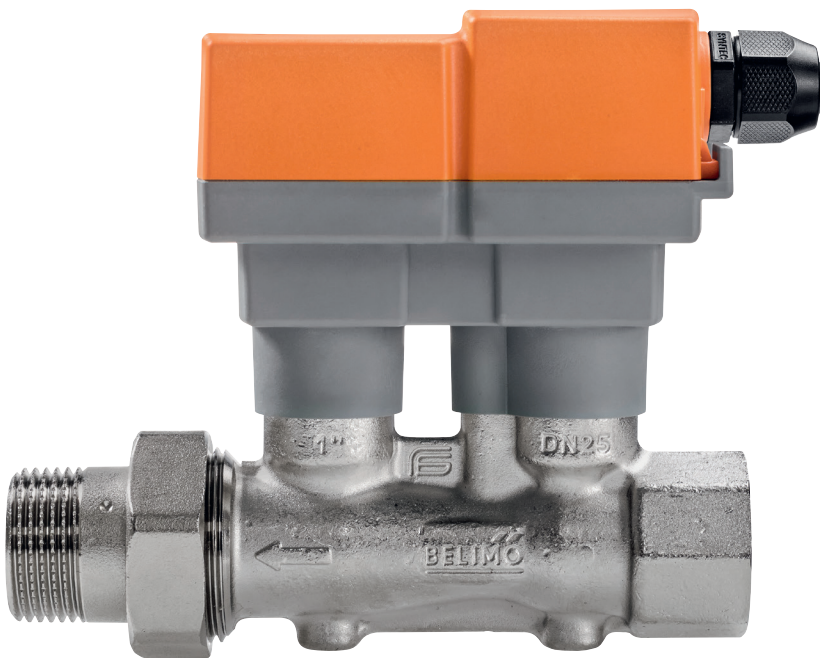
- Universal robust enclosure features an electronic display with an audible and visual alarm.
- Easily configured operation with adjustable alarm relays, indicators, and strobes allow for on-demand ventilation and relay activation.
- Reduce cabling with a daisy-chain network of up to 32 devices.
- Backlit LCD allows for easy access, configuration, calibration, and live gas concentration.
- Simplified field calibration procedure using calibrated gas bottle mixtures or replacing used sensor modules with factory calibrated plug-and-play sensor modules.
- Stand-alone operation and seamless integration into the BMS with BACnet MS/TP and CAN bus networks.
- UL-2075/ULC-S588 listed (only on single element CO monitors), UL-61010 listed (all 6000-A & B models)

### PRODUCT SERIES

Carbon Monoxide  
 Nitrogen Dioxide  
 Carbon Monoxide + Nitrogen Dioxide  
 Carbon Dioxide  
 Relative Humidity

## Flow Sensors

Reliable measurement of flow plays an important role in maximizing HVAC system efficiency and conserving energy. Belimo's inline flow sensors utilize ultrasonic transit-time technology to provide accurate and repeatable flow measurement in any application. Their compact size and robust design makes them suitable for use with chilled water, hot water, and water/glycol solutions at temperatures ranging from  $-4...+250^{\circ}\text{F}$  [ $-20...+120^{\circ}\text{C}$ ]. The sensors are fabricated from corrosion-resistant materials, ensuring reliable operation and extended product life.



## FEATURES

- Multi-point wet calibrated to ensure accuracy and repeatability.
- Patented glycol compensation logic eliminates manual calibration.
- $\pm 2\%$  accuracy of reading and  $\pm 0.5\%$  repeatability ensure accurate and precise flow measurement.
- Ultra-compact size with a short inlet length of 5 x nominal pipe diameter and no output-length requirements allow the ultrasonic flow sensor to be installed in tight spaces.
- Low power consumption of 0.5 W saves energy and transformer capacity.

