

## 2006 3/2-way stainless steel



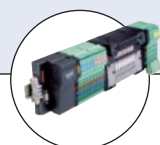
## Pneumatically operated 3 way seat valve CLASSIC

- For mixing or distributing mediums
- Controlled by a pilot valve or centrally by a valve island
- Flow optimized body in stainless steel or brass/ stainless steel
- Long service life and maintenance-free operation

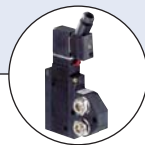
Type 2002 can be combined with...



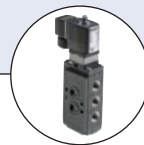
**Type 6012/6014 P**  
Pilot valve



**Type 8640/8644**  
Valve block



**Type 5470**  
Solenoid valve



**Type 6519 NAMUR**



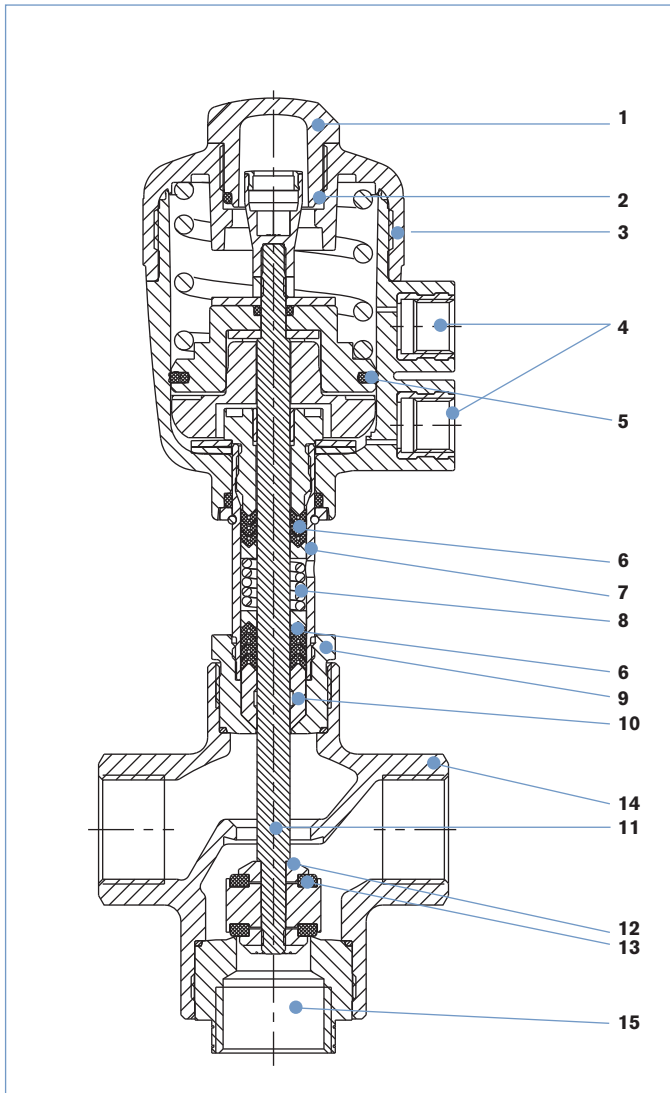
**Type 8697**  
Feedback unit



The Bürkert 3 way seat valve, Type 2006, consists of a pneumatically operated CLASSIC actuator and a 3 way valve body. The actuator is available in two different materials, PA or PPS, depending on the ambient temperature. Available materials for the valve body include stainless steel and a brass/stainless steel variant. Interchanging of pressure and service ports enables different fluidic circuit functions, such as the mixing or distributing of mediums. The flow-optimized valve body of Type 2006 allows excellent flow rates. The tried and tested self-adjusting gland secures a high level of tightness and thus ensures reliable operation over years. The 3 way valve Type 2006 is controlled by a pilot valve, or by centralized automation using a valve island. It can be equipped easily with an electrical position indicator. For the user, the compact Type 2006 is thus often an economic alternative instead of two single shut-off valves.

