

Econosto Fig.nr. **21170 [bare shaft]****21172 [gear]****21176 [electric]****21177 [gear underground]****PN 6/10/16/25/40 - DN 100...4000**

KAT-A 1310-EW

Product characteristics and benefits

- Resilient seated in accordance with EN 593
- 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
- 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 1 Torr
- Tight in both flow directions acc. EN 1074-2
- With self-locking, fully enclosed, maintenance-free worm gear including mechanical position indicator

Materials

- Body: Ductile cast iron EN-JS 1030 (GGG-40)
- Disk: Ductile cast iron EN-JS 1030 (GGG-40) (exception: DN 100 / DN 125 stainless steel 1.4408)
- Valve sealing: EPDM
- O-rings: EPDM
- Butterfly valve stem: Stainless steel 1.4021
- Shaft bearing: Zincfree bronze (exception: DN 100 / DN 125 plastic compound)
- Seat: High-alloy weld overlay, microfinished

Corrosion protection

- Body: Inside and outside epoxy coating acc. to GSK guidelines
- Disk: Epoxy coating according to GSK guidelines (exception: DN 100 / DN 125 stainless steel)

Versions

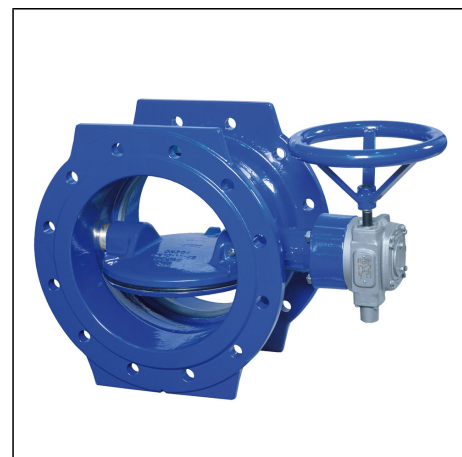
- Standard version as described
- With handwheel
- With electric actuator
- With pneumatic actuator
- With hydraulic actuator
- Special designs and bigger sizes available on request
- With ceramic coating

Field of Application

- Underground installation
- Chamber installation
- Installation in plants

Tests and approvals

- Final inspection test acc. to EN 12266 (DIN 3230 Part 4)
- DVGW tested and registered (DN 150...1200 - PN 10/16)
- Elastomers approved acc. to W270



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

For proper installation and safe operation please follow the installation and operation instructions:
KAT-B 1310