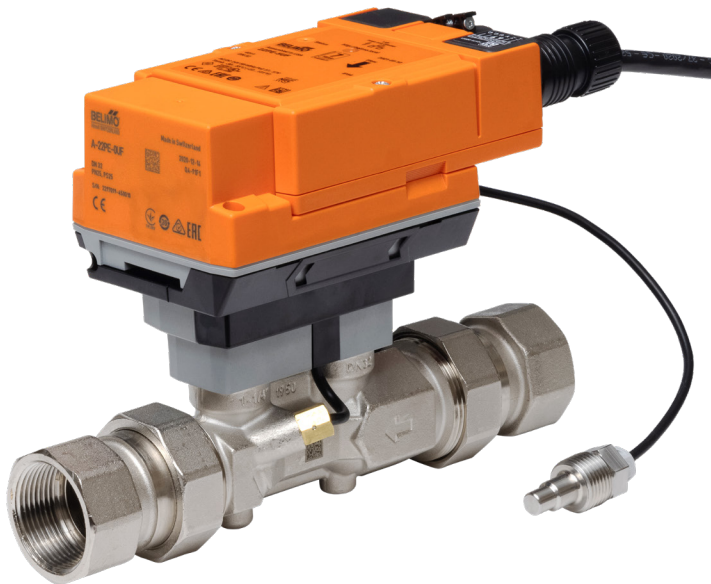
## PRODUCT SERIES

Ultrasonic Flow (Volumetric Flow)



## Thermal Energy Meters

Accurate measurement for heating and cooling allows building operators to adopt a cost recovery strategy through tenant billing. Designed to EN1434/MID and equipped for IoT-based billing, Belimo's thermal energy meters provide the proper flow and energy measurement. The patented glycol compensation algorithm automatically selects the glycol concentration, ensuring reliable performance and eliminating manual input and inaccuracies. Thermal energy meters are designed for chillers, boilers, commercial/multi-tenant energy metering, and monitoring applications such as commercial units, condominiums, apartments, or central plant systems.



### FEATURES

- Multi-point wet calibrated to ensure accuracy and repeatability.
- $\pm 2\%$  accuracy of reading and  $\pm 0.5\%$  repeatability for accurate and precise measurement.
- IoT capability allows for remote meter reading and data utilized for billing.
- Power over Ethernet (PoE) utilized for both data and power simplifies installation, reducing the need for additional transformers and wiring.
- Utilize ultrasonic technology with patented automatic glycol compensation algorithm to provide accurate and repeatable flow measurements of water and water/glycol mixtures without drift.
- Thermal heat transfer energy data is transparent allows users to view and document system performance during commissioning and over time.
- Field configuration via the Belimo Assistant App and a smartphone for easy field adjustments.
- Seamless system integration analog feedback and Modbus RTU and Modbus TCP BACnet MSTP and BACnet IP.

### PRODUCT SERIES

Thermal Energy Meters  
(Volumetric Flow and Energy  
Consumptions)

# A seamless approach

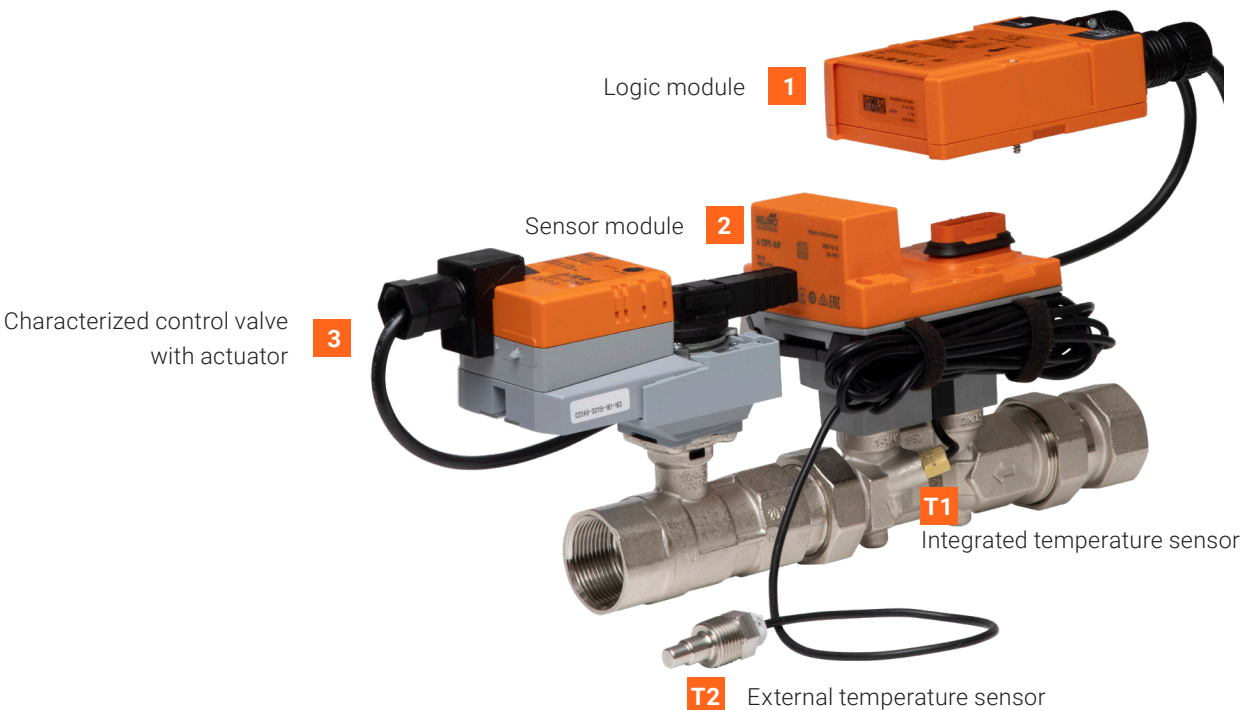
The sensor and meter offering stems from the release of the Belimo Energy Valve™, an innovative solution that features a unique combination of a valve, IoT actuator, sensors and an ultrasonic thermal energy meter.

