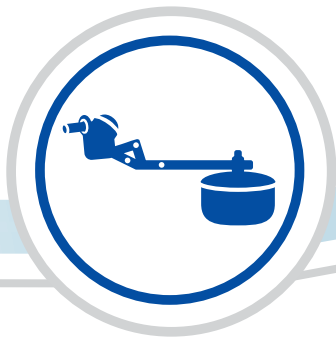




Berluto® Armaturen-Gesellschaft mbH
Rhineland Valve Factory

100 years
1920-2020
made in germany

Float valves

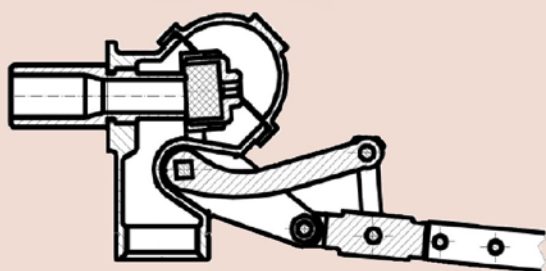


Expert for float valves for more than 100 years

Particularly robust and reliably functioning float valves laid the foundation for our current range of valves. In 1917, the Düsseldorf plumber Jean Bergner was granted the German Imperial Patent for his pioneering design of a new type of float valve with lever mechanism and founded the company Berluto in 1920. Even today, over 100 years later, our technology is still functionally reliable and up-to-date. The areas of application are manifold.

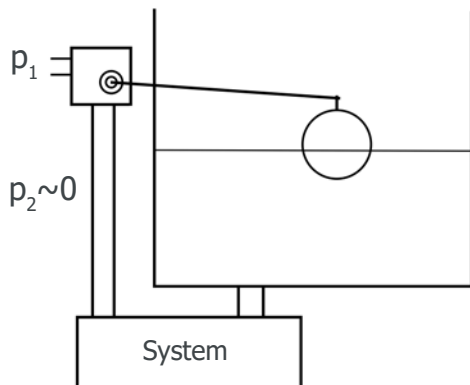
Without any auxiliary energy and sensitive sensors, these filling valves reliably control inflow and level. Regardless of which medium you want to use or which flow rates are required - you will find a suitable float valve with us!

Over the years, Berluto has developed numerous valve types with different controls or level regulations for different applications. To make it easier for you to find a suitable valve, we explain the differences between the types on the following pages.



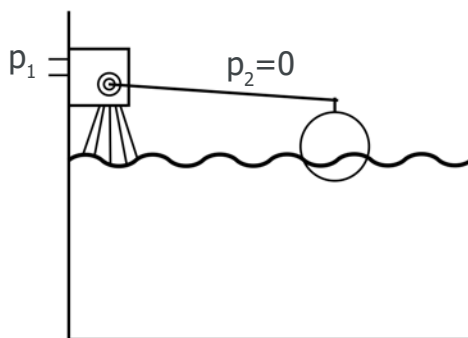
Berluto lever design

The special design of the lever mechanism of Berluto float valves has been used for over 100 years and is still unique today. Due to this lever mechanism, the float valve requires less lifting force and is significantly lower than the values of float valves without lever mechanism. As a result, Berluto float valves can withstand high pressures with a comparatively short rod or relatively small floats. Today, in often compactly dimensioned systems, this offers a decisive advantage. The valves are extremely robust, durable and, thanks to their control flap, also highly resistant to dirt.



Pressure-tight design

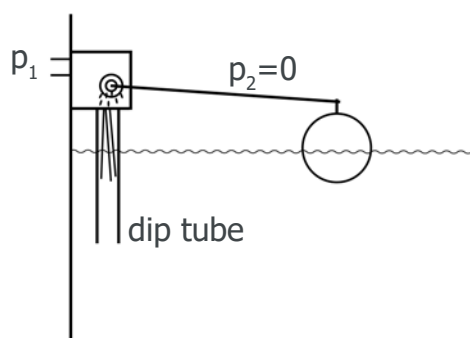
This design is specially developed for tank mounting or installation in pipelines. The valves are completely pressure-tight up to 12 bar. The function is also guaranteed in case of a back pressure on the outlet side of the valve. These valves can be used with air, gas, water or fluids, as well as for tank mounting. If no dip tube is used and the valve is installed in the tank, the criteria according to DIN EN 1717 category AA are also met here.



Open design

With an open-type float valve, the medium flows directly into the tank without a specific guide. This means that no backflow can occur and the valve has an even higher flow rate compared to the closed design. This design complies with the guidelines for system separator category AA (DIN EN 1717) and is therefore ideally suited for use with drinking water. The RSV O type has DVGW approval.

