

Control Head for the integrated mounting on process valves, for the series 21XX

8695

- Compact stainless steel design
- Integrated analog valve position registration (Teach function)
- Coloured illuminated status display
- Internal control air routing
- Fieldbus interface AS-Interface/ DeviceNet (option)



The control head, Type 8695, is optimised for integrated mounting on the 21XX process valve series with smaller actuator sizes.

The registration of the valve position is done through a contact-free analog position sensor, which automatically recognises and saves the valve end position through the Teach function when starting up. The integrated pilot valve controls single or double-acting actuators. The design of the control unit and the actuator is specially designed for the requirements of a hygienic process environment and enables an internal control air channel without external tubings.

Besides the electrical position feedback signal the status of the device is shown directly on the control head itself through coloured LEDs showing a clear visible valve position status.

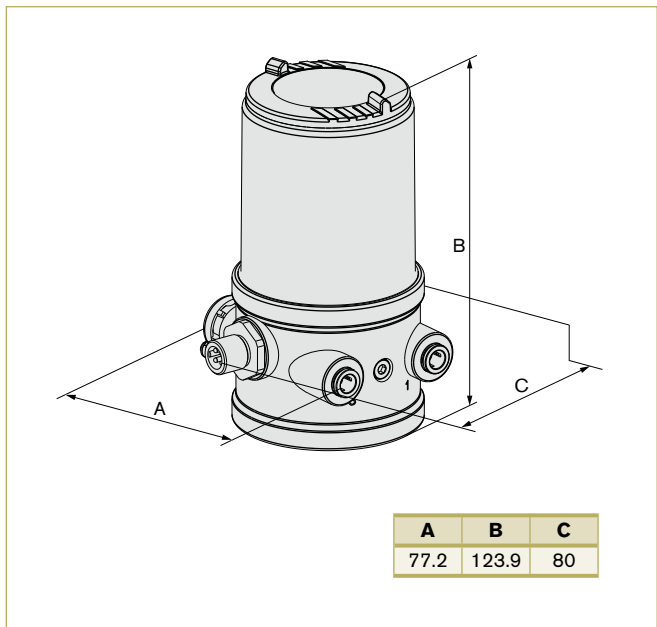
As an option a Fieldbus interface, AS-Interface or DeviceNet can be chosen.

Technical Data

Material	
Body	PPS, stainless steel
Cover	PC
Sealing	EPDM
Control medium	neutral gases, air DIN ISO 8573-1
Dust concentration	Class 5 (<40 µm particle size)
Particle density	Class 5 (<10 mg/m ³)
Pressure condensation point	Class 3 (<-20 °C)
Oil concentration	Class 5 (<25 mg/m ³)
Supply pressure	0 to 7 bar ¹⁾
Actuator system	for single or double-acting actuators
Actuator series 21XX	actuator ø 50 mm
Pilot air ports	Threaded ports G 1/8" stainless steel or Push-in connectors (Ø 6 mm and 1/4" tube)
Position feedback	Analog position sensor (contact-free) with autotune switchpoint (PNP) (NPN on request)
Stroke range valve spindle	2.5 to 32 mm
Ambient temperature	0 to +55 °C
Installation	as required, preferably with actuator in upright position
Protection class	IP65/67 according to EN 60529
Protection class	3 according to VDE 0580
Fieldbus communication	AS-Interface / DeviceNet (option)
Conformity	according to CE in compliance with EMV2004/108/EG

¹⁾ The supply pressure has to be 0.5 - 1 bar above the minimum required pilot pressure for the valve actuator.

Envelope Dimensions [mm] (see datasheet for details)