## Belimo Energy Valve™

The Belimo Energy Valve is an Internet of Things (IoT) cloud device utilizing advanced analytic technology leveraging captured system data to improve coil and system performance while achieving increased energy savings. Connecting to the Belimo Cloud offers lifetime data storage, setpoint recommendations, and performance reporting, along with an additional two years of warranty. Local data storage and trending capability coupled with BACnet, Modbus, and analog communication provides the ability to monitor energy usage and develop energy savings strategies through the BAS. Belimo Energy Valves are available in sizes ½ to 6 inches.

## FEATURES

- The thermal energy data is accurately measured, logged, and identifies areas for optimization when detected.
- Patented Power Control and Delta T Manager logic optimizes the available energy of the coil by maintaining Delta T.
- Glycol monitoring ensures concentration meets design needs while reducing additional pumping, providing optimized heat exchange, and promoting safe operation.
- Dynamic coil performance illustrates the real time operation of the coil while accurately providing transparency of power degradation and other operational issues.
- Simplified commissioning with flow measurement and verification.



# Convenience

## Simplifying installation and ensuring optimal performance

A variety of apps are offered by Belimo, such as the Retrofit App, which provides quick, efficient replacement solutions, to Apps that facilitate programming, commissioning, and troubleshooting of products with NFC.

### Duct Sensor Assistant App

The ability to view basic sensor information, parameterize the output signals and measurement ranges, and change the LCD text alignment, brightness, color, and measuring units for sensors. The App allows you to modify the sensor's address, view the BUS settings, schedule future servicing dates, and view past dates. Saving the configuration to the App and uploading it to other sensors saves time and money. The App is available in six languages.

### Belimo Room Display App

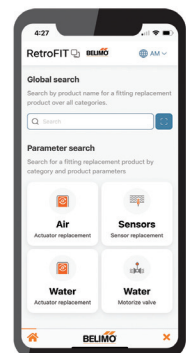
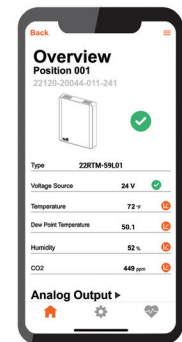
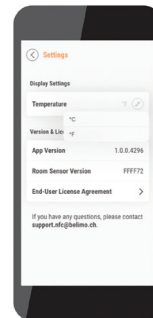
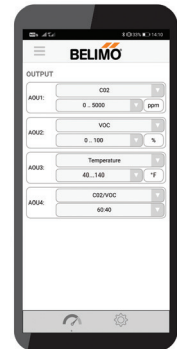
The App is the most innovative way to access Belimo room sensors. The intuitive App displays current room values and allows users to modify the setpoints. Access protection prevents input by unauthorized personnel. The App communicates with the room unit via NFC. Adaptation of the temperature setpoint even without a display.

### Belimo Assistant App

On-site operation of devices with built-in NFC interface. Complete transparency at all times regarding your Belimo HVAC actuator solution and the process of your system. With the Belimo Assistant App, your smartphone or tablet provides on-site wireless operation for VAV, sensors, damper, and valve actuators.






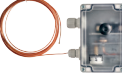
### Belimo RetroFIT App

With the Belimo RetroFIT app, you can specifically replace your obsolete or defective sensors and actuators from various suppliers with devices from Belimo. Belimo Duct Sensor Assistant App Via the Belimo Duct Sensor Assistant App it is possible to extend the range of use and adapt the configuration individually to application requirements.






