Hydronic





# Hydronic Specialties

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### Flo-control valves for hydronic heating

- Stop gravity flow when circulator is not running.
- Summer operation.
- For use with an indirect water heater.

#### QUIET OPERATION . . . NO CHATTERING, STEADY FLOW CONDITIONS. . . NO RATTLING.

Armstrong Flo-control valves are designed to prevent gravity circulation in a hydronic system when the circulating pump is not running. When the pump starts, the Flo-control valve opens automatically to permit circulation of water in the heating system.

If gravity flow is required, for any reason (such as electric power failure), the valve may be opened manually.

Armstrong Flo-control valves are an essential part of a hot water heating system when domestic water is heated from an indirect heater in the boiler. In summer, when no heat is required and the heating pump is not running, the Flo-control valve prevents gravity flow in the system.

In addition to permitting year-round use of the indirect water heater, Armstrong Flocontrol valves, in conjunction with the room thermostat and circulating pump, help to regulate building temperatures when the heating system is in operation.

Armstrong Flo-control valves, sizes <sup>3</sup>/<sub>4</sub>" through 3", are available in iron straight-angle type for horizontal or vertical installation, in various piping designs.

#### **Materials of Construction**

34" to 3" straight-angle: Iron body/Bronze fittings Working pressure: 125 PSI (1103 kPa) Maximum operating temperature: 250°F (121°C)









### Easy to clean

It is not necessary to remove Armstrong Flo-Control Valves from the line for cleaning Simply:

- Unscrew top cap.
- Remove valve mechanism.
- Clean out all foreign matter.
- Replace cap.

When installing, leave sufficient clearance from centre line of valve to ceiling in order to facilitate cleaning. Sizes to 1½<sup>"</sup>.....leave 5" clearance Sizes 2"and larger......leave 9" clearance



#### Dimensions

	SIZE	CONNECTIONS			С	D	E		
STRAIGHT-ANGLE									
	3⁄4 "	SCREWED 3 ENDS	3.50 (89)	5.50 (130)	1.88 (48)	1.75 (44)	1.50 (38)		
	1"	SCREWED 3 ENDS	3.50 (89)	5.50 (130)	1.88 (48)	1.75 (44)	1.50 (38)		
	1¼"	SCREWED 3 ENDS	4.00 (102)	6.50 (165)	2.25 (57)	2.00 (51)	1.88 (48)		
	1½"	SCREWED 3 ENDS	5.00 (127)	7.25 (184)	3.00 (72)	2.50 (63)	2.25 (57)		
	2"	FLANGED 1 SCREWED 2 ENDS	6.88 (175)	7.50 (190)	4.62 (117)	4.00 (102)	2.62 (66)		
	2½"	FLANGED 1 SCREWED 2 ENDS	8.38 (213)	9.62 (244)	6.00 (152)	5.00 (127)	3.44 (87)		
	3 "	FLANGED 1 SCREWED 2 ENDS	9.00 (229)	10.00 (254)	6.00 (152)	5.25 (133)	3.75 (95)		

NOTE: Dimensions are in inches (mm)

### **Combination valves**

Low-priced combination Relief and Reducing valves, built to the high standards of all Armstrong products.

Bodies have built-in strainer, extra large diaphragms, ½" sweat or threaded union fitting and anti-siphon check valve feature on Reducing valve. Reducing valve is factory set at 12 lbs but is easily adjusted to meet varying building heights. The special composition valve disc seat is brass and is practically noiseless during operation.

	SIZE		BODY CONSTRUCTION				
NUMBED				REDUCING VALVE		BODY	APRROXIMATE
NUMBER	BOILER	FILL	RELIEF VALVE	FACTORY SETTING DEL. PRESS.	READJUSTABLE RANGE	CONSTRUCTION	WEIGHT
C 11	1⁄2"	1⁄2"	30 lbs	12 lbs	7 to 25 lbs	BRASS	2¼ lbs

### Standard relief valves

These competitively priced valves are built to high standards and offer many outstanding superiorities. Extra large diaphragm assures positive action.

NUMBER	SIZE	MAXIMUM SETTING	BODY CONSTRUCTION	APRROXIMATE SHIPPING WEIGHT
RL 11	1/2"	30 lbs	BRASS	1¼ lbs

## **Reducing valves**

#### Low Pressure Reducing Valves

The same unit as used in the Armstrong Combination valve. All working parts are of brass with easily cleaned built-in strainer. Factory adjusted at 12 lbs suitable for 1, 2, and 3 story buildings. Complete with integral check valve the RD-11 is equipped with either a sweat or threaded tail piece on the inlet side.

NUMBER	SIZE	BODY CONSTRUCTION	APRROXIMATE SHIPPING WEIGHT
*RD 11 T/S	1⁄2"	BRASS	1¼ lbs
RD 40	3⁄4''	BRASS	3¼ lbs
RD 50	3⁄4''	IRON	3¼ lbs



#### High Pressure Reducing Valves

Factory adjusted for 150 lbs initial pressure, 45 lbs delivery pressure. Other pressures must be specified when ordering. All working parts brass, built-in strainer, extra large diaphragm. Complete with check valve.

NUMBER	SIZE	BODY CONSTRUCTION	FACTORY PRESSURE SETTING	APRROXIMATE SHIPPING WEIGHT
HRD 70	3⁄4"	BRASS	45 lbs DELIVERY	3¼ lbs





### The Armstrong Family of Circulators

Armstrong circulating pumps are engineered for dependability and serviceability. They feature a convenient radially split body that can be left in-line while servicing. Armstrong circulators are designed for efficient, trouble-free use in residential and commercial hot water-heating recirculation systems. Armstrong circulators feature quiet operating, vibration-free motors that meet NEMA specifications. All Armstrong circulators (except the Astro series) feature ARMSEAL leak-proof construction.

#### S & H Series

S & H Series circulators feature the unique Armstrong shaft and bearing module for ease of serviceability and maximum interchangeability. Oversized shafts of alloy steel machined to exact tolerances. Impellers are constructed from non-ferrous material and are designed for optimal water delivery. Available in bronze-fitted and all-bronze construction.



#### Series 1050 & 1060

These custom circulators feature the classic horizontal in-line design, engineered for durability and smooth operation. Designed for large flow applications. Impellers and motors are fine-tuned to meet the exact system requirements. Available in all-bronze and bronze-fitted construction.



#### **Astro Series**

The Astro line of circulators offers breakthrough engineering in a compact, wet rotor circulator that features a replacement cartridge. Available with selflubricated bearing, vent plug for initial purging, and dynamically balanced stainless steel rotor assembly. These circulators eliminate the worry of mechanical seal or coupler alignment failure.



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