

# 2/2-way drain valve, DN 40, vacuum controlled

# Product Information



**A. u. K. Müller**

Solenoid valves  
Control valves  
Special valves and systems

A. u. K. Müller GmbH & Co. KG  
Dresdener Str. 162  
D-40595 Düsseldorf/Germany

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

e-mail: [info@akmueller.de](mailto:info@akmueller.de)  
Internet: [www.akmueller.de](http://www.akmueller.de)

**Series 04.040.113**



## Characteristics

- Direct acting
- Vacuum controlled
- Long term performance capability
- Max. medium temperature 90 °C
- Works from zero pressure
- Suitable for spray- and jet water
- High operating safety through the use of high quality materials and 100% final testing of the products

## Applications

- Industrial washing machines and dishwashers
- Cleaning devices for medical equipment
- Cleaning and disinfecting systems in the dairy industry and process engineering

## Description

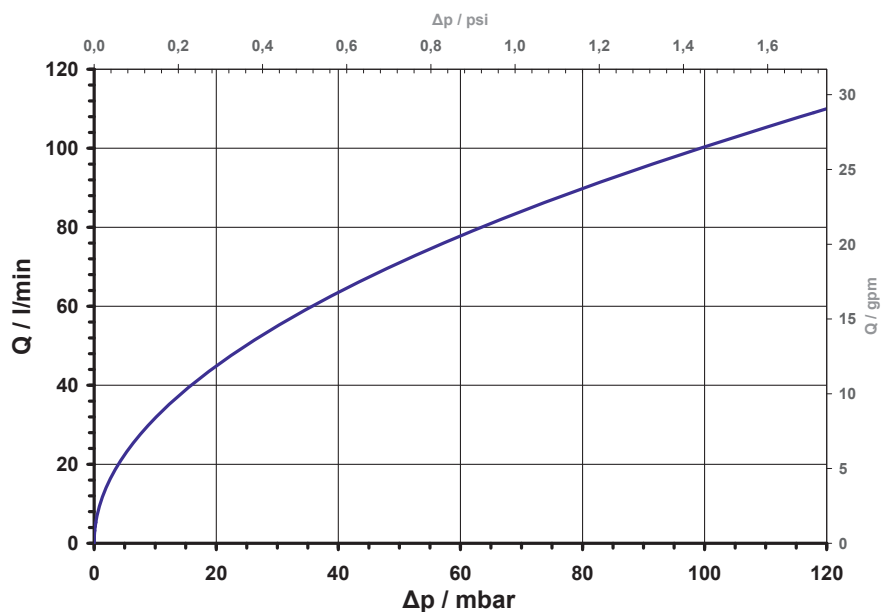
2/2-way direct acting drain valve of nominal diameter DN 40 for controlling low aggressive liquid media, such as cleaning or disinfection agents.

Valves of this type are medium separated, having a single chamber valve body with the inlet at ninety degrees to the outlet. They can be manufactured in various materials and equipped with threaded or hose connections.

Valve housing made of PPE or stainless steel are suitable for hot water. Valve housing made of PVDF have a higher resistance to chemicals where stainless steel has both features.

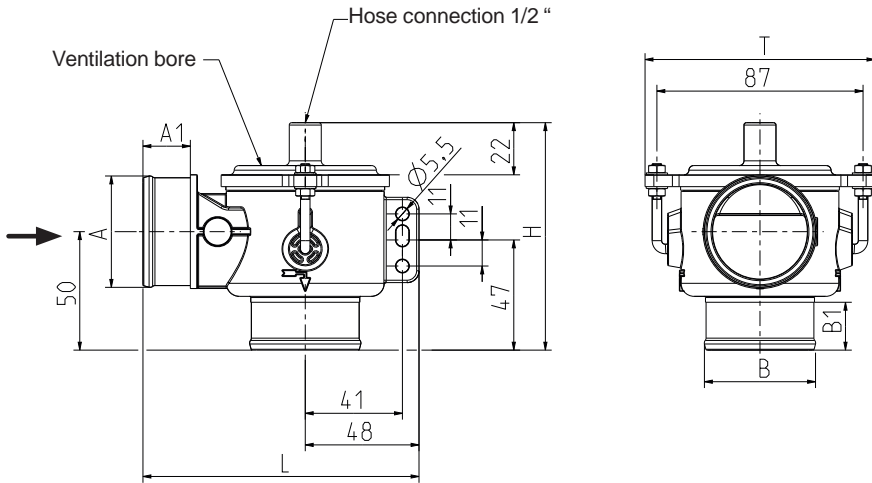
The smooth internal shape improves liquid flow and avoids dirt traps. The valve bodies can be equipped with an additional flush spout.