Technical data	
<b>Orifice</b>	DN 15 - 50
<b>Body materials</b>	Stainless steel 316L
<b>Nominal pressure</b>	PN16 (body)
<b>Actuator material</b>	PA (PPS on request)
<b>Seal material</b>	PTFE
<b>Media</b>	Water, alcohol, oils, fuels, hydraulic fluid, alkaline solutions, salt solution, organic solutions, hot water, steam
<b>Viscosity</b>	Max. 600 mm <sup>2</sup> /s
<b>Packing gland (with silicone grease)</b>	PTFE V-rings with spring compensation
<b>Media temperature</b>	-10 to +180°C
<b>Ambient temperature</b>	
<b>PA actuator</b>	-10 to +60°C
<b>PPS actuator</b>	
Actuator sizes Ø 50-80	+5 to +140°C
Actuator sizes Ø 125	+5 to +90°C, (up to 140°C for a short period)
<b>Installation</b>	As required, preferably with actuator in upright position
<b>Control medium</b>	Neutral gases, air
<b>Max. pilot pressure</b>	10 bar 7 bar with actuator Ø 125
<b>Port connections</b>	G thread acc. to EN ISO 228-1 NPT thread acc. to ANSI B 1.20.1 (RC thread on request)
<b>Approval and Conformity</b>	EGV 1935/2004 (optional) FDA (optional)

Materials



Description	Material
1 Transparent cap	Polycarbonate (PC) (with PPS - actuator PSU)
2 O-Ring	FKM
3 Actuator	Polyamide (PPS)
4 Pilot air ports G 1/4	Stainless steel 1.4305
5 Cylinder seal	NBR (with PPS - actuator FKM)
6 Spindle seal	PTFE
7 Tube <sup>2)</sup>	Stainless steel 1.4401 / 316 Stainless steel 1.4404 / 316L <sup>3)</sup>
8 Tension spring	Stainless steel 1.4310
9 Nipple <sup>2)</sup>	Stainless steel 1.4401 / 316 Stainless steel 1.4404 / 316L <sup>3)</sup>
10 Wiper	PTFE PEEK <sup>1)</sup>
11 Spindle	Stainless steel 1.4404 / 316L
12 Plug	Stainless steel 1.4404 / 316L
13 Seals	PTFE
14 Valve body	Stainless steel 1.4404 / 316L
15 Seat nipple	Stainless steel 1.4404 / 316L

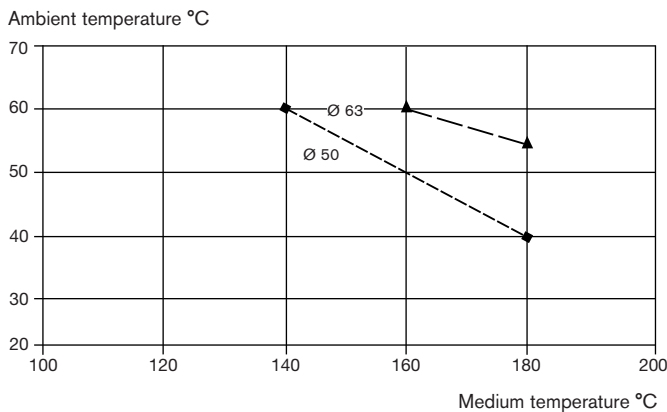
<sup>1)</sup> For actuator size 125 mm

<sup>2)</sup> One-piece with the drive sizes 63 mm to 125 mm

<sup>3)</sup> For actuator sizes 63 mm to 125 mm

Temperature chart

■ **Note:** For PA actuators in the sizes 50 and 63, the combination of max. media temperature and max. ambient temperature is as shown in the following chart:

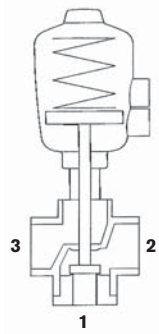


Connections for fluidic circuit functions C, D, E and F

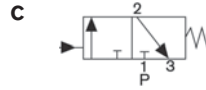
Actuator with control function A

When de-energised port connection 1 is closed with spring

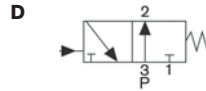
Fluidic circuit function	Connection - port		
	1	2	3
C	P	A	R
D	R	A	P
E	P1	A	P2
F	A	P	B



