FIG.240

PROPORTIONAL SAFETY VALVE zAMARK

Body material	Nominal pressure	Nominal diameter	Max. temperature	Ex. index
A Grey cast iron	**C** 16 bar	DN **15-200**	300°C	2501
F Cast steel	**E** 40 bar	DN **20-200**	450°C	2302
F Cast steel	**E** 40 bar	DN **20-200**	400°C	2502
R Acid resistant cast steel	**E** 40 bar	DN **20-100**	300°C	2502CrNi

CE 0045 for standard valves

CE 1433 for valves made of insert

FEATURES

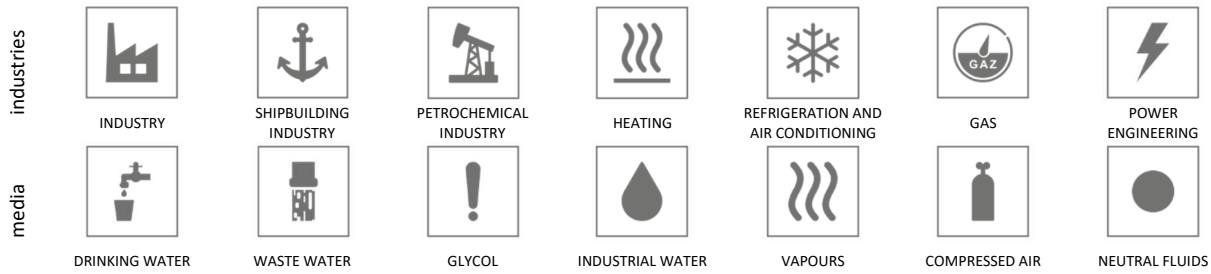
- connection dimensions of flanges PN-EN 1092
- valves produced in accordance with the requirements of PN-EN ISO 4126-1
- a high degree of tightness

In the case of valves with soft seals:

- quiet operation of the valve
- increased tightness of the closure
- protection of disc sealing surface against limescale settling (when the factor is industrial and drinking water) and against minor mechanical impurities

APPLICATION*

*not all applications are suitable for any material production



Data given can be changed without notice.

Edition 01/2018

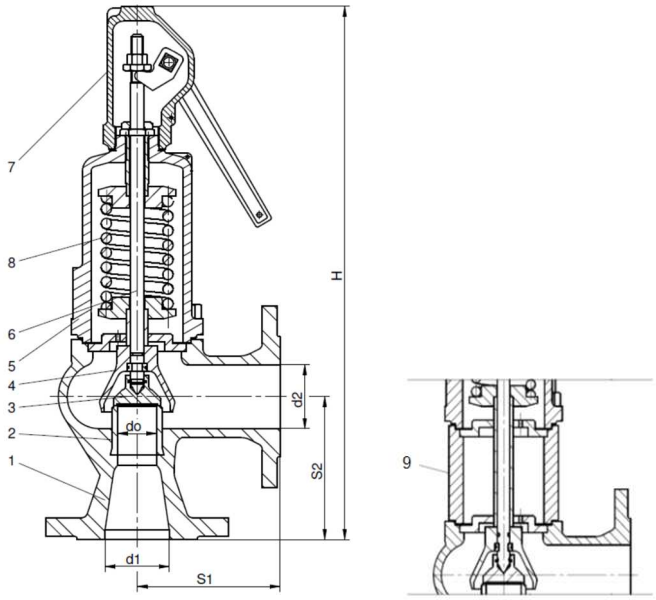
ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

FIG.240

MATERIALS, DIMENSIONS PN16 and PN40



	Body material	A	
	Type	standard	with soft seal
		01-1, 02-1, 05-1, 07-1	01-2(3), 02-2(3), 05-2(3), 07-2(3)
1	Body	EN-GJL-250 5.1301	
2	Seat	X39CrMo17-1 1.4122	
3	Disc	X39CrMo17-1 1.4122	X6CrNiTi18-10/EPDM or /NBR 1.4541/EPDM or /NBR
4	Bell	EN-GJS-400-15 5.3106	
5	Bonnet	EN-GJL-250 / EN-GJS-400-15 5.1301 / 5.3106	
6	Spindle	X20Cr13* 1.4021	
7	Cap	EN-GJL-250 / EN-GJS-400-15 5.1301 / 5.3106	
8	Spring	51CrV4** 1.8159	
Temperature range		**-10...300°C*** **	**-10...120°C EPDM -10...90°C NBR**

