



## PN 6/10/16/25/40 - DN 100...4000

KAT-A 1310

## Product characteristics and benefits

- Resilient seated in accordance with EN 593
- Face-to-face length acc. to EN 558, basic series 14 (DIN 3202, F4)
- With flange ends on both sides acc. to EN 1092-2
- Double-offset disk bearing mounted in maintenance-free bushing
- Medium free bearing (dry shaft) in body by means of double O-ring sealing and closed disk eyes
- Wear-resistant, corrosion-resistant and undermining-resistant seat
- Possible to replace profile sealing ring without disassembling the disk
- Automatic sealing system with enclosed and pressure-supported profile sealing ring
- Vacuum tight up to 0,1 bar absolute
- Tight in both flow directions acc. EN 12266, leak rate A
- With self-locking, fully enclosed, maintenance-free worm gear including mechanical position indicator

## Materials

- Body: Ductile iron EN-GJS-400-15 (GGG-40)
- Disk: Ductile iron EN-GJS-400-15 (GGG-40) (exception: DN 100 / DN 125 stainless steel 1.4408)
- Valve sealing: EPDM (for PN 40 polyurethane)
- O-rings: EPDM
- Butterfly valve stem: Stainless steel 1.4021
- Seat: High-alloy weld overlay

## Corrosion protection

- Body: Internally and externally epoxy coated acc. to GSK guidelines
- Disk: Epoxy coated according to GSK guidelines (exception: DN 100 / DN 125 stainless steel)

## Versions

- Standard version as described
- With electric actuator
- With handwheel
- With pneumatic actuator
- With hydraulic actuator
- Suitable for gas according to EN 13774
- Special coatings and special materials on request
- For buried installations (acc. to drawing picture 1)
- Pressure rating PN 50 available on request

## Field of application

- Chamber installation
- Installation in plants

## Tests and approvals

- Final inspection test according to EN 12266-1 (leakage rate A)
- DVGW tested and registered
- Elastomers approved acc. to W270
- WRAS tested and registered

## Field of application

DN	PN	Maximum operating pressure [bar]	Maximum operating temperature for neutral liquids [°C]
1400...4000	6	6	50
200...2800	10	10	50
100...2600	16	16	50
150...1800	25	25	50
150...1800	40	40	50



## Accessories

- T-key
- Installation equipment
- Extension spindle
- Surface box cast iron
- Plastic base plate

## Operation data

- Maximum flow velocity in fully open position:
  - PN 40: 6 m/s
  - PN 25: 5 m/s
  - PN 16: 4 m/s
  - PN 10: 3 m/s
  - PN 6: 2.5 m/s

## Note

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

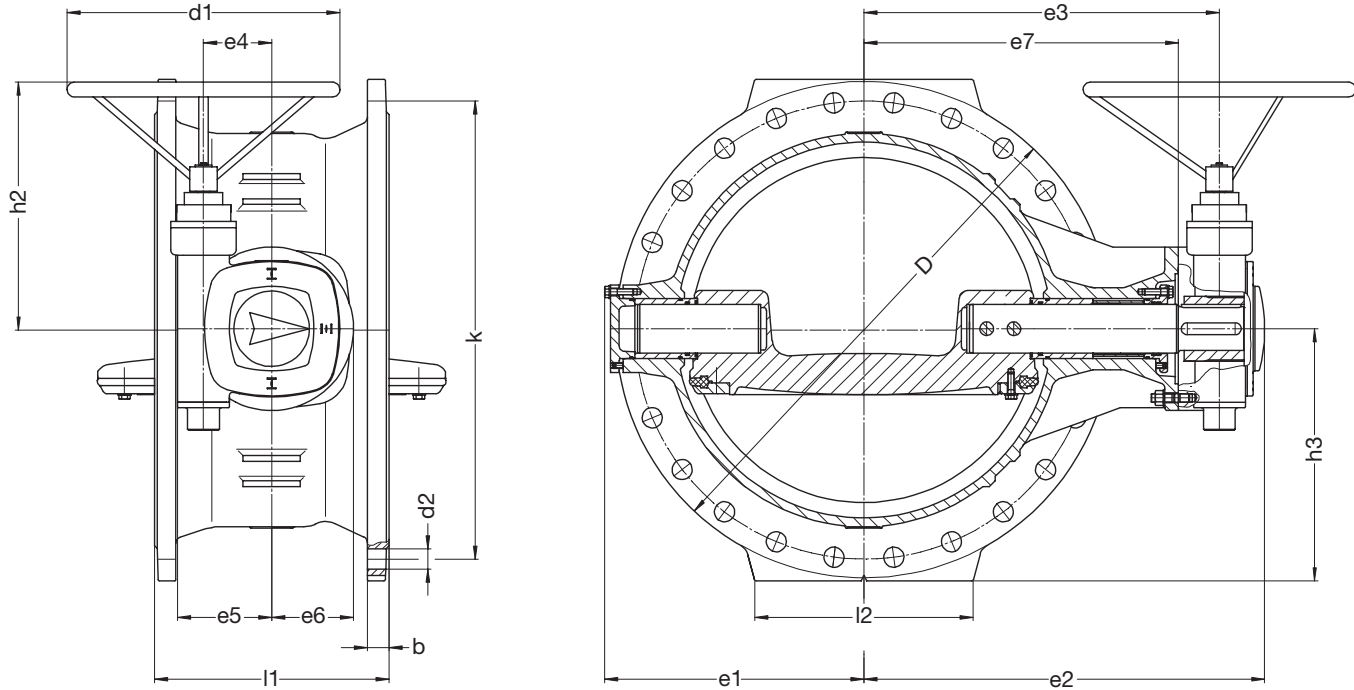
For proper installation and safe operation please follow the installation and operation instructions:

KAT-B 1310

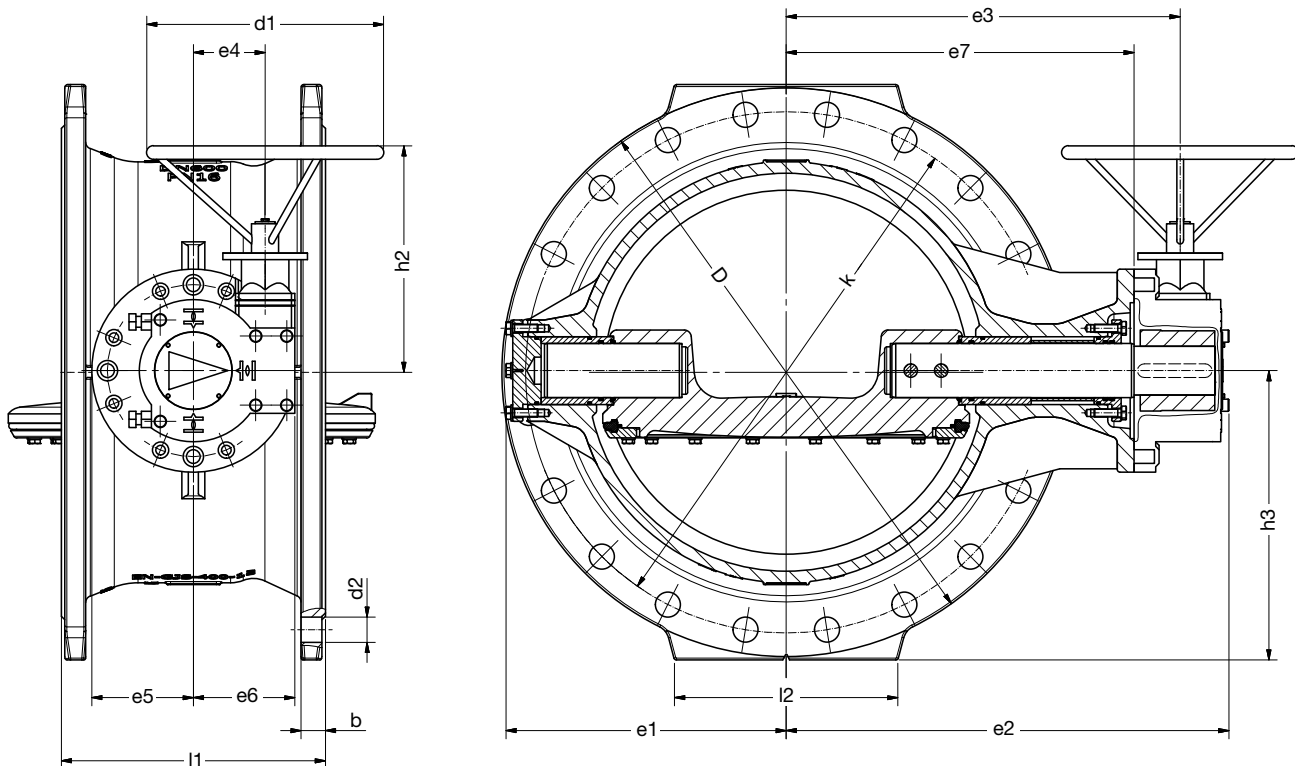


Drawing

Picture 1



Picture 2



Applies to DN 450 to DN 1800 PN 10, from DN 400 to DN 1600 PN 16 and from DN 300 to DN 1400 PN 25



### Technical data

#### PN 6

DN		1400	1500	1600	1800	2000	2200	2400	2500	2600	2800	3000	4000
D	[mm]	1675	1785	1915	2115	2325	2550	2760	2800	2960	3180	3405	4440
b	[mm]	55	60	60	65	55	74	68	70	88	80	90	120
k	[mm]	1590	1700	1820	2020	2230	2440	2650	2730	2850	3070	3290	4300
d1	[mm]	400	400	400	400	400	500	630	640	640	640	640	640
d2	[mm]	44	44	50	50	50	56	57	45	56	56	62	60
e1	[mm]	855	920	970	1100	1240	1355	1485	1610	1733	1850	2000	2725
e2 max.	[mm]	1220	1290	1380	1490	1705	1910	2038	1980	2100	2285	2470	3342
e3 max.	[mm]	1110	1155	1245	1355	1545	1715	1843	1785	1905	2025	2225	3025
e4 max.	[mm]	246	250	250	279	343	400	400	400	400	1087	1087	630
e5 max.	[mm]	273	575	365	488	555	610	610	610	709	1052	1052	845
e6 max.	[mm]	208	268	268	298	368	430	430	430	430	535	540	645
e7	[mm]	907	982	1013	1124	1332	1455	1583	1610	1733	1850	2000	2725
h2 max.	[mm]	746	746	746	846	872	963	963	963	1037	1176	1210	1685
h3	[mm]	845	870	965	1065	1180	1245	1350	1410	1500	1620	1720	2250
l1	[mm]	710	750	790	870	950	1030	1110	1150	1190	1270	1350	1750
l2	[mm]	800	850	900	1000	1100	1200	1300	1300	1800	1800	2000	2630
No. of holes		36	36	40	44	48	52	56	56	60	64	68	84
Weight approx.	[kg]	2060.00	2525.00	3685.00	4625.00	7520.00	10000.00	12250.00	14000.00	15000.00	19000.00	23000.00	47000.00
