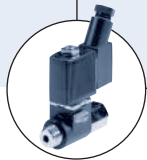




Type 2034 can be combined with...



Type 6012

Solenoid
banjo valve



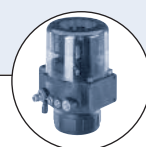
Stroke limitation

Min./max. stroke
limitation



Type 1062

Electrical position
feedback



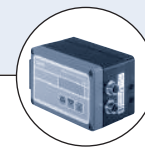
Type 8631

TopControl On/Off



Type 8630

Positioner Top-
Control continuous



Type 1067

SideControl
Positioner

Tandem valve, welded valve configuration

- Fully integrated in Bürkert's Process Control Systems
- Quality certifications 

The Bürkert welded valve configurations for SAP (sterile access port) and GMP (good manufacturing practice) are designed for the control of ultrapure, sterile, aggressive or abrasive fluids. The configurations are made from two separate forged valve bodies and fall into industry standard patterns. They are welded to be fully drainable and can be operated by either a pneumatic actuator or a manual handwheel.


The user can choose the required configuration in two separated specification keys. The first details the geometry, body and diaphragm materials while the second specifies body sizes, end connections, operator and surface finishes.

Available accessories include Positioner/PID controllers, stroke limiters, electrical feedback, three-position actuators or pneumatic pilot valves.

Technical data	
Orifice	DN 8-100
Body materials	Forged stainless steel 316 L/1.4435 / BN2 Fe < 0.5% / C ≤ 0.03%
Actuator materials	
Pneumatic	PPS, stainless steel
Manual	
Handwheel and bonnet DN 8-50	PPS, stainless steel
Handwheel and bonnet DN 65-100	Grey cast iron, white epoxy coated
Pilot air ports	Stainless steel 1.4305
Diaphragm material	EPDM, PTFE/EPDM (FKM on request)
Media	Neutral gases and liquids, high-purity, sterile, aggressive or abrasive fluids
Viscosity	up to viscous
Surface finish	(Average surface finish)
internal mechanical polished	Ra ≤ 0.5 µm
internal electro polished	Ra ≤ 0.4 µm
internal mirror finished (other see specification key 2 on p. 9)	Ra ≤ 0.25 µm
Media temperature	
EPDM	-10 to +130 °C Briefly up to +150°C for steam sterilisation
PTFE/EPDM	-10 to +130°C
Ambient temperature	
Actuator size < 100mm	+5 to +140°C
Actuator size 100-125mm	+5 to +90°C / Briefly up to +140°C
Actuator size ≥ 175mm	-10 to +50°C
Control media	Neutral gases; air
Pilot pressure max.	max. 7 bar, see table on p.2
Port connections	
Weld end acc. to	▪ EN ISO 1127/ISO 4200 ▪ DIN 11850 Serie 2 ▪ SMS 3008 ▪ ASME BPE ▪ BS 4825
Clamp acc. to	▪ ISO 2852 ▪ DIN 32676 ▪ ASME BPE
Sterile threaded ends	on request
Installation	As required, preferably with actuator in upright position


Technical data, continued

Pneumatic valve



	Port connection		Kv-value water [m ³ /h]	Actuator size Ø [mm]	Pilot pressure [bar]		Max. operating pressure for seal material [bar]		Weight [kg]
	[mm]	[inch]			min.	max.	EPDM	PTFE/EPDM	
8		1/4"	1.0	40	5.0	7	10	10	0.4
10		3/8"	1.0	40	5.0	7	10	10	0.4
15		1/2"	4.0	50	5.0	7	8.5	5	0.7
			4.5	63	5.0	7	10	10	0.9
20		3/4"	7.0	63	5.5	7	10	5	1.3
			7.5	80	5.0	7	10	10	2.0
25		1"	12.0	63	5.0	7	3	–	1.6
				80	5.5	7	10	7.5	2.2
32		1 1/4"	30.0	100	5.5	7	6.5	6	4.2
			30.5	125	5.5	7	10	10	5.7
40		1 1/2"	30.0	100	5.5	7	6.5	6	4.2
			30.5	125	5.5	7	10	10	5.7
50		2"	51.5	100	5.5	7	4.5	2.5	5.9
				125	5.5	7	8	7	7.6
65		2 1/2"	160.0	125	5.5	7	8	7	7.6
				225	5.0	6	10	10	26.0
80		3"	160.0	225	5.0	6	10	10	26.0
100		4"	235.0	225	5.0	6	8	4	38.0

