



2-way Diaphragm Valve, stainless steel body, manually operated, port connection DN 8-50

- Cold-formed pipe valve body
- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes

Type 3233 GP can be combined with...



Type 2031 GP

Version with pneumatic actuator



Type 8034

Flow meter

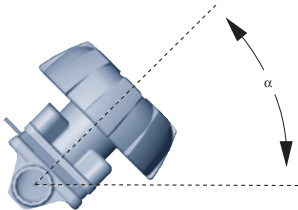
The manually-operated diaphragm valve in compact form of the Type 3233 GP consists of a flow-optimised stainless steel body with various surface finishes, a diaphragm and a manual actuator.

The diaphragm is both a switch element and a sealing element to the outside. It can be easily replaced. The flow can be continually adjusted with the handwheel.

The valves have no dead volume and can be mounted to be self-draining. This enables high flow capacities and a variety of applications to be realised.

Recommendation for draining operation

$\alpha = 15$ up to 35°
plus 1° to 5° inclination to the pipe axis.



Technical data	
Port connection	DN 8 - 50
Body material Cold-formed pipe valve body	Stainless steel 1.4404, 316L
Actuator materials Hand wheel and bonnet DN 8-50 DN 65-100	PPS or stainless steel Grey cast iron, white epoxy coated
Seal material	EPDM, PTFE/EPDM (FKM on request)
Media	Neutral gases and liquids, high purity, sterile, aggressive or abrasive fluids
Viscosity	Up to viscous
Surface quality	Glass-beaded (1.6 μm)
Media temperature	-10 to +130 °C Briefly up to +150 °C for steam sterilisation
Ambient temperature	Up to +130 °C, briefly up to +150 °C
Port connections • Threaded ports • Welded acc. to • Flanged acc. to	G 1/4 to G2 EN ISO 1127/ISO 4200 or DIN 11850 Series 2 DIN EN 1092-1
Installation	As required, preferably with actuator in upright position. Tilted 15 to 30° to the horizontal and inclined 1° to 5° to the flow direction for draining operation.
Options	Locking function

Technical data, continued

Kv values and weight

Port connection DN [mm]	Kv value water [m ³ /h]	Kv value water port connection DIN 11850 S2 [m ³ /h]	Max. operating pressure [bar]	Weight [kg]	
				Welded [kg]	Flanged [kg]
8/10	1.0	1.0	10	0.26	–
15	6.5	4.0	10	0.6	2.0
20	12.0	4.5	10	1.0	2.8
25	18.0	12.5	10	1.1	3.2
32	33.0	17.0	10	3.2	6.3
40	45.0	24.5	10	4.0	7.4
50	56.0	35.0	7/10 ¹⁾	4.8	9.5

¹⁾ see ordering chart p. 3

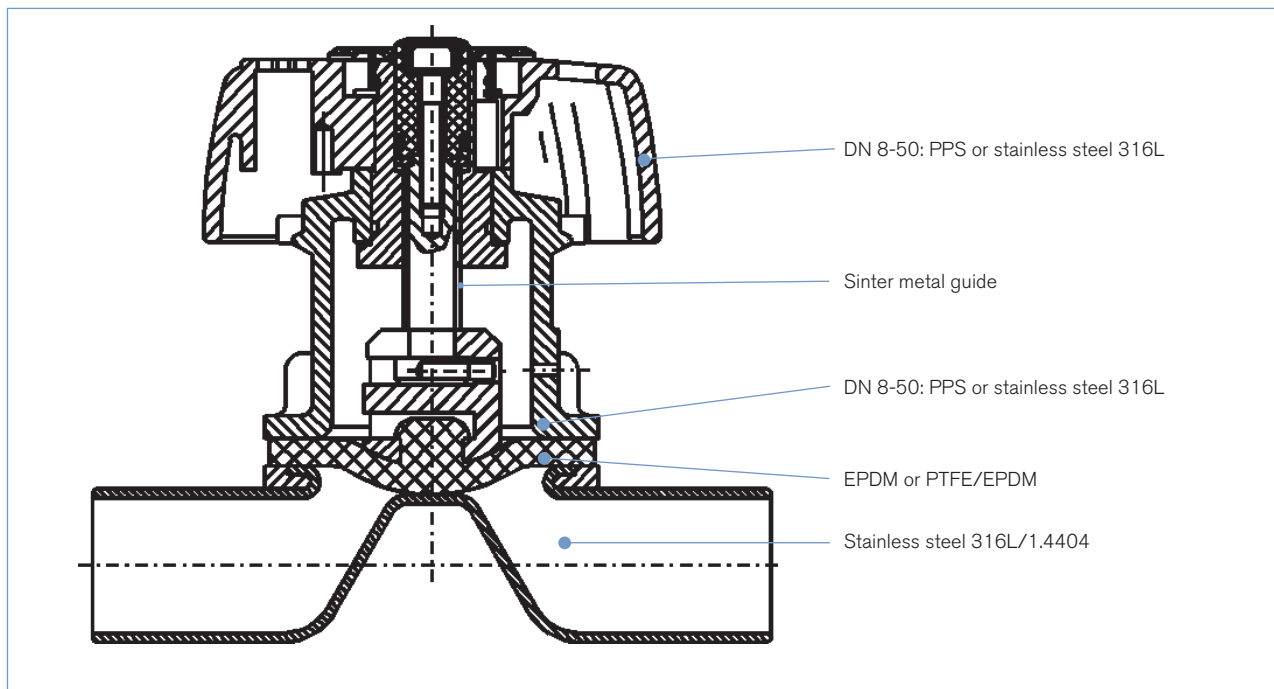
Flow rate: Kv value water [m³/h]

