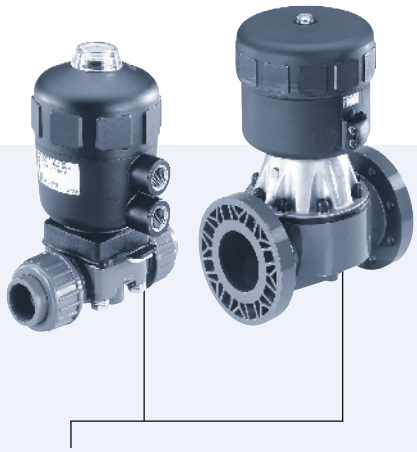
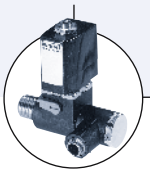
bürkert
FLUID CONTROL SYSTEMS



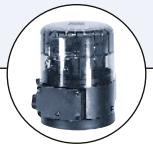
2/2-way Diaphragm Valve with plastic body, pneumatically operated, DN 15-100

- Applications with aggressive media
- Flow-optimised body with zero dead volume
- Self-draining installation possible
- Removable radial true union, spigot and flange connections

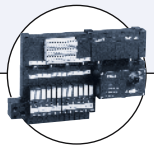
Type 2030 can be combined with...



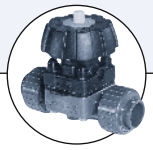
Type 6012/6014 P
Pilot valve



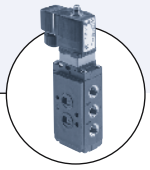
Type 8631
TopControl On/Off



Type 8640/8644
Valve block



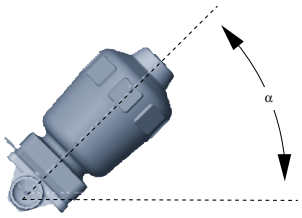
Type 3233
Manually-operated valve



Type 6519 NAMUR
Solenoid valve

Pilot controlled diaphragm valve with piston actuator and diaphragm seal.
As standard, actuator from PA.
The flow optimised and zero dead volume valve body makes high flow rates possible.

Installation for self-draining
α = 15 up to 30° plus 3 up to 5° inclination to pipe axis



Technical data	
Orifice	DN 15-100
Body materials	PVC-U, PP, PVDF
Actuator material	PA polyamide (PPS on request)
Seal material	EPDM, PTFE/EPDM
Media	Neutral gases and liquids, aggressive or abrasive media
Viscosity	Up to viscous
Media temperature	See charts p. 2
Ambient temperature	-10 to +60°C (PA) Actuator size ≥175 mm: -10 to +50°C
Control medium	Neutral gases, air
Port connections	DN 15-50: True union and spigot connections DN 65: Loose flanges DN 80-100: Fixed flanges
Installation	As required, preferably with actuator in upright position

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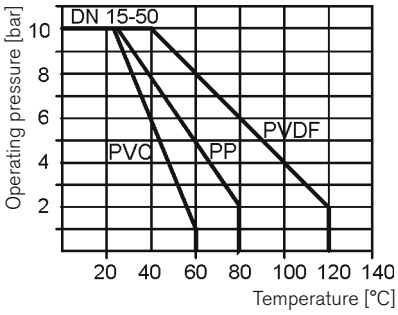
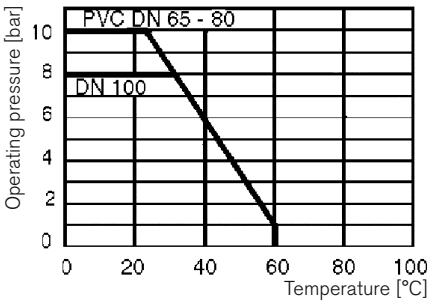
Media temperature