Manual valve



	Port connection		Kv-value water [m ³ /h]	Max. operating pressure [bar]	Weight [kg]	
	[mm]	[inch]			Handwheel PPS / bonnet stainless steel	Handwheel and bonnet PPS
8		1/4"	1.0	10	0.3	0.4
10		3/8"	1.0	10	0.3	0.4
15		1/2"	6.0	10	0.6	0.7
20		3/4"	11.0	10	0.9	1.0
25		1"	16.0	10	1.6	1.8
32		1 1/4"	29.0	10	3.1	3.4
40		1 1/2"	29.0	10	3.1	3.4
50		2"	50.0	7	3.7	4.2
65		2 1/2"	160.0 ¹⁾	5	–	18.5 ²⁾
80		3"	160.0	5	–	18.5 ²⁾
100		4"	235.0	5	–	30.0 ²⁾

1) For ASME BPE and SMS versions 54 m³/h

2) Bonnet and handwheel grey cast iron, white epoxy coated

Flow rate: Kv-value water (m³/h)


Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

Pressure values (bar)

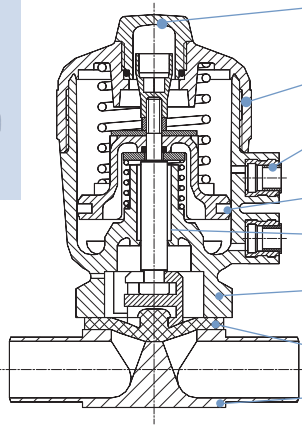
Gauge pressures with respect to the prevailing atmospheric pressure.

Materials

Pneumatic valve

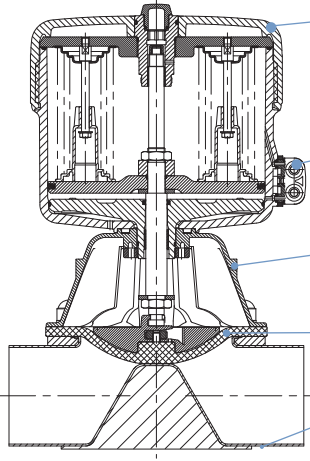


DN 8-50




- Polysulfon (PSU)
- PPS (PA polyamide on request)
- Pilot air ports, stainless steel 1.4305
- FKM
- Sinter metal guide
- PPS (PA polyamide on request)
- EPDM or PTFE/EPDM
- Forged stainless steel 316L/1.4435/BN2

DN 65-100



- PA polyamide
- Pilot air ports, stainless steel 1.4305
- Stainless steel 1.4308
- EPDM or PTFE/EPDM
- Forged stainless steel 316L/1.4435/BN2

Manual valve



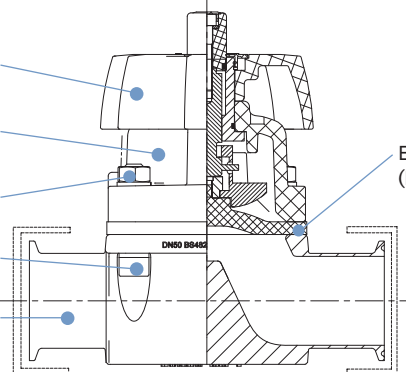
DN 8-50: PPS or stainless steel 316L
 DN 65-100: Grey cast iron, white epoxy coated

DN 8-50: PPS or stainless steel 316L
 DN 65-100: Grey cast iron, white epoxy coated

Stainless steel 316L

Stainless steel 316L

Stainless steel/316L/1.4435/
 BN2 Fe < 0.5%



EPDM or PTFE/EPDM (FKM on request)

