

Datasheet pneumatic Diaphragm Valves

Type Six, Ten, TenPlus and Sixteen

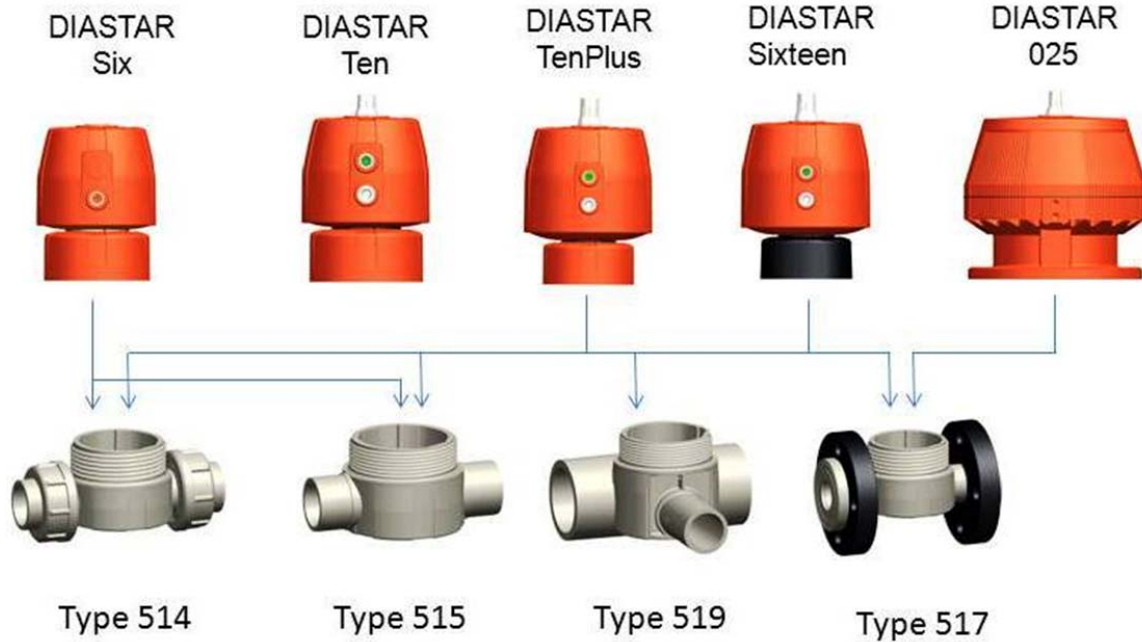


Advantages

- Actuators type Sixteen for 16 bar, TenPlus for 10 bar, Ten for 10 bar and Six for 6 bar nominal pressure
- No corrosion as there are no metal screws
- The uniform expansion with temperature changes of the plastic-plastic connection prevents leaks
- An optimized flow geometry with soft transitions and radii doubles the flow rate
- The valve body geometry results in a linear flow characteristic, clearly simplifying valve control
- 90° turnable air connection for a flexible installation
- The unique design provides maximum hygienic with minimized dead space

Dimensions	
Type Six: d20DN 15 – d63DN 50, 1/2" - 2"	
Type Ten: d20DN 15 – d63DN 50, 1/2" - 2"	
Type TenPlus: d20DN 15 – d63DN 50, 1/2" - 2"	
Type Sixteen: d20DN 15 – d63DN 50, 1/2" - 2"	
Type 025: d75DN65 - d160DN150, 2 1/2" - 6"	
Materials valve body	Sealing-/ Diaphragm materials
Type Six: PVC-U, PVC-C, ABS, PP-H	Type Six: EPDM, FFPM,
Type Ten: PVC-U, PVC-C, ABS, PP-H, PP-N, PVDF, PVDF-HP	Type Ten: EPDM, PTFE/EPDM, FPM, EPDM/FPM, NBR, FFPM
Type TenPlus: PVC-U, PVC-C, ABS, PP-H, PP-n, PVDF, PVDF-HP	Type TenPlus: EPDM, PTFE/EPDM, FPM, EPDM/FPM, NBR, FFPM
Type Sixteen: PVC-U, PVC-C, ABS, PVDF, PVDF-HP	Type Sixteen: EPDM, PTFE/EPDM, FPM, EPDM/FPM, NBR, FFPM
Type 025: PVC-U, PVC-C, ABS, PP-H, PVDF, PVDF-HP	Type 025: EPDM, PTFE/EPDM, FPM, FFPM
Functions	Materials housing nut
Type Six: FC	PPGF 30 up to PN10
Type Ten: FC, FO, DA	PPSGF40 PN 16
Type TenPlus: FC	Approvals
Type Sixteen: FC	ACS, FDA, DIBt, MPA, NAMSA
Type 025: FC, FO, DA	Pressure rates
Accessories for Types: Ten, TenPlus, Sixteen	Type Six: PN6
Limiter	Type Ten: PN10
Manual operation	Type TenPlus: PN10 both sides
Stroke limiter	Type Sixteen: PN 16
Positioner	Type 025: PN 10, from DN 100: PN 6
Bus-connection	

