

water capacity

Flow capacity (kg/h)
Overpressure 10%

Set pressure (barg)	BSP / NPT							
	1/2" x 3/4"	1/2" x 1"	3/4" x 1"	1" x 1"	1" x 1 1/4"	1 1/4" x 1 1/4"	1 1/2" x 2"	2" x 2"
	Orifice (mm)							
	11,5	13	14	16	16	18	28	32
	Area (mm ²)							
	104	133	154	201	201	254	616	804
0,5	1.882	2.406	2.790	3.644	3.644	4.612	11.160	14.576
1	2.662	3.402	3.946	5.153	5.153	6.522	15.782	20.614
1,5	3.261	4.167	4.832	6.312	6.312	7.988	19.329	25.246
2	3.765	4.811	5.580	7.288	7.288	9.224	22.319	29.152
2,5	4.209	5.379	6.238	8.148	8.148	10.313	24.954	32.593
3	4.611	5.893	6.834	8.926	8.926	11.297	27.336	35.704
3,5	4.981	6.365	7.381	9.641	9.641	12.202	29.526	38.564
4	5.324	6.804	7.891	10.307	10.307	13.045	31.565	41.227
4,5	5.647	7.217	8.370	10.932	10.932	13.836	33.479	43.728
5	5.953	7.607	8.823	11.523	11.523	14.584	35.290	46.093
5,5	6.244	7.978	9.253	12.086	12.086	15.296	37.013	48.343
6	6.521	8.333	9.665	12.623	12.623	15.976	38.658	50.493
6,5	6.787	8.674	10.059	13.139	13.139	16.629	40.237	52.554
7	7.044	9.001	10.439	13.635	13.635	17.256	41.756	54.538
7,5	7.291	9.317	10.805	14.113	14.113	17.862	43.221	56.453
8	7.530	9.622	11.160	14.576	14.576	18.448	44.639	58.304
8,5	7.762	9.919	11.503	15.025	15.025	19.015	46.013	60.098
9	7.987	10.206	11.837	15.460	15.460	19.567	47.347	61.841
9,5	8.206	10.486	12.161	15.884	15.884	20.103	48.644	63.535
10	8.419	10.758	12.477	16.296	16.296	20.625	49.908	65.186
11	8.830	11.283	13.086	17.092	17.092	21.632	52.344	68.367
12	9.222	11.785	13.668	17.852	17.852	22.594	54.671	71.407
13	9.599	12.266	14.226	18.581	18.581	23.516	56.904	74.323
14	9.961	12.729	14.763	19.282	19.282	24.404	59.052	77.129
15	10.311	13.176	15.281	19.959	19.959	25.261	61.124	79.836
16	10.649	13.608	15.782	20.614	20.614	26.089	63.129	82.454
17	10.977	14.027	16.268	21.248	21.248	26.892	65.072	84.992
18	11.295	14.434	16.740	21.864	21.864	27.672	66.958	87.456
19	11.604	14.829	17.198	22.463	22.463	28.430	68.793	89.852
20	11.906	15.214	17.645	23.047	23.047	29.168	70.580	92.187
21	12.200	15.590	18.081	23.616	23.616	29.889	72.323	94.463
22	12.487	15.957	18.506	24.172	24.172	30.592	74.025	96.686
23	12.768	16.316	18.922	24.715	24.715	31.280	75.689	98.859
24	13.042	16.667	19.329	25.246	25.246	31.952	77.317	100.985
25	13.311	17.010	19.728	25.767	25.767	32.611	78.911	103.068

