



## 2/2-way diaphragm valve with manually operated actuator (FullFunction)

- Valve body and diaphragm are available in different materials and versions
- Wetted surfaces from  $Ra \leq 0.38 \mu m \dots \leq 1.6 \mu m$  (optionally electropolished)
- Available in all common connection sizes and variants
- Integrated locking
- Minimum and maximum stroke limitation

Product variants described in the data sheet may differ from the product presentation and description.

### Can be combined with

	<b>Type 2933</b> 2/2-way diaphragm valve with manually operated actuator (basic)	▶
	<b>Type 2974</b> T-diaphragm valve with manually operated actuator (FullFunction)	▶
	<b>Type 2975</b> Tank bottom diaphragm valve with manually operated actuator (FullFunction)	▶
	<b>Type 2031</b> 2/2-way diaphragm valve with pneumatic plastic actuator (Type CLASSIC)	▶
	<b>Type 2103</b> 2/2-way diaphragm valve with pneumatic stainless steel actuator (Type ELEMENT) for decentralised automation	▶
	<b>Type 2063</b> 2/2-way diaphragm valve with pneumatic actuator in stainless steel (Type INOX)	▶

### Type description

The Type 2973 manually operated diaphragm valve consists of a manually operated actuator, a diaphragm and a 2-way body. The manual actuator with plastic handwheel ensures use in hygienic or aggressive ambient conditions. The flow-optimised valve body with minimum dead space enables high flow values and a wide range of possible applications. The valve body and the diaphragms are available in all common materials and versions. The actuator has a compact, autoclavable design and is compatible with all other Bürkert diaphragm valves. An explosion-proof ATEX/IECEx device variant is available. The manual actuator possesses a visual position indicator with reproducible stroke scale. The actuator also possesses an adjustable minimum and maximum stroke limitation and/or locking. The manual actuator can be optionally equipped with sensors for position feedback.

## Table of contents

<b>1. General technical data</b>	<b>3</b>
<hr/>	
<b>2. Approvals and conformities</b>	<b>4</b>
2.1. General notes.....	4
2.2. Conformity .....	4
2.3. Standards.....	4
2.4. Explosion protection .....	4
2.5. Foods and beverages/Hygiene .....	4
<hr/>	
<b>3. Materials</b>	<b>5</b>
3.1. Bürkert resistApp .....	5
3.2. Material specifications .....	6
3.3. Example of available diaphragm materials .....	6
<hr/>	
<b>4. Dimensions</b>	<b>7</b>
4.1. Manual actuator .....	7
Diaphragm size 15...25.....	7
Diaphragm size 32...50.....	8
4.2. Forged steel valve body (VS) with welded connection .....	9
4.3. Forged steel valve body (VS) with clamp connection .....	11
4.4. Tube valve body (VP) with welded connection .....	12
4.5. Tube valve body (VP) with clamp connection .....	13
4.6. Tube valve body (VP) with threaded connection.....	14
4.7. Tube valve body (VP) with flange connection .....	15
4.8. Cast valve body (VG) with welded connection .....	16
4.9. Cast valve body (VG) with clamp connection .....	18
<hr/>	
<b>5. Performance specifications</b>	<b>19</b>
5.1. Flow characteristics .....	19
Forged steel valve body (VS).....	19
Tube valve body (VP).....	19
Cast valve body (VG).....	19
5.2. Medium pressure .....	20
<hr/>	
<b>6. Ordering information</b>	<b>20</b>
6.1. Bürkert eShop.....	20
6.2. Bürkert product filter.....	20
6.3. Bürkert Product Enquiry Form .....	20

DTS 1000597497 EN Version: - Status: RL (released | freigegeben | validé) printed: 23.01.2024

## 1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 7.
<b>Material<sup>1.)</sup></b>	
Forged steel valve body (VS) <sup>1.)</sup>	Forged stainless steel 316L/1.4435/BN2, Fe <0.5 %/C ≤0.03 %
Tube valve body (VP) <sup>1.)</sup>	Stainless steel 316L/1.4435/BN2
Cast valve body (VG) <sup>1.)</sup>	Cast stainless steel 316L/1.4435
Diaphragm	EPDM (AD) <sup>1.)</sup> , PTFE/EPDM (EA) <sup>1.)</sup> , advanced PTFE/EPDM (EU) <sup>1.)</sup> , GYLON®/laminated EPDM (ER) <sup>1.)</sup>
Actuator (diaphragm bonnet/handwheel)	Stainless steel/PPS
Diaphragm size	15...50 (65...100 see <b>Type 3232</b> ▶ and <b>Type 3233</b> ▶)
<b>Standard surface quality<sup>2.)</sup></b>	
Forged steel valve body (VS) <sup>1.)</sup>	Interior electrically polished: Ra ≤0.38 µm (NO17) <sup>1.)</sup> (ASME BPE SF4/DIN HE4) (external forged surface electrically polished) Interior mechanically polished: Ra ≤0.5 µm (NO14) <sup>1.)</sup> (ASME BPE SF1) (external forged surface)
Tube valve body (VP) <sup>1.)</sup>	Interior electrically polished: Ra ≤0.38 µm (NO17) <sup>1.)</sup> (ASME BPE SF4/DIN HE4) (external electrically polished) Interior glass bead blasted: Ra ≤1.6 µm (NO05) <sup>1.)</sup> (external glass bead blasted (NO01) <sup>1.)</sup> )
Cast valve body (VG) <sup>1.)</sup>	Interior electrically polished: Ra ≤0.6 µm (NO16) <sup>1.)</sup> (ASME BPE SF6) (external cast surface electrically polished) Interior mechanically polished: Ra ≤0.76 µm (NO06) <sup>1.)</sup> (ASME BPE SF3/DIN H2) (external cast surface)
<b>Medium data</b>	
Operating medium	Neutral gases and liquids, highly purified, sterile, aggressive or abrasive media (see <b>resistance chart</b> ▶)
<b>Medium temperature</b>	
EPDM (AD) <sup>1.)</sup>	-10...+143 °C (steam sterilisation + 150 °C for 60 min)
PTFE/EPDM (EA) <sup>1.)</sup>	-10...+130 °C (steam sterilisation + 140 °C for 60 min)
Advanced PTFE/EPDM (EU) <sup>1.)</sup>	-5...+143 °C (steam sterilisation + 150 °C for 60 min)
GYLON®/laminated EPDM (ER) <sup>1.)</sup>	-5...+130 °C (steam sterilisation + 140 °C for 60 min)
<b>Process/Port connection &amp; communication</b>	
Nominal diameter	DN 08...DN 65 (¼"...2 ½")
<b>Port connection<sup>2.)</sup> for stainless steel valve body<sup>3.)</sup></b>	
Welded connection <sup>2.)</sup>	DIN EN ISO 1127/ISO 4200/DIN 11866 series B DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A ASME BPE/DIN 11866 series C
Clamp connection <sup>2.)</sup>	DIN 32676 series A (DIN pipe) DIN 32676 series B (ISO pipe) ASME BPE
<b>Environment and installation</b>	
Installation position	See <b>operating instructions Type 2973</b> ▶
<b>Ambient temperature: actuator (diaphragm bonnet/handwheel)</b>	
Stainless steel/PPS	-10...+130 °C (short-term up to +150 °C), autoclavable

1.) This information is part of the product key (see "6.3. Bürkert Product Enquiry Form" on page 20).

