

2/2-way direct acting dialysis valve, NC medium separation by PTFE bellow



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
Internet: www.akmueller.de

Series U9x.60x



Characteristics

- Special valve for haemodialysis machines
- Medium separated by PTFE bellow
- Function and leak tightness in both flow directions
- Plunger guided by PTFE
- High flow rate
- Various fixing options
- Suitable for pressure and vacuum operation
- Short cycle times
- High number of ON-OFF cycles
- Minimal dead areas in valve body
- Easy chemical disinfection
- Materials with worldwide approvals
- High operating safety by use of high quality materials
- Low power consumption
- CE - Marking
- UL and CSA certification on request

Applications

- Haemodialysis machines
- Medical engineering
- Water treatment
- Disinfection equipment

Description

This valve series has been specially developed for use in haemodialysis machines and other medical devices. The design recognizes the specific requirements of this market.

Used as an inlet or outlet valve for the balance chamber of a dialysis machine, the valve will work in both flow directions across the complete pressure range.

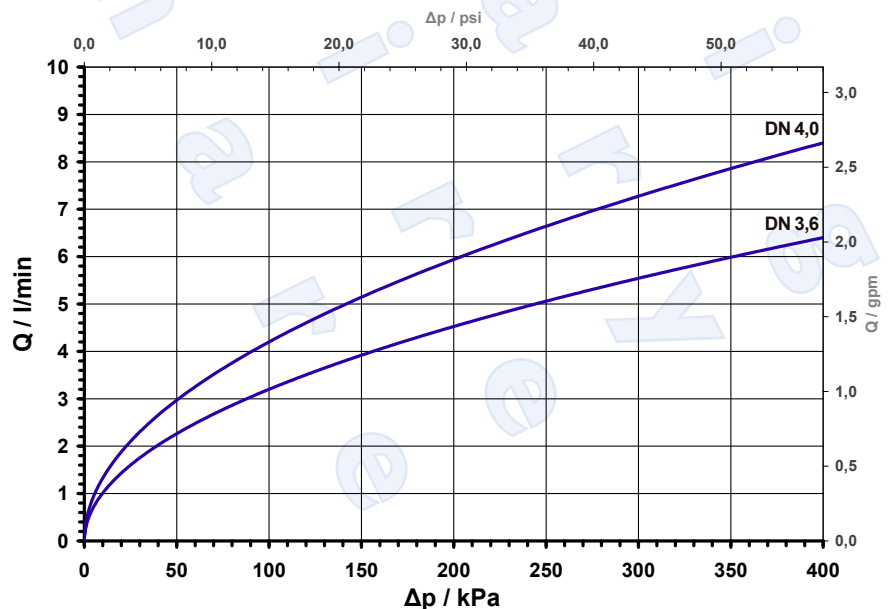
A variety of standard bodies are available to connect to the customer's balance chamber but customised versions can be produced.

The use of high quality plastics and sealing elements made of EPDM or FKM ensure durability even with aggressive media such as dialysate, cleaning agents and disinfectants.

The PTFE Bellows ensure a longer lifetime than a rubber membrane as it is less likely to become brittle.

All materials meet EU, RoHS and REACH regulations.

typical performance curve



2/2-way direct acting dialysis valve, NC
 Medium de séparation par soufflet en PTFE



A. u. K. Müller

Series U9x.60x



I



II



III



IV



V



VI



VII



VIII

Technical Data

Type	Solenoid valve for dialysis machines	
Construction	2/2-way single chamber straight valve, direct acting	
Function	NC (normally closed) NO (normally open) on request	
Fitting position	any	
Media	Water Dialysis fluid Disinfection solutions in the concentration for each application	
T-Medium	90	°C max.
T-Ambient	70 (60	°C max. °C max. on coils MS.024, MS.025)
DN	3,6 4,0	mm mm
p-Operating	10 - 400	ΔkPa (abs) both flow directions
Cv-value DN 3,6 DN 4,0	3,2 4,2	l/min l/min
Coil type	MS.006, MS.024, MS.025	
Nominal voltages	24	V DC
	other voltages on request	
Voltage tolerance	±10%	
Duty cycle	100%	
Nominal power	9,5 W	
Protection Type	IP 00, IP 65 according to EN 60529	
Coil connections	flat tabs 6,3 x 0,8 mm plug socket according to EN 175301-803 (IP65), several cable connections (IP65)	
Insulation class	F	according to EN 60730
Protection class	III	according to EN 60730 (for incorporation in class I)

Materials

Valve body	PEI PPSU on request PEEK on request
Plunger guide	PTFE
Plunger and spring	stainless steel
Bellow	PTFE
Seal	EPDM FKM on request
Coil coating	PBT, PET or epoxy resin

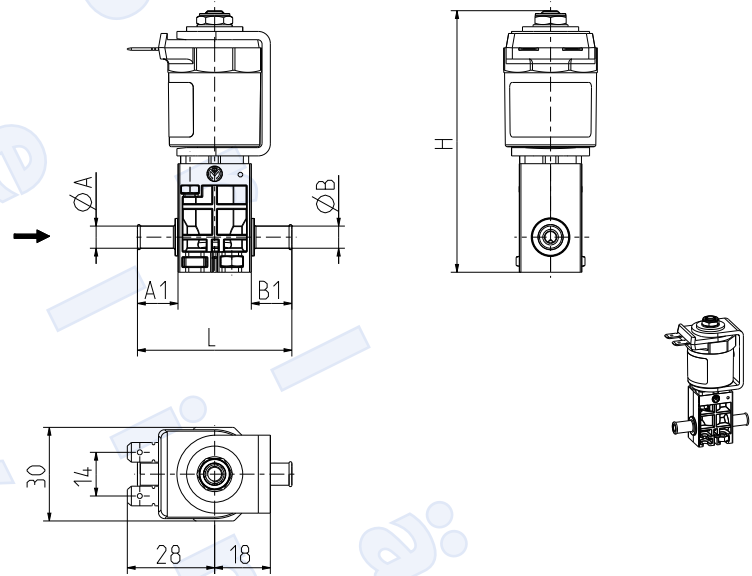
90.60x	MS.024 (IP65)	
92.60x	MS.006 (IP00)	
93.60x	MS.025 (IP65)	

2/2-way direct acting dialysis valve, NC
medium separation by PTFE bellow

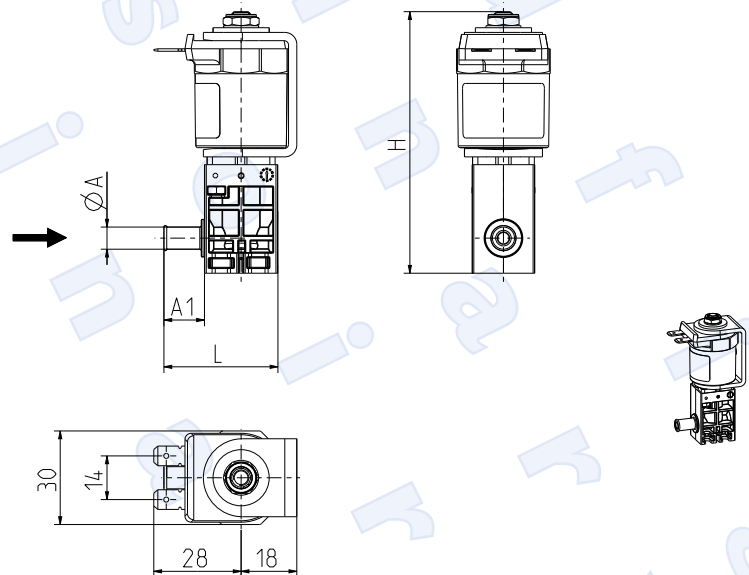


A. u. K. Müller

Series U9x.60x



II



Options

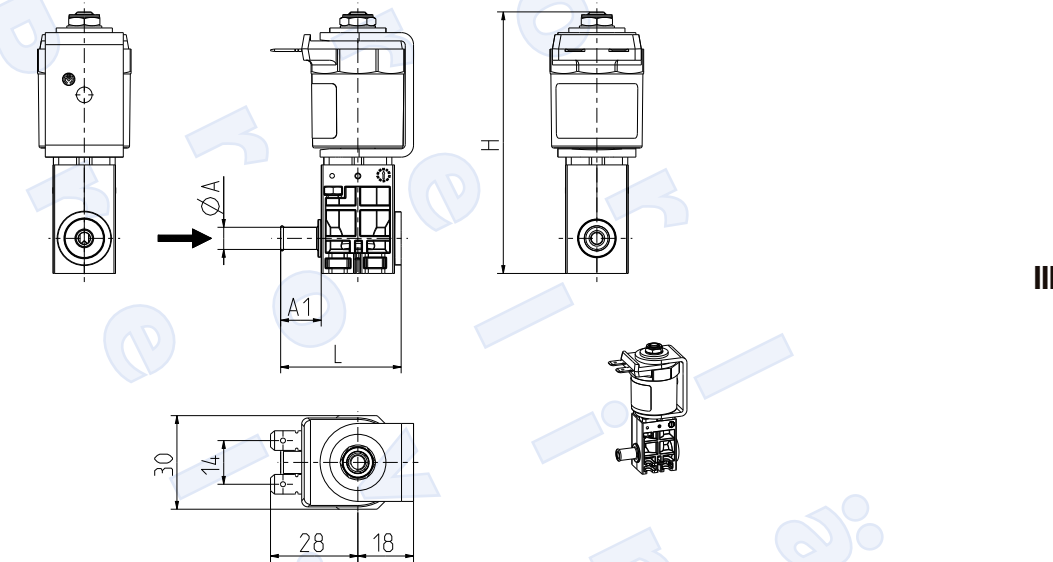
Variant	DN	$\varnothing A$	A1	$\varnothing B$	B1	Length L	Height H
I	3,6	7,1 Nozzle	13,0	7,1 Nozzle	13,0	49,5	84,0
II	3,6	7,1 Nozzle	13,0	-	-	37,0	84,0

