

# JRDL Series

## Gas Pressure Reducing Valves

### PRESSURE REGULATING VALVE

The LowFlow JRDL Series line of diaphragm sensed, high pressure regulators have the ability to handle very high pressures and very low flows. These valves are typically used in applications such as high pressure gas, water seal regulation, air compressors, gas chromatography and more.

#### Features:

- Barstock construction guarantees material integrity and surface finish
- High flow rate coupled with high rangeability reduces need for reduced trim sizes
- Optimized internal volume
- Soft seat material for ANSI Class VI shutoff

#### Product Highlights

- Ability to reduce high inlet pressures from 1-400 psig in one valve
- Provides superior sensitivity in pressure regulation to the 'piston' operated JRPL, and has a CV that's nearly 10x greater than the 0.2 CV in the JR
- Sizes available: ½", ¾", 1"
- Diaphragm Sensed- Buna, EPDM, and Viton options

#### Applications

- High Pressure Gas
- Liquid Pump Systems Control
- Water Seal Regulation
- Hyperbaric Chambers
- Air Compressors
- Pressurized Ballast Tanks
- Gas Transfer Systems
- Gas Chromatography
- Flame Ionization



## JRDL SERIES SPECIFICATIONS

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

### End Connections

- Threaded
- Socket Weld
- Flanged

### Soft Seat Materials for ANSI Class VI Shut-off

- Buna-N to + 200°F (93°C)
- EPDM to + 240°F (143°C)
- Viton to + 450°F (232°C)

### Body Material

- 316L SST - Standard
- Contact factory for other body / trim / seat materials

**Diaphragm Material:** Buna-N / EPDM / Viton

**Maximum Inlet Pressure:** 1000 psi (69 bar) @ -20°F (-28,9°C)

**Flow Capacity:** Cv 1.7 (1,46 Kv)

**Maximum Pressure Drop:** 1000 psi (69 bar)

### Spring Ranges:

- 0 – 50 psi (0,00 – 3,4 bar)
- 0 – 100 psi (0,00 – 6,9 bar)
- 0 – 200 psi (0,00 – 13,8 bar)
- 0 – 400 psi (0,00 – 27,6 bar)

### 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 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.

**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.

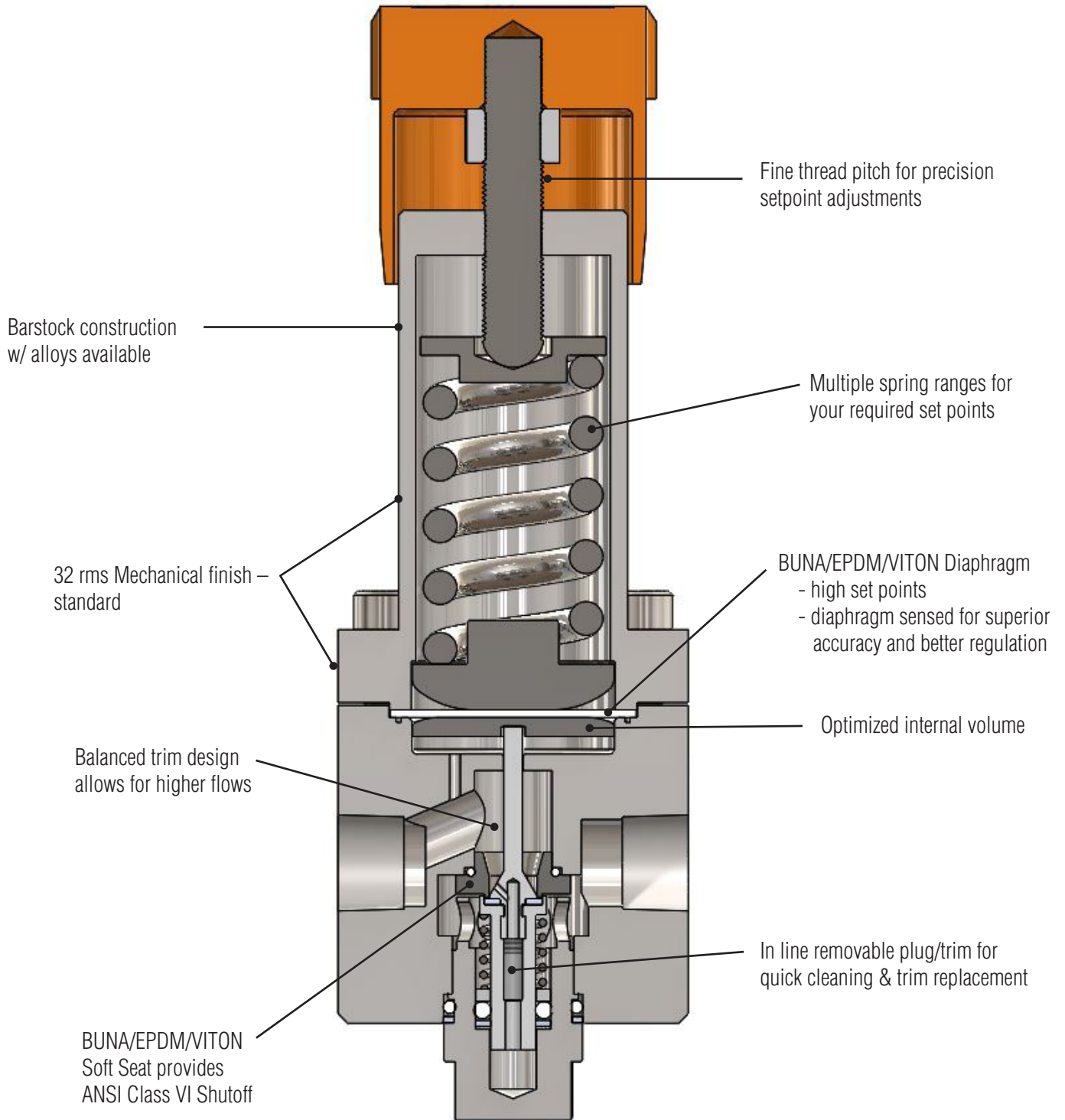
**Tamper Proof** The tamper proof option replaces the standard adjusting knob with a stainless steel acorn nut.

