


NVCS SERIES CONTROL VALVE SCREWED END


NENUTEC[®]

INNOVATIVE MEMBER OF SWISSTECH

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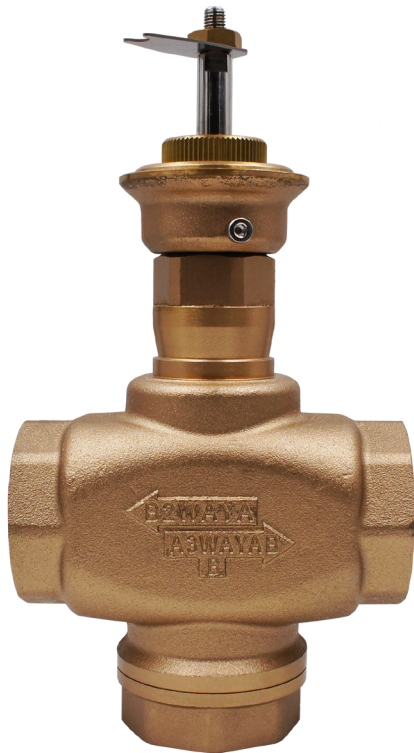
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NVCS SERIES

CONTROL VALVE SCREWED END



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

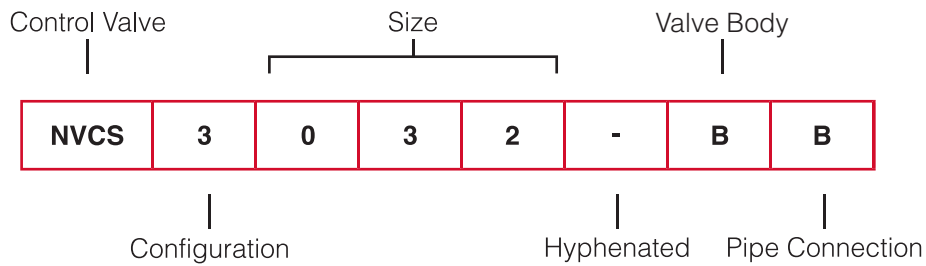
PRODUCT FEATURE

- Complete range from DN 15 to DN 50
- 2 Way and 3 Way Mixing or Diverting
- Forged brass 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

TECHNICAL SPECIFICATION

| | | | |
|---|---|-------------|-----------------|
| VALVE BODY PRESSURE RATING | 232 psig (PN16 or 1,600 kPa) Meets requirements of ANSI B16.15, Class 250 | | |
| FLUID / AMBIENT TEMPERATURE LIMIT | 2 to 120°C water at an Ambient temperature of 40°C 2 to 180°C water / steam at an Ambient temperature of 40°C (With Cooling Fin) | | |
| SHIPPING & STORAGE TEMPERATURE LIMIT | -40 to 70°C (-40 to 158°F) | | |
| BODY SIZE | See TABLE 1: VALVE CODE NUMBER DESIGNATION | | |
| SERVICE | Chilled, Hot Water and Steam, up to 50% Glycol Solutions | | |
| POWER SUPPLY | 24AC or 230 VAC ±10%, 50Hz | | |
| SEAT LEAKAGE | 0.05% | | |
| PIPE CONNECTION | BSP | | |
| MAXIMUM CLOSE OFF PRESSURE | See TABLE 3: FLOW RATE, KV FACTOR AND MAXIMUM CLOSE-OFF PRESSURE (KPA) 2-WAY AND 3-WAY ELECTRICALLY ACTUATED VALVE | | |
| BODY MATERIAL | Brass | Body | Forged Brass |
| | | Stem | Stainless Steel |
| | | Seat | Stainless Steel |
| | | Seal | PTFE |
| VALVE STROKE | Brass | DN 15 to 50 | Max 20 mm |

TABLE 1: VALVE CODE NUMBER DESIGNATION



| VALVE BODY TYPE | VB = NVCS Screwed Valve Body |
|---|--|
| CONFIGURATION | 2 = 2 - Way 3 = 3 - Way |
| VALVE SIZE | 015 = DN15 020 = DN20 025 = DN25 032 = DN32 040 = DN40 050 = DN50 |
| VALVE BODY | B = Brass Body |
| PIPE CONNECTION | B = BSP N = NPT |
| FLOW CHARACTERISTIC (FOR 3-WAY VALVE ONLY) | 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

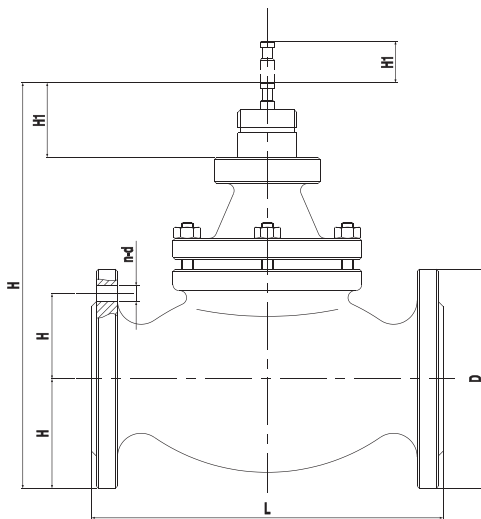
Available repair parts for NVCS Series Valves include replacement valve bodies and replacement actuators. No other field repairs should be attempted.

NVCS SERIES

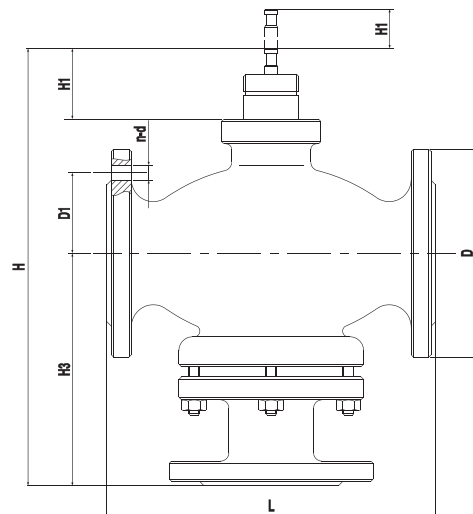
CONTROL VALVE SCREWED END

TABLE 2: DIMENSION OF VALVE BODY (mm)

| TRIM | DN (mm) | L | H | H1 | H2 | H3 |
|-------|---------|-----|-----|-------|----|----|
| Brass | 20 | 80 | 170 | 21-31 | 15 | 40 |
| | 25 | 110 | 183 | 21-31 | 20 | 62 |
| | 32 | 120 | 186 | 21-31 | 20 | 62 |
| | 40 | 130 | 200 | 13-23 | 20 | 74 |
| | 50 | 145 | 211 | 13-23 | 20 | 77 |



**Brass Body
2 Way Valve**

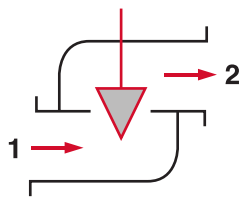


**Brass Body
3 Way Valve**

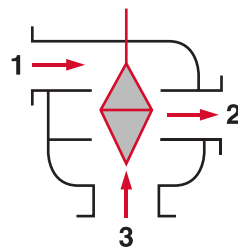
TABLE 3: FLOW RATE, KV FACTOR AND MAXIMUM CLOSE-OFF PRESSURE (KPA) 2-WAY AND 3-WAY ELECTRICALLY ACTUATED VALVE

| VALVE SIZE (mm) | TRIM | DN15/DN20 | DN25 | DN32 | DN40 | DN50 |
|---------------------------------------|-----------|-----------|------|------|------|------|
| FLOW RATE (KV) | | 6.3 | 10 | 16 | 25 | 40 |
| VALVE STROKE (mm) | Brass | 20 | | | | |
| STROKE TIME (sec) | | 90 | | | 110 | |
| MAXIMUM SHUTOFF PRESSURE (KPA) | | | | | | |
| MODEL | FORCE (N) | DN15/DN20 | DN25 | DN32 | DN40 | DN50 |
| NAV... -- 10 | 1000 | - | - | 550 | 400 | 270 |

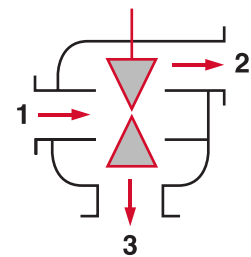
FLOW CHARACTERISTIC



2-Way Valve PTDC



3-Way Valve PTDC



3-Way Valve Diverting

APPLICATION OVERVIEW

The NVCS control valve feature Brass Body are available in 2-Way configurations with Push-Down-To-Close (PDTDC - Normally open) with threaded BSP. The valve can be ordered with NENUTEC Valve Actuator NAV... and NTC controller for a complete HVAC solutions.

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.