

VXL: Unit through valve

How energy efficiency is improved

Absolutely no losses through leakage, therefore energy consumption minimised.

Areas of application

Valve for regulating heating zones, air secondary-treatment appliances and fan-coil units in combination with thermal unit valve drive AXT 211, continuous drive AXS 215S or motorised unit valve drive AXM 117(S).

Features

- Nominal pressure 16 bar or as per DIN 3841 10 bar
- Nominal diameter DN10 to DN32
- Linear characteristic
- Adjustable kvs value in case of DN10 to DN15 standard version
- Standard valve and angle valve version
- Nominal diameter DN25 and DN32, decompressed
- Inlet female thread and outlet with box nut and connection nipple, conical seal (Euroconus) as per DIN 3841
- If the spindle is depressed, the control passage is closed
- Closes against the pressure

Technical description

- Valve body made of gun metal, DN10 to DN20 nickel-plated
- Stainless steel spindle
- Cone with soft seal made of EPDM
- Stuffing box with double O-ring seal
- Valve fitting width as per DIN3841-T1

Type	Nominal diameter DN	k _{vs} -value m ³ /h	Δp _{max} ¹⁾ bar	Nickel-plated body	Weight kg
With stable k _{vs} value					
VXL 025 F200 ²⁾	25	5.5	1.0	no	0.96
With variable k _{vs} value					
VXL 010 F260	10	0.04...0.72	2.0	yes	0.29
VXL 010 F250	10	0.25...1.70	1.0	yes	0.29
VXL 015 F260	15	0.04...0.72	2.0	yes	0.31
VXL 015 F250	15	0.25...1.85	1.0	yes	0.31
VXL 020 F260	20	0.04...0.72	2.0	yes	0.43
VXL 020 F250	20	0.25...1.95	1.0	yes	0.43
Pressure-relieved through valves					
VXL 025 F201 ²⁾	25	5.5	4.0	no	1.0
VXL 032 F201 ²⁾	32	10.0	3.5	no	1.5
Angle valve					
VXL 010 F510	10	0.36	2.2	yes	0.23
VXL 010 F500	10	0.8	2.2	yes	0.23
VXL 015 F520	15	0.8	2.2	yes	0.28
VXL 015 F510	15	2.2	4.0	yes	0.28
VXL 015 F500 ²⁾	15	5.0	0.9	no	0.45
VXL 020 F500 ²⁾	20	7.0	0.8	no	0.58
Nominal pressure	PN 16	Characteristic curve		linear	
Type of construction	DIN 3841-D	Leakage rate		0.0001% of k _{vs}	
Max. operating pressure	16 bar at 130 °C	Valve stroke		2.5 mm	
Dimension drawing		Perm. operating temp.		2...130 °C	
VXL 010, 015, 020, F250, F260	M01890	Fitting instructions		MV 505261	
VXL 025, 050, F200, F201	M01891	fitted onto AXT 211		MV P100002547	
VXL 010, F500, F510	M04467	with auxiliary contacts			
VXL 015, F510, F520		fitted onto AXM 117/117S		MV 505456	
VXL 015, F500	M04468	fitted onto AXM 117 F200		MV 505816	
VXL 020, F500					

Accessories

0378038 001 k_{vs} adjustment key for VXL...F260

1) max. permissible pressure difference across the valve at which the actuator can still firmly open and close the valve. Figures stated are for a static pressure of 6 bar; at a static pressure of 16 bar, the values are reduced by 15%

2) not suitable for assembling with AXS 111S



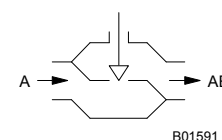
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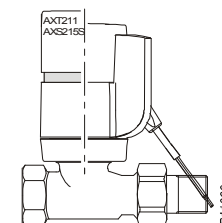
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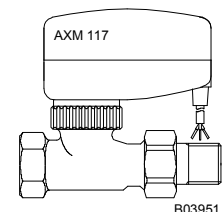
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Operation

The valve is closed (passage A-AB) by depressing the spindle, which is returned by spring pressure. The AXT 211 thermal drive allows the valve to be moved to the OPEN or CLOSED position. With the

AXS 215S continuous drive for unit valves or the AXM 117 motorised drive for unit valves, the valve can be moved to any position. On the AXM 117S (with positioner), the valve is positioned continuously by means of a control voltage of 0...10 V. As the control voltage rises, the F202 opens and the F302 closes.

Engineering and fitting notes

The final control element can be fitted in any position except facing downwards.
The ingress of condensate, dripping water etc. into the drive should be prevented.

To prevent damage resulting from non-usage, the valves should be operated for a short time at regular intervals. We recommend performing a stroke movement of at least 10% every month.

