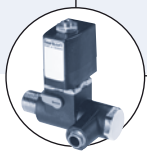


2/2-way Angle-Seat Valve with weld end connection, DN 15-65



- High flow rate and long life cycle
- For hygienic connections with weld end bodies
- NC and NO universal actuators with modular universal accessory program up to control heads

Type 2000 can be combined with...



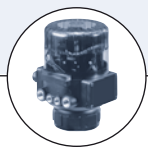
Type 6012/6014 P

Pilot valve



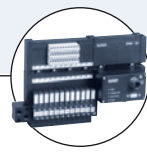
Type 1062

Electrical position feedback



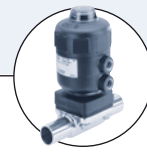
Type 8631

TopControl On/Off



Type 8640/8644

Valve block



Type 2031

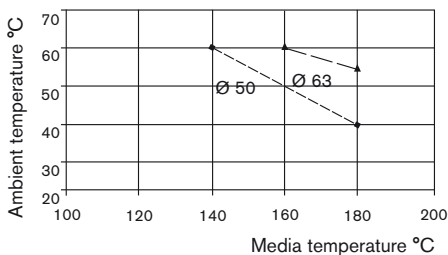
Diaphragm valve

The externally piloted angle-seat valve is operated with a single or double-acting piston actuator. The actuator is available in two different materials, PA and PPS depending on the ambient temperature. The reliable self-adjusting packing gland provides high sealing integrity. High flow rates are attained with the stainless steel 2-way body.

These maintenance-free and robust valves can be retrofitted with a comprehensive range of accessories for position indication, stroke limitation or manual override.

For valves with port connection Tri-Clamp® and threaded port please see separate datasheets.

1) **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



Technical data	
Orifice	DN 15 to 65
Body materials EN ISO 1127/ISO 4200 and DIN 11850 serie 2 ASME BPE and BS 4825 Part 1	Stainless steel 1.4581 (316L on request) Stainless steel 316L
Actuator material	PA (PPS on request)
Seal material	PTFE (NBR, FKM, EPDM on request)
Medien	Water, alcohol, oils, fuel, hydraulic fluids, salt solution, alkali solutions, organic solvents, steam
Viscosity	max. 600 mm ² /s
Packing gland (with silicone grease)	PTFE V-rings with spring compensation
Media temperature¹⁾	-10 to +180 °C with PTFE seal
Ambient temperature PA actuator ¹⁾ PPS actuator ¹⁾ Ø 50-80 PPS actuator ¹⁾ Ø 100-125	-10 to +60 °C +5 to +140 °C +5 to +90 °C
Installation	As required, preferably with actuator in upright position
Control medium	Neutral gases, air
Max. pilot pressure Actuator size Ø 50-80 Actuator size Ø 100 Actuator size Ø 100	PA and PPS 10 bar PA 10 bar PPS 7 bar
Port connection Weld end acc. to	EN ISO 1127/ISO 4200 DIN 11850 serie 2 ASME BPE BS 4825 Part 1
Surface finish on request	standard Ra, internal and external ≤ 3.2 µm int. Ra ≤ 0.8 µm, ext. Ra ≤ 3.2 µm electro polished int. Ra ≤ 0.4 µm, ext. Ra ≤ 3.2 µm electro polished

Ordering information for Angle Seat Valve System Type 8801-YA/8803-YA

A complete continuous angle seat valve system Type 8801-YA/8803-YA consists of an angle seat control valve Type 2000 and a valve actuation system TopControl Type 8631 or an electrical position feedback Type 1062. The control head is only delivered in combination with an actuator as a part of a complete control valve. The following information is necessary for the selection of a complete control valve:

• **Item no.** of the seat control valve **Type 2000** (see Ordering chart)

• **Item no.** of the desired positioner **Type 8631 or Type 1062** (see separate datasheets)

Please also use the "request for quotation" form on p. 10 for ordering the complete system [go to page](#)

Example for variations of continuous angle seat valve system

Angle seat valve Type 2000 with required process connection



Control Head



8631



1062

Angle seat valve with required body and port connection

For port connections Tri-Clamp® and threaded ports, see separate datasheets



**Angle seat valve
TopControl system**
2000+8631
(Type 8801-YA)



**Angle seat valve
Electrical Position
Feedback system**
2000+1062
(Type 8803-YA)

When you 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 Type 8631 TopControl On/Off



DeviceNet™

More
info.

