



HIGH PRESSURE VALVES

PRESSURE RELIEF VALVES

High Pressure, Low Flow

These valves are direct operated, differential poppet, dry spring chamber design. All ports can accept full working pressure permitting their use also as a sequence valve or back pressure controller regulator (BPR). Wetted alloys are stainless steel. Dynamic seals are UHMWPE. Static seals are Buna. Optional: Viton add-V. EPR add-E. Wrench flats are standard on adjusting screws.*



Model No.	Service		Seat	Adjustable Range (PSI)	Orifice Dia (in.)	Port	Remarks	Symbols
	Relief	BPR						
*RVL-100	Liquid	Liquid or Gas	Stainless steel	1000 thru 10,000	.070	1/4 NPT	Not bubble tight	
*RVG-100	Gas	Gas	Nylon					
RV-300	Liquid or Gas		Stainless Steel	3000 thru 30,000	1/4" Super Pressure		Not bubble tight	
RV-600				10,000 thru 60,000				

*Plastic knob optional at extra cost on RVL or RVG models only. Specify with suffix "H" (e.g. RVL-100H).

PILOT CUTOFF VALVES

Sense Liquid or Gas Pressures. Provide Air Signal.

These valves perform a function similar to a pressure switch. The sensing piston or plunger movement is spring or air adjusted. When the sensed pressure is reached, a small, integral air valve shifts position cutting off, or providing, a pilot air signal. Useful for start/stop control of various pneumatically piloted devices such as HII pumps, valves and boosters. Maximum air valve pressure is 120 PSI. Sensing section alloys are stainless steel. Buna static seal standard, optional: Viton add-V, EPR add -E. (e.g. PCV-E002E).



Model No.	Adjusted By	Sensing		Air Valve		Symbols
		Nominal-Range(Psi)	Port	Configuration	Ports	
PCV-002	INTERNAL SPRING LOADED BOLT	50-200	1/4 NPT	2 WAY Three ports convertible to NC or NO with plug provided	1/8 NPT	
PCV-020		200-2000				
PCV-100		1500-10,000				
PCV-250		5000-25,000				
PCV-E002	EXTERNAL SPANNER NUT (UNDERNEATH THE NAME PLATE)	50-200	1/4 NPT	3 WAY Three ports useable for either NC or NO applications	1/8 NPT	
PCV-E020		200-2000				
PCV-E100		1500-10,000				
PCV-E250		5,000-25,000				
PCV-R025	REMOTE AIR PRESSURE REGULATOR 20-100 PSI	500-2500	1/4 NPT			
PCV-R100		2000-10,000				
PCV-R250		5000-25,000				

UNLOADING VALVES

Normally Open, Normally Closed, Air Pilot Actuated.

These valves open or close high pressure oil or plain water back to tank or to another line or high pressure gas to another line. High pressure section alloys are stainless steel with stainless steel ball or poppet design.



Model No.	Basic Configuration	Nominal Area Ratios	Port/Max. Pressure PSI		Reverse Flow	Flow Orifice Dia. (in.)	Symbols
			Inlet	Outlet			
UV-50	NORMALLY OPEN AIR PILOT TO CLOSE, (4) SINGLE STAGE	50:1	1/4 NPT 5000 ⁽¹⁾	1/4 NPT 4000 ⁽³⁾	BLOCKED		
UV-80		80:1	1/4 NPT 8000 ⁽¹⁾				
UV-120		120:1	1/4 NPT 12,000 ⁽¹⁾				
UV-200		200:1	1/4" Super Pressure 20,000 ⁽¹⁾				
UV-150-2	Normally closed Air pilot to open Two stage	2 nd stage 9:1 1 st stage 250:1	1/2 NPT 15,000 ⁽²⁾	1/2 NPT 10,000 ⁽³⁾	Free flow	.344 Nom. 2 stage	

NOTES: (1) Based on 100 PSI air pilot. Maximum inlet pressure will be increased proportionally with increase in air pilot pressure up to 150 PSI maximum.

