



EN 215-1



Straight version ADN...



Angle version AEN...



## Radiator Lockshield Valves

for 2-pipe heating systems

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

- Valve bodies made of brass, mat nickel-plated
- DN10, DN15 and DN20
- 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

When ordering, please give quantity, product name and type reference.

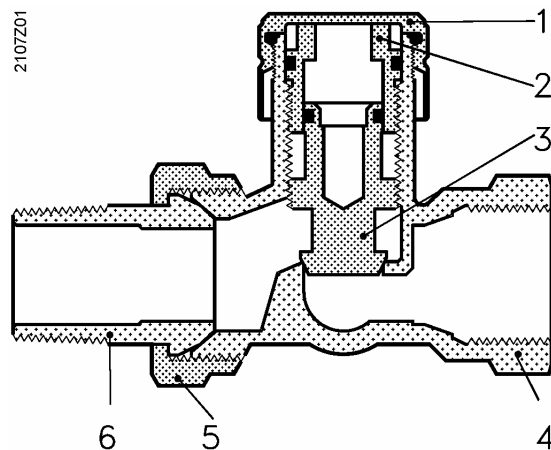
Example: 2 lockshield valves AEN15

### Delivery

Lockshield valves and accessories are packed separately.

## Function / mechanical design

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



- 1 Cap
- 2 Guiding sleeve
- 3 Plug
- 4 Valve body
- 5 Union nut
- 6 Nipple

## 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.

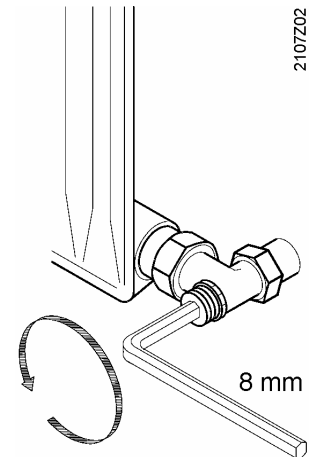
### $k_v$ -values at different positions

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.

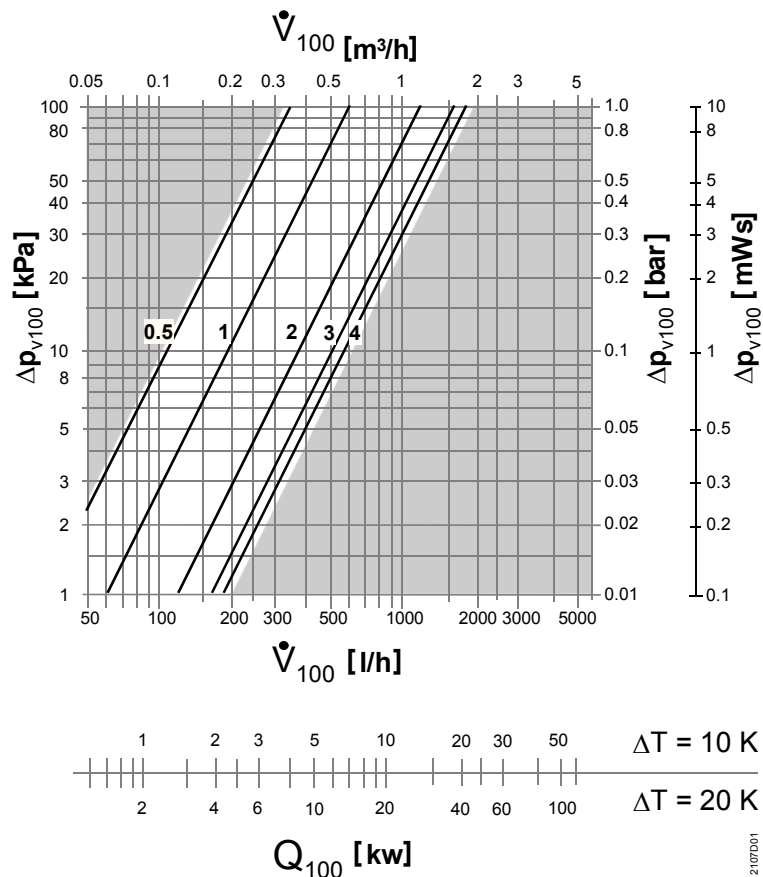
Setting procedure:

