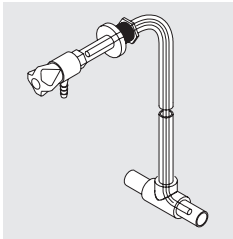
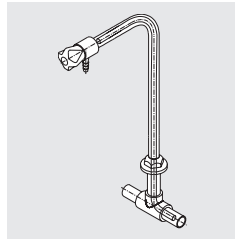


BOSS fittings for special water

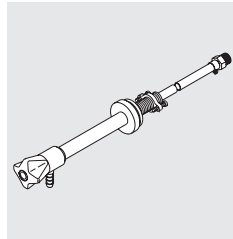
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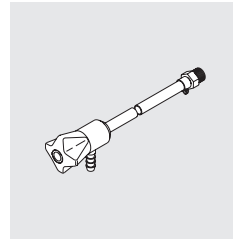
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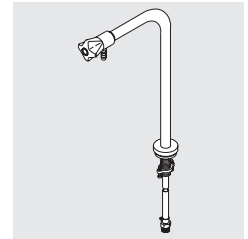
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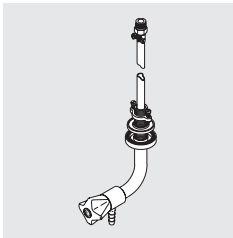
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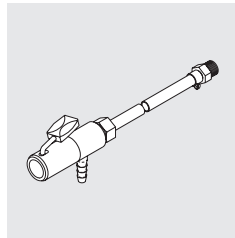
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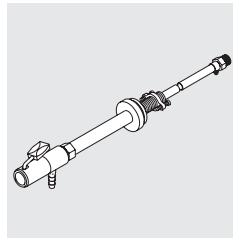
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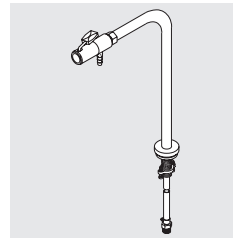
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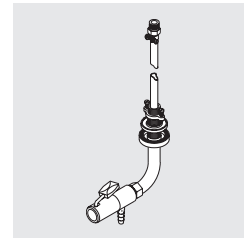
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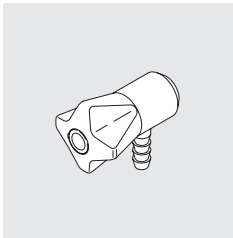
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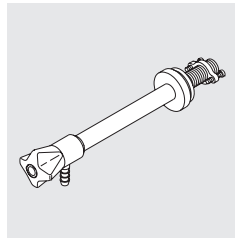
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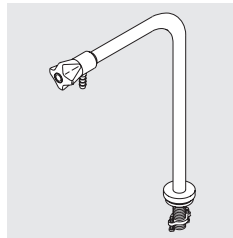
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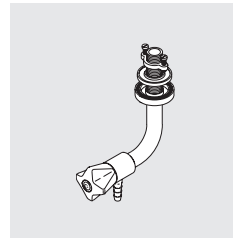
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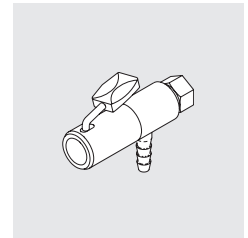
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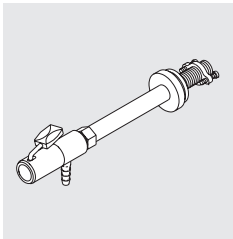
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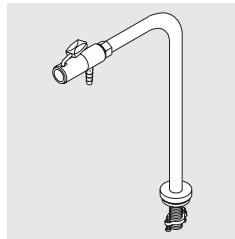
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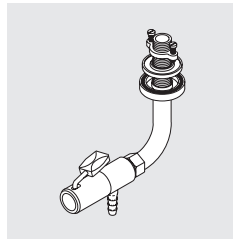
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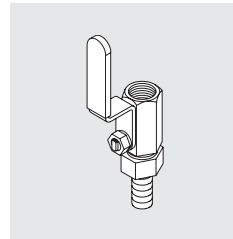
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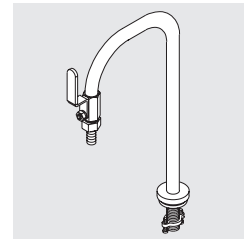
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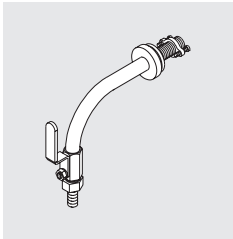
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04-21

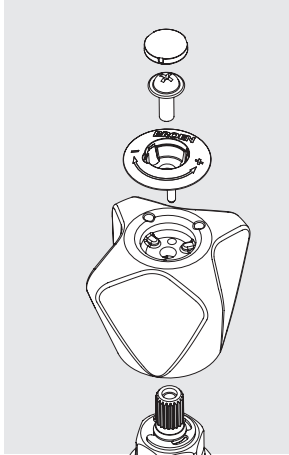


04-22



04-23

BOSS fittings for special water - headworks

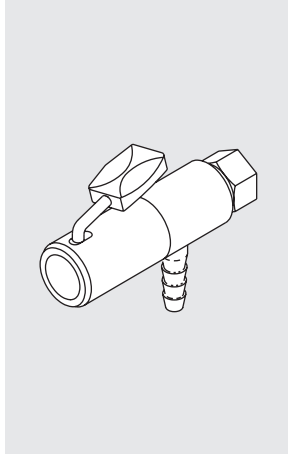
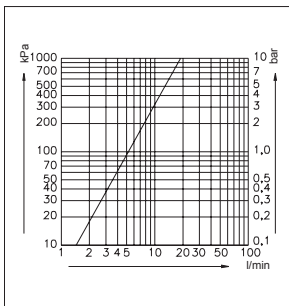


Manual valve based on diaphragm headwork.
Opening/closing function = 360° turn.
Maximum temperature = 90°C.
Spare parts see section 13.

Materials with medium contact:

Sealing: EPDM

Flow Chart:

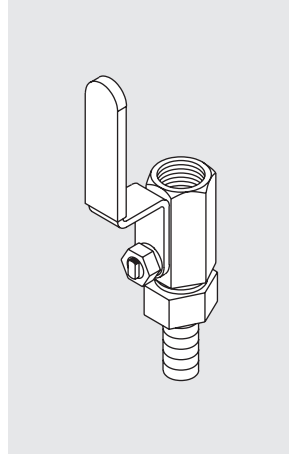
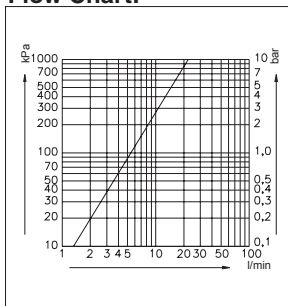


Valve based on self-closing principle with a stainless steel valve house. Filter on inlet side.
Maximum temperature = 90°C.
Spare parts see section 13.

Materials with medium contact:

Valve house: Stainless steel
Plastics: POM
Sealing: EPDM
Filter: Nylon 6

Flow Chart:

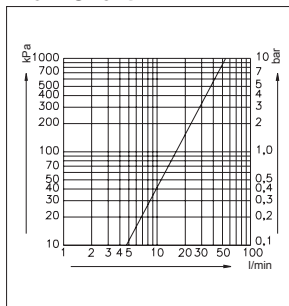


Full flow valve in stainless steel based on a ball valve.
Opening/closing function = 90° turn.
Maximum temperature = 90°C.

Materials with medium contact:

Body: Stainless steel
Sealing: PTFE

Flow Chart:



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The most commonly used material in BROEN's special water fittings are:

- PP (Polypropylene)
- PEX (Polyethylene cross link)
- SS (Stainless Steel)
- ABS

Fittings for re-circulating special water are also included in the range.

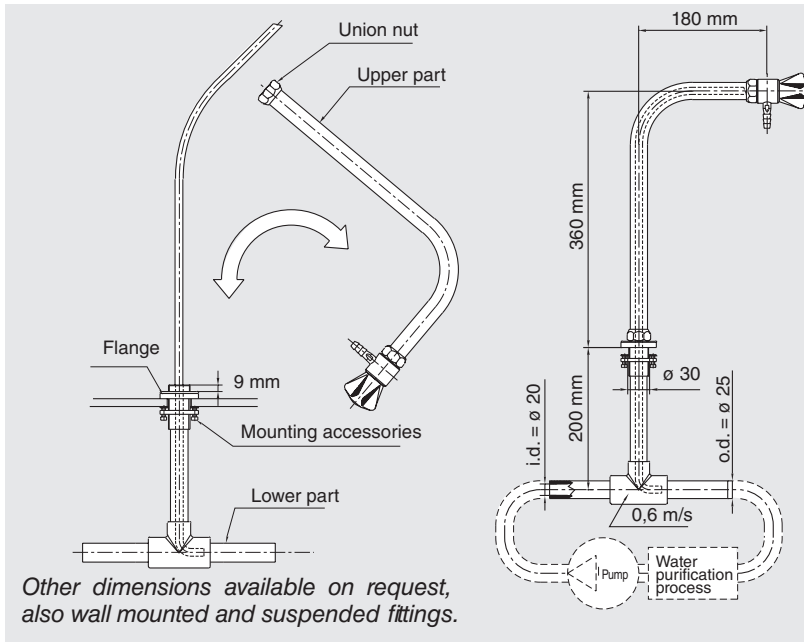
The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

Every fitting is leak tested before leaving our factory.

Max. allowable test pressure 10 bar water or 6 bar air.