It should be noted that the media surface is more turbulent due to the free outlet than with a valve of the closed design.



Closed design

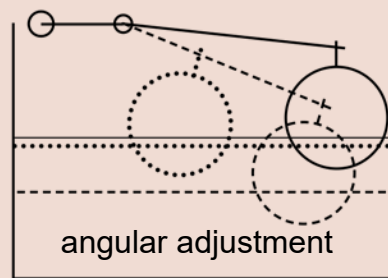
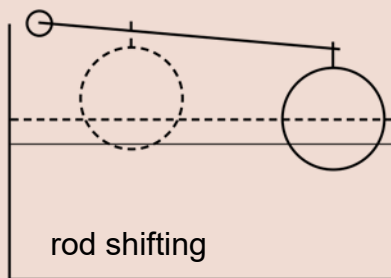
In the case of valves of the closed design, an optional dip tube can be connected. The guided flow of the medium into the container ensures a still medium surface. However, it must be noted here that closed valve types are not completely pressure-tight and are only suitable for installation in unpressurised tanks. The RSV G type has KIWA approval.

If no dip tube is used, these valves also meet the guidelines of system separator category AA (DIN EN 1717). For tank mounting or installation in pipelines, we recommend our pressure-tight design.



The level setting on Berluto float valves

The adjustment of the liquid level has become particularly important in many applications today. More and more often, a certain level of the liquid must be precisely adjustable. Our float valves offer two types of adjustment. With all valves, it is possible to move the float on the rod (see illustration on the left). Since the rod is slightly angled, this shifts the liquid level. In addition, the valves of the KSV and ESV series have a further adjustment option by means of an angular adjustment of the rod (illustration on the right). This angular adjustment is particularly suitable for a very precise level setting.

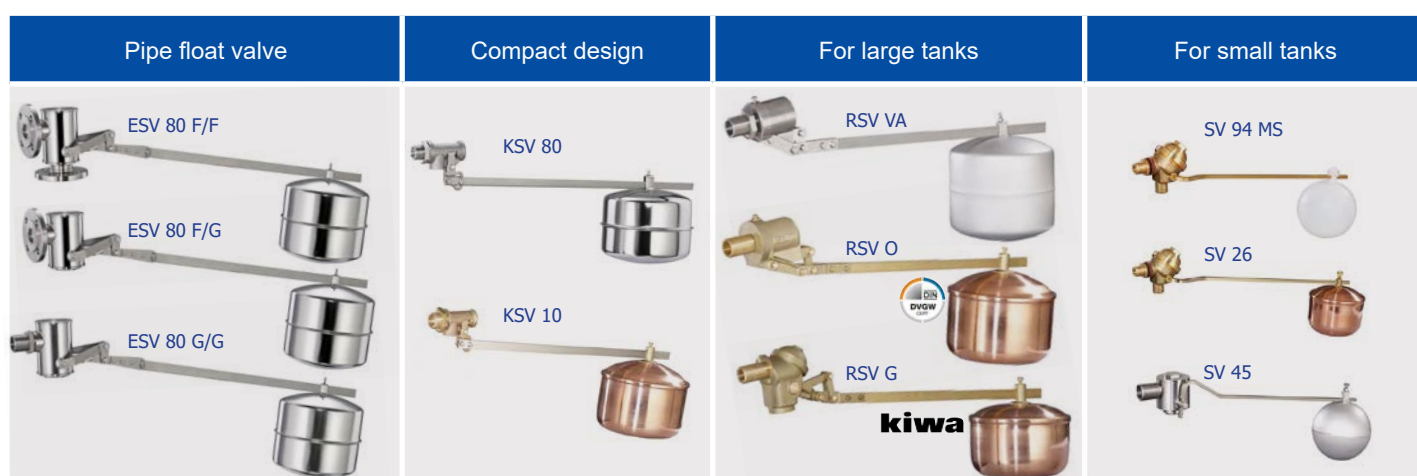


Individual design of your float valve by Berluto

In addition to the level control mentioned above, we also offer you the option of adapting the float valve even more precisely to your requirements.

We would be happy to use your operating data to adapt the float valve precisely to your requirements and, for example, shorten the float rod if desired or equip the valve with the optimum float for your application. In this way, we will find a solution for you that is technically optimally matched to your system.