Calculation according EN 4126-1



water capacity

**Flow capacity (kg/h)
Overpressure 10%**

Set pressure (barg)	BSP / NPT							
	1/2" x 3/4"	1/2" x 1"	3/4" x 1"	1" x 1"	1" x 1 1/4"	1 1/4" x 1 1/4"	1 1/2" x 2"	2" x 2"
	Orifice (mm)							
	13	13	14	16	16	18	28	32
	Area (mm ²)							
	133	133	154	201	201	254	616	804
0,5	2.406	2.406	2.790	3.644	3.644	4.612	11.160	14.576
1	3.402	3.402	3.946	5.153	5.153	6.522	15.782	20.614
1,5	4.167	4.167	4.832	6.312	6.312	7.988	19.329	25.246
2	4.811	4.811	5.580	7.288	7.288	9.224	22.319	29.152
2,5	5.379	5.379	6.238	8.148	8.148	10.313	24.954	32.593
3	5.893	5.893	6.834	8.926	8.926	11.297	27.336	35.704
3,5	6.365	6.365	7.381	9.641	9.641	12.202	29.526	38.564
4	6.804	6.804	7.891	10.307	10.307	13.045	31.565	41.227
4,5	7.217	7.217	8.370	10.932	10.932	13.836	33.479	43.728
5	7.607	7.607	8.823	11.523	11.523	14.584	35.290	46.093
5,5	7.978	7.978	9.253	12.086	12.086	15.296	37.013	48.343
6	8.333	8.333	9.665	12.623	12.623	15.976	38.658	50.493
6,5	8.674	8.674	10.059	13.139	13.139	16.629	40.237	52.554
7	9.001	9.001	10.439	13.635	13.635	17.256	41.756	54.538
7,5	9.317	9.317	10.805	14.113	14.113	17.862	43.221	56.453
8	9.622	9.622	11.160	14.576	14.576	18.448	44.639	58.304
8,5	9.919	9.919	11.503	15.025	15.025	19.015	46.013	60.098
9	10.206	10.206	11.837	15.460	15.460	19.567	47.347	61.841
9,5	10.486	10.486	12.161	15.884	15.884	20.103	48.644	63.535
10	10.758	10.758	12.477	16.296	16.296	20.625	49.908	65.186
11	11.283	11.283	13.086	17.092	17.092	21.632	52.344	68.367
12	11.785	11.785	13.668	17.852	17.852	22.594	54.671	71.407
13	12.266	12.266	14.226	18.581	18.581	23.516	56.904	74.323
14	12.729	12.729	14.763	19.282	19.282	24.404	59.052	77.129
15	13.176	13.176	15.281	19.959	19.959	25.261	61.124	79.836
16	13.608	13.608	15.782	20.614	20.614	26.089	63.129	82.454
17	14.027	14.027	16.268	21.248	21.248	26.892	65.072	84.992
18	14.434	14.434	16.740	21.864	21.864	27.672	66.958	87.456
19	14.829	14.829	17.198	22.463	22.463	28.430	68.793	89.852
20	15.214	15.214	17.645	23.047	23.047	29.168	70.580	92.187
21	15.590	15.590	18.081	23.616	23.616	29.889	72.323	94.463
22	15.957	15.957	18.506	24.172	24.172	30.592	74.025	96.686
23	16.316	16.316	18.922	24.715	24.715	31.280	75.689	98.859
24	16.667	16.667	19.329	25.246	25.246	31.952	77.317	100.985
25	17.010	17.010	19.728	25.767	25.767	32.611	78.911	103.068
26	17.347	17.347	20.119	26.277	26.277	33.257	80.474	105.109
27	17.678	17.678	20.502	26.778	26.778	33.891	82.007	107.111
28	18.002	18.002	20.878	27.269	27.269	34.513	83.512	109.077
29	18.321	18.321	21.248	27.752	27.752	35.123	84.990	111.007
30	18.634	18.634	21.611	28.226	28.226	35.724	86.443	112.905
31	18.942	18.942	21.968	28.693	28.693	36.314	87.872	114.771
32	19.245	19.245	22.319	29.152	29.152	36.895	89.278	116.608
33	19.543	19.543	22.666	29.604	29.604	37.468	90.662	118.416
34	19.837	19.837	23.006	30.049	30.049	38.031	92.026	120.197
35	20.127	20.127	23.342	30.488	30.488	38.586	93.369	121.951
36	20.412	20.412	23.673	30.920	30.920	39.134	94.694	123.681
37	20.694	20.694	24.000	31.347	31.347	39.673	96.000	125.387
38	20.972	20.972	24.322	31.768	31.768	40.206	97.288	127.070
39	21.246	21.246	24.640	32.183	32.183	40.731	98.560	128.732
40	21.516	21.516	24.954	32.593	32.593	41.250	99.816	130.372

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)
Overpressure 10%

Set pressure (barg)	BSP / NPT						
	1" x 1 1/2"	1 1/4" x 1 1/2"	1 1/2" x 2"	2" x 2"	2" x 2 1/2"	2 1/2" x 2 1/2"	3" x 3"
	Orifice (mm)						
	22	23,8	36	40	46	46	46
	Area (mm ²)						
	380	445	1.018	1.257	1.662	1.662	1.662
0,5	7.176	8.399	19.216	23.724	31.375	31.375	31.375
1	10.149	11.878	27.176	33.551	44.371	44.371	44.371
1,5	12.430	14.547	33.284	41.091	54.343	54.343	54.343
2	14.353	16.798	38.433	47.448	62.750	62.750	62.750
2,5	16.047	18.780	42.969	53.048	70.156	70.156	70.156
3	17.579	20.573	47.070	58.112	76.853	76.853	76.853
3,5	18.987	22.221	50.842	62.768	83.010	83.010	83.010
4	20.298	23.756	54.352	67.101	88.742	88.742	88.742
4,5	21.529	25.197	57.649	71.172	94.125	94.125	94.125
5	22.694	26.560	60.768	75.022	99.216	99.216	99.216
5,5	23.802	27.856	63.734	78.683	104.059	104.059	104.059
6	24.860	29.095	66.568	82.182	108.686	108.686	108.686
6,5	25.875	30.283	69.286	85.538	113.124	113.124	113.124
7	26.852	31.426	71.901	88.767	117.394	117.394	117.394
7,5	27.794	32.529	74.425	91.882	121.514	121.514	121.514
8	28.706	33.595	76.866	94.896	125.500	125.500	125.500
8,5	29.589	34.629	79.231	97.816	129.362	129.362	129.362
9	30.447	35.633	81.528	100.652	133.112	133.112	133.112
9,5	31.282	36.610	83.762	103.410	136.760	136.760	136.760
10	32.094	37.561	85.938	106.097	140.313	140.313	140.313
11	33.661	39.394	90.133	111.275	147.161	147.161	147.161
12	35.157	41.146	94.141	116.223	153.705	153.705	153.705
13	36.593	42.826	97.985	120.969	159.981	159.981	159.981
14	37.974	44.443	101.684	125.535	166.020	166.020	166.020
15	39.307	46.002	105.252	129.941	171.847	171.847	171.847
16	40.596	47.511	108.704	134.203	177.483	177.483	177.483
17	41.846	48.973	112.050	138.333	182.946	182.946	182.946
18	43.059	50.393	115.298	142.344	188.249	188.249	188.249
19	44.239	51.774	118.458	146.244	193.408	193.408	193.408
20	45.388	53.119	121.535	150.043	198.432	198.432	198.432
21	46.509	54.431	124.536	153.749	203.333	203.333	203.333
22	47.603	55.712	127.467	157.367	208.118	208.118	208.118
23	48.673	56.964	130.332	160.904	212.795	212.795	212.795
24	49.720	58.189	133.135	164.364	217.372	217.372	217.372
25	50.745	59.389	135.880	167.754	221.854	221.854	221.854
26	51.750	60.565	138.571	171.076	226.248	226.248	226.248
27	52.736	61.719	141.211	174.335	230.558	230.558	230.558
28	53.704	62.851	143.802	177.534	234.788	234.788	234.788
29	54.655	63.964	146.348	180.676	238.944	238.944	238.944
30	55.589	65.057	148.849	183.765	243.029	243.029	243.029
31	56.508	66.133	151.310	186.802	247.046	247.046	247.046
32	57.412	67.191	153.731	189.791	250.999	250.999	250.999
33	58.302	68.233	156.115	192.734	254.891	254.891	254.891
34	59.179	69.259	158.462	195.633	258.724	258.724	258.724
35	60.043	70.270	160.776	198.489	262.501	262.501	262.501
36	60.895	71.267	163.056	201.304	266.225	266.225	266.225
37	61.735	72.250	165.306	204.081	269.897	269.897	269.897
38	62.563	73.220	167.525	206.820	273.520	273.520	273.520
39	63.381	74.177	169.715	209.524	277.096	277.096	277.096
40	64.188	75.122	171.877	212.193	280.626	280.626	280.626

Calculation according EN 4126-1



water capacity

**Model 1416
PN-100**

Flow capacity (kg/h)

Overpressure 10%

Set pressure (barg)	BSP / NPT						
	1/2" x 1"	3/4" x 1"	1" x 1"	1" x 1 1/2"	1 1/4" x 2"	1 1/2" x 2 1/2"	2" x 3"
	Orifice (mm)						
	13	14	14	16	18	23,8	26
	Area (mm ²)						
	133	154	154	201	254	445	531
33	20.358	23.610	23.610	30.837	39.029	68.233	81.430
34	20.664	23.965	23.965	31.301	39.616	69.259	82.655
35	20.965	24.315	24.315	31.758	40.194	70.270	83.861
36	21.263	24.660	24.660	32.209	40.764	71.267	85.051
37	21.556	25.000	25.000	32.653	41.326	72.250	86.224
38	21.845	25.336	25.336	33.091	41.881	73.220	87.382
39	22.131	25.667	25.667	33.524	42.429	74.177	88.524
40	22.413	25.994	25.994	33.951	42.969	75.122	89.652
42	22.966	26.636	26.636	34.789	44.030	76.977	91.866
44	23.507	27.262	27.262	35.608	45.066	78.788	94.027
46	24.035	27.875	27.875	36.408	46.079	80.559	96.141
48	24.552	28.475	28.475	37.191	47.070	82.292	98.208
50	25.058	29.062	29.062	37.958	48.041	83.989	100.234
52	25.555	29.637	29.637	38.710	48.992	85.652	102.219
54	26.041	30.202	30.202	39.447	49.926	87.284	104.166
56	26.519	30.756	30.756	40.171	50.842	88.885	106.077
58	26.989	31.301	31.301	40.882	51.742	90.459	107.955
60	27.450	31.836	31.836	41.581	52.626	92.005	109.800
62	27.904	32.362	32.362	42.269	53.496	93.526	111.615
64	28.350	32.880	32.880	42.945	54.352	95.022	113.401
66	28.790	33.389	33.389	43.611	55.195	96.496	115.160
68	29.223	33.892	33.892	44.267	56.025	97.947	116.891
70	29.650	34.386	34.386	44.913	56.843	99.377	118.598
72	30.070	34.874	34.874	45.550	57.649	100.786	120.280
74	30.485	35.355	35.355	46.178	58.444	102.177	121.939
76	30.894	35.830	35.830	46.798	59.229	103.548	123.576
78	31.298	36.298	36.298	47.410	60.003	104.902	125.192
80	31.697	36.761	36.761	48.014	60.768	106.238	126.787
82	32.090	37.217	37.217	48.610	61.522	107.558	
84	32.479	37.668	37.668	49.200	62.268	108.862	
86	32.864	38.114	38.114	49.782	63.005	110.150	
88	33.244	38.555	38.555	50.357	63.734	111.424	
90	33.619	38.991	38.991	50.926	64.454	112.683	
92	33.991	39.421	39.421	51.489	65.166		
94	34.358	39.848	39.848	52.046	65.870		
96	34.722	40.269	40.269	52.597	66.568		
98	35.082	40.687	40.687	53.142	67.257		
100	35.438	41.100	41.100	53.681	67.940		

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)

Overpressure 10%

Set pressure (barg)	Flanges EN-1092-1											
	15 x 25	20 x 32	25 x 40	32 x 50	40 x 65	50 x 80	65x100	80x125	100x150	125x200	150x200	200x250
	Orifice (mm)											
	16	18	23,8	29,5	36	46	59,5	72	90	105	125	153
Area (mm ²)												
	201	254	445	683	1.018	1.662	2.781	4.072	6.362	8.659	12.272	18.385
0,5	3.796	4.804	8.399	12.904	19.216	31.375	52.493	76.866	120.102	163.473	231.679	347.096
1	5.368	6.794	11.878	18.248	27.176	44.371	74.236	108.704	169.850	231.185	327.644	490.868
1,5	6.575	8.321	14.547	22.350	33.284	54.343	90.920	133.135	208.023	283.143	401.280	601.188
2	7.592	9.608	16.798	25.807	38.433	62.750	104.986	153.731	240.205	326.945	463.358	694.192
2,5	8.488	10.742	18.780	28.853	42.969	70.156	117.378	171.877	268.557	365.536	518.050	776.130
3	9.298	11.768	20.573	31.607	47.070	76.853	128.581	188.281	294.190	400.425	567.495	850.208
3,5	10.043	12.710	22.221	34.140	50.842	83.010	138.883	203.367	317.761	432.508	612.965	918.330
4	10.736	13.588	23.756	36.497	54.352	88.742	148.472	217.409	339.701	462.371	655.287	981.736
4,5	11.387	14.412	25.197	38.711	57.649	94.125	157.479	230.597	360.307	490.418	695.037	1.041.288
5	12.003	15.192	26.560	40.805	60.768	99.216	165.997	243.070	379.797	516.946	732.633	1.097.614
5,5	12.589	15.933	27.856	42.796	63.734	104.059	174.099	254.934	398.335	542.178	768.392	1.151.187
6	13.149	16.642	29.095	44.699	66.568	108.686	181.841	266.270	416.047	566.286	802.560	1.202.376
6,5	13.686	17.321	30.283	46.525	69.286	113.124	189.266	277.143	433.035	589.409	835.331	
7	14.203	17.975	31.426	48.281	71.901	117.394	196.410	287.605	449.382	611.659	866.864	
7,5	14.701	18.606	32.529	49.975	74.425	121.514	203.304	297.699	465.155	633.127	897.289	
8	15.183	19.216	33.595	51.614	76.866	125.500	209.972	307.462	480.410	653.891	926.716	
8,5	15.651	19.808	34.629	53.203	79.231	129.362	216.434	316.925	495.195	674.015	955.237	
9	16.104	20.382	35.633	54.745	81.528	133.112	222.709	326.113	509.551	693.556	982.931	
9,5	16.546	20.941	36.610	56.245	83.762	136.760	228.811	335.049	523.514	712.561	1.009.866	
10	16.975	21.485	37.561	57.707	85.938	140.313	234.755	343.753	537.114	731.072	1.036.100	
11	17.804	22.533	39.394	60.523	90.133	147.161	246.214	360.531	563.330	766.755		
12	18.596	23.535	41.146	63.214	94.141	153.705	257.162	376.563	588.379	800.850		
13	19.355	24.496	42.826	65.796	97.985	159.981	267.662	391.939	612.405	833.551		
14	20.086	25.421	44.443	68.279	101.684	166.020	277.766	406.734	635.522	865.016		
15	20.791	26.313	46.002	70.676	105.252	171.847	287.516	421.010	657.828	895.377		
16	21.472	27.176	47.511	72.994	108.704	177.483	296.945	434.817	679.402	924.741		
17	22.133	28.012	48.973	75.240	112.050	182.946	306.084	448.199	700.311			
18	22.775	28.825	50.393	77.422	115.298	188.249	314.957	461.193	720.615			
19	23.399	29.614	51.774	79.543	118.458	193.408	323.588	473.831	740.361			
20	24.007	30.384	53.119	81.610	121.535	198.432	331.994	486.140	759.594			
21	24.600	31.134	54.431	83.625	124.536	203.333	340.193	498.146	778.353			
22	25.179	31.867	55.712	85.593	127.467	208.118	348.199	509.868	796.669			
23	25.745	32.583	56.964	87.516	130.332	212.795	356.024	521.328	814.574			
24	26.298	33.284	58.189	89.399	133.135	217.372	363.682	532.540	832.094			
25	26.841	33.970	59.389	91.242	135.880	221.854	371.181	543.522				
26	27.372	34.643	60.565	93.049	138.571	226.248	378.532	554.285				
27	27.894	35.303	61.719	94.822	141.211	230.558	385.743	564.844				
28	28.405	35.951	62.851	96.562	143.802	234.788	392.821	575.209				
29	28.908	36.587	63.964	98.271	146.348	238.944	399.774	585.391				
30	29.402	37.212	65.057	99.951	148.849	243.029	406.608	595.398				
31	29.888	37.827	66.133	101.603	151.310	247.046	413.330	605.240				
32	30.367	38.433	67.191	103.229	153.731	250.999	419.943	614.924				
33	30.837	39.029	68.233	104.829	156.115	254.891	426.454					
34	31.301	39.616	69.259	106.406	158.462	258.724	432.868					
35	31.758	40.194	70.270	107.959	160.776	262.501	439.187					
36	32.209	40.764	71.267	109.491	163.056	266.225	445.417					
38	33.091	41.881	73.220	112.491	167.525	273.520	457.623					
40	33.951	42.969	75.122	115.413	171.877	280.626	469.511					

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)
Overpressure 10%

	PN-63						PN-100					
	Flanges EN-1092-1						Flanges EN-1092-1					
	15 x 25 20 x 32	25 x 50	32 x 50	40 x 65	50 x 80	65 x100	15 x 25 20 x 32	25 x 50	32 x 50	40 x 65	50 x 80	65 x100
Set pressure (barg)	Orifice (mm)						Orifice (mm)					
	13	20	23,8	26	32	48	13	16	20	23,8	32	39
	Area (mm ²)						Area (mm ²)					
	133	314	445	531	804	1.810	133	201	314	445	804	1.195
33	20.358	48.184	68.233	81.430	123.350	277.537	20.358	30.837	48.184	68.233	123.350	183.218
34	20.664	48.908	69.259	82.655	125.205	281.711	20.664	31.301	48.908	69.259	125.205	185.973
35	20.965	49.622	70.270	83.861	127.033	285.824	20.965	31.758	49.622	70.270	127.033	188.688
36	21.263	50.326	71.267	85.051	128.835	289.878	21.263	32.209	50.326	71.267	128.835	191.365
37	21.556	51.020	72.250	86.224	130.612	293.877	21.556	32.653	51.020	72.250	130.612	194.005
38	21.845	51.705	73.220	87.382	132.365	297.821	21.845	33.091	51.705	73.220	132.365	196.609
39	22.131	52.381	74.177	88.524	134.095	301.715	22.131	33.524	52.381	74.177	134.095	199.179
40	22.413	53.048	75.122	89.652	135.804	305.558	22.413	33.951	53.048	75.122	135.804	201.716
42	22.966	54.358	76.977	91.866	139.157	313.104	22.966	34.789	54.358	76.977	139.157	206.698
44	23.507	55.638	78.788	94.027	142.432	320.472	23.507	35.608	55.638	78.788	142.432	211.562
46	24.035	56.888	80.559	96.141	145.633	327.675	24.035	36.408	56.888	80.559	145.633	216.317
48	24.552	58.112	82.292	98.208	148.766	334.722	24.552	37.191	58.112	82.292	148.766	220.969
50	25.058	59.310	83.989	100.234	151.833	341.625	25.058	37.958	59.310	83.989	151.833	225.526
52	25.555	60.484	85.652	102.219	154.840	348.390	25.555	38.710	60.484	85.652	154.840	229.992
54	26.041	61.637	87.284	104.166	157.790	355.027	26.041	39.447	61.637	87.284	157.790	234.373
56	26.519	62.768	88.885	106.077	160.685	361.542	26.519	40.171	62.768	88.885	160.685	238.674
58	26.989	63.879	90.459	107.955	163.529	367.941	26.989	40.882	63.879	90.459	163.529	242.899
60	27.450	64.971	92.005	109.800	166.325	374.231	27.450	41.581	64.971	92.005	166.325	247.051
62	27.904	66.045	93.526	111.615	169.074	380.417	27.904	42.269	66.045	93.526	169.074	251.135
64							28.350	42.945	67.101	95.022	171.780	255.153
66							28.790	43.611	68.142	96.496	174.443	259.109
68							29.223	44.267	69.167	97.947	177.066	263.006
70							29.650	44.913	70.176	99.377	179.651	266.846
72							30.070	45.550	71.172	100.786	182.200	
74							30.485	46.178	72.154	102.177	184.713	
76							30.894	46.798	73.122	103.548	187.193	
78							31.298	47.410	74.078	104.902	189.640	
80							31.697	48.014	75.022	106.238	192.055	
82							32.090	48.610	75.954	107.558		
84							32.479	49.200	76.874	108.862		
86							32.864	49.782	77.784	110.150		
88							33.244	50.357	78.683	111.424		
90							33.619	50.926	79.572	112.683		
92							33.991	51.489	80.452			
94							34.358	52.046	81.322			
96							34.722	52.597	82.182			
98							35.082	53.142	83.034			
100							35.438	53.681	83.877			

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)
Overpressure 10%

	Flanges ANSI B16.5																	
	1/2" x 1"	1/2" x 1"	3/4" x 1"		3/4" x 1"		1 1/2"x3"		2" x 3"		3" x 4"		4" x 6"		6" x 8"		8" x 10"	
	D	E	F	G	H	J	K	L	M	N	P	Q	R	T				
	Orifice (mm)																	
	9,5	13	16	21	26	32,5	39	48	55	60	73	96	115	147				
Set pressure (barg)	Area (mm ²)																	
	71	133	201	346	531	830	1.195	1.810	2.376	2.827	4.185	7.238	10.387	16.972				
	Area (square inchs)																	
	0,11	0,196	0,307	0,503	0,785	1,287	1,838	2,586	3,6	4,34	6,38	11,05	16	26				
0,5	1.606	3.007	4.555	7.847	12.028	18.794	27.063	40.995	53.824	64.055	94.819	163.980	235.312	384.488				
1	2.271	4.253	6.442	11.097	17.010	26.578	38.273	57.976	76.118	90.587	134.094	231.903	332.781	543.748				
1,5	2.781	5.208	7.889	13.591	20.833	32.552	46.875	71.005	93.225	110.946	164.231	284.021	407.572	665.953				
2	3.212	6.014	9.110	15.693	24.056	37.588	54.126	81.990	107.647	128.109	189.637	327.960	470.624	768.976				
2,5	3.591	6.724	10.185	17.546	26.896	42.024	60.515	91.668	120.353	143.230	212.021	366.670	526.173	859.741				
3	3.933	7.366	11.157	19.220	29.463	46.035	66.291	100.417	131.841	156.901	232.257	401.667	576.394	941.799				
3,5	4.249	7.956	12.051	20.760	31.823	49.724	71.602	108.462	142.404	169.473	250.867	433.850	622.576	1.017.259				
4	4.542	8.505	12.883	22.194	34.020	53.157	76.546	115.951	152.236	181.174	268.188	463.805	665.562	1.087.496				
4,5	4.817	9.021	13.665	23.540	36.084	56.381	81.189	122.985	161.471	192.164	284.456	491.940	705.935	1.153.464				
5	5.078	9.509	14.404	24.813	38.036	59.431	85.581	129.637	170.205	202.559	299.843	518.550	744.121	1.215.857				
5,5	5.326	9.973	15.107	26.025	39.892	62.332	89.758	135.965	178.513	212.445	314.478	543.860	780.441	1.275.202				
6	5.563	10.417	15.779	27.182	41.666	65.104	93.749	142.011	186.451	221.892	328.461	568.043	815.144	1.331.905				
6,5	5.790	10.842	16.423	28.292	43.368	67.762	97.577	147.809	194.064	230.952	341.873	591.238	848.429	1.386.291				
7	6.008	11.251	17.043	29.360	45.005	70.320	101.261	153.389	201.390	239.670	354.779	613.556	880.456	1.438.622				
7,5	6.219	11.646	17.641	30.390	46.584	72.788	104.815	158.773	208.458	248.082	367.231	635.091	911.359	1.489.115				
8	6.423	12.028	18.220	31.387	48.112	75.175	108.252	163.980	215.295	256.218	379.275	655.919	941.247	1.537.952				
8,5	6.621	12.398	18.781	32.353	49.593	77.489	111.584	169.027	221.921	264.104	390.947	676.106	970.215	1.585.284				
9	6.813	12.758	19.325	33.291	51.031	79.735	114.819	173.927	228.355	271.761	402.281	695.708	998.343	1.631.244				
9,5	7.000	13.107	19.855	34.203	52.429	81.920	117.965	178.693	234.612	279.208	413.305	714.772	1.025.700	1.675.944				
10	7.181	13.448	20.371	35.091	53.791	84.048	121.030	183.335	240.707	286.461	424.042	733.340	1.052.346	1.719.482				
11	7.532	14.104	21.365	36.804	56.416	88.151	126.937	192.283	252.455	300.443	444.739	769.134	1.103.710	1.803.408				
12	7.867	14.731	22.315	38.441	58.925	92.070	132.581	200.833	263.681	313.802	464.515	803.334	1.152.788	1.883.598				
13	8.188	15.333	23.226	40.010	61.331	95.830	137.995	209.034	274.448	326.616	483.482	836.136	1.199.859	1.960.511				
14	8.497	15.912	24.103	41.521	63.646	99.447	143.204	216.925	284.808	338.945	501.733	867.700	1.245.153	2.034.519				
15	8.795	16.470	24.949	42.978	65.880	102.938	148.231	224.539	294.804	350.842	519.343	898.155	1.288.856	2.105.927				
16	9.084	17.010	25.767	44.388	68.041	106.314	153.092	231.903	304.473	362.348	536.375	927.610						
18	9.635	18.042	27.330	47.080	72.168	112.763	162.378	245.970	322.942	384.328	568.912	983.879						
20	10.156	19.018	28.808	49.627	76.072	118.862	171.162	259.275	340.411	405.117	599.686	1.037.100						
22	10.652	19.946	30.214	52.049	79.785	124.664	179.516	271.930	357.026	424.890	628.956							
24	11.125	20.833	31.558	54.363	83.333	130.207	187.499	284.021	372.901	443.783	656.923							
26	11.580	21.684	32.847	56.583	86.735	135.524	195.155	295.619	388.128	461.904	683.747							
28	12.017	22.502	34.086	58.719	90.010	140.640	202.522	306.778	402.780	479.341	709.558							
30	12.439	23.292	35.283	60.780	93.169	145.576	209.630	317.546	416.916	496.165	734.462							
32	12.847	24.056	36.440	62.774	96.224	150.350	216.505	327.960	430.589	512.437	758.549							
34	13.242	24.796	37.561	64.705	99.186	154.978	223.168	338.053	443.841	528.208	781.895							
36	13.626	25.515	38.650	66.581	102.061	159.471	229.638	347.854	456.709	543.522								
38	13.999	26.214	39.710	68.406	104.858	163.841	235.930	357.386	469.224	558.415								
40	14.363	26.896	40.741	70.183	107.582	168.097	242.060	366.670	481.414	572.922								
42	14.718	27.560	41.747	71.916	110.239	172.248	248.037	375.725	493.302	587.070								
44	15.064	28.208	42.730	73.608	112.833	176.302	253.874	384.567	504.911	600.886								
46	15.402	28.842	43.690	75.263	115.369	180.264	259.580	393.210	516.259	614.390								
48	15.734	29.463	44.630	76.882	117.850	184.141	265.163	401.667	527.362	627.605								
50	16.058	30.070	45.550	78.467	120.280	187.938	270.631	409.950	538.237	640.546								

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)
Overpressure 10%

	Flanges ANSI B16.5										
	1/2" x 1"	1/2" x 1"									
	3/4" x 1"	3/4" x 1"									
	1" x 1"	1" x 1"									
	1" x 2"	1" x 2"	1 1/2"x2"	1 1/2"x3"	2" x 3"	3" x 4"	3" x 4"	4" x 6"	4" x 6"	4" x 6"	6" x 8"
	D	E	F	G	H	J	K	M	N	P	Q
	Orifice (mm)										
	9,5	13	16	21	26	32,5	39	55	60	73	96
Set pressure (barg)	Area (mm ²)										
	71	133	201	346	531	830	1.195	2.376	2.827	4.185	7.238
	Area (square inches)										
	0,11	0,196	0,307	0,503	0,785	1,287	1,838	3,6	4,34	6,38	11,05
40	14.363	26.896	40.741	70.183	107.582	168.097	242.060	481.414	572.922	848.084	1.466.680
41	14.541	27.230	41.247	71.055	108.918	170.185	245.067	487.394	580.039	858.619	1.484.901
42	14.718	27.560	41.747	71.916	110.239	172.248	248.037	493.302	587.070	869.027	1.502.900
43	14.892	27.886	42.241	72.767	111.543	174.287	250.973	499.140	594.018	879.312	1.520.686
44	15.064	28.208	42.730	73.608	112.833	176.302	253.874	504.911	600.886	889.478	1.538.267
45	15.234	28.527	43.212	74.440	114.108	178.294	256.743	510.616	607.676	899.529	1.555.649
46	15.402	28.842	43.690	75.263	115.369	180.264	259.580	516.259	614.390	909.468	1.572.839
47	15.569	29.154	44.162	76.076	116.616	182.213	262.386	521.840	621.033	919.301	1.589.844
48	15.734	29.463	44.630	76.882	117.850	184.141	265.163	527.362	627.605	929.029	1.606.668
49	15.897	29.768	45.092	77.678	119.071	186.049	267.911	532.827	634.108	938.657	1.623.318
50	16.058	30.070	45.550	78.467	120.280	187.938	270.631	538.237	640.546	948.186	1.639.798
52	16.376	30.666	46.452	80.021	122.662	191.660	275.990	548.896	653.232	966.964	1.672.273
54	16.688	31.250	47.337	81.545	124.999	195.311	281.248	559.352	665.675	985.384	1.704.128
56	16.994	31.823	48.206	83.042	127.293	198.895	286.409	569.616	677.890	1.003.466	1.735.399
58	17.295	32.386	49.059	84.511	129.546	202.415	291.478	579.699	689.889	1.021.228	1.766.117
60	17.591	32.940	49.897	85.956	131.761	205.876	296.461	589.609	701.683	1.038.686	
62	17.882	33.485	50.722	87.377	133.939	209.279	301.362	599.355	713.282	1.055.856	
64	18.168	34.020	51.534	88.775	136.082	212.628	306.184	608.945	724.695	1.072.750	
66	18.449	34.548	52.333	90.152	138.192	215.924	310.931	618.387	735.932	1.089.383	
68	18.727	35.067	53.120	91.507	140.270	219.172	315.607	627.687	746.999	1.105.766	
70	19.000	35.579	53.895	92.843	142.318	222.371	320.215	636.850	757.905		
72	19.270	36.084	54.660	94.160	144.336	225.526	324.757	645.884	768.655		
74	19.536	36.582	55.414	95.459	146.327	228.637	329.237	654.793	779.258		
76	19.798	37.073	56.158	96.741	148.292	231.706	333.656	663.583	789.718		
78	20.057	37.558	56.892	98.005	150.230	234.735	338.018	672.258	800.042		
80	20.312	38.036	57.617	99.254	152.144	237.725	342.324	680.822	810.234		
82	20.564	38.509	58.332	100.487	154.034	240.678	346.577	689.279			
84	20.814	38.975	59.039	101.705	155.901	243.596	350.778	697.635			
86	21.060	39.437	59.738	102.908	157.746	246.478	354.929	705.891			
88	21.304	39.892	60.429	104.098	159.570	249.328	359.032	714.052			
90	21.544	40.343	61.112	105.274	161.373	252.145	363.089	722.120			
92	21.782	40.789	61.787	106.438	163.156	254.932	367.101	730.100			
94	22.018	41.230	62.455	107.588	164.920	257.688	371.070				
96	22.251	41.666	63.116	108.727	166.665	260.415	374.997				
98	22.481	42.098	63.770	109.854	168.392	263.113	378.883				
100	22.710	42.526	64.417	110.969	170.102	265.785	382.730				

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)
 Overpressure 10%

Set pressure (barg)	Flanges x BSP / NPT or Flanges x Flanges				
	1/2" x 3/4"	1/2" x 1"	3/4" x 3/4"	3/4" x 1"	1" x 1"
	Orifice (mm)				
	13	13	14	14	16
	Area (mm ²)				
	133	133	154	154	201
0,5	2.406	2.406	2.790	2.790	3.644
1	3.402	3.402	3.946	3.946	5.153
1,5	4.167	4.167	4.832	4.832	6.312
2	4.811	4.811	5.580	5.580	7.288
2,5	5.379	5.379	6.238	6.238	8.148
3	5.893	5.893	6.834	6.834	8.926
3,5	6.365	6.365	7.381	7.381	9.641
4	6.804	6.804	7.891	7.891	10.307
4,5	7.217	7.217	8.370	8.370	10.932
5	7.607	7.607	8.823	8.823	11.523
5,5	7.978	7.978	9.253	9.253	12.086
6	8.333	8.333	9.665	9.665	12.623
6,5	8.674	8.674	10.059	10.059	13.139
7	9.001	9.001	10.439	10.439	13.635
7,5	9.317	9.317	10.805	10.805	14.113
8	9.622	9.622	11.160	11.160	14.576
8,5	9.919	9.919	11.503	11.503	15.025
9	10.206	10.206	11.837	11.837	15.460
9,5	10.486	10.486	12.161	12.161	15.884
10	10.758	10.758	12.477	12.477	16.296
11	11.283	11.283	13.086	13.086	17.092
12	11.785	11.785	13.668	13.668	17.852
13	12.266	12.266	14.226	14.226	18.581
14	12.729	12.729	14.763	14.763	19.282
15	13.176	13.176	15.281	15.281	19.959
16	13.608	13.608	15.782	15.782	20.614
17	14.027	14.027	16.268	16.268	21.248
18	14.434	14.434	16.740	16.740	21.864
19	14.829	14.829	17.198	17.198	22.463
20	15.214	15.214	17.645	17.645	23.047
21	15.590	15.590	18.081	18.081	23.616
22	15.957	15.957	18.506	18.506	24.172
23	16.316	16.316	18.922	18.922	24.715
24	16.667	16.667	19.329	19.329	25.246
25	17.010	17.010	19.728	19.728	25.767
26	17.347	17.347	20.119	20.119	26.277
27	17.678	17.678	20.502	20.502	26.778
28	18.002	18.002	20.878	20.878	27.269
29	18.321	18.321	21.248	21.248	27.752
30	18.634	18.634	21.611	21.611	28.226
31	18.942	18.942	21.968	21.968	28.693
32	19.245	19.245	22.319	22.319	29.152
33	19.543	19.543	22.666	22.666	29.604
34	19.837	19.837	23.006	23.006	30.049
35	20.127	20.127	23.342	23.342	30.488
36	20.412	20.412	23.673	23.673	30.920
37	20.694	20.694	24.000	24.000	31.347
38	20.972	20.972	24.322	24.322	31.768
39	21.246	21.246	24.640	24.640	32.183
40	21.516	21.516	24.954	24.954	32.593

Calculation according EN 4126-1

water capacity

Flow capacity (kg/h)

Overpressure 10%

	Clamp x BSP / NPT or Clamp x Clamp			
	15 x 1" 15 x 25	20 x 1" 20 x 25	25 x 1" 25 x 25	40 x 2" 40 x 40
Set pressure (barg)	Orifice (mm)			
	9,5	15	20	32
	Area (mm ²)			
	71	177	314	804
0,5	1.285	3.203	5.694	14.576
1	1.817	4.529	8.052	20.614
1,5	2.225	5.547	9.862	25.246
2	2.569	6.405	11.387	29.152
2,5	2.873	7.162	12.732	32.593
3	3.147	7.845	13.947	35.704
3,5	3.399	8.474	15.064	38.564
4	3.634	9.059	16.104	41.227
4,5	3.854	9.608	17.081	43.728
5	4.062	10.128	18.005	46.093
5,5	4.261	10.622	18.884	48.343
6	4.450	11.095	19.724	50.493
6,5	4.632	11.548	20.529	52.554
7	4.807	11.984	21.304	54.538
7,5	4.975	12.404	22.052	56.453
8	5.139	12.811	22.775	58.304
8,5	5.297	13.205	23.476	60.098
9	5.450	13.588	24.157	61.841
9,5	5.600	13.960	24.818	63.535
10	5.745	14.323	25.463	65.186

Calculation according EN 4126-1