## For Residential and Commercial Applications

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

# Series 25AUB-Z3

## Water Pressure Reducing Valves\*

Sizes: 1/2" - 2" (15 - 50mm)

Series 25AUB-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 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 for accessible outdoor or pit installations
- Union inlet connection
- Integral stainless steel strainer
- · Replaceable seat module
- Bronze body construction
- · Serviceable in line
- · Bypass feature controls thermal expansion pressure\*\*
- · High temperature resistant reinforced diaphragm for hot water

#### Models

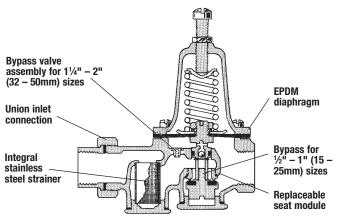
25AUB-Z3 NPT threaded female union inlet x NPT female outlet 25AUB-S-Z3 Solder union inlet x NPT female outlet 25AUB-DU-Z3 Double Union - NPT threaded union female inlet and outlet 25AUB-S-DU-Z3 Double Union - Solder union inlet and outlet 25AUB-DU-THDxPEX-Z3 Double Union - NPT threaded female inlet and PEX union outlet Double union body less fittings (3/4", 1", 11/4") 25AUB-DU-LF-Z3 25AUB-QC-Z3 Single Union – Quick-Connect union inlet (1/2", 3/4", 1") 25AUB-DU-QC-Z3 Double Union - Quick-Connect inlet and outlet (1/2", 3/4", 1")

#### **Specifications**

Standard Specifications: A Water Pressure Reducing Valve with intergral 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 valve shall feature a bronze body 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 25AUB-Z3.\*

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







<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).

#### **Materials**

Body: **Bronze** 

Seat: ½"-1" (15-25mm) Replaceable engineered polymer

(10% glass filled Noryl®)

11/4"-2" (32-50mm) Replaceable stainless steel

Integral Strainer: Stainless steel Reinforced EPDM Diaphragm:

Valve Disc: **EPDM** 

Note: for LP models where application temperatures exceed 160°F (71°C), but not over 180°F (82°C), a Teflon® protector should be added to

sizes 11/4"-2" (32-50mm).

## Pressure - Temperature

Temperature Range: 33°F – 160°F (0.5°C – 71°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

Gauge tapping,  $\frac{1}{4}$ " (8mm) on  $\frac{1}{2}$ " &  $\frac{3}{4}$ ", all other sizes  $\frac{1}{8}$ " (3mm) G

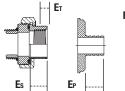
GG Gauge tapping and 160psi (11 bar) gauge ΗP High pressure range 75-125psi (5.2 - 8.6 bar) LP Low pressure range 10-35psi (69 - 241 kPa)

**Z7** 400psi (27.6 bar) initial pressure, 1/2" (20mm) models only

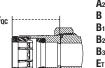
Noryl® is a registered trademark of SABIC Innovative Plastics™.

Teflon® is a registered trademark of E.I. du pont de Nemours & Company.

## Dimensions - Weights







- 25AUB-Z3

- 25AUB-S-Z3

- 25AUB-DU-LF-Z3

- 25AUB-DU-Z3

- 25AUB-S-DU-Z3

B<sub>2</sub> - 25AUB-DU-THDxPEX-Z3

B<sub>3</sub> - 25AUB-DU-QC-Z3

E<sub>T</sub> - NPT Engagement for tight joint Es - Female sweat socket depth

E<sub>P</sub> - PEX end connection

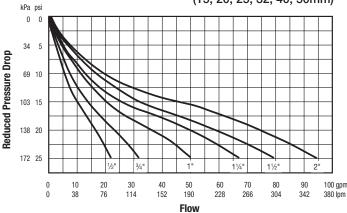
Foc - Quick-Connect union

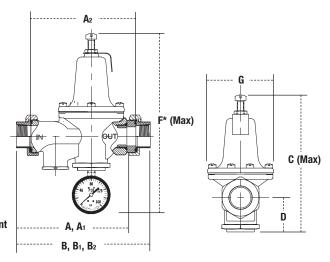
# Standards (855)

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

Sizes: ½", ¾", 1", 1¼", 1½", 2" (15, 20, 25, 32, 40, 50mm)





SIZ	E (DN)	DIMENSIONS													
		Α		A <sub>1</sub> A <sub>2</sub>		<b>A</b> <sub>2</sub>	В		B <sub>1</sub>		B <sub>2</sub>		С		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1/2	15	53/8	137	55/16	135	53/16	132	67/16	164	6%	162	_	_	7	178
3/4	20	55/16	135	51/2	140	51/4	133	61/2	165	67//8	175	63/4	171	7	178
1	25	6	152	61/4	159	57//8	149	73/8	187	713/16	198	711/16	195	8	203
11/4	32	83/4	222	815/16	227	81/4	210	10¾	273	11	279	_	-	9	229
11/2	40	83/4	222	9	229	81/4	210	103/4	273	11 <sup>3</sup> ⁄16	284	_	-	91/2	241
2	50	91/4	235	10	254	83/4	222	115/16	287	1211/16	322	_	_	111/4	286

DIMENSIONS											WEIGHT				
D		F*		G		Eτ		Es		Ep		Fac			
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
11/2	38	97/16	240	31//8	79	1/2	13	1/2	13	_	_	11/2	38	3.5	1.6
11/2	38	97/16	240	31//8	79	1/2	13	3/4	19	5/8	16	111/16	42	3.5	1.6
13/4	44	107/16	266	35/8	92	5/8	16	15/16	23	13/16	21	13/4	45	6.5	3.0
21/8	54	117/16	291	35/8	92	5/8	16	1	25	_	-	_	-	10	4.5
23/8	60	<b>11</b> <sup>15</sup> / <sub>16</sub>	304	41/16	103	5/8	16	11/16	28	_	_	-	_	10	4.5
31/4	83	1311/16	348	43/4	121	5/8	16	15/16	34	_	_	_	_	15	6.8

<sup>\*</sup> Dimension includes optional gauge







ES-25AUB 1226