# Engineering Specification

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

# **LEAD FREE\***

# **Series LF25AUB-Z3**

# Water Pressure Reducing Valves\*\*

Sizes: 1/2" - 2"

Series LF25AUB-Z3 Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. 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 LF25AUB-Z3 features Lead Free\* construction to comply with Lead Free\* installation requirements. 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**

- Standard construction includes Z3 sealed spring cage and stainless steel corrosion resistant adjusting & cage screws
- · Union inlet connection
- · Integral stainless steel strainer
- Replaceable seat module
- · Lead Free\* cast copper silicon alloy construction
- · Serviceable in line
- Bypass feature controls thermal expansion pressure\*\*\*
- · High temperature resistant reinforced diaphragm for hot water

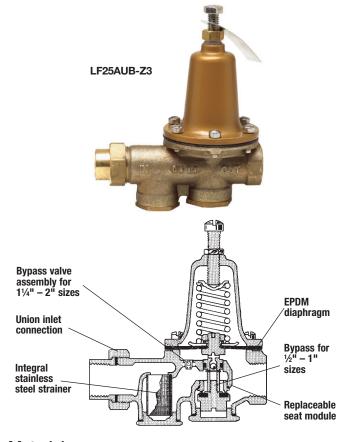
## **Specifications**

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 suitable for water supply pressures 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. Water Pressure Reducing Valve with built-in bypass check valves will be acceptable. Approved valve shall be listed to ASSE 1003 and IAPMO and certified to CSA B356. Valve shall be a Watts Series LF25AUB-Z3.

#### NOTICE

Product is for interior or exterior applications. Product should not be buried directly in the ground. For exterior applications where the valve will be situated in a vault or pit or be in contact with the ground, the valve should be installed in a meter box/vault, accessible for repair and adjustment, per local code.

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.



#### **Materials**

Body: Lead Free\* copper silicon alloy

Seat: ½"-1" Replaceable engineered polymer

(10% glass filled Noryl®)

11/4"-2" Replaceable stainless steel

Integral Strainer: Stainless steel

Diaphragm: Reinforced EPDM with PTFE wetted surface

Valve Disc: EPDM

<sup>\*\*\*</sup>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).



<sup>\*</sup>The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

<sup>\*\*</sup>A water saving test program concluded that reducing the supply pressure from 80-50psi (551-345 kPa) resulted in a water savings of 30%.

## 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)

## **Options**

#### Add Suffix

End

-" " Threaded female union inlet x NPT female outlet -S Solder union inlet x NPT female outlet -QC Quick-Connect union inlet ( $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1") Double union body less fittings ( $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ")

-DU Double Union – NPT threaded union female inlet and outlet

-S-DU Double Union —Solder union inlet and outlet -DU-PEX Double Union —PEX union inlet and outlet

-DU-QC Double Union – Quick-Connect inlet and outlet (½", ¾", 1")

-DU-PR Double Union – Press union inlet and outlet

-DU-CEF Double Union – PEX CEF (F1960) union inlet and outlet

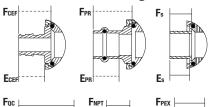
 $\begin{array}{lll} \text{-G} & \text{Gauge tapping, } 1/4\text{'' } (1/2\text{''}, 3/4\text{''}), 1/8\text{''} (11/4\text{''}-2\text{''}) \\ \text{-GG} & \text{Gauge tapping and 160psi (11 bar) gauge} \\ \text{-HP} & \text{High pressure range } 75-125\text{psi } (5.2-8.6 \text{ bar)} \dagger \\ \text{-LP} & \text{Low pressure range } 10-35\text{psi } (69-241 \text{ kPa}) \dagger \\ \end{array}$ 

-Z6 Water meter threaded connections and 7½" (190mm) lay length for new or existing meter box installations, For 5%", 5%"

x 3/4" or 3/4" meter setters or resetters

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## Dimensions - Weights



A1 - SINGLE UNION LF25AUB LESS FITTING
A2 - DOUBLE UNION LF25AUB LESS FITTINGS
\*3/4" AND 1" DOUBLE UNION CONFIGURATIONS
ARE MADE WITH ONE PIECE BODY

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

"E" DIMENSIONS ARE APPROXIMATE ENGAGEMENT LENGTHS

#### **Standards**



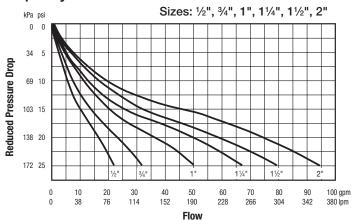


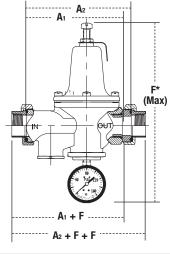


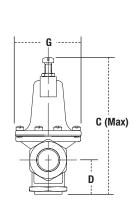


Meets requirements of ASSE Standard 1003: ANSI A112.26.2: CSA Standard B356; Southern Standard Plumbing Code and listed by IAPMO. Military Standard MIL-V-18146B Type I.

#### Capacity







SIZE													
	A	1	A	12	(	C	] [	D	F/	7	G		
in	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
1/2	55/16	135	51/16	129	7	178	11/2	38	97/16	240	31//8	79	
3/4	55/16	135	53/16	132	7	178	11/2	38	97/16	240	31//8	79	
1	6	152	53/4	146	8	203	13/4	44	107/16	265	35/8	92	
11/4	81/4	210	715/16	202	9	229	21//8	54	117/16	291	35/8	92	
11/2	81/4	210	81/16	205	91/2	241	23/8	60	<b>11</b> <sup>15</sup> ⁄16	303	41/16	103	
2	87/8	225	811/16	221	111/4	286	31/4	83	13 11/16	348	43/4	121	

SIZE		DIMENSIONS															WEIGHT									
	F	NPT	F	s	Fi	PEX	F	QC	F	PR	F	CEF	Enpt		Es		E	EPEX		Eqc		Epr		ECEF		
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	lbs.	kgs.
1/2	5/8	16	1/2	13	5/8	16	11/2	38	11/4	32	7/8	22	1/2	13	1/2	13	-	-	1%	35	11//8	29	3/4	19	3.5	1.6
3/4	5/8	16	3/4	19	5/8	16	111/16	43	17/16	37	11//8	29	9/16	14	3/4	19	5/8	16	1%16	40	13/16	30	15/16	24	3.5	1.6
1	3/4	19	<sup>15</sup> / <sub>16</sub>	24	<sup>13</sup> / <sub>16</sub>	21	13/4	44	1½	38	17/16	37	11/16	17	<sup>15</sup> / <sub>16</sub>	24	13/16	21	1%	41	<b>1</b> 3/16	30	13/16	30	6.5	3.0
11/4	3/4	19	1	25	-	-	-	-	1½	38	13/4	44	11/16	17	1	25	-	-	-	-	<b>1</b> 3/16	30	11/2	38	10	4.5
11/2	7/8	22	11/16	27	-	-	-	-	13/4	44	<b>1</b> 15/16	49	11/16	17	11/16	27	-	-	-	-	1%	35	13/4	44	10	4.5
2	15/16	24	15/16	33	-	-	-	-	2	51	-	-	3/4	19	15/16	33	-	-	-	-	1%16	40	-	-	15	6.8

Δ Dimension includes optional gauge

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



USA: T: (978) 689-6066 • Watts.com
Canada: T: (888) 208-8927 • Watts.ca
Latin America: T: (52) 55-4122-0138 • Watts.com

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<sup>&</sup>lt;sup>†</sup> Not available on G or GG models