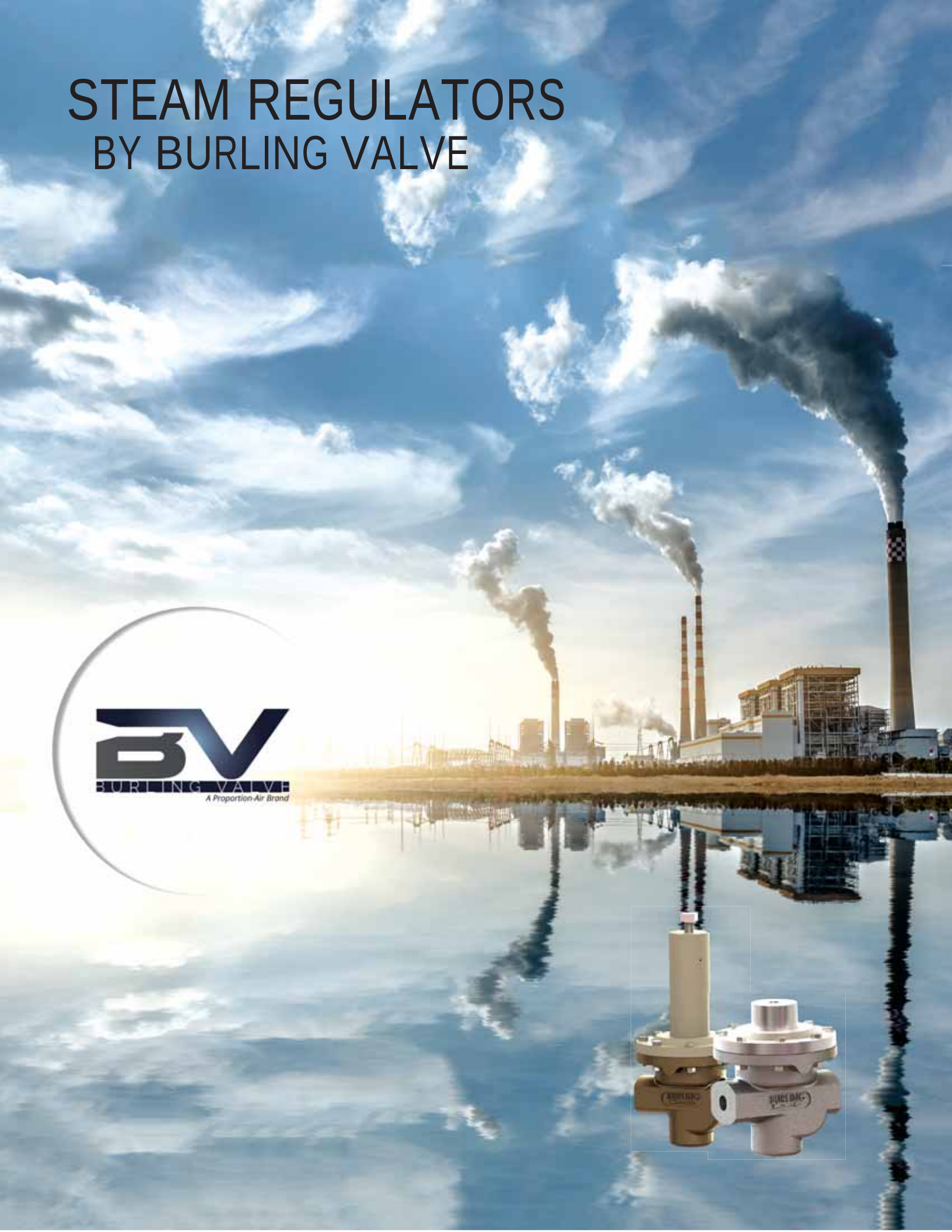
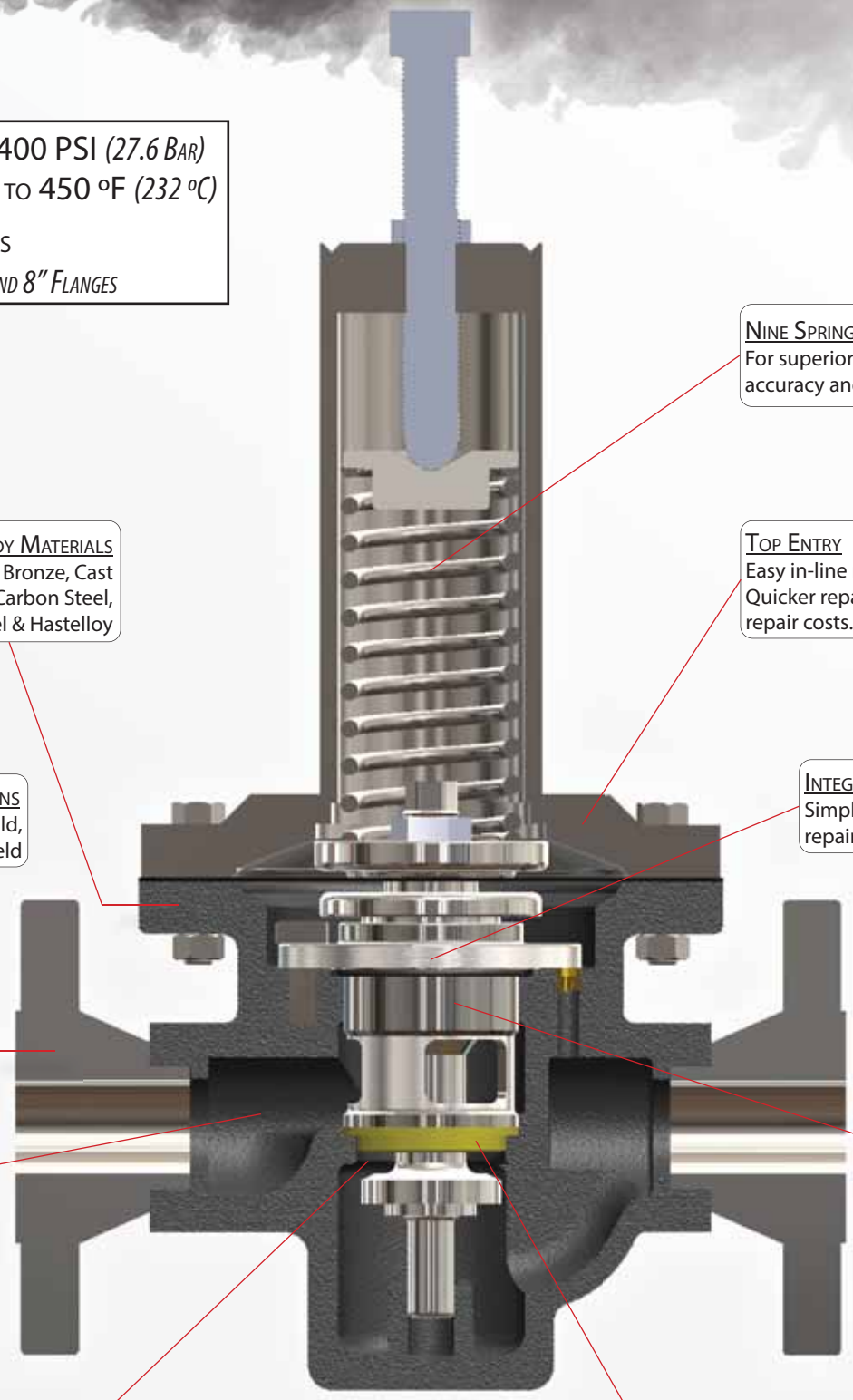
STEAM REGULATORS
BY BURLING VALVE



