

2/2 way Diaphragm Valve, forged valve body, weld end and clamp connection, port connection DN8-100



Type 2031 with weld end

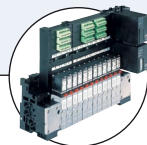
Type 2031 with clamp connection

Type 2031 can be combined with...



Type 8697

Electrical position feedback



Type 8640/8644

Valve block



Type 6012/6014 P

Pilot valve



Type 8311

Pressure Sensor/ Switch

For process valves with decentralized automation see ELEMENT Type 2103



The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2 way valve housing made of forged stainless steel.



The standard material of the actuator is PPS. With its favourable flow characteristics and zero dead volume, the valve housing enables high flow capacities and a variety of applications to be realized.

Applications

- Pharma
- Biotechnology
- Food industry

Technical data	
Port connection size	DN6 - DN100 (1/8" - 4")
Diaphragm size	8 - 100
Port connections	
Weld ends	DIN EN ISO 1127 / ISO 4200 / DIN11866 B DIN 11850 2 / DIN11866 A ASME BPE / DIN 11866 C BS4825 SMS 3008 DIN 11850 0
Clamps	DIN 32676 B (with pipe ISO 4200) DIN 32676 A (with pipe DIN 11850 2) ASME BPE further port connections on request
Diaphragm materials	PTFE/EPDM (EA), EPDM (AD), advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF) on request
Materials	
Body	Stainless steel 316L / 1.4435 / BN2
Actuator	PPS (PA on request)
Pilot air ports	Stainless steel 1.4305
Media	Neutral gases and liquids, high-purity, sterile, aggressive or abrasive fluids
Viscosity	Up to viscous
Surface finish	
internally electropolished (external surface forged electropolished)	Ra ≤ 0.38 µm (ASME BPE SF4)
internally mechanically polished (external surface forged)	Ra ≤ 0.5 µm (ASME BPE SF1)

Content

Valve specifications	System spec. On/Off Classic	Request for quotation
 Type 2031 forged	 Type 8801-DB	Type 8801-DB
Technical data & ordering info. p. 1-12	Ordering info. & technical data p. 13-16	p. 17

Technical data, *continued*

Technical data	
Medium temperature	
PTFE/EPDM (EA)	- 10 to + 130 °C (steam sterilisation + 140 °C for 60 min)
EPDM (AD), advanced PTFE/EPDM (EU)	- 10 to + 143 °C (steam sterilisation + 150 °C for 60 min)
GYLON®/EPDM laminated (ER)	- 5 to + 143 °C (steam sterilisation + 150 °C for 60 min)
FKM (FF)	- 5 to + 130 °C (steam sterilisation + 140 °C for 60 min)
	0 to + 130 °C (not recommended for steam)
Ambient temperature	
PPS actuator size ≤ 80 mm	+ 5 to 140 °C
PPS actuator size 100 mm, 125 mm	+ 5 to 90 °C (briefly up to + 140 °C)
PA actuator size ≤ 125 mm (on request)	- 10 to + 60 °C
PA actuator size ≥ 175 mm	- 10 to + 50 °C
Control fluid	Neutral gases; air
Installation	As required, preferably with actuator in upright position

Technical data Pressure

Diaphragm size	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	
			EPDM, FKM	PTFE, advanced PTFE, Gylon ®
8	40	5.0...7	10	10
15	50	5.0...7	8.5	5
	63	5.0...7	10	10
20	63	5.5...7	10	5
	80	5.0...7	-	10
25	80	5.5...7	10	7.5
40	100	5.5...7	6.5	6
	125	5.5...7	10	10
50	125	5.5...7	8	7
80	225	5.0...6	10	10
100	225	5.0...6	8	4

Pressure values: Overpressure to the atmospheric pressure, valve closes dynamical against max. operating pressure.

Remark: For low operating pressures optional variants with reduced spring forces are recommended.

Technical data K_v

Port Connection DN		Diaphragm size	K_v value [m³/h] DIN EN ISO 1127 ISO 4200 DIN 11866 B	DIN 11850 2 DIN 11866 A	ASME BPE DIN 11866 C	BS4825	SMS3008	DIN 11850 0
[mm]	[inch]							
6	1/8"	8	-	-	-	-	-	1.1
8	1/4"	8	1.5	-	0.7	0.5	-	1.7
10	3/8"	8	1.5	1.5	1.6	1.4	-	-
15	1/2"	8	-	-	1.5	-	-	-
10	3/8"	15	5.5	3.5	-	-	-	-
15	1/2"	15	6.5	6.5	3.1	3.7	-	-
20	3/4"	15	-	-	6.5	-	-	-
20	3/4"	20	12.5	12.4	8.4	8.9	-	-
25	1"	25	18	20	15.5	15.5	16	-
32	1 1/4"	40	-	34	-	-	-	-
40	1 1/2"	40	41	40	37	37	37.8	-
50	2"	50	66	66	66	66	66	-
65	2 1/2"	50	-	-	66	66	66	-
65	2 1/2"	80	160	160	160	160	-	-
80	3"	80	160	160	160	160	160	-
100	4"	100	235	235	235	235	-	-

Flow rate: K_v value [m³/h] for elastomer diaphragms measured at 20 °C and 1 bar pressure drop at mean operating pressure.

Approvals

Suitability for foodstuffs / sterile applications

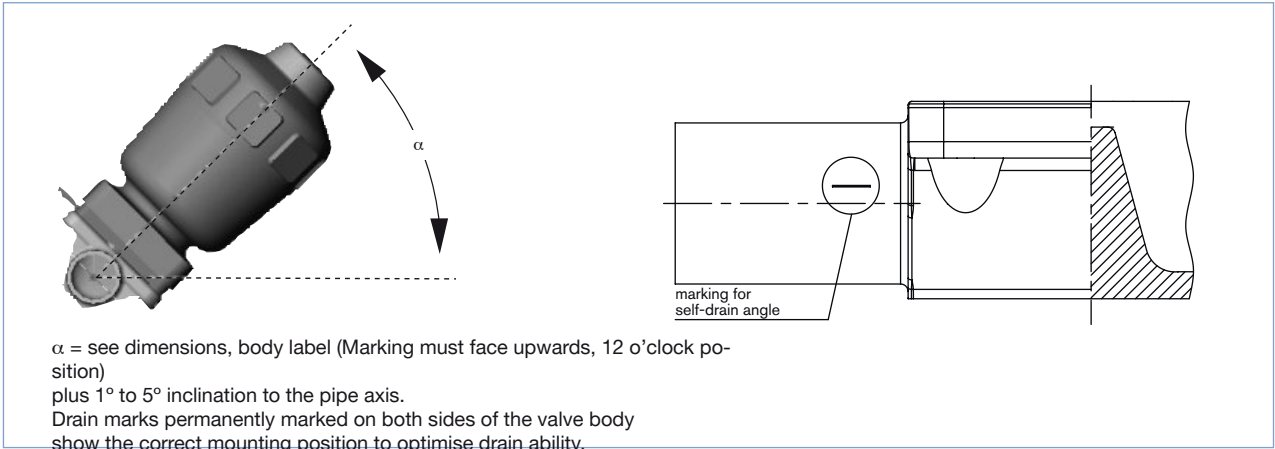


- The composition of the EPDM (AD), Gylon®/EPDM laminated (ER), PTFE/EPDM (EA) and advanced PTFE (EU) diaphragms corresponds to the Code of Federal Regulations, published by the FDA (Food and Drug Administration, USA).



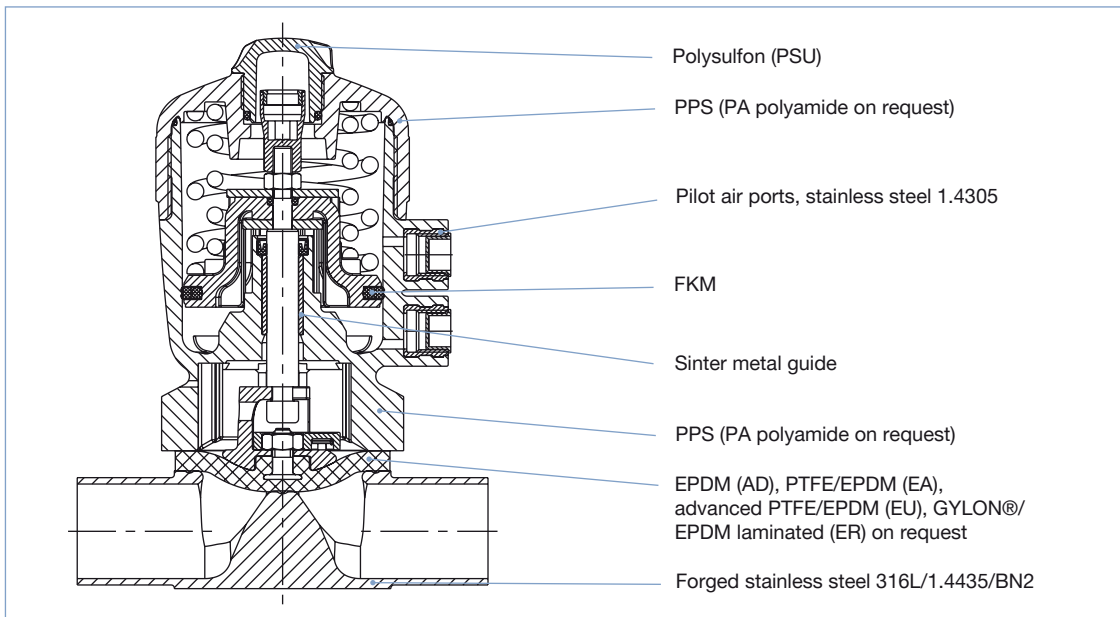
- The composition of the EPDM (AD), Gylon®/EPDM laminated (ER), PTFE/EPDM (EA) and advanced PTFE (EU) diaphragms is suitable for the application with food and beverage (acc. to EC-Regulation 1935/2004/EC)
- The composition of the EPDM (AD), Gylon®/EPDM laminated (ER), PTFE/EPDM (EA) und advanced PTFE (EU) diaphragms are approved acc. USP Class VI
- Approval according to TA-air (Port size DN4 - 50)