The Type 8631 TopControl On/Off head performs the task of completely automating pneumatically operated process valves. Mechanical mounting and pneumatic coupling to the process valve result in a unit that is both visually pleasing and functionally compact. Valve position feedback and pneumatic actuation can also be integrated into common fieldbusses such as AS-Interface or DeviceNet.

Main customer benefits are:

- Control of process valves
 - single-acting/double-acting
 - with external pneumatic control
- Position feedback with maximum two adjustable inductive limit switches or two micro limit switches
- Electrical control of the control head, optionally via multipole (parallel wiring) or field bus interface (AS-Interface or DeviceNet)
- Pressure-relief valve
- Suitable for hazardous locations per zone 1 or zone 2 and 22

Electrical Position Feedback Type 1062



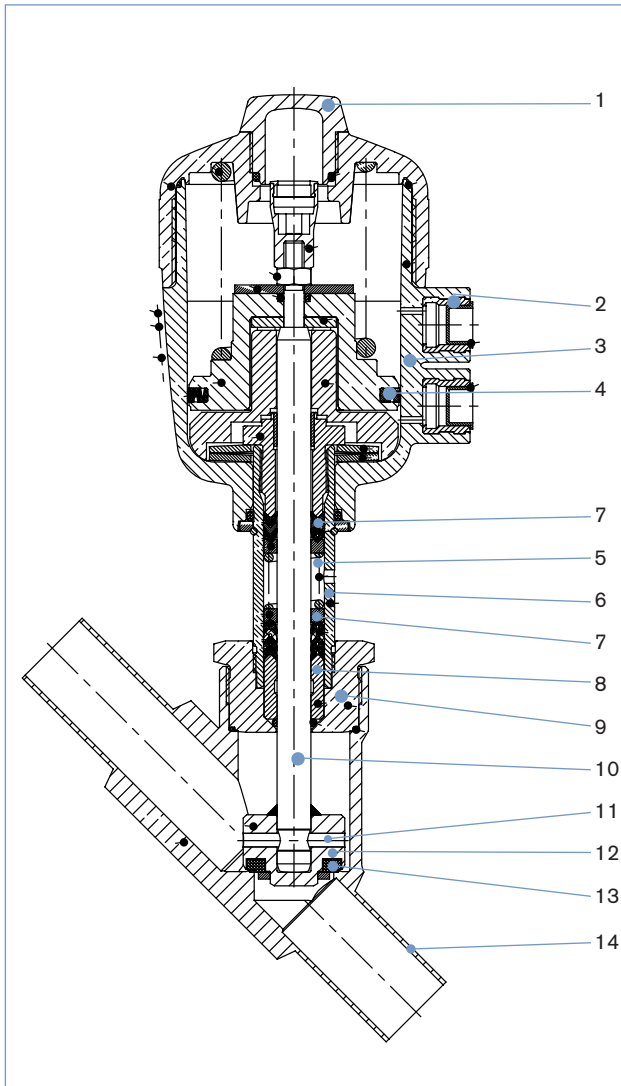
More
info.

Positions are electrically signaled according to switch type:

- open,
 - closed or
 - open and closed.
- LEDs provide optical position indication (except for Namur Ex-version). Mechanical or inductive switches are housed in a compact splash-proof enclosure. The position indicator can be rotated 360° and is easily fitted to the valve. Trip cams do not require adjustment.

