**For Commercial, Institutional and Industrial Applications**

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

# Series N223B/N223BS

## Super Capacity Water Pressure Reducing Valves*

### Sizes: 2½" – 3" (65 – 80mm)

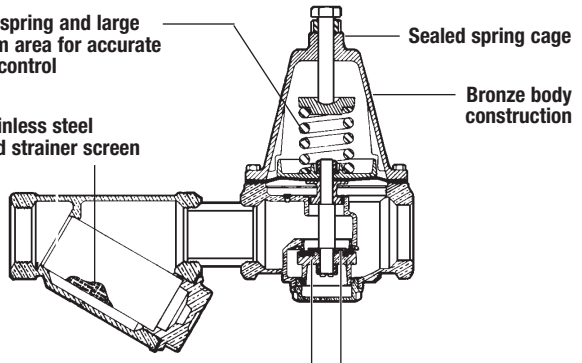
Series N223B and N223BS Super Capacity Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption. This series is suitable for water supply pressures up to 300psi (20.7 bar) and may be adjusted from 25 – 75psi (172 – 517 kPa). The standard setting is 50psi (345 kPa). Series N223B features an enlarged diaphragm, spring cage and seat orifice for super capacity performance. Series N223BS has the same options as the N223B, except it is furnished with a strainer. 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.

**Available with or without separate strainer**

**Series N223B**

### Features

- Enlarged diaphragm, spring cage and seat orifice for super capacity performance
- Bronze body construction
- Serviceable in line
- Series N223BS furnished with separate strainer
- Standard bypass feature controls thermal expansion pressure**
- Sealed spring cage on all models for accessible outdoor or pit installations




### Models

N223B NPT threaded female inlet x NPT threaded female outlet

N223BS NPT threaded female inlet with strainer x NPT threaded female outlet

For ½" – 2½" (15 – 65mm) threaded connections, refer to literature ES-223.

For 3" (80mm) flanged connections, refer to literature ES-N223F.

### Specifications

A Water Pressure Reducing Valve 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 strainer will be acceptable. Approved valves shall comply with ASSE 1003. Valve shall be a Watts Regulator Company Series N223B or N223BS (with strainer).

***IMPORTANT:** INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS*

***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 pressures above 150psi (10.3 bar).**



WATTS®

## Materials

| | |
|---|---|
| Body: | Bronze |
| Seat: | Replaceable stainless steel alloy |
| Strainer Screen: | Stainless steel (model N223S) |
| Diaphragm: | Reinforced Buna-N |
| Valve Disc: | EPDM |

## 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)

## Standards

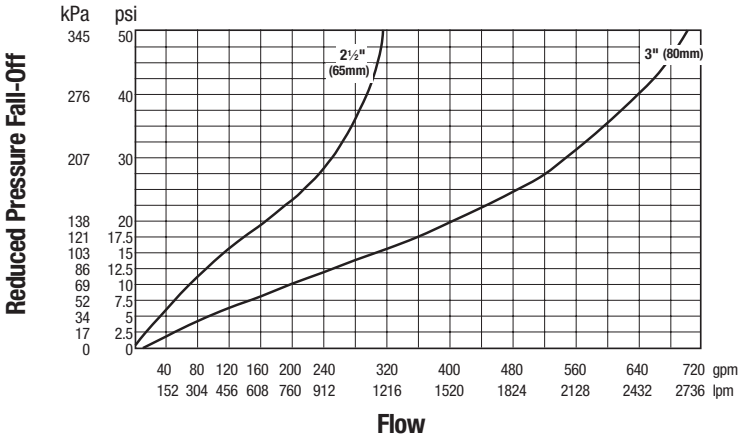
Both 2½" and 3" are listed to ASSE 1003 through IAPMO (UPC).

The 2½" is also listed to ASSE 1003 through ASSE.

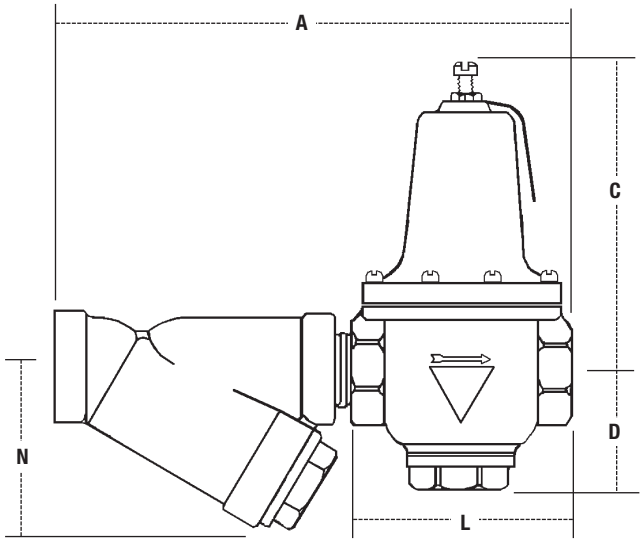
## Options

HP High pressure range 75 – 125psi (172 – 517 kPa)

## Capacity




I.P. = 83 psi, R.P. = 50 psi Lockup




## Dimensions — Weights

| SIZE (DN) | | DIMENSIONS | | | | | | | | | | WEIGHT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A (N223BS) | | C | | D | | L | | N (N223BS) | | N223B | | N223BS | |
| *in.* | *mm* | *in.* | *mm* | *in.* | *mm* | *in.* | *mm* | *in.* | *mm* | *in.* | *mm* | *lbs.* | *kgs.* | *lbs.* | *kgs.* |
| 2½ | 65 | 17 | 432 | 10¾ | 273 | 2⅞ | 73 | 7⅞ | 200 | 5 | 127 | 30 | 13.6 | 44 | 20.0 |
| 3 | 80 | 20¾ | 527 | 12¾ | 324 | 4⅛ | 105 | 10½ | 267 | 6¾ | 172 | 71 | 32.2 | 95 | 43.0 |