



A. u. K. Müller



Inspirational Valve Technology

**Solenoid Valves
Control Valves
Special Valves and Systems**





Drain Valves (NC/NO)

Valves of this type are used to drain low to highly aggressive liquids, in washing or flushing equipment for milk cooling tanks, milking machines and in cleaning and disinfecting equipment used in the dairy industry.

These are medium separated single chamber valves with inlet 90 degree to the outlet and nominal diameters of 40 or 50mm. Designed as normally closed (NC) or normally open (NO) the valve housing can be manufactured in materials such as PPE, PVDF or stainless steel. Protection type IP 68 is achieved with a moulded cable connection or IP 65 by using a mounted plug connector.

As an option the normally closed (NC) valves can be equipped with an emergency manual override, to ensure the tanks can be drained in the event of a power failure.

Special valve characteristics

- > **N**ormally closed (NC) or normally open (NO)
- > **C**oil system is protected against corrosion by separating the medium by a membrane
- > **S**uitable for spray and splash water
- > **P**rotection type IP 68 using cable or respectively IP 65 using plug connector
- > **O**ptional FKM membrane for higher resistance to chemicals
- > **N**o minimum pressure required
- > **O**ptional flush spout on valve body
- > **W**ith or without manual emergency override
- > **M**aximum medium temperature 98 °C (208 °F)
- > **N**ominal voltages
 - 12 V DC
 - 24 V DC
 - 24 V AC/DC*
 - 110 V AC/DC*
 - 200-240 V AC/DC*
 - 400 V AC/DC*

*Valves can be operated with AC or DC voltages



Without manual emergency override (NC/NO-version)



With manual emergency override (NC-version)



Pull ball handle to open the valve



Vacuum Controlled Drain Valves



04.040.113

2/2-way valve



04.040.114

3/2-way valve

Vacuum controlled drain valves are used as a 2/2 or 3/2-way valves with a nominal diameter of DN 40 in cleaning and disinfection equipment for dairies.

They are suitable for controlling low aggressive media, such as cleaning or disinfection agents.

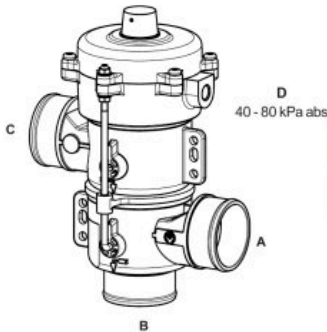
Valves of this type have a medium separated control pressure chamber and are suitable for spray and splash water with no minimum pressure required.

Depending on the customer's requirements, the valve housing are made either of PPE or PVDF. Both materials are suitable for hot water and have a good resistance to chemicals.

Special valve characteristics

- > **V**acuum controlled
- > **D**irect controlled function
- > **C**an be designed as single chamber with inlet 90 degree to the outlet or as a 2-chamber valve
- > **M**aximum medium temperature 90 °C (194 °F)
- > **T**hreaded- or hose connections
- > **H**igh operating safety through the use of high quality materials
- > **A**nd 100% final testing of the products

3/2-way valve functional principle



D - inactiv	A - B	open
	A - C	closed
D - activ	A - B	closed
	A - C	Open

Control port D can be rotated by 180° to direction C on request.



25.003.300



25.003.300

Vacuum control valves

- > **S**uitable to control the vacuum inside automated milking equipment



VACUMASTER®

The VACUMASTER is used for milking installations with a regulated or unregulated vacuum pump. In the first case the VACUMASTER keeps the milking vacuum constant within narrow limits (± 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.

Key features:

- ▶ **A** adjustable milking vacuum in the range of 35 - 60 kPa
- ▶ **M**aintains accurate vacuum (± 1 kPa)
- ▶ **A**ny fitting orientation, Low leakage of air
- ▶ **L**ow Noise due to streamlined air intake design
- ▶ **A**ir inlet filter made of PU foam retain dirt particles from the ambient air
- ▶ **F**or safety, there is a forced ventilation of the system in the event of internal membrane damage



