Product Overview

A. u. K. Müller

Inspirational Valve Technology

Solenoid Valves
Control Valves
Special Valves and Systems

Content

Key to product description

Expert Knowledge

More than 60 years of experience...

... in valve technology

From an initially family business we have grown internationally into a respected leading manufacturer of valve technology with around 180 staff at our location in Düsseldorf.

With more than 60 years experience, drawn from the wide range of our products out in the market, we develop tailor made innovative valve solutions for the specific needs of our customers.

Our modern manufacturing and testing technologies, in-house production and the multi-industry exchange of experience of the dedicated staff within our Düsseldorf factory enable our customers to stay at the forefront of the marketplace.

Our products are certified to national and international quality standards. Special emphasis is placed on the suitability and certification for drinking water applications and the food industry. By using certified high-performance plastics, the applicable regulations on the lead content in drinking water can be achieved more easily and it also allows to creation of 100 % lead-free solutions, depending on the other components used. Furthermore it ensures a neutral taste.

Independent institutes and our active involvement in various quality standard panels verify that we take these quality demands seriously and our customers can expect nothing less than product quality of the highest level.

More than 60% of total turnover is achieved in our export markets, supported by our sales subsidiaries in Great Britain and France.

Get into the fascinating world of valve technology and be inspired. You will find that a valve is much more than just a “component”.

Possible product certifications available on request

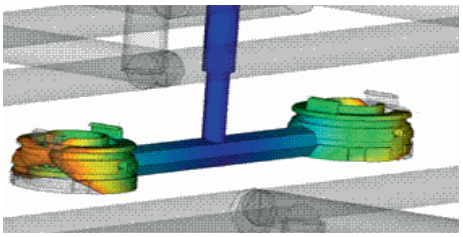
Innovation

We provide customized valve solutions...

... with advice and ideas

The process begins with ideas and specification requirements of our customers. We take them up on that and develop together individual concepts and designs using our extensive resources and the skills of our experienced engineers. Ultimately this process results in the development of innovative products and complete systems which exceed usual market standards and expectations.

We have developed thousands of bespoke innovative product systems and specifications in partnership with our customers for a wide range of industry sectors including Medical Technology, Sanitary, Vending, Agricultural and Food Technology as well as Environmental Technology. Our components are used in any application where high reliability counts.



We do not believe in just ‘selling a valve’. The integration of our product into a customer’s application is the result of detailed analysis of the ambient environment, operating parameters and specification requirements. This enables us to offer components that are individually optimized solutions to suit even the most complex fluid applications.

Such tailored valve design ensures a long product life expectancy and utmost reliability, in turn reducing service costs for our customers significantly. Features such as low power consumption and minimal noise emission levels of our products support an efficient overall design of customers equipment.

The use of modern technologies and techniques for structural analysis, fluid and electromagnetic simulations and rapid prototyping builds quality and reliability into every stage of the development process.

We are constantly researching and evaluating materials, our products and the way they are manufactured. Changes are constantly being implemented to every area to ensure we stay one step ahead and ensure the ongoing outstanding functionality and operational reliability of our products.

From the initial design stage through production to the point of delivery, we promise a service and product that exceeds the expectation afforded by the term, “Made in Germany“.

Sanitary

Cartridge valves are specifically developed for applications in sanitary faucets. Their compact size allows them to be easily integrated into the most exciting designs, where style leaves little room for components. In combination with electronically controlled infra-red sensors, complete solutions for use in battery powered, electronically controlled, sanitary faucets. As well as being hygienic these valves also save on water and power consumption.

Cartridge Valves

Compact latching or mono stable cartridge valves, directly screwable into the socket of faucets.

Good resistance against thermal and chemical disinfection (e.g. T-medium 80 °C (176 °F) for 10 minutes).

050-B05.060/050-M05.120
DN 5; 0,5 - 8 bar; 11 l/min @ 1 bar

50.005.101 mono/latching
DN 5; 0,5 - 10 bar; 11 l/min @ 1 bar

50.007.101 mono/latching
DN 7; 0,5 - 10 bar; 23 l/min @ 1 bar

50.009.101 mono/latching
DN 9; 0,5 - 10 bar; 27 l/min @ 1 bar

19.00x.287 mono/latching
DN 0,5; 0 - 10 bar; 0,13 l/min @ 1 bar

Mono stable or latching pilot valve

The miniaturized valve with the approximate dimension of a sugar cube is used as pilot control unit for servo controlled main valves.

The fixing contour can be realised by the customer or can be customized.

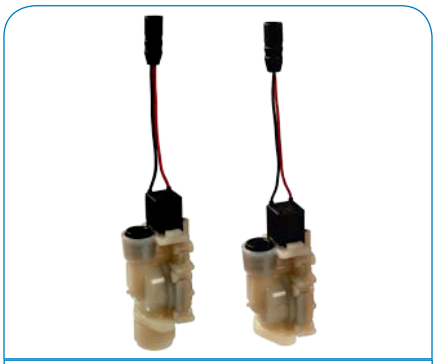
19.00x.287 mono/latching
DN 0,8; 0 - 10 bar; 0,31 l/min @ 1 bar

Valve solutions based on the pilot valve

Due to the linear fluid path the integration is also possible into minimum space and already existing installations.

Also available as mono stable version.

51.005.125 mono/latching
DN5; 0,5 - 10 bar; 7,5 l/min @ 1 bar



51.007.125 mono/latching
DN 7; 0,5 - 10 bar; 12 l/min @ 1 bar

50.007.806 mono/latching
DN 7; 0,5 - 10 bar; 16 l/min @ 1 bar

50.013.806 mono/latching
DN 13; 0,5 - 10 bar; 36 l/min @ 1 bar

50.007.800 mono/latching
DN 7; 0,5 - 10 bar; 16 l/min @ 1 bar

Acentric Cartridge Valve

The compact acentric dimension makes it easy to integrate in faucets with limited space.

The plug-in design simplifies installation and service.

Infrared Sensors and Accessories

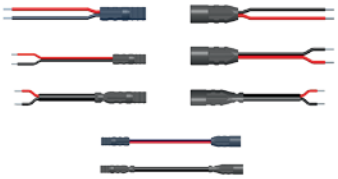
IRS-WT-x/IRS-UWS-x
Control unit for sanitary faucets, urinals, toilets or showers

Smart infrared sensor for contactless control of the cartridge valve.

Specific versions for wash basin, urinal, shower and toilet applications are available.

IRS-WT-MxC/-MxF
Control unit for sanitary faucets, urinals, toilets or showers

Remote Control
Detection range, flushing time, ON/OFF



Connectors/Cables
Strand, twin strand or round sleeved cables

Battery cases (Elastomer), Mains or In-Wall Adapter

Integrated Cartridge

050-W07.06I/09I
DN 7, 0,5 - 8 bar, 20 l/min @ 1 bar

Latching versions with integrated infrared sensor for faucets- or urinal applications.

050-U07.06I/09I
DN 7, 0,5 - 8 bar, 20 l/min @ 1 bar

Cartridge Valve Body Adapter

Soon also available in DN 9.

50.007.126 (PA 6/6)
DN 7; 0,5 - 10 bar, burst pressure 50 bar

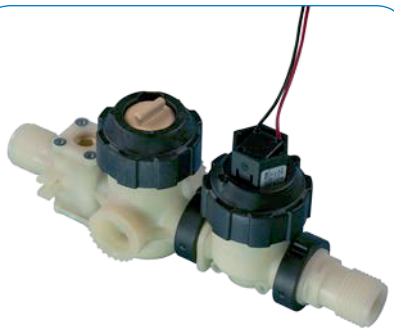
50.007.126 (PPE)
DN 7; 0,5 - 8 bar, burst pressure 25 bar

50.007.52x (Brass)
DN 7; 0,5 - 10 bar, burst pressure 50 bar

Modular Urinal Valve System

52.007.126
DN 7; 0,5 - 10 bar; 18 l/min @ 1 bar

- For cold water applications
- With or without integrated strainer and shut-off valve



52.007.1xx
DN 7; 0,5 - 10 bar; 18 l/min @ 1 bar

Vending

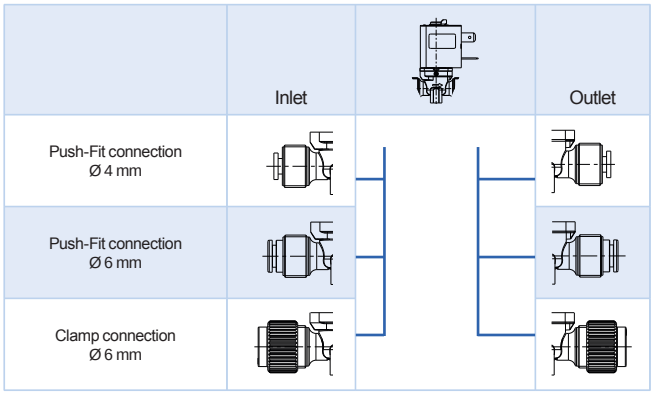
Valves for vending applications have to be able to produce a variety of pressure, volume and temperature ranges depending on the type of machine and the drink to be prepared. For the varied needs of the beverage industry we offer traditional dispense valves, as well as, espresso valves, cold drink dispense valves, pumps and complete systems based on our fast coupling components.

These valves are made from high performance plastics which, compared to brass components, are completely lead free and does not effect the taste of the dispensed drink. The surface of the plastic has an increased resistance to the build-up of lime scale. Also, in operation, plastic components cool the hot water at a much lower rate than brass, which deliver the drinks at a more consistent temperature.

Espresso Valves

- Direct acting
- Compact design
- Long term performance capability
- Suitable for food and hot water appliances
- Applicable for saturated steam 143 °C (3 bar)
- Works from zero pressure
- Easy to assemble and service

Any connector combination possible



2/2 Way, NC

18.003.000
DN 1,5; 0 - 16 bar; 0,9 l/min @ 1 bar

18.004.000
DN 2; 0 - 10 bar; 1,5 l/min @ 1 bar

18.005.000
DN 2,5; 0 - 6 bar; 2,5 l/min @ 1 bar

2/2 Way, NO

18.003.001
DN 1,5; 0 - 10 bar; 0,8 l/min @ 1 bar

Other nominal orifices on request:
DN 1,2
DN 2,0
DN 2,5

3/2 Way

18.002.032
DN 1,2; 0 - 16 bar; 0,6 l/min @ 1 bar

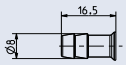
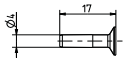
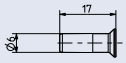
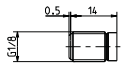
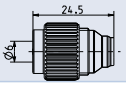
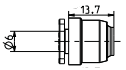
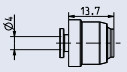
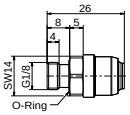
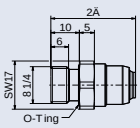
18.003.032
DN 1,5; 0 - 12 bar; 1 l/min @ 1 bar

18.005.032
DN 2,5; 0 - 5,5 bar; 2,2 l/min @ 1 bar

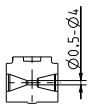
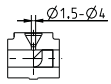
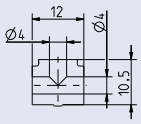
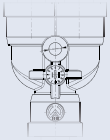
Push-Fit Fitting System FitSys 18

Modular fitting system made from high performance plastic for the creation of customised fluid paths.

- High temperature resistance: 98 °C/16 bar or 143 °C/3 bar
- Assembly without tools
- Any combination possible and easily expandable
- NSF- and UL-approved variants available

A		Hose stem connection ID Ø 6 mm (0.236 inch)
B		Push-fit stem Ø 4 mm (0.158 inch) (Counterpart of type G)
C		Push-fit stem Ø 6 mm (0.236 inch) (Counterpart of type F)
D		Thread connection G 1/8
E		Clamp connection Ø 6 mm (0.236 inch)
F		Push-fit connection Ø 6 mm (0.236 inch) (Counterpart of type C)
G		Push-fit connection Ø 4 mm(0.158 inch) (Counterpart of type B)
H		Thread connection G 1/8 (Thread insert made of stainless steel)
I		Thread connection G 1/4 (Thread insert made of stainless steel)

Available connector types and base bodies

G x		Straight passage Ø 4 mm (0.0158 inch)
		Straight passage with reduced orifice possible Ø 0.5 - 4 mm (Ø 0.02 - 0.158 inch)
L x		L-Fitting body Ø 4 mm
		L-Fitting body with reduced orifice possible Ø 1.5 - 4 mm (Ø 0.06 - 0.158 inch)
T		T-Fitting body Ø 4 mm (0.158 inch)
S		S-Closure stop
Y		Y-Fitting for connection type F, G

Available configurations

G- Connector
DN 4; 0 - 16 bar

L-Connector
DN 4; 0 - 16 bar

T-Connector
DN 4; 0 - 16 bar

Y-Connector
DN 4; 0 - 16 bar

S-Plug
DN 4; 0 - 16 bar

Manifold
DN 4; 0 - 16 bar

Pressure Relief Valve
4, 10 or 12 bar

Functional elements

Control Valve
DN 4; 0 - 16 bar

Dispense Valves

Media separated seat valve for outlet control of liquid dispense in hot or cold drink dispensers.

Two-piece Dispense Valves

46.008.104
DN 8; 0 - 60 mbar

46.008.114 (PTFE valve seat)
DN 8; 0 - 60 mbar

Two-piece valve housing. The valve outlet nozzle is removable and allows independent replacement of components.

One-piece Dispense Valves

46.008.101
DN 8; 0 - 60 mbar

46.008.111 (PTFE valve seat)
DN 8; 0 - 60 mbar

Cost-effective, one-piece valve housing.

46.008.118
DN 8; 0 - 60 mbar

Flow and maintenance optimised dispense valve

- **M**aximized life, reduces service calls
- **I**nternally angled inlet nozzle for redirection of air bubbles and reduction of lime scale
- **E**levated PTFE valve seat to inhibit scale build up
- **M**embrane “tail” is vibrated during closing to minimize drips. Tail is angled to channel final drip away from critical area (Patented EP 1 286 092).
- **B**arbed inlet reduces deposits of dirt particles and prevents clogging by scale particles.

Dispense Bank Valves

46.008.x06
DN 8; 0 - 60 mbar

46.008.x16
DN 8; 0 - 60 mbar

Two-piece valve housing with and without PTFE valve seat.

A maximum of five output units can be built up.

46.008.x07
DN 8; 0 - 60 mbar

46.008.x17
DN 8; 0 - 60 mbar

One-piece valve housing:

- **W**ith and without PTFE valve seat
- **C**ost effective

Dispense Valves DN 12 and DN 14

40.012.101
DN 12; 0 - 60 mbar

40.012.111/ 40.014.111
DN 12/14; 0 - 60 mbar

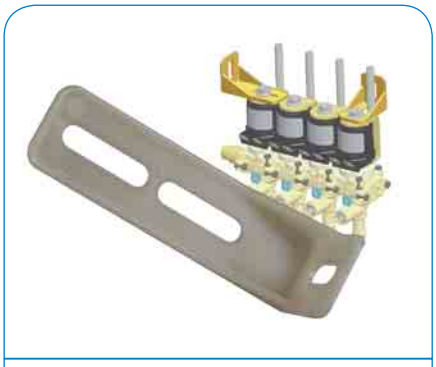
40.012.151
DN 12; 0 - 60 mbar (regulated breather)

Especially suitable for delivery of larger quantities, e.g. pot or canister filling.

