



A. u. K. Müller



Environmental Technology

Fascinating Valve Technology

We do not sell valves.
We offer solutions.



Fascinated by Valve Technology

A. u. K. Müller has more than 70 years experience in the customer oriented development and manufacture of solenoid valves, control equipment and speciality valves.

Initially a family business, we have grown internationally into a respected leading manufacturer of valve technology thanks to our many years of experience and our process engineering quality solutions.

Our strength: the development and manufacture of your application-specific valve solution

Thanks to many years of experience in innovation and a very high level of vertical integration, we are able to respond precisely and efficiently to our customers' wishes. Our detailed knowledge of customer applications as well as the applicable standards and regulations helps us to do this. Our know-how is complemented by the use of state-of-the-art technologies in production and testing.

Our portfolio offers comprehensive approval options include:



We have developed thousands of innovative, future-oriented product variants and systems for our customers and together with our customers. Our high-quality components are used wherever high reliability counts, people and machines need to be protected and resources need to be economised.

Our many years of experience in the field of valve and fluid technology extends to a wide variety of industries, in particular:

- **Sanitary**
- **Vending**
- **Medical Technology**
- **Industry**
- **Agriculture/Food**
- **Environmental Technology**

The name A. u. K. Müller stands for precision-fit valve solutions with a high level of continuous serviceability and functional reliability. Every valve is tested thoroughly before it leaves our factory. Low energy consumption values and noise emissions of our products support an efficient overall design of your equipment.

You too can profit from our cross-sector know-how and our development competence, which have been combined in our products and systems for many years.

From the initial design to series delivery, we support you with consistently high quality as befits a product carrying the words **"Made in Germany"**.



Because every drop counts.

Solutions for environmental technology & resource conservation

When it comes to protecting our drinking water, the highest reliability is required. We make no compromises here. Thanks to production in Germany, with a high level of vertical integration and using the latest technologies, you can rely on the high quality of our products. And because that is not enough for us, we put every single valve through its paces before it leaves our factory - to protect our environment and conserve our resources.

Valves Made of High Performance Synthetic Material

A. u. K. Müller valves made of high-performance plastic ensure a long service life of the valves and enable use in drinking water applications. Due to the low thermal conductivity of the plastic, they have less influence on the media temperature than valves made of non-ferrous metal. The better energy balance, the absence of heavy metals and the long service life make the material particularly sustainable for the application. Valves made of high-performance thermoplastic offer comprehensive approvals for drinking water and foodstuffs and are therefore more future-proof than metal variants. They are suitable for hot water and, in some cases, steam. In short: plastic valves are significantly lighter than metal valves, they do not contain any harmful heavy metals and are particularly cost-efficient, durable and robust.

Drinking Water Protection

Due to their functional reliability, A. u. K. Müller float valves are suitable for use in isolating sections in accordance with DIN EN 1717. They operate purely mechanically and are independent of any voltage supply. In addition, our float valves are extremely repeatable in that they keep the level in the tank constant due to the proportional inflow behaviour.

Resource conservation + digitalisation

In times of climate change, the simple and at the same time resource-saving irrigation of gardens and greenhouses is increasingly becoming the focus of users. A. u. K. Müller valves incorporate the know-how of more than 100 years of company history and over 60 years of solenoid valves. Many well-known manufacturers rely on them to automate and integrate their irrigation solutions and rainwater utilisation into the Internet of Things.

Individual solution

Based on our many years of know-how and innovative product portfolio of valve technology made of engineering thermoplastics and high-temperature plastics, we offer our OEM customers the reliable realisation of customised components or system solutions from planning to the 100% compliant product for the target market and application.

Protects potable water. Conserves resources.



Linear float valve for narrow tanks with patented protection against dripping

21.010.726

further information on page 12

Float valves for the realisation of separation distances according to DIN 1717

Digital does not always equal better. Our analogue float valves are ahead in many areas. That is why many manufacturers rely on float valves from A. u. K. Müller, especially for sustainable applications.

Float valves operate independently of the mains and ensure the function of an isolating line even in the event of a power failure. There is no need for external sensors or electrical power supply.

A. u. K. Müller float valves are servo-controlled. The medium does most of the lif-

ting work to open and close the valve.

Our float valves are extremely repeatable and have a proportional closing behaviour. This prevents pressure surges in the system. In addition, the water inflow is reduced in line with the rising level in the tank, thus promoting a calm water surface. This reduces splashing, waves and pulsations during tank filling.

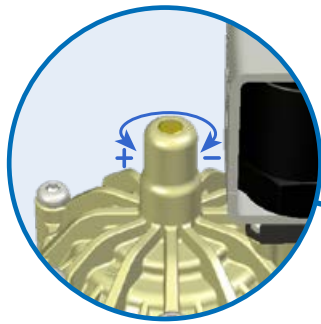
All these advantages make A. u. K. Müller float valves the first choice when setting

up an air separation section in accordance with DIN EN 1717, e.g. for rainwater utilisation systems.

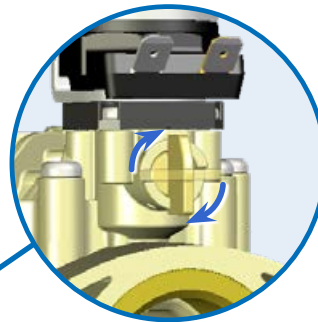


Can be customised for almost any tank geometry. The universal lever for float valves.
further information on page 12

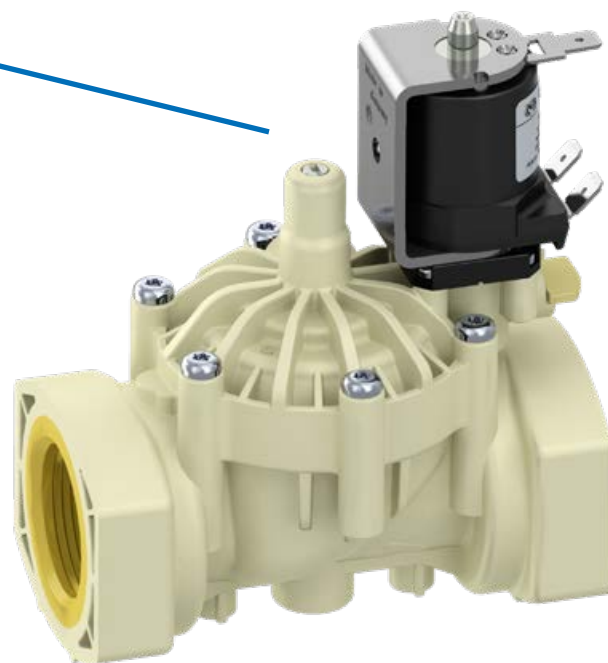
Intelligent irrigation. Sustainable & efficient



The flow of the valve can be adjusted by turning the slotted screw in the cone of the valve cover.



The manual control lever can be used if the piping systems of a de-energised installation are to be filled in advance or the flow must be maintained in the event of a power failure.



Water inlet valve
14.025.126

further information on page 16

Servo-controlled solenoid valves for the water inlet

If the water supply for appliances and systems is controlled automatically, electromagnetic servo valves are used in most cases. Here, the pressure difference of 0.2 bar required for the servo principle is given in order to realise an efficient water supply with the smallest possible electromagnetic switching element. In order to meet the most diverse

installation conditions, a wide variety of threaded and grommet connections as well as coil systems for common voltage ranges and mains frequencies are available.

We have developed the 2/2-way servo-controlled solenoid valve of nominal width 25 especially for the safe supply

of media to your irrigation, rainwater harvesting or water treatment systems. Valves of this type are 1-chamber globe valves and normally closed (NC). They are also particularly suitable for service and cooling water.



(Living) quality that saves energy.



Jettisoning and filtering in one
12.017.500
further information on page 18



Flow measuring turbine
MT40
further information on page 18



servo-controlled proportional valve
10.00x.126 ss
further information on page 18

A. u. K. Müller control valves for heat pumps for sustainable heating and air conditioning of buildings

In order for the heat pumps to work energy-efficiently and gently, especially in autumn and spring, the speed of the compressor and thus the output of the heat pump is controlled via an inverter. This must be cooled reliably and controllably during operation. Among other things, the proportional valve of the 10.009.126 ss series and the MT40 flow turbine were developed for this responsible task, ensuring efficient cooling

through electronic communication.

What is special about A. u. K. Müller valves for heat pumps is that they are not made of non-ferrous metals, but of high-performance plastics. Not only do they have a special chemical resistance to the water-coolant mixture, but they also have less influence on the media temperature due to their reduced conductivity. In addition, the control valves offer good

reproducibility of the flow rate and thus ensure precise cooling. A low power requirement - just like a long service life - is a basic prerequisite for a sustainable product. The A. u. K. Müller proportional valves prevent pressure surges in the piping system.