2.) Further versions are available on request.

3.) Tube valve body (VP) also available with flange and threaded connections

## 2. Approvals and conformities

### 2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available versions can be supplied with the below mentioned approvals or conformities.



### 2.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.


### 2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

### 2.4. Explosion protection

Approval	Description																
 	<p><b>Optional: Explosion protection</b> As a category 2 device suitable for zone 1/21 and zone 2/22 (optional).</p> <p><b>ATEX:</b> EPS 18 ATEX 2 008 X II 2G Ex h IIC T4 Gb/II 2D Ex h IIIIC T135 °C Db II 2G Ex h IIC T4...T2 Gb II 2D Ex h IIIIC T135 °C...T300 °C Db</p> <p><b>IECEx:</b> IECEx EPS 18.0007X Ex h IIC T4 Gb/Ex h IIIIC T135 °C Dbb Ex h IIC T4...T2 Gb Ex h IIIIC T135 °C...T300 °C Db</p> <table border="1"> <thead> <tr> <th>Temperature class</th> <th>T2</th> <th>T3</th> <th>T4</th> </tr> </thead> <tbody> <tr> <td>Permissible surface temperature</td> <td>+300 °C</td> <td>+200 °C</td> <td>+135 °C</td> </tr> <tr> <td>Ambient temperature</td> <td>-40...+130 °C</td> <td>-40...+130 °C</td> <td>-40...+100 °C</td> </tr> <tr> <td>Maximum medium temperature</td> <td>+285 °C</td> <td>+185 °C</td> <td>+125 °C</td> </tr> </tbody> </table>	Temperature class	T2	T3	T4	Permissible surface temperature	+300 °C	+200 °C	+135 °C	Ambient temperature	-40...+130 °C	-40...+130 °C	-40...+100 °C	Maximum medium temperature	+285 °C	+185 °C	+125 °C
Temperature class	T2	T3	T4														
Permissible surface temperature	+300 °C	+200 °C	+135 °C														
Ambient temperature	-40...+130 °C	-40...+130 °C	-40...+100 °C														
Maximum medium temperature	+285 °C	+185 °C	+125 °C														

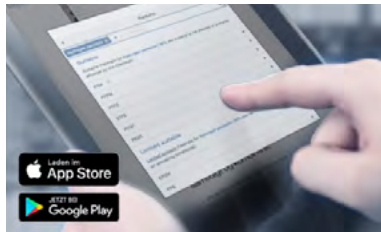
### 2.5. Foods and beverages/Hygiene

Conformity	Description
<b>FDA</b>	<p><b>FDA – Code of Federal Regulations</b> The diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) comply with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA).</p>
<b>USP</b>	<p><b>United States Pharmacopeial Convention (USP)</b> The diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) are tested according to USP Class VI.</p>
	<p><b>EC Regulation 1935/2004 of the European Parliament and of the Council</b> The diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) are suitable for use with food and beverages (according to EC Regulation 1935/2004/EC).</p>

DTS 1000597497 EN Version: - Status: RL (released | freigegeben | validé) printed: 23.01.2024

### 3. Materials

#### 3.1. Bürkert resistApp



#### **Bürkert resistApp – Chemical resistance chart**

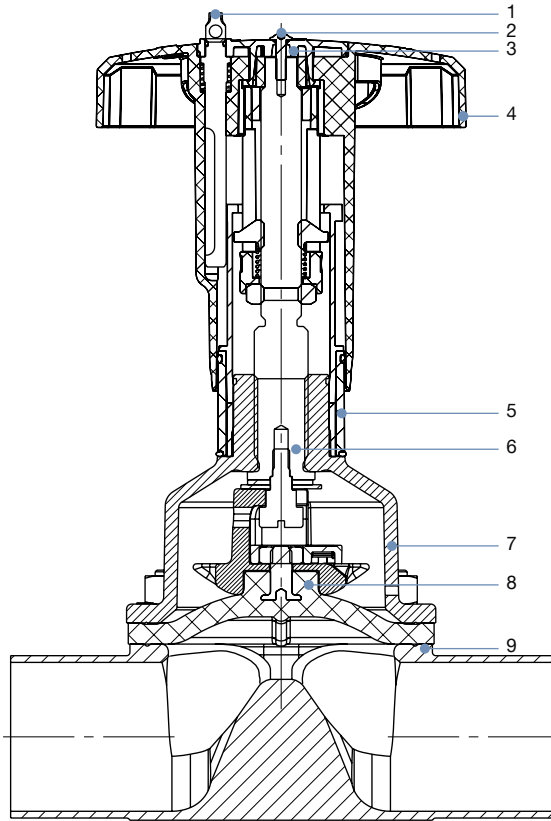
You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

### 3.2. Material specifications

**Note:**

Your product variant may differ from this illustration depending on the body and interface options.



No.	Element	Material
1	Lock pin	Stainless steel 1.4305
2	Screw	Stainless steel A2
3	Handwheel cover	Polyamide (PA)
4	Handwheel	Polyphenylene sulphide (PPS)
5	Visual position indicator	Polyamide (PA)
6	Valve spindle	Stainless steel 1.4305
7	Diaphragm socket	Stainless steel 1.4308
8	Diaphragm	EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU), GYLON®/laminated EPDM (ER)
9	Valve body	See "1. General technical data" on page 3.

### 3.3. Example of available diaphragm materials

The diaphragms have been developed to meet the unique challenges of hygienic and sterile requirements. Bürkert offers diaphragms with precise material composition and high accuracy. Bürkert diaphragms are available in a wide range of materials which have been tested and proven in applications in the food and beverage, biotechnology, pharmaceutical and cosmetics industries. Diaphragms are tested during development and production to ensure reliability under difficult process conditions.



- EPDM (AD)
- PTFE/EPDM (EA)
- Advanced PTFE/EPDM (EU)
- GYLON®/laminated EPDM (ER)

For further information please refer to our flyer "Diaphragm competence for hygienic applications" on our [website](#) ►.

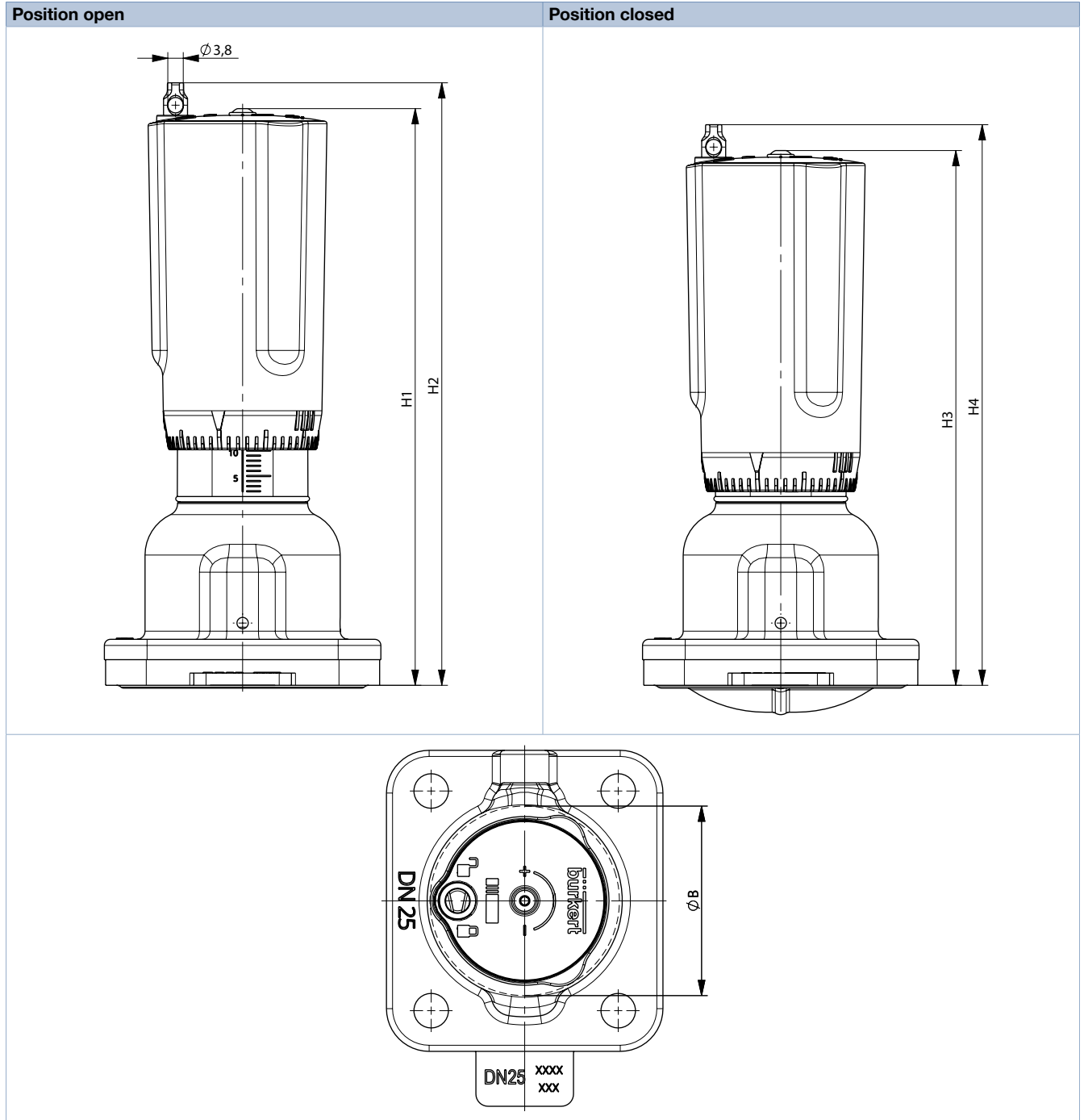
## 4. Dimensions

### 4.1. Manual actuator

Diaphragm size 15...25

**Note:**

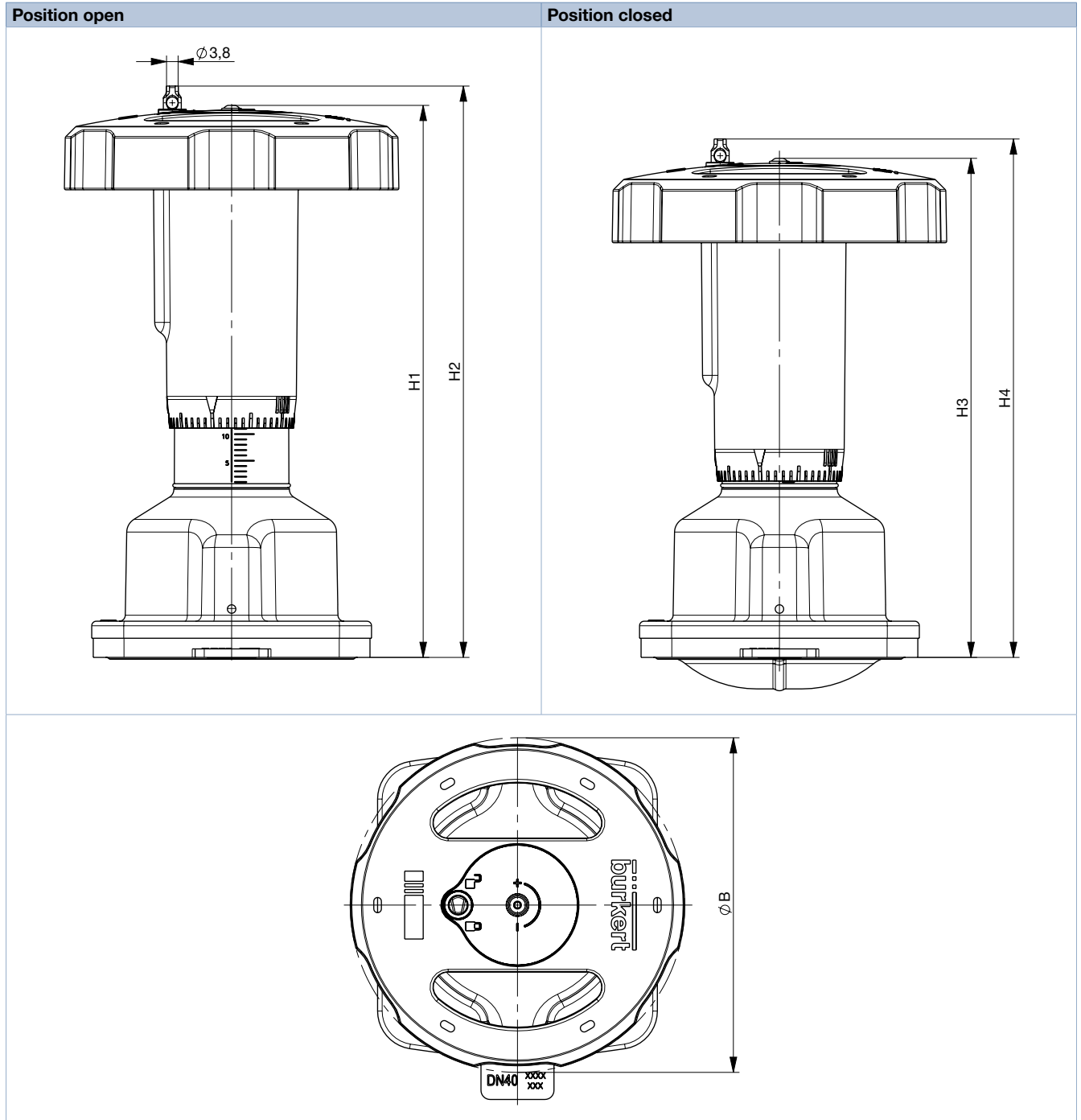
Dimensions in mm



Diaphragm size	H1	H2	H3	H4	Ø B
15	127	133	121	127	45
20	138	144	129	135	45
25	143	149	133	139	45

