



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

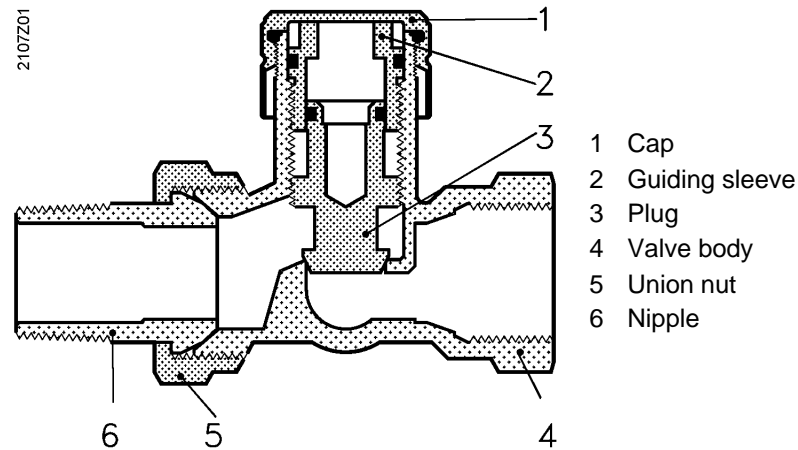
Example:	Type	Order number	Description	Quantity
	AEN15	AEN15	Lockshield valves	2

Delivery Valves and accessories are packed separately.

Rev. no. See overview, page **Fehler! Textmarke nicht definiert..**

## 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

**$k_v$ -value**

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

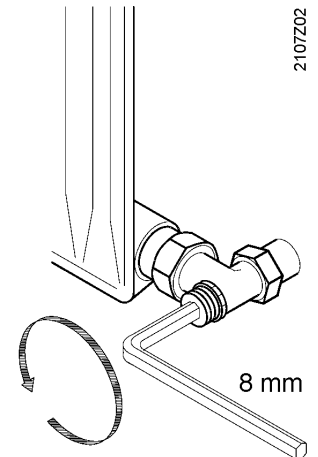
**$k_v$ -values at different positions**

Type reference	$k_v$ -value [ $m^3/h$ ] 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.

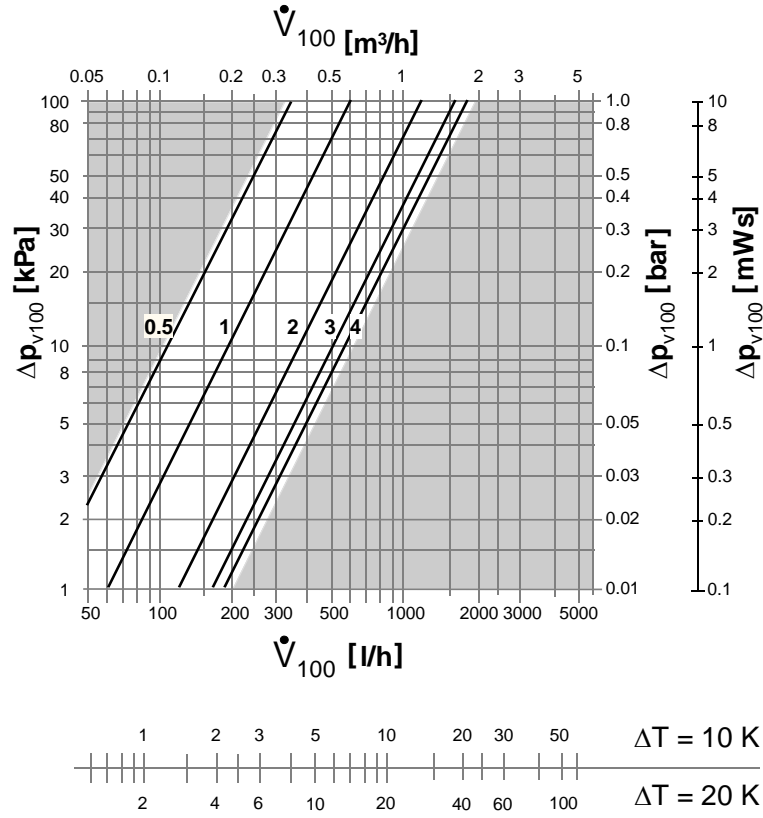
Setting procedure:

