# **BRONZE** Solenoid Valves



# FULL PORT NORMALLY OPEN - 1/2" to 1" PIPE SIZE

( NO DIFFERENTIAL PRESSURE REQUIRED TO OPEN )

### **OPERATION:**

Valve closes when energized and opens when de-energized. When the coil is energized the plunger presses the poppet, closing the pilot orifice, and opens a bleed passageway to permit pressure to build above the piston and seal it. Upon de-energizing the coil, the pilot orifice is opened, relieving the pressure above the piston, allowing it to leave its seat. The bottom spring allows the valve to operate at zero pressure drop.

### **CONSTRUCTION:** \*Wetted parts

- Valve Body\* Cast Bronze, Globe Pattern NPT ends (Flanged Ends available)
- Piston\* Cast Bronze
- Coil Enclosure Malleable or Cast Iron, 1/2" NPS conduit conn.
- Plunger\* 430 Stainless Steel
- Poppet\* 303 Stainless Steel
- Stem\* 303 Stainless Steel
- Bonnet Tube\* 304 Stainless Steel
- Springs\* Inconel and 302 Stainless Steel
- Body Seal\* Buna N or Non Asbestos Gasket (Viton® or Teflon® available)
- Orifice Seal\* Buna N (Viton® or Glass Filled Teflon® available)
- AC Shading Coil\* Copper
- Stem Pin\* 304 Stainless Steel
- Coil Encapsulated Class B, 18" leads (Class H available)

#### **APPLICATION:**

To control the flow of **Coolant**, the valve is designed with the piston "turned down", and a larger pilot port, offering additional clearance, allowing the valve to operate with fluids containing some grit/sediment typically found in coolant. Valve operates from zero to maximum differential pressure indicated in table. Valve must be mounted in horizontal pipe with solenoid enclosure vertical and on top.

	Pipe Size Inches	Max. Diff. PSI	Type No.	Watts AC	Watts DC	Ship Wt. Lbs.	Dimensions in Inches			
							Α	В	с	D
	1/2	200	MS33AR42-C	45	23	8	9-3/8	8-1/4	4-1/8	3-1/4
	3/4	50	MS18AR23-C	25	18	9	8-1/4	7-1/8	2-3/4	3-1/2
		110	MS233AR43-C	80	40	13	9-1/4	8-1/8	3-1/2	3-1/2
	1	110	MS33AR44-C	45	23					
		200	MS233AR24-C	80	40	14	10	8-5/8	3-1/2	4-1/8
		300	MS233AR44-C	80	40					

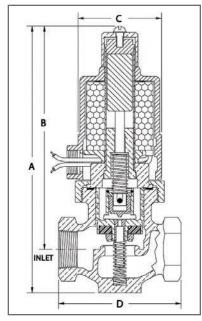
"A" Dimension does not include the "MS" Mounting Stud (approx. 7/8") Note: The addition of any bottom mounted option would replace the "MS" Mounting Stud and change the prefix to reflect the appropriate option.



## MAX. FLUID TEMP. 212° F MAX. STATIC PRESSURE 300 PSI



For Options and Accessories see pages 26 & 27. Strainers are recommended for use with solenoid valves (see page 19).



#### When ordering please supply:

– Pipe Size

- Valve Type

– Hertz

- Fluid Temperature
  - Max. Diff. Pressure
- Voltage Max. (AC or DC) - Optio
  - Optional Features
    (See pages 26 & 27)

– Fluid