

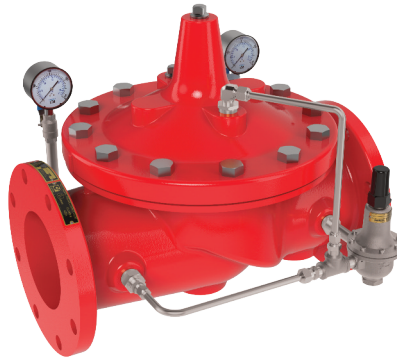


MODELS 90G-21 90A-21

Fire Protection Pressure Reducing Valves



**MEA
Approved**



90-21 UL Listed Fire Protection Pressure Reducing Valve

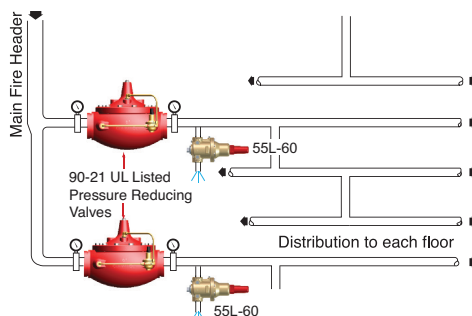
- **UL Listed, ULC Listed, MEA Approved**
- **Globe or Angle Pattern**
- **Proven Reliable Design**
- **Available in Cast Bronze, Ductile Iron and Cast Steel**
- **Accurate Pressure Control**
- **In Line Service**
- **Grooved Ends (1-1/2" - 8")**

Cla-Val 90-21 Pressure Reducing Valves are indispensable in any fire protection system. Available in globe (90G-21) and angle patterns (90A-21), our diaphragm actuated design is proven to be highly reliable and easy to maintain. Globe and angle pattern valves feature a full range of adjustments. These valves are also available in a variety of material options. Epoxy coating is strongly recommended for all fire system valves (excluding bronze valves). All configurations of the valve can be supplied with optional internal and external epoxy coating of the main valve wetted surfaces.

Special System Water Control Valves – Class II
UL Product Category VLMT – File No. Ex 2534

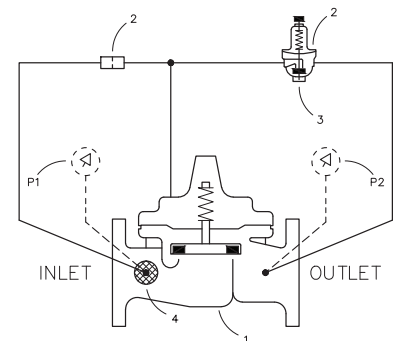
Function

Cla-Val 90G-21 (globe) and 90A-21 (angle) Pressure Reducing Valves automatically reduce a higher inlet pressure to a steady lower outlet pressure regardless of changing flow rate and/or varying inlet pressure. The valves pilot control system is very sensitive to slight downstream pressure fluctuations, and will automatically open or close to maintain the desired pressure setting. The downstream pressure can be set over a wide range by turning the adjustment screw on the CRD pilot control. The adjustment screw is protected by a screw-over cover, which can be sealed to discourage tampering.



Schematic Diagram

- | Item | Description |
|------|--|
| 1 | 100KX Hytrol Main Valve |
| 2 | X58C Restriction Assembly |
| 3 | CRD Pressure Reducing Control (see note) |
| 4 | X46A Flow Clean Strainer |
| P | Gauge Option |



Note:

For Steel and Ductile Iron 300 Class Valves, use CRDKX with a special diaphragm washer, yoke and screws (30- 165)

Typical Application

Underwriters Laboratories requires the installation of pressure gauges upstream and downstream of the Pressure Reducing Valve.

A relief valve of not less than 1/2 inch in size must also be installed on the downstream side of the pressure control valve. Adequate drainage for the relief valve discharge must be provided.

The valve made be installed in either vertical or horizontal positions.

UL / ULC Listings

Size	Ductile Iron 150# Flanged	Ductile Iron 300# Screwed	Ductile Iron 300 # Flanged	Bronze 300# Threaded	Bronze 150# Flanged	Bronze 300# Flanged	Cast Steel 300# Flanged & Grooved End	Globe Pattern Ductile Iron Grooved End	Angle Pattern Ductile Iron Grooved End
1 1/2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC			UL / ULC	UL / ULC	
2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL / ULC	UL / ULC
2 1/2"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL	
3"	UL / ULC	UL / ULC	UL / ULC	UL / ULC	ULC	ULC	UL / ULC	UL / ULC	UL / ULC
4"	UL / ULC		UL / ULC		ULC	ULC	UL / ULC	UL / ULC	UL / ULC
6"	UL / ULC		UL / ULC				UL / ULC	UL / ULC	UL / ULC
8"	UL / ULC		UL / ULC					UL / ULC	

Valve Size (Inches)	1 1/2	2	2 1/2	3	4	6	8
A Threaded	7.25	9.38	11.00	12.50	—	—	—
AA 150 ANSI	8.50	9.38	11.00	12.00	15.00	20.00	25.38
AAA 300 ANSI	9.00	10.00	11.62	13.25	15.62	21.00	26.38
AAAA Grooved End	8.50	9.00	11.00	12.50	15.00	20.00	25.38
B	1.12	1.50	1.69	2.56	3.19	4.31	5.31.
BB Grooved End	2.00	2.50	2.88	3.12	4.25	6.00	7.56
C Max.	5.50	6.50	7.56	8.19	10.62	13.38	16.00
CC Max. Grooved End	4.10	5.00	6.88	6.50	8.80	11.10	14.50
D	2.81	3.31	4.40	4.56	5.75	7.88	10.00
DD Grooved End	2.81	3.31	4.40	4.56	5.75	7.88	10.00
E Threaded	3.25	4.75	5.50	6.25	—	—	—
EE 150 ANSI	4.00	4.75	5.50	6.00	7.50	10.00	12.75
EEE 300 ANSI	4.25	5.00	5.88	6.38	7.88	10.50	13.25
EEEE Grooved End	—	4.75	—	6.00	7.50	—	—
F Threaded	1.88	3.25	4.00	4.50	—	—	—
FF 150 ANSI	4.00	3.25	4.00	4.00	5.00	6.00	8.00
FFF 300 ANSI	4.25	3.50	4.31	4.38	5.31	6.50	8.50
FFFF Grooved End	—	3.25	—	4.50	5.00	—	—
G (Max)	7.50	7.75	7.75	8.00	9.00	9.50	10.50
GG (Max)	8.10	8.00	—	8.13	9.31	10.50	11.50

1. Model Number 90-21
2. Size
3. Globe or Angle Pattern
4. Main Valve Body and Cover Material
5. Threaded, Flanged or Grooved
6. Pressure Class
7. Optional Epoxy Coating (specify w/suffix KC)