



LOWFLOW

a division of Jordan Valve



J-Series High Pressure Regulators

The LowFlow J-Series consists of the JR Series, which are pressure reducing valves, and the JB Series, which are back pressure regulating valves. The J-Series regulators have the ability to handle very high pressures and very low flows.

LowFlow Regulator Matrix

Model	Description	Function	Max Inlet	Max Set	Max Cv	Cv Options	Sizes	Sizing
JB	Diaphragm back pressure regulator	BPRV	3,000	750	0.35	0.05, 0.15, 0.25, 0.35	1/4", 3/8", 1/2"	Charts
JBDL	Diaphragm operated back pressure regulator -Low Range	BPRV	1,000	400	1.95	1.95	1/2"	LFCV
JR	Diaphragm pressure regulator	PRV	4,000	750	0.2	0.012, 0.08, 0.2	1/4", 3/8", 1/2"	Charts
JRC	A JR with special gauge pattern for use on gas cylinders	PRV	4,000	750	0.2	0.012, 0.08, 0.2	1/4", 3/8", 1/2"	Charts
JRH	Diaphragm pressure regulator - High Flow	PRV	4,000	450	0.8	0.8	3/8", 1/2"	Charts
JRHF	Diaphragm pressure regulator - High Flow	PRV	230	150	1.9	1.5, 1.9	1/2", 3/4", 1.0"	LFCV
JRPH	Piston operated pressure regulator -High Range	PRV	6,000	5,800	2.1	2.1	1/2", 3/4", 1.0"	LFCV
JRPL	Piston operated pressure regulator - Low Range	PRV	6,000	1,160	2.1	2.1	1/2", 3/4", 1.0"	LFCV
JRPH (1/4")	Piston operated pressure regulator -High Range	PRV	10,100	9,135	0.2	0.012, 0.03, 0.07, 0.2	1/4"	LFCV
JRA	Air loaded pressure regulator	PRV	2,000	750	0.2	0.012, 0.08, 0.2	1/4", 3/8", 1/2"	Charts

General Usage of Letters in Naming Conventions:

J-	Original Jordan J series designation
B-	Back Pressure
BP-	Back Pressure - Higher Flows (piston)
BD-	Back Pressure - Higher Flows (diaphragm)
R-	Pressure Regulator
RP-	Pressure Regulator (piston)
L-	Lower set points
H-	Higher set points <OR> Higher flow rates
A-	Air loaded

J Series High Pressure Regulators

- Proprietary Jorlon diaphragm material provides exceptionally long life
 - ▣ Tested to more than 1 million cycles
- Barstock construction guarantees material integrity
 - ▣ Alloys are readily available
- LowFlow Express
 - ▣ Some J- Series regulators are available for next day shipment

JR Series

The JR Series have the ability to handle very high pressures and very low flows. Typically used in research and sampling systems for corrosive and specialty gases. Typical applications include gas chromatography and flame ionization detectors. Inlet pressures up to 4000 psi.



JR Series Specifications

- Seat Type: PTFE, PEEK
- Sizes: 1/4", 3/8", 1/2" (DN8, DN10, DN15)
- End Connections: Threaded, Socket Weld, Flanged, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, other
- Cv (Kv): 0.012, 0.08, 0.20, (0,010, 0,07, 0,17)
- Setpoints: up to 750 psi (52 bar)

JR-A Series

The JR-A is a dome loaded, pressure reducing valve. This is the perfect valve for applications where droop must be kept at a minimum. The LowFlow JR-A Series line of high pressure regulators has the ability to handle very high pressures and very low flows.



JR-A Series Specifications

- Seat Type: PTFE, PEEK
- Sizes: 1/4", 3/8", 1/2" (DN8, DN10, DN15)
- End Connections: Threaded (NPT), Socket Weld, Flanged
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, other
- Cv (Kv): 0.012, 0.08, 0.20, (0,010, 0,07, 0,17)
- Setpoints: Airloaded 25-750 psi (1,7 to 52 bar)

JRH Series

The JRH Series have the ability to handle very high pressures and very low flows. The Jorlon diaphragm contributes to extremely long service life by greatly reducing or eliminating diaphragm failure.