BOSS fittings for special water

- mounting information on recirculating fitting



Working temperature and pressures:

Circulating flow rate:
The flow rate in the main water flow has to be so high, that the water velocity passing the bent inner tube in the main stream is more than 0,6 m/s.

$$Q = (\pi/4) \cdot d^2 \cdot v$$

Q = Flow rate [m³/s]
d = Inside diameter of main tubing [m]
(standard: d = ø20mm = ø0.02m)
v = Water velocity (> 0.6 m/s) [m/s]

Example:

standard; d=ø20mm

$$Q = (\pi/4) \cdot 0.02^2 \cdot 0.6 = 1.88 \cdot 10^{-4} \text{ m}^3/\text{s} = 11.3 \text{ l/min}$$

11.3 l/min

Please note that Q = 11.3 l/min should be obtained even with open point of use valves in other parts of the system.

Installation

Unscrew the union nut and lift off the upper part of the valve. Unscrew the flange and mount the lower part from under the table and up into a ø30 mm hole. Remount the flange leaving 9 mm free thread above the flange for the union nut. Use the mounting accessories to fix the lower part. Remount the upper part by sticking the inner tube into the upper part. Place the upper part in the correct position and mount the union nut to the 9 mm M28x1.5 thread with a torque of 20-30 Nm.

Connect the valve to the recirculating special water system.

BROEN recommend heat welding connections made of PP for the connection for the ø25 mm PP-pipe ends.

Connection methods:

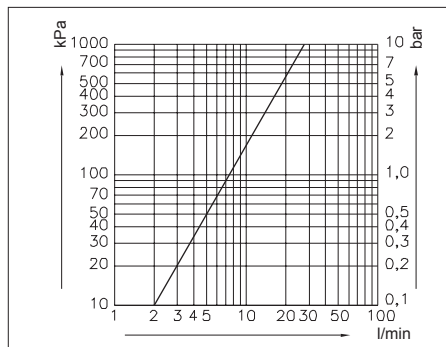
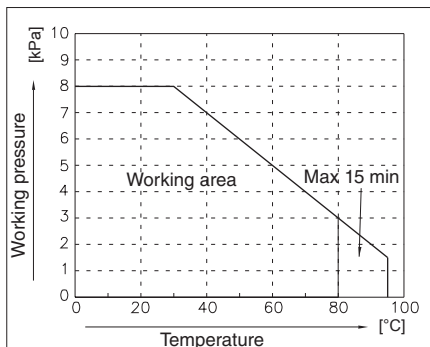
PP connections: Welded

ABS connections: Glued

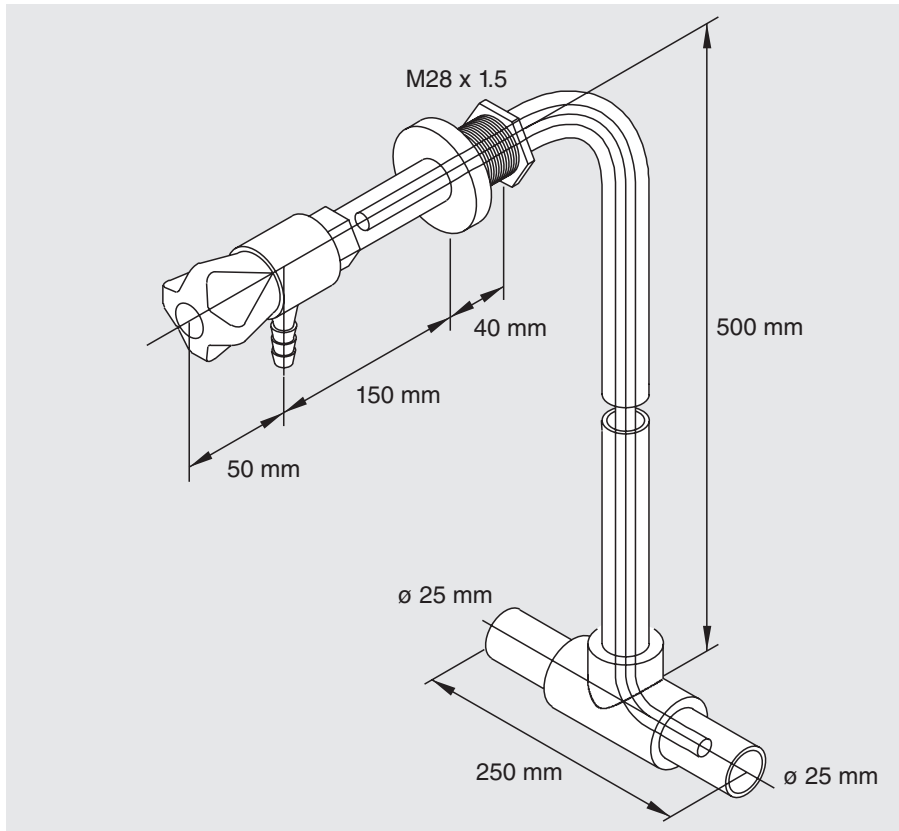
Outlet flow rate:

The connection between the dynamic pressure and the outlet flow rate is showed on the graph:

Capacity graph for 15 400.00 headwork:



BOSS fittings for special water - fully recirculating



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 411.009 Wall mounted fitting made of brass with internal PP liner with internal PEX pipe and T-Piece connection.

Water will constantly recirculate up through the column to the head work with no deadlegs. This prevents bacteria build-up.

For further information please request our data sheet concerning recirculating fittings for special water.

This fitting is available in other material and with different pipe size connection upon request.

Materials with medium contact:

Plastics: PP, PVDF
Sealing: EPDM

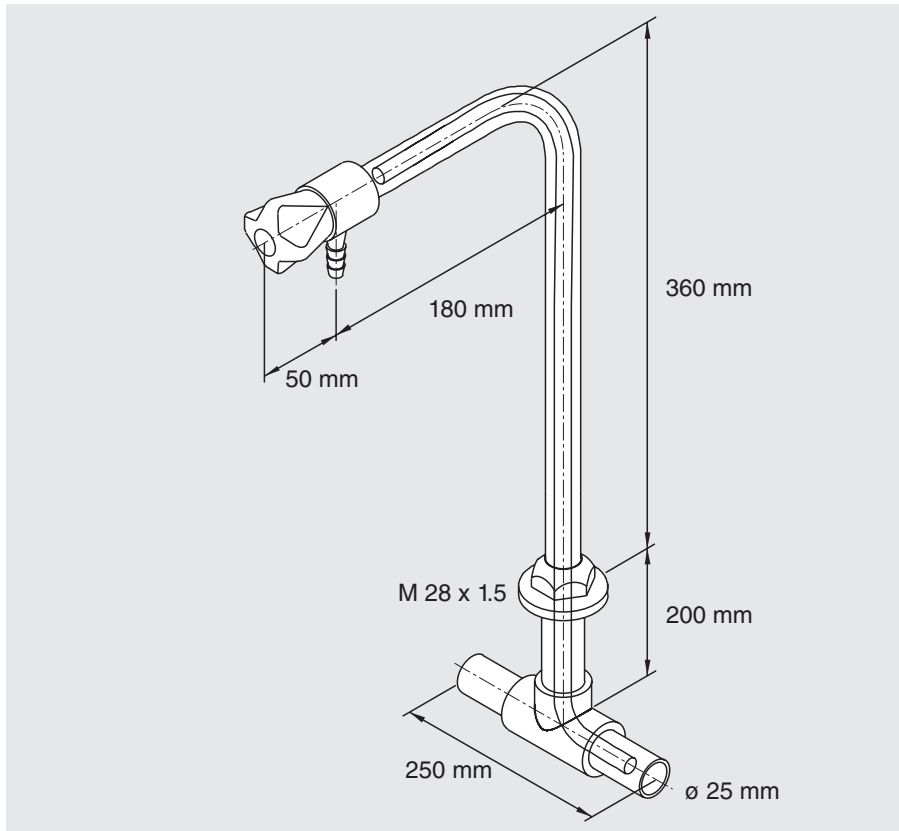
Weight: 1.6 kg

Maximum working pressure:
10 bar/147 psi

Mounting information:

See page 04-2

BOSS fittings for special water - fully recirculating



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 410.009 Bench mounted fitting made of brass with internal PP liner with internal PEX pipe and T-Piece connection.

Water will constantly recirculate up through the column to the head work with no deadlegs. This prevents bacteria build-up.

For further information please request our data sheet concerning recirculating fittings for special water.

This fitting is available in other material and with different pipe size connection upon request.

No. 15 414.009 ABS 1" OD

No. 15 414.109 ABS 1¼" OD

No. 15 414.209 ABS 1½" OD

Materials with medium contact:

Plastics: PP, PVDF
Sealing: EPDM

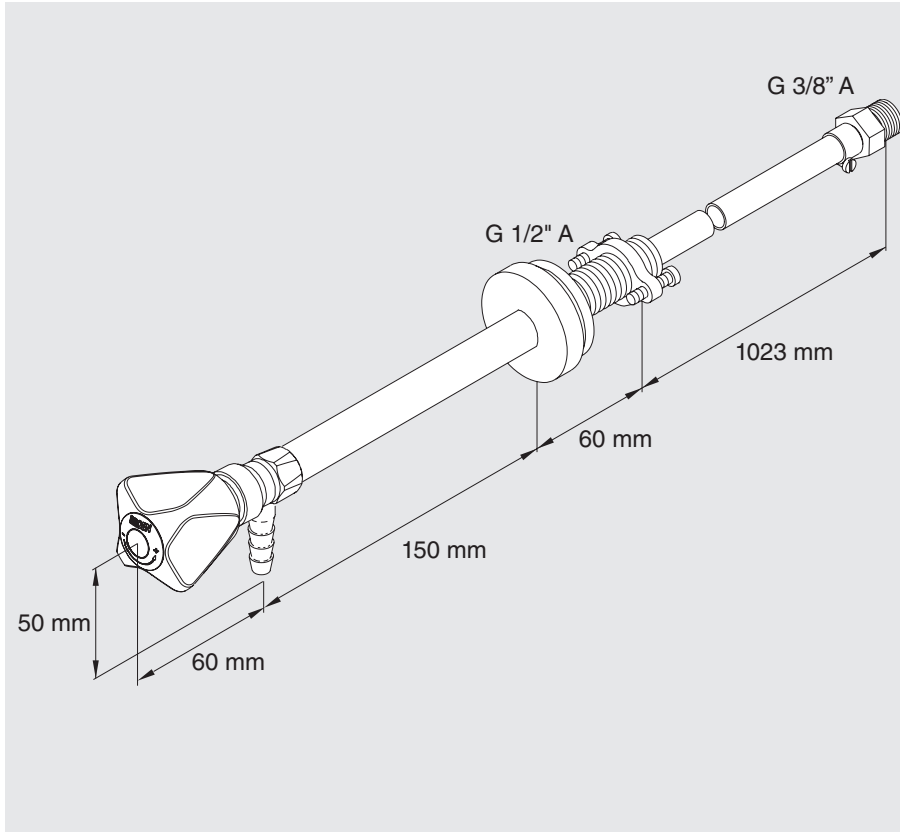
Weight: 1.8kg

Maximum working pressure:
10 bar/147 psi

Mounting information:

See page 04-2
(PP connections are welded and ABS connections are glued).

BOSS fittings for special water - plastic inner tube



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 403.009 Wall mounted fitting with 12 mm PEX pipe, protected by a brass pipe.

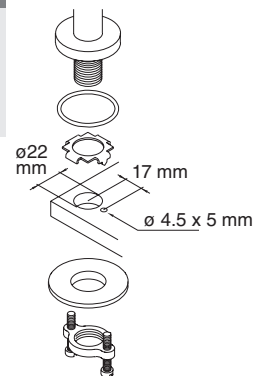
Delivered with mounting accessories.

Materials with medium contact:

Plastics:	PVDF
Sealing:	EPDM
Pipe:	PEX (crosslinked PE)

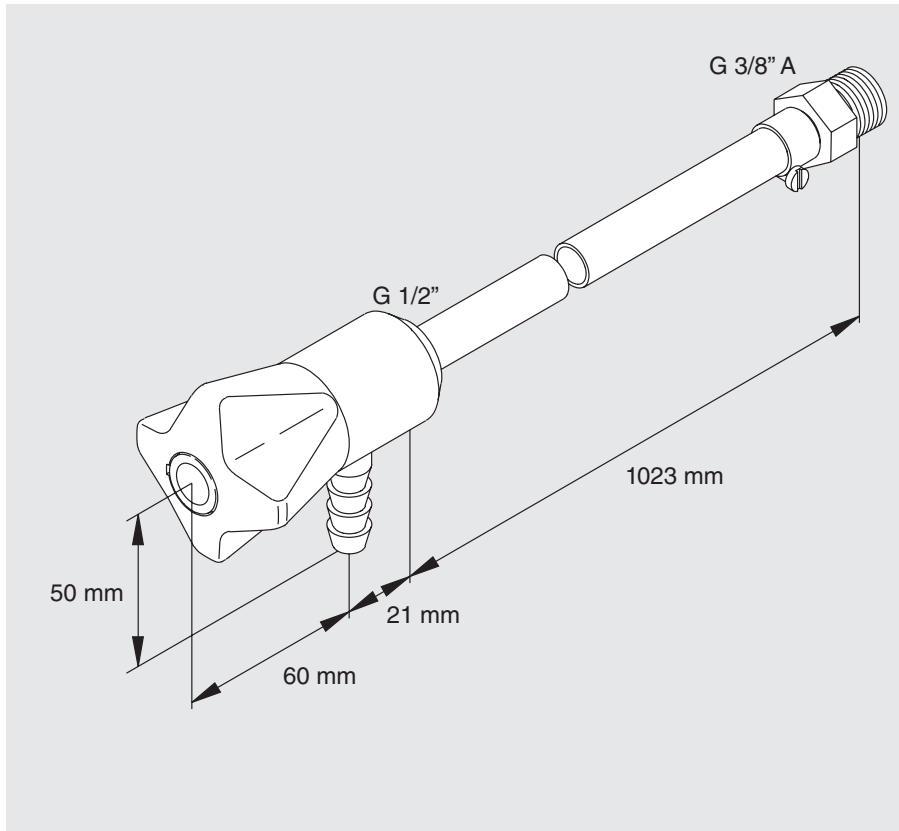
Weight: 0.7 kg
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill ø 22 mm for the inlet.
Drill ø 4.5 mm for the locking ring at a distance of 17 mm from the center of the ø 22 mm hole.
The ø 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - plastic inner tube



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

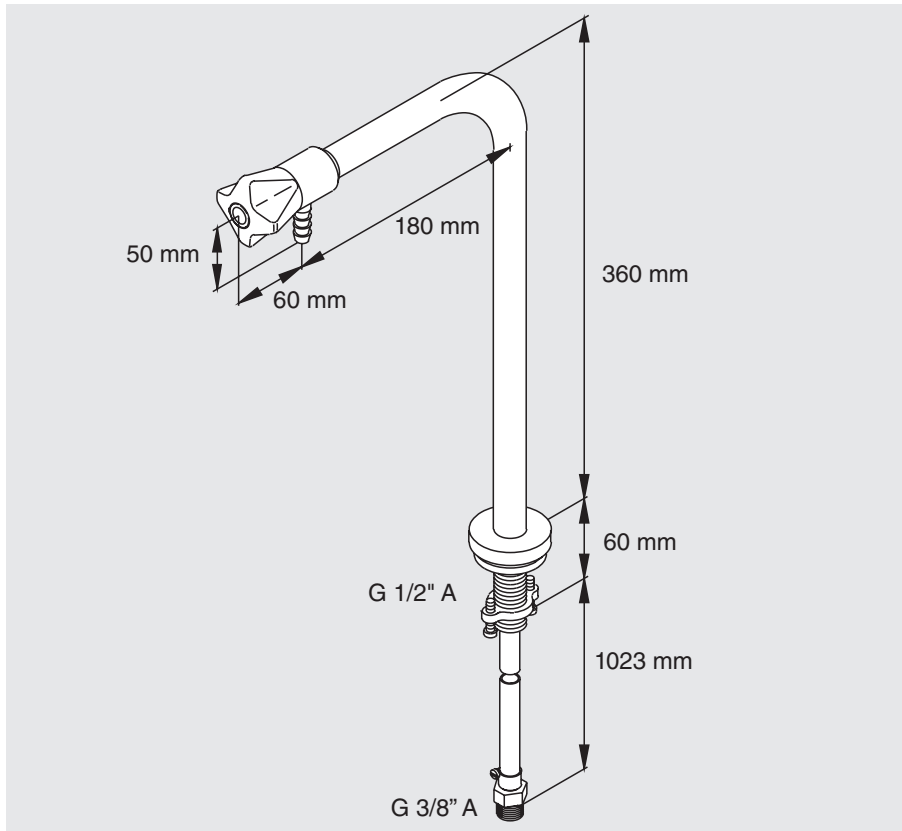
No. 15 404.009 Valve with 12 mm PEX pipe.

Materials with medium contact:

Plastics:	PVDF
Sealing:	EPDM
Pipe:	PEX (crosslinked PE)

Weight: 0.7 kg
Maximum working pressure:
10 bar/147 psi

BOSS fittings for special water - plastic inner tube



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 402.009 Bench mounted fitting with 12 mm PEX pipe, protected by a brass pipe.

Delivered with mounting accessories.

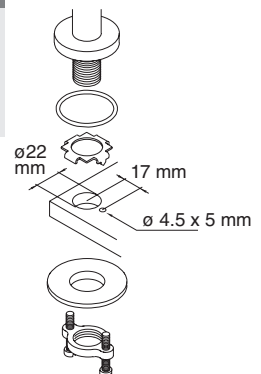
Materials with medium contact:

Plastics:	PVDF
Sealing:	EPDM
Pipe:	PEX (crosslinked PE)

Weight: 0.7 kg

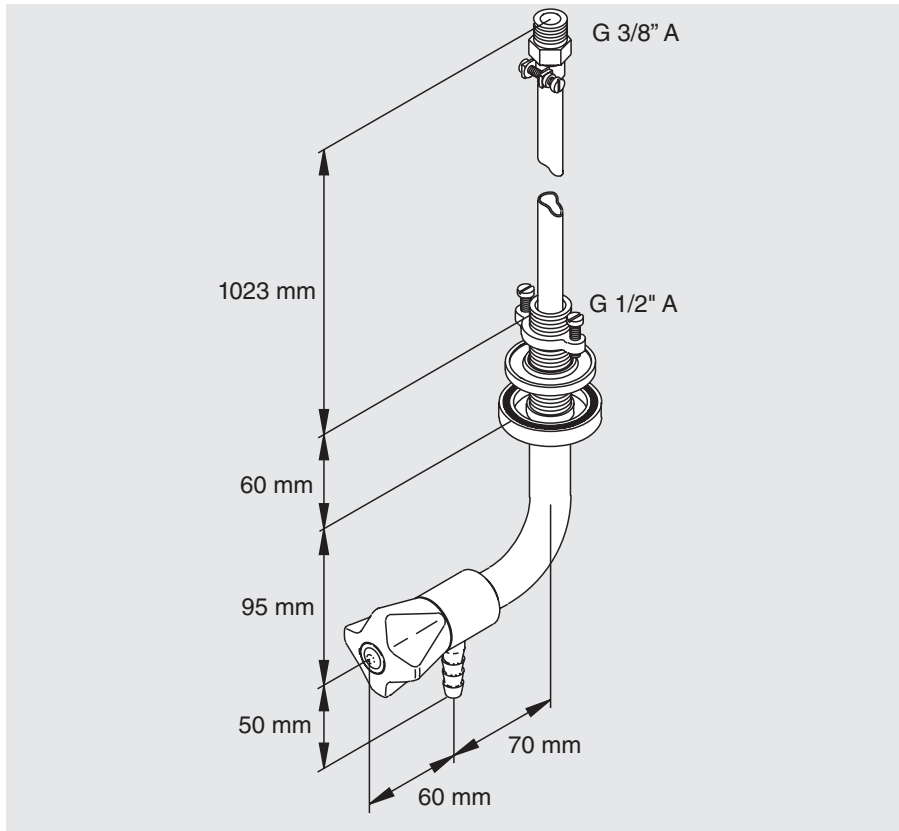
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - plastic inner tube



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 399.009 Suspended fitting with 12 mm PEX pipe, protected by a brass pipe.

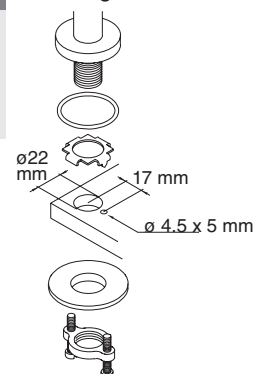
Delivered with mounting accessories.

Materials with medium contact:

Plastics:	PVDF
Sealing:	EPDM
Pipe:	PEX (crosslinked PE)

Weight: 1.1 kg
Maximum working pressure:
10 bar/147 psi

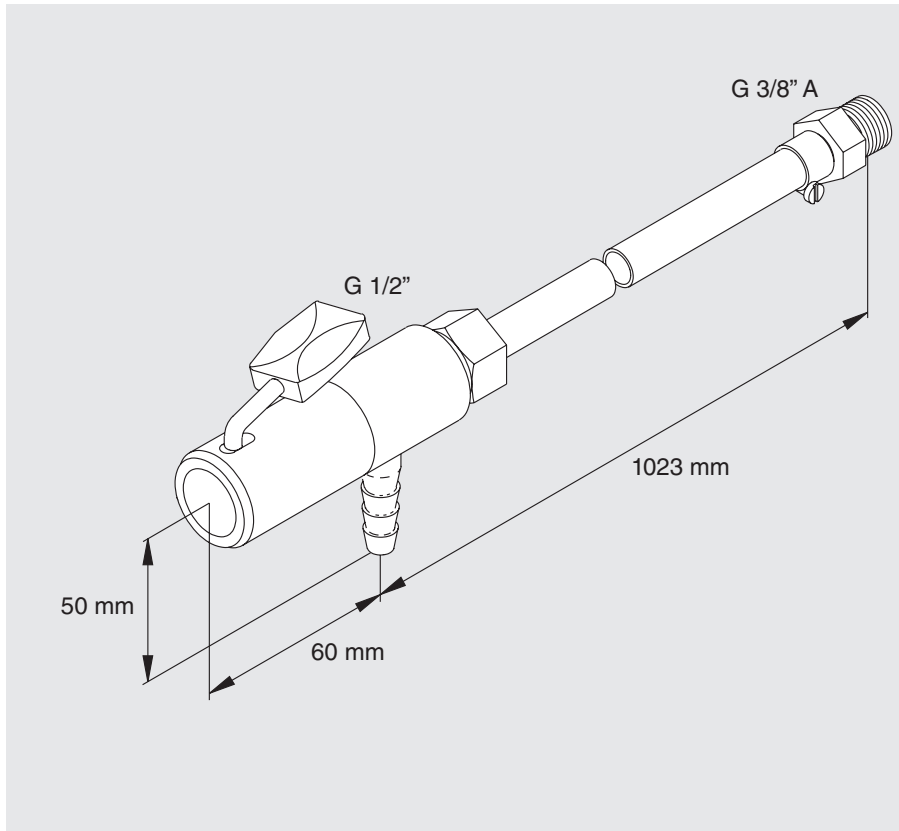
Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.

The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - self-closing fitting



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 383.009 Self-closing valve with 12 mm PEX pipe.

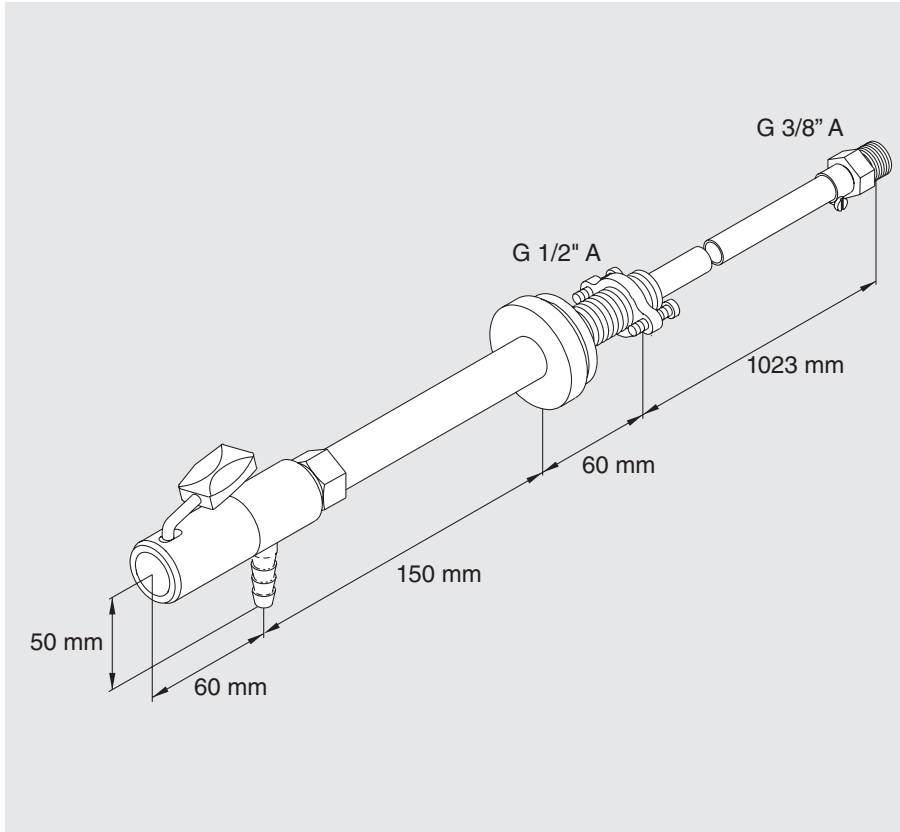
Materials with medium contact:

Plastics:	POM
Sealing:	EPDM
Valve house:	Stainless steel
Lubrication:	Silicone based
Filter:	Nylon
Pipe:	PEX (crosslinked PE)

Weight: 0.7 kg

Maximum working pressure:
10 bar/147 psi

BOSS fittings for special water - self-closing fitting



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 397.009 Wall mounted self-closing fitting with 12 mm PEX pipe, protected by a brass pipe.

Delivered with mounting accessories.

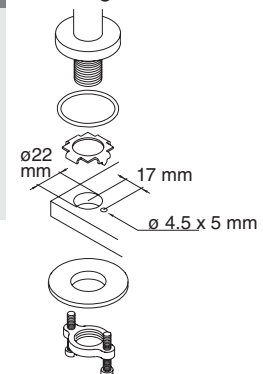
Materials with medium contact:

Plastics:	POM
Sealing:	EPDM
Valve house:	Stainless steel
Lubrication:	Silicone based
Filter:	Nylon
Pipe:	PEX (crosslinked PE)

Weight: 0.7 kg

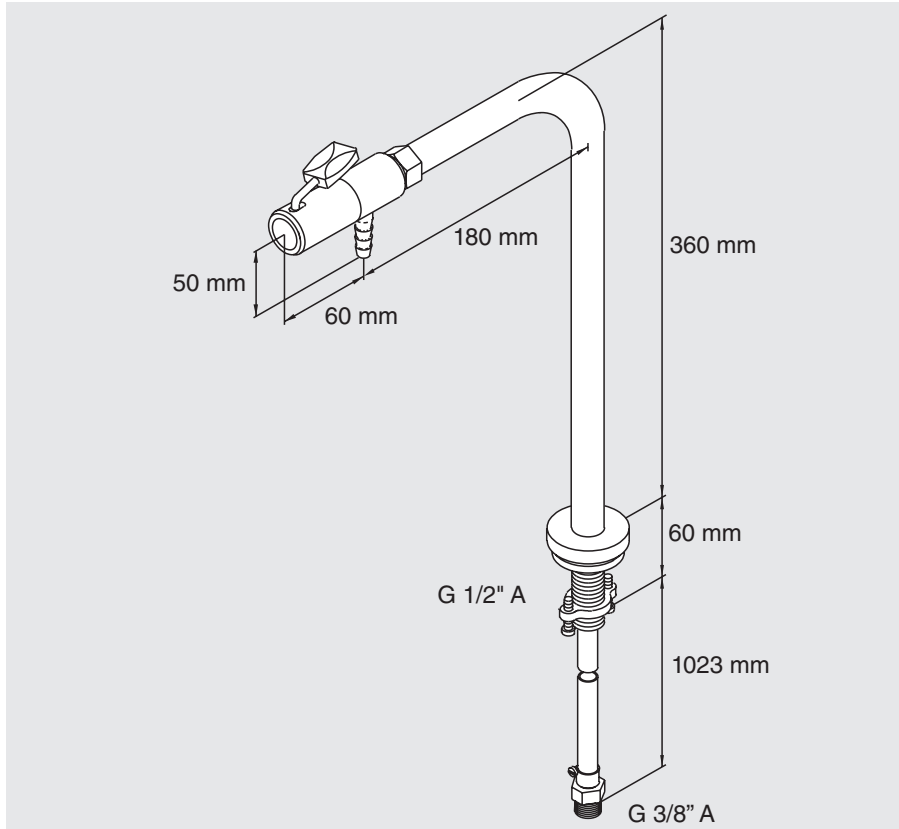
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - self-closing fitting



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 395.009 Bench mounted fitting with self-closing valve with 12 mm PEX pipe, protected by a brass pipe.

