



A. u. K. Müller



Vending

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**
- **Industry**
- **Vending**
- **Agriculture/Food**
- **Medical Technology**
- **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"**.

System Components for Moments of Pleasure

Control, Measure & Connect

The choice of fast, automatic preparation of coffee, espresso and cappuccino to barista quality, as well as tea, chocolate or even a tasty soup at the push of a button, is very popular. Cold and iced drinks are also very much in favour with consumers. A beverage dispenser has to be capable of multi-tasking, placing a high demand on the technology.

A. u. K. Müller offers solutions ranging from classic beverage dispensing valves to complete system components for first-class beverage quality, as if brewed by hand and without any loss of taste.

Do not compromise. We work in accordance with standards and with the corresponding approvals for use with drinking water and food. Thus, we already support you at component level in the certification of your end product.

Valves Made of High Performance Synthetic Material

A. u. K. Müller valves made of high-performance synthetic material have extensive approvals for drinking water and foodstuffs. They are suitable for hot water and steam and due to their low conductivity they have less influence on the medium temperature. In addition, the engineering polymer valves are significantly lighter than metal valves, they do not contain any harmful heavy metals and are particularly cost-efficient, durable and robust.

Espresso Valves, Dispensing Valves, Lever Valves

A. u. K. Müller offers innovative solenoid valves for controlling fluids and gases at up to 16 bar. The valves impress with the most compact dimensions and a particularly long service life, which is why they are especially suitable for use in professional applications - but also wherever follow-up costs, safety and sustainability are important.

FitSys 18 - Push Fit System

To match the series of 18.00x valves, A. u. K. Müller offers the FitSys 18, a particularly intuitive, tool-free and, above all, safe fitting system including functional elements such as distributors, backflow preventers and pressure reducers.

Water Inlet

The water supply is particularly important for safety and function. That is why we offer solutions that ensure appliance function with optimal parameters and at the same time guarantee safety functions for drinking water networks and use in sensitive areas.

Individual Solution

Based on our many years of know-how and innovative product portfolio of valve technology made of high-performance engineering polymer, we offer our OEM customers the reliable realisation of customised components or system solutions from planning to the finished product.

**46.008.xxx**

further information on page 15

If it needs to be more individual:
Also as a proportional valve

as single valve, as well as proportional

40.xx/46.xx

further information on page 15

Control & Dosing

Dispensing valves are particularly suitable for dispensing liquids and repeatable dosing in beverage vending machines. They can be lined up and thus enable the control of several media paths within the vending machine – also for hot water.

The media separation and the **lime-repellent PTFE valve seats** ensure a hygiene advantage and long service life in the application field.

**Backflow Preventer**
49.0xx.x26

further information on page 17

**Servo-controlled Solenoid Valve**
incl. Dirt Strainer
44.007.126

further information on page 16

**Pressure reducer**
13.007.226

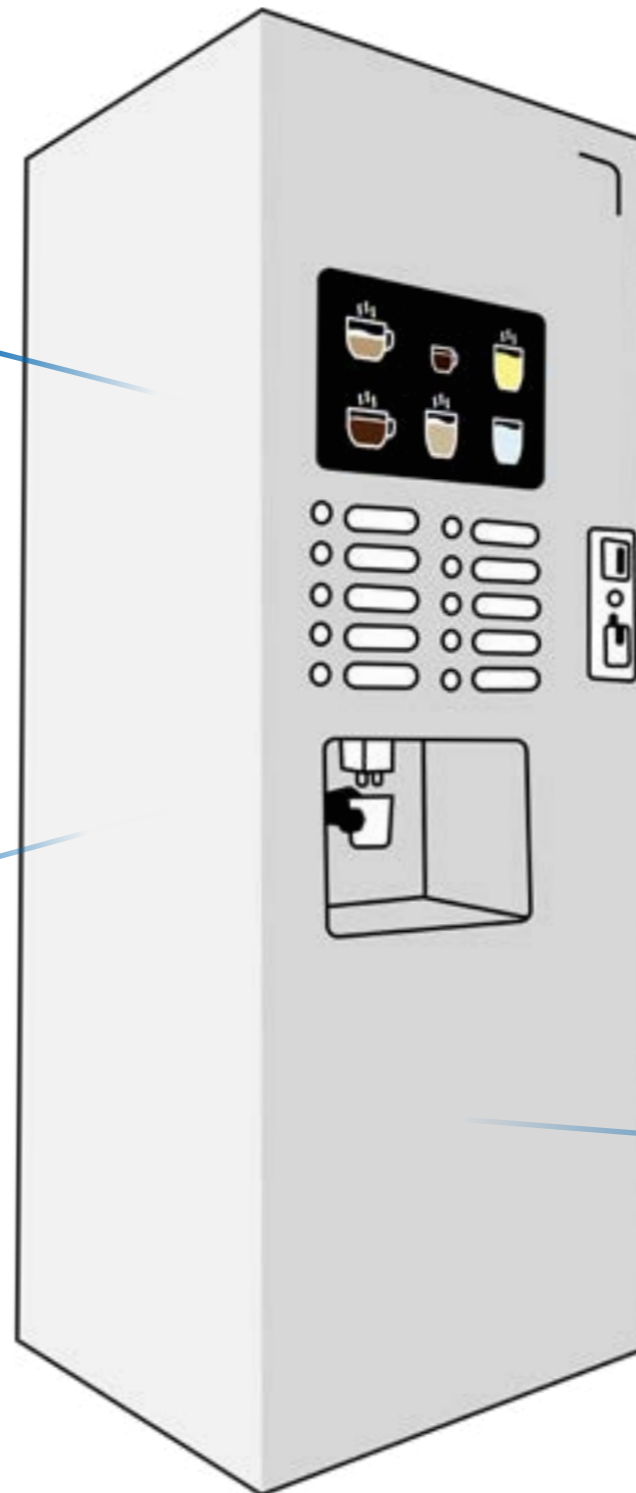
further information on page 17

Water Inlet: Safety Knows No Compromise

Special requirements are placed on water inlet components such as servo-controlled valves, dirt strainers or backflow preventers. Water inlet components not only ensure the water supply to the unit, they also ensure operational safety. On the one hand, through leakage protection in sensitive areas. On the other hand,

they ensure the protection of the unit by guaranteeing a constant operating pressure as well as the protection of the drinking water network by preventing backflow.

Safety knows no compromises. That is why many well-known manufacturers rely on tested quality from A. u. K. Müller.



Solutions for a Continuous and Lasting Operation

**41.007.400**

further information on page 14

Pressure Increase, Dosing Constancy

A constant operating pressure is required for the perfect preparation of various speciality drinks.

Magnetically coupled impeller pumps from A. u. K. Müller are used to increase the pressure.

Thanks to the magnetic coupling, the impeller pumps operate separately from the media. For easy maintenance and resource conservation, the motor of the latest generation of the 41.007.400 impeller pump can be changed without tools.