Installation for self-draining operation



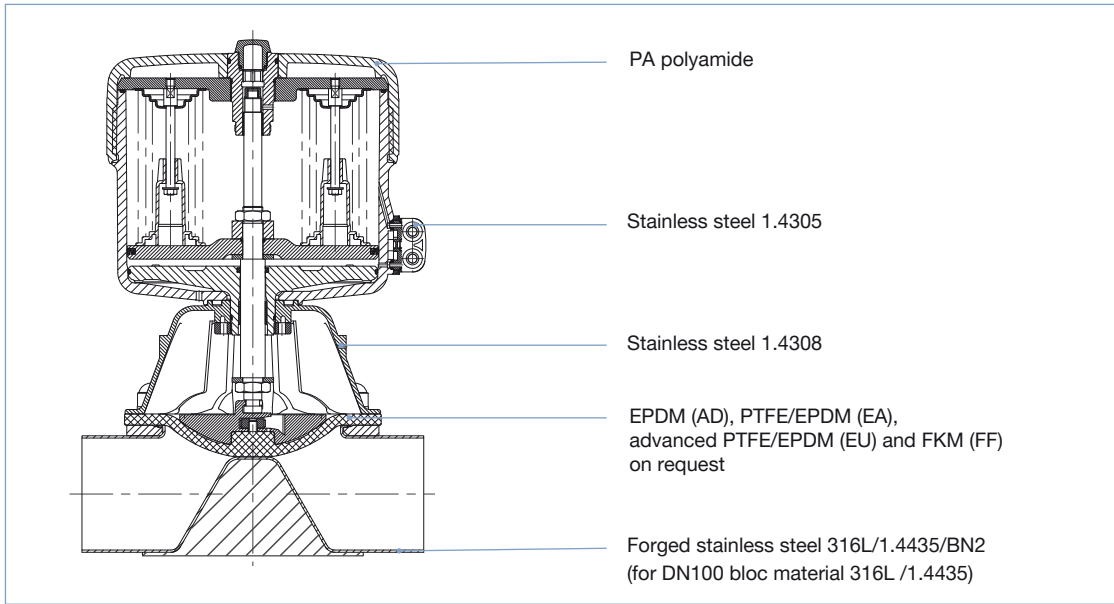
Materials

Diaphragm size 8-50

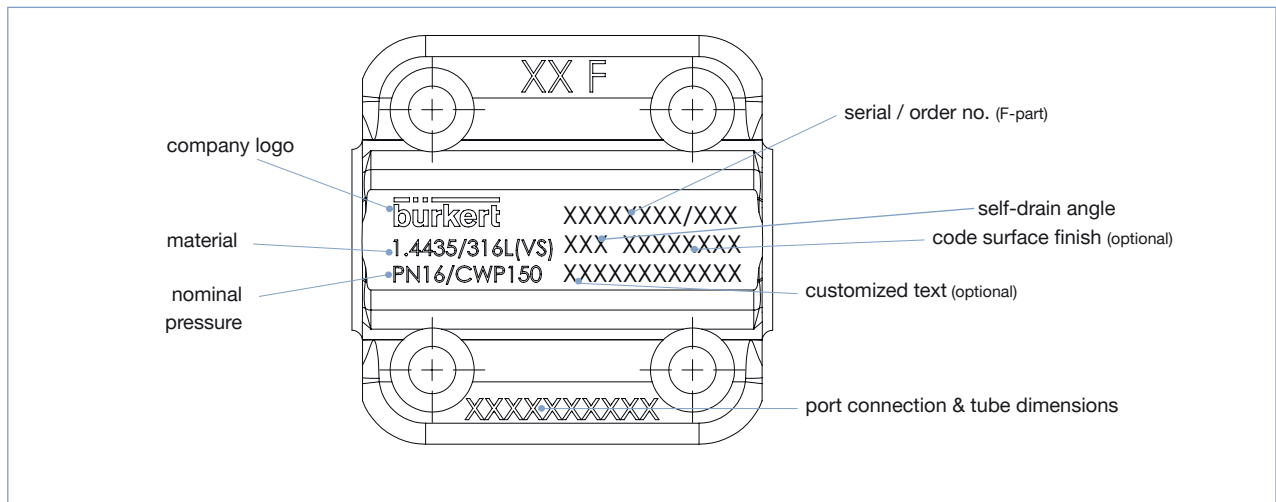


Materials, *continued*

Diaphragm size 80 - 100



Body label



Ordering information for valve system On/Off CLASSIC Type 8801-DB

A diaphragm valve **Type 2031** can be combined with the feedback **Type 8697** to form a valve system On/Off **CLASSIC**.

The valve system On/Off CLASSIC is composed of:

- a feedback **Type 8697** (see separate datasheet)
- a diaphragm valve **Type 2031** (see ordering chart)



For the configuration of further valve systems please use the "Request for quotation".
You order two components and receive a complete assembled and certified valve.



Electrical position feedback



Type 8697

Actuator size 40 to 225

The position feedback Type 8697 is designed for integrated mounting on CLASSIC series 20XX process valves suiting the requirements of hygienic process environment Mechanical or inductive limit switches register the position of the valve.

Features

- Compact design
- LED position indicator
- Mechanical or inductive limit switches for end position registering
- Easy to clean chemically resistant housing featuring IP65 / IP67, 4X Rating
- Optional intrinsically safe version acc. to ATEX

Benefits

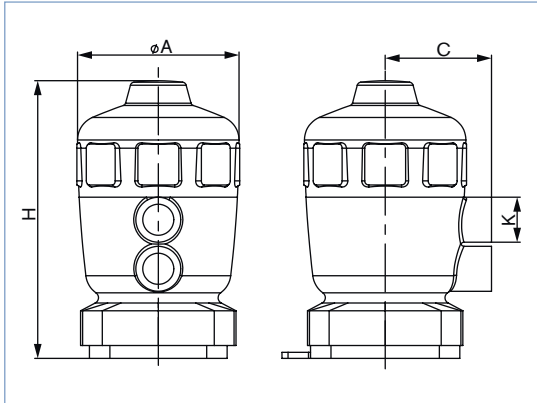
- Easy and quick installation
- High level of signal reliability thanks to self adjusting limit switches
- Minimised space requirement in the plant piping for more flexibility in plant design

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

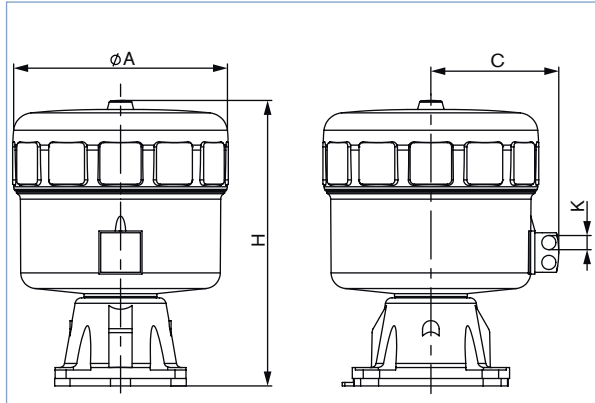
Dimensions [mm] - Actuator CLASSIC and valve system On/Off CLASSIC

Welded connection

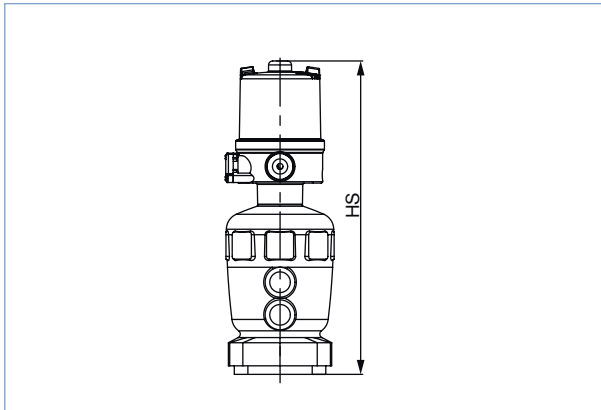
Diaphragm size 8-50



Diaphragm size 80-100



Valve system On/Off CLASSIC with feedback, Type 8697

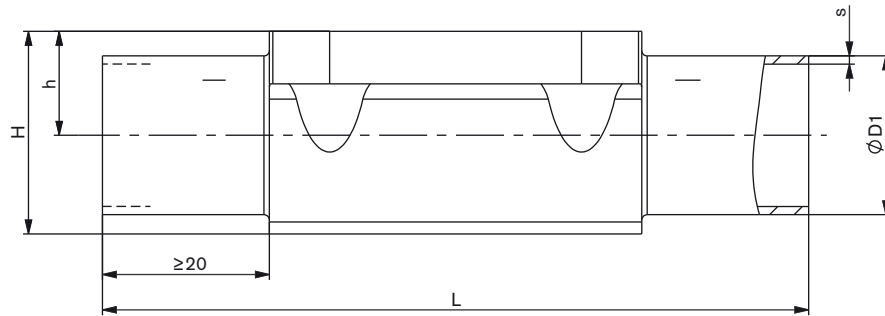


Actuator and valve system On/Off CLASSIC

Diaphragm size	Actuator size ϕ [mm]	ϕA [mm]	C [mm]	K	H [mm]	HS with 8697 [mm]
8	40	53	34	G 1/8"	89	184
15	50	64	39	G 1/8"	108	203
	63	80	52	G 1/4"	125	220
20	63	80	52	G 1/4"	130	225
	80	101	60	G 1/4"	151	246
25	80	101	60	G 1/4"	155	250
40	100	127	73	G 1/4"	205	300
	125	153	86	G 1/4"	243	338
50	125	153	86	G 1/4"	243	338
80	225	261	155	G 1/4"	345	440
100	225	261	155	G 1/4"	345	440

Dimensions Type 2031 forged diaphragm valve [mm]

Forged body - weld end

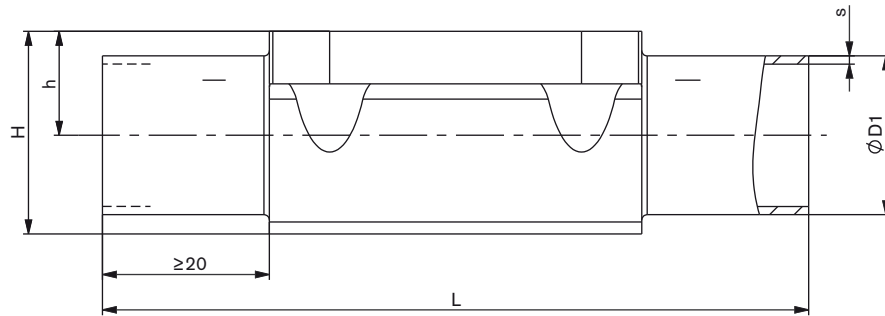


Port Connection DN		Diaphragm Size	ØD1	s	h	H	L	Self-drain angle α
[mm]	[inch]							
DIN EN ISO 1127 / ISO 4200 / DIN 11866 B								
[mm]	[inch]		[mm]	[mm]	[mm]	[mm]	[mm]	[°]
8	¼"	8	13.5	1.6	9	19	90	24
10	⅜"	8	17.2	1.6	9	19	90	13
10	⅜"	15	17.2	1.6	12	24	110	25
15	½"	15	21.3	1.6	12	24	110	18
20	¾"	20	26.9	1.6	16	30	119	17
25	1"	25	33.7	2.0	19	37	129	19
40	1½"	40	48.3	2.0	28	52	161	14
50	2"	50	60.3	2.0	36	68	192	14
65	2½"	80	76.1	2.0	51	98	250	20
80	3"	80	88.9	2.3	51	98	250	15
100	4"	100	114.3	2.3	64	127	295	13.5
DIN 11850 2 / DIN 11866 A								
10	⅜"	8	13.0	1.5	9	19	90	24
10	⅜"	15	13.0	1.5	8	20	110	40
15	½"	15	19.0	1.5	12	24	110	22
20	¾"	20	23.0	1.5	16	30	119	22
25	1"	25	29.0	1.5	19	37	129	23
32	1¼"	40	35.0	1.5	28	52	161	26
40	1½"	40	41.0	1.5	28	52	161	20
50	2"	50	53.0	1.5	36	68	192	18
65	2½"	80	70.0	2.0	51	98	250	22.5
80	3"	80	85.0	2.0	51	98	250	16
100	4"	100	104.0	2.0	64	127	295	17
ASME BPE / DIN 11866 C								
8	¼"	8	6.35	0.89	6	15	78	48
10	⅜"	8	9.53	0.89	6	15	89	39
15	½"	8	12.70	1.65	9	19	89	26
15	½"	15	12.70	1.65	8	20	108	41
20	¾"	15	19.05	1.65	12	24	108	22
20	¾"	20	19.05	1.65	16	30	117	29
25	1"	25	25.40	1.65	19	37	127	27
40	1½"	40	38.10	1.65	28	52	159	24
50	2"	50	50.80	1.65	36	68	190	20
65	2½"	50	63.50	1.65	36	68	192	11
65	2½"	80	63.50	1.65	51	98	250	25
80	3"	80	76.20	1.65	51	98	250	19
100	4"	100	101.60	2.11	64	127	295	18

DTS 1000010981 EN Version: A1 Status: RL (released | freigegeben | valide) printed: 11.02.2020