# Belimo sensors, gas monitoring devices, and meters at a glance

## Temperature


Application	Type code	Output signal			Measurement range	Probe length	Application/comment
		Passive	Active	Switch	Factory settings		
 Outdoor air	01UT	■			-30...+122°F [-35...+50°C]		– Outdoor temperature – Wall temperature with NEMA 4X / IP65 protection
	22UT		■		-30...+130°F [-50...+50°C]	8	
 Duct immersion	01DT	■			Sensor dependent	2" [50 mm], 4" [100 mm], 6" [150 mm], 8" [200 mm], 12" [300 mm], 18" [450 mm]	– Duct temperature – Immersion sensor and thermowell pockets in brass or stainless steel
	22DT		■		0...150°F [0...160°C]	8	
 Duct averaging	01MT	■			Sensor dependent	10 ft [3 m], 20 ft [6 m]	Duct averaging temperature sensor for air-handling units or larger ducts with air stratification
	22MT		■		40...90°F [-20...+80°C]	8	
 Strap-on	01ST	■			-30...+212°F [-35...+100°C]		Pipe strap-on temperature sensors for heating systems, 01ST without housing and 01HT, 22HT with housing
	01HT	■			-30...+194°F [-35...+90°C]		
	22HT		■		40...240°F [0...100°C]	8	
 Cable	01CT	■			-30...+212°F [-35...+100°C]	2" [50 mm]	Cable temperature sensor passive (without housing) and active (with housing)
	22CT		■		0...150°F [0...160°C]*	8	
 Low temperature detection	01DTS			■	14...54°F [-10...+12°C]	10 ft [3 m], 20 ft [6 m]	Low temperature detection for frost protection in air-handling units available with automatic or manual reset






## Humidity

Application	Type code	Output signal				Measured values	Measurement range			Application/comment
		Active	Modbus RTU	BACnet MS/TP	Switch		Humidity	Temperature (factory settings)	Multirange (selectable)	
 Outdoor	22UTH	■	■	■		Humidity, Temperature, Enthalpy, Dew Point, Absolute Humidity	0...100% rH non-condensing	0...200°F [-20...+80°C]	4	<ul style="list-style-type: none"> <li>Outdoor humidity temperature sensor</li> <li>Wall humidity temperature sensor with NEMA 4X / IP65 protection</li> <li>Option: weather/rain shield protection</li> </ul>
 Duct	22DTH	■	■	■		Humidity, Temperature, Enthalpy, Dew Point, Absolute Humidity	0...100% rH non-condensing	0...200°F [-20...+80°C]	4	Duct humidity temperature sensor
 Condensation	22HH				■	Condensation				Condensation sensor Optional: external sensor

## Air Quality

Application	Type code	Output signal			Measured values	Measurement range			Options	Application/comment
		Active	Modbus RTU	BACnet MS/TP		CO <sub>2</sub>	Temperature	Humidity		
 Duct	22DC	■			CO <sub>2</sub>	0...2000 ppm				Duct CO <sub>2</sub>
	22DTC	■			CO <sub>2</sub> , Temperature	0...5000 ppm	32...122°F [0...50°C]			Duct CO <sub>2</sub> , Temp
	22DTM	■	■	■	CO <sub>2</sub> , Temperature, Humidity	0...2000 ppm	32...122°F [0...50°C]	0...100% Non condensing	■	Duct CO <sub>2</sub> , rH, Temp
	22DCV	■			CO <sub>2</sub> , VOCs	0...2000 ppm				Duct CO <sub>2</sub> , VOCs
	22DCM	■			CO <sub>2</sub> , Temperature, VOCs	0...2000 ppm	32...122°F [0...50°C]			Duct CO <sub>2</sub> , VOCs, Temp
	22DCK	■			CO <sub>2</sub> , Temperature, VOCs, CO <sub>2</sub> /VOCs mix	0...2000 ppm	32...122°F [0...50°C]			Duct CO <sub>2</sub> , VOCs, CO <sub>2</sub> /VOCs, Temp