Pressure-temperature compatibility charts

DN 15-50



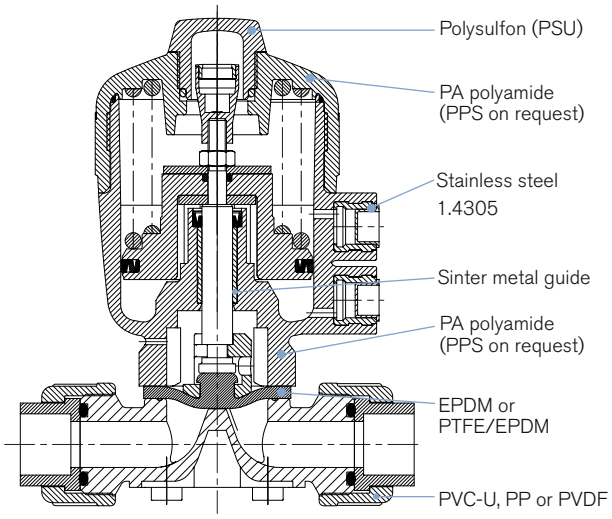
DN 65-100



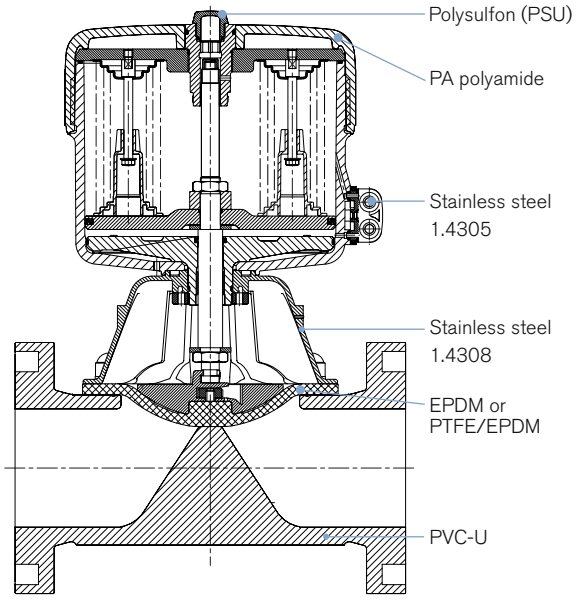
Important for the material selection!
Note that the permissible operating pressure is dependent on the media temperature.

Materials

DN 15-50



DN 65-100



Approvals

Suitable for foodstuffs

- 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).
- The EPDM diaphragms correspond to the *KTW Recommendation* (Plastics in the Drinking Water Sector). A Manufacturer's Declaration will be supplied on request.

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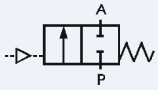
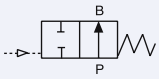
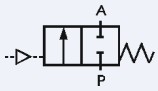
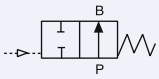
Ordering chart for diaphragm valves with piston actuator (other versions on request)

Body in PVC-U with true union or spigot connections
DN 15-50

Control function	Orifice [mm]	Port connection [mm]	Actuator size Ø [mm]	Kv value water [m³/h]	Minimum pilot pressure [bar]	Operating pressure [bar]	Item no. true union	Item no. spigot
Seal material EPDM								
A  2/2-way, NC by spring action	15	20	50	3.0	5.0	8.5	141 449	141 451
			63	3.5	5.0	10	141 450	141 452
	20	25	63	7.0	5.5	10	141 459	141 461
	25	32	80	11.0	5.5	10	141 468	141 469
	32	40	100	18.0	5.5	10	141 475	141 860
	40	50	100	24.0	5.5	6.5	141 482	141 861
			125	26.0	5.5	10	141 483	141 484
	50	63	125	43.0	5.5	8	141 490	141 862
B  2/2-way, NO by spring action	15	20	50	3.0	see chart 1 on p. 5	10	141 497	141 499
	20	25	63	7.0		10	141 507	141 509
	25	32	80	11.0		10	141 516	141 518
	32	40	100	18.0	see chart 2 on p. 5	10	141 524	141 864
	40	50	100	24.0		10	141 531	141 865
	50	63	125	43.0		10	141 539	141 866
Seal material PTFE/EPDM								
A  2/2-way, NC by spring action	15	20	50	3.0	5.0	5	144 293	144 294
			63	3.5	5.0	10	141 455	141 456
	20	25	63	7.0	5.5	5	144 297	144 298
			80	7.0	5.0	10	141 465	141 466
	25	32	80	11.0	5.5	7.5	141 472	141 473
	32	40	100	18.0	5.5	8	141 478	141 479
	40	50	100	24.0	5.5	6.0	144 301	144 302
			125	26.0	5.5	10	141 487	141 488
	50	63	125	43.0	5.5	7	141 493	141 494
B  2/2-way, NO by spring action	15	20	63	3.5	see chart 3 on p. 5	10	141 503	141 504
	20	25	80	7.0		10	141 514	141 515
	25	32	80	11.0		10	141 521	141 522
	32	40	100	18.0	see chart 4 on p. 5	10	141 527	141 528
	40	50	125	26.0		10	141 536	141 537
	50	63	125	34.0		10	141 542	141 543