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



Approvals

Suitable for foodstuffs/sterile applications



The composition of the EPDM and PTFE/EPDM diaphragms corresponds to the *Code of Federal Regulations*, published by the *FDA* (Food and Drug Administration, USA).

Ordering chart for valves (other versions on request)

Welded body according to EN ISO 1127/ISO 4200 or DIN 11850 Series 2, stainless steel, cold-formed body, inside glass-beaded, different material combinations

Port connection DN [mm]	Orifice (Diaphragm size) [mm]	External Ø [mm]	Max. operating pressure [bar]	Kv value water [m ³ /h]	Handwheel/bonnet PPS/PPS		Handwheel/bonnet PPS/St. st.	
					Item no. EPDM diaphragm	Item no. PTFE/ EPDM diaphragm	Item no. EPDM diaphragm	Item no. PTFE/ EPDM diaphragm
Acc. EN ISO 1127/ISO 4200								
8	8	13.5	10	1.0	704 943	704 945	704 939	704 941
15	15	21.3	10	6.5	435 241	435 253	435 235	435 247
20	20	26.9	10	12.0	435 242	435 254	435 236	435 248
25	25	33.7	10	18.0	435 243	435 255	435 237	435 249
32	32	42.4	10	33.0	435 244	435 256	435 238	435 250
40	40	48.3	10	45.0	435 245	435 257	435 239	435 251
50	50	60.3	7	56.0	435 246	435 258	–	–
			10	56.0	–	–	435 240	435 252
Acc. DIN 11850 Serie 2								
10	8	13.0	10	1.0	704 944	704 946	704 940	704 942
15	15	19.0	10	4.0	435 265	435 277	435 259	435 271
20	15	23.0	10	4.5	435 266	435 278	435 260	435 272
25	20	29.0	10	12.5	435 267	435 279	435 261	435 273
32	25	35.0	10	17.0	435 268	435 280	435 262	435 274
40	32	41.0	10	24.5	435 269	435 281	435 263	435 275
50	40	53.0	10	35.0	435 270	435 282	435 264	435 276

 Further versions on request

 Material
Seal: FKM

Threaded body, with stainless steel, cold-formed body, inside glass-beaded, different material combinations

Port connection DN [mm]	Orifice (Diaphragm size) [mm]	Port connection threaded port	Max. operating pres- sure [bar]	Kv value water [m ³ /h]	Handwheel/bonnet PPS/PPS		Handwheel/bonnet PPS/St. st.	
					Item no. EPDM diaphragm	Item no. PTFE/ EPDM diaphragm	Item no. EPDM diaphragm	Item no. PTFE/ EPDM diaphragm
8	8	G 1/4	10	1.0	704 949	704 950	704 947	704 948
15	15	G 1/2	10	6.5	435 289	435 300	435 283	435 294
20	20	G 3/4	10	12.0	435 290	435 301	435 284	435 295
25	25	G 1	10	18.0	435 291	435 302	435 285	435 296
32	32	G 1 1/4	10	33.0	435 156	435 303	435 286	435 297
40	40	G 1 1/2	10	45.0	435 292	435 304	435 287	435 298
50	50	G 2	7	56.0	435 293	435 305	–	–
			10	56.0	–	–	435 288	435 299