- 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

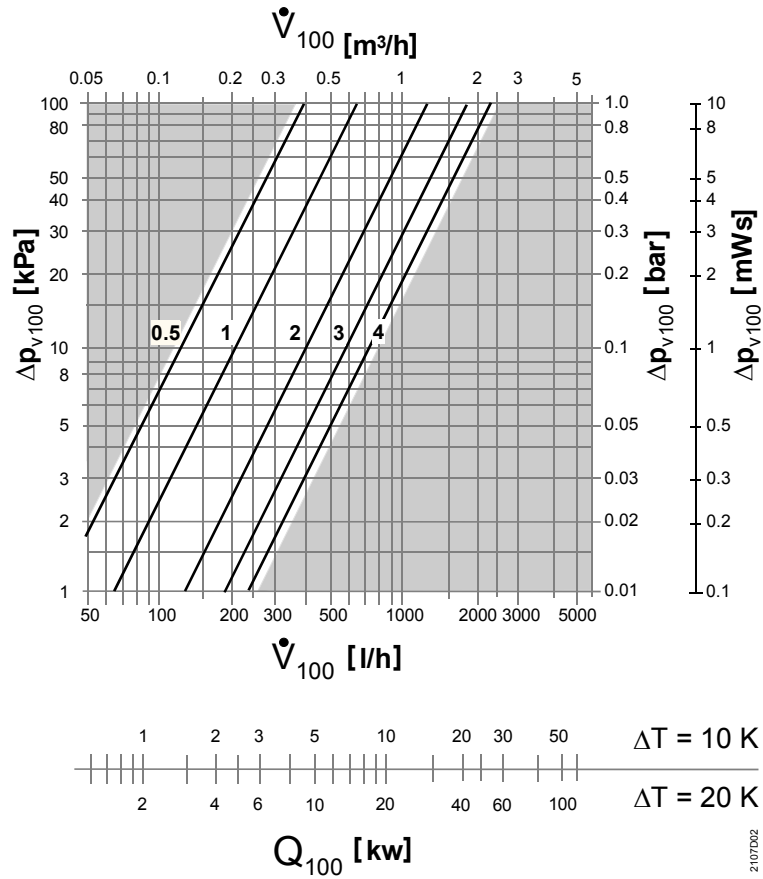


## Setting charts

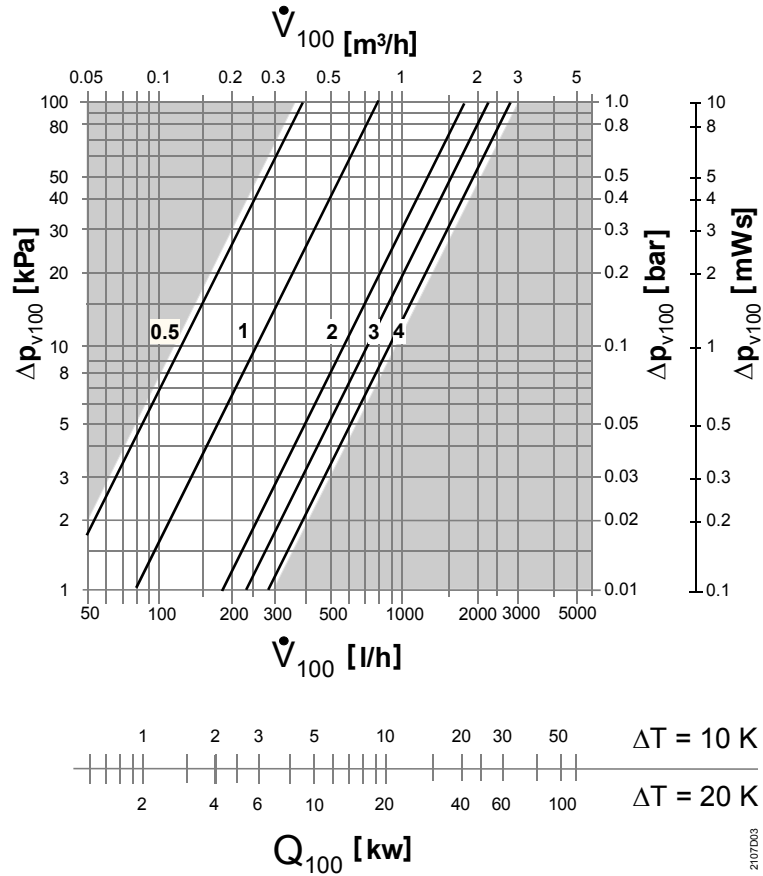
### ADN10 AEN10



ADN15  
AEN15




ADN20  
AEN20



## Notes

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<b>Mounting</b>	The lockshield valves are supplied fully open.
Orientation	Optional
<b>Maintenance</b>	The lockshield valves are maintenance-free.
Repair	The valves cannot be repaired; the complete unit must be replaced.
<b>Disposal</b> 	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. <b>Current local legislation must be observed.</b>

## Warranty

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Application-related technical data must be adhered to.

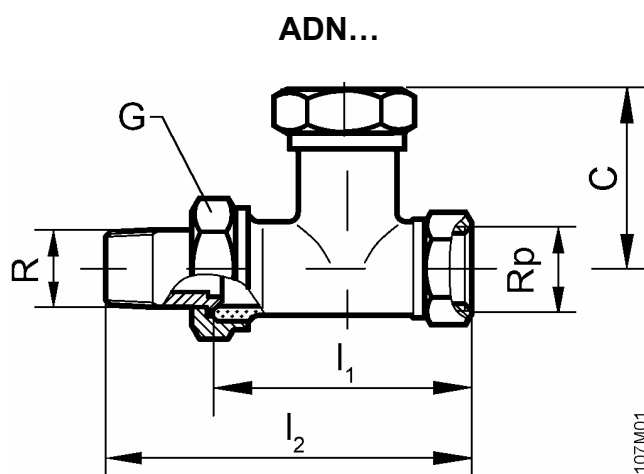