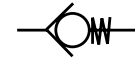
(2) To open against 15,000 PSI, 60 PSI minimum air pilot required.

(3) Maximum outlet port pressure for gas service is 1500 PSI.

(4) May also be used as a relief valve. Adjust with air pressure regulator on air pilot line.

INLINE CHECK VALVES , 316 STAINLESS STEEL BODIES

High Pressure. These valves are 316 S.S. ball type and soft seat (PTFE ring) in the 1/4 NPT, 1/2 NPT, 3/4 NPT, and 1 NPT sizes; Brass poppet on S.S. seat in the 2 NPT size. Control springs hold approximately 3 PSI. Optional higher pressure springs are available in the 2" NPT unit only.



Model No.	Port	Maximum Pressure-PSI	Flow Orifice Min. Dia. (Inches)	Static Seal
CVH-025N2	1/4 NPT	15,000 Liquid 11,250 Gas	.156	BUNA ⁽¹⁾
CVH-025S2	1/4 Super Pressure			
CVH-050N2	1/2 NPT	20,000 Liquid 15,000 Gas	.344	PTFE
CVH-075N2	3/4 NPT	15,000 Liquid 11,250 Gas	.486	PTFE
CVH-100N2	1 NPT	12,000 Liquid 9,000 Gas	.540	PTFE
CVM-200N2	2 NPT	5,000 Liquid 3,750 Gas	1.750	BUNA ⁽¹⁾

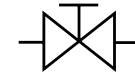
Notes: (1) Optional static seal: For Viton, add "V", for EPR, add "E" to model no.



NEEDLE VALVES

Panel Mount is Standard. 1/4" and 3/8" basic body sizes. 316 forged stainless steel. Working pressure: 10,000 PSI

These economical valves employ a semi-balanced needle with PTFE bearing and buna O-ring stem seal. Full pressure both ports. Optional stem o-ring in viton, add-V; or EPR, add-E to model no.



Model No.	Ports	Body Style	Model No.	Ports	Body Style
NVH-025T2A	1/4" Tube Male 37° Flare	Angle	NVH-038T2A	3/8" Tube Male 37° Flare	Angle
NVH-025T2B		Straight	NVH-038T2B		Straight
NVH-025N2A	1/8 NPT	Angle	NVH-038N2A	1/4 NPT	Angle
NVH-025N2B		Straight	NVH-038N2B		Straight

Samples are available for evaluation for potential OEM quantity requirements. Non panel mount configuration available in quantity.



GAS RECEIVERS AND PLENUM CHAMBERS

High Pressure. The Receivers (PR) are normally used at the outlet of a gas booster unit or system to store a volume of gas for smooth, intermittent release through a pressure reducing valve. The Plenum chambers (PC) are normally used between stages of a gas booster package to dampen pulsation.



Model No.	Internal Volume-Cu.In.	Maximum Pressure-PSI	Nom. Length -Inches	Outside Dia. -Inches	Ports Both Ends	Alloy
PR-020	20	10,000	11	2.5	1/4 Super Pr.	4130 CD
PR-040	40	10,000	19	2.5	1/4 Super Pr.	4130 CD
PR-134	134	10,000	17	6	3/8 Super Pr.	4140 HT
PR-200	200	10,000	22	5	3/8 Super Pr.	4130 CD
PR-400	400	10,000	40	5	3/8 Super Pr.	4130 CD
PR-450	450	10,000	31	6.0	3/8 Super Pr.	4140 HT
PR-900	900	10,000	57	6.0	3/8 Super Pr.	4140 HT
PC-020A	20	5,000	23	1.5	1/4 NPT	304SS
PC-025B	25	5,000	29	1.5	1/4 NPT	304SS
PC-020C	20	10,000	17	3	1/4 Super Pr.	304SS
PC-025D	25	10,000	19	3	1/4 Super Pr.	304SS

The receivers (PR) are electroless nickel plated. All PR and PC models are proof tested to 1.5 x maximum rating and designed for a minimum burst of 4x maximum rating.