BURLING STEAM REGULATOR

Pressures up to 400 PSI *(27.6 Bar)*
Temperatures up to 450 °F *(232 °C)*
1/2" to 4" Bodies
with the option of 6" and 8" Flanges



Nine Spring Ranges
For superior control, accuracy and regulation.

Body Materials
Alloy 20, Bronze, Cast Iron, Carbon Steel, Stainless Steel & Hastelloy

Top Entry
Easy in-line maintenance. Quicker repairs and lower repair costs.

End Connections
NPT, Flanged, Butt Weld, Socket Weld

Integral Cage Design
Simple removal and repair of all soft goods.

High Cv Valves
Allows more flow through smaller valves, reducing piping costs

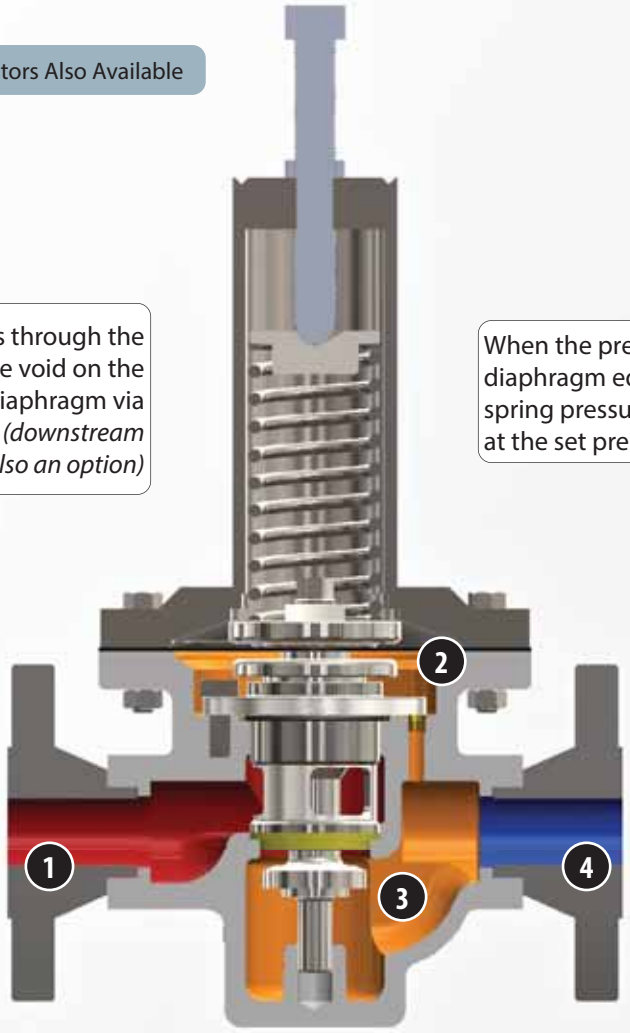
Dynamic U-Cup
Specially designed U-Cup maintains a consistent seal between the stem and cage.

Dead End Shutoff
Class VI soft seat steam shutoff

Seat Selection
Soft seats including PTFE, RTFE, Kel-F, EPDM & TFM 1600 to meet a wide range of pressure and temperature conditions.

Back Pressure Steam Regulators Also Available

STANDARD OPERATING CYCLE OF THE BURLING STEAM REGULATOR



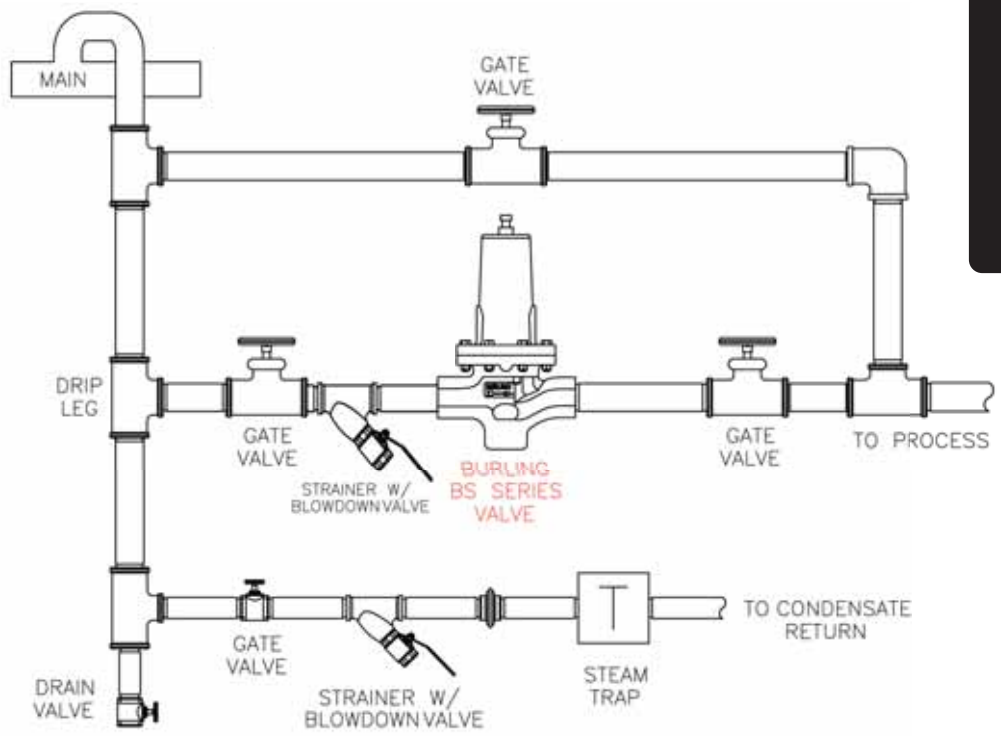
1 Valve is normally open. Incoming steam fills the chamber *(red)*

