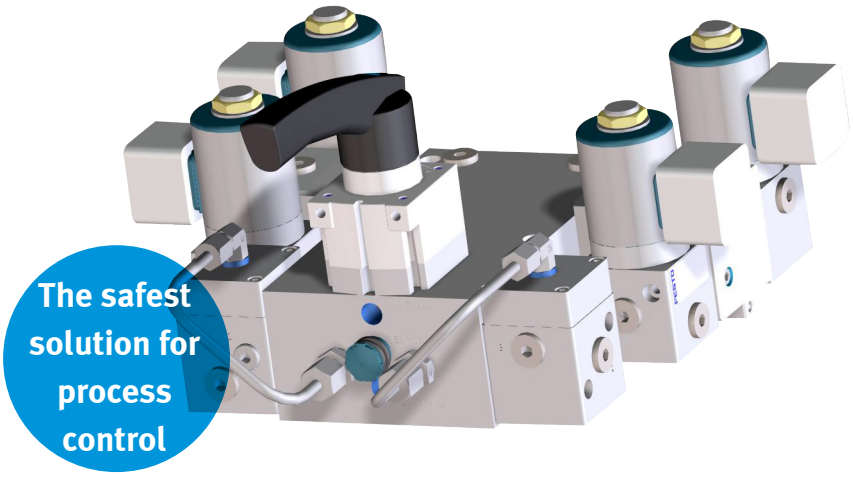
Functional safety solutions for the process control industry



FESTO

Safe control!

Highlights

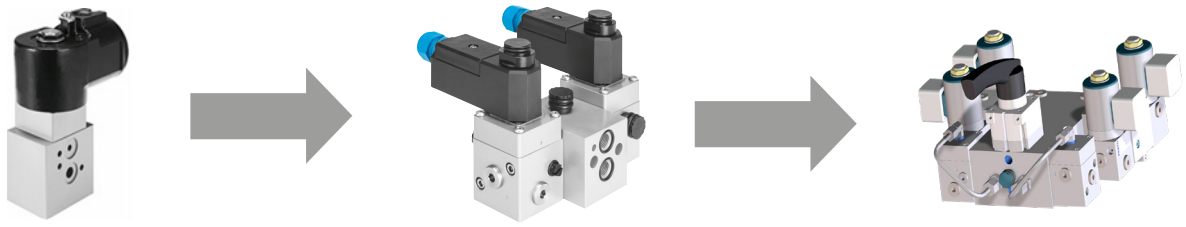
- Global support
- Standard components
- Corrosion resistant
- SIL 3 capable
- Approved for HAZLOC environments
- Low wattage consumption
- Custom Configurations
- High flow rates

Festo solenoid pilot valves are an integral part of the final control element in any Emergency Shutdown System.

Festo understands the need for reliable products to ensure minimum downtime while ensuring the process can be shut down when commanded. Festo offers solenoid pilot valve solutions that are widely used in the process industry.

To reduce downtime, critical applications require an individual 3-way pilot valve, or redundant pilot valve systems, or even modular systems complete with manual override systems.

At the heart of each system is a certified and proven pilot valve per IEC 61508 standards and SIL 3 capable and HAZLOC approved.



Solenoid valve VOFD

2oo2 Manifold

2oo4 Manifold

Functional safety solutions for the process control industry

Direct operated pilot valve - VOFD



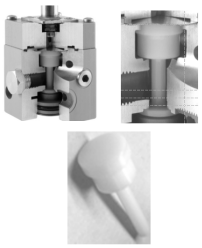
Product highlights

- Complete valve range + accessories
- Meets the highest requirements for SIL and explosion protection
- Suitable for outdoor use
- Top quality, top switching reliability
- High level of system availability

Technical features

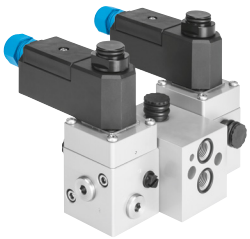
- Up to SIL 3 according IEC 61508/61511
- NAMUR flange pattern or threaded connection
- Ematal coating
- Stainless steel design
- Low temperature down to -50°C
- Ex ia, Ex em, Ex d
- Class 1 Div 2