Field of application

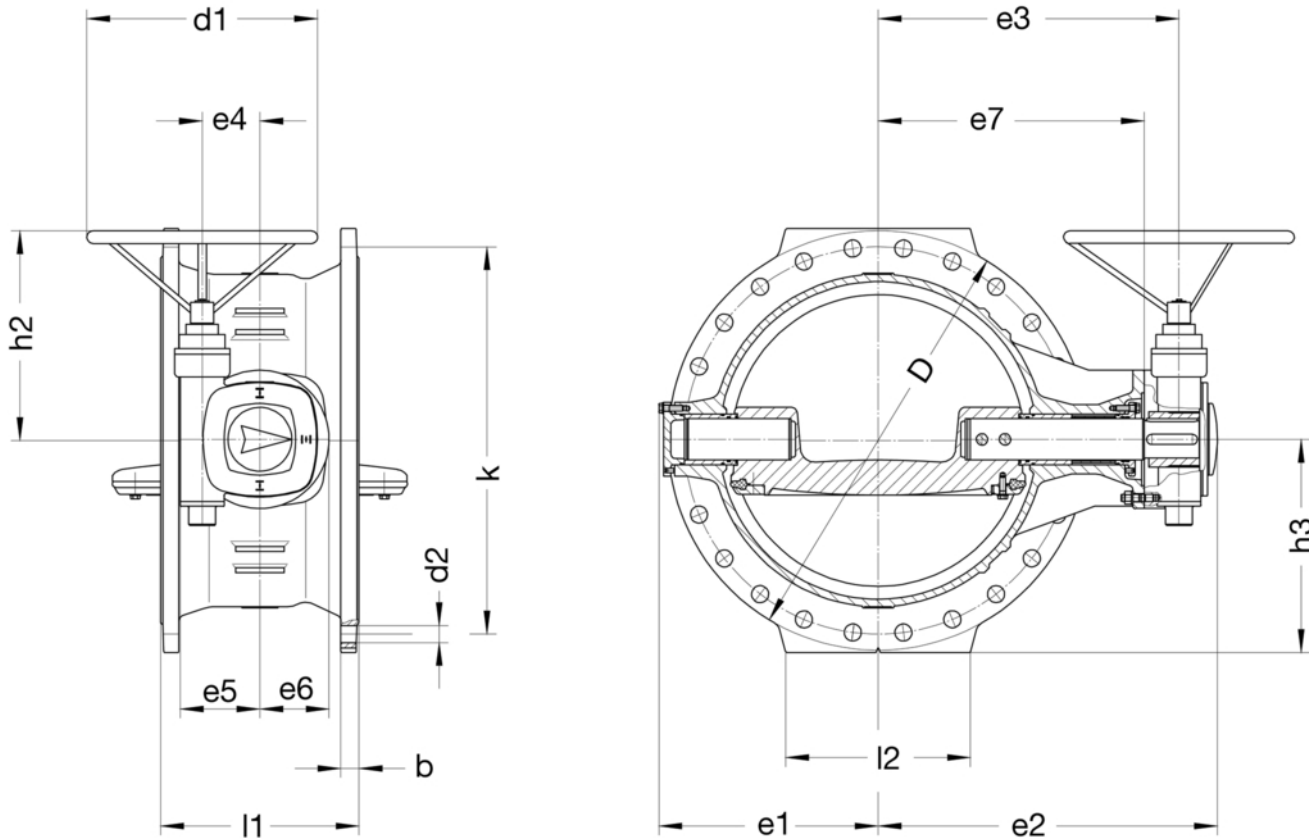
DN	PN	Maximum operating pressure [bar]	Maximum operating temperature for neutral liquids [°C]
150...1800	40	32	50
150...1800	25	25	50
100...2600	16	16	50
200...2800	10	10	50
1400...4000	6	6	50

Pressure test acc. to EN 12266

Test pressure body with water [bar]	Test pressure seat with water [bar]
60	34.5
37.5	27.5
24	18
15	11
9	6.6



Drawing



Technical data

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
d1	[mm]	250	250	250	250	250	250	350	400	400	500	500	500
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	[mm]	230.2	240.2	279	308	351	401	440	463	508	583	673	736
e3	[mm]	184	194	225	256	299	349	378	401	460	499	585	648
e4	[mm]	50	50	50	50	50	50	63	80	100	100	125	125
e5	[mm]	73	73	73	73	73	73	94	94	148	148	173	173
e6	[mm]	54	54	54	54	54	54	75	75	105	105	150	150
e7	[mm]	149	159	185	216	259	309	333	356	385	424	510	573
h2	[mm]	230	230	231	231	231	231	283	308	367	407	395	395
h3	[mm]	119.5	119.5	150	175	205	232	265	295	325	362	425	460
k	[mm]	180	210	240	295	355	410	470	525	585	650	770	840
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
Turns/stroke		12.75	12.75	12.75	12.75	12.75	12.75	12.75	13.25	13	13	13	51
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 ³]	0.015	0.018	0.025	0.037	0.055	0.078	0.106	0.137	0.172	0.235	0.356	0.472