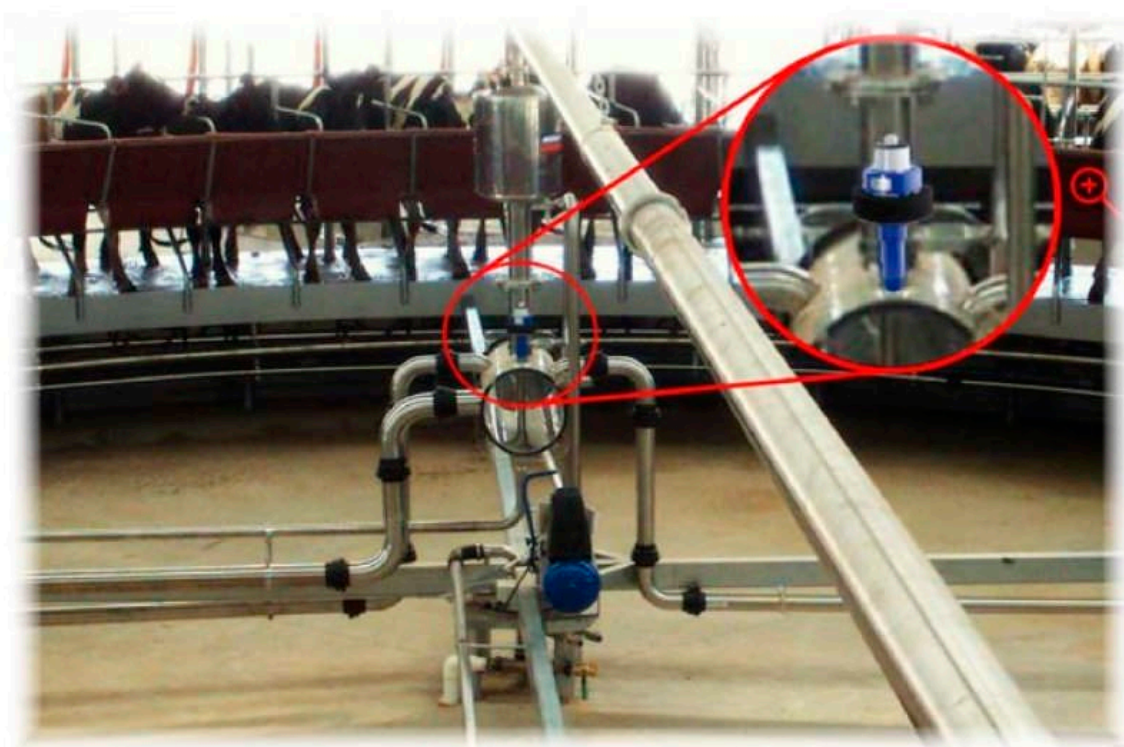
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23.020.100



23.025.000





Contact



A. u. K. Müller GmbH & Co. KG

Dresdener Str. 162
D-40595 Düsseldorf

Tel.: +49(0)211-7391-0
Fax: +49(0)211-7391-281

E-Mail: info@akmueller.de
Internet: www.akmueller.de



A. K. Muller (UK) Ltd.

Unit 4, Brookside Business Park
Brookside Avenue
GB-Rustington, West Sussex, BN16 3LP

Tel.: +44 1903 788888
Fax: +44 1903 785817

E-Mail: valves@akmuller.co.uk
Internet: www.akmuller.co.uk



A.K. Müller France

10 Avenue du Gué Langlois
F-77600 Bussy Saint Martin

Tel.: +33 1 64 62 95 14
Fax: +33 1 64 62 95 12

E-Mail: info@akmuller.fr
Internet: www.akmuller.fr



Possible product certifications available on request





Single-Chamber Solenoid Valves

Valves of this type are usually straight-through or angle valves and can also be designed as multi-chamber valves. Depending on the version it can be equipped with an upstream integrated strainer. By applying different flow regulators into the valve inlet, the flow rate can be limited, which helps to save water.

With built-in dirt strainer
 0.16 / 0.25 mm
 Mesh size

DN 07

44.007.126 01.007.126 01.007.111

DN 10

01.010.511 01.010.523 01.010.115 01.010.123 01.010.126

DN 13

01.013.523 01.013.115 01.013.126

DN 17

01.017.523 01.017.126

DN 21

01.021.521 01.021.126





Multi-Chamber Solenoid Valves

2 chambers



01.010.215

01.010.216

01.010.225



01.013.215

01.013.225

3 chambers



01.010.315

01.010.325

4 chambers



01.010.415

01.010.425

General

Type	Solenoid valve
Construction	2/2-way 2-4 chamber valve straight or inlet ninety degree to outlet, servo-controlled
Function	NC (normally closed)
Fitting position	Any, preferably coil pointing upward
Media	cold and heated potable water and physically and chemically similar media

Hydraulic/Thermal Parameters

T-medium	90	°C max.
T-ambient	70 (60)	°C max. °C max. USA and MS.026)
DN	10 13	mm
p-operating	0,2 - 10	bar
Pressure surge	according to EN 60730	