Dimensions Type 2031 forged diaphragm valve [mm], *continued*

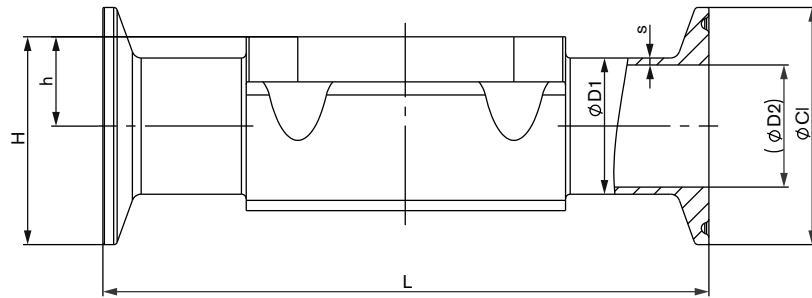
Forged body - weld end



Port Connection DN		Diaphragm Size	ØD1 [mm]	s [mm]	h [mm]	H [mm]	L [mm]	Self-drain angle α [°]
[mm]	[inch]							
BS 4825								
8	1/4"	8	6.35	1.20	6	15	78	50
10	3/8"	8	9.53	1.20	6	15	89	42
15	1/2"	15	12.70	1.20	8	20	108	40
20	3/4"	20	19.05	1.20	16	30	117	28
25	1"	25	25.40	1.65	19	37	127	27
40	1 1/2"	40	38.10	1.65	28	52	159	24
50	2"	50	50.80	1.65	36	68	190	20
65	2 1/2"	50	63.50	1.65	36	68	192	11
65	2 1/2"	80	63.50	1.65	51	98	250	25
80	3"	80	76.20	1.65	51	98	250	19
100	4"	100	101.60	2.11	64	127	295	18
SMS 3008								
25	1"	25	25.0	1.2	19	37	129	27
40	1 1/2"	40	38.0	1.2	28	52	161	22
50	2"	50	51.0	1.2	36	68	192	19
65	2 1/2"	50	63.5	1.6	36	68	192	11
80	3"	80	76.1	1.6	51	98	250	19
DIN 11850								
6	1/8"	8	8.0	1.0	6	15	90	44
8	1/4"	8	10.0	1.0	6	15	90	39

Dimensions Type 2031 forged diaphragm valve [mm], *continued*

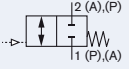
Forged body - clamp



Port Connection DN		Diaphragm Size	ØD1	s	Cl	ØD2	h	H	L	Self-drain angle α
[mm]	[inch]									
DIN 32676 B (with pipe EN ISO 4200)										
15	½"	15	21.3	1.6	50.5	18.1	12	37	167	18
20	¾"	20	26.9	1.6	50.5	23.7	16	41	114	17
25	1"	25	33.7	2.0	50.5	29.7	19	44	129	19
40	1½"	40	48.3	2.0	64.0	44.3	28	60	161	14
50	2"	50	60.3	2.0	77.5	56.3	36	74	190	14
DIN 32676 A (with pipe DIN 11850 2)										
10	⅜"	15	13.0	1.5	34.0	10.0	8	25	110	40
15	½"	15	19.0	1.5	34.0	16.0	12	29	110	22
20	¾"	20	23.0	1.5	34.0	20.0	16	33	119	22
25	1"	25	29.0	1.5	50.5	26.0	19	44	129	23
40	1½"	40	41.0	1.5	50.5	38.0	28	53	161	20
50	2"	50	53.0	1.5	64.0	50.0	36	68	192	18
ASME BPE										
8	¼"	8	6.35	0.89	25.0	4.57	6	18	64	48
10	⅜"	8	9.53	0.89	25.0	7.75	6	18	89	39
15	½"	8	12.70	1.65	25.0	9.4	9	22	89	26
15	½"	15	12.70	1.65	25.0	9.4	8	21	89	41
20	¾"	20	19.05	1.65	25.0	15.75	16	29	102	29
25	1"	25	25.40	1.65	50.5	22.1	19	44	114	27
40	1½"	40	38.10	1.65	50.5	34.8	28	53	140	24
50	2"	50	50.80	1.65	64.0	47.5	36	68	159	20
65	2½"	50	63.50	1.65	77.5	60.2	36	74	190	11
65	2½"	80	63.50	1.65	77.5	60.2	51	98	216	25
80	3"	80	76.20	1.65	91.0	72.9	51	98	222	19
100	4"	100	101.60	2.11	119.0	97.38	64	127	306	18

Ordering chart Type 2031 forged diaphragm valve, weld end

Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)

Control function	Port Connection DN		Diaphragm size	Actuator size Ø [mm]	K _v value [m³/h]	Pilot pressure [bar]	Max. operating pressure [bar]	Article no. mechanically polished Ra ≤0.5 µm	Article no. electro polished Ra ≤0.38 µm	
	[mm]	[inch]								
Welded connection acc. DIN EN ISO 1127 / ISO 4200 / DIN11866 B										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	8	¼"	8	40	1.5	5.0...7	10	319780	319781	
	10	⅜"	8	40	1.5	5.0...7	10	319782	319492	
	10	⅜"	15	50	5.5	5.0...7	8.5	319783	319784	
	15	½"	15	50	6.5	5.0...7	8.5	319785	291162	
	20	¾"	20	63	12.5	5.5...7	10	319786	291178	
	25	1"	25	80	18	5.5...7	10	319787	291218	
	40	1½"	40	100	41	5.0...7	6.5	319788	319789	
	50	2"	50	125	66	5.0...7	8	319790	319791	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	8	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	8	¼"	8	40	2	5.0...7	10	445003	445004	
	10	⅜"	8	40	2	5.0...7	10	445008	445009	
	10	⅜"	15	63	5.2	5.0...7	10	299523	299495	
	15	½"	15	63	6	5.0...7	10	445013	445014	
	20	¾"	20	80	12	5.0...7	10	445018	445019	
	25	1"	25	80	16	5.5...7	7.5	445023	445024	
	40	1½"	40	125	40	5.0...7	10	445027	445028	
50	2"	50	125	67	5.0...7	7	445032	445033		
65	2½"	80	225	160	5.0...6	10	on request	on request		
80	3"	80	225	160	5.0...6	10	on request	on request		
100	4"	100	225	235	5.0...6	4	on request	on request		
Welded connection acc. DIN 11850 2 / DIN 11860 A										
	Diaphragm material EPDM (AD)									
	10	⅜"	8	40	1.5	5.0...7	10	319810	291122	
	10	⅜"	15	50	3.5	5.0...7	8.5	319811	319812	
	15	½"	15	50	6.5	5.0...7	8.5	293915	319813	
	20	¾"	20	63	12.4	5.5...7	10	319814	319815	
	25	1"	25	80	20	5.5...7	10	291220	319816	
	32	1¼"	40	100	34	5.0...7	6.5	319817	319818	
	40	1½"	40	100	40	5.0...7	6.5	319819	319820	
	50	2"	50	125	66	5.0...7	8	319821	319822	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	8	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	10	⅜"	8	40	1.9	5.0...7	10	445137	445138	
	10	⅜"	15	63	3.4	5.0...7	10	299521	299492	
	15	½"	15	63	6	5.0...7	10	445142	445143	
	20	¾"	20	80	12	5.0...7	10	445147	445148	
	25	1"	25	80	17	5.5...7	7.5	445152	445153	
	32	1¼"	40	125	34	5.0...7	10	554976	554977	
	40	1½"	40	125	40	5.0...7	10	445157	445158	
50	2"	50	125	66	5.0...7	7	445162	445163		
65	2½"	80	225	160	5.0...6	10	on request	on request		
80	3"	80	225	160	5.0...6	10	on request	on request		
100	4"	100	225	235	5.0...6	4	on request	on request		

