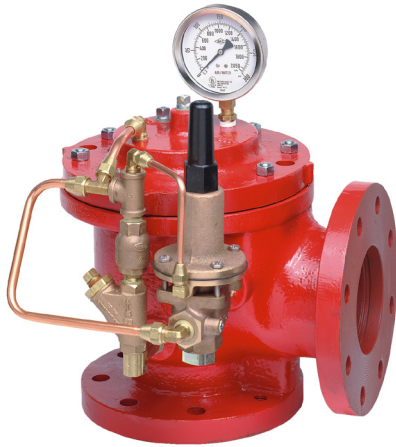


"Apollo" Valves

SUBMITTAL SHEET

108FC Series

Fire Pump Relief Valve



Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO Number:	
Representative:	
Wholesale Distributor:	



DESCRIPTION

The Model 108FC automatically relieves excess fire pump discharge pressure, to prevent the pressure from exceeding the rating of the fire system components.

The normally closed, spring loaded pilot, sensing pump discharge pressure, opens when pressure exceeds the spring setting, allowing the main valve to open. As the pump pressure increases the pilot controls the main valve to open further. Pressure is maintained at the controlled set point over a wide range of flows regardless of back pressure in the downstream piping. The valve closes gradually as pressures decrease below the set point.

FEATURES

- Limits maximum pump discharge pressure.
- Opens quickly; maintains pressure within close limits.
- Adjustable 60-180 psi or 100-300 psi.
- Pilot-operated main valve.
- Pressure setting is adjustable with single screw.
- Factory tested and pre-set to your requirements.
- UL Listed & Factory Mutual Approved for both split-case centrifugal and vertical turbine pumps.
- Sizes 3" - 8", globe and angle pattern.
- ANSI Flanged Class 150, Class 300, and 300 inlet x 150 outlet.
- Wide range of materials available.

SIZING

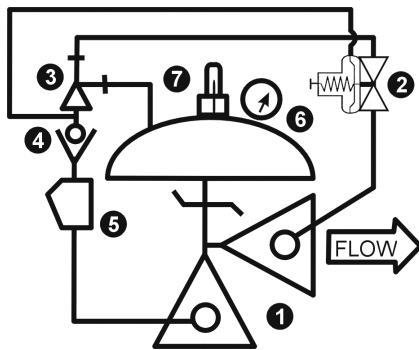
Fire pump relief valves are sized per the guidelines in NFPA 20, and are based on the rated flow of the pump.

Valve Size	Max Pump Flow (gpm)	Max Pressure Setting (psi)
3"	500	300 (UL) 175 (FM)
4"	1000	300 (UL) 175 (FM)
6"	2500	300 (UL) 175 (FM)
8"	5000	175 (UL & FM)

MAXIMUM PRESSURE

End Connections	Ductile Iron	Steel/SS	Bronze
Threaded	640 psi	640 psi	500 psi
Grooved	300 psi	300 psi	300 psi
150# Flanged	250 psi	285 psi	225 psi
300# Flanged	640 psi	740 psi	500 psi

SCHEMATIC



COMPONENTS (as shown on the schematic diagram)

No.	Component
1	Model 65 Basic Control Valve (angle pattern shown), a hydraulically operated, diaphragm-actuated, globe or angle valve which closes with an elastomer-on-metal seal.
2	Model 1330FC Pressure Relief Pilot , a two-way, normally-closed pilot valve which senses upstream pressure under its diaphragm and balances it against an adjustable spring load. An increase in upstream pressure tends to make the pilot open.
3	Model 126 Ejector , a simple "tee" fitting with a fixed orifice in its inlet port. It provides the proper pressure to the diaphragm chamber of the main valve depending on the position of the pressure relief pilot.
4	Model 141-1 Check Valve , that prevents the valve from opening under a vacuum condition that may be encountered with a vertical turbine pump.
5	Model 159 Y-Strainer . The strainer protects the pilot system from solid contaminants in the line fluid.
6	Pressure Gauge
7	Model 155 Visual Indicator (optional), enables user to determine valves' operating position.