**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)

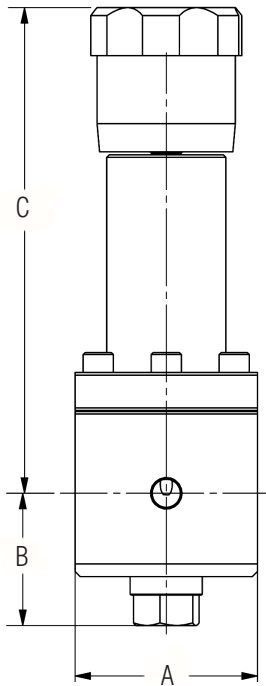
## JRDL SIZING

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 JRDL is rated from 30% to 70% of the flow value using LVCV.

**JRDL FEATURES & BENEFITS**



**JRDL SERIES DIMENSIONS**



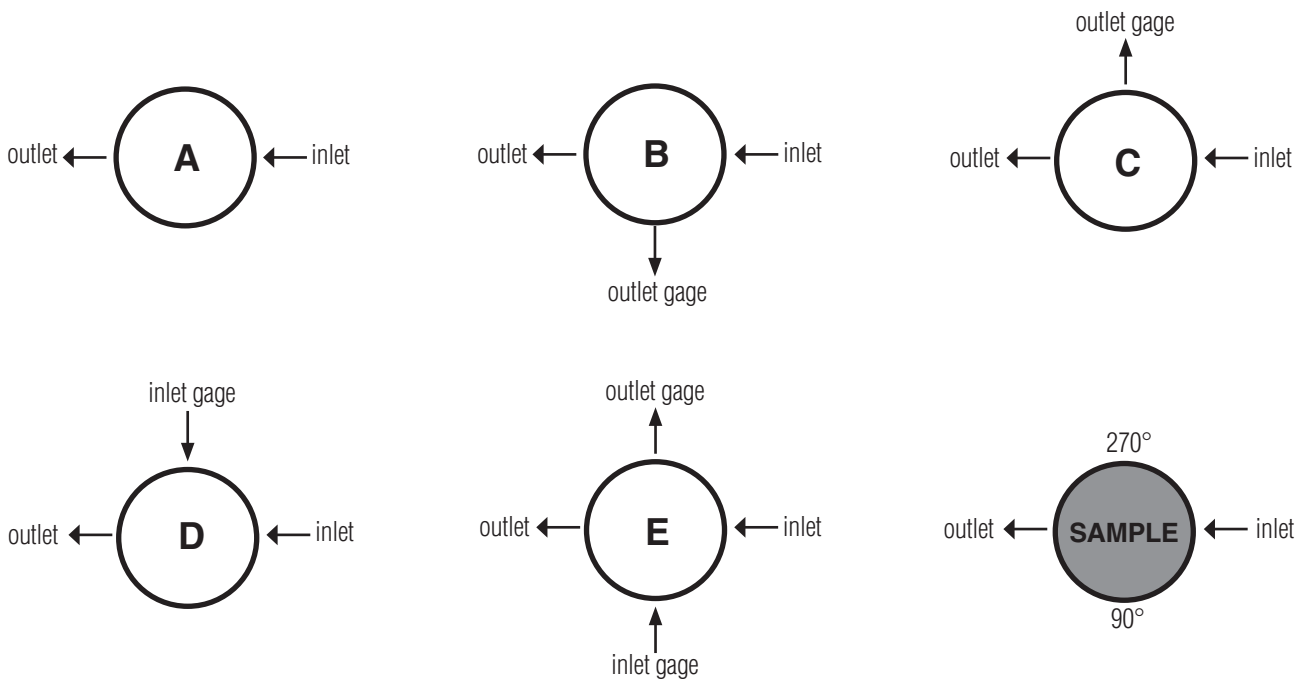
• **JRDL Series, Inches**

VALVE SIZE	DIMENSIONS, INCHES			WEIGHT, LBS
	A	B	C	
1/2"	2.8	2.1	7.5	7.5
3/4"	3.2	1.8	7.5	9.6
1"	3.2	1.8	7.5	9.5

• **JRDL Series, Metric**

VALVE SIZE	DIMENSIONS, MM			WEIGHT, KGS
	A	B	C	
DN15	71.1	53.3	190.5	3.40
DN20	81.3	45.7	190.5	4.35
DN25	81.3	45.7	190.5	4.31

**JRDL SERIES FLOW CONFIGURATIONS**



**Top View**

\* Gage ports are 1/4" FNPT; Consult factory for other porting options

**JRDL SERIES ORDERING SCHEMATIC**

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

Size	
050	1/2" (DN15)
075	3/4" (DN20)
100	1" (DN25)

Material	
6L	Stainless Steel 316L

1 & 2	Body Feature		
End Connection	Port Configuration		
