



 Check Valves Range

Conex Banninger Check Valves

Compact, simple and cost effective, the Conex Banninger Check Valve works automatically to keep water flowing in one direction and prevents any reverse flow in a system. The force of flow, in the correct direction, opens the valves whilst backflow forces the valve closed.

The Conex Banninger range includes:

- Double Check Valves
- Horizontal Lift Check Valves
- Spring Check Non-Return Valves
- Foot Valves
- Swing Check Valves (brass and bronze versions)

Double Check Valves

The Conex Banninger Double Check Valve consists of two check valve assemblies in series. This employs two operating principles: Firstly, one check valve will still act, even if the other is jammed wide open. Secondly, the closure of one valve reduces the pressure differential across the other, allowing a more reliable seal and avoiding even minor leakage. Double Check Valves are designed specifically to prevent contamination in drinking water systems. These valves are designed in accordance with EN 13959: 2004 Family E, type D.

Horizontal Lift Check Valves

Conex Banninger Horizontal Lift Check Valves are suitable for installation in horizontal or vertical pipelines with upward flow. Flow to lift check valves must always enter below the seat. Lift check valves are particularly suitable for high-pressure service where velocity of flow is high or in conditions where pulsating action in the line may cause excessive wear in swing check type valves. This type of check valve is commonly used in piping systems, in which globe valves are used as flow control valves.

Spring Check Non-Return Valves

Spring Check Non-Return Valves are simple, low cost but effective products providing back flow protection. As these products are fitted with a resilient seat they are suitable for use in systems for air, gas or low pressure applications where bubble tight closure is necessary.

Foot Valves

Foot Valve assemblies comprise a spring check non-return valve fitted with a strainer screen on the inlet side. These products are most often used in connection with drawing fluid from a well, tank or reservoir. The screen prevents soil, dirt and debris getting in the system, thus protecting the valves further along the pipe.

Swing Check Valves

Swing Check Valves are used for water and other liquids. Swing Check Valves can be installed in horizontal or vertical upward flow pipe systems. For low pressure applications and for air or gas systems where bubble tight closure is necessary, the valve should be fitted with a rubber faced seal. The current range does not include this facility but such a feature can be made available to special order.

Applications and uses

Conex Banninger Check Valve range is available for use with water, oil and air up to 5 bar. The Double Check Valve is specifically designed for use with drinking water and should be used in domestic applications to protect drinking water supply systems from contamination.

Conex Banninger Check Valves are approved for drinking water applications where stated and are suitable for low temperature hot water and chilled systems.

Valve materials

Valves made from yellow brass are suitable for general purpose applications. They are not recommended for chilled water systems because of a risk of stress corrosion cracking, or waters which may result in dezincification.

Valves made from DZR brass are suitable for applications where they may be subjected to waters which are very hard and contain high salt levels. Waters which contain high levels of some chlorides, sulphides or carbon dioxide, may also cause dezincification.

Valves made from bronze are suitable for a broad range of application areas as they are classed as immune to dezincification, stress corrosion cracking and are highly corrosion resistant.

Quality assurance

Conex Universal is an ISO 9001 Quality Assured company and is registered with the BSI.

5-year warranty

When professionally fitted and in accordance with the installation instructions, Conex Banninger valves are guaranteed against manufacturing defects for five years from first purchase date.

Any alleged defects must be reported to Conex Universal Ltd within one month of the first occurrence, clearly setting out the nature of the claim. The warranty is limited to the repair and replacement of defective fittings at the discretion of Conex Universal Ltd and the company reserves the right to inspect and test the alleged defects. This warranty provided by Conex Universal Ltd does not affect your statutory rights.

For more information visit www.conexbanninger.com.