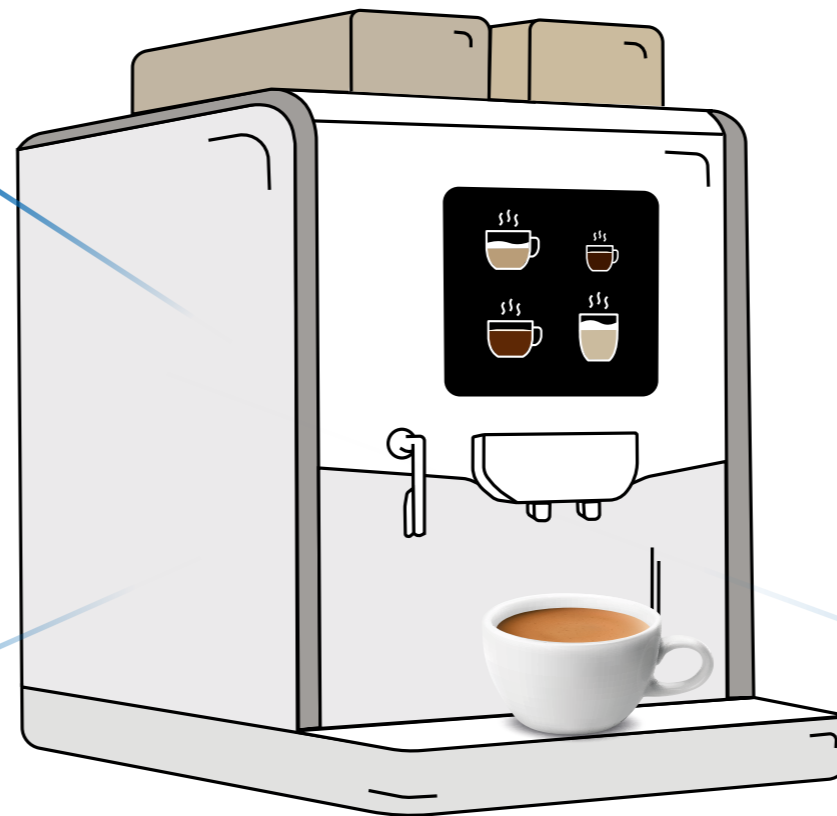


Controlling Hot Water & Steam – High Tech for a Full-bodied Aroma.

Espresso valves from A. u. K. Müller are direct acting valves and suitable for hot water up to 16 bar at 98° C as well as saturated steam applications up to 143° C. They impress with their compact design and their high continuous serviceability. At the same time, they are particularly easy to install and can be used in modular form in combination with the FitSys 18 system.

This saves resources and is budget-friendly.

Thanks to the use of high-performance synthetic materials, they are not only suitable for use with food and hot water. They have no influence on media temperature and aroma.



Components for the Best Coffee Experience



Backflow Preventer
49.0xx.x26
further information on page 17



Servo Controlled Valve
13.007.226
further information on page 16



Dirt Strainer
13.007.226
further information on page 18

Water Inlet: Safety Knows No Compromise

Special requirements are placed on water inlet components such as servo-controlled valves, dirt traps or backflow preventers. Water inlet components not only ensure the water supply to the unit, they also ensure operational safety. On the one hand, through leakage protection in sensitive areas. On the other hand, they ensure the protection of the units and the drinking water network. They en-

sure a constant operating pressure and protect the drinking water network by preventing backflow, in accordance with DIN EN1717. They also help to prevent pressure peaks in accordance with EN 60730.

Safety knows no compromises. That is why many well-known manufacturers rely on tested quality from A. u. K. Müller.



FitSys 18
further information on page 17

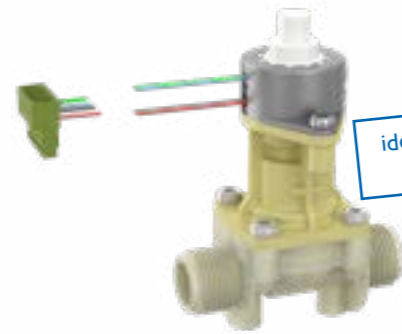
FitSys 18 - Fittings, Manifolds & System Components

The easy-to-install fittings and manifolds of the FitSys 18 system from A. u. K. Müller make media routing in the unit sustainable and easy. Assembly and maintenance can be done without tools.

In addition to a wide range of fittings and manifolds, we offer functional elements such as pressure relief valves, backflow preventers and manual control valves. The FitSys 18 system is the right complement to the 18.00 valve series.



Dispense valve, proportional
46.00.111prop
further information on page 15



Direct acting, stepper motor
controlled valve
10.004.126 ds
further information on page 19

ideal for mixing
drinks



If you need to make it more individual...

Our proportional valves are made for individual dosing. With these special valves, it is possible to handle even the most demanding dosing tasks where not only the correct ratio but also the way of mixing is important. This is because with the proportional valves, the opening behaviour of the valve can be

controlled by means of pulse width modulation. This makes the valves a real barkeeper in the box.

The proportional valves are completely media-separated and impress with their high functional reliability.



Dispense Valve
06.003.234
further information on page 13

Mixing & Dispensing

Beverage dispensers have become popular in the hospitality and vending sector. They are more environmentally friendly, cheaper and more hygienic than bottled drinks. They score, when the aim is to serve the guest quickly and, above all, with consistent quality.

A. u. K. Müller dispensing valves are designed precisely for this application. Two inlets, the flow of which can be individually adjusted, enable two different drinks to be dispensed or allow chilled water to be served as still and sparkling and always of excellent quality. Selected materials ensure neutrality of taste.



Fresh Solutions for Dosing & Mixing Trendy Drinks






16.003.525
further information on page 13

Absolute hygiene - exact dosages.