Electrical Parameter

Nominal voltages	220 - 240	V AC	50-60 Hz
	110	V AC	50 Hz
	110 - 127	V AC	60 Hz
	24	V AC	50/60 Hz
	12	V AC	50/60 Hz
	24 12	V DC V DC	
	other voltages on request		
Voltage tolerance	+10% -15%		
Duty cycle	100%		
Protection type	IP 00 to IP 68		
Coil connections	Flat tabs 6,3 x 0,8 mm (MS.006), Plug socket according to EN 175301-803 (IP65) cable connections (IP67, IP68)		
Insulation class	F	according to EN 60730	
Protection class	I	According to EN 60730	



Special Multi-Chamber Valves

Features

29.007.215	29.010.225	29.010.226	29.010.326
Two valves in series in one housing.		One upstream valve with two separately controllable outlets.	
Strainer in the inlet	Strainer located in a separate compartment	Strainer in the inlet	
Outlet nozzle either on the left or right side of the inlet	Elbow nozzle	Outlet nozzle	

DN 7



29.007.215

DN 10



29.010.226



29.010.225

Additional compartment for strainer



29.010.326

Features

			Outlet
15.017.425	15.017.325	One common inlet	DN 17
			DN 10
			DN 10
			DN 10

DN 17



15.017.325



15.017.425

Features

14.025.126
Flow rate limitation (Optional)
Manual closing of valve

DN 25



14.025.126

Ideally suitable for irrigation systems



Aquastop Series 13.007.226



13.007.226



open outlet

Connected between the water supply and a the machine to be filled, the Aquastop prevents water damage to floors and walls in both domestic and commercial property.

The outer corrugated tube returns even very minor leaks in the inner flexible inlet hose back into the appliance where it is detected by a sensor.

The sensor signal received by the appliance controller shuts the water supply before any major damage can occur.

Specific characteristics:

- ▶ Two single servo controlled compact valves (NC) in line to increase operational reliability
- ▶ Connection to water supply (swivel nut) possible without tools
- ▶ Water supply tube routed in flexible corrugated tube
- ▶ The Aquastop system has been designed for free outlet
- ▶ Flexible corrugated tube to guide leakage water to a moisture sensor
- ▶ Stainless steel filter in the valve inlet
- ▶ Flow regulator can be fitted in the inlet
- ▶ Suitable for warm water up to 60°C (EU, UK) / (USA: 90°C)

Options

Design for	Inlet		Corrugated tube		Inlet tube L 2	Cable L 3	Height H	Depth T	Cable type	Tm / C°	Approval (Status)
	ØA	A1	L 1	L 2							
EU	G 3/4 female gland nut	12	1300	2200	1400	71	40	H03VVH2-F 0,75 mm²	60	VDE Cert.-No.: 40016187 Materials in touch with medium according to KTW recommendation	
	G 3/4 female gland nut	12	1800	2700	1900						
USA	.75-11.5 NH female gland nut	12	1300	2200	1400	71	40	AWM: 3289 CSA: CL 1503 AWG 18	90	UL: Y10Z2/8, MH13874 NSF Cert.-No.: N13.007	
	.75-11.5 NH female gland nut	12	1800	2700	1900						
UK	G 3/4 female gland nut	12	1300	2200	1400	71	40	H03VVH2-F 0,75 mm²	60	WRAS Cert.-No.: 0909800	
	G 3/4 female gland nut	12	1800	2700	1900						



Dirt Strainers

By fitting a dirt strainer series 12.01x.x00 upstream valves, other downstream equipment is reliably protected from damage caused by suspended particles. Changing the filter insert is done without removing the entire strainer from the installation and requires no tools.

Special characteristics:

- Temperature resistance to 90°C
- Operating pressure up to 10 bar
- High flow rates from 17 up to max. 79 l/min. (at 1 bar)
- Various threaded connections and filter inserts available
- Versions with integrated shut off device available



12.010.300 / ≈500



12.017.400 / ≈500

The double- and triple stage strainer combines two or three successive filter inserts of reducing mesh sizes arranged in one housing. Coarse, medium and small particles are reliably filtered out of the media stream.

Special features:

- Large filter area but compact external dimensions
- Filter inserts are stacked, so that strainers become progressively finer

Two or triple stage
filter system

12.017.800

Pressure Reducer

For devices that require a constant inlet flow or are to be filled with a specified volume in a defined period of time, the pressure reducer series 42.010.000 is an ideal choice.

It is a pressure regulator which ensures in a subsequent line system a constant but lower pressure than in the feed line. It therefore separates the downstream system from a fluctuating supply pressure.

