

Product Overview



Made
in
Germany

Berluto® Armaturen-Gesellschaft mbH
Rhineland Valve Factory

Berluto

Pressure reducing valves in red bronze

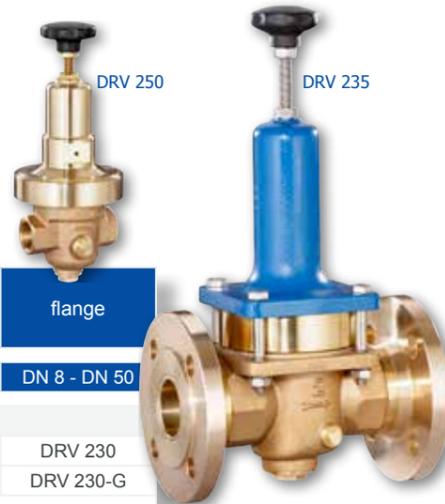
Pressure reducing valves in red bronze

Compressed Air & Gases

Series 200 pressure reducers regulate the outlet pressure very sensitively, have a high setting accuracy and a particularly good response. They are preferably used with gaseous media, such as compressed air, nitrogen and other neutral, non-combustible gases. For liquid media, they are ideal when low flow rates are required, whenever other types of pressure reducers would be oversized and would therefore operate in an unfavorable operating range

max. inlet pressure [bar]	outlet pressure range [bar]	seals	reduction ratio	kvs-value [m³/h]	female thread	flange
					DN 8 - DN 50	DN 8 - DN 50
diaphragm pressure reducer for standard pressure						
25	1.5 - 8	CR / NBR	10 : 1	0.5 - 7.2	DRV 200	DRV 230
25	0.8 - 8	CR / NBR	10 : 1	0.5 - 7.2	DRV 200-G	DRV 230-G
pressure reducer with low pressure diaphragm						
25	0.2 - 2	CR / NBR	20 : 1	0.5 - 7.2	DRV 250	
pressure reducer with high pressure piston						
40	1.5 - 20	NBR opt. FKM	6 : 1	0.5 - 7.2	DRV 225	DRV 235
60	20 - 45	NBR opt. FKM	3 : 1	0.5 - 1.3	DRV 226*	

* only up to DN 20



Drinking Water

The pressure in the public drinking water supply depends on the local development, the respective topography and is also subject to frequent fluctuations. The use of pressure reducers prevents damage to the domestic installation and leads to water savings and lower noise emissions due to a uniform and reduced pressure level. Berluto drinking water pressure regulators have proven thousands of times in daily use - like all Berluto valves, these bronze valves are also manufactured entirely in Germany.

The pressure reducers of type DRV 403-6 are DVGW-certified, sound-proofed and have a maintenance-friendly replaceable regulator cartridge. The variants DRV 403-6 and DRV 403-6 H cover the installation dimensions of all standard pressure reducers and are therefore particularly suitable for the replacement business.

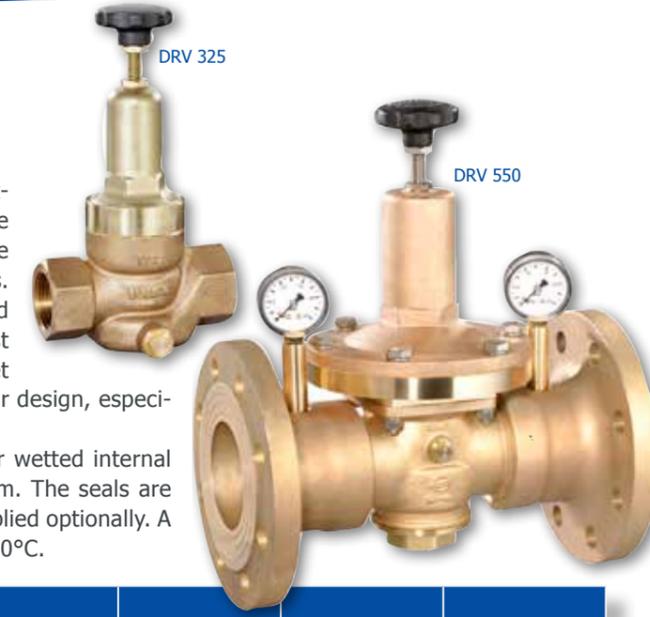
nominal size	installation length [mm]			
	DN 15	DN 20	DN 25	DN 32
DRV 403-6	78	78	90	100
DRV 403-6 H	80	90	100	105

max. inlet pressure [bar]	outlet pressure [bar]	seals	temperature	female thread	male thread	flange	flange
				DN 15 - DN 50	DN 10 - DN 65	DN 15 - DN 80	DN 65 - DN 150
16	1.5 - 6	EPDM	-30°C up to +75°C	DRV 303-6 DRV 302-6	DRV 403-6 DRV 402-6	DRV 502-6	DRV 602-6



Any Media

Pressure reducing valves of the series 300 (internal thread), 400 (external thread) and 500 (flange connection) differ in the connection type and are preferably used for water and liquid media. Different pressure ranges from 0.2 bar to 20 bar are available within the individual series. While diaphragm pressure regulators are used in the low-pressure and standard-pressure ranges for a sensitive control behaviour, the robust piston pressure reducers are suitable for applications with higher outlet pressures. Also, the piston pressure reducing valves prove due to their design, especially in plants where pressure shocks cannot be avoided. With a sophisticated modular system of materials and elastomers for wetted internal parts, an optimal valve design can be found for almost every medium. The seals are made of high-quality NBR as standard, EPDM or FPM seals can be supplied optionally. A special high-temperature version covers media temperatures up to 190°C.



max. inlet pressure [bar]	outlet pressure [bar]	seals	kvs-value [m³/h]	temperature	female thread	male thread	flange
					DN 15 - DN 50	DN 10 - DN 65	DN 15 - DN 80
diaphragm pressure reducer for standard pressure							
40 / 25	1.5 - 6	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 302	DRV 402	DRV 502
40 / 25	1.5 - 10	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 308	DRV 408	DRV 508
40 / 25	0.5 - 4	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 372	DRV 472	DRV 572
40 / 25	0.5 - 9	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 378	DRV 478	DRV 578
pressure reducer with low pressure diaphragm							
25	0.2 - 2	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 350	DRV 450	DRV 550
pressure reducer with high pressure piston							
40 / 25	1.5 - 12	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 324	DRV 424	DRV 524
40 / 25	1.5 - 20	NBR opt. EPDM / FKM	2.9 - 18	-30°C up to +190°C	DRV 325	DRV 425	DRV 525

Large Flow Rates

The large, particularly robust flange pressure reducers of the 600 series are made of red bronze (gunmetal) and offer very high flow rates. They are preferably used to reduce the pressure of water and other neutral, non-sticky liquids. Varying pressures on the input side have no effect on the set outlet pressure due to inlet pressure compensation. Depending on the application, it is possible to choose between sensitive diaphragm pressure reducers and robust piston pressure reducers. The overall lengths of the enclosures comply with DIN EN 558-1, the standard flange connections are designed in accordance with DIN EN1092 (PN16 or PN25), but can optionally also be manufactured in accordance with ANSI or JIS. Thanks to special logistics and stockpiling, these large valves are always available at short notice.

max. inlet pressure [bar]	outlet pressure [bar]	seals	kvs-value [m³/h]	temperature	flange
					DN 65 - DN 150
diaphragm pressure reducer for standard pressure					
16	1.5 - 6	NBR opt. EPDM	48 - 210	-30°C up to +130°C	DRV 602
16	3 - 10	NBR opt. EPDM	48 - 210	-30°C up to +130°C	DRV 608
16	0.5 - 4	NBR opt. EPDM	48 - 210	-30°C up to +130°C	DRV 672
16	0.5 - 9	NBR opt. EPDM	48 - 210	-30°C up to +130°C	DRV 678
pressure reducer with high pressure piston					
25	4 - 12	NBR	48 - 70	-15°C bis +100°C	DRV 624*

* only up to DN 100



Aggressive Media

The stainless steel series 700 (internal thread) and 800 (flange connection) are made entirely of V4A (1.4408). In addition to the standard seals made of FKM, elastomers made of NBR or EPDM can also be used. The EPDM seals comply with the EU Drinking Water Ordinance (1935/2004/EC) and are FDA compliant. Thus, these pressure reducers are particularly suitable for critical media such as aggressive gases and liquids or e.g. completely desalinated water and tolerate temperatures up to 190 °C. In addition, the integrated inlet pressure relief ensures an absolutely constant outlet pressure even with strongly fluctuating upstream pressure.



max. inlet pressure [bar]	outlet pressure [bar]	seals	kvs-value [m³/h]	temperature	female thread	flange
					DN 15 - DN 50	DN 15 - DN 50
diaphragm pressure reducer for standard pressure						
40	1.5 - 6	FKM opt. EPDM (FDA compl.)	2.9 - 13	-30°C up to +190°C	DRV 702	DRV 802
40	1.5 - 10	FKM opt. EPDM (FDA compl.)	2.9 - 13	-30°C up to +190°C	DRV 708	DRV 808
40	0.5 - 4	FKM opt. EPDM (FDA compl.)	2.9 - 13	-30°C up to +190°C	DRV 772	DRV 872
40	0.5 - 9	FKM opt. EPDM (FDA compl.)	2.9 - 13	-30°C up to +190°C	DRV 778	DRV 878
pressure reducer with low pressure diaphragm						
25	0.2 - 2	FKM opt. EPDM (FDA compl.)	2.9 - 13	-30°C up to +190°C	DRV 750	DRV 850
pressure reducer with high pressure piston						
40	1.5 - 12	FKM opt. NBR	2.9 - 13	-15°C up to +190°C	DRV 724	DRV 824
40	1.5 - 20	FKM opt. NBR	2.9 - 13	-15°C up to +190°C	DRV 725	DRV 825



Seawater

The pressure reducer series with the designation -SW was specially developed for contact with seawater. The materials carefully selected for this application ensure optimum corrosion resistance. Whether in shipbuilding, on oil platforms, in desalination plants or in all systems using seawater, these long-life pressure reducers have proven themselves for years in practical use. Thanks to a variable modular system, inlet pressures of up to 40 bar and outlet pressure ranges of 0.2 bar to 20 bar can be realized, covering virtually all applications.



max. inlet pressure [bar]	outlet pressure [bar]	seals	kvs-value [m³/h]	temperature	female thread	flange	flange
					DN 15 - DN 50	DN 15 - DN 80	DN 65 - DN 150
diaphragm pressure reducer for standard pressure							
40 / 25 / 16	1.5 - 6	NBR	2.9 - 210	-15°C up to +100°C	DRV 302 SW	DRV 502 SW	DRV 602 SW
40 / 25 / 16	1.5 - 10	NBR	2.9 - 210	-15°C up to +100°C	DRV 308 SW	DRV 508 SW	DRV 608 SW*1
40 / 25 / 16	0.5 - 4	NBR	2.9 - 210	-15°C up to +100°C	DRV 372 SW	DRV 572 SW	DRV 672 SW
40 / 25 / 16	0.5 - 9	NBR	2.9 - 210	-15°C up to +100°C	DRV 378 SW	DRV 578 SW	DRV 678 SW
pressure reducer with low pressure diaphragm							
25	0.2 - 2	NBR	2.9 - 18	-15°C up to +100°C	DRV 350 SW	DRV 550 SW	
pressure reducer with high pressure piston							
40 / 25	1.5 - 12	NBR	2.9 - 70	-15°C up to +100°C	DRV 324 SW	DRV 524 SW	DRV 624 SW*2
40 / 25	1.5 - 20	NBR	2.9 - 18	-15°C up to +100°C	DRV 325 SW	DRV 525 SW	

*1 outlet pressure: 3- 10 bar

*2 outlet pressure: 4 - 12 bar

Small Reservoirs

The compact float valves of the SV series are used for level control in systems with smaller storage tanks. Especially in applications with limited space, such as cisterns for railways and airplanes, agricultural drinking troughs, systems for air humidification or steam generation, overflow protection of refueling equipment, etc., the short installation lengths are appreciated. The desired liquid level can be set exactly by moving the float on the float rod.

Valve types SV94 and SV26 are made of brass and can be used with water and neutral liquids.

The stainless steel float valve SV45 is suitable for aggressive liquids or demineralized water.

All valves can be supplied with floats made of hostalen, copper or stainless steel. The replacement of the seals can be carried out user-friendly in the installed state for all valves.

The SV26 valve is optionally available with a double bar, which allows a vertical adjustment of the float (with limited installation space) and suppresses lateral oscillation (in case of an unstable liquid surface).



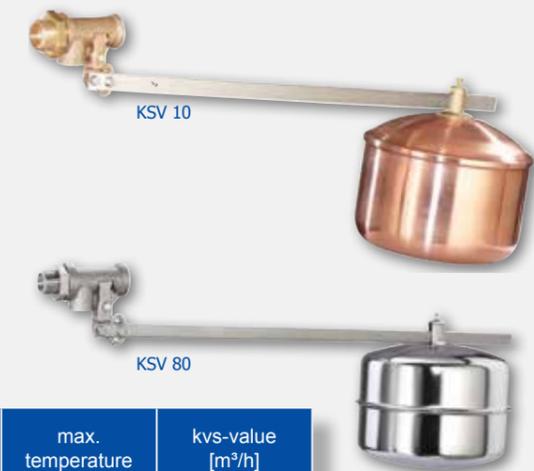
type	nominal size	max. inlet pressure	material	seals	max. temperature	kvs-value [m³/h]
SV 94	DN10-DN15	6 bar	brass	NBR	80°C	0.2 - 0.3
SV 26	DN10-DN15	12 bar	brass	NBR	80°C	0.3
SV 45	DN10-DN20	10 bar	stainless steel (1.4404)	FKM	190°C	0.3

„All-rounder“ in Compact Design

The KSV series comprises of „all-round“ float valves, which can be used in almost all applications for level control. The valves are characterized by an excellent price-performance ratio and are compatible in dimensions to a variety of other industrial float valves, so that KSV valves can also be used for existing systems as replacement valves.

The valves work with a robust piston control. The body of KSV10 is made of high-quality red bronze (gunmetal); the valve type KSV80 is completely made of stainless steel.

Floats made of copper or stainless steel can be supplied with either variant. With all valves, the fluid level can be adjusted exactly by moving the float on the float rod.



type	nominal size	max. inlet pressure	material	seals	max. temperature	kvs-value [m³/h]
KSV 10	DN15-DN25	12 bar	red bronze	FKM	80°C	2.7 - 6.7
KSV 80	DN10-DN65	12 bar	stainless steel	FKM	190°C	2.9 - 24

Robust Design for Large Reservoirs

The RSV series float valves are highly robust valves for extended supply pressures and high flow rates. The special design of the lever transmission of the Berluto RSV float valves has been used for over 90 years and is still unique to date. By this leverage the buoyancy of the float is reinforced so that it is about 2.8 times the value of conventional float valves without leverage. This allows RSV float valves to hold high pressures with a relatively short rod or manage with smaller floats. This offers e.g. in narrow-sized systems a decisive advantage. In addition, the robust lever construction is much stiffer and thus prevents a lateral oscillation of the float.

The types RSV O (open design) and RSV G (closed design) are made entirely of brass and are therefore particularly suitable for drinking water. They comply with the strict guidelines of the European Drinking Water Ordinance and DIN 1717 and are additionally DVGW and KIWA certified. This makes them ideal for applications requiring connection to the drinking water network (such as pressure booster and fire protection systems, etc.).

The type RSV VA, on the other hand, is completely made of stainless steel (V4A) and is therefore particularly suitable for aggressive or critical media.

Suitable floats made of copper or stainless steel (V4A) can be supplied for all RSV. Due to the special design, all valves can be inspected when installed; similarly, the gaskets - if necessary - can be replaced in the installed state.



type	nominal size	max. inlet pressure	material	seals	max. temperature	kvs-value [m³/h]
RSV O	DN10-DN80	12 bar	brass	EPDM	80°C	0.6 - 47
RSV G	DN10-DN80	12 bar	brass	EPDM	80°C	2.1 - 40
RSV VA	DN10-DN65	8 bar	stainless steel (1.4571)	FKM	190°C	1.9 - 34

Overpressure Protection

MSV - diaphragm safety valves made of red brass for heating systems and water heaters with a temperature resistance up to 120 °C. The valves of this series are factory-set and delivered with a set pressure of 2.5, 3, 6, 8 or 10 bar.

NHS - Direct acting, spring loaded and free venting safety valves according to AD2000-Merkblatt A2. The valves of this series are used as a safety device to blow off air or other neutral, non-toxic and non-flammable gases from pressure vessels.

SP - SP80 is an overflow valve for use in industrial installations, SP82C and SP83C are TUEV and EC component tested safety valves. All SP valves are suitable for liquids, gases and steam depending on the choice of sealing material (EPDM, FPM or PTFE) and resistant to oil, unleaded petrol and gasoline. Media temperatures are tolerated up to 225 °C. The set pressure can be adjusted by the user on site without any special tools.

ASV - Safety valves with threaded connection in a compact design for industrial applications made of stainless steel and red bronze (gunmetal). Suitable for different applications and media with integrated metal bellows.

FSV - Flanged Safety Valves for applications where high blow-off rates are required. The valves in this series are made of ductile iron, red bronze (gunmetal) or stainless steel and have soft or metallic sealing end caps.



type	nominal size	pressure range	material body	applications	design	certification
MSV HN	DN 15 - DN 50	2.5 / 3 bar	red bronze	heating system	angle valve	CE, TÜV
MSV WN	DN 15 - DN 32	6 / 8 / 10 bar	red bronze	water heating system	angle valve	CE, TÜV
NHS 10	DN 8 - DN 20	0.3 - 47 bar	brass	D / G	free blow-off	CE, DEKRA
NHS 11	DN 15 - DN 20	0.2 - 30 bar	brass	D / G	free blow-off	CE, DEKRA
NHS 12	DN 25 - DN 50	0.5 - 6 bar	brass	D / G	free blow-off	CE, DEKRA
SP 80	DN 10 - DN 50	0.2 - 20 bar	red bronze	D / G / F	angle valve	CE
SP 81	DN 15 - DN 50	0.2 - 25 bar	red bronze	D / G / F	angle valve	CE
SP 85	DN 10 - DN 50	0.2 - 20 bar	stainless steel	D / G / F	angle valve	CE
SP 82 C	DN 15 - DN 50	0.2 - 20 bar	red bronze	D / G	angle valve	CE, TÜV
SP 83 C	DN 15 - DN 50	1.0 - 16 bar	red bronze	F	angle valve	CE, TÜV
ASV 40	DN 15 - DN 50	0.5 - 50 bar	red bronze	D / G / F	angle valve	CE, TÜV
ASV 45	DN 15 - DN 50	0.5 - 70 bar	stainless steel	D / G / F	angle valve	CE, TÜV
FSV 20	DN 15 - DN 150	2.0 - 16 bar	red bronze	D / G / F	angle valve	
FSV 25	DN 20 - DN 100	0.2 - 40 bar	stainless steel	D / G / F	angle valve	CE, TÜV
FSV 27	DN 40 - DN 50	0.5 - 16 bar	ductile cast iron	D / G / F	angle valve	CE, TÜV

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