Pressure reducers for seawater

Made in Germany

In 1920, the plumber Jean Bergner founded the "Berluto Schwimmerhahngesellschaft Ludwig & Co." together with his business partners Ludwig and Toeller. Years later the company was renamed "Berluto Armaturen GmbH" and the production site, initially placed in Duesseldorf, moved to Toenisvorst.

Today, Berluto works with an ultra-modern machinery park which allows flexible and highly precise production processes. All valves are being tested for functioning and leakage in order to fulfill the highest quality standards.

Nevertheless, only with the help of our longstanding and top-qualified employees, who care for the attention for detail and for firstclass workmanship, we are able to provide our consistent top quality *made-in-Germany*.

Why Berluto?

The requirements to pressure reducing valves are most different and individual. A certain feature which is crucial for your special application might be of minor importance for other users. Our brochure shows all series listing the technical key features. It provides a first overview and might be helpful to find the most appropriate valve type for your purposes.

It may nevertheless be necessary to receive more detailed information. In that case we look forward to receiving your e-mail or you just give us a call – we will gladly answer all your questions and provide personal advice.

You will see: There are many good reasons for a pressure reducing valve from Berluto.

Just standard or also customized special versions?

We offer a wide range of standard valves adapted for a variety of applications. But particularly in recent years we extended our range in line with our customers' individual requirements. In our high-tech production plant we manufacture standard valves in large quantities as well as small series or even single items. To date, we worked out and realised a large number of specific solutions for our customers.

Please contact us if you will not find the appropriate valve in this brochure – we will always find a solution for you!

Why red bronze?

For decades our company is manufacturing a wide range of pressure reducers and float valves. The most available valves on the market are made of brass or coated grey cast iron. However, Berluto has always used the high quality, seawater-resistant red bronze and can look back on a long experience with this specific media-material encounter.

Our know-how and our product variety is specially appreciated by our customers in the shipping industry because our valves can be used without concerns for drinking water or seawater applications.

With good reason

With good reason

Our program



Pressure reducers in stainless steel



Pressure reducers in red bronze



Float valves in stainless steel



Float valves in red bronze and brass



Safety valves in red bronze and brass



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DRV-Type	Max. inlet pressure	Outlet pressure range*	Nominal size	kvs-Wert
DRV 302 SW	25 bar	1.5 - 6 bar	DN 15 - DN 50	2.9 - 13 m³/h
DRV 378 SW	25 bar	0.5 - 9 bar	DN 15 - DN 50	2.9 - 13 m³/h
DRV 502 SW	25 bar	1.5 - 6 bar	DN 15 - DN 80	2,9 - 24 m³/h
DRV 578 SW	25 bar	0.5 - 9 bar	DN 15 - DN 80	2,9 - 24 m³/h
DRV 602 SW	16 bar	1.5 - 6 bar	DN 80 - DN 150	60 - 210 m³/h
DRV 678 SW	16 bar	0.5 - 9 bar	DN 80 - DN 150	60 - 210 m³/h

further pressure ranges on request

Features

Our pressure reducers of series DRV 300, 500 and 600-SW operate with an integrated prepressure relief so that a constant back pressure is always guaranteed, even with strong pressure

Series DRV 300 and 500 are equipped with a strainer that protects against damage by solid particles. For an easy maintenance all sizes up to DN 32 have a removable cartridge.

As standard we offer our pressure reducers for seawater with internal threads and flanges. But of course we are also able to deliver connection types like external threads, NPT threads or ANSI-flanges.

Applications

Our series DRV with suffix "-SW" was specially designed for the use with seawater. All materials have been carefully selected and provide an optimum corrosion resistance. Whenever seawater is in use, e.g. on ships, oil rigs or desalination plants, our pressure reducing valves of series SW are the right choice.

With pre-pressures up to 25 bar and back pressures between 0.5 and 9 bar our standard valves cover a wide scope of applications. Moreover, we offer further pressure ranges for your individual purpose.

Our pressure reducers are suitable for applications with reduced flow rates (from kvs-value 2.9m³/h up) as well as for higher flow rates (up to kvs-value 210 m³/h).