Volume approx.	[m <sup>3</sup> ]	2.468	2.959	3.555	4.766	6.505	8.576	10.793	12.565	13.501	16.437	20.547	47.141

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

#### PN 10

DN		200	250	300	350	400	450	500	600	700	800	900	1000
D	[mm]	340	400	455	505	565	615	670	780	900	1020	1120	1245
b	[mm]	20	22	24.5	24.5	24.5	26.5	26.5	30	32.5	35	37.5	40
k	[mm]	295	350	400	460	515	565	620	725	840	950	1050	1160
d1	[mm]	250	250	250	250	350	400	400	500	300	350	400	300
d2	[mm]	23	23	23	23	28	28	28	31	31	34	34	37
e1	[mm]	169	199	236	261	285	306	345	392	462	512	576	640
e2 max.	[mm]	324	367	417	427	471	495	526	585	691	745	827	913
e3 max.	[mm]	261	304	354	364	408	441	472	531	660	714	750	820
e4 max.	[mm]	76	76	76	76	102	84	84	84	106	106	130	168
e5 max.	[mm]	139	139	139	139	165	120	120	120	150	150	180	236
e6 max.	[mm]	85	85	85	85	109	88	88	105	150	150	150	175
e7	[mm]	216	259	309	319	358	385	416	466	559	613	675	729
h2 max.	[mm]	298	298	298	298	342	311	311	331	334	334	381	434
h3	[mm]	175	205	232	265	288	312	340	395	455	515	565	630
l1	[mm]	230	250	270	290	310	330	350	390	430	470	510	550
l2	[mm]	185	225	260	270	300	250	300	330	400	450	550	600
No. of holes		8	12	12	16	16	20	20	20	24	24	28	28
Weight approx.	[kg]	44.00	60.00	81.00	110.00	135.00	190.00	240.00	320.00	470.00	620.00	800.00	1050.00
Volume approx.	[m <sup>3</sup> ]	0.037	0.055	0.078	0.098	0.131	0.165	0.207	0.309	0.458	0.616	0.803	1.065

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.



