

Series 2023A No-Freeze Valve

Liquid Dump Valve:

Reliable with high pressure, low temperature



The Series 2023A "No Freeze" control valve is a high-pressure, reverse-seating liquid dump valve typically used in separators and other process vessels. The body screws directly into the vessel connection, placing the trim inside the vessel where any warm fluid present will impede freezing inside the valve body.

Application

The Series 2023A is ideal for use as a high pressure liquid dump valve for separators and other process vessels. The valve body is specifically designed for constant trim immersion in the vessel's fluid.

Maximum Differential Pressures (ΔP) No.9 Non-Adjustable Actuator

- Diaphragm supply pressure = 19 psig to fully open valve
- Valve/actuator is reverse acting, air to open, normally closed
- Maximum service pressure = 2220 psig
- Flow in lower port, flow out side port

Notes:

1. Maximum $\Delta P = P_1 - P_2$ where $P_2 = 0$ psig.
2. Maximum ΔP cannot exceed maximum value working pressure

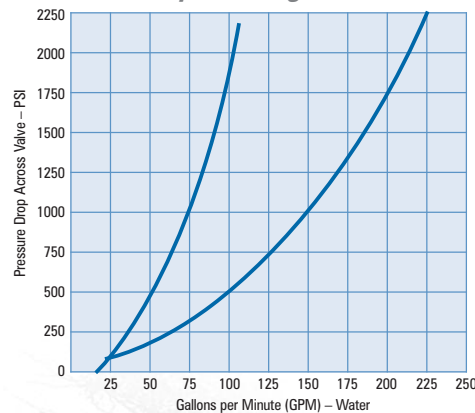
Features

- Threaded end connections
- Hexagonal steel body
- Ball type trim design
- Replaceable plug and seat
- 300 Series SST trim standard
- Non-adjustable actuator
- Carbide trim option
- NACE MR-01-75 compliance option

Specifications

- Body inlet connection 1.00" NPT (male)
- Body outlet connection 0.50" or 0.75" NPT (female)
- Body style Angle/freeze resistant
- Max. working pressure 2220 psig (ASME Class 900)
- Temperature limits -20° to 180° F
- Trim characteristic Quick opening
- Actuator mode Reverse acting
- Actuator effective area 35 Sq. in.

Liquid Sizing Chart



Notes:

1. Maximum Flow Coefficient (C_v) for 0.25" Trim is 2.22. Maximum Flow Coefficient (C_v) for 0.375" Trim is 4.8
3. For Gravity Correction, multiply GPM by 1 $\sqrt{S.G.}$.
4. To Convert Barrels Per Day, Multiply GPM by 34.3

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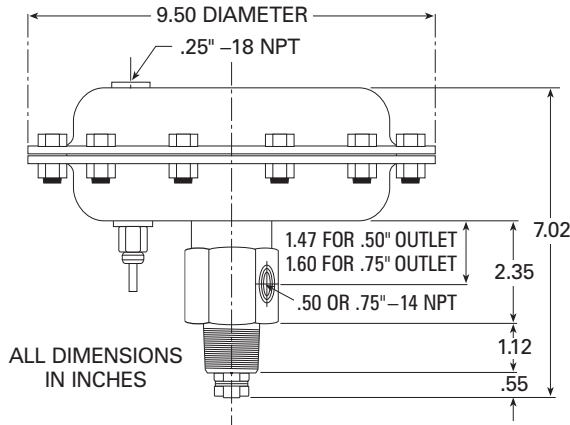
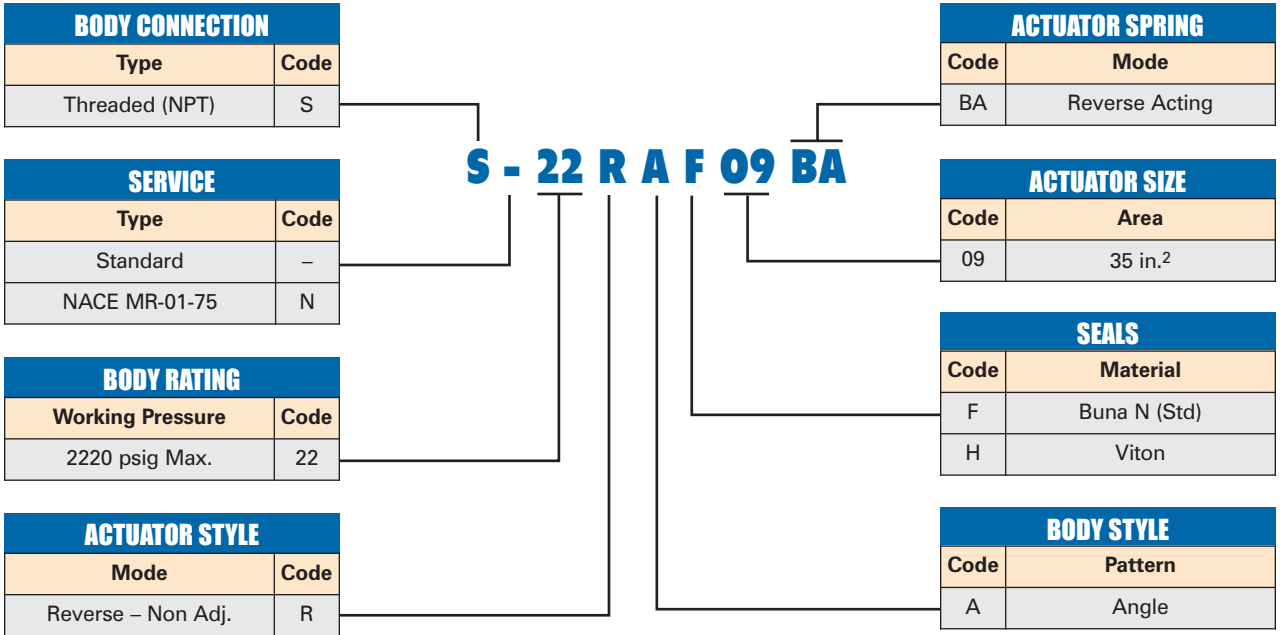
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Model Code

How to Order

1. Specify series number – 1.0" Series 2023
2. Specify outlet size – .50" or .75" – 14 NPT
3. Select model number from chart below
4. Specify trim size – 0.25" or 0.375"
5. Select trim material



TRIM MATERIAL	
Standard	303 SST
Optional	Kynar/303 SST
Optional	Carbide/440 SST
Optional (NACE)	316 SST
Optional (NACE)	Kynar/316 SST

Please contact your Norriseal representative for more details and assistance in specifying the optimal solution for your application.



Engineered Performance

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