Technical data

PN 16

DN		800	900	1000	1200	1400	1500	1600	1800	2000	2600
D	[mm]	1025	1125	1255	1485	1685	1820	1930	2130	2345	3048
b	[mm]	43	46.5	50	57	64	67	70	70	75	120
d1	[mm]	400	500	400	500	400	400	400	640	640	640
d2	[mm]	41	41	44	50	50	57	57	57	62	60
e1	[mm]	537	589	665	784	915	1000	1045	1170	1275	1805
e2	[mm]	822	865	1005	1154	1235	1315	1415	1725	1685	2275
e3	[mm]	721	770	890	1014	1075	1155	1255	1530	1490	2030
e4	[mm]	160	160	200	250	315	315	315	400	400	500
e5	[mm]	218	218	273	335	555	555	555	610	610	738
e6	[mm]	175	175	208	258	340	340	340	430	430	540
e7	[mm]	631	680	774	884	928	1010	1058	1270	1314	1805
h2	[mm]	517	537	642	722	865	865	865	963	1210	1210
h3	[mm]	520	570	635	750	850	920	970	1070	1200	1544
k	[mm]	950	1050	1170	1390	1590	1710	1820	2020	2230	2908
l1	[mm]	470	510	550	630	710	750	790	870	950	1190
l2	[mm]	450	550	600	700	800	850	900	1000	1100	1900
No. of holes		24	28	28	32	36	36	40	44	48	72
Turns/stroke		110.5	110.5	216	212	424	424	424	432	432	832
Weight approx.	[kg]	775.00	970.00	1320.00	2090.00	2945.00	3755.00	4450.00	5320.00	8300.00	22600.00
Volume approx.	[m ³]	0.655	0.834	1.153	1.813	2.572	3.160	3.751	5.365	6.594	14.799

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]	20	30	34	39.5	44	48	49	52	58	64	65	70
d1	[mm]	250	250	250	350	400	400	400	400	500	400	500	500
d2	[mm]	28	31	34	34	37	41	41	44	50	48	56	56
e1	[mm]	133	168	198	235	260	307	307	371	417	487	571	613
e2	[mm]	289	320	363	425	440	555	555	641	715	770	894	954
e3	[mm]	227	258	301	359	384	467	467	553	614	675	797	839
e4	[mm]	63	63	63	80	100	125	125	160	160	200	200	200
e5	[mm]	94	94	94	111	111	173	173	173	218	305	305	305
e6	[mm]	75	75	75	88	88	125	125	150	165	208	208	208
e7	[mm]	185	216	259	312	327	392	392	478	524	585	682	725
h2	[mm]	263	263	263	288	308	332	432	432	537	600	670	670
h3	[mm]	155	195	230	260	295	345	350	395	460	505	580	640
k	[mm]	250	320	385	450	510	585	610	670	795	900	1030	1140
l1	[mm]	210	230	250	270	290	310	330	350	390	430	470	510
l2	[mm]	160	200	240	260	285	360	300	390	460	400	450	550
No. of holes		8	12	12	16	16	16	20	20	20	24	24	28
Turns/stroke		12.75	12.75	12.75	13.25	13.25	51	51	51	110.5	216	216	216
Weight approx.	[kg]	40.00	65.00	90.00	140.00	185.00	275.00	395.00	450.00	650.00	920.00	1150.00	1830.00
Volume approx.	[m ³]	0.027	0.042	0.063	0.092	0.118	0.176	0.195	0.267	0.393	0.538	0.785	0.999



Technical data

PN 40

DN		1000	1200	1400	1800
D	[mm]	1360	1575	1795	2270
b	[mm]	75	80	85	110
d1	[mm]	500	500	500	640
d2	[mm]	56	62	62	70
e1	[mm]	681	813	1025	1200
e2	[mm]	1051	1269	1483	1730
e3	[mm]	894	1108	1288	1483
e4	[mm]	250	315	400	500
e5	[mm]	385	490	610	738
e6	[mm]	208	340	430	540
e7	[mm]	761	895	1030	1258
h2	[mm]	725	865	965	1210
h3	[mm]	700	800	925	1175
k	[mm]	1250	1460	1680	2120
l1	[mm]	550	630	710	870
l2	[mm]	600	900	1000	1000
No. of holes		28	32	36	48
Turns/stroke		216	424	432	832
Weight approx.	[kg]	2250.00	2800.00	4000.00	10000.00
Volume approx.	[m ³]	1.296	2.066	3.196	5.786