2/2-way direct acting dialysis valve, NC
 Medium de séparation par soufflet en PTFE

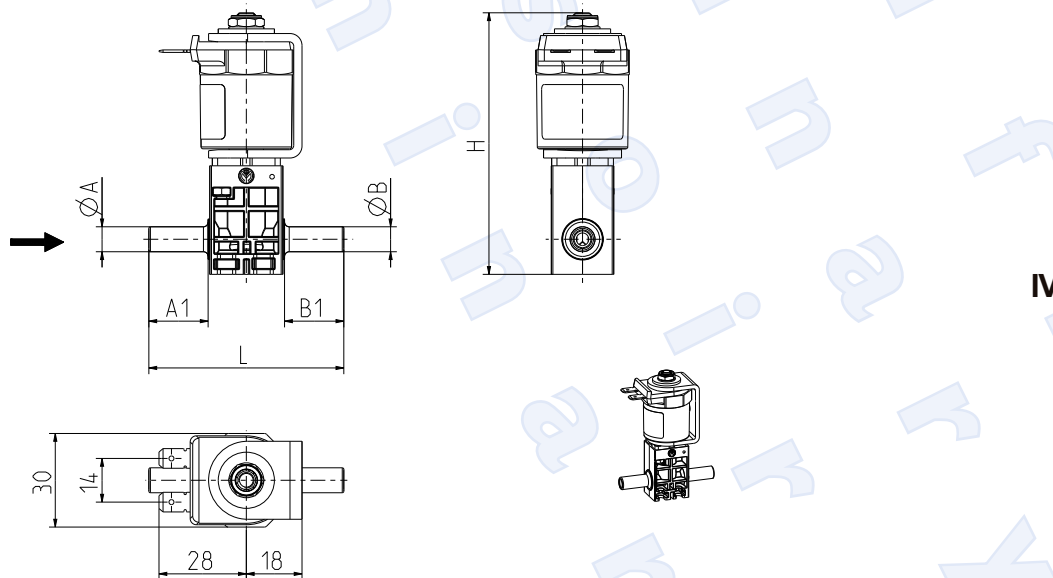


A. u. K. Müller

Series U9x.60x



III



IV

Options

Variant						Length	Height
	DN	øA	A1	øB	B1	L	H
III	3,6	7,1 Nozzle	13,0	-	-	39,0	84,0
IV	3,6	8,0 Nozzle JG	19,0	8,0 Nozzle JG	19,0	62,5	84,0

JG = John Guest connection

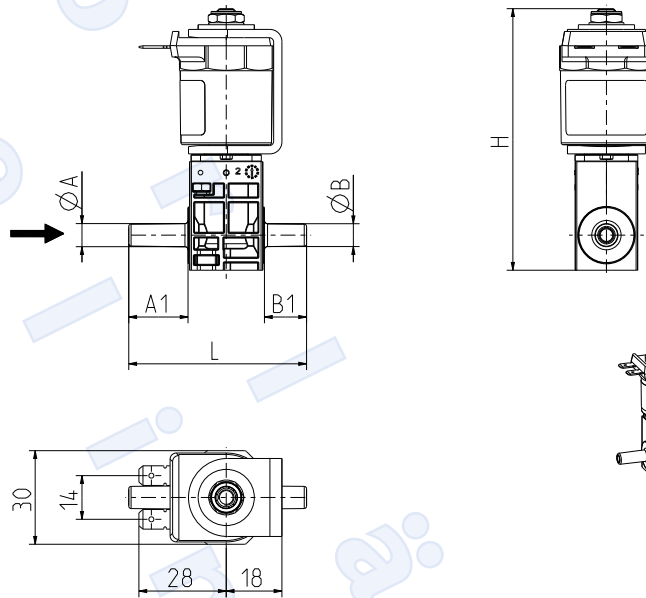
2/2-way direct acting dialysis valve, NC
medium separation by PTFE bellow



