



Straight version ADN..

Angle version AEN..

ACVATIX™

## Radiator Lockshield Valves

**ADN..**  
**AEN..**

for 2-pipe heating systems

- Valve bodies made of brass, mat nickel-plated
- DN 10, DN 15 and DN 20
- Integrated presetting of  $k_v$ -values
- Internally and externally threaded (Rp/R) conforming to ISO 7-1
- Presetting protected by a cap

### Use

The radiator lockshield valves are for use in hot water heating plant to:

- shut off the flow of water to the radiator when doing maintenance work or when replacing the radiator
- throttle the flow of water for hydraulic balancing in the case of thermostatic valves without presetting or when using manual valves

## Type summary

Straight version	Angle version	DN	$k_v$ -value [m <sup>3</sup> /h] setting range
ADN10	AEN10	10	0...1.8
ADN15	AEN15	15	0...2.5
ADN20	AEN20	20	0...3.0

## Ordering

Example:

Product number	Stock number	Description	Quantity
AEN15	AEN15	Lockshield valves	2

Delivery

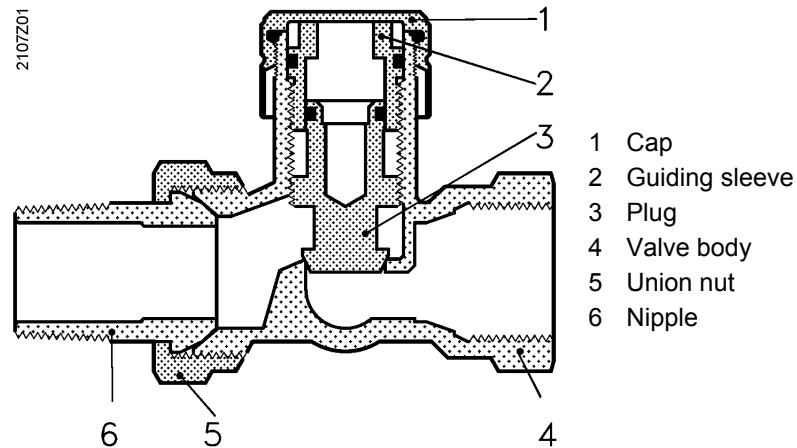
Valves and accessories are packed separately.

Rev. no.

See overview, page 6.

## Function / mechanical design

The flow rate can be throttled by turning the plug with an 8 mm hexagonal socket wrench.



## Accessories

AVN..

Compression fittings



Data Sheet  
N2100

## Engineering notes

### $k_v$ -value

The  $k_v$ -value gives the volumetric water flow  $\dot{V}_{100}$  in  $\text{m}^3/\text{h}$  at a pressure drop  $\Delta p_{V100}$  across the valve of 1 bar.

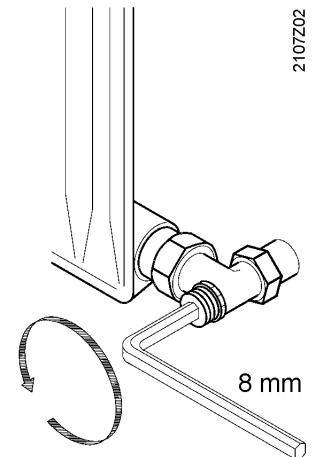
### $k_v$ -values at different positions

Type reference	$k_v$ -value [ $\text{m}^3/\text{h}$ ] with number of revolutions of plug										
	0.25	0.5	0.75	1	1.5	2	2.5	3	3.5	4	$k_{Vs}$
ADN10 / AEN10	0.15	0.35	0.45	0.6	0.9	1.2	1.5	1.6	1.7	1.8	1.8
ADN15 / AEN15	0.2	0.4	0.5	0.65	1.0	1.3	1.7	1.9	2.1	2.3	2.5
ADN20 / AEN20	0.2	0.4	0.6	0.8	1.3	1.8	2.2	2.4	2.6	2.8	3.0

The lockshield valves are supplied in their fully open position.