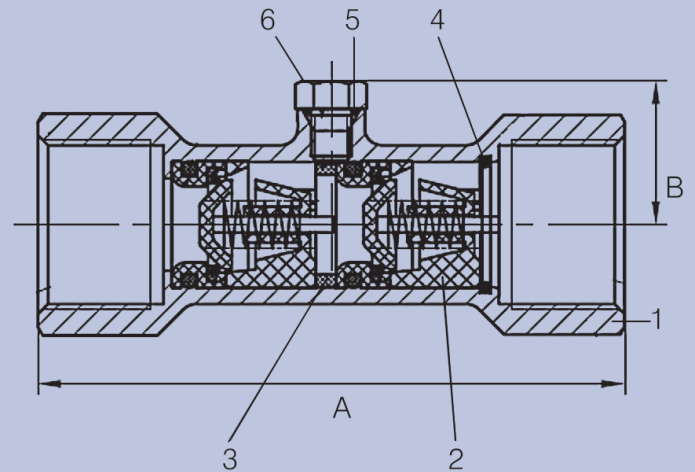
General information

Performance data, including pressure-temperature ratings has been developed from published standards, supplier material specifications, design calculations and in-house testing. It covers typical applications for the Conex Banninger valve product range and is provided as a general guideline.

For specific applications, users are advised to contact Conex Universal Ltd for technical advice, or to complete their own evaluation to prove technical suitability of the products. Failure to follow this may result in damage and personal injury for which Conex Universal Ltd cannot be held liable.

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Valve range

1340 Double Check Valve - PN16 - (DZR)

Material specification

1340 - 1/2" - 2"

No	Component	Material	Specification
1	Body	DZR Brass	EN 12165 CW602N
2	Check Spool	Acetal	Acetal
3	Retaining Ring	Nylon	Nylon 66
4	Clip	Stainless steel	ISO.15510
5	O-ring	EPDM	EN 2430:1995
6	Inspection Port	DZR Brass	EN 12164 CW602N

Features and benefits:

- Designed in accordance with EN 13959, family E, type D.
- WRAS approved for drinking water applications.
- End connections, ISO 228 parallel threads, female ends.
- PN16 from -10° to +85°C.
- Suitable for low temperature hot water and chilled systems.
- Prevents backflow.
- Drain screw / inspection port.

Double Check Valve - 1340

Order Code ISO 228	Size	DN	A	B	KV Value	Weight (Kg)
134050FF0160404	1/2"	15	70	17	2.7	0.10
134050FF0160606	3/4"	20	85	20	4.8	0.17
134050FF0160808	1"	25	100	23	10	0.27
134050FF0161010	1 1/4"	32	120	26	19.6	0.40
134050FF0161212	1 1/2"	40	138	30	35.5	0.58
134050FF0161616*	2"	50	183	36	-	1.30

* Valve available to special order.

Valve suitability

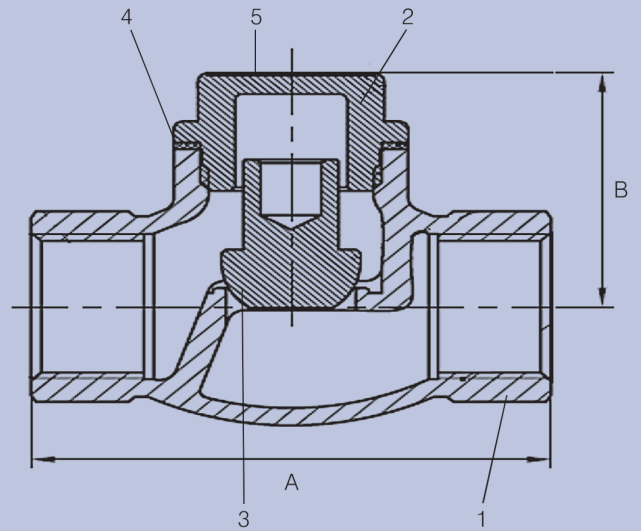
Product	Steam	Water	Drinking Water	Oil	Air (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1340	x	✓	✓	x	x	x	x	x	x

Max. working parameters

1340	Temperature °C	Pressure bar	Pressure psi
Water	-10 to +85	16	230

Specification clauses:

- Designed in accordance with EN 13959.
- WRAS approved for drinking water applications.
- Suitable for low temperature hot water and chilled systems.
- Prevents backflow.
- End connections, ISO 228 parallel threads, female ends.
- Inspection port.



Valve range

1360 Horizontal Lift Check Valve - PN32 - (Bronze)

Material specification

1360 - 1/2" - 2"

No	Component	Material	Specification
1	Body	Bronze	EN 1982 CC491K
2	Cap	Bronze	EN 1982 CC491K
3	Disc	Bronze	EN 1982 CC491K
4	Gasket Seal	PTFE	PTFE
5	ID Disc	Aluminium	EN 1706 LM6

Features and benefits:

- Designed in accordance with EN 5154.
- Suitable for water, oil and oil free air applications.
- Suitable for low temperature hot water and chilled systems.
- WRAS approved for drinking water applications.
- Metal to metal seat.
- Seating disc guided inside cap.
- End connections, female taper threads to EN 10226-2 (ISO 7-1).

Horizontal Lift Check Valve - 1360

Order Code EN 10226-2 (ISO 7-1) thread	Size	DN	A	B	KV Value	Weight (Kg)
136020RRR0320404	1/2"	15	60	34	-	0.28
136020RRR0320606	3/4"	20	75	42	-	0.44
136020RRR0320808	1"	25	85	46	12.3	0.60
136020RRR0321010	1 1/4"	32	100	51	-	1.14
136020RRR0321212	1 1/2"	40	110	54	-	1.46
136020RRR0321616	2"	50	120	72	-	2.57

Valve suitability

Product	Steam	Water	Drinking Water	Oil	Air (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1360	x	✓	✓	✓	✓	x	x	x	x

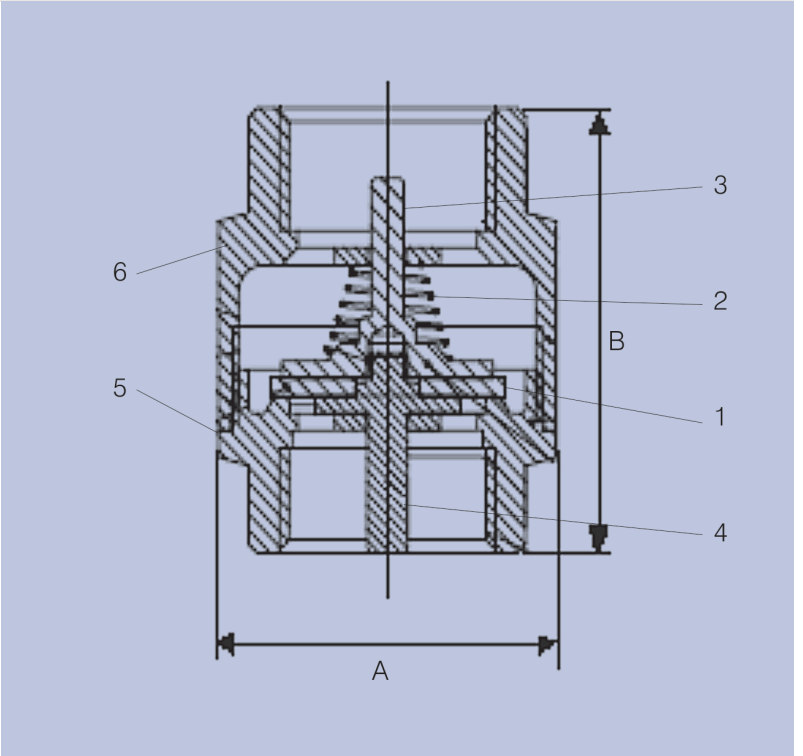
This valve is not suitable for gas applications.

Max. working parameters

1360	Temperature °C	Pressure Bar	Pressure psi
Water	-10 to +100	32	460

Specification clauses:

- Valves are designed in accordance with EN 5154.
- WRAS approved for drinking water applications.
- Suitable for low temperature hot water and chilled systems.
- Disc is spherical shaped, guided in the cap.
- Body seat is integral.
- End connections, female taper threads to EN 10226-2 (ISO 7-1).



Valve range
1451 Spring Check Non Return Valve - PN10/12 - (Brass)

Material specification

1451 - 1/2" - 2"

No	Component	Material	Specification
1	Seat	EPDM	EN 2430:1995
2	Spring	Stainless Steel	ISO.15510
3	Spindle core (Upstream)	Brass	EN 12165 CW617N-DW
4	Spindle core (Downstream)	Brass	EN 12165 CW617N-DW
5	Bonnet	Brass	EN 12165 CW617N-DW
6	Body	Brass	EN 12165 CW617N-DW

Features and benefits:

- WRAS approved for drinking water applications.
- Brass core for improved strength and performance.
- PN12 up to 1", PN10 above 1".
- End connections, female parallel threads to ISO 228 female ends.
- Suitable for low temperature hot water systems.

Spring Check Non Return Valve - 1451

Order Code ISO 228 thread	Size	DN	A	B	KV Value	Weight (Kg)
145110FF0120404	1/2"	15	48	33	2.4	0.14
145110FF0120606	3/4"	20	51	42	3.3	0.24
145110FF0120808	1"	25	59	47	-	0.27
145110FF0101010	1 1/4"	32	72	59	17.2	0.52
145110FF0101212	1 1/2"	40	83	67	36.5	0.74
145110FF0101616	2"	50	92	83	52.7	1.06

Valve suitability

Product	Steam	Water	Drinking Water	Oil	Air* (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1451	x	✓	✓	✓	✓	x	x	x	x

*Limited to 5 bar max.

This valve is not suitable for gas applications.

Max. working parameters

1451	Size	Temperature °C	Pressure bar	Pressure psi	Min. operating pressure bar
Water	1/2" - 1"	-10 to +100	12	174	-0.002 to +0.04
Water	1 1/4" - 2"	-10 to +100	10	145	-0.002 to +0.04

Not suitable for temperatures above +100°C.

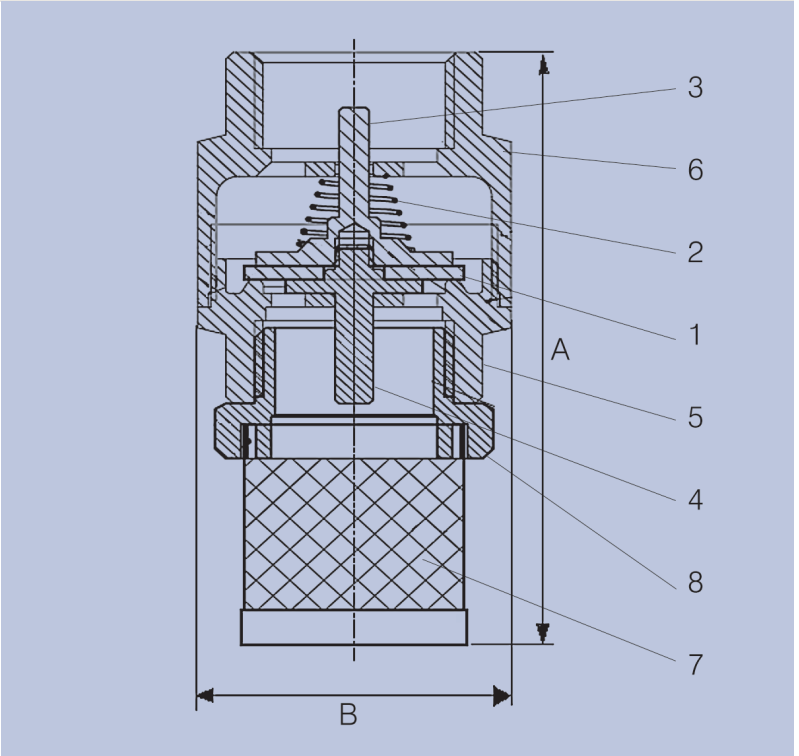
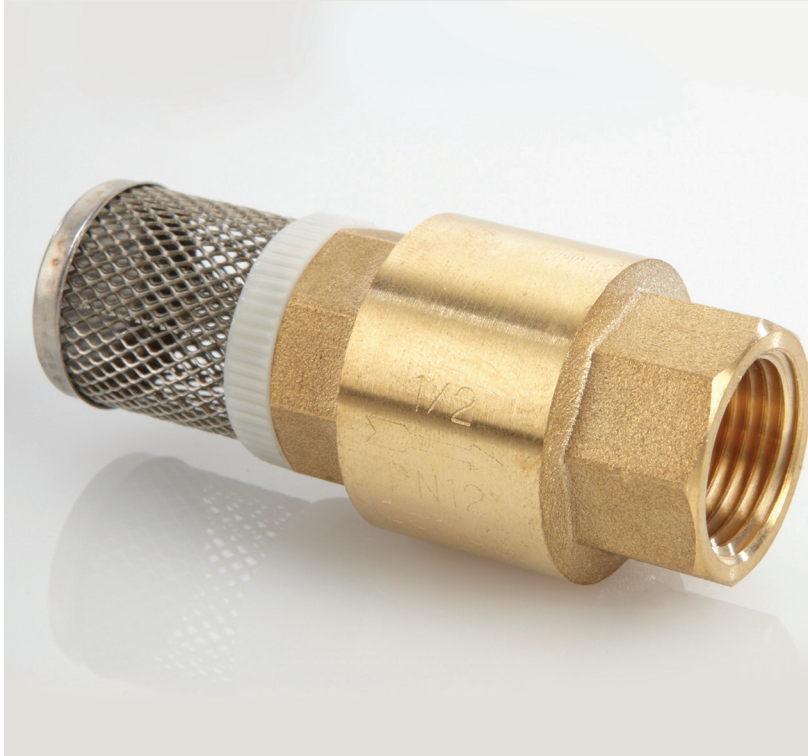
Specification clauses:

WRAS approved for drinking water applications.

Suitable for low temperature hot water systems.

End connections, female parallel threads to ISO 228 female ends.

Brass core for improved strength and performance.



Valve range

1461 Foot Valve - PN10/PN12 - (Brass)

Material specification

1461 - 1/2" - 2"

No	Component	Material	Specification
1	Seat	EPDM	EN 2430:1995
2	Spring	Stainless Steel	ISO.15510
3	Spindle Core (Upstream)	Brass	EN 12165 CW617N-DW
4	Spindle Core (Downstream)	Brass	EN 12165 CW617N-DW
5	Bonnet	Brass	EN 12165 CW617N-DW
6	Body	Brass	EN 12165 CW617N-DW
7	Strainer	Stainless Steel	ISO.15510
8	Strainer Adaptor	Acetal	Acetal

Features and benefits:

- Designed in accordance with WRAS requirements.
- Stainless steel mesh strainer.
- Brass core for improved strength and performance.
- PN12 up to 1", PN10 above 1".
- End connections, parallel threads to ISO 228 female ends.
- Suitable for low temperature hot water systems.

Foot Valve - 1461

Order Code ISO 228 thread	Size	DN	A	B	KV Value	Weight (Kg)
146110FF0120404	1/2"	15	65	33	2.4	0.14
146110FF0120606	3/4"	20	86	42	3.3	0.24
146110FF0120808	1"	25	103	47	-	0.27
146110FF0101010	1 1/4"	32	119	59	17.2	0.52
146110FF0101212	1 1/2"	40	141	67	36.5	0.74
146110FF0101616	2"	50	159	83	52.7	1.06

Valve suitability

Product	Steam	Water	Drinking Water	Oil	Air* (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1461	x	✓	x	✓	✓	x	x	x	x

* Limited to 5 bar max.

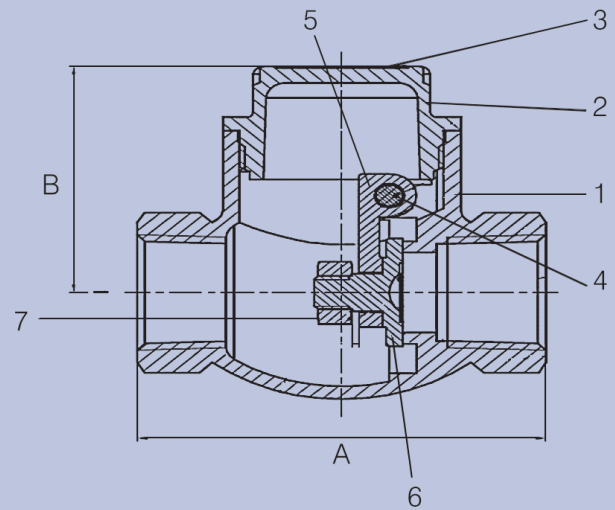
Max. working parameters

1461	Size	Temperature °C	Pressure bar	Pressure psi	Min. operating pressure bar
Water	1/2" - 1"	-10 to +100	12	174	-0.002 to +0.04
Water	1 1/4" - 2"	-10 to +100	10	145	-0.002 to +0.04

Not suitable for temperatures above +100°C.

Specification clauses:

- Suitable for low temperature hot water systems.
- End connections, parallel threads to ISO 228 female ends.
- Brass core for improved strength and performance.
- Stainless steel mesh strainer.



Valve range

1470 Swing Check Valve - PN25 - (Brass)

Material specification

1470 - 1/2" - 2"

No	Component	Material	Specification
1	Body	Brass	EN 12165 CW617N
2	Cap	Brass	EN 12165 CW617N
3	Identity Disc	Aluminium	EN 1706 LM6
4	Swing Pin	Stainless steel	ISO.15510
5	Swing Arm	Brass	EN 12165 CW617N
6	Seat	Brass	EN 12165 CW617N
7	Retaining Nut	Brass	EN 12165 CW617N

Features and benefits:

- WRAS approved for drinking water systems.
- Suitable for water and other liquids.
- Metal to metal seat.
- Horizontal swing check design.
- Choice of alternative disc material to special order.
- End connections, female taper threads to EN 10226-2 (ISO 7-1).
- Suitable for low temperature hot water systems.

Swing Check Valve - 1470

Order Code EN 10226-2 (ISO 7-1) thread	Size	DN	A	B	KV Value	Weight (Kg)
147010RR0250404	1/2"	15	60	42	5.8	0.26
147010RR0250606	3/4"	20	70	48	7.1	0.37
147010RR0250808	1"	25	80	54	23	0.64
147010RR0251010	1 1/4"	32	90	60	-	0.92
147010RR0251212	1 1/2"	40	100	70	82	1.26
147010RR0251616	2"	50	110	80	93	1.95

Valve suitability

Product	Steam	Water	Drinking Water	Oil	Air (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1470	x	✓	✓	✓	✓	x	x	x	x

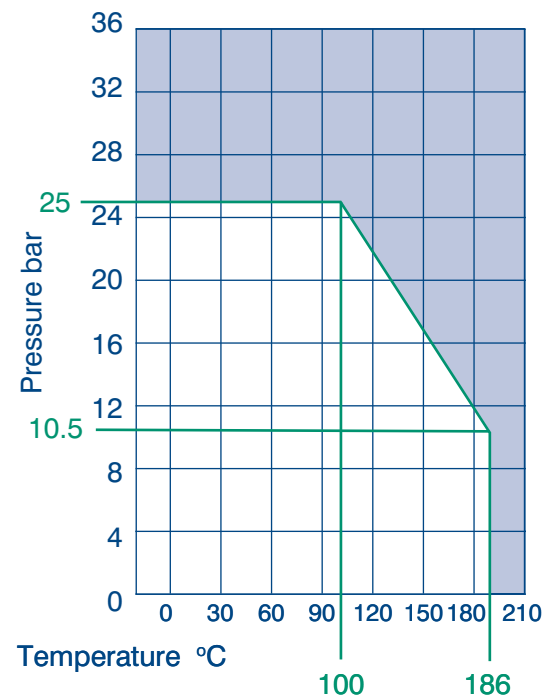
This valve is not suitable for gas applications.

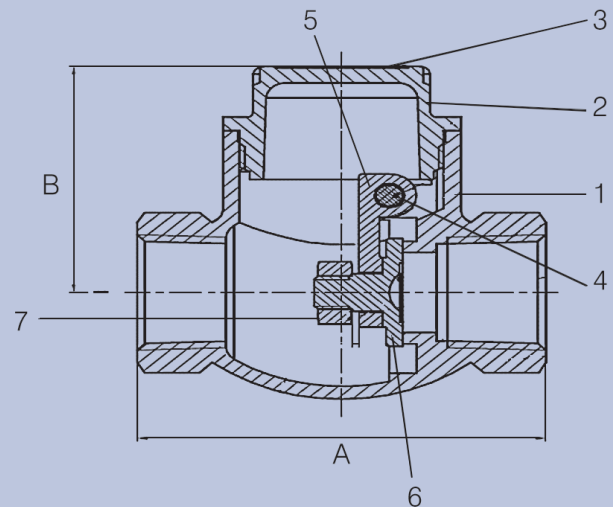
Max. working parameters

1470	Temperature °C	Pressure bar	Pressure psi
Water	-10 to +100	25	360

Specification clauses:

- Brass body.
- Metal disc, screwed in cap.
- Operation is automatic using a swing type check.
- Valves are manufactured in accordance with EN 5154:1991 PN25 for Series B ratings.
- End connections, female taper threads to EN 10226-2 (ISO 7-1).
- WRAS approved for drinking water systems.
- Suitable for low temperature hot water systems.





Valve range

1470 Swing Check Valve - PN25 - (Bronze)

Material specification

1470 - 1/2" - 2"

No	Component	Material	Specification
1	Body	Bronze	EN 1982 CC491K
2	Cap	Bronze	EN 1982 CC491K
3	Identity Disc	Aluminium	EN 1706 LM6
4	Swing Pin	Stainless steel	ISO.15510
5	Swing Arm	Bronze	EN 1982 CC491K
6	Seat	Bronze	EN 1982 CC491K
7	Retaining Nut	Bronze	EN 1982 CC491K

Features and benefits:

- WRAS approved for drinking water systems.
- Horizontal swing check design.
- Metal to metal seat.
- Choice of alternative disc material to special order.
- End connections, female taper threads to EN 10226-2 (ISO 7-1).
- Suitable for water and other liquids.
- Suitable for low temperature hot water and chilled systems.

Swing Check Valve - 1470

Order Code EN 10226-2 (ISO 7-1) thread	Size	DN	A	B	KV Value	Weight (Kg)
147020RR0250404	1/2"	15	60	42	5.8	0.36
147020RR0250606	3/4"	20	70	48	7.1	0.44
147020RR0250808	1"	25	80	54	23	0.69
147020RR0251010	1 1/4"	32	90	60	-	0.97
147020RR0251212	1 1/2"	40	100	70	82	1.38
147020RR0251616	2"	50	110	80	93	2.01

Valve suitability

Product	Steam	Water	Drinking Water	Oil	Air (Oil Free)	Gas (Inert)	Gas (Combustible)	Gas (Corrosive)	Gas (Oxygen)
1470	x	✓	✓	✓	✓	x	x	x	x

This valve is not suitable for gas applications.

Max. working parameters

1470	Temperature °C	Pressure bar	Pressure psi
Water	-10 to +100	25	360

Specification clauses:

Valves manufactured in accordance with EN 5154:1991 PN25 for Series B ratings.

Bronze body.

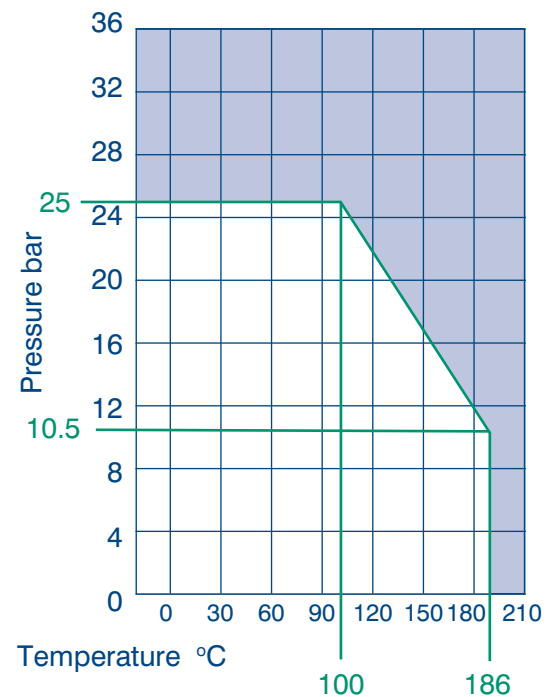
Metal disc, screwed in cap.

Operation is automatic using a swing type check.

End connections, female taper threads to EN 10226-2 (ISO 7-1).

WRAS approved for drinking water systems.

Suitable for low temperature hot water and chilled systems.



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>B< Press Carbon

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Series 8000

Conex | Bänninger
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