Connections



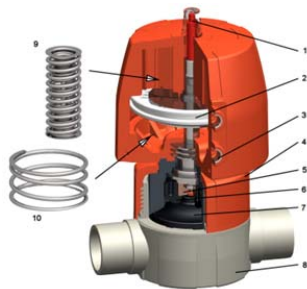
kv 100-Values

Type 514 - 517					
d mm	DN mm	Zoll Inch	kv 100 l/min $\Delta p = 1\text{bar}$	Cv 100 gal/min $\Delta p = 1\text{psi}$	kv 100 m ³ /h $\Delta p = 1\text{bar}$
20	15	½	125	9	8
25	20	¾	271	19	16
32	25	1	481	33	29
40	32	1¼	759	52	45
50	40	1½	1263 (960*)	87	76
63	50	2	1728 (1181*)	119	104

* DIASTAR SIX

Type 519								
d mm	DN mm	Zoll Inch	d1 mm	DN1 mm	Zoll Inch	kv 100 [l/min] $\Delta p = 1\text{bar}$	Cv 100 [gal/min] $\Delta p = 1\text{psi}$	kv 100 [m ³ /h] $\Delta p = 1\text{bar}$
20	15	1/2"	20	15	1/2"	57	4	3
25	20	3/4"	20	15	1/2"	89	6	5
25	20	3/4"	25	20	3/4"	118	8	7
32	25	1"	20	15	1/2"	80	6	5
32	25	1"	25	20	3/4"	105	7	6
32	25	1"	32	25	1"	231	16	14
40	32	1 1/4"	20	15	1/2"	85	6	5
40	32	1 1/4"	25	20	3/4"	119	8	7
40	32	1 1/4"	32	25	1"	153	11	9
40	32	1 1/4"	40	32	1 1/4"	187	13	11
50	40	1 1/2"	20	15	1/2"	86	6	5
50	40	1 1/2"	25	20	3/4"	160	11	10
50	40	1 1/2"	32	25	1"	206	14	12
50	40	1 1/2"	40	32	1 1/4"	524	36	31
50	40	1 1/2"	50	40	1 1/2"	667	46	40
63	50	2"	20	15	1/2"	84	6	5
63	50	2"	25	20	3/4"	150	11	9
63	50	2"	32	25	1"	184	13	11
63	50	2"	40	32	1 1/4"	471	32	28
63	50	2"	50	40	1 1/2"	610	42	37
63	50	2"	63	50	2"	747	52	45
90	80	3"	20	15	1/2"	82	6	5
90	80	3"	25	20	3/4"	103	7	6
90	80	3"	32	25	1"	129	9	8
90	80	3"	50	40	1 1/2"	623	43	37
90	80	3"	63	50	2"	696	48	42
110	100	4"	20	15	1/2"	78	5	4
110	100	4"	25	20	3/4"	103	7	6
110	100	4"	32	25	1"	131	9	8
110	100	4"	50	40	1 1/2"	604	42	36
110	100	4"	63	50	2"	661	46	40

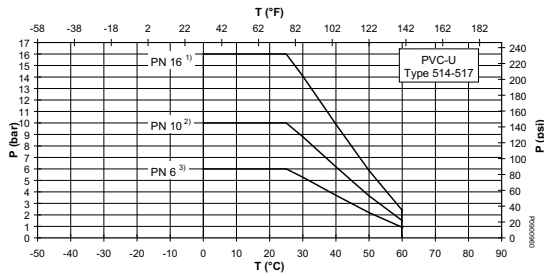
Design



1. Optical position indicator with cap	6. Compressor
2. Piston	7. Diaphragm
3. Air connections	8. Valve body
4. All-plastic housing	9. Pre-loaded spring sets for FC-mode
5. Diaphragm holder	10. Spring for FO mode

P / T-Diagrams

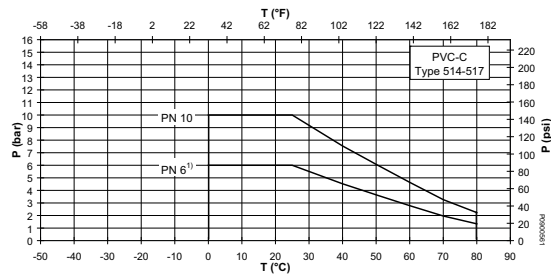
PVC-U



P: Permissible pressure in bar, psi, T: Temperature in °C, °F

- 1) Only with black PPS housing nut
- 2) Depending on the connection type and actuator, the nominal pressure is reduced to PN10
- 3) Depending on the connection type and actuator, the nominal pressure is reduced to PN6