General characteristics:

- Output pressure adjustable, factory presetable
- Inlet pressure balancing
- Suitable for hot water up to 90°C
- Ambient temperature up to 70°C
- Reduced flow noise
- Compact design



42.010.000



Accessories

Flow Regulator - Components to save water

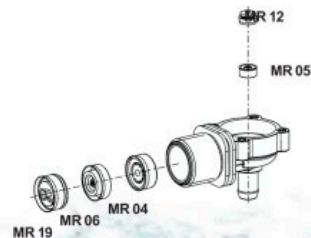
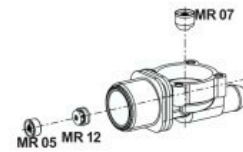
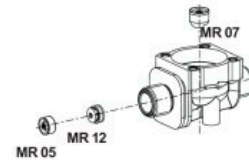
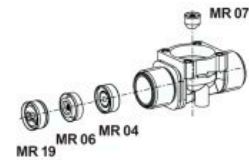


- ▶ Flow regulators provide a constant flow rate independent of the incoming pressure effectively reducing water consumption
- ▶ These are available in most common flow rate values
- ▶ Placed directly into the inlet of the valve housing (MR 04, 06, 19) or even in the valve seat (MR 05, 07, 12)



Installation possibilities for an individual flow regulator in servo controlled valves.

Flow Regulator	Valve housing	T-medium
MR 04	Ø 19,0 mm (for G 3/4 valve inlet / with receptacle contour)	65°C max.
MR 05	Ø 9,5 mm (for G 3/8 and G 1/2 valve inlet / angled housing valve seat DN 10 / with receptacle contour)	
MR 06	Ø 19,0 mm (for G 3/4 valve inlet / with receptacle contour)	
MR 07	Ø 10 mm (Straight through housing valve inlet DN 10 / with receptacle contour)	90°C max.
MR 12	Ø 9,5 mm (for G 3/8 and G 1/2 valve inlet / angled housing valve seat DN 10 / with receptacle contour)	
MR 19	Ø 19,0 mm (for G 3/4 valve inlet / with receptacle contour)	98°C max.



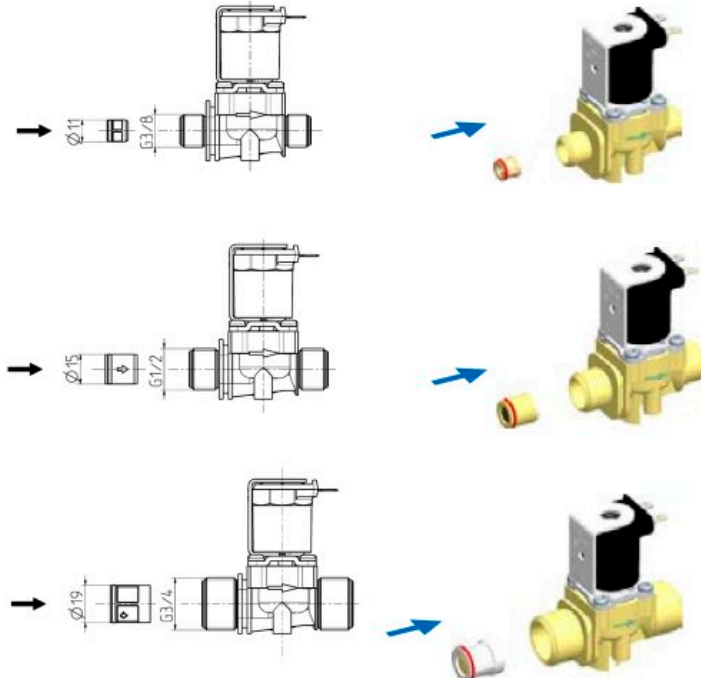


Accessories

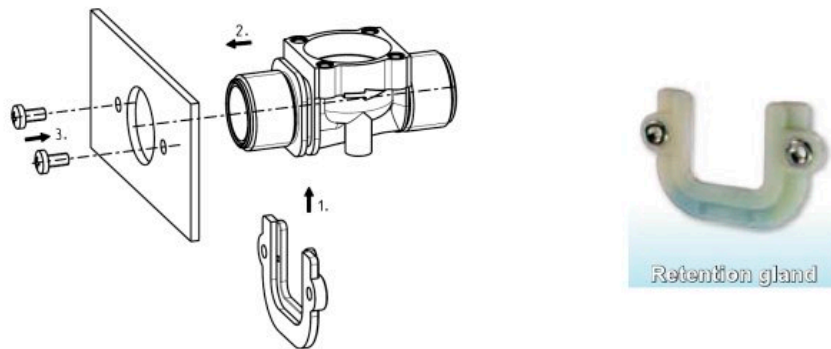
Backflow Preventers

Backflow preventers should effectively avoid back sucking of the medium. Also practical is the direct placement of backflow preventers (EB according to EN 1717) into the inlet of a valve.

For domestic use, it can be used anywhere where it is part of a discharge fitting or a domestic appliance.