 Further versions on request

 Material
Seal: FKM

Ordering chart for valves (other versions on request), continued

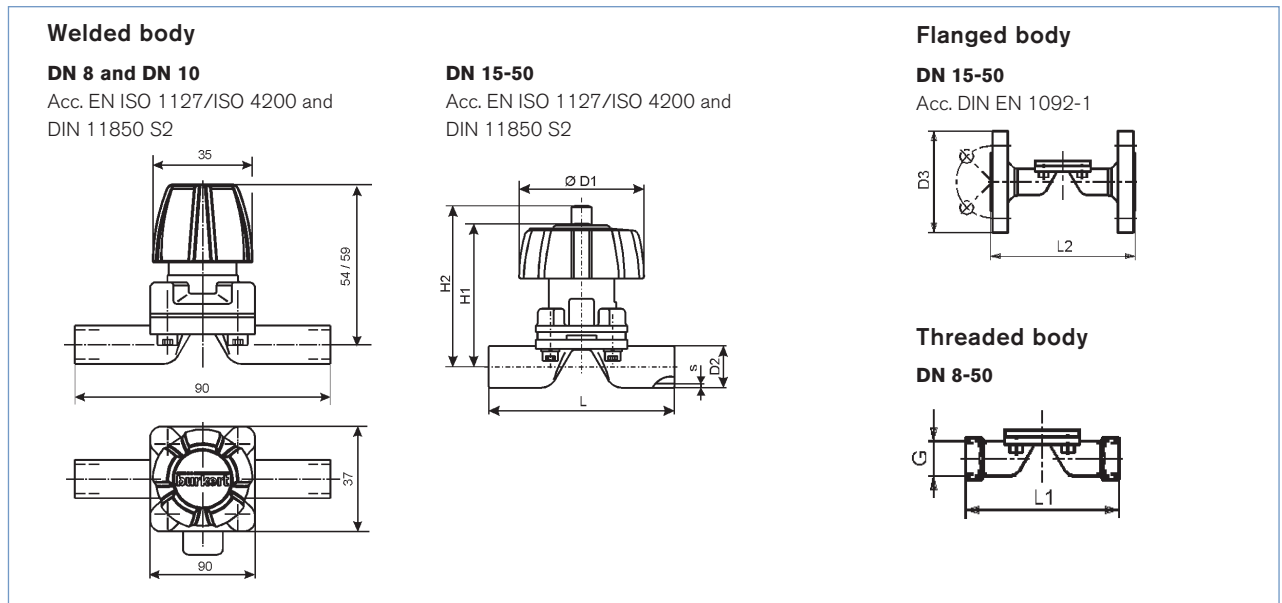
Flanged body according to DIN EN 1092-1, with stainless steel, cold-formed body, inside glass-beaded, different material combinations

Port connection DN [mm]	Orifice (Diaphragm size) [mm]	Port connection threaded port	Max. operating pressure [bar]	Kv value water [m³/h]	Handwheel/bonnet PPS/PPS		Handwheel/bonnet PPS/St. st.	
					Item no. EPDM diaphragm	Item no. PTFE/EPDM diaphragm	Item no. EPDM diaphragm	Item no. PTFE/EPDM diaphragm
Acc. DIN EN 1092-1								
15	15	4 x 90°	10	6.5	435 091	435 103	435 097	435 109
20	20	4 x 90°	10	12.0	435 092	435 104	435 098	435 110
25	25	4 x 90°	10	18.0	435 093	435 105	435 099	435 111
32	32	4 x 90°	10	33.0	435 094	435 106	435 100	435 112
40	40	4 x 90°	10	45.0	435 095	435 107	435 101	435 113
50	50	4 x 90°	7	56.0	435 096	435 108	-	-
			10	56.0	-	-	435 102	435 114

i Further versions on request

Material
Seal: FKM

Dimensions [mm]