i Further versions on request**Control function B**

Material
Diaphragms for steam sterilization advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF)

Additional
Versions with reduced spring force

Ordering chart Type 2031 forged diaphragm valve, weld end, continued

Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)

Control function	Port Connection DN		Diaphragm size	Actuator size Ø [mm]	K _v value [m³/h]	Pilot pressure [bar]	Max. operating pressure [bar]	Article no. mechanically polished Ra ≤ 0.5 µm	Article no. electro polished Ra ≤ 0.38 µm	
	[mm]	[inch]								
Welded connection acc. ASME BPE / DIN 11866 C										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	8	¼"	8	40	0.7	5.0...7	10	291108	319800	
	10	⅜"	8	40	1.6	5.0...7	10	319802	291121	
	15	½"	8	40	1.5	5.0...7	10	291109	319803	
	15	½"	15	50	3.1	5.0...7	8.5	274226	255243	
	20	¾"	15	50	6.5	5.0...7	8.5	318103	319804	
	20	¾"	20	63	8.4	5.5...7	10	274227	319805	
	25	1"	25	80	15.5	5.5...7	10	274228	255244	
	40	1½"	40	100	37	5.0...7	6.5	274231	291243	
	50	2"	50	125	66	5.0...7	8	274232	255246	
	65	2½"	50	125	66	5.0...7	8	319830	319831	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	8	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	8	¼"	8	40	0.7	5.0...7	10	447915	447916	
	10	⅜"	8	40	1.8	5.0...7	10	447920	447921	
	15	½"	8	40	1.9	5.0...7	10	250491	218537	
	15	½"	15	63	3.1	5.0...7	10	445082	445083	
	20	¾"	15	63	6	5.0...7	10	250492	299489	
	20	¾"	20	80	8.5	5.0...7	10	445087	445088	
	25	1"	25	80	14.5	5.5...7	7.5	445092	445093	
	40	1½"	40	125	37.5	5.0...7	10	445097	445098	
	50	2"	50	125	66	5.0...7	7	445102	445103	
	65	2½"	50	125	66	5.0...7	7	299536	276355	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	4	on request	on request	
Welded connection acc. SMS 3008										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	25	1"	25	80	16	5.5...7	10	319792	319793	
	40	1½"	40	100	37.8	5.0...7	6.5	319794	319796	
	50	2"	50	125	66	5.0...7	8	319797	319798	
	65	2½"	50	125	66	5.0...7	8	260734	319799	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	25	1"	25	80	14.8	5.5...7	7.5	445182	445183	
	40	1½"	40	125	38	5.0...7	10	445187	445188	
	50	2"	50	125	66	5.0...7	7	445192	445193	
	65	2½"	50	125	66	5.0...7	7	449521	551469	
	80	3"	80	225	160	5.0...6	10	on request	on request	

i Further versions on request

Control function B

Material
Diaphragms for steam sterilization advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF)

Additional
Versions with reduced spring force

Ordering chart Type 2031 forged diaphragm valve, weld end, continued

Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)

Control function	Port Connection DN		Diaphragm size	Actuator size Ø [mm]	K _v value [m³/h]	Pilot pressure [bar]	Max. operating pressure [bar]	Article no. mechanically polished Ra ≤ 0.5 µm	Article no. electro polished Ra ≤ 0.38 µm	
	[mm]	[inch]								
Welded connection acc. BS4825										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	8	¼"	8	40	0.5	5.0...7	10	319823	319824	
	10	⅜"	8	40	1.4	5.0...7	10	319825	319826	
	15	½"	15	50	3.7	5.0...7	8.5	319827	319828	
	20	¾"	20	63	8.9	5.5...7	10	291180	319829	
	25	1"	25	80	15.5	5.5...7	10	274228	255244	
	40	1½"	40	100	37	5.0...7	6.5	274231	291243	
	50	2"	50	125	66	5.0...7	8	274232	255246	
	65	2½"	50	125	66	5.0...7	8	319830	319831	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	8	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	8	¼"	8	40	0.5	5.0...7	10	445072	445073	
	10	⅜"	8	40	1.6	5.0...7	10	445077	445078	
	15	½"	15	63	3.6	5.0...7	10	447905	447906	
	20	¾"	20	80	8.8	5.0...7	10	447910	447911	
	25	1"	25	80	14.5	5.5...7	7.5	445092	445093	
	40	1½"	40	125	37.5	5.0...7	10	445097	445098	
50	2"	50	125	66	5.0...7	7	445102	445103		
65	2½"	50	125	66	5.0...7	7	299536	276355		
65	2½"	80	225	160	5.0...6	10	on request	on request		
80	3"	80	225	160	5.0...6	10	on request	on request		
100	4"	100	225	235	5.0...6	4	on request	on request		
Welded connection acc. DIN 11850 0										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	8	¼"	8	40	1.1	5.0...7	10	319806	319807	
	10	⅜"	8	40	1.7	5.0...7	10	319808	319809	
	Diaphragm material PTFE/EPDM (EA)									
	8	¼"	8	40	1.1	5.0...7	10	299511	448288	
10	⅜"	8	40	1.9	5.0...7	10	299515	448289		

i Further versions on request**Control function B**

Material
Diaphragms for steam sterilization advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF)