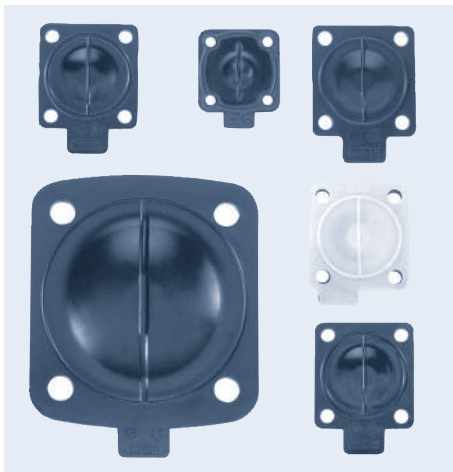
Approvals/certifications

- Certification of Conformity for Raw Material EN-ISO 10204 3.1
- Attestation of compliance with the order EN-ISO 10204 2.1
- Test report EN-ISO 10204 2.2
- 3A Certification on request
- Certification of Conformity for Pickling and Electropolishing Processes
- Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1
- Attestation of compliance with FDA CFR No. 21.177.1550 for PTFE/EPDM and TFM/EPDM and 21.177.2600 for EPDM
- USP CLASS VI certification for EPDM and PTFE diaphragm
- Test Certification and Conformity Certification for the Final Assembly of Diaphragm Valves
- ISO 9001 Certification

Note: Retrospective manufacturing certification for process diaphragm valves can not be made, therefore please notify when ordering.

Example of available diaphragm materials

Developed to handle the unique challenges of hygienic and sterile applications, Bürkert offers diaphragms with precise material formula and physical tolerances. Bürkert diaphragms are available in a wide range of materials which have been proven in food & beverage, biotechnology, pharmaceutical and cosmetic industry applications. Diaphragms are tested during development and production to ensure reliability in critical processing environments.



- EPDM (Ethylene Propylene Rubber)
- PTFE/EPDM
- TFM/EPDM
- FKM
- PTFE/FKM
- NBR

Note
You can fill out the fields directly in the PDF file before printing out the form.

Diaphragm valves – request for quotation

▶ Please fill out and send to your nearest Bürkert facility* with your inquiry or order

Company	Contact person
Customer no.	Department
Address	Tel./Fax
Postcode/town	E-Mail

= mandatory fields to fill out Quantity Required delivery date

Operating data

<input type="checkbox"/> Process medium	<input type="text"/>	
<input type="checkbox"/> Type of media	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam <input type="checkbox"/> Gas
<input type="checkbox"/> Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/> nominal	<input type="text"/> unit
<input type="checkbox"/> Temperature at valve inlet	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Absolute pressure at valve inlet	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Absolute pressure at valve outlet	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Steam pressure P _v	<input type="text"/>	<input type="text"/>

¹⁾ standard unit:
Liquid Q = m³/h;
Steam W = kg/h;
Gas Q_N = Nm³/h

Valve features

Specification key 1 2034

(automatically transferred from p. 7)

Specification key 2 2034 +

(automatically transferred from p. 9)

Accessories

Click on the orange box "More info." below... you will come to our website for the resp. product where you can download the datasheet.

Pilot valve More info.	Stroke limitation More info.	Electrical position feedback More info.
<input type="checkbox"/> Type 6012	<input type="checkbox"/> Stroke limitation	<input type="checkbox"/> Type 1062
Power supply <input type="text"/>	<input type="checkbox"/> Min./max. stroke limitation, with visual position indicator <input type="checkbox"/> Max. stroke limitation, without visual position indicator	Limit switches <input type="checkbox"/> mechanical <input type="checkbox"/> Voltage 12-48 V <input type="checkbox"/> Voltage 110-250 V <input type="checkbox"/> inductive <input type="checkbox"/> NAMUR EExi
Please specify item no. if known: <input type="text"/>	Please specify item no. if known: <input type="text"/>	Status <input type="checkbox"/> closed <input type="checkbox"/> open <input type="checkbox"/> open/closed Please specify item no. if known: <input type="text"/>
Main valve <input type="checkbox"/> Sampling valve <input type="checkbox"/>	Main valve <input type="checkbox"/> Sampling valve <input type="checkbox"/>	Main valve <input type="checkbox"/> Sampling valve <input type="checkbox"/>