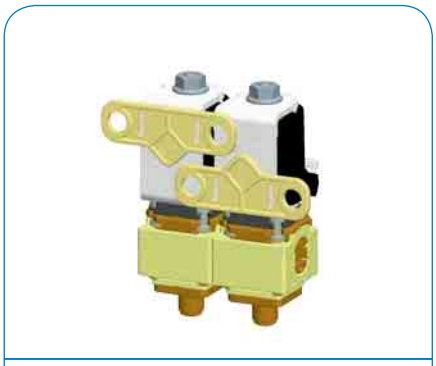
Accessories Dispense Valves

Adjuster Wheel

Fixing Clip



Fixing Bracket, angled



Flange

Soda Valve

06.003.234
DN 3; 0 - 7 bar; 5 l/min@ 1 bar

Dispense valve for still or sparkling water. Used, for example, in water mains connected drink dispensers. Equipped with two inlets, each with a manually adjustable compensator to adjust flow rate and bubble size.

Pumps

41.008.100
DN 8; 155 mbar; 3,6 l/min @ 24 V DC

41.008.200
DN 8; 430 mbar; 12 l/min @ 24 V DC

Pumps increase the pressure and improve dosing consistency. As 12 or 24 V DC version available.

The flow rate can be varied in relation to the voltage applied.

Suitable for hot water up to 95 °C.

41.005.300
DN 5; 102 mbar; 3,6 l/min @ 16 V DC
or 3,0 l/min @ 26 V DC

Dosing pump allows the dispense valve to be placed up to 0.4 m above the water level in the boiler.

Medical Technology

For years we have produced valve solutions for the particular needs of the dialysis, sterilisation, disinfection, water purification and medical instrument cleaning fields. Where reliability, extended life and high quality are required.

We are expert at designing products with the stringent needs of the medical market in mind. We produce standard products or can tailor a bespoke solution.

High performance, bio-compatible polymers are used in areas of medium contact to ensure good chemical resistance and a long life time.

Dialysis Valves

U9x.60x
DN 3,6; 10 - 400 kPa abs.; 3,2 l/min@ 1 bar

U9x.60x
DN 4; 10 - 400 kPa abs.; 4,2 l/min@ 1 bar

Housing versions


I


II


III


IV


V


VI


VII


VIII

- High number of ON-OFF cycles
- Short cycle times
- Function and leak tightness in both flow directions
- Medium separated by PTFE bellow
- Minimal dead areas in valve body
- Material valve housing: PEI (PPSU or PEEK on request)
- Sealing material: EPDM (FKM on request)
- Other nominal widths, DN 0,8 - 6,0, on request

Further products for medical technology: stainless steel drain valves, see page S. 35.

Vending and Medical Technology

2/2 Way Direct Acting Compact Valves

Without medium separation

43.00x.142

Available nominal orifices

43.001.142
DN 1; 0 - 10 bar; 0,5 l/min @ 1 bar

43.002.142
DN 2; 0 - 7,5 bar; 1,8 l/min @ 1 bar

43.003.142
DN 3; 0 - 5 bar; 3,3 l/min @ 1 bar

43.004.142
DN 4; 0 - 3 bar; 4,4 l/min @ 1 bar

43.005.142
DN 5; 0 - 0,8 bar; 5,5 l/min @ 1 bar

Medium separation by membrane

43.00x.102

Available nominal orifices

43.003.102
DN 3; 0 - 3 bar; 3,5 l/min @ 1 bar

43.004.102
DN 4; 0 - 2,5 bar; 5 l/min @ 1 bar

43.005.102
DN 5; 0 - 2 bar; 6 l/min @ 1 bar

Medium separation by PTFE bellow

43.00x.122

Available nominal orifices

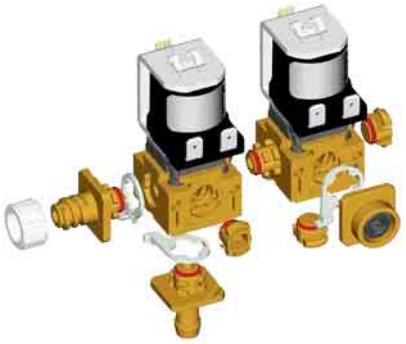
43.003.122
DN 3; 0 - 5 bar; 3,3 l/min @ 1 bar

43.004.122
DN 4; 0 - 4 bar; 4,2 l/min @ 1 bar

43.005.122
DN 5; 0 - 3 bar; 5,5 l/min @ 1 bar

Valve housings from high performance polymer PEI, also available in PPSU.

Modular Compact Valves



43.00x.xx
DN 1,5 - 5

Material: PEI or PEEK

Available connectors:

- **N**ozzles 6,5 - 12 mm
- **S**crew thread G 1/8
- **A**dapter connector for 6 and 8 mm
- **B**oiler connector
- **C**losure and cover

Lever Valves

47.002.102 (2/2 way)
DN 2; 0 - 10 bar; 2 l/min @ 1 bar

47.004.102 (2/2 way)
DN 4; 0 - 3,5 bar; 4 l/min @ 1 bar

47.004.103 (3/2 way)
DN 4; 0 - 2,5 bar; 3,5 l/min @ 1 bar

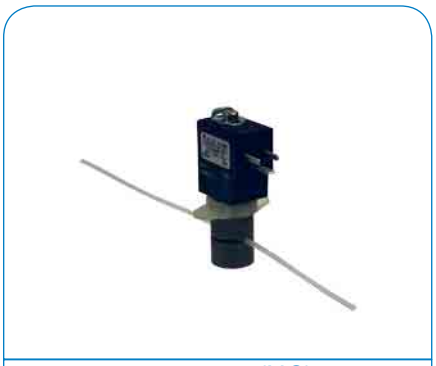
Particularly suitable for the hygienic control of pure or thermally sensitive media.