Low friction principle



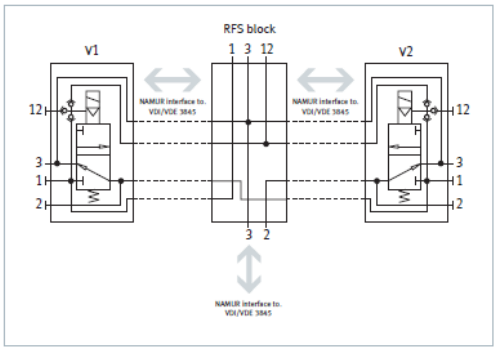
No soft seal - no friction

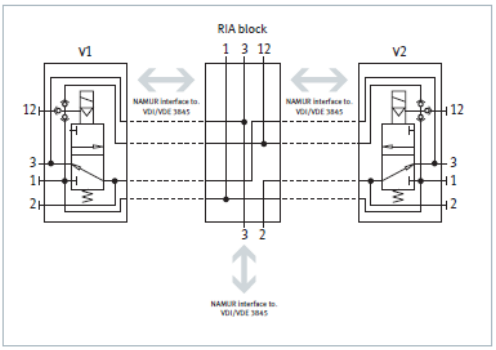
1oo2 and 2oo2 systems



Redundant NAMUR block

NAMUR interfaces make redundancy easy to implement.
The advantages: low warehousing costs and easy replacement of solenoid valves

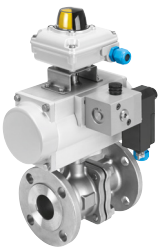


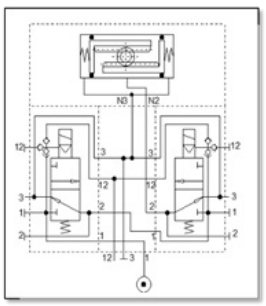


Increased safety (1oo2)
With enhanced safety (1oo2), two valves are connected in series. Both are energized during operation. Should a valve or one of the control signals fail during operation, the entire system is exhausted in order to protect it from subsequent damage. Media conveyor lines frecuency require this higher level of safety.

Increased uptime (2oo2)
With enhanced availability (2002), two valves are connected in parallel. Both are energized during operation. Should a valve or one of the two control signals fail during operation, the plant remains active and the entire system continues to work. For example, cooling circuits require this enhanced availability.

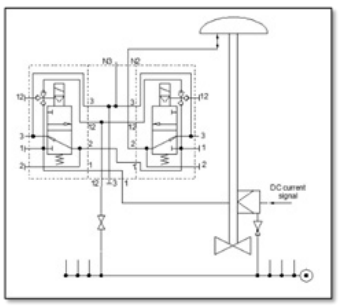
Redundant NAMUR block – internal block connection