Delivered with mounting accessories.

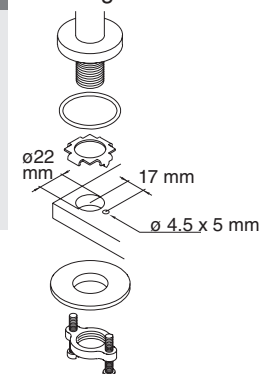
Materials with medium contact:

Plastics:	POM
Sealing:	EPDM
Valve house:	Stainless steel
Lubrication:	Silicone based
Filter:	Nylon
Pipe:	PEX (crosslinked PE)

Weight: 0.7 kg

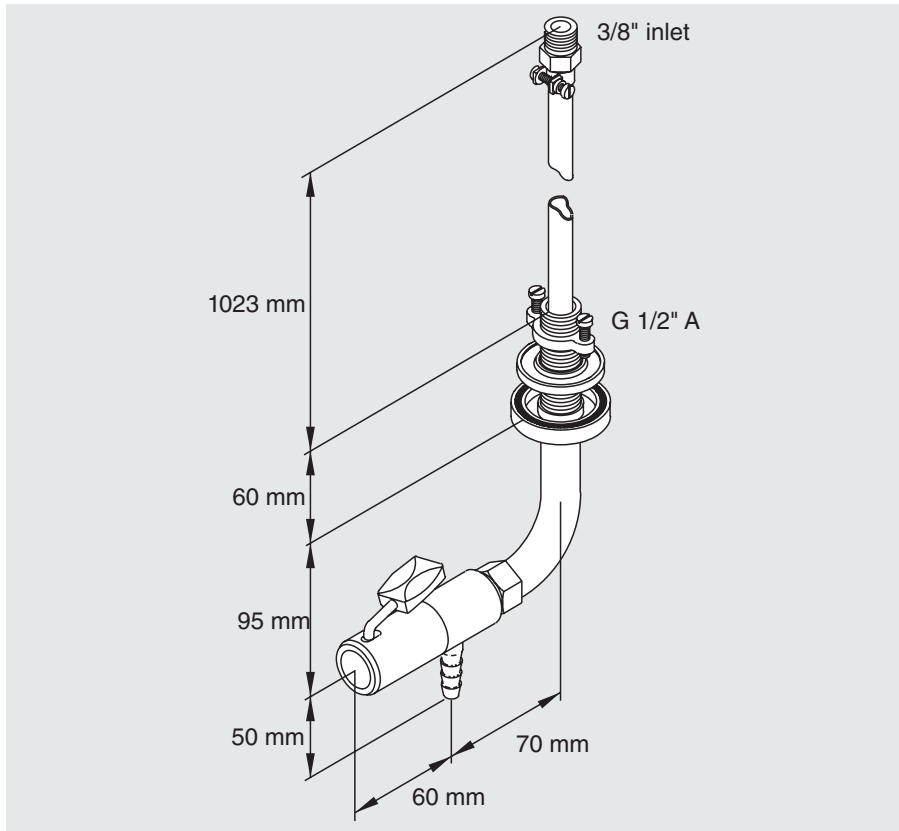
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - self-closing fitting



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 407.009 Suspended self-closing fitting with 12 mm PEX pipe, protected by a brass pipe.

Delivered with mounting accessories.

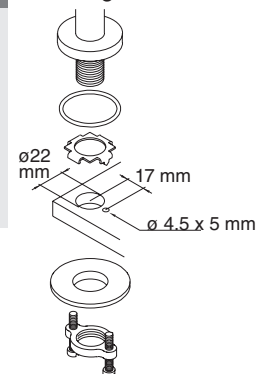
Materials with medium contact:

Plastics:	POM
Sealing:	EPDM
Valve house:	Stainless steel
Lubrication:	Silicone based
Filter:	Nylon
Pipe:	PEX (crosslinked PE)

Weight: 1.1 kg

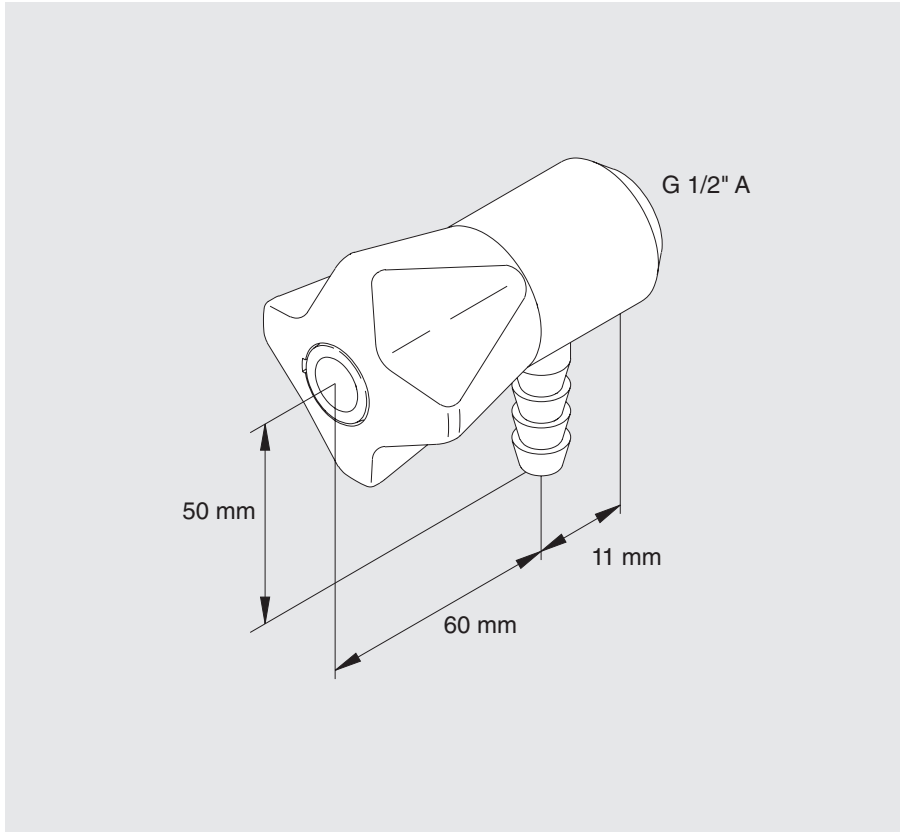
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 382.009 Manual valve in stainless steel.

No. 15 400.000 Manual valve in PVDF.

Materials with medium contact:

No. 15 392.009

Body: Stainless steel
Sealing: EPDM

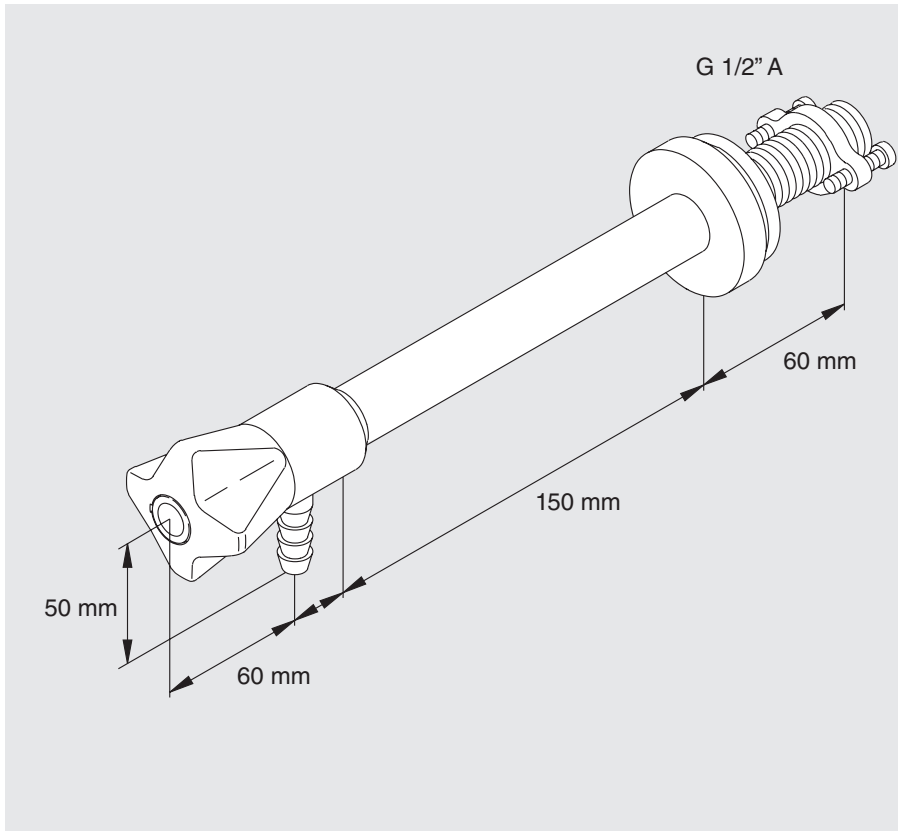
No. 15 400.000

Plastics: PVDF
Sealing: EPDM

Weight: 0.5 kg

Maximum working pressure:
10 bar/147 psi

BOSS fittings for special water - stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 392.009 Wall mounted fitting in stainless steel.

Delivered with mounting accessories.