* For marine production (05-07-) spindle made of X17CrNi16 material-2
** Springs with wire diameter Φ6, of patented wire, max. operating temperature then is 250°C
*** For vapours boilers are limits according to WUDT-CA-WO-M, i.e. 10 bar and 200°C

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

FIG.240

No.	Body material	F		R
	Type	standard	with soft seal	standard
		01-1, 02-1, 05-1, 07-1	01-2 (3), 02-2(3), 05-2(3), 07-2(3)	02-1
1	Body	GP240GH 1.0619		GX5CrNi19-10 1.4308
2	Seat	X39CrMo17-1 1.4122		X6CrNiTi18-10 1.4541
3	Disc	X39CrMo17-1 1.4122	X6CrNiTi18-10/EPDM or /NBR 1.4541/EPDM or /NBR	X6CrNiTi18-10 1.4541
4	Bell	EN-GJS-400-15 5.3106		X6CrNiTi18-10 1.4541
5	Bonnet	GP240GH 5.3106	EN-GJS-400-15 5.3106	GX5CrNi19-10 1.4308
6	Spindle	X20Cr13* 1.4021		X6CrNiTi18-10 1.4541
7	Cap	EN-GJS-400-15 5.3106		GX5CrNi19-10 1.4308
8	Spring	51CrV4** 1.8159		X10CrNi18-10 1.4310
9	Insert	P245GH 1.0352	-----	
Temperature range		**-40...400°C*** **	**-40...120°C EPDM -10...90°C NBR**	**-196...300°C**

* For marine production (05-07-) spindle made of X17CrNi16 material-2
** Springs with wire diameter Φ6, of patented wire, max. operating temperature then is 250°C
For the open valve construction, max. temperature is 450°C
The open valve only for water vapor and other vapours and gases.

Body material		Type	A (PN16)											
DN			15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
d_o (mm)			12	12	16	20	25	32	40	50	63	77	93	110
A (mm^2)			113	113	201	314	491	804	1257	1964	3117	4657	6793	9503
S_1 (mm)			90	95	100	105	115	125	145	155	175	200	225	225
S_2 (mm)			90	95	100	105	115	125	145	155	175	200	225	250
H (mm)			330	335	350	390	420	485	540	655	705	810	850	980
Pressure at the beginning of the opening (bar)	min	standard	0.45											
	max		16*											
	min	with soft seal	1											
	max		16											
Weight (kg)			6.0	6.0	8.0	10.0	12.0	20.0	25.0	36.0	47.0	74.0	100.0	140.0

*For vapours boilers restrictions arising from WUDT-CA-WO-M-IE rules apply. 10 bar and 200°C

Data given can be changed without notice. **Edition 01/2018**

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

Body material		Type	F, R (Pn 40)										
DN			20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
d_o (mm)			12	16	20	25	32	40	50	63	77	93	110
A (mm²)			113	201	314	491	804	1257	1964	3117	4657	6793	9503
S_1 (mm)			95	100	105	115	125	145	155	175	200	225	225
S_2 (mm)			95	100	105	115	125	145	155	175	200	225	250
H (mm)	without insert		335	350	390	420	485	540	655	705	815	850	980
	with insert		-	410	460	495	575	645	765	835	955	-	-
Pressure of the beginning of the opening (bar)	min	standard	0.45 (0.2)										
	max		40									25	16
	min	with soft seal	1										
	max		40										
Weight (kg)			7.0	9.0	12.0	14.0	22.0	28.0	40.0	52.0	80.0	110.0	150.0

* The value in parentheses relates to the body made of R materials (standard type)

DISCHARGE COEFFICIENTS PN 16 and PN 40

Media	Ranges	DN										
		15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
Body material: A, F, R Standard type: 01-1, 02-1, 05-1, 07-1 Type with soft seal: 01-2 (3), 02-2(3), 05-2(3), 07-2(3) Nominal pressure: PN16, PN40													
S/G	b_1 = 0,1 bar for p ≤ 1 bar b_1 = 10% for p >1 bar	0.25											
L	b_1 = 0,1 bar for p ≤ 1 bar b_1 = 10% for p >1 bar	0.006											