Mounting Flange for Valve Fixing



For most servo valves a surrounding groove on the inlet side of the valve allows for the placement of a separate U-shaped retaining flange. It is easy to assemble and ensures a secure fit of the valve to a bulkhead.



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Possible product certifications available on request





Float Valves Series 21.01x.

Valves of this design are single chamber, with either an inlet at ninety degrees to the outlet or with the inlet and outlet in line. The valves have a glass fibre reinforced polyamide body with nominal diameters of 10, 13 or 17mm and can be manufactured with various connection types. Depending on the medium temperature, the float can be made of stainless steel (max 90°C), PE foam (max 60°C) or polystyrene (max 30°C).

Special Characteristics:

- For use in tanks with a wider surface area
- Servo controlled 2/2 way valve
- Long term performance capability
- Suitable for medium temperatures from 30 to 90°C
- Float cylinders are available in different materials
- Version with patented guide lever, to reduce turbulence on the surface, available



Patented
EP 1 469 241 B1
21.010.110

If your application is for a tank that has a smaller surface area and is deeper, our patented series 21.01x.126 Linear could match your requirements

Characteristics:

- Available with a nominal diameter of DN 13 or DN 17mm
- Vertically guided float cylinder
- Shorter closing time reduces dripping
- The elbow outlet nozzle can be rotated in 45° steps
- The float can be fixed in four different positions



Patented
EP 1 626 215 A1





Water Inlet Valves Series 14.025.126

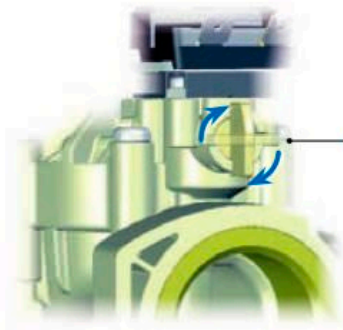


Specially designed for use in irrigation, rain water utilisation or water treatment plants, this 2/2 way servo controlled solenoid valve has an orifice size of 25mm, is normally closed (NC) and has the inlet and outlet in line.

Insulation class F ensures electrical operating safety and can also be provided with an integrated protection circuit.

Special Features:

- > Opening with manual override
- > Optional flow rate limiter
- > Ideal for process and cooling water
- > Connection ports with brass female threads

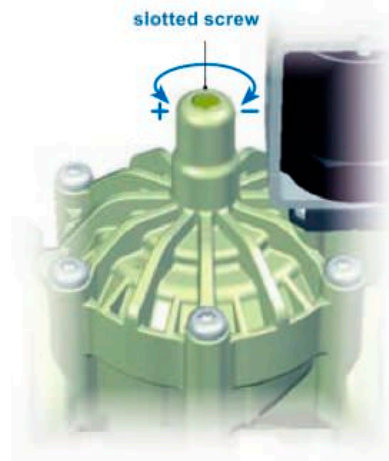


Manual Override control lever

This can be used if the equipment has to be filled before power up or used in the event of a power failure.

The flow rate limiter can be adjusted by turning the slotted screw in the valve's cover cone.

- Turning clockwise lowers the flow rate
- + Turning anti-clockwise increases the flow rate







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Internet: www.akmuller.co.uk



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Fax: +33 1 64 62 95 12

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Possible product certifications available on request





To automate a tap three components are needed

1. Sensor



IR-Sensor

IR-Sensor Mini

The basic functions for each application are already built in the contact free operating infrared sensor and can, if necessary, be adjusted using a remote control.

2. Cartridge valve



50.005.100

50.007.100

050-B07

51.007.126

DN 05

DN 07

A compact latching or mono-stable solenoid valve, which meets international standards, can be built into the tap and is controlled by a sensor pre-programmed for the application.



Special housing

Special housing

If the valve is not located in the tap directly, a special housing is available for some variants to achieve a more traditional connection

3. Voltage supply



Power supply

Rubber case 9V

Rubber case 6V

The power supply is provided by either a battery (6 or 9 V DC) or an AC adapter (Input 100 - 240 VAC / Output 12 or 6.75 V DC).

