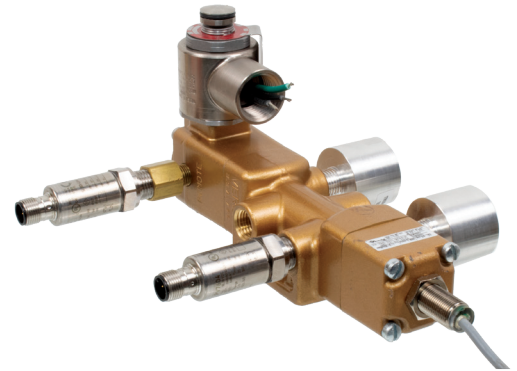


DIAGNOSTIC FEEDBACK OPTIONS

Sensor port options for IIOT integration. Automated testing and remote operation

REAL WORLD CHALLENGES

- Traditional unmanned systems can lead to dangerous/expensive downtime
- IIoT implementation demands process monitoring and diagnostic feedback capabilities for all components
- Manual cycle testing is often neglected
- Pre-packaged smart valve options have low flow rates and limited options
- Control solenoids account for ~25% of failure in basic automated valve systems



THE VERSA SOLUTION

VERSA's Diagnostic Feedback Options add an intelligence capability to our field-proven valves. Adding key modular components enables the Versa valve to provide strategic sensing. Combining this with our extensive valve options and the ever-expanding IIoT technologies opens a blank canvas for users to engineer various intelligent system options.

Remote Sensor Port (-20):

When a spool valve's solenoid is energized, it lifts a poppet to allow air pressure to the piston, providing the force to shift the valve. Simultaneously, a 1/8" NPT port receives pressure connected to the pilot chamber. The port can be fitted with pressure sensors for a wealth of diagnostic feedback information focused on the solenoid operation.

Spring Cap Sensor Port with an M12 Thread Option (-407):

In some cases, pressure sensor feedback from the spool position isn't enough. For those applications, we offer the option (-407), which is a spring cap sensor port with an M12 thread to accommodate a proximity sensor to read the spool position physically.

Smart Exercise & Bypass Circuit

VERSA's Diagnostic Feedback Options can be incorporated into a Smart Exercise & Bypass Circuit, allowing process monitoring, automated cycling, and diagnostic feedback from your control solenoids without cycling the ESD valve. Equipping valves with sensory feedback can add diagnostic intelligence to an already highly reliable system.

CUSTOMER SPOTLIGHT:

A VERSA customer in West Virginia has adapted our valves with diagnostic feedback options for protection against expensive downtime at an unmanned compressor station for natural gas. In this application with multiple Emergency Shut Down (ESD) valves, coil burn-out led to hours of costly downtime. Utilizing our Redundant Solenoid (-RS) and remote sensor port (-20), our customer created a solution that provides continuous availability in the event of a burned-out coil AND sends a notification for maintenance upon detection. (VERSA valves used: VAA-3521-181D-RS-NGST-XV1-20-D024).