FLOAT VALVES

- Tank filling
- Rainwater harvesting systems
- Irrigation systems
- Water treatment plants
- Separation lines DIN EN 1717

Float valves are used in many areas of environmental technology where the mixing, control and regulation of water flows is required.

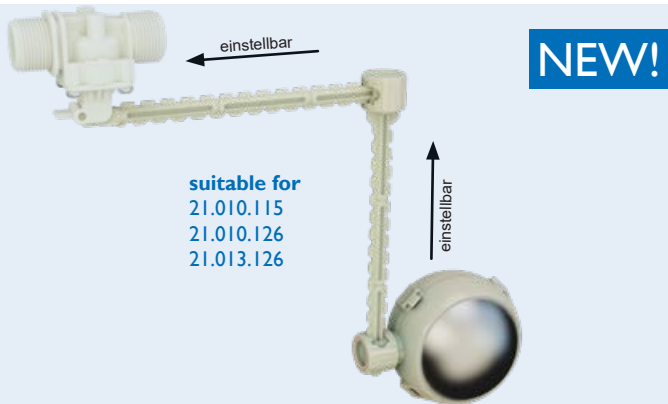
The buoyancy of the float body opens or closes the servo-controlled diaphragm valve and thus adjusts the liquid level in the tank. If the liquid level in the tank drops, the float valve is automatically automatically replenishes. If the water level rises and lifts the float in the tank, the inflow is throttled in proportion to the position of the float lever. throttled. The fill level is thus kept constant.

		Series Nominal width	Ways	Kv-Wert (l/min @ 1 bar)	p-Operation (bar)	Float	
	Redundant safety through upstream valve chamber for electronic shut-off	21.010.226 DN 10	2/2	15,5	0,3 - 10	PE PS	
	with guide lever so that the medium does not hit the float	21.010.110 DN 10	2/2	28	0,3 - 10	PE PS	
	Angle valve, also available with universal lever available	21.010.115 DN 10	2/2	25	0,3 - 10	PE PP PS Stainless Steel	
	Globe valve, also available with universal lever available	21.010.126 DN 10	2/2	22	0,3 - 10	PE PP PS Stainless Steel	
	Globe valve, also available with universal lever available	21.013.126 DN 13	2/2	28	0,3 - 10	PE PP PS Stainless Steel	
	with guide lever so that the medium does not hit the float	21.013.110 DN 13	2/2	34	0,3 - 10	PE PS	

UNIVERSAL LEVER FOR FLOAT VALVES

- Float lever can be individually adapted to the tank conditions.
- Shortening at predetermined breaking points possible
- Individual presetting possible at the factory

The multi-position float lever can be adapted to the individual tank geometries. Especially for small series, complex development and tooling costs can be minimised.



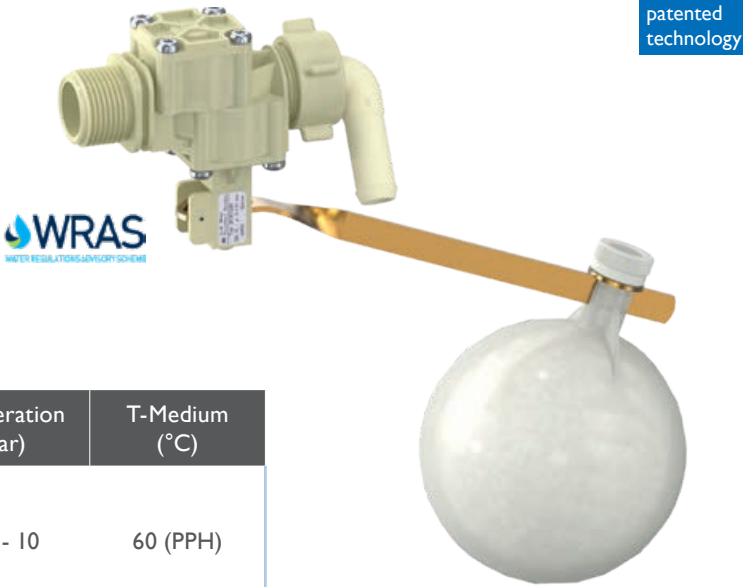
		Series Nominal width	Ways	Kv-Wert (l/min @ 1 bar)	p-Operation (bar)	Float	
	Globe valve, with float ball	21.013.126,1 DN 13	2/2	31	0,3 - 10	PPH Stainless Steel	
	Linear valve for narrow tanks, patented drip protection especially for use in narrow, deep tanks	21.013.126 LIN DN 13	2/2	25	0,8 - 10	PE PS	
	Globe valve, with float ball	21.017.126 DN 17	2/2	53	0,3 - 10	PPH Stainless Steel	
	Linear valve for narrow tanks, patented drip protection especially for use in narrow, deep tanks	21.017.126 LIN DN 17	2/2	50	0,8 - 10	PE PS	

