

## For Residential and Commercial Applications

Job Name \_\_\_\_\_ Contractor \_\_\_\_\_

Job Location \_\_\_\_\_ Approval \_\_\_\_\_

Engineer \_\_\_\_\_ Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_ Representative \_\_\_\_\_

# Series N45B

## Water Pressure Reducing Valves\*

Sizes: 1¼" – 2" (32 – 50mm)

Series N45B 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

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

### Models

N45B	NPT threaded female inlet x NPT female outlet
N45BU	NPT threaded union inlet x NPT female outlet
N45BU-S	Solder union inlet x NPT female outlet
N45BDU	Double Union – NPT threaded union female inlet and outlet
N45BDU-S	Double Union – Solder union inlet and outlet

### Specifications

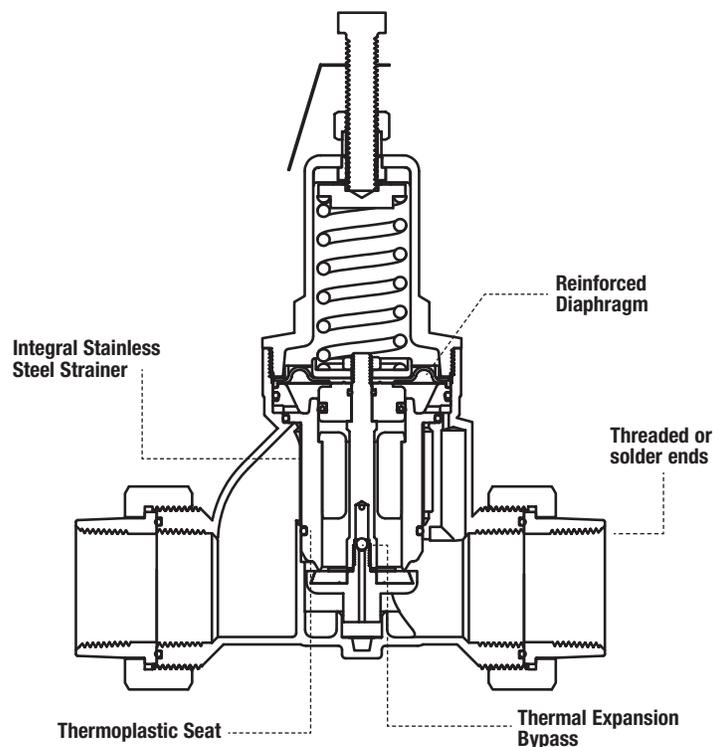
A Water Pressure Reducing Valve and strainer shall be installed on the water service pipe near its entrance to the building where supply main pressure exceeds 60psi (413 kPa) to reduce it to 50psi (345 kPa) or lower. Provision shall be made to permit the bypass flow of water back through the valve into 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 Regulator Company Series N45B.

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

\*\*NOTE: 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).



Series N45BDU – 2" (50mm) size shown



## Materials

Body: Bronze  
 Seat: Thermoplastic  
 Cage: Thermoplastic  
 Integral Strainer: Stainless steel  
 Diaphragm: Reinforced EPDM  
 Valve Disc: Elastomer

## 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

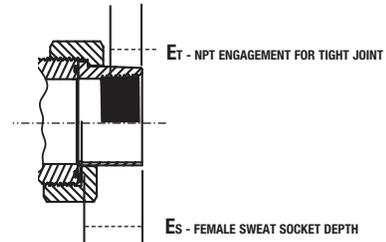
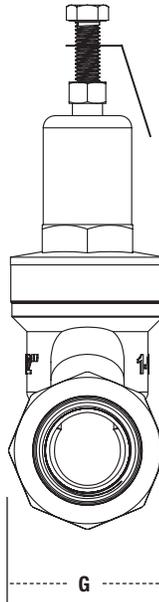
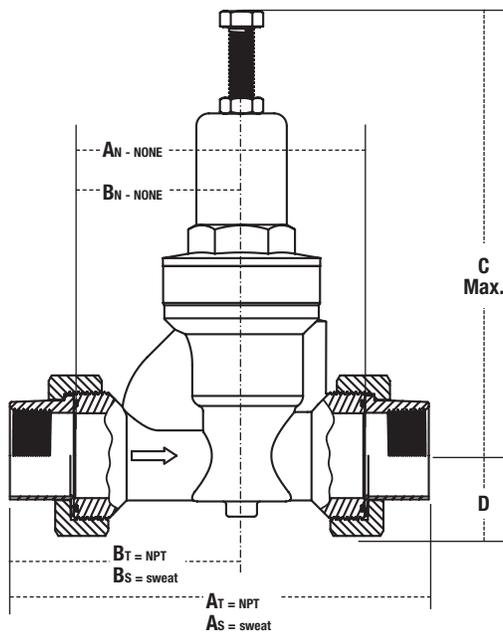


