

For Residential and Commercial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series X65B

Water Pressure Reducing Valves*

Sizes: 1/2" – 2" (15 – 50mm)

Series X65B Water Pressure Reducing Valves are designed to reduce incoming water pressure to a sensible level to protect plumbing system components and reduce water consumption.

The X65B is a cartridge style regulator and is orderable three ways: As a complete, ready-to-install regulator, or as a separate Rough-in Kit consisting of a bronze body with integral strainer, or as a separate Cartridge Assembly.

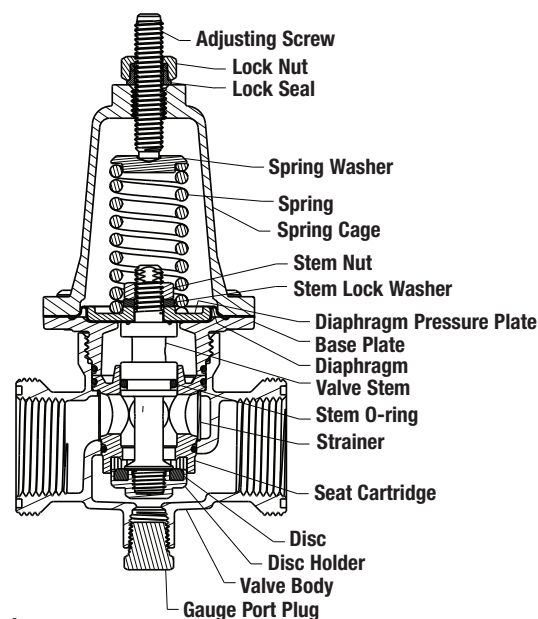
The X65B delivers superior flow performance with low fall off pressure while reducing flow noise with its engineered seat design. The X65B is a 100 percent balanced valve, as inlet pressures fluctuate, reduced pressure does not.

The X65B incorporates control valve style stem and disc guidance for accuracy and longevity. It is available with interchangeable union tailpiece kits in standard-sized solder and threaded tailpieces for Quick-Connect, PEX and CPVC options. The X65B Cartridge Assemblies are available in standard pressure range of 20 - 80psi (138 - 552 kPa), preset at the factory to 50psi (345 kPa) or high-pressure range (HP) of 50 -150psi (345 to 1034 kPa) preset at the factory to 100psi (6.9 bar). 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

- Cartridge Style valve enables quick and easy installation or service in-line.
- Greater flow performance with lower fall off pressure for consistent operation
- Seat design reduces flow noise
- 100% balanced valve, unique to Watts, provides reliable flow performance
- Full size range available rated to 400psi to meet your commercial and residential applications
- Cartridge Assemblies available in standard and high-pressure (HP) models
- Bypass feature in Cartridge Assembly controls thermal expansion pressure**.
- Standard construction includes sealed spring cage and corrosion resistant adjusting and cage screws for accessible outdoor or pit installations
- High performance thermoplastic integral seat cartridge
- Union inlet connection and tailpiece kits for solder, Quick-Connect, PEX, CPVC and threaded to meet your commercial and residential applications.
- High temperature resistant reinforced diaphragm for hot water

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



Specifications

A Water Pressure Reducing Valve with integral 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 400psi (27.6 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 X65B.

**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 product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.



Models

X65B	NPT threaded female inlet x NPT female outlet
X65BU	NPT threaded union inlet x NPT female outlet
X65BUS	Solder union inlet x NPT female outlet
X65BDU	Double Union – NPT threaded union female inlet and outlet
X65BDUS	Double Union – Solder union inlet and outlet
X65BU-QC	Single Union – Quick-Connect union inlet x NPT female outlet*
X65BDU-QC	Double Union – Quick-Connect union inlet and outlet*
X65BDU-CPVC	Double Union - CPVC union inlet x CPVC union outlet**
X65BDU-PEX	Double Union - PEX union inlet x PEX union outlet*
X65B-HP	High Pressure – NPT threaded female inlet x NPT female outlet

*For sizes 1/2", 3/4", 1" (15, 20, 25mm) only

**For sizes 3/4", 1" (20, 25mm) only

Materials

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

Pressure – Temperature

Temperature Range:	33°F – 180°F (0.5°C – 82°C)
Maximum Working Pressure:	400psi (27.6 bar)
Adjustable Reduced Pressure Range:	20–80psi (138 – 552 kPa)
Standard Reduced Pressure Setting:	50psi (345 kPa)
HP Reduced Pressure Range:	50-150psi (345 – 1034 kPa)
HP Reduced Pressure Setting:	100psi (6.9 bar)