The maximum media temperature depends on the float material used:
PS 30°C | PE, PP, PPH 60 °C | stainless steel 90 °C

BACKSIPHON PROOF GLIMMER VALVES

- Upstream non-return valve
- ideal for flood-proof construction of separation sections according to DIN 1717
- Patented development by A. u. K. Müller

This valve was specially developed for back-siphonage-proof use. This is achieved by a second valve chamber with a non-return valve. This enables a WRAS-compliant design that withstands the specific vacuum test.



Series Nominal width	Ways	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)
21.010.726 DN 10	2/2	17	0,2 - 10	60 (PPH)

WATER INLET VALVES / SERVO-CONTROLLED VALVES

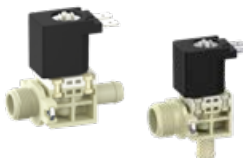








- minimised pressure surge
- Media temperature up to 90 °C
- Coil systems of insulation class F (155 °C)
- Coil exchange without opening the media circuit, coil can usually be locked 4 x 90
- Different voltages (AC and DC)
- Pressure range 0.2 - 10 bar
- Long service life
- Comprehensive range of accessories (from page 18)

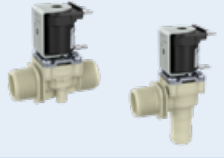






Servo-controlled valves are used in the water supply of appliances and systems. The central advantage of A. u. K. Müller valves is the minimised pressure surge characteristics.

The opening and closing of the valve is initiated by the solenoid and essentially carried out by the medium pressure. Therefore, they require a pressure difference of approx. 0.2 bar between inlet and outlet. Due to the design, only

a small hydraulic control flow is required. This means that the electromagnetic switching element can be small and energy-efficient.

In order to meet the different installation conditions, the valves can be supplied with common threaded and spout connections as well as coil systems.

		Series Nominal width	Ways	Function	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)
	Globe valve	62.005.126 DN 5	2/2	NC	6	0,2 - 10	90	70
	Angle valve	62.005.115 DN 5			7			
	with integrated strainer	44.007.126 DN 7	2/2	NC	10	0,2 - 10	90	70
	Angle valve with lateral outlet	01.007.111 DN 7	2/2	NC	10	0,2 - 10	90	70
	Globe valve	01.007.126 DN 7	2/2	NC	11	0,2 - 10	90	70
	Angle valve	01.007.115 DN 7			12,4			
	Globe valve	01.010.126 DN 10	2/2	NC	21	0,2 - 10	90	70
	Angle valve	01.010.115 DN 10						
	2-chamber globe valve	01.010.225 DN 10	2/2	NC	15	0,2 - 10	90	70
	2-chamber angle valve	01.010.215 DN 10			17			
	3-chamber globe valve	01.010.325 DN 10	2/2	NC	18 per valve chamber	0,2 - 10	90	70
	3-chamber angle valve	01.010.315 DN 10						
	4-chamber globe valve	01.010.425 DN 10	2/2	NC	17 per valve chamber	0,2 - 10	90	70
	4-chamber angle valve	01.010.415 DN 10						
	normally open, available with female thread, male thread and union nut	36.010.126 DN 17	2/2	NO	18 per valve chamber	0,2 - 10	90	70

		Series Nominal width	Ways	Function	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)
	Globe valve	01.013.126 DN 13	2/2	NC	30	0,2 - 10	90	70
	Angle valve	01.013.115 DN 13			33			
	2-chamber globe valve	01.013.225 DN 13	2/2	NC	17 per valve chamber	0,2 - 10	90	70
	2-chamber angle valve	01.013.215 DN 13						
	Servo controlled solenoid valve	01.017.126 DN 17	2/2	NC	58	0,2 - 10	90	70
		01.017.115 DN 17			70			
	Globe valve	01.021.126 DN 17	2/2	NC	65	0,2 - 10	90	70
	triple / quadruple, DN 10, DN 17	15.017.x25 DN 10, DN 17	2/2	NC	59 DN 17 25 DN 10 per valve chamber	0,2 - 10	90	70
	Globe valve	01.013.52x DN 13	2/2	NC	36	0,2 - 10	90	70
	Brass body							
	Globe valve	01.017.52x DN 17	2/2	NC	78	0,2 - 10	90	70
	Brass body				76 (01.017.524)			

Weitere Varianten & Sonderlösungen zu servogesteuerten Ventilen finden Sie in unserer Produktübersicht oder www.akmueller.de/servoventile.

WATER INLET VALVE, DN 25



- servo-controlled
- lockable manual override
- adjustable diaphragm stroke for flow limitation
- metal connection thread

The 2/2-way servo-controlled solenoid valve DN 25 was developed for the safe supply of media in irrigation, rainwater utilization or water treatment systems. The 1-chamber globe valves are normally closed (NC) and suitable, among other things, for rainwater utilization, water treatment, irrigation and temperature control devices.



Series Nominal width	Ways	Function	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)	Connection
14.025.126 DN 25	2/2	NC	175	0,3 - 10	4 - 30	60	G3/4 IG GI IG

WATER SUPPLY VALVES / SERVO-CONTROLLED VALVES WITH FORCED LIFTING

- switch from 0 bar differential pressure
- Media temperature up to 90 °C
- Coil systems of insulation class F (155 °C)

For valve applications with high volume flow and no or low differential pressure. The valves combine the characteristics of a direct-acting and servo-controlled valve, i.e. in the low-pressure range they behave

like a direct-acting valve and in the high-pressure range like a servo-controlled valve.





		Series Nominal width	Ways	Function	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)
	force controlled solenoid valve	31.010.126 DN 10	2/2	NC	24	0 - 10	90	70
	force controlled solenoid valve	31.013.126 DN 13	2/2	NC	28	0 - 10	90	70

DIRECT OPERATED SOLENOID VALVES

- Plunger chamber media separated by membrane
- Suitable for hot water up to 98 °C
- Available with coil systems for common voltage and frequency ranges

- Connection variety as with servo-controlled valves
- High switching speeds
-

Wherever low pressures are present and fast switching of the valve is required for accurate metering, direct operated solenoid valves are used. One example is the emptying of unpressurized containers.

		Series Nominal width	Ways	Function	Q-max (l/min)	p-Operation	T-Medium (°C)	T-Environment (°C)
	modular and combinable, medium pressure range	43.00x.006 DN 1,5 - 5	2/2	NC	5,75 (DN 3 @ 3 bar)	0 - 8 bar	98	70
	Angle valve	01.010.114 DN 5	2/2	NC	6,75	0 - 60 mbar	98	50
	Globe valve	01.010.127 DN 5	2/2	NC	6,25	0 - 60 mbar	98	50
	Globe valve	01.013.127 DN 5	2/2	NC	8,5	0 - 60 mbar	98	50



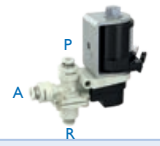
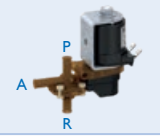


You will find further variants, nominal diameters and special solutions in our product overview or www.akmueller.de/produkte

LEVER VALVES




- media separated
- good thermal separation between hydraulics & electrics
- higher pressure level than with media-separated diaphragm valves
- high switching speeds

Lever valves operate directly and can be used for a wide pressure and flow range with a small design. They are media-separated and are suitable for controlling neutral gases and liquid media.

The good thermal separation between fluid path and solenoid coil allows the use with temperature-sensitive media...




	Series Nominal width	Ways	Function	Kv (l/min)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)	Connection
	47.00x.202 DN 2 DN 3 DN 4	2/2	NC	2,0 - 4,3	0 - 8	98 °C	70 °C	Plug-in connector Ø 6 mm / 8 mm
	47.00x.282 DN 2 DN 4	2/2	NO	1,8 - 3,8	0 - 8	98 °C	60 °C	Plug-in connector Ø 6 mm / 8 mm
	47.00x.203 DN 3 DN 4	3/2	P - A = NC R - A = NO	1,6 - 3,8	0 - 3	98 °C	60 °C	Plug-in connector Ø 4 mm / 6 mm / 8 mm
	47.00x.103 DN 4	3/2	P - A = NC R - A = NO	3,5	0 - 2,5	98 °C	70 °C	Hose nozzle
	47.009.302 DN 9	2/2	NC / NO		0 - 0,6	5 - 90 °C	60 °C	G 1/2"
	47.009.303 DN 9	3/2	P - A = NC R - A = NO		0 - 0,6	5 - 90 °C	60 °C	G 1/2"