Diaphragm size 32...50

**Note:**  
Dimensions in mm



Diaphragm size	H1	H2	H3	H4	Ø B
32	177	183	163	169	110
40	182	188	164	170	110
50	197	203	173	179	110

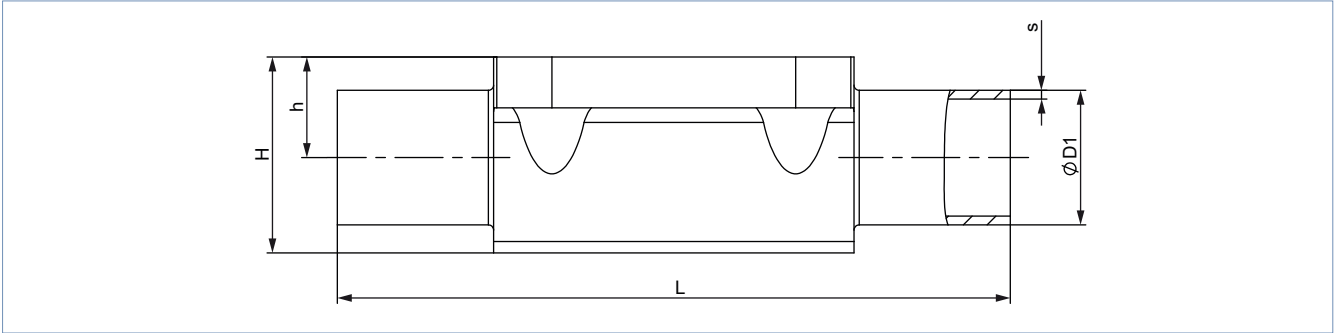
DTS 1000597497 EN Version: - Status: RL (released | freigegeben | valide) printed: 23.01.2024



#### 4.2. Forged steel valve body (VS) with welded connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key <sup>1)</sup>
<b>DIN EN ISO 1127/ISO 4200/DIN 11866 series B</b>							
15	8	13.5	1.6	108	8.15	19.85	SA40
15	10	17.2	1.6	110	12.05	23.75	SA41
15	15	21.3	1.6	110	12.05	23.75	SA42
20	15	21.3	1.6	119	16	30.3	SA42
20	20	26.9	1.6	119	16	30.3	SA43
25	20	26.9	1.6	119	19	37	SA43
25	25	33.7	2.0	129	19	37	SA44
40	25	33.7	2.0	161	27.6	52.4	SA44
40	32	42.4	2.0	161	27.6	52.4	SA45
40	40	48.3	2.0	161	27.6	52.4	SA46
50	50	60.3	2.0	192	35.5	68.3	SA47
<b>DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A</b>							
15	10	13	1.5	110	8.15	19.85	SD40
15	15	19	1.5	110	12.05	23.75	SD42
20	20	23	1.5	119	16.0	30.3	SD43
25	25	29	1.5	129	19.0	37.0	SD44
40	32	35	1.5	161	27.6	52.4	SD45
40	40	41	1.5	161	27.6	52.4	SD46
50	50	53	1.5	192	35.5	68.3	SD47
<b>ASME BPE/DIN 11866 series C</b>							
15	½"	12.7	1.65	108	8.15	19.85	SA92
15	¾"	19.05	1.65	108	12.05	23.75	SA93
20	¾"	19.05	1.65	117	16.0	30.3	SA93
25	1"	25.4	1.65	127	19.0	37.0	SODF
40	1½"	38.1	1.65	159	27.6	52.4	SODH
50	2"	50.8	1.65	190	35.5	68.3	SODI
50	2½"	63.5	1.65	192	35.5	68.6	SODJ

DTS 1000597497 EN Version: - Status: RL (released | freigegeben | validé) printed: 23.01.2024

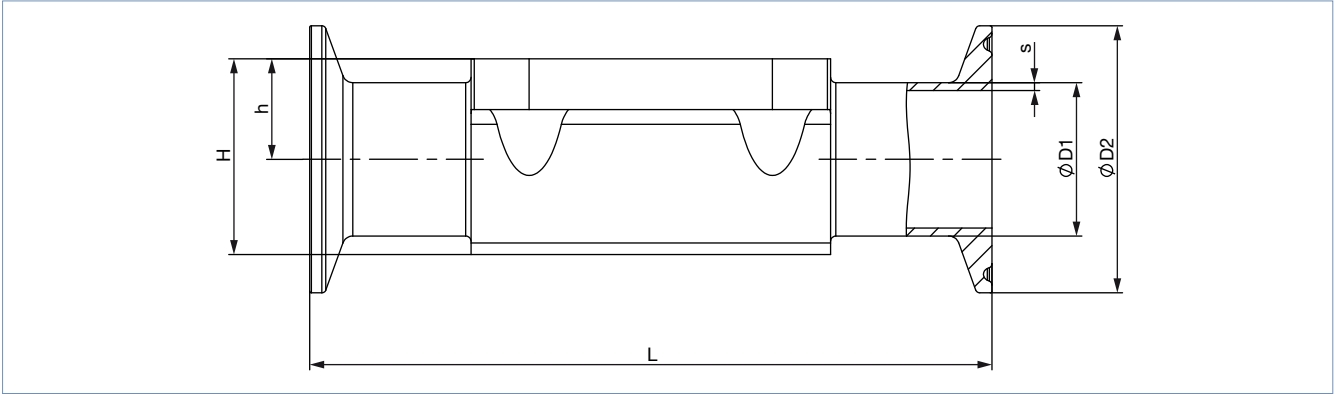
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key <sup>1.)</sup>
<b>BS 4825</b>							
15	15	12.7	1.20	108	8.15	19.85	SODD
20	20	19.05	1.20	117	16.0	30.3	SODE
25	25	25.4	1.65	127	19.0	37.0	SODF
40	40	38.1	1.65	159	27.6	52.4	SODH
50	50	50.8	1.65	190	35.5	68.3	SODI
50	65	63.5	1.65	192	35.5	68.6	SODJ
<b>SMS 3008</b>							
25	25	25	1.2	129	19	37	SA60
40	40	38	1.2	161	27.6	52.4	SA62
50	50	51	1.2	192	35.5	68.3	SA63

1.) This information is part of the product key (see "6.3. Bürkert Product Enquiry Form" on page 20).