## Pressure

Application	Type code	Output signal				Measured values	Media	Measurement range (22ADP factory default settings shown)		Options		Application/ comment
		Active	Modbus RTU	BACnet MS/TP	Switch			Pressure	Multirange (selectable)	Auto-zero	Display	
 Duct	22ADP	■	■	■	Differential Pressure	Air	0...1"wc [250 Pa] 0...10"wc [2500 Pa] 0...28"wc [7000 Pa]	8	■	■	Differential air pressure sensor	
 Switch	01APS				Differential Pressure	Air	0.08...1.20"wc [20...300 Pa] 0.20...2.00"wc [50...500 Pa] 0.80...4.00"wc [200...1000 Pa] 2.00...10.00"wc [500...2500 Pa]				Duct differential air pressure switch	
 Pipe	22WP	■			Pressure	Air, Water	0...15 psi 0...50 psi 0...100 psi 0...200 psi 0...580 psi				Pipe water and pressure sensor	
	22WDP	■			Differential Pressure	Water	0...15 psi 0...50 psi 0...100 psi				Pipe water differential pressure sensor	

### All sensors feature:

**Active:** 0...5/10 V, 4...20 mA

**Passive:** PT100, PT1000, Ni1000, 10K2, 10K3, NTC20K

**Supply voltage:** DC 15...24 V, AC 24 V




**UL:** cULus listing

**Protection:** NEMA 4X / IP65 (except for 01DTS, 01APS, 22WP, 22WDP; 01APS is ETL listed)

\* For active temperature sensors with several measurement ranges, the default range is noted. For additional and allowable operating temperature ranges refer to the data sheet.






For pressure sensors with several measurement ranges, the maximum range is noted, refer to the data sheet for additional ranges.

## Room

Application	Type code	Output signal				Measured values	Measurement range				Communication					
		Active	Passive	NTC10k2	NTC10k3		Temperature	Humidity	CO <sub>2</sub>	ePaper Display	Display App (remote)	BACnet MS/TP	Modbus	MP-Bus		
Room   	22RT-5900A*	■				Temperature	32...122°F [0...50°C]				■				■	
	22RTH-59L0A*	■	■	■		Temperature, Relative Humidity, Dew Point		0...100%			■				■	
	22RTH-5900A*	■				Temperature, Relative Humidity, Dew Point		0...100%			■				■	
	22RTM-59L0A*	■	■	■		Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■				■	
	22RTH-59M0A*	■	■		■	Temperature, Relative Humidity, Dew Point		0...100%			■				■	
	22RTM-59M0A*	■	■		■	Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■				■	
	22RTM-5900A*	■				Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■				■	
	22RT-5900D	■				Temperature					■					■
	22RTH-5900D	■				Temperature, Relative Humidity, Dew Point		0...100%			■					■
	22RTM-5900D	■				Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■					■
	22RTH-5U00A*	■				Temperature, Relative Humidity, Dew Point		0...100%			■	■	■	■	■	
	22RTM-5U00A*	■				Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■	■	■	■	■	
	22RTH-5U00D	■				Temperature, Relative Humidity, Dew Point		0...100%			■	■	■	■	■	
	22RTM-5U00D	■				Temperature, Relative Humidity, CO <sub>2</sub>		0...100%	0...2000 ppm		■	■	■	■	■	


\* Remote setpoint capability with Belimo Room Display App.

## Room (Continued)

Application	Type code	Output signal						Manual Override	Measured values	Measurement range	Additional information
		Active	Passive	NTC10k2	NTC10k3	NTC20k	PT1000				
	01RT-5B-0	■					■	■	Temperature	32...122°F [0...50°C]	
	01RT-5B00L-0	■					■	■			■
	01RT-5L-0	■	■					■			
	01RT-5L00L-0	■	■					■			■
	01RT-5M-0	■			■			■			
	01RT-5M00L-0	■			■			■			■
	01RT-5Q-0	■					■	■			
	01RT-5Q00L-0	■					■	■			■
	P-01RT-5B-0	■						■	Temperature with Setpoint		
	P-01RT-5B00L-0	■						■		■	
	P-01RT-5L-0	■	■					■			
	P-01RT-5L00L-0	■	■					■		■	
	P-01RT-5M-0	■			■			■			
	P-01RT-5M00L-0	■			■			■		■	
	P-01RT-5Q-0	■					■	■			
	P-01RT-5Q00L-0	■					■	■		■	
	EXT-RT-SS1000	■					■	■	Temperature		
	EXT-RT-SS10K3	■			■						
	EXT-RT-SS20K	■				■					
 	EXT-TN-1066869	■							Light		Light Harvesting and Occupancy Detection 0...10 V
	EXT-TN-1071511	■									