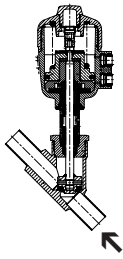
The unit only needs to be screwed on and connected to be ready for operation.

Materials



- | | | |
|-----------|-----------------|---|
| 1 | Transparent cap | PC (with PPS actuator; PSU) |
| 2 | Pilot air ports | Stainless steel 1.4305 |
| 3 | Actuator | PA (PPS on request) |
| 4 | Piston seal | NBR (with PPS actuator; FKM) |
| 5 | Spring | Stainless steel 1.4310 |
| 6 | Tube | Stainless steel 1.4401 |
| 7 | V-Seals | PTFE (FKM on request) |
| 8 | Wiper | PTFE |
| 9 | Nipple | Stainless steel 1.4401 |
| 10 | Spindle | Stainless steel 1.4401 |
| 11 | Pins | Stainless steel 1.4401 |
| 12 | Swivel plate | Stainless steel 1.4401 |
| 13 | Seal | PTFE (NBR, FKM, EPDM on request) |
| 14 | Valve body | EN ISO 1127/ISO 4200 and
DIN 11850 Series 2
ASME BPE/BS 4825 Part 1 |
| | | Stainless steel 1.4581
(316L on request)
Stainless steel 316L |

Technical data for valves with flow direction below seat (for gas and liquid)



Flow direction below seat

Orifice [mm]	Actuator size [mm]	Kv value water (m ³ /h)	Min. pilot pressure CFA [bar]	Max. operating pressure up to 180°		Weight [kg]
				CFA [bar]	CFB [bar]	
15	50	4.2	3.9	16	16	0.8
20	50	8.0	3.9	11	16	1.0
25	63	19	4.2	11	16	1.8
32	63	27	4.2	6	16	2.3
	80	28	5.0	15	16	3.1
40	63	35	-	-	16	2.7
	80	38	5.0	9	16	3.5
50	63	49	-	-	13	4.0
	100	55	4.4	7.2	-	7.0
65	80	77	-	-	16	6.4
	125	90	3.2	5.2	-	11.0

Kv value water [m³/h]: Measured at +20 °C, 1 bar pressure at valve inlet and free outlet
 Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Pilot pressure diagram with control function B and flow direction below seat

Diagram 1

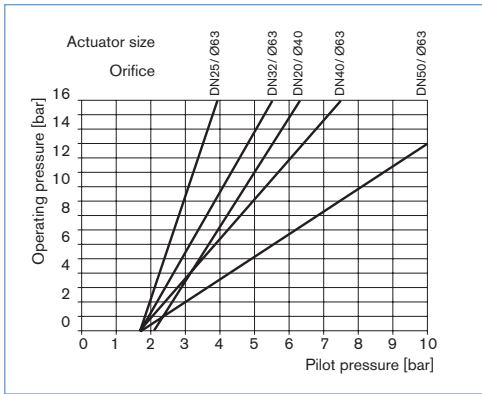
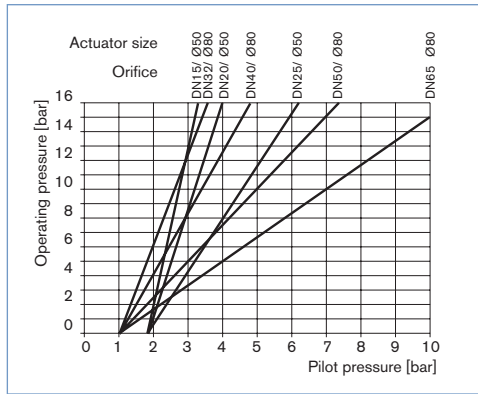


Diagram 2



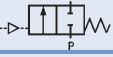
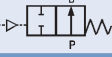
Ordering chart for valves with flow direction below seat (further versions on request)

Valves with weld end connection acc. to EN ISO 1127/ISO 4200 and DIN 11850 S2, body in stainless steel, actuator material PA, Ra internal/external ≤ 3.2 µm

Control function	Orifice [mm]	Actuator size Ø [mm]	Port connection Weld end, tube - Ø [mm]		Min. pilot pressure [bar]	Operating pressure up to 180°C [bar]	Item no. St.st. body	
			EN ISO 1127/ ISO 4200	DIN 11850 S2			EN ISO 1127/ ISO 4200	DIN 11850 Series 2
A 2/2-way, normally closed (NC) 	15	50	21.3 x 1.6	19 x 1.5	3.9	16	001 392	143 443
	20	50	26.9 x 1.6	23 x 1.5	3.9	11	001 393	143 444
	25	63	33.7 x 2	29 x 1.5	4.2	11	001 394	143 445
	32	80	42.4 x 2	35 x 1.5	5	15	001 395	143 446
	40	80	48.3 x 2	41 x 1.5	5	9	001 396	143 447
	50	100	60.3 x 2.6	53 x 1.5	4.4	7.2	001 397	143 448
	65	125	76.1 x 2.3	70 x 2.0	3.2	5.2	165 985	169 344
B 2/2-way, normally open (NO) 	15	50	21.3 x 1.6	19 x 1.5	see diagram 1 and 2 on above	16	001 488	143 449
	20	50	26.9 x 1.6	23 x 1.5		16	001 489	143 450
	25	63	33.7 x 2	29 x 1.5		16	001 490	143 451
	32	63	42.4 x 2	35 x 1.5		16	001 491	143 452
	40	63	48.3 x 2	41 x 1.5		16	001 492	143 453
	50	63	60.3 x 2.6	53 x 1.5		13	001 493	143 454
	65	80	76.1 x 2.3	70 x 2.0		15	168 835	169 989

Ordering chart for valves with flow direction below seat, continued (further versions on request)

Valves with weld end connection acc. to ASME BPE and BS 4825 Part 1, body in stainless steel, actuator material PA, Ra internal/external ≤ 3.2 µm

Control function	Orifice [mm]	Actuator size Ø [mm]	Port connection Weld end, tube - Ø [mm]		Min. pilot pressure [bar]	Operating pressure up to 180°C [bar]	Item no.	
			ASME BPE	BS 4825 Part 1			ASME BPE	BS 4825 Part 1
A 2/2-way, normally closed (NC) 	15	50	12.7 x 1.65	12.7 x 1.2	3.9	16	154 675	183 271
	20	50	19.05 x 1.65	19.05 x 1.2	3.9	11	183 268	183 273
	25	63	25.4 x 1.65	25.4 x 1.65	4.2	11	154 678	180 507
	40	80	38.1 x 1.65	38.1 x 1.65	5	9	154 680	183 274
	50	100	50.8 x 1.65	50.8 x 1.65	4.4	7.2	183 269	183 275
B 2/2-way, normally open (NO) 	15	50	12.7 x 1.65	12.7 x 1.2	see diagram 1 and 2 on previous page	16	154 676	183 278
	20	50	19.05 x 1.65	19.05 x 1.2		16	164 579	183 279
	25	63	25.4 x 1.65	25.4 x 1.65		16	183 270	183 280
	40	63	38.1 x 1.65	38.1 x 1.65		16	154 681	183 281
	50	63	50.8 x 1.65	50.8 x 1.65		13	174 554	183 282

i Further versions on request

Material
Seal: NBR, FKM, EPDM
Actuator: PPS

Control function
Double-acting actuator

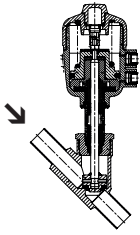
Port connections
Tri-Clamp®, threaded port

Approvals
GL, SIL

Additional
Surface finish: int. Ra ≤ 0.8 µm, ext. Ra ≤ 3.2 µm electro polished,
int. Ra ≤ 0.4 µm, ext. Ra ≤ 3.2 µm electro polished

Temperature
Version with flow above seat for steam applications

Technical Data for valves with flow direction above seat (only for gas and steam)



Flow direction above seat

Orifice [mm]	Actuator size [mm]	Kv value water (m³/h)	Max. operating pressure up to 180°	Weight [kg]
15	50	4.2	16	0.8
20	50	8.0	16	1.0
25	63	19.0	16	1.8
32	63	27.0	16	2.2
40	63	35.0	16	2.7
50	63	49.0	16	4.0
65	80	77.0	14	6.4

Kv value water [m³/h]: Measured at +20 °C, 1 bar pressure at valve inlet and free outlet
 Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Attention!