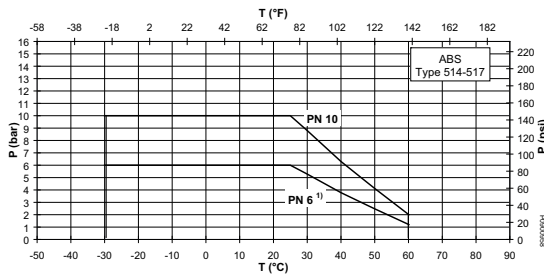
PVC-C



P: Permissible pressure in bar, psi, T: Temperature in °C, °F

- 1) Depending on the connection type and actuator, the nominal pressure is reduced to PN6P

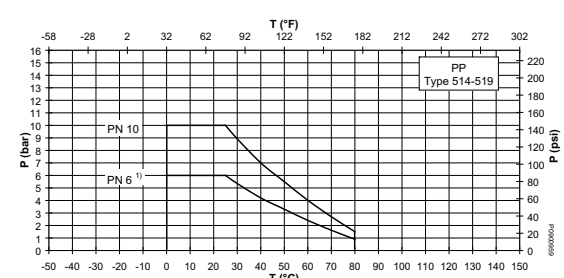
ABS



P: Permissible pressure in bar, psi, T: Temperature in °C, °F

- 1) Depending on the connection type and actuator, the nominal pressure is reduced to PN6

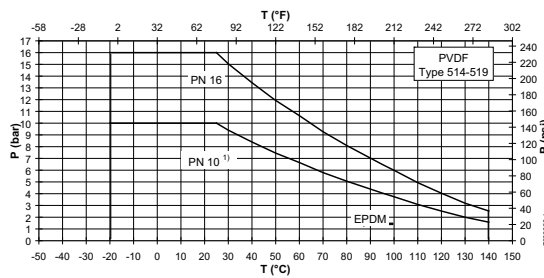
PP



P: Permissible pressure in bar, psi, T: Temperature in °C, °F

- 1) Depending on the connection type and actuator, the nominal pressure is reduced to PN6

PVDF

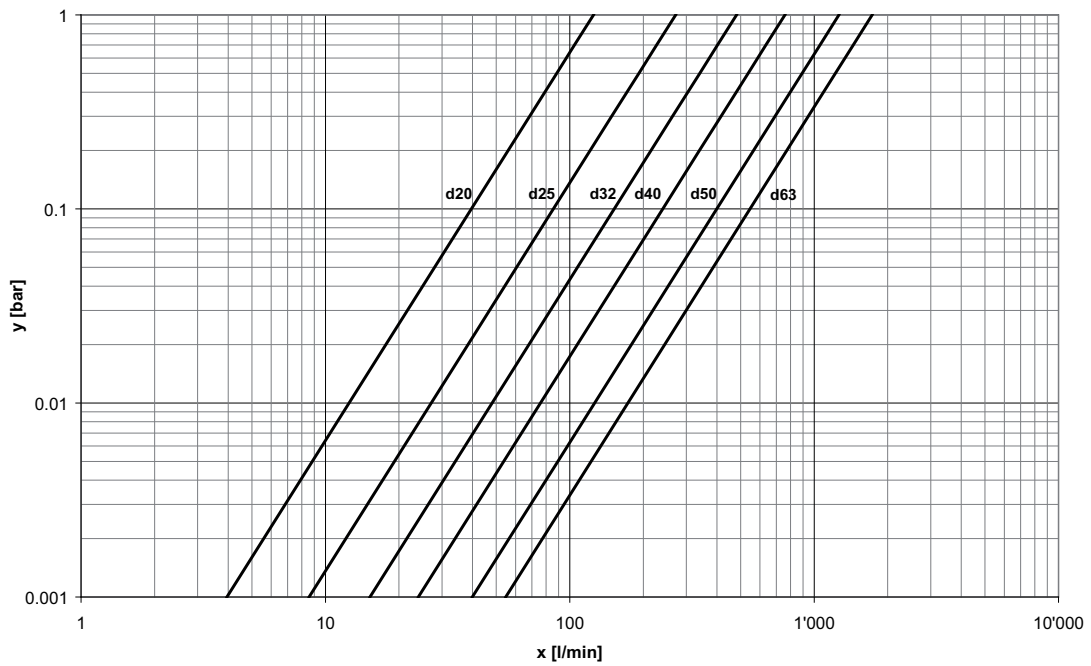


P: Permissible pressure in bar, psi, T: Temperature in °C, °F

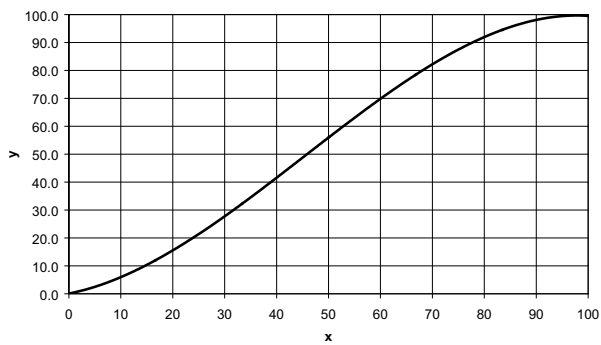
- 1) Depending on the connection type and actuator, the nominal pressure is reduced to PN6

