# **36HLF Series**

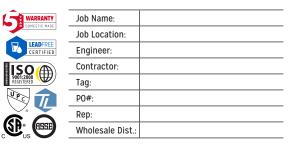
Model PRH-LF High Capacity Pressure Reducing Valve

## SUBMITTAL SHEET



# EAD FREE





### **DESCRIPTION**

The Apollo® PRH-LF Lead Free\* Pressure Reducing Valve (36HLF Series) is designed for commercial, industrial, and institutional applications to reduce incoming water pressure for protection of plumbing system components and to reduce water consumption. The valve is made with proven ASTM grade Lead Free\* bronze and stainless steel materials. The PRH-LF 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**

- · Dezincification resistant Lead Free\* Bronze
- Sealed Spring Cage for Vault Installations
- · Ultra-high Flow Capacity
- Internal Thermal Expansion By-pass
- · Standard Factory Setting: 50 psi
- Three spring ranges cover 10 125 psi
- · Stainless Steel Bolts and Spring
- · 150# ANSI B16.24 Flange Connection Option
- · In-line strainer option
- 100% MADE IN THE USA

#### PERFORMANCE RATING

- Maximum Inlet Supply Pressure: up to 400 psig
- · Temperature Range: 33 °F 180 °F

#### **APPROVALS**

- · NSF/ANSI 372 Lead Free 3rd party certified
- ASSE 1003
- CSA B356

#### **OPTIONS**

- · (02) 10-35 psi
- · (03) 75-125 psi
- (36H) with Standard Materials for Non-Potable Applications

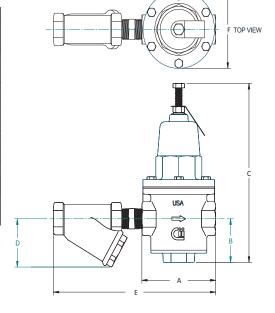
#### STANDARD MATERIALS LIST

BODY	Bronze, C89836 Lead Free*
BONNET/CAP	Bronze, ASTM B584
DIAPHRAGM	FDA approved Buna-N w/ Nylon
SEAT DISC	FDA approved EPDM
YOKE	Bronze, C89836 Lead Free*
SPRINGS	Stainless Steel
0-RINGS	FDA approved Nitrile

### **DIMENSIONS**

Model	Part Number	Size (in.)	Dimensions (in.)							Wt.
Number			A	В	C	D	E	F	( <b>lbs.</b> ) w/strainer	(lbs.) wo/strainer
PRH-LF	36HLF-203	1/2	4.12	2.25	9.25	1.87	8.37	4.00	7.00	6.0
PRH-LF	36HLF-204	3/4	4.12	2.25	9.25	2.44	9.00	4.00	8.00	6.0
PRH-LF	36HLF-205	1	4.82	2.31	9.81	4.00	10.25	4.70	12.00	8.0
PRH-LF	36HLF-206	1 -1/4	6.19	3.19	13.20	3.37	12.50	6.50	29.00	24.0
PRH-LF	36HLF-207	1- 1/2	6.75	3.19	13.20	3.87	13.13	6.50	29.00	23.0
PRH-LF	36HLF-208	2	8.12	3.50	16.00	4.63	16.00	7.63	47.00	38.0
PRH-LF	36HLF-209	2 -1/2	8.12	3.50	16.00	6.00	17.70	7.63	49.00	37.0
PRH-LF	36HLF-200	3	10.37	4.00	19.12	7.00	20.50	9.75	87.00	70.0
Flanged										
PRH-LF	36HLF-709	2- 1/2	10.37	3.50	16.00	7.12	21.70	7.63	105.00	55.0
PRH-LF	36HLF-700	3	12.50	4.00	19.12	8.12	24.50	9.75	132.00	104.0

<sup>\*</sup> Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances.



\*LEAD FREE: The wetted surfaces of this product shall contain no more than 0.25% lead by weighted average. Complies with Federal Public Law III-380. ANSI 3rd party approved and listed.



# **36HLF Series**

Model PRH-LF High Capacity Pressure Reducing Valve

## SUBMITTAL SHEET



### PART NUMBER

36HLF			
36H - X	X	Х -	OX
END CONNECTIONS	OPTIONS	SIZE	PRESSURE RANGE
2 - FNPT x FNPT (Standard)	0 - Standard	3 - 1/2"	01 - 25-75 psig (Standard)
7 - Flanged (2-1/2" - 3" only)	1 - With Y-Strainer	4 - 3/4"	02 - 10-35 psig
		5 -1"	03 - 75-125 psig
		6 - 1-1/4"	
		7 - 1-1/2"	
		8 -2"	
		9 - 2-1/2"	
		0 -3"	

### **MODEL NUMBER**

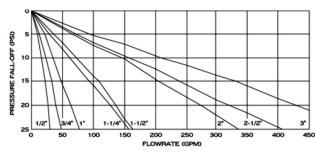
PRH - X	Х	X	Х	LF
END CONNECTIONS	ACCESSORIES	PRESSURE ADJ. RANGE	SIZE	
T - Threaded	Y - with Y-Strainer	Standard - 25-75 psig (set at 50)	12 - 1/2"	LF - Lead Free
F - ANSI 150# Flanges (2-1/2" - 3" only)		H - 75-125 psig (set at 100) L - 10-35 psig (set at 25)	34 - 3/4" 1 - 1" 114 - 1-1/4"	Blank - Standard Material
			112 - 1-1/2" 2 - 2"	
			212 - 2-1/2" 3 - 3"	

#### FLOW CAPACITY (GPM)

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

<sup>\*</sup> Fall Off is the difference between the PRV's set pressure and the flowing pressure at any given demand.

### PRH SERIES PRV FLOW RATE VS. PRESSURE FALL-OFF



Note: Flow curves are based on static conditions of 100 psi inlet pressure and 50 psi outlet pressure. Pressure Fall-off is the decrease in downstream regulated pressure when the flow increases.

Customer Service (704) 841-6000 www.apollovalves.com

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 **apollovalves.com** for the most current information.

