

Pressure Reducing Valves



For Potable Water...

DRV 402-6 / DRV 403-6: Proven Brand Quality

DRV 403-6 pressure reducing valves for potable water are corresponding in full detail to the regulations of DVGW (German Gas and Water Control Board), bodies are made of high quality gunmetal. As a result, they are not only outperforming the requirements of DIN 50930-6 but also exceeding the quality of pressure reducers made of brass with regard to corrosion and stability. All integrated plas-

tic parts meet the KTW recommendations for potable water, the pressure reducing valves themselves are being tested according to DIN EN1567, are DVGW-certified, noise insulation-tested and have a maintenance-friendly exchangeable valve insert.

DRV 403-6 are primarily used for lower flow rates. For larger applications series DRV 402-6 is recommended.

	DRV 403-6 ^{*)}				DRV 402-6 ^{*)}		
Nominal Size	DN15	DN20	DN25	DN32	DN40	DN50	DN65
Connection R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
Length [mm]	137	145	160	178	211	211	273
kvs [m³/h]	2.9	3.9	5.4	6.1	9.0	13.0	20.0

^{*)} As standard, all potable water pressure reducing valves are designed for a max. nominal pressure of 16 bar, an outlet pressure of 1.5 to 6 bar and a max. media temperature of 70 °C. But of course we also offer custom made solutions on request.

DRV 602-6: Potable Water Professionals with Flange

Our flanged pressure reducing valve series DRV 602-6 is especially designed for large potable water supply systems. Also the bodies of these large-volume valves are entirely made of gunmetal so that delicate coatings are not required. The potable water protection is guaranteed and corrosion is off the cards.

	DRV 602-6 ^{*)}			
Nominal Size	DN65	DN80	DN100	DN125
Flange-Ø [mm]	185	200	220	270
Length [mm]	290	310	350	400
kvs [m³/h]	20	60	80	130

For Compressed Air and Gases...

Series DRV 200: Sensitive & Precise Pressure Regulation

The DRV 200 series valves are regulating the outlet pressure extremely sensitive. Due to the low friction of the few moving internal parts this type shows a high setting accuracy and an extremely good response to flow fluctuations. DRV 200 are preferably used for pressure reduction of compressed air, nitrogen and other neutral, non-combustible gases. Provided that the required flow rates are relatively low this type is also suitable for water and other non-viscous liquids. Valve seats and bodies are made of

corrosion-resistant gunmetal, spring bonnets are in brass (DN32 onwards in grey cast iron), seals are in SBR, NBR and CR. The low pressure version DRV 250 is equipped with an enlarged regulating diaphragm, whereas the high pressure versions 225/235 and 226 are provided with a solid brass regulating piston. All DRV series 200 are supplied with internal threads according to DIN ISO 228, the mean pressure ranges are also available with flanges in DIN construction lengths (DRV 230/235).

PN bar	p ₂ bar	Nominal Size	kvs m³/h	Internal Thread DRV Type	Flange DRV Type
25	0.2 - 2.0	DN8 - DN50	0.5 - 7.2	DRV 250	
25	1.5 - 8.0 ^{*)}	DN8 - DN50	0.5 - 7.2	DRV 200	DRV 230
40	1.5 - 20	DN8 - DN50	0.5 - 7.2	DRV 225	DRV 235
60	20 - 45	DN8 - DN20	0.5 - 1.3	DRV 226	

^{*)} also available with outlet pressure range 0.8 - 8.0 bar (Option G)

Pressure Reducing Valves

Berluto Armaturen - The Valve Factory



On 31th July 1917, the plumber Jean Bergner received the German Patent for his invention of an extraordinary robust and reliable float valve. In 1920, Bergner founded - in cooperation with the merchant Ludwig and the plumber Igeller - the company "Berluto". 4 years later, in 1924, the "Berluto Armaturen AG" was established under the chairmanship of August Bender with numerous plumbers of the German Rhineland area as shareholders . In 1953, the company was transformed into today's "Berluto Armaturen-GmbH". This day the business is conducted already in the third generation by descendants of the company's founder.

Today Berluto is situated in an up-to-date development and production site located in Toenisvorst, Germany. A flexible production with high and constant precision and short processing times is guaranteed due to computer-aided development processes with direct CAD/CAM connection to CNC-machining centers. This allows a production of large valve series as well as custom-made valves in well-known Berluto-Quality. Commencing the production, all utilized and certified materials (gunmetal, brass, stainless steel, sealants) are subject to a rigid quality control. On the other hand, computer-aided test benches finalize the completion of the production chain by a one-hundred-percent checkout and quality assurance.

In spite of modern development and production methods all our employees hold on a crucial Berluto-feature: the passion for detail and first-class workmanship, just like Jean Bergner did in 1917.

Still today, all Berluto valves benefit from a centenary know-how in development, construction and production of special and custom-made valves, pressure reducing valves, safety valves, float valves, dirt traps and filters.



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High Quality Valves Since 1920



Water
Potable Water
Sea Water



Any
Other
Fluids



Compressed
Air & Gases
Steam

Commercial & Industrial Valves



High Quality Valves
Since 1920



Pressure Reducing Valves



Pressure Control for any Media...

High Temperatures?

As standard, our valves are designed for a max. media temperature of 75 °C. However, optionally the max. temperature scope can be extended to 200 °C by adding special seals and internal parts.

The Advantage of Gunmetal

The valve bodies, completely made of gunmetal, are extremely solid, non-corrosive and can therefore be used not just for precious potable water but for almost any other media. Pressure reducing valves of inferior quality are requiring expensive coatings. Due to our high-quality bodies we can leave out such coatings – and a coating which does not exist cannot get damaged.

Series DRV 300 and DRV 400 (Form A and Form B)

Two different types (form A and B) are covering nominal size diameters from DN 15 to DN 65 and flow rates from 2.9 to 20 m³/h (kvs-value, see below). Designed for maximum inlet pressures (nominal pressure PN) of 16 and 25 bar, these valve types offer a wide scale of adjustable outlet pressure ranges p_2 , starting with 0.2 - 2.0 bar up to the high pressure area with 2.0 - 20 bar.

PN bar	p_2 bar	Nominal Size	kvs m³/h	Internal Thread DRV Type	Threaded Male DRV Type	Flange DRV Type
16	0.2 - 2	DN15 - DN65 ²⁾	2.9 - 20	DRV 350	DRV 450 (403-N) ⁴⁾	
16	0.5 - 4	DN15 - DN65 ²⁾	2.9 - 20	DRV 302G / 303G ³⁾	DRV 402G / 403G ³⁾	DRV 413
16	1.5 - 6	DN15 - DN65 ²⁾	2.9 - 20	DRV 302 / 303 ³⁾	DRV 402 / 403 ³⁾	DRV 411
25	1.5 - 10 ¹⁾	DN15 - DN65 ²⁾	2.9 - 20	DRV 308	DRV 408	DRV 412
25	1.5 - 12	DN15 - DN65 ²⁾	2.9 - 20	DRV 324	DRV 424 (403-H) ⁴⁾	DRV 414
25	2.0 - 20	DN15 - DN65 ²⁾	2.9 - 20	DRV 325	DRV 425	

1) also available with outlet pressure range 0.5 – 9 bar (Option G)
3) types DRV 303 and DRV 403 up to DN32 only (kvs up to 6.0 m³/h)

2) internal thread types (DRV 3xx) up to DN50 only (kvs up to 13 m³/h)
4) former type designations in brackets

Series DRV 600 (Form C)

In case that flow volumes of previously mentioned DRV types will be exceeded, our large flange pressure reducing valves will be of service. The construction lengths are corresponding to DIN 3202 and are thus ensuring an

PN bar	p_2 bar	Nominal Size	kvs m³/h	DRV Type
16	0.5 - 4.0	DN65 - DN125	20 - 130	DRV 602G (413) ¹⁾
16	1.5 - 6.0	DN65 - DN125	20 - 130	DRV 602 (411) ¹⁾
16	3.0 - 10	DN65 - DN125	20 - 130	DRV 608 (412) ¹⁾
25	4.0 - 12	DN65 - DN100	20 - 80	DRV 624 (414) ¹⁾

1) former type designations in brackets

Whenever liquid media are used (as well compressed air and neutral gases requiring high flow rates) the time has come for our industrial pressure reducing valve series DRV 300 and DRV 400.

Difficult Media?

The standard versions are suitable for water and neutral, non-viscous liquids, for air and neutral, non-combustible gases. Nevertheless, we are supplying whatever type of pressure reducing valves specially equipped for potable water, cold, warm and hot water, sea water, diluted acids and alkalis, oils, fuels, liquid foodstuff, adhesives, foams, gases, compressed air, etc.

The Agony of Choice

No problem – we will gladly assist you in selecting the right Pressure Reducing Valve – let us know the requested flow rate, inlet and outlet pressure, temperature, the kind of media and we will shortly deliver the appropriate DRV valve in well-known high quality made by Berluto.

In view of the connection types there are hardly any restrictions: almost all valve types are also available with (ISO) internal threads, threaded male or flange connections. Moreover, regarding the threaded male connections you can choose between threaded or solder connection sets (even press-fittings of all leading manufacturers can be used).

Safety Valves



Over-Pressure Protection...

MSV-Prescor: For Water Heaters and Heating Systems

MSV-Prescor are high quality but yet favourable diaphragm safety valves with a brass body and a separating diaphragm protecting the spring against sediments (e.g. calcification). Type W for water heaters (according to DIN 4753, DIN 1988 and TRD 721) is available for set

Valve Type	Set Pressure	Nominal Sizes	Applications	Certificates
MSV-Prescor W	6 / 8 / 10 bar	DN 15 - DN 25	Water Heaters (200 - 5000 Liters)	TUEV, CE
MSV-Prescor H	2.5 / 3.0 bar	DN 15 - DN 25	Heating Systems (50 - 200 kW)	TUEV, CE

Series MSV: Full-Metal Top Quality out of Brass/Gunmetal

Whenever full-metal valves are required, whether due to high temperatures or for optical reasons, as well as for general industrial applications our solid high quality MSV-series safety valves, entirely made of brass or gunmetal,

pressures 6, 8 and 10 bar. Version H for heating systems (according to DIN 4751) is designed to set pressures 2.5 and 3 bar. The valves are TUEV-approved, CE-certified and temperature resistant up to 140 °C.

Series SP: Pressure Relief and Safety Valves in Gunmetal

The bodies of the SP80 pressure relief valves and the SP82/SP83 safety valves are made of gunmetal, bonnets and internal parts are in brass or stainless steel. Depending on the seals (EPDM, FPM or PTFE), the valves are applicable for temperatures up to 225 °C (SP80) respec-

are applied. The valves are temperature resistant up to 140 °C and are available with set pressures from 3 to 10 bar.

tively 185 °C (SP82/SP83), can be used for liquids, gases and steam and are resistant to oil, unleaded fuel and benzene. SP82C and SP83C components are TUEV-approved and CE-tested. The SP80 can be used as pressure relief valve for industrial applications.

Series VHS: High Performance Safety Valves

VHS84C are direct action spring loaded high performance valves (in accordance with AD Code of Practice A2) and are suitable for air and other comparable gases. The relief valves are used as safety devices in pressure vessels in order to avoid an exceeding of maximum working

pressures. Permissible working temperatures are -10 °C to +200 °C. Valve body, bonnet and internal parts are in brass, the pressure spring is of stainless steel and the seals are FPM-made. VHS-valves are not suitable for liquid or dust-like media.

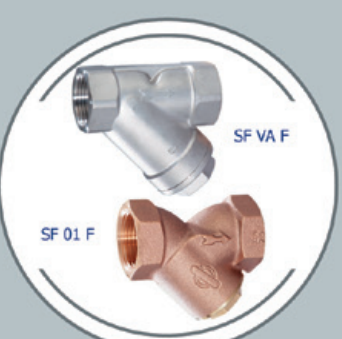
Valve Type	Set Pressure	Nominal Sizes	Applications	Certificates
MSV	3 - 10 bar	DN 15 - DN 40	Liquids, Air, Gases	TUEV, CE
SP 80	0.2 - 20 bar	DN 10 - DN 50	Liquids, Air, Gases, Steam	
SP 82 C	0.2 - 20 bar	DN 15 - DN 50	Air, Gases, Steam	TUEV, CE
SP 83 C	1.0 - 16 bar	DN 15 - DN 50	Liquids	TUEV, CE
VHS 84 C	0.5 - 12 bar	DN 25 - DN 50	Air, Neutral Gases	TUEV, CE

Filtration...

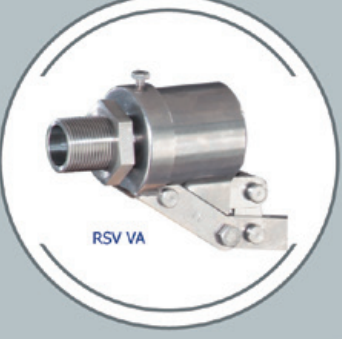
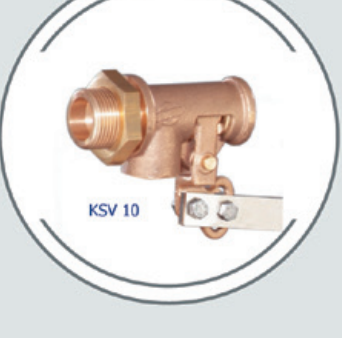
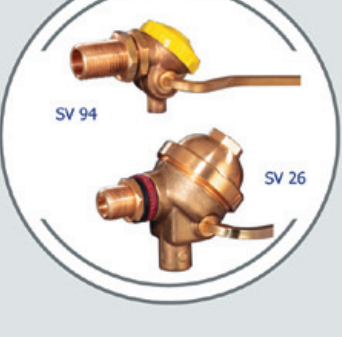
SF: High Quality Dirt Traps in Gunmetal or Stainless Steel

Dirt traps are used for the filtration of neutral, non-viscous liquids and neutral, non-combustible gases. Dirt traps protect against damage caused by weld spatters, sealing material, boiler scale, rust or other dirt particles. Even on these simple armatures we are demanding highest standards: with the unique Berluto series F dirt traps with double strainer you will amplify the protection of your devices considerably.

Type	Max. Press. / Temp.	Nominal Sizes	Strainer (Mesh Size)	Material (Body, Seal)
SF 01 N	16 bar / 90 °C	DN 10 - DN 65	Single (0.6)	Gunmetal, Brass, NBR/FPM
SF 01 F	16 bar / 90 °C	DN 10 - DN 65	Double (0.25 / 0.6)	Gunmetal, Brass, NBR/FPM
SF VA F	40 bar / 90 °C	DN 15 - DN 50	Double (0.25 / 0.6)	V4A (1.4408), EPDM



Float Valves



Ultra-solid and reliable float valves are the root of our current wide-ranging valve program: in 1917, the plumber Jean Bergner got the German Patent for his invention of a robust and reliable float valve; in 1920 he established his company named Berluto. Initially designed for the use as toilet flushing, in these days our float valves are used worldwide in agriculture and industry, implemented for the filling of separation or storage systems respectively its level regulation, such as poultry drinking troughs, humidifiers, car washers, booster stations, pool or pond constructions, etc. And still to this day our technology is so highly developed and up-to-date that it is even applied in train and air craft industry.

Our float valves are regulating inflow and level reliably without any auxiliary power or sensitive sensors, just along the lines: simply install it and it's done! And moreover: if extremely aggressive or abrasive media are being used, the only genuine wearing parts nozzle and seal can be replaced easily. This cannot always be assumed for competing float valves.

No matter what kind of media should be used or which flow is required – in our range you will always find the adequate float valve made of brass, gunmetal or stainless steel, with seals of NBR or Viton (FPM) and floats of Hostalen (PE), copper or V4A-steel.

Series SV: For Small Storage Tanks

The small SV-series starts with type SV 94 made of brass (optionally with plastic or brass cap) for reduced flow rates or pressures (up to 6 bar). For higher working pressures (up to 12 bar) we recommend our SV 26 valve, entirely made of brass. The latest type of this series is the

SV 45, completely produced of stainless steel (1.4571) and applicable for working pressures up to 10 bar. For all valves of our SV-series we offer matching floats of either Hostalen (PE), copper or stainless steel (V4A).

Type	p_{max} / bar	Nominal Size	kvs / m³/h	Valve Body	Seal	Floats
SV 94	6	DN 10 - DN 15	0.2 - 0.3	Brass	NBR	PE, Copper, V4A
SV 26	12	DN 10 - DN 15	0.3 - 0.4	Brass	NBR	PE, Copper, V4A
SV 45	10	DN 10 - DN 20	0.3 - 0.4	Stainless Steel (1.4571)	FPM	PE, Copper, V4A
KSV 10	6, 8, 12	DN 15 - DN 40	2.0 - 13	Gunmetal	NBR, FPM	Copper, V4A
RSV O	6, 8, 12	DN 10 - DN 80	1.2 - 72	Brass	NBR	Copper, V4A
RSV G	6, 8, 12	DN 10 - DN 80	1.9 - 48	Brass	NBR	Copper, V4A
RSV VA	6, 8	DN 15 - DN 65	2.1 - 48	Stainless Steel (1.4571)	FPM	V4A

Series KSV: Allrounder made of Gunmetal

The KSV-series is our allrounder in the middle range whenever SV-valves might be too small or RSV-valves are too big. The KSV-series valves are working with a regulating piston, bodies are made of gunmetal, nozzles and seals are easily replaceable. Furthermore, these valves are

very cost-effective and their dimensions are compatible with numerous industrial float valves. Matching floats out of copper or stainless steel (V4A) are available.

Series RSV: Highly Robust Reservoir Valves

Whenever robust valves for high inlet pressures and/or large flows are required the float valves of our RSV-series are brought into action. RSV-series valves are available in open (RSV O) or closed (RSV G) design for working pressures up to 12 bar and kvs-values from 1.2 m³/h up to 72 m³/h. Due to the special leverage all RSV-valves get along with a relatively short float arm. Seals can be inspected and replaced without dismantling the entire

valve. RSV-valves are made of brass or stainless steel (RSV VA). The RSV VA is equipped with Viton (FPM) seals and allows media temperatures up to 190 °C. For all RSV-valves we offer matching floats, either of copper or stainless steel (V4A).

Pressure Reducing Valves

Dirt Traps

Float Valves