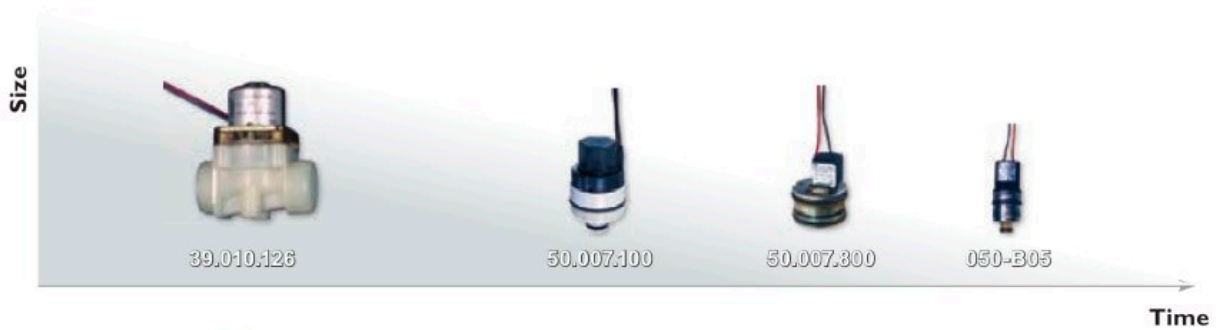
Rubber battery cases accommodate 6 V lithium batteries or 9 V battery block type E with moisture-protected contacts. Thus power supply can easily be provided in humid environments independent from the mains.

The power supply has a special feature to support an emergency shutdown of the valve in the event of a power failure. Costs due to a sustained flow of water or expensive water damage can be avoided.



Size does matter

The design of the valves for integration into tap ware has become more compact over time and today allows the tap ware designers far more design possibilities.



We develop also customized designs of course.

Characteristic values

General

Type	Solenoid valve / cartridge valve	
Construction	2/2-way, servo controlled	
Function	NC (normally closed)	
Fitting position	Any, preferably with coil upwardly	
Media	Cold and heated potable water and physically and chemically similar media	

Hydraulic / Thermal Parameters

T-Medium	70	°C max.
T-Ambient	60	°C max.
DN	5, 7	mm
p-Operating	0,2 - 10	bar
Pressure surge	according to EN 60730 or EN 15091	

Electrical parameters

Coil type	MS.026, MS.028		
Nominal voltages	6	VDC	bi-stable (latching) bi-stable (latching) monostable monostable
	9		
	12		
	24		
other voltages on request			
Duty cycle	100% (monostable)		
Nominal power	0,5 - 1,2 W		
Protection type	IP 65		
Coil connections	Litzen mit Stecker		



The valve is not all



IR-captteur

A smart contact free infrared sensor controls the valve inside the tap. It detects the presence of the user and, depending on the application, controls the flow of water stopping it automatically in the case of a permanent detection after a preset time. The waste of water becomes enormously reduced.

For some operating modes (wash basin, urinal, shower, WC) an automatic activation every 24 h or 72 h is available, to fill the drain trap regularly for hygienic reasons and to avoid stagnating water in the pipe.

The infrared sensor also checks the battery voltage and reports by flashing the LED that it is time for their replacement. If this remains unnoticed, the valve in the tap receives a closing pulse and remains closed until the battery is replaced.



Bloc d'alimentation

A buffer in the power supply delivers in the event of power failure for a short time a residual energy, detected by the sensor as a low voltage, sufficient to ensure the closing of the valve. This provides additional security and helps to prevent water damages.



Remote control

The operating modes of modern infrared sensors are factory preset to common detection ranges and flow times. The detection range even adapts automatically to the distance to the water jet.

If necessary the settings can be individually changed with a remote control.



Especially designed for use in sanitary tap ware with high water flow



This latching, servo-controlled 2/2-way valve of nominal orifice size 7 mm is specifically designed for use in battery-powered, electronically controlled tap ware with high water flow rate (Cv-value of 16 l / min.). Due to the horizontally located pilot valve, it can also be used where minimal space is available.

Special features:

- > **H**orizontally positioned pilot valve
- > **D**ual filtering of the pilot water
- > **I**nternal pollution protection
- > **P**retested functional unit
- > **L**ow power consumption by pulse control



Technical Data

Construction	2/2-way, servo controlled	
Function	bi-stable, pulse controlled	
Fitting position	Any, preferably with coil horizontal	
Media	Cold and heated potable water and physically and chemically similar media	
T-Medium	5 - 70	°C
T-Ambient	5 - 50	°C
DN	7	mm
p-Operating	0,5 - 10	bar
Cv-value	16	l/min
Pressure surge	according to EN 60730 and EN 15091	
Nominal voltage	6	V DC
	other voltages on request	
Operating voltage	4,0- 6,9 V DC open/close	
	at T-Ambient 25 °C	
Pulse shape/time		
Nominal power	1,4 W	at nominal voltage
Protection type	IP 65	according EN 60529
Insulation class	B	according EN 60730
Protection class	III	according EN 60730

Connection options

Connection type	Standard cable length
with leads and connector	85 mm
with leads	120 mm
connector	on request



Design of a Concealed Unit

Especially for the control of the water in urinal applications the concealed unit can be configured in many ways. A concealed unit usually consists of an inlet housing with "stop cock", a dirt strainer and a downstream cartridge valve.

