

# Product Information

## 3/2-way drain valve, DN 40, vacuum controlled



### A.u.K. Müller

Solenoid valves  
Control valves  
Special valves and systems

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### Series 04.040.114



### Characteristics

- direct acting
- vacuum controlled
- Optional PVDF valve body
- long term performance capability
- max. medium temperature 90°C
- no minimum pressure required
- 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 disinfection systems in the dairy industry and process engineering

### Description

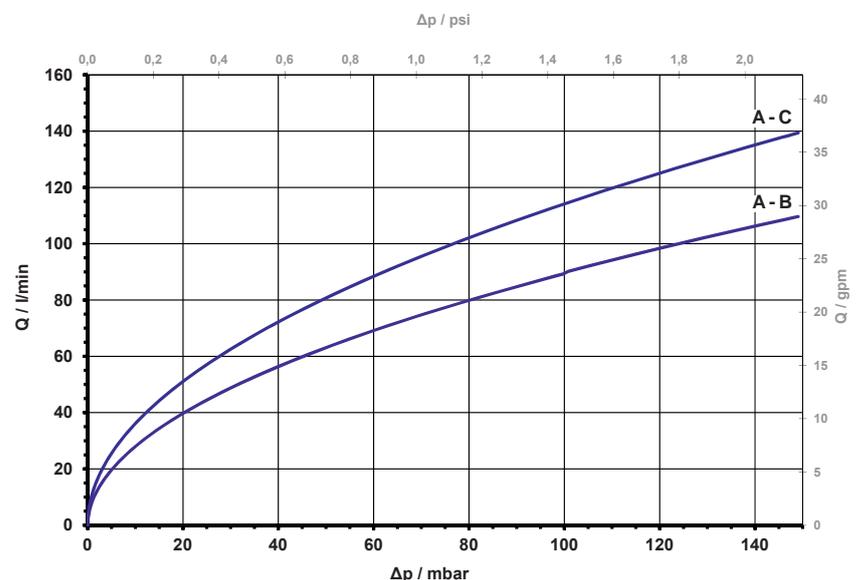
3/2-way direct acting dump valve of nominal diameter DN 40 for controlling low aggressive media, such as cleaning or disinfection agents.

Valves of this type have a medium separated control pressure chamber and can be manufactured in various materials equipped with threaded or hose connections.

The valve with valve body made of PPE, is suitable for water of higher temperature and chemically resistant.

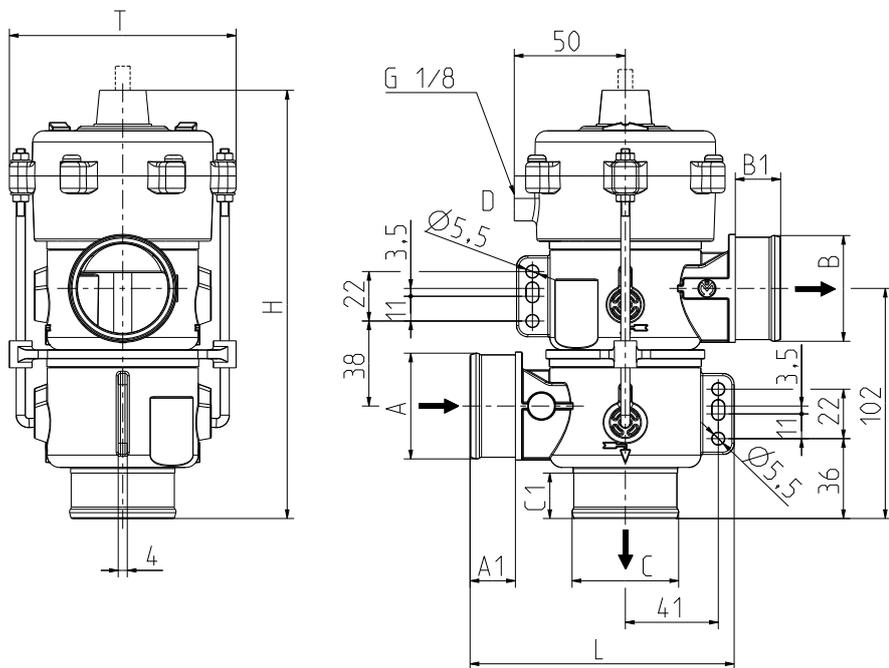
By using high quality insulation materials, continuous duty at higher medium temperatures is possible.

typical performance curve





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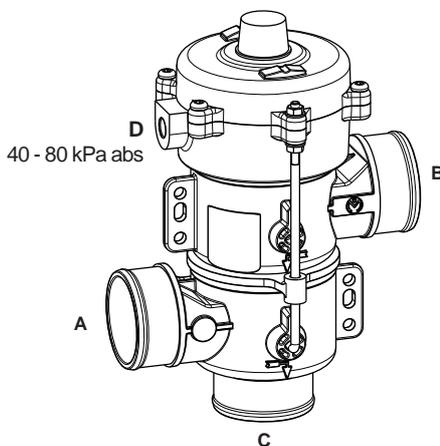


#### Technical Data

Type	drain valve, vacuum controlled	
Construction	2-chamber valve, direct acting, 3/2-way	
Fitting position	any, preferably upwardly	
Media	low aggressive media, such as cleaning or disinfection agents in water	
T-Medium	90	°C max.
T-Ambient	50	°C max.
DN	40	mm
p-Operating	0 - 150	mbar max.
Control vacuum (D)	40 - 80 - 0,2 - -0,6	kPa abs bar rel.

#### Materials

Valve body	PPE, PVDF stainless steel on request
Control chamber	PPE
Plunger guide	stainless steel
Plunger	stainless steel
Sealings	EPDM FKM NBR (on request)



D - inactive	A - C	open
	A - B	closed
D - active	A - C	closed
	A - B	open

Control port D can be rotated by 180° to the opposite position.  
To prevent moisture entries in the vacuum chamber, appropriate measures should be provided.

#### Options

Material	Ø A	A1	Ø B	B1	C	C1	Length L	Height H	Depth T
PPE	G 1 1/2	21	G 1 1/2	21	G 1 1/2	21	117	190	100
PPE	nozzle 1 1/2"	21	nozzle 1 1/2"	21	G 1 1/2	21	117	190	100
PPE	G 1 1/2	21	G 1 1/2	21	nozzle 1 1/2"	21	117	190	100
PPE	nozzle 1 1/2"	21	nozzle 1 1/2"	21	nozzle 1 1/2"	21	117	190	100

all valve bodys on request : PVDF

Emergency manual override on request.



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**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



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