Transmitters and Controllers

A large range of sensors needs an optimum offering of transmitters and controllers.

Our transmitters take the raw signals from the sensors and amplify or convert them into standard industrial signals or digital information while displaying the process variable as clearly as possible. Our controllers become the heart of reliable loops whether they are positioned at the sensor, in a panel, on a wall or integrated onto a control valve. Its is that flexible and that simple.

With multiple channels, relay outpus and digital communication using RS485, Profibus, and Ethernet as standard we offer solutions for all your process variables. Data logging, process tune, digital calibration, SD card interfaces and specific user friendly programming for cooling towers, boilers and reverse osmosis means we can control pumps or valves, in real time, in any application.

Each device fits inside an architecture arranged around common interfaces and communication structures which are characterized by similar menus, displays, materials and connections. You can decide when to centralize or decentralize intelligence and the interface with our valves is designed to be as simple as possible and complete PID flow loops can be made with just two components.

Simplicity and flexibility from one source.

Transmitter and Controller Range

Type 8611 eCONTROL – Single Channel Universal Controller

Thanks to its compact design, the universal 8611 controller is specially de-signed for compact control system applications. It is compatible with a wide range of proportional control valves and connects with an electro pneumatic servo-system for pneumatically actuated process control valves. The PI pro-cess controller is equipped with many additional functions. The actual process value can be supplied as one of three inputs; a standard current (4-20 mA), frequency or Pt100 signal directly to the universal controller. The process switching points can be set via a 4-20 mA signal or with the keypad.

ELEMENT Range of Process Controllers

A range of compact positioners and controllers for integrated mounting on pneumatically operated process can either control the loop or transmit pro-cess variables to centralized control. All the features of a separate controller or transmitter are ready inside the beautiful new ELEMENT design. Com-munications through 4-20mA, ASInterface or Profibus are standard allowing these unique valve mount controllers to save you time and money.

Type 8619 MultiCELL – Multi-Channel Transmitter/Controller

Bürkert's 8619 transmitter/controller is the latest addition to Bürkert's pro-cess control program. The 1/4DIN panel mounted controller incorporates a large backlit LCD display for viewing up to six possible process variables dependent on the types of connected types of sensors in a free mix of flow and analytical. Additional input and output modules can be added to further enhance the controller's capabilities with additional 4-20mA and binary in-puts and outputs. An SD card is standard for data logging and up/down load-ing of para-meterization files.

Type 8620 – mxCONTROL

Multi-parameter controller designed to automate the control of rocess varia-bles within a water treatment system (e.g. boiler, cooling tower or reverse osmosis system). Sophisticated electronics and state of the art control algo-rithms ensure that optimum process control is maintained at all times, with minimal operator intervention. It saves time and space by allowing parame-terization and data logging of a wide number of control variants via an SD card slot, USB connection or via an Ethernet interface. Up to eight functions can be performed simultaneously by utilizing up to 23 I/O points.

Transmitter and Controller Features

Type		8611	8693	8619 Panel	8619 Wallmount	8620
Mounting size		54x54x50mm1/16 DIN Cut out	90x156mm	¼ DIN Cut out	181 x 186 x 172 mm	230x204x119mm
Housing		Wall-/Rail-/Panel- and Valve mount	Top mount on process valves	Panel mount	Wall mount; pipe mount	Wall mount
Display		8-digit, 2-line with backlight	128x64 pixels, backlight	160x128 pixels 4" monochrome, backlight	160 x 128 pixels 4" monochrom, backlight	128x64mm pixels, two colored backlight
Controller type		PI, 2-P control, cascade	PID control	PID	PID	PID, cascaded, 2-Point
Power supply		24 VDC +/- 10%	24 VDC	12-36 VDC	12…36 VDC; 110…240 VAC	100..240 VAC
Controller channels		1 channel (2 for ratio control)	1 channel	max. 6 channels	max. 6 channels	8 channels
Inputs	Analog	4 (4-20mA, RTD)	Sensor (RTD, 4-20mA) Set point (0/4-20mA or 0-5/10V)	Options: Conductivity sensor pH-Sensor ORP-Sensor, PT1000 2 (4-20 mA or 0-5 V/10 V)	Options: Conductivity sensor pH-Sensor ORP-Sensor, PT1000 2 (4-20 mA oder 0-5 V/10 V)	Up to 4 (4-20mA) Up to 4 (RTD)
	Digital	1	1	2, extendable	2, extendable	Up to 4
	Frequency	2 (Flow)	1 (Flow)	2, extendable	2, extendable	Up to 4
Output	Analog	1 (4-20mA)	1 (0/4-20mA or 0-5/10V)	Standard: 2 (4-20mA), extendable	Standard: 2-mal 4–20 mA, extendable	4 (4-20mA)
	Digital	3 transistor (NPN or PNP)	2	Standard: 2 transistors, extendable	Standard: 2-mal transistors, extendable	4 transistor
	Relay					5
Interface		RS485 on request	Profibus, Devicenet			RS485, Ethernet
Remarks		Predefined Loops for Pressure, Temperature, Flow. Data for Sensor- and Solenoid control valves are memorized. Ratio Control function on request.	Process controller and positioner in combination with Bürkert process control valves.	SD-Card for data logging & configuration. Software modules for Dosing and mathematical functions, PID-control and / or concentration tables (specific measurement ranges for sulfuric acid, nitric acid, hydrochloric acid, sodium hydroxide or NaCl-Solution)	SD-Card for data logging & configuration. Software modules for Dosing and mathematical functions, PID-control and / or concentration tables (specific measurement ranges for sulfuric acid, nitric acid, hydrochloric acid, sodium hydroxide or NaCl-Solution)	Predefined Program modules for boiler water control, cooling tower control, RO-water control, Ion exchange control, conductivity and pH conrol. Configuration with Setup-program. SD-card for data logging & configuration.