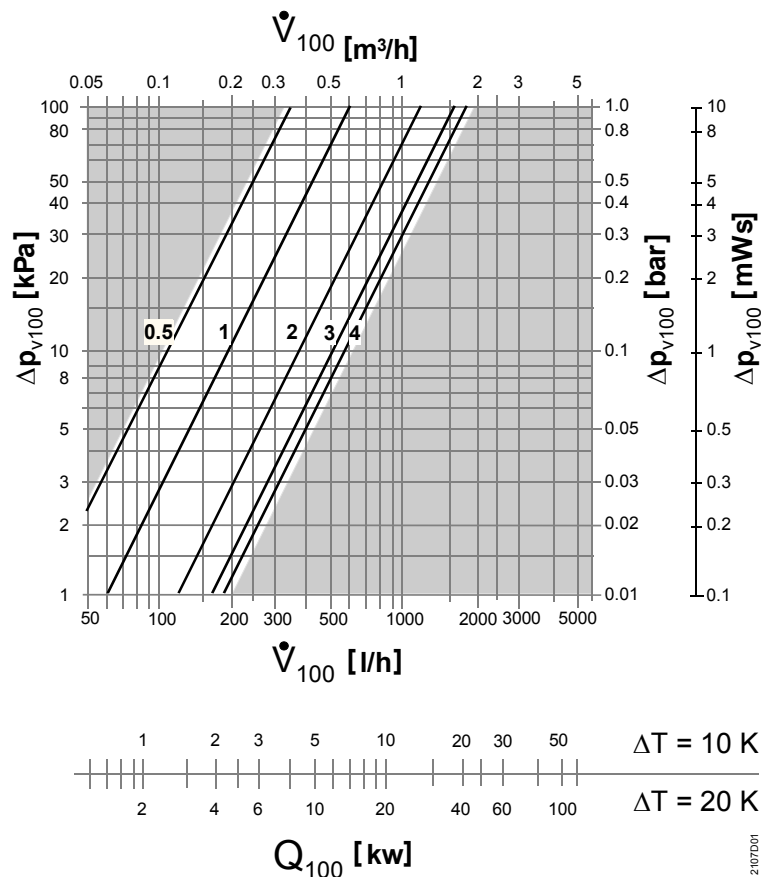
Setting procedure:

- Remove cap (use a spanner SW12, if required)
- Use an 8 mm hexagonal socket wrench. to fully close the plug (clockwise rotation)
- Set the required  $k_v$ -value by making the correct number of revolutions according to the above table or the chart given below (counterclockwise rotation)
- Replace cap

