WILKINS
a ZURN company

Model NR3

Water Pressure Reducing Valve with Integral By-pass check Valve and Strainer

SPECIFICATION SUBMITTAL SHEET

FEATURES

Sizes: ❑1/2" ❑3/4" ❑1" ❑1-1/4" ❑1-1/2" ❑2"

Max. working water pressure (1/2" - 1-1/4")	400 psi
Max. working water pressure (1-1/2" - 2")	300 psi
Max. working water temperature	180°F
Reduced pressure range (1/2" - 1-1/4")	15 to 75 psi
Reduced pressure range (1-1/2" - 2")	25 to 75 psi
Factory preset	50 psi
Threaded connections (FNPT)	ANSI B1.20.1
Copper connections (FC)	ANSI B16.22
CPVC tailpiece: Max.hot water temp.	180°F @ 100 psi
Cold water rated temp.	73.4°F @ 400 psi

OPTIONS (Suffixes can be combined)

- ❑ - standard with single union FNPT connection and 20 mesh strainer screen
- ❑ C - with FC (copper sweat) union connection
- ❑ DU - with double union connection (FNPT)
- ❑ LU - with integral FNPT connection (no union)
- ❑ PEX - with male barbed connection tailpiece for crossed-linked polyethylene tubing
- ❑ SC - with ss adjustment bolt and lock nut, with ss spring for below-ground installations
- ❑ P - tapped and plugged for gauge
- ❑ CPVC - CPVC tailpiece connection (1")
- ❑ HRSC - High Range 15-150 psi (1/2"-1-1/4" only) with sealed cage

APPLICATION

Designed for installation on potable water lines to reduce high inlet pressure to a lower outlet pressure. The integral strainer makes this device most suitable for residential and commercial water systems that require frequent cleaning of sediment and debris. The direct acting integral by-pass design prevents buildup of excessive system pressure caused by thermal expansion. The balance piston design enables the regulator to react in a smooth and responsive manner to changes in system flow demand, while at the same time, providing protection from inlet pressure changes.

STANDARDS COMPLIANCE

- ASSE® Listed 1003
- IAPMO® Listed
- CSA® Certified

MATERIALS

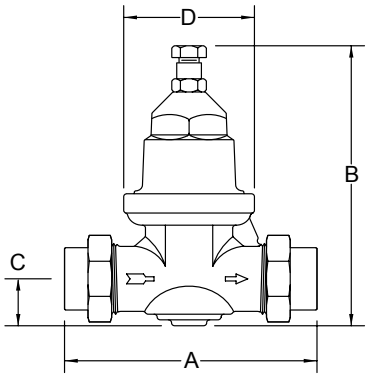
Main valve body	Cast bronze ASTM B 584, UNS C84400
Bell housing	UV resistant polymer composite
Internals	Stainless steel, 300 Series
Stem	Brass ASTM B 16
Elastomers	EPDM (FDA approved)
	Buna nitrile (FDA approved)
Cartridge	Delrin™ (NSF Listed)
Springs	Oil temp wire, ASTM A 229
Strainer screen	300 Series Stainless Steel

ACCESSORIES

- ❑ Repair kit
- ❑ 1" BR4DUSPC Special plastic spacer nipple
- ❑ 1-1/4" NR3DUSPC Steel pipe
- ❑ 1-1/2" NR3DUSPC Steel pipe
- ❑ 2" NR3DUSPC Steel pipe
- ❑ TPK Tailpiece kit

DIMENSIONS & WEIGHTS (do not include pkg.)

SIZE		CONNECTIONS	DIMENSIONS (approximate)								WEIGHT	
			A		B		C		D			
in.	mm		in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg
1/2	15	SINGLE UNION	4 3/8	111	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1/2	15	LESS UNION	3 1/2	89	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1/2	15	DOUBLE UNION	5 1/4	133	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	SINGLE UNION	4 7/16	113	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	LESS UNION	3 1/2	89	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
3/4	20	DOUBLE UNION	5 3/8	137	6 1/4	159	1 1/8	29	2 1/2	64	3	1.5
1	25	SINGLE UNION	4 15/16	125	6 1/4	159	1 1/8	29	2 1/2	64	4	2
1	25	LESS UNION	4	102	6 1/4	159	1 1/8	29	2 1/2	64	3.5	1.6
1	25	DOUBLE UNION	5 15/16	151	6 1/4	159	1 1/8	29	2 1/2	64	45	2.1
1 1/4	32	SINGLE UNION	6 3/16	157	7 3/4	197	1 3/16	30	3	76	5.5	2.5
1 1/4	32	LESS UNION	5	127	7 3/4	197	1 3/16	30	3	76	5	2.3
1 1/4	32	DOUBLE UNION	7 3/8	187	7 3/4	197	1 3/16	30	3	76	6	2.7
1 1/2	40	SINGLE UNION	6 5/16	160	8 1/2	216	1 3/4	45	3 3/4	95	6.6	3
1 1/2	40	LESS UNION	5	127	8 1/2	216	1 3/4	45	3 3/4	95	5.5	2.5
1 1/2	40	DOUBLE UNION	7 1/2	191	8 1/2	216	1 3/4	45	3 3/4	95	7.7	3.5
2	50	SINGLE UNION	6 1/4	159	8 1/2	216	2	51	3 3/4	95	8.1	3.7
2	50	LESS UNION	5	127	8 1/2	216	2	51	3 3/4	95	6.7	3
2	50	DOUBLE UNION	7 1/2	191	8 1/2	216	2	51	3 3/4	95	9.5	4.3



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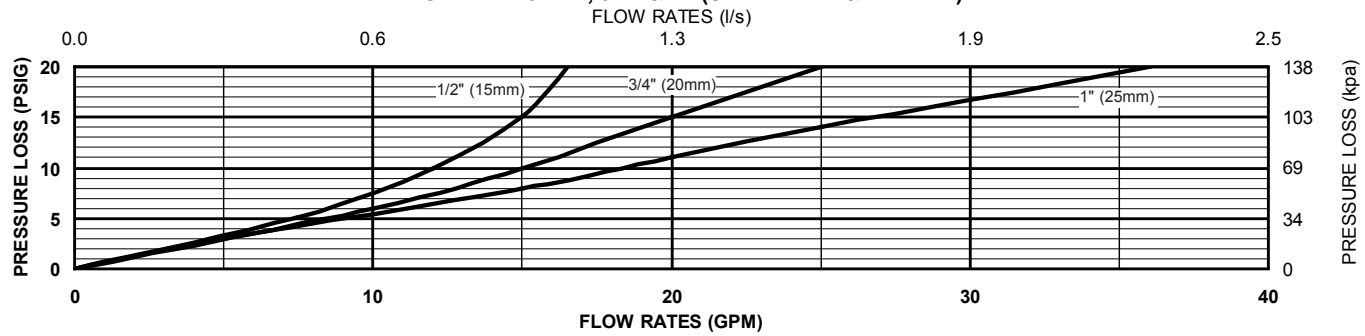
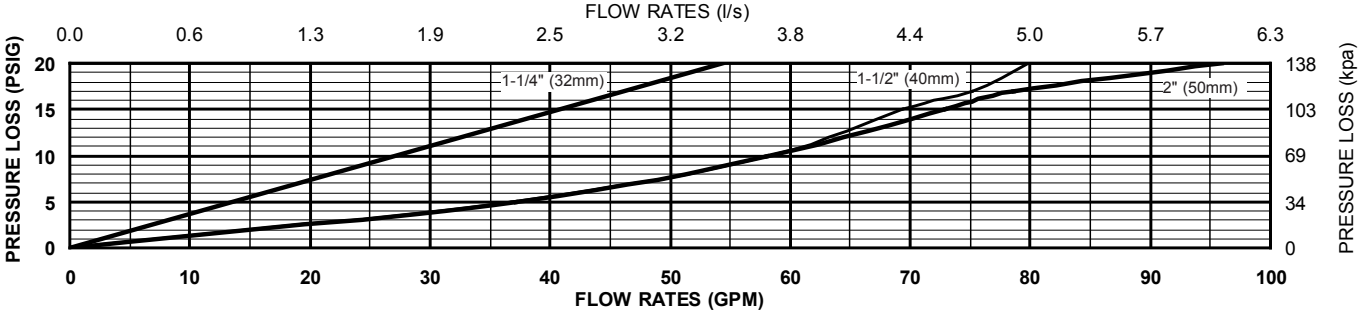
Product Support Help Line: 1-877-BACKFLOW **(1-877-222-5356)** • **Website: http://www.zurn.com**

