



PN 10/16/25 - DN 300...1200

KAT-A 5512-EKN

Product characteristics and benefits

- Quick-closing valve with hydraulic brake and lift unit
- Hydraulic cylinder for external oil supply for a pressure between 80 and 200 bar
- Lever and weight with double bearing, angular joint bearing on one side and with bearing ring made of PTFE gliding sheet on the other side. This prevents the transmission of drop weight loads to the valve bearing.
- Modular design of the drop weight allows adaptation to the operation conditions
- Two-piece drop-weight lever
- Two limit switches to indicate the open and closed positions, protection class IP 65
- Two-step hydraulic cylinder and adjustable limit stop for the closed position
- Opening and closing time depending on the external oil supply
- Compact design consisting of the valve plus mounted actuator

Materials

- Console and lever: SJ235
- Drop weight: Cast iron EN-JL- 1040 (GG-25)
- Bearing pins, bolts and coupling: Stainless steel 1.4021
- Lever bearing: Stainless steel 1.4305 or rather zinc-free bronze and PTFE

Corrosion protection

- Bracket, lever: Epoxy primer and top coating
- Drop weight: Epoxy coating

Versions

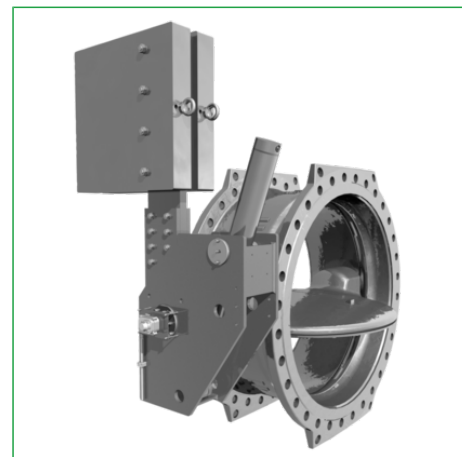
- Standard version as described
- Smaller sizes available on request
- With hydraulic unit for opening (with internal oil supply - version: HYsec E), with terminal box made of steel plate and third limit switch for keeping the valve open automatically. Fixed opening time, closing time adjustable - both depending from the dimension of the cylinder.
- Optional arrangement of actuator and drop direction
- As quick-opening valve
- For other types see HYsec PRO

Field of application

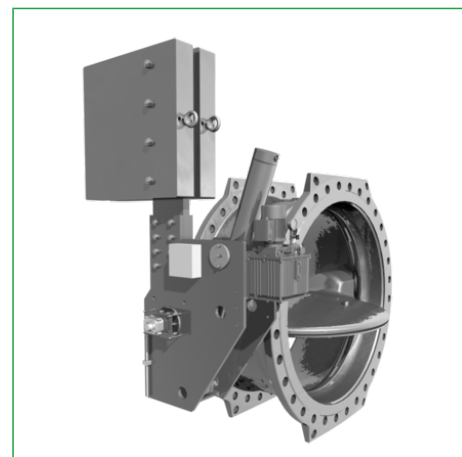
- Turbine inlet valve
- Pump protection valve
- Pipe burst safety device with electric release

Tests and approvals

- Final inspection test according to EN 12266-1 (leakage rate A)



HYsec F: Standard type (with external oil supply)



HYsec E: Version with hydraulic unit (with internal oil supply)

Operation data

- To enable us to properly design the valve, please specify your operation data:
 - Field of application
 - Maximum flow rate
 - Maximum differential pressure
 - Existing oil pressure in case of external oil supply