PN 25

DN		150	200	250	300	350	400	450	500	600	700	800	900
D	[mm]	300	360	425	485	555	620	670	730	845	960	1085	1185
b	[mm]	20	22	24.5	27.5	30	32	34.5	36.5	42	46.5	51	59.5
d1	[mm]	250	250	250	350	400	400	400	400	500	500	500	500
d2	[mm]	28	28	31	31	34	37	37	37	41	44	50	50
e1	[mm]	134	169	199	236	261	298	312	377	425	487	570	612
e2	[mm]	277	308	351	419	450	485	555	636	679	763	912	954
e3	[mm]	225	256	299	357	384	419	467	548	591	668	797	839
e4	[mm]	50	50	50	63	80	80	100	125	125	160	200	200
e5	[mm]	73	73	73	94	111	111	148	173	173	218	273	273
e6	[mm]	54	54	54	75	88	88	105	150	150	175	208	208
e7	[mm]	185	216	259	312	327	362	392	473	516	578	682	724
h2	[mm]	231	231	231	283	308	308	428	432	452	537	667	667
h3	[mm]	155	185	218	248	285	315	340	370	428	485	550	600
k	[mm]	250	310	370	430	490	550	600	660	770	875	990	1090
l1	[mm]	210	230	250	270	290	310	330	350	390	430	470	510
l2	[mm]	160	200	240	255	285	320	250	300	330	400	450	550
No. of holes		8	12	12	16	16	16	20	20	20	24	24	28
Turns/stroke		12.75	12.75	12.75	12.75	13.25	13.25	51	51	51	110.5	216	216
Weight approx.	[kg]	32.00	50.00	67.00	103.00	133.00	174.00	280.00	380.00	490.00	780.00	800.00	1250.00
Volume approx.	[m ³]	0.026	0.039	0.058	0.086	0.114	0.150	0.192	0.259	0.364	0.516	0.756	0.946



Technical data

PN 25

DN		1000	1200	1400	1500	1600	1800
D	[mm]	1320	1530	1755	1865	1975	2195
b	[mm]	60	74	76	77.5	84	90
d1	[mm]	500	500	500	500	640	640
d2	[mm]	57	57	62	48	62	70
e1	[mm]	681	813	900	995	1025	1170
e2	[mm]	1051	1175	1325	1425	1505	1620
e3	[mm]	911	1035	1165	1263	1310	1425
e4	[mm]	250	250	315	400	400	500
e5	[mm]	335	335	490	610	610	610
e6	[mm]	258	258	340	430	430	430
e7	[mm]	781	895	1020	1118	1135	1250
h2	[mm]	722	722	870	870	963	963
h3	[mm]	665	780	900	940	1010	1110
k	[mm]	1210	1420	1640	1759	1860	2070
l1	[mm]	550	630	710	750	790	870
l2	[mm]	600	700	1000	850	900	670
No. of holes		28	32	36	52	40	44
Turns/stroke		212	212	424	432	432	432
Weight approx.	[kg]	1685.00	2400.00	3500.00	4500.00	5200.00	6160.00
Volume approx.	[m ³]	1.257	1.916	2.772	3.385	3.947	5.328