JRH Series Specifications

- Seat Type: KEL-F/ Viton
- Sizes: 3/8", 1/2" (DN10, DN15)
- End Connections: FNPT Standard, Others on Application
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 0.8 (0,69)
- Ranges: 2-10 psi (0,14- 0,69 bar) to 75-450 psi (5,2- 31 bar)



JRH and JR Bodies

JRH Body



JR Body



JRHF Series

The JRHF is a high-flow, diaphragm operated, balanced trim regulator with a 1.9 Cv and PTFE soft seat.



JRHF Series Specifications

- Seat Type: PTFE
- Sizes: 1/2" , 3/4", 1" (DN15, DN20, DN25)
- End Connections: Threaded (NPT), Socket Weld, Flanged, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 1/2, 1.5 (1,3) 3/4"-1" 1.9 (1,6)
- Setpoints: up to 150 psi (10 bar)

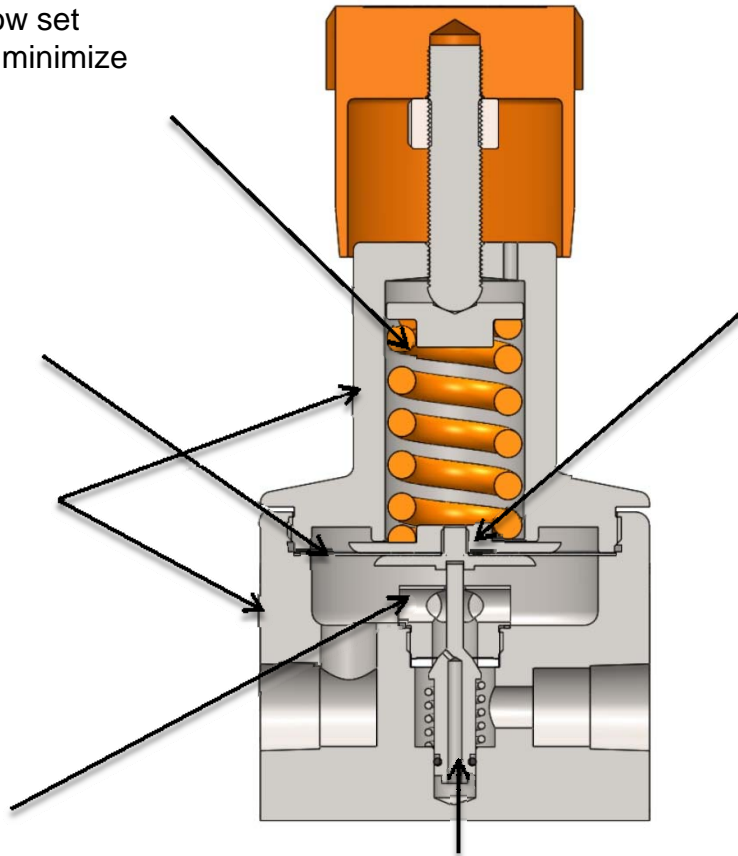
JRHF Series Features and Benefits

4 Spring Ranges allow set point optimization to minimize droop

Rugged Jorlon- PTFE diaphragm will eliminate failures

32 rms Mechanical Finish- Standard

Hex outlet difuser eliminates hydraulic flow forces from affecting diaphragm position, ensuring smooth, accurate control



One piece diaphragm subassembly promotes quick, inline maintenance

Balanced port design minimizes DP forces on the plug, maximizing stability regardless of supply pressure variation

JRC Series

The JRC Series is ideal for corrosive and non-corrosive cylinder gas service. It maintains precise, accurate outlet pressure control. Inlet pressures up to 4000 psi.



JRC Series Specifications

- Seat Type: PTFE, PEEK
- Sizes: 1/4", 3/8", 1/2" (DN8, DN10, DN15)
- End Connections: Threaded (NPT), Socket Weld, CGA
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 0.012, 0.08, 0.20, (0,010, 0,07, 0,17)
- Setpoints: up to 750 psi (up to 52 bar)

JRPH Series 1/4"

The 1/4" JRPH are piston operated pressure reducing valves with high pressure capability and ANSI Class VI shutoff.



JRPH Series 1/4" Specifications

- Seat Type: PEEK, KEL-F
- Sizes: 1/4" (DN8)
- End Connections: Threaded, Socket Weld, Butt Weld, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 0.03, 0.7 (0,026, 0,06)
- Ranges: Up to 9135 psi (630 bar)

JRPH Series 1/2"-1"

The JRPH Series are piston operated, balanced trim pressure regulators with high Cv's and soft seats for ANSI Class VI shutoff.



