

For Commercial and Industrial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series 2300

Direct Operated Water Pressure Reducing Valves

Sizes: 3" – 6" (80 – 150mm)

Series 2300 Direct Operated Water Pressure Reducing Valves are designed for dead-end water service where the flow is intermittent and changes rapidly, as on domestic water system. This Series is also installed to regulate the flow of water to such fast acting equipment as flushometers and snap cocks. The Series 2300 is recommended where city water pressure is to be reduced to supply plumbing fixtures to prevent violent pressure fluctuations.

Features

- An essentially balanced single seat minimizes variation in delivery pressure resulting from varying inlet pressure
- A large Hycar diaphragm ensures a sensitive response to the slightest changes in reduced pressure
- Packless design eliminates stuffing box friction
- Hycar composition single seat provides for dead-end shutoff and prevents pressure-creep when no flow is required
- Self-aligning design. Eliminates the need for a stem guide in the bottom flanges and removes a point of direct collection that can cause faulty operation
- Disc and piston are located to minimize the possibility of obstruction by dirt
- Large pressure plate gives ample support to the diaphragm – assuring long life
- Self-contained design, requires no control lines
- All internal parts accessible by removing blind flange or spring chamber. Regular maintenance can be performed with the valve body in line
- No stuffing box maintenance required

Applications

- Industrial plants for washrooms and processing operations
- Apartment buildings, hotels, office buildings and hospitals to provide each floor with a steady pressure.
- Municipal or plant water main to maintain constant pressure

Specifications

A Direct Operated Water Pressure Reducing Valve shall be installed where indicated on the plans. The Valve shall be manufactured out of cast iron and be pressure rated to 200psi (13.8 bar). The valve shall have a large Hycar diaphragm to ensure sensitive response. Valve shall be a Watts Regulator Company Series 2300.



Series 2300

The design of this valve minimizes any danger of dirt lodging in the stem guide.

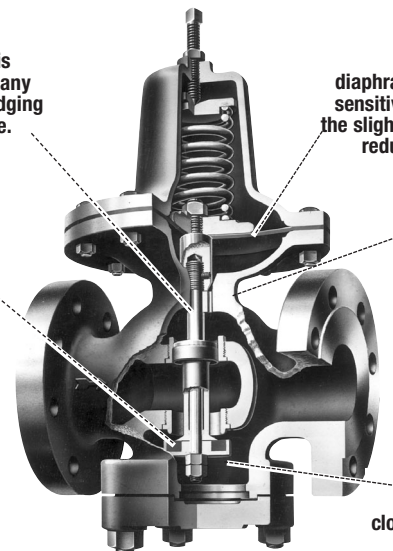
Essentially balanced single seat minimizes a variation in delivery pressure resulting from a varying inlet pressure.

A large Hycar diaphragm ensures a sensitive response to the slightest change in reduced pressure.

This design being self-contained, no control lines are required.

Designed to close against the flow. Will not chatter or produce water hammer. Operates smoothly and quietly.

No stem guide in bottom flange to collect dirt. These valves are self-aligning and the guiding of the disc is independent of the bolted bottom flange.



Materials List

Body	Cast Iron
Disc	Hycar Composition
Trim	Stainless Steel
Diaphragm	Hycar
Spring	Tempered Steel

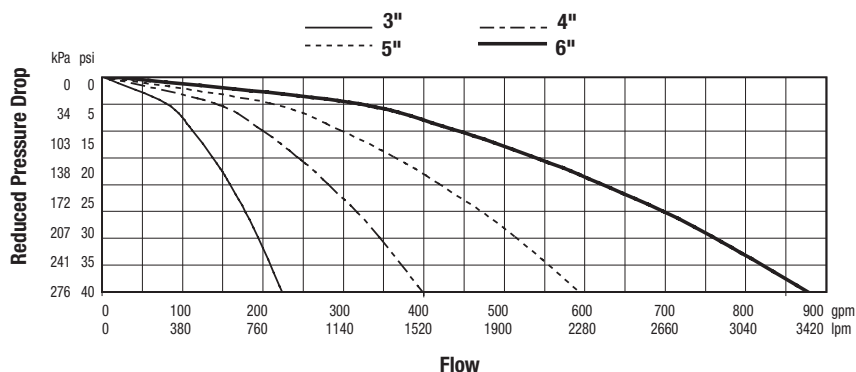
Pressure – Temperature

Maximum Temperature: 150°F (66°C)

Maximum Pressure: 200psi (13.8 bar)

Reduced Pressure Range: 30 – 80psi (207 – 552 kPa)

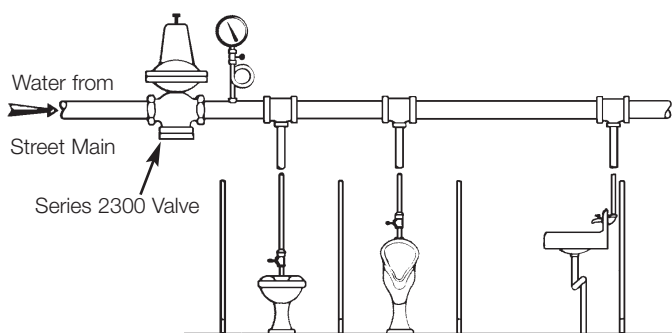
Capacity



Typical Applications

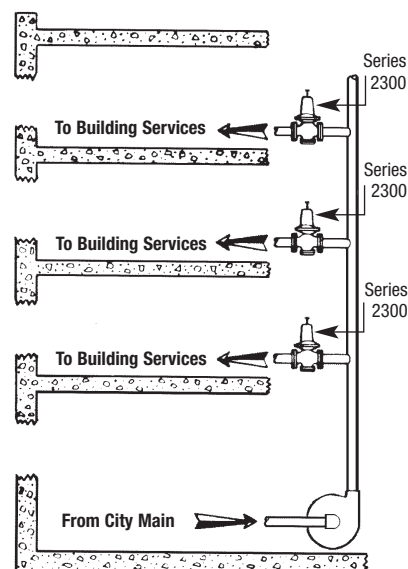
Washroom Water Supply

Series 2300 is a direct operated, balanced, tight seating pressure reducing valve, opened and closed by small variations in delivery pressure.



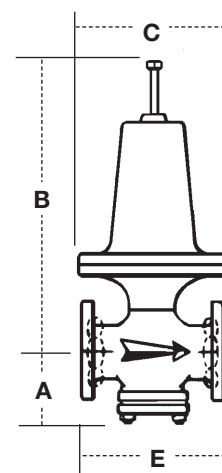
Domestic water pressure control for tall buildings

Series 2300 provides each floor of the building with water at a steady economical pressure. The delivery pressure acting on the spring loaded diaphragm throttles the balanced valve to control the pressure.



Dimensions — Weights

SIZE (DN)		DIMENSIONS						WEIGHTS	
in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.
3	80	6	153	21 ³ / ₄	552	9	229	108	49
4	100	6 ⁵ / ₈	168	26 ⁵ / ₈	676	11 ¹ / ₄	286	198	90
5	125	7 ⁵ / ₈	194	33 ¹ / ₈	841	14 ¹ / ₄	362	352	160
6	150	9 ¹ / ₈	232	35 ⁷ / ₈	911	16	406	500	227



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Water Safety & Flow Control Products



ISO 9001-2000
CERTIFIED

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Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca