

## V2SAR Series

### Characterized Control Valves, 2-way

#### Description

Suitable for closed and open warm-and cold-water HVAC systems.

Used in water side modulating control of air handling and heating HVAC systems.

Zero Leakage.

Order Code	Size / Thread	KVs Value
V2SAR.65_120	DN65 / R2 1/2"	120
V2SAR.80_160	DN80 / R3"	160
V2SAR.100_275	DN100 / R4"	275
V2SAR.125_396	DN125 / R5"	396
V2SAR.150_544	DN150 / R6"	544



#### Features

##### Equal-percentage Flow Characteristics

The valve from A to AB has a perfect equal-percentage control curve, and the rangeability is >100:1. The valve core is made of stainless steel, which is more corrosion resistant and has a longer service life.

##### Fixed Valve Core

It adopts fixed valve core structure with a high close-off DP and a low torque.

##### Zero Leakage Rate

It is "0" leakage rate when the valve is closed from A to AB.

##### Stainless Steel Full Core

It adopts full core structure with dual seal and is made of stainless steel with corrosion resistance.

##### Double Flange Connection

It is much easier to locate and install with double flange connection compared to wafer connection.

##### Quality Materials

The valve body is made of high-quality ductile iron (EN-GJS-450-10), and the surface adopts electrostatic spraying craft, the body has better intensity and corrosion resistance.

## General data

### Technical data

<b>Fluid</b>	Cold and hot water with up to 50% vol. glycol
<b>Fluid temperature</b>	-5...120°C
<b>Close-Off differential pressure</b>	800 & 600 kPa
<b>Differential pressure rating</b>	350 KPa
<b>Operational Pressure rating</b>	PN16
<b>Flow characteristic</b>	A-AB Equal percentage
<b>Leakage rate</b>	Zero leakage
<b>Angle of rotation</b>	90°
<b>Pipe connection</b>	flanged ISO 7005
<b>Installation position</b>	Upright (stem on top)
<b>Service</b>	Maintenance free
<b>Rangeability</b>	>100:1

### Material

<b>Body</b>	Ductile iron
<b>Stem</b>	Stainless steel
<b>Stem seal</b>	Stainless steel
<b>Seat</b>	PTFE
<b>O-ring</b>	FKM

### Functional data

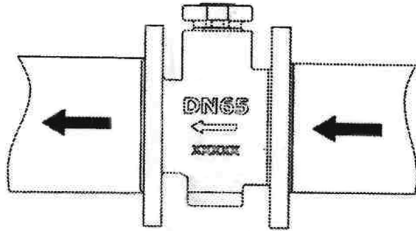
<b>Application</b>	Water
<b>Installation places</b>	Plant Rooms of Spaces

## Security Notes / Disposal Notes

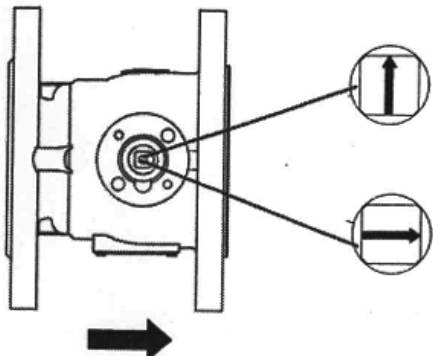
The valve has been designed for use in heating, ventilation and air conditioning systems. The device is not allowed to be used outside the specified field of application, especially in airplanes.

It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly. When determining the flow characteristic, the accepted directives must be observed. The device is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Dimensions

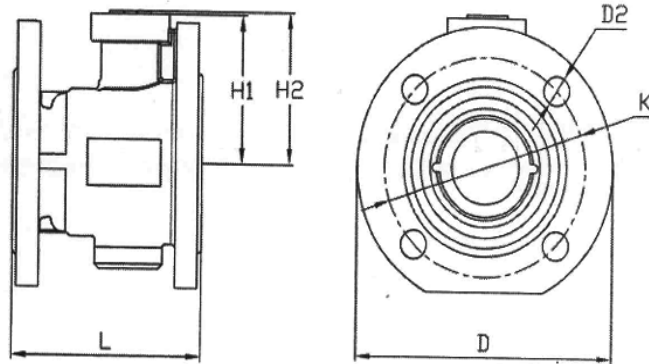


Pay attention to the flow direction during installation!



Arrow on valve shaft top is up, valve closed.

Arrow on valve shaft top is to the right, valve opened.



DN	D mm	D2 mm	K mm	L mm	H1 mm	H2 mm	Weight Kg
DN65	185	4-19	145	136.5	98	100	10
DN80	200	8-19	160	168	105	107	12.5
DN100	220	8-19	180	211	117	119	18
DN125	250	8-19	210	263	137.5	139.5	26
DN150	285	8-23	240	315	152	154	36.5

**Commonly used valve / Actuator Combination**

Characterized Control Valve (CCV) / Small HVAC Equipment					Actuators																		
Characteristic	Valve Size	Operational Pressure	Order Code	KV's Value (m³/h)	Differential Pressure, max. (kPa)	Open Close Actuators						Modulating Actuators											
						Non Spring Return Actuators																	
						Picture																	
						Country of origin						Germany											
						Power Supply						24V AC/DC		230V AC		24V AC/DC							
						IP Rating						IP54											
						Running Time (s)						150		150		150							
						Auxiliary switch						n.a.	x2	n.a.	x2	n.a.	x2	n.a.	x2	n.a.	x2	n.a.	x2
						Torque (Nm)						20	20	40	40	20	20	40	40	20	20	40	40
						Order Code						363-024-20_VNB	363-024-20-S2_VNB	363-024-40_VNB	363-024-40-S2_VNB	363-230-20_VNB	363-230-20-S2_VNB	363-230-40_VNB	363-230-40-S2_VNB	363C-024-20_VNB	363C-024-20-S2_VNB	363C-024-40_VNB	363C-024-40-S2_VNB
						Close-Off pressure, max (KPa)																	
2 - Way Valve	DN65	PN16	V2SAR.65_120	120.0	350		800			800			800										
	DN80		V2SAR.80_160	160.0																			
	DN100		V2SAR.100_275	275.0																			
	DN125		V2SAR.125_396	396.0				600				600						600					
	DN150		V2SAR.150_544	544.0																			

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