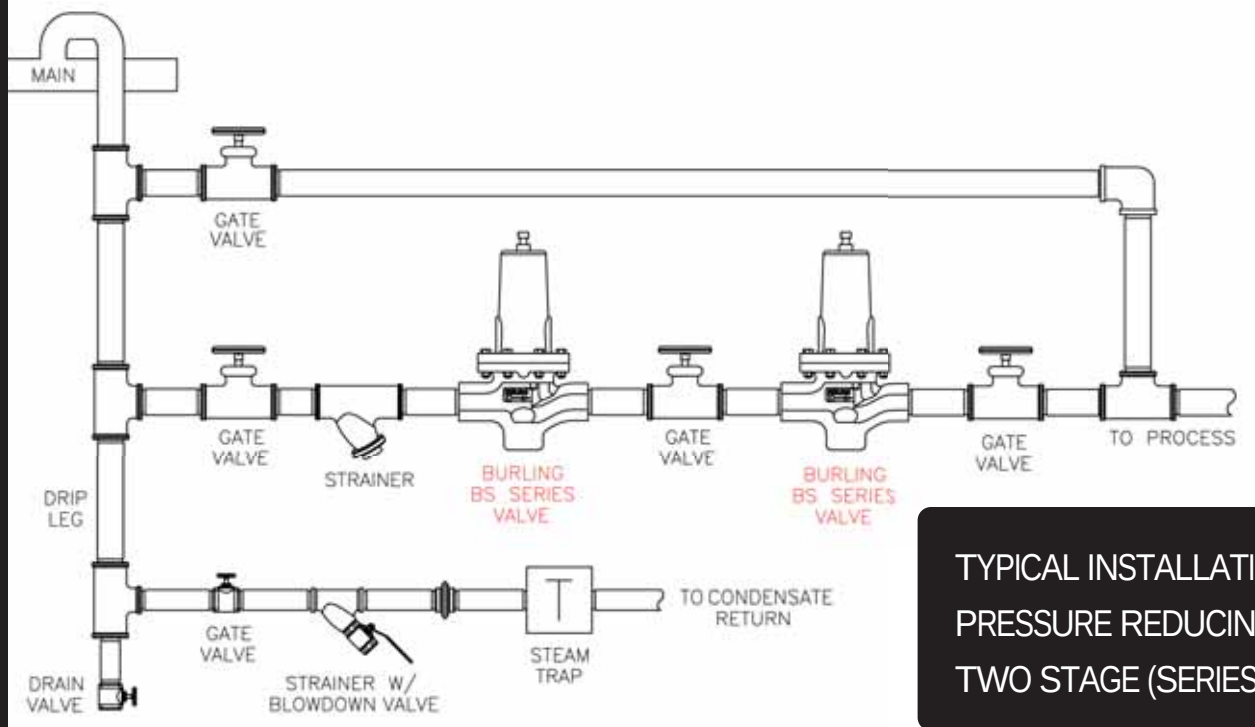
2 As steam moves through the regulator, it fills the void on the bottom side of the diaphragm via the sensing port. *(downstream sensing is also an option)*