### 4.3. Forged steel valve body (VS) with clamp connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



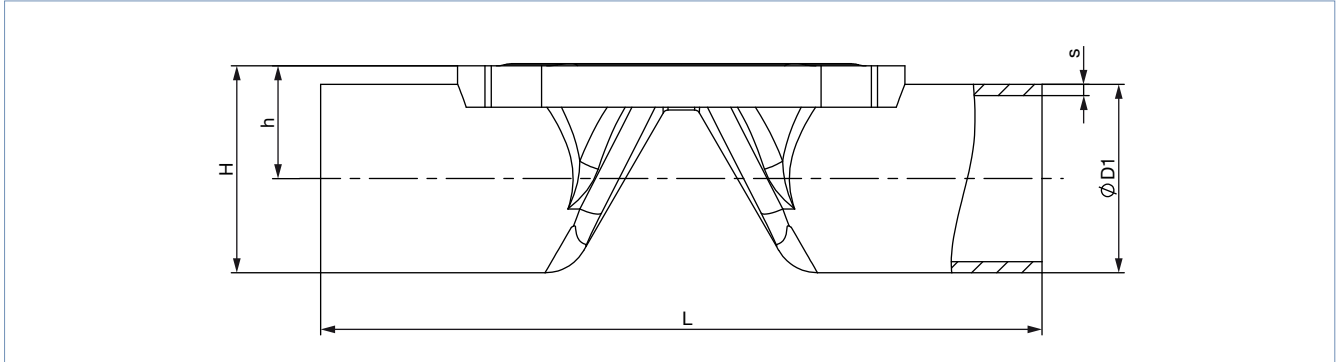
Diaphragm size	Port connection DN	ØD1	s	ØD2	L	h	H	Product key <sup>1.)</sup>	Variable code <sup>1.)</sup>
<b>DIN 32676 series B (ISO pipe)</b>									
15	15	21.3	1.6	50.5	167	12.05	23.75	TC52	–
20	20	26.9	1.6	50.5	114	16.0	30.3	TC43	–
25	25	33.7	2	50.5	129	19	37	TC44	–
40	40	48.3	2	64.0	161	27.6	52.4	TC46	–
50	50	60.3	2	77.5	190	35.5	68.3	TC47	–
<b>DIN 32676 series A (DIN pipe)</b>									
15	10	13	1.5	34.0	110	8.15	19.85	TD41	–
15	15	19	1.5	34.0	110	12.05	23.75	TD42	–
20	20	23	1.5	34.0	119	16	30.3	TD43	–
25	25	29	1.5	50.5	129	19	37	TD44	–
40	40	41	1.5	50.5	161	27.6	52.4	TD46	–
50	50	53	1.5	64.0	192	35.5	68.3	TD47	–
<b>ASME BPE</b>									
15	½"	12.7	1.65	25.0	89	8.15	19.85	TG02	–
15	½"	12.7	1.65	25.0	108	8.15	19.85	TG02	AF34
15	¾"	19.05	1.65	25.0	89	12.05	23.75	TG03	–
20	¾"	19.05	1.65	25.0	102	16	30.3	TG03	–
20	¾"	19.05	1.65	25.0	117	16	30.3	TG03	AF34
25	1"	25.4	1.65	50.5	114	19	37	TG04	–
25	1"	25.4	1.65	50.5	127	19	37	TG04	AF34
40	1½"	38.1	1.65	50.5	140	27.6	52.4	TG05	–
40	1½"	38.1	1.65	50.5	159	27.6	52.4	TG05	AF34
50	2"	50.8	1.65	64.0	159	35.5	68.3	TG06	–
50	2"	50.8	1.65	64.0	190	35.5	68.3	TG06	AF34

1.) This information is part of the product key (see “6.3. Bürkert Product Enquiry Form” on page 20).

#### 4.4. Tube valve body (VP) with welded connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see **operating instructions Type 2973** ▶).



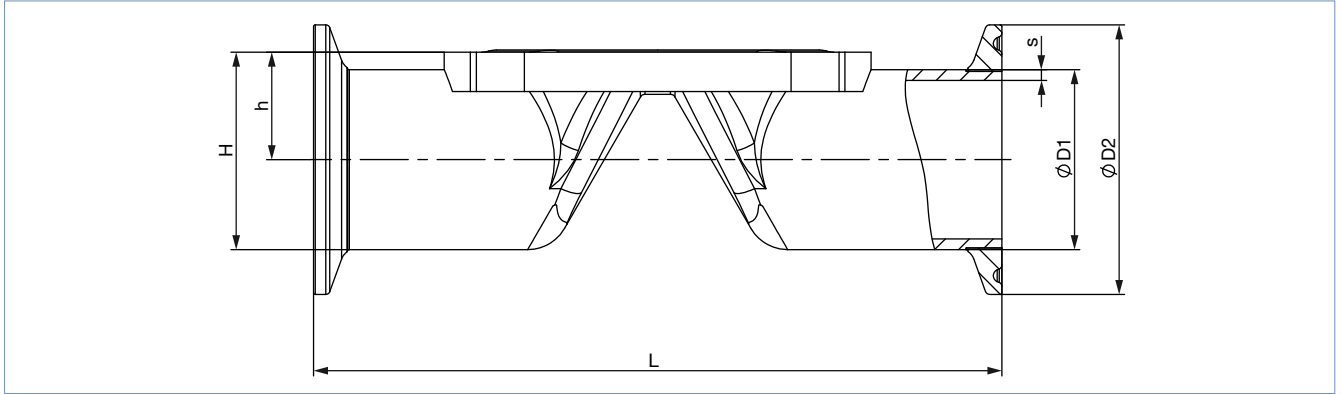
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key <sup>1.)</sup>
<b>DIN EN ISO 1127/ISO 4200/DIN 11866 series B</b>							
15	15	21.3	1.6	110.0	14.35	25.0	SA42
20	20	26.9	1.6	119.0	17.15	30.45	SA43
25	25	33.7	2.0	129.0	20.55	37.4	SA44
32	32	42.4	2.0	148.0	25.10	46.3	SA45
40	40	48.3	2.0	161.0	29.35	53.5	SA46
50	50	60.3	2.0	192.0	35.35	65.50	SA47
<b>DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A</b>							
15	15	19	1.5	110	13.20	22.70	SD42
15	20	23	1.5	119	15.20	26.70	SD43
20	25	29	1.5	129	18.20	32.70	SD44
25	32	35	1.5	148	21.20	38.70	SD45
32	40	41	1.5	161	24.40	44.90	SD46
40	50	53	1.5	192	31.70	58.20	SD47
<b>ASME BPE/DIN 11866 series C</b>							
15	¾"	19.05	1.65	117.0	13.23	25.73	SA93
20	1"	25.4	1.65	127.0	16.40	41.65	SODF
32	1½"	38.1	1.65	159.0	22.95	48.20	SODH
40	2"	50.8	1.65	190	30.60	62.60	SODI
50	2½"	63.5	1.65	192	37.35	69.1	SODJ

1.) This information is part of the product key (see “6.3. Bürkert Product Enquiry Form” on page 20).