Options

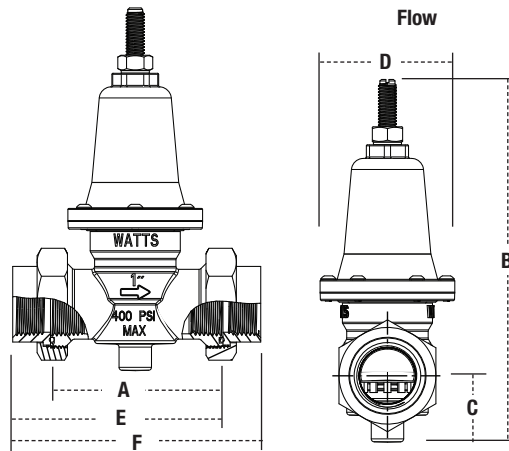
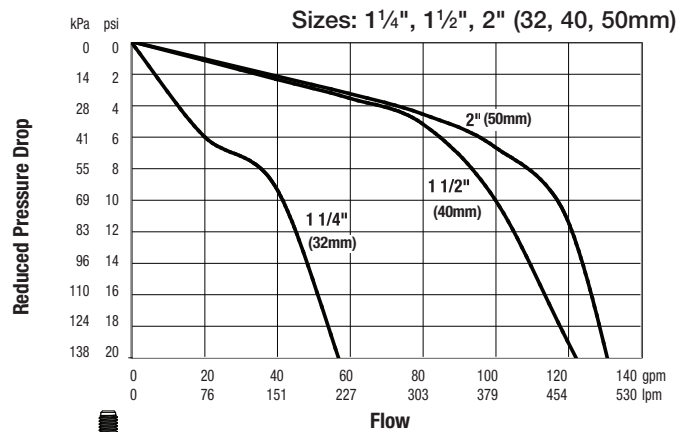
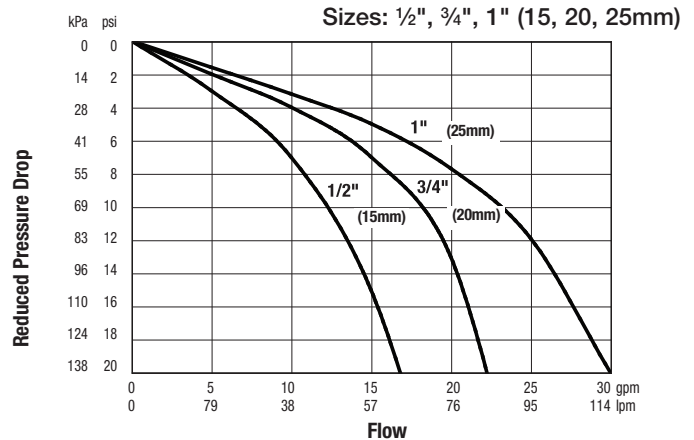
Add Suffix	
G	Gauge tapping, 1/4" (8mm)
GG	Gauge tapping and 160psi (11.0 bar) gauge
HP	High pressure range 50–150psi (3.4 – 10.3 bar)

Dimensions – Weights



Certified to ASSE Standard 1003, and listed by ASSE and IAPMO. Approved to CSA B356-2000 by IAPMO.

Capacity



SIZE (DN)		DIMENSIONS										WEIGHTS													
in.	mm	A	B (MAX) STD	B (MAX) HP	C	D (DIA)	E (Threaded)	E (Sweet)	E (OC)	F (Threaded)	F (Sweet)	F (OC)	lbs.	kgs.											
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	mm											
1/2	15	3	76.7	5 7/16	137.7	6 11/16	169.9	1 5/16	32.8	2 7/16	61.2	3 11/16	93.0	3 3/8	91.9	4 1/2	115	4 5/16	109.2	4 1/4	107.2	6	153	1.43	0.65
3/4	20	3 3/8	79.8	5 7/16	137.7	6 11/16	169.9	1 5/16	32.8	2 7/16	61.2	3 3/4	96.0	4	101.1	4 13/16	122	4 7/16	112.3	4 13/16	122.4	6 1/2	165	1.52	0.69
1	25	3 3/16	90.4	6 3/16	157.2	7 1/4	199.9	1 3/8	34.5	2 3/4	70.6	4 15/16	110.2	4 3/8	116.1	5 1/8	135	5 1/8	130.0	5 9/16	141.7	7 1/16	179	2.22	1.01
1 1/4	32	4 5/16	110.2	6 15/16	176.0	9 13/16	248.9	1 9/16	39.40	3 1/4	81.8	5 5/8	142.7	5 3/8	136.9	–	–	6 7/8	175.3	6 7/16	163.6	–	–	3.61	1.64
1 1/2	40	5 1/2	140.2	11 3/4	297.9	16 3/4	426.0	1 7/8	47.50	4 9/16	115.8	6 13/16	142.7	6 11/16	169.9	–	–	8 1/16	205.2	7 7/8	199.6	–	–	9.27	4.20
2	50	5 1/2	140.2	11 3/4	297.9	16 3/4	426.0	1 7/8	47.50	4 9/16	115.8	6 13/16	173.5	6 15/16	176.5	–	–	8 7/8	206.8	8 3/8	212.9	–	–	9.59	4.35



A Watts Water Technologies Company



ISO 9001-2008
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