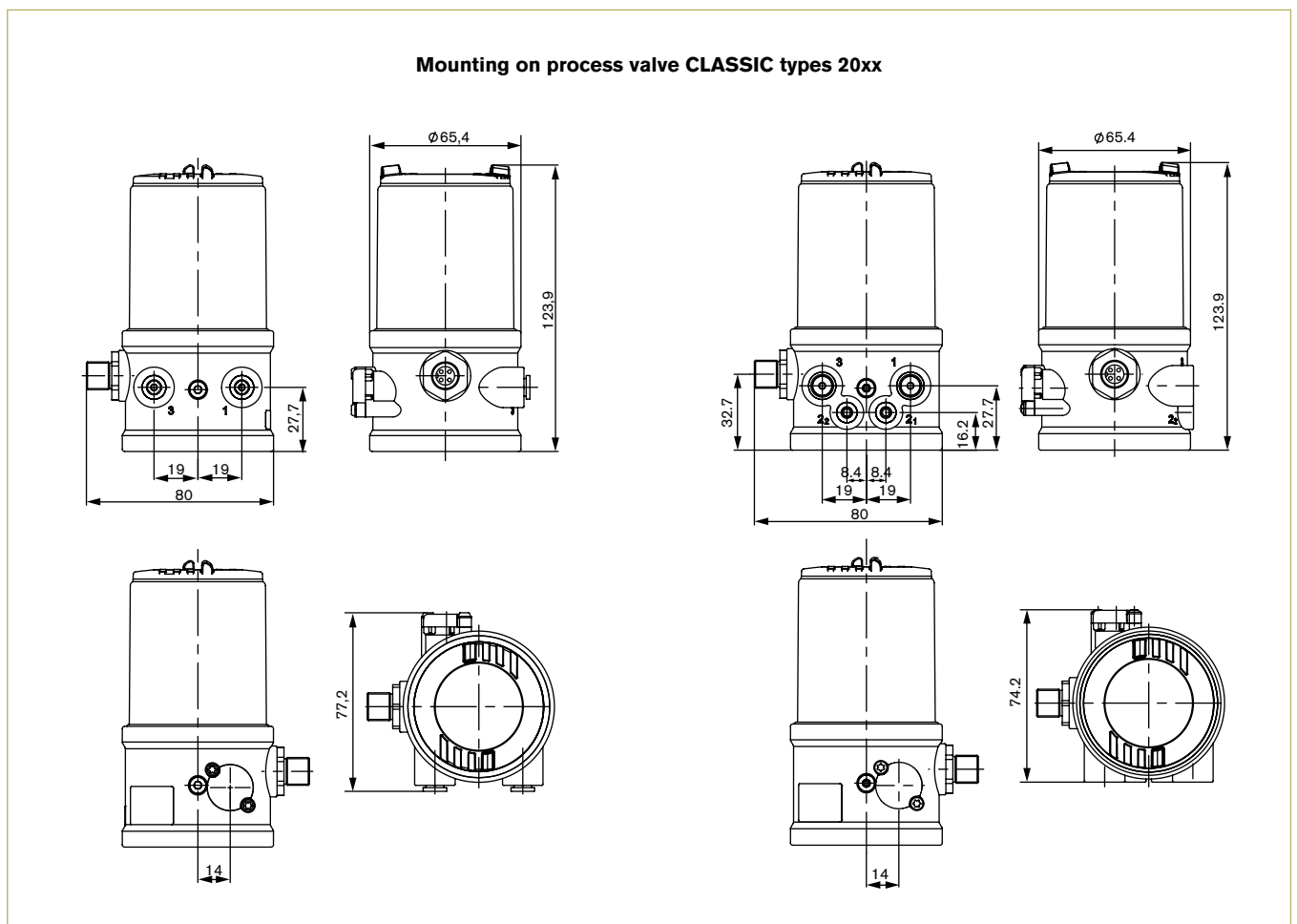
Technical Data continued

Power supply	24 VDC ±10%
Residual ripple with DC	10%
Power consumption	< 2W
Electrical connection	M12, 8-pin
Multipole	
Output	max. 100 mA per output

Technical data (cont.)

With Fieldbus communication; AS-Interface	
Profile	S-B.A.E. (A/B slave, max. 62 slaves/master) Certificate No. 87301 acc. to version 3.0
Power supply through bus line separated from bus signal	29.5 to 31.6 VDC according to specification on request
Power consumption Units without external power supply Max. power consumption Power consumption in normal operation (after current reduction; Valve + 1 end position achieved)	120 mA 90 mA
Output Contact rating Watch-dog function	≤ 1W over AS-Interface integrated
Electrical connection	M12 4-pins
Programming data	see operating instructions
With Fieldbus communication; DeviceNet	
Profile	Group 2 Only Slave Device; MAC-ID and transfer rate adjustable through DIP-switch
Power supply	11 to 25 VDC
Power consumption	≤ 80 mA
Output Inrush current Hold current	≤ 50 mA ≤ 30 mA
Input "0" "1"	0 to 1.5 V ≥ 8 V
Electrical connection	M12-Micro Style - flange connector 5-pins (configuration according DeviceNet-specification)

Dimensions [mm]



Ordering Chart

8695

Communication	Control function pilot valve system	Pilot air ports	Position feedback	Item no.	
				Actuator series ELEMENT types 21xx	Actuator series CLASSIC types 20xx
AS-Interface S-B.A.E	Single acting (NO/NC)	threaded ports G 1/8"	2 switching points	227 444	223 896
	Single acting (NO/NC)	Push-in Ø 6 mm or 1/4"	2 switching points	227 445	–
	Double acting (springless)	threaded ports G 1/8"	2 switching points	227 440	223 906
	Double acting (springless)	Push-in Ø 6 mm or 1/4"	2 switching points	227 441	–
DeviceNet	Single acting (NO/NC)	threaded ports G 1/8"	2 switching points	238 724	238 726
	Single acting (NO/NC)	Push-in Ø 6 mm or 1/4"	2 switching points	238 723	–
	Double acting (springless)	threaded ports G 1/8"	2 switching points	*	238 727
	Double acting (springless)	Push-in Ø 6 mm or 1/4"	2 switching points	*	–
Without	Single acting (NO/NC)	threaded ports G 1/8"	2 switching points	227 446	223 895
	Single acting (NO/NC)	Push-in Ø 6 mm or 1/4"	2 switching points	227 447	–
	Double acting (springless)	threaded ports G 1/8"	2 switching points	227 442	223 905
	Double acting (springless)	Push-in Ø 6 mm or 1/4"	2 switching points	227 443	–
	without	threaded ports G 1/8"	2 switching points	234 246	*
		Push-in Ø 6 mm or 1/4"	2 switching points	248 993	*

* on request

Accessories

Specifications	Actuator size [mm]	Control function	Item no.
Adapter kit ELEMENT types 21xx	Ø 50	universal	679 918
Adapter kit CLASSIC types 20xx	Ø 40	universal	683 057
Adapter kit CLASSIC types 20xx	Ø 50	universal	683 058
Globe and angle seat valves 2000 / 2012			
Diaphragm valve 2030 / 2031			
Adapter kit CLASSIC types 20xx	Ø 63 1)	universal	on request

For installation kits to 3rd party process valves please see datasheet installation kits for hygienic process valves or contact your sales office for related drawings or individual engineering support

1) When combining actuator size Ø 63 mm with 8695 CLASSIC reduced switching dynamics should be expected. Please choose Type 8691 for shorter response times.

Specifications	Item no.
M12 socket, 8-pins, 2 m assembled cable	919 061
M12 socket, 8-pins, 5 m assembled cable	919 267
M12 socket, 4-pins, 5 m assembled cable	918 038
M12 socket, 5-pins, 2 m assembled cable	438 680
Silencer with G 1/8"	780 779
Silencer with push-in connector	902 662
Sensor puck (spare part)	677 245

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