Note

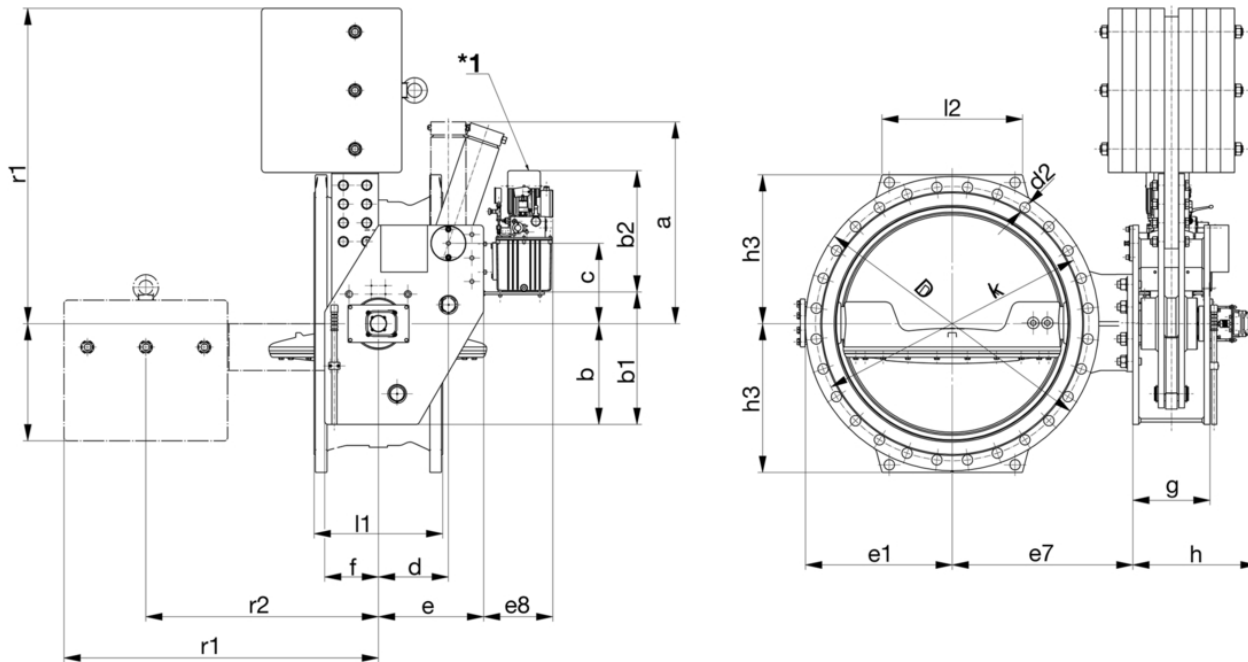
For proper installation and safe operation please follow the installation and operation instructions:
KAT-B 5512

Field of application

DN	PN	Maximum operating pressure [bar]	Maximum operating temperature for neutral liquids [°C]
300...1000	25	25	50
350...1200	16	16	50
400...1200	10	10	50



Drawing



*1: Hydraulic unit for opening (with internal oil supply - version: HYsec E). Not included in the standard type HYsec F (with external oil supply).

Attention: Dimension e8 and b2 only relevant for the version HYsec E with hydraulic unit.

Note: Dimensions for a hydraulic control pressure of 80 bar.

Technical data

PN 10

DN		400	450	500	600	700	800	900	1000	1100	1200
D	[mm]	565	615	670	780	900	1020	1120	1245	1340	1470
b	[mm]	230	230	350	315	400	400	430	430	550	550
k	[mm]	515	565	620	725	840	950	1050	1160	1270	1380
a	[mm]	495	495	616	671	785	795	860	860	1109	1109
b1	[mm]	-	-	-	-	395	395	395	545	545	555
b2	[mm]	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5
b3	[mm]	290	320	320	340	340	340	500	500	500	500
b4	[mm]	720	920	960	960	1100	1300	1500	1500	1500	1350
c	[mm]	205	205	225	251	340	340	343	343	458	458
d	[mm]	153	153	227	227	299.5	299.5	299.5	299.5	444.5	444.5
d2	[mm]	28	28	28	31	31	34	34	37	37	41
e	[mm]	260	260	340	340	425	425	450	450	620	620
e1	[mm]	282	306	345	392	463	513	571	636	680	763
e7	[mm]	358	385	416	466	563	613	675	729	783	874
e8	[mm]	-	-	-	-	283.5	283.5	283.5	283.5	283.5	283.5
f	[mm]	130	130	130	180	180	180	230	230	230	230
f1	[mm]	720	920	960	960	1100	1300	1500	1500	1500	1345
g	[mm]	215	215	215	260	280	280	330	330	330	330
h	[mm]	399	399	399	449	470	470	529	529	529	529
h3	[mm]	288	312	340	395	455	515	565	630	680	740
l1	[mm]	310	330	350	390	430	470	510	550	590	630
l2	[mm]	300	350	300	330	400	450	550	600	650	700
r1	[mm]	500	620	660	660	800	1000	1025	1025	1150	995
Drop weight	[kg]	210	220	260	370	560	600	800	1000	1200	1600
Number of holes in the valve flange		16	20	20	20	24	24	28	28	32	32



