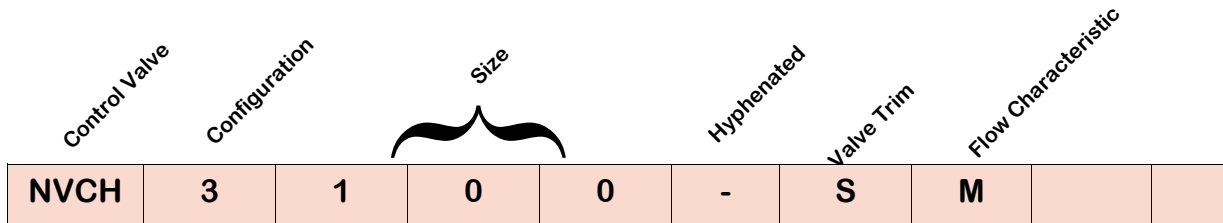




- NENUTEC is proud to offer the NVCH Flanged End Control Valve. These valve are mainly use in the HVAC system to regulate the flow of water and steam in response to the demand of a controller.
- Complete range from DN 20 to DN 150 with Cooling Fin
- 2 Way Normally Open, 3 Way Mixing and Diverting
- Cast Steel Body
- Low leakage factor of up to 0.05%
- High close-off pressure actuator satisfies demanding requirements of high-rise buildings and high-pressure pumping systems
- PN 16 or 232 PSI system operating pressure
- Actuator can be factory or field installed
- Equal Percentage Flow Characteristic

## Specifications

Valve Body Pressure Rating	232 psig (PN16 or 1,600 kPa) Meets Requirements of ASME B16.15, Class 250, EN1561		
Fluid / Ambient Temperature Limits	2 to 180 °C water /steam at an Ambient Temperature of 40 °C		
Shipping & Storage Temperature Limits	-40 to 70 °C (-40 to 158 °F)		
Body Sizes	See Table 1: Valve Code Number Selection Guide		
Service	Chilled, Hot Water and Steam, up to 50% Glycol Solutions		
Seat Leakage	0.05%		
Face to Face Dimensions	Meet requirement of DIN EN 1092-2		
Body Materials	Steel Trim	Body Stem Seat Seal	Cast Steel Stainless Steel Stainless Steel PTFE
Valve Stroke	DN 20 to DN150	20mm to Max 39 mm	
Maximum Close off Pressure	See Tables 3		



**Valve Code Number Designations**

<b>Valve Body Type</b>
VB = NVCH Flanged End
<b>Configuration</b>
2 = 2-way 3 = 3-way
<b>Valve Size</b>
020 = DN20 025 = DN25 032 = DN32 040 = DN40 050 = DN50 065 = DN 65 080 = DN 80 100 = DN 100 125 = DN 125 150 = DN 150
<b>Valve Trim</b>
S = Steel Trim
<b>Flow Characteristic (For 3 Way Valve Only)</b>
M = Mixing (2 in, 1 out) D = Diverting (1 in, 2 out)

**To Order**

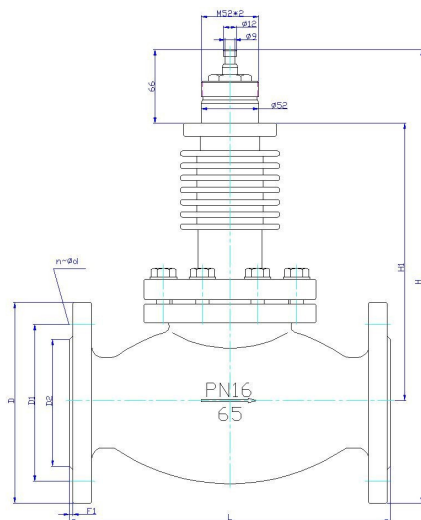
Specify the code number from the Valve Code Number Selection Guide.

