

# JRHF Series

## Pressure Regulating Valves

### PRESSURE REGULATING VALVE

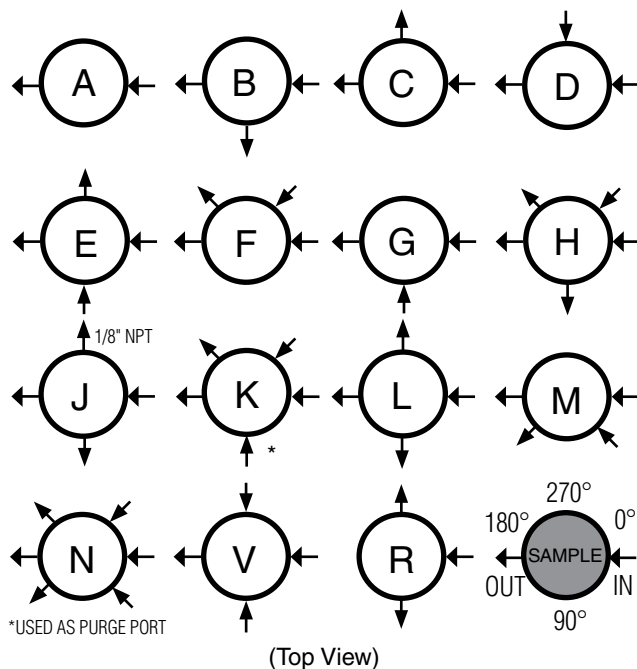
The JRHF Series is a diaphragm operated, balanced trim pressure regulator. The choice between 1.5 and 1.9 Cv offers increased flows across the JRHF's 230 psi inlet range, while the PTFE soft seat provides ANSI Class VI shutoff. Four set spring ranges and three soft seal options offer the customer flexibility in a number of applications and environments. These valves are designed to regulate a variety of gases and liquids in applications where high flows and low control pressures are required.

#### Features:

- Top entry design facilitates in-line cleaning and maintenance
- Barstock construction guarantees material integrity and surface finish
- Balanced trim offers high flows with minimal lockup
- Optimized internal volume
- Proprietary Jorlon diaphragm provides exceptionally long life
- PTFE or PEEK soft seat for ANSI Class VI shutoff



### JRHF SERIES FLOW CONFIGURATIONS



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## JRHF SERIES SPECIFICATIONS

**Line Size:** 1/2", 3/4", 1" (DN15, DN20, DN25)

### End Connections

- Threaded
- Socket Weld
- Flanged

### Materials

- PTFE soft seat - 230 psi @ 100°F (16 bar @ 38°C), 160 psi @ 250°F (11,1 bar @ 121°C)
- PEEK soft seat - 230 psi @ 100°F (16 bar @ 38°C), 150 psi @ 275°F (10,3 bar @ 135°C)
- 316L SST body - (standard) 230 psi @ 100°F (16 bar @ 38°C), 150 psi @ 275°F (10,3 bar @ 135°C)

**Diaphragm Material:** Jorlon

**Maximum Inlet Pressure:** 230 psig (16 bar)

**Pressure at Maximum Temperature:** 150 psi @ 275°F

### Spring Ranges

- 5-20 psi (0,3 - 1,4 bar)
- 5-50 psi (0,3 - 3,4 bar)
- 5-100 psi (0,3 - 6,9 bar)
- 5-150 psi (0,3 - 10,3 bar)

### Flow Characteristics

- Cv 1.5 for 1/2", Cv 1.9 for 3/4" and 1"

### Options

- Panel Mounting
- Captured Vent
- Locking Wire
- Tamper Proof
- Lockout Device

## OPTIONS & DEFINITIONS

**Panel Mount** The panel mount feature utilizes a threaded spring housing and a panel mount ring to secure the regulator to an instrument panel. This option requires a 1-1/2" panel cut out.

**Captured Vent** The captured vent design provides maximum safety for the user when handling toxic or hazardous media. It features a 1/8" FNPT port located on the spring housing. The user can easily tube this vent to a safe location. This option can be incorporated into a self-relieving regulator that provides an additional port to permit the safe expulsion of hazardous media.

**Self Relieving** The self relieving option is used for internal venting of downstream pressure. From a practical standpoint, it allows for immediate reduction in pressure setpoints and automatically alleviates regulator lock up.

**Locking Wire** The locking wire option utilizes a lead sealed metal wire to physically hold the adjusting screw in place to prevent any unwanted set point changes.

**Tamper Proof** The tamper proof option replaces the standard adjusting knob with a stainless steel acorn nut.

**Lockout Device** The lockout device is a 2 piece polypropylene enclosure which encapsulates the adjustment knob and prevents unwanted set point changes. The part number required for this valve is 26971. (Lock not included)

## JRHF SIZING

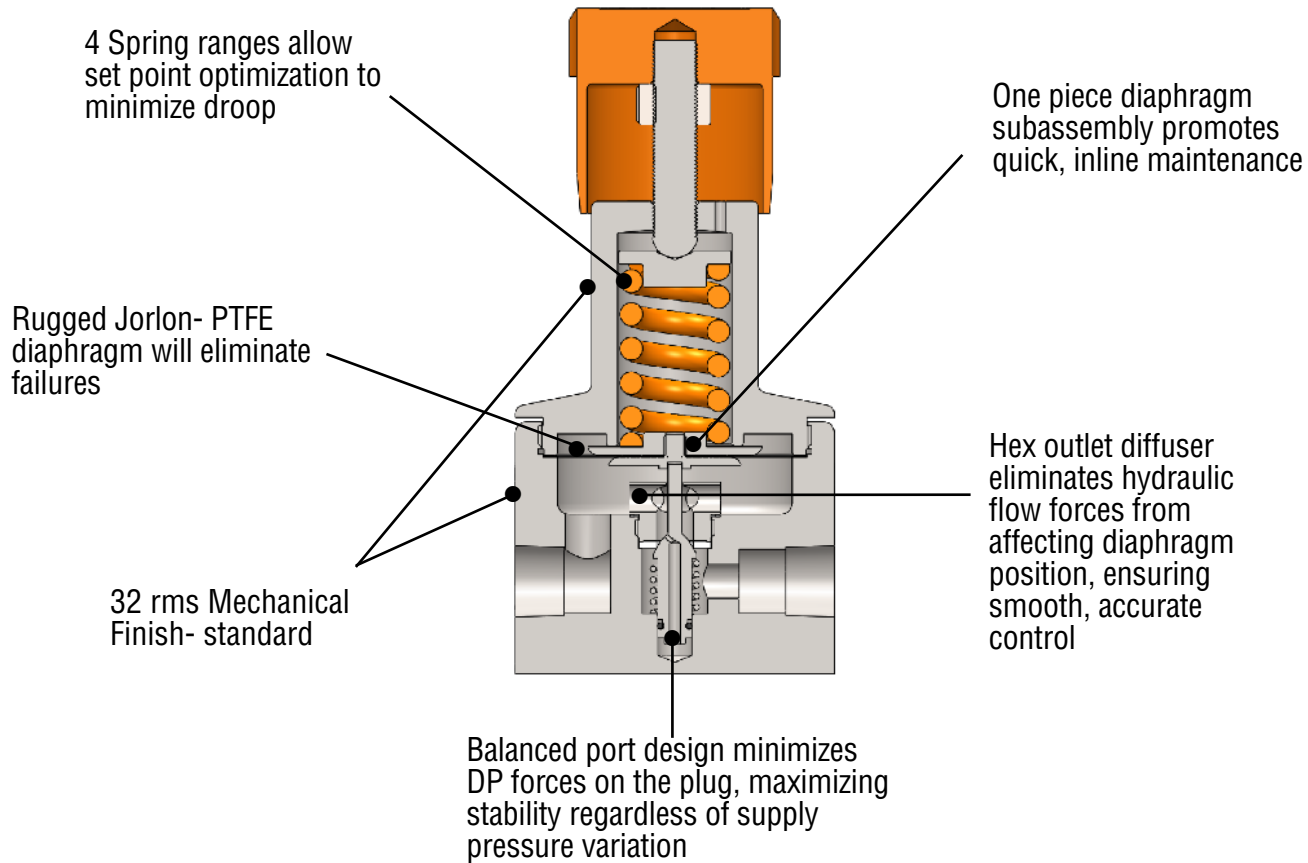
1. Use the "LVCV Sizing Software" link found on the [www.lowflowvalve.com](http://www.lowflowvalve.com) home page and navigate to LowFlow valve sizing.
2. Use the software to size for flow using the listed CV of the valve and the customer's application conditions.
3. The JRHF is rated to 60% of the flow value found using LVCV. There is no low-end cutoff limit.