Additional
Versions with reduced spring force

Ordering chart Type 2031 forged diaphragm valve, clamp

Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)

Control function	Port Connection DN		Diaphragm size	Actuator size Ø [mm]	K _v value [m³/h]	Pilot pressure [bar]	Max. operating pressure [bar]	Article no. mechanically polished Ra ≤ 0.5 µm	Article no. electro polished Ra ≤ 0.38 µm
	[mm]	[inch]							
Clamp connection acc. DIN 32676 B (with pipe ISO 4200)									
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)								
	15	½"	15	50	6.5	5.0...7	8.5	319840	319841
	20	¾"	20	63	12.5	5.5...7	10	319832	319833
	25	1"	25	80	18	5.5...7	10	319834	319835
	40	1½"	40	100	41	5.0...7	6.5	319836	319837
	50	2"	50	125	66	5.0...7	8	319838	319839
	Diaphragm material PTFE/EPDM (EA)								
	15	½"	15	63	6	5.0...7	10	299526	299494
	20	¾"	20	80	12	5.0...7	10	299530	299500
	25	1"	25	80	16	5.5...7	7.5	299531	299501
	40	1½"	40	125	40	5.0...7	10	299534	299504
	50	2"	50	125	67	5.0...7	7	299539	299508
Clamp connection acc. DIN 32676 A (with pipe DIN 11850 2)									
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)								
	10	⅜"	15	50	3.5	5.0...7	8.5	319842	319843
	15	½"	15	50	6.5	5.0...7	8.5	319844	319845
	20	¾"	20	63	12.4	5.5...7	10	319846	319847
	25	1"	25	80	20	5.5...7	10	319848	319849
	40	1½"	40	100	34	5.0...7	6.5	319850	319851
	50	2"	50	125	40	5.0...7	8	319852	319853
	Diaphragm material PTFE/EPDM (EA)								
	10	⅜"	15	63	3.4	5.0...7	10	299518	299487
	15	½"	15	63	6	5.0...7	10	445361	445362
	20	¾"	20	80	12	5.0...7	10	445366	445367
	25	1"	25	80	17	5.5...7	7.5	445371	445372
40	1½"	40	125	34	5.0...7	10	445376	445377	
50	2"	50	125	40	5.0...7	7	445381	445382	

i Further versions on request

Control function B

Material
Diaphragms for steam sterilization advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF)

Additional
Versions with reduced spring force

Ordering chart Type 2031 forged diaphragm valve, clamp, continued

Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)

Control function	Port Connection DN		Diaphragm size	Actuator size Ø [mm]	K _v value [m³/h]	Pilot pressure [bar]	Max. operating pressure [bar]	Article no. mechanically polished Ra ≤ 0.5 µm	Article no. electro polished Ra ≤ 0.38 µm	
	[mm]	[inch]								
Clamp connection acc. ASME BPE										
A Pneumatically operated on / off valve, bidirectional, normally closed by spring force 	Diaphragm material EPDM (AD)									
	8	¼"	8	40	0.7	5.0...7	10	291111	319863	
	10	⅜"	8	40	1.6	5.0...7	10	319854	319855	
	15	½"	8	40	1.5	5.0...7	10	282107	319856	
	15	½"	15	50	3.1	5.0...7	8.5	291167	255242	
	20	¾"	20	63	8.4	5.5...7	10	291181	319857	
	25	1"	25	80	15.5	5.5...7	10	282110	319858	
	40	1½"	40	100	37	5.0...7	6.5	274655	319859	
	50	2"	50	125	66	5.0...7	8	282111	319860	
	65	2½"	50	125	66	5.0...7	8	291266	319861	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	8	on request	on request	
	Diaphragm material PTFE/EPDM (EA)									
	8	¼"	8	40	0.7	5.0...7	10	445301	445302	
	10	⅜"	8	40	1.8	5.0...7	10	445306	445307	
	15	½"	8	40	1.9	5.0...7	10	250487	252214	
	15	½"	15	63	3.1	5.0...7	10	445311	445312	
	20	¾"	20	80	8.5	5.0...7	10	445316	445317	
	25	1"	25	80	14.5	5.5...7	7.5	445321	445322	
	40	1½"	40	125	37.5	5.0...7	10	445326	445327	
	50	2"	50	125	66	5.0...7	7	445331	445332	
	65	2½"	50	125	66	5.0...7	7	551473	551474	
	65	2½"	80	225	160	5.0...6	10	on request	on request	
	80	3"	80	225	160	5.0...6	10	on request	on request	
	100	4"	100	225	235	5.0...6	4	on request	on request	

i Further versions on request

Control function B

Material
Diaphragms for steam sterilization advanced PTFE/EPDM (EU), GYLON®/EPDM laminated (ER) and FKM (FF)

Additional
Versions with reduced spring force

Valve system On/Off Classic Type 8801-DB/8803-DB – 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

Pipeline	DN	<input type="text"/>	PN	<input type="text"/>
Pipe material	<input type="text"/>			
<input type="checkbox"/> Process medium	<input type="text"/>			
<input type="checkbox"/> Type of medium	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas	
	standard	unit		
<input type="checkbox"/> Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/>	<input type="text"/>		
<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"/>		
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 last page

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	----------------------	--------------------------

Surface finish (if not standard)

internal μm external μm

Pilot pressure

min. max.