Valves with flow direction above the seat are only conditionally usable for liquid media .
 There is a danger of waterhammer!

Technical data	Flow direction above seat (only for gases and steam)
Media	Gaseous media and steam
Further technical data	Please see information Technical data on page 1

Pilot pressure diagram with control function A and flow direction above seat

Diagram 3

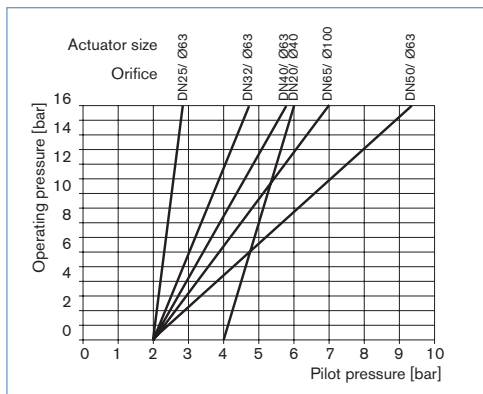
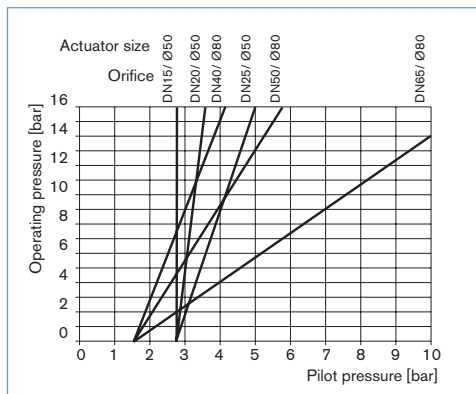


Diagram 4



Ordering chart for valves with flow direction above seat, only for gas & steam
 (further versions on request)

Valves with weld end connection acc. to EN ISO 1127/ISO 4200 and DIN 11850 S2 , body in stainless steel, actuator material PA, Ra internal/external ≤ 3.2 µm.

Control function	Orifice [mm]	Actuator size Ø [mm]	Port connection Weld end Tube - Ø [mm]		Min. pilot pressure [bar]	Operating pressure up to 180 °C [bar]	Item no. St.st. body	
			EN ISO 1127/ ISO 4200	DIN 11850 Series 2			EN ISO 1127/ ISO 4200	DIN 11850 Series 2
	15	50	21.3 x 1.6	19 x 1.5	See diagram 3 and 4 above	16	001 449	143 455
	20	50	26.9 x 1.6	23 x 1.5		16	001 448	143 456
	25	63	33.7 x 2	29 x 1.5		16	001 447	143 457
	32	63	42.4 x 2	35 x 1.5		16	001 414	143 458
	40	63	48.3 x 2	41 x 1.5		16	001 415	143 459
	50	63	60.3 x 2.6	53 x 1.5		16	001 416	143 460
	65	80	76.1 x 2.3	70 x 2.0		14	431 530	171 013

Ordering chart for valves with flow direction above seat, only for gas & steam, continued
(further versions on request)

Valves with weld end connection acc. to ASME BPE and BS 4825 Part1, body in stainless steel, actuator material PA, Ra internal/external ≤ 3.2 µm.