Technical data

PN 16

DN		350	400	450	500	600	700	800	900	1000	1200
D	[mm]	520	580	640	715	840	910	1025	1125	1255	1485
b	[mm]	230	230	350	315	400	400	430	550	550	590
k	[mm]	470	525	585	650	770	840	950	1050	1170	1390
a	[mm]	495	495	616	671	785	795	860	1109	1109	1179
b1	[mm]	-	-	-	-	395	395	545	545	555	555
b2	[mm]	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5
b3	[mm]	290	320	320	340	340	340	500	500	500	500
b4	[mm]	720	920	920	960	1000	1300	1500	1500	1350	1700
c	[mm]	205	205	225	251	340	340	343	458	458	453
d	[mm]	153	153	227	227	299.5	299.5	299.5	444.5	444.5	444.5
d2	[mm]	28	31	31	34	37	37	41	41	44	50
e	[mm]	260	260	340	340	425	425	450	620	620	620
e1	[mm]	261	297	306	357	413	475	537	615	660	780
e7	[mm]	333	362	385	424	514	577	631	680	774	884
e8	[mm]	-	-	-	-	283.5	283.5	283.5	283.5	283.5	283.5
f	[mm]	130	130	130	180	180	180	230	230	230	245
f1	[mm]	720	920	920	960	1000	1300	1500	1500	1345	1705
g	[mm]	215	215	215	260	280	280	330	330	330	470
h	[mm]	399	399	399	449	470	470	529	529	529	659
h3	[mm]	265	295	325	362	425	460	520	570	635	750
l1	[mm]	290	310	330	350	390	430	470	510	550	630
l2	[mm]	270	320	250	300	330	400	450	550	600	700
r1	[mm]	500	620	620	660	700	1000	1025	1150	995	1355
Drop weight	[kg]	210	220	260	370	560	600	1000	1400	1600	1600
Number of holes in the valve flange		16	16	20	20	20	24	24	28	28	32

PN 25

DN		300	350	400	450	500	600	700	800	900	1000	1200
D	[mm]	485	555	620	670	730	845	960	1085	1185	1320	1530
b	[mm]	230	230	350	315	400	400	430	550	590	590	730
k	[mm]	430	490	550	600	660	770	875	990	1090	1210	1420
a	[mm]	495	495	616	671	785	795	860	1109	1179	1179	1417
b1	[mm]	-	-	-	-	395	395	545	555	555	555	775
b2	[mm]	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5	519.5
b3	[mm]	290	320	320	340	340	340	500	500	500	500	880
b4	[mm]	720	920	960	960	1000	1200	1500	1350	1700	1700	1990
c	[mm]	205	205	225	251	340	340	343	458	453	453	490
d	[mm]	153	153	227	227	299.5	299.5	299.5	444.5	444.5	444.5	584.5
d2	[mm]	31	34	37	37	37	41	44	50	50	57	57
e	[mm]	260	260	340	340	425	425	450	620	620	620	745
e1	[mm]	236	261	297	312	377	425	485	570	612	681	813
e7	[mm]	312	327	362	392	478	524	578	682	724	781	895
e8	[mm]	-	-	-	-	283.5	283.5	283.5	283.5	283.5	283.5	278.5
f	[mm]	130	130	130	180	180	180	230	230	245	245	245
f1	[mm]	720	920	960	960	1000	1190	1500	1345	1705	1705	1990
g	[mm]	215	215	215	260	280	280	330	330	470	470	470
h	[mm]	399	399	399	449	470	470	523	529	659	659	659
h3	[mm]	248	285	315	340	370	428	485	550	615	554	780
l1	[mm]	270	290	310	330	350	390	430	470	510	550	630
l2	[mm]	255	285	320	250	300	330	400	450	550	600	700
r1	[mm]	500	865	660	660	700	900	1025	995	1355	1355	1500
Drop weight	[kg]	210	180	260	370	560	560	1000	1400	1400	1600	2250
Number of holes in the valve flange		16	16	16	20	20	20	24	24	28	28	32