Automation unit features

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

Electrical position feedback

Type 8697
For actuator size 40 to 225



- LED position indicator
- Mechanical or inductive limit switches for end position registering
- Housing with IP65/IP67, 4X rating protection
- Optional intrinsically safe version acc. to ATEX / IECEx

Position feedback switches

- Micro switch 24 V DC
- Micro switch 50 – 225 V DC/AC
- Inductive switch 3-wire PNP
- Inductive switch 2-wire NAMUR
- Inductive switch 2-wire 24 V DC

Electrical connection

- Cable gland
- M12 connector (applicable only with inductive switch 3-wire PNP)

Number of Position feedback switches

- 2x

Approval

- ATEX cat. 3GD, IECEx
- ATEX cat. 2DG, IECEx
- without

Valve system On/Off CLASSIC Type 8801-DB – request for quotation , *continued*

Valve accessories	
Pilot valve	Stroke limitation
<input type="checkbox"/> Pilot valve	<input type="checkbox"/> Stroke limitation
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
Please specify item no. if known: <input type="text"/>	Please specify item no. if known: <input type="text"/>

Certifications
<input type="checkbox"/> Test Report 2.2 acc. to EN 10204 (Item no. 803722)
<input type="checkbox"/> Inspection Certificate 3.1 acc. to EN 10204 - Material Test Report (included in delivery)
<input type="checkbox"/> Inspection Certificate 3.1 acc. to EN 10204 - Surface Roughness Measurement (Item no. 804175)
<input type="checkbox"/> Compliance with FDA, EC-Regulation 1935/2004/EC and USP Class VI

Comment / sketch

DTS 1000010981 EN Version: AI Status: RL (released | freigegeben | validé) printed: 11.02.2020

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

Valve features, specification key

Example

A 15 AD VS SA42 NO17

Specification key

Please make a choice

CONTROL FUNCTION

A	normally closed by spring action
B	normally open by spring action
I	double acting

ORIFICE (Diaphragm size) [mm]

08
15
20
25
40
50
65
80
100

SEAL MATERIAL

AD	EPDM
EA	PTFE/EPDM
ER	GYLON®/EPDM laminated
FF	FKM
EU	advanced PTFE/EPDM in two pieces

BODY MATERIAL

VS	Standard DN8 - 80 Standard DN100	forged stainless steel 316L / 1.4435 / BN2
VH		block material 316L / 1.4435

VARIABLE CODES

NO14	Int. mechanically polished Ra ≤0.5µm (ASME BPE SF1)
NO17	Int. electropolished Ra ≤0.38µm (ASME BPE SF4)
EC04	Reduced spring force



PORT CONNECTION

Port Connection DN [mm]	Port Connection DN [inch]	DIN EN ISO 1127 / ISO 4200 / DIN11866 B	DIN 11850 2 / DIN11866 A	ASME BPE / DIN 11866 C	BS4825	SMS 3008	DIN 11850 0
6	1/8"						SC41 - 8.0 × 1.0
8	1/4"	SA40 - 13.5 × 1.6		SA90 - 6.35 × 0.89	SODB - 6.35 × 1.2		SC42 - 10.0 × 1.0
10	3/8"	SA41 - 17.2 × 1.6	SD40 - 13.0 × 1.5	SA91 - 9.53 × 0.89	SODC - 9.53 × 1.2		
15	1/2"	SA42 - 21.3 × 1.6	SD42 - 19.0 × 1.5	SA92 - 12.7 × 1.65	SODD - 12.7 × 1.2		
20	3/4"	SA43 - 26.9 × 1.6	SD43 - 23.0 × 1.5	SA93 - 19.05 × 1.65	SODE - 19.05 × 1.2		
25	1"	SA44 - 33.7 × 2.0	SD44 - 29.0 × 1.5	SODF - 25.4 × 1.65	SODF - 25.4 × 1.65	SA60 - 25.0 × 1.2	
32	1 1/4"	SA45 - 42.4 × 2.0	SD45 - 35.0 × 1.5				
40	1 1/2"	SA46 - 48.3 × 2.0	SD46 - 41.0 × 1.5	SODH - 38.1 × 1.65	SODH - 38.1 × 1.65	SA62 - 38.0 × 1.2	
50	2"	SA47 - 60.3 × 2.0	SD47 - 53.0 × 1.5	SODI - 50.8 × 1.65	SODI - 50.8 × 1.65	SA63 - 51.0 × 1.2	
65	2 1/2"	SA48 - 76.1 × 2.0	SD48 - 70.0 × 2.0	SODJ - 63.5 × 1.65	SODJ - 63.5 × 1.65	SA64 - 63.5 × 1.6	
80	3"	SA49 - 88.9 × 2.3	SD49 - 85.0 × 2.0	SODK - 76.2 × 1.65	SODK - 76.2 × 1.65	SA65 - 76.1 × 1.6	
100	4"	SA39 - 114.3 × 2.3	SD50 - 104.0 × 2.0	SODL - 101.6 × 2.11	SODL - 101.6 × 2.11		

Port Connection DN [mm]	Port Connection DN [inch]	DIN 32676 B (with pipe ISO 4200)	DIN 32676 A (with pipe DIN 11850 2)	ASME BPE
8	1/4"			TG50 - 6.35 × 0.89 Cl: 25.0
10	3/8"		TD41 - 13.0 × 1.5 Cl: 34.0	TG01 - 9.53 × 0.89 Cl: 25.0
15	1/2"	TC52 - 21.3 × 1.6 Cl: 50.5	TD42 - 19.0 × 1.5 Cl: 34.0	TG02 - 12.7 × 1.65 Cl: 25.0
20	3/4"	TC43 - 26.9 × 1.6 Cl: 50.5	TD43 - 23.0 × 1.5 Cl: 34.0	TG03 - 19.05 × 1.65 Cl: 25.0
25	1"	TC44 - 33.7 × 2.0 Cl: 50.5	TD44 - 29.0 × 1.5 Cl: 50.5	TG04 - 25.4 × 1.65 Cl: 50.5
40	1 1/2"	TC46 - 48.3 × 2.0 Cl: 64.0	TD46 - 41.0 × 1.5 Cl: 50.5	TG05 - 38.1 × 1.65 Cl: 50.5
50	2"	TC47 - 60.3 × 2.0 Cl: 77.5	TD47 - 53.0 × 1.5 Cl: 64.0	TG06 - 50.8 × 1.65 Cl: 64.0
65	2 1/2"			TG07 - 63.5 × 1.65 Cl: 77.5
80	3"			TG08 - 76.2 × 1.65 Cl: 91.0
100	4"			TG09 - 101.6 × 2.11 Cl: 119.0

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

Subject to alteration.
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