With NAMUR interface to mount directly on a quarter-turn actuator

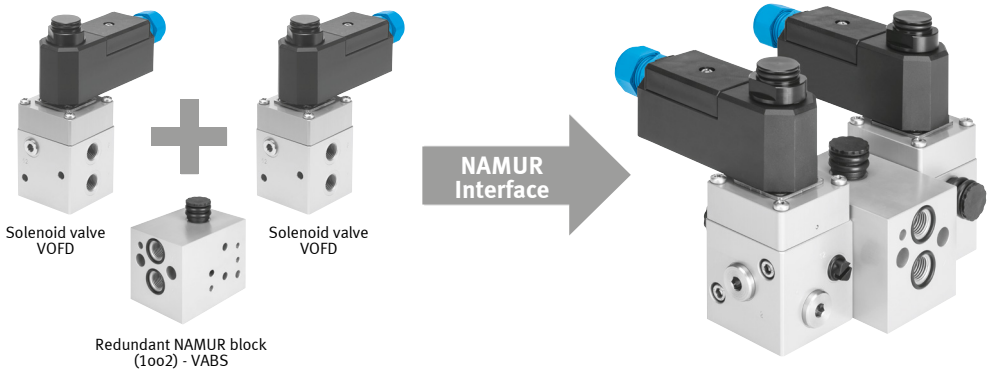




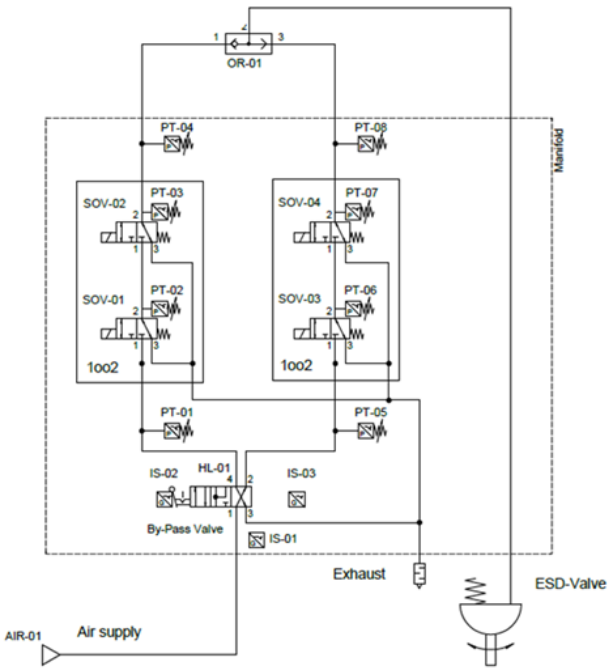
With threaded connection to mount on linear actuators or actuators with positioner



Modular components permit easy configuration to increase level of safety

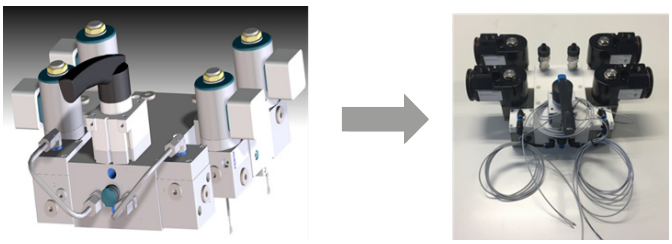


Custom 2oo4 manifold – with 2 strings of 1oo2 blocks complete with a lockable bypass hand lever

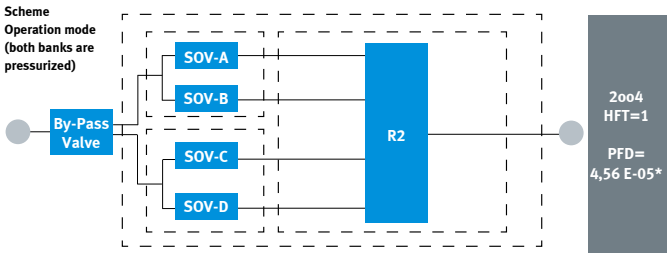


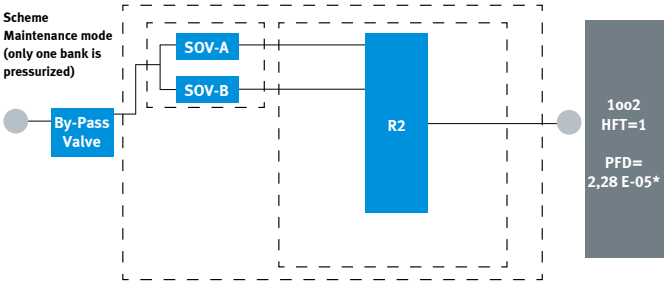
Features

- Position feedback of each solenoid valve (SOV 1-4)
- Bypass hand lever valve, lockable in each position and includes position feedback
- Pressure sensoring for each bank
- Maintenance without interruption of operation
- Easy maintenance due to NAMUR interfaces and standard catalog products
- SIL certification of single solenoid valves and manifold