typical performance curve





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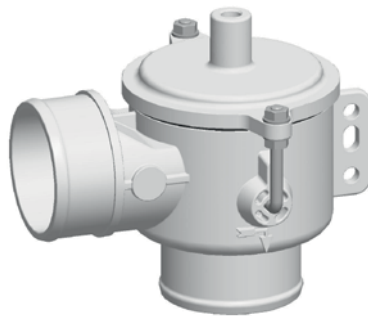


**Technical Data**

<b>Type</b>	solenoid valve	
<b>Construction</b>	single chamber valve, direct acting	
<b>Function</b>	2/2-way	
<b>Fitting position</b>	any, preferably with coil upwardly	
<b>Media</b>	low aggressive media, such as cleaning or disinfection agents in water	
<b>T-Medium</b>	90	°C max.
<b>T-Ambient</b>	50	°C max.
<b>DN</b>	40	mm
<b>p-Operating</b>	0 - 600 mbar max	
<b>Control vacuum</b>	30 - 60 -0,4 -- -0,7	kPa abs. bar rel.

**Materials**

<b>Valve body</b>	PPE, PVDF, stainless steel
<b>Control chamber</b>	PPE
<b>Membrane and sealings</b>	EPDM



To prevent moisture entries in the vacuum chamber, appropriate measures should be provided.

**Options**

Material	Ø A	A1	Ø B	B1	L	H	T	
PPE/PVDF	G 1 1/2	21	G 1 1/2	21	117	96	97	on request
	G 1 1/2		nozzle 1 1/2"					
	nozzle 1 1/2"		G 1 1/2					
	nozzle 1 1/2"		nozzle 1 1/2"					
Stainless steel	G 1 1/2	21	G 1 1/2	21	117	94	97	on request
	G 1 1/2		nozzle 1 1/2"					
	nozzle 1 1/2"		G 1 1/2					
	nozzle 1 1/2"		nozzle 1 1/2"					



**International vacuum/pressure conversion table**

Unit	bar	N/cm <sup>2</sup>	kPa	atm., kp/cm <sup>2</sup> , m H <sub>2</sub> O	Torr, mm Hg	psi
bar	1	10	100	1,0197	750,06	14,5
N/cm <sup>2</sup>	0,1	1	10	0,1019	75,006	1,45
kPa	0,01	0,1	1	0,0102	7,5006	0,145
atm., kp/cm <sup>2</sup> ; m H <sub>2</sub> O	0,9807	9,807	98,07	1	735,56	14,22
Torr, mm Hg	0,00133	0,0133	0,1333	0,00136	1	0,0193
psi(a)	0,0689	0,6896	6,896	0,0703	51,68	1

**International vacuum/ pressure conversion table comparing absolute and relative values**

Relative vacuum	Residual pressure absolute		Relative pressure					
	kPa	bar	bar	N/cm <sup>2</sup>	kPa	atm., kp/ cm <sup>2</sup> , m H <sub>2</sub> O	Torr, mm Hg	psi
10	90	0,9	-0,101	-1,01	-10,1	-0,1	-76	-1,47
20	80	0,8	-0,203	-2,03	-20,3	-0,2	-152	-2,94
30	70	0,7	-0,304	-3,04	-30,4	-0,3	-228	-4,41
40	60	0,6	-0,405	-4,05	-40,5	-0,4	-304	-5,88
50	50	0,5	-0,507	-5,07	-50,7	-0,5	-380	-7,35
60	40	0,4	-0,608	-6,08	-60,8	-0,6	-456	-8,82
70	30	0,3	-0,709	-7,09	-70,9	-0,7	-532	-10,28
80	20	0,2	-0,811	-8,11	-81,1	-0,8	-608	-11,75
90	10	0,1	-0,912	-9,12	-91,2	-0,9	-684	-13,22