C	FNPT 1/2"	A	Port "A"
D	FNPT 3/4"	B	Port "B"
E	FNPT 1"	C	Port "C"
F	BSPP 1/2"	D	Port "D"
G	BSPP 3/4"	E	Port "E"
H	BSPP 1"		
ZZ	Non-Standard		

3 & 4	Trim
BB	Buna-N
EE	EPDM
VV	Viton
ZZ	Non-Standard

5 & 6	Seat
BB	Buna-N
EE	EPDM
VV	Viton
ZZ	Non-Standard

7 & 8	Range Spring/Outlet Pressure
E1	0 - 50 PSI
E2	0 - 100 PSI
E3	0 - 200 PSI
E4	0 - 400 PSI
ZZ	Non-Standard

9 & 10	Diaphragm
BB	Buna-N
EE	EPDM
VV	Viton
ZZ	Non-Standard

11 & 12	Actuator
SK	Standard
PM	Panel Mount
TP	Top Mount
ZZ	Non-Standard

13 & 14	Inlet Gauge
HH	0 - 600 PSIG/BAR (Dual)
JJ	0 - 1000 PSIG /BAR (Dual)
KK	0 - 2000 PSIG/BAR (Dual)
NN	None
ZZ	Non-Standard

15	Outlet Gauge
B	0 - 60 PSIG/BAR (DUAL)
C	0 - 100 PSIG/BAR (DUAL)
D	0 - 160 PSIG/BAR (DUAL)
E	0 - 200 PSIG/BAR (DUAL)
F	0 - 300 PSIG/BAR (DUAL)
G	0 - 400 PSIG/BAR (DUAL)
H	0 - 600 PSIG/BAR (DUAL)
N	None
Z	Non-Standard

16	SEP Compliance
G	SEP Compliant
0	None
Z	Non-Standard

17	Accessories
S	Clean for Oil Free
X	Clean for Oxygen
0	None
Z	Non-Standard