Type	Max. operating pressure	kvs-Value	Nominal size	Material	Inlet connection	Seals	Lever translation	Design	Control	Angular adjustment
ESV G/G	12 bar	3,5 - 47 m³/h	DN 15 - DN 80	stainless steel	thread	FKM	yes	pressure tight	flap	yes
ESV F/G	12 bar	13,6 - 47 m³/h	DN 40 - DN 80	stainless steel	flange	FKM	yes	pressure tight	flap	yes
ESV F/F	12 bar	13,6 - 47 m³/h	DN 40 - DN 80	stainless steel	flange	FKM	yes	pressure tight	flap	yes
KSV 10	12 bar	2,7 - 6,7 m³/h	DN 15 - DN 25	red bronze	thread	EPDM	--	closed	piston	yes
KSV 80	12 bar	2,9 - 24 m³/h	DN 10 - DN 65	stainless steel	thread	FKM	--	closed	piston	yes
RSV G	12 bar	2,1 - 40 m³/h	DN 10 - DN 80	brass	thread	EPDM	yes	closed	flap	--
RSV O	12 bar	0,6 - 47 m³/h	DN 10 - DN 80	brass	thread	EPDM	yes	open	flap	--
RSV VA	12 bar	1,9 - 34 m³/h	DN 15 - DN 65	stainless steel	thread	FKM	yes	open	flap	--
SV 94 MS	6 bar	0,2 - 0,3 m³/h	DN 10 - DN 15	brass	thread	NBR	--	closed	flap	--
SV 26	12 bar	0,3 m³/h	DN 10 - DN 15	brass	thread	NBR	--	closed	flap	--
SV 45	10 bar	0,3 m³/h	DN 10 - DN 20	stainless steel	thread	FKM	--	pressure tight	flap	--





Float valve series ESV with male thread according to ISO 228 or flanges according to DIN EN 1092

ESV-Type	Max. operating pressure	Material	Connection inlet/ outlet
ESV 80 G/G	12 bar	stainless steel	thread/ thread
ESV 80 F/G	12 bar	stainless steel	flange/ thread
ESV 80 F/F	12 bar	stainless steel	flange/ flange



Features

ESV valves offer optimum media resistance through the exclusive use of stainless steel (V4A); the pressure-tight sealing of the valve housings makes them suitable not only for tank installation but also as pipeline valves.

The valves are extremely robust, durable and also extremely resistant to dirt due to their control flap. The special lever ratio allows the use of comparatively short float rods. The valve seal can be checked and replaced in the installed condition.

The valves are supplied with different connection configurations:

ESV 80 G/G: inlet and outlet threaded connection

ESV 80 F/G: flanged inlet, threaded outlet

ESV 80 F/F: inlet and outlet flange connection

Of course, these types are also available with ANSI flanges or NPT threads.

Nominal size	Article number							
	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
ESV 80 G/G	007002	007003	007004	007005	007006 / 007016*	007007	007008	007009
ESV 80 F/G	--	--	--	--	007106 / 007116*	007107	007108	007109
ESV 80 F/F	--	--	--	--	007206 / 007216*	007207	007208	007209

* compact design



Features

- flange connection acc. DIN EN 1092
- male thread acc. DIN ISO 228
- max. inlet pressure 12 bar
- valve seat replaceable without disassembling the valve
- compact installation length due to lever ratio
- robust, dirt-resistant construction
- closed and pressure-tight design
- high flow rate

Temperatures

Various options in the area of seals and internal parts in contact with the medium allow a max. temperature of up to 190°C.