The pressure temperature diagrams are based on a lifetime of 25 years and the medium water or similar media

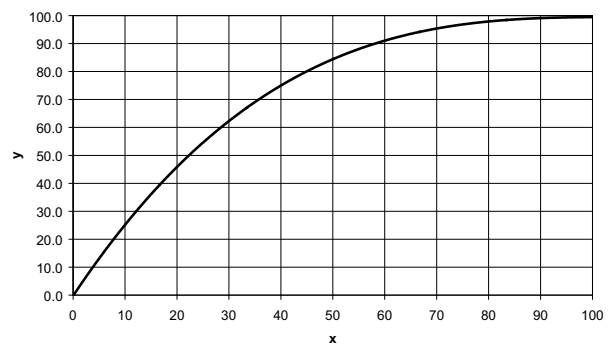
Pressure loss diagram Type 514 - 517



Flow characteristics Type 514-517

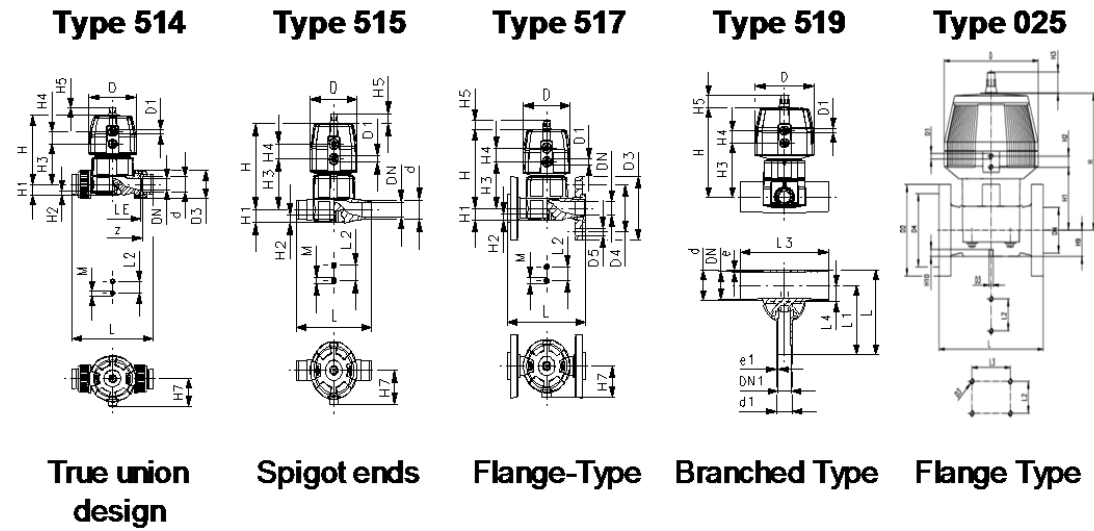


Flow characteristics Type 519



X: Open angle (%), Y: Flow factor kv, cv (%)

Dimensions



Caption	
L(1) Union with cemented socket, metric	L(6) Butt fusion spigot
L(2) Union with threaded socket, metric	L(7) Cemented spigot, metric
L(3) Union with fusion socket	L(8) Socket fusion spigot
L(4) Union with butt fusion spigot	L(9) Backing flange, metric
L(5) Union with butt fusion spigot (PVDF)	

DIASTAR Six FC (Type 514 - 517)													
d	DN	Zoll	D	D1	D4	D5	L(1)	L(2)	L(3)	L(4)	L(5)	L(6)	L(7)
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	68	1/8"	65	14	128	128	128	224	196	124	124
25	20	3/4"	96	1/8"	75	14	152	152	150	250	221	144	144
32	25	1"	96	1/8"	85	14	166	166	162	262	234	154	154
40	32	1 1/4"	120	1/8"	100	18	192	192	184	296	260	174	174
50	40	1 1/2"	120	1/8"	110	18	222	222	210	328	284	194	194
63	50	2"	120	1/8"	125	18	266	266	248	370	321	224	224

d	DN	Zoll	L(8)	L(9)	L2	H	H1	H2	H3	H7	M	z	LE	z for L(3)	Hx
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm		mm		mm	mm
20	15	1/2"	124	130	25	101	14	12	60	43	M6	96	90	100	7
25	20	3/4"	144	150	25	132	18	12	73	57	M6	114	108	118	10
32	25	1"	154	160	25	143	22	12	84	57	M6	122	116	126	13
40	32	1 1/4"	174	180	45	173	26	15	99	69	M8	140	134	144	14
50	40	1 1/2"	194	200	45	193	32	15	119	69	M8	160	154	164	16
63	50	2"	224	230	45	205	39	15	132	69	M8	190	184	194	16