Control function	Orifice [mm]	Actuator size Ø [mm]	Port connection Weld end, tube - Ø [mm]		Min. pilot pressure [bar]	Operating pressure up to 180°C [bar]	Item no.	
			ASME BPE	BS 4825 Part 1			ASME BPE	BS 4825 Part 1
A 2/2-way, normally closed (NC) 	15	50	12.7 x 1.65	12.7 x 1.2	See diagram 3 and 4 on previous page	16	183 283	183 290
	20	50	19.05 x 1.65	19.05 x 1.2		16	183 284	183 291
	25	63	25.4 x 1.65	25.4 x 1.65		16	183 286	183 351
	40	63	38.1 x 1.65	38.1 x 1.65		16	183 288	183 353
	50	63	50.8 x 1.65	50.8 x 1.65		16	166 536	183 355

i Further versions on request

- Material**
Seal: NBR, FKM, EPDM
Actuator: PPS
- Control function**
Double-acting actuator
- Port connections**
Tri-Clamp®, threaded port
- Approvals**
GL, SIL
- Additional**
Surface finish: int. Ra ≤ 0.8 µm, ext. Ra ≤ 3.2 µm electro polished,
int. Ra ≤ 0.4 µm, ext. Ra ≤ 3.2 µm electro polished

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]	Qn 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
40	6012P	G 1/4	G 1/8	1.2	48	0-10	Form B	4	552 295	552 298
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

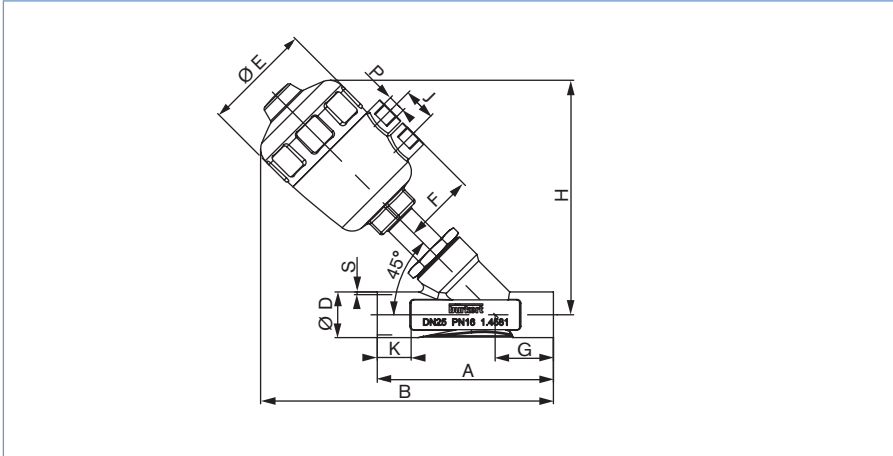
For further accessories see datasheet for Type 1062 or the accessories datasheet Type 2XXX for the full options programme.

Note: For design reasons, some of the accessories cannot be supplied for actuator size Ø 40 mm. Please request the accessories datasheet Type 2XXX.

DTS 1000100996 EN Version: D Status: RL (released | freigegeben | validé) printed: 23.04.2008

Dimensions [mm]

