

Relief Valve



Relief valves are precision pressure-control valves used for system over pressure protection and pressure stabilization. They are available in soft-seat (FRV10/20) and metal-seat (FRV30/45) versions, with body material 316 stainless steel. Working pressure ranges from 50 psi up to 45,000 psi, suitable for gas, liquid, high-pressure gas systems, cryogenic systems and petrochemical applications. Easy field adjustment and reliable relief performance.

Feature

1. Working pressure: 50–10,000 psi (RV series); 3,000–45,000 psi (FRV series)
2. Body: 316 stainless steel; seals: NBR, PTFE packing, nylon or metal seat
3. FRV10/FRV20: soft seat design, good sealing, repeatable pop & reset, long cycle life
4. FRV30/FRV45: metal seat design, ultra-low temp resistance to -252°C (-421°F)
5. Orifice size: 2.7 mm – 6.35 mm
6. Inlet & Outlet: 1/4" NPT standard; easy on-site adjustment
7. Proportional opening with pressure rise; full flow at 10% above set pressure
8. All pressure-containing parts traceable to raw material.

Datashheet

RV Series Relief Valves

Model	Pressure Rating (psi)	Orifice (mm)	Cv Rating	Media
RV-06	50 – 6000	3.6	0.27	Gas / Liquid
RV-10	1000 – 10000	1.6	0.12	Gas / Liquid
RV-20	10000 – 20000	1.6	0.12	Gas / Liquid

FRV Series Relief Valves

Model	Inlet	Outlet (NPT)	Orifice (mm)	Min Setting (psi)	Max Setting (psi)	Max Back Pressure (psi)	Length (mm)
FRV-10	LF9	3/4"	6.35	3000	11000	500	239
FRV-	LF9	3/4"	3.96	11000	21000	500	239

Model	Inlet	Outlet (NPT)	Orifice (mm)	Min Setting (psi)	Max Setting (psi)	Max Back Pressure (psi)	Length (mm)
20							
FRV-30	HF9	3/4"	3.18	21000	30000	500	251.5
FRV-45	HF9	1/2"	2.7	30000	45000	500	360

Application

1. High-pressure gas systems & pressure test systems
2. Cryogenic systems (excluding LN₂ & L-CO₂ for soft-seat types)
3. Petroleum, petrochemical & chemical processing
4. Industrial hydraulic systems & overpressure protection
5. Special fluid systems requiring precise pressure relief..

If you have any questions about similar or special models, please contact us.

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