Engineering Specification

Job Name _____

Job Location _____

Engineer _____

Approval _____

Contractor _____

Approval _____

Contractor's P.O. No. _____

Representative _____

LEAD FREE*

Series LFN45B-M1

Water Pressure Reducing Valves**

Sizes: ½" – 1"

Series LFN45B-M1 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 400psi (27.6 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 construction
- Serviceable in line
- Bypass feature controls thermal expansion pressure***
- Sealed spring cage on all models for accessible outdoor or pit installations

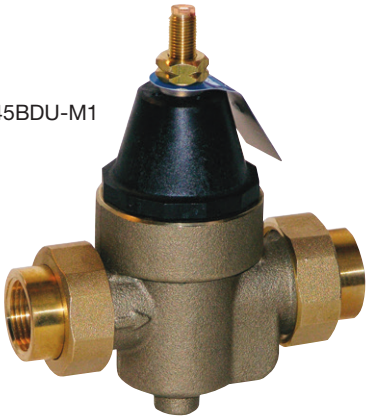
Specifications

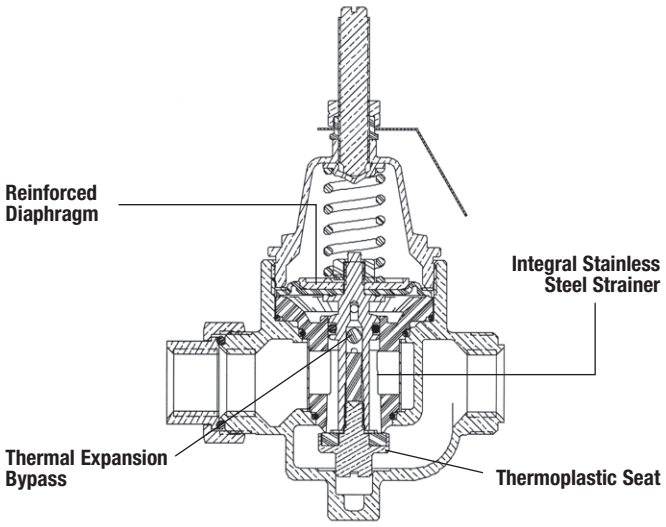
Standard Specifications: A Water Pressure Reducing Valve with integral strainer shall be installed in the water service pipe near its entrance to the building where supply main pressure exceeds 60psi (413 kPa) to reduce it to 50psi (345 kPa) or lower. The water pressure reducing valve shall be constructed 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 pressures up to 400psi (27.6 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. Water Pressure Reducing Valve with built-in bypass check valves and integral strainer will be acceptable. Approved valve shall be listed to ASSE 1003 and IAPMO and certified to CSA B356. Valve shall be a Watts Series LFN45B-M1.

Materials

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

LFN45BDU-M1





***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).**

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.

WATTS®

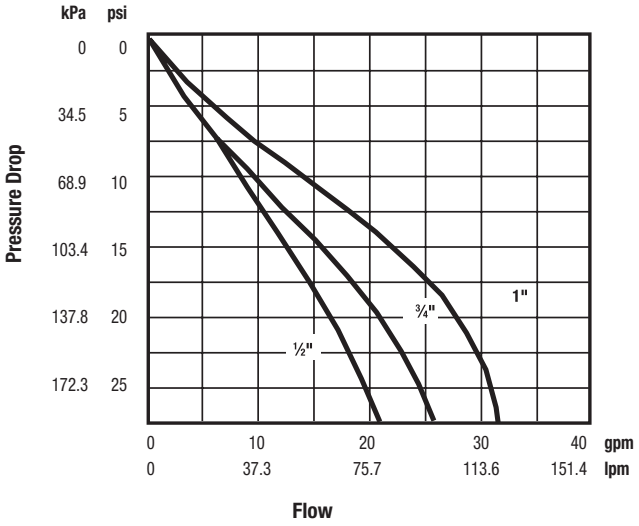
Pressure – Temperature

Temperature Range: 33˚F – 180˚F (0.5˚C – 82˚C)
Maximum Working Pressure: 400psi (27.6 bar)
Adjustable Reduced Pressure Range: 25 – 75psi (172 – 517 kpa)
Standard Reduced Pressure Setting: 50psi (345 kpa)