#### 4.5. Tube valve body (VP) with clamp connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



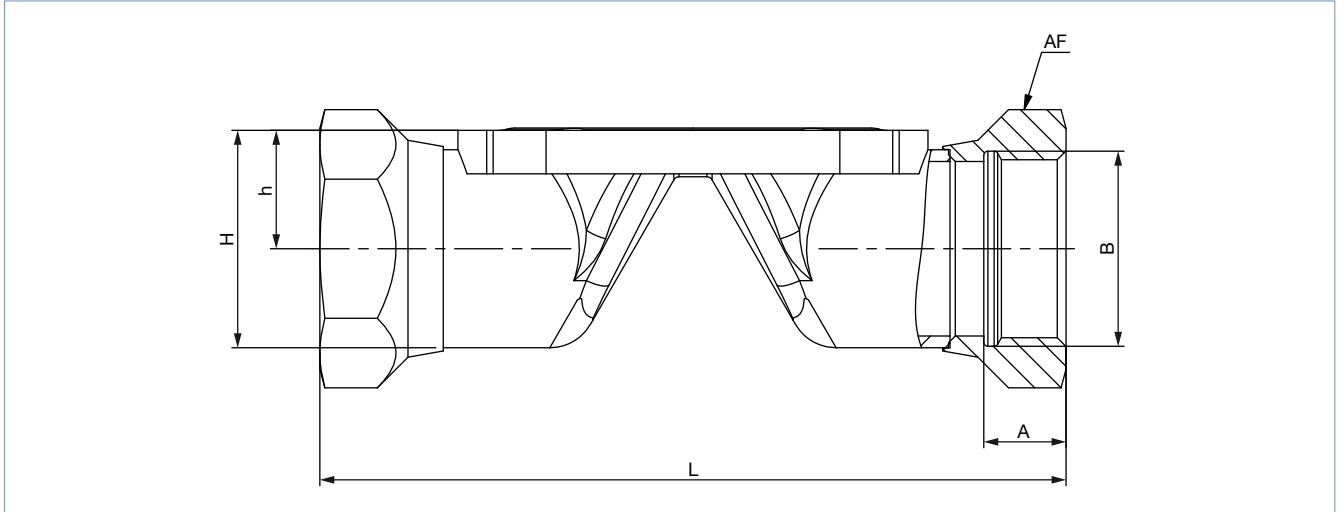
Diaphragm size	Port connection DN	ØD1	s	ØD2	L	h	H	Product key <sup>1.)</sup>
<b>DIN 32676 series B (ISO pipe)</b>								
15	15	21.3	1.6	50.5	110	14.35	39.60	TC52
20	20	26.9	1.6	50.5	119	17.15	42.40	TC43
25	25	33.7	2.0	50.5	129	20.55	45.80	TC44
32	32	42.4	2.0	64.0	148	25.10	57.10	TC55
40	40	48.3	2.0	64.0	161	29.35	61.35	TC46
50	50	60.3	2.0	77.5	192	35.35	74.10	TC47
<b>DIN 32676 series A (DIN pipe)</b>								
15	15	19.0	1.5	34.0	110	13.2	30.20	TD42
15	20	23.0	1.5	34.0	119	15.20	32.20	TD43
20	25	29.0	1.5	50.5	129	18.20	43.45	TD44
25	32	35.0	1.5	50.5	148	21.20	46.45	TD45
32	40	41.0	1.5	50.5	161	24.40	49.65	TD46
40	50	53.0	1.5	64.0	192	31.70	63.70	TD47
<b>ASME BPE</b>								
15	¾"	19.05	1.65	25.0	102	13.20	25.73	TG03
20	1"	25.4	1.65	50.5	114	16.40	41.65	TG04
32	1½"	38.10	1.65	50.5	140	22.95	48.20	TG05
40	2"	50.80	1.65	64.0	159	30.60	62.60	TG06
50	2½"	63.5	1.65	77.5	190	37.35	69.1	TG07

1.) This information is part of the product key (see “6.3. Bürkert Product Enquiry Form” on page 20).

#### 4.6. Tube valve body (VP) with threaded connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



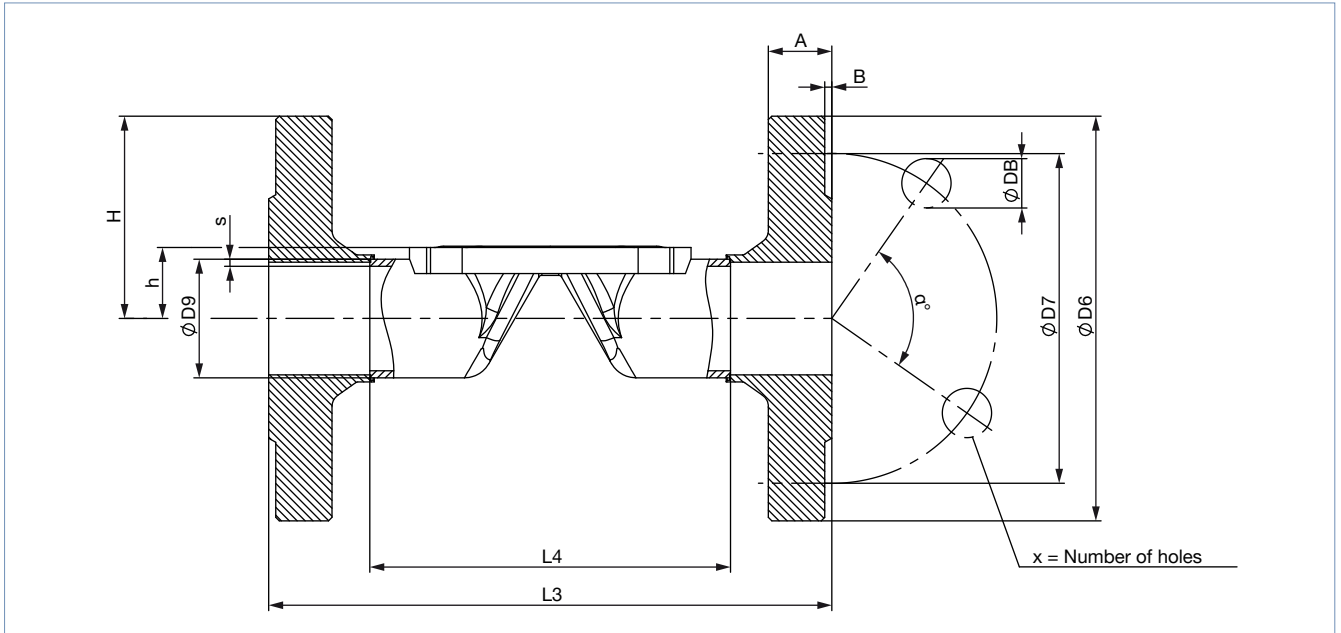
Diaphragm size	L	A	B	h	H	Width across flats of threaded ports	Product key <sup>1.)</sup>
15	102	14	G ½	14.35	25.0	27	GM84
20	118	12	G ¾	17.15	30.45	32	GM85
25	127	14	G 1	20.55	37.4	41	GM86
32	146	16	G 1¼	25.10	46.3	50	GM87
40	159	18	G 1½	29.35	53.5	60	GM88
50	191	20	G 2	35.35	65.50	70	GM89
Diaphragm size	L	A	B	h	H	Width across flats of threaded ports	Product key <sup>1.)</sup>
15	102	13.2	Rc ½	14.35	25.0	27	RC84
20	118	14.5	Rc ¾	17.15	30.45	32	RC85
25	127	16.8	Rc 1	20.55	37.4	41	RC86
32	146	19.1	Rc 1¼	25.10	46.3	50	RC87
40	159	19.1	Rc 1½	29.35	53.5	60	RC88
50	191	23.4	Rc 2	35.35	65.50	70	RC89
Diaphragm size	L	A	B	h	H	Width across flats of threaded ports	Product key <sup>1.)</sup>
15	102	13.7	NPT ½	14.35	25.0	27	NM84
20	118	14	NPT ¾	17.15	30.45	32	NM85
25	127	16.8	NPT 1	20.55	37.4	41	NM86
32	146	17.3	NPT 1¼	25.10	46.3	50	NM87
40	159	17.3	NPT 1½	29.35	53.5	60	NM88
50	191	17.6	NPT 2	35.35	65.50	70	NM89

1.) This information is part of the product key (see “6.3. Bürkert Product Enquiry Form” on page 20).