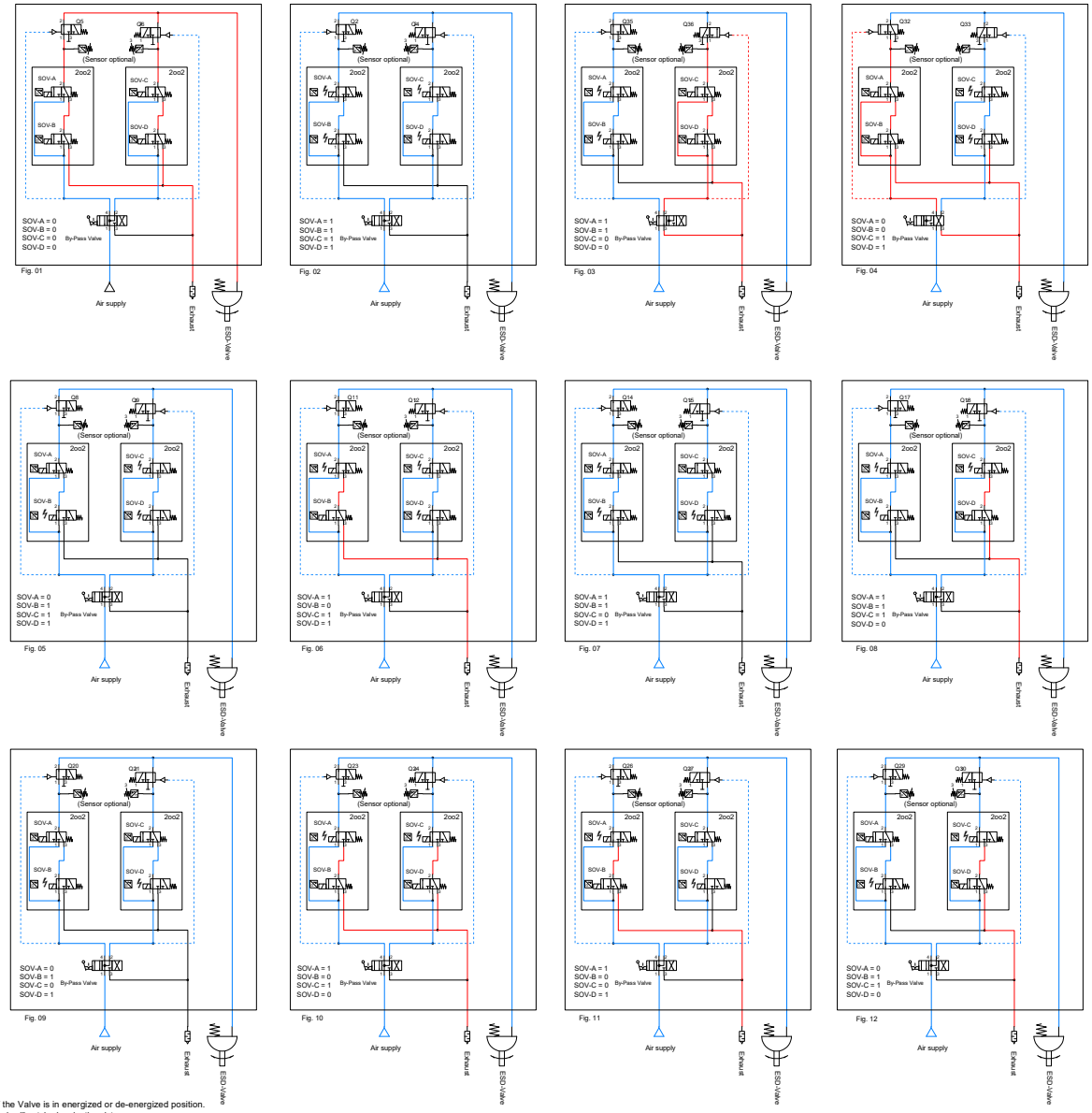
SIL certification - 2oo4 redundant manifold

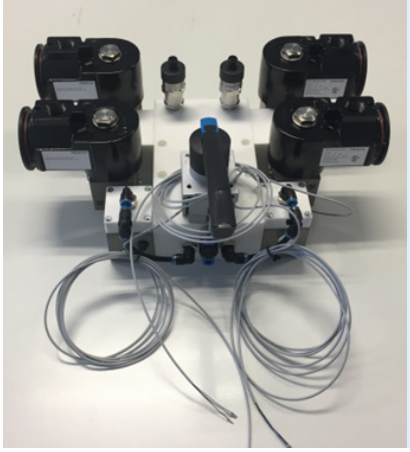




High integrity Pressure Protections Systems (HIPPS systems)

SIL certification - 2oo4 redundant manifold





Advantage of customized modular solution

- One part number, offering you a complete system
- Delivered complete and ready to be installed
- Less complicated component replacement
- Standard components
- Reduced leakage points
- Fully customizable
- No spurious trips
- Electronic valve position feedback
- Localized manual control
- Hot field swappable
- Diagnostic feedback

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FSS.PSI.NA 05.2021 EN - Errors and omissions expected