JRPH Series 1/2"-1" Specifications

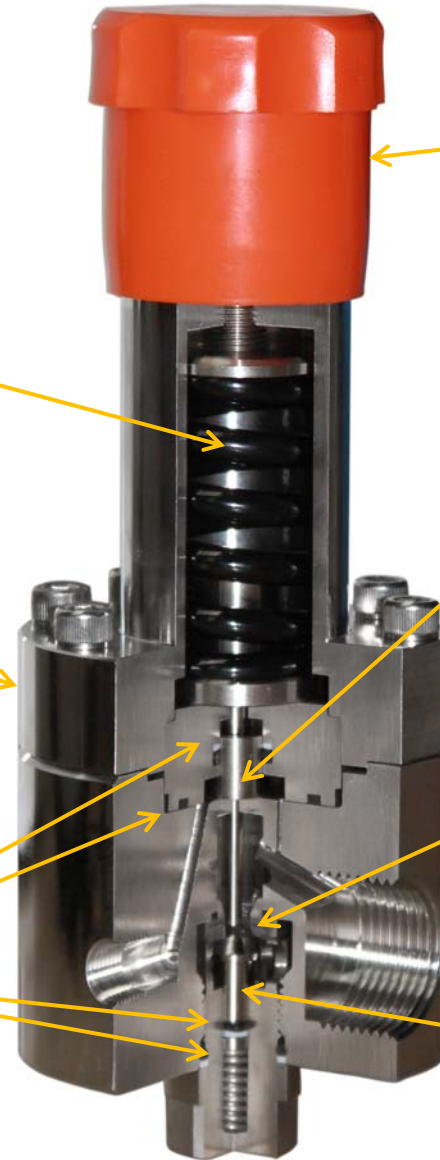
- Seat Type: KEL-F
- Sizes: 1/2", 3/4", 1" (DN15, DN20, DN25)
- End Connections: Threaded, Socket Weld, Butt Weld, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 2.1 (1,81)
- Ranges: Up to 5800 psi (400 bar)

JRPH Product Features

Three set ranges for each model with color coded springs

All wetted materials are 316L stainless steel. Other materials available on application

Elastomer seals with PTFE split ring backup seals used throughout



Large knob allows for easy adjustment.

Piston sensing for better regulation at higher pressures

Soft KEL-F seat provides ANSI Class VI shutoff

Balanced trim design allows for higher flows

JRPL Series

The JRPL Series are piston operated, balanced trim pressure regulators with high Cv's and soft seats for ANSI Class VI shutoff.



JRPL Specifications

- Seat Type: KEL-F
- Sizes: 1/2", 3/4", 1" (DN15, DN20, DN25)
- End Connections: Threaded, Socket Weld, Butt Weld, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 2.1 (1,81))
- Ranges: Up to 1160 psi (80 bar)

JRPL Product Features

Three set ranges for each model with color coded springs

All wetted materials are 316L stainless steel. Other materials available on application

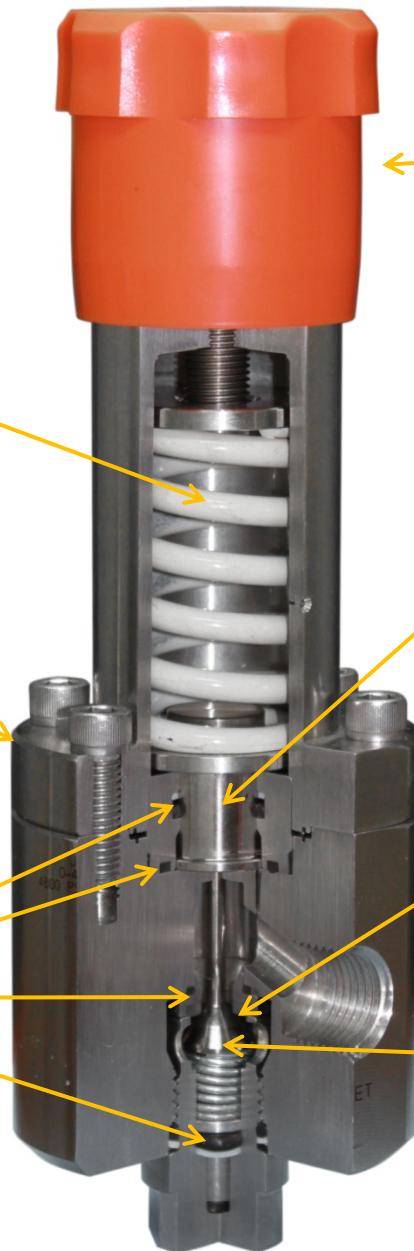
Elastomer seals with PTFE split ring backup seals used throughout

Large knob allows for easy adjustment.