Diastar Ten FC (Type 514 - 517)														
d	DN	Zoll	D	D1	D4	D5	L(1)	L(2)	L(3)	L(4)	L(5)	L(6)	L(7)	L(8)
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	68	1/8"	65	14	128	128	128	224	196	124	124	124
25	20	3/4"	96	1/8"	75	14	152	152	150	250	221	144	144	144
32	25	1"	96	1/8"	85	14	166	166	162	262	234	154	154	154
40	32	1 1/4"	120	1/8"	100	18	192	192	184	296	260	174	174	174
50	40	1 1/2"	150	1/4"	110	18	222	222	210	328	284	194	194	194
63	50	2"	150	1/4"	125	18	266	266	248	370	321	224	224	224

d	DN	Zoll	L(9)	L2	H	H1	H2	H3	H4	H5	H7	M	z	LE	z für L(3)	Hx
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	130	25	101	14	12	60	24	16	43	M6	96	90	100	7
25	20	3/4"	150	25	132	18	12	73	25	16	57	M6	114	108	118	10
32	25	1"	160	25	143	22	12	84	25	16	57	M6	122	116	126	13
40	32	1 1/4"	180	45	173	26	15	99	26	26	69	M8	140	134	144	15
50	40	1 1/2"	200	45	214	32	15	119	36	26	88	M8	160	154	164	19
63	50	2"	230	45	226	39	15	132	36	26	88	M8	190	184	194	23

DIASTAR Ten FO / DA (Type 514 - 517)														
d	DN	Zoll	D	D1	D4	D5	L(1)	L(2)	L(3)	L(4)	L(5)	L(6)	L(7)	L(8)
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	68	1/8"	65	14	128	128	128	224	196	124	124	124
25	20	3/4"	96	1/8"	75	14	152	152	150	250	221	144	144	144
32	25	1"	96	1/8"	85	14	166	166	162	262	234	154	154	154
40	32	1 1/4"	120	1/8"	100	18	192	192	184	296	260	174	174	174
50	40	1 1/2"	150	1/4"	110	18	222	222	210	328	284	194	194	194
63	50	2"	150	1/4"	125	18	266	266	248	370	321	224	224	224

d	DN	Zoll	L(9)	L2	H	H1	H2	H3	H4	H5	H7	M	z	LE	z für L(3)	Hx
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	130	25	101	14	12	60	24	16	43	M6	96	90	100	7
25	20	3/4"	150	25	132	18	12	73	25	16	57	M6	114	108	118	10
32	25	1"	160	25	143	22	12	84	25	16	57	M6	122	116	126	13
40	32	1 1/4"	180	45	173	26	15	99	26	26	69	M8	140	134	144	15
50	40	1 1/2"	200	45	214	32	15	119	36	26	88	M8	160	154	164	19
63	50	2"	230	45	226	39	15	132	36	26	88	M8	190	184	194	23

DIASTAR Ten FO / DA (Type 519)