from 0°C to +190°C

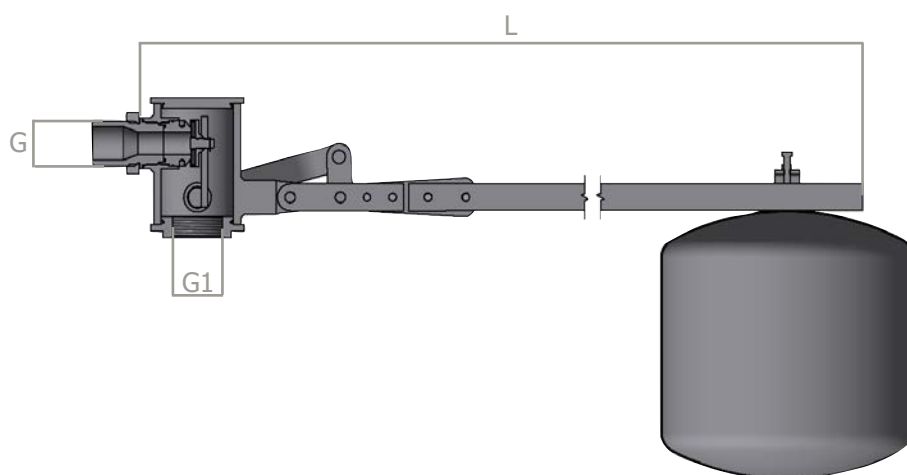
Connections



male thread acc. DIN ISO 228
flange connection acc. DIN EN 1092

Seals and temperatures

FKM 0°C to +190°C



Nominal size	Connection		ESV 80 G/G			ESV 80 F/G			ESV 80 F/F		
	G	G1	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg
DN 15	1/2"	3/4"	3,5	657	1,8	-	-	-	-	-	-
DN 20	3/4"	1"	5,7	657	1,8	-	-	-	-	-	-
DN 25	1"	1 1/4"	9,5	811	3,1	-	-	-	-	-	-
DN 32	1 1/4"	1 1/2"	13,6	811	3,2	-	-	-	-	-	-
DN 40*	1 1/2"	1 1/2"	14	829	3,4	14	818	5,4	14	818	7,9
DN 40	1 1/2"	2"	20	1048	6,9	20	1028	8,7	20	1028	11,3
DN 50	2"	2 1/2"	30	1048	6,9	30	1028	9,2	30	1028	12,6
DN 65	2 1/2"	3"	40	1193	11,5	40	1180	13,6	40	1180	17,5
DN 80	3"	3"	47	1193	11,5	47	1180	14,5	47	1180	18,6

* compact design



Float valve series KSV with male thread according to ISO 228

KSV-Type	Max. operating pressure	Material	Seals	Sax. temperature
KSV 10	12 bar	red bronze	EPDM	150°C
KSV 80	12 bar	stainless steel	FPM	190°C



Features

The KSV series is the „all-rounder“ in the medium range if SV valves are too small and RSV/ESV valves too elaborate. The KSV valves work with a robust piston control.

The housing of the KSV 10 is made of high-quality red bronze, the KSV 80 is made entirely of stainless steel. Nozzles and seals can be easily replaced on all models; by loosening a single bolt, you can remove and check the complete piston.

In addition, KSV valves are particularly cost-effective and compatible in dimensions with a wide range of other industrial float valves.

Since the angle of the rod is variable and the float can be moved on the rod, the desired liquid level can be set very precisely.

We supply matching floats, optionally made of copper, HDPE or stainless steel (V4A).

Article number								
Nominal size	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
G	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
KSV 10	--	010702-18170	010703-18170	010704-18170	--	--	--	--
KSV 80	007501	007502	007503	007504	007505	007506	007507	007508



Features

- male thread acc. ISO 228
- max. inlet pressure 12 bar
- valve seat replaceable
- control piston
- variable angle adjustment of the float rod
- float rod can be shortened
- Dip tube connection
- compact design
- Float optionally in HDPE, copper or stainless steel

Temperatures

Various options in the area of seals and internal parts in contact with the medium allow a max. temperature of up to 190°C.



from 0°C to +190°C

Connections

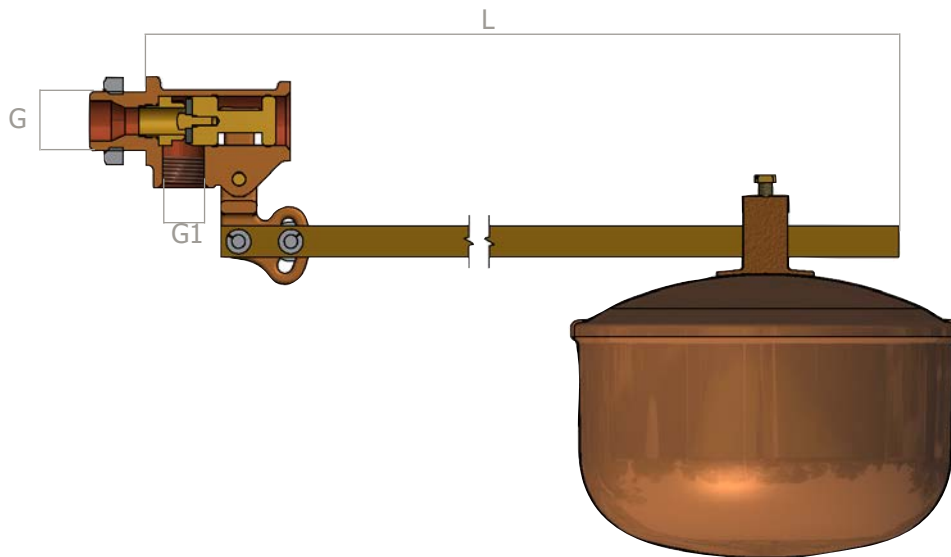


Male thread acc. ISO 228
from G 3/8" to G 2 1/2"