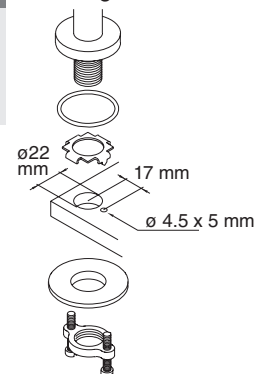
Materials with medium contact:

Body:	Stainless steel
Sealing:	EPDM
Pipe:	Stainless Steel

Weight: 0.9 kg

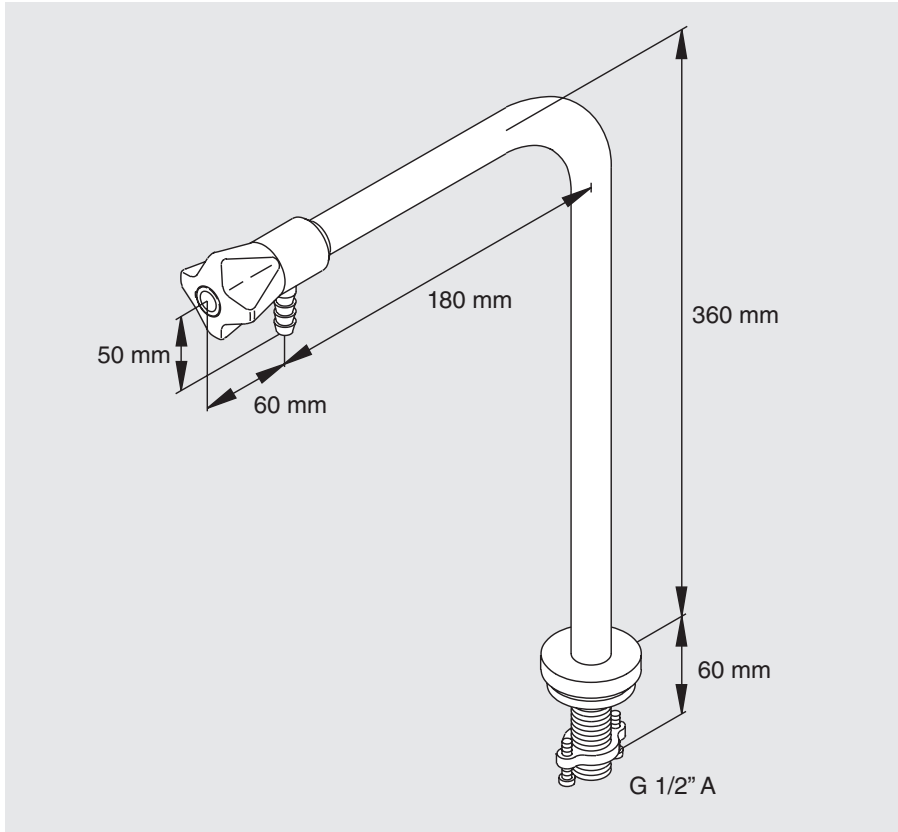
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 386.009 Bench mounted fitting in stainless steel.

Delivered with mounting accessories.

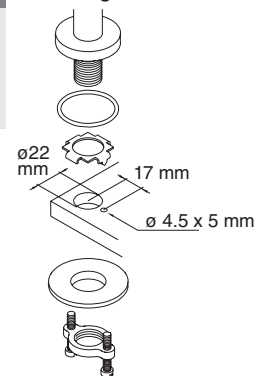
Materials with medium contact:

Body:	Stainless steel
Sealing:	EPDM
Pipe:	Stainless Steel

Weight: 1.4 kg

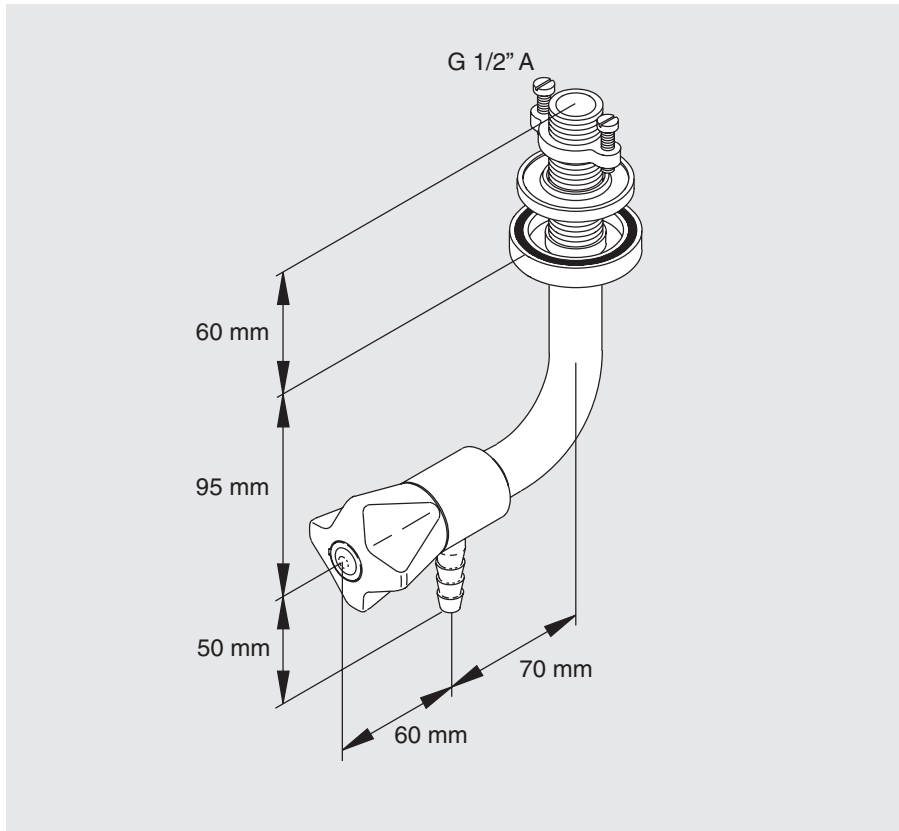
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill $\varnothing 22\text{ mm}$ for the inlet.
Drill $\varnothing 4.5\text{ mm}$ for the locking ring at a distance of 17 mm from the center of the $\varnothing 22\text{ mm}$ hole.
The $\varnothing 4.5\text{ mm}$ hole must be at least 5 mm deep.

BOSS fittings for special water - stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 380.009 Suspended special water fitting in stainless steel.

Delivered with mounting accessories.

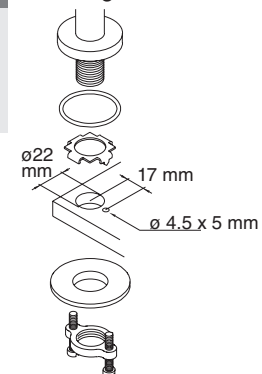
Materials with medium contact:

Body:	Stainless steel
Sealing:	EPDM
Pipe:	Stainless Steel

Weight: 1.2 kg

Maximum working pressure:
10 bar/147 psi

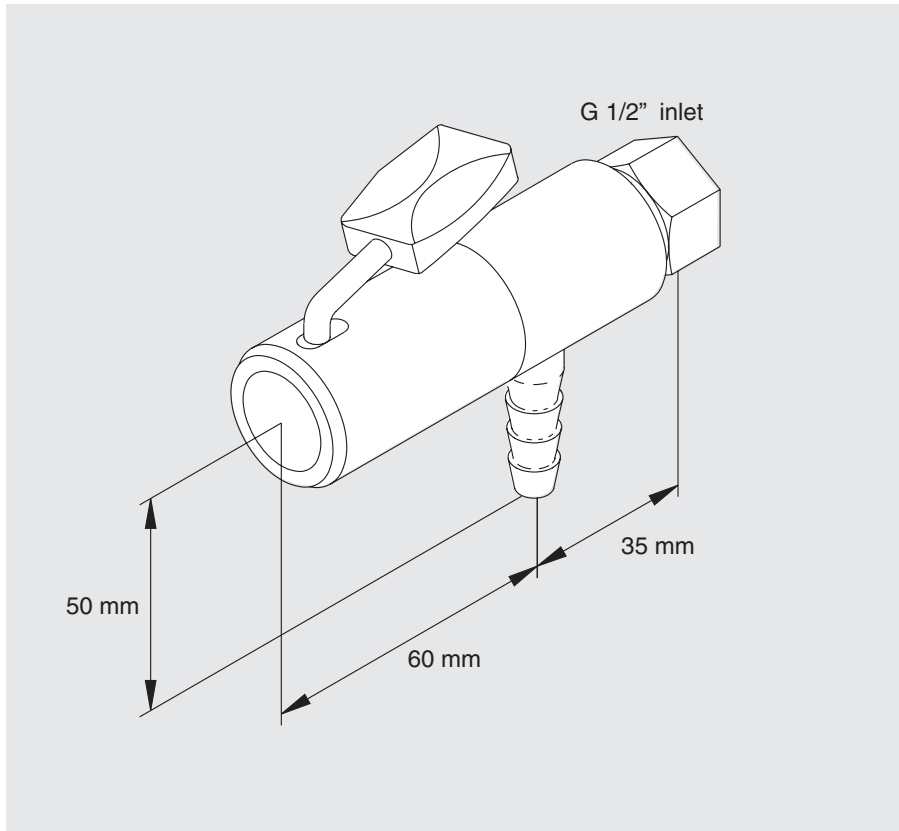
Mounting information:



Drill ø 22 mm for the inlet.
Drill ø 4.5 mm for the locking ring at a distance of 17 mm from the center of the ø 22 mm hole.
The ø 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water

- self-closing fitting in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 389.009 Self-closing valve in stainless steel.