d	d1	DN	Zoll	DN1	Zoll 1	DN2	Zoll 2	D	D1	L(6)	L1	L3	L4	H	H3	H4	H5	Hx
mm	mm	mm	Inch	mm	Inch	mm	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	20	15	1/2"	15	1/2"	15	1/2"	68	1/8"	117	96	162	12	104	63	24	16	7
25	20	20	3/4"	15	1/2"	20	3/4"	96	1/8"	133	108	162	16	131	73	25	16	10
25	25	20	3/4"	20	3/4"	20	3/4"	96	1/8"	133	108	162	16	131	73	25	16	10
32	20	25	1"	15	1/2"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	25	25	1"	20	3/4"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	32	25	1"	25	1"	25	1"	96	1/8"	145	120	160	19	143	84	25	16	13
40	20	32	1 1/4"	15	1/2"	25	1"	96	1/8"	149	128	180	23	151	92	25	16	13
40	25	32	1 1/4"	20	3/4"	25	1"	96	1/8"	149	128	180	23	151	92	25	16	13
40	32	32	1 1/4"	25	1"	25	1"	96	1/8"	149	128	180	23	151	92	25	16	13
40	40	32	1 1/4"	32	1 1/4"	25	1"	96	1/8"	174	153	180	23	151	92	25	16	13
50	20	40	1 1/2"	15	1/2"	20	3/4"	96	1/8"	160	134	180	27	148	90	25	16	10
50	25	40	1 1/2"	20	3/4"	25	1"	96	1/8"	160	134	180	28	156	97	25	16	13
50	32	40	1 1/2"	25	1"	25	1"	96	1/8"	160	134	180	28	156	97	25	16	13
50	40	40	1 1/2"	32	1 1/4"	50	2"	150	1/4"	209	169	209	33	224	129	36	26	23
50	50	40	1 1/2"	40	1 1/2"	50	2"	150	1/4"	209	169	209	33	224	129	36	26	23
63	20	50	2"	15	1/2"	20	2"	96	1/8"	177	144	180	33	155	96	25	16	10
63	25	50	2"	20	3/4"	25	1"	96	1/8"	177	144	180	35	163	104	25	16	13
63	32	50	2"	25	1"	25	1"	96	1/8"	177	144	180	35	163	104	25	16	13
63	40	50	2"	32	1 1/4"	50	2"	150	1/4"	225	192	220	39	230	136	36	26	23
63	50	50	2"	40	1 1/2"	50	2"	150	1/4"	225	192	220	39	230	136	36	26	23
63	63	50	2"	50	2"	50	2"	150	1/4"	225	192	220	39	230	136	36	26	23
90	20	80	3"	15	1/2"	25	1"	96	1/8"	205	159	190	47	176	117	25	16	13
90	25	80	3"	20	3/4"	25	1"	96	1/8"	205	159	190	47	176	117	25	16	13
90	32	80	3"	25	1"	25	1"	96	1/8"	205	159	190	47	176	117	25	16	13
90	50	80	3"	40	1 1/2"	50	2"	150	1/4"	254	207	250	51	244	150	36	26	23
90	63	80	3"	50	2"	50	2"	150	1/4"	254	207	250	51	244	150	36	26	23
110	20	100	4"	15	1/2"	25	1"	96	1/8"	227	171	190	56	185	126	25	16	13
110	25	100	4"	20	3/4"	25	1"	96	1/8"	227	171	190	56	185	126	25	16	13
110	32	100	4"	25	1"	25	1"	96	1/8"	227	171	190	56	185	126	25	16	13
110	50	100	4"	40	1 1/2"	50	2"	150	1/4"	276	219	250	60	254	160	36	26	23
110	63	100	4"	50	2"	50	2"	150	1/4"	276	219	250	60	254	160	36	26	23

DIASTAR TenPlus FC (Typ 514 - 517)

d	DN	Zoll	D	D1	D4	D5	L(1)	L(2)	L(3)	L(4)	L(5)	L(6)	L(7)	L(8)
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	96	1/8"	65	14	128	128	128	224	196	124	124	124
25	20	3/4"	96	1/8"	75	14	152	152	150	250	221	144	144	144
32	25	1"	120	1/8"	85	14	166	166	162	262	234	154	154	154
40	32	1 1/4"	150	1/4"	100	18	192	192	184	296	260	174	174	174
50	40	1 1/2"	180	1/4"	110	18	222	222	210	328	284	194	194	194
63	50	2"	180	1/4"	125	18	266	266	248	370	321	224	224	224

d	DN	Zoll	L(9)	L2	H	H1	H2	H3	H4	H5	H7	M	z	z für L(3)	Hx
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm
20	15	1/2"	130	25	127	14	12	68	25	16	57	M6	96	100	7
25	20	3/4"	150	25	132	18	12	73	25	16	57	M6	114	118	10
32	25	1"	160	25	167	22	12	93	26	26	69	M6	122	126	13
40	32	1 1/4"	180	45	196	26	15	101	36	26	88	M8	140	144	15
50	40	1 1/2"	200	45	239	32	15	124	37	26	103	M8	160	164	19
63	50	2"	230	45	251	39	15	137	37	26	103	M8	190	194	23

DIASTAR TenPlus FC (Type 519)