Piston sensing for better regulation at higher pressures

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Balanced trim design allows for higher flows



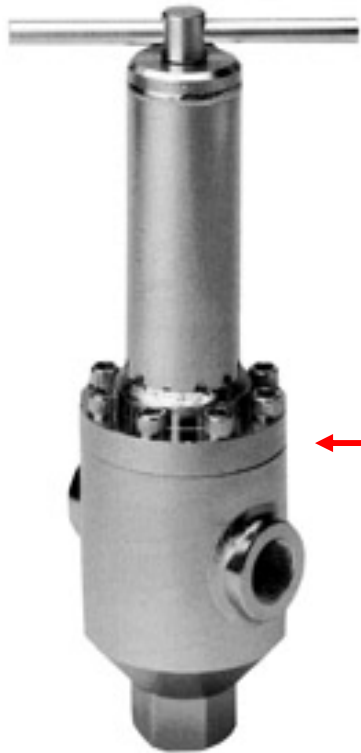
Mark 6800HP Series

A line of self-operated pressure regulating valves for use on high pressure industrial gas and liquid services to 3,800 psi (262 bar). The 6800HP features a balanced piston design for excellent stability even in high pressure drop situations.



MK6800HP / MK5800HP

- Higher Pressure
- Higher Setpoint
- Higher Flows



← MK6800HP

MK5800HP →



Mark 6800HP Series

- Seat Type: Stellite, Vespel, Teflon
- Sizes: 1/2" – 1" (DN15 – DN25)
- End Connections: Threaded, Socket Weld, Flanged
- Body Materials: 316L Stainless Steel, others
- Cv (Kv): 0.5 to 2.5 (0,4 to 2,1)
- Setpoints: 250 - 3000 psi (17,2 - 207 bar)

JB Series

The JB Series back pressure regulating valves have the ability to handle very high pressures and very low flows. Top entry design facilitates in-line cleaning and maintenance.



JB Series Specifications

- Seat Type: PEEK
- Sizes: 1/4", 3/8", 1/2" (DN8, DN10, DN15)
- End Connections: Threaded (NPT), Socket Weld, Flanged, others
- Body Materials: Stainless Steel, Hastelloy C, Monel, Alloy 20, others
- Cv (Kv): 0.05, 0.15, 0.25, 0.35 (0,043, 0,13, 0,22, 0,30)
- Setpoints: up to 750 psi (up to 52 bar)

JBDL Series

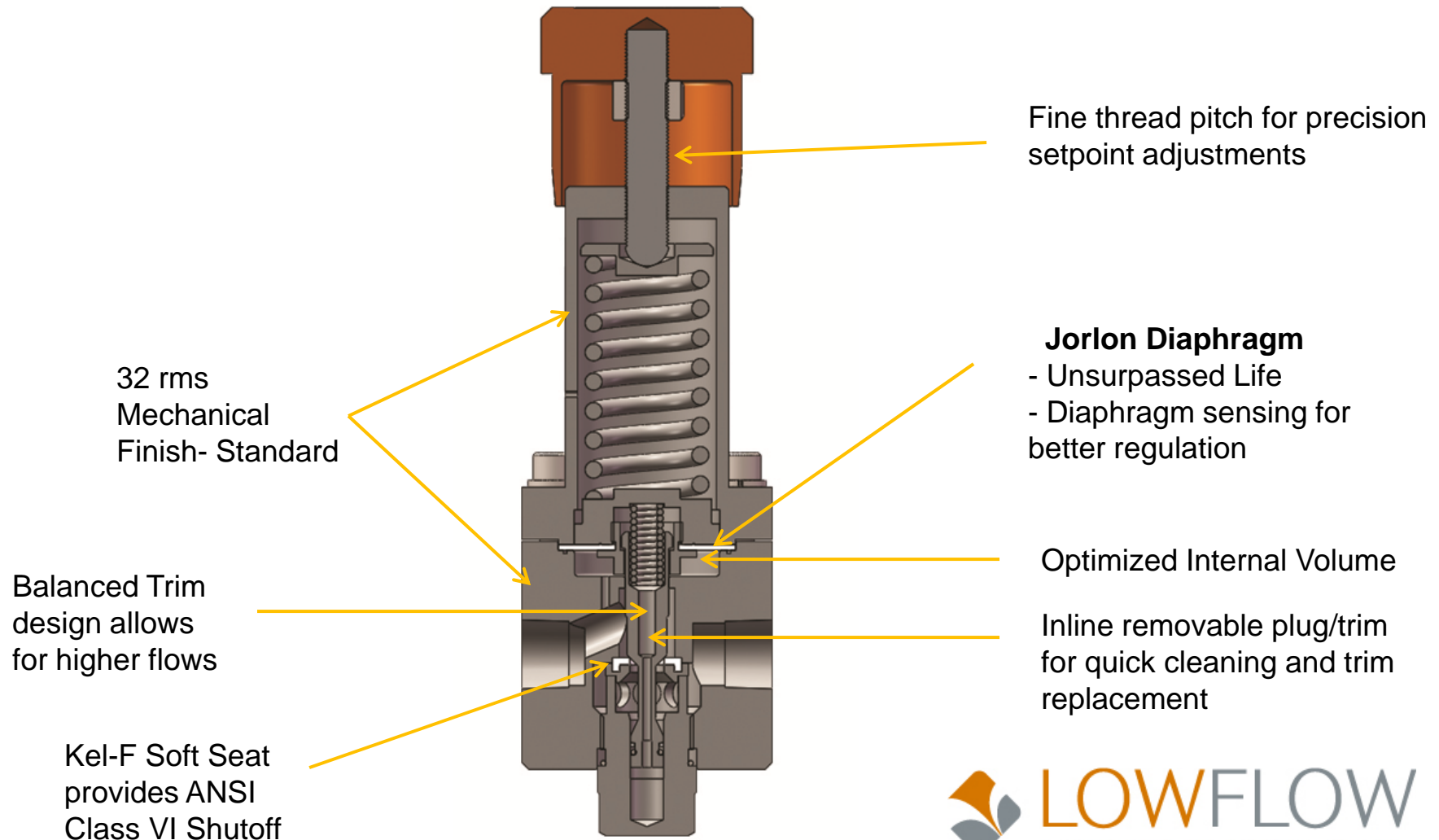
The JBPL Series are high Cv diaphragm sensed back pressure regulators. The most common applications are fuels, water, acids, liquids and gases.



JBDL Series Specifications

- Seat Type: KEL-F
- Sizes: 1/2" (DN15)
- End Connections: Threaded, Socket Weld, Flanged
- Body Materials: Stainless Steel, others
- Cv (Kv): 1.95 (1,66)
- Setpoints: up to 400 psi (up to 28 bar)

JBDL Series Features and Benefits



Mark 5800HP/5850 Series

The Mark 5800HP/ Mark 5850HP Series are high pressure, back pressure regulators designed to maintain upstream pressure of gases and liquids. As lightweight products, both are well suited for applications where space and weight are at a premium. Inlet pressures up to 5000 psi (345 bar).



Mark 5800HP/Mark 5850 Series Specifications

- Seat Type: Teflon (standard), PEEK, Delrin
- Sizes: 1/2", 3/4", 1" (DN15, DN20, DN25)
- End Connections: Threaded, Socket Weld, Flanged
- Body Materials: 316L Stainless Steel, others
- Cv (Kv): 0.4 to 1.0 (0,34 to 0,86)
- Setpoints: 400 - 5000 psi (27,6 - 345 bar)

Applications

- Process gases
- Specialty gases
- Analyzers
- Lecture bottles
- Sampling systems
- R&D labs
- Pilot plants
- CNG
- Test consoles
- Hydrogen
- Instrumentation
- Inline point of use
- Gas cabinets

MK6800HP/MK5800HP Applications

- Off-shore platforms
- Air/gas separation units
- High pressure vessels
- Compressor skids
- Test stands
- High pressure hydraulic systems



Competitors

- Tescom
- GO
- Swagelok
- Parker – Veriflo
- AP Tech
- Cashco – Sensiflo

www.lowflowvalve.com