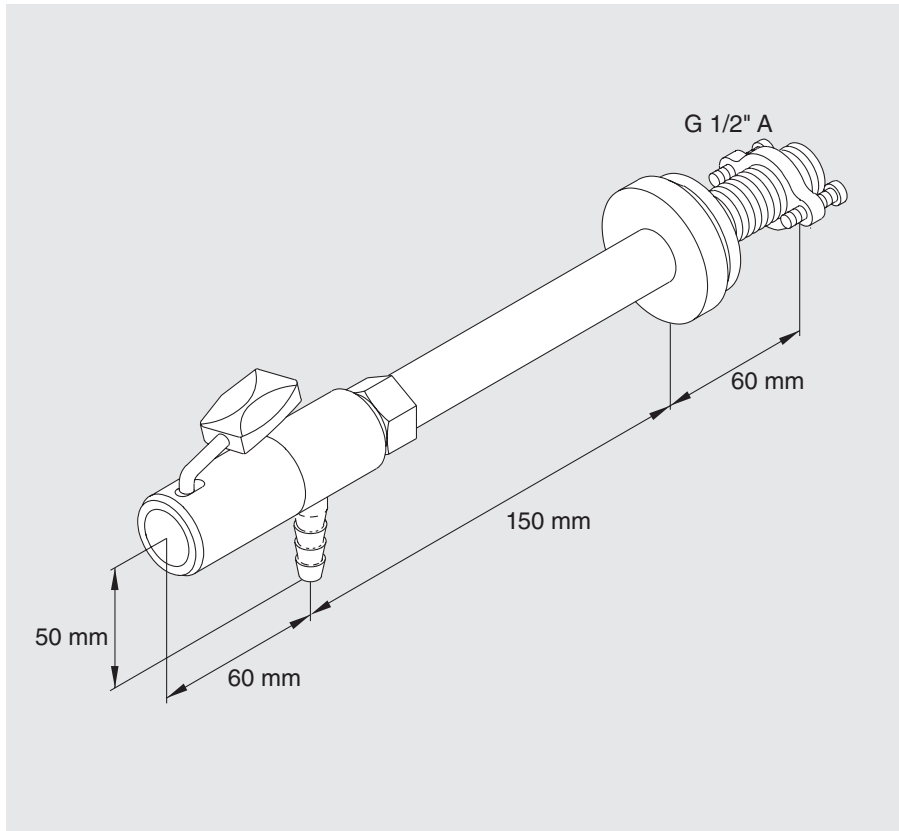
Materials with medium contact:

Body:	Stainless steel
Plastics:	POM
Sealing:	EPDM
Filter:	Nylon

Weight: 0.7 kg

Maximum working pressure:
10 bar/147 psi

BOSS fittings for special water - self-closing fitting in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 398.009 Wall mounted self-closing fitting in stainless steel.

Delivered with mounting accessories.

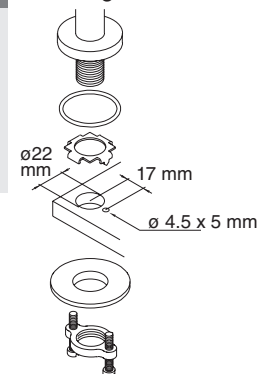
Materials with medium contact:

Body:	Stainless steel
Plastics:	POM
Sealing:	EPDM
Filter:	Nylon
Pipe:	Stainless Steel

Weight: 0.9 kg

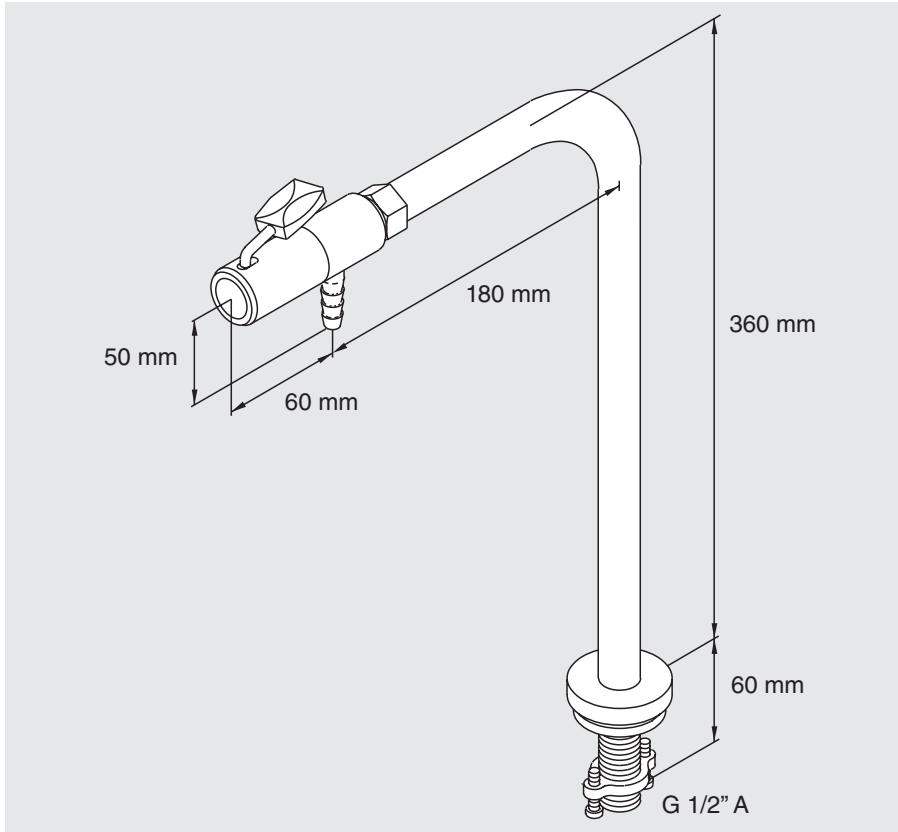
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - self-closing fitting in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 396.009 Bench mounted self-closing fitting in stainless steel.

Delivered with mounting accessories.

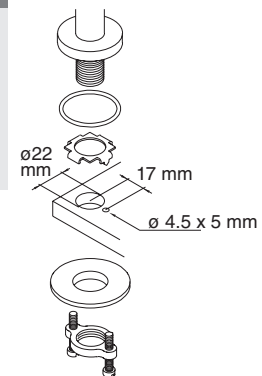
Materials with medium contact:

Body:	Stainless steel
Plastics:	POM
Sealing:	EPDM
Filter:	Nylon
Pipe:	Stainless Steel

Weight: 1.4 kg

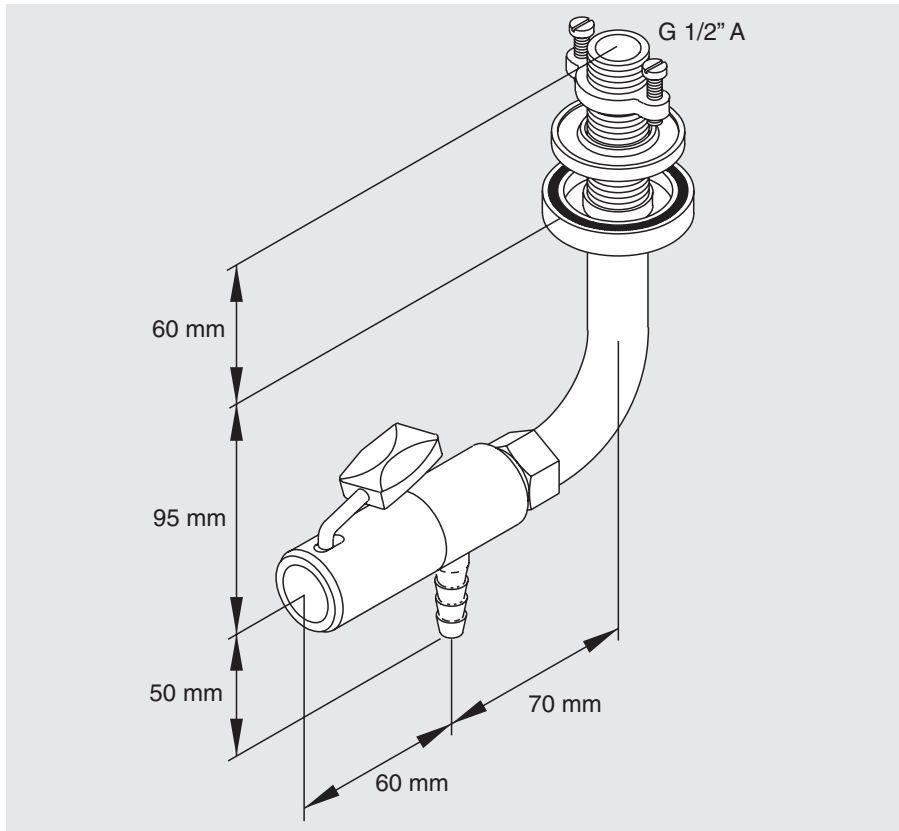
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill ø 22 mm for the inlet.
Drill ø 4.5 mm for the locking ring at a distance of 17 mm from the center of the ø 22 mm hole.
The ø 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - self-closing fitting in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 408.009 Drop mounted self-closing fitting in stainless steel.

Delivered with mounting accessories.

