

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series N223F/N223FS

Flanged Super Capacity Water Pressure Reducing Valves*

Sizes: 3"

Series N223F and N223FS 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 175psi (12.1 bar) and may be adjusted from 25 – 75psi (172 – 517 kPa). The standard setting is 50psi (345 kPa). Series N223F features an enlarged diaphragm, spring cage and seat orifice for super capacity performance. These valves also contain a semibalanced piston feature to assure rapid response to reduced pressure changes as well as to provide maximum flow with minor pressure drop. Series N223FS has the same options as the N223F, except it is furnished with a strainer. All parts are quickly and easily serviceable without removing the valve from the line. The optional 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

- Enlarged diaphragm, spring cage and seat orifice for super capacity performance
- Iron body construction
- Stainless steel piston
- Series N223FS furnished with separate strainer
- Sealed spring cage on all models for accessible outdoor or pit installations

Models

N223F Flanged inlet x Flanged outlet

N223FS Flanged inlet x Flanged outlet with strainer

For 1/2" – 2 1/2" threaded connections, refer to literature ES-223.

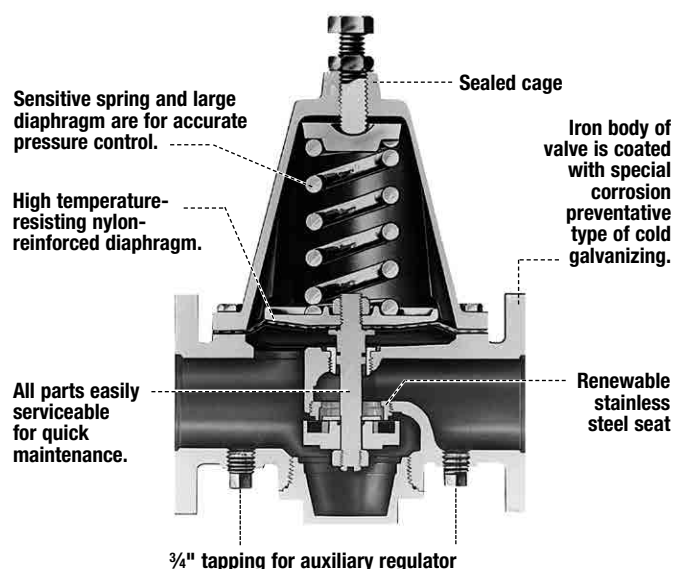
For 2 1/2" – 3" bronze threaded valves, refer to literature ES-N223B.

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. Valve shall be a Watts Series N223F or N223FS (with strainer).



Series N223F



NOTICE

Companion flange size connections are 125 lbs. WSP.

NOTICE

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 pressure above 150psi (10.3 bar).

Materials

- Body:Iron coated with corrosion-resistant cold galvanizing
- Seat:Replaceable stainless steel
- Diaphragm:Reinforced Buna-N
- Disc:EPDM
- Piston:Stainless steel

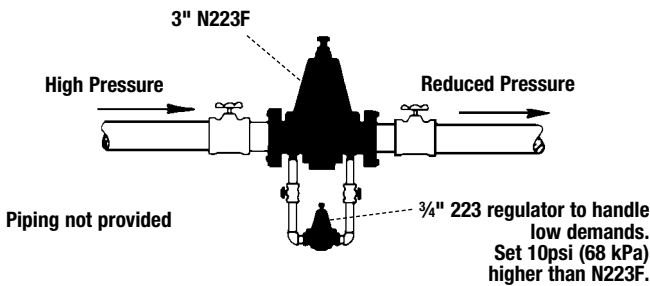
Pressure – Temperature

- Temperature Range: 33°F – 160°F (0.5°C – 71°C)
- Maximum Working Pressure: 175psi (12.1 bar)
- Adjustable Reduced Pressure Range: 25 – 75psi (172 – 517 kPa)
- Standard Reduced Pressure Setting: 50psi (345 kPa)

Options

- WR3/4" Model 223 auxiliary regulator
(piping not included)

Option WR



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.

Dimensions — Weights

MODEL NO.	SIZE	DIMENSIONS												WEIGHT			
		A			AS		C		D		L		M		N		lb
	in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
N223F	3	12½	318	—	—	14½	368	3¾	95	7½	191	—	—	—	—	86	39
N223FS	3	12½	318	22⅝	575	14½	368	3¾	95	7½	191	10⅞	257	7	178	120	54

Capacity