4.7. Tube valve body (VP) with flange connection

Note:

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



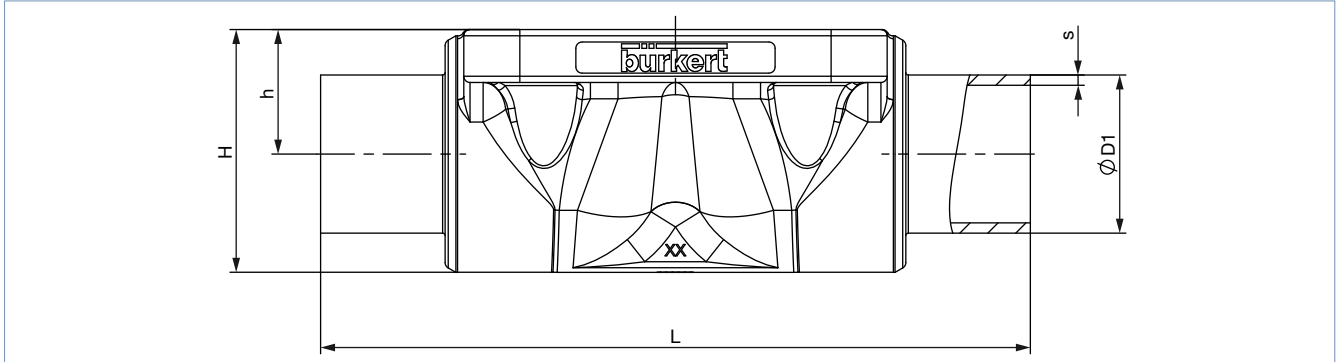
Diaphragm size	L4	L3	s3	ØD9	ØD6	ØD7	a°	ØDB	A	B	X	Product key <sup>1.)</sup>
<b>DIN EN 1092 - 1</b>												
15	76.5	130	1.6	21.3	76.5	65.0	90	14	16	2	4	FD22
20	92.5	150	1.6	26.9	92.5	75.0	90	14	18	2	4	FD23
25	102.5	160	2.0	33.7	102.5	85.0	90	14	18	2	4	FD24
32	122.5	180	2.0	42.4	122.5	100.0	90	18	18	2	4	FD25
40	136.5	200	2.0	48.3	136.5	110.0	90	18	18	3	4	FD26
50	160.5	230	2.0	60.3	160.5	125.0	90	18	20	3	4	FD27
<b>ANSI B16.5</b>												
15	67.0	130	1.6	21.3	89	60.5	90	15.7	11.2	1.6	4	FA02
25	106.0	160	2.0	33.7	108	79.2	90	15.7	14.2	1.6	4	FA04
40	128.0	200	2.0	48.3	127	98.6	90	15.7	17.5	1.6	4	FA06
50	151.0	230	2.0	60.3	152	120.7	90	19.1	19.1	1.6	4	FA07
<b>JIS 10K</b>												
15	89	130	1.6	21.3	95	70	90	15	12	1	4	FJ01
20	103	150	1.6	26.9	100	75	90	15	14	1	4	FJ02
25	116	160	2.0	33.7	125	90	90	19	14	1	4	FJ03
40	147	200	2.0	48.3	140	105	90	19	16	2	4	FJ05
50	175	230	2.0	60.3	155	120	90	19	16	2	4	FJ06

1.) This information is part of the product key (see [“6.3. Bürkert Product Enquiry Form”](#) on page 20).

**4.8. Cast valve body (VG) with welded connection**

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see **operating instructions Type 2973** ▶).



Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key <sup>1)</sup>
<b>DIN EN ISO 1127/ISO 4200/DIN 11866 series B</b>							
15	15	21.3	1.6	110	13.5	25.0	SA42
20	15	21.3	1.6	119	18.0	32.9	SA42
20	20	26.9	1.6	119	18.0	32.7	SA43
25	25	33.7	2.0	129	20.0	39.0	SA44
40	32	42.4	2.0	161	28.6	55.0	SA45
40	40	48.3	2.0	161	28.6	55.0	SA46
50	50	60.3	2.0	192	35.5	68.0	SA47
<b>DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A</b>							
15	15	19	1.5	110	13.5	25.0	SD42
20	20	23	1.5	119	18.0	32.8	SD43
25	25	29	1.5	129	20.0	39.0	SD44
40	40	41	1.5	161	28.6	55.0	SD46
50	50	53	1.5	192	35.5	68.0	SD47

DTS 1000597497 EN Version: - Status: RL (released | freigegeben | validé) printed: 23.01.2024



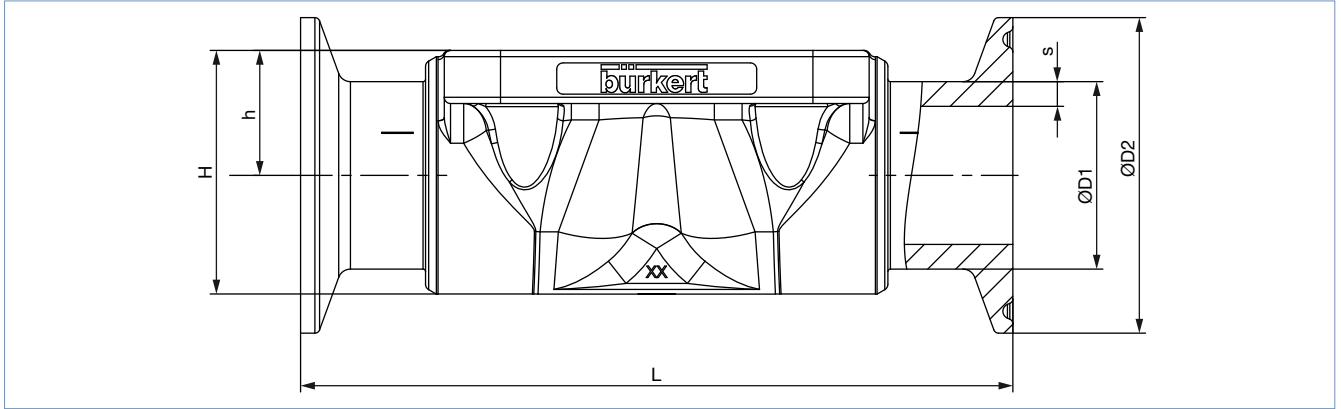
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key <sup>1.)</sup>
<b>ASME BPE/DIN 11866 series C</b>							
15	¾"	19.05	1.65	102	13.5	25.0	SA93
20	¾"	19.05	1.65	119	18.0	32.8	SA93
20	1"	25.4	1.65	119	18.0	32.7	SODF
25	1"	25.4	1.65	114	20.0	39.0	SODF
40	1½"	38.1	1.65	140	28.6	55.0	SODH
50	2"	50.8	1.65	159	35.5	68.0	SODI
50	2½"	63.5	1.65	192	35.5	68.0	SODJ
<b>BS 4825</b>							
15	20	19.05	1.20	102	14.0	25.5	SODE
20	25	25.4	1.65	119	18.0	32.8	SODF
25	25	25.4	1.65	114	20.0	39.0	SODF
40	40	38.1	1.65	140	28.6	55.0	SODH
50	50	50.8	1.65	159	35.5	68.0	SODI
50	65	63.5	1.65	192	35.5	68.0	SODJ
<b>SMS 3008</b>							
20	25	25	1.2	119	18.0	32.8	SA60
25	25	25	1.2	129	20.0	39.0	SA60
40	40	38	1.2	161	28.6	55.0	SA62
50	50	51	1.2	192	35.5	68.0	SA63
<b>DIN 11850 series 0</b>							
15	15	18	1.5	110	13.5	25.0	SC43
20	20	22	1.5	119	18.0	32.8	SC44
25	25	28	1.5	129	20.0	39.0	SC45
25	32	34	1.5	129	20.0	39.0	SC46
40	40	40	1.5	161	28.6	56.0	SC47
50	50	52	1.5	192	35.5	68.0	SC48