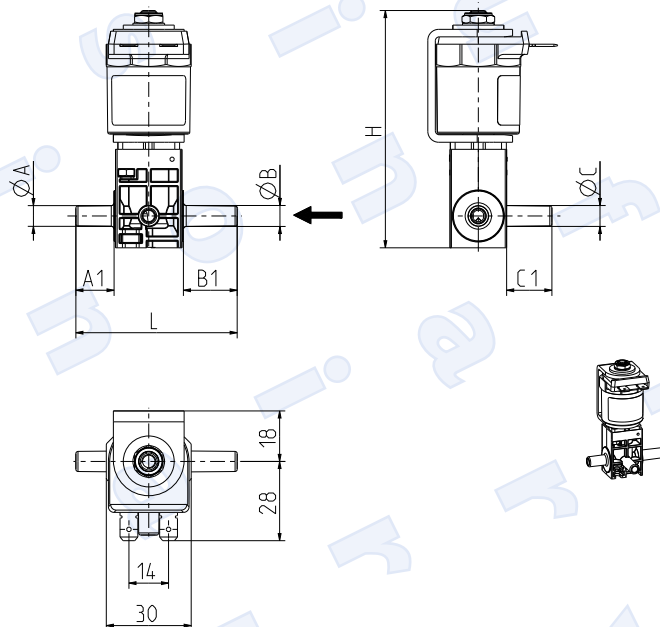
A. u. K. Müller

Series U9x.60x

V



VI



Options

Variant	DN	øA	A1	øB	B1	øC	C1	Length L	Height H
V	3,6	7,3 Nozzle	19,0	7,3 Nozzle	13,5	-	-	57,0	84,0
VI	3,6	7,3 Nozzle	13,5	7,3 Nozzle	19,0	7,5 Nozzle	16,0	57,0	84,0

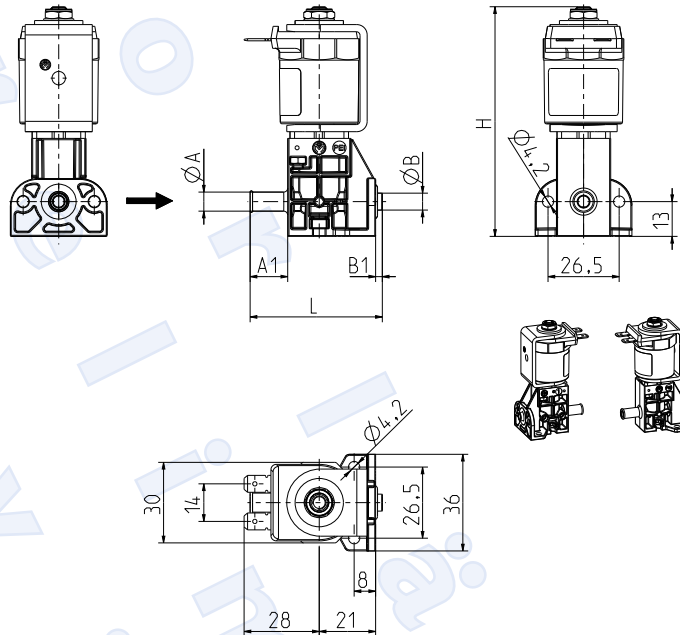
2/2-way direct acting dialysis valve, NC
 Medium de séparation par soufflet en PTFE



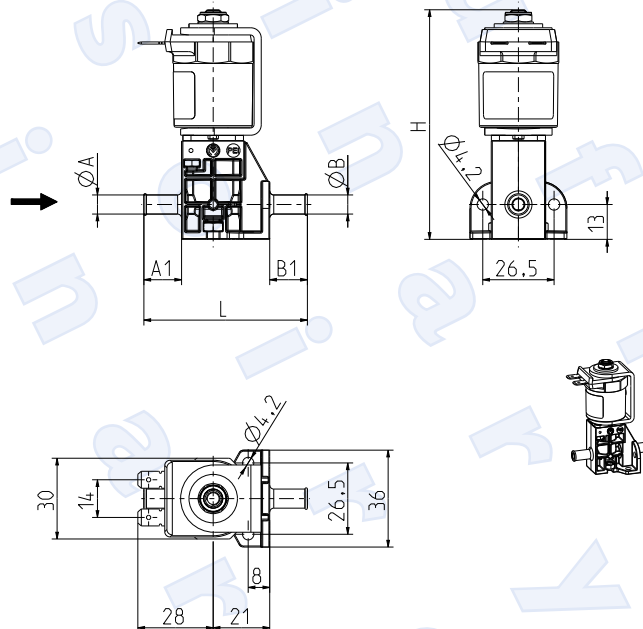
A. u. K. Müller

Series U9x.60x

VII



VIII



Options

Variant	DN	øA	A1	øB	B1	Length L	Height H
VII	4,0	7,1 Nozzle	14,0	6,3	2,5	49,0	85,0
VIII	4,0	7,1 Nozzle	14,0	7,1 Nozzle	14,0	61,0	85,0