PRESSURE-TEMPERATURE RATINGS

	PN		-40 (-10*)°C	RT	50 °C	100 °C	150 °C	200 °C	250 °C	300 °C	350 °C	400 °C	450 °C
EN-GJL-250	16	bar	16	16	16	16	14.4	12.8	11.2	9.6			
GP240GH	40	bar	30	40	40	40	38.1	35	32	28	25.7	23.8	18.1
GX5CrNi19-10	40	bar	38	37.6	35.6	27.6	24.9	22.6	21	19.6			

*The minimum temperature for cast iron valves

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

CAPACITY TABLE FOR AIR

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure at the beginning of bar opening (g)	Air 20°C [kg/h]											
0.45	36.1	36.1	64.2	100	157	257	401	627	995	1487	2168	3034
0.50	37.6	37.6	66.9	105	163	268	418	654	1038	1550	2261	3163
0.55	39.1	39.1	69.5	109	170	278	435	679	1078	1611	2349	3287
0.60	40.5	40.5	72.0	113	176	288	450	704	1117	1669	2434	3405
0.65	41.8	41.8	74.4	116	182	298	465	727	1154	1724	2515	3519
0.70	43.1	43.1	76.7	120	187	307	480	750	1190	1778	2594	3628
0.75	44.4	44.4	79.0	123	193	316	494	772	1225	1830	2669	3734
0.80	45.6	45.6	81.1	127	198	325	507	793	1258	1880	2742	3836
0.90	48.0	48.0	85.4	133	209	342	534	835	1325	1979	2887	4038
1.00	50.4	50.4	89.7	140	219	359	561	876	1391	2078	3031	4240
1.10	53.1	53.1	94.4	147	231	378	590	922	1464	2187	3190	4462
1.20	55.7	55.7	99.1	155	242	396	620	968	1536	2296	3349	4684
1.30	58.3	58.3	104	162	254	415	649	1014	1609	2404	3507	4906
1.40	61.0	61.0	108	169	265	434	678	1060	1682	2513	3666	5129
1.50	63.6	63.6	113	177	276	453	708	1106	1755	2622	3825	5351
1.60	66.3	66.3	118	184	288	471	737	1152	1828	2731	3984	5573
1.80	71.5	71.5	127	199	311	509	796	1244	1974	2949	4301	6017
2.00	76.8	76.8	137	213	334	547	855	1335	2119	3166	4619	6461
2.20	82.1	82.1	146	228	357	584	913	1427	2265	3384	4936	6905
2.40	87.4	87.4	155	243	380	622	972	1519	2411	3602	5254	7350
2.60	92.7	92.7	165	258	403	659	1031	1611	2556	3819	5571	7794
3.00	103	103	184	287	449	735	1148	1794	2848	4255	6206	8682
3.25	110	110	195	305	477	782	1222	1909	3030	4527	6603	9238
3.50	116	116	207	324	506	829	1295	2024	3212	4799	7000	9793
3.75	123	123	219	342	535	875	1369	2139	3394	5071	7397	10348
4.00	130	130	231	360	563	922	1442	2253	3576	5343	7794	10903

Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

Data given can be changed without notice.

Edition 01/2018

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

CAPACITY TABLE FOR AIR

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure at the beginning of bar opening (g)	Air 20°C [kg/h]											
4.25	136.3	136.3	242.4	379	592	969	1516	2368	3758	5615	8191	11459
4.50	142.9	142.9	254.1	397	621	1016	1589	2483	3941	5887	8588	12014
5.00	156.1	156.1	277.6	434	678	1110	1736	2712	4305	6432	9382	13124
5.50	169.3	169.3	301.1	470	735	1204	1883	2942	4669	6976	10175	14235
6.00	182.5	182.5	324.6	507	793	1298	2030	3171	5033	7520	10969	15345
6.50	195.7	195.7	348.1	544	850	1392	2177	3401	5398	8064	11763	16456
7.00	208.9	208.9	371.6	580	908	1486	2324	3630	5762	8609	12557	17566
8.00	235.3	235.3	418.5	654	1022	1674	2617	4090	6490	9697	14145	19787
9.00	261.7	261.7	465.5	727	1137	1862	2911	4549	7219	10785	15732	22008
10.00	288.1	288.1	512.5	801	1252	2050	3205	5008	7947	11874	17320	24230
11.00	314.5	314.5	559.5	874	1367	2238	3499	5467	8676	12962	18908	26451
12.00	340.9	340.9	606.4	947	1481	2426	3793	5926	9404	14051	20495	28672
13.00	367.3	367.3	653	1021	1596	2614	4086	6385	10133	15139	22083	30893
14.00	393.8	393.8	700	1094	1711	2802	4380	6844	10861	16228	23671	33114
15.00	420.2	420.2	747	1168	1826	2989	4674	7303	11590	17316	25258	35335
16.00	446.6	446.6	794	1241	1940	3177	4968	7762	12318	18404	26846	37556
18.00		499.4	888	1388	2170	3553	5555	8680	13775	20581	30021	
20.00		552.2	982	1534	2399	3929	6143	9598	15232	22758	33197	
22.00		605.0	1076	1681	2629	4305	6730	10516	16689	24935	36372	
24.00		657.9	1170	1828	2858	4681	7318	11434	18146	27112	39547	
25.00		684.3	1217	1901	2973	4869	7612	11893	18875	28200	41135	
28.00		763	1358	2122	3318	5432	8493	13270	21060	31466		
30.00		816	1452	2268	3547	5808	9081	14188	22517	33642		
32.00		869	1546	2415	3777	6184	9668	15106	23974	35819		
35.00		948	1687	2635	4121	6748	10550	16483	26160	39085		
40.00		1080	1922	3002	4695	7687	12019	18778	29802	44527		

Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

Data given can be changed without notice. **Edition 01/2018**

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

FIG.240

CAPACITY TABLE FOR WATER

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure at the beginning of bar opening (g)	Water 20°C [kg/h]											
0.45	22.7	22.7	41.3	65.4	103	171	270	424	677	1017	1489	2089
0.50	23.8	23.8	43.3	68.4	108	179	282	443	708	1063	1556	2184
0.55	24.9	24.9	45.1	71.4	113	186	294	462	738	1107	1621	2275
0.60	25.9	25.9	46.9	74.2	117	194	305	480	766	1150	1684	2362
0.65	26.9	26.9	48.7	76.9	122	201	316	497	794	1191	1744	2447
0.70	27.8	27.8	50.4	79.6	126	208	327	514	820	1231	1802	2528
0.75	28.7	28.7	52.0	82.1	130	214	337	530	846	1270	1858	2607
0.80	29.6	29.6	53.6	84.6	134	221	347	546	871	1307	1913	2684
0.90	31.3	31.3	56.6	89.4	141	233	367	576	919	1379	2019	2832
1.00	33.0	33.0	59.6	94.0	148	245	385	605	965	1448	2119	2972
1.10	34.7	34.7	62.6	98.8	156	257	404	635	1013	1520	2224	3119
1.20	36.3	36.3	65.5	103	163	269	423	664	1059	1589	2325	3260
1.30	37.9	37.9	68.3	108	170	280	441	692	1103	1655	2421	3395
1.40	39.4	39.4	71.0	112	176	291	458	719	1146	1718	2514	3525
1.50	40.8	40.8	73.6	116	183	302	474	744	1187	1779	2603	3651
1.60	42.2	42.2	76.1	120	189	312	490	769	1227	1839	2690	3772
1.80	44.9	44.9	80.9	128	201	331	520	817	1302	1952	2856	4004
2.00	47.5	47.5	85.5	135	212	349	549	862	1374	2059	3012	4223
2.20	49.9	49.9	89.8	141	223	367	577	905	1442	2162	3161	4432
2.40	52.2	52.2	94.0	148	233	384	603	946	1507	2259	3304	4632
2.60	54.5	54.5	98.0	154	243	400	628	985	1570	2353	3441	4823
3.00	58.7	58.7	105	166	261	430	676	1060	1688	2530	3699	5185
3.25	61.2	61.2	110	173	272	448	704	1104	1758	2634	3852	5399
3.50	63.6	63.6	114	180	283	465	731	1146	1826	2735	3999	5605
3.75	65.9	65.9	118	186	293	482	757	1187	1891	2833	4141	5804
4.00	68.1	68.1	122	192	303	498	782	1227	1954	2927	4279	5997

Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

Data given can be changed without notice. **Edition 01/2018**

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

CAPACITY TABLE FOR WATER

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure of the beginning of bar opening (g)	Water 20°C [kg/h]											
4.25	70.3	70.3	126	198	312	514	807	1265	2015	3018	4412	6183
4.50	72.4	72.4	130	204	321	529	830	1302	2074	3106	4541	6364
5.00	76.5	76.5	137	216	339	558	876	1374	2188	3277	4790	6712
5.50	80.3	80.3	144	227	356	586	920	1442	2296	3438	5026	7043
6.00	84.0	84.0	151	237	372	612	961	1507	2399	3593	5252	7359
6.50	87.6	87.6	157	247	388	638	1001	1569	2498	3742	5469	7663
7.00	91.0	91.0	163	256	403	662	1040	1629	2594	3884	5677	7955
8.00	97.5	97.5	175	274	431	709	1112	1744	2775	4156	6073	8509
9.00	104	104	186	291	458	753	1181	1851	2946	4410	6445	9030
10.00	109	109	196	308	483	794	1246	1952	3107	4651	6797	9523
11.00	115	115	206	323	507	834	1307	2049	3260	4881	7132	9991
12.00	120	120	215	337	530	871	1366	2141	3407	5100	7452	10439
13.00	125	125	224	352	552	907	1423	2229	3547	5310	7759	10869
14.00	130	130	233	365	573	942	1477	2315	3682	5513	8054	11282
15.00	135	135	241	378	594	976	1530	2397	3813	5708	8339	11681
16.00	139	139	249	391	613	1008	1581	2476	3939	5897	8615	12067
18.00		148	264	415	651	1070	1678	2628	4181	6258	9142	
20.00		156	279	438	687	1129	1770	2772	4409	6599	9640	
22.00		164	293	459	721	1185	1857	2908	4626	6924	10114	
24.00		171	306	480	753	1238	1941	3039	4834	7234	10568	
25.00		175	313	490	769	1264	1981	3102	4934	7385	10787	
28.00		185	331	519	815	1338	2098	3285	5225	7819		
30.00		192	343	538	844	1386	2172	3402	5410	8095		
32.00		198	354	556	872	1432	2244	3514	5588	8363		
35.00		208	371	582	912	1498	2348	3677	5847	8749		
40.00		222	397	622	976	1603	2512	3933	6254	9357		

Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

Data given can be changed without notice.

Edition 01/2018

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

CAPACITY TABLE FOR SATURATED VAPOURS

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure at the beginning of bar opening (g)	Saturated vapours [kg/h]											
0.45	22.5	22.5	40.0	62.5	97.8	160	250	391	621	928	1353	1893
0.50	23.4	23.4	41.6	65.0	102	166	260	407	645	964	1406	1967
0.55	24.3	24.3	43.1	67.4	105	173	270	422	669	1000	1458	2040
0.60	25.1	25.1	44.7	69.8	109	179	279	436	693	1035	1509	2111
0.65	26.0	26.0	46.2	72.1	113	185	289	451	716	1070	1560	2183
0.70	26.8	26.8	47.7	74.5	117	191	298	466	740	1106	1613	2256
0.75	27.7	27.7	49.3	77.1	121	197	309	482	765	1143	1668	2333
0.80	28.7	28.7	51.0	79.7	125	204	319	499	792	1183	1725	2413
0.90	30.8	30.8	54.7	85.5	134	219	342	535	849	1268	1849	2587
1.00	32.0	32.0	57.0	89.0	139	228	356	557	884	1320	1926	2694
1.10	33.5	33.5	59.5	93.0	145	238	372	582	923	1379	2012	2815
1.20	34.9	34.9	62.2	97.1	152	249	389	607	964	1440	2101	2939
1.30	36.5	36.5	64.9	101	159	260	406	634	1006	1504	2193	3068
1.40	38.1	38.1	67.7	106	165	271	424	662	1050	1569	2289	3202
1.50	39.7	39.7	70.7	110	173	283	442	691	1096	1637	2389	3341
1.60	41.5	41.5	73.8	115	180	295	461	721	1144	1709	2493	3487
1.80	45.2	45.2	80.4	126	196	322	503	786	1247	1863	2718	3802
2.00	48.2	48.2	85.8	134	210	343	536	838	1330	1988	2899	4056
2.20	51.3	51.3	91.2	143	223	365	570	891	1415	2113	3083	4313
2.40	54.5	54.5	97.0	151	237	388	606	947	1504	2247	3277	4584
2.60	57.9	57.9	103	161	252	412	645	1007	1598	2388	3483	4873
3.00	64.3	64.3	114	179	280	458	716	1118	1775	2652	3868	5411
3.25	68.3	68.3	121	190	297	486	760	1187	1883	2814	4105	5742
3.50	72.5	72.5	129	201	315	516	806	1259	1999	2986	4356	6094
3.75	76.5	76.5	136	213	333	545	852	1330	2111	3155	4602	6437
4.00	80.4	80.4	143	223	349	572	894	1397	2217	3313	4832	6760

Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

Data given can be changed without notice.

Edition 01/2018

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

CAPACITY TABLE FOR SATURATED VAPOURS

DNxDN PN16, PN40	15 x 15	20 x 20	25 x 25	32 x 32	40 x 40	50 x 50	65 x 65	80 x 80	100 x 100	125 x 125	150x150	200 x 200
A - flight computational area [mm²]	113	113	201	314	491	804	1 257	1 964	3 117	4 657	6 793	9 503
Pressure at the beginning of bar opening (g)	Saturated vapours [kg/h]											
4.25	84.4	84.4	150	235	366.7	600	939	1467	2328	3478	5073	7097
4.50	88.6	88.6	158	246	385	630	986	1540	2444	3652	5327	7452
5.00	96.4	96.4	171	268	419	686	1072	1675	2658	3971	5792	8103
5.50	104	104	186	290	454	744	1162	1816	2882	4307	6282	8788
6.00	112	112	200	312	488	798	1248	1951	3096	4625	6746	9438
6.50	120	120	214	334	522	856	1338	2090	3317	4956	7228	10112
7.00	128	128	228	356	556	911	1425	2226	3532	5278	7699	10770
8.00	144	144	256	400	625	1024	1600	2500	3968	5929	8648	12098
9.00	160	160	284	444	694	1136	1776	2775	4404	6581	9599	13428
10.00	175	175	312	487	762	1248	1952	3049	4839	7230	10546	14754
11.00	191	191	340	531	830	1359	2125	3321	5271	7875	11486	16069
12.00	207	207	368	574	898	1471	2299	3592	5701	8518	12424	17381
13.00	222	222	395	618	966	1582	2473	3863	6132	9161	13363	18694
14.00	238	238	423	661	1034	1693	2647	4137	6565	9809	14307	20015
15.00	254	254	451	705	1102	1805	2821	4408	6996	10453	15248	21331
16.00	269	269	479	748	1170	1915	2995	4679	7426	11095	16184	22640
18.00		300	535	835	1306	2138	3343	5223	8289	12384	18064	
20.00		332	590	922	1442	2361	3691	5768	9153	13676	19949	
22.00		363	645	1008	1576	2581	4036	6306	10008	14952	21810	
24.00		394	701	1095	1712	2804	4384	6850	10871	16242	23692	
25.00		410	729	1139	1781	2916	4559	7123	11305	16891	24638	
28.00		457	813	1270	1986	3252	5084	7944	12607	18836		
30.00		488	869	1357	2122	3475	5434	8490	13474	20131		
32.00		520	924	1444	2258	3698	5782	9033	14337	21420		
35.00		566	1008	1574	2461	4030	6301	9845	15624	23344		
40.00		646	1148	1794	2805	4593	7181	11220	17808	26606		

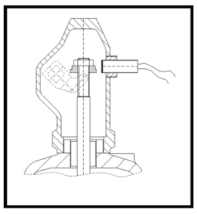
Capacity calculated at overpressure b_1 = 0,1 bar or b_1 = 10%

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

OPTIONS



Type with inductive sensor with operation alert

Operation range:
depending on the type and diameter of the valve
Supply voltage:
10 ÷ 30 V [DC]
Degree of protection:
IP67, IP68 (depending on sensor type)
Operating temperature:
-25 ÷ 70°C
Other upon agreement with the manufacturer
Standard cable length
2000 mm

ATEX

The product meets the requirements of the following standards
PN-EN 1127:1:2011
PN-EN 13463-1:2011
PN-EN 13463-1:2010
The product is labelled:

II 2G c IIC TX

NOTE:
ATEX type does not include valves with soft tightening for disc

Standard flanges valves are drilled according to standards
PN-EN 1092-1 cast steel
PN-EN 1092-2 cast iron

Upon client's request, it is possible to make flange drillings according to ANSI standards or according to European standards other than basic ones (after consultation with the manufacturer)

ATTENTION

- In the case of when condensate forms, provide drainage in the lowest spot of blow-out installation. Drainage in the body valve is made only upon request of the customer. For liquids, blow-out installation should be made in a tilted way.
- Valves should be mounted in a vertical position.