To increase the functional reliability of the valve, the system must conform to DIN EN 14336 (heating systems in buildings). DIN EN 14336 also states that the system has to be flushed through before being put into service.

In order to prevent cavitation noise from affecting rooms where quietness is essential, the pressure difference across the valve should not exceed 0.5 bar.

Fitting outdoors

If the devices are fitted outdoors, we recommend that additional measures be taken to protect them against the effects of the weather.

Settings in k_{vs} value m^3/h

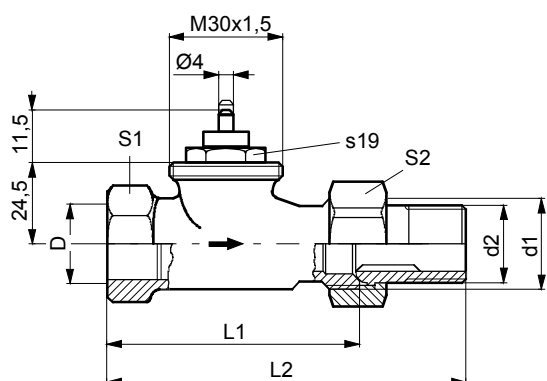
Scale	1	2	3	4	5	6	7	8	max.
VXL . . . F260	0.04	0.09	0.22	0.35	0.43	0.51	0.62	0.72	–
VXL010 F250	0.25	0.50	0.70	1.00	1.25	–	1.50	–	1.70
VXL015 F250	0.25	0.50	0.70	1.00	1.25	–	1.50	–	1.85
VXL020 F250	0.25	0.50	0.70	1.00	1.25	–	1.50	–	1.95

To make adjustments, see MV 505261

Additional information

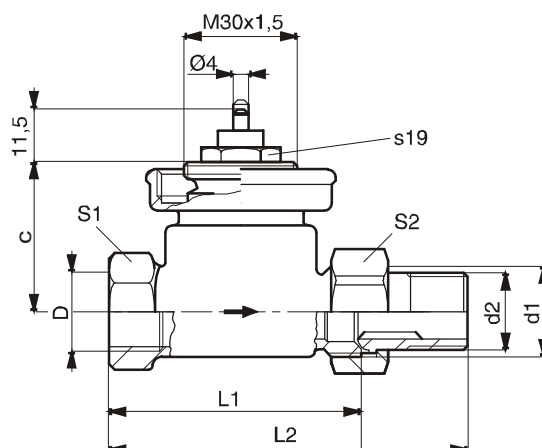
Valve input with female thread for thread-sealing pipes; output with male thread for the following connecting parts (supplied): nickel-plated cap nut and conically-sealing connecting nipple with male thread for DN 10...25; flat sealing with EPDM gasket for DN 32.

Dimension drawings



Type	F-Nr.	DN	D	d1	d2	L1	L2	S1	S2
VXL 010	F250 / F260	10	Rp 3/8	G 5/8	R 3/8	59	85	22	27
VXL 015	F250 / F260	15	Rp 1/2	G 3/4	R 1/2	66	95	27	30
VXL 020	F250 / F260	20	Rp 3/4	G 1	R 3/4	74	106	30	32

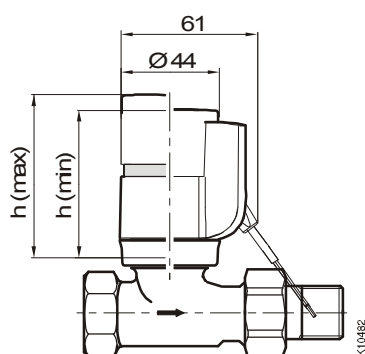
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Type	DN	D	d1	d2	L1	L2	S1	S2	c
VXL 025 F200	25	Rp 1	G1 1/4	R 1	90	122	43	47	40
VXL 025 F201	25	Rp 1	G1 1/4	R 1	90	122	43	47	42,5
VXL 032 F201	32	Rp 1 1/4	G1 1/2	R 1 1/4	110	146	50	52	61,5

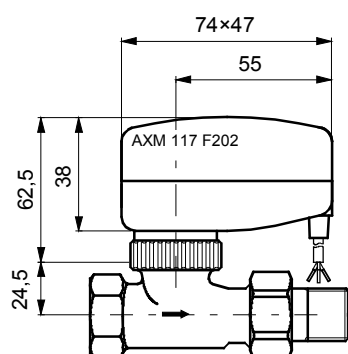
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Combinations with AXT/AXS thermal actuator and AXM motorised actuator

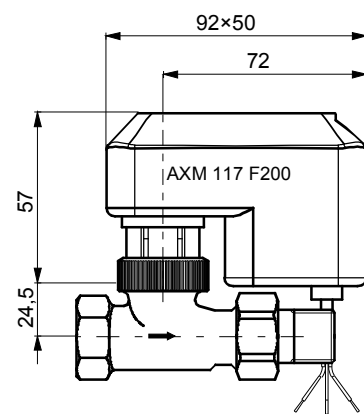


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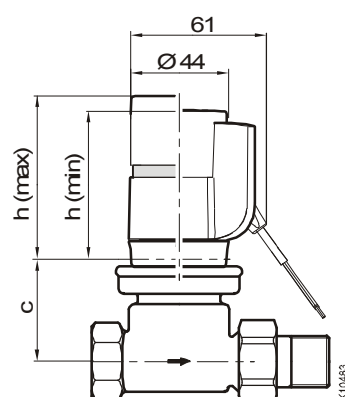
	h (min)	h (max)
NC	59	66



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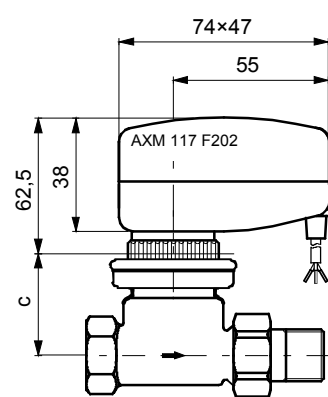


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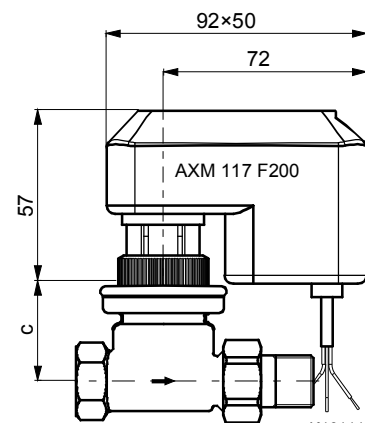


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	h (min)	h (max)
NO	59	64
manual	66.5	73.5

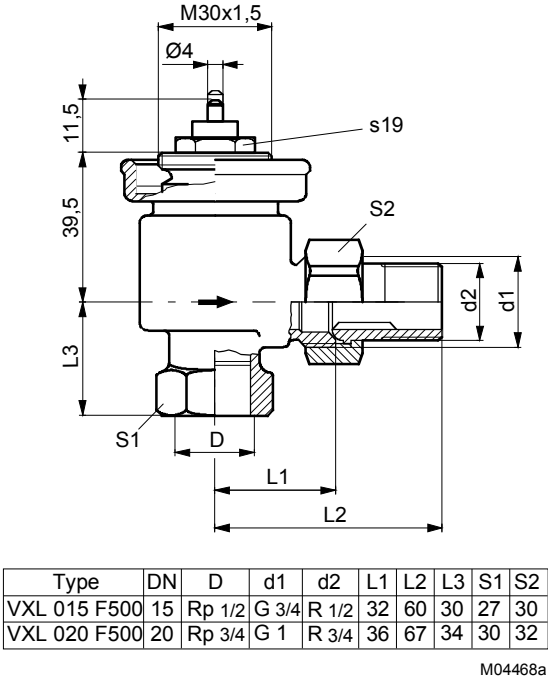
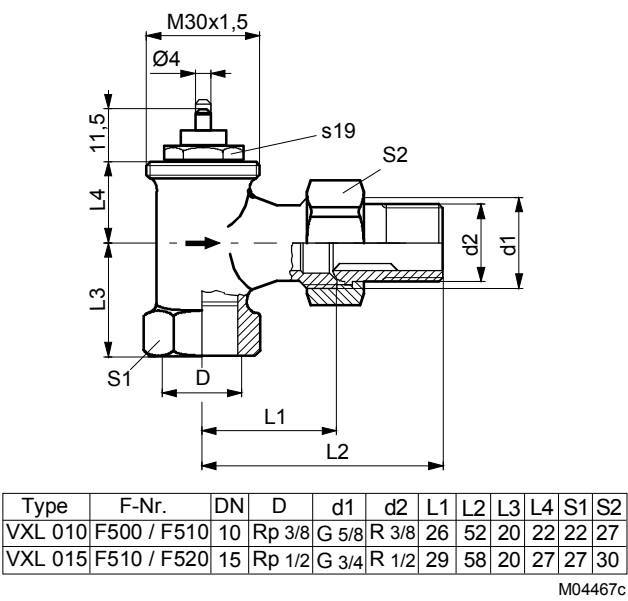


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Dimension drawings



Combinations with AXT, AXS thermal drive and AXM motorised drive.