- 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

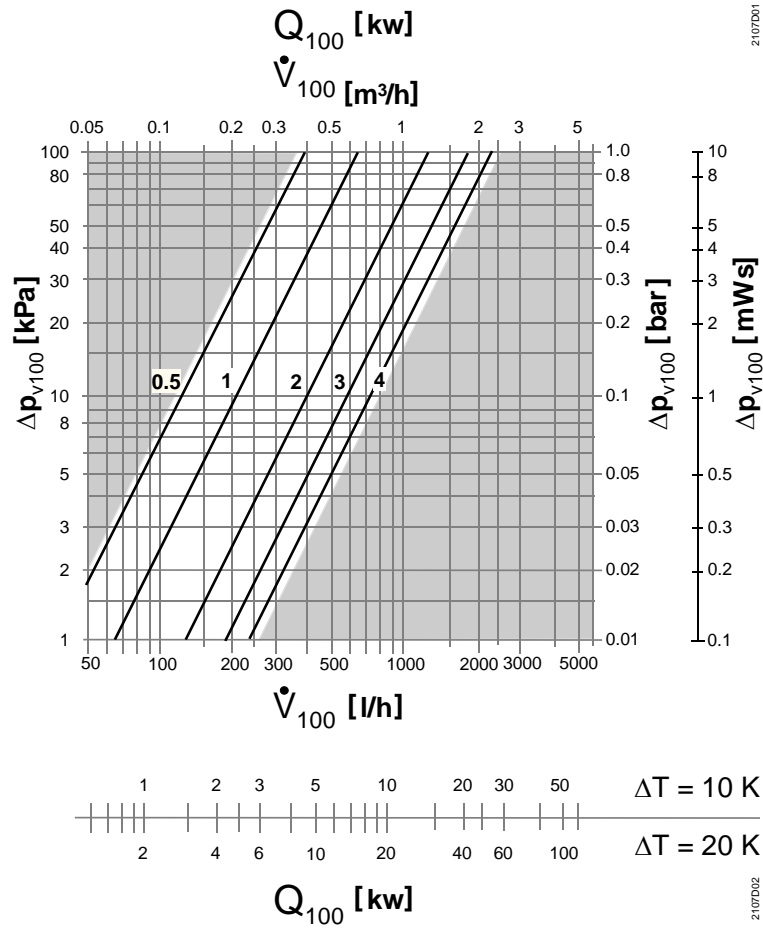


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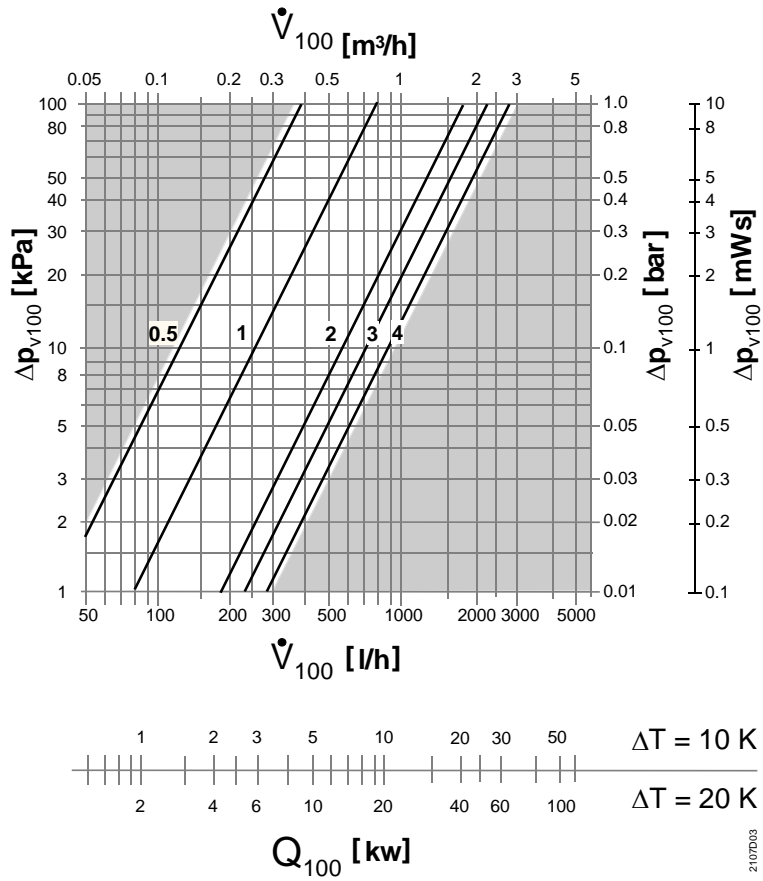
ADN10  
AEN10