Technical data

PN 10

DN		1100	1200	1400	1500	1600	1800	2000	2200	2400	2600	2800
D	[mm]	1340	1470	1675	1785	1915	2115	2325	2550	2760	2960	3180
b	[mm]	43	45	55	60	60	65	55	74	68	88	80
k	[mm]	1270	1380	1590	1700	1820	2020	2230	2440	2650	2850	3070
d1	[mm]	300	300	400	400	400	500	500	640	640	640	640
d2	[mm]	37	41	44	44	50	50	50	56	57	56	56
e1	[mm]	692	763	880	970	995	1140	1270	1400	1490	1733	1850
e2 max.	[mm]	967	1100	1146	1273	1301	1442	1825	1740	1860	2205	2320
e3 max.	[mm]	874	990	1036	1132	1160	1301	1630	1545	1656	1960	2075
e4 max.	[mm]	168	210	210	263	263	263	400	400	450	1087	1087
e5 max.	[mm]	236	290	290	368	368	368	610	709	742	1052	1052
e6 max.	[mm]	175	207.5	207.5	241	241	241	430	430	486	540	540
e7	[mm]	783	874	920	985	1013	1154	1370	1370	1490	1733	1850
h2 max.	[mm]	434	484	504	592	592	612	963	1037	1239	1210	1210
h3	[mm]	680	740	845	900	965	1065	1180	1290	1390	1500	1620
l1	[mm]	590	630	710	750	790	870	950	1030	1110	1190	1270
l2	[mm]	650	700	800	850	900	1000	1100	1200	1300	1800	1800
No. of holes		32	32	36	36	40	44	48	52	56	60	64
Weight approx.	[kg]	1390.00	1740.00	2545.00	3425.00	3985.00	4850.00	7800.00	11500.00	13200.00	14600.00	19500.00
Volume approx.	[m <sup>3</sup> ]	1.312	1.729	2.575	3.026	3.602	4.784	6.836	8.247	10.263	13.871	16.841

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

PN 16

DN		100	125	150	200	250	300	350	400	450	500	600	700
D	[mm]	220	250	285	340	400	455	520	580	640	715	840	910
b	[mm]	19	19	19	20	22	24.5	26.5	28	31.5	31.5	36	39.5
k	[mm]	180	210	240	295	355	410	470	525	585	650	770	840
d1	[mm]	250	250	250	250	250	250	350	400	500	500	350	400
d2	[mm]	19	19	23	23	28	28	28	31	31	34	37	37
e1	[mm]	110	125	134	169	199	236	261	298	306	357	413	470
e2 max.	[mm]	230	240	293	324	367	417	446	466	495	543	642	725
e3 max.	[mm]	184	194	230	261	304	354	383	412	441	489	578	648
e4 max.	[mm]	50	50	76	76	76	76	102	84	84	84	106	130
e5 max.	[mm]	73	73	139	139	139	139	165	120	120	120	150	180
e6 max.	[mm]	54	54	85	85	85	85	109	88	88	105	150	150
e7	[mm]	149	159	185	216	259	309	333	356	385	424	510	573
h2 max.	[mm]	230	230	298	298	298	298	342	311	331	331	334	381
h3	[mm]	119.5	119.5	150	175	205	232	265	295	325	362	425	460
l1	[mm]	190	200	210	230	250	270	290	310	330	350	390	430
l2	[mm]	120	120	150	185	225	260	270	320	250	300	330	400
No. of holes		8	8	8	12	12	12	16	16	20	20	20	24
Weight approx.	[kg]	16.60	18.65	30.00	44.00	60.00	85.00	116.00	155.00	237.00	300.00	460.00	670.00
Volume approx.	[m <sup>3</sup> ]	0.015	0.018	0.025	0.037	0.055	0.078	0.106	0.137	0.172	0.235	0.356	0.472

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.



