Engineering Specification

Job Name _

Job Location

Engineer _

Approval _



Series LFN45B Water Pressure Reducing Valves**

Sizes: 11/4" - 2"

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

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

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* cast copper silicon alloy 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.

*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).

Contractor _

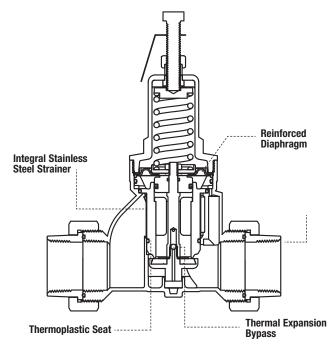
Approval

Contractor's P.O. No.

Representative ____



Series LFN45BDU - 2" size shown



NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

NOTICE

Inquire with governing authorities for local installation requirements

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. 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.



Materials

Body:	Lead Free* cast copper silicon alloy								
Seat:	Thermoplastic								
Cage:	Thermoplastic								
Integral Strainer:	Stainless steel								
Diaphragm:	Reinforced EPDM								
Valve Disc:	EPDM								

Pressure – Temperature

Temperature Range: 33°F - 180°F (0.5°C - 82°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

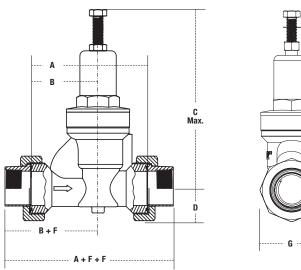
Meets requirements of ASSE Standard 1003; (ANSI A112.26.2); CSA Standard B356; and listed by IAPMO.

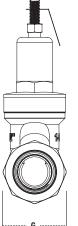


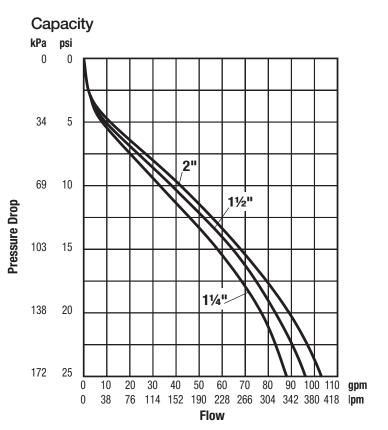
Options

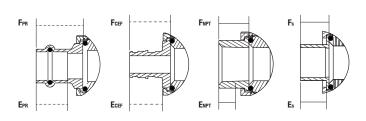
"	NPT threaded female inlet x NPT female outlet
-U	NPT threaded union inlet x NPT female outlet
-U-S	Solder union inlet x NPT female outlet
-DU	Double Union – NPT threaded union female inlet and outlet
-DU-S	Double Union – Solder union inlet and outlet
-G	Gauge tapping, 1/8"
-DU-PR	Double Union – Press union inlet and outlet
-DU-CEF	Double Union – PEX CEF (F1960) union inlet and outlet (11/4" and 11/2")

Dimensions – Weights









VALVES MAY BE ORDERED WITH 0, 1, OR 2 UNION CONNECTIONS USING ANY COMBINATION OF NPT, SOLDER, CEF (F1960), OR PRESS CONNECTIONS REQUIRED

"E" DIMENSIONS ARE APPROXIMATE ENGAGEMENT LENGTHS

SIZE		DIMENSIONS															WEI	GHT										
	A		В		С		D		FNPT		Fs		Fpr		FCEF		Enpt		Es		Epr		ECEF		G			
in	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	in.	тт	lbs.	kgs
11/4	51/8	149	3 ¹ /16	78	81/8	225	1 ½16	37	3/4	19	1	25	11/2	38	13⁄4	44	¹¹ /16	17	1	25	1 ³ ⁄16	30	11/2	38	31/4	83	61⁄2	2.9
1½	51/8	149	31/4	83	81/8	225	1%	41	7/8	22	1 ¹ ⁄16	27	1¾	44	1 ¹⁵ ⁄16	49	¹¹ / ₁₆	17	11/16	27	1%	35	13⁄4	44	31/4	83	8	3.6
2	6¾	162	3 ¹¹ /16	94	81/8	225	1%	48	¹⁵ ⁄16	24	1 5⁄16	33	2	51	-	-	3⁄4	19	15/16	33	1%16	40	-	-	311/16	94	9	4.1

Nominal dimensions are shown. Allowances must be made for manufacturing tolerances.