continued on next page →

Diaphragm valves – request for quotation, *continued*

Accessories		
Click on the orange box "More info." below... you will come to our website for the resp. product where you can download the datasheet.		
Control Head		
<div style="float: right; text-align: center; margin-right: 20px;"> <div style="background-color: #e69d00; color: white; padding: 5px; transform: rotate(-15deg); display: inline-block;">More info.</div> </div> <input type="checkbox"/> Type 8631		
Control <input type="checkbox"/> 24 V DCI <input type="checkbox"/> ASI-Bus <input type="checkbox"/> DeviceNet <input type="checkbox"/> Ex-version	Feedback <input type="checkbox"/> mechanical limit switches <input type="checkbox"/> inductive proximity switches	Electrical connection <input type="checkbox"/> Cable connector <input type="checkbox"/> Multipol circular connector
Please specify item no. if known: <input style="width: 150px;" type="text"/>		
Main valve <input type="checkbox"/> Sampling valve <input type="checkbox"/>		
Certifications		
<input type="checkbox"/> Attestation of compliance with the order EN-ISO 10204 2.1 <input type="checkbox"/> Certification of Conformity for Pickling and Electropolishing Processes <input type="checkbox"/> Test report EN-ISO 10204 2.2 <input type="checkbox"/> FDA and USP compliance <input type="checkbox"/> Certification of Conformity for Raw Material EN-ISO 10204 3.1 <input type="checkbox"/> 3A certificate <input type="checkbox"/> Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1		
Comment / sketch		
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>		

Valve features, specification key 1

Example

W 2 3 K P VS EA GMP8

Specification key

Please make a choice

PRODUCTION OF BODY	
B	Monoblock
<i>standard</i> W	Welded

AMOUNT OF VALVES	
2	Seats

NUMBER OF PORTS	
3	Connections

ACTUATOR VERSION	
K	Conventional actuator

OPERATION	
P	Pneumatic
M	Manual
X	Combination of manual and pneumatic

BODY MATERIAL	
VS	Forged
<i>only block</i> VH	1.4435/AISI 316L
<i>only block</i> VI	1.4435BN2/ASME BPE

CONFIGURATION

SAP1	see next page for further info go to page
SAP2	
SAP3	
SAP4	
SAP5	
SAP6	
SAP7	
SAP8	
SAPA	
SAPB	
SAPC	
SAPD	
GMP1	
GMP2	
GMP3	
GMP4	
GMP5	
GMP6	
GMP7	
GMP8	
GMPA	
GMPB	

DIAPHRAGM MATERIAL

AB	EPDM in food quality
EA	PTFE
FF	FKM
EU	TFM



Configuration options



For SAP (sterile access port)

SAP1	SAP2	SAP3	SAP4	SAP5	SAP6

SAP7	SAP8	SAPA	SAPB	SAPC	SAPD

For GMP (good manufacturing practice)

GMP1	GMP2	GMP3	GMP4	GMP5	GMP6

GMP7	GMP8	GMPA	GMPB

Valve features, specification key 2

Example

40 D051 HW 8 D051 HW SA47 SA47 SA42 NO19 + NO14

Specification key

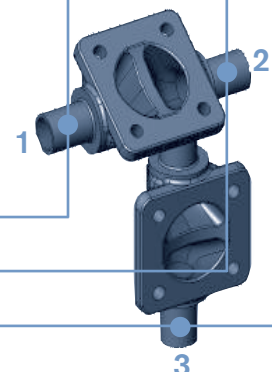
Please make a choice

MAIN VALVE			
Orifice [mm]	Actuator version		Actuator size
	Pneumatic		
8	A	normally closed by spring action	C Ø 40 mm
	B	normally open by spring action	D Ø 50 mm
	I	double acting	E Ø 63 mm
15	Manual		F Ø 80 mm
	D050	Handwheel PPS / bonnet PPS	G Ø 100 mm
20	D051	Handwheel PPS / bonnet stainless steel	H Ø 125 mm
	D052	Handwheel stainless steel / bonnet stainless steel	K Ø 175 mm
25	D058	Handwheel PPS / bonnet stainless steel with hole for bolts	L Ø 225 mm
			Manual
40			HW Handwheel

VARIABLE CODES	
Surface finish, external	
NO03	Ext. Mirror finished Ra=0.25 µm
NO09	Ext. Electro polished Ra=3.2µm
NO15	Ext. Electro polished Ra=0.8µm
NO19	Ext. Mech. polished Ra=1.6µm
NO22	Ext. Glassbeaded Ra=3.2 µm <i>only block</i>
Surface finish, internal	
NO07	Int. Mirror finished Ra=0.25 µm
NO14	Int. Satin finished Ra=0.5µm <i>standard</i>
NO17	Int. Electro finished Ra=0.4µm
NO20	Int. Electro polished Ra=0.25µm