Seals and temperatures

FPM 0°C to +190°C*
EPDM 0°C to +150°C*

* in combination with HDPE- and cooper floats max. 80°C



Nominal size	Connection		KSV 10			KSV 80		
	G	G1	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg
DN 10	3/8"	3/8"	--	--	--	2,9	606	0,7
DN 15	1/2"	3/8"	2,7	604	0,8	3,0	607	0,8
DN 20	3/4"	1/2"	4,0	604	0,8	4,4	607	0,8
DN 25	1"	3/4"	6,7	723	1,0	7,7	728	1,1
DN 32	1 1/4"	1 1/2"	--	--	--	14	805	3,3
DN 40	1 1/2"	1 1/2"	--	--	--	22	805	3,4
DN 50	2"	1 1/2"	--	--	--	23	805	3,7
DN 65	2 1/2"	1 1/2"	--	--	--	24	815	5,0



Float valve series RSV with male thread according to ISO 228

RSV-Type	Max. operating pressure	Material	Seals	Design	Approvals	Max. temperature
RSV O	12 bar	brass	EPDM	open	DVGW	130°C
RSV G	12 bar	brass	EPDM	closed	KIWA	130°C
RSV VA	12 bar	stainless steel	FKM	open	--	190°C



Features

Float valves of the RSV series are always in demand when particularly robust valves for high supply line pressures and/or large flow rates are required.

The RSV O and RSV G series are particularly suitable for drinking water. They meet the strict guidelines of the European Drinking Water Directive and DIN 1717 and are also DVGW and KIWA certified. This makes these two series ideally suited for applications where a connection to the drinking water network is required (e.g. pressure boosting, fire protection systems, etc.).

Due to the special lever ratio, RSV valves can get by with relatively short float rods. The seal can be checked and replaced in the installed condition. The valves are made either completely of brass or of stainless steel (RSV VA). We supply matching floats for all RSVs, optionally made of copper or stainless steel (V4A).

Nominal size	Article number								
	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
G	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
RSV O	000401	000402	000403	000404	000405	000406	000407	000408	000409
RSV G	000501	000502	000503	000504	000505	000506	000507	000508	000509
RSV VA	--	000302	000303	000304	000305	000306	000307	000308	--



Features

- male thread acc. ISO 228
- max. inlet pressure 12 bar
- valve seat replaceable
- float rod can be shortened
- elaborate lever design
- dirt-resistant control flap
- RSV O with DVGW approval
- RSV G with KIWA approval
- dip tube for RSV G
- robust design
- float optionally in HDPE, copper or stainless steel

Temperatures

Various options in the area of seals and internal parts in contact with the medium allow a max. temperature of up to 190°C.



from 0°C to +190°C

Seals and temperature

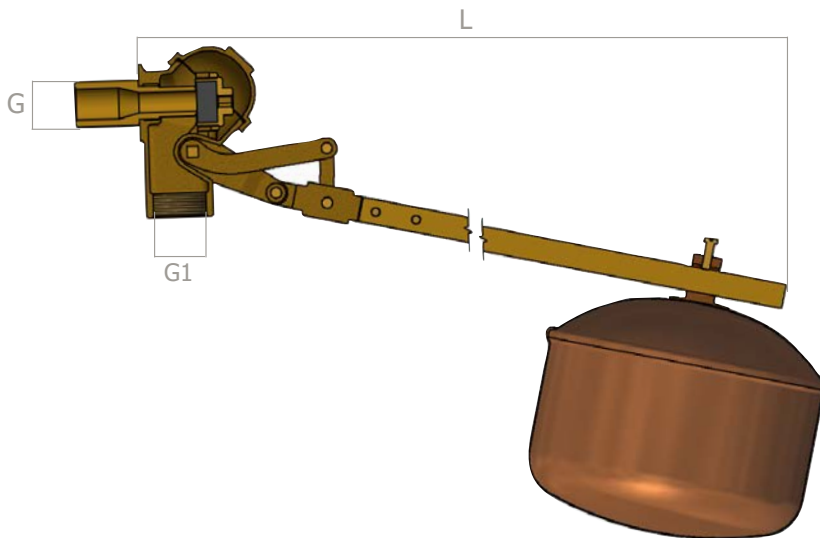
FPM 0°C to +190°C
EPDM 0°C to +130°C*

Connections



Male thread acc. ISO 228
from G 3/8" to G 3"