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
d1	[mm]	250	250	250	250	350	400	400	500	500	400	400	400
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	[mm]	308	351	401	411	465	508	539	625	722	772	830	915
e3	[mm]	256	299	349	359	403	442	473	541	634	684	750	820
e4	[mm]	50	50	50	50	63	80	80	100	125	125	160	160
e5	[mm]	73	73	73	73	94	111	111	148	173	173	218	218
e6	[mm]	54	54	54	54	75	88	88	105	150	150	175	175
e7	[mm]	216	259	309	319	358	385	416	466	559	613	675	729
h2	[mm]	231	231	231	231	231	308	308	407	395	432	520	520
h3	[mm]	175	205	232	265	288	312	340	395	455	515	565	630
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]	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
Turns/stroke		12.75	12.75	12.75	12.75	12.75	13.25	13.25	13	13	51	110.5	110.5
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 ³]	0.037	0.055	0.078	0.098	0.131	0.165	0.207	0.309	0.458	0.616	0.803	1.065



Technical data

PN 10

DN		1100	1200	1300	1400	1500	1600	1800	2000	2200	2400	2600	2800
D	[mm]	1340	1470	1585	1675	1785	1915	2115	2325	2550	2760	2960	3180
b	[mm]	43	45	45	55	60	60	65	55	74	68	88	80
d1	[mm]	400	500	400	400	500	500	500	500	640	640	640	640
d2	[mm]	37	41	44	44	44	50	50	50	56	57	56	56
e1	[mm]	692	763	830	880	970	995	1140	1270	1400	1490	1733	1850
e2	[mm]	968	1104	1235	1285	1290	1386	1460	1825	1740	1860	2205	2320
e3	[mm]	873	989	1100	1150	1130	1226	1300	1630	1545	1655	1960	2075
e4	[mm]	160	200	250	250	250	250	315	400	400	400	500	500
e5	[mm]	218	273	365	365	365	365	555	610	610	610	738	738
e6	[mm]	175	208	268	268	268	268	340	430	430	430	540	540
e7	[mm]	783	874	880	920	985	1013	1154	1370	1370	1490	1733	1850
h2	[mm]	517	667	745	745	745	745	865	963	963	963	1210	1210
h3	[mm]	680	740	795	845	900	965	1065	1180	1290	1390	1500	1620
k	[mm]	1270	1380	1490	1590	1700	1820	2020	2230	2440	2650	2850	3070
l1	[mm]	590	630	670	710	750	790	870	950	1030	1110	1190	1270
l2	[mm]	650	700	750	800	850	900	1000	1100	1200	1300	1800	1800
No. of holes		32	32	32	36	36	40	44	48	52	56	60	64
Turns/stroke		110.5	216	208	208	208	208	424	432	432	432	832	832
Weight approx.	[kg]	1390.00	1740.00	2260.00	2545.00	3425.00	3985.00	4850.00	7800.00	11500.00	13200.00	14600.00	19500.00
Volume approx.	[m ³]	1.312	1.729	2.193	2.575	3.026	3.602	4.784	6.836	8.247	10.263	13.871	16.841

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
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	[mm]	1220	1290	1380	1490	1705	1910	2038	1980	2100	2220	2470	3342
e3	[mm]	1110	1155	1245	1355	1545	1715	1843	1785	1905	2020	2225	3025
e4	[mm]	200	250	250	250	315	400	400	400	400	400	500	630
e5	[mm]	315	365	365	365	555	610	610	610	610	610	738	845
e6	[mm]	215	268	268	268	340	430	430	430	430	430	540	645
e7	[mm]	907	982	1013	1124	1332	1455	1583	1610	1733	1850	2000	2725
h2	[mm]	665	745	745	745	865	963	963	963	963	963	1210	1685
h3	[mm]	845	870	965	1065	1180	1245	1350	1410	1500	1620	1720	2250
k	[mm]	1590	1700	1820	2020	2230	2440	2650	2730	2850	3070	3290	4300
l1	[mm]	710	750	790	870	950	1030	1110	1250	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
Turns/stroke		106	208	208	208	424	432	432	432	432	432	832	1735
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 ³]	2.468	2.959	3.555	4.766	6.505	8.576	10.793	12.565	13.501	16.437	20.547	47.141



Type of actuator

