

Non-Surge Check Valve (W-M118)

◆ Application:

The Watts W-M118 Non-Surge Check Valve is designed to prevent the backflow of medium in pipeline. It's generally used in city water supply, industrial and agricultural water transmission pipeline, etc.

◆ Features:

1. Stable performance, safe and reliable;
2. Simple operation, and adjust the opening and closing speed respectively;
3. Large flow, small pressure loss;
4. Long service life;
5. Can prevent water hammer.



◆ Operating Principles:

The valve controls the opening and closing speed through the two way pipe and the regulator valve, when the downstream pressure is higher than the upstream pressure, the valve closes. When the downstream pressure is below the upstream pressure, the valve opens. The valve adjusts the opening and closing speed automatically by two way controlling, reducing turbulence and water hammer.

◆ Technical Specification:

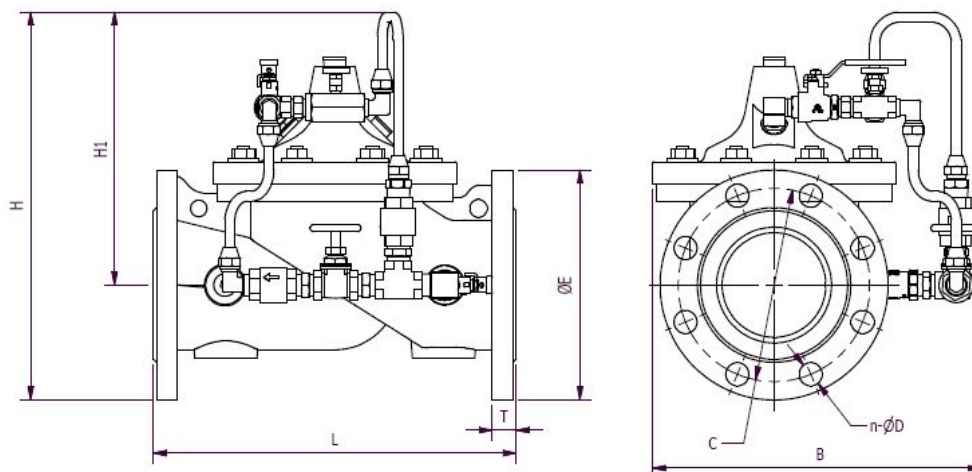
| | |
|-----------------------------|-----------------|
| Nominal Diameter: | DN50~DN400 |
| Maximum Working Pressure: | 1.6MPa |
| Working Temperature: | 0°C~80°C |
| Fluid Medium: | Water |
| Minimum Different Pressure: | 5PSI (0.035MPa) |

◆ Material:

| Part | Body / Bonnet | Stem | Seat | Diaphragm | Sealing |
|----------|---------------|-----------------|-----------------|-----------|---------|
| Material | Ductile Iron | Stainless Steel | Stainless Steel | NBR+Nylon | NBR |

◆ Installation Dimensions:

Connection Dimension: GB/T 17241.6;



| Size DN | Dimensions(mm) | | | | Flange Dimensions(mm) | | | |
|------------|----------------|-----|-----|-----|-----------------------|--------|-------|------|
| | L | H | H1 | B | C | n-φD | E | T |
| 50 | 230 | 272 | 190 | 290 | 125 | 4-φ19 | 165 | 19 |
| 65 | 290 | 290 | 198 | 300 | 145 | 4-φ19 | 185 | 19 |
| 80 | 310 | 375 | 265 | 320 | 160 | 8-φ19 | 200 | 19 |
| 100 | 350 | 395 | 285 | 355 | 180 | 8-φ19 | 220 | 19 |
| 125 | 400 | 395 | 285 | 360 | 210 | 8-φ19 | 250 | 19 |
| 150 | 480 | 430 | 288 | 420 | 240 | 8-φ23 | 285 | 19 |
| 200 | 600 | 540 | 370 | 485 | 295 | 12-φ23 | 340 | 20 |
| 250 | 660 | 660 | 458 | 695 | 355 | 12-φ28 | 406.4 | 30.2 |
| 300 | 762 | 770 | 524 | 810 | 410 | 12-φ28 | 482.6 | 31.8 |
| 400 | 889 | 931 | 631 | 925 | 525 | 16-φ31 | 596.9 | 36.6 |

◆ Typical Application:

1. Water plant and water source project;
2. Environmental protection;
3. Municipal facilities;
4. Electric power and utilities;
5. Construction industry.

◆ Installation Instructions:

- (1) The valve's rated parameters should match the equipment's. Make sure that the valve's rated flow satisfies the actual demand;
- (2) The installer must be trained or experienced so as to operate the installation correctly;
- (3) The flow direction from inlet to outlet should be paid attention to in installation, and maintenance space around the valve is convenient to assemble;
- (4) After debugging, the pilot valve and the needle type flow valve must be locked with locknut;
- (5) For the size below DN150, the main valve can be installed horizontally or vertically, but horizontal installation is better. The size above DN150 only can be installed horizontally;
- (6) Valve should be checked regularly, ensuring the debris in filter being cleaned.