Apollo Valves, Manufactured by **Conbraco Industries, Inc.**
 701 Matthews Mint-Hill Road, Matthews, NC 28105 USA
www.apollovalves.com | (704) 841-6000

This specification is provided for reference only. Conbraco Industries Inc. reserves the right to change any portion of this specification without notice and without incurring obligation to make such changes to Conbraco products previously or subsequently sold. Please visit our website @ www.apollovalves.com for the most current information.

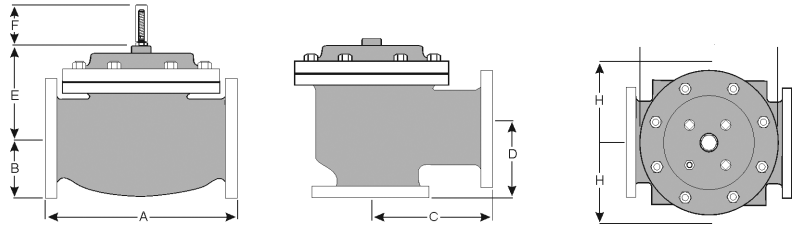


"Apollo" Valves

SUBMITTAL SHEET

108FC Series

Fire Pump Relief Valve



DIMENSIONS (in.)

DIM	END CONN.	3	4	6	8
A	150#	12	15	17-3/4	25-3/8
	300#	12-3/4	15-5/8	18-5/8	26-3/8
	300#x150#	12-3/4	15-5/8	18-5/8	26-3/8
C Angle	150#	6	7-1/2	10	12-11/16
	300#	6-3/8	7-13/16	10-1/2	13-3/16
	300#x150#	6-3/8	7-13/16	10	12-11/16
D Angle	150#	4	5-1/2	6	8
	300#	4-3/8	5-13/16	6-1/2	8-1/2
	300#x150#	4-3/8	5-13/16	6-1/2	8-1/2
E	ALL	6-1/2	8	10	11-7/8
F	ALL	3-7/8	3-7/8	3-7/8	6-3/8
H	ALL	11	12	13	14

DIMENSIONS (mm)

DIM	END CONN.	DN80	DN100	DN150	DN200
A	150#	305	381	451	645
	300#	324	397	473	670
	300#x150#	324	397	473	670
C Angle	150#	152	191	254	322
	300#	162	196	267	335
	300#x150#	162	196	254	322
D Angle	150#	102	140	152	203
	300#	111	148	165	216
	300#x150#	111	148	165	216
E	ALL	165	203	254	302
F	ALL	98	98	98	98
H	ALL	279	305	330	356

For maximum efficiency, the Apollo control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 8" and larger valves, or any valves with a limit switch, in positions other than described. Space should be taken into consideration when mounting valves and their pilot systems.

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician.

FACTORY CODE

108	G	002	020	1	1	1	3			
MODEL NUMBER	VALVE TYPE/ CONNECTION FULL PORT	SERIES EXTENSION	VALVE SIZE - FULL PORT	BODY & BONNET MATERIAL	SEAT RING MATERIAL	PILOT, FITTINGS, TUBE		ELASTOMERS		
108 = Standard	A = Angle/Flanged ANSI CLS 150 B = Angle/Flanged ANSI CLS 300 F = Angle/Flanged CLS 300 x CLS 150 G = Globe/Flanged ANSI CLS 150 (Full & Reduced Port) H = Globe/Flanged ANSI CLS 300	FC0	030 = 3" 040 = 4" 060 = 6" 080 = 8"	1 = Ductile Iron Red Enamel Epoxy Coated	1 = Bronze B61	Code 1	Pilot BZ	Ftgs BRS	Tube CU	1 = Buna-N

HOW TO ORDER YOUR VALVE

When ordering please provide:

-Size -Globe or Angle -End Connection -Pressure Setting or Spring Range -Special Requirements / Installation requirements.

Apollo Valves, Manufactured by **Conbraco Industries, Inc.**
701 Matthews Mint-Hill Road, Matthews, NC 28105 USA
www.apollovalves.com | (704) 841-6000