Characteristics

- ▶ Valve body with "stop cock" for manual shut-off
- ▶ Bi-stable (latching) or monostable cartridge valves DN 7, series 50.007.100
- ▶ Various connections and filter inserts available
- ▶ Also available with integral strainer
- ▶ Brass connections available
- ▶ Assembly of the dirt strainer and cartridge valve can be done without tools
- ▶ An optional plug can be inserted instead of the cartridge valve to flush the system
- ▶ Dirt strainer and cartridge valve housing can be pre-assembled in 15° increments to each other

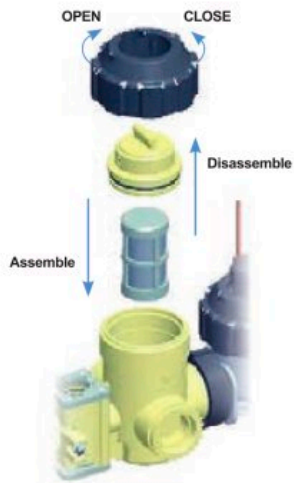


Connection Options

	Materials	Inlet		Outlet			L	H
		Ø A	A1	Ø B	B1	B2		
52.007.126	PA 6/6	Plug connection 18	8,5	Plug connection 18	8,5	16,6	151,5	-
52.007.126	PA 6/6	G 1/2	24,5	G 1/2	22,5	30,6	181,5	-
52.007.126	PA 6/6	Plug connection 18	8,5	G 1/2	22,5	30,6	165,5	-
52.007.126	PA 6/6	G 1/2	24,5	Plug connection 18	8,5	16,6	167,5	-
52.007.1xx	PA 6/6	Plug connection 18	8,5	Plug connection 18	8,5	16,6	125,5	82,0
52.007.1xx	PA 6/6	G 1/2	24,5	G 1/2	22,5	30,6	139,5	98,0
52.007.1xx	PA 6/6	Plug connection 18	8,5	G 1/2	22,5	30,6	125,5	98,0
52.007.1xx	PA 6/6	G 1/2	24,5	Plug connection 18	8,5	16,6	139,5	82,0



Concealed Unit - Filtration of dirt particles



For the filtering of dirt particles in the media strainers with different mesh sizes in PA66 are available.

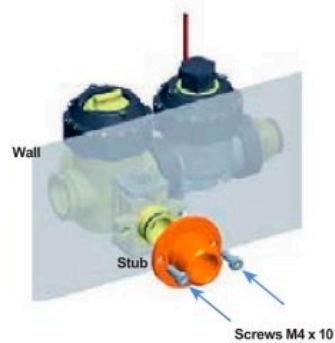
Mesh sizes

- > 0,50 (0,20mm Ø)
- > 0,25 (0,12mm Ø)
- > 0,11 (0,06mm Ø)

Concealed Unit - Installation options



This application is particularly suitable for back wall installation and may either be fixed directly against the wall by means of M4 nuts or attached by means of plug-in connection with M4 screws or by using the box wall in a concealed wall installation.





Dirt Strainers

By fitting a dirt strainer series 12.01x.x00 upstream valves, other downstream equipment is reliably protected from damage caused by suspended particles. Changing the filter insert is done without removing the entire strainer from the installation and requires no tools.

Special characteristics:

- ▶ Replaceable filter elements, easy to clean
- ▶ Temperature resistance to 90°C
- ▶ Operating pressure up to 10 bar
- ▶ High flow rates from 17 up to max. 79 l/min. (at 1 bar)
- ▶ Various threaded connections and filter inserts available
- ▶ Versions with integrated shut off device available



12.010.300 / ~500



12.017.400 / ~500

The double- and triple stage strainer series 12.017.800 combines two or three successive filter inserts of reducing mesh sizes arranged in one housing. Coarse, medium and small particles are reliably filtered out of the media stream.

Special features:

- ▶ Large filter area but compact external dimensions
- ▶ Filter inserts are stacked, so that strainers become progressively finer

Two or triple stage
filter system

12.017.800

Pressure Reducer

For devices that require a constant inlet flow or are to be filled with a specified volume in a defined period of time, the pressure reducer series 42.010.000 is an ideal choice.

It is a pressure regulator which ensures in a subsequent line system a constant but lower pressure than in the feed line. It therefore separates the downstream system from a fluctuating supply pressure.