### Example:

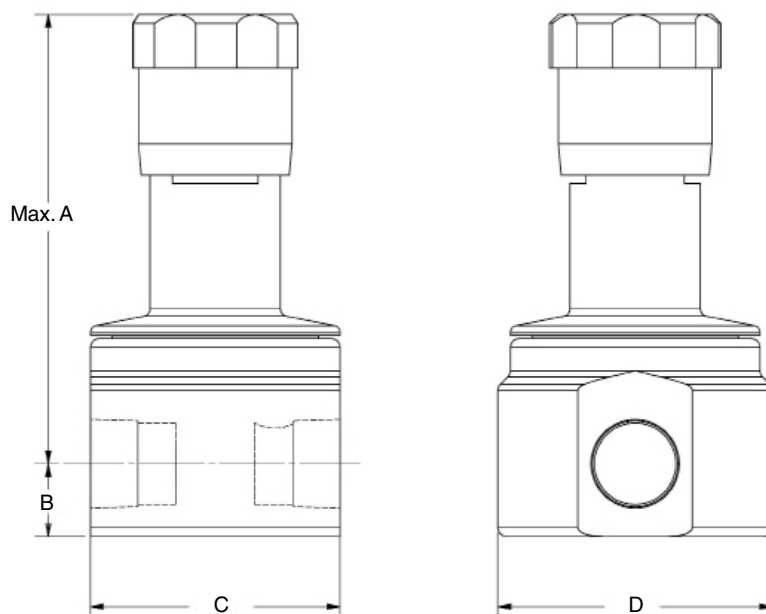
Air, ambient temperature, P1 = 200 psi, P2 = 80 psi, 1" schedule 40 pipe, flow rate 7,800 SCFH

Using LVCV to size for flow we find that these conditions and a 1.9 CV will result in a maximum flow of 13,212 scfh. Multiply this value by 0.60 to find the maximum rated flow for the JRHF-100-6L. Your result will be 7,927 scfh (13,212 x 0.6 = 7,927). Any flow below this result is acceptable for the valve.

### JRHF SERIES FEATURES AND BENEFITS



### JRHF DIMENSIONS



VALVE SIZE	DIMENSIONS, INCHES				WEIGHT, LBS
	A	B	C	D	
1/2", 3/4", 1"	6.29	1.02	3.50	3.85	9

VALVE SIZE	DIMENSIONS, MM				WEIGHT, KGS
	A	B	C	D	
DN15, DN20, DN25	160	26	89	98	4,1

## JRHF SERIES ORDERING SCHEMATIC

Model	Size	Material	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15	16	17
	—	—	—	—	—	—	—	—	—	—	—	—

Model
JRHF Pressure Reducing Valve

Size
050 1/2"
075 3/4"
100 1

Material
6L Stainless Steel 316L

1 & 2	Body Feature
End Connection	Port Configuration
C FNPT	Port "A"
	Port "B"
	Port "C"
	Port "D"
	Port "E"
	Port "F"
	Port "G"
	Port "H"
	Port "J"
	Port "K"
	Port "L"
	Port "M"
	Port "N"
	Port "V"
	Port "R"
ZZ	Non-Standard

3 & 4	Trim
1E	EPDM & 6L
1V	VIT & 6L
1K	Buna-N & 6L
2E	EPDM & 6L Self Relieving
2V	VIT & 6L Self Relieving
2K	Buna-N & 6L Self Relieving
ZZ	Non-Standard

5 & 6	Seat Material
TF	PTFE (1/2" 1.5 Cv) 1.9 Cv
PK	PEEK (1/2" 1.5 Cv) 1.9 Cv
ZZ	Non-Standard

7 & 8	Range Spring/Outlet Pressure
02	5-20 PSI (0,3 - 1,4 BAR)
05	5-50 PSI (0,3 - 3,4 BAR)
10	5-100 PSI (0,3 - 6,9 BAR)
15	5-150 PSI (0,3 - 10,3 BAR)
ZZ	Non-Standard

9 & 10	Diaphragm Material
JL	Jorlon
ZZ	Non-Standard

11 & 12	Actuator
SK	Standard
CV	Captured Vent
PM*	Panel Mount
TP	Tamper Proof
ZZ	Non-Standard

\* When combined with gauge options, the guage(s) will be behind the panel

13 & 14	Inlet Gauge
AA	0-30 PSIG/BAR (Dual)
BB	0-60 PSIG/BAR (Dual)
CC	0-100 PSIG/BAR (Dual)
DD	0-160 PSIG/BAR (Dual)
EE	0-200 PSIG/BAR (Dual)
FF	0-300 PSIG/BAR (Dual)
NN	None
ZZ	Non-Standard

\* Customer assumes all responsibility for possible damage or injury if selected gauge span does not fully cover range spring / outlet pressure option

15	Outlet Gauge
A	0-30 PSIG/BAR (Dual)
B	0-60 PSIG/BAR (Dual)
C	0-100 PSIG/BAR (Dual)
D	0-160 PSIG/BAR (Dual)
E	0-200 PSIG/BAR (Dual)
N	None
Z	Non-Standard

\* Customer assumes all responsibility for possible damage or injury if selected gauge span does not fully cover range spring / outlet pressure option

### JRHF SERIES ORDERING SCHEMATIC

Model	Size	Material		1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12	13 & 14	15	16	17
	—	—	—										

16	SEP Compliance
G	SEP Compliant
Z	Non-Standard

17	Accessories
S	Clean for Oil Free*
X	Clean for Oxygen*
Z	Non-Standard

\*Consult factory for compatible gauge options