	DRV 300 SW	DRV 500 SW	DRV 600 SW	
Valve body	CuSn5Zn5Pb2-C-GS (RG5)	CuSn5Zn5Pb2-C-GS (RG5)	CuSn5Zn5Pb2-C-GS (RG5)	
Spring bonnet	up to DN32 - brass from DN 40 - cast iron	up to DN32 - brass from DN 40 - cast iron	cast iron	
Flanges		CuSn7Zn4Pb7-C (RG7)	CuSn5Zn5Pb2-C-GS (RG5)	
Diaphragm	NBR (optionally FKM)	NBR (optionally FKM)	NBR (optionally EPDM)	
Seals	NBR (optionally FKM)	NBR (optionally FKM)	NBR (optionally EPDM)	
Spindle	CuSn7Zn4Pb7-C (RG7)	CuSn7Zn4Pb7-C (RG7)	1.4404	
Valve seat	up to DN32 - POM from DN40 - CuSn7Zn4Pb7-C	up to DN32 - POM from DN40 - CuSn7Zn4Pb7-C	CuSn5Zn5Pb2-C-GS (RG5)	
Internal parts	up to DN32 - POM/CuSn7Zn4Pb7-C from DN40 - CuSn7Zn4Pb7-C	up to DN32 - POM/CuSn7Zn4Pb7-C from DN40 - CuSn7Zn4Pb7-C	CuSn7Zn4Pb7-C (RG7)	

For this series we exclusively use sealing materials with a high seawater resistance.

As standard, NBR is being used for all types. For certain series we can optionally offer FKM or EPDM seals.

For NBR seals the temperature resistance is limited to 75°C; for EPDM and FKM seals the temperature resistance is 120°C or rather 190°C.

Internal parts

Smaller nominal widths up to DN 32 have a removable POM/red bronze cartridge. From nominal width DN 40 upwards all internal parts are completely made of red bronze; series DRV 600 types are equipped with a high-grade stainless steel spindle.

Manometer connection

All series have double-sided manometer connections for the back pressure. For series DRV 500 and 600 the nominal widths from DN65 upwards are additionally equipped with a doublesided flange manometer connection for pre- and back pressure.

Valve body

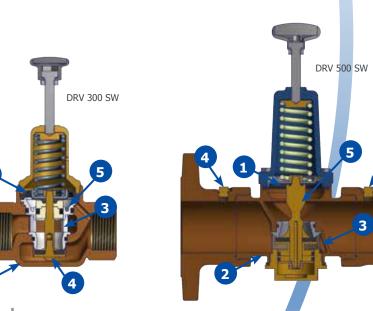
All types of series DRV 300, 500 and 600-SW have a red bronze valve body (CuSn5Zn5Pb2-C-GS/ CC491K, "RG5").

This material has proved its worth for decades in the drinking and seawater sector and is known for its corrosion resistance. Red bronze is a further development of the so called gun metal which is used for centuries in the shipbuilding.

Flanges

The flanges, as well as all wetted parts, are made of red bronze. Up to nominal width DN 80 they are manufactured corresponding to DIN EN 1092 PN 25. From DN 100 upwards the flanges can be delivered either according to DIN EN 1092/PN 16 or according to DIN EN 1092/ PN 25. Of course, we can also offer flanges like ANSI, JIS, etc.

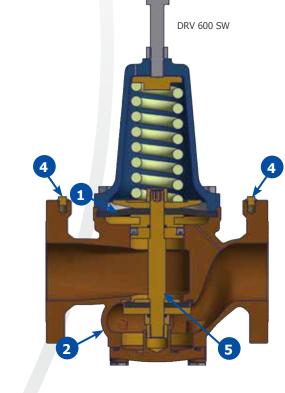
Nominal size	Art.no. DRV 302 SW	Art.no. DRV 378 SW	Art.no. DRV 502 SW	Art.no. DRV 578 SW	Art.no. DRV 602 SW	Art.no. DRV 678 SW
DN 15	030202-00500	037802-00500	050202-00500	057802-00500	-	-
DN 20	030203-00500	037803-00500	050203-00500	057803-00500	-	-
DN 25	030204-00500	037804-00500	050204-00500	057804-00500	-	-
DN 32	030205-00500	037805-00500	050205-00500	057805-00500	-	-
DN 40	030206-00200	037806-00200	050206-00200	057806-00200	-	-
DN 50	030207-00200	037807-00200	050207-00200	057807-00200	-	-
DN 65	-	-	050208-00200	057808-00200	-	-
DN 80	-	-	050209-00200	057809-00200	060209-00200	067809-00200
DN 100	-	-	-	-	060210-00200	067810-00200
DN 125	-	-	-	-	060211-00200	067811-00200
DN 150	-	-	-	-	060212-00200	067812-00200



1 high-grade NBR-diaphragm for a sensitive control and a precise setting of the outlet pressure

2 robust red bronze valve body for a high durability

3 integrated strainer protects against damage by solid particles



manometer connection

to control the outlet pressure setting (from DN65 upwards two-sided on the flanges)

fast and simple maintenance with removable cartridge or exchangeable spindle

Berluto® Armaturen-Gesellschaft mbH