There is no room for compromise when it comes to food processing. Especially when it is a matter of taste and health protection. This is where pinch valves show their advantage. Opening and closing is ensured by clamping off a hose without any media contact. Due to the media separation, there is no influence on the medium. In addition, they need

absolutely minimal maintenance, as the hose can be replaced easily. There are no stagnation spaces in the hose, which prevents contamination. It is not without reason that A. u. K. Müller pinch valves are also used in medical technology. They are a good and economical choice when it is a question of the highest hygiene standards for your dosing tasks.


ESPRESSO VALVES / HIGH-PRESSURE VALVES

	Series Nominal width	Ways	Function	Cv-value (l/min)	p-Operating (bar)	T-Medium (°C)	T-Ambient (°C)	Connections
	18.00x.000 DN 1,5 DN 2 DN 2,5	2/2	NC	0,9 - 2,5	0 - 16	98 (143 °C (3 bar) saturated steam)	60	Hose clamp or push-fit connection Ø 4 mm / 6 mm
	18.00x.001 DN 1,5 DN 2,5	2/2	NO	0,75 - 2,25	0 - 10	98 (143 °C (3 bar) saturated steam)	50	Hose clamp or push-fit connection Ø 4 mm / 6 mm
	18.00x.032 DN 1,2 DN 1,5 DN 2,5	3/2	R - A = NC P - A = NO	0,6	0 - 16	98 °C (143 °C (3 bar) saturated steam)	60	Hose clamp or push-fit connection Ø 4 mm / 6 mm

LEVER VALVES

	Series Nominal width	Ways	Function	Cv-value (l/min)	p-Operating (bar)	T-Medium (°C)	T-Ambient (°C)	Connections
	47.00x.202 DN 2 DN 3 DN 4	2/2	NC	2,0 - 4,3	0 - 8	98 °C	70 °C	push-fit connection 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	push-fit connection 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	push-fit connection Ø 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		0 - 0,6	5 - 90 °C	60 °C	G 1/2"
	47.009.382 DN 9	2/2	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"

DISPENSE VALVE

	Series Nominal width	Function	Cv-value (l/min)	p-Operating (bar)	T-Medium (°C)	T-Ambient (°C)
	06.003.234 DN 3	NC	1,9	0 - 7	30 max.	60 max.

PINCH VALVES

	Series	Ways	Function	p-Operating (bar) depending on the tube	T-Medium (°C)	T-Ambient (°C)	Tube diameter	
	16.003.525	2/2	NC	0 - 1,5	90 °C	-10 - +50 °C	max Ø 5,2 mm	
	16.001.116	2/2	NC	0 - 1	0 - 90 °C	-10 - +60 °C	max. Ø 2,2 mm	
	16.001.216	2/2	NO	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 2,2 mm	
	16.001.316	3/2	NO o. NC selectable	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 2,2 mm	
	16.002.116	2/2	NC	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 3,2 mm	
	16.002.216	2/2	NO	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 3,2 mm	
	16.002.316	3/2	NO o. NC selectable	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 3,2 mm	
	16.006.130	2/2	NC	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 9,2 mm	
	16.006.230	2/2	NO	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 9,2 mm	
	16.006.330	3/2	NO o. NC selectable	0 - 1	5 - 90 °C	-10 - +60 °C	max. Ø 9 mm	

DIRECT ACTING VALVES

with up to DN 5 greater fluid flow than with lever valves

	Series Nominal width	Ways	Function	Cv-value (l/min @ 1 bar)	p-Operating (bar)	T-Medium (°C)	T-Ambient (°C)	Connections
	43.00x.102 (media separated) DN 3 DN 4 DN 5	2/2	NC	3,5 - 6,0	0 - 3	98 (65 °C max. John Guest)	70 (65 °C max. John Guest)	Nozzle, push-fit connection Ø 6 mm / 8 mm
	43.00x.142 DN 1 DN 2 DN 3 DN 4 DN 5	2/2	NC	0,5 - 5,5	0 - 10	98 (65 °C max. John Guest)	70 (65 °C max. John Guest)	Nozzle, push-fit connection Ø 6 mm / 8 mm
	43.00x.122 (media separated) DN 3 DN 4 DN 5	2/2	NC	3,3 - 5,5	0 - 5	98	70	Nozzle, push-fit connection Ø 6 mm / 8 mm
	43.00x.182 (media separated) DN 2 DN 4	2/2	NO	1,8 - 5,3	0 - 3,5	98 (65 °C max. John Guest on request)	70 (65 °C max. John Guest)	Nozzle, push-fit connection Ø 6 mm / 8 mm
	43.00x.xx6 DN 1,5 DN 2 DN 3 DN 5	2/2 3/2 (on request)	NC	1,0 - 5,5	0 - 8	98	70	