Further versions on request

Materials
Actuator: PPS

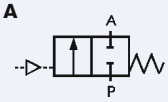
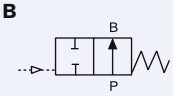
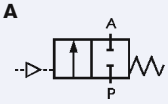
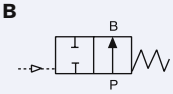
Control function
I Double-acting actuator

DTS 1000010973 EN Version: G Status: RL (released | freigegeben | validé) printed: 26.08.2008

bürkert

Ordering chart for diaphragm valves with piston actuator (other versions on request)

Body in PP with true union or spigot connections
DN 15-50

Control function	Orifice [mm]	Port connection [mm]	Actuator size Ø [mm]	Kv value water [m³/h]	Minimum pilot pressure [bar]	Operating pressure [bar]	Item no. true union	Item no. spigot
Seal material EPDM								
A  2/2-way, NC by spring action	15	20	50	3.0	5.0	8.5	154 768	141 447
			63	3.5	5.0	10	154 769	141 448
	20	25	63	7.0	5.5	10	154 782	141 859
	25	32	80	11.0	5.5	10	154 786	141 467
	32	40	100	18.0	5.5	10	154 788	141 474
	40	50	100	24.0	5.5	6.5	154 790	141 480
			125	26.0	5.5	10	154 791	141 481
	50	63	125	43.0	5.5	8	154 794	141 489
B  2/2-way, NO by spring action	15	20	50	3.0	see chart 1 on p. 5	10	154 805	141 495
	20	25	63	7.0		10	154 808	141 505
	25	32	80	11.0		10	154 811	141 863
	32	40	100	18.0	see chart 2 on p. 5	10	154 813	141 523
	40	50	100	24.0		10	154 815	141 529
	50	63	125	43.0		10	154 818	141 538
Seal material PTFE/EPDM								
A  2/2-way, NC by spring action	15	20	50	3.0	5.0	5	154 770	144 295
			63	3.5	5.0	10	154 781	141 454
	20	25	63	7.0	5.5	5	154 784	144 299
			80	7.0	5.0	10	154 785	141 464
	25	32	80	11.0	5.5	7.5	154 787	141 471
	32	40	100	18.0	5.5	8	154 789	141 477
	40	50	100	24.0	5.5	6.0	154 792	144 303
			125	26.0	5.5	10	154 793	141 486
	50	63	125	43.0	5.5	7	154 795	141 492
B  2/2-way, NO by spring action	15	20	63	3.5	see chart 3 on p. 5	10	154 807	141 502
	20	25	80	7.0		10	154 810	141 513
	25	32	80	11.0		10	154 812	141 520
	32	40	100	18.0	see chart 4 on p. 5	10	154 814	141 526
	40	50	125	26.0		10	154 817	141 535
	50	63	125	43.0		10	154 819	141 541

Further versions on request

Materials
Actuator: PPS

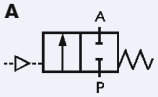
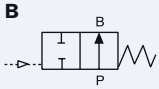
Control function
I Double-acting actuator

DTS 1000010973 EN Version: G Status: RL (released I freigegeben I validé) printed: 26.08.2008

bürkert

Ordering chart for diaphragm valves with piston actuator (other versions on request)

Body in PVDF with true union or spigot connections
DN 15-50

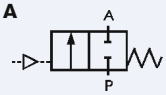
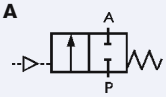
Control function	Orifice [mm]	Port connection [mm]	Actuator size Ø [mm]	Kv value water [m³/h]	Minimum pilot pressure [bar]	Operating pressure [bar]	Item no. true union	Item no. spigot
Seal material PTFE/EPDM								
A  2/2-way, NC by spring action	15	20	50	3.0	5.0	5	154 796	144 296
			63	3.5	5.0	10	154 797	141 453
	20	25	63	7.0	5.5	5	154 798	144 300
			80	7.0	5.0	10	154 799	141 463
	25	32	80	11.0	5.5	7.5	154 800	141 470
	32	40	100	18.0	5.5	8	154 801	141 476
	40	50	100	24.0	5.5	6.0	154 802	144 337
			125	26.0	5.5	10	154 803	141 485
	50	63	125	43.0	5.5	7	154 804	141 491
B  2/2-way, NO by spring action	15	20	63	3.5	see chart 3 underneath	10	154 820	141 501
	20	25	80	7.0		10	154 821	141 512
	25	32	80	11.0		10	154 822	141 519
	32	40	100	18.0	see chart 4 underneath	10	154 823	141 525
	40	50	125	24.0		10	154 824	141 534
	50	63	125	43.0		10	154 825	141 540

Further versions on request

Materials
Actuator: PPS

Control function
I Double-acting actuator

Body in PVC-U with flange connection
DN 65-100

Control function	Orifice [mm]	Port connection	Actuator size Ø [mm]	Kv value water [m³/h]	Minimum pilot pressure [bar]	Operating pressure [bar]	Item no. flanges
Seal material EPDM							
A  2/2-way, NC by spring action	65	Loose flanges	125	55.0	5.5	7	149 295
			175	60	4.5	10	147 838
	80	Fixed flanges	175	100	5.0	5	147 840
			225	100	5.0	10	147 842
	100	Fixed flanges	225	160	5.0	8	147 843
Seal material PTFE/EPDM							
A  2/2-way, NC by spring action	65	Loose flanges	125	55	5.5	4.5	149 296
			175	60	4.5	8	147 845
	80	Fixed flanges	175	100	5.0	4.5	147 847
			225	100	5.0	10	147 849
	100	Fixed flanges	225	160	5.0	4	147 850

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Pilot pressure charts for control function B

Seal material EPDM

Chart 1 – orifice 15-25

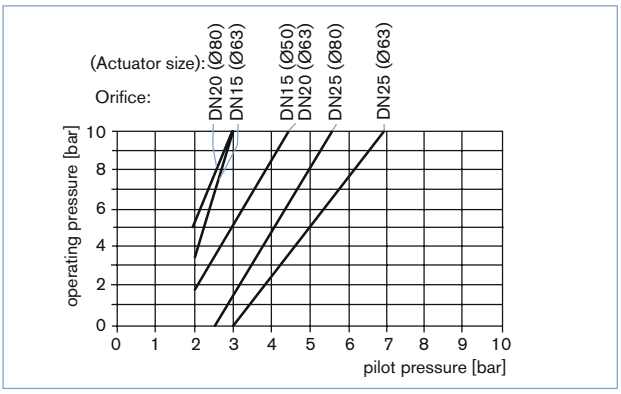
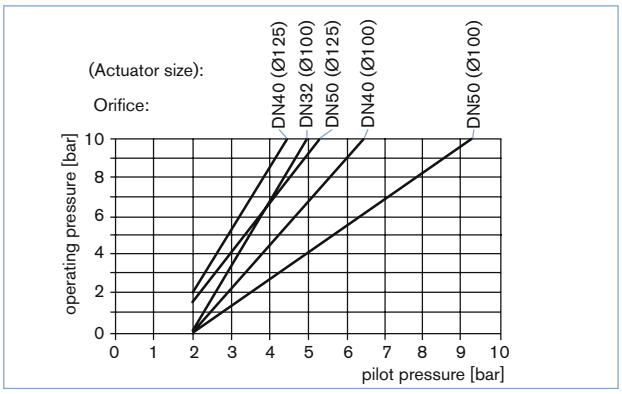


Chart 2 – orifice 32-50



Seal material PTFE/EPDM

Chart 3 – orifice 15-25

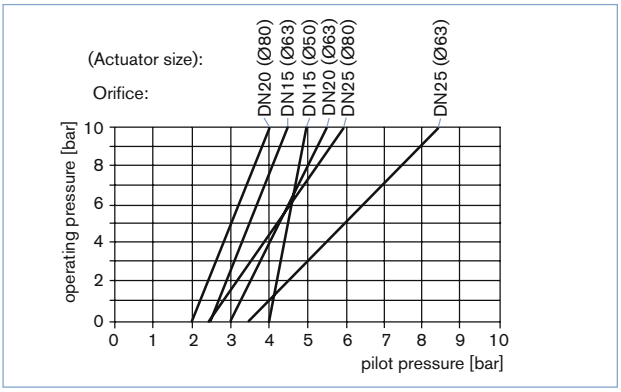
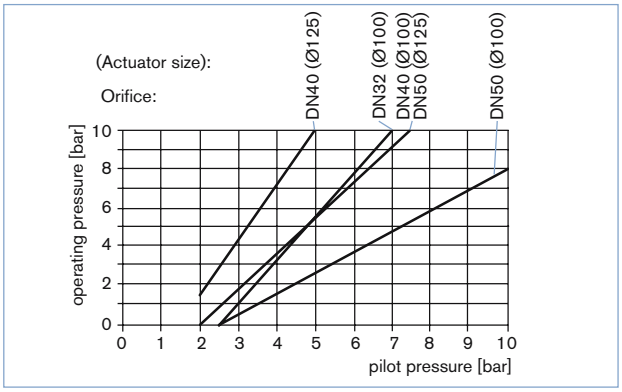