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

FIG.240

TYPES

Figure	Body material	Nominal diameter	Nominal pressure	Type
240	A Grey cast iron EN-GJL-250	15-200 mm	C 16 bar	01-1 basic type for liquids, vapours and gases, metal/metal sealing
		15-200 mm	C 16 bar	02-1 gastight type for liquids, vapours and gases, metal/metal sealing
		15-200 mm	C 16 bar	05-1 marine type for liquids, vapours and gases, metal/metal sealing
		15-200 mm	C 16 bar	07-1 marine gastight type for liquids, vapours and gases, metal/metal sealing
		15-125 mm	C 16 bar	01-2 basic type for liquids, vapours and gases, metal/metal tightening for nbr disc
		15-125 mm	C 16 bar	02-2 gastight type for liquids, vapours and gases, tightening for nbr disc
		15-125 mm	C 16 bar	05-2 marine type for liquids, vapours and gases, tightening for nbr disc
		15-125 mm	C 16 bar	07-2 gastight type for liquids, vapours and gases, tightening for nbr disc
		15-125 mm	C 16 bar	01-3 basic type for liquids, vapours and gases, tightening for epdm disc
		15-125 mm	C 16 bar	02-3 gastight type for liquids, vapours and gases, tightening for epdm disc
		15-125 mm	C 16 bar	05-3 marine type for liquids, vapours and gases, tightening for epdm disc
		15-125 mm	C 16 bar	07-3 marine gastight type for liquids, vapours and gases, tightening for epdm disc
240	F Cast steel GP240GH	20-200 mm	E 40 bar	01-1 basic type for liquids, vapours and gases, metal/metal sealing
		20-200 mm	E 40 bar	02-1 gastight type for liquids, vapours and gases, metal/metal sealing
		20-200 mm	E 40 bar	05-1 marine type for liquids, vapours and gases, metal/metal sealing
		20-200 mm	E 40 bar	07-1 marine gastight type for liquids, vapours and gases, metal/metal sealing
		20-125 mm	E 40 bar	01-2 basic type for liquids, vapours and gases, metal/metal tightening for nbr disc
		20-125 mm	E 40 bar	02-2 gastight type for liquids, vapours and gases, tightening for nbr disc
		20-125 mm	E 40 bar	05-2 marine type for liquids, vapours and gases, tightening for nbr disc
		20-125 mm	E 40 bar	07-2 marine gastight type for liquids, vapours and gases, tightening for nbr disc
		20-125 mm	E 40 bar	01-3 basic type for liquids, vapours and gases, tightening for epdm disc
		20-125 mm	E 40 bar	02-3 gastight type for liquids, vapours and gases, tightening for epdm disc

Data given can be changed without notice.

Edition 01/2018

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com

FIG.240

				20-125 mm		**E** 40 bar		**05-3** marine type for liquids, vapours and gases, tightening for epdm disc
				20-125 mm		**E** 40 bar		**07-3** marine gastight type for liquids, vapours and gases, tightening for epdm disc
240		**R** Acid resistant cast steel GX5CrNi19-10		**20-100** mm		**E** 40 bar		**02-1** gastight type for liquids, vapours and gases, metal/metal sealing

ORDERING

Figure		**Body material**		**Nominal diameter**		**Nominal pressure**		**Type**
240		**A** Grey cast iron EN-GJL-250		**15-200** mm		**C** 16 bar		**01-1** basic type for liquids, vapours and gases, metal/metal sealing

Order example by index **240 A 050 C 01-1**

Safety valve, proportional, angle form	**240**
Grey cast iron EN-GJL-250	**A**
Nominal diameter (mm)	**050**
Nominal pressure PN 16	**C**
Basic type for liquids, vapours and gases, metal/metal sealing	**01-1**

Data given can be changed without notice. **Edition 01/2018**

ZETKAMA Sp. z o.o.
Ul. 3 Maja 12
PL 57-410 Ścinawka Średnia

Tel. +48 74 8652 193
Tel. +48 74 8652 111
Fax +48 74 8652 199

E-mail export@zetkama.com.pl
www.zetkama.com