NEW: also with
FitSys 18 connectors

combinable and
customisable

INDIVIDUAL MEDIA PATHS – BESPOKE TO YOUR APPLICATION



Controlling liquids and gases in any application is not a trivial task. With increasing demands on the preparation of beverage specialities, the number of media paths is also growing. In addition to uncompromising quality, we take into

account your requirements for economy and efficiency in development, assembly and tool-free maintenance. That's why we put together your specific solution individually – stackable, scalable and maintenance-friendly





LOW-PRESSURE DRAIN VALVES

	Series Nominal width	Ways	Function	Flow rate @ 60 mbar	p-Operating (mbar)	T-Medium (°C)	T-Ambient (°C)	
	Dispense valve, proportional PTFE valve seat to inhibit scale build up 46.008.111prop DN 8	2/2	NC	3,2 l/min	0 - 60	98	70	
	46.008.101 DN 8	2/2	NC	7,1 l/min	0 - 60	98	70	
	removable outlet nozzle 46.008.104 DN 8	2/2	NC / NO	7,2 l/min	0 - 60	98	70	
	Low Scale 46.008.111 DN 8	2/2	NC	7,2 l/min	0 - 60	98	70	
	lime-repellent, removable outlet nozzle 46.008.114 DN 8	2/2	NC	6,8 l/min	0 - 60	98	70	
	Low Scale 46.008.118 DN 8	2/2	NC	6,8 l/min	0 - 60	98	70	
	40.012.101 DN 12	2/2	NC	10 l/min	0 - 60	98	70	
	Low Scale 40.012.111 DN 12	2/2	NC	10 l/min	0 - 60	98	70	
	Low Scale 40.014.111 DN 14	2/2	NC	11,5 l/min	0 - 60	98	70	
	stackable 46.008.x06 DN 8	2/2	NC	8 l/min	0 - 250	98	70	
	stackable, removable outlet nozzle, Low Scale 46.008.x16 DN 8	2/2	NC	8 l/min	0 - 250	98	70	
	stackable 46.008.x17 DN 8	2/2	NC	8 l/min	0 - 250	98	70	

NEW: also available
as NO version

pumps for pressure
boosting on page 16

WATER SUPPLY / SOLENOID VALVES



		Series Nominal width	Ways	Function	Cv-value (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Ambient (°C)
NEW!		Servo-controlled solenoid Valve 62.005.126 DN 5	2/2	NC	6	0,2 - 10	5 - 90	70
NEW!		Servo-controlled solenoid corner valve 62.005.115 DN 5	2/2	NC	7	0,2 - 10	5 - 90	70
		Servo-controlled solenoid valve with integrated dirt strainer 44.007.126 DN 7	2/2	NC	10	0,3 - 10	5 - 90	70 *)
		Servo-controlled solenoid corner valve 01.007.126 DN 7	2/2	NC	11	0,2 - 10	5 - 90	70 *)
		Servo-controlled solenoid corner valve 01.010.126 DN 10	2/2	NC	21	0,2 - 10	5 - 90	70 *)
		Aquastop 13.007.226 DN 7	2/2	NC	8	0,2 - 10	5 - 90	60

*) 60 °C max. USA and MS.028

PUMPS

	Series Nominal width	p-max	Q-max	T-Medium (°C)	T-Ambient (°C)	
	41.005.300 DN 5	102 mbar (16 V DC) 71 mbar (24 V DC)	3,6 l/min (16 V DC) 3,0 l/min (26 V DC)	95 max.	70	
	41.008.20x DN 8	430 mbar	12 l/min	95 max.	70	
	41.007.400 DN 7	280 mbar	5,8 l/min	96 max.	60	NEW: compact and maintenance-friendly


PRESSURE REDUCER (OPTIONALLY WITH PRESSURE GAUGE CONNECTION)