Body dimensions							Welded					Threaded		Flanged	
Orifice	EN ISO 1127/ISO 4200			DIN 11850 S2			All	EN ISO 1127/ISO 4200		DIN 11850 S2		Threaded		DIN EN 1092-1	
DN	Ø D1	H1	H2	Ø D1	H1	H2	L	s	D2	s	D2	G	L1	D3	L2
8/10	35	54	59	35	54	59	90	1.6	13.5	1.5	13	G 1/4	85	-	-
15	80	87	94	80	85.5	92.5	110	1.6	21.3	1.5	19	G 1/2	102	95	130
20	80	93	104	80	87.5	94.5	119	1.6	26.9	1.5	23	G 3/4	118	105	150
25	80	97	109	80	94	105	129	2.0	33.7	1.5	29	G 1	127	115	160
32	114	115	130	80	97.5	109.5	148	2.0	42.4	1.5	35	G 1 1/4	146	140	180
40	114	120	139	114	114	128	161	2.0	48.3	1.5	41	G 1 1/2	159	150	200
50	114	135	160	114	121	140	192	2.0	60.3	1.5	53	G 2	191	165	230

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"/> Steam sterilisation	temperature	<input type="text"/>	

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

Valve features

Specification key

automatically transferred from next page

<input type="text" value="3233-2-0"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="VA"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Surface finish (if not standard) internal μm external μm

Certifications

- Attestation of compliance with the order EN-ISO 10204 2.1 (Item-No. 440 788)
- Test report EN-ISO 10204 2.2 (Item-No. 803 722)
- Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1
- Certification of Conformity for Pickling and Electropolishing Processes
- FDA and USP compliance
- 3A certificate

Comment / sketch

Valve features, specification key

Example

15 AB VA SA40 D050 NO05

Specification key

Please make a choice

ORIFICE [mm] (Diaphragm size)

08
15
20
25
32
40
50

SEAL MATERIAL

AB	EPDM in food quality
EA	PTFE/EPDM
FF	FKM
EU	advanced PTFE/EPDM in two pieces
ET	advanced PTFE (bonded on EPDM)

BODY MATERIAL

VA	Cold-formed stainless steel 1.4404/316L
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VARIABLE CODES

Surface finish, internal	
NO05	Internal glass beaded Ra=1.6µm

ACTUATOR VERSION

D050	Top and handwheel PPS
D051	Top stainless steel, handwheel PPS
D052	Top and handwheel stainless steel



PORT CONNECTION

Welded

Port conn. [mm]	EN ISO 1127/ ISO 4200	DIN 11850 Series 2
8	SA40=13.5x1.6	
10	SA41=17.2x1.6	SD40=13x1.5
15	SA42=21.3x1.6	SD42=19x1.5
20	SA43=26.9x1.6	SD43=23x1.5
25	SA44=33.7x2.0	SD44=29x1.5
32	SA45=42.4x2.0	SD45=35x1.5
40	SA46=48.3x2.0	SD46=41x1.5
50	SA47=60.3x2.0	SD47=53x1.5

Flange

Port conn. [mm]	DIN EN 1092-1
15	FD22 - L=130 mm, Ø=95 mm
20	FD23 - L=150 mm, Ø=105 mm
25	FD24 - L=160 mm, Ø=115 mm
32	FD25 - L=180 mm, Ø=140 mm
40	FD26 - L=200 mm, Ø=150 mm
50	FD27 - L=230 mm, Ø=165 mm

Thread

Port conn. [mm]	G
8	GM82 - G 1/4
15	GM84 - G 1/2
20	GM85 - G 3/4
25	GM86 - G 1
32	GM87 - G 1 1/4
40	GM88 - G 1 1/2
50	GM89 - G 2

Clamp

Port conn. [mm]	ISO 2852 SMS 3017
8	TC51=Clamp 34 - for tube ISO 4200
10	TC41=Clamp 34 - for tube ISO 4200
15	TC42=Clamp 34 - for tube ISO 4200
20	TC43=Clamp 50.5 - for tube ISO 4200
25	TC44=Clamp 50.5 - for tube ISO 4200
40	TC46=Clamp 64 - for tube ISO 4200
50	TC47=Clamp 77.5 - for tube ISO 4200

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

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