

SAFETY & RELIEF VALVES

Multi-Purpose Safety Relief Valves

500 SERIES



Versatile safety relief valve available in bronze, carbon steel or all stainless steel construction, suitable for a wide range of steam, air, gas and liquid applications. High capacity full nozzle design is available with metal to metal, PCTFE or elastomer O-ring seating. Short tuned blowdown and backpressure tight body minimizes fugitive emissions and product losses in the event of valve operation.

ASME Section VIII Air, Steam, and Liquid service

Sizes 1/2" through 2" NPT

Factory set pressure range 5-1200 psig @ 800°F max.

(See press. / temp. limit chart below for specific ratings for each model).

APPLICATIONS:

- Pressure Vessels and Pressure Piping Systems
- Pumps, Tanks and Hydraulic Systems
- Thermal Relief of Liquid Filled Vessels
- Chemical, Process and other Industrial Plants.
- Power Plant Auxiliary Systems
- Cryogenic and Industrial Gases
- Air and Gas Compressors and Dryers
- Vacuum Relief



FEATURES:

- Wide Range of Materials and Options
- One Trim Design is Suitable for Steam, Air / Gas and Liquid Service
- High Capacity Full Nozzle Design
- Stainless Steel Springs
- Integral Lift Stop
- Self - Aligning Pivoting Disc
- API 527 Seat Tightness, standard for all models
- Tuned Blowdown - Short and Adjustable, reduces product losses.
- Backpressure Tight Design Minimizes Fugitive Emissions
- CSA B51 CRN OG8547.5C

OPTIONS:

- Screwed Cap (standard), Packed Lift Lever
- Test gags
- Elastomer or PCTFE Soft Seat for Exceptional Seat Tightness
- High Temperature Alloy Springs for 550°F - 800°F Service
- Special Cleaning Available
- European Pressure Equipment Directive compliant option (CE/PED)

HOW TO SELECT:

1. Determine the orifice letter that corresponds to your required flow rate from the capacity charts on pages 46-48.
2. Select the inlet x outlet connection options from the list of models available for that orifice from page 45.
3. Enter this base model number into the matrix below. Complete by specifying the Code, service and set pressure requirements.

500 SERIES MODEL NUMBERING SYSTEM

| 52 | 3 | J | H | B | K | M | AA | 0425 | Q |
|-------------------------------|-------------------|-------------------|---------------|---------------------|----------------------|--------------|---------------------------|--------------------|-----------------|
| SERIES BODY/ TRIM MATERIAL | CAP | ORIFICE LETTER | INLET SIZE | CONNECTION | SERVICE | SEAT | SPECIAL OPTIONS | SET PRESSURE | SUFFIX |
| 51 = Bronze/Brass | 1 = Screwed Cap | D | C = 1/2 | B = MNPT x NPT | J = Sec VIII Liquid | M = Metal | Factory Issued | Set Pressure, PSIG | Q = Performance |
| 52 = Bronze/Stainless | 2 = Screwed + Gag | E | D = 3/4 | D = 3/4 Outlet | K = Sec VIII Air/Gas | B = BUNA-N | Letters/Numbers for | (4 digits) | (Calibration) |
| 53 = Carbon/Stainless | 3 = Packed Lever | F | E = 1 | (Model 510 & | L = Sec VIII Steam | E = EPR | Special Options or | Vacuum "HG" | Test Reports |
| 54 = All Stainless | 4 = Packed + Gag | G | F = 1-1/4 | 520 D Orifice Only) | M = Non Code Liquid | K = PCTFE | Features | Prefix + 2 digits | |
| | | H | G = 1-1/2 | | N = Non Code Air | N = Neoprene | "AA" = Default Setting | | |
| | | J | H = 2 | | P = Non Code Steam | Z = Kalrez® | "CE" = CE/PED | | |
| | | | | | Q = Vacuum | S = Silicone | "HT" = High Temp Spring | | |
| | | | | | | V = Viton | "OX" = Cleaned for Oxygen | | |

Notes:

1. The ASME Code Section VIII requires a lift lever for the following services: air, steam, or hot water over 140°F
2. Maximum back pressure is 50 psig.
3. High temperature stainless steel alloy spring is required above 550°F / 288°C. Specify option "HT"
4. Contact factory for pricing and availability.



For additional information, submittal sheets and manuals, visit www.apollovalves.com

Customer Service (704) 841-6000