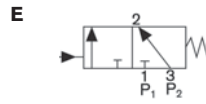
A, B service ports  
P, P1, P2 pressure ports  
R exhaust port



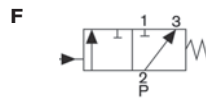
When de-energised, pressure port 1 closed, service port 2 exhausted



When de-energised, pressure port 3 connected to service port 2, exhaust port 1 closed

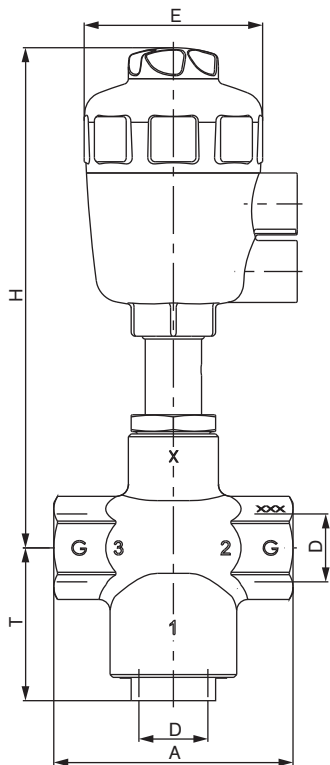


Mixer valve  
When de-energised, pressure port 3 connected to service port 2, pressure port 1 closed



Distributor valve  
When de-energised, pressure port 2 connected to service port 3, service port 1 closed

Dimensions [mm]



Orifice	Actuator size Ø	Port connection D	A	E	H	T	
15	50	G 1/2	85	64	178	54	
	63			80			220
20	50	G 3/4	85	64	178	54	
	63			80			220
25	63	G 1	105	80	220	54	
32	80	G 1 1/4	130	101	249	68	
	125			158			345
40	63	G 1 1/2	130	80	226	68	
	80			101			249
	125			158			345
50	125	G 2	150	158	352	72	

Ordering chart for valves with port 1 closed by spring action (other versions on request)

Threaded connection acc. to EN ISO 228-1

Control function	Port connection	Orifice [mm]	Actuator size Ø [mm]	Kv value water [m³/h]		Min. pilot pressure [bar]	Max. operating pressure to 180°C [bar]		Weight [kg]	Item no. PA actuator	Item no. PPS actuator
				1 → 2	2 → 3		1 → 2	2 → 3 2 → 1			
A 3/2 way, normally closed (NC) (port 1)	G 1/2	15	50	7	4.5	4.4	11	16	1.3	287 191	287 202
			63	8	4.5	4.7	16	16	1.6	287 192	287 203
	G 3/4	20	50	9	6.2	4.4	11	16	1.3	287 193	287 204
			63	11	5.6	4.7	16	16	1.6	287 194	287 205
	G 1	25	63	17	11	4.9	10	16	2.1	287 195	287 206
			80	32	21	6.0	9	16	4.3	287 196	287 207
	G 1 1/4	32	125	35	24	3.4	14	16	8.1	287 197	287 208
			80	35	24	6.0	9	16	4.3	287 199	287 210
	G 1 1/2	40	125	35	24	3.4	14	16	8.1	287 200	287 211
			50	51	35	4.3	10	16	9.5	287 201	287 212

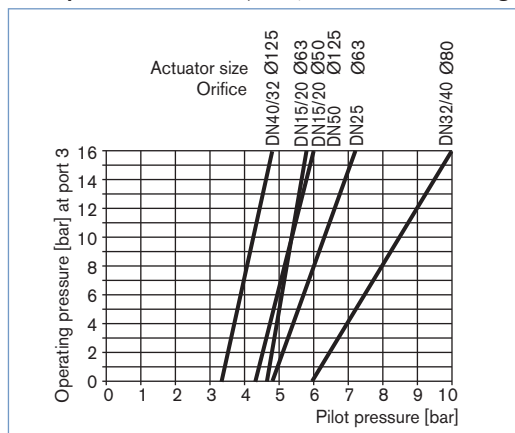
Threaded connection with NPT thread acc. to ANSI B 1.20.1