ADN15  
AEN15



ADN20  
AEN20



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## 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>	Do not dispose of the device as household waste. <ul style="list-style-type: none"><li>• Special handling of individual components may be mandated by law or make ecological sense.</li><li>• Observe all local and currently applicable laws and regulations.</li></ul>

## Warranty

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Application-related technical data must be adhered to.  
If not observed, Siemens will not assume any responsibility.

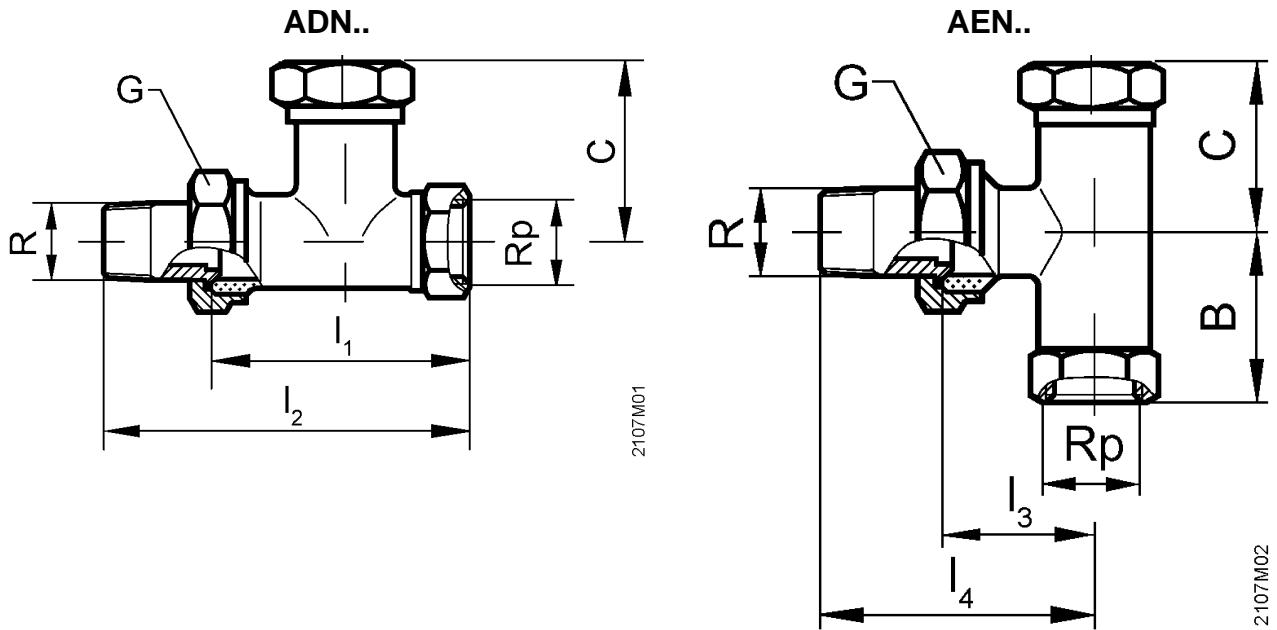
## Technical data

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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>Environmental compatibility</b>	Product environmental declaration (contains data on RoHS compliance, materials composition, packaging, environmental benefit, disposal)	CE1E2107*)	
	RoHS conformity declaration	compliant	
<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	

\*) The documents can be downloaded from <http://siemens.com/bt/download>.

## Dimensions



Type	DN	Dimensions [mm]						Thread [inch]			Weight [kg]
		$l_1$	$l_2$	$l_3$	$l_4$	B	C	$R_p$	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 [Inch]	Connection pipe side pipe Ø [mm]	Prod. no.	Connection valve side [Inch]	Connection pipe side pipe Ø [mm]
ADN10	10						
ADN15	15	AVN15-15	1/2	15	AVN15-A16	1/2	16 x 2
ADN20	20						
AEN10	10						
AEN15	15	AVN15-15	1/2	15	AVN15-A16	1/2	16 x 2
AEN20	20						

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