



503 Series - Series Zoned Safety Manifold

INTEGRATION OF FUNCTIONAL SAFETY AND MACHINE CONTROL

The introduction of the Zoned Safety Manifold allows the integration of safety functionality within a pneumatic valve manifold. Zoned Safety Manifolds offer many benefits over traditional methods of pneumatic safety, while allowing for adherence to the Machinery Directive and ISO 13849-1.



- Safe Stopping of Actuators and Unexpected Startup - Actuators stop and will not move
- Safe Exhausting of Pneumatic Energy - Air is released from Actuators slowing or stopping movement and decreasing cylinder force
- Safe Return of Motion - Actuators will return to a predetermined position

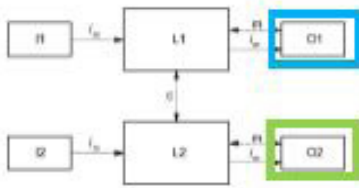
Constructed from the proven Numatics 503 Series valve and G3 Fieldbus Electronics platforms; users will enjoy the ease of implementation and use. Capabilities allow for the integration of up to three electro-pneumatic safety zones in one manifold assembly. Each zone allows for independent control and the ability to safely disable air and power to the pneumatic equipment controlled by each zone.

The Numatics Zoned Safety Manifold is part of a Safety System as a Safety Related Part (SRP) and can be used in Safety Systems allowing the end users to:

- Achieve ISO 13849 performance up to Cat 4 PLe (with appropriate monitoring and control functionality)
- Create a Manifold with Standard Valve Functions in Combination with up to 3 different Safety Function Zones
- Compatible With Multiple Safety Control Platforms (with or without Pulse Test)
- Supports Ethernet Communication Protocols (EtherNet/IP, PROFINET, EtherNet/IP DLR, EtherCAT, POWERLINK, Modbus TCP)
- Ideal for Load/Unload Applications

The Zoned Safety Manifold has been evaluated by TÜV Rheinland® (Report No. 968/FSP 228.00/14) to satisfy the requirements of ISO 13849-1 Type-B for use in pneumatic safety related applications. The Zoned Safety Manifold is part of a Safety System as a Safety Related Part (SRP) and can be used in Safety Systems up to Category 4 PLe, with appropriate external safety control functionality (e.g. monitoring, timing, pulse test, etc.) and insuring that adherence to all related Safety Standards are met. Per ISO 13849, the end user or third party organization must evaluate and certify adherence of the complete Control System (CS) including all SRPs. Reliability data of our pneumatic components can be given upon request. More details on sample applications and technical information can be found in our technical manual available on our website.

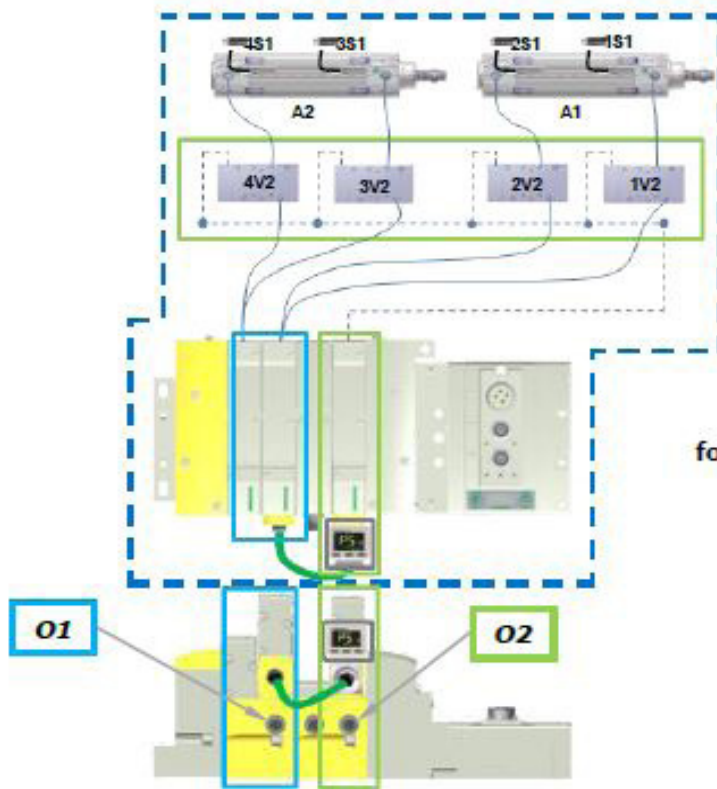
Below is an example of the Numatics 503 Zoned Safety manifold integrated into a Category 3 safety solution:



ISO 13849-1 Cat 3 Designated Architecture



Pneumatic Circuit Representation for CAT 3 Designated Architecture



Physical Representation for CAT 3 Designated Architecture

Catalog files, product configurators, and CAD Models are available for download at <http://www.asco.com/en-us/Pages/pneumatic-valve-series-503-zoned.aspx>.

To support your productivity and efficiency needs with this innovative product, please contact us at 651.452.8452 or visit www.jhfoster.com.

John Henry Foster (JHFoster) is a leading distributor and service provider for automation and compressed air systems. Our mission is to assist companies like yours automate their manufacturing applications to make the process a positive journey. We are committed to providing successful solutions that exceed production demands, reduce costs, and increase overall efficiencies.

Headquartered in Eagan, MN, with a location in Fargo, ND, we also offer a fully-equipped team of mobile technicians that provide service to the 5-state area. Contact us today at 800.582.5162 or jhfoster.com to learn more about how you might benefit from knowing us.

The Zoned Safety Manifold has been evaluated by TÜV Rheinland® (Report No. 968/FSