


**PN 10/16 - DN 200...1200**

KAT-A 1510

**Product characteristics and benefits**

- Metallic sealing in accordance with EN 12334 - Part 3)
- Face-to-face length acc. to EN 558-1, basic series 14 (DIN 3202, F4)
- With flange ends on both sides acc. to EN 1092-2
- Compact design
- Short closing time due to approx. 30% reduced stroke by means of a slanted seat
- Corrosion-resistant and wear-resistant sealing seat
- No moving parts outside of the valve
- Reduced pressure losses due to free running disk

**Materials**

- Body: Ductile cast iron EN-JS 1030 (GGG-40)
- Check valve disk: Ductile cast iron EN-JS 1030 (GGG-40)
- Check valve shaft: Stainless steel 1.4021
- Shaft bearing: Zincfree bronze
- Seat: Chrome-nickel overlay welded, microfinished

**Corrosion protection**

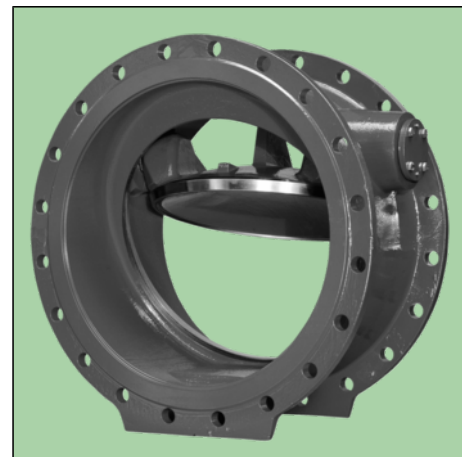
- Inside and outside epoxy coating

**Versions**

- Standard version as described
- Bigger sizes available on request
- Special designs available on request
- Pressure rating PN 25 available on request
- With internal damping unit
- With blind cover (prepared for internal damping unit)
- With mechanical position indicator
- With limit switch
- With rubber lining
- Welded design
- Forged design

**Field of Application**

- Chamber installation
- Installation in plants


**Tests and approvals**

- Final inspection test acc. to EN 12266 (DIN 3230 Part 4)

**Operation data**

- Operating limits of version with damper:
  - DN 200 - 800: max. pressure 16 bar
  - DN 900: max. pressure 10 bar
  - DN 1000: max. pressure 6 bar
  - DN 1200: max. pressure 4 bar
- Minimum flow velocity of the medium > 1.6 m/s
- Minimum distance after pumps with:
  - horizontal shaft: 3 x DN
  - vertical shaft: 5 x DN

**Note**

The regulations applicable to tilting disk check valves must be followed. For the safe use of this valve in waste water, the medium must not contain any plait-creating components.

For proper installation and safe operation please follow the installation and operation instructions:  
KAT-B 1510

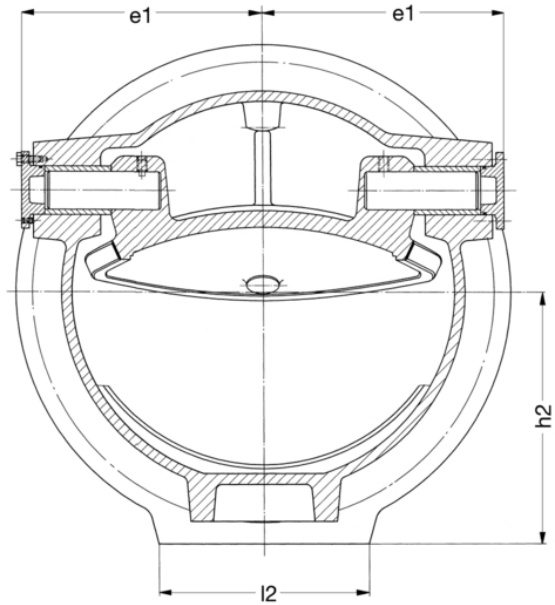
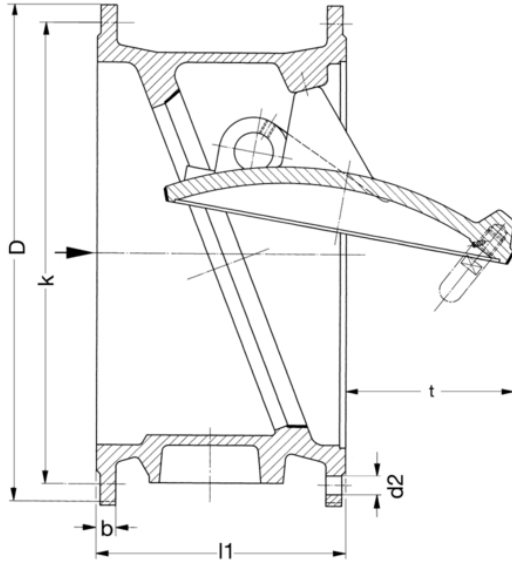
**Field of application**

