Pressure Control

Issue 07




It’s all at Albion

ART 642
Gunmetal Safety Valve

Features

- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases and liquids
- Fitted with diaphragm to protect spring housing
- Set range 0.5 to 16 Bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, DNV
- ATEX approval available at extra cost
- 5 year warranty
- Test certificate to EN10204-3.1 available on request

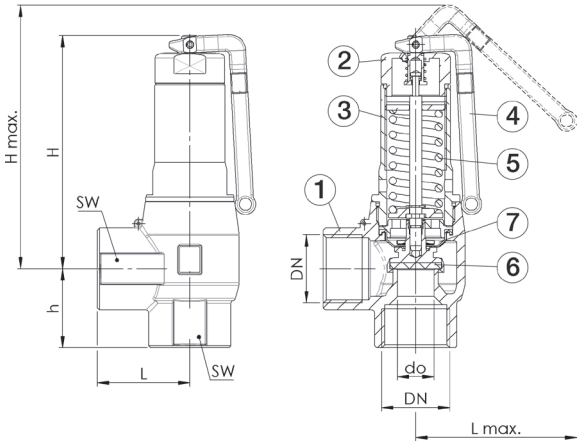
WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

Max pressure: 16 Bar
Working temp: EPDM Diaphragm
-50°C to 195°C

See overleaf for discharge capacity.



DN	1/2”	3/4”	1”	1 1/4”	1 1/2”	2”	2 1/2”
L	35	42	45	47	58	68	80
Lmax	63	75	78	100	140	150	155
H	90	106	120	150	192	229	275
Hmax	102	120	133	153	210	252	298
h	28	36	38	37	45	55	65
SW	27	34	41	50	60	70	90
do	13	15	18	23	30	39	48
Kgs	0.5	0.8	1.1	1.7	3.3	5.8	8.9

N.	Part Name	Materials
1	Body	Gunmetal
2	Housing Cap	Brass CC499K / Gunmetal
3	Spring Housing	Brass CC499K / Gunmetal
4	Lifting Lever	Stainless Steel CF8M
5	Spring	Stainless Steel 302
6	Seat - Seal	PTFE
7	Diaphragm	EPDM

Typical Applications

- Pressure vessels
- Mechanical engineering
- Pump protection
- Pressure booster systems water / air-side
- Cooling / chilling systems
- Steam and industrial boiler systems

V2. Dimensions in mm

ART 642

Nm³/h - Air
Kg/h - Steam
M³/h - Water
Kw - Heating Water

Discharge Capacities

Blowing off rates at 10% above set pressure

DN	1/2"				3/4"				1"				1 1/4"			
Bar	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW
0.5	76	62	2.3	38	101	83	3.1	51	143	117	4.3	72	234	191	7.0	118
1	110	88	3.2	54	147	117	4.2	71	207	165	5.8	101	338	269	9.5	164
2	180	142	4.5	85	240	189	6.0	113	340	268	8.2	160	556	437	13.5	262
3	248	193	5.5	114	330	257	7.3	152	468	365	10.1	215	764	595	16.5	352
4	312	242	6.4	141	416	322	8.5	188	592	458	11.7	267	966	748	19.1	436
5	376	290	7.1	167	501	386	9.5	223	712	549	13.1	316	1163	896	21.3	517
6	440	337	7.8	193	586	449	10.4	256	833	639	14.3	365	1359	1043	23.4	595
7	503	385	8.4	218	670	513	11.2	290	953	729	15.5	412	1556	1190	25.2	673
8	567	432	9.0	242	755	576	12.0	323	1074	819	16.5	459	1753	1337	27.0	749
9	631	480	9.6	267	840	639	12.7	355	1194	908	17.5	505	1950	1483	28.6	825
10	694	527	10.1	291	925	702	13.4	387	1315	998	18.5	550	2147	1629	30.2	899
11	758	574	10.6	315	1009	765	14.1	419	1435	1088	19.4	595	2343	1776	31.7	972
12	822	622	11.1	338	1094	828	14.7	450	1556	1177	20.2	640	2540	1922	33.1	1045
13	885	669	11.5	361	1179	891	15.3	481	1676	1266	21.1	684	2737	2068	34.4	1116
14	949	716	11.9	384	1264	954	15.9	511	1797	1356	21.9	727	2934	2214	35.7	1187
15	1013	764	12.4	407	1348	1017	16.5	542	1917	1446	22.6	770	3130	2361	37.0	1257
16	1076	811	12.8	429	1433	1080	17.0	571	2038	1535	23.4	813	3327	2507	38.2	1327

DN	1 1/2"				2"				2 1/2"			
Bar	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW
0.5	338	276	10.5	170	571	466	17.7	288	864	706	26.8	436
1	491	392	14.3	239	831	662	24.1	404	1258	1003	36.5	612
2	816	642	20.2	385	1379	1085	34.2	650	2089	1643	51.8	985
3	1128	879	24.8	520	1907	1486	41.9	878	2888	2251	63.5	1330
4	1430	1107	28.7	646	2417	1872	48.4	1092	3661	2835	73.4	1654
5	1721	1326	32.1	765	2909	2241	54.2	1293	4407	3395	82.1	1958
6	2013	1544	35.1	882	3402	2609	59.4	1490	5153	3953	89.9	2257
7	2304	1762	37.9	996	3894	2977	64.1	1684	5899	4510	97.1	2551
8	2595	1979	40.6	1109	4386	3344	68.6	1875	6644	5066	103.9	2840
9	2887	2196	43.0	1221	4879	3711	72.7	2063	7390	5621	110.2	3125
10	3178	2412	45.4	1331	5371	4077	76.7	2249	8136	6175	116.1	3407
11	3469	2629	47.6	1439	5863	4443	80.4	2433	8882	6730	121.8	3685
12	3761	2845	49.7	1547	6356	4809	84.0	2614	9627	7284	127.2	3959
13	4052	3061	51.7	1652	6848	5174	87.4	2793	10373	7837	132.4	4230
14	4343	3278	53.7	1758	7340	5541	90.7	2970	11119	8393	137.4	4500
15	4635	3495	55.6	1862	7833	5907	93.9	3146	11865	8948	142.3	4766
16	4926	3711	57.4	1964	8325	6272	97.0	3319	12611	9501	146.9	5028

Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
PTFE/EPDM	Polytetrafluorethylen/Ethylen-Propylene-Diene **(Standard)**	Flat seal and moulded diaphragm	–50°C to +195°C
EPDM/EPDM	Ethylen-Propylene-Diene/Ethylen-Propylene-Diene	Flat seal and moulded diaphragm	–50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	–30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	–20°C to +200°C

V2. Dimensions in mm

ART 645
Gunmetal High Discharge Safety Valve

Features

- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases and liquids
- Fitted with diaphragm to protect spring housing
- Set range 0.5 to 16 Bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, DNV
- ATEX approval available at extra cost
- 5 year warranty
- Test certificate to EN10204-3.1 available on request
- High capacity discharge

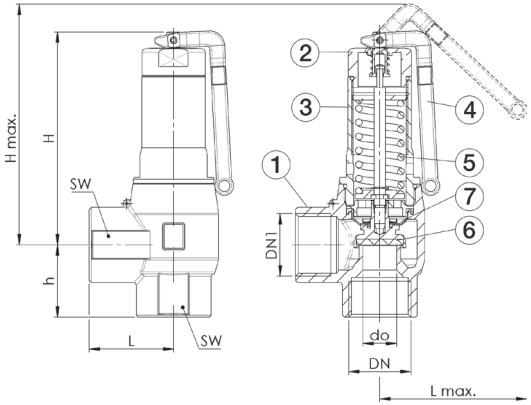
WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

Max pressure: 16 Bar
Working temp: EPDM Diaphragm
-50°C to 195°C

See overleaf for discharge capacity.



DN	1/2”	3/4”	1”	1 1/4”	1 1/2”	2”
DN1	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
L	36	43	47	58	68	80
Lmax	63	78	100	140	150	155
H	90	115	146	192	229	275
Hmax	102	133	148	210	252	298
h	30	35	37	45	55	65
SW1	27	34	41	55	65	80
SW2	34	41	50	60	70	90
do	13	18	23	30	39	48
Kgs	0.5	0.9	1.6	3.3	5.8	8.9

N.	Part Name	Materials
1	Body	Gunmetal
2	Housing Cap	Brass CC499K / Gunmetal
3	Spring Housing	Brass CC499K / Gunmetal
4	Lifting Lever	Stainless Steel CF8M
5	Spring	Stainless Steel 302
6	Seat - Seal	PTFE
7	Diaphragm	EPDM

Typical Applications

- Pressure vessels
- Mechanical engineering
- Pump protection
- Pressure booster systems water / air-side
- Cooling / chilling systems
- Steam and industrial boiler systems

V2. Dimensions in mm

ART 645

Nm³/h - Air
Kg/h - Steam
M³/h - Water
Kw - Heating Water

Discharge Capacities

Blowing off rates at 10% above set pressure

DN	1/2"				3/4"				1"			
Bar	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW
0.5	76	62	2.3	38	143	117	4.3	72	234	191	7.0	118
1	110	88	3.2	54	207	165	5.8	101	338	269	9.5	164
2	180	142	4.5	85	340	268	8.2	160	556	437	13.5	262
3	248	193	5.5	114	468	365	10.1	215	764	595	16.5	352
4	312	242	6.4	141	592	458	11.7	267	966	748	19.1	436
5	376	290	7.1	167	712	549	13.1	316	1163	896	21.3	517
6	440	337	7.8	193	833	639	14.3	365	1359	1043	23.4	595
7	503	385	8.4	218	953	729	15.5	412	1556	1190	25.2	673
8	567	432	9.0	242	1074	819	16.5	459	1753	1337	27.0	749
9	631	480	9.6	267	1194	908	17.5	505	1950	1483	28.6	825
10	694	527	10.1	291	1315	998	18.5	550	2147	1629	30.2	899
11	758	574	10.6	315	1435	1088	19.4	595	2343	1776	31.7	972
12	822	622	11.1	338	1556	1177	20.2	640	2540	1922	33.1	1045
13	885	669	11.5	361	1676	1266	21.1	684	2737	2068	34.4	1116
14	949	716	11.9	384	1797	1356	21.9	727	2934	2214	35.7	1187
15	1013	764	12.4	407	1917	1446	22.6	770	3130	2361	37.0	1257
16	1076	811	12.8	429	2038	1535	23.4	813	3327	2507	38.2	1327

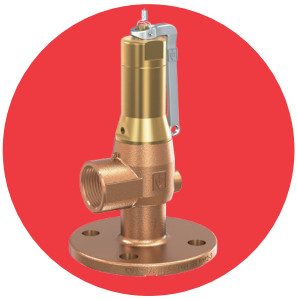
DN	1 1/4"				1 1/2"				2"			
Bar	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW	Nm³/h	kg/h	m³/h	kW
0.5	338	276	10.5	170	571	466	17.7	288	864	706	26.8	436
1	491	392	14.3	239	831	662	24.1	404	1258	1003	36.5	612
2	816	642	20.2	385	1379	1085	34.2	650	2089	1643	51.8	985
3	1128	879	24.8	520	1907	1486	41.9	878	2888	2251	63.5	1330
4	1430	1107	28.7	646	2417	1872	48.4	1092	3661	2835	73.4	1654
5	1721	1326	32.1	765	2909	2241	54.2	1293	4407	3395	82.1	1958
6	2013	1544	35.1	882	3402	2609	59.4	1490	5153	3953	89.9	2257
7	2304	1762	37.9	996	3894	2977	64.1	1684	5899	4510	97.1	2551
8	2595	1979	40.6	1109	4386	3344	68.6	1875	6644	5066	103.9	2840
9	2887	2196	43.0	1221	4879	3711	72.7	2063	7390	5621	110.2	3125
10	3178	2412	45.4	1331	5371	4077	76.7	2249	8136	6175	116.1	3407
11	3469	2629	47.6	1439	5863	4443	80.4	2433	8882	6730	121.8	3685
12	3761	2845	49.7	1547	6356	4809	84.0	2614	9627	7284	127.2	3959
13	4052	3061	51.7	1652	6848	5174	87.4	2793	10373	7837	132.4	4230
14	4343	3278	53.7	1758	7340	5541	90.7	2970	11119	8393	137.4	4500
15	4635	3495	55.6	1862	7833	5907	93.9	3146	11865	8948	142.3	4766
16	4926	3711	57.4	1964	8325	6272	97.0	3319	12611	9501	146.9	5028

Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
PTFE/EPDM	Polytetrafluorethylen/Ethylen-Propylene-Diene **(Standard)**	Flat seal and moulded diaphragm	–50°C to +195°C
EPDM/EPDM	Ethylen-Propylene-Diene/Ethylen-Propylene-Diene	Flat seal and moulded diaphragm	–50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	–30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	–20°C to +200°C

V2. Dimensions in mm

ART 642 FL
Gunmetal Safety Valve



Features

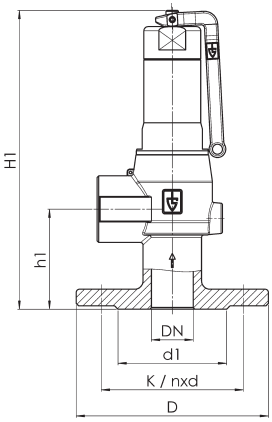
- Flanged Connection
- Suitable for gases and liquids
- Fitted with diaphragm to protect spring housing
- Set range 0.5 to 16 Bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, DNV
- ATEX approval available at extra cost
- 5 year warranty
- Test certificate to EN10204-3.1 available on request

WRAS APPROVED PRODUCT

Technical data

Max pressure: 16 Bar
Working temp: EPDM Diaphragm
-50°C to 195°C

See overleaf for discharge capacity.



DN	1”	1 1/4”	1 1/2”	2”	2 1/2”
H1 DIN / ANSI	180 / 180	216 / 216	265 / 265	312 / 312	371 / 371
h1 DIN / ANSI	60 / 60	66 / 66	73 / 73	83 / 83	96 / 96
D DIN / ANSI	115 / 110	140 / 115	150 / 125	165 / 150	185 / 180
d1 DIN / ANSI	65 / 50.8	76 / 63.5	84 / 73	99 / 92.1	118 / 104.8
K / nxd (DIN)	85 / 4x14	100 / 4x18	110 / 4x18	125 / 4x18	145 / 4x18
K / nxd (ANSI)	79.4 / 4x15.9	88.9 / 4x15.9	98.4 / 4x15.9	120.7 / 4x19.1	139.7 / 4x19.1
Kgs DIN / ANSI	2.0 / 1.9	3.4 / 2.9	4.1 / 3.5	8.4 / 7.9	12.0 / 11.8

Part Name	Materials
Body	Gunmetal
Housing Cap	Brass CC499K / Gunmetal
Spring Housing	Brass CC499K / Gunmetal
Lifting Lever	Stainless Steel CF8M
Spring	Stainless Steel 302
Seat - Seal	PTFE
Diaphragm	EPDM

Typical Applications

- Pressure vessels
- Mechanical engineering
- Pump protection
- Pressure booster systems water / air-side
- Cooling / chilling systems
- Steam and industrial boiler systems

V1. Dimensions in mm

ART 642 FL

Discharge Capacities

Nm^3/h - Air	Kg/h - Steam
M^3/h - Water	Kw - Heating Water

DN	1"				1 1/4"				1 1/2"			
Bar	Nm^3/h	kg/h	m^3/h	kW	Nm^3/h	kg/h	m^3/h	kW	Nm^3/h	kg/h	m^3/h	kW
0.5	143	117	4.3	72	234	191	7.0	118	338	276	10.5	170
1	207	165	5.8	101	338	269	9.5	164	491	392	14.3	239
2	340	268	8.2	160	556	437	13.5	262	816	642	20.2	385
3	468	365	10.1	215	764	595	16.5	352	1128	879	24.8	520
4	592	458	11.7	267	966	748	19.1	436	1430	1107	28.7	646
5	712	549	13.1	316	1163	896	21.3	517	1721	1326	32.1	765
6	833	639	14.3	365	1359	1043	23.4	595	2013	1544	35.1	882
7	953	729	15.5	412	1556	1190	25.2	673	2304	1762	37.9	996
8	1074	819	16.5	459	1753	1337	27.0	749	2595	1979	40.6	1109
9	1194	908	17.5	505	1950	1483	28.6	825	2887	2196	43.0	1221
10	1315	998	18.5	550	2147	1629	30.2	899	3178	2412	45.4	1331
11	1435	1088	19.4	595	2343	1776	31.7	972	3469	2629	47.6	1439
12	1556	1177	20.2	640	2540	1922	33.1	1045	3761	2845	49.7	1547
13	1676	1266	21.1	684	2737	2068	34.4	1116	4052	3061	51.7	1652
14	1797	1356	21.9	727	2934	2214	35.7	1187	4343	3278	53.7	1758
15	1917	1446	22.6	770	3130	2361	37.0	1257	4635	3495	55.6	1862
16	2038	1535	23.4	813	3327	2507	38.2	1327	4926	3711	57.4	1964

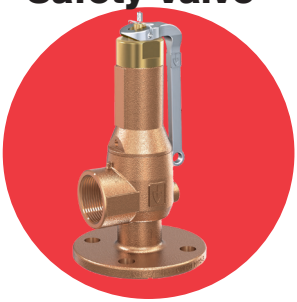
DN	2"				2 1/2"			
Bar	Nm^3/h	kg/h	m^3/h	kW	Nm^3/h	kg/h	m^3/h	kW
0.5	571	466	17.7	288	864	706	26.8	436
1	831	662	24.1	404	1258	1003	36.5	612
2	1379	1085	34.2	650	2089	1643	51.8	985
3	1907	1486	41.9	878	2888	2251	63.5	1330
4	2417	1872	48.4	1092	3661	2835	73.4	1654
5	2909	2241	54.2	1293	4407	3395	82.1	1958
6	3402	2609	59.4	1490	5153	3953	89.9	2257
7	3894	2977	64.1	1684	5899	4510	97.1	2551
8	4386	3344	68.6	1875	6644	5066	103.9	2840
9	4879	3711	72.7	2063	7390	5621	110.2	3125
10	5371	4077	76.7	2249	8136	6175	116.1	3407
11	5863	4443	80.4	2433	8882	6730	121.8	3685
12	6356	4809	84.0	2614	9627	7284	127.2	3959
13	6848	5174	87.4	2793	10373	7837	132.4	4230
14	7340	5541	90.7	2970	11119	8393	137.4	4500
15	7833	5907	93.9	3146	11865	8948	142.3	4766
16	8325	6272	97.0	3319	12611	9501	146.9	5028

Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
PTFE/EPDM	Polytetrafluorethylen/Ethylen-Propylene-Diene **(Standard)**	Flat seal and moulded diaphragm	–50°C to +195°C
EPDM/EPDM	Ethylen-Propylene-Diene/Ethylen-Propylene-Diene	Flat seal and moulded diaphragm	–50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	–30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	–20°C to +200°C

V1. Dimensions in mm

ART 645 FL
Gunmetal High Discharge Safety Valve



Features

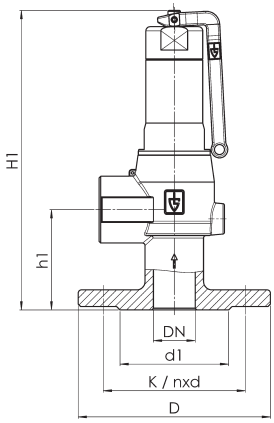
- Flanged Connection
- Suitable for gases and liquids
- Fitted with diaphragm to protect spring housing
- Set range 0.5 to 16 Bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, DNV
- ATEX approval available at extra cost
- 5 year warranty
- Test certificate to EN10204-3.1 available on request
- High capacity discharge

WRAS APPROVED PRODUCT

Technical data

Max pressure: 16 Bar
Working temp: EPDM Diaphragm
-50°C to 195°C

See overleaf for discharge capacity.



DN	1”	1 1/4”	1 1/2”	2”
H1 DIN / ANSI	206 / 206	258 / 258	302 / 302	358 / 358
h1 DIN / ANSI	60 / 60	66 / 66	73 / 73	83 / 83
D DIN / ANSI	115 / 110	140 / 115	150 / 125	165 / 150
d1 DIN / ANSI	65 / 50.8	76 / 63.5	84 / 73	99 / 92.1
K / nxd (DIN)	85 / 4x14	100 / 4x18	110 / 4x18	125 / 4x18
K / nxd (ANSI)	79.4 / 4x15.9	88.9 / 4x15.9	98.4 / 4x15.9	120.7 / 4x19.1
Kgs DIN / ANSI	2.6 / 2.4	4.8 / 4.3	7.5 / 6.9	11.3 / 10.8

Part Name	Materials
Body	Gunmetal
Housing Cap	Brass CC499K / Gunmetal
Spring Housing	Brass CC499K / Gunmetal
Lifting Lever	Stainless Steel CF8M
Spring	Stainless Steel 302
Seat - Seal	PTFE
Diaphragm	EPDM

Typical Applications

- Pressure vessels
- Mechanical engineering
- Pump protection
- Pressure booster systems water / air-side
- Cooling / chilling systems
- Steam and industrial boiler systems

V1. Dimensions in mm

ART 645 FL

Discharge Capacities

Nm^3/h - Air	Kg/h - Steam
M^3/h - Water	Kw - Heating Water

DN	1"				1 1/4"			
Bar	Nm^3/h	kg/h	m^3/h	kW	Nm^3/h	kg/h	m^3/h	kW
0.5	234	191	7.0	118	338	276	10.5	170
1	338	269	9.5	164	491	392	14.3	239
2	556	437	13.5	262	816	642	20.2	385
3	764	595	16.5	352	1128	879	24.8	520
4	966	748	19.1	436	1430	1107	28.7	646
5	1163	896	21.3	517	1721	1326	32.1	765
6	1359	1043	23.4	595	2013	1544	35.1	882
7	1556	1190	25.2	673	2304	1762	37.9	996
8	1753	1337	27.0	749	2595	1979	40.6	1109
9	1950	1483	28.6	825	2887	2196	43.0	1221
10	2147	1629	30.2	899	3178	2412	45.4	1331
11	2343	1776	31.7	972	3469	2629	47.6	1439
12	2540	1922	33.1	1045	3761	2845	49.7	1547
13	2737	2068	34.4	1116	4052	3061	51.7	1652
14	2934	2214	35.7	1187	4343	3278	53.7	1758
15	3130	2361	37.0	1257	4635	3495	55.6	1862
16	3327	2507	38.2	1327	4926	3711	57.4	1964

DN	1 1/2"				2"			
Bar	Nm^3/h	kg/h	m^3/h	kW	Nm^3/h	kg/h	m^3/h	kW
0.5	571	466	17.7	288	864	706	26.8	436
1	831	662	24.1	404	1258	1003	36.5	612
2	1379	1085	34.2	650	2089	1643	51.8	985
3	1907	1486	41.9	878	2888	2251	63.5	1330
4	2417	1872	48.4	1092	3661	2835	73.4	1654
5	2909	2241	54.2	1293	4407	3395	82.1	1958
6	3402	2609	59.4	1490	5153	3953	89.9	2257
7	3894	2977	64.1	1684	5899	4510	97.1	2551
8	4386	3344	68.6	1875	6644	5066	103.9	2840
9	4879	3711	72.7	2063	7390	5621	110.2	3125
10	5371	4077	76.7	2249	8136	6175	116.1	3407
11	5863	4443	80.4	2433	8882	6730	121.8	3685
12	6356	4809	84.0	2614	9627	7284	127.2	3959
13	6848	5174	87.4	2793	10373	7837	132.4	4230
14	7340	5541	90.7	2970	11119	8393	137.4	4500
15	7833	5907	93.9	3146	11865	8948	142.3	4766
16	8325	6272	97.0	3319	12611	9501	146.9	5028

Seat-Seal/Diaphragm Options

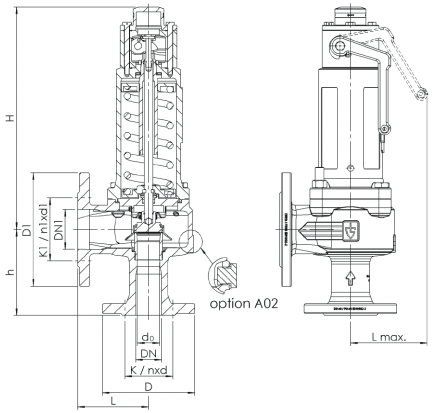
Option	Materials	Type	Working Temp.
PTFE/EPDM	Polytetrafluorethylen/Ethylen-Propylene-Diene **(Standard)**	Flat seal and moulded diaphragm	–50°C to +195°C
EPDM/EPDM	Ethylen-Propylene-Diene/Ethylen-Propylene-Diene	Flat seal and moulded diaphragm	–50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	–30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	–20°C to +200°C

V1. Dimensions in mm

ART 655
Cast Iron High Discharge Safety Valve

Features

- Flanged connection to BS EN1092
- Fitted with bellows to protect moving parts
- Set range 0.5 to 25 Bar
- ISO 4126-1, PED 2014/68/EU
- 5 year warranty
- Test certificate to EN10204-3.1 available on request



Technical data

Max pressure: 25 Bar

Working temp: EPDM bellow
-10°C to 120°C

See overleaf for discharge capacities.

DN	15	20	25	32	40	50	65	80	100
DN / PN	15 / 25	20 / 25	25 / 25	32 / 25	40 / 25	50 / 25	65 / 25 (16[4])	80 / 25	100 / 25 (16[4])
DN1 / PN	25 / 16	32 / 16	40 / 16	50 / 16	65 / 16	80 / 16	100 / 16	125 / 16	150 / 16
L	80	95 (85[2])	100	110	115	120	140	160	180
h	90	85 (95[2])	105	115	140	150	170	195	220
D	95	105	115	140	150	165	185	200	235
K/nxd	65 / 4x14	75 / 4x14	85 / 4x14	100 / 4x19	110 / 4x19	125 / 4x19	145 / 8x19	160 / 8x19	190 / 8x23
D1	115	140	150	165	185	200	220	250	285
K1 / n1xd1	85 / 4x14	100 / 4x19	110 / 4x19	125 / 4x19	145 / 4x19	160 / 8x19	180 / 8x19	210 / 8x19	240 / 8x23
H	204	204	229	320	363	413	497	556	647
Lmax	75	85	95	120	130	160	205	215	255
G	1/4"	1/4"	1/4"	1/4"	1/2"	1/2"	1/2"	1/2"	1/2"
$A_w/K_{dr}(D/G)^1$	0.72	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
do	15.0	18.0	22.5	29.3	36.0	45.0	59.0	72.0	90.0
Kg	6.0	7.0	9.5	19.0	22.0	28.5	47.5	60.5	93.5
Bar	0.5 - 15	0.5-25	0.5-25	0.5-25	0.5-25	0.5-25	0.5-25	0.5-25	0.5-22.5 (25[3])

[1] Flow coefficients for blow-off pressures <3.0 bar: Please refer to the Flow Coefficients Chart. [2] Option S66.
[3] On request. [4] Inlet flange connection supplied PN25 as standard. PN16 flange connection available on request.

Part Name	Materials
Body	Spheroidal graphite cast iron
Valve Seat	Stainless Steel
Internal Parts	Steel
Spring	Steel
Bellows	Elastomere EPDM

Typical Applications

- Heating systems for building technology and industrial applications
- Co-generation plants (CHP)
- Biogas plants
- District heating transfer solutions, building sub-stations

V1. Dimensions in mm

ART 655

Discharge Capacities

Kg/h - Steam
Kw - Heating Water

DN	15		20		25		32		40	
Set Pressure bar	d0=15mm		d0=18mm		d0=22.5mm		d0=29.3mm		d0=36mm	
Bar	kW	kg/h	kW	kg/h	kW	kg/h	kW	kg/h	kW	kg/h
0.5	60	92	80	142	130	221	220	375	340	566
1	80	133	120	199	190	311	320	527	480	796
1.5	110	178	160	261	250	407	420	690	640	1042
2	130	219	190	318	300	497	510	843	770	1272
2.5	150	255	220	375	350	586	590	994	890	1501
3	180	291	250	431	390	673	670	1141	1010	1723
3.5	200	327	280	484	440	757	750	1283	1130	1937
4	220	363	310	537	480	840	820	1424	1240	2150
4.5	240	399	340	590	530	923	900	1565	1360	2362
5	250	435	370	644	570	1006	970	1705	1470	2574
5.5	270	471	390	696	620	1088	1050	1845	1580	2786
6	290	506	420	749	660	1171	1120	1985	1690	2997
6.5	310	542	450	802	700	1253	1190	2125	1800	3207
7	330	577	480	855	750	1335	1270	2264	1910	3418
7.5	350	613	500	907	790	1417	1340	2403	2020	3628
8	370	648	530	960	830	1499	1410	2543	2120	3839
8.5	390	684	560	1012	870	1582	1480	2682	2230	4049
9	410	719	580	1065	910	1664	1550	2821	2340	4259
9.5	420	755	610	1117	950	1746	1620	2960	2440	4469
10	440	790	640	1170	1000	1828	1690	3099	2550	4678
11	480	861	690	1274	1080	1991	1830	3376	2760	5096
12	510	931	740	1379	1160	2154	1960	3653	2960	5514
13	550	1002	790	1483	1240	2317	2100	3930	3170	5932
14	580	1073	840	1588	1310	2481	2230	4208	3370	6352
15	620	1143	890	1692	1390	2644	2360	4484	3560	6768
16	650	1214	940	1797	1470	2807	2490	4760	3760	7186
17	690	1284	990	1901	1540	2970	2620	5037	3950	7604
18	720	1355	1040	2005	1620	3133	2750	5312	4150	8020
19	750	1425	1080	2110	1690	3296	2870	5590	4340	8438
20	790	1496	1130	2214	1770	3460	3000	5867	4520	8857
21	820	1567	1180	2319	1840	3623	3120	6144	4710	9275
22	850	1637	1230	2423	1910	3786	3250	6421	4900	9693
23	880	1708	1270	2528	1990	3949	3370	6697	5090	10111
24	920	1778	1320	2632	2060	4112	3490	6974	5270	10528
25	950	1849	1360	2736	2130	4276	3610	7251	5450	10946

V1. Dimensions in mm

ART 655

Kg/h - Steam
Kw - Heating Water

Discharge Capacities

DN	50		65		80		100	
Set Pressure bar	d0=45mm		d0=59mm		d0=72mm		d0=90mm	
Bar	kW	kg/h	kW	kg/h	kW	kg/h	kW	kg/h
0.5	530	885	910	1522	1360	2266	2120	3540
1	750	1244	1290	2139	1930	3185	3010	4977
1.5	990	1628	1710	2799	2540	4168	3970	6513
2	1200	1988	2070	3417	3080	5089	4810	7952
2.5	1390	2345	2390	4031	3560	6003	5570	9380
3	1580	2692	2710	4628	4030	6893	6300	10770
3.5	1760	3026	3020	5202	4500	7747	7030	12105
4	1940	3359	3330	5774	4960	8599	7750	13436
4.5	2120	3690	3640	6344	5420	9448	8470	14762
5	2290	4022	3940	6914	5870	10296	9180	16088
5.5	2470	4352	4240	7482	6320	11142	9870	17410
6	2640	4683	4540	8049	6760	11987	10560	18730
6.5	2810	5012	4840	8615	7200	12830	11250	20047
7	2980	5341	5130	9181	7640	13672	11940	21363
7.5	3150	5669	5420	9746	8070	14513	12610	22677
8	3320	5998	5710	10310	8500	15354	13280	23991
8.5	3490	6327	6000	10875	8930	16196	13950	25306
9	3650	6655	6280	11440	9360	17037	14620	26620
9.5	3820	6983	6560	12004	9780	17876	15280	27932
10	3980	7310	6840	12566	10190	18714	15930	29240
11	4310	7962	7400	13688	11030	20384	17230	31850
12	4630	8616	7960	14812	11850	22058	18520	34465
13	4950	9269	8500	15934	12660	23730	19780	37078
14	5260	9925	9040	17061	13460	25407	21030	39699
15	5560	10576	9570	18180	14240	27074	22260	42303
16	5870	11228	10100	19302	15040	28744	23490	44913
17	6180	11881	10620	20424	15820	30416	24720	47525
18	6480	12531	11140	21540	16580	32079	25910	50123
19	6780	13185	11650	22664	17350	33753	27100	52738
20	7070	13839	12150	23789	18100	35428	28280	55356
21	7370	14493	12660	24913	18860	37101	29460	57971
22	7660	15146	13170	26036	19610	38773	30640	60583
23	7950	15798	13660	27157	20350	40443	31800	63192
24	8230	16449	14160	28277	21080	42111	32940	65798
25	8520	17102	14640	29399	21810	43782	34070	68410

In order to achieve the highest possible heating output, up to three valves per system can be installed.

To protect indirectly heated heat generators in accordance with DIN 4751 Part 2 the safety valves have to be rated for the flow of the expansion water.

V1. Dimensions in mm

ART 671
Pressure Reducing Valve with gauge

Features

- BSP Parallel Male Ends (ISO 228/1)
- Controls static and dynamic pressure
- Designed & manufactured to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

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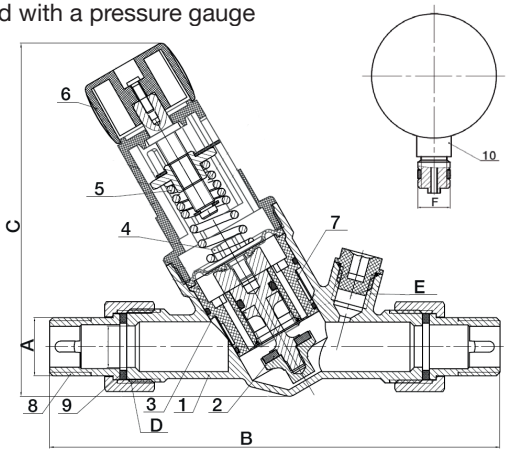
Available on bimstore.co



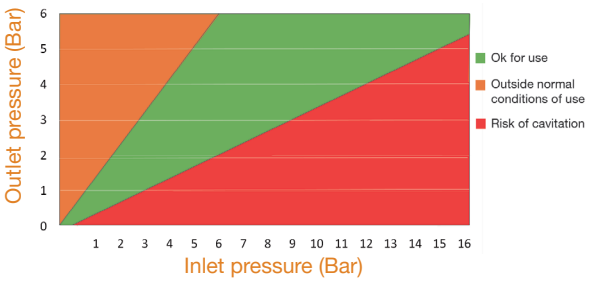
Technical data

Max inlet pressure:	16 Bar
Outlet pressure range:	0.5 - 6 Bar
Min inlet pressure:	1 Bar
Operating temperature:	0°C - 80°C
Factory set pressure:	3 Bar

A	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
B	163	163	205	214	239	254
C	128	131	164	174	186	199
D	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"
E	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
F	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Kv	1.7	2.1	3.7	5.5	5.9	6.7
Kgs	0.76	0.92	1.49	1.90	2.61	3.71

N.	Part Name	Materials
1	Body	DZR Brass CW602N / Nickel Plated
2	Disc	DZR Brass CW602N
3	Cartridge	Polyoxymethelene
4	Seat	DZR Brass CW602N
5	Spring	Stainless Steel 304
6	Adjustable Knob	Polyamid / 6T
7	Filter	Stainless Steel 302
8	Male Union End	DZR Brass CW602N / Nickel Plated
9	Seal	EPDM
10	Pressure Gauge	Steel Casing / Glycerine Filled

Cavitation Chart



V2. Dimensions in mm

ART 675
Pressure Reducing Valve with gauge

Features

- 22mm with 15mm adaptors (adaptors supplied loose)
- Conforms to BS EN 1567
- Supplied with a loose pressure gauge
- Compression ends (BS EN1254-2)

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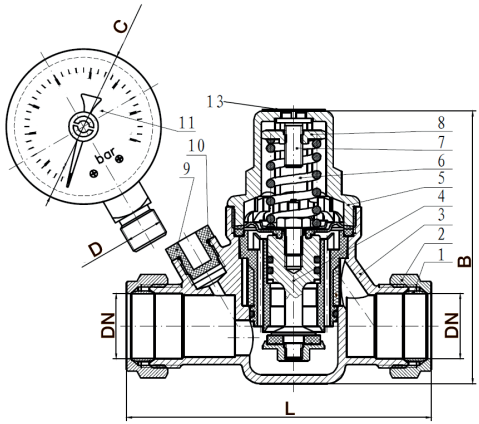
Available on bimstore.co

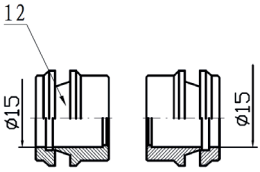


Technical data

Max inlet pressure (static):	16 Bar
Adjustable pressure range:	1 - 6 Bar
Pressure gauge:	0 - 10 Bar
Min inlet pressure:	1 Bar
Max inlet temperature:	80°C
Factory set pressure:	3 Bar

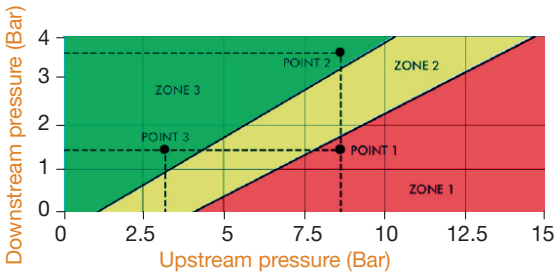
DN	15mm	22mm
L	123	104
B	92.5	92.5
C	52.5	52.5
D	1/4“	1/4“
Kgs	0.61	0.54

15mm Adaptor



N.	Part Name	Materials
1	Olives	Copper -T2
2	Nuts	DZR - CW602N
3	Body	DZR - CW602N
4	Cartridge	Brass - CW617N
5	Plastic Cap	Nylon
6	Spring	Spring Steel
7	Screw	Brass - Hpb58-3
8	Nut	Brass - Hpb58-3
9	Plug	Nylon
10	O-Ring	EPDM
11	Gauge	Steel - Q235A
12	Reducer	DZR - CW602N
13	Pre-set Label	

Cavitation Chart

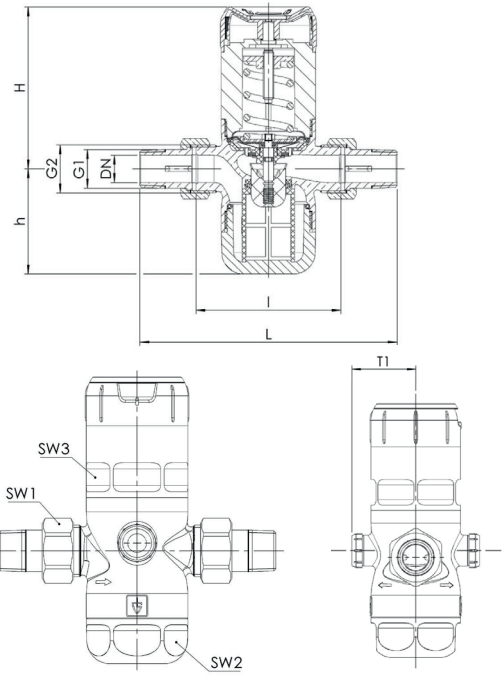


V1. Dimensions in mm

ART 678
Gunmetal Pressure Reducing Valve

Features

- Standard threaded connections:
  - Male thread BSPT (ISO 7/1)
- Suitable for liquids
- BS EN 1567, ISO 3822, PED 2014/68/EU, PESR 2016
- Test certificate to EN10204-3.1 available on request
- Also available in Stainless Steel - ART 478



Technical data

Standard Version

Maximum Inlet pressure: 16 Bar

Outlet pressure: 1.5 - 7.0 Bar

Other Outlet Pressures Available

Low Pressure: 0.5 - 3.0 Bar

High Pressure: 3.0 - 12.0 Bar

Working temp: EPDM Seal
+5°C to +40°C

It is recommended that a reduction ratio no greater than 5:1 is achieved to avoid the risk of cavitation.

Connection	DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Inlet pressure SP	bar	16	16	16	16	16	16
Outlet pressure SP	bar	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0
Installation dimensions	L	136	152	170	191	220	254
in mm	l	80	90	100	105	130	140
	H	89	89	111	111	151	151
	h	58	58	64	64	94	94
	T1	37	37	46	46	50	50
	SW1	30	37	46	52	65	80
	SW2	46	46	66	66	75	75
	SW3	46	46	65	65	75	75
Weight	kg	0.8	0.9	1.7	1.9	3.9	4.5
Coefficient of flow kvs	m^3/h	3.4	4.4	9.3	10.5	19.5	20.5

V2. Dimensions in mm

ART 678

Part Name	Materials
Body	Gunmetal
Valve Insert	Plastic + EPDM
Filter Cup	Plastic
Filter Screen	Plastic
Spring Housing	Plastic PA Glass Fibre Reinforced
O-Rings	EPDM
Plugs	Plastic PA Glass Fibre Reinforced

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Machines / plants connected to the drinking water network
- Irrigation technology

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm.

Complete valve insert SP/HP (order code: 679 Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Complete valve insert LP (order code: 679 LP Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Built-in filter screen with 160µm mesh and made of stainless steel.

Medium

F	Liquid	For drinking water. Not suitable for steam. Other medium on request.

Type of lifting mechanism

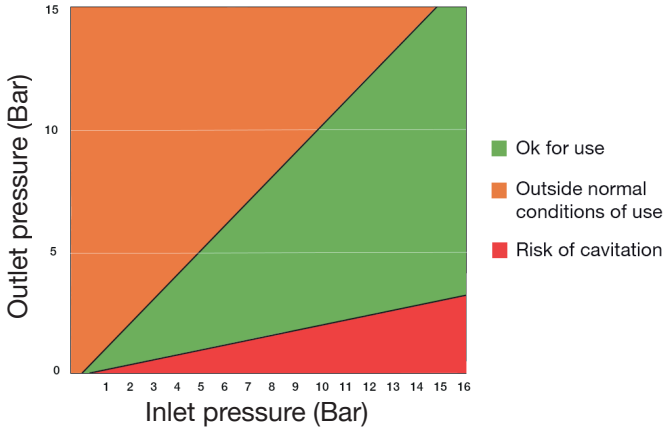
O	Without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: 16 Bar	Outlet pressure: from 1.5 to 7.0 bar
HP	High-pressure version	Inlet pressure: 16 Bar	Outlet pressure: from 3.0 to 12.0 bar
LP	Low-pressure version	Inlet pressure: 16 Bar	Outlet pressure: from 0.5 to 3.0 bar

ART 678

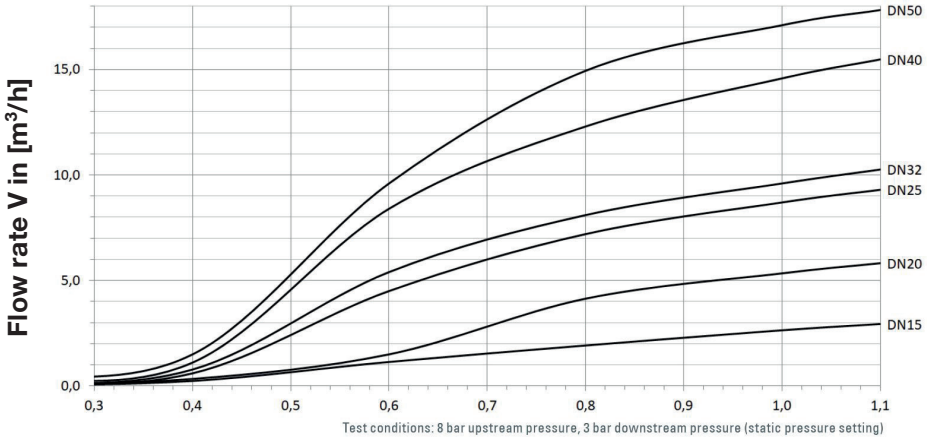
Cavitation Chart



Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water

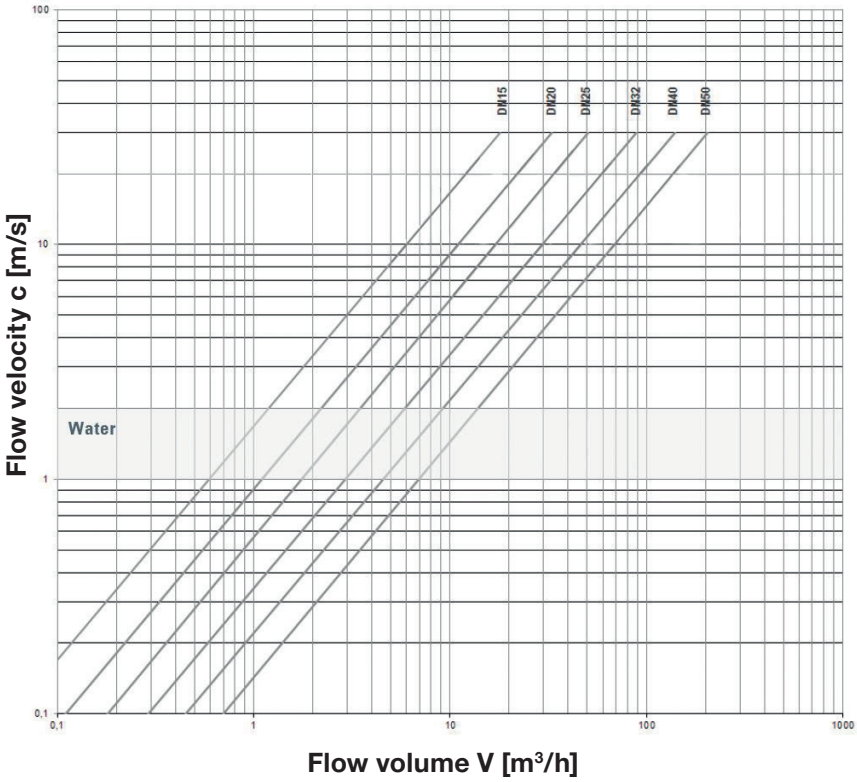


Pressure drop delta p [bar]

Dimensioning by flow velocity.

For liquids:
By using the chart you can determine the nominal diameter (DN) for a given flow volume V (m^3/h). According to the DVGW guidelines (DIN 1988) a flow velocity of 2m/s in domestic water supply systems should not be exceeded.

ART 678



V2. Dimensions in mm

ART 679
Gunmetal Pressure Reducing Valve

Features

- Standard threaded connections:
  - Male thread BSPT (ISO 7/1)
- Suitable for liquids
- BS EN 1567, ISO 3822, PED 2014/68/EU, PESR 2016
- Test certificate to EN10204-3.1 available on request
- Also available in Stainless Steel - ART 479

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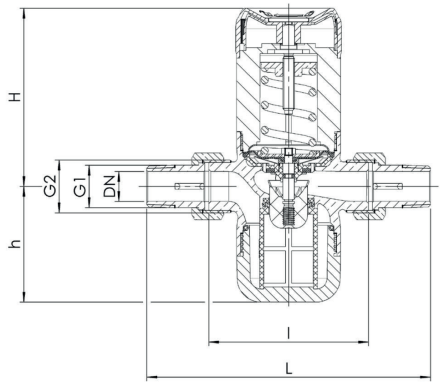
Available on bimstore.co



Technical data

Standard Version

Maximum Inlet pressure: 25 Bar

Outlet pressure: 1.5 - 7.0 Bar

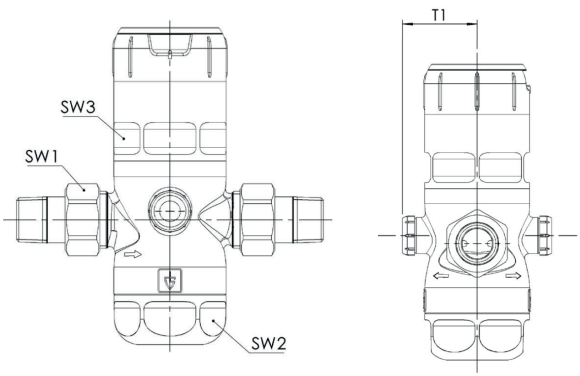
Other Outlet Pressures Available

Low Pressure: 0.5 - 3.0 Bar

High Pressure: 3.0 - 12.0 Bar

Working temp: EPDM Seal
+5°C to +85°C

It is recommended that a reduction ratio no greater than 5:1 is achieved to avoid the risk of cavitation.



Connection	DN	1/2”	3/4”	1”	1 1/4”	1 1/2”	2”
Inlet pressure SP	bar	25	25	25	25	25	25
Outlet pressure SP	bar	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0
Installation dimensions	L	136	152	170	191	220	254
in mm	l	80	90	100	105	130	140
	H	89	89	111	111	151	151
	h	58	58	64	64	94	94
	T1	37	37	46	46	50	50
	SW1	30	37	46	52	65	80
	SW2	46	46	66	66	75	75
	SW3	46	46	65	65	75	75
Weight	kg	0.8	0.9	1.7	1.9	3.9	4.5
Coefficient of flow kvs	m^3/h	3.4	4.4	9.3	10.5	19.5	20.5

V1. Dimensions in mm

ART 679

Part Name	Materials
Body	Gunmetal
Valve Insert	Stainless Steel + EPDM
Filter Cup	Gunmetal
Filter Screen	Stainless Steel
Spring Housing	Plastic PA Glass Fibre Reinforced
O-Rings	EPDM
Plugs	Plastic PA Glass Fibre Reinforced

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Machines / plants connected to the drinking water network
- Irrigation technology

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm.

Complete valve insert SP/HP (order code: 679 Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Complete valve insert LP (order code: 679 LP Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Built-in filter screen with 160µm mesh and made of stainless steel.

Medium

F	Liquid	For drinking water. Not suitable for steam. Other medium on request.

Type of lifting mechanism

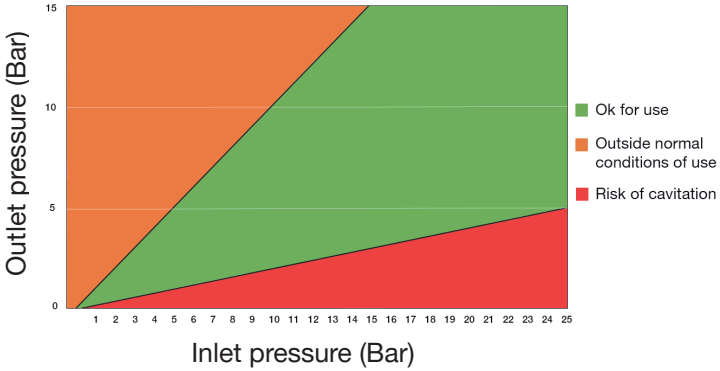
O	Without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: 25 Bar	Outlet pressure: from 1.5 to 7.0 bar
HP	High-pressure version	Inlet pressure: 25 Bar	Outlet pressure: from 3.0 to 12.0 bar
LP	Low-pressure version	Inlet pressure: 25 Bar	Outlet pressure: from 0.5 to 3.0 bar

ART 679

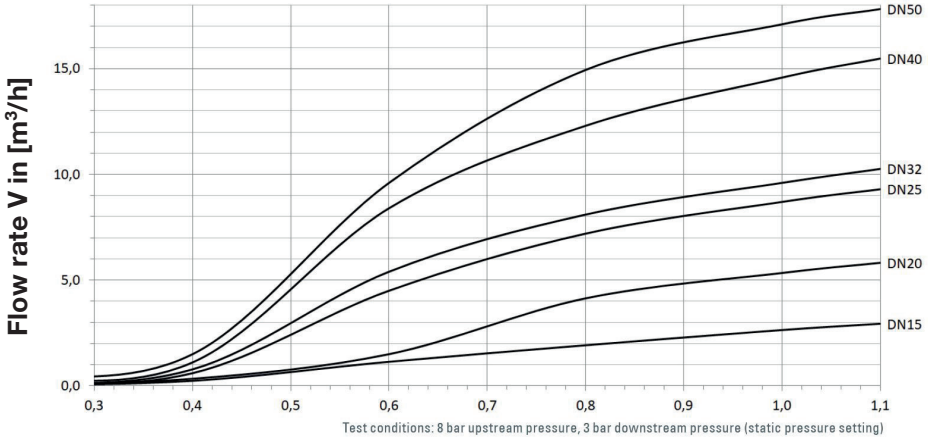
Cavitation Chart



Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water

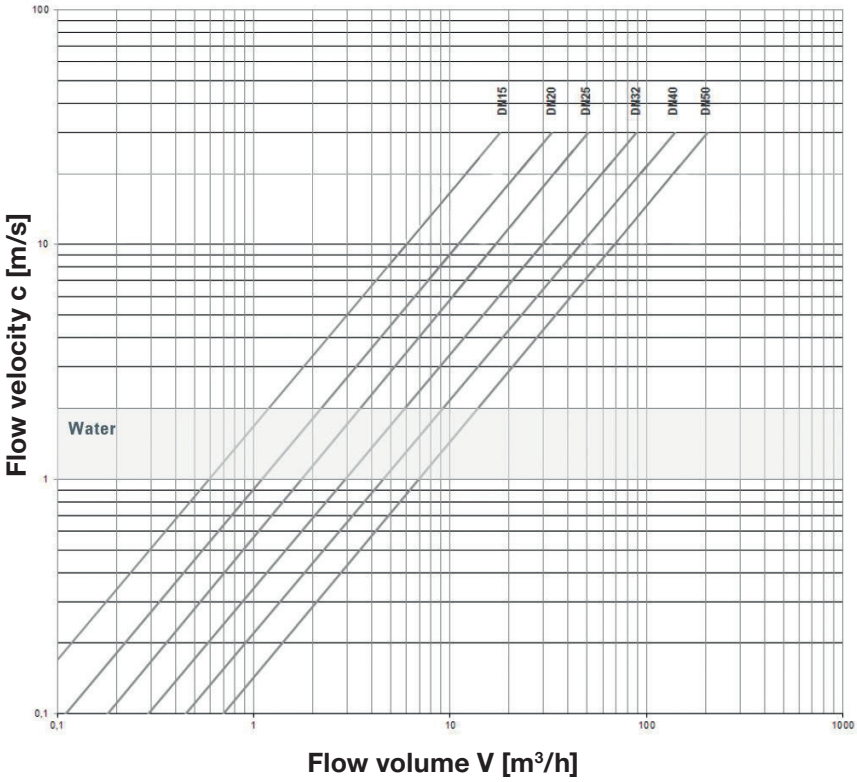


Pressure drop delta p [bar]

Dimensioning by flow velocity.

For liquids:
By using the chart you can determine the nominal diameter (DN) for a given flow volume V (m^3/h). According to the DVGW guidelines (DIN 1988) a flow velocity of 2m/s in domestic water supply systems should not be exceeded.

ART 679



V1. Dimensions in mm

ART 681 M & F
Bronze / Gunmetal
Pressure Reducing Valve

Features

- Standard threaded connections:
  - Male thread BSPT (ISO 7/1)
  - Female thread BSPP (ISO 228/1). Available DN15, DN20 & DN25.
- Suitable for neutral and non-neutral liquids, air, gases, vapours and warm water
- DIN EN 1567, ISO 3822, PED 2014/68/EU
- Marine approvals - GL, LR, EMEA, BV, ABS, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request
- Available in PN25 and PN40

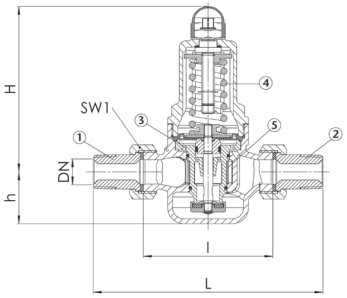
WRAS APPROVED PRODUCT

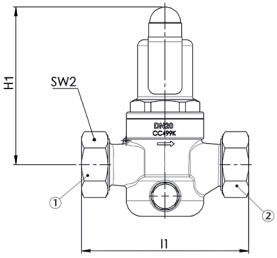
Available on bimstore.co

Technical data

Inlet pressure: Up to 40 Bar
Outlet pressure: 0.5 to 15 Bar
Working temp: EPDM or FKM Seal
-10°C to +95°C

See overleaf for additional information.





Connection	DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Inlet pressure LP up to	bar	25	25	25	25	25	25
Outlet pressure LP	bar	0.5-2	0.5-2	0.5-2	0.5-2	0.5-2	0.5-2
Inlet pressure SP up to	bar	40	40	40	40	40	40
Outlet pressure SP	bar	1-8	1-8	1-8	1-8	1-8	1-8
Inlet pressure HP up to	bar	40	40	40	40	40	40
Outlet pressure HP	bar	5-15	5-15	5-15	5-15	5-15	5-15
Installation dimensions	L	142	158	180	193	226	252
in mm	l	80	90	100	105	130	140
	l1	85	95	105			
	H (H1)	102 (128[1])	102 (128[1])	130 (150[1])	130 (150[1])	165 (185[1])	165 (185[1])
	h	33	33	45	45	70	70
	SW1	30	37	46	52	65	75
	SW2	28	35	43	48	57	68
Weight	kg	1.2 (1.5[1])	1.3 (1.6[1])	2.4 (2.9[1])	2.6 (3.1[1])	5.5 (6.2[1])	6.0 (6.7[1])
Coefficient of flow kvs	m^3/h	3	3.5	6.7	7.6	12.5	15

[1] for type 681mGFO-LP

N.	Part Name	Materials
1	Inlet body	Bronze / Gunmetal CC499K
2	Outlet body	Bronze / Gunmetal CC499K
3	Internal parts	Bronze / Gunmetal CC499K Stainless Steel 1.4404 (316)
4	Spring	Spring steel with anti-rust protection 1.1200 (EN10270-1)
5	Strainer	Stainless Steel 316

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Fire-fighting equipment & sprinkler systems
- Shipbuilding industry and offshore plants
- Secondary areas in the food, pharmaceutical and cosmetics industries

V2. Dimensions in mm

ART 681 M & F

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. Pressure adjustment by means of non-rising spindle. Valve insert with balanced single seat valve completely made of stainless steel.

Complete valve insert SP/HP (order code: 681 Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Complete valve insert LP (order code: 681 LP Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Built-in dirt trap made of stainless steel.

Mesh size:	DN 15 to DN 32	0,60 mm
	DN 40 and DN 50	0,75 mm

Medium

GF	gaseous and liquid	for water and distilled water, neutral and non-sticking liquids, compressed air and neutral gases; optionally with FPM elastomere seals for non-neutral media i.e. oils, fuels, oil-laden compressed air etc.

Type of lifting mechanism

O	without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: up to 40 bar	Outlet pressure: from 1 to 8 bar
HP	High-pressure version	Inlet pressure: up to 40 bar	Outlet pressure: from 5 to 15 bar
LP	Low-pressure version	Inlet pressure: up to 25 bar	Outlet pressure: from 0,5 to 2 bar

Fixed setting at a required outlet pressure against surcharge.

Seat-Seal/Diaphragm Options

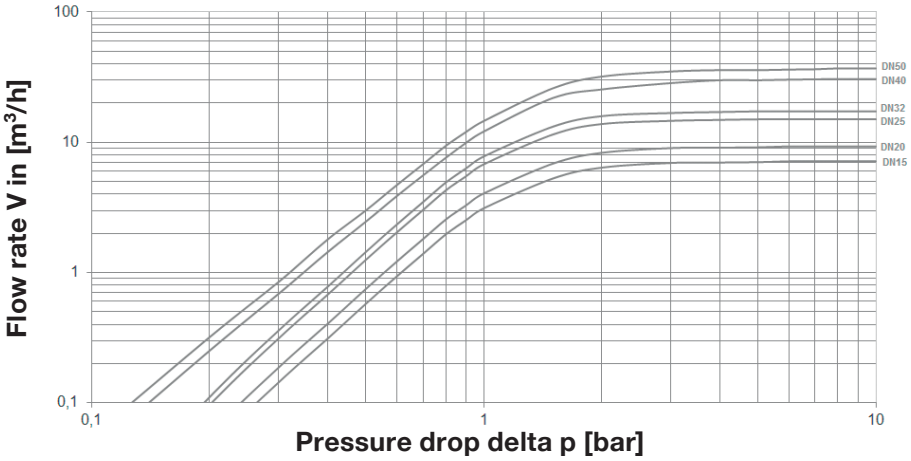
Option	Materials	Type	Working Temp.
EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	–10°C to +95°C
Against surcharge			
FKM	Fluorocarbon	Elastomere moulded diaphragm and seals	–10°C to +95°C

ART 681 M & F

Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



ART 681 M & F

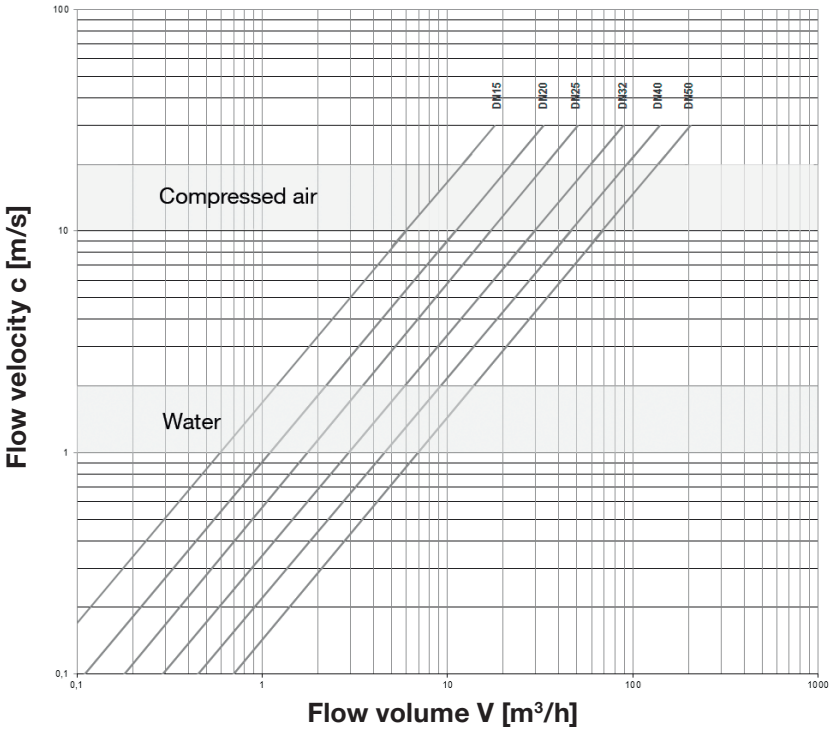
Dimensioning by flow velocity

For Liquids:
With help of the chart you can determine the nominal diameter (DN) for a given flow volume V (m^3/h). The ideal flow velocity is between 1m/s – 2m/s.

For compressed air and other gaseous media:
The usual flow velocity for compressed air is 10 - 20 m/s. For gaseous media the flow volume V should always be shown in actual cubic meters/hour.
If the flow volume is given in standard cubic meters, these should be converted into actual cubic meters before using the diagram.

$$V\,(m^3/h) = \frac{V_{Norm}\,(Nm^3/h)}{p_{absolut}\,(bar)} = \frac{V_{Norm}}{p_{ü}+1}$$

Actual cubic meters are based on the prevailing pressure of the medium on the outlet side of the pressure reducer.



V2. Dimensions in mm

ART 6200 PN16
PN16 Adjustable Pressure Reducing Valve

Features

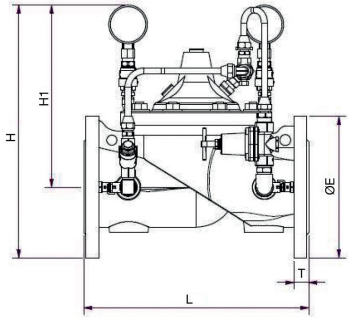
- Automatic Control Valve
- Suitable for potable water applications
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves
- Fully WRAS Approved valve - Cert No. 2105035

WRAS APPROVED PRODUCT

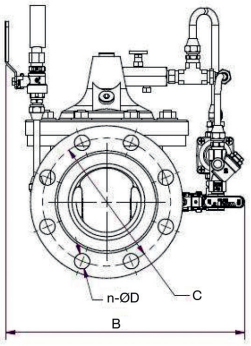
Available on bimstore.co

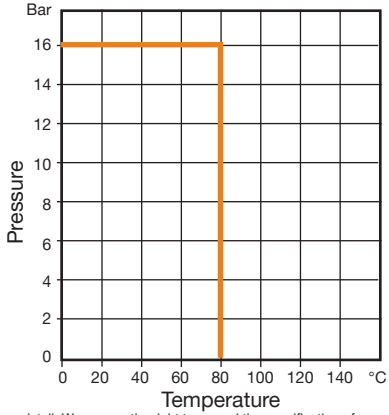
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



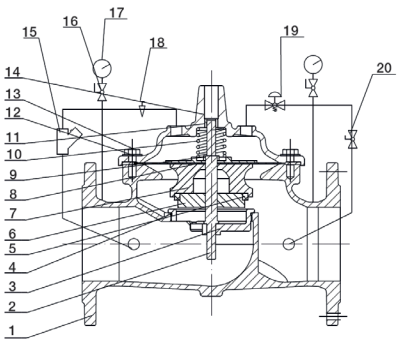
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	265	300	310	320	350	385	440	505	560
H	452	462	470	483	498	513	540	573	598
H1	369	370	370	373	373	376	376	378	396
Kgs	13	17	23	30	65	69	132	315	420





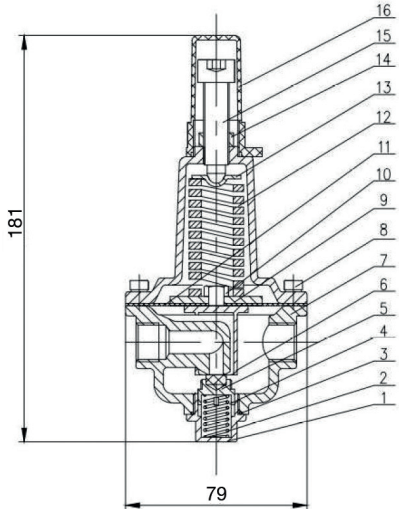
V1. Dimensions in mm

ART 6200 PN16



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Ball Valve	Stainless Steel 304
17	Gauge	Stainless Steel 304
18	Needle Valve	Stainless Steel 304
19	Pilot Valve	Stainless Steel 304
20	Ball Valve	Stainless Steel 304

Pilot Valve Detail - ART 6250



N.	Part Name	Materials
1	Plug	Stainless Steel 304
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Seat	Stainless Steel 304
5	Disc	NBR
6	Yoke	Stainless Steel 304
7	Body	Stainless Steel 304
8	Screw	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Nut	Stainless Steel 304
11	Diaphragm	EPDM
12	Spring	Stainless Steel 304
13	Spring Holder	Stainless Steel 304
14	Locking Nut	Stainless Steel 304
15	Adjusting Screw	Stainless Steel 304
16	Cap	ABS

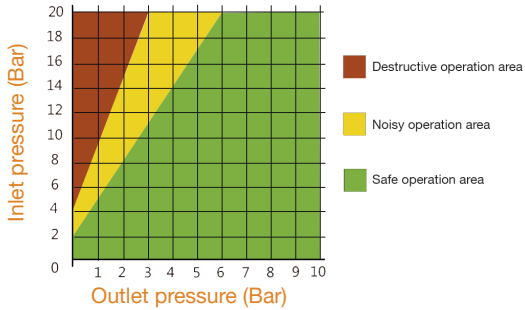
Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)
Factory set to 3.5 Bar (50 PSI)

Other Pilot Valves available
1.40 to 12.00 Bar (20 to 175 PSI)
2.10 to 20.00 Bar (30 to 300 PSI)

V1. Dimensions in mm

ART 6200 PN16

Cavitation Chart

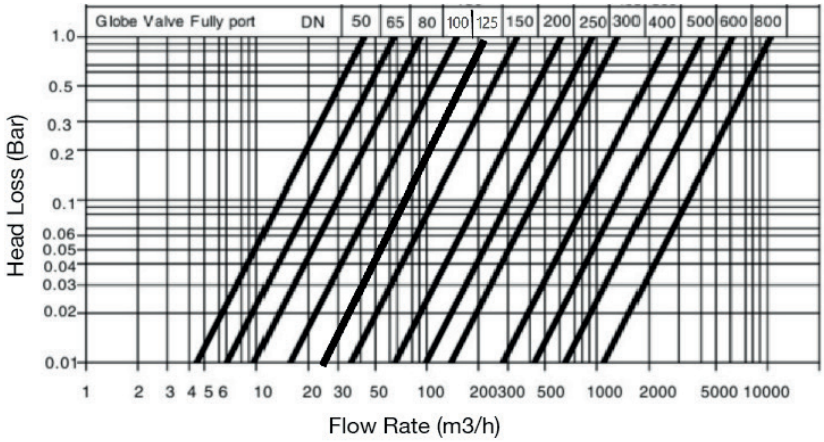


Flow Volume vs Velocity (water)

	Volume m3/h													
Size DN	**0.4 m/s**	**0.6 m/s**	**0.8 m/s**	**1.0 m/s**	**1.2 m/s**	**1.4 m/s**	**1.6 m/s**	**1.8 m/s**	**2.0 m/s**	**2.2 m/s**	**2.4 m/s**	**2.6 m/s**	**2.8 m/s**	**3.0 m/s**
50	2.8	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1	15.6	17.0	18.4	19.8	21.2
65	4.8	7.2	9.6	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.7	31.1	33.4	35.8
80	7.2	10.9	14.5	18.1	21.7	25.3	29.0	32.6	36.2	39.8	43.4	47.0	50.7	54.3
100	11.3	17.0	22.6	28.3	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5	79.2	84.8
125	17.7	26.5	35.3	44.2	53.0	61.9	70.7	79.5	88.4	97.2	106.0	114.9	123.7	132.5
150	25.4	38.2	50.9	63.6	76.3	89.1	101.8	114.5	127.2	140.0	152.7	165.4	178.1	190.9
200	45.2	67.9	90.5	113.1	135.7	158.3	181.0	203.6	226.2	248.8	271.4	294.1	316.7	339.3
250	70.7	106.0	141.4	176.7	212.1	247.4	282.7	318.1	353.4	388.8	424.1	459.5	494.8	530.1
300	101.8	152.7	203.6	254.5	305.4	356.3	407.1	458.0	508.9	559.8	610.7	661.6	712.5	763.4

Note; for good pressure control within the valves optimum flow rate, the pressure reducing valve should be sized on on a velocity of 1 to 2m/s.

Flow curve of the main valve at fully open status

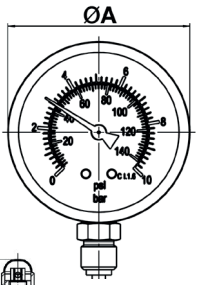


V1. Dimensions in mm

ART 688
Cast Iron Pressure Reducing Valve

Features

- Flange conforms to BS EN 1092-2
- Suitable for liquids
- Test certificate to BS EN 10204-3.1 available on request
- Adjustment dial for setting without operating pressure; bonnet can be positionable.
- Conforms to BS EN 1567
- Supplied with pressure gauges



Technical data

Standard Pressure

Max inlet pressure: 16 Bar

Outlet pressure range: 1.5 - 7 Bar

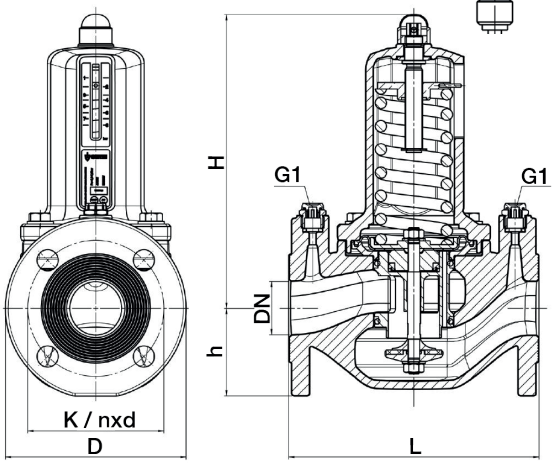
Other Outlet Pressures Available

High Pressure: 3 - 12 Bar

Low Pressure: 0.5 - 3 Bar

Working temp: +5°C to +65°C

It is recommended that a reduction ratio no greater than 5:1 is achieved to avoid the risk of cavitation.



Connection	DN	50	65	80	100	125
Inlet pressure	bar	16	16	16	16	16
Outlet pressure SP	bar	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0
Outlet pressure HP	bar	3 - 12	3 - 12	3 - 12	3 - 12	3 - 12
Outlet pressure LP	bar	0.5 - 3	0.5 - 3	0.5 - 3	0.5 - 3	0.5 - 3
Installation dimensions	L	230	290	310	350	400
in mm	H	270	260	285	275	275
	h	83	93	100	110	120
	D	165	185	200	220	250
	K / nxd	125 / 4x19	145 / 4x19	160 / 8x19	180 / 8x19	210 / 8x28
	ØA	67.8	67.8	67.8	67.8	67.8
Pressure Gauge Connection	G1	1/4"	1/4"	1/4"	1/4"	1/4"
Weight	Kgs	18	19	24	27	32
Coefficient of flow kvs	m^3/h	24	26	42	57	63

V1. Dimensions in mm

ART 688

Part Name	Materials
Body	Spheroidal Graphite Cast Iron
Coating	Polyamide
Valve Insert	Stainless Steel 316 / EPDM
Seal	EPDM
Plug	PA Glass Fibre reinforced
Gauge Housing	Stainless Steel
Gauge Connection	Brass

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Machines / equipment with connection to the drinking water network

Protection of supply networks, water supply systems in apartment buildings, commercial and industrial buildings or machinery from excessive supply pressure. Use of pressure reducing valves if a constant supply pressure is required in the system.

- Protection against excess pressure
- Increasing comfort and reducing water consumption

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. Pressure adjustment by means of non-rising spindle.

Medium

F	Liquid	Suitable for drinking water. Other medium on request.

Type of lifting mechanism

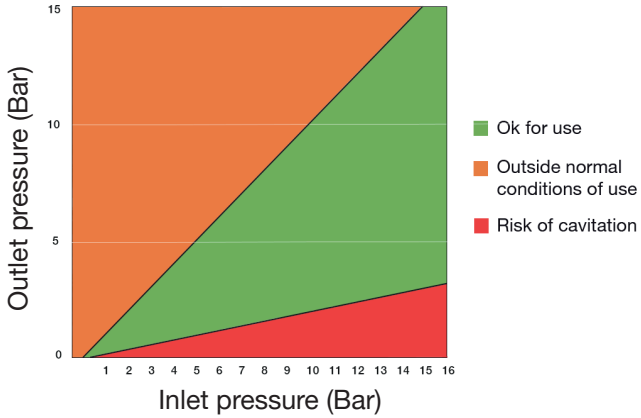
O	Without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: up to 16 Bar	Outlet pressure: from 1.5 to 7.0 bar
HP	High-pressure version	Inlet pressure: up to 16 Bar	Outlet pressure: from 3.0 to 12.0 bar
LP	Low-pressure version	Inlet pressure: up to 16 Bar	Outlet pressure: from 0.5 to 3 bar

ART 688

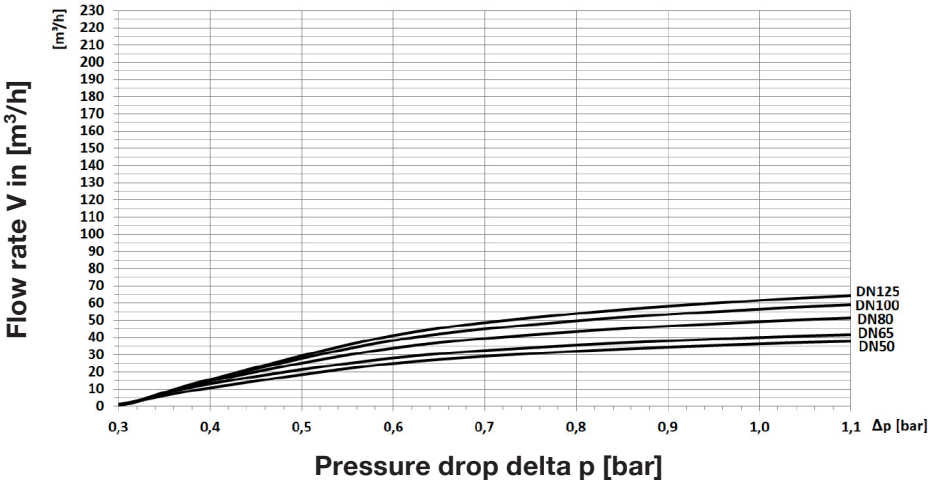
Cavitation Chart



Capacity Charts

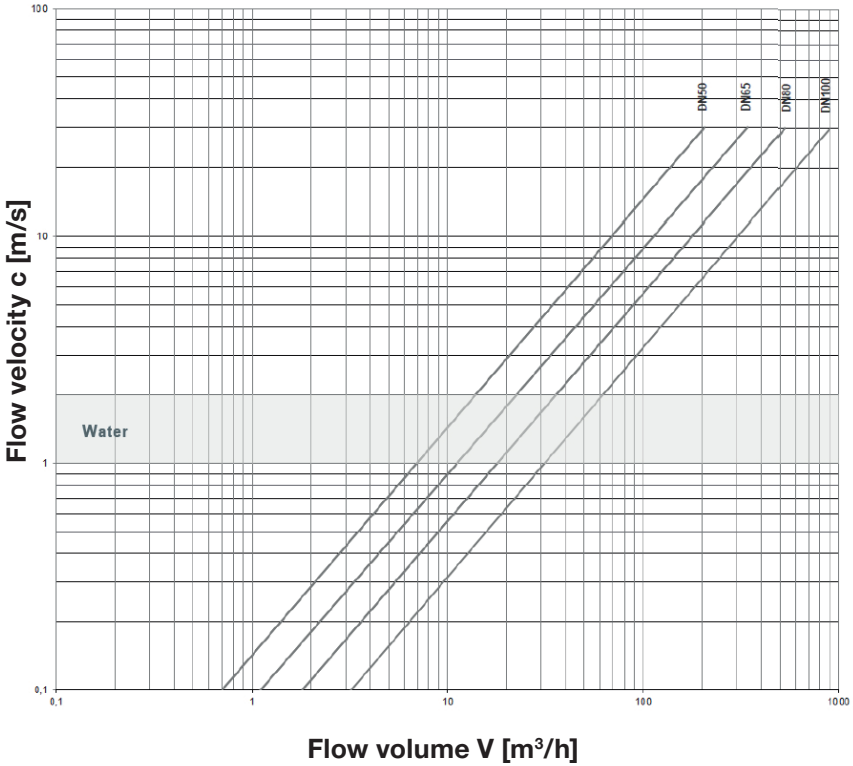
Dimensioning by pressure loss on the outlet pressure side

Flow chart water



V1. Dimensions in mm

ART 688

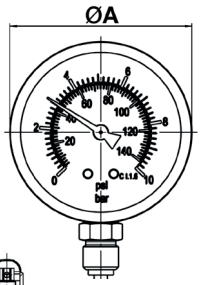


V1. Dimensions in mm

ART 689
Cast Iron Pressure Reducing Valve

Features

- Flange conforms to BS EN 1092-2
- Suitable for liquids
- Test certificate to BS EN 10204-3.1 available on request
- Adjustment dial for setting without operating pressure; bonnet can be positionable.
- Conforms to BS EN 1567
- Supplied with pressure gauges



Technical data

Standard Pressure

Max inlet pressure: 25 Bar

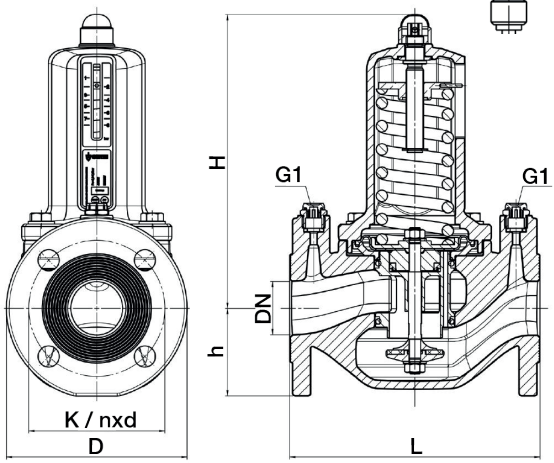
Outlet pressure range: 1.5 - 7 Bar

Other Outlet Pressures Available

High Pressure: 3 - 12 Bar

Working temp: +5°C to +65°C

It is recommended that a reduction ratio no greater than 5:1 is achieved to avoid the risk of cavitation.



Connection	DN	50	65	80	100	125
Inlet pressure	bar	25	25	25	25	25
Outlet pressure SP	bar	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0	1.5 - 7.0
Outlet pressure HP	bar	3 - 12	3 - 12	3 - 12	3 - 12	3 - 12
Installation dimensions	L	230	290	310	350	400
in mm	H	270	260	285	275	275
	h	83	93	100	113	130
	D	165	185	200	235	270
	K / nxd	125 / 4x19	145 / 8x19	160 / 8x19	190 / 8x23	220 / 8x28
	ØA	67.8	67.8	67.8	67.8	67.8
Pressure Gauge Connection	G1	1/4"	1/4"	1/4"	1/4"	1/4"
Weight	Kgs	18	19	24	28	33
Coefficient of flow kvs	m^3/h	24	26	42	57	63

V1. Dimensions in mm

ART 689

Part Name	Materials
Body	Spheroidal Graphite Cast Iron
Coating	Polyamide
Valve Insert	Stainless Steel 316 / EPDM
Seal	EPDM
Plug	PA Glass Fibre reinforced
Gauge Housing	Stainless Steel
Gauge Connection	Brass

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Machines / equipment with connection to the drinking water network

Protection of supply networks, water supply systems in apartment buildings, commercial and industrial buildings or machinery from excessive supply pressure. Use of pressure reducing valves if a constant supply pressure is required in the system.

- Protection against excess pressure
- Increasing comfort and reducing water consumption

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. Pressure adjustment by means of non-rising spindle.

Medium

F	Liquid	Suitable for for drinking water. Other medium on request.

Type of lifting mechanism

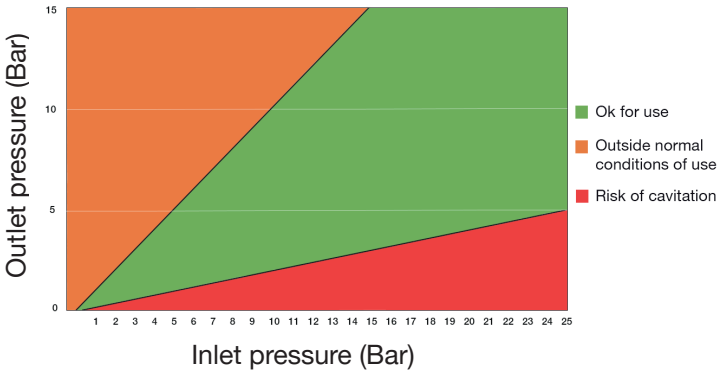
O	Without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: up to 25 Bar	Outlet pressure: from 1.5 to 7.0 bar
HP	High-pressure version	Inlet pressure: up to 25 Bar	Outlet pressure: from 3.0 to 12.0 bar

ART 689

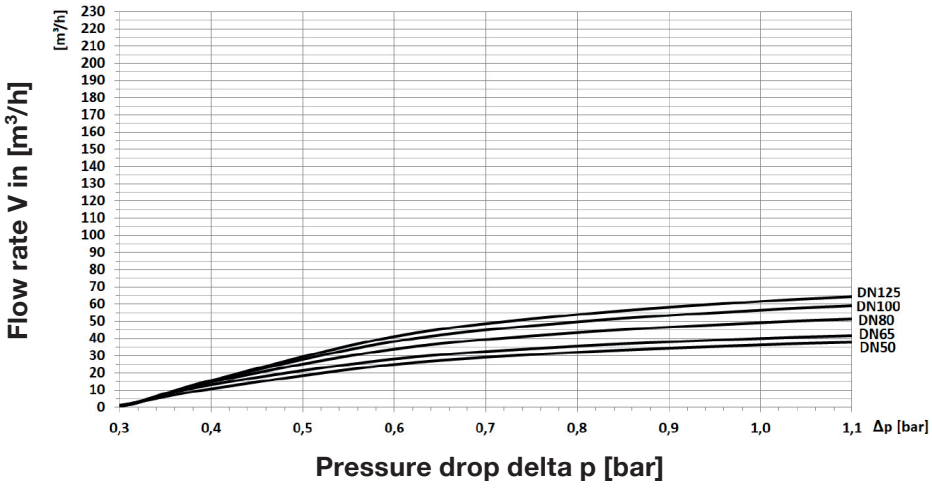
Cavitation Chart



Capacity Charts

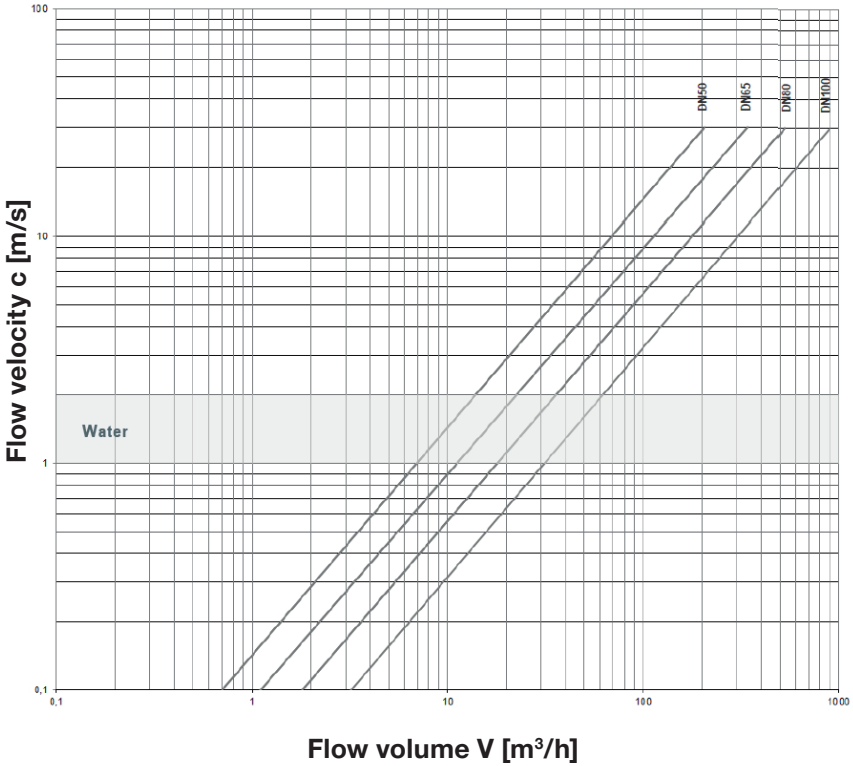
Dimensioning by pressure loss on the outlet pressure side

Flow chart water



V1. Dimensions in mm

ART 689



V1. Dimensions in mm

ART 670M
Pressure Reducing Valve with gauge

Features

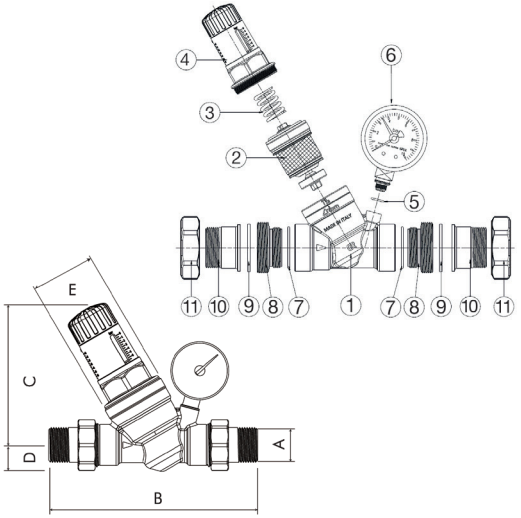
- BSP Parallel Male Ends (ISO 228/1)
- Controls static and dynamic pressure
- Conforms to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

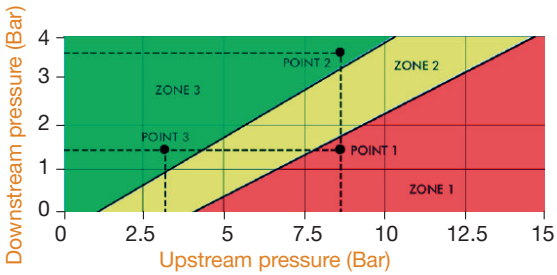
Max inlet pressure (static):	16 Bar
Adjustable pressure range:	0.5 - 6 Bar
Min inlet pressure:	0.5 Bar
Max inlet temperature:	80°C
Factory set pressure:	3 Bar



A	1”	1 1/4”	1 1/2”	2”
B	199	217	236	269
C	134	138	144	146
D	24	30	37	47
E	61	61	61	61
Kgs	1.49	2.07	2.72	3.93

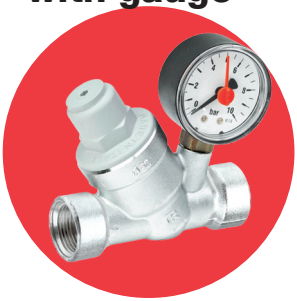
N.	Part Name	Materials
1	Body	DZR Brass CW602N
2	Cartridge	PA66 + 30% f.d.v.
3	Spring	EN 0270-3-1.431
4	Adjustable Knob	PA66 + 30% f.d.v.
5	O-Ring	EPDM + Perox
6	Pressure Gauge	
7	O-Ring	EPDM + Perox
8	Adaptor	CW617N
9	Gasket	EPDM + Perox
10	Male Union End	CW617N
11	Nut	CW602N

Cavitation Chart



V1. Dimensions in mm

ART 670F
Pressure Reducing Valve with gauge



Features

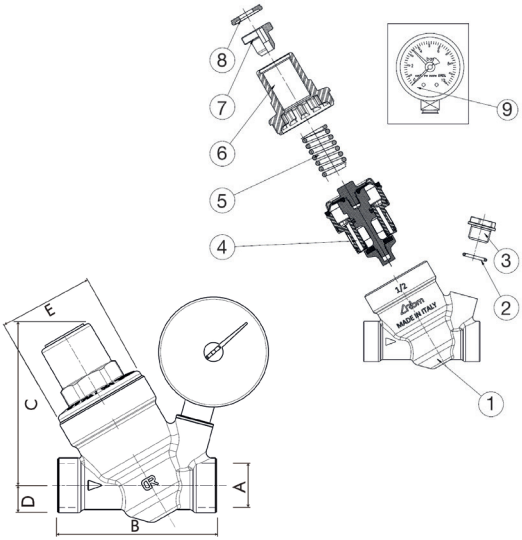
- BSP Parallel Female Ends (ISO 228/1)
- Controls static and dynamic pressure
- Conforms to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

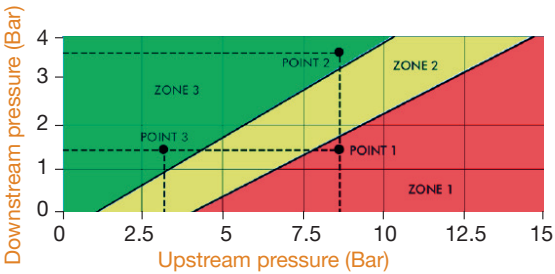
Max inlet pressure (static):	16 Bar
Adjustable pressure range:	0.5 - 6 Bar
Min inlet pressure:	0.5 Bar
Max inlet temperature:	80°C
Factory set pressure:	3 Bar



A	1/2”	3/4”
B	75	78
C	76	77
D	18	16
E	46	46
Kgs	0.48	0.54

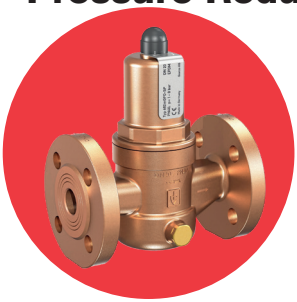
N.	Part Name	Materials
1	Body	DZR Brass CW602N
2	O-Ring	EPDM + Perox
3	Plug	PA66 + 30% f.d.v
4	Cartridge	PA66 + 30% F.V. + colouring MACROVERS 564FA
5	Spring	EN 0270-3-1.4310
6	Bonnet	PA66+30% f.d.v.
7	Adjustable Plug	CW614N
8	Plastic Cap	PC / ABS
9	Pressure gauge	

Cavitation Chart



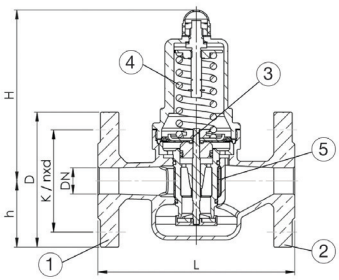
V1. Dimensions in mm

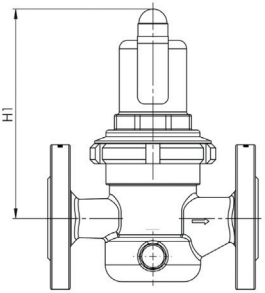
ART 682
Bronze / Gunmetal
Pressure Reducing Valve



Features

- Flange connection (DIN EN 1092)
- Suitable for neutral and non-neutral liquids, air, gases, vapours and warm water
- DIN DVGW guidelines, PED 2014/68/EU
- 24 month warranty
- Gauges available on request
- Available in PN16 and PN40





Technical data

Inlet pressure: Up to 40 Bar
Outlet pressure: 0.5 to 15 Bar
Working temp: -20°C to +120°C*

*See overleaf for additional information.

Connection	DN	15	20	25	32	40	50	65	80	100
Inlet pressure LP up to	bar	16/25	16/25	16/25	16/25	16/25	16/25	-	-	-
Outlet pressure LP	bar	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	-	-	-
Inlet pressure SP up to	bar	16/40	16/40	16/40	16/40	16/40	16/40	16	16/40	16
Outlet pressure SP	bar	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1-8	1-8	1-8
Inlet pressure HP up to	bar	16/40	16/40	16/40	16/40	16/40	16/40	16	16/40	16
Outlet pressure HP	bar	5 - 15	5 - 15	5 - 15	5 - 15	5 - 15	5 - 15	5-15	5-15	5-13[3]
Installation dimensions	D	95	105	115	140	150	165	185	200	220
in mm	L	130	150	160	180	200	230	290	310	350
	H (H1)	102 (128[1])	130 (150[1])	130 (150[1])	130 (150[1])	165 (185[1])	165 (185[1])	235	235	320
	h	46	50	55	68	73	80	89	96	112
	K / nxd	65 / 4xM12	75 / 4xM12	85 / 4xM12	100 / 4xM16	110 / 4xM16	125 / 4xM16	145 / 8xM16	160 / 8xM16	180 / 8xM16
Weight	kg	2.8 (3.1[1])	4.2 (4.6[1])	4.7 (5.1[1])	5.9 (6.3[1])	8.6 (9.3[1])	10.5 (11.2[1])	20	22	40
Coefficient of flow kvs	m^3/h	3	5.8	6.7	7.6	12.5	15	25	26	80

[1] for type 682mGFO-LP [2]The kvs value was determined according to DIN EN 60534-2-3. Instructions on how to determine size and capacity are to be found overleaf. [3] Piston Version.

N.	Part Name	Materials
1	Inlet body	Bronze / Gunmetal CC499K
2	Outlet body	Bronze / Gunmetal CC499K
3	Internal parts	Bronze / Gunmetal CC499K Stainless Steel 1.4404
4	Spring	Spring steel with anti-rust protection 1.1200
5	Strainer	Stainless Steel 1.4404

Typical Applications

- Protection of domestic water supply systems
- Protection of commercial and industrial plants against an excess supply pressure
- Potable water supply according to DIN 1988
- Process water supply in industrial and building technology
- Fire-fighting equipment and sprinkler systems
- Shipbuilding industry and offshore plants

V2. Dimensions in mm

ART 682

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. Pressure adjustment by means of non-rising spindle. Valve insert with balanced single seat valve completely made of stainless steel.

Complete valve cartridge SP/HP (order code: 482 Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Complete valve cartridge LP (order code: 482 LP Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Built-in dirt trap made of stainless steel.

Mesh size:	DN 15 to DN 32	0,60 mm
	DN 40 and DN 80	0,75 mm

Medium

GF	gaseous and liquid	for water, neutral and non-sticking liquids, compressed air and neutral gases; optionally with FPM elastomere seals for non-neutral media i.e. oils, fuels, oil-laden compressed air etc. Not suitable with steam.

Type of lifting mechanism

O	without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: up to 40 bar	Outlet pressure: from 1 to 8 bar
HP	High-pressure version (not for DN65 and DN80)	Inlet pressure: up to 40 bar	Outlet pressure: from 5 to 15 bar
LP	Low-pressure version (not for DN65, DN80 and DN100)	Inlet pressure: up to 25 bar	Outlet pressure: from 0,5 to 2 bar

Seal Options

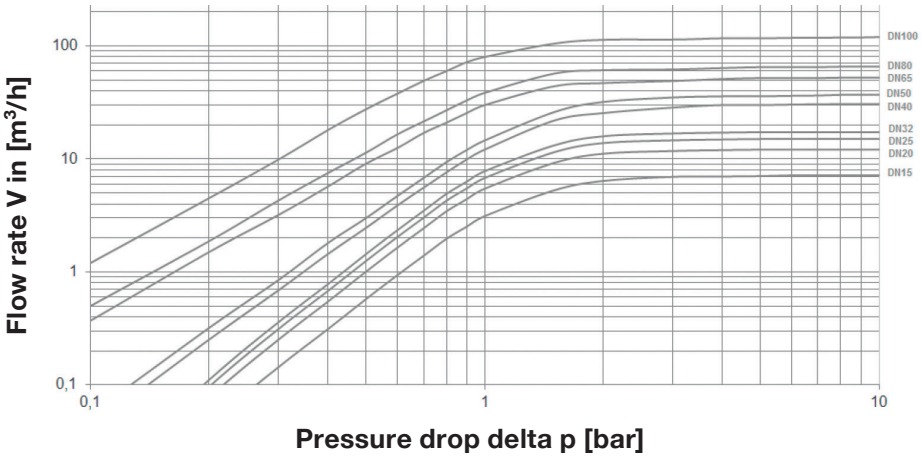
Option	Materials	Type	Working Temp.
EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	–20°C to +120°C (up to 8 bar outlet pressure) –20°C to +95°C (from 8 bar outlet pressure)
FKM	Fluorocarbon	Elastomere moulded diaphragm and seals	–10°C to +120°C (up to 8 bar outlet pressure) –10°C to +95°C (from 8 bar outlet pressure)

ART 682

Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



ART 682

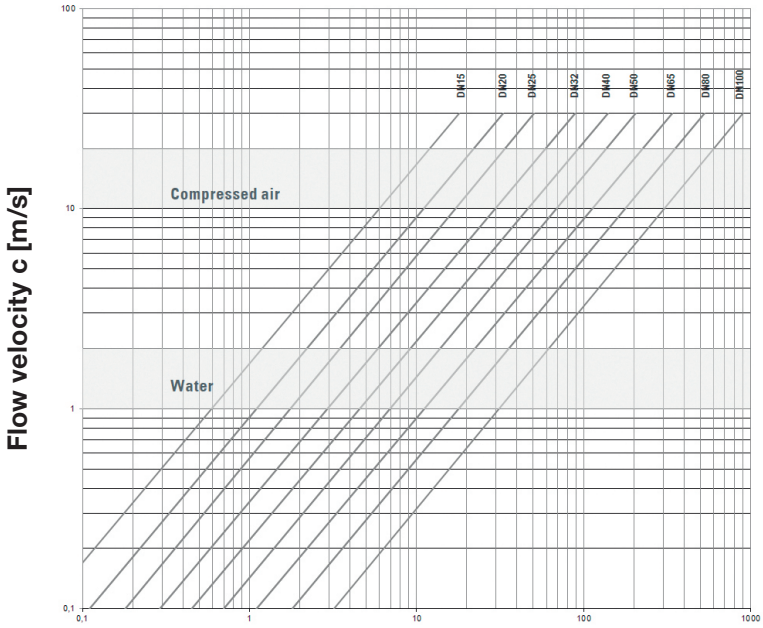
Dimensioning by flow velocity

For Liquids:
With help of the chart you can determine the nominal diameter (DN) for a given flow volume V (m^3/h). According to DVGW-guidelines (DIN 1988) a flow velocity of 2 m/s in domestic water supply systems should not be exceeded.

For compressed air and other gaseous media:
The usual flow velocity for compressed air is 10 - 20 m/s. For gaseous media the flow volume V should always be shown in actual cubic meters/hour.
If the flow volume is given in standard cubic meters, these should be converted into actual cubic meters before using the diagram.

$$V\,(m^3/h) = \frac{V_{Norm}\,(Nm^3/h)}{p_{absolut}\,(bar)} = \frac{V_{Norm}}{p\ddot{u}+1}$$

Actual cubic meters are based on the prevailing pressure of the medium on the outlet side of the pressure reducer.

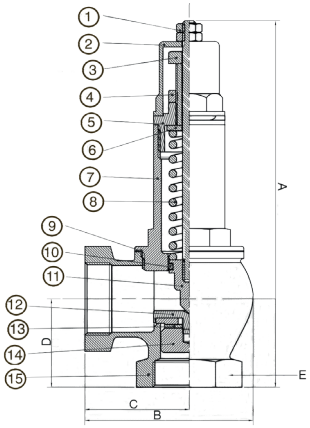


V2. Dimensions in mm

ART 622
Brass Adjustable Pressure Relief Valve

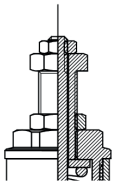
Features

- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases, liquids and steam
- Adjustable range: 0.5 to 16 bar
- PED 2014/68/EU
- Manual test function
- Suitable for use as a bypass valve
- This product should not be used as a safety valve



Technical data

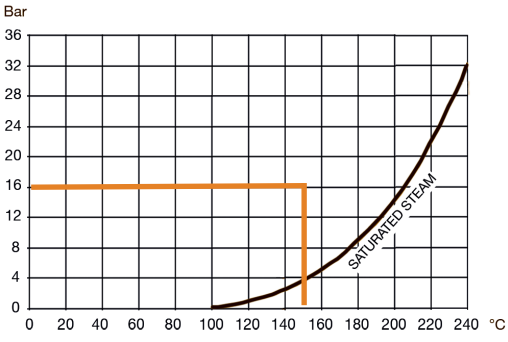
Max pressure:	16 Bar
Adjustable pressure range:	0.5 -16 Bar
Working temp:	0°C to 150°C



Alternative top on 2½ and 3" valves.

DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
A	136	158	169	207	230	259	305	315
B	56	64	76	90	100	124	135	145
C	35.5	39.5	47	56	62.5	75	79.5	84.5
D	30	32	40	44	47	60	69	78
E	28	35	41	49	56	71	88	100
Kgs	0.47	0.69	0.97	1.57	2.04	3.18	4.52	5.30

N.	Part Name	Materials
1	Nut and Locknut	Brass CW617N
2	Housing Cap	Brass CW617N
3	Regulator	Brass CW617N
4	Locknut Regulator	Brass CW617N
5	Regulator Seat	Brass CW617N
6	Spring Pusher	Brass CW617N
7	Bonnet	1/2"-1.1/2" Brass EN12165-CW617N 2"-3" Brass EN1982-CC754S
8	Spring	Galvanised Steel EN10270-1 / AISI302
9	Gasket	Pressed Fibre
10	O-Ring	EPDM Rubber
11	Rod	Brass CW617N
12	Valve Seat	Brass CW617N
13	Valve Gasket	EPDM Rubber
14	Valve Nut	Brass CW617N
15	Body	Brass EN1982-CC754S



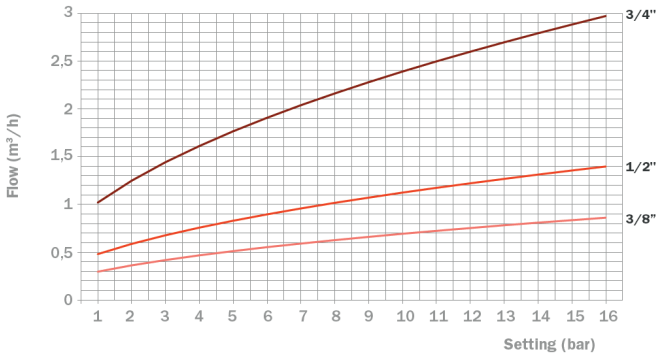
V2. Dimensions in mm

ART 622

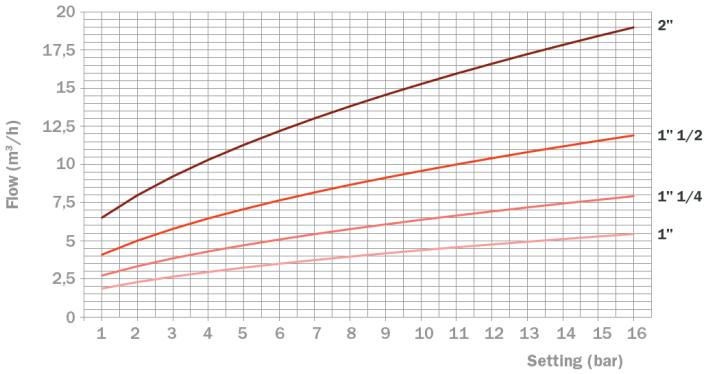
Discharge Charts

Discharging Pressure Flow - (setting pressure and overpressure)

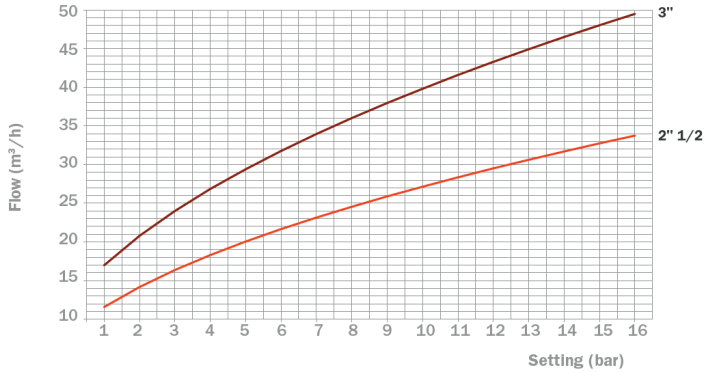
H_2O 3/8”-3/4”



H_2O 1”-2”



H_2O 2.1/2”-3”



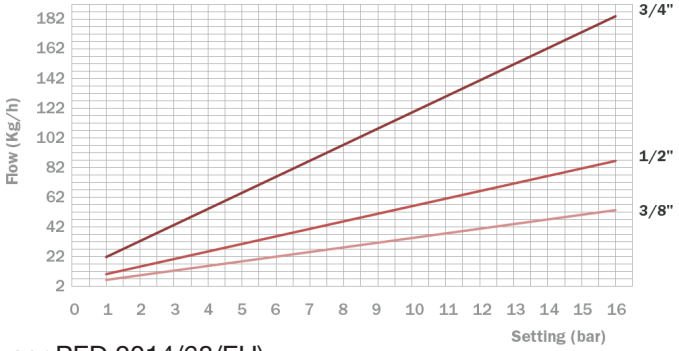
V2. Dimensions in mm

ART 622

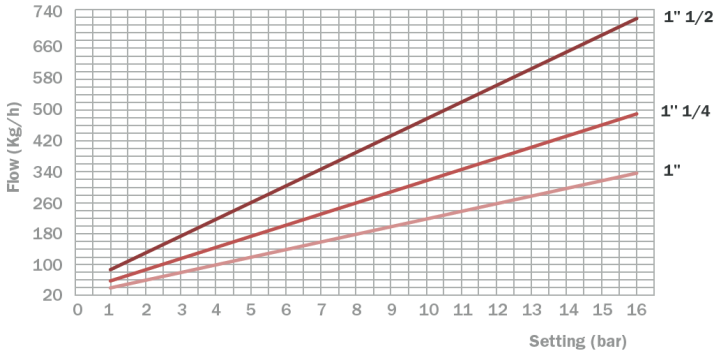
Discharge Charts

Discharging Pressure Flow - (setting pressure and overpressure)

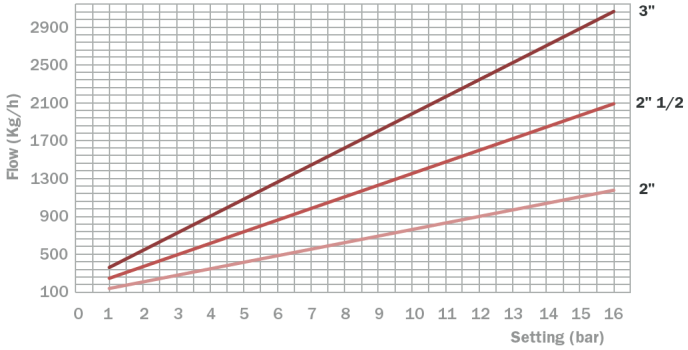
Gas (Category 1 as per PED 2014/68/EU)
3/8”-3/4”



Gas (Category 1 as per PED 2014/68/EU)
1”-1.1/2”



Gas (Category 1 as per PED 2014/68/EU)
2”-3”



V2. Dimensions in mm

ART 617
Gunmetal Overflow & Pressure Relief Valve

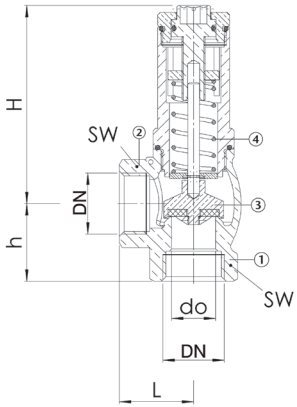
Features

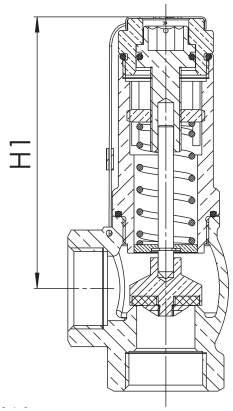
- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases and liquids
- Set pressure: 0.2 to 20 bar
- PED 2014/68/EU
- Marine approvals - GL, LR EMEA, ABS, BV, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request

Technical data

Max pressure: 20 Bar
Working temp: PTFE Seal
-60°C to 225°C

See overleaf for discharge capacity.





DN	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
L	27	30	33	40	45	50	60
H / H1	60 / 63	69 / 72	86 / 88.5	101 / 104	118 / 121	139 / 141.5	149 / 152
h	26	30	35	41	45	51	60
SW	24	28	34	41	52	58	70
do	10	13	19	25	30	38	50
Kgs	0.3	0.4	0.7	1.2	1.9	2.5	3.8

N.	Part Name	Materials
1	Inlet body	Gunmetal CC499K
2	Outlet body	Gunmetal CC499K
3	Internal Parts	Brass CW617N
4	Spring	Stainless Steel 1.4310

Typical Applications

- Pump protection
- Test rig construction
- Process equipment construction
- Shipbuilding industry and marine equipment
- De-icing technology
- Mechanical engineering
- Industrial applications

V1. Dimensions in mm

ART 617

Discharge Capacities

Kv values at 1 bar overpressure

Air [Nm³/h]

Nominal diameter DN	3/8"					1/2"					3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar																				
0,2	24					53					177					200				
0,5	28	83				61	147				200	209				220	375			
0,8	32	90				67	153				220	220				245	384			
1		95					158					228					390			
1,5		101					173					257					433			
2		111	62	48			180	126	86			287	180	159			462	335	302	
2,5		119	68	50			202	132	89			306	197	168			495	351	311	
3			75	51				143	95				226	188				376	322	
4			83	62				166	101				239	213				423	341	
5			95	80				169	105				233	242				466	361	
6			101	90				173	111				269	250				402	380	
7			106	96				150	118				303	257				398	391	
8			112	114				139	117				324	314				391	347	
9				115					123					324					301	
10				122					133					331					288	
11				121					138					339					274	
12				126	96				138	112				354	221				261	305
13					109					103					206					291
14					116					94					166					282
15					120					85					140					269
16					122					76					132					257
17					124					57					115					245
18					129					56					84					233
19					134					44					50					220
20					140					36					45					208

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	600					930					1500				
0,5	680	717				970	847				1620	1376			
0,8	700	771				1050	878				1740	1478			
1		808					899					1546			
1,5		901					1033					1734			
2		977	353	233			1104	552	426			1904	1001	788	
2,5		1031	361	257			1205	564	447			1953	1082	802	
3			369	272				577	481				1170	821	
4			417	311				601	527				1339	878	
5			459	352				726	566				1508	942	
6			502	397				893	597				1846	994	
7			549	437				994	764				2224	1050	
8			606	492				1113	910				2666	1123	
9				546					949					1187	
10				600					1023					1280	
11				569					1070					1358	
12				538	594				1095	682				1480	1237
13					625					758					1277
14					656					834					1388
15					687					911					1499
16					716					987					1609
17					737					954					1821
18					758					922					2033
19					779					889					2245
20					801					851					2357

V1. Dimensions in mm

ART 617

Discharge Capacities

Kv values at 1 bar overpressure

Water [Nm³/h]

Nominal diameter DN	3/8"					1/2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar										
0,2	2,7					4,4				
0,5	2,9	2,7				4,6	4,3			
0,8	2,9	2,8				4,9	4,5			
1		3,0					4,6			
1,5		3,2					4,8			
2		3,4	1,9	1,6			5,0	2,2	1,8	
2,5		3,7	2,2	1,7			5,2	2,1	1,8	
3			2,3	1,9				1,9	1,8	
4			2,7	2,2				1,6	1,7	
5			2,9	2,5				1,4	1,6	
6			3,4	2,8				1,3	1,5	
7			3,6	2,9				1,1	1,5	
8			3,9	3,1				1,0	1,4	
9				3,2					1,4	
10				3,4					1,4	
11				3,5					1,4	
12				3,7	1,7				1,3	0,4
13					1,4					0,4
14					1,3					0,5
15					1,1					0,5
16					0,8					0,5
17					0,6					0,5
18					0,4					0,6
19					0,2					0,6
20					0,2					0,6

Nominal diameter DN	3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar										
0,2	5,6					6,0				
0,5	5,6	6,1				6,4	10,8			
0,8	5,6	6,3				7,1	11,5			
1		6,5					11,9			
1,5		6,7					12,6			
2		6,9	4,5	3,7			13,0	8,5	4,2	
2,5		7,3	4,8	3,8			13,7	8,9	4,3	
3			5,2	4,1				9,3	4,3	
4			5,7	4,6				10,0	4,5	
5			6,5	5,1				10,4	4,6	
6			7,1	6,1				11,0	4,7	
7			7,9	6,5				11,2	5,0	
8			8,5	7,1				11,3	5,1	
9				7,3					5,3	
10				8,3					5,5	
11				9,1					5,8	
12				9,3	2,8				5,9	2,2
13					2,4					2,2
14					2,2					1,9
15					1,7					1,6
16					1,4					1,3
17					1,1					1,1
18					0,9					1,0
19					0,7					0,8
20					0,7					0,7

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	18,3					29,0					41,0				
0,5	19,5	16,0				29,0	21,7				44,4	31,6			
0,8	20,0	16,4				29,0	22,6				47,0	34,0			
1		16,7					23,3					35,6			
1,5		17,5					24,0					37,7			
2		18,1	7,6	6,2			25,2	10,9	8,8			40,6	24,3	17,9	
2,5		18,9	7,5	6,2			26,1	11,3	9,1			43,0	26,2	19,4	
3			7,4	6,1				11,8	9,3				28,2	21,1	
4			7,3	6,1				12,2	9,7				31,3	24,7	
5			7,2	6,0				12,5	10,3				34,7	28,9	
6			7,0	5,9				12,8	10,6				36,3	30,1	
7			6,7	5,8				13,7	11,9				41,1	31,7	
8			6,5	5,6				15,1	13,1				47,4	34,2	
9				5,5					14,3					37,4	
10				5,3					15,7					39,3	
11				5,2					17,2					42,4	
12				5,0	6,8				17,6	10,1				43,9	18,9
13					6,5					10,3					21,2
14					6,3					10,5					24,1
15					6,1					10,6					25,7
16					6,0					10,9					27,6
17					5,8					11,0					29,3
18					5,6					11,3					31,8
19					5,1					11,4					34,6
20					5,0					11,5					36,6

V1. Dimensions in mm

ART 617

Discharge Capacities

Kv values at 1 bar overpressure

Steam [Nm³/h]

Nominal diameter DN	3/8"					1/2"					3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar																				
0,2	18					41					138					156				
0,5	22	65				47	113				156	163				172	295			
0,8	25	70				52	120				172	173				191	305			
1		74					125					181					313			
1,5		81					135					200					345			
2		86	53	40			143	98	73			221	144	126			373	280	218	
2,5		93	60	45			157	104	79			235	161	141			384	302	244	
3			66	43				111	80				171	156				309	258	
4			79	53				129	79				187	160				339	308	
5			77	66				135	82				186	176				412	322	
6			78	75				132	88				212	200				388	326	
7			84	81				118	93				225	198				275	298	
8			89	89				123	96				249	190				254	279	
9				89					98					193					250	
10				97					106					192					273	
11				94					106					189					262	
12				101	79				105	78				204	183				282	247
13					84					68					174					189
14					90					57					162					201
15					95					54					123					213
16					94					51					130					180
17					99					46					110					142
18					96					32					87					150
19					101					28					61					105
20					105					21					32					165

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	468					726					1172				
0,5	531	509				757	665				1265	1100			
0,8	547	541				820	700				1359	1173			
1		553					724					1222			
1,5		615					798					1345			
2		642	283	194			862	455	311			1451			
2,5		619	301	218			940	510	349			1535	787	663	
3			297	223				506	387				884	698	
4			333	244				499	428				876	670	
5			361	283				579	455				987	740	
6			441	323				707	518				1145	859	
7			429	363				740	635				1224	816	
8			475	402				821	645				1284	916	
9				441					707					1015	
10				480					770					1002	
11				472					833					1090	
12				406	457				814	570				1179	987
13					489					610					1056
14					521					650					1125
15					552					590					1022
16					584					728					1261
17					615					768					1140
18					576					693					1399
19					604					606					1678
20					632					634					1537

V1. Dimensions in mm

ART 617

Seat-Seal/Diaphragm Options

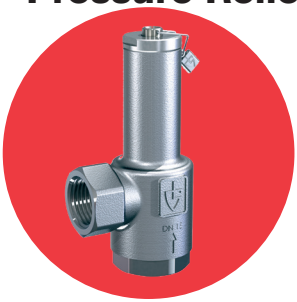
Option	Materials	Type	Working Temp.
NBR	Nitrile rubber (standard)	Elastomere flat seal 0,2 – 12 bar	–30°C to +130°C
FKM	Fluorocarbon	Elastomere flat seal 0,2 – 12 bar	–20°C to +200°C
EPDM	Ethylene propylene diene	Elastomere flat seal 0,2 – 12 bar	–50°C to +150°C
PTFE	Polytetrafluoroethylene	Flat seal 0,5 – 12 bar	–60°C to +225°C

If the seat seal is made of PTFE the O-rings of the body and setting spindle seal are made of FPM.

Against surcharge

PTFE	Polytetrafluoroethylene	Flat seal 12 – 20 bar	–60°C to +225°C

ART 417
Stainless Steel Overflow & Pressure Relief Valve



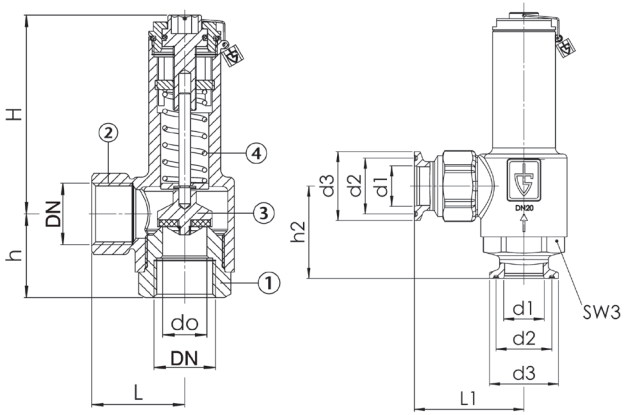
Features

- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases and liquids
- Set pressure: 0.2 to 20 bar
- PED 2014/68/EU
- Marine Approvals - GL, LR, EMEA, ABS, BV. RS
- ATEX Approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request

Technical data

Max pressure: 20 Bar
Working temp: PTFE Seal
-60°C to 225°C

See overleaf for discharge capacity.



DN	3/8”	1/2”	3/4”	1”	1 1/4”	1 1/2”	2”
L	30	34	40	46	50	61	67
L1	41	44	54	57	61	75	82
H	60	69	86	101	118	139	149
h	29	33	36	67	52	60	66
h1	42	49	50	67	71	85	91
h2	41	46	46	61	63	76	80
d1	10	16	20	26	32	38	50
d2	27,5	27,5	27,5	43,5	43,5	43,5	56,5
d3	34	34	34	50,5	50,5	50,5	64
SW3	30	30	36	46	55	65	70
do	10	13	19	25	30	38	50
Kgs	0.3	0.4	0.7	1.2	1.9	2.5	3.8

N.	Part Name	Materials
1	Inlet body	Stainless Steel 1.4404
2	Outlet body	Stainless Steel 1.4404 / 1.4408
3	Internal Parts	Stainless Steel 1.4404
4	Spring	Stainless Steel 1.4310

Typical Applications

- Chemical plants, biogas plants
- Desalination plants
- Mechanical engineering and process equipment construction
- Shipbuilding industry and marine equipment
- Industrial applications
- Secondary areas in the food, beverage, pharmaceutical and cosmetics industries

V1. Dimensions in mm

ART 417

Discharge Capacities

Kv values at 1 bar overpressure

Air [Nm³/h]

Nominal diameter DN	3/8"					1/2"					3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar																				
0,2	24					53					177					200				
0,5	28	83				61	147				200	209				220	375			
0,8	32	90				67	153				220	220				245	384			
1		95					158					228					390			
1,5		101					173					257					433			
2		111	62	48			180	126	86			287	180	159			462	335	302	
2,5		119	68	50			202	132	89			306	197	168			495	351	311	
3			75	51				143	95				226	188				376	322	
4			83	62				166	101				239	213				423	341	
5			95	80				169	105				233	242				466	361	
6			101	90				173	111				269	250				402	380	
7			106	96				150	118				303	257				398	391	
8			112	114				139	117				324	314				391	347	
9				115					123					324					301	
10				122					133					331					288	
11				121					138					339					274	
12				126	96				138	112				354	221				261	305
13					109					103					206					291
14					116					94					166					282
15					120					85					140					269
16					122					76					132					257
17					124					57					115					245
18					129					56					84					233
19					134					44					50					220
20					140					36					45					208

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	600					930					1500				
0,5	680	717				970	847				1620	1376			
0,8	700	771				1050	878				1740	1478			
1		808					899					1546			
1,5		901					1033					1734			
2		977	353	233			1104	552	426			1904	1001	788	
2,5		1031	361	257			1205	564	447			1953	1082	802	
3			369	272				577	481				1170	821	
4			417	311				601	527				1339	878	
5			459	352				726	566				1508	942	
6			502	397				893	597				1846	994	
7			549	437				994	764				2224	1050	
8			606	492				1113	910				2666	1123	
9				546					949					1187	
10				600					1023					1280	
11				569					1070					1358	
12				538	594				1095	682				1480	1237
13					625					758					1277
14					656					834					1388
15					687					911					1499
16					716					987					1609
17					737					954					1821
18					758					922					2033
19					779					889					2245
20					801					851					2357

V1. Dimensions in mm

ART 417

Discharge Capacities

Kv values at 1 bar overpressure

Water [Nm³/h]

Nominal diameter DN	3/8"					1/2"					3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar																				
0,2	2,7					4,4					5,6					6,0				
0,5	2,9	2,7				4,6	4,3				5,6	6,1				6,4	10,8			
0,8	2,9	2,8				4,9	4,5				5,6	6,3				7,1	11,5			
1		3,0					4,6					6,5					11,9			
1,5		3,2					4,8					6,7					12,6			
2		3,4	1,9	1,6			5,0	2,2	1,8			6,9	4,5	3,7			13,0	8,5	4,2	
2,5		3,7	2,2	1,7			5,2	2,1	1,8			7,3	4,8	3,8			13,7	8,9	4,3	
3			2,3	1,9				1,9	1,8				5,2	4,1				9,3	4,3	
4			2,7	2,2				1,6	1,7				5,7	4,6				10,0	4,5	
5			2,9	2,5				1,4	1,6				6,5	5,1				10,4	4,6	
6			3,4	2,8				1,3	1,5				7,1	6,1				11,0	4,7	
7			3,6	2,9				1,1	1,5				7,9	6,5				11,2	5,0	
8			3,9	3,1				1,0	1,4				8,5	7,1				11,3	5,1	
9				3,2					1,4					7,3					5,3	
10				3,4					1,4					8,3					5,5	
11				3,5					1,4					9,1					5,8	
12				3,7	1,7				1,3	0,4				9,3	2,8				5,9	2,2
13					1,4					0,4					2,4					2,2
14					1,3					0,5					2,2					1,9
15					1,1					0,5					1,7					1,6
16					0,8					0,5					1,4					1,3
17					0,6					0,5					1,1					1,1
18					0,4					0,6					0,9					1,0
19					0,2					0,6					0,7					0,8
20					0,2					0,6					0,7					0,7

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	18,3					29,0					41,0				
0,5	19,5	16,0				29,0	21,7				44,4	31,6			
0,8	20,0	16,4				29,0	22,6				47,0	34,0			
1		16,7					23,3					35,6			
1,5		17,5					24,0					37,7			
2		18,1	7,6	6,2			25,2	10,9	8,8			40,6	24,3	17,9	
2,5		18,9	7,5	6,2			26,1	11,3	9,1			43,0	26,2	19,4	
3			7,4	6,1				11,8	9,3				28,2	21,1	
4			7,3	6,1				12,2	9,7				31,3	24,7	
5			7,2	6,0				12,5	10,3				34,7	28,9	
6			7,0	5,9				12,8	10,6				36,3	30,1	
7			6,7	5,8				13,7	11,9				41,1	31,7	
8			6,5	5,6				15,1	13,1				47,4	34,2	
9				5,5					14,3					37,4	
10				5,3					15,7					39,3	
11				5,2					17,2					42,4	
12				5,0	6,8				17,6	10,1				43,9	18,9
13					6,5					10,3					21,2
14					6,3					10,5					24,1
15					6,1					10,6					25,7
16					6,0					10,9					27,6
17					5,8					11,0					29,3
18					5,6					11,3					31,8
19					5,1					11,4					34,6
20					5,0					11,5					36,6

V1. Dimensions in mm

ART 417

Discharge Capacities

Kv values at 1 bar overpressure

Steam [Nm³/h]

Nominal diameter DN	3/8"					1/2"					3/4"					1"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar																				
0,2	18					41					138					156				
0,5	22	65				47	113				156	163				172	295			
0,8	25	70				52	120				172	173				191	305			
1		74					125					181					313			
1,5		81					135					200					345			
2		86	53	40			143	98	73			221	144	126			373	280	218	
2,5		93	60	45			157	104	79			235	161	141			384	302	244	
3			66	43				111	80				171	156				309	258	
4			79	53				129	79				187	160				339	308	
5			77	66				135	82				186	176				412	322	
6			78	75				132	88				212	200				388	326	
7			84	81				118	93				225	198				275	298	
8			89	89				123	96				249	190				254	279	
9				89					98					193					250	
10				97					106					192					273	
11				94					106					189					262	
12				101	79				105	78				204	183				282	247
13					84					68					174					189
14					90					57					162					201
15					95					54					123					213
16					94					51					130					180
17					99					46					110					142
18					96					32					87					150
19					101					28					61					105
20					105					21					32					165

Nominal diameter DN	1 1/4"					1 1/2"					2"				
Pressure range bar	0,2-0,8	0,5-2,5	2-8	2-12	12-20	0,2-0,8	0,5 - 2,5	2-8	2-12	12-20	0,2-0,8	0,5-2,5	2-8	2-12	12-20
Set pressure bar															
0,2	468					726					1172				
0,5	531	509				757	665				1265	1100			
0,8	547	541				820	700				1359	1173			
1		553					724					1222			
1,5		615					798					1345			
2		642	283	194			862	455	311			1451			
2,5		619	301	218			940	510	349			1535	787	663	
3			297	223				506	387				884	698	
4			333	244				499	428				876	670	
5			361	283				579	455				987	740	
6			441	323				707	518				1145	859	
7			429	363				740	635				1224	816	
8			475	402				821	645				1284	916	
9				441					707					1015	
10				480					770					1002	
11				472					833					1090	
12				406	457				814	570				1179	987
13					489					610					1056
14					521					650					1125
15					552					590					1022
16					584					728					1261
17					615					768					1140
18					576					693					1399
19					604					606					1678
20					632					634					1537

V1. Dimensions in mm

ART 417

Seat-Seal/Diaphragm Options

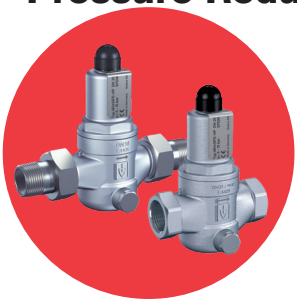
Option	Materials	Type	Working Temp.
NBR	Nitrile rubber **(standard)**	Elastomere flat seal 0,2 – 12 bar	–30°C to +130°C
FKM	Fluorocarbon	Elastomere flat seal 0,2 – 12 bar	–20°C to +200°C
EPDM	Ethylene propylene diene	Elastomere flat seal 0,2 – 12 bar	–50°C to +150°C
PTFE	Polytetrafluoroethylene	Flat seal 0,5 – 12 bar	–60°C to +225°C

If the seat seal is made of PTFE the O-rings of the body and setting spindle seal are made of FPM.

Against surcharge

PTFE	Polytetrafluoroethylene	Flat seal 12 – 20 bar	–60°C to +225°C

ART 481 M & F
Stainless Steel Pressure Reducing Valve



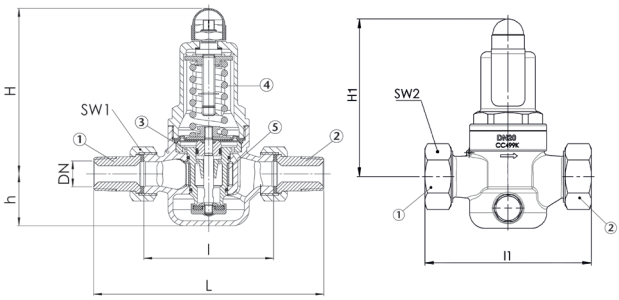
Features

- Standard threaded connections:
  - Male thread BSPT (ISO 7/1)
  - Female thread BSPP (ISO 228/1). Available DN15, DN20 & DN25
- Suitable for neutral and non-neutral liquids, air, gases, vapours and warm water
- EN 1567, ISO 3822, PED 2014/68/EU
- Marine approvals - GL, LR, EMEA, BV, ABS, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request
- Available in PN25 and PN40

Technical data

Inlet pressure: Up to 40 Bar
Outlet pressure: 0.5 to 15 Bar
Working temp: EPDM or FKM Seal
-10°C to +95°C

See overleaf for additional information.



Connection	DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Inlet pressure LP up to	bar	25	25	25	25	25	25
Outlet pressure LP	bar	0.5-2	0.5-2	0.5-2	0.5-2	0.5-2	0.5-2
Inlet pressure SP up to	bar	40	40	40	40	40	40
Outlet pressure SP	bar	1-8	1-8	1-8	1-8	1-8	1-8
Inlet pressure HP up to	bar	40	40	40	40	40	40
Outlet pressure HP	bar	5-15	5-15	5-15	5-15	5-15	5-15
Installation dimensions	L	142	158	180	193	226	252
in mm	l	80	90	100	105	130	140
	l1	85	95	105			
	H (H1)	102 (128[1])	102 (128[1])	130 (150[1])	130 (150[1])	165 (185[1])	165 (185[1])
	h	33	33	45	45	70	70
	SW1	30	37	46	52	65	75
	SW2	28	35	43	48	57	68
Weight	kg	1.2 (1.5[1])	1.3 (1.6[1])	2.3 (2.8[1])	2.5 (3.0[1])	5.2 (5.9[1])	5.7 (6.4[1])
Coefficient of flow kvs	m^3/h	3	3.5	6.7	7.6	12.5	15

[1] for type 481mGFO-LP

N.	Part Name	Materials
1	Inlet body	Stainless Steel 1.4408
2	Outlet body	Stainless Steel 1.4408
3	Internal parts	Stainless Steel 1.4408, 1.4404
4	Spring	Spring steel with anti-rust protection 1.1200
5	Strainer	Stainless Steel 1.4404

Typical Applications

- Potable water supply
- Process water supply in industrial and building technology
- Fire-fighting equipment & sprinkler systems
- Shipbuilding industry and offshore plants
- Secondary areas in the food, pharmaceutical and cosmetics industries

V2. Dimensions in mm

ART 481 M & F

Valve version

m	with diaphragm	High-quality, heat-resistant moulded elastomere, fabric-reinforced diaphragm. Pressure adjustment by means of non-rising spindle. Valve insert with balanced single seat valve completely made of stainless steel.

Complete valve insert SP/HP (order code: 481 Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Complete valve insert LP (order code: 481 LP Insert-DN..-seal) available as replacement part can be exchanged without removing the valve.

Built-in dirt trap made of stainless steel.

Mesh size:	DN 15 to DN 32	0,60 mm
	DN 40 and DN 50	0,75 mm

Medium

GF	gaseous and liquid	for water and distilled water, neutral and non-sticking liquids, compressed air and neutral gases; optionally with FPM elastomere seals for non-neutral media i.e. oils, fuels, oil-laden compressed air etc.

Type of lifting mechanism

O	without lifting device

Outlet pressure ranges

SP	Standard version	Inlet pressure: up to 40 bar	Outlet pressure: from 1 to 8 bar
HP	High-pressure version	Inlet pressure: up to 40 bar	Outlet pressure: from 5 to 15 bar
LP	Low-pressure version	Inlet pressure: up to 25 bar	Outlet pressure: from 0,5 to 2 bar

Fixed setting at a required outlet pressure against surcharge.

Seat-Seal/Diaphragm Options

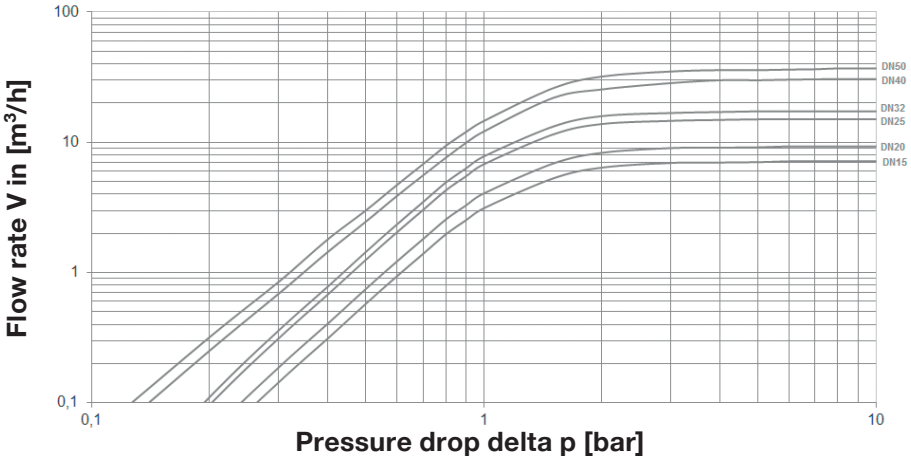
Option	Materials	Type	Working Temp.
EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	–10°C to +95°C
Against surcharge			
FKM	Fluorocarbon	Elastomere moulded diaphragm and seals	–10°C to +95°C

ART 481 M & F

Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



ART 481 M & F

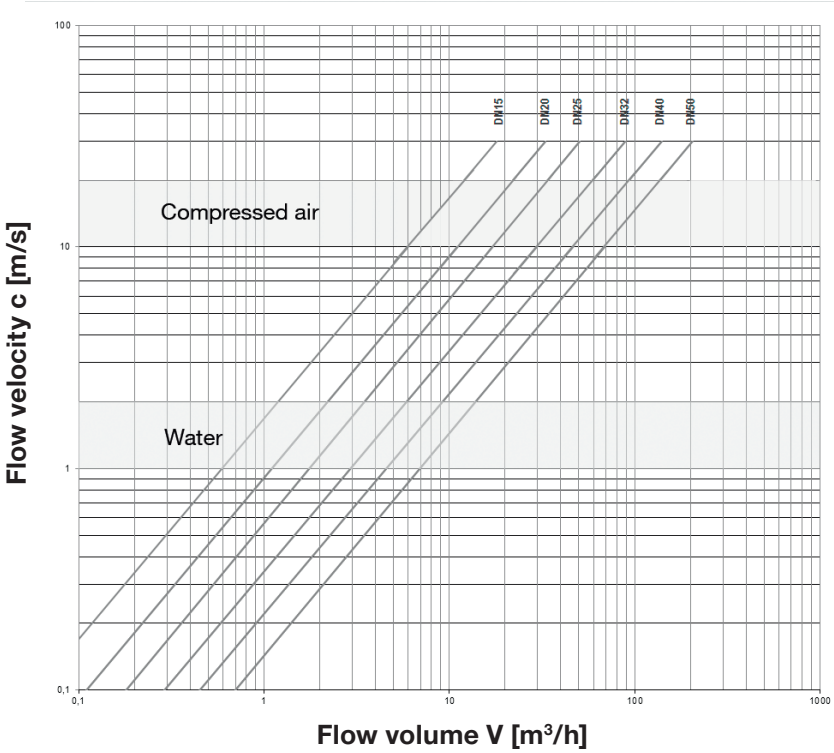
Dimensioning by flow velocity

For Liquids:
With help of the chart you can determine the nominal diameter (DN) for a given flow volume V (m^3/h). The ideal flow velocity is between 1m/s – 2m/s.

For compressed air and other gaseous media:
The usual flow velocity for compressed air is 10 - 20 m/s. For gaseous media the flow volume V should always be shown in actual cubic meters/hour.
If the flow volume is given in standard cubic meters, these should be converted into actual cubic meters before using the diagram.

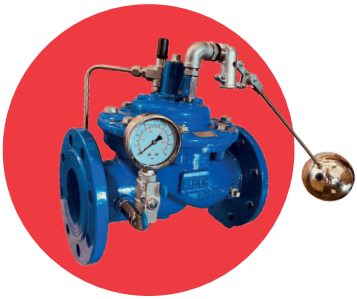
$$V\,(m^3/h) = \frac{V_{Norm}\,(Nm^3/h)}{p_{absolut}\,(bar)} = \frac{V_{Norm}}{p_{\ddot{U}}+1}$$

Actual cubic meters are based on the prevailing pressure of the medium on the outlet side of the pressure reducer.



V2. Dimensions in mm

ART 6100 PN16 Modulating
PN16 Float Control Valve

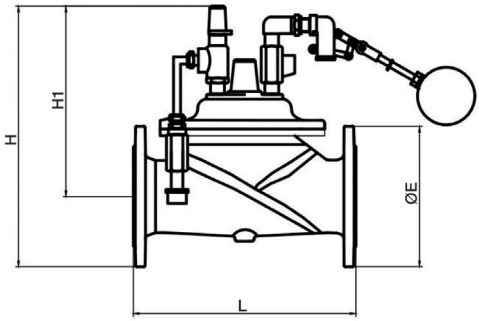


Features

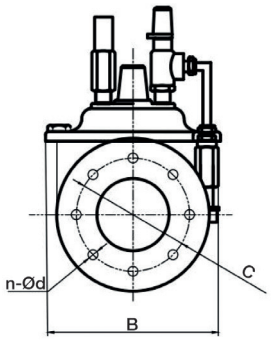
- Automatic Control Valve
- Suitable for potable water applications
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves
- Copper float option
- Fully WRAS Approved valve - Cert No. 2104026

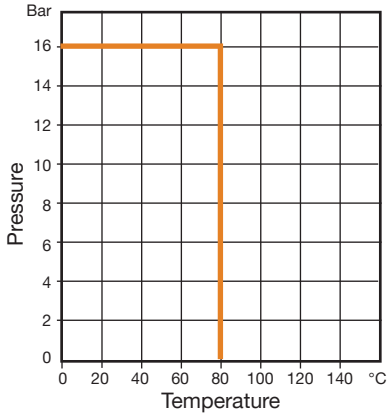
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



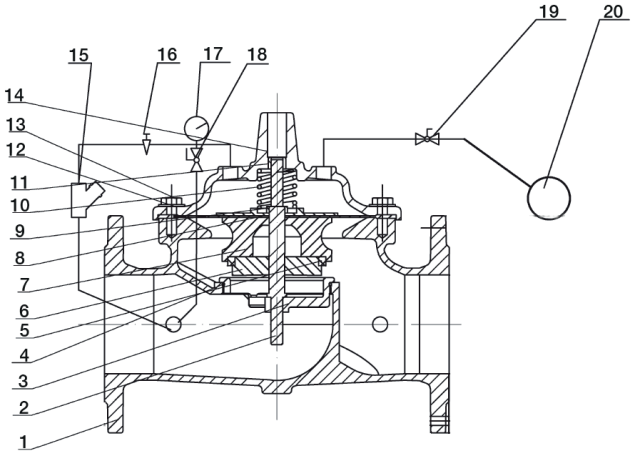
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V2. Dimensions in mm

ART 6100 PN16
Modulating

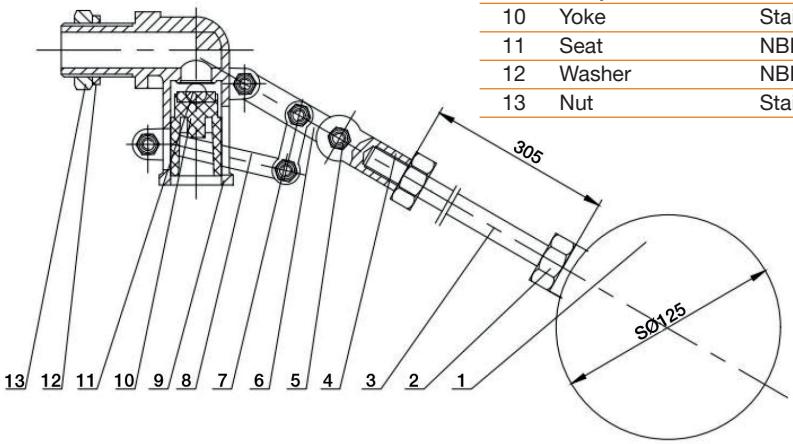


N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Pressure Gauge	Stainless Steel 304 (Glycerin Filled)
18	Ball Valve	Stainless Steel 304
19	Ball Valve	Stainless Steel 304
20	Float Control Valve	Stainless Steel 304

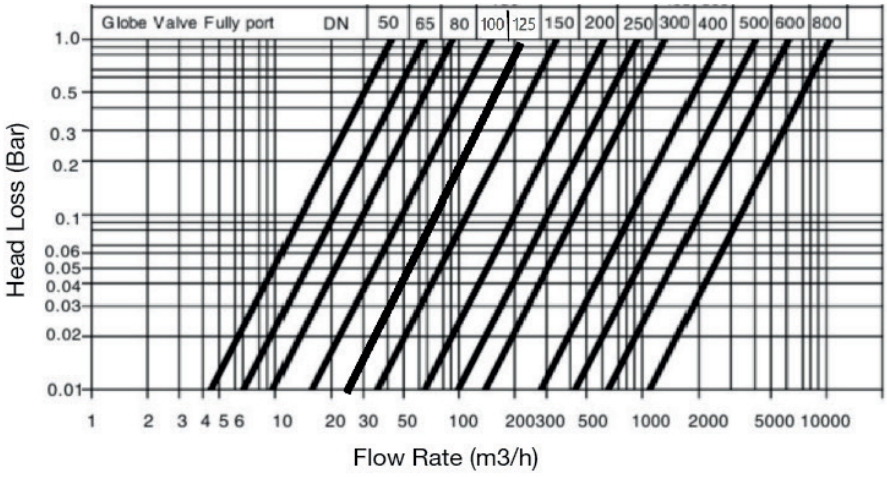
ART 6100 PN16 Modulating

Pilot Valve Detail - ART 6150

N.	Part Name	Materials
1	Float Ball	Stainless Steel 304
2	Nut	Stainless Steel 304
3	Rod	Stainless Steel 304
4	Level Holder	Stainless Steel 304
5	Screw / Nut	Stainless Steel 304
6	Arm	Stainless Steel 304
7	Level	Stainless Steel 304
8	Seat Holder	Stainless Steel 304
9	Body	Stainless Steel 304
10	Yoke	Stainless Steel 304
11	Seat	NBR
12	Washer	NBR
13	Nut	Stainless Steel 304

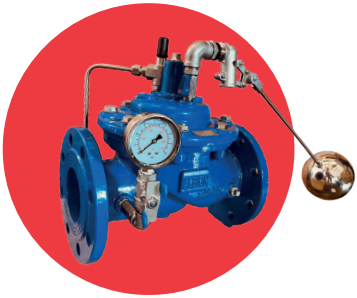


Flow curve of the main valve at fully open status



V2. Dimensions in mm

ART 6100 ANSI Modulating
ANSI Float Control Valve

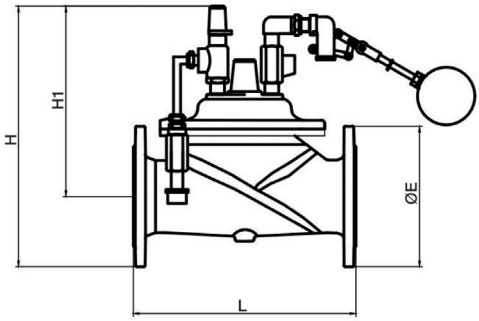


Features

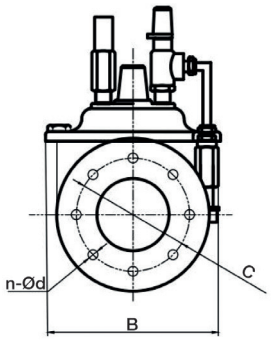
- Automatic Control Valve
- Suitable for potable water applications
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing and valves
- Copper float option
- Fully WRAS Approved valve - Cert No. 2104026

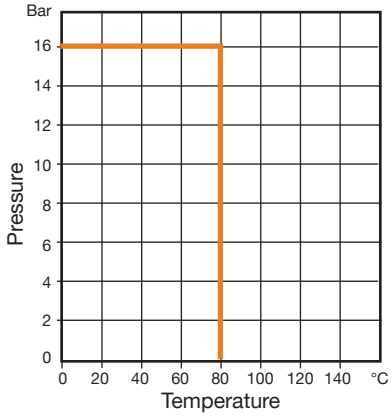
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



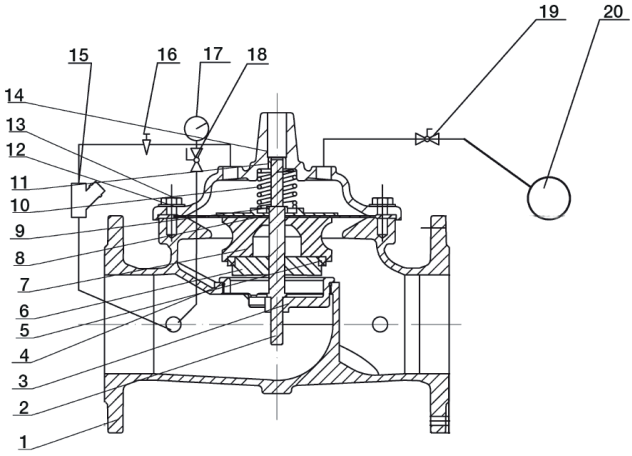
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V2. Dimensions in mm

ART 6100 ANSI
Modulating

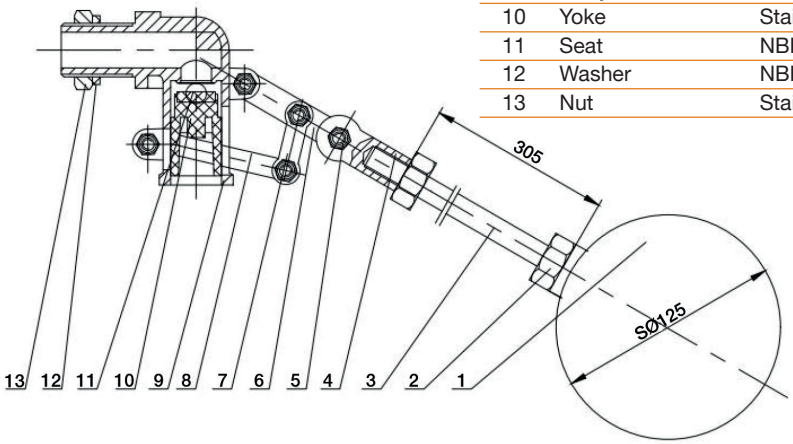


N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Pressure Gauge	Stainless Steel 304 (Glycerin Filled)
18	Ball Valve	Stainless Steel 304
19	Ball Valve	Stainless Steel 304
20	Float Control Valve	Stainless Steel 304

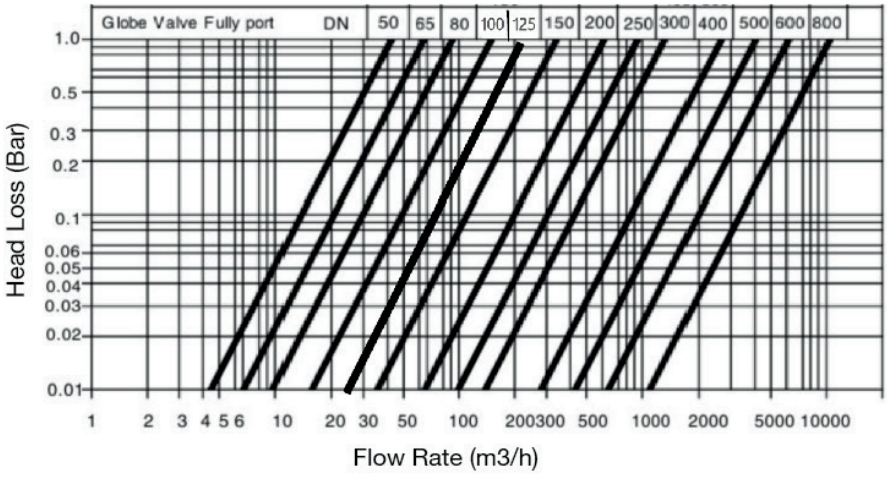
ART 6100 ANSI Modulating

Pilot Valve Detail - ART 6150

N.	Part Name	Materials
1	Float Ball	Stainless Steel 304
2	Nut	Stainless Steel 304
3	Rod	Stainless Steel 304
4	Level Holder	Stainless Steel 304
5	Screw / Nut	Stainless Steel 304
6	Arm	Stainless Steel 304
7	Level	Stainless Steel 304
8	Seat Holder	Stainless Steel 304
9	Body	Stainless Steel 304
10	Yoke	Stainless Steel 304
11	Seat	NBR
12	Washer	NBR
13	Nut	Stainless Steel 304



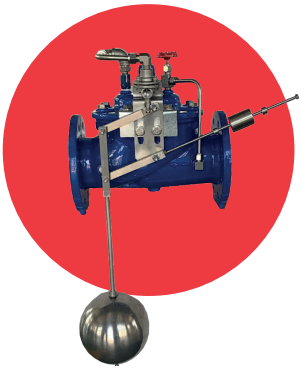
Flow curve of the main valve at fully open status



V2. Dimensions in mm

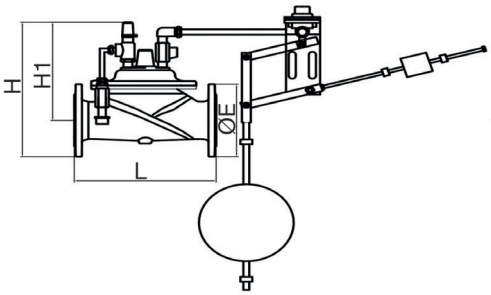
ART 6100 PN16 ON/OFF

PN16 Float Control ON/OFF valve



Features

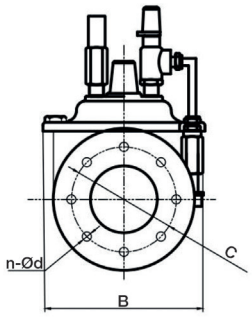
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves
- Copper float option

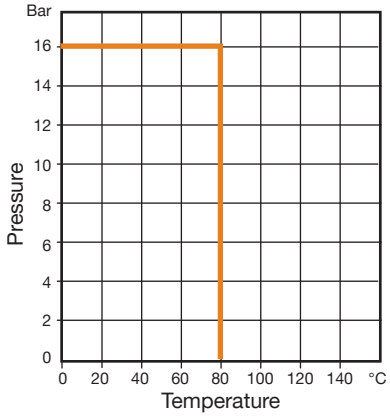


Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C

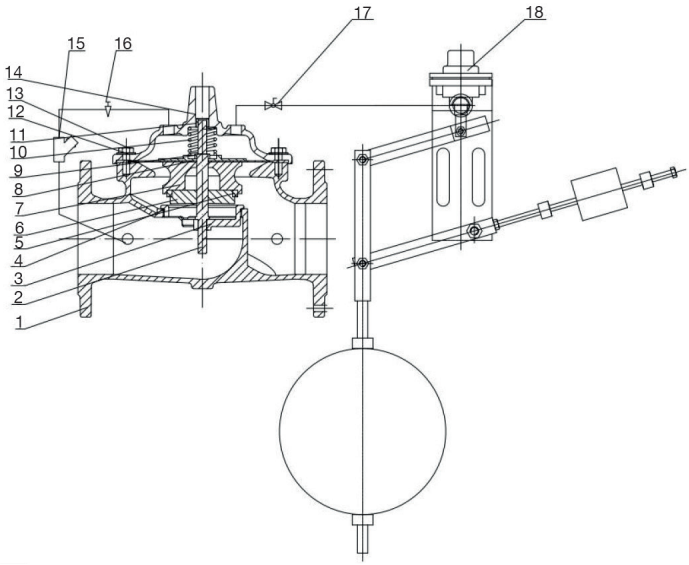
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V1. Dimensions in mm

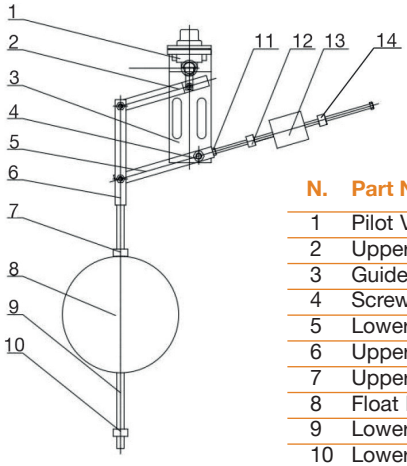
ART 6100 PN16 ON/OFF



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Ball Valve	Stainless Steel 304
18	Float Control Valve	Stainless Steel 304

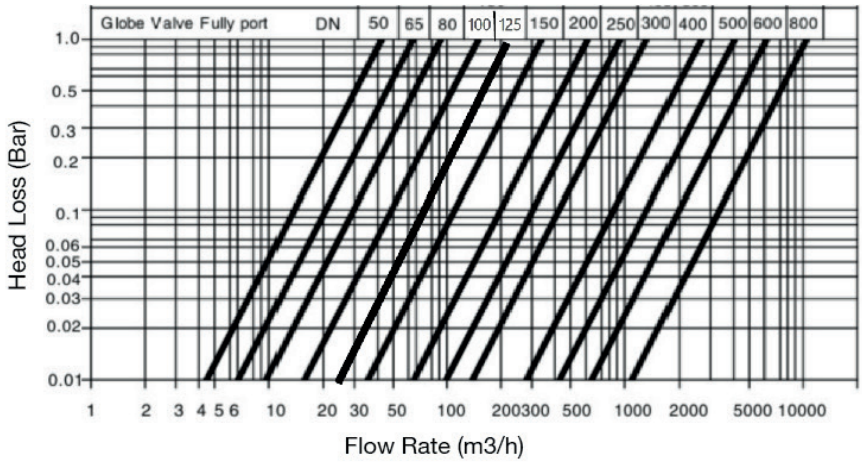
ART 6100 PN16 ON/OFF

Pilot Valve Detail - ART 6175



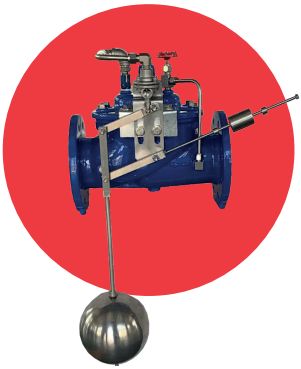
N.	Part Name	Materials
1	Pilot Valve	Stainless Steel 304 + NBR
2	Upper Level	Stainless Steel 304
3	Guide	Stainless Steel 304
4	Screw / Nut	Stainless Steel 304
5	Lower Level	Stainless Steel 304
6	Upper Stem	Stainless Steel 304
7	Upper Setting Nut	Stainless Steel 304
8	Float Ball	Stainless Steel 304
9	Lower Stem	Stainless Steel 304
10	Lower Setting Nut	Stainless Steel 304
11	Nut	Stainless Steel 304
12	Lower Weight Adjustable Nut	Stainless Steel 304
13	Weight Balance Load	Stainless Steel 304
14	Upper Weight Adjustable Nut	Stainless Steel 304

Flow curve of the main valve at fully open status



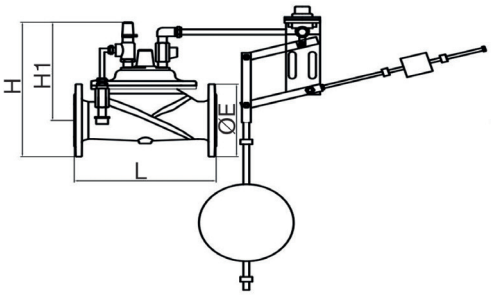
V1. Dimensions in mm

ART 6100 ANSI ON/OFF
ANSI Float Control ON/OFF valve



Features

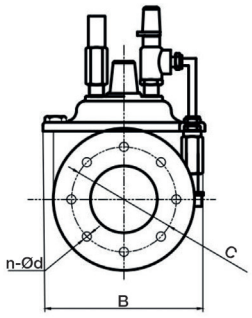
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing and valves
- Copper float option

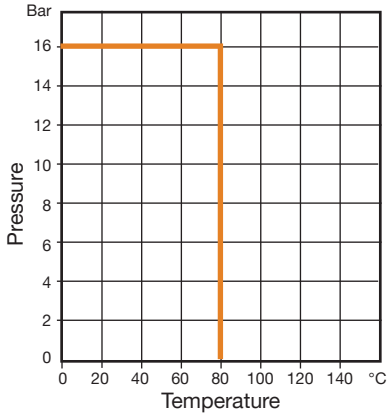


Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C

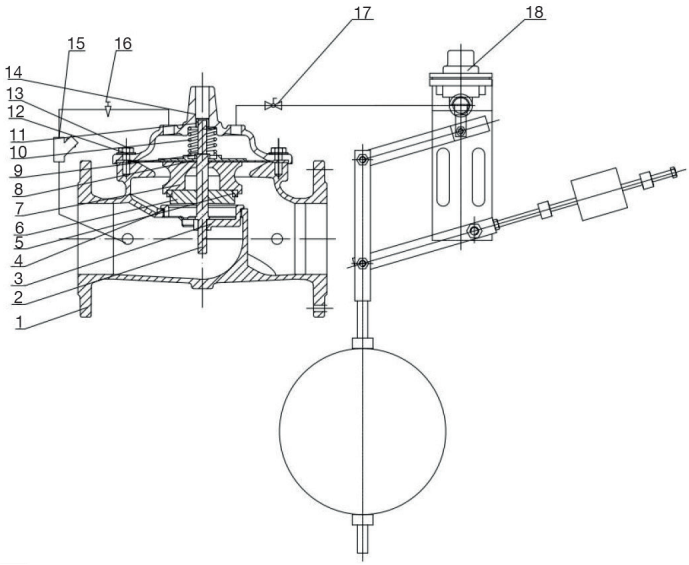
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V1. Dimensions in mm

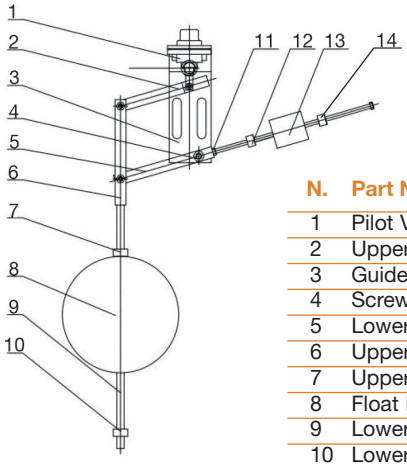
ART 6100 ANSI ON/OFF



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Ball Valve	Stainless Steel 304
18	Float Control Valve	Stainless Steel 304

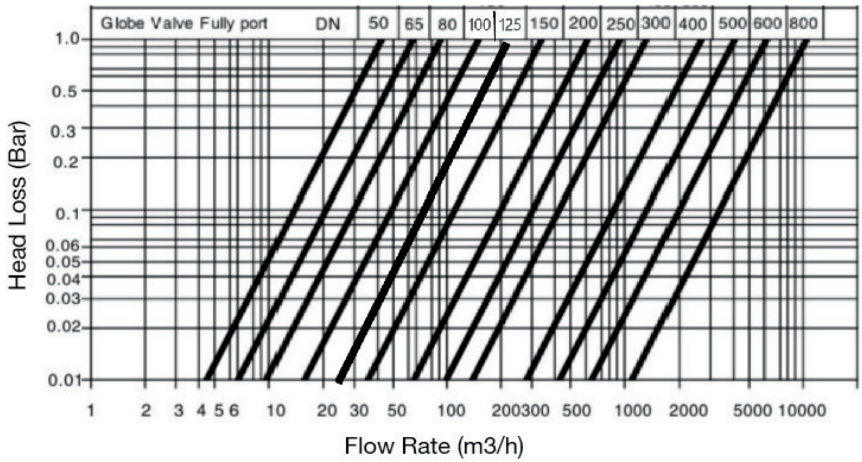
ART 6100 ANSI ON/OFF

Pilot Valve Detail - ART 6175



N.	Part Name	Materials
1	Pilot Valve	Stainless Steel 304 + NBR
2	Upper Level	Stainless Steel 304
3	Guide	Stainless Steel 304
4	Screw / Nut	Stainless Steel 304
5	Lower Level	Stainless Steel 304
6	Upper Stem	Stainless Steel 304
7	Upper Setting Nut	Stainless Steel 304
8	Float Ball	Stainless Steel 304
9	Lower Stem	Stainless Steel 304
10	Lower Setting Nut	Stainless Steel 304
11	Nut	Stainless Steel 304
12	Lower Weight Adjustable Nut	Stainless Steel 304
13	Weight Balance Load	Stainless Steel 304
14	Upper Weight Adjustable Nut	Stainless Steel 304

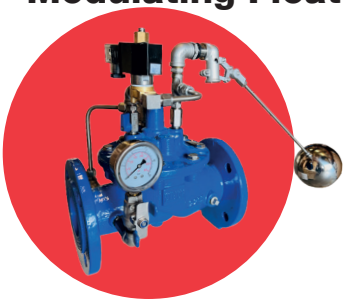
Flow curve of the main valve at fully open status



V1. Dimensions in mm

ART 6100 PN16
Modulating with Solenoid

Modulating Float Control Valve with Solenoid Valve

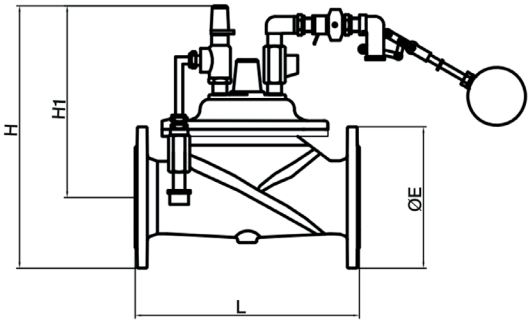


Features

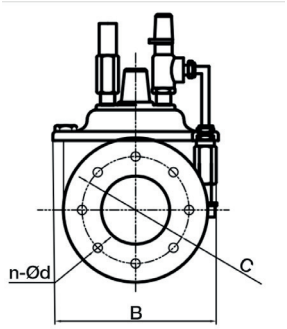
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing, valves, float pilot and brass pilot solenoid valve
- Copper float option
- Normally closed and normally open option

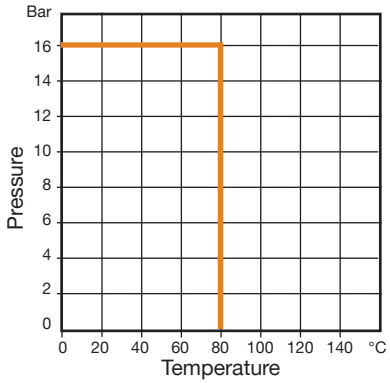
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



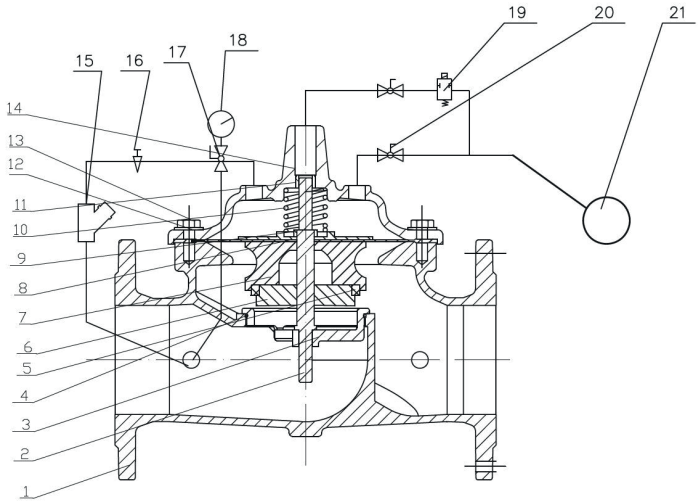
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V2. Dimensions in mm

ART 6100 PN16
Modulating with Solenoid



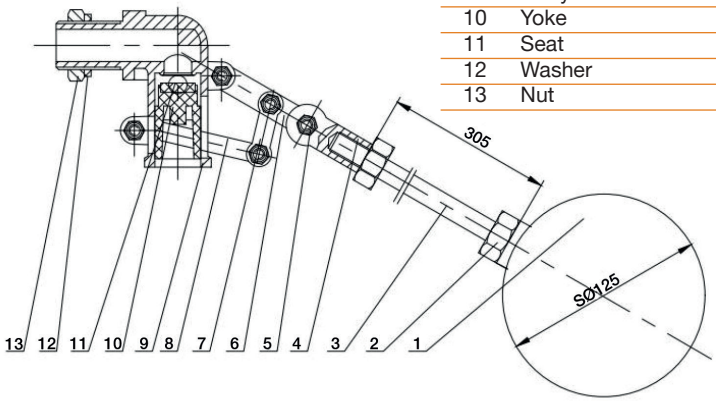
N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Ball Valve	Stainless Steel 304
18	Pressure Gauge	Stainless Steel 304 (Glycerin Filled)
19	Solenoid Valve	Brass
20	Ball Valve	Stainless Steel 304
21	Float Control Valve	Stainless Steel 304

V2. Dimensions in mm

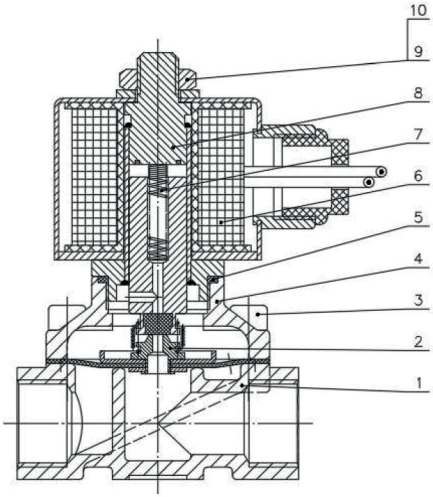
ART 6100 PN16
Modulating with Solenoid

Pilot Valve Detail - ART 6150

N.	Part Name	Materials
1	Float Ball	Stainless Steel 304
2	Nut	Stainless Steel 304
3	Rod	Stainless Steel 304
4	Level Holder	Stainless Steel 304
5	Screw / Nut	Stainless Steel 304
6	Arm	Stainless Steel 304
7	Level	Stainless Steel 304
8	Seat Holder	Stainless Steel 304
9	Body	Stainless Steel 304
10	Yoke	Stainless Steel 304
11	Seat	NBR
12	Washer	NBR
13	Nut	Stainless Steel 304



Solenoid Pilot Valve - ART 6180 NC / ART 6180 NO

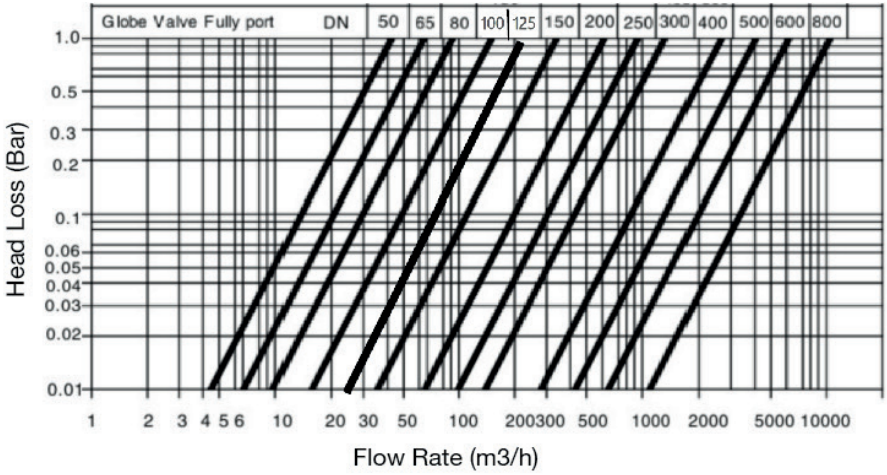


N.	Part Name	Materials
1	Body	Brass
2	Diaphragm Kits	NBR / Stainless Steel 304
3	Bolt	Stainless Steel 304
4	Adaptor	Stainless Steel 304
5	O-Ring	NBR
6	Core	Brass / Nylon
7	Spring	Stainless Steel 304
8	2W Pilot	Brass / NBR
9	Nut	Brass
10	Washer	Brass

V2. Dimensions in mm

ART 6100 PN16
Modulating with Solenoid

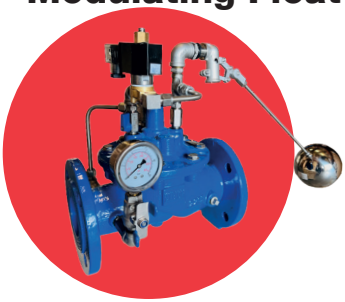
Flow curve of the main valve at fully open status



V2. Dimensions in mm

ART 6100 ANSI Modulating with Solenoid

Modulating Float Control Valve with Solenoid Valve

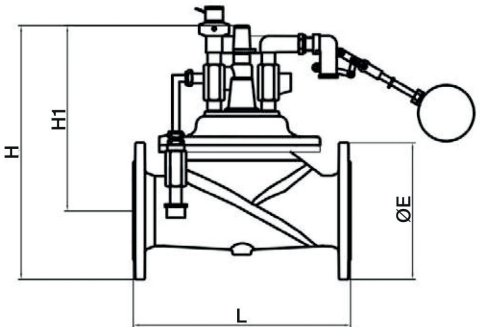


Features

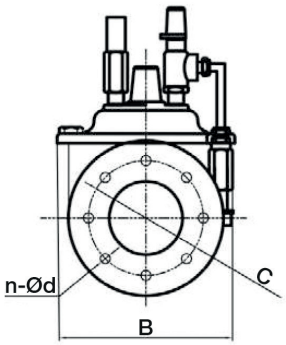
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing, valves, float pilot and brass pilot solenoid valve
- Copper float option
- Normally closed and normally open option

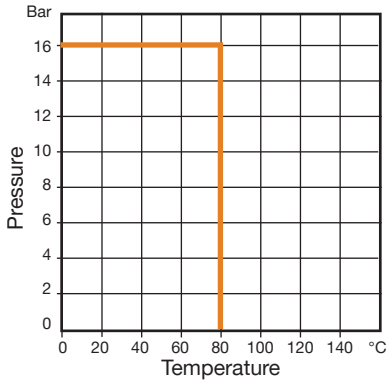
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



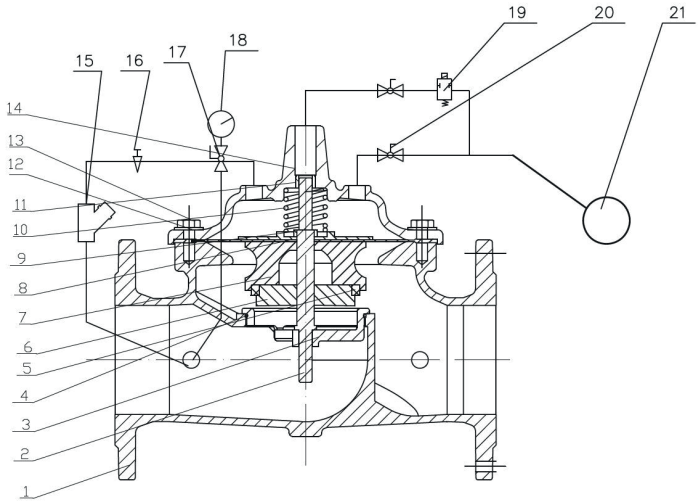
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	13	17	23	30	65	69	132	315	420





V2. Dimensions in mm

ART 6100 ANSI
Modulating with Solenoid

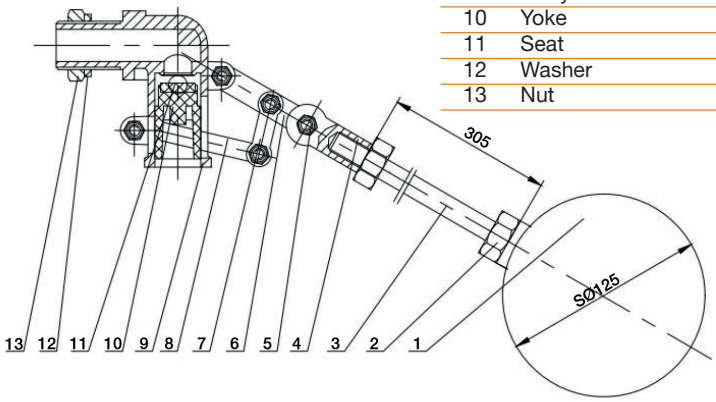


N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Ball Valve	Stainless Steel 304
18	Pressure Gauge	Stainless Steel 304 (Glycerin Filled)
19	Solenoid Valve	Brass
20	Ball Valve	Stainless Steel 304
21	Float Control Valve	Stainless Steel 304

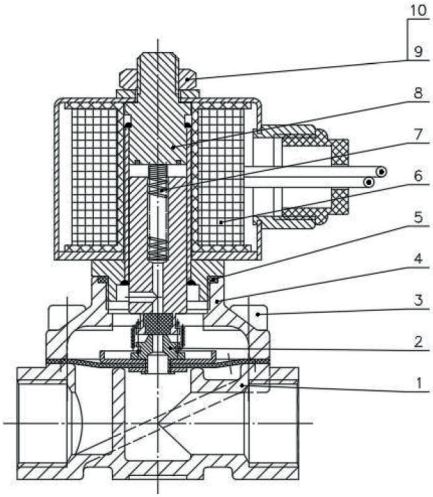
ART 6100 ANSI
Modulating with Solenoid

Pilot Valve Detail - ART 6150

N.	Part Name	Materials
1	Float Ball	Stainless Steel 304
2	Nut	Stainless Steel 304
3	Rod	Stainless Steel 304
4	Level Holder	Stainless Steel 304
5	Screw / Nut	Stainless Steel 304
6	Arm	Stainless Steel 304
7	Level	Stainless Steel 304
8	Seat Holder	Stainless Steel 304
9	Body	Stainless Steel 304
10	Yoke	Stainless Steel 304
11	Seat	NBR
12	Washer	NBR
13	Nut	Stainless Steel 304



Solenoid Pilot Valve - ART 6180 NC / ART 6180 NO

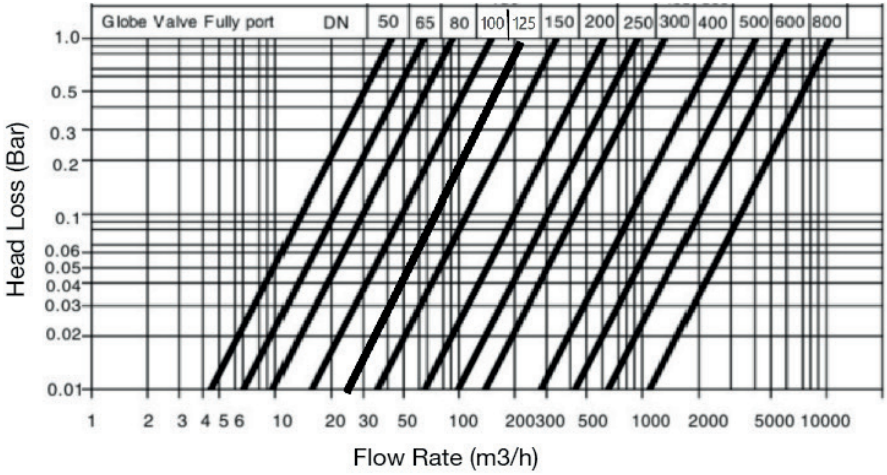


N.	Part Name	Materials
1	Body	Brass
2	Diaphragm Kits	NBR / Stainless Steel 304
3	Bolt	Stainless Steel 304
4	Adaptor	Stainless Steel 304
5	O-Ring	NBR
6	Core	Brass / Nylon
7	Spring	Stainless Steel 304
8	2W Pilot	Brass / NBR
9	Nut	Brass
10	Washer	Brass

V2. Dimensions in mm

ART 6100 ANSI
Modulating with Solenoid

Flow curve of the main valve at fully open status



V2. Dimensions in mm

ART 6100 PN16
ON/OFF with Solenoid

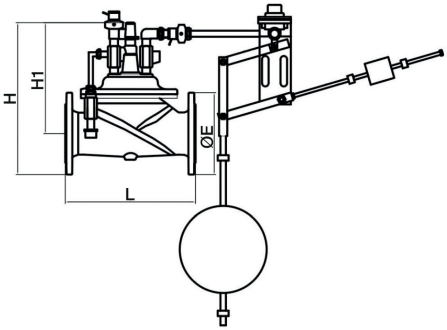
Modulating Float Control Valve with Solenoid Valve

Features

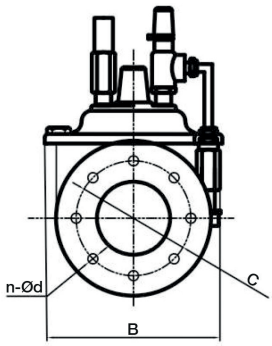
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Flange conforms to BS EN 1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing, valves, float pilot and brass pilot solenoid valve
- Copper float option
- Normally closed and normally open option

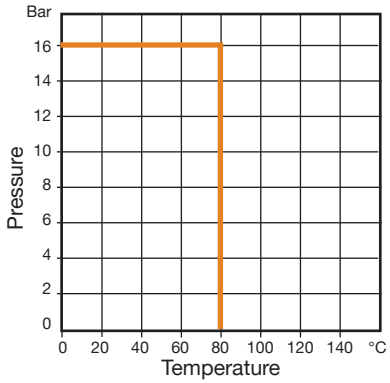
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



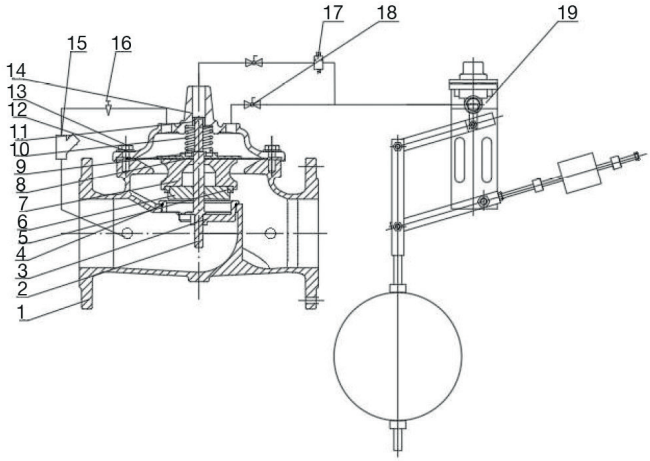
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	15	19	25	32	67	71	135	317	422





V1. Dimensions in mm

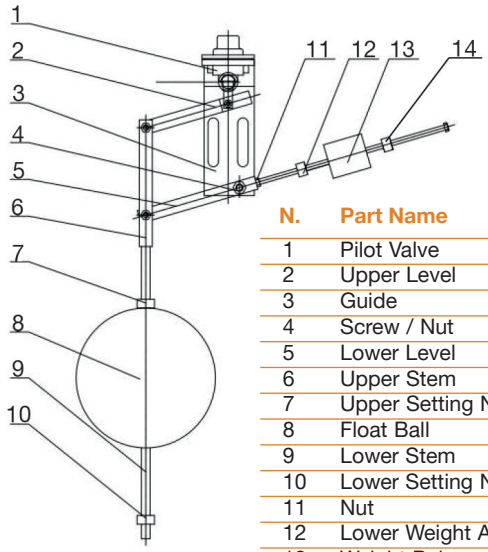
ART 6100 PN16
ON/OFF with Solenoid



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Solenoid Valve	Brass
18	Ball Valve	Stainless Steel 304
19	ON-OFF Float Control Valve	Stainless Steel 304

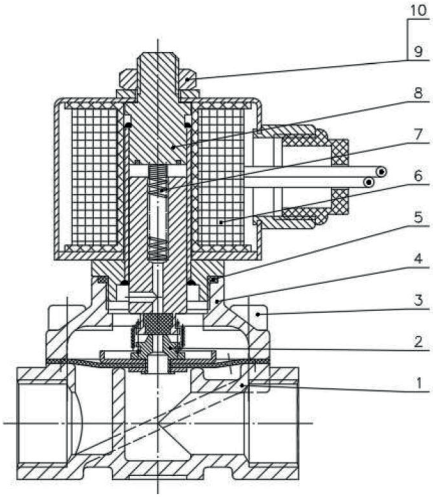
ART 6100 PN16
ON/OFF with Solenoid

Pilot Valve Detail - ART 6175



N.	Part Name	Materials
1	Pilot Valve	Stainless Steel 304 + NBR
2	Upper Level	Stainless Steel 304
3	Guide	Stainless Steel 304
4	Screw / Nut	Stainless Steel 304
5	Lower Level	Stainless Steel 304
6	Upper Stem	Stainless Steel 304
7	Upper Setting Nut	Stainless Steel 304
8	Float Ball	Stainless Steel 304
9	Lower Stem	Stainless Steel 304
10	Lower Setting Nut	Stainless Steel 304
11	Nut	Stainless Steel 304
12	Lower Weight Adjustable Nut	Stainless Steel 304
13	Weight Balance Load	Stainless Steel 304
14	Upper Weight Adjustable Nut	Stainless Steel 304

Solenoid Pilot Valve - ART 6180 NC / ART 6180 NO

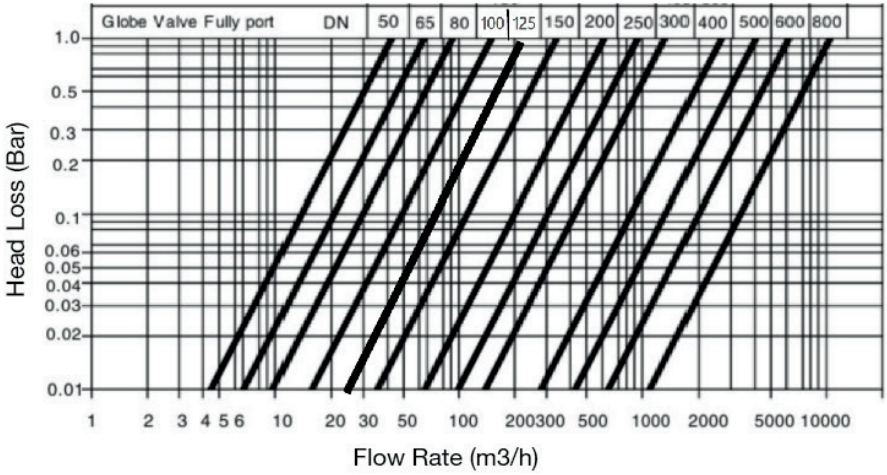


N.	Part Name	Materials
1	Body	Brass
2	Diaphragm Kits	NBR / Stainless Steel 304
3	Bolt	Stainless Steel 304
4	Adaptor	Stainless Steel 304
5	O-Ring	NBR
6	Core	Brass / Nylon
7	Spring	Stainless Steel 304
8	2W Pilot	Brass / NBR
9	Nut	Brass
10	Washer	Brass

V1. Dimensions in mm

ART 6100 PN16
ON/OFF with Solenoid

Flow curve of the main valve at fully open status



V1. Dimensions in mm

ART 6100 ANSI ON/OFF with Solenoid

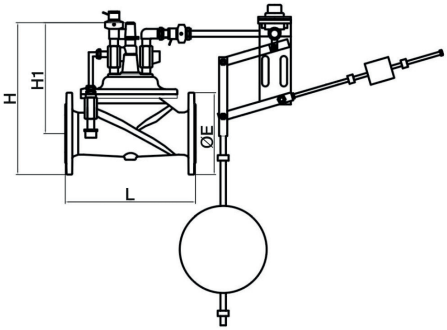
Modulating Float Control Valve with Solenoid Valve

Features

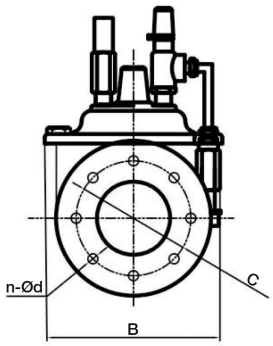
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing, valves, float pilot and brass pilot solenoid valve
- Copper float option
- Normally closed and normally open option

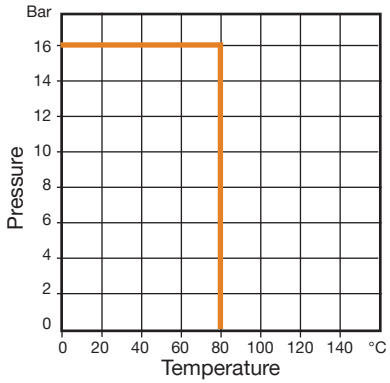
Technical data

Max pressure: 16 Bar
Minimum differential pressure: 5PSI (0.035MPa)
Working temp: 0°C to +80°C



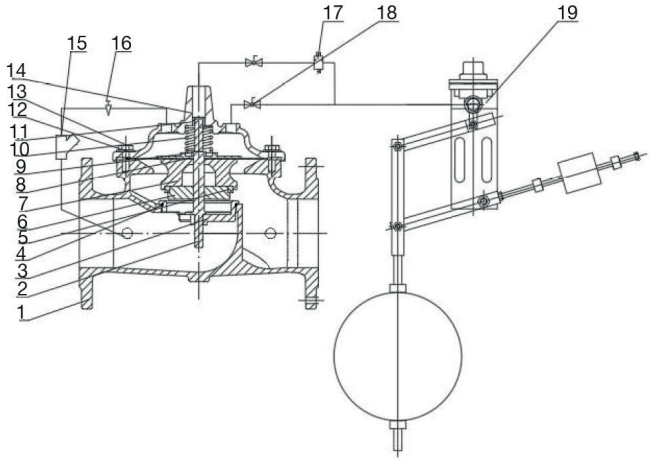
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	164	194	218	252	286	348	476	574	662
H	335	355	370	390	420	455	510	575	630
H1	242	252	270	280	295	313	340	372	400
Kgs	15	19	25	32	67	71	135	317	422





V1. Dimensions in mm

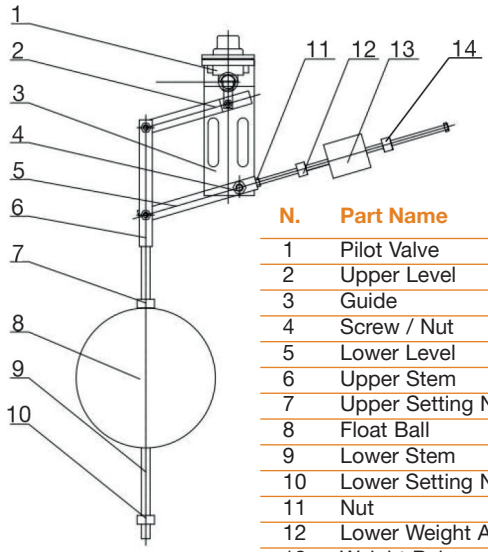
ART 6100 ANSI
ON/OFF with Solenoid



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Solenoid Valve	Brass
18	Ball Valve	Stainless Steel 304
19	ON-OFF Float Control Valve	Stainless Steel 304

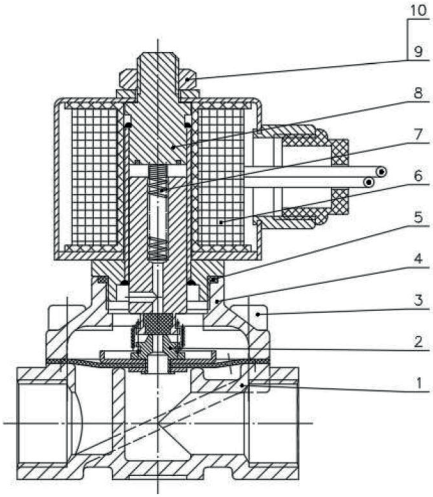
ART 6100 ANSI
ON/OFF with Solenoid

Pilot Valve Detail - ART 6175



N.	Part Name	Materials
1	Pilot Valve	Stainless Steel 304 + NBR
2	Upper Level	Stainless Steel 304
3	Guide	Stainless Steel 304
4	Screw / Nut	Stainless Steel 304
5	Lower Level	Stainless Steel 304
6	Upper Stem	Stainless Steel 304
7	Upper Setting Nut	Stainless Steel 304
8	Float Ball	Stainless Steel 304
9	Lower Stem	Stainless Steel 304
10	Lower Setting Nut	Stainless Steel 304
11	Nut	Stainless Steel 304
12	Lower Weight Adjustable Nut	Stainless Steel 304
13	Weight Balance Load	Stainless Steel 304
14	Upper Weight Adjustable Nut	Stainless Steel 304

Solenoid Pilot Valve - ART 6180 NC / ART 6180 NO

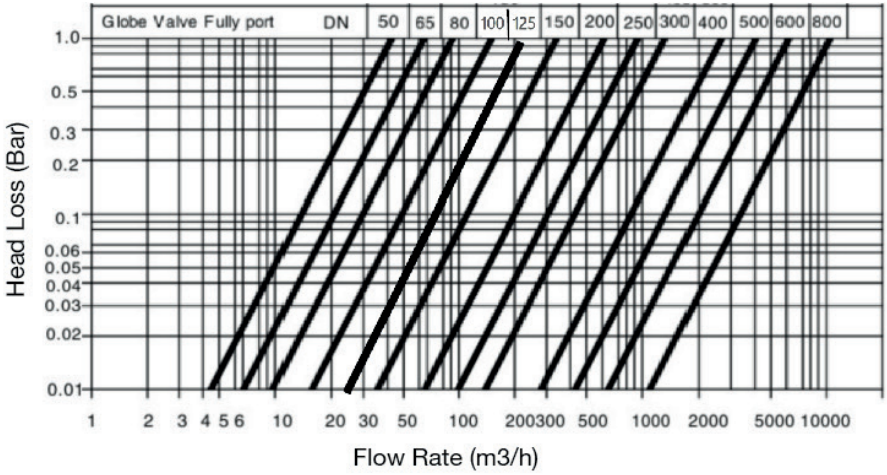


N.	Part Name	Materials
1	Body	Brass
2	Diaphragm Kits	NBR / Stainless Steel 304
3	Bolt	Stainless Steel 304
4	Adaptor	Stainless Steel 304
5	O-Ring	NBR
6	Core	Brass / Nylon
7	Spring	Stainless Steel 304
8	2W Pilot	Brass / NBR
9	Nut	Brass
10	Washer	Brass

V1. Dimensions in mm

ART 6100 ANSI
ON/OFF with Solenoid

Flow curve of the main valve at fully open status



V1. Dimensions in mm

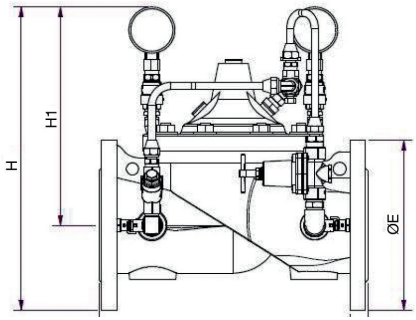
ART 6200 ANSI
ANSI Adjustable Pressure Reducing Valve

Features

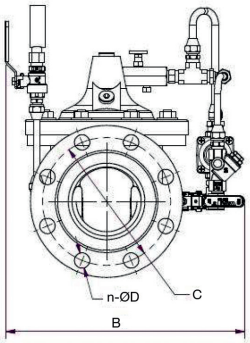
- Automatic Control Valve
- Suitable for potable water applications
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing and valves
- Fully WRAS Approved valve - Cert No. 2105035

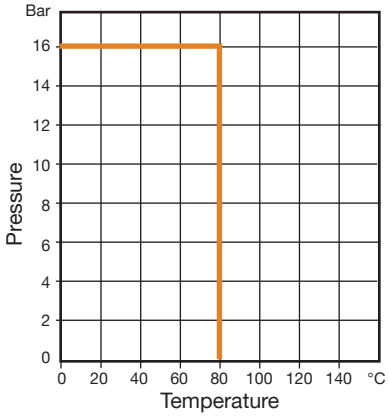
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



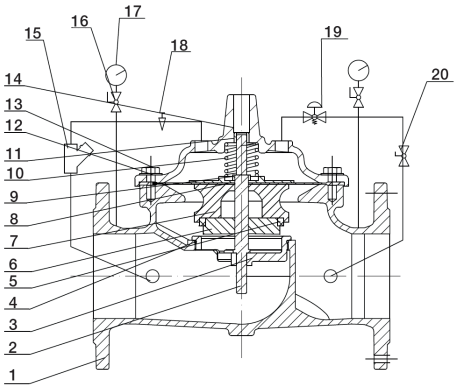
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	265	300	310	320	350	385	440	505	560
H	452	462	470	483	498	513	540	573	598
H1	369	370	370	373	373	376	376	378	396
Kgs	13	17	23	30	65	69	132	315	420





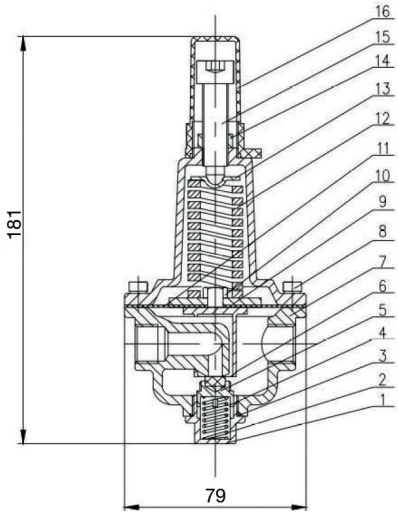
V1. Dimensions in mm

ART 6200 ANSI



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Ball Valve	Stainless Steel 304
17	Gauge	Stainless Steel 304
18	Needle Valve	Stainless Steel 304
19	Pilot Valve	Stainless Steel 304
20	Ball Valve	Stainless Steel 304

Pilot Valve Detail - ART 6250



N.	Part Name	Materials
1	Plug	Stainless Steel 304
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Seat	Stainless Steel 304
5	Disc	NBR
6	Yoke	Stainless Steel 304
7	Body	Stainless Steel 304
8	Screw	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Nut	Stainless Steel 304
11	Diaphragm	EPDM
12	Spring	Stainless Steel 304
13	Spring Holder	Stainless Steel 304
14	Locking Nut	Stainless Steel 304
15	Adjusting Screw	Stainless Steel 304
16	Cap	ABS

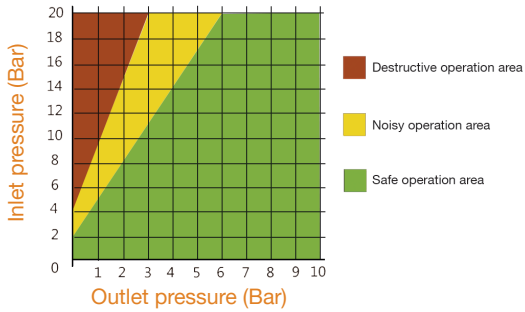
Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)
Factory set to 3.5 Bar (50 PSI)

Other Pilot Valves available
1.40 to 12.00 Bar (20 to 175 PSI)
2.10 to 20.00 Bar (30 to 300 PSI)

V1. Dimensions in mm

ART 6200 ANSI

Cavitation Chart

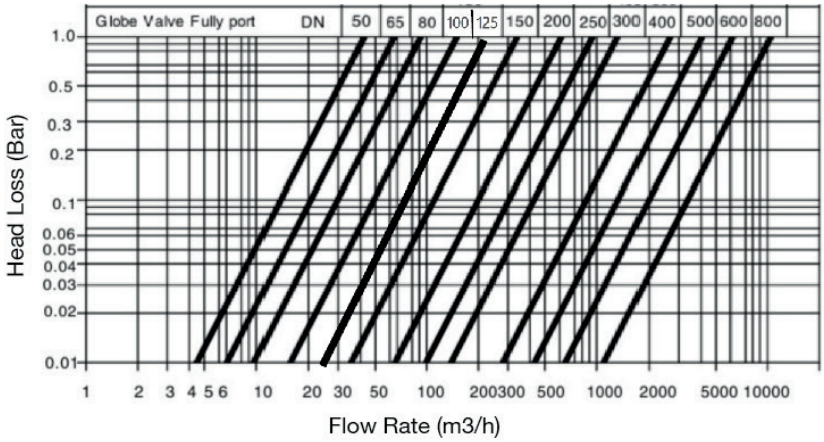


Flow Volume vs Velocity (water)

	Volume m3/h													
Size DN	**0.4 m/s**	**0.6 m/s**	**0.8 m/s**	**1.0 m/s**	**1.2 m/s**	**1.4 m/s**	**1.6 m/s**	**1.8 m/s**	**2.0 m/s**	**2.2 m/s**	**2.4 m/s**	**2.6 m/s**	**2.8 m/s**	**3.0 m/s**
50	2.8	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1	15.6	17.0	18.4	19.8	21.2
65	4.8	7.2	9.6	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.7	31.1	33.4	35.8
80	7.2	10.9	14.5	18.1	21.7	25.3	29.0	32.6	36.2	39.8	43.4	47.0	50.7	54.3
100	11.3	17.0	22.6	28.3	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5	79.2	84.8
125	17.7	26.5	35.3	44.2	53.0	61.9	70.7	79.5	88.4	97.2	106.0	114.9	123.7	132.5
150	25.4	38.2	50.9	63.6	76.3	89.1	101.8	114.5	127.2	140.0	152.7	165.4	178.1	190.9
200	45.2	67.9	90.5	113.1	135.7	158.3	181.0	203.6	226.2	248.8	271.4	294.1	316.7	339.3
250	70.7	106.0	141.4	176.7	212.1	247.4	282.7	318.1	353.4	388.8	424.1	459.5	494.8	530.1
300	101.8	152.7	203.6	254.5	305.4	356.3	407.1	458.0	508.9	559.8	610.7	661.6	712.5	763.4

Note; for good pressure control within the valves optimum flow rate, the pressure reducing valve should be sized on on a velocity of 1 to 2m/s.

Flow curve of the main valve at fully open status



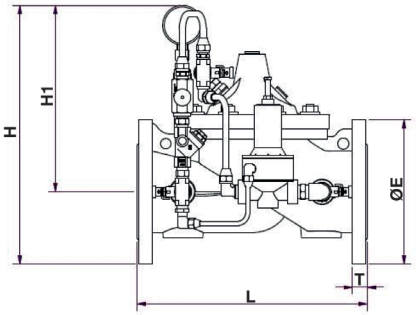
V1. Dimensions in mm

ART 6500 PN16

PN16 Adjustable Pressure Relief / Sustaining Valve

Features

- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves

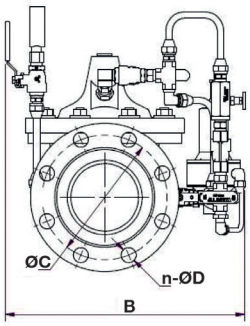


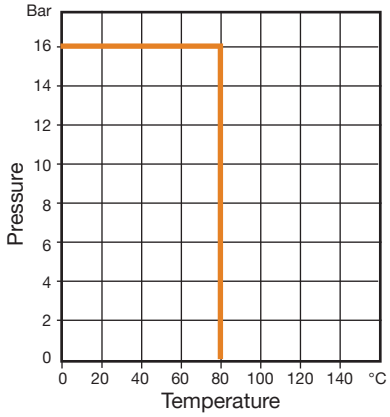
Technical data

Max pressure: 16 Bar

Working temp: 0°C to +80°C

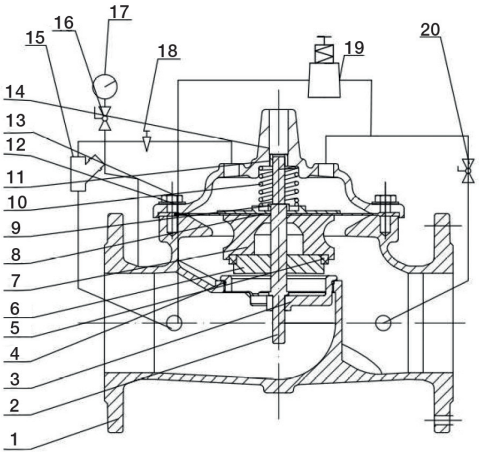
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	270	290	305	325	355	390	435	500	565
H	485	505	520	540	570	605	660	725	780
H1	402	412	420	430	445	463	491	523	651
Kgs	13	17	23	30	65	69	132	315	420





V1. Dimensions in mm

ART 6500 PN16

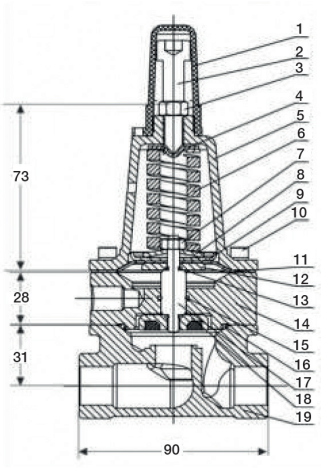


N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Ball Valve	Stainless Steel 304
17	Gauge	Stainless Steel 304
18	Needle Valve	Stainless Steel 304
19	Pilot Valve	Stainless Steel 304
20	Ball Valve	Stainless Steel 304

V1. Dimensions in mm

ART 6500 PN16

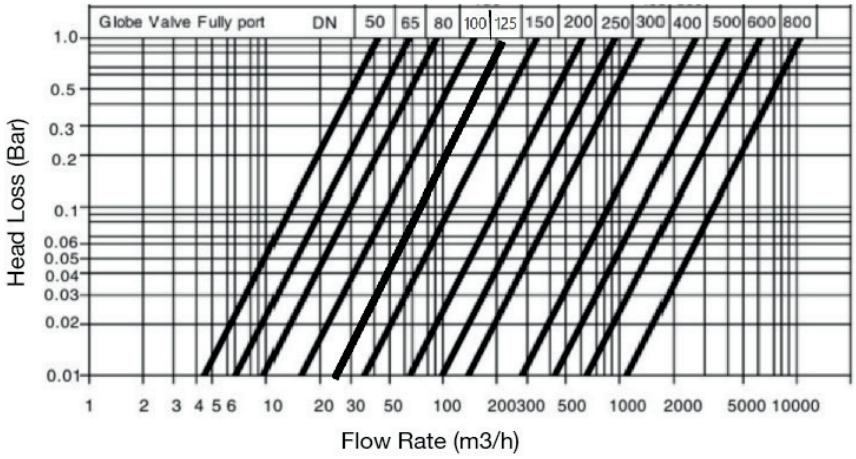
Pilot Valve Detail - ART 6550



N.	Part Name	Materials
1	Cap	ABS
2	Adjusting Screw	Stainless Steel 304
3	Locking Nut	Stainless Steel 304
4	Upper Spring Holder	Stainless Steel 304
5	Cover	Stainless Steel 304
6	Spring	Stainless Steel 304
7	Nut	Stainless Steel 304
8	Lower Spring Holder	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Screw	Stainless Steel 304
11	Diaphragm	EPDM
12	Disc Holder	Stainless Steel 304
13	O-Ring	NBR
14	Guide	Stainless Steel 304
15	O-Ring	NBR
16	O-Ring	NBR
17	Stem	Stainless Steel 304
18	Disc	Stainless Steel 304 + NBR
19	Body	Stainless Steel 304

Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)

Flow curve of the main valve at fully open status

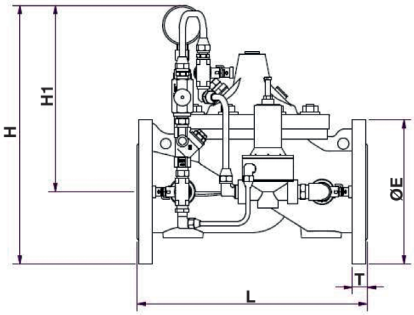


V1. Dimensions in mm

ART 6500 ANSI
ANSI Adjustable Pressure Relief / Sustaining Valve

Features

- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing and valves

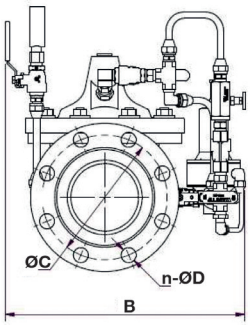


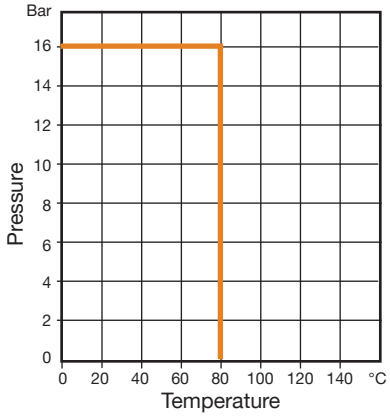
Technical data

Max pressure: 16 Bar

Working temp: 0°C to +80°C

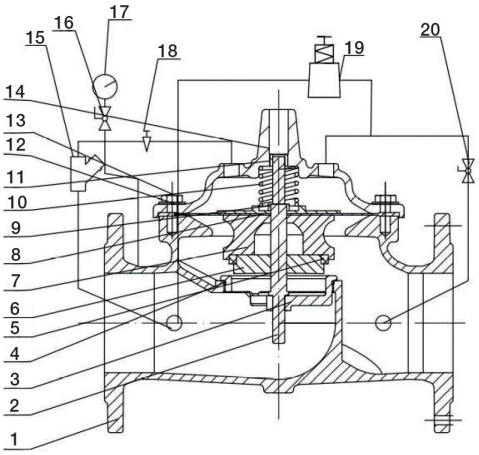
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	270	290	305	325	355	390	435	500	565
H	485	505	520	540	570	605	660	725	780
H1	402	412	420	430	445	463	491	523	651
Kgs	13	17	23	30	65	69	132	315	420





V1. Dimensions in mm

ART 6500 ANSI

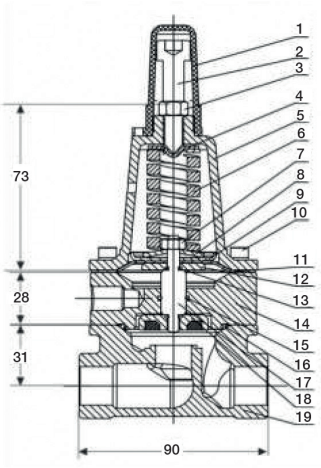


N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Ball Valve	Stainless Steel 304
17	Gauge	Stainless Steel 304
18	Needle Valve	Stainless Steel 304
19	Pilot Valve	Stainless Steel 304
20	Ball Valve	Stainless Steel 304

V1. Dimensions in mm

ART 6500 ANSI

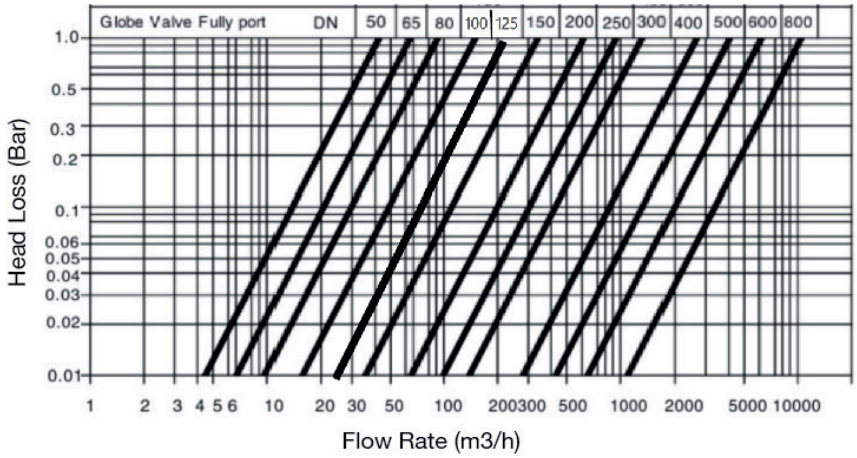
Pilot Valve Detail - ART 6550



N.	Part Name	Materials
1	Cap	ABS
2	Adjusting Screw	Stainless Steel 304
3	Locking Nut	Stainless Steel 304
4	Upper Spring Holder	Stainless Steel 304
5	Cover	Stainless Steel 304
6	Spring	Stainless Steel 304
7	Nut	Stainless Steel 304
8	Lower Spring Holder	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Screw	Stainless Steel 304
11	Diaphragm	EPDM
12	Disc Holder	Stainless Steel 304
13	O-Ring	NBR
14	Guide	Stainless Steel 304
15	O-Ring	NBR
16	O-Ring	NBR
17	Stem	Stainless Steel 304
18	Disc	Stainless Steel 304 + NBR
19	Body	Stainless Steel 304

Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)

Flow curve of the main valve at fully open status



V1. Dimensions in mm

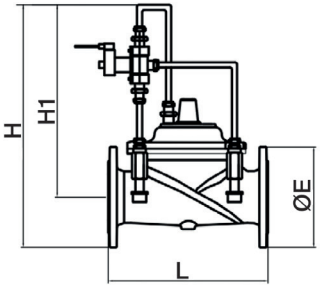
ART 6600 PN16
PN16 Solenoid On/Off Control Valve

Features

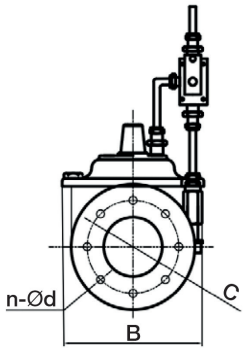
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves, brass pilot solenoid valve
- Normally open and normally closed options
- For the main valve to open, the minimum pressure should be greater than 0.8 bar

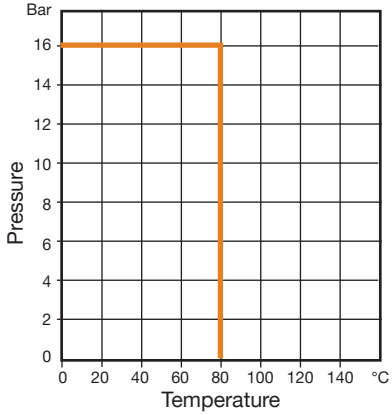
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



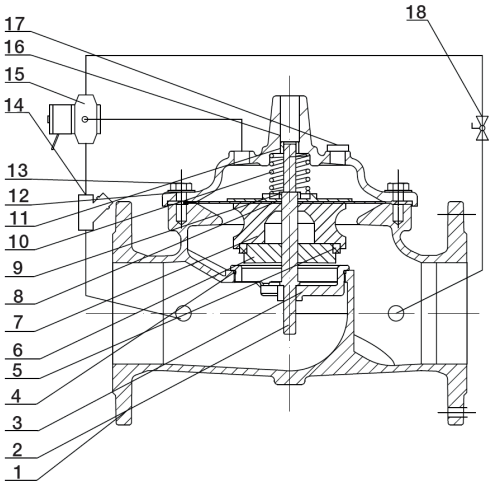
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	265	300	310	320	350	385	440	505	560
H	365	385	400	420	450	485	540	605	660
H1	282	293	300	310	325	342	370	402	430
Kgs	12.0	16.0	22.0	29.0	64.0	68.0	131.0	314.0	418.0





V2. Dimensions in mm

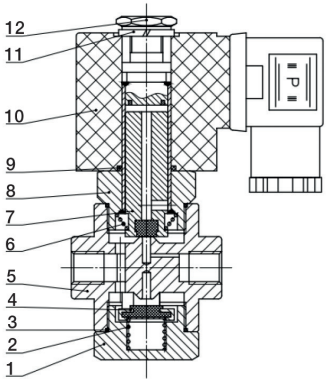
ART 6600 PN16



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Strainer	Stainless Steel 304
15	Solenoid Valve	Brass
16	Cover	Stainless Steel 304
17	Plug	Stainless Steel 304
18	Ball Valve	Stainless Steel 304

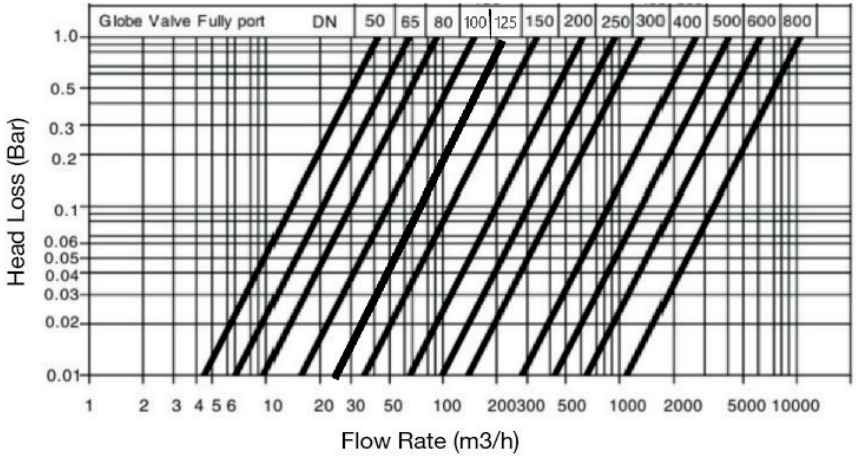
ART 6600 PN16

Pilot Valve Detail - ART 6650 NC / ART 6675 NO



N.	Part Name	Materials
1	Nut	HPb59-1
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Part Sub-assembling	ABS
5	Body	HPb59-1
6	Spring	Stainless Steel 304
7	Part Sub-assembling	ABS + NBR
8	Part Sub-assembling	ABS + NBR
9	O-Ring	NBR
10	Coil	Copper + PVF
11	Gasket	65Mn
12	Nut	A3

Flow curve of the main valve at fully open status



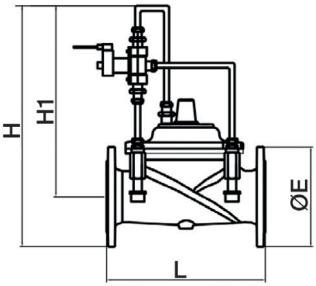
ART 6600 ANSI
ANSI Solenoid On/Off Control Valve

Features

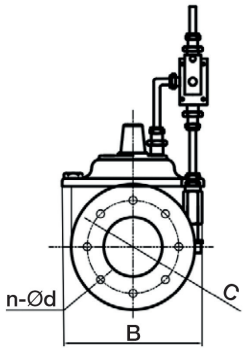
- Automatic Control Valve
- Suitable for potable water applications
- WRAS Approved epoxy coated body
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 300
- Stainless Steel pilot tubing and valves, brass pilot solenoid valve
- Normally open and normally closed options
- For the main valve to open, the minimum pressure should be greater than 0.8 bar

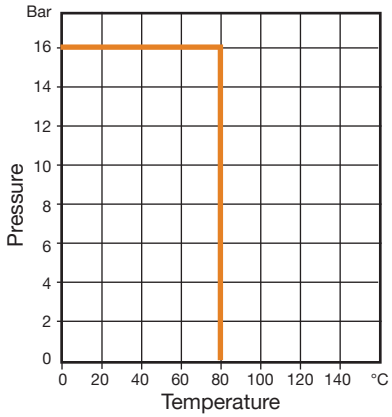
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



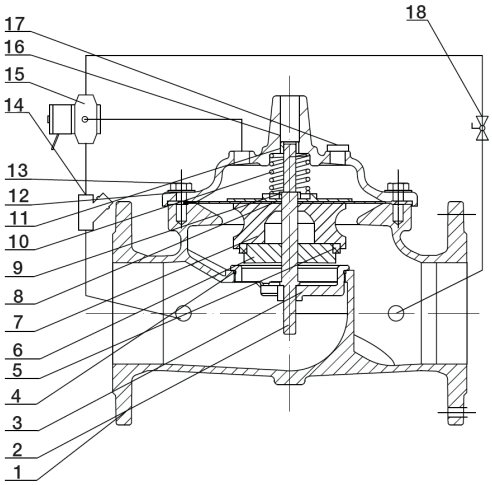
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	265	300	310	320	350	385	440	505	560
H	365	385	400	420	450	485	540	605	660
H1	282	293	300	310	325	342	370	402	430
Kgs	12.0	16.0	22.0	29.0	64.0	68.0	131.0	314.0	418.0





V2. Dimensions in mm

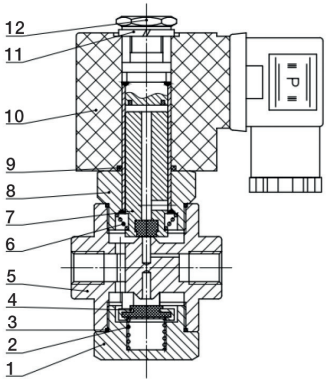
ART 6600 ANSI



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Strainer	Stainless Steel 304
15	Solenoid Valve	Brass
16	Cover	Stainless Steel 304
17	Plug	Stainless Steel 304
18	Ball Valve	Stainless Steel 304

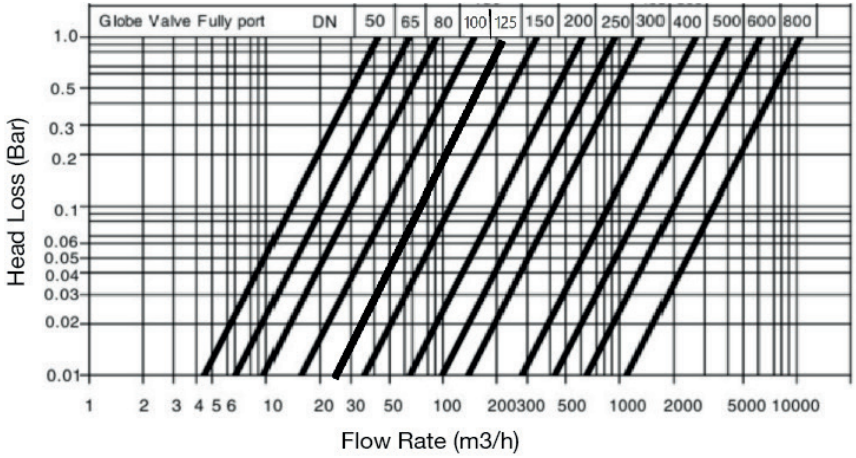
ART 6600 ANSI

Pilot Valve Detail - ART 6650 NC / ART 6675 NO



N.	Part Name	Materials
1	Nut	HPb59-1
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Part Sub-assembling	ABS
5	Body	HPb59-1
6	Spring	Stainless Steel 304
7	Part Sub-assembling	ABS + NBR
8	Part Sub-assembling	ABS + NBR
9	O-Ring	NBR
10	Coil	Copper + PVF
11	Gasket	65Mn
12	Nut	A3

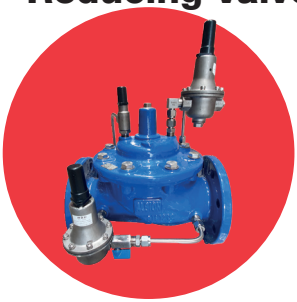
Flow curve of the main valve at fully open status



V2. Dimensions in mm

ART 6800 PN16

PN16 Adjustable Pressure Reducing Valve with Low Flow Bypass

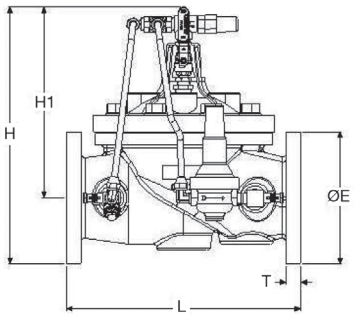


Features

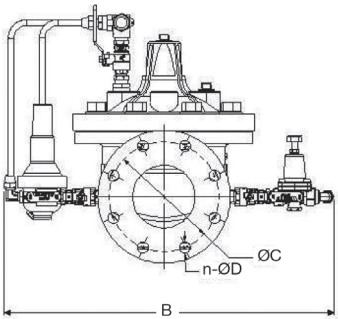
- Automatic Control Valve
- Suitable for potable water applications
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves
- Fully WRAS Approved valve - Cert No. 2105035

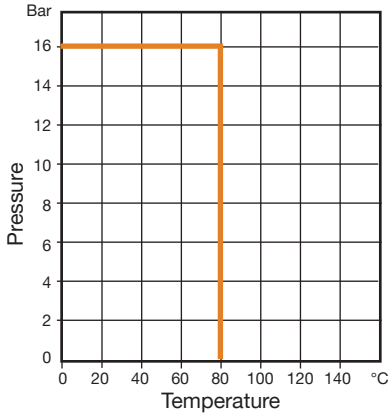
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



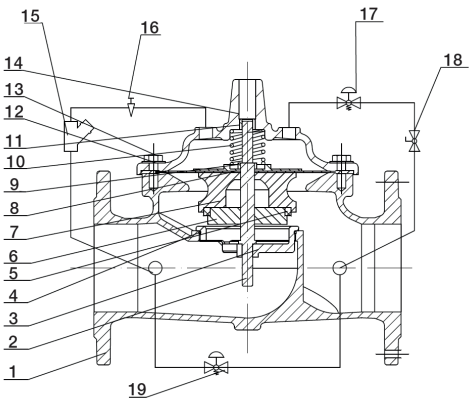
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	365	375	383	393	405	422	448	478	605
H	482	505	520	540	570	605	660	725	780
H1	350	413	420	430	445	463	490	523	550
Kgs	13	17	23	30	65	69	132	315	420





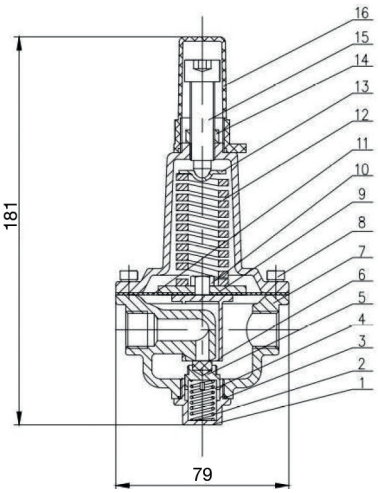
V1. Dimensions in mm

ART 6800 PN16



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Pilot Valve	Stainless Steel 304
18	Ball Valve	Stainless Steel 304
19	Low Bypass Pilot Valve	Stainless Steel 304

Pilot Valve Detail - ART 6250



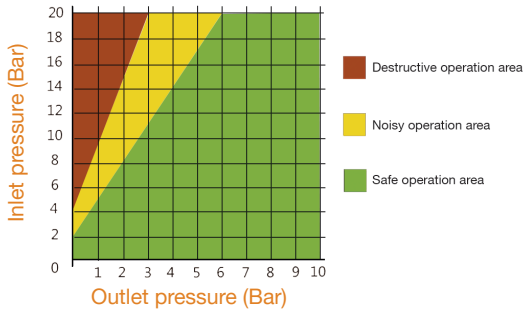
N.	Part Name	Materials
1	Plug	Stainless Steel 304
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Seat	Stainless Steel 304
5	Disc	NBR
6	Yoke	Stainless Steel 304
7	Body	Stainless Steel 304
8	Screw	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Nut	Stainless Steel 304
11	Diaphragm	EPDM
12	Spring	Stainless Steel 304
13	Spring Holder	Stainless Steel 304
14	Locking Nut	Stainless Steel 304
15	Adjusting Screw	Stainless Steel 304
16	Cap	ABS

Fitted with standard Pilot Valve
2.10 to 20.00 Bar (30 to 300 PSI)
Factory set to 5.50 Bar (80 PSI)

Low Flow Bypass Range
1.37 to 12.00 Bar (20 to 175 PSI)

ART 6800 PN16

Cavitation Chart

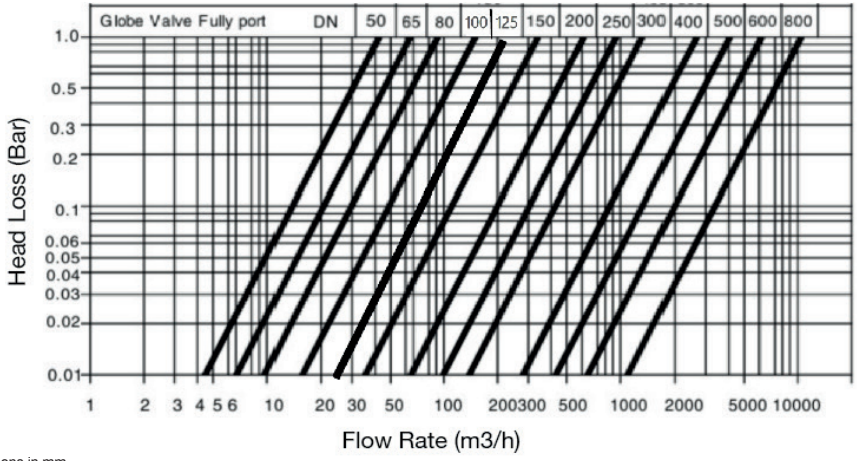


Flow Volume vs Velocity (water)

	Volume m3/h													
Size DN	**0.4 m/s**	**0.6 m/s**	**0.8 m/s**	**1.0 m/s**	**1.2 m/s**	**1.4 m/s**	**1.6 m/s**	**1.8 m/s**	**2.0 m/s**	**2.2 m/s**	**2.4 m/s**	**2.6 m/s**	**2.8 m/s**	**3.0 m/s**
50	2.8	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1	15.6	17.0	18.4	19.8	21.2
65	4.8	7.2	9.6	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.7	31.1	33.4	35.8
80	7.2	10.9	14.5	18.1	21.7	25.3	29.0	32.6	36.2	39.8	43.4	47.0	50.7	54.3
100	11.3	17.0	22.6	28.3	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5	79.2	84.8
125	17.7	26.5	35.3	44.2	53.0	61.9	70.7	79.5	88.4	97.2	106.0	114.9	123.7	132.5
150	25.4	38.2	50.9	63.6	76.3	89.1	101.8	114.5	127.2	140.0	152.7	165.4	178.1	190.9
200	45.2	67.9	90.5	113.1	135.7	158.3	181.0	203.6	226.2	248.8	271.4	294.1	316.7	339.3
250	70.7	106.0	141.4	176.7	212.1	247.4	282.7	318.1	353.4	388.8	424.1	459.5	494.8	530.1
300	101.8	152.7	203.6	254.5	305.4	356.3	407.1	458.0	508.9	559.8	610.7	661.6	712.5	763.4

Note; for good pressure control within the valves optimum flow rate, the pressure reducing valve should be sized on on a velocity of 1 to 2m/s.

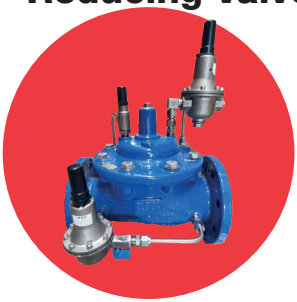
Flow curve of the main valve at fully open status



V1. Dimensions in mm

ART 6800 ANSI

ANSI Adjustable Pressure Reducing Valve with Low Flow Bypass

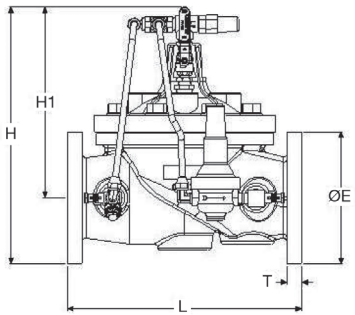


Features

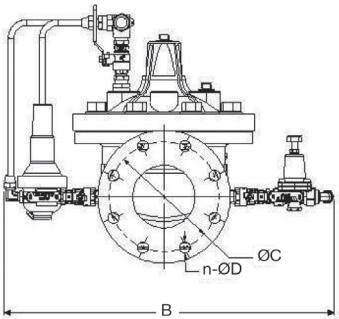
- Automatic Control Valve
- Suitable for potable water applications
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to ANSI 150 (B16.42)
- Available flanged ANSI Class 150
- Stainless Steel pilot tubing and valves
- Fully WRAS Approved valve - Cert No. 2105035

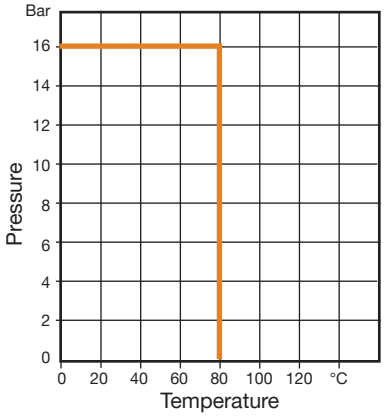
Technical data

Max pressure: 16 Bar
Working temp: 0°C to +80°C



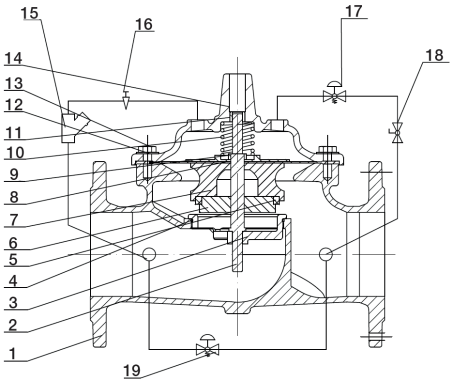
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	152.4	177.8	190.5	228.6	254.0	279.4	342.9	406.4	482.6
C	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362.0	431.8
n-Ød	4-19	4-19	4-19	8-19	8-22.4	8-22.4	8-22.4	12-25.4	12-25.4
B	365	375	383	393	405	422	448	478	605
H	482	505	520	540	570	605	660	725	780
H1	350	413	420	430	445	463	490	523	550
Kgs	13	17	23	30	65	69	132	315	420





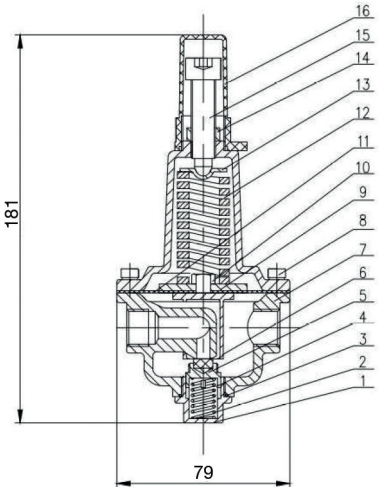
V1. Dimensions in mm

ART 6800 ANSI



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Pilot Valve	Stainless Steel 304
18	Ball Valve	Stainless Steel 304
19	Low Bypass Pilot Valve	Stainless Steel 304

Pilot Valve Detail - ART 6250



N.	Part Name	Materials
1	Plug	Stainless Steel 304
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Seat	Stainless Steel 304
5	Disc	NBR
6	Yoke	Stainless Steel 304
7	Body	Stainless Steel 304
8	Screw	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Nut	Stainless Steel 304
11	Diaphragm	EPDM
12	Spring	Stainless Steel 304
13	Spring Holder	Stainless Steel 304
14	Locking Nut	Stainless Steel 304
15	Adjusting Screw	Stainless Steel 304
16	Cap	ABS

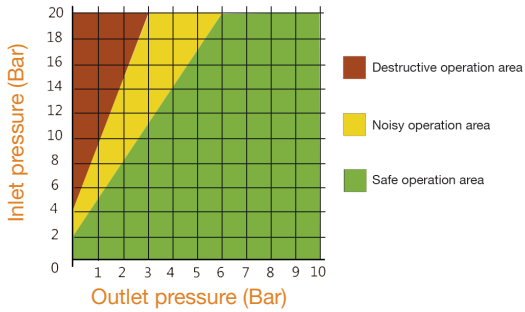
Fitted with standard Pilot Valve
2.10 to 20.00 Bar (30 to 300 PSI)
Factory set to 5.50 Bar (80 PSI)

Low Flow Bypass Range
1.37 to 12.00 Bar (20 to 175 PSI)

V1. Dimensions in mm

ART 6800 ANSI

Cavitation Chart

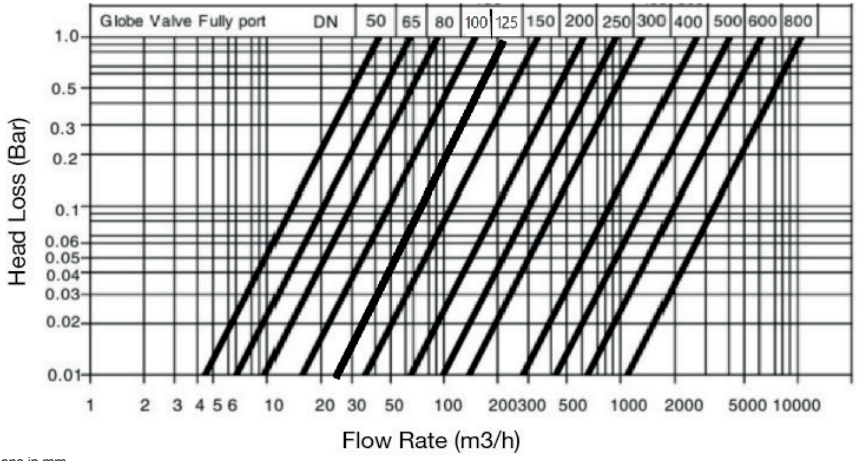


Flow Volume vs Velocity (water)

	Volume m3/h													
Size DN	**0.4 m/s**	**0.6 m/s**	**0.8 m/s**	**1.0 m/s**	**1.2 m/s**	**1.4 m/s**	**1.6 m/s**	**1.8 m/s**	**2.0 m/s**	**2.2 m/s**	**2.4 m/s**	**2.6 m/s**	**2.8 m/s**	**3.0 m/s**
50	2.8	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1	15.6	17.0	18.4	19.8	21.2
65	4.8	7.2	9.6	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.7	31.1	33.4	35.8
80	7.2	10.9	14.5	18.1	21.7	25.3	29.0	32.6	36.2	39.8	43.4	47.0	50.7	54.3
100	11.3	17.0	22.6	28.3	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5	79.2	84.8
125	17.7	26.5	35.3	44.2	53.0	61.9	70.7	79.5	88.4	97.2	106.0	114.9	123.7	132.5
150	25.4	38.2	50.9	63.6	76.3	89.1	101.8	114.5	127.2	140.0	152.7	165.4	178.1	190.9
200	45.2	67.9	90.5	113.1	135.7	158.3	181.0	203.6	226.2	248.8	271.4	294.1	316.7	339.3
250	70.7	106.0	141.4	176.7	212.1	247.4	282.7	318.1	353.4	388.8	424.1	459.5	494.8	530.1
300	101.8	152.7	203.6	254.5	305.4	356.3	407.1	458.0	508.9	559.8	610.7	661.6	712.5	763.4

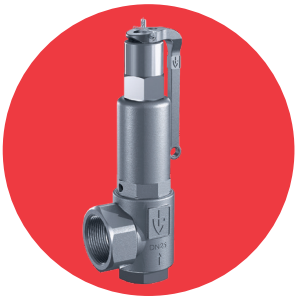
Note; for good pressure control within the valves optimum flow rate, the pressure reducing valve should be sized on on a velocity of 1 to 2m/s.

Flow curve of the main valve at fully open status



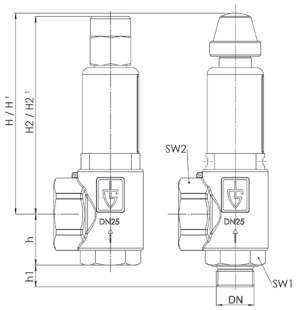
V1. Dimensions in mm

ART 451
Stainless Steel Safety Valve



Features

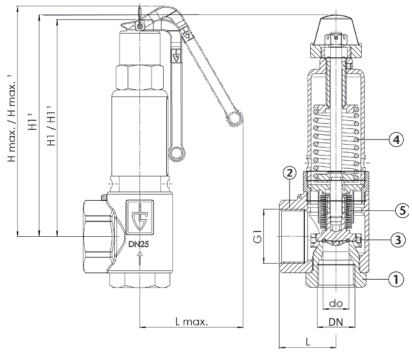
- Screwed BSP Parallel (ISO 228/1)
- Suitable for gases, liquids and steam
- Set pressure: 0.5 to 70 bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, LR EMEA, BV, ABS, DNV, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request



Technical data
Max pressure: 70 Bar
Working temp: PTFE Seal
-60°C to 225°C

Safety valves are set and sealed at the factory.

See overleaf for discharge capacity.



N.	Part Name	Materials
1	Inlet Body	Stainless Steel 1.4404
2	Outlet Body	Stainless Steel 1.4408
3	Internal Parts	Stainless Steel 1.4404
4	Spring	Stainless Steel 1.4310
5	Bellows (optional)	Stainless Steel 1.4571

DN	½"		¾"		1"		1¼"		
G1	1/2" (15)	1" (25)	1" (25)	3/4" (20)	1 1/4" (32)	1 1/2" (32)	2" (50)	1 1/2" (40)	2" (50)
L	34	40	40	42	43	50	61	61	61
Lmax	65	65	65	91	91	92	92	92	92
H / H[1]	79 / 79	77 / 77	131 / 131	137 / 137	138 / 152	178 / 196	241 / 263	241 / 263	241 / 263
H1 / H1[1]	93 / 93	91 / 91	149 / 149	154 / 154	158 / 174	192 / 210	264 / 286	264 / 286	264 / 286
H2 / H2[1]	79 / 79	77 / 77	131 / 131	138 / 138	139 / 153	175 / 193	241 / 263	241 / 263	241 / 263
Hmax / Hmax[1]	105 / 105	103 / 103	164 / 164	169 / 169	173 / 184	207 / 225	277 / 299	277 / 299	277/299
h	28	30	30	31	39	45	55	69	74
h1	15	15	15	16	16	18	20	23	25
SW1	30	30	30	36	36	46	55	55	70
SW2	-	40	40	32	50	58	70	70	70
do	15,8	15,8	15,8	15,8	18	23	30,3	30,3	30,3
kg	0,4	0,4	0,8	1,0	1,0	1,8	4,0	4,0	4,0
bar	0.5[2]-25	0.5[2]-25	0.5-70	0.5[2]-70	0.5-70	0.5-70	0.5-70	0.5-70	0.5-70

V2. Dimensions in mm

ART 451

Discharge Capacities

Blowing off rates at 10% above set pressure

DN	1/2"				3/4"					
			Bellows without	Bellows with	do = 15,8			do = 18		
Bar	Air Nm³/h	Steam kg/h	Water m³/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h
0,5	56**	42**	2,3**	1,9**	64**	48**	2,9**	127	96	5,4
1	87	69	3,1	2,5	120	96	4,0	189	151	7,3
1,5	113	90	3,8	3,1	166	132	4,9	252	200	9,0
2	141	111	4,4	3,6	205	161	5,6	316	249	10,4
2,5	165	129	5,0	4,0	250	196	6,3	383	300	11,6
3	189	148	5,4	4,4	298	233	6,9	447	349	12,7
3,5	214	166	5,9	4,7	336	262	7,4	504	392	13,7
4	238	184	6,3	5,0	375	291	8,0	561	435	14,7
4,5	262	203	6,7	5,3	413	319	8,4	618	478	15,6
5	286	221	7,0	5,6	451	348	8,9	675	521	16,4
5,5	310	239	7,4	5,9	489	377	9,3	732	564	17,2
6	335	257	7,7	6,2	527	406	9,7	790	608	18,0
6,5	359	275	8,0	6,4	565	434	10,1	847	650	18,7
7	383	293	8,3	6,6	604	462	10,5	904	692	19,4
7,5	407	311	8,6	6,9	642	491	10,9	961	735	20,1
8	431	329	8,9	7,1	680	519	11,3	1018	777	20,8
8,5	456	347	9,2	7,3	718	547	11,6	1075	820	21,4
9	480	365	9,4	7,5	756	576	11,9	1132	862	22,0
9,5	504	383	9,7	7,7	794	604	12,3	1190	905	22,6
10	528	401	9,9	7,9	833	632	12,6	1247	947	23,2
11	577	437	10,4	8,3	909	688	13,2	1361	1031	24,3
12	625	472	10,9	8,7	985	744	13,8	1475	1115	25,4
13	674	508	11,3	9,1	1061	801	14,3	1590	1199	26,5
14	722	544	11,8	9,4	1138	857	14,9	1704	1284	27,5
15	770	580	12,2	9,7	1214	914	15,4	1818	1368	28,4
16	819	616	12,6	10,1	1290	970	15,9	1932	1453	29,4
17	867	650	13,0	10,4	1367	1025	16,4	2047	1535	30,3
18	916	686	13,3	10,7	1443	1081	16,9	2161	1619	31,1
19	964	721	13,7	11,0	1519	1137	17,3	2275	1703	32,0
20	1013	757	14,0	11,2	1596	1193	17,8	2390	1787	32,8
21	1061	793	14,4	11,5	1672	1250	18,2	2504	1872	33,6
22	1109	829	14,7	11,8	1748	1306	18,7	2618	1956	34,4
23	1158	865	15,1	12,1	1825	1363	19,1	2732	2040	35,2
24	1206	900	15,4	12,3	1901	1419	19,5	2847	2125	35,9
25	1255	936	15,7	12,6	1977	1475	19,9	2961	2209	36,7
26	1303	972*	16,0	12,8	2054	1532	20,3	3075	2294*	37,4
27	1352	1008*	16,3	13,1	2130	1589	20,7	3190	2379*	38,1
28	1400	1044*	16,6	13,3	2206	1646	21,1	3304	2465*	38,8
29	1449	1081*	16,9	13,5	2283	1703	21,4	3418	2550*	39,5
30	1497	1114*	17,2	13,8	2359	1755	21,8	3532	2628*	40,2
32	1594	1186*	17,8	14,2	2511	1869	22,5	3761	2799*	41,5
34	1691	1258*	18,3	14,7	2664	1982	23,2	3990	2969*	42,8
36	1788	1330*	18,8	15,1	2817	2096	23,9	4218	3139*	44,0
38	1884	1402*	19,4	15,5	2969	2209	24,5	4447	3309*	45,2
40	1981	1474*	19,9	15,9	3122	2323	25,2	4675	3479*	46,4
42	2078	1547*	20,4	16,3	3275	2437	25,8	4904	3650*	47,6
44	2175	1619*	20,8	16,7	3427	2551	26,4	5132	3821*	48,7
46	2272	1692*	21,3	17,0	3580	2666	27,0	5361	3992*	49,8
48	2369	1764*	21,8	17,4	3732	2780	27,6	5589	4163*	50,8
50	2466	1837*	22,2	17,8	3885	2895	28,1	5818	4335*	51,9
52	2562	1910*	22,7	18,1	4038	3009	28,7	6047	4506*	52,9
54	2659	1984*	23,1	18,5	4190	3126	29,2	6275	4681*	53,9
56	2756	2061*	23,5	18,8	4343	3248	29,8	6504	4868*	54,9
58	2853	2136*	23,9	19,1	4496	3366	30,3	6732	5040*	55,9
60	2950	2209*	24,3	19,5	4648	3481	30,8	6961	5213*	56,8
62	3047	2282*	24,7	19,8	4801	3596	31,3	7189	5385*	57,8
64	3144	2355*	25,1	20,1	4954	3711	31,8	7418	5558*	58,7
66	3240	2428*	25,5	20,4	5106	3827	32,3	7647	5730*	59,6
68	3337	2502*	25,9	20,7	5259	3943	32,8	7875	5905*	60,5
70	3434	2578*	26,3	21,0	5411	4062	33,3	8104	6082*	61,4

V2. Dimensions in mm *) only possible with metal-to-metal sealing **) Version with bellows only available from 1 bar

ART 451

Discharge Capacities

Blowing off rates at 10% above set pressure

DN	1"			1 1/4"		
Bar	Air Nm³/h	Steam kg/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h
0,5	199	150	8,8	353	266	15,4
1	291	232	12,0	515	411	20,8
1,5	390	309	14,7	683	542	25,5
2	489	385	16,9	832	656	29,4
2,5	583	457	18,9	1012	793	32,9
3	681	532	20,8	1182	924	36,0
3,5	768	597	22,4	1333	1036	38,9
4	855	663	24,0	1484	1151	41,6
4,5	942	729	25,4	1635	1265	44,1
5	1029	794	26,8	1786	1378	46,5
5,5	1116	860	28,1	1937	1492	48,8
6	1203	926	29,3	2088	1607	50,9
6,5	1290	990	30,5	2239	1719	53,0
7	1377	1054	31,7	2390	1830	55,0
7,5	1464	1119	32,8	2542	1943	56,9
8	1552	1184	33,9	2693	2056	58,8
8,5	1639	1249	34,9	2844	2168	60,6
9	1726	1314	35,9	2995	2281	62,4
9,5	1813	1379	36,9	3146	2392	64,1
10	1900	1443	37,9	3297	2504	65,8
11	2074	1571	39,7	3599	2727	69,0
12	2248	1699	41,5	3902	2948	72,0
13	2422	1827	43,2	4204	3172	75,0
14	2596	1957	44,8	4506	3396	77,8
15	2771	2085	46,4	4808	3618	80,5
16	2945	2214	47,9	5111	3842	83,2
17	3119	2339	49,4	5413	4059	85,7
18	3293	2467	50,8	5715	4281	88,2
19	3467	2594	52,2	6017	4503	90,6
20	3641	2723	53,6	6320	4726	93,0
21	3816	2852	54,9	6622	4950	95,3
22	3990	2981	56,2	6924	5173	97,5
23	4164	3109	57,5	7226	5396	99,7
24	4338	3238	58,7	7529	5619	101,9
25	4512	3366	59,9	7831	5842	104,0
26	4686	3496*	61,1	8133	6067*	106,0
27	4860	3626*	62,3	8435	6293*	108,0
28	5035	3756*	63,4	8738	6518*	110,0
29	5209	3886*	64,5	9040	6744*	112,0
30	5383	4005*	65,6	9342	6951*	113,9
32	5731	4265*	67,8	9947	7401*	117,6
34	6080	4524*	69,9	10551	7851*	121,2
36	6428	4783*	71,9	11156	8301*	124,8
38	6776	5042*	73,9	11760	8751*	128,2
40	7124	5301*	75,8	12365	9200*	131,5
42	7473	5562*	77,6	12969	9653*	134,8
44	7821	5823*	79,5	13574	10105*	137,9
46	8169	6083*	81,3	14178	10558*	141,0
48	8518	6344*	83,0	14783	11011*	144,1
50	8866	6606*	84,7	15387	11464*	147,0
52	9214	6867*	86,4	15992	11917*	149,9
54	9563	7134*	88,0	16596	12380*	152,8
56	9911	7412*	89,7	17200	12864*	155,6
58	10259	7681*	91,2	17805	13330*	158,4
60	10608	7943*	92,8	18409	13786*	161,1
62	10956	8206*	94,3	19014	14242*	163,7
64	11304	8469*	95,8	19618	14699*	166,3
66	11652	8732*	97,3	20223	15155*	168,9
68	12001	8998*	98,8	20827	15616*	171,5
70	12349	9269*	100,2	21432	16086*	174,0

*) only possible with metal-to-metal sealing

V2. Dimensions in mm

ART 451

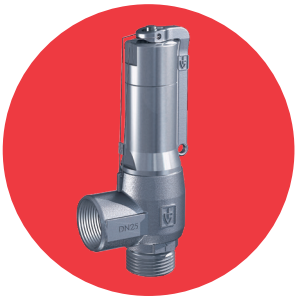
Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
NBR	Nitrile rubber	Elastomere moulded seal with metallic support up to 25 bar	–30°C to +130°C
EPDM	Ethylene propylene diene	Elastomere moulded seal with metallic support up to 25 bar	–40°C to +170°C
FKM	Fluorcarbon	Elastomere moulded seal with metallic support up to 25 bar	–20°C to +200°C
PTFE	Polytetrafluoroethylene	Flat seal up to 25 bar	–60°C to +225°C
PTFE+Kohle	Polytetrafluoroethylene + carbon	Flat seal from 25 bar	–60°C to +225°C
Against surcharge			
FFKM	Perfluorinated rubber	Elastomere moulded seal with metallic support up to 25 bar	–10°C to +260°C
MD	Metal-to-metal sealing	Flat seal	–60°C to +400°C

Typical Applications

- Chemical plants, biogas plants
- Process equipment, construction and medical technology (sterilisers, autoclaves)
- Secondary areas in the food, beverage, pharmaceutical and cosmetics industries

ART 452
Stainless Steel Safety Valve



Features

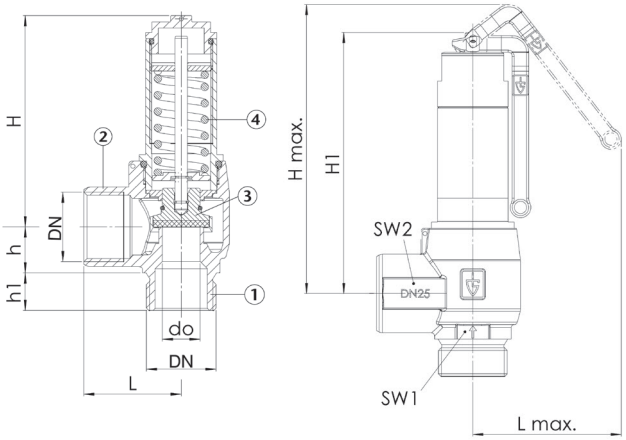
- Male BSP Parallel (ISO 228/1)
- Suitable for gases, liquids and steam
- Set pressure: 0.2 to 25 bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, LR EMEA, ABS, DNV, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request

Technical data

Max pressure: 25 Bar
Working temp: PTFE Seal
-60°C to 225°C

Safety valves are set and sealed at the factory.

See overleaf for discharge capacity.



DN	3/8"	1/2"	3/4"	1"
L	30	36	43	47
Lmax	72	72	72	72
H	77.5	82	90.5	101
H1	98	107	117	127
h	17	19	20	22
h1	12	15	16	18
SW1	24	27	34	38
SW2	22	26	32	38
do	9	13	15	18
Kgs	0.3	0.4	0.6	0.8

N.	Part Name	Materials
1	Inlet body	Stainless Steel 1.4408 (CF8M / 316)
2	Outlet body	Stainless Steel 1.4408
3	Internal Parts	Stainless Steel 1.4401 (316)
4	Spring	Stainless Steel 1.4310 (301)

Typical Applications

- Chemical plants, biogas plants
- Desalination plants
- Process equipment, construction and medical technology
- Shipbuilding industry and marine equipment
- Secondary areas in the food, beverage, pharmaceutical and cosmetics industries

V2. Dimensions in mm

ART 452

Discharge Capacities

Blowing off rates at 10% above set pressure

DN	3/8"			1/2"			3/4"			1"		
Bar	Air Nm³/h	Steam kg/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h	Air Nm³/h	Steam kg/h	Water m³/h
0,2	18	14	0,6	41	33	1,3	58	46	1,8	77	61	2,6
0,5	25	20	0,8	62	50	1,9	81	65	2,5	111	89	3,7
0,8	34	27	1,0	82	65	2,3	107	85	3,1	145	115	4,7
1	39	31	1,1	95	75	2,6	124	97	3,4	167	132	5,2
1,5	53	41	1,4	127	99	3,3	169	132	4,2	243	191	6,3
2	65	51	1,6	159	124	3,8	212	165	4,8	310	243	7,3
2,5	80	62	1,8	190	147	4,3	257	200	5,4	370	288	7,7
3	91	71	2,0	217	169	4,7	295	229	5,9	439	341	8,5
3,5	105	81	2,2	250	193	5,1	338	262	6,4	512	396	9,2
4	119	92	2,3	278	214	5,5	383	296	7,0	570	440	9,8
4,5	134	103	2,5	306	236	5,8	429	331	7,4	628	485	10,4
5	146	113	2,7	340	263	6,1	469	362	7,8	687	530	10,9
5,5	159	122	2,8	369	285	6,4	509	392	8,2	745	574	11,5
6	174	135	2,9	398	307	6,7	557	430	8,6	804	620	12,0
6,5	187	144	3,0	442	341	7,0	598	461	8,9	864	666	12,5
7	200	154	3,1	471	364	7,2	638	492	9,7	934	721	12,9
7,5	216	167	3,3	510	393	7,5	678	523	10,1	993	766	13,4
8	246	190	3,4	549	423	7,7	719	555	10,4	1052	812	13,8
8,5	260	200	3,6	580	447	8,0	759	586	10,7	1111	857	14,3
9	274	211	3,7	610	471	8,2	799	617	11,0	1170	903	14,7
9,5	287	222	3,8	641	495	8,4	840	648	11,3	1229	948	15,1
10	301	232	3,9	672	518	8,6	880	679	11,6	1288	994	15,5
11	329	254	4,1	734	566	9,1	961	741	12,2	1406	1085	16,2
12	357	275	4,2	795	613	9,5	1042	803	12,7	1524	1176	16,9
13	384	296	4,4	857	661	9,8	1122	866	13,3	1643	1267	17,6
14	412	318	4,6	918	708	10,2	1203	928	13,8	1761	1358	18,3
15	439	339	4,7	980	756	10,6	1284	990	14,3	1879	1449	18,9
16	467	360	4,9	1042	803	10,9	1364	1052	14,7	1997	1540	19,6
17	495	382	5,0	1103	851	11,3	1445	1115	15,2	2115	1632	20,2
18	522	403	5,2	1165	899	11,6	1526	1177	15,6	2233	1723	20,8
19	550	424	5,3	1226	946	11,9	1606	1239	16,0	2351	1814	21,3
20	577	446	5,5	1288	994	12,2	1687	1301	16,5	2469	1905	21,9
21	605	467	5,6	1350	1041	12,5	1768	1364	16,9	2587	1996	22,4
22	633	488	5,7	1411	1089	12,8	1848	1426	17,3	2705	2087	22,9
23	660	509	5,9	1473	1136	13,1	1929	1488	17,6	2823	2178	23,5
24	688	531	6,0	1534	1184	13,4	2010	1550	18,0	2942	2269	24,0
25	716	552	6,1	1596	1231	13,6	2090	1613	18,4	3060	2360	24,5

Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
NBR	Nitrile rubber	Elastomere flat seal	–30°C to +130°C
EPDM	Ethylene propylene diene	Elastomere flat seal	–50°C to +150°C
FKM	Fluorcarbon	Elastomere flat seal	–20°C to +200°C
PTFE	Polytetrafluoroethylene	Flat seal from 0,5 bar	–60°C to +225°C

V2. Dimensions in mm

ART 810
Brass Atmospheric Discharge Safety Valve

Features

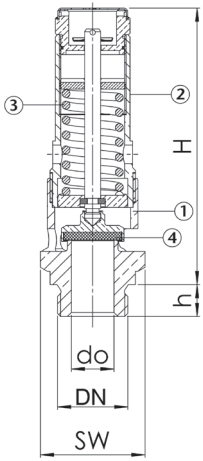
- Male BSP Parallel (ISO 228/1)
- Suitable for neutral gases and air
- Set pressure: 0.2 to 50 bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, LR EMEA, BV, ABS, DNV, RS
- ATEX approval available at extra cost
- 24 month warranty
- Test certificate to EN10204-3.1 available on request
- Standard discharge capacity

Technical data

Max pressure: 50 Bar
Working temp: PTFE Seal
-60°C to 225°C

Safety valves are set and sealed at the factory.

See overleaf for discharge capacity.



DN	1/4"	3/8"		1/2"		3/4"		1"
H	60	65	78	66	79	94	104	111
h	10	10	10	12	12	12	12	14
SW	19	24	24	27	27	34	34	41
do	7.5	10	10	11	11	16	16	20
Kgs	0.10	0.14	0.16	0.17	0.19	0.35	0.40	0.60

N.	Part Name	Materials
1	Inlet Body	Brass CW617N
2	Outlet Body	Brass CW617N
3	Spring	Stainless Steel 1.4568
4	Internal Parts	Brass CW617N

Typical Applications

- Compressors
- Pressure booster plants air-side
- Paint spray shops
- Pneumatic control units
- Transport and railway applications

V1. Dimensions in mm

ART 810

Discharge Capacities

Blowing-off rates at 10% above set pressure

DN Bar	1/4"	3/8"	1/2"	3/4"	1"
0,2	20	35	46	100	133
0,3	25	45	54	119	144
0,4	29	52	67	137	167
0,5	32	58	74	158	185
0,6	35	64	82	172	211
0,7	37	70	87	187	235
0,8	41	74	95	200	260
0,9	43	80	101	213	282
1	46	85	107	227	305
1,5	60	108	137	286	408
2	73	132	166	346	506
3	100	182	222	465	699
4	125	228	279	584	889
5	151	274	336	703	1070
6	176	321	393	821	1251
7	201	367	450	940	1432
8	227	414	507	1059	1613
9	252	460	564	1178	1794
10	278	507	621	1297	1975
11	303	553	678	1416	2156
12	329	599	735	1535	2337
13	354	646	791	1654	2518
14	380	692	848	1773	2700
15	405	739	905	1891	2881
16	431	785	962	2010	3062
17	456	832	1019	2129	3243
18	482	878	1076	2248	3424
19	507	925	1133	2367	3605
20	533	971	1190	2486	3786
21	558	1017	1247	2605	3967

DN Bar	1/4"	3/8"	1/2"	3/4"	1"
22	584	1064	1304	2724	4148
23	609	1110	1361	2843	4329
24	635	1157	1417	2961	4510
25	660	1203	1474	3080	4691
26	685	1250	1531	3199	4872
27	711	1296	1588	3318	5053
28	736	1342	1645	3437	5234
29	762	1389	1702	3556	5415
30	787	1435	1759	3675	5597
31	813	1482	1816	3794	5778
32	838	1528	1873	3913	5959
33	864	1575	1930	4031	6140
34	889	1621	1986	4150	6321
35	915	1667	2043	4269	6502
36	940	1714	2100	4388	6683
37	966	1760	2157	4507	6864
38	991	1807	2214	4626	7045
39	1017	1853	2271	4745	7226
40	1042	1900	2328	4864	7407
41	1068	1946	2385	4983	7588
42	1093	1993	2442	5101	7769
43	1119	2039	2499	5220	7950
44	1144	2085	2556	5339	8131
45	1170	2132	2612	5458	8313
46	1195	2178	2669	5577	8494
47	1220	2225	2726	5696	8675
48	1246	2271	2783	5815	8856
49	1271	2318	2840	5934	9037
50	1297	2364	2897	6053	9218

Seat-Seal/Diaphragm Options

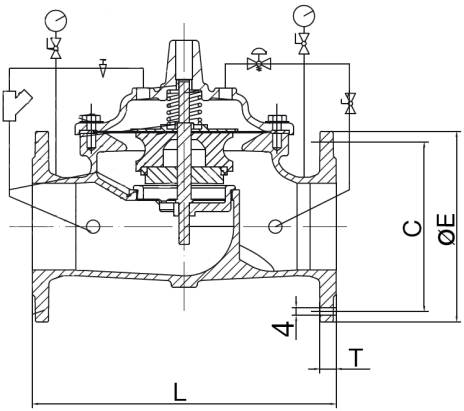
Option	Materials	Type	Working Temp.
FKM	Fluorocarbon	Elastomere flat seal 0,2 – 25 bar	–20°C to +200°C
PTFE	Polytetrafluoroethylene	Flat seal 25,1 – 50 bar	–60°C to +225°C
Against surcharge			
PTFE	Polytetrafluoroethylene	Flat seal 0,2 – 25 bar	–60°C to +225°C

V1. Dimensions in mm

ART 6200 PN25
PN25 Adjustable Pressure Reducing Valve

Features

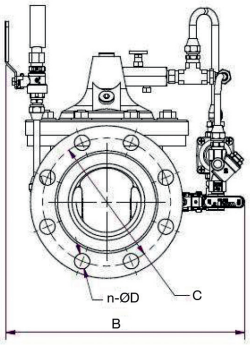
- Automatic Control Valve
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN25
- Available flanged PN16
- Stainless Steel pilot tubing and valves
- WRAS Approved Epoxy Coating and Polymers

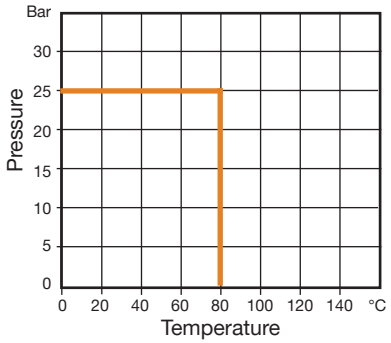


Technical data

Max pressure: 25 Bar
Working temp: 0°C to +80°C

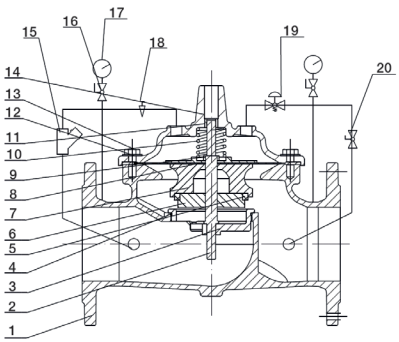
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
C	125	145	160	190	220	250	310	370	430
E	165	185	200	235	270	300	360	425	485
T	19	19	19	19	19	20	22	24.5	27.5
B	265	300	310	320	350	385	440	505	560
n-Ød	4-19	4-19	8-19	8-23	8-28	8-28	12-28	12-31	16-31





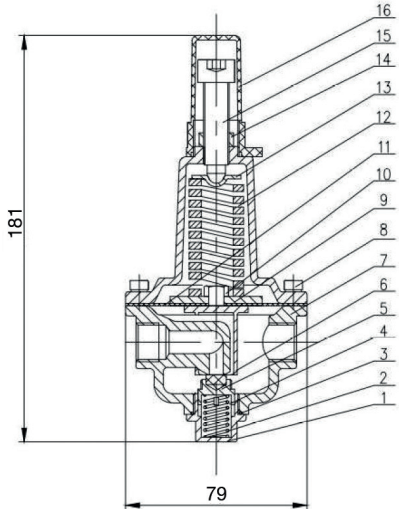
V1. Dimensions in mm

ART 6200 PN25



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Ball Valve	Stainless Steel 304
17	Gauge	Stainless Steel 304
18	Needle Valve	Stainless Steel 304
19	Pilot Valve	Stainless Steel 304
20	Ball Valve	Stainless Steel 304

Pilot Valve Detail - ART 6250



N.	Part Name	Materials
1	Plug	Stainless Steel 304
2	Spring	Stainless Steel 304
3	O-Ring	NBR
4	Seat	Stainless Steel 304
5	Disc	NBR
6	Yoke	Stainless Steel 304
7	Body	Stainless Steel 304
8	Screw	Stainless Steel 304
9	Diaphragm Washer	Stainless Steel 304
10	Nut	Stainless Steel 304
11	Diaphragm	EPDM
12	Spring	Stainless Steel 304
13	Spring Holder	Stainless Steel 304
14	Locking Nut	Stainless Steel 304
15	Adjusting Screw	Stainless Steel 304
16	Cap	ABS

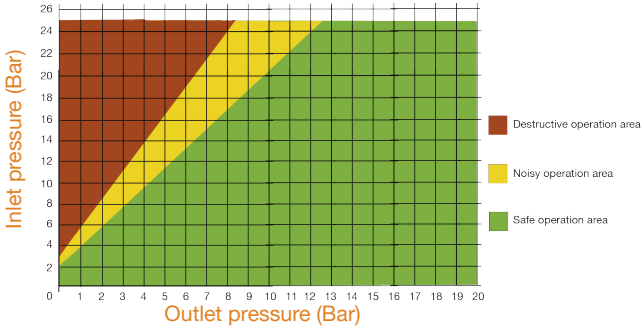
Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)
Factory set to 3.5 Bar (50 PSI)

Other Pilot Valves available
1.40 to 12.00 Bar (20 to 175 PSI)
2.10 to 20.00 Bar (30 to 300 PSI)

V1. Dimensions in mm

ART 6200 PN25

Cavitation Chart

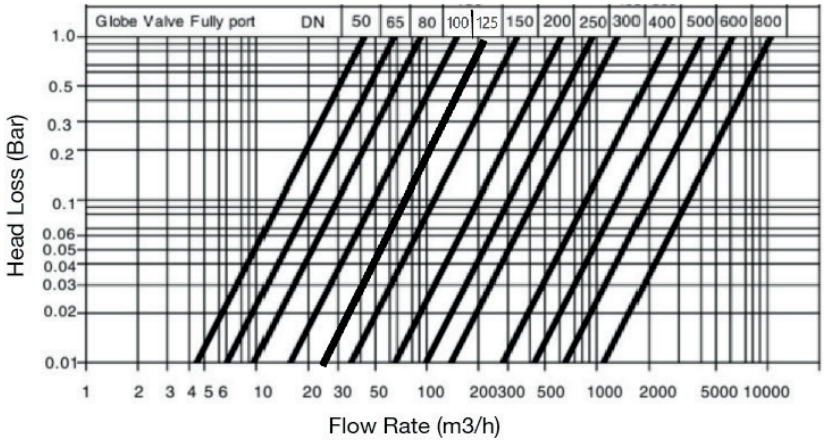


Flow Volume vs Velocity (water)

	Volume m3/h													
Size DN	**0.4 m/s**	**0.6 m/s**	**0.8 m/s**	**1.0 m/s**	**1.2 m/s**	**1.4 m/s**	**1.6 m/s**	**1.8 m/s**	**2.0 m/s**	**2.2 m/s**	**2.4 m/s**	**2.6 m/s**	**2.8 m/s**	**3.0 m/s**
50	2.8	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1	15.6	17.0	18.4	19.8	21.2
65	4.8	7.2	9.6	11.9	14.3	16.7	19.1	21.5	23.9	26.3	28.7	31.1	33.4	35.8
80	7.2	10.9	14.5	18.1	21.7	25.3	29.0	32.6	36.2	39.8	43.4	47.0	50.7	54.3
100	11.3	17.0	22.6	28.3	33.9	39.6	45.2	50.9	56.5	62.2	67.9	73.5	79.2	84.8
125	17.7	26.5	35.3	44.2	53.0	61.9	70.7	79.5	88.4	97.2	106.0	114.9	123.7	132.5
150	25.4	38.2	50.9	63.6	76.3	89.1	101.8	114.5	127.2	140.0	152.7	165.4	178.1	190.9
200	45.2	67.9	90.5	113.1	135.7	158.3	181.0	203.6	226.2	248.8	271.4	294.1	316.7	339.3
250	70.7	106.0	141.4	176.7	212.1	247.4	282.7	318.1	353.4	388.8	424.1	459.5	494.8	530.1
300	101.8	152.7	203.6	254.5	305.4	356.3	407.1	458.0	508.9	559.8	610.7	661.6	712.5	763.4

Note; for good pressure control within the valves optimum flow rate, the pressure reducing valve should be sized on on a velocity of 1 to 2m/s.

Flow curve of the main valve at fully open status



V1. Dimensions in mm