Meets requirements of ASSE Standard 1003; (ANSI A112.26.2); CSA Standard B356; and listed by IAPMO. City of Los Angeles.

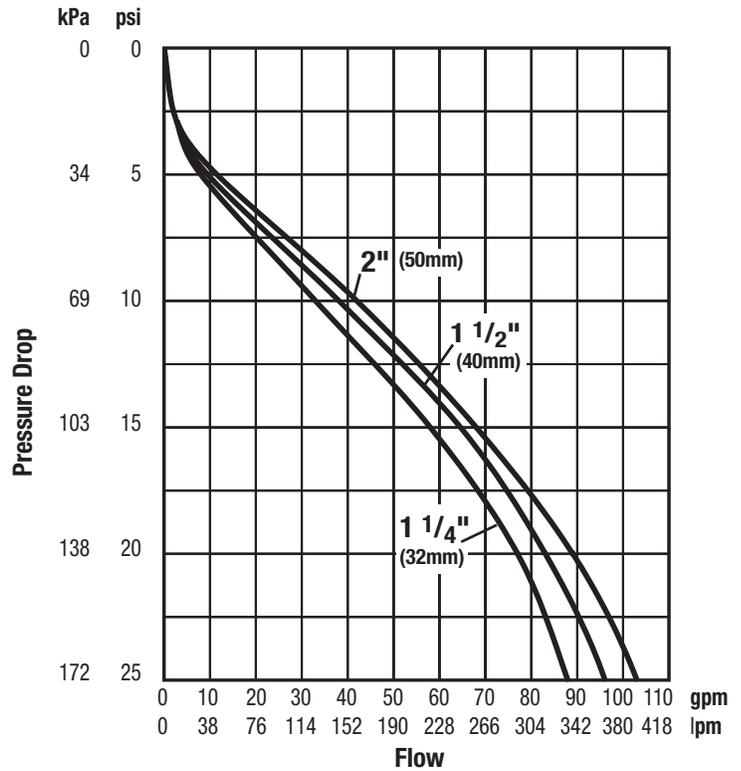
## Options

G Gauge tapping  
 GG Gauge tapping and 160psi (11 bar) gauge

## Dimensions – Weights



## Capacity



SIZE (DN)		DIMENSIONS												WEIGHT											
in.	mm	A <sub>T</sub>	A <sub>S</sub>	A <sub>N</sub>	B <sub>T</sub>	B <sub>S</sub>	B <sub>N</sub>	C	D	E <sub>t</sub>	E <sub>s</sub>	G	lbs.	kgs.											
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	mm											
1 1/4	32	8 3/8	213	7 15/16	201	5 13/16	148	4 3/8	111	4 7/8	105	3 1/16	78	8 7/8	225	1 7/16	36	1 1/16	17	1	25	3 3/4	82	6.5	2.9
1 1/2	40	8 3/8	213	8 3/16	207	5 13/16	148	4 9/16	115	4 7/16	112	3 3/4	83	8 7/8	225	1 5/8	41	1 1/16	17	1 1/8	28	3 3/4	82	8	3.6
2	50	9	228	9 1/4	235	6 3/8	162	5	126	5 1/16	129	3 11/16	93	8 7/8	225	1 7/8	47	1 1/16	17	1 3/8	34	3 11/16	93	9	4.1



A Watts Water Technologies Company



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