PRESSURE REDUCER (OPTIONALLY WITH PRESSURE GAUGE CONNECTION)


	Series Nominal width	p-Input (bar)	p-Output (bar)	T-Medium (°C)
	42.008.126 DN 8	16 High pressure	1,2 - 8 High pressure	85
		10 Low pressure	0,2 - 1 Low pressure	
	42.010.000 DN 10	3 - 10	1 - 8	90

MEASURE AND REGULATE

PROPORTIONAL VALVES / CONTINUOUS VALVES / CONTROL VALVES



	Series Nominal width	Kv (l/min)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)	Connection
 direct-continuous complete media separation	10.004.126ds DN 4,2	9,5	0 - 3	5 - 80	5 - 60	G 1/2 or G 3/8
 servo-direct-continuous complete media separation	10.010.126sds DN 10	20	0 - 10	5 - 80	5 - 60	G 3/8 or G 1/2 or G 3/4
 servo-continuous magnetically coupled insensitive to wear	10.009.126ss DN 9	18	0,5 - 10	5 - 90	5 - 60	G 1/2 or G 3/4

FLOW SENSORS



	Measuring range (l/min)	Kv (l/min)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)	Connection
 Flow-measuring turbine MT40	6 - 40	41,5	0 - 10	90	60	AG 3/4 Inflow IG 3/4 Expiration

ACCESSORIES






MOUNTING

	Type	Description
 1 2	Holding flange	Mounting support for most A. u. K. Müller solenoid and float valves and strainers in two variants. Variant 1: for mounting screws M4 standard thread (ID 010660) Variant 2: for thread forming screws (ID 010607)
	Retaining flange (Coil/Yoke)	additional assembly support for most A. u. K. Müller GmbH & Co. KG Solenoid valves




MANUAL SHUT-OFF VALVES

	Series Nominal width	Kv (l/min)	p-Operation (bar)	T-Medium (°C)	T-Environment (°C)	Connection
	52.009.100 DN 9 Shut-off element 8 mm inner sec.	57	0 - 10	5 - 90	5 - 60	G 1/2, G 3/4
	52.009.200 DN 9 Shut-off element Handle	57	0 - 10	5 - 90	5 - 60	G 1/2, G 3/4

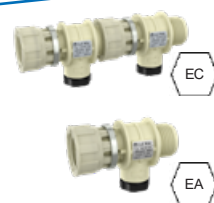
FLOW REGULATOR [P-OPERATION I - 10 BAR]

	Series	Outer diameter (mm)	Flow range (l/min)	T-Medium (°Celsius)	Setting	Rule star	Rule- element
	MR 04	19	5,0 - 20,0	65	PA	POM	EPDM
	MR 05	9,5	0,5 - 9,0	65	POM	POM	EPDM
	MR 06	19	0,5 - 9,0	65	POM	POM	EPDM
	MR 12	9,5	4,0 - 5,0	90	–	PA 6/6	NBR or FKM
	MR 19	19	3,5 - 22,0	98	PEI	PEI	EPDM or FKM

DIRT STRAINER

	Series Nominal width	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	Mesh sizes / wire diameters
	12.010.300 DN 10 without forced shut-off 12.010.500 DN 10 with forced shut-off	20 (12.010.300) 17 (12.010.500)	0 - 10	90	0,16 mm / Ø 0,08 mm 0,25 mm / Ø 0,10 mm
	12.017.400 DN 17 without forced shut-off 12.017.500 DN 17 with forced shut-off	79 (12.017.400) 70 (12.017.500)	0 - 10	90	0,08 mm / Ø 0,06 mm 0,11 mm / Ø 0,06 mm 0,25 mm / Ø 0,10 mm
	12.017.800 DN 17	51	0 - 10	90	depending on version

CONTROLLABLE BACKFLOW PREVENTER

	Series Nominal width	Pressure range (bar)	T-Medium (°C)	T-Environment (°C)	Connection
 according to DIN EN 1717	49.0xx.x26 DN 8 DN 10 DN 12	10	65 90 max. for 1h	60	G 3/4" G 1/2" G 3/8" G 1/4" (Control connection)



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