- **R**obust design
- **M**edium temperature 70 °C
- **E**asily disassembled for cleaning
- **A**ny fitting position
- **M**inimised dead areas
- **G**ood thermal separation: applicable for temperature sensitive media and reduced build up of limescale with aqueous medium

For applications with hot water or saturated steam (98 °C/16 bar or 143 °C/3 bar) all variants are also available made from PPSU with 4 or 6 mm push fit connectors.

47.00x.203 (3/2 way)
DN 3; 0 - 5 bar; 2,3 l/min @ 1 bar
DN 4; 0 - 3 bar; 4,1 l/min @ 1 bar

Pinch Valves



16.001.116 (NC)
Silicone tube 1x0,25; 60°Sh,
0 - 1 bar; 0,33 l/min @ 1 bar

16.001.216 (NO)
Silicone tube 1x0,25; 60°Sh,
0 - 1 bar; 0,33 l/min @ 1 bar

16.001.316 (3/2 way)
Silicone tube 1x0,25; 60°Sh,
0 - 1 bar; 3,3 l/min @ 1 bar

16.002.116 (NC)
Silicone tube 2x0,4; 60°Sh,
0 - 1 bar; 1,6 l/min @ 1 bar

16.002.216 (NO)
Silicone tube 2x0,4; 60°Sh,
0 - 1 bar; 1,6 l/min @ 1 bar

16.002.316 (3/2 way)
Silicone tube 2x0,4; 60°Sh,
0 - 1 bar; 1,6 l/min @ 1 bar

100 % medium separated and therefore particularly suitable for the use with aggressive, particle-loaded or high purity liquids.

- **N**o valve parts in medium contact
- **F**ree of turbulences
- **N**o dead areas
- **F**low in either direction
- **A**vailable for different tubing diameters
- **T**ube can easily be changed
- **C**hemical resistance depends on the material of selected tube

16.003.125 (NC)
Silicone tube 2,85x1,1; 60°Sh,
0 - 1 bar; 3,5 l/min @ 1 bar

16.003.225 (NO)
Silicone tube 2,85x1,1; 60°Sh,
0 - 1 bar; 3,5 l/min @ 1 bar

16.003.325 (3/2 way)
Silicone tube 3,0x1,0; 60°Sh,
0 - 1 bar; 2,1 l/min @ 1 bar

16.006.130 (NC)
Silicone tube 6,0x1,0; 60°Sh,
0 - 800 mbar

16.006.230 (NO)
Silicone tube 6,0x1,0; 60°Sh,
0 - 800 mbar

16.006.330 (3/2 way)
Silicone tube 6,0x1,0; 60°Sh,
0 - 800 mbar

Industry

Servo controlled valves are typically applied in automatic control of water into appliances. For secure function a minimum differential pressure of ~0,02 MPa (~0,2 bar) between inlet and outlet is required. As this design uses the medium pressure to operate so the actuator can be relatively small, making the valves compact. The valves are suitable for the control of water, drinking water, as well as physically and chemically similar media.

An advantage of the A. u. K. Müller servo controlled valves is the self-cleaning pin in the pilot port of the membrane, a design that increases the life of the valve. Additionally, the flow design results in low water hammer. Our unique valve design ensures reliable performance as well as high durability for many areas of application.

Servo Controlled Valves, NC

01.007.111
DN 7; 0,2 - 10 bar; 11 l/min @ 1 bar

01.007.126
DN 7; 0,2 - 10 bar; 11 l/min @ 1 bar

44.007.126
DN 7; 0,3 - 10 bar; 10 l/min @ 1 bar

01.010.115
DN 10; 0,2 - 10 bar; 21 l/min @ 1 bar

01.010.125
DN 10; 0,2 - 10 bar; 21 l/min @ 1 bar

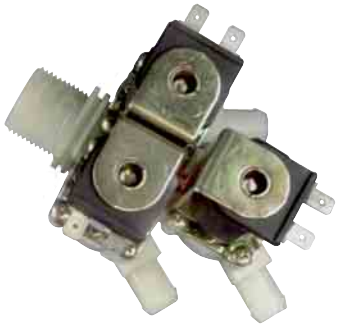
01.010.126
DN 10; 0,2 - 10 bar; 21 l/min @ 1 bar

01.010.215
DN 10; 0,2 - 10 bar; 17 l/min @ 1 bar

01.010.216
DN 10; 0,2 - 10 bar; 22 l/min @ 1 bar

01.010.225
DN 10; 0,2 - 10 bar; 15 l/min @ 1 bar

01.010.315
DN 10; 0,2 - 10 bar; 18 l/min @ 1 bar



01.010.325
DN 10; 0,2 - 10 bar; 18 l/min @ 1 bar

01.010.415
DN 10; 0,2 - 10 bar; 17 l/min @ 1 bar

Secure function also under extreme conditions

All servo controlled valves are equipped with a class F coil. Therefore full function is also given at highest environmental temperature (max. 70 °C) and lowest specified voltage (Un + 10 % / - 15 %) as well as maximum pressure (10 bar) and maximum medium temperature (90 °C).