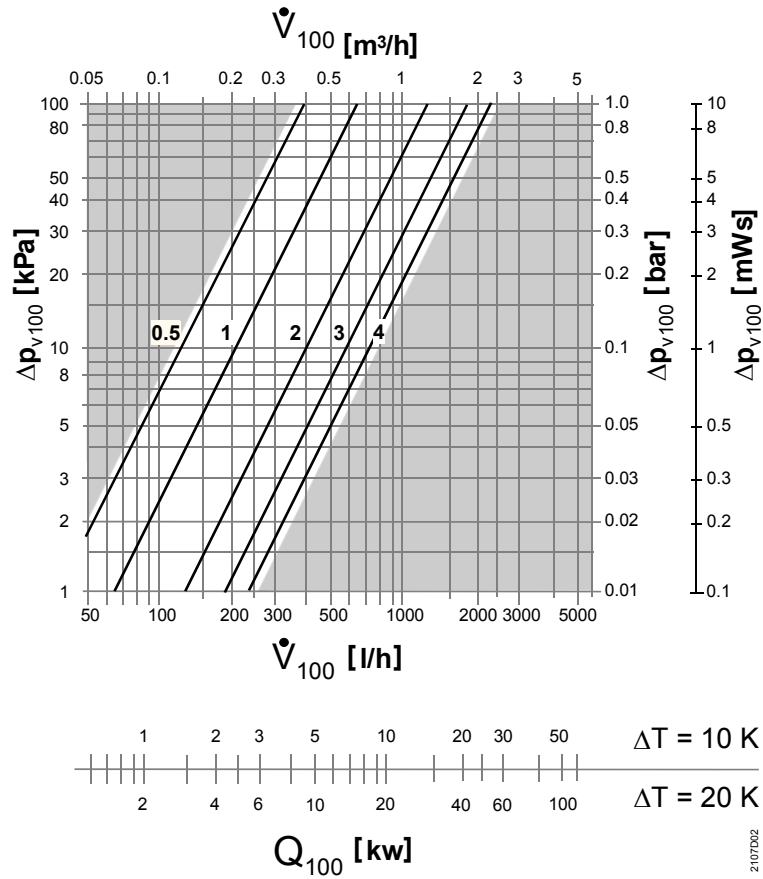


## Setting charts

### ADN10 AEN10

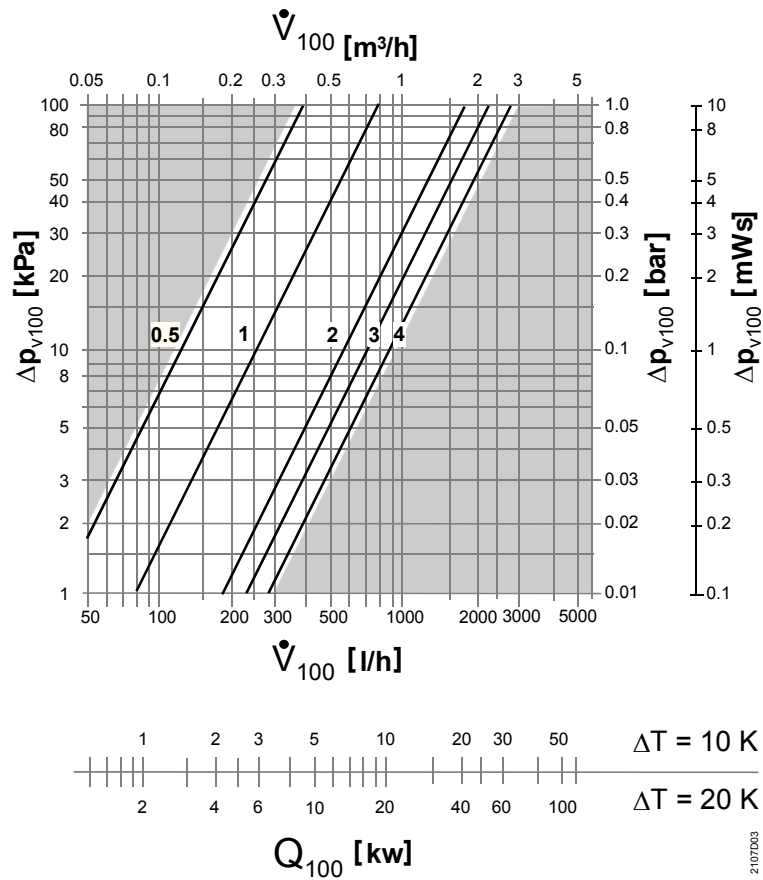


ADN15  
AEN15



2107D02

ADN20  
AEN20



2107D03

## Notes

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**Mounting** The lockshield valves are supplied fully open.

Orientation Optional

**Maintenance** The lockshield valves are maintenance-free.

Repair The valves cannot be repaired; the complete unit must be replaced.

## Disposal



The valve must not be disposed of together with domestic waste. Legislation may demand special handling of certain components, or it may be sensible from an ecological point of view.

**Current local legislation must be observed.**

## Warranty

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Application-related technical data must be adhered to.