Weld end body acc. to EN ISO 1127/ISO 4200 and DIN 11850 Series 2

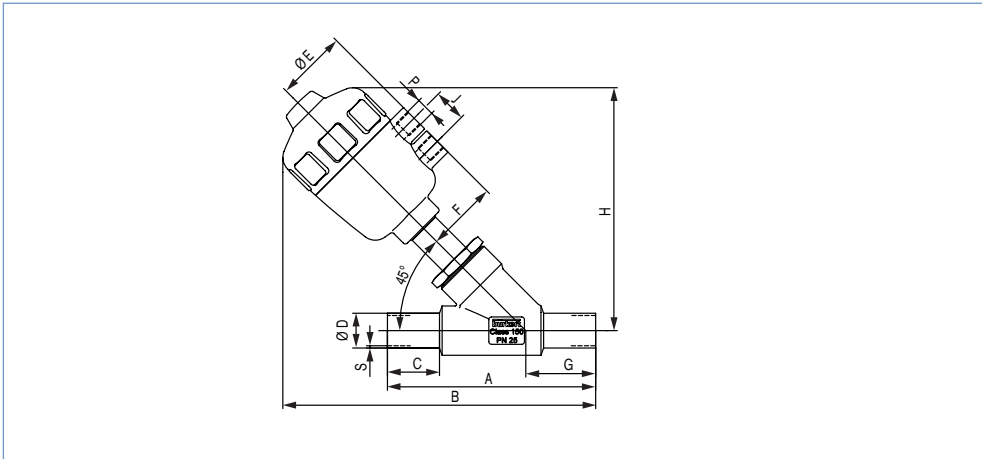


DN	Actuator size Ø	Ø E	F	P	J	B	H	A	G	Weld end body acc. to EN ISO 1127/ISO 4200			Weld end body acc. to DIN 11850 Series 2		
										K	Ø D	S	K	Ø D	S
15	40	53	33	G 1/8	16.5	148	114	100	34	20	21.3	1.6	20	19	1.5
	50	64	44	G 1/4	24	174	137								
20	40	53	33	G 1/8	16.5	158	119	115	39	25	26.9	1.6	25	23	1.5
	50	64	44	G 1/4	24	181	145								
	63	80	52	G 1/4	24	209	170								
25	50	64	44	G 1/4	24	191	148	130	43	30	33.7	2	30	29	1.5
	63	80	52	G 1/4	24	217	173								
	80	101	60	G 1/4	24	238	195								
32	63	80	52	G 1/4	24	230	186	145	45	30	42.4	2	30	35	1.5
	80	101	60	G 1/4	24	259	210								
	100	127	73	G 1/4	30	301	256								
40	63	80	52	G 1/4	24	238	189	160	49	30	48.3	2	30	41	1.5
	80	101	60	G 1/4	24	258	213								
	100	127	73	G 1/4	30	309	260								
	125	158	86	G 1/4	30	337	288								
50	63	80	52	G 1/4	24	255	205	175	50	30	60.3	2.6	30	53	1.5
	80	101	60	G 1/4	24	275	225								
	100	127	73	G 1/4	30	327	271								
	125	158	86	G 1/4	30	351	301								
65	63	80	52	G 1/4	24	271	221	210	50	26	76.1	2.3	26	70	2.0
	80	101	60	G 1/4	24	292	242								
	100	127	73	G 1/4	30	340	290								
	125	158	86	G 1/4	30	370	320								

DTS 1000100996 EN Version: D Status: RL (released | freigegeben | validé) printed: 23.04.2008

Dimensions [mm]

Weld end body acc. to BS 4825 Part 1 and ASME BPE



DN	Actuator size Ø	Ø E	H	F	P	J	Weld end body acc. to BS 4825 Part 1						Weld end body acc. to ASME BPE					
							A ¹⁾	B	C	Ø D	G	S	A ¹⁾	B	C	Ø D	G	S
15	40	53	120	33	G 1/8	16.5	135	166	38	12.7	46	1.2	135	166	38	12.7	46	1.65
	50	64	145	44	G 1/4	24		191						191				
	63	80	177	52	G 1/4	24		223						223				
	80	101	198	60	G 1/4	24		244						244				
20	40	53	125	33	G 1/8	16.5	145	177	38	19.05	52	1.2	145	177	38	19.05	52	1.65
	50	64	149	44	G 1/4	24		201						201				
	63	80	176	52	G 1/4	24		228						228				
	80	101	198	60	G 1/4	24		250						250				
25	40	53	128	33	G 1/8	16.5	152	179	38	25.4	51	1.65	152	179	38	25.4	51	1.65
	50	64	152	44	G 1/4	24		203						203				
	63	80	178	52	G 1/4	24		229						229				
	80	101	199	60	G 1/4	24		250						250				
40	63	80	191	52	G 1/4	24	182	251	38	38.1	60	1.65	182	251	38	38.1	60	1.65
	80	101	213	60	G 1/4	24		273						273				
	100	127	263	73	G 1/4	30		323						323				
	125	158	293	86	G 1/4	30		353						353				
50	63	80	209	52	G 1/4	24	210	273	45	50.8	64	1.65	210	273	45	50.8	64	1.65
	80	101	230	60	G 1/4	24		294						294				
	100	127	277	73	G 1/4	30		341						341				
	125	158	307	86	G 1/4	30		371						371				