SAMPLING VALVE			
Orifice [mm]	Actuator version		Actuator size
	Pneumatic		
8	A	normally closed by spring action	C Ø 40 mm
	B	normally open by spring action	D Ø 50 mm
	I	double acting	E Ø 63 mm
15	Manual		F Ø 80 mm
	D050	Handwheel PPS / bonnet PPS	G Ø 100 mm
20	D051	Handwheel PPS / bonnet stainless steel	H Ø 125 mm
	D052	Handwheel stainless steel / bonnet stainless steel	K Ø 175 mm
25	D058	Handwheel PPS / bonnet stainless steel with hole for bolts	L Ø 225 mm
			Manual
40			HW Handwheel

PORT CONNECTIONS



Port connection 1 main valve

Port connection 2 main valve

Port connection 3 sampling valve

Port connection weld end

Orifice DN [mm]	EN ISO 1127/ ISO 4200	SMS 3008	DIN 11850 Series 0	Series 1	Series 2	Series 3	BS 4825	ASME BPE	JIS Sanitary	JIS Utility
4			SC40=6x1.0							
6			SC41=8x1.0							
8	SA40=13.5x1.6		SC42=10x1.0				SODB=6.35x1.2	SA90=6.35x0.89	SA70=13.8x1.65	
10	SA41=17.2x1.6			SF40=12x1.0	SD40=13x1.5	SE40=14x20.0	SODC=9.53x1.2	SA91=9.53x0.89	SA71=17.3x1.65	
15	SA42=21.3x1.6		SC43=18x1.5	SF41=18x1.0	SD42=19x1.5	SE42=20x2.0	SODD=12.7x1.2	SA92=12.7x1.65	SA72=21.7x2.1	
20	SA43=26.9x1.6		SC44=22x1.5	SF42=22x1.0	SD43=23x1.5	SE43=24x2.0	SODE=19.05x1.2	SA93=19.05x1.65	SA76=27.2x2.1	SA80=27.2x2.1
25	SA44=33.7x2.0	SA60=25.0x1.2	SC45=28x1.5	SF43=28x1.0	SD44=29x1.5	SE44=30x2.0		SODF=25.4x1.65	SA73=25.4x1.2	SA81=34x2.0
32	SA45=42.4x2.0		SC46=34x1.5	SF44=34x1.0	SD45=35x1.5	SE45=36x2.0				SA82=42.7x2.0
40	SA46=48.3x2.0	SA62=38.0x1.2	SC47=40x1.5	SF45=40x1.0	SD46=41x1.5	SE46=42x2.0		SODH=38.1x1.65	SA74=38.1x1.2	SA83=48.6x2.0
50	SA47=60.3x2.0	SA63=51.0x1.2	SC48=52x1.5	SF46=52x1.0	SD47=53x1.5	SE47=54x2.0		SODI=50.8x1.65	SA75=50.8x1.5	SA84=60.5x2.0
65	SA48=76.1x2.0	SA64=63.5x1.6			SD48=70x2.0			SODJ=63.5x1.65		
80	SA49=88.9x2.3	SA65=76.1x1.6			SD49=85x2.0			SODK=76.2x1.65		
100	SA39=114.3x2.3	SA66=101.6x2.0			SD50=104x2.0			SODL=101.6x2.11		

Port connection Clamp

Orifice DN [mm]	ISO 2852 / SMS 3017	ASME BPE	DIN 32676
8	TC51=Clamp 34 - for tube ISO 4200	TG50=Clamp 25 - Tube 6.35x0.89	
10	TC41=Clamp 34 - for tube ISO 4200	TG01=Clamp 25 - Tube 9.53x0.89	TD41=Clamp 34 - Tube 13x1.5
15	TC42=Clamp 34 - for tube ISO 4200	TG02=Clamp 25 - Tube 12.7x1.65	TD42=Clamp 34 - Tube 19x1.5
20	TC43=Clamp 50.5 - for tube ISO 4200	TG03=Clamp 25 - Tube 19.05x1.65	TD43=Clamp 34 - Tube 23x1.5
25	TC44=Clamp 50.5 - for tube ISO 4200	TG04=Clamp 50.5 - Tube 25.4x1.65	TD44=Clamp 50.5 - Tube 29x1.5
40	TC46=Clamp 64 - for tube ISO 4200	TG05=Clamp 50.5 - Tube 38.1x1.65	TD46=Clamp 50.5 - Tube 41x1.5
50	TC47=Clamp 77.5 - for tube ISO 4200	TG06=Clamp 64 - Tube 50.8x1.65	TD47=Clamp 64 - Tube 53x1.5

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

We reserve the right to make technical changes without notice.
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