Tested according to DIN EN 60730. VDE approved variants are available.

01.010.425
DN 10; 0,2 - 10 bar; 15 l/min @ 1 bar

01.013.126
DN 13; 0,2 - 10 bar; 30 l/min @ 1 bar

01.013.215
DN 13; 0,2 - 10 bar; 33 l/min @ 1 bar

01.013.225
DN 13; 0,2 - 10 bar; 33 l/min @ 1 bar

01.013.115
DN 13; 0,2 - 10 bar; 33 l/min @ 1 bar

01.017.115
DN 17; 0,3 - 10 bar; 70 l/min @ 1 bar

Possible connectors for servo controlled valves

For inlet and outlet the following versions are offered:

- **T**hreads: G 3/8, G 3/4, G 3/4 clamping nut, G 1/4 x 10 female, G 1/2, G 1, .75 - 11,5 NH
- **J**ohn-Guest®: 3/8“ JG, 1/2“ JG
- **N**ozzles: 1/2“, 3/4“, 3/8“, Ø 15 (compatible to quick fit connector system 11.000)

More on request.

01.017.126
DN 17; 0,3 - 10 bar; 58 l/min @ 1 bar

15.017.325
DN 17/10; 0,3 - 10 bar; 59/25 l/min @ 1 bar

15.017.425
DN 17/10; 0,3 - 10 bar; 59/25 l/min @ 1 bar

01.021.126
DN 21; 0,3 - 10 bar; 65 l/min @ 1 bar

29.007.215
DN 7; 0,2 - 10 bar; 8 l/min @ 1 bar

29.010.226/326
DN 10; 0,2 - 10 bar; 15,5/13 l/min @ 1 bar

Typical material

- Valve housing: PA66; PA6/6, PPE and PEI on request
- Plunger guide, plunger and spring: stainless steel
- Membrane and sealing: EPDM; NBR and VMQ on request
- Coil coating: PBT, PET or epoxy resin
- Filter: stainless steel (in inlet), POM

Typically the valves are suitable for hot water up to 90 °C.

Aquastop

Aquastop 13.007.226
DN 7; 0,2 - 10 bar; 8 l/min @ 1 bar

Two single servo-controlled valves (NC) connected in series, in order to prevent water damage.

- **H**igh reliability as both valves are switched simultaneously
- **C**onnection to water supply (swivel nut) possible without tool
- **W**ater supply tube routed in flexible corrugated tube
- **D**esigned for free outlet
- **F**lexible corrugated tube to guide leakage medium to directed recirculation
- **P**re-filtration in inlet by stainless steel filter
- **F**low regulator retainer in inlet
- **S**uitable for warm water up to 60° C (EU, UK), 90 °C (USA)

Servo Controlled Valve, NO

36.010.126
DN 10; 0,2 - 8,5 bar; 20 l/min @ 1 bar

Single chamber straight valve, normally open (NO). Also available in the housing variants of NC servo valves, with various connectors.

Suitable for hot water up to 90 °C.

Flow Meter Turbine

17.007.126
max. DN 7; 0,2 - 10 bar; 12 l/min @ 1 bar

The combination of a flow meter and a solenoid valve in one compact unit enables, with suitable electronics (provided by customer), the accurate metering, dosing and control of a liquid together with the ability to interrupt the flow.

Furthermore water hammer is reliably prevented by the integrated servo controlled valve.

Depending on the orifice used, different measuring ranges can be achieved.

Servo-direct Stepper Motor Controlled Valve

10.010.126 - sds
DN 10; 0 - 10 bar; 20 l/min @ 1 bar

For the design of controlled fluidic paths, for continuous regulation of flow rates or for dosing of constant volumes.

- **S**tepper motor driven
- **C**ontinuous operation
- **N**o water hammer
- **M**edium separated by PTFE bellow
- **M**edium temperatures up to 80°C

10.00x.126 - ds
DN 4,2; 0 - 3 bar; 10 l/min @ 1 bar

Servo Controlled Valves with Brass Housing

01.010.511
DN 10; 0,2 - 10 bar; 25 l/min @ 1 bar

01.01x.521

Available nominal orifices

01.010.521
DN 10; 0,2 - 10 bar; 21 l/min @ 1 bar

01.013.521
DN 13; 0,2 - 10 bar; 36 l/min @ 1 bar

01.010.522
DN 10; 0,2 - 10 bar; 21 l/min @ 1 bar

01.01x.523

Available nominal orifices

01.010.523
DN 10; 0,2 - 10 bar; 20 l/min @ 1 bar

01.013.523
DN 13; 0,2 - 10 bar; 36 l/min @ 1 bar

01.017.523
DN 17; 0,3 - 10 bar; 78 l/min @ 1 bar

01.017.521
DN 17; 0,3 - 10 bar; 78 l/min @ 1 bar

01.017.524
DN 17; 0,3 - 10 bar; 76 l/min @ 1 bar

01.021.521
DN 21; 0,3 - 10 bar; 67 l/min @ 1 bar

Brass material corresponds to the metal recommendation of the UBA.

