

# NVCF SERIES

## CONTROL VALVE FLANGED END

### NVCF SERIES

NVCF control valve flanged end is mainly use in the HVAC system to regulate the flow of water and steam in response to the demand of a controller.



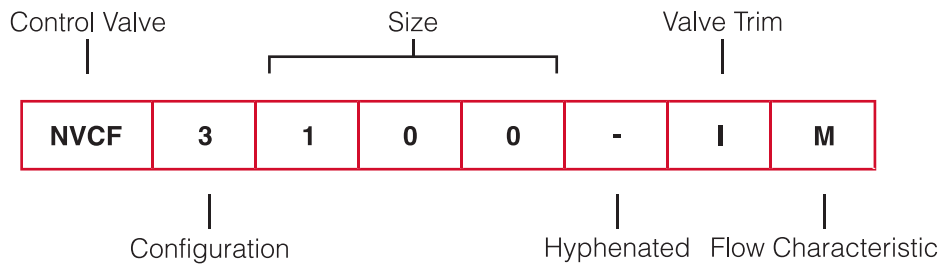
### PRODUCT FEATURE

- Complete range from DN 65 to DN 150
- 2 Way and 3 Way Mixing or Diverting
- Cast Iron
- 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 operation pressure
- Actuator can be factory or field installed
- Equal percentage flow characteristic

### TECHNICAL SPECIFICATION

<b>VALVE BODY PRESSURE RATING</b>	232 psig (PN16 or 1,600 kPa) Meets Requirements of ANSI B16.15, Class 250, EN1561		
<b>FLUID / AMBIENT TEMPERATURE LIMIT</b>	2 to 120°C water at an Ambient temperature of 40°C		
<b>SHIPPING &amp; STORAGE TEMPERATURE LIMIT</b>	-40 to 70°C (-40 to 158°F)		
<b>BODY SIZE</b>	See TABLE 1: VALVE CODE NUMBER DESIGNATION		
<b>SERVICE</b>	Chilled, Hot Water and Steam, up to 50% Glycol Solutions		
<b>SEAT LEAKAGE</b>	0.05%		
<b>FACE TO FACE DIMENSION</b>	Meet requirement of DIN EN 1092-2		
<b>VALVE STROKE</b>	DN 65 to DN 150		
<b>BODY MATERIAL</b>	Iron Trim	Body	Cast Iron
		Stem	Stainless Steel
		Seat	Stainless Steel
		Seal	PTFE

## TABLE 1: VALVE CODE NUMBER DESIGNATION



VALVE BODY TYPE	VB = NVCF Series Flanged End
<b>CONFIGURATION</b>	2 = 2 - Way 3 = 3 - Way
<b>VALVE SIZE</b>	065 = DN65 080 = DN80 100 = DN 100 125 = DN 125 150 = DN 150
<b>VALVE TRIM [IRON TRIM AVAILABLE FROM DN 65 TO DN100]</b>	I = Iron 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

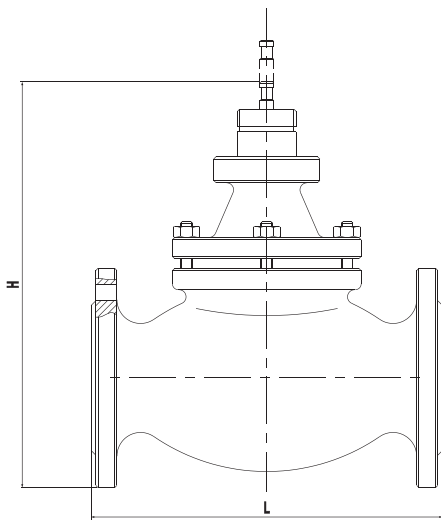
Available repair parts for NVCF Series Valves include replacement valve bodies and replacement actuators. No other field repairs should be attempted.

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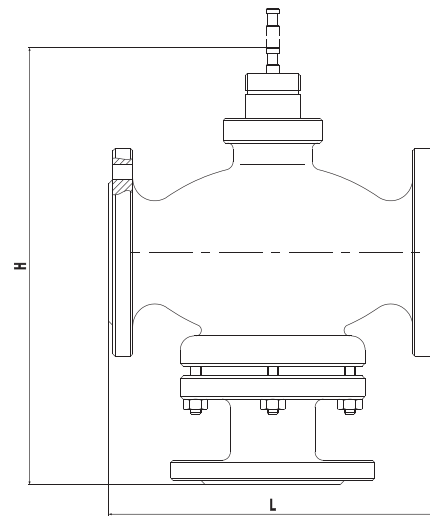
## CONTROL VALVE FLANGED END

**TABLE 2: DIMENSION OF VALVE BODY (mm)**

TRIM	DN (mm)	L	H	H1	H2	H3	D	D1	BOLT HOLE
<b>2-Way</b>	65	290	341	66	39	93	185	145	4 x $\Phi$ 18
	80	310	366	66	39	100	200	160	8 x $\Phi$ 18
	100	350	390	66	39	110	220	180	8 x $\Phi$ 18
	125	400	465	66	39	125	250	210	8 x $\Phi$ 18
	150	480	516	66	39	143	285	240	8 x $\Phi$ 22
<b>3-Way</b>	65	290	333	66	39	165	185	145	4 x $\Phi$ 18
	80	310	358	66	39	180	200	160	8 x $\Phi$ 18
	100	350	403	66	39	195	220	180	8 x $\Phi$ 18
	125	400	500	66	39	230	250	210	8 x $\Phi$ 18
	150	480	558	66	39	325	285	240	8 x $\Phi$ 22



**2-Way Valve**

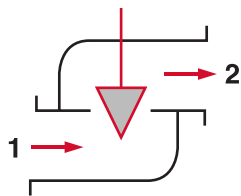


**3-Way Valve**

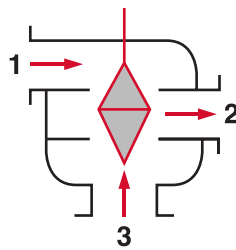
**TABLE 3: FLOW RATE, KV FACTOR AND MAXIMUM CLOSE-OFF PRESSURE (KPA) FOR PDTC 2-WAY AND 3-WAY ELECTRICALLY ACTUATED VALVE**

VALVE SIZE (mm)	DN65	DN80	DN100	DN125	DN150
FLOW RATE (KV)	63	100	160	250	400
VALVE STROKE (mm)	Max 39 mm				
STROKE TIME (sec)	90 - 180 seconds				
MAXIMUM SHUTOFF PRESSURE (KPA)					
MODEL	DN65	DN80	DN100	DN125	DN150
NAV... -- 18	340	150	90	-	-
NAV... -- 30	-	-	270	600	600

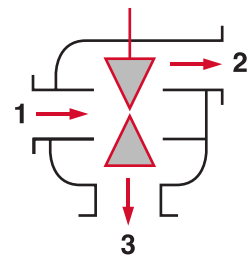
## FLOW CHARACTERISTIC



2-Way Valve PTDC



3-Way Valve Mixing



3-Way Valve Diverting

## APPLICATION OVERVIEW

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

The performance specifications are nominal and conform to acceptable industry standards. NENUTEC shall not be liable for damages resulting from misapplication or misuse of its products.