¹⁾ Long version (Code AF93)

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

Process 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

Site of control	<input type="text"/>			
Measuring and control task	<input type="text"/>			
Pipeline	DN <input type="text"/>	PN <input type="text"/>		
Pipe material	<input type="text"/>			
Process medium	<input type="text"/>			
Type of media	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas	
Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/> min	<input type="text"/> standard	<input type="text"/> max	<input type="text"/> unit
Temperature at valve inlet T1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Absolute pressure at valve inlet P1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Absolute pressure at valve outlet P2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steam pressure P _v	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Kinematic viscosity (ν)	<input type="text"/>	mm ² /s or cSt		
Dynamic viscosity (η)	<input type="text"/>	mPa.s or cP		
Standard density	<input type="text"/>	Kg/m ³		
Max. sound level accepted	<input type="text"/>	dB (A)		

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

Valve features

Valve type	<input type="checkbox"/> Globe	<input type="checkbox"/> Angle seat	<input type="checkbox"/> Diaphragm	<input type="checkbox"/> Ball valve	<input type="checkbox"/> Butterfly	<input type="checkbox"/> Other
Body material	<input type="checkbox"/> Stainless steel	<input type="checkbox"/> PVC	<input type="checkbox"/> PP	<input type="checkbox"/> PVDF	<input type="checkbox"/> Other	
Surface finish ²⁾	<input type="text"/> internal		<input type="text"/> external			
Seat sealing material	<input type="checkbox"/> Metal	<input type="checkbox"/> PTFE	<input type="checkbox"/> EPDM ²⁾	<input type="checkbox"/> FKM ²⁾		
Nominal pressure	PN <input type="text"/>					
Nominal size	DN <input type="text"/>					
Type of connection	<input type="checkbox"/> Flange	<input type="checkbox"/> Socket union	<input type="checkbox"/> Welded	<input type="checkbox"/> Internal thread	<input type="checkbox"/> External thread	<input type="checkbox"/> Tri-Clamp [*]
Standard connection	<input type="checkbox"/> ISO	<input type="checkbox"/> DIN	<input type="checkbox"/> ANSI	<input type="checkbox"/> JIS	<input type="checkbox"/> Other	
Function	<input type="checkbox"/> NC ³⁾	<input type="checkbox"/> NO ³⁾	<input type="checkbox"/> Double-acting			
Pilot pressure	<input type="text"/>	min.	<input type="text"/>	max.		

²⁾ only diaphragm valve ³⁾ NC: normally closed by spring action; NO: normally open by spring action
* Tri-Clamp® is a registered Trademark of Alfa Laval Inc.

Control Head

Electrical position feedback

<input type="checkbox"/> Type 8631	<input type="checkbox"/> Type 1062
Control <input type="checkbox"/> 24 V DCI <input type="checkbox"/> ASI-Bus <input type="checkbox"/> DeviceNet <input type="checkbox"/> Ex-version	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
Feedback <input type="checkbox"/> mechanical limit switches <input type="checkbox"/> inductive proximity switches	Status <input type="checkbox"/> closed <input type="checkbox"/> open <input type="checkbox"/> open/closed
Electrical connection <input type="checkbox"/> Cable connector <input type="checkbox"/> Multipol circular connector	Please specify item no. if known: <input type="text"/>
Please specify item no. if known: <input type="text"/>	Please specify item no. if known: <input type="text"/>

* To find your nearest Bürkert facility, click on the orange box → www.burkert.com

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

We reserve the right to make technical changes without notice.
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