

E vs. R Series Comparison

Based on ERV Set Pressure of 2740 psig

	E Series (Pneumatic Act) Options	R Series (Pneumatic Act) Options	Competition
Pressure measurement	Pressure transducer w/programmable controller (0-3000 psi)	Pressure switch (3000#)	Pressure switch (3000#)
Setting of values	To Set pressure and blowdown, enter the numeric values in controller ± 0.05%	Dial Indication for Set pressure on pressure switch (this is very inaccurate and difficult to set in the field)	Dial Indication for Set pressure on pressure switch (this is very inaccurate and difficult to set in the field) *
Set Pressure Repeatability	± 0.05%	± 30 psig (± 1% of range)	± 30 psig (± 1% of range)
Accuracy	± 1.5%	¼ + ¼% ≅ ± ½%	¼ + ¼% ≅ ± ½%
Deadband	No Deadband – can easily achieve blowdown of ¼%	Deadband (blowdown): 2%	Deadband (blowdown): 2%
Siphon	Yes	Yes	Yes
Pressure boundary	Monel diaphragm, siphon & cooling tower (welded)	Customer supplied	Customer supplied
Control box internals	Microprocessing programmable controller with digital readout	Uncalibrated set switch screw	Uncalibrated set switch screw
	Relays	Relays	Relays
	Terminals	Terminals	Terminals
	Solenoid	+	+
	Pushbuttons, selector switch, indicating lights	Pushbuttons, selector switch, indicating lights	Pushbuttons, selector switch, indicating lights
	Voltage converter		
Diffuser Outlet	Yes	No	No
	Limit switches on actuator	Limit switches on actuator	Limit switches on actuator
Seating Technology	Integral seat/Ceramet	Integral seat/Ceramet	No integral seat
Experience with Ceramet seated ball type valve in service	Over 100,000	< 100	<100
Can isolation valve be opened and closed with unit on line	Yes	Yes	No **
Offers integral isolation valve	Yes	Yes	No
RCS interfaces available	Yes	No	No
Live pressure in control box	No	Yes	Yes

* See page 15 of CON-15, Adjusting the Set Pressure and Blowdown, and the actual screw in fig. 5 on page 16 of CON 15. See also Minimum Blowdown Setting on page 17 of CON 15.

** See B System Start Up, CON-15, page 15.

+ Solenoid is mounted on the valve, not in the control box