### Technical data

#### PN 16

DN		800	900	1000	1200	1400	1500	1600	1800	2000	2200	2400	2600
D	[mm]	1025	1125	1255	1485	1685	1820	1930	2130	2345	2550	2765	3048
b	[mm]	43	46.5	50	57	64	67	70	70	75	85	100	120
k	[mm]	950	1050	1170	1390	1590	1710	1820	2020	2230	2440	2650	2908
d1	[mm]	300	400	300	500	500	500	500	640	640	640	640	640
d2	[mm]	41	41	44	50	50	57	57	57	62	62	62	60
e1	[mm]	537	589	665	784	915	1000	1045	1170	1275	1449	1645	1805
e2 max.	[mm]	783	864	973	1110	1216	1298	1346	1725	1685	1976	2172	2275
e3 max.	[mm]	724	777	880	1000	1075	1157	1205	1530	1490	1681	1877	2030
e4 max.	[mm]	130	168	168	210	263	263	263	400	450	500	1087	1087
e5 max.	[mm]	180	236	236	290	368	368	368	610	742	843	1052	1052
e6 max.	[mm]	175	175	207.5	207.5	241	241	241	430	486	540	540	540
e7	[mm]	631	680	774	884	928	1010	1058	1270	1314	1449	1645	1805
h2 max.	[mm]	408	454	434	524	612	612	612	963	1239	1323	1323	1210
h3	[mm]	520	570	635	750	850	920	970	1070	1200	1320	1420	1544
l1	[mm]	470	510	550	630	710	750	790	870	950	1030	1110	1190
l2	[mm]	450	550	600	700	800	850	900	1000	1100	1200	1700	1900
No. of holes		24	28	28	32	36	36	40	44	48	52	56	72
Weight approx.	[kg]	775.00	970.00	1320.00	2090.00	2945.00	3755.00	4450.00	5320.00	8300.00	12100.00	14600.00	22600.00
Volume approx.	[m <sup>3</sup> ]	0.655	0.834	1.153	1.813	2.572	3.16	3.751	5.365	6.594	11.569	14.398	14.799

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

#### PN 25

DN		100	150	200	250	300	350	400	450	500	600	700	800
D	[mm]	235	300	360	425	485	555	620	670	730	845	960	1085
b	[mm]	19	20	22	24.5	27.5	30	32	34.5	36.5	42	46.5	51
k	[mm]	190	250	310	370	430	490	550	600	660	770	875	990
d1	[mm]	250	250	250	250	300	400	500	250	300	400	300	300
d2	[mm]	23	28	28	31	31	34	37	37	37	41	44	50
e1	[mm]	110	134	169	199	236	261	298	312	377	425	487	570
e2 max.	[mm]	230	293	324	367	422	437	472	524	605	668	730	881
e3 max.	[mm]	184	230	261	304	368	383	418	460	541	594	671	800
e4 max.	[mm]	50	76	76	76	84	84	84	106	106	130	130	168
e5 max.	[mm]	139	139	139	139	120	120	120	150	150	180	180	236
e6 max.	[mm]	85	85	85	85	88	88	88	105	150	150	175	207.5
e7	[mm]	142	185	216	259	312	327	362	392	473	516	578	682
h2 max.	[mm]	230	298	298	298	291	311	331	314	334	381	408	434
h3	[mm]	127.5	155	185	218	248	285	315	340	370	428	485	550
l1	[mm]	190	210	230	250	270	290	310	330	350	390	430	470
l2	[mm]	120	160	200	240	255	285	320	250	300	330	400	450
No. of holes		8	8	12	12	16	16	16	20	20	20	24	24
Weight approx.	[kg]	22.00	32.00	50.00	67.00	103.00	133.00	174.00	280.00	380.00	490.00	780.00	800.00
Volume approx.	[m <sup>3</sup> ]	0.018	0.026	0.039	0.058	0.086	0.114	0.15	0.192	0.259	0.364	0.516	0.756

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.



