# ARMSTRONG



# Flo Control Valves for Hydronic Heating

- STOP GRAVITY FLOW WHEN CIRCULATOR IS NOT RUNNING
- 5UMMER OPERATION
- FOR USE WITH AN INDIRECT WATER HEATER

Quiet Operation . . . no chattering Steady Flow Conditions. . . no rattling

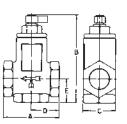
Armstrong Flo-Control Valves are designed to prevent gravity circulation in a Hydronic System when the circulating pump is not running. When the pump starts, the Flo-Control Valve opens automatically to permit circulation of water in the heating system. If gravity flow is required, for any reason . . . such as electric power failure . . . the valve may be opened manually.

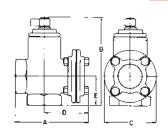
Armstrong Flo-Control Valves are an essential part of a hot water heating system when domestic water is heated from an indirect heater in the boiler. In summer, when no heat is required and the heating pump is not running, the Flo-Control Valve prevents gravity flow in the system.

In addition to permitting year-round use of the indirect water heater, Armstrong Flo-Control 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. A 1" Bronze Straightway Type is available for use with copper tubing.

Size	Gamma ediama	Dimensions in Inches				
Size	Connections	A	В	С	D	E
STR	AIGHT-ANGLE					
3/4"	Screwed 3 Ends	31/2	51/2	17/8	13/4	11/2
1"	1" Screwed 3 Ends		51/2	17/8	13/4	11/2
11/4"	Screwed 3 Ends	4	61/2	21/4	2	17/8
11/2"	Screwed 3 Ends	5	71/4	3	21/2	21/4
2"	Flanged 1 Screwed 2 Ends	67/8	71/2	45/8	4	25/8
21/2"	Flanged 1 Screwed 2 Ends	83/8	95/8	6	5	37/16
3"	Flanged 1 Screwed 2 Ends	9	10	6	51/4	33/4
STRA	STRAIGHTWAY-Bronze					
1"	1" Sweat 2 Ends		43/8	17/8	17/8	3/4







# 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, to facilitate cleaning.

Sizes to 1<sup>1</sup>/<sub>2</sub>" . . . . . . leave 5" clearance Sizes 2" and larger . . . . leave 9" clearance

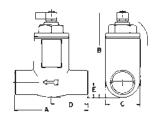
#### **Materials of Construction**

1" Straightway: Bronze body

<sup>3</sup>/<sub>4</sub>" to 3" Straight-Angle: Iron body/Bronze fittings

Working Pressure: 125 psig (1103 kPa)

Max. Operating Temperature: 250°F (121°C)



### **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, and Reducing Valve is equipped wth anti-siphon check valve feature, and 1/2" sweat or threaded union fitting. Reducing Valve is factory set at 12 lbs. but is easily adjusted to meet varying building heights. The special composition valve disc seats on Brass and is practically noiseless in operation.

				Е	ody Construction			
	Number Size		70		Reducing Valve		Body	Annroy
			Relief	Factory Setting	Readjustable	Constr.	Approx. Ship	
		Boiler	Fill	Valve	Del. Press.	Range		Weight
Ī	C11	1/2"	1/2"	30 lbs	12 lbs	7 to 25 lbs	Brass	21/4 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	Max. Setting	Body Const.	Approx. Ship Weight
RL 11	1/2"	30 lbs	BRASS	11/4 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	Approximate Shipping Weight
*RD 11 T/S	1/2"	BRASS	1 <sup>1</sup> /4 lbs.
RD 40	3/4"	BRASS	31/4 lbs.
RD 50	3/4"	IRON	31/4 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	Approx. Ship. Weight
HRD 70	3/4"	BRASS	45 lbs DELIVERY	31/4 lbs

# "The Armstrong Family of Circulators"

Dependable 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, featuring quiet operating, vibration-free motors that meet NEMA specifications. All Armstrong circulators (except Astro series) feature ARMSEAL leak-proof construction.





#### 'S' and 'H' Series

Both S and 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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