

Series LFN45B-M1

LFN45B/-M1-EN-202008

Sizes: DN15-DN25

Series LFN45B

Sizes: DN32-DN50

Pressure Reducing Valves

The Watts LFN45B Pressure Reducing Valves is designed to reduce the incoming water pressure to a sensible level to protect the system components and reduce water consumption. Its generally used in building services, water treatment etc.

Features

- Integral stainless steel strainer
- Thermoplastic seat & cage
- Lead Free cast copper silicon alloy body construction
- Serviceable in line
- Bypass feature controls thermal expansion pressure
- Sealed spring cage on all models for accessible outdoor or pit installations

Working Principles

After static pressure and dynamic pressure go into valve, adjusting the spring on the upper part of the valve to make the outlet pressure decreased; After the valve pressure expansion, leaking out pressure through the by-pass pipe to ensure the safety of channel; Built-in filter in the valve can filter out impurities when medium go through.

Material

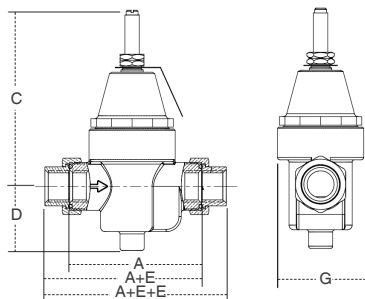
Component	Material
Body	Lead Free Bronze
Seat	Thermoplastic
Bonnet	Thermoplastic
Strainer	SS304
Diaphragm	EPDM
Disc	EPDM

Typical Application

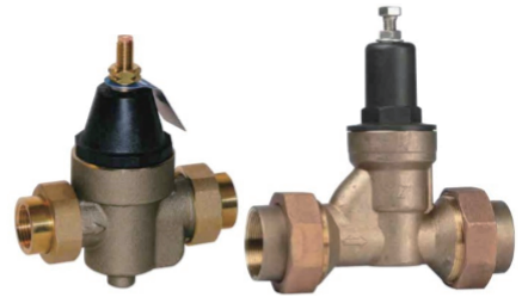
- Water plant and water source project
- Environmental protection
- Municipal facilities
- Electric power and utilities
- Construction industry

Installation Dimensions

LFN45B-M1



DN	A	C	D	E _{NPT}	G
15	88	116	43	16	57
20	88	116	43	16	57
25	105	116	43	20	57



Pressure - Temperature

- Pressure Reducing Range: 25~75psi(172KPa~517KPa)
- Standard Pressure Setting: 50psi(345KPa)
- Maximum Pressure: LFN45BM1 (DN15-DN25)
400psi(2.76MPa)
LFN45B (DN32-DN50)
300psi(2.07MPa)
- Temperature Range: 0.5 C ~82 C

Specification

- Nominal Diameter: DN15~DN50
- Design Standard: ASSE 1003, ANSI A II 2.26.2, CSAB356, IAPMO
- Connection Standard: NPT to ASME B1.20.1
- Working Medium: Water
- Note: Single stage pressure reduction is recommended when incoming pressure is less than 200psi and when reduction ratio is less than 3:1. If the incoming pressure is above 200psi or reduction ratio is more than 3:1 (eg. 200psi to 50 psi) or when inflow pressure fluctuates greatly, two-stage pressure reduction is recommended by adding PRV in series.

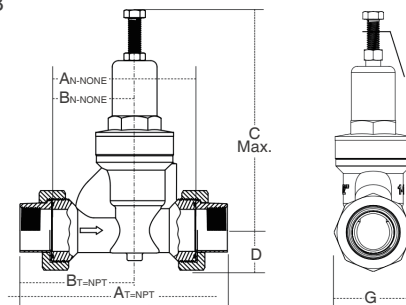
Models

- No Suffix—NPT threaded female inlet x NPT female outlet
- U—NPT threaded union inlet x NPT female outlet
- DU—Double Union – NPT threaded union female inlet and outlet
- G—Gauge tapping option 1/8"

Approval



LFN45B



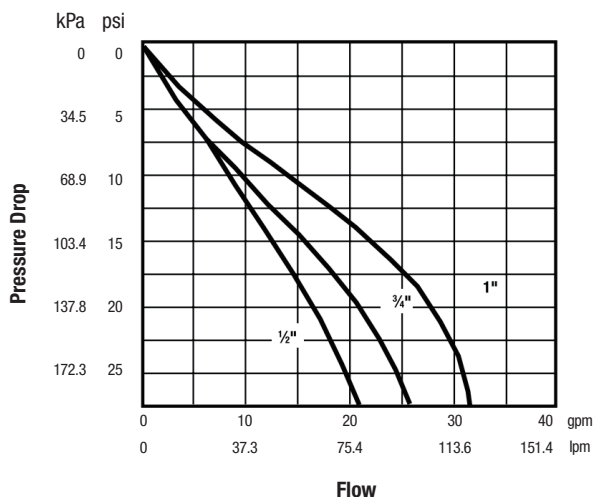
DN	A _T	A _N	B _T	B _N	C	D	G
32	213	148	111	78	225	36	82
40	213	148	115	83	225	41	82
50	228	162	126	93	225	47	93

Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

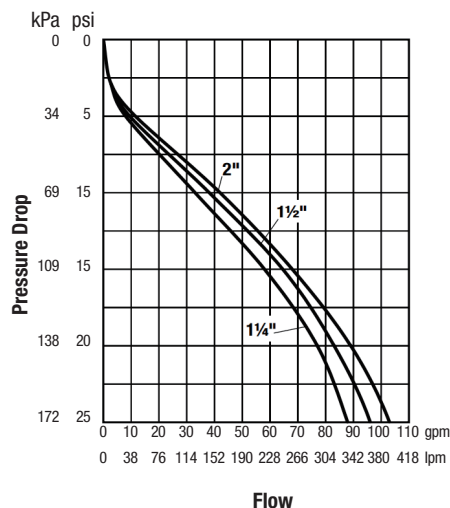


Characteristic Curves

LFN45B-M1 (DN15, DN20, DN25)



LFN45B (DN32, DN40, DN50)



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. A thorough check after installation is needed to ensure no errors.
4. A thorough cleaning before installation is needed (chemical reagent can be applied if it is necessary) to ensure that there is not any rusting or dirt in the pipe. All the filters must be removed before washing to keep the pipe smoothly open.
5. When beginning to wash the system, it is suggested to install the valve on a temporary pipe. After finishing system cleaning, move the valve back and install it on the system's pipe.
6. Use threaded connector that meets the standard to connect the valve.
7. The direction of flow must accord with the direction of the arrow head on the valve body.