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
-U-QC	Quick-Connect union inlet (½", ¾", 1")
-DU	Double Union – NPT threaded union female inlet and outlet
-DU-S	Double Union – Solder union inlet and outlet
-DU-PEX	Double Union - PEX union inlet and outlet (¾", 1")
-DU-QC	Double Union – Quick-Connect union inlet and outlet (¾", 1")
-DU-CPVC	Double Union - CPVC union inlet and outlet (¾", 1")
-DU-PR	Double Union – Press union inlet and outlet
-DU-CEF	Double Union – PEX CEF (F1960) union inlet and outlet

Capacity

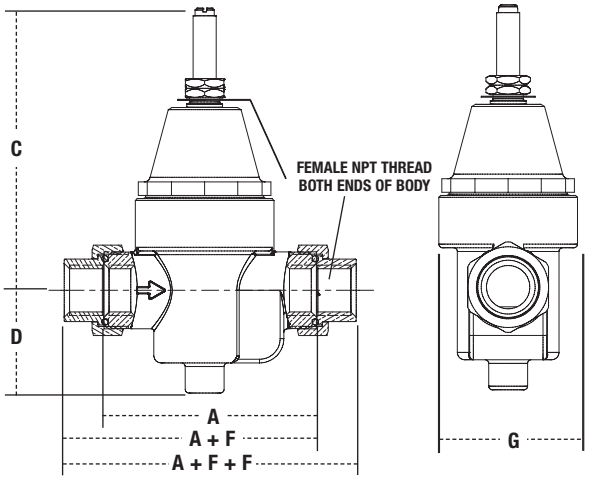


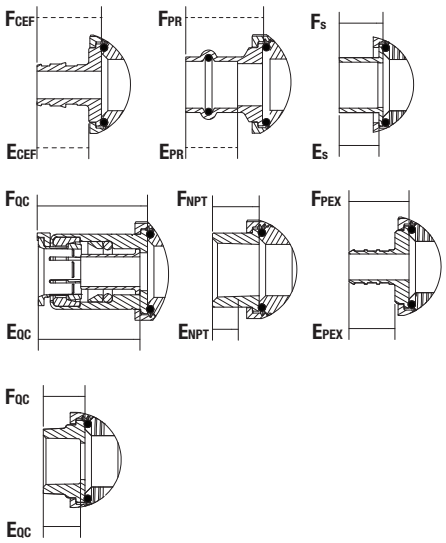
Standards

1003

Meets requirements of ASSE Standard 1003; (ANSI A112.26.2) and CSA Standard B356. Certified by NSF to ANSI/NSF Standard 61 Annex G. Listed by IAPMO and City of Los Angeles.

Dimensions – Weights





ABOVE VALVE SHOWN WITH SINGLE NPT UNION CONNECTION ON INLET

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

“E” DIMENSIONS ARE APPROXIMATE ENGAGEMENT LENGTHS.

SIZE	DIMENSIONS																						WEIGHT	
	A		C		D		FNPT		FS		FPEX		FCPVC		FQC		FPR		FCEF		ENPT		ES		EPEX		ECPVC		EQC		EPR		ECEF		G			
in	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	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
½	3 7/16	87	4 9/16	116	1 11/16	43	⅝	16	9/16	14	13/16	21	9/16	14	1½	38	1¼	32	⅞	22	½	13	½	13	⅝	16	½	13	1⅜	35	1⅛	29	¾	19	2¼	57	2	0.91
¾	3 7/16	87	4 9/16	116	1 11/16	43	⅝	16	¾	19	15/16	24	13/16	21	1 11/16	43	1 7/16	37	1⅛	29	9/16	14	¾	19	⅝	16	¾	19	1 9/16	40	1 3/16	30	15/16	24	2¼	57	2	0.91
1	4⅛	105	4 9/16	116	1 11/16	43	¾	19	1	25	1⅛	29	1 1/16	27	1¾	44	1½	38	1 7/16	37	11/16	17	15/16	24	13/16	21	15/16	24	1⅝	41	1 3/16	30	1 3/16	30	2¼	57	3	1.36

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

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