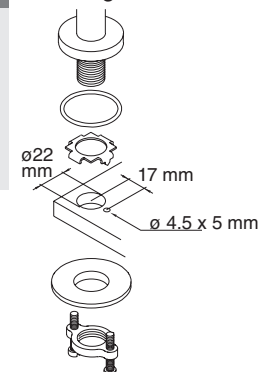
Materials with medium contact:

Body:	Stainless steel
Plastics:	POM
Sealing:	EPDM
Filter:	Nylon
Pipe:	Stainless Steel

Weight: 1.2 kg

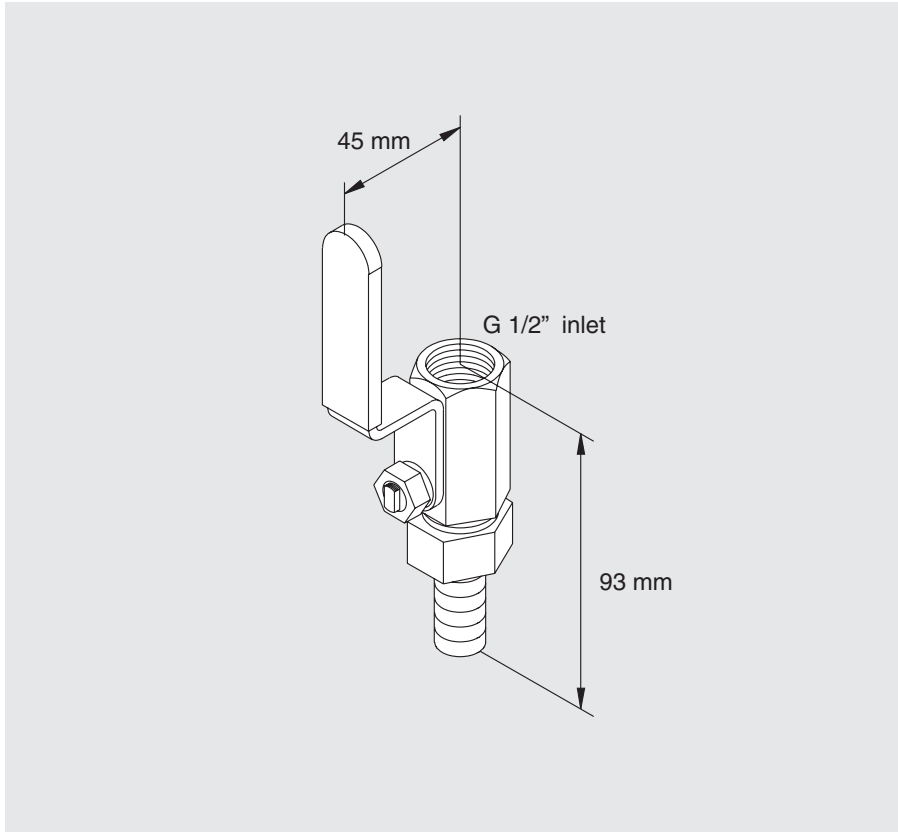
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - full flow valve in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

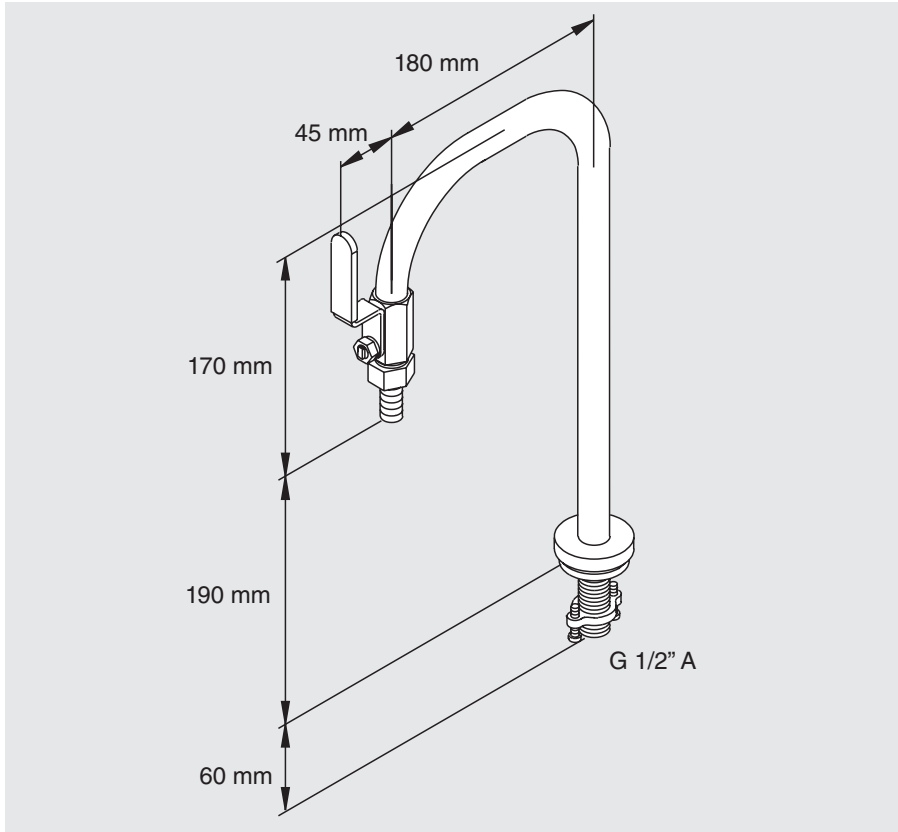
No. 15 382.509 Full flow stainless steel valve for special water.

Materials with medium contact:

Body: Stainless steel
Sealing: PTFE

Weight: 0.5 kg
Maximum working pressure:
10 bar/147 psi

BOSS fittings for special water - full flow valve in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

No. 15 386.509 Bench mounted full flow stainless steel water fitting.

Delivered with mounting accessories.

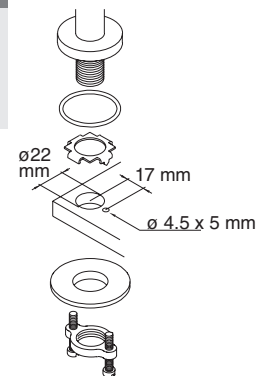
Materials with medium contact:

Body:	Stainless steel
Sealing:	PTFE
Pipe:	Stainless Steel

Weight: 1.5 kg

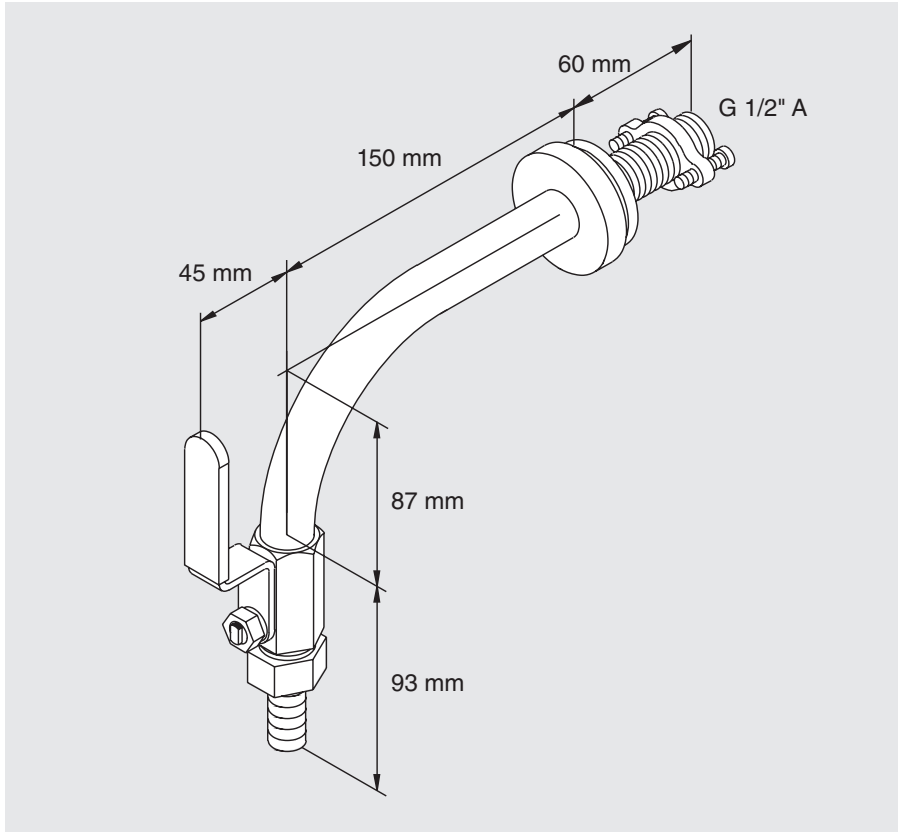
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill \varnothing 22 mm for the inlet.
Drill \varnothing 4.5 mm for the locking ring at a distance of 17 mm from the center of the \varnothing 22 mm hole.
The \varnothing 4.5 mm hole must be at least 5 mm deep.

BOSS fittings for special water - full flow valve in stainless steel



These fittings can be used for demineralized, distilled or deionized water and for other special water sorts and brine.

The choice of fitting depends on the requirements of the actual process.

The fittings are surface treated with BROEN POLYCOAT powder coat, which is highly resistant to most chemicals, UV fading and heat.

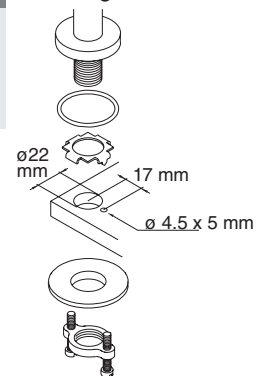
No. 15 392.509 Wall mounted full flow stainless steel fitting.
Delivered with mounting accessories.

Materials with medium contact:

Body:	Stainless steel
Sealing:	PTFE
Pipe:	Stainless Steel

Weight: 1.2 kg
Maximum working pressure:
10 bar/147 psi

Mounting information:



Drill $\varnothing 22\text{ mm}$ for the inlet.
Drill $\varnothing 4.5\text{ mm}$ for the locking ring at a distance of 17 mm from the center of the $\varnothing 22\text{ mm}$ hole.
The $\varnothing 4.5\text{ mm}$ hole must be at least 5 mm deep.