Direct Acting Solenoid Valves

Direct acting solenoid valves are typically applied where fast switching of the valve is required for dosing tasks and low pressure is involved.

01.010.114
DN 10; 0 - 60 mbar

01.010.124
DN 10; 0 - 60 mbar

01.010.127
DN 10; 0 - 60 mbar

01.013.127
DN 13; 0 - 60 mbar

- **I**nternal plunger assembly medium separated by membrane
- **S**uitable for hot water up to 98 °C
- **A**vailable with coil system in all common voltage and frequency ranges
- **H**ousings are based on servo controlled valves therefore all types of connection are possible (see page 25)

Without medium separation:

24.006.115
DN 3; 0 - 10 bar; 3 l/min @ 1 bar

24.006.126
DN 3; 0 - 10 bar; 3 l/min @ 1 bar

24.006.225
DN 3; 0 - 10 bar; 3 l/min @ 1 bar

Pressure Reducer

42.008.126
DN 8; inlet pressure max. 16 bar,
outlet pressure 1,2 - 6 bar

Converts the inlet pressure into a lower, constant outlet pressure regardless of inlet pressure fluctuations in order to protect equipment from high or inconsistent incoming medium pressure. Outlet pressure adjustable and can be preset in factory.

100 % lead free.

42.010.000
DN 10; inlet pressure 3 - 10 bar,
outlet pressure 1 - 8 bar

Pressure Switch

30.010.126
DN 10; 0 - 10 bar; 11 l/min@ 1 bar

Pressure dependent electrical switch (changeover), which can switch ON or OFF when the response pressure is reached. Therefore it reliably indicates the presence of the medium pressure, e.g. for protection against water shortage.

- **R**esponse pressure: 0,3 - 0,5 bar
- **O**ptional: 0,9 - 1,3 bar

30.010.215
DN 10; 0,2 - 10 bar; 17 l/min@ 1 bar

Accessories

Modular Fitting System

11.000
DN 10/13; 10 bar

Modular fitting system based on the popular John Guest push fit cartridge for 15 and 18 mm OD tubing. Combined with solenoid valves of 10 and 13 mm nominal bore, for simple creation of complex fluid delivery systems.

- **L**, T and X-couplings
- **A**ssembly without tools
- **A**nti-twist protection
- **S**uitable for warm water up to 65 °C

CF-System

Manifolds DN 13
DN 13; 0 - 10 bar

For distribution and merging of liquids.

- **M**edium temperature up to 90 °C
- **O**perating pressure up to 10 bar
- **B**urst pressure of >50 bar

Manifolds DN17
DN 17; 0 - 10 bar

Hose connection
G 3/4; 0 - 10 bar

For direct connection of valves and tubes with sealed front side G 3/4 female thread (thread length 10 mm). Swivel nut manually releasable.

Approvals of the materials in contact with medium for hot drinking water, 85 °C.

Flow Regulator

MR 04, Ø 19 mm
1 - 10 bar; 5 - 20 l/min @ 4 bar;
Tm: 65 °C max.

MR 05, Ø 9,5 mm
1 - 10 bar; 0,5 - 9 l/min @ 4 bar;
Tm: 65 °C max.

MR 06, Ø 19 mm
1 - 10 bar; 0,5 - 9 l/min @ 4 bar;
Tm: 65 °C max.

MR 07, Ø 10 mm
1 - 10 bar; 0,5 - 9 l/min @ 4 bar;
Tm: 65 °C max.

MR 12, Ø 9,5 mm
1 - 10 bar; 4/5 l/min @ 4 bar;
Tm: 90 °C max.

MR 19, Ø 19 mm
1 - 10 bar; 3,5 - 22 l/min @ 4 bar;
Tm: 98 °C max.

Dirt Strainer

12.010.300/~.500
DN 10; max. 10 bar; 20/17 l/min @ 1 bar

12.017.400/~.500
DN 17; max. 10 bar; 79/70 l/min @ 1 bar

12.017.800 (three stages filter)
DN 17; max. 10 bar; 51 l/min @ 1 bar

Inlet Filter

POM, G 3/4
Mesh size 0,45; 65 °C

Stainless steel, G 3/4, G 1/2, G 3/8
Mesh size 0,25; 90 °C

Stainless steel, G 3/4
Mesh size 0,5; 90 °C

Flange

PE, stainless steel, G 3/4
Mesh size 0,25; 65 °C

Flange

- **F**lange for simple mounting of valves
- **S**ecure fixing of valves in housings
- **M**ountable to fixing bracket
- **A**pplicable with servo controlled valves, float valves and dirt strainer

Insertable Check Valves

Check Valve
DN 6; max. 16 bar; 12 l/min @ 1 bar

Check Valve
DN 10; max. 16 bar; 35 l/min @ 1 bar

Check Valve
DN 12; max. 16 bar; 38 l/min @ 1 bar

Agriculture and Food Processing

Within the field of agriculture our products are used in milk tanks, milking machines as well as in cleaning and disinfection plants for the dairy farm. Particularly for the milking process we produce regulation valves which guarantee the constant vacuum supply.

