Public Health

Issue 03




It’s all at Albion

ART 671
Pressure Reducing Valve with gauge

Features

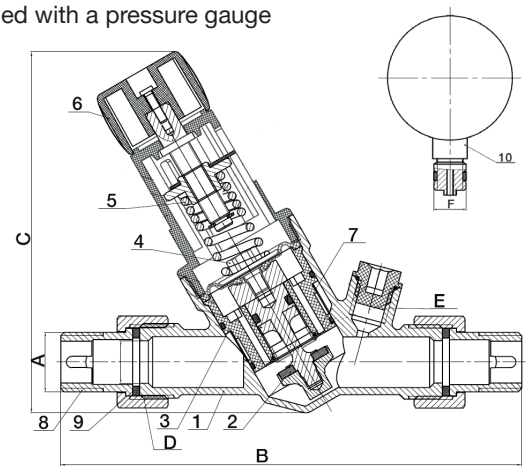
- BSP Parallel Male Ends (ISO 228/1)
- Controls static and dynamic pressure
- Designed & manufactured to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

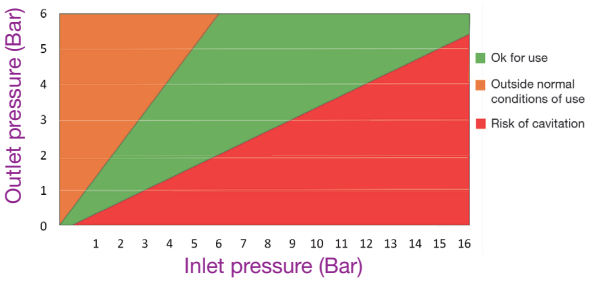
Max inlet pressure:	16 Bar
Outlet pressure range:	0.5 - 6 Bar
Min inlet pressure:	1 Bar
Operating temperature:	0°C - 80°C
Factory set pressure:	3 Bar



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

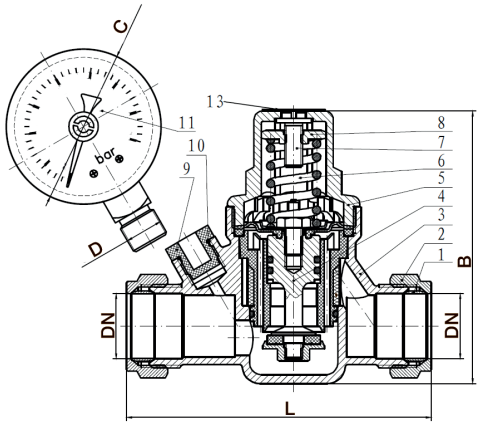
ART 675
Pressure Reducing Valve with gauge

Features

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

WRAS APPROVED PRODUCT

Available on bimstore.co

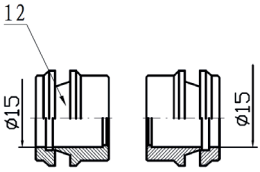


Technical data

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

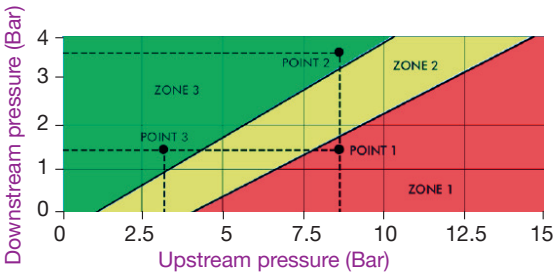
DN	15mm	22mm
L	123	104
B	92.5	92.5
C	52.5	52.5
D	1/4“	1/4“
Kgs	0.61	0.54

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

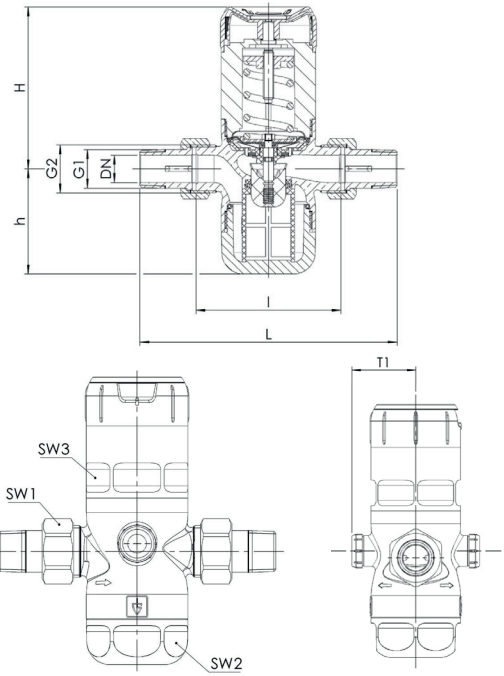


V1. Dimensions in mm

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

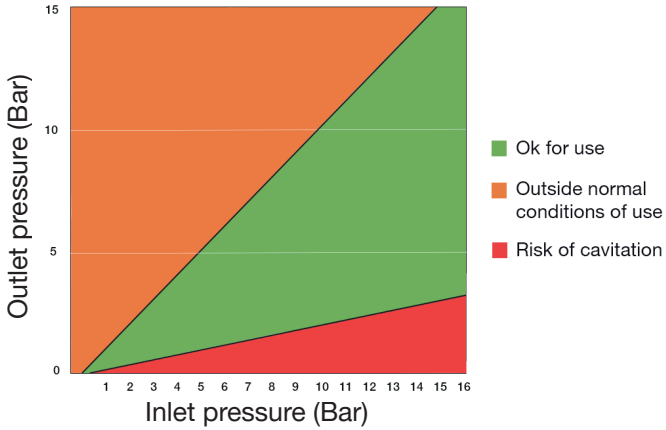
O	Without lifting device

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

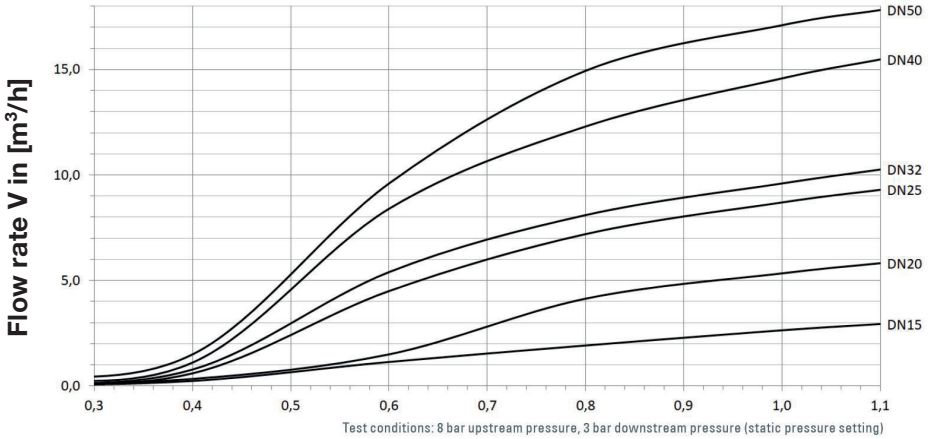
Cavitation Chart



Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

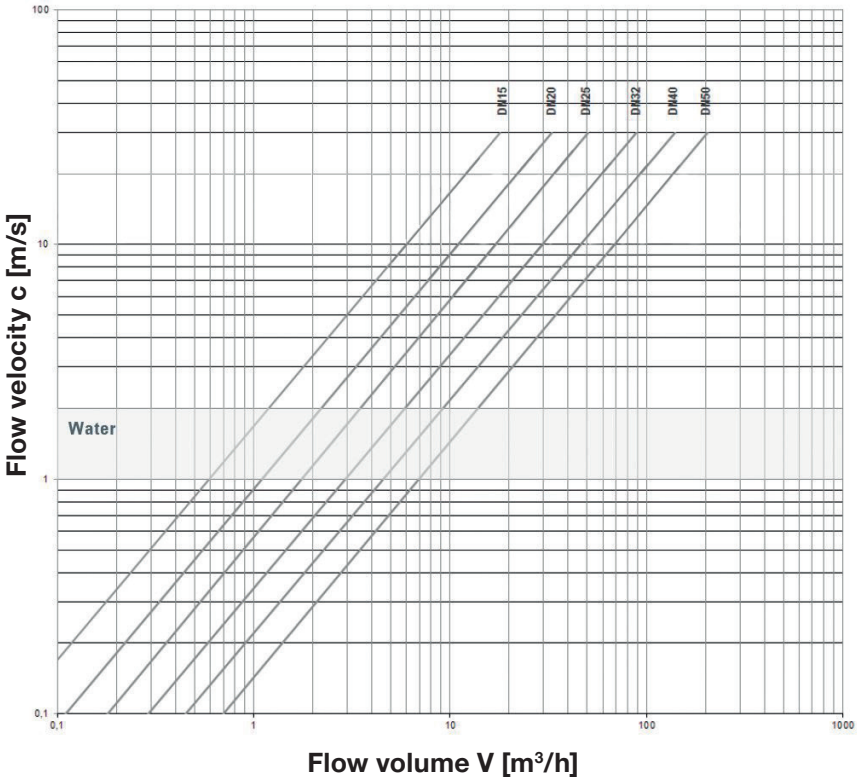
Flow chart water



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

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

Standard Version

Maximum Inlet pressure: 25 Bar

Outlet pressure: 1.5 - 7.0 Bar

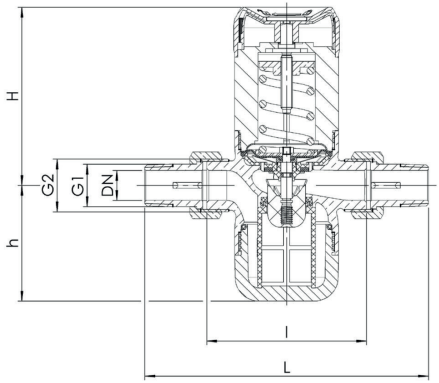
Other Outlet Pressures Available

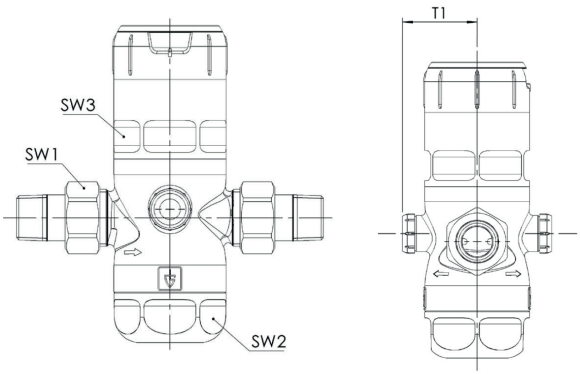
Low Pressure: 0.5 - 3.0 Bar

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

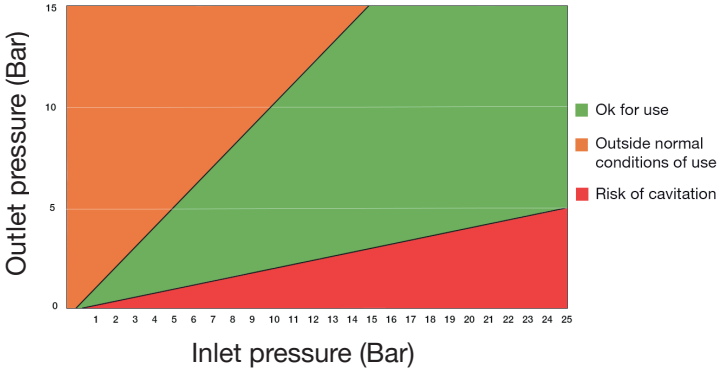
O	Without lifting device

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

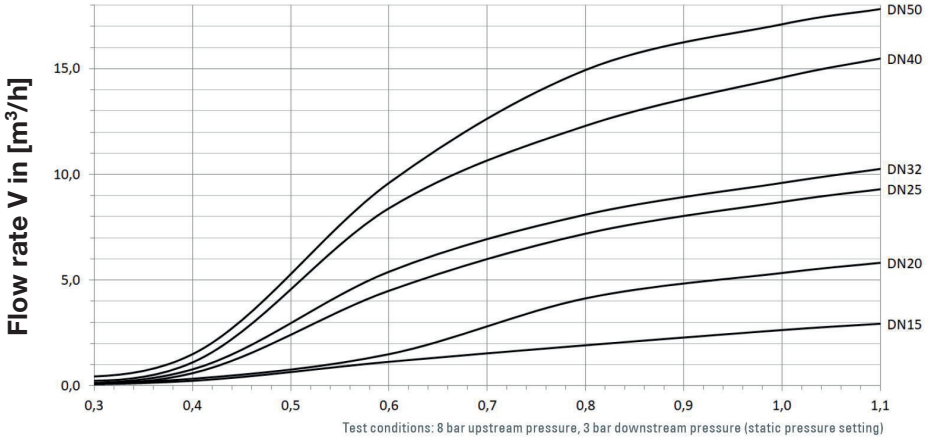
Cavitation Chart



Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

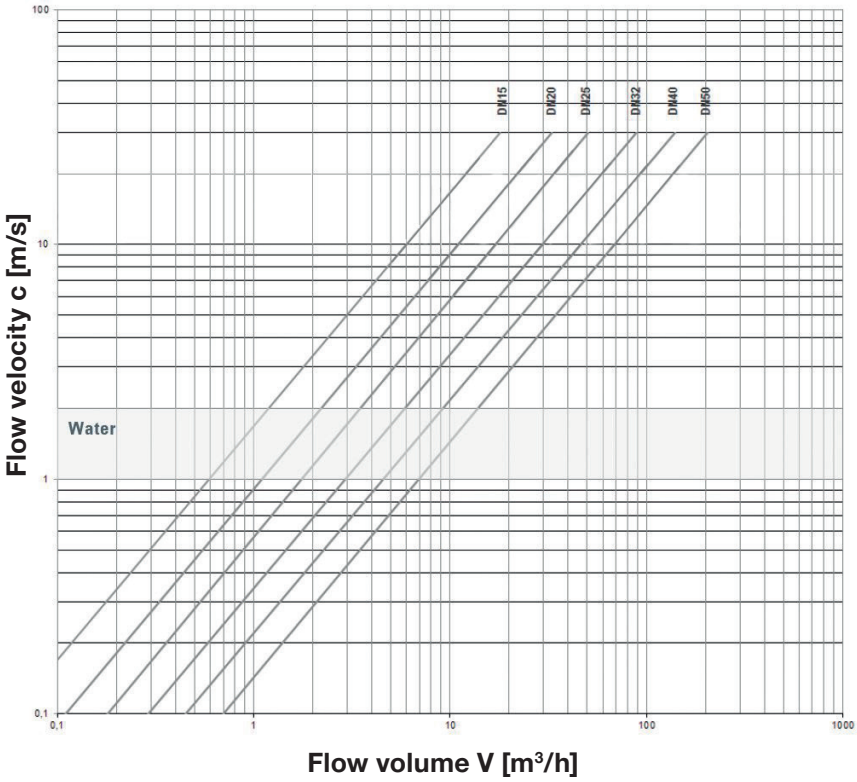
Flow chart water



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

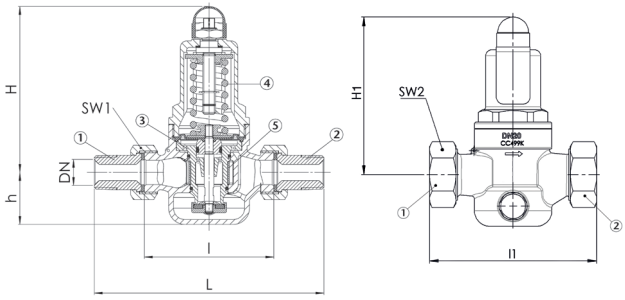
WRAS APPROVED PRODUCT

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 SP, HP up to	bar	40	40	40	40	40	40
Inlet pressure LP to	bar	25	25	25	25	25	25
Outlet pressure	bar	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2	0.5 - 2
		1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8
		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

V1. 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

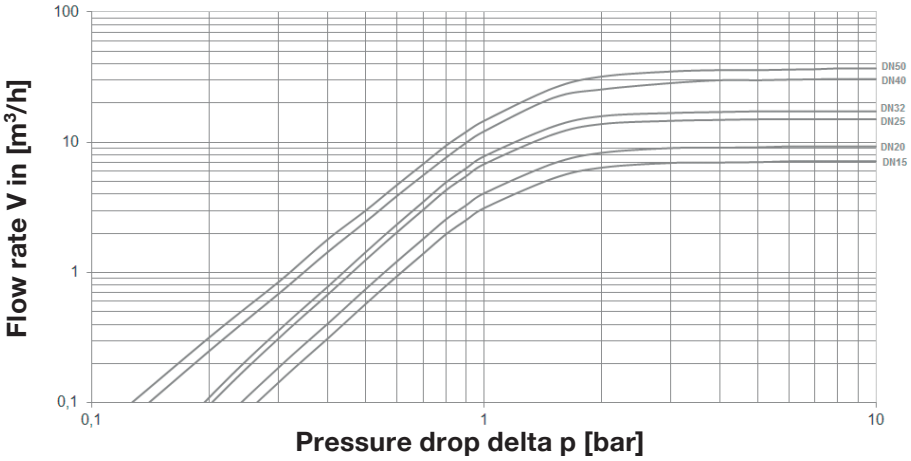
Option	Materials	Type	Working Temp.
EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	–10°C to +95°C
Against surcharge			
FKM	Fluorocarbon	Elastomere moulded diaphragm and seals	–10°C to +95°C

ART 681 M & F

Capacity Charts

Dimensioning by pressure loss on the outlet pressure side

Flow chart water



V1. Dimensions in mm

ART 681 M & F

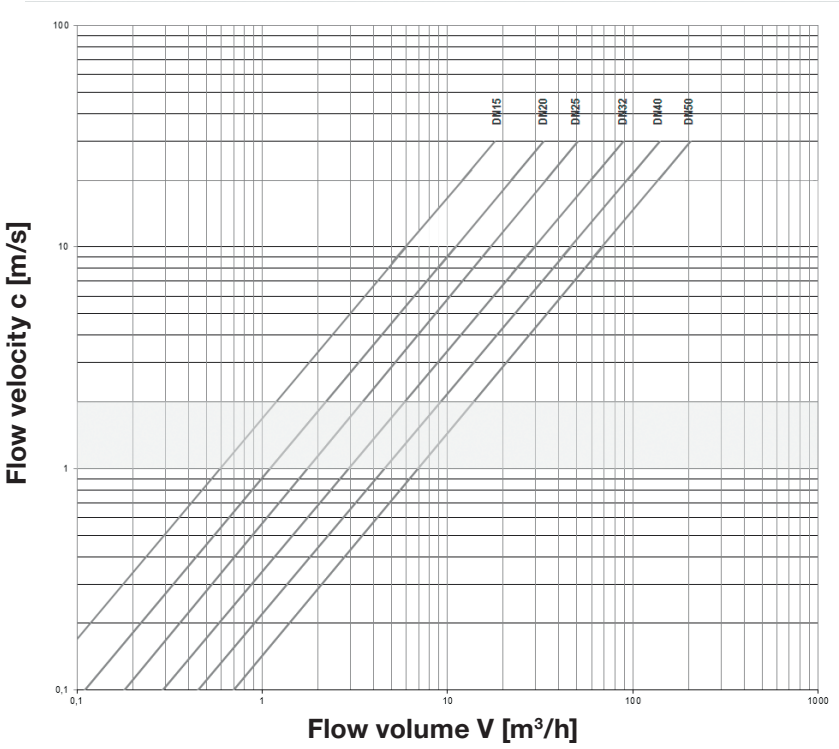
Dimensioning by flow velocity

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.

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

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



V1. Dimensions in mm

ART 6200 PN16
PN16 Adjustable Pressure Reducing Valve

Features

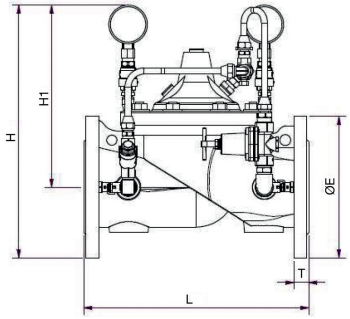
- Automatic Control Valve
- Suitable for potable water applications
- Pressure adjusted by integral pilot valve
- Conforms to BS EN558-1 Series 1
- Flange conforms to BS EN1092 PN16
- Available flanged PN25
- Stainless Steel pilot tubing and valves
- Fully WRAS Approved valve - Cert No. 2105035

WRAS APPROVED PRODUCT

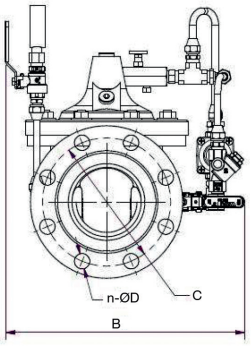
Available on bimstore.co

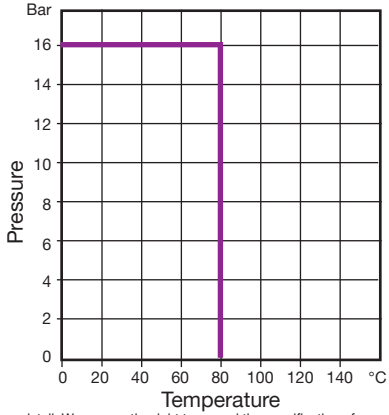
Technical data

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



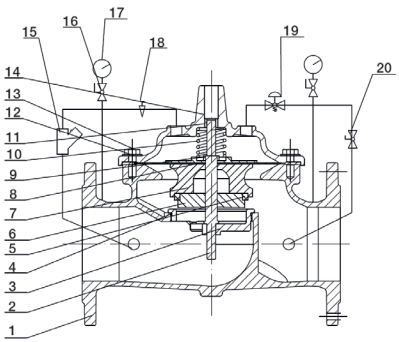
DN	50	65	80	100	125	150	200	250	300
L	230	290	310	350	400	480	600	730	850
E	165	185	200	220	250	285	340	405	460
C	125	145	160	180	210	240	295	355	410
n-Ød	4-19	4-19	8-19	8-19	8-19	8-23	12-23	12-28	12-28
B	265	300	310	320	350	385	440	505	560
H	452	462	470	483	498	513	540	573	598
H1	369	370	370	373	373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





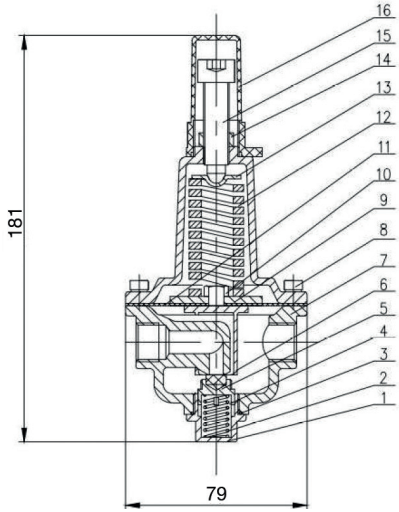
V1. Dimensions in mm

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

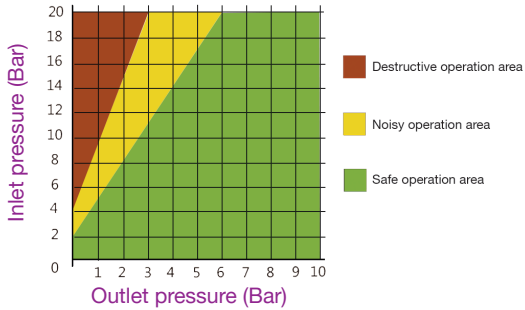
Fitted with standard Pilot Valve
0.70 to 12.00 Bar (10 to 175 PSI)
Factory set to 3.5 Bar (50 PSI)

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

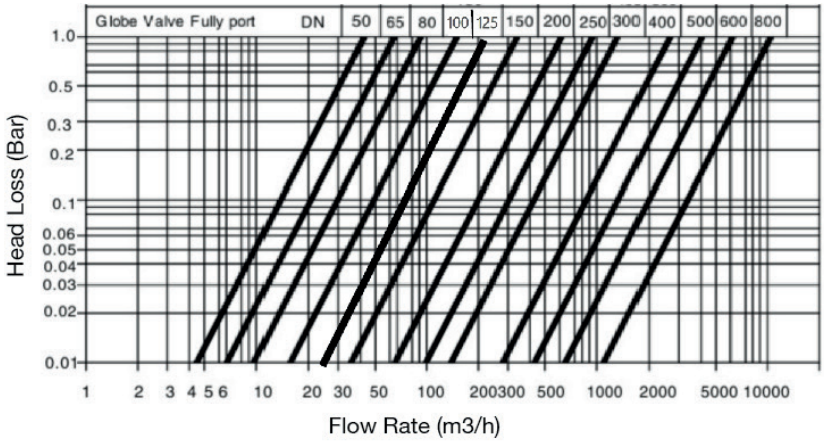


Flow Volume vs Velocity (water)

	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 670M
Pressure Reducing Valve with gauge

Features

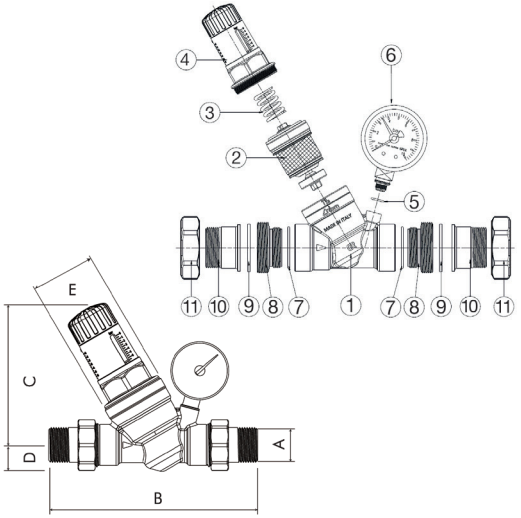
- BSP Parallel Male Ends (ISO 228/1)
- Controls static and dynamic pressure
- Conforms to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

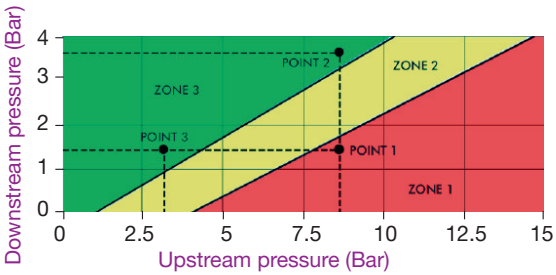
Max inlet pressure (static):	16 Bar
Adjustable pressure range:	0.5 - 6 Bar
Min inlet pressure:	0.5 Bar
Max inlet temperature:	80°C
Factory set pressure:	3 Bar



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

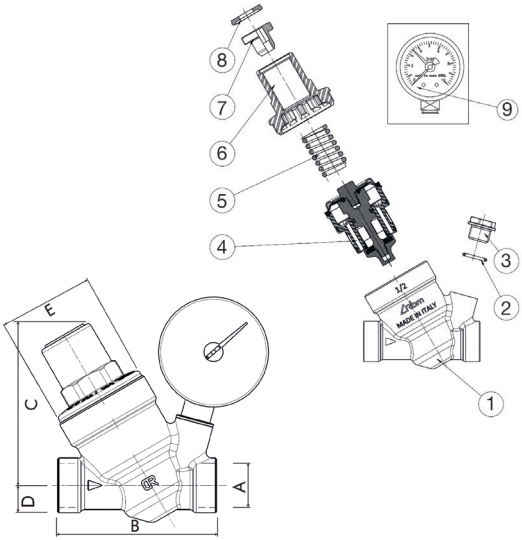
- BSP Parallel Female Ends (ISO 228/1)
- Controls static and dynamic pressure
- Conforms to BS EN 1567
- Easy to service high temperature cartridge
- AISI 304 stainless steel cartridge filter
- Supplied with a pressure gauge

WRAS APPROVED PRODUCT

Available on bimstore.co

Technical data

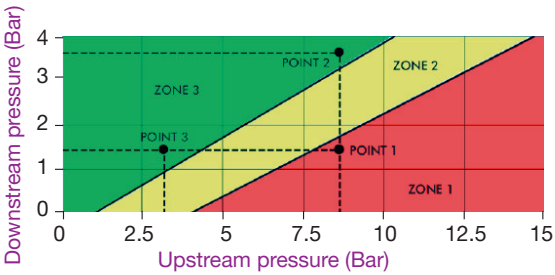
Max inlet pressure (static):	16 Bar
Adjustable pressure range:	0.5 - 6 Bar
Min inlet pressure:	0.5 Bar
Max inlet temperature:	80°C
Factory set pressure:	3 Bar



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

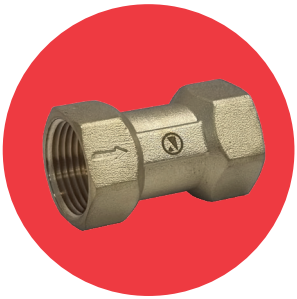
N.	Part Name	Materials
1	Body	DZR Brass CW602N
2	O-Ring	EPDM + Perox
3	Plug	PA66 + 30% f.d.v
4	Cartridge	PA66 + 30% F.V. + colouring MACROVERS 564FA
5	Spring	EN 0270-3-1.4310
6	Bonnet	PA66+30% f.d.v.
7	Adjustable Plug	CW614N
8	Plastic Cap	PC / ABS
9	Pressure gauge	

Cavitation Chart



V1. Dimensions in mm

ART 38
DZR Brass Single Check Valve



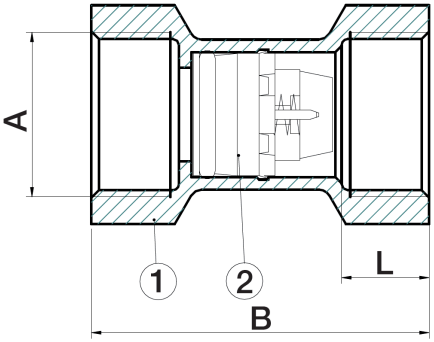
Features

- Screwed F/F BSP Parallel (ISO 228/1) ends
- Conforms with EN13959
- Prevention of back flow and back syphonage contamination
- Suitable for Fluid Categories 1 & 2

WRAS APPROVED PRODUCT

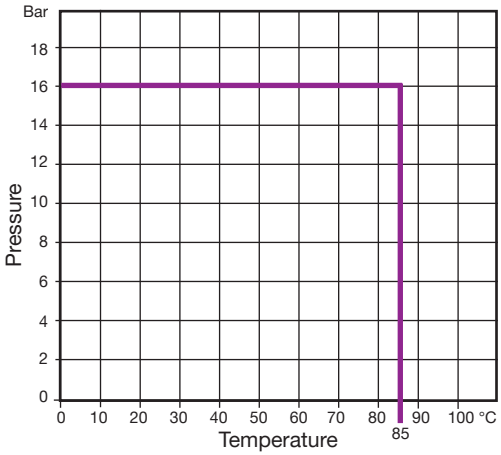
Available on bimstore.co

Technical data
Max pressure: 16 Bar
Max Working temp: 85°C



DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
B	46.0	54.0	63.5	75.5	82.5	105.5
L	13.5	14.0	16.0	18.5	18.5	23.0
Kgs	0.08	0.12	0.20	0.33	0.43	0.83

N.	Part Name	Materials
1	Body	DZR Brass
2	Non-Return Core	POM

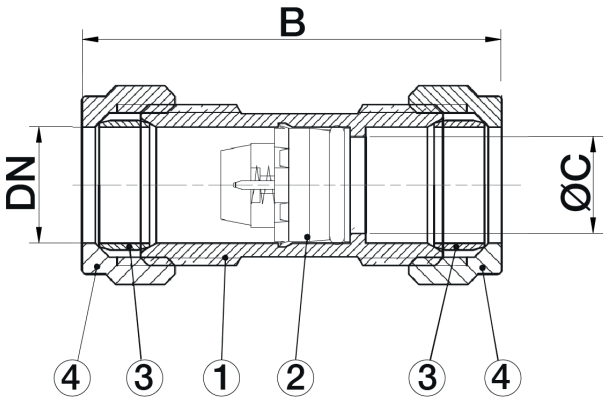


V1. Dimensions in mm

ART 39
DZR Brass Single Check Valve

Features

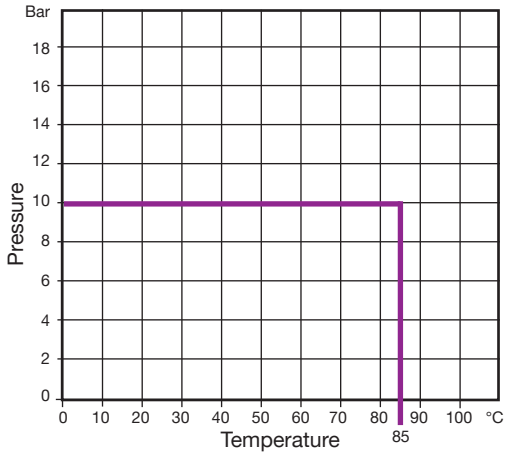
- Compression ends (EN1254-2)
- Conforms with EN13959
- Prevention of back flow and back syphonage contamination
- Suitable for Fluid Categories 1 & 2



Technical data
Max pressure: 10 Bar
Max Working temp: 85°C

DN	15	22	28
B	54.0	64.5	77.5
C	12.5	15.0	18.0
Kgs	0.08	0.13	0.19

N.	Part Name	Materials
1	Body	DZR Brass
2	Non-Return Core	POM
3	Olive	T2 Copper
4	Compression Nut	Brass HPb59-T

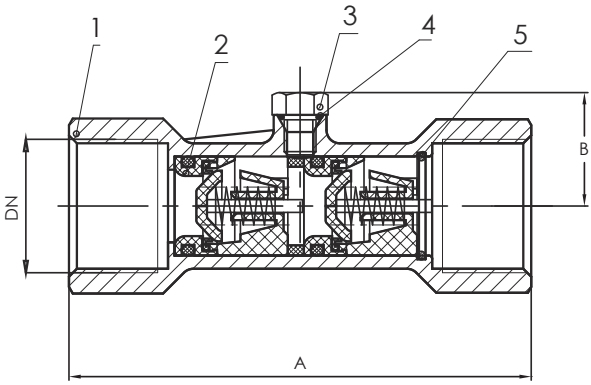


V3 Dimensions in mm

ART 36
DZR Brass Double Check Valve

Features

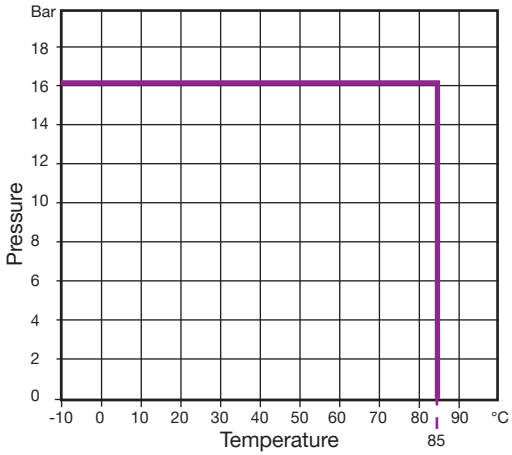
- Screwed F/F BSP Parallel (ISO 228/1) ends
- Conforms with EN13959
- Prevention of back flow and back syphonage contamination
- Suitable for Fluid Categories 1, 2 & 3



Technical data
Max pressure: 16 Bar
Working temp: -10°C to 85°C

DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	71	83	98	118	134	173
B	17.5	20	22.8	26	30	35
Kv	3.7	7.1	10.3	17.5	26.0	42.5
Kgs	0.11	0.17	0.28	0.45	0.64	1.19

N.	Part Name	Materials
1	Body	DZR Brass
2	Non-return core	POM
3	Screw	Brass HPb59-T
4	O-Ring	NBR
5	Catch Spring	Stainless Steel 304

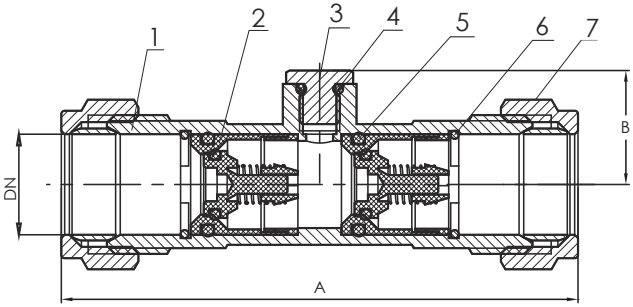


V2 Dimensions in mm

ART 37
DZR Brass Double Check Valve

Features

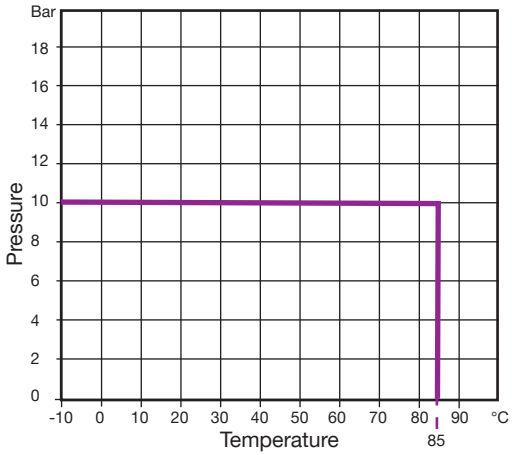
- Compression ends
- Conforms with EN13959
- Prevention of back flow and back syphonage contamination
- Suitable for Fluid Categories 1, 2 & 3



Technical data
Max pressure: 10 Bar
Working temp: -10°C to 85°C

DN	15	22	28
A	79	100	112
B	16	18.5	21
Kv	3.7	7.1	10.3
Kgs	0.10	0.19	0.30

N.	Part Name	Materials
1	Body	DZR Brass
2	Non-return core	POM
3	Screw	Brass HPb59-T
4	O-Ring	NBR
5	Catch Spring	Stainless Steel 304
6	Compression Nut	Brass HPb59-T
7	Olive	Copper T2

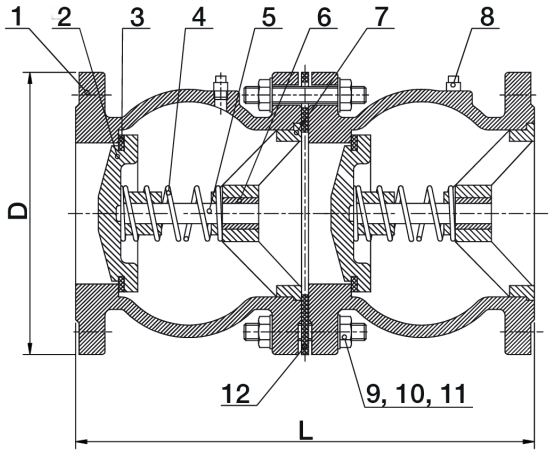


V2 Dimensions in mm

ART 237
PN16 Ductile Iron Flanged Double Check Valve

Features

- Flange mounting PN16 only (EN1092-2)
- Operates in any position
- Epoxy coat finish
- WRAS Approved as a non-return valve

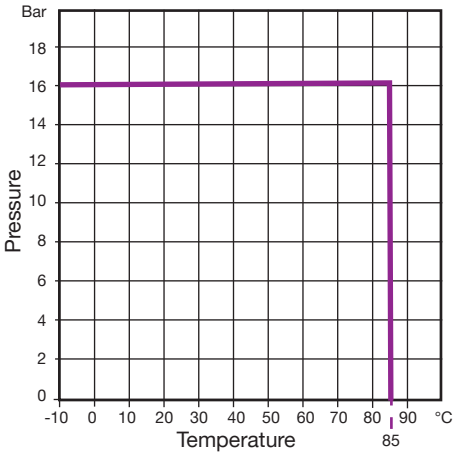


Technical data

Max pressure: 16 Bar
Working temp: -10°C to +85°C

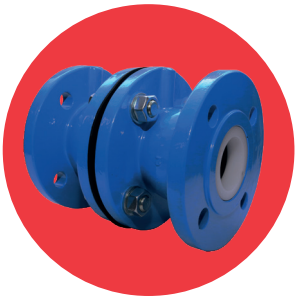
DN	50	65	80	100	125	150	200	250	300
L	203	243	283	343	403	463	579	711	823
D	165	185	200	220	250	285	340	405	460
KV	89.9	109.7	133.9	240.2	375.8	540.0	963.4	1529.3	2160.0
Kgs	16.6	21.0	27.0	35.0	57.0	78.0	106.0	173.0	253.0

N.	Part Name	Materials
1	Body	Ductile Iron EN-GJS-450-10
2	Disc	Ductile Iron EN-GJS-450-10
3	Disc Trim	EPDM
4	Spring	Stainless Steel 304
5	Stem	Stainless Steel 304
6	Bushing	Brass
7	Guide	Ductile Iron EN-GJS-450-10
8	Plug	Stainless Steel 304 (Rc 1/4)
9	Stud	Carbon Steel, Zinc Plated BS EN 3692 Grade 8.8
10	Nut	Carbon Steel, Zinc Plated BS EN 3692 Grade 8
11	Washers	Stainless Steel 304
12	Gasket	EPDM



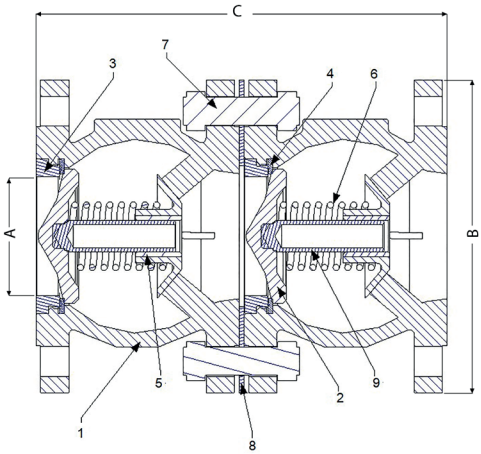
V1 Dimensions in mm

ART 236
PN16 Ductile Iron Flanged Double Check Valve



Features

- Flange mounting PN16 only (EN1092-2)
- Operates in any position
- Epoxy coat finish

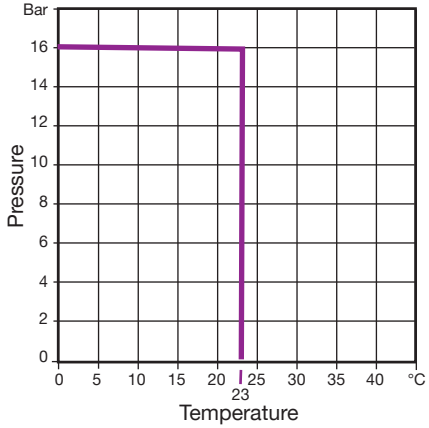


Technical data

Max pressure: 16 Bar
Working temp: -10°C to +23°C

DN	50	65	80	100	125	150
A	50	65	80	100	125	150
B	165	185	200	220	250	285
C	205	245	265	315	405	465
Kv	72	135	185	340	515	725
Kgs	12	16.2	17.2	25.0	40.0	60.0

N.	Part Name	Materials
1	Body	Ductile Iron SG 420/12
2	Plunger Top	Delrin 150
3	Sealing Ring	Delrin 150
4	Seal	Nitrile 70 Shore
5	Guide Bush	Cz132 DZR Brass
6	Spring	Stainless Steel Grade 304 S26
7	Studs	Mild Steel (Plated)
8	Gasket	Nitrile 70 Shore
9	Plunger Shaft	Cz132 DZR Brass



V2 Dimensions in mm

ART 32
DZR Brass Thermostatic Balancing Valve with Anti Legionella Device

Features

- BSP Parallel (ISO 7/1)
- Fluid: water
- Automatic Legionella Disinfectant feature
- Improves efficiency of DHW systems
- Automatically responds to changes in system temperature and flow requirements
- Reduces heat loss through lower circulation of hot water
- Keeps temperature evenly distributed and reduces dead-legs

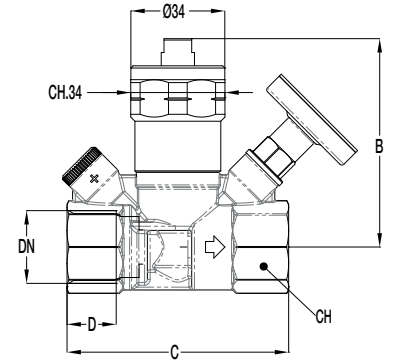
WRAS APPROVED PRODUCT

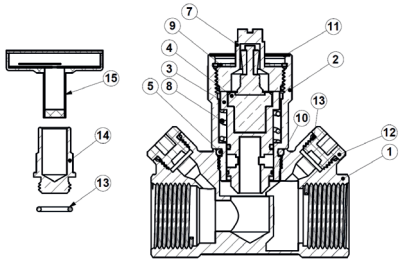
Available on bimstore.co

Technical data

Max pressure (Static): 25 Bar
Working temp: +40°C to +60°C
Max Inlet temp: 90°C
Anti Legionella Temp: 70°C

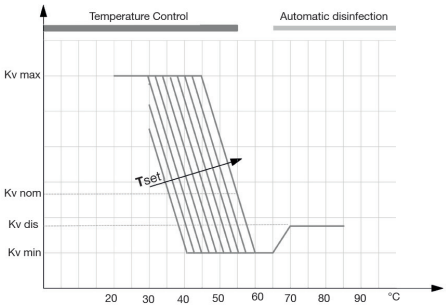
DN	1/2"	3/4"	1"
B	73	75	77
C	77	80	87
D	17	18.5	21
CH	25	31	38
KV Max	1.5	3.1	3.6
KV Nom	0.6	0.7	0.8
KV Dis	0.5	0.5	0.5
KV Min	0.25	0.25	0.25
Kgs	0.49	0.55	0.65





N.	Part Name	Materials
1	Body	DZR Brass CW602N-M
2	Bonnet	Brass CW510L-DW
3	Shutter	Brass CW510L-DW
4	Thermostatic Element	
5	O-Ring	EDPM PEROX
6	O-Ring	EDPM PEROX
7	Ring Nut	Brass CW617N-DW
8	Spring	INOX AISI 302
9	Seeger	Steel
10	O-Ring	EPDM PEROX
11	Index	Aluminium
12	Plug	Nylon 6.6
13	O-Ring	EPDM PEROX
14	Temperature Gauge Sheath	Brass CW501L-DW
15	Temperature Gauge	Brass CW501L-DW

Regulating Characteristics



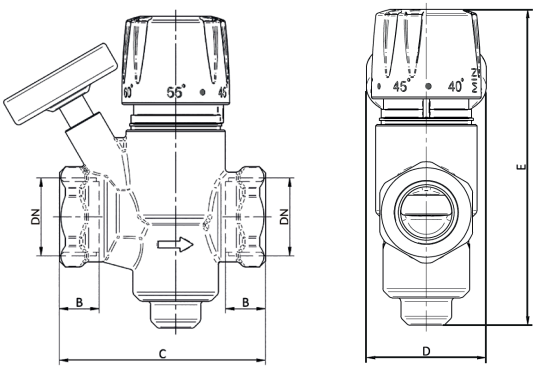
V1. Dimensions in mm

ART 31
DZR Brass Thermostatic Balancing Valve

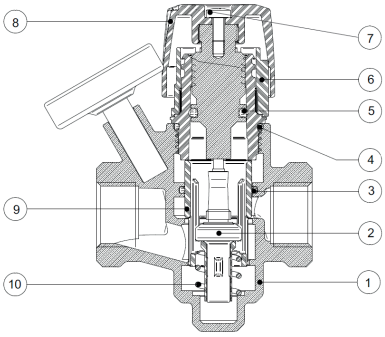
Features

- BSP Parallel (ISO 228/1)
- Fluid: water
- Improves efficiency of DHW systems
- Automatically responds to changes in system temperature and flow requirements
- Reduces heat loss through lower circulation of hot water
- Keeps temperature evenly distributed and reduces dead-legs

Technical data
Max pressure (Static): 10 Bar
Working temp: +40°C to +60°C
Max Inlet temp: 90°C

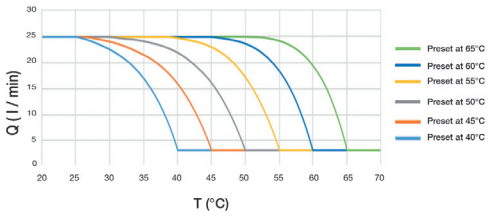


DN	1/2”	3/4”
B	13.5	13.5
C	70	73
D	40	40
E	Max 110	Max 110
Kv	1.5	1.5



N.	Part Name	Materials
1	Body	DZR Brass
2	Element	Thermostatic Element
3	O-Ring	EPDM
4	O-Ring	EPDM
5	O-Ring	EDPM
6	Locking Ring	ABS
7	Screw	Stainless Steel
8	Cap	ABS
9	Regulator	Plastic S2010 G4
10	Spring	Stainless Steel

Flow



V1. Dimensions in mm

ART 34NPT

Thermostatic Mixing Valve (TMV)

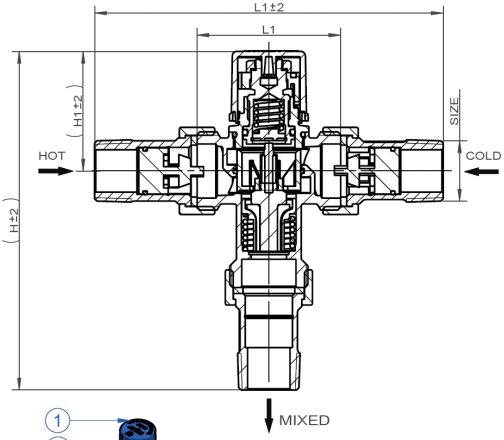
Features

- Cold water supply temperature 4.4°C - 26.6°C
- Hot water supply temperature 48.8°C - 82.2°C
- Temperature adjustment range 30°C - 49°C
- Working temperature range 38°C - 44°C
- Factory temperature setting 41°C ±2°C
- Mix temperature stability 1.7°C
- Max supply pressure 125psi
- Temperature differential 11°C
- Maximum temperature 90°C
- Flow rate minimum 4 litres/min (1gpm)
- ASSE 1017 Approved

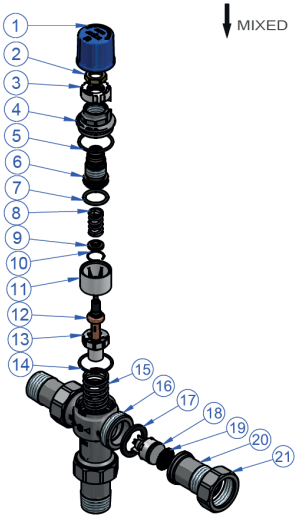
Technical data

Max supply pressure 125psi
Temp adjustment range 30°C to 49°C

DN	1/2”	3/4”
H	136.2	143.7
H1	50.1	50.7
L	135	146
L1	59	61
Kgs	0.56	0.76



N.	Part Name	Materials
1	Cap	ABS
2	Locking Cap	Brass CW617N
3	Locating Ring	POM+25%GF
4	Bonnet	Brass C46500
5	O-Ring	EPDM WRAS approved
6	Stem	Brass C46500
7	O-Ring	EPDM WRAS approved
8	Spring	Stainless Steel 304
9	Block	Brass C46500
10	Circlip	Stainless Steel 304
11	Piston	PSU
12	Thermostat	Assembly
13	Water Flow Directors	PSU
14	O-Ring	EPDM WRAS approved
15	Spring	Stainless Steel 304
16	Valve Body	Brass C46500
17	Gasket	EPDM WRAS approved
18	Check Valve	Acetal
19	Strainer	Stainless Steel 304
20	Connect Pipe	Brass C46500
21	Union Nut	Brass CW617N



V2 Dimensions in mm