d	d1	DN	Zoll	DN1	Zoll 1	DN2	Zoll 2	D	D1	L(6)	L1	L3	L4	H	H3	H4	H5	Hx
mm	mm	mm	Inch	mm	Inch	mm	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	20	15	1/2"	15	1/2"	15	1/2"	96	1/8"	117	96	162	12	130	71	25	16	7
25	20	20	3/4"	15	1/2"	20	3/4"	96	1/8"	133	108	162	16	131	72	25	16	10
25	25	20	3/4"	20	3/4"	20	3/4"	96	1/8"	133	108	162	16	131	72	25	16	10
32	20	25	1"	15	1/2"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	25	25	1"	20	3/4"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	32	25	1"	25	1"	25	1"	120	1/8"	145	120	160	19	167	93	26	26	13
40	20	32	1 1/4"	15	1/2"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	25	32	1 1/4"	20	3/4"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	32	32	1 1/4"	25	1"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	40	32	1 1/4"	32	1 1/4"	25	1"	120	1/8"	174	153	180	23	175	101	26	26	13
50	20	40	1 1/2"	15	1/2"	20	3/4"	96	1/8"	160	134	180	27	148	90	25	16	10
50	25	40	1 1/2"	20	3/4"	25	1"	120	1/8"	160	134	180	28	180	106	26	26	13
50	32	40	1 1/2"	25	1"	25	1"	120	1/8"	160	134	180	28	180	106	26	26	13
50	40	40	1 1/2"	32	1 1/4"	50	2"	180	1/4"	209	169	209	33	249	135	37	26	23
50	50	40	1 1/2"	40	1 1/2"	50	2"	180	1/4"	209	169	209	33	249	135	37	26	23
63	20	50	2"	15	1/2"	20	2"	96	1/8"	177	144	180	33	155	96	25	16	10
63	25	50	2"	20	3/4"	25	1"	120	1/8"	177	144	180	35	187	113	26	26	13
63	32	50	2"	25	1"	25	1"	120	1/8"	177	144	180	35	187	113	26	26	13
63	40	50	2"	32	1 1/4"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
63	50	50	2"	40	1 1/2"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
63	63	50	2"	50	2"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
90	20	80	3"	15	1/2"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	25	80	3"	20	3/4"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	32	80	3"	25	1"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	50	80	3"	40	1 1/2"	50	2"	180	1/4"	254	207	250	51	269	155	37	26	23
90	63	80	3"	50	2"	50	2"	180	1/4"	254	207	250	51	269	155	37	26	23
110	20	100	4"	15	1/2"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	25	100	4"	20	3/4"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	32	100	4"	25	1"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	50	100	4"	40	1 1/2"	50	2"	180	1/4"	276	219	250	60	279	165	37	26	23
110	63	100	4"	50	2"	50	2"	180	1/4"	276	219	250	60	279	165	37	26	23

DIASTAR Sixteen FC (Type 514 - 517)

d	DN	Zoll	D	D1	D4	D5	L(1)	L(2)	L(3)	L(4)	L(5)	L(6)	L(7)	L(8)
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	15	1/2"	96	1/8"	65	14	128	128	128	224	196	124	124	124
25	20	3/4"	96	1/8"	75	14	152	152	150	250	221	144	144	144
32	25	1"	120	1/8"	85	14	166	166	162	262	234	154	154	154
40	32	1 1/4"	150	1/4"	100	18	192	192	184	296	260	174	174	174
50	40	1 1/2"	180	1/4"	110	18	222	222	210	328	284	194	194	194
63	50	2"	180	1/4"	125	18	266	266	248	370	321	224	224	224

d	DN	Zoll	L(9)	L2	H	H1	H2	H3	H4	H5	H7	M	z	z für L(3)	Hx
mm	mm	inch	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm
20	15	1/2"	130	25	127	14	12	68	25	16	57	M6	96	100	7
25	20	3/4"	150	25	132	18	12	73	25	16	57	M6	114	118	10
32	25	1"	160	25	167	22	12	93	26	26	69	M6	122	126	13
40	32	1 1/4"	180	45	196	26	15	101	36	26	88	M8	140	144	15
50	40	1 1/2"	200	45	239	32	15	124	37	26	103	M8	160	164	19
63	50	2"	230	45	251	39	15	137	37	26	103	M8	190	194	23

DIASTAR Sixteen FC (Type 519)

d	d1	DN	Zoll	DN1	Zoll 1	DN2	Zoll 2	D	D1	L(6)	L1	L3	L4	H	H3	H4	H5	Hx
mm	mm	mm	Inch	mm	Inch	mm	Inch	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
20	20	15	1/2"	15	1/2"	15	1/2"	96	1/8"	117	96	162	12	130	71	25	16	7
25	20	20	3/4"	15	1/2"	20	3/4"	96	1/8"	133	108	162	16	131	72	25	16	10
25	25	20	3/4"	20	3/4"	20	3/4"	96	1/8"	133	108	162	16	131	72	25	16	10
32	20	25	1"	15	1/2"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	25	25	1"	20	3/4"	20	3/4"	96	1/8"	142	120	162	19	135	76	25	16	10
32	32	25	1"	25	1"	25	1"	120	1/8"	145	120	160	19	167	93	26	26	13
40	20	32	1 1/4"	15	1/2"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	25	32	1 1/4"	20	3/4"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	32	32	1 1/4"	25	1"	25	1"	120	1/8"	149	128	180	23	175	101	26	26	13
40	40	32	1 1/4"	32	1 1/4"	25	1"	120	1/8"	174	153	180	23	175	101	26	26	13
50	20	40	1 1/2"	15	1/2"	20	3/4"	96	1/8"	160	134	180	27	148	90	25	16	10
50	25	40	1 1/2"	20	3/4"	25	1"	120	1/8"	160	134	180	28	180	106	26	26	13
50	32	40	1 1/2"	25	1"	25	1"	120	1/8"	160	134	180	28	180	106	26	26	13
50	40	40	1 1/2"	32	1 1/4"	50	2"	180	1/4"	209	169	209	33	249	135	37	26	23
50	50	40	1 1/2"	40	1 1/2"	50	2"	180	1/4"	209	169	209	33	249	135	37	26	23
63	20	50	2"	15	1/2"	20	2"	96	1/8"	177	144	180	33	155	96	25	16	10
63	25	50	2"	20	3/4"	25	1"	120	1/8"	177	144	180	35	187	113	26	26	13
63	32	50	2"	25	1"	25	1"	120	1/8"	177	144	180	35	187	113	26	26	13
63	40	50	2"	32	1 1/4"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
63	50	50	2"	40	1 1/2"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
63	63	50	2"	50	2"	50	2"	180	1/4"	225	192	220	39	255	141	37	26	23
90	20	80	3"	15	1/2"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	25	80	3"	20	3/4"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	32	80	3"	25	1"	25	1"	120	1/8"	205	159	190	47	200	126	26	26	13
90	50	80	3"	40	1 1/2"	50	2"	180	1/4"	254	207	250	51	269	155	37	26	23
90	63	80	3"	50	2"	50	2"	180	1/4"	254	207	250	51	269	155	37	26	23
110	20	100	4"	15	1/2"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	25	100	4"	20	3/4"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	32	100	4"	25	1"	25	1"	120	1/8"	227	171	190	56	209	135	26	26	13
110	50	100	4"	40	1 1/2"	50	2"	180	1/4"	276	219	250	60	279	165	37	26	23
110	63	100	4"	50	2"	50	2"	180	1/4"	276	219	250	60	279	165	37	26	23