FLOW CHARACTERISTICS

MODEL NR3 1/2", 3/4" & 1" (STANDARD & METRIC)

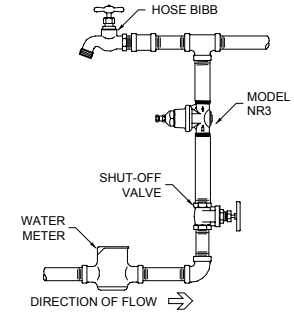


MODEL NR3 1-1/4, 1-1/2' & 2" (STANDARD & METRIC)

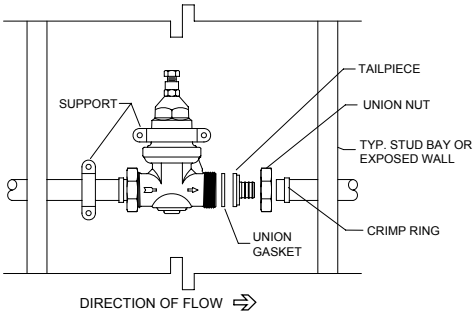


TYPICAL INSTALLATION

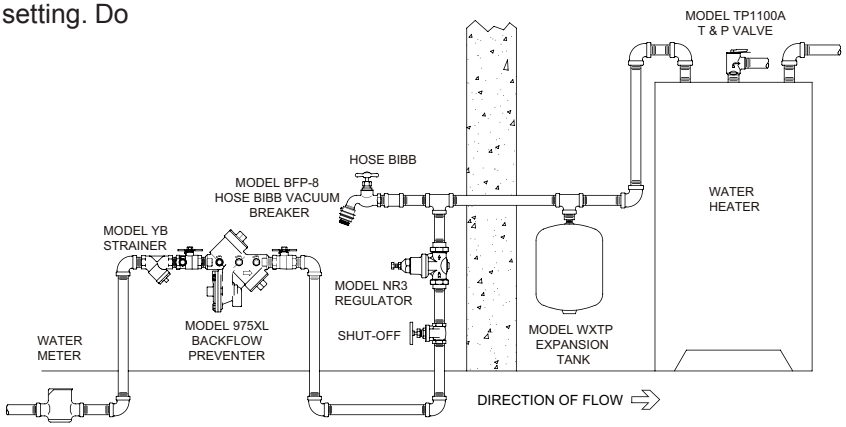
Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted in accordance with the latest edition of the Uniform Plumbing Code. The Model NR3 may be installed in any position. If installed in a pit, vault, or indoors, specify the “SC” sealed cage option. The assembly shall be installed with sufficient side clearance for testing and maintenance. Multiple installations are recommended for wide demand variations or where the desired pressure reduction is more than 4 to 1 (ie: 200 psi inlet reduced to 50 psi outlet). CAUTION: Anytime a reducing valve is adjusted, a pressure gauge must be used downstream to verify correct pressure setting. Do not bottom adjustment bolt on bell housing.



OUTDOOR INSTALLATION



NR3 PEX INSTALLATION



TYPICAL INSTALLATION

SPECIFICATIONS

The Water Pressure Reducing Valve shall be ASSE® Listed 1003, and available with single union, double union and less union end connections. The main body shall be cast bronze (ASTM B 584) alloy. The bell shall be composite plastic. The cartridge shall be acetal and incorporate an integral seat. The seat disc elastomer shall be EPDM. The assembly shall be accessible for maintenance without removing the device from the line. The Water Pressure Reducing Valve shall be a WILKINS Model NR3.