

# Model PRH HIGH CAPACITY PRESSURE REDUCING VALVE

(36H SERIES)

Job Name:	Contractor:
Job Location:	P.O. Number:
Engineer:	Representative:
Tag:	Wholesale Distributor:

#### DESCRIPTION

The Apollo® PRH (36H Series) Pressure Reducing Valves are designed for commercial, industrial, and institutional applications to reduce incoming water pressure for protection of plumbing system components and to reduce water consumption. The valves are made with proven ASTM grade bronze and stainless steel materials. The PRH provides high capacity flow with low pressure drop. It is designed with an integral by-pass relief to protect against thermal expansion downstream. The bottom access enables easy in-line cleaning or seat replacement.

#### **FEATURES**

- Sealed Spring Cage for Vault Installation
- Ultra-high Flow Capacity
- Internal Thermal Expansion By-pass
- Local Code Approvals
- Standard Factory Setting: 50 psi
- Three spring ranges cover 10 165 psi
- · Stainless Steel Bolts and Spring
- 150 lb ANSI Flange Connection Option
- In-line strainer option
- 100% MADE IN THE USA

#### **MATERIAL SPECIFICATIONS**

MATERIAL OF LOW TOATIONS					
Part Name	Material				
Body	Bronze, ASTM B584				
Bonnet/Cap	Bronze, ASTM B584				
Diaphragm	FDA approved EPDM W/ Polyester				
Seat disc	FDA approved EPDM				
Yoke	Bronze, ASTM B-16				
Springs	Stainless Steel				
O-Rings	FDA approved Nitrile				

### **APPROVALS:**













#### **PERFORMANCE RATING**

Maximum Operating Pressure up to 400 psig Temperature Range 33 °F – 180 °F

# **OPTIONS**

FIIONS
END CONNECTION
T – Threaded
F − ANSI 150# Flanges (2-1/2"-3" only)
<u>ACCESSORIES</u>
Y - With Y-Strainer
PRESSURE ADJUSTMENT RANGE
Standard – 25–75 PSIG (set at 50)
L − 10–35 PSIG (set at 25)
<u>SIZE</u>
34 - 34" $$ 112 - 1-1/2" $$ 3 - 3"
1 - 1" 2 - 2"
PRH-

36H			
	CONNECTIONS:	SIZE	PRESSURE
	2 - NO UNION NPT	03 - 1/2"	1- 25-75 PSI RANGE
	7 - FLANGED	04 - 3/4"	2- 10-35 PSI RANGE
		05 - 1"	3- 75-125 PSI RANGE
		06 - 1-1/4"	
		07 - 1-1/2"	
		08 - 2"	
		09 - 2-1/2"	
		00 - 3"	

**DIMENSIONS (in.) - WEIGHTS (lbs.)** 

Conbraco Industries, Inc. 701 Matthews Mint Hill Rd. Matthews NC 28106 USA; www.apollovalves.com; 704-841-6000

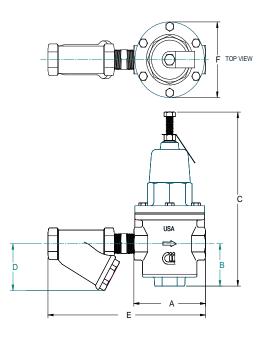
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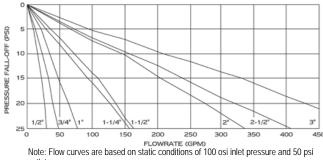
MODEL	ITEM	SIZE	DIMENSIONS (IN.)					Wt. W/STRAINER	Wt. W/O STRAINER	
NUM BER	NUM BER	(in)	Α	В	С	D	Е	F	(lbs. EA)	(lbs. EA)
PRH	36H-213	1/2	4.12	2.25	9.25	1.87	8.37	4.00	7.00	6.0
PRH	36H-214	3/4	4.12	2.25	9.25	2.44	9.00	4.00	8.00	6.0
PRH	36H-215	1	4.82	2.31	9.81	4.00	10.25	4.70	12.00	8.0
PRH	36H-216	1 1/4	6.19	3.19	13.20	3.37	12.50	6.50	29.00	24.0
PRH	36H-217	1 1/2	6.75	3.19	13.20	3.87	13.13	6.50	29.00	23.0
PRH	36H-218	2	8.12	3.50	16.00	4.63	16.00	7.63	47.00	38.0
PRH	36H-219	2 1/2	8.12	3.50	16.00	6.00	17.70	7.63	49.00	37.0
PRH	36H-210	3	10.37	4.00	19.12	7.00	20.50	9.75	87.00	70.0
FLANGED										
PRH	36H-708	2	10.37	3.50	16.00	6.25	20.00	7.63	79.00	50.0
PRH	36H-709	2 1/2	10.37	3.50	16.00	7.12	21.70	7.63	105.00	55.0
PRH	36H-700	3	12.50	4.00	19.12	8.12	24.50	9.75	132.00	104.0

Nominal dimensions are shown. Allowances must be made for

manufacturers' tolerances.



## PRH Series PRV Flow Rate vs. Pressure Fall-Off



outlet pressure.

 $\label{eq:continuous} \begin{tabular}{ll} Pressure Fall-off is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease in downstream regulated pressure when the flow $(P)$ is the decrease of $(P)$ is the decre$ increases.

36 SERIES WATER CAPACITY (GPM)								
PIPE SIZE	FALL-OFF PRESSURE DIFFERENTIAL (PSI)							
	(PSI)	25	50	75				
	5	8.5	10	11.5				
1/2"	10	13.6	16	18.4				
	15	17.9	21	24.2				
	20	21.3	25	28.8				
	5	10.6	12.5	14.4				
3/4"	10	20.4	24.0	27.6				
	15	28.1	33.0	38.0				
	20	34.0	40.0	46.0				
	5	17.0	20.0	23.0				
1"	10	29.8	35.0	40.3				
	15	40.8	48.0	55.2				
	20	51.0	60.0	69.0				
	5	21.3	25.0	28.8				
1-1/4"	10	51.9	61.0	70.2				
	15	80.8	95.0	109.3				
	20	106.3	125.0	143.8				
	5	29.8	35.0	40.3				
1-1/2"	10	61.5	72.3	83.1				
	15	90.1	106.0	121.9				
	20	113.1	133.0	153.0				
	5	55.3	65.0	74.8				
2"	10	126.7	149.0	171.4				
	15	174.3	205.0	235.8				
	20	231.2	272.0	312.8				
	5	58.7	69.0	79.4				
2-1/2"	10	132.6	156.0	179.4				
	15	200.6	236.0	271.4				
	20	271.2	319.0	366.9				
	5	80.8	95.0	109.3				
3"	10	176.0	207.0	238.1				
	15	282.5	332.4	382.3				
	20	365.5	430.0	494.5				