DIASTAR 025 DN 65 - DN 150

d	DN	Zoll	D	D1 (G)	D2	D3	D4	L	L2	L3	H	H1	H2	H3	H9	H10	Stroke
mm	mm	Inch	mm		mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
75	65	2 1/2"	280	1/4	185	M8	145	290	70	-	298	148	24	46	46	15	30
90	80	3"	280	1/4	200	M12	160	310	120	-	302	150	24	46	57	15	35
110	100	4"	335	1/4	225	M12	180	350	120	-	409	176	24	46	69	20	40
160	150	6"	335	1/4	285	M12	240	480	100	200	201	237	24	46	108	20	40

Specifications

All diaphragm Valves, metric sized from d20 to d63, shall be either:

- true double union design, DN15 to 50
- spigot design, DN15 to 50
- flange design, DN15 to 50

All diaphragm Valves shall be manufactured in accordance with EN ISO 16138. The upper body shall be connected to the lower body with a central union avoiding exposed screws. Diaphragms shall be EPDM, FPM, NBR, PTFE with EPDM or FOM supporting diaphragm.

The diaphragm valve shall have following KV values:

d mm	DN mm	Zoll Inch	kv l/min; $\Delta p = 1\text{bar}$
20	15	1/2"	125
25	20	3/4"	271
32	25	1"	481
40	32	1 1/4"	759
50	40	1 1/2"	1263 (960)
63	50	2"	1728 (1181)

Pneumatic actuators shall be available as

- actuator for PN up to 6 bar
- actuator for PN up to 10 bar (both sides)
- actuator for PN up to 16 bar

The mode of operation shall be fail safe close (FC), fail safe open (FO) and double acting (DA). The valves shall have an integrated optical position indicator. Actuator housing shall be made of PPGF (polypropylene glass fibre reinforced). Actuators with FC mode shall contain a preloaded galvanised steel spring assembly to ensure safe actuator operation and maintenance.

pneumatic Diaphragm Valves d75 to d160

All PVC-U diaphragm valves, metric sized, shall be flanged design, DN 15-150 All diaphragm valves shall be manufactured in accordance with EN ISO 16138. The upper body shall be connected to the lower body with exposed stainless steel bolts. Diaphragms are to be EPDM, FPM, NBR, or PTFE with EPDM or FPM supporting diaphragm. The mode of operation shall be fail safe close (FC), fail safe open (FO) and double acting (DA). The valves shall have an integrated optical position indicator. Actuator housing shall be made of PPGF (polypropylene glass fibre reinforced). Actuators with FC mode shall contain a preloaded galvanised steel spring assembly to ensure safe actuator operation and maintenance.

The actuator shall have following accessories available:

- Solenoid pilot valve remote or direct mounted in voltages 24VDC/AC, 110VAC, 230VAC
- Positioner
- Feedback with following limit switches Ag-Ni, Au, NPN, PNP, NAMUR
- Stroke limiter & emergency manual override
- ASI Controller

Planning Fundamentals

The following link will lead you to the Georg Fischer Planning Fundamentals. These detailed documents will support you by choosing the right valve for your application.

http://www.gfps.com/content/gfps.com/en/support_and_services/planning_assistance/planning_fundamentals.html?lang=en