42.010.000

General characteristics:

- ▶ Output pressure adjustable, factory presettable
- ▶ Inlet pressure balancing
- ▶ Suitable for hot water up to 90°C
- ▶ Ambient temperature up to 70°C
- ▶ Reduced flow noise
- ▶ Compact design



Contact



A. u. K. Müller GmbH & Co. KG

Dresdener Str. 162
D-40595 Düsseldorf

Tel.: +49(0)211-7391-0
Fax: +49(0)211-7391-281

E-Mail: info@akmueller.de
Internet: www.akmueller.de



A. K. Muller (UK) Ltd.

Unit 4, Brookside Business Park
Brookside Avenue
GB-Rustington, West Sussex, BN16 3LP

Tel.: +44 1903 788888
Fax: +44 1903 785817

E-Mail: valves@akmuller.co.uk
Internet: www.akmuller.co.uk



A.K. Müller France

10 Avenue du Gué Langlois
F-77600 Bussy Saint Martin

Tel.: +33 1 64 62 95 14
Fax: +33 1 64 62 95 12

E-Mail: info@akmuller.fr
Internet: www.akmuller.fr



Possible product certifications available on request





Valves for Haemodialysis

This series of valves was developed specifically for use in haemodialysers and other medical devices and their design recognises the stringent requirements of medical applications.

Used as either inlet or outlet valves in balance chambers of dialysers, these valves control media flow of the haemodialysis concentrate in both flow directions, without leakage across the entire pressure range.

These valves are characterised by:

- ▶ **Durability and long life expectancy**
The use of biocompatible and physiologically suitable high quality plastics ensure long product life whilst in contact with media such as haemodialysis concentrate, disinfectants and cleansing solutions
 - ▶ **At least several millions of cycles**
Every batch of valves produced is tested before delivery to the customer. Only after passing several millions of cycles without failure will we release goods for despatch
 - ▶ **Chemical disinfection**
Due to the selected high grade materials it is suitable for chemical disinfection, even at high temperatures
- ▶ **Medium temperature up to 90°C (194°F)**
 - ▶ **Pressure range** 10 - 400kPa (abs)
(1.45 - 58 psi (abs))
 - ▶ **Various hydraulically connections available**
 - ▶ **Valve housings made of PEI or PPSU**

- ▶ **Direct acting 2/2-way solenoid valves NC**
(normally closed)
- ▶ **DN** 3,6, 4,0, 4,5 Ø mm
(0.142, 0.158, 0.177 Ø in)



- ▶ **Direct acting 3/2-way solenoid valve**
- ▶ **DN** 4 Ø mm (0.158 Ø in)





Drain Valves

- ▶ **D**irect acting 2/2-way solenoid valves
NC (normally closed) or
NO (normally open).
- ▶ **DN** 40, 50 Ø mm (1.57, 1.97 Ø in)

Drain valves can be supplied for either normally closed (NC) or normally open (NO) operation. They are designed specifically to be part of cleansing processes within medical applications and meet the stringent requirements of this highly sensitive sector.



Materials are carefully selected for their suitability, for example, PVDF and stainless steel valve housings provide optimal resistance when used with chemicals and other aggressive media.

Special features:

- ▶ **Emergency manual override**
Valves can be equipped with an emergency manual override, to ensure the drainage of the tank even in the event of power loss
- ▶ **Rinse nozzle**
This nozzle enables cleaning of the valve itself. Regular flushing after use helps eliminate dirt and chemical residues to maintain performance and longevity of the valve
- ▶ **Rolling membrane**
A specially developed rolling membrane made of FKM protects the internal magnetic system from corrosion and enhances the chemical resistance of the valve
- ▶ **Medium temperature up to 98°C (208°F)**
- ▶ **Pressure range** 0 - 120 mbar
(0 - 1.74 psi)
- ▶ **Various hydraulically connections available**



Valve housing materials compared

	 PVDF	 Stainless steel
R esistance to chemicals	++	++
S uitability for hot water	+	++



Pinch Valves

Pinch valves are particularly suitable for applications where high levels of hygiene are required.

This design is fundamentally different to traditional valves in that a seat and membrane is not necessary. Flow is controlled by pinching the inserted tube which avoids turbulences in the fluid flow and virtually eliminates dead areas in the valve housing where medium or dirt can collect.

The resistance against chemicals depends on the selected material of the tube.

These valves are available in NO, NC and 3/2-way configurations.

Main characteristics:

- ▶ **Aluminium body**
HART-COAT® surface refinement permanently protects the body from wear and corrosion
- ▶ **Adjustable coil position**
The coil can be fixed in any position through 360°
- ▶ **Easy to change tubing**
By manually opening the pinch mechanism the tube can be easily inserted or removed. Manual operation is also possible in case of power failure



- ▶ **D**irect acting pinch valves
- ▶ **M**edium temperature up to 90°C (194°F)
- ▶ **P**ressure range 0 - 1 bar
(0 - 14.5 psi)
- ▶ **O**uter diameter of tube 1,5 - 9,2 mm
(0.06 - 0.36 in)



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