* in combination with HDPE- and cooper floats max. 80°C



Nominal size	Connection		RSV O			RSV G			RSV VA		
	G	G1*	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg
DN 10	3/8"	3/4"	0,6	393	0,9	2,1	408	1,0	-	-	-
DN 15	1/2"	3/4"	1,8	524	1,4	2,3	510	1,1	1,9	523	1,3
DN 20	3/4"	1"	3,8	543	1,8	5,3	542	1,7	3,7	572	1,4
DN 25	1"	1 1/4"	7,6	618	2,7	7,5	630	2,6	5,6	654	1,6
DN 32	1 1/4"	1 1/2"	14	692	4,1	11	730	3,5	11	720	2,7
DN 40	1 1/2"	1 3/4"	23	750	4,9	16	800	4,6	14	770	2,8
DN 50	2"	2"	34	877	7,1	18	960	7,9	23	885	4,8
DN 65	2 1/2"	2"	47	1013	11,5	40	985	9,0	34	952	6,0
DN 80	3"	2"	47	1014	12,5	40	985	10,0	-	-	-

* only for RSV G



Float valve series SV with male thread to ISO 228

SV-Type	Max. operating pressure	Material	Seals	Design	Max. temperature
SV 94 MS	6 bar	brass	NBR	closed	130°C
SV 26	12 bar	brass	NBR	closed	80°C
SV 45	10 bar	stainless steel	FKM	pressure-tight	190°C

Features

The SV series offers very compact float valves for small water supply tanks respectively their level control, such as cisterns, poultry drinking troughs, air humidification systems, pond systems, steam generation systems, etc.. They are ideally suited for applications with limited installation space or when only low flow rates are required.

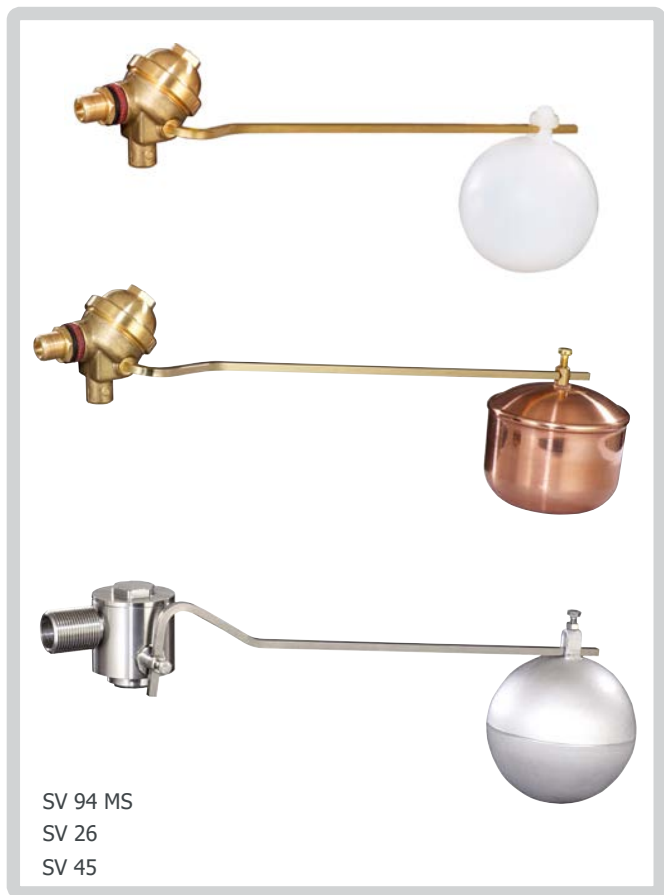
The desired liquid level can be precisely adjusted by moving the float on the float rod.

For this series there is a choice of Hostalen, copper or stainless steel floats.

The float valves SV 94 MS and SV 26 can be used for water and neutral liquids, the SV 45 is made of stainless steel and is therefore also suitable for aggressive liquids and deionised water.

Type SV 26 is available with a double bracket which allows vertical adjustment of the float and suppresses lateral oscillation.

The seal can be checked and replaced in the installed condition.