**If not observed, Siemens Building Technologies / HVAC Products will not assume any responsibility.**

## Technical data

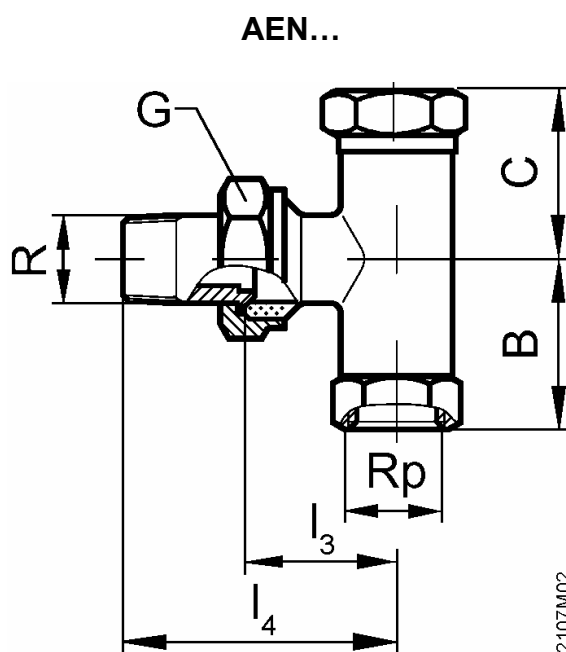
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<b>Functional data</b>	Pressure class	PN 10	
	Suitable media	cold and hot water, water-glycol mixtures; recommendation: water treatment to VDI 2035	
	Medium temperature	max. 120 °C	
	Perm. operating pressure	1,000 kPa (10 bar)	
	Test pressure	1,600 kPa (16 bar)	
<b>Materials</b>	Valve body	brass, mat nickel-plated	
	Fitting	brass, mat nickel-plated	
	Cap	brass, mat nickel-plated	
	O-ring	NBR	
<b>Dimensions / weight</b>	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



2107M01



2107M02

Type	DN	Dimensions [mm]					Thread [inch]			Weight [kg]	
		I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	I <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