Chart 4 – orifice 32-50



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]	QNn 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	6012P	G 1/4	G 1/8	1.2	48	0-10	Form B	4	552 295	552 298
63	6012P	Tube fitting ø6 mm	G 1/4	1.2	48	0-10	Form B	4	552 283	552 286
63-125	6014P	G 1/4	G 1/4	2	120	0-10	Form A	8	424 103	424 107
175-225	6014P	G 1/8	G 1/4	2.5	174	0-6	Form A	8	786 014	786 015
175-225	0331P	G 1/4	G 1/4	3	194	0-10	Form A	8	–	041 233

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 the 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, 175 and 225 mm. Please request the accessories datasheet Type 2XXX.

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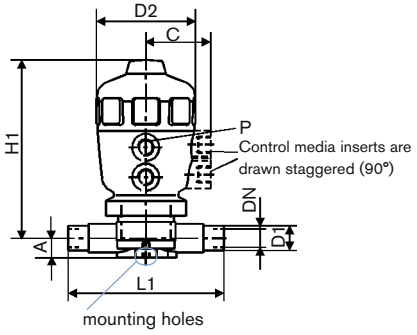
Dimensions [mm]

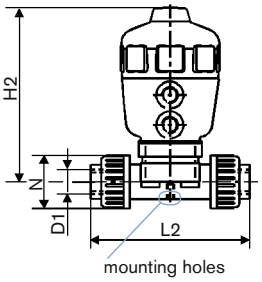
DN 15-50

Spigot connection

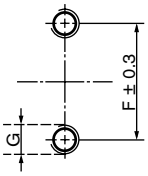


True union connection

(radially expandable)



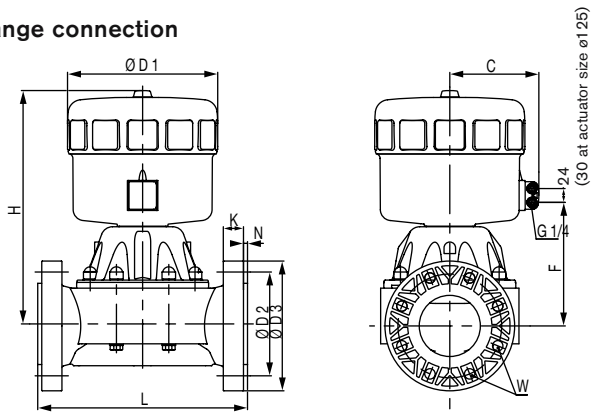
Mounting holes



DN [mm]	All bodies Actuator size Ø	C	D1	D2	P	F ±0.3	G	Spigot connection A	H1	L1	True union connection L2	H2	N
15	50	39	20	64	G 1/8	25	M6	14	121	124	128	123	43
	63	52	20	80	G 1/4	25	M6	14	137	124	128	139	43
20	63	52	25	80	G 1/4	25	M6	18	146	144	152	148	53
	80	60	25	101	G 1/4	25	M6	18	172	144	152	173	53
25	80	60	32	101	G 1/4	25	M6	21	175	154	166	176	60
32	100	73	40	127	G 1/4	45	M8	26	229	174	192	231	74
40	100	73	50	127	G 1/4	45	M8	33	236	194	222	239	83
	125	86	50	153	G 1/4	45	M8	33	276	194	222	277	83
50	125	86	63	153	G 1/4	45	M8	39	283	224	266	284	103

DN 65-100

Flange connection



DN [mm]	Actuator size	Port connection	C	D1	D2	D3	F	H	K	L	W
65	125	Loose flanges	86	158	145	185	129	295	29	290	4 x 90°
	175	Loose flanges	130	211	145	185	180	387	29	290	4 x 90°
80	175	Fixed flanges	130	211	160	200	197	398	36	310	8 x 45°
	225	Fixed flanges	155	261	160	200	198	393	36	310	8 x 45°
100	225	Fixed flanges	155	261	180	225	210	410	36	350	8 x 45°

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

We reserve the right to make technical changes without notice.

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