SV 94 MS
SV 26
SV 45

Nominal size	Article number		
	DN 10	DN 15	DN 20
G	3/8"	1/2"	3/4"
SV 94 MS	000711	000712	--
SV 26	000601	000602	--
SV 26 double bracket	000681	000692	--
SV 45	000451	000452	000453



Features

- male thread acc. ISO 228
- max. inlet pressure 12 bar
- valve seat replaceable
- float rod can be shortened
- control flap
- pressure-tight design for SV 45
- robust design
- float optionally in hostal, copper or stainless steel
- special version SV 26 with double bracket and angled float rod

Connections



Male thread acc. ISO 228
from G 3/8" to G 3/4"



Temperatures

Various options in the area of seals and internal parts in contact with the medium allow a max. temperature of up to 190°C.

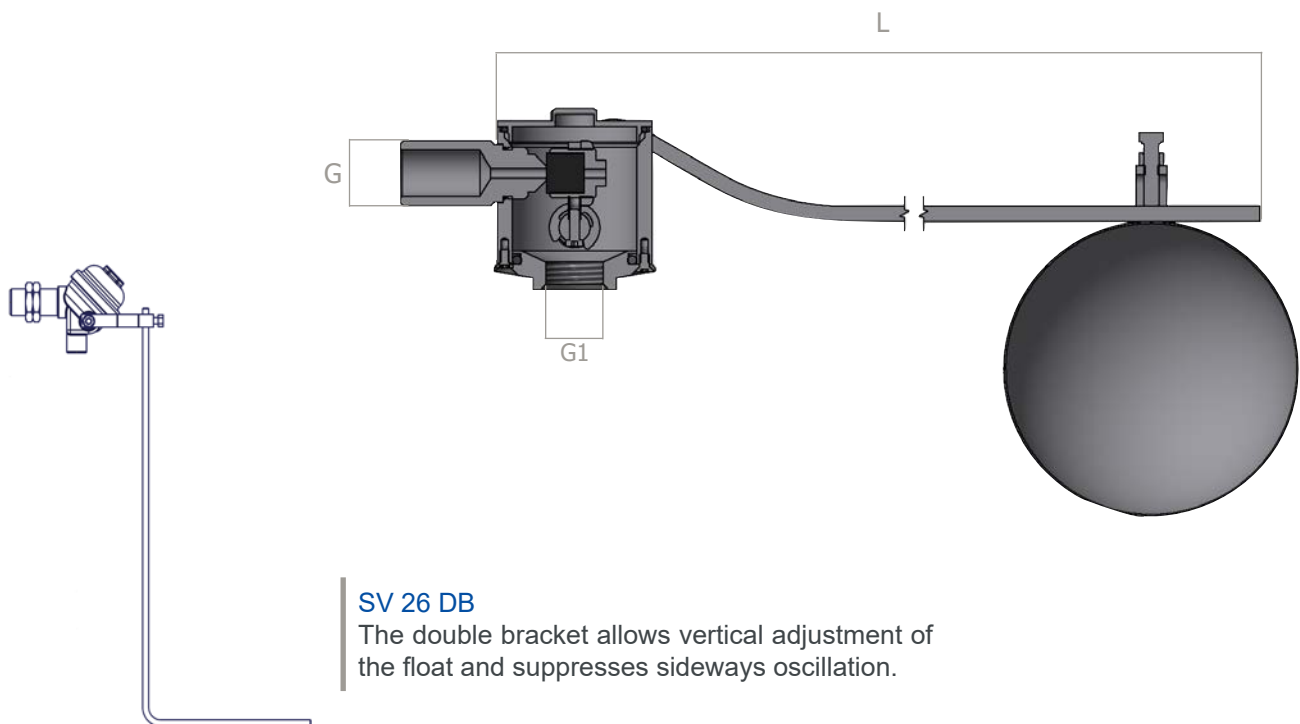


from 0°C to +190°C

Seals and temperature

NBR 0°C to +100°C*
FPM 0°C to +190°C*

* in combination with HDPE- and cooper floats max. 80°C

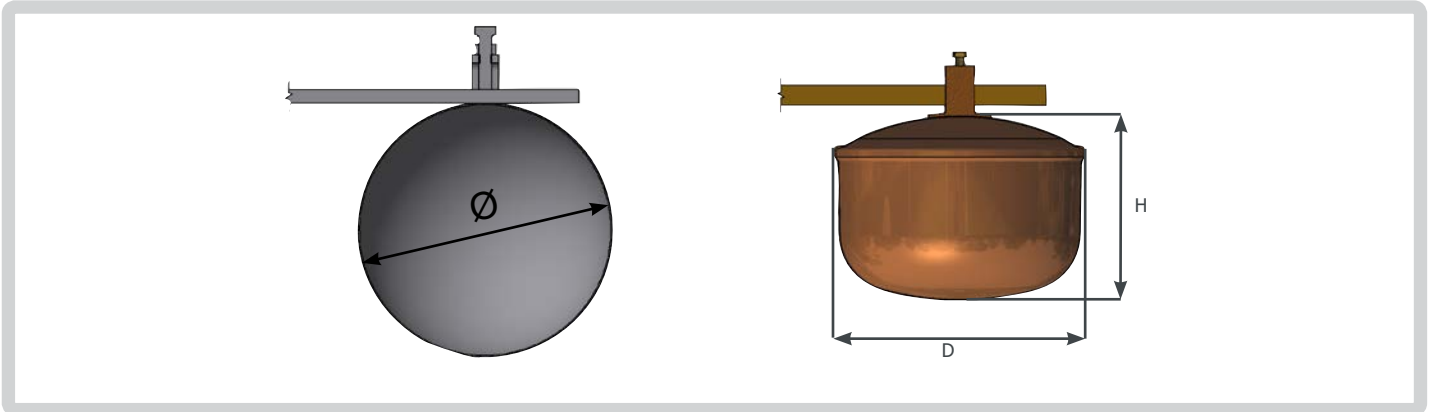


SV 26 DB

The double bracket allows vertical adjustment of the float and suppresses sideways oscillation.

Nominal size	Connec-tion G + G1	SV 94 MS			SV 26			SV 45		
		kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg	kvs-Value in m³/h	L in mm	Weight in kg
DN 10	3/8"	0,2	329	0,3	0,3	393	0,4	0,3	398	0,6
DN 15	1/2"	0,3	329	0,4	0,3	393	0,5	0,3	398	0,6
DN 20	3/4"	-	-	-	-	-	-	0,3	398	0,6

Floats



SV series - floats			
Nominal size	DN 10	DN 15	DN 20
PE	000831	000831	000831
Dimensions - Ø [mm]	90	90	90
Copper	000800	000800	--
Dimensions - D [mm] x H [mm]	97 x 89	97 x 89	--
VA	000841	000841	000841
Dimensions - Ø [mm]	95	95	95

KSV series - floats								
nominal size	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65
HDPE	000833	000833	000833	000834	--	--	--	--
Dimensions - Ø [mm]	150	150	150	180	--	--	--	--
Copper	--	000802	000803	000804	--	--	--	--
Dimensions - D [mm] x H [mm]	--	153 x 116	174 x 128	209 x 172	--	--	--	--
VA	000842	000842	000843	000844	000845	000846	000847	000848
Dimensions - D [mm] x H [mm]	179 x 90	179 x 90	246 x 107	200 x 200	240 x 180	240 x 240	280 x 280	305 x 305

RSV series - floats									
Nominal size	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Copper	000802	000802	000803	000804	000805	000806	000807	000808	
Dimensions - D [mm] x H [mm]	153 x 116	153 x 116	174 x 128	209 x 172	232 x 199	257 x 221	308 x 254	353 x 285	
VA	--	000842	000843	000844	000845	000846	000847	000848	
Dimensions - D [mm] x H [mm]	--	179 x 90	246 x 107	200 x 200	240 x 180	240 x 240	280 x 280	305 x 305	

ESV 80 series - floats									
Nominal size	DN 15	DN 20	DN 25	DN 32	DN 40	DN 40	DN 50	DN 65	DN 80
VA	000842	000843	000844	000845	000845	000846	000847	000848	000849
Dimensions - D [mm] x H [mm]	179 x 90	246 x 107	200 x 200	240 x 180	240 x 180	240 x 240	280 x 280	305 x 305	400 x 260



Fast order processing

You will usually receive offers and order confirmations from us within 24 hours.



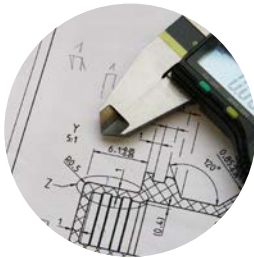
Short delivery times

70% of all products can be delivered within 48 hours. If it is particularly urgent, we are happy to organise express shipping.



Commercial support

Our sales team is always available to answer your questions about order processing competently and reliably.



Technical support

Technical advice, spare parts, drawings & STEP files or solutions according to customer requirements. We will work with you to find the right solution!



Made in Germany

We manufacture and assemble our products exclusively in Germany. This ensures the highest availability and quality.



Tradition obliges

We have been an internationally successful manufacturer of valves for over 100 years and stand by our customers as a reliable partner.

Berluto Armaturen-Gesellschaft mbH

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