1.) This information is part of the product key (see "6.3. Bürkert Product Enquiry Form" on page 20).

#### 4.9. Cast valve body (VG) with clamp connection

**Note:**

- Dimensions in mm
- For further information on the discharge angle, please refer to the “Supplementary instructions Type 2xxx 3xxx” on our website (see [operating instructions Type 2973](#) ▶).



Diaphragm size	Port connection DN	ØD1	s	ØD2	L	h	H	Product key <sup>1.)</sup>
<b>DIN 32676 series B (ISO pipe)</b>								
25	25	33.7	2	50.5	129	20.0	39.0	TC44
40	40	48.3	2	64.0	161	28.6	55.0	TC46
50	50	60.3	2	77.5	192	35.5	68.0	TC47
<b>DIN 32676 series A (DIN pipe)</b>								
15	15	19	1.5	34.0	110	13.5	25.0	TD42
20	20	23	1.5	34.0	119	18.0	32.8	TD43
25	25	29	1.5	50.5	129	20.0	39.0	TD44
40	40	41	1.5	50.5	161	28.6	55.0	TD46
50	50	53	1.5	64.0	192	35.5	68.0	TD47
<b>ASME BPE</b>								
15	¾"	19.05	1.65	25.0	102	13.5	23.0	TG03
20	¾"	19.05	1.65	25.0	117	18.0	25.0	TG03
25	1"	25.4	1.65	50.5	114	18.0	40.0	TG04
40	1½"	38.1	1.65	50.5	140	28.6	55.0	TG05
50	2"	50.8	1.65	64.0	159	35.5	68.0	TG06
50	2½"	63.5	1.65	77.5	190	35.5	68.0	TG07
<b>BS 4825: Clamp BS 4825 - 3/pipe BS 4825 - 1</b>								
15	20	19.05	1.2	25	102	13.5	25.0	TH43
25	25	25.4	1.65	50.5	114	20.0	39.0	TG04
40	40	38.1	1.65	50.5	140	28.6	55.0	TG05
50	50	50.8	1.65	64.0	159	35.5	68.0	TG06
50	65	63.5	1.65	77.5	190	35.5	68.0	TG07
<b>Clamp 34.0 similar to DIN 32676 series B (ISO pipe)</b>								
15	15	21.3	1.6	34	110	13.5	25.0	TC42

1.) This information is part of the product key (see “6.3. Bürkert Product Enquiry Form” on page 20).

## 5. Performance specifications

### 5.1. Flow characteristics

#### Note:

- The  $K_v$  values may vary slightly for different diaphragm materials.
- Further  $K_v$  values are available on request.
- Flow:  $K_v$  value water (m<sup>3</sup>/h) for elastomer diaphragms
- Measurement at +20 °C, 4 bar at valve inlet and 3 bar at valve outlet

#### Forged steel valve body (VS)

Diaphragm size	Port connection		$K_v$ values [m <sup>3</sup> /h]					
			DIN EN ISO 1127 ISO 4200 DIN 11866 series B	DIN 11850 series 2 DIN 11866 series A DIN EN 10357 series A	ASME BPE DIN 11866 series C	DIN 11850 series 0	BS4825	SMS 3008
DN	[mm]	[inch]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]
15	10	3/8"	5.5	3.5	–	–	–	–
15	15	1/2"	6.5	6.5	3.1	–	3.7	–
15	20	3/4"	–	–	6.5	–	–	–
20	20	3/4"	12.5	12.4	8.4	–	8.9	–
25	25	1"	18	20	15.5	–	15.5	16
40	32	1 1/4"	–	34	–	–	–	–
40	40	1 1/2"	41	40	37	–	37	38
50	50	2"	66	66	66	–	66	66
50	65	2 1/2"	–	–	66	–	66	66

#### Tube valve body (VP)

Diaphragm size	Port connection		$K_v$ values [m <sup>3</sup> /h]		
			DIN EN ISO 1127 ISO 4200 DIN 11866 series B	DIN 11850 series 2 DIN 11866 series A DIN EN 10357 series A	ASME BPE DIN 11866 series C
DN	[mm]	[inch]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]	[m <sup>3</sup> /h]
15	10	3/8"	–	–	7.1
15	15	1/2"	7.2	7.4	–
15	20	3/4"	–	7.4	–
20	20	3/4"	13.5	–	–
20	25	1"	–	14.9	12.8
25	32	1 1/4"	–	22.3	–
25	25	1"	20.8	–	–
32	32	1 1/4"	36	–	–
32	40	1 1/2"	–	34.8	31
40	40	1 1/2"	47.9	–	–
40	50	2"	–	46.2	43
50	50	2"	69.7	–	–

#### Cast valve body (VG)


Diaphragm size	Port connection		$K_v$ values [m <sup>3</sup> /h]
	[mm]	[inch]	
15	15	1/2"	5.6
20	20	3/4"	10.7
25	25	1"	14.6
40	40	1 1/2"	35
50	50	2"	47

## 5.2. Medium pressure

Diaphragm size	Actuator (Diaphragm socket/handwheel)	Max. operating pressure for seal material
<b>DN</b>		<b>EPDM, PTFE/EPDM, advanced PTFE/EPDM, GYLON®/laminated EPDM</b>
15...50	Stainless steel/PPS	<b>Max. [bar]</b> 10

## 6. Ordering information

### 6.1. Bürkert eShop




**Bürkert eShop – Easy ordering and quick delivery**

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

### 6.2. Bürkert product filter



**Bürkert product filter – Get quickly to the right product**

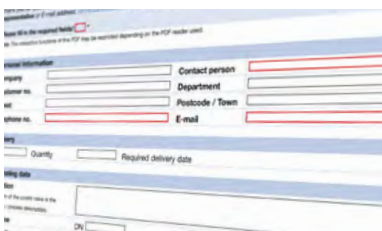
You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

### 6.3. Bürkert Product Enquiry Form

**Note:**

Please see our Product Enquiry Form for a full explanation of our specification key.



**Bürkert Product Enquiry Form – Your enquiry quickly and compactly**

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

[Fill out the form now](#)