

# SYST VD CLC

Valve



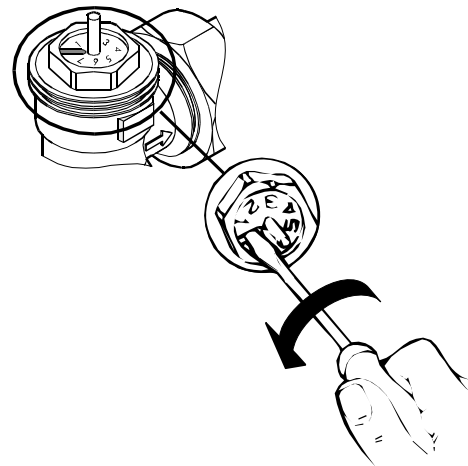
## QUICK FACTS

- Handles larger flows compared to VDN / VEN.

Art.	Dim.	Kv (m <sup>3</sup> /h)
SYST VD 115 CLC	DN15 (1/2")	0,25-1,90
SYST VD 120 CLC	DN20 (3/4")	0,25-2,60

**$k_v$ -values at the different preadjusted positions [ $m^3/h$ ]**

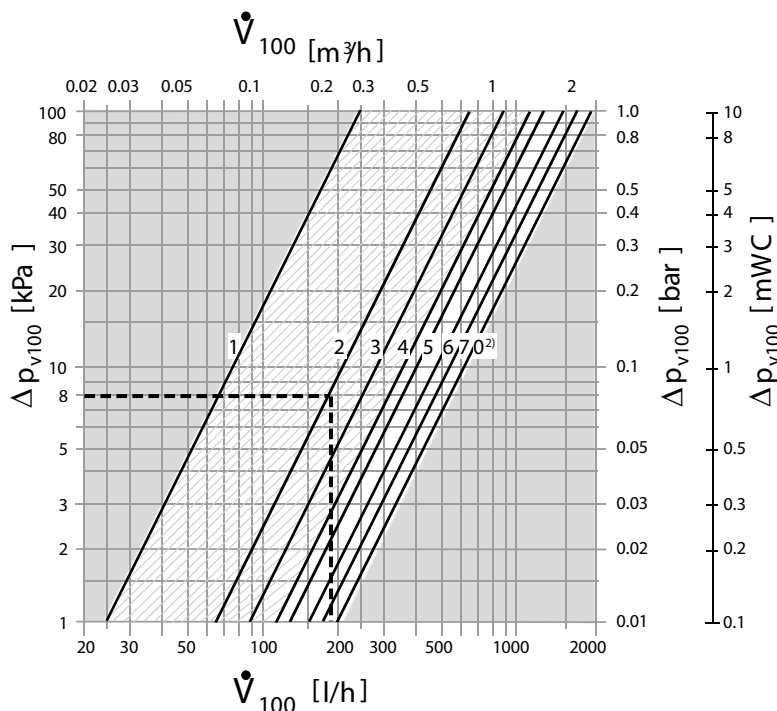
- The  $k_v$ -values give the volumetric water flow  $\dot{V}$  in  $m^3/h$  passing through the valve at a pressure drop  $\Delta p$  of 1 bar across the valve.
- The preadjusting ring permits 2 full revolutions. The values given in the table (reference numbers 0<sup>1)</sup>... 0<sup>2)</sup>) define the first revolution. After another revolution (reference number 0<sup>2)</sup>...6), the stroke still increases to 2.5 mm (fully open), but the  $k_v$  values will not exceed 0<sup>2)</sup>.
- The valves are supplied with the preadjusting ring fully opened (reference number 0<sup>2)</sup>). To make a preadjustment, the ring must first be fully closed – only then can the required reference number be selected. The markings on the different types are not necessarily identical.



Reference numbers for preadjustment	0 <sup>1)</sup>	1	2	3	4	5	6	7	0 <sup>2)</sup>
Valve stroke [mm]	0	0.188	0.375	0.563	0.75	0.938	1.125	1.313	1.5
VD115CLC	0	0.25	0.65	0.88	1.12	1.30	1.46	1.57	1.90
VD120CLC	0	0.25	0.60	0.91	1.18	1.43	1.64	1.85	2.60
Flow tolerance [ $\pm$ %]	0	60	30	20	10	10	10	10	10