3 When the pressure below the diaphragm equalizes with the spring pressure, the valve closes at the set pressure.

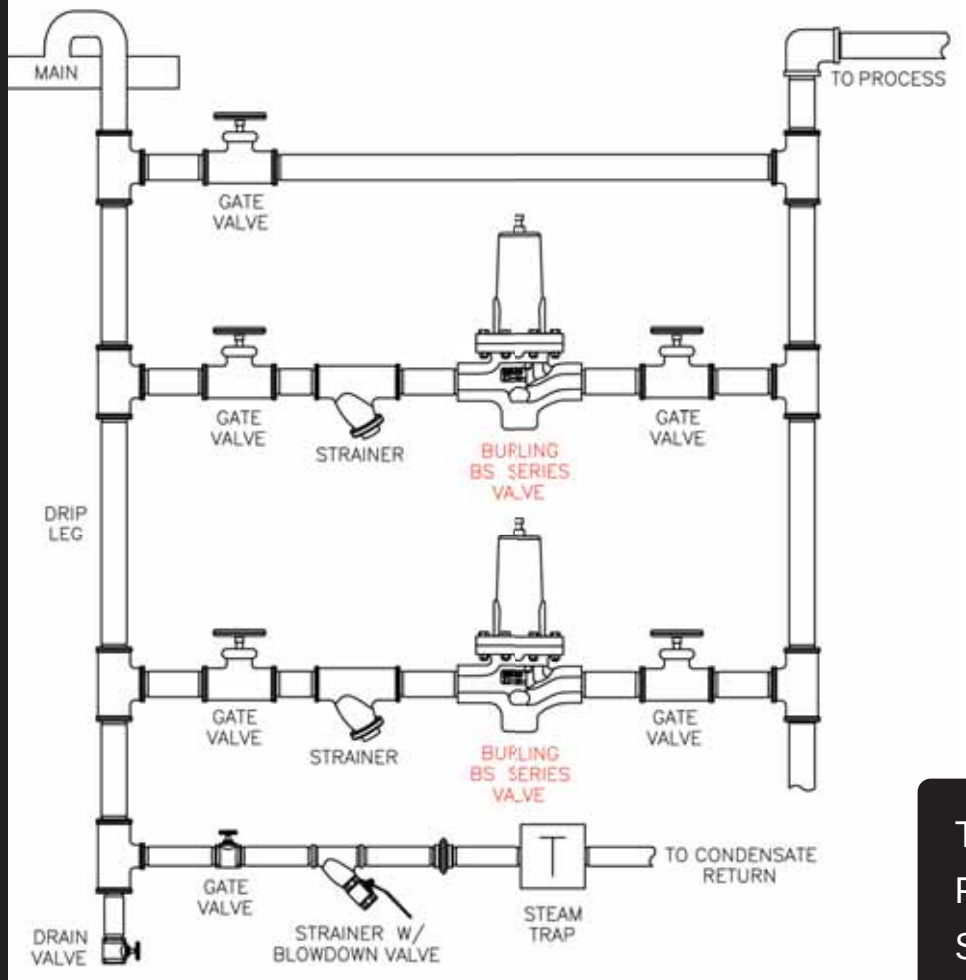
4 As pressure decreases downstream, the spring forces the valve open and allows steam to pass through to the process at the desired pressure and temperature

TYPICAL INSTALLATION PRESSURE REDUCING VALVE STATION





TYPICAL INSTALLATION
PRESSURE REDUCING
TWO STAGE (SERIES)



TYPICAL INSTALLATION
PARALLEL REDUCING
STATION

MECHANICAL
CONTROL TYPES AND
CONFIGURATIONS

BS-1 Series

Direct Operated *(Spring)*
Internally or Externally Sensed
Accuracy: ± 7 psi

BD-3 Series

Dome-Loaded *with* Manual Air Pilot
Internally or Externally Sensed
Accuracy: ± 1-2 psi

BD-7 Series

Dome-Loaded *with* Steam Pilot
Accuracy: ± 0.1-0.2 psi

ELECTRICAL
CONTROL TYPES AND
CONFIGURATIONS

Single-Loop Electronic Control

BD-4 Series

In Single-Loop configuration, the electronic pilot controls pressure to the dome of the Burling steam regulator. As the diaphragm forces equal out, the pressure in the main line is controlled.

However, the electronic controller does not know the pressure in the main line and cannot adjust to leaks, backpressure and mechanical deficiencies.

Accuracy: ± 2-4%

Dual-Loop Electronic Control

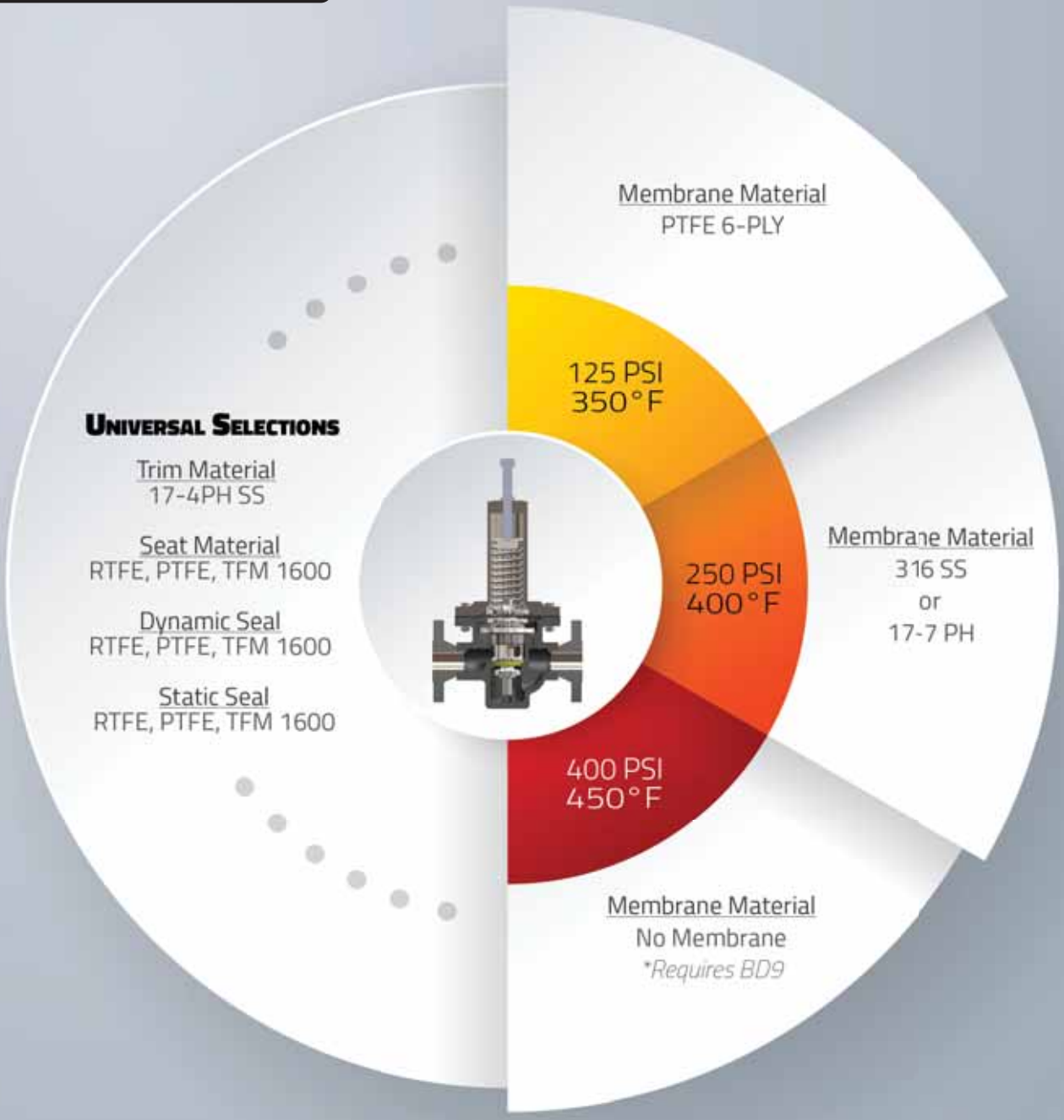
BD-4 Series

With Dual-Loop control, the electronic pilot controls pressure to the dome of the Burling steam regualtor. As the diaphragm forces equal out, the pressure in the main line is controlled.

But, instead of sensing pressure in the dome, a 2nd loop is added that senses pressure in the main line and allows the electronic regulator to compensate for leaks, back pressure and any mechanical deficiencies.

Accuracy: ± 0.5%

STEAM REGULATOR MATERIAL SELECTION GUIDE



*For temperatures between 450°F & 500°F contact factory

Steam Regulators

BurlingValve.com

Texas
4200 Main Avenue
Groves, TX 77619

Indiana
8250 N 600 W
McCordsville, IN 46055

317.335.2602
sales@burlingvalves.com