Control function	Port connection	Orifice [mm]	Actuator size Ø [mm]	Kv value water [m³/h]		Min. pilot pressure [bar]	Max. operating pressure to 180°C [bar]		Weight [kg]	Item no. PA actuator	Item no. PPS actuator
				1 → 2	2 → 3		1 → 2	2 → 3 2 → 1			
A 3/2 way, normally closed (NC) (port 1)	NPT 1/2	15	50	7	4.5	4.4	11	16	1.3	292 542	292 553
			63	8	4.5	4.7	16	16	1.6	292 543	292 554
	NPT 3/4	20	50	9	6.2	4.4	11	16	1.3	292 544	292 555
			63	11	5.6	4.7	16	16	1.6	292 545	292 556
	NPT 1	25	63	17	11	4.9	10	16	2.1	292 546	292 557
			80	32	21	6.0	9	16	4.3	292 547	292 558
	NPT 1 1/4	32	125	35	24	3.4	14	16	8.1	292 548	292 559
			80	35	24	6.0	9	16	4.3	292 550	292 560
	NPT 1 1/2	40	125	35	24	3.4	14	16	8.1	292 551	292 561
			50	51	35	4.3	10	16	9.5	292 552	292 562

**i** Further versions on request

 Port connection  
RC thread

Pilot pressure chart (CFA, flow direction 3 g 2)



## Ordering chart for accessories

### 3/2 way pilot valves with banjo bolts

Seal material valve FKM, seal material banjo bolt NBR

Valve for actuator size [Ø mm]	Type	Pressure inlet P (valve body)	Service port A (banjo bolt)	Orifice [mm]	Q <sub>Nn</sub> value air [l/min]	Pressure range [bar]	Electrical coil connection Ind. Std.	Power consumption [W]	Item no. Voltage/frequency [V/Hz]	
									024/DC	230/50
50-63	6012P	Tube fitting ø6 mm	G 1/4	1.2	48	0-10	Form B	4	552 283	552 286
50-125	6014P	G 1/4	G 1/4	2	120	0-10	Form A	8	424 103	424 107

### Cable plug Type 2507, Form B or Type 2508, Form A

	Item no.
Type 2507, Form B Industrial standard, 0 to 250 V without circuitry (Type 6012 P)	423 845
Type 2508, Form A acc. DIN EN 175301-803, 0 to 250 V without circuitry (Type 6014 P, Type 0331P)	008 376

For further accessories see the accessories datasheet Type 2XXX for the full options programme.

## Type 8697 Pneumatic feedback unit

End position feedback											
Inductive Switch 3-wire PNP	Inductive Switch 2-wire NAMUR	Inductive Switch 2-wire 24V DC	Micro Switch 24V DC	Micro Switch 50-250V AC/DC	Feedback status LEDs	Electrical connection	ATEX / IECEX Cat. 3D/G Zone 22/2 <sup>2)</sup>	ATEX / IECEX Cat. 2D/G Zone 21/1 <sup>3)</sup>	ATEX / IECEX Cat. 2G Zone 1 <sup>4)</sup>	cULus	Item no. Actuator series CLASSIC Types 20XX
Feedback (without pilot valve)											
2					yes	Cable gland				yes	248 827
2					yes	Cable gland	yes				255 851
2					yes	M12 connector	yes				255 858
2					yes	M12 connector				yes	250 472
	2				yes	Cable gland		yes			248 831
	2				yes	Cable gland			yes		255 863
		2			yes	Cable gland				yes	248 826
		2			yes	Cable gland	yes				255 850
			2			Cable gland				yes	248 833
				2		Cable gland				yes	248 825

**Note:** cULus only valid for versions without ATEX approval

<sup>2)</sup> II 3D Ex tc IIIC T135 / II 3G Ex nA IIC T4 Gc

<sup>3)</sup> II 2D Ex ia IIIC T135°C IP64 / II 2G Ex ia IIC T4 Gb

<sup>4)</sup> II 2G Ex ia IIC T4 Gb

### Adapter kit

Description	Actuator size	Control function	Item no.
Feedback	Ø50/63/80 mm	universal	682 264
Feedback	Ø125 mm	universal	682 265

Weitere Informationen siehe Datenblatt Typ 8697

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In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.

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