For Residential and Commercial Applications

lob Name	Contractor
lob Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

LEAD FREE*

Series LFN45B

Water Pressure Reducing Valves**

Sizes: 11/4" - 2" (32 - 50mm)

Series LFN45B Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. The LFN45B features Lead Free* construction to comply with Lead Free* installation requirements. This series is suitable for water supply pressures up to 300psi (20.7 bar) and may be adjusted from 25 – 75psi (172 – 517 kPa). The standard setting is 50psi (345 kPa). All parts are quickly and easily serviceable without removing the valve from the line. The standard bypass feature permits the flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply.

Features

- · Double union inlet & outlet connections
- · Integral stainless steel strainer
- Thermoplastic seat & cage
- Lead Free* brass body construction
- Serviceable in line
- Bypass feature controls thermal expansion pressure***
- · Sealed spring cage on all models for accessible outdoor or pit installations

Models

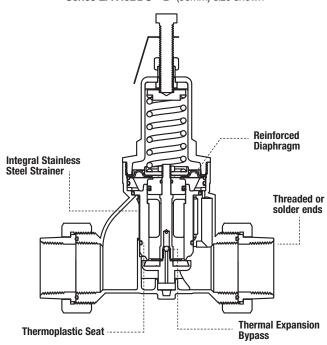
LFN45B	NPT threaded female inlet x NPT female outlet
LFN45BU	NPT threaded union inlet x NPT female outlet
LFN45BU-S	Solder union inlet x NPT female outlet
LFN45BDU	$\label{eq:continuous_problem} \mbox{Double Union} - \mbox{NPT threaded union female inlet} \\ \mbox{and outlet}$
LFN45BDU-S	Double Union – Solder union inlet and outlet

Specifications

A Water Pressure Reducing Valve with integral strainer shall be installed on the water service pipe near its entrance to the building where supply main pressure exceeds 60psi (413 kPa) to reduce it to 50psi (345 kPa) or lower. The water pressure reducing valve shall be constructed using Lead Free* materials. Lead Free* regulators shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve shall feature a Lead Free* body suitable for water supply pressure up to 300psi (20.7 bar). Provision shall be made to permit the bypass flow of water back through the valve into the main when pressures, due to thermal expansion on the outlet side of the valve, exceed the pressure in the main supply. Pressure reducing valves with built in bypass check valves and integral strainer will be acceptable. Approved valves shall comply with ASSE 1003. Valve shall be a Watts Series LFN45B.



Series LFN45BDU - 2" (50mm) size shown



- *The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.
- **A water saving test program concluded that reducing the supply pressure from 80-50psi (551-345 kPa) resulted in a water savings of 30%.
- ***The bypass feature will not prevent the pressure relief valve from opening on the hot water supply system with pressure above 150psi (10.3 bar).



Materials

Body: Lead Free* Copper-Silicon Casting

Seat: Thermoplastic
Cage: Thermoplastic
Integral Strainer: Stainless steel
Diaphragm: Reinforced EPDM

Valve Disc: EPDM

Pressure - Temperature

Temperature Range: $33^{\circ}F - 180^{\circ}F$ (0.5°C $- 82^{\circ}C$) Maximum Working Pressure: 300psi (20.7 bar)

Adjustable Reduced Pressure Range: 25 - 75psi (172 - 517 kPa)

Standard Reduced Pressure Setting: 50psi (345 kPa)

Standards





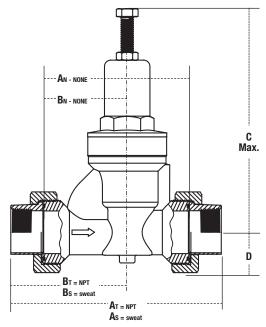


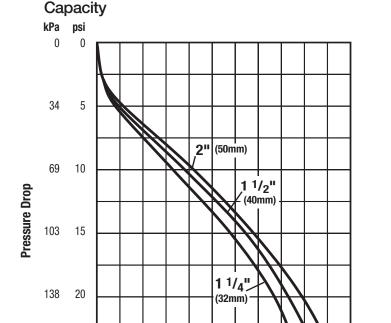
Options

G Gauge tapping

GG Gauge tapping and 160psi (11.0 bar) gauge

Dimensions - Weights



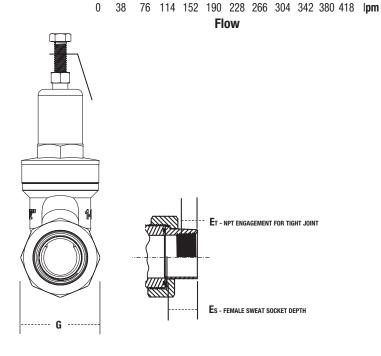


60

70 80

100 110 **gpm**

90



20 30

40 50

10

SIZ	E (DN)	V) DIMENSIONS															WEIGHT								
			Ат		As		An		Вт		Bs		Ви		С		D		Ет		Es		G		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in	mm	in	mm	in.	mm	lbs.	kgs.
11/4	32	83/8	213	715/16	201	5 ¹³ / ₁₆	148	43/8	111	41//8	105	31/16	78	87/8	225	1 7/16	36	11/16	17	1	25	31/4	82	6.5	2.9
11/2	40	83/8	213	83/16	207	5 ¹³ / ₁₆	148	4 %16	115	47/16	112	31/4	83	87/8	225	1%	41	11/16	17	11//8	28	31/4	82	8	3.6
2	50	9	228	91/4	235	63%	162	5	126	51/16	129	311/16	93	87/8	225	11//8	47	11/16	17	13/8	34	311/16	93	9	4.1

172

25