DN	PN	Maximum operating pressure [bar]	Maximum operating temperature for neutral liquids [°C]
200...1000	16	16	50
200...1200	10	10	50

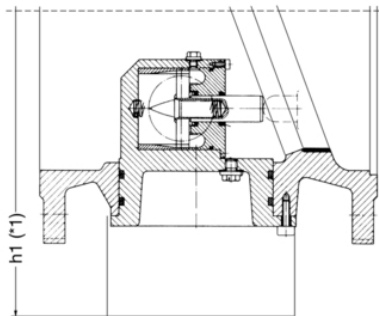
**Pressure test acc. to EN 12266**

Test pressure body with water [bar]	Test pressure seat with water [bar]
24	17.6
15	11

## Drawing



## With internal damping unit



\*1: Dismantling space h1 up to centre of valve

## Technical data

### PN 16

DN		200	250	300	350	400	450	500	600	700	800	900	1000
D	[mm]	340	400	455	520	575	640	715	840	910	1025	1125	1255
b	[mm]	20	22	24.5	26.5	28	31.5	31.5	36	39.5	43	46.5	50
d2	[mm]	23	28	28	28	31	31	34	37	37	40	40	43
e1	[mm]	145	170	200	225	270	300	325	385	450	500	565	630
h1	[mm]	245	270	340	370	420	460	500	585	650	750	855	890
h2	[mm]	175	205	232	265	295	325	362	425	460	520	570	635
k	[mm]	295	355	410	470	525	585	650	770	840	950	1050	1170
l1	[mm]	230	250	270	290	310	330	350	390	430	470	510	550
l2	[mm]	160	180	200	225	250	250	300	330	400	450	550	600
t	[mm]	55	75	100	135	150	190	210	265	320	380	420	470
No. of holes		12	12	12	16	16	20	20	20	24	24	28	28
Weight approx.	[kg]	40.00	65.00	83.00	118.00	145.00	210.00	250.00	365.00	470.00	750.00	980.00	1250.00
Weight with damper	[kg]	43.5	68.5	92	127	160	225	274	400	518	814	1054	1335
Volume approx.	[m <sup>3</sup> ]	0.030	0.045	0.060	0.080	0.110	0.140	0.190	0.280	0.370	0.520	0.660	0.880


**Technical data**
**PN 10**

<b>DN</b>		<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>	<b>600</b>	<b>700</b>	<b>800</b>	<b>900</b>	<b>1000</b>
D	[mm]	340	400	455	520	575	615	670	780	895	1015	1115	1230
b	[mm]	20	22	24.5	26.5	28	26.5	26.5	30	32.5	35	37.5	40
d2	[mm]	23	23	23	23	28	28	28	31	31	34	34	37
e1	[mm]	145	170	200	225	270	300	325	385	450	500	565	630
h1	[mm]	245	270	340	370	420	460	500	585	650	750	855	890
h2	[mm]	175	205	232	265	295	312	340	395	455	525	565	620
k	[mm]	295	350	400	460	515	565	620	725	840	950	1050	1160
l1	[mm]	230	250	270	290	310	330	350	390	430	470	510	550
l2	[mm]	160	180	200	225	250	250	300	330	400	450	550	600
t	[mm]	55	75	100	135	150	190	210	265	320	380	420	470
No. of holes		8	12	12	16	16	20	20	20	24	24	28	28
Weight approx.	[kg]	40.00	65.00	83.00	118.00	145.00	190.00	220.00	315.00	420.00	640.00	910.00	1150.00
Weight with damper	[kg]	43.5	68.5	92	127	160	205	244	350	468	704	984	1235
Volume approx.	[m <sup>3</sup> ]	0.030	0.045	0.060	0.080	0.110	0.130	0.170	0.250	0.360	0.500	0.640	0.850

**PN 10**

<b>DN</b>		<b>1200</b>
D	[mm]	1455
b	[mm]	45
d2	[mm]	40
e1	[mm]	730
h1	[mm]	1020
h2	[mm]	740
k	[mm]	1380
l1	[mm]	630
l2	[mm]	700
t	[mm]	670
No. of holes		32
Weight approx.	[kg]	1520.00
Weight with damper	[kg]	1600
Volume approx.	[m <sup>3</sup> ]	1.360



## Further information

### Flow resistance coefficient

DN	200	250	300	350	400	450	500	600	700	800	900	1000	1200
$\zeta$ -value (standard)	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.55
$\zeta$ -value (with damping unit)	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.7