In addition our valves control the water supply in animal feeding and irrigation.

Also the applications in food processing are many. For example our valves control the water supply in steam appliances, baking ovens, ice machines for flake ice and cubes as well as temperature controlled installations and in food warmers (see also products in the category industry).

It is necessary for us to adhere to the strict regulations and laws in this sensitive area. Only food safe and harmless materials are used in our components, so that the food quality is not affected.

Drain Valves

04.040.116 (NC)
DN 40; 0 - 120 mbar, optional 180 mbar

- Material: PPE (Tm: 98 °C), PVDF (Tm: 50 °C) or stainless steel (Tm: 98 °C)
- Moisture-proof by potted coil
- Cable or mounted connector
- Protection type: IP68 and IP65

04.040.916 (NO)
DN 40; 0 - 120 mbar

04.050.116 (NC)
DN 50; 0 - 120 mbar, optional 180 mbar

Optional with:

Manual emergency override (only NC) and

flush spout on valve body.

04.050.916 (NO)
DN 50; 0 - 120 mbar

Vacuum Controlled Drain Valves

04.040.113 (2/2 way)
DN 40; 0 - 600 mbar;
Control vacuum 30 - 60 kPa abs.

Soon also available as NC/NO-types with DN 50.

04.040.115 (2/2 way)
DN 40; 0 - 200 mbar;
Control vacuum 10 - 80 kPa abs.

Soon also available in DN 50.

04.040.114 (3/2 way)
DN 40; 0 - 150 mbar;
Control vacuum 20 - 60 kPa abs.

3/2 Way Vacuum Control Valves (NC)

26.005.115
DN 5; Vacuum range 40 - 80 kPa abs.

26.008.126
DN 8; Vacuum range 40 - 80 kPa abs.

When the valve is energized vacuum is applied to the point of use. In de-energized state the system is under atmospheric pressure, then the point of use is fully separated from the vacuum resulting from the ventilation through the control valve.

Suitable for vacuum controlled drain valves.

Valves for Agricultural Spraying Systems

19.00x.287
DN 0,5/DN0,8; 0 - 10 bar; 0,13/0,
31 l/min @ 1 bar

90.00x.100
DN 4; 0 - 8 bar; 3,5 l/min @ 1 bar

Suitable for dosing in spray systems.

Small dimensions and low weight allow these valves to be connected directly to the spray nozzles.

Vacumaster

The Vacumaster is used for milking installations with a unregulated or regulated vacuum pump. In the first case the Vacumaster keeps the milking vacuum constant within narrow limits of ± 1 kPa. In the second case the Vacumaster is used for fine adjustment.

The function of the Vacumaster is based on a low-inertia differential pressure principle with high control of the speed and accuracy which requires no electrical power.

23.015.100
Vacuum control range 35 - 60 kPa;
Flow range 100 - 600 l/min

23.020.100
Vacuum control range 35 - 60 kPa;
Flow range 450 - 2800 l/min

23.025.000
Vacuum control range 35 - 60 kPa;
Flow range 700 - 4000 l/min

3/2 Way Pulsator Valves

25.008.600
DN 8

25.010.600
DN 10

The 3/2-way pulsator valves are used in combination with the Vacumaster in order to control the vacuum in automatic milking processes.

The vacuum range is 30 - 60 kPa.

Environmental Technology

Valves are required in applications such as rain water harvesting, water treatment and irrigation systems to regulate and control the flow of water.

For tanks, float valves are used, where the buoyancy of the float closes or opens the servo-controlled valve, so that a constant water level is maintained.

Float Valves

21.010.110
DN 10; 0,3 - 10 bar; 28 l/min @ 1 bar
Patent-registered: EP 1 469 241

21.010.115
DN 10; 0,3 - 10 bar; 25 l/min @ 1 bar

21.010.126
DN 10; 0,3 - 10 bar; 22 l/min @ 1 bar

21.010.226
DN 10; 0,3 - 10 bar; 15,5 l/min @ 1 bar

Available as single chamber valves, either as straight through or inlet at 90° to the outlet version with various connector options.

Float material

- Stainless steel for max. 90 °C
- PE-foam or PPH for max. 60 °C
- Polystyrene for max. 30 °C

21.013.110
DN 13; 0,3 - 10 bar; 34 l/min @ 1 bar
Patent-registered: EP 1 469 241

21.013.126
DN 13; 0,3 - 10 bar; 28 l/min @ 1 bar

21.017.126
DN 17; 0,3 - 10 bar; 53 l/min @ 1 bar

Linear Float Valves

21.013.126 lin
DN 13; 0,8 - 10 bar; 25 l/min @ 1 bar
Patent-registered: EP 1 626 215

21.017.126 lin
DN 17; 0,8 - 10 bar; 50 l/min @ 1 bar
Patent-registered: EP 1 626 215

For narrow or deep tanks, uses a linear guide for the float.

Servo Controlled Valve DN 25

14.025.126
DN 25; 0,3 - 10 bar; 175 l/min @ 1 bar

Water inlet valve with nominal width DN 25 for safe media inlet in irrigation, rain water utilisation or water treatment systems. Also applicable for process and cooling water.

- Flow limitation by adjustable stroke of membrane
- Lockable manual actuation
- Valve housing with female metal thread in common dimensions

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Possible product certifications available on request