

AZURA® Valve Unifier VU 4.1

The valve drive AZURA® Valve Unifier VU 4.1 enables automatic valve switching. Due to its low switching time, the flow path is blocked only for a very short time, and pressure peaks are reduced to a minimum. Valves are identified via RFID technology, which guarantees an easy valve exchange of KNAUER valves with RFID technology. This RFID technology allows to easily check GLP data, and this way to simplify maintenance such as the exchange of a rotor seal. The display enables user-friendly standalone operation. In addition, the valve drive can be operated with software as well with an optional touch display (Mobile Control), via LAN or analog input/output, by which it can be integrated into nearly every LC system.

Specifications

Communication

Interfaces	LAN, display, terminal strip
Control	Display, software, event control
Inputs	Binary control; Home, Backward/Inject, Forward/Load, Start IN
Outputs	Trigger out, Event

General

Power supply	External DC 24V, 65 W
Dimensions	80 x 123 x 192 mm (W x H x D)
Weight	1.9 kg
Ambient conditions	Temperature range: 4-40 °C; 39.2-104 °F below 90 % humidity (non condensing)

Key features

- One valve drive for all valves
- Ultra fast switching cycle
- Easy maintenance
- Compact
- Multiple interfaces and drivers available



KNAUER offers various software control options:
www.knauer.net/softwarecontrol



For valve accessories
see p. 45



Valve drive VU 4.1 (AWA01)
with 6 port 2-position valve
(AVC28AC)



AVS34CE

AVN94CE

AVR38AC

AVC38AC

AVS62CE

Ordering details:

Valve drive

Device	Order number
VU 4.1 valve drive for V 4.1 valves	AWA01

Mounting bracket

Device	Order number
Mounting bracket to mount VU 4.1 to AZURA L device	A9854-3

Valves for valve drive VU 4.1

Manual valves*

*the mounting bracket A9853 is required to mount the manual valves to an AZURA L device

Ports	Stator material	Rotor material	Capillary connection	Max. pressure [bar]	Bore size [mm]	Order number
6	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVJ26AE
6	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVI28AC
6	PEEK	PEEK	1/16" (UNF 10-32)	240	0.75	AVG24CE
6	SST DLC ¹	PEEK	1/8" (UNF 1/4-28 coned)	300	1.5	AVK25AE
6	PEEK	PEEK	1/8" (UNF 1/4-28 coned)	50	2	AVL22CE
8	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVJ36AE
8	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVI38AC

2-position valves

Ports	Stator material	Rotor material	Capillary connection	Max. pressure [bar]	Bore size [mm]	Order number
6	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVD26AE
6	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVC28AC
6	PEEK	PEEK	1/16" (UNF 10-32)	240	0.75	AVD24CE
6	SST DLC ¹	PEEK	1/8" (UNF 1/4-28 coned)	300	1.5	AVE25AE
6	PEEK	PEEK	1/8" (UNF 1/4-28 coned)	50	2	AVF22CE
8	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVD36AE
8	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVC38AC

Multiposition valves

Ports	Stator material	Rotor material	Capillary connection	Max. pressure [bar]	Bore size [mm]	Order number
6	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVR28AC
6	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVS26AE
6	SST DLC ¹	PEEK	1/8" (UNF 1/4-28 coned)	300	1.5	AVT25AE
8	SST DLC ¹	Vespel	1/16" (UNF 10-32)	1200	0.3	AVR38AC
8	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.75	AVS36AE
8	SST DLC ¹	PEEK	1/16" (UNF 10-32)	300	0.75	AVS35AE
8	PEEK	PEEK	1/16" (UNF 10-32)	240	0.75	AVS34CE
8	SST DLC ¹	PEEK	1/8" (UNF 1/4-28 coned)	200	1.5	AVU34AE
8	PEEK	PEEK	1/8" (UNF 1/4-28 coned)	50	2	AVU32CE
12	SST DLC ¹	PEEK	1/8" (UNF 1/4-28 coned)	50	1.5	AVT52AE
16	SST DLC ¹	PEEK	1/16" (UNF 10-32)	500	0.6	AVQ66AE
16	PEEK	PEEK	1/16" (UNF 10-32)	50	0.75	AVS62CE

Special purpose valves*

*for detailed information please check our website: www.knauer.net/valves

Valves	Capillary connection	Max. pressure [bar]	Bore size [mm]	Order number
Column selection valve, biocompatible Allows switching of up to 5 columns incl. bypass and reverse flow option.	1/16" (UNF 10-32)	50	0.4	AVZ52CE
Multi-injection valve, biocompatible Allows manual and automated sample loading as well as direct injection.	1/16" (UNF 10-32)	240	0.75	AVN94CE
Multi-injection valve, stainless steel Allows manual and automated sample loading as well as direct injection.	1/16" (UNF 10-32)	500	0.75	AVN96AE

¹ stainless steel coated with diamond-like carbon