## Gas Monitoring Devices - Vehicle Emissions


Application	Type code	Output signal				Measuring range			Communication	
		Active	1 SPDT relay	2 SPDT relay	2 analog 4...20 mA or 2...10 V	Carbon Monoxide	Nitrogen Dioxide	Measuring range	CAN bus	BACnet MS/TP
 <p>Vehicle Emissions</p>	EXT-OP-6002-250-A	■	■		■		0...250 ppm	■	■	
	EXT-OP-6002-250-B	■		■	■			■	■	
	EXT-OP-6002-250-C	■			■			■		
	EXT-OP-6014-A	■	■		■		■	0...10 ppm	■	■
	EXT-OP-6014-B	■		■			■		■	■
	EXT-OP-6014-C	■					■		■	
	EXT-6002-250-14-A	■	■		■	■	■	0...250 CO, 0...10 NO <sub>2</sub>	■	■
	EXT-6002-250-14-B	■		■		■	■		■	■
	EXT-6002-250-14-C	■				■	■		■	

Additional accessories are available, i.e. communication module, replacement sensors, calibration bottles, and more.

## Gas Monitoring Devices - Indoor Air Quality


Application	Type code	Output signal				Measuring range			Communication	
		Active	1 SPDT relay	2 SPDT relay	2 analog 4...20 mA or 2...10 V	Carbon Dioxide	Relative Humidity	Measuring range	CAN bus	BACnet MS/TP
 <p>Indoor Air Quality</p>	EXT-OP-6015-2000-A	■	■		■		0...2000 ppm	■	■	
	EXT-OP-6015-2000-B	■		■	■			■	■	
	EXT-OP-6015-5000-A	■	■		■			0...5000 ppm	■	■
	EXT-OP-6015-5000-B	■		■					■	■
	EXT-OP-6015-10000C	■						0...10000 ppm	■	
	EXT-OP-6015-10000B	■		■					■	■
	EXT-OP-6025-B	■	■				■	0...100%	■	■

## Flow Sensors

Application	Type code	Output signal	Measured values	Media	Pipe size	Body pressure rating			Measurement range
		Analog (0 to 10 VDC)	Flow	Water/glycol (<60%)	Inches [mm]	360 psi	ANSI 125	ANSI 250	Max. GPM
 Pipe	FM050	■	■	■	½" [15]	■			6.6
	FM075	■	■	■	¾" [20]	■			12.4
	FM100	■	■	■	1" [25]	■			21.8
	FM125	■	■	■	1¼" [32]	■			34.2
	FM150	■	■	■	1½" [40]	■			47.5
	FM200	■	■	■	2" [50]	■			91.2
	FM250	■	■	■	2½" [65]		■		152
	FM250-250	■	■	■	2½" [65]			■	152
	FM300	■	■	■	3" [80]		■		215
	FM300-250	■	■	■	3" [80]			■	215
	FM400	■	■	■	4" [100]		■		380
	FM400-250	■	■	■	4" [100]			■	380
	FM500	■	■	■	5" [125]		■		594
	FM500-250	■	■	■	5" [125]			■	594
	FM600	■	■	■	6" [150]		■		855
	FM600-250	■	■	■	6" [150]			■	855

NOTE: Vnom accounts for 20% overflow (120% flow is the max output reading at 10V).

## Thermal Energy Meters

Application	Type code	Output signal	Measured values	Media	Pipe size	Body pressure rating	Features		Measurement range
		Analog (0...5 V) (0...10 V) (2...10 V)	Flow & Thermal Energy	Water/glycol (<60%)	Inches [mm]	360 psi	Alarm	Display	Max. GPM
 <p>Pipe</p> <p>Certification EN1434 Approval 2014/32/EU (MID)</p>	22PE-5UC	■	■	■	½" [15]	■			6.6
	22PE-5UD	■	■	■	¾" [20]	■			11.0
	22PE-5UE	■	■	■	1" [25]	■			15.4
	22PE-5UF	■	■	■	1¼" [32]	■			26.4
	22PE-5UG	■	■	■	1½" [40]	■			44.0
	22PE-5UH	■	■	■	2" [50]	■			66.0
	22PE-5UHH	■	■	■	2" [50]	■			100
	22PEM-5UC	■	■	■	½" [15]	■	■	■	6.6
	22PEM-5UD	■	■	■	¾" [20]	■	■	■	11
	22PEM-5UE	■	■	■	1" [25]	■	■	■	15.4
	22PEM-5UF	■	■	■	1¼" [32]	■	■	■	26.4
	22PEM-5UG	■	■	■	1½" [40]	■	■	■	44
	22PEM-5UH	■	■	■	2" [50]	■	■	■	66.0

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