		Series Nominal width	p-Input (bar)	p-Outlet (bar)	T-Medium (°C)
	Pressure reducer suitable for drinking water & food (no non-ferrous metal)	42.004.126 DN 4	5	0,2 - 1	80
	Pressure reducer suitable for drinking water & food (no non-ferrous metal)	42.008.126 DN 8	16	1,2 - 8	85




FITSYS I8 PUSHFIT SYSTEM






					
1	2	3	4	5	
	Series	DN	Pressure Range (bar)	T-Medium (°C)	T-Ambient (°C)
1	FitSys I8 connector system				
2	FitSys I8 pressure relief valve				
3	FitSys I8 pressure relief valve with backflow preventer	4	0 - 16 (98 °C) 0 - 3 (143 °C)	98 143 (saturated steam at 3 bar)	60 max.
4	FitSys I8 throttle valve				
5	FitSys I8 backflow preventer				


CONTROLLING DEVICES



		Series Nominal width	Ways	Function	Cv-value (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	T-Ambient (°C)	Connections
	Flow meter turbine, with shut-off device	17.007 DN 7	2/2	NC	12	0,2 - 10	60 max.	60 max.	G 1/2 G 3/4 10,5 nozzle

ACCESSORIES		
	Type	Description
	Flange	Mounting support for most A. u. K. Müller solenoid valves, float valves and strainers with M5 threaded nut or for self tapping screws
	Holding Flange (coil/bracket)	Additional assembly support for most A.u.K. Müller GmbH & Co. KG solenoid valves
	Mounting Bracket	For mounting valve banks or single valves (preferably series 40.008 and 46.008)
	Mounting Clip	Increases the stability of valve groups of the 40.008 and 46.008 series
	Adjuster Wheel	Simplifies the adjustment of the regulating screw of beverage valves of the series 40.00x and 46.00x
	IRS-WT-MSx-x	Optoelectronic sensor unit for contactless beverage dispensing

DIRT STRAINER					
	Series Nominal width	Kv (l/min @ 1 bar)	p-Operation (bar)	T-Medium (°C)	Mesh size / Wire diameters
	12.010.300 DN 10 without shut off flow capability	20 (12.010.300)	0 - 10	5 - 90	0,16 mm / Ø 0,08 mm 0,25 mm / Ø 0,10 mm
	12.010.500 DN 10 with shut off flow capability	17 (12.010.500)			
	12.017.400 DN 17 without shut off flow capability	79 (12.017.400)	0 - 10	5 - 90	0,08 mm / Ø 0,06 mm 0,11 mm / Ø 0,06 mm 0,25 mm / Ø 0,10 mm
	12.017.500 DN 17 with shut off flow capability	70 (12.017.500)			
	12.017.800 DN 17	51	0 - 10	5 - 90	depending on version

FLOW REGULATORS [P-OPERATION 1 - 10 BAR]							
	Series	Outer diameter (mm)	Flow range (l/min)	T-Medium (°Celsius)	Socket	Star-shaped regulating element	Regulating element / Elastomer
	MR 04	19	5,0 - 20,0	5 - 65	PA	POM	EPDM
	MR 05	9,5	0,5 - 9,0	5 - 65	POM	POM	EPDM
	MR 06	19	0,5 - 9,0	5 - 65	POM	POM	EPDM
	MR 12	9,5	4,0 - 5,0	5 - 90	–	PA 6/6	NBR or FKM
	MR 19	19	3,5 - 22,0	5 - 98	PEI	PEI	EPDM or FKM

VERIFIABLE CHECK VALVE					
	Series Nominal width	Pressure range (bar)	T-Medium (°C)	T-Ambient (°C)	Connections
 <div>according to DIN EN 1717</div>	49.0xx.x26 DN 8 DN 10 DN 12	10	65 max. 95 max. für 1h	65 max.	G 3/4“ G 1/2“ G 3/8“ G 1/4“ (control connection)

PROPORTIONAL VALVES ... if you need it to be more individual ...							
		Series Nominal Width	Ways	Function	T-Medium (°C)	T-Ambient (°C)	
	Dispense Valve proportional	46.008.IIIprop DN 8	2/2	NC	98	70	
	Direct Acting, Stepper Motor Controlled Valve for continuous flow control	10.00x.126 - ds DN 4,2	2/2	Continuously adjustable stroke	80	60	



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