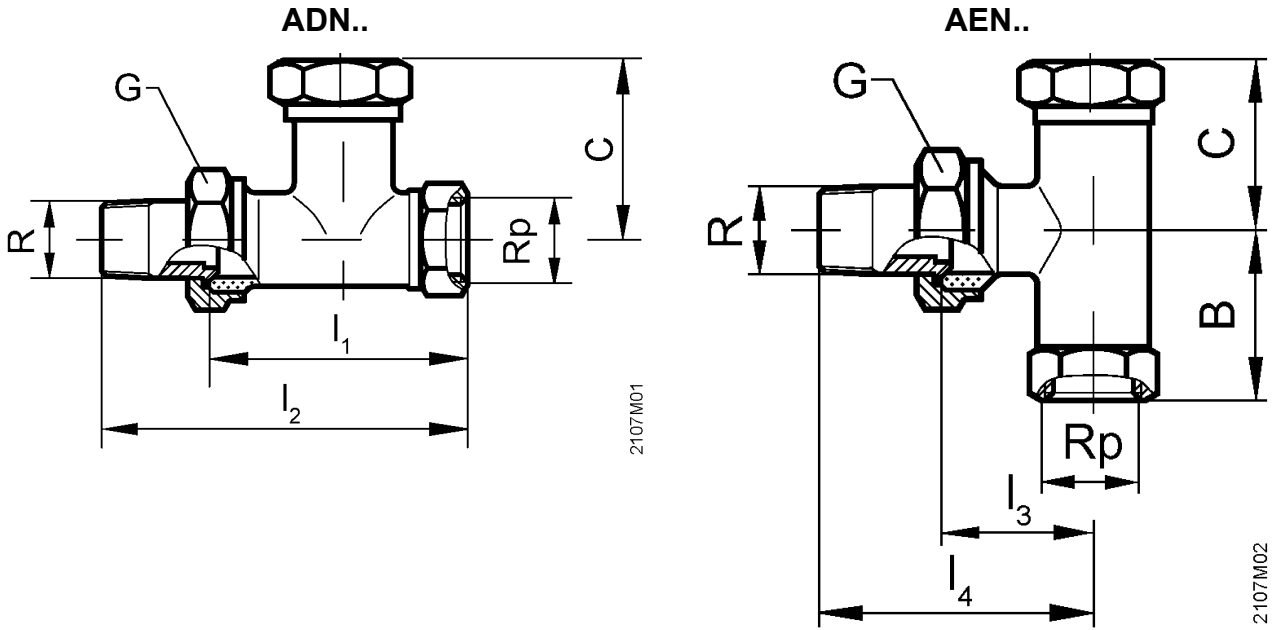
**If not observed, Siemens Building Technologies / HVAC Products will not assume any responsibility.**

## Technical data

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<b>Functional data</b>	Pressure class	PN 10	
	Suitable media	cold and hot water, water-glycol mixtures; recommendation: water treatment to VDI 2035	
	Medium temperature	max. 120 °C	
	Perm. operating pressure	1,000 kPa (10 bar)	
	Test pressure	1,600 kPa (16 bar)	
<b>Standards</b>	Environmental compatibility	ISO 14001 (Environment) ISO 9001 (Quality) SN 36350 (Environmentally compatible products) RL 2002/95/EG (RoHS)	
	Valve body	brass, mat nickel-plated	
	Fitting	brass, mat nickel-plated	
	Cap	brass, mat nickel-plated	
<b>Materials</b>	O-ring	NBR	
	Refer to «Dimensions»		
	Mounting length	DIN 3842-1	
	Thread	Rp internally threaded	to ISO 7-1
	R externally threaded	to ISO 7-1	
	G thread	to ISO 228/1	

**Dimensions**



Type	DN	Dimensions [mm]				Thread [inch]			Weight [kg]		
		l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	B	C	Rp		R	G
ADN10	10	51	76				40	3/8	3/8B	5/8	0.150
ADN15	15	53	81				41	1/2	1/2B	3/4	0.210
ADN20	20	61	92				40	3/4	3/4B	1	0.325
AEN10	10			27	51	23	34	3/8	3/8B	5/8	0.125
AEN15	15			30	57	27	36	1/2	1/2B	3/4	0.200
AEN20	20			34	65	30	33	3/4	3/4B	1	0.280

Prod. no.	DN	Compression fittings					
		for copper and soft steel pipes			for plastic pipes with aluminum foil		
		Prod. no.	Connection valve side	Connection pipe side	Prod. no.	Connection valve side	Connection pipe side
		[Inch]	pipe Ø [mm]		[Inch]	pipe Ø [mm]	
ADN10	10						
ADN15	15	AVN15-15	½	15	AVN15-A16	½	16 x 2
ADN20	20						
AEN10	10						
AEN15	15	AVN15-15	½	15	AVN15-A16	½	16 x 2
AEN20	20						

**Revision numbers**

Product number	Valid from rev. no.	Product number	Valid from rev. no.
ADN10	..A	AEN10	..A
ADN15	..A	AEN15	..A
ADN20	..A	AEN20	..A