Technical data

PN 25

DN		900	1000	1200	1400	1500	1600	1800
D	[mm]	1185	1320	1530	1755	1865	1975	2195
b	[mm]	59.5	60	74	76	77.5	84	90
k	[mm]	1090	1210	1420	1640	1759	1860	2070
d1	[mm]	400	500	640	500	500	640	640
d2	[mm]	50	57	57	62	48	62	70
e1	[mm]	612	681	813	900	995	1025	1170
e2 max.	[mm]	950	1007	1131	1256	1425	1505	1620
e3 max.	[mm]	839	897	1021	1146	1263	1310	1425
e4 max.	[mm]	210	210	210	210	400	450	500
e5 max.	[mm]	290	290	290	290	709	610	843
e6 max.	[mm]	207.5	207.5	237.5	237.5	430	430	486
e7	[mm]	724	781	895	1020	1118	1135	1250
h2 max.	[mm]	504	524	524	524	1037	1239	1251
h3	[mm]	600	665	780	900	940	1010	1110
l1	[mm]	510	550	630	710	750	790	870
l2	[mm]	550	600	700	1000	850	900	670
No. of holes		28	28	32	36	52	40	44
Weight approx.	[kg]	1250.00	1685.00	2400.00	3500.00	4500.00	5200.00	6160.00
Volume approx.	[m <sup>3</sup> ]	0.946	1.257	1.916	2.772	3.385	3.947	5.328

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

PN 40

DN		150	200	250	300	350	400	450	500	600	700	800	900
D	[mm]	300	375	450	515	580	660	685	755	890	995	1140	1250
b	[mm]	29	30	34	39.5	44	48	49	52	58	65	65	65
k	[mm]	250	320	385	450	510	585	610	670	795	900	1030	1140
d1	[mm]	250	350	400	400	400	400	400	500	500	500	500	500
d2	[mm]	28	31	34	34	36	41	41	44	50	48	56	56
e1	[mm]	150	188	225	255	290	330	350	388	445	512	538	613
e2 max.	[mm]	285	327	378	453	506	537	595	642	703	833	933	973
e3 max.	[mm]	236	278	328	386	439	467	525	562	623	737	814	854
e4 max.	[mm]	63	63	80	100	100	125	125	160	160	200	250	250
e5 max.	[mm]	94	94	111	148	148	173	173	218	218	273	335	335
e6 max.	[mm]	75	75	88	105	105	150	150	165	175	208	258	258
e7	[mm]	191	233	271	311	364	392	450	487	533	622	684	724
h2 max.	[mm]	263	283	308	370	370	442	442	537	537	667	742	742
h3	[mm]	162	195	230	260	295	345	350	395	480	550	600	640
l1	[mm]	210	230	250	270	290	310	330	350	390	430	470	510
l2	[mm]	210	200	240	260	285	360	400	390	450	450	550	550
No. of holes		8	12	12	16	16	16	20	20	20	20	24	28
Weight approx.	[kg]	54.00	95.00	105.00	188.00	233.00	360.00	404.00	530.00	810.00	1120.00	1550.00	1830.00
Volume approx.	[m <sup>3</sup> ]	0.026	0.039	0.058	0.086	0.114	0.15	0.192	0.259	0.364	0.516	0.756	0.999

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.



## Technical data

### PN 40

DN		1200	1400	1600	1800
D	[mm]	1575	1795	1915	2270
b	[mm]	85	85	180	110
k	[mm]	1460	1680	1820	2120
d1	[mm]	640	500	640	640
d2	[mm]	62	62	48	70
e1	[mm]	960	1020	1200	1225
e2 max.	[mm]	1330	1400	1520	1728
e3 max.	[mm]	1135	1205	1325	1483
e4 max.	[mm]	400	400	400	500
e5 max.	[mm]	610	610	610	738
e6 max.	[mm]	430	430	430	540
e7	[mm]	960	1030	1150	1258
h2 max.	[mm]	963	963	963	1322
h3	[mm]	800	925	975	1175
l1	[mm]	630	710	790	870
l2	[mm]	700	1000	900	1000
No. of holes		32	36	48	48
Weight approx.	[kg]	4000.00	4400.00	5000.00	8000.00
Volume ap- prox.	[m <sup>3</sup> ]	1.916	2.772	3.947	5.328

Valves with pressure rating of PN 6 are generally manufactured according to EN 1092-2 and drilled to PN 10, PN 6 drilling is available on request.