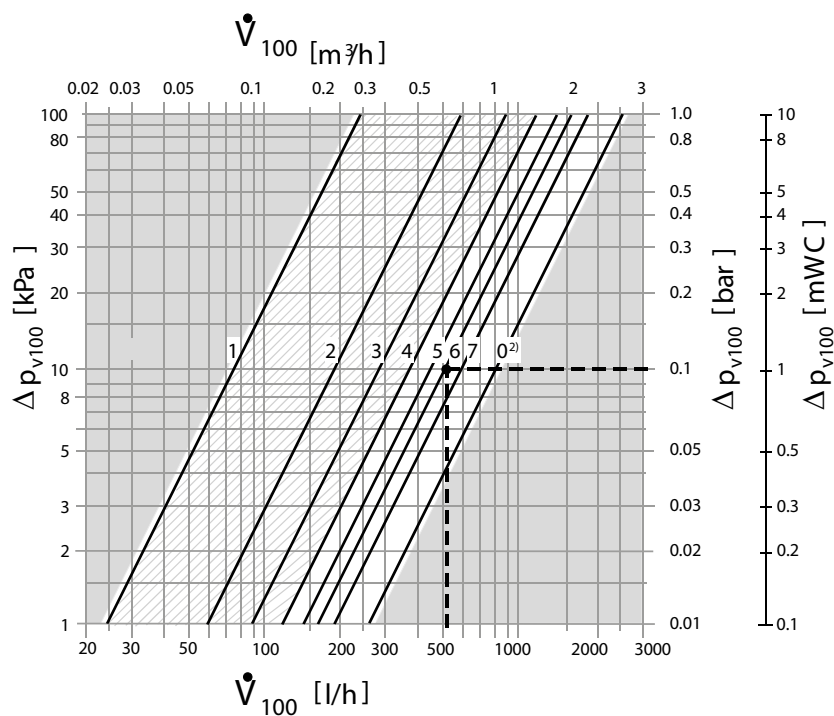
Preadjustments < 5 are not recommended because the stroke resolution is too small.

SYST VD 115 CLC



Ex. At a waterflow of 0,05 l/s or 180 l/h and  $k_v$  ref 2 the pressure drop across the valve is ca 8 kPa.  
 Note; Current waterflow of a product at a certain operation point can be read out from ProSelect.

SYST VD 120 CLC

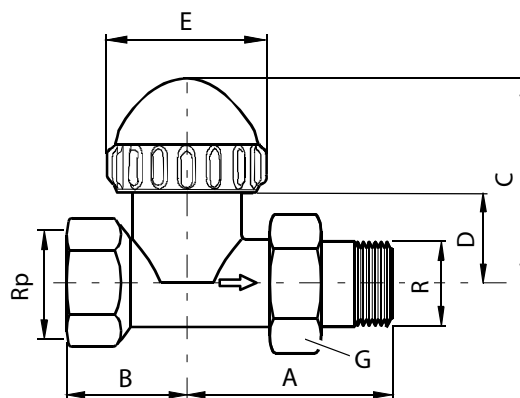


Ex. At a waterflow of 0,1 bar/10 kPa over the valve and  $k_v$  ref 6 the flow through the valve is ca 500 l/h or 0.14 l/s.

**Technical data**

Functional data	PN class	PN 10	
	Permissible media	chilled water, low temperature hot water, water with anti-freeze; recommendation: water treatment to VDI 2035	
	Medium temperature	1...110 °C	
	Perm. operating pressure	1000 kPa (10 bar)	
	Differential pressure $\Delta p_{max}$	max. 150 kPa (1.5 bar)	
	Differential pressure $\Delta p_{v100}$	5...20 kPa (0.05...0.20 bar): recommended range	
	Nominal stroke	2.5 mm	
Industri standards	Pressure Equipment Directive	PED 97/23/EC	
	Pressure Accessories	as per article 1, section 2.1.4	
	Fluid group 2	without CE-marking as per article 3, section 3 (sound engineering practice)	
Materials	Valve body	brass CuZn40Pb2, mat nickel-plated	
	Fitting	brass CuZn40Pb2, mat nickel-plated	
	Protective cover	polypropylene	
	O-ring	EPDM	
Dimensions/weight	refer to "Dimensions"		
	Mounting length	EN 215	
	Thread	Rp internally threaded	to ISO 7-1
		R externally threaded	to ISO 7-1
	G-thread	to ISO 228-1	
Maintenance	The valves are maintenance-free		

**Dimensions**



Prod.no	DN	Dimensions (mm)					Thread (inch)			Weight (kg)
		A	B	C	D	E	Rp	R	G	
VD 115 CLC	15	61	33	46.5	24.5	35	1/2	1/2	3/4	0.28
VD 120 CLC	20	65	40	46.5	24.5	35	3/4	3/4	1	0.33