**Repair Parts**

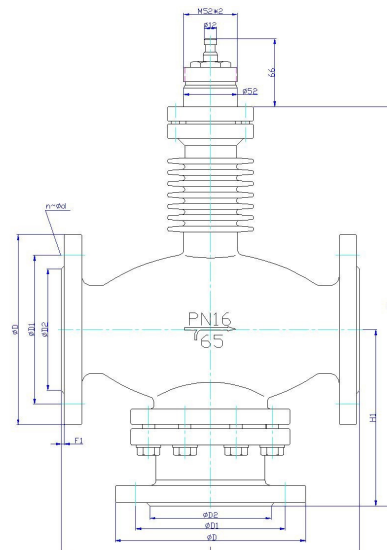
Available repair parts for NVCS Series Valves include replacement valve bodies and replacement actuators. No other field repairs should be attempted.

**Table 2 : Dimensions of Valve Body (mm)**

Valve Body	DN (mm)	L	H	H1	D	D1	D2	Bolt Holes
2 Way	20	150	290.5	198	105	75	56	4 x Φ14
	25	160	295.5	198	115	75	65	4 x Φ14
	32	180	325	215	140	100	76	4 x Φ18
	40	200	332	217	150	110	84	4 x Φ18
	50	230	345	225	160	125	99	4 x Φ18
	65	290	406.5	248	185	145	118	4 x Φ18
	80	310	420	254	200	160	132	8 x Φ18
	100	350	441	265	220	180	156	8 x Φ18
	125	400	498	307	250	210	184	8 x Φ18
150	480	550.5	342	285	240	211	8 x Φ22	
3 Way	25	160	331	110	115	75	65	4 x Φ14
	32	180	360	130	140	100	76	4 x Φ18
	40	200	388	140	150	110	84	4 x Φ18
	50	230	399	148	160	125	99	4 x Φ18
	65	290	388	171	185	145	118	4 x Φ18
	80	310	401	180	200	160	132	8 x Φ18
	100	350	430	199	220	180	156	8 x Φ18
	125	400	508	232	250	210	184	8 x Φ18
	150	480	589	251	285	240	211	8 x Φ22



**2 Way Valve Body**

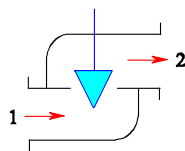


**3 Way Valve Body**

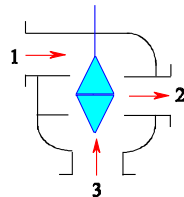
**Table 3 : Flow Rate, KV Factor and Maximum Close-off Pressure (KPA) for PDTC 2 Way and 3 Way Electrically Actuated Valves**

VALVE SIZE (mm)	Trim	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150
Flow Rate (KV)		6.3	10	16	25	40	63	100	160	250	400
Valve Stroke (mm)		Max 20 mm					Max 39 mm				
Stroke Time (Sec)		90—180 sec									
Maximum Shutoff Pressure (KPA)											
Model	Force (N)	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150
NAV..... – 05	500	1000	680	420	240	NA	NA	NA	NA	NA	NA
NAV.... -- 10	1000	NA	NA	550	400	270	NA	NA	NA	NA	NA
NAV..... – 18	1800	NA	NA	NA	NA	NA	340	150	90	NA	NA
NAV.... -- 30	3000	NA	NA	NA	NA	NA	NA	NA	270	150	90

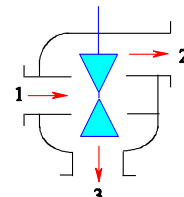
## Flow Characteristics



2 Way Valve PTDC



3 Way Valve Mixing



3 Way Valve Diverting

## Application Overview

The NVCH control Valve feature Steel Trim and are available in two-way configurations with Push-Down-to-Close (PDTC – normally open) or three way configurations with Flanged End. The Valve can be ordered with NENUTEC Valve Actuator NAV... and NTC controller for a complete HVAC solution.

### Main Office :

**NENUTEC®**

**NENUTEC ASIA PACIFIC PTE LTD**  
 7030 Ang Mo Kio Ave 5 #08-55  
 Northstar@AMK  
 Singapore 569 880  
 Phone : +65 6570 3233  
 Fax : +65 6570 6783  
 Email : info@nenutec.com.sg  
 Website : www.nenutec.com.sg

### Headquarter:



**TELIMA AG**

Schachenstrasse 80  
 CH-8645 Jona / Switzerland  
 Phone : +41 55 212 40 60  
 Fax : +41 55 212 40 69  
 Email : info@telima.ch  
 Website : www.nenutec.com