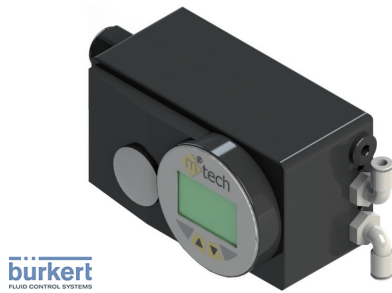


8793 Process controller

Digital electropneumatic process controller



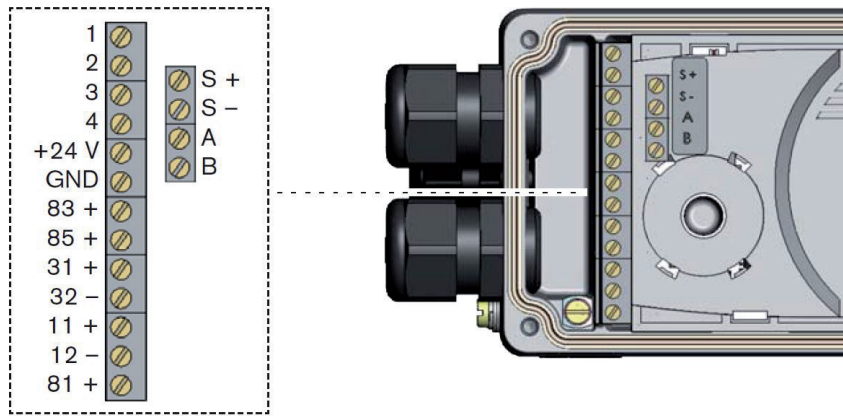
- ♦ Compact and robust design
- ♦ Easy Start-up using tune function of the positioned and process controller
- ♦ Integrated diagnostic functions for valve monitoring
- ♦ Dynamic positioning system with no air consumption in controlled state
- ♦ Optimized for high-pressure proportional valves MPG and HPG
- ♦ Version for quarter-turn actuators (NAMUR) available

The robust and compact Bürkert process controller has been tailored for m-tech proportional valves with a remote stroke sensor. The process controller is equipped with additional diagnostic functions to monitor the state of the valve. Operation is done via the external operation and display module with a backlit graphical display.

Technical data

♦ Material body	Aluminium plastic-coated
♦ Operating voltages	24 V DC +/- 10 %
♦ Residual ripple	max. 10 %
♦ Setpoint setting	0/4 bis 20 mA and 0 bis 5/10 V
♦ Input resistance	0/4 bis 20 mA: 180 Ω
	0 bis 5/10 V: 19 kΩ
♦ Analogue feedback	4-20 mA, 0-20 mA
	0-10 V, 0-5 V
♦ Binary input	galvanically isolated, 0-5 V = log „0“, 10-30 V = log „1“
♦ Pilot media	neutral gases, air DIN ISO 8573-1
Dust concentration	Class 7 (<40 µm particle size)
Particle density	Class 5 (<10 mg/m ³)
Pressure condensation point	Class 3 (<-20 °C)
Oil concentration	Class X (<25 mg/m ³)
♦ Ambient temperature	0 °C to + 60 °C
♦ Pilot air ports	Threaded ports G 1/4
♦ Supply pressure	6-7 bar
♦ Air supply filter	Exchangeable (aperture size ~ 0,1 mm)
♦ Installation	as required, display above or sideways
♦ Type of protection	IP65 and IP67 acc. to EN 60529
♦ Electrical connection	
Cable gland	2xM20x1,5 (cable Ø10 mm) on screw terminals (0,14-1,5 mm ²)
	1xM12x1,5 (cable Ø3 to 6,5 mm)
♦ Conformity	EMV directive 2004/108/EG
♦ Considered standards	CAN/CSA-C22 2 Nr. 139
	UL 429
♦ Weight	1 kg

Connection options



Terminal	Configuration	External circuitry / signal level
11+	Setpoint +	11+ — + (4-20 mA or 0... 5 / 10 V) Completely galvanically separated
12-	Setpoint GND	12- — GND
81+	Binary input +	81+ — + $\begin{cases} 0...5 \text{ V (log. 0)} \\ 10...30 \text{ V (log. 1)} \end{cases}$
+24 V	Operating voltages +	+24 V — 24 V DC \pm 10 %
GND	Operating voltages GND	GND — max. residual ripple 10 %

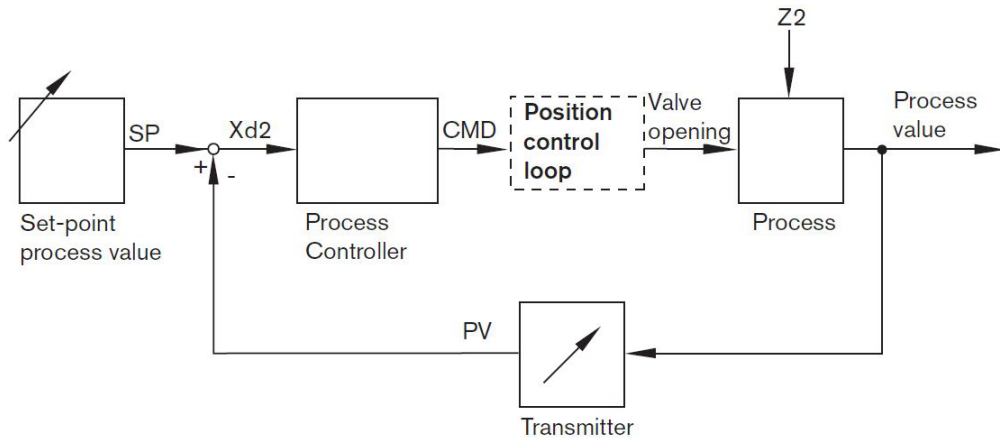
◆ Analogue feedback / binary output

Terminal	Configuration	External circuitry / signal level
83+	Binary output 1	83+ — 24 V/0 V, NC/NO Obtained at GND operating voltages (GND clamps)
85+	Binary output 2	85+ — 24 V/0 V, NC/NO Obtained at GND operating voltages (GND clamps)
31+	Analogue feedback +	31+ — + (0/4-20 mA or 0-5/10 V) Completely galvanically separated
32-	Analogue feedback GND	32- — GND

◆ Pressure transmitter type PTG, internally supplied

Terminal	Configuration	External Circuitry
1	+24V transmitter input	1 —
2	Output from transmitter	2 —
3	Bridge after GND	3 —
4	Not used	GND —

Signal flow plan



Part numbers

<ul style="list-style-type: none"> ◆ Execution DN 0,6 DN 2,0 NAMUR DN 0,6 NAMUR DN 2,0 	<ul style="list-style-type: none"> Application MPG 03 PR / HPG 12 PR MPG 12 PR / PCG-H15 PR Rack/pinion actuators (Single acting) Rack/pinion actuators (Single und double acting) 	<ul style="list-style-type: none"> ◆ Article number 04178 04176 04193 04194
<ul style="list-style-type: none"> ◆ Remote stroke sensor 	<ul style="list-style-type: none"> Cable length 5 m (Standard) 10 m, 20 m, 20 m ATEX 	<ul style="list-style-type: none"> 04161 Other length on request

Dimensions

