

ERV VS. SKY VENT VALVES

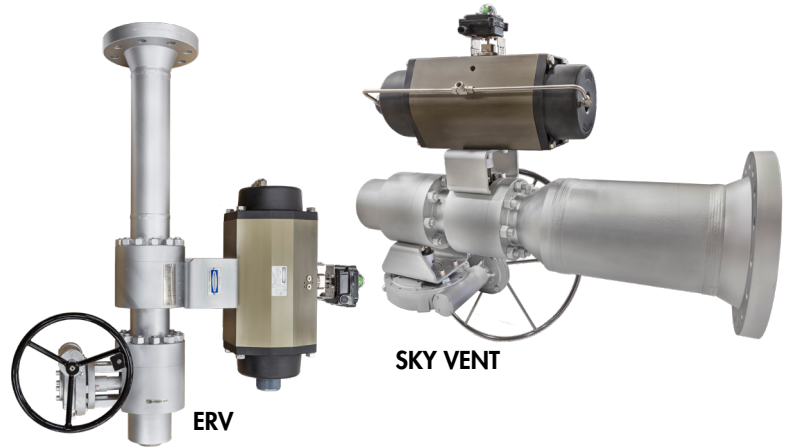
Product Comparison



OVERVIEW

ValvTechnologies' ERV is the perfect combination of zero-leakage isolation valve plus the electronic controls needed to monitor and regulate system pressures in a safety valve environment and within ASME Code Section I "V" Stamp requirements where critical over-pressure protection is paramount. ValvTechnologies' ERV is the benchmark.

To address issues of high-temperature, extreme noise and absolute tight shutoff during initial operation of combined cycle plant start-up, ValvTechnologies introduced sky vent valves. Sky vent valves are designed to address the high-performance demands of steam power generation start-up, ensuring plant piping and equipment do not rise in temperature too quickly protecting it from thermal induced stresses.



FEATURES	ERV	SKY VENT
SIZES AVAILABLE	Typical 2.5" x 4"	Typical 6" and larger
PRESSURE CLASSES	Up to 4500#	Up to 4500#
MATERIALS OF CONSTRUCTION	Selected per pressure and temperature requirements	Selected per pressure and temperature requirements
IN COMPLIANCE	Main steam safety valve system. ASME Section I for supercritical pressures and temperatures. Capacity certified	Design engineering/customer preference. Not mandatory
END CONNECTIONS	Typical butt weld end x flanged piped into a drip pan	Butt weld end, flanged per customer preference/specification
SHUTOFF	Zero-leakage when properly installed and utilized in its intended application	Zero-leakage when properly installed and utilized in its intended application
OPTIONS	- Isolation valve when in a non-code application below supercritical P/T. (see brochure for exceptions) - ERV control box, premium and economical packages available	Isolation valve. Mark III Xactrol® stacked disc trim (see brochure for additional options)
APPLICATIONS	- Protection of the main steam safety valve system - Silent sentinel - not to be used during startup as a vent - Always closed until operational pressure excursions beyond the set point	Modulating during startup enabling large amounts of steam to discharge during startup, then closed
FEATURES	Tight shut-off, high spring load, accuracy top 1/10% of 1 PSI, accurate blowdown (see brochure for more information)	Tight shut off, high spring load, precision reliability (see brochure for more information)
WARRANTY	Four-year power product ERV for main steam relief applications	Four-year standard power product warranty
TYPICAL ISSUES	Improper use as a startup vent, hard piped to a discharge silencer. Can contribute to body seal and seat leakage.	Piping loads especially on the discharge of the valve being hard piped to the atmosphere or into a silencer without being properly supported. Body seal and seat leakage possible.
WHAT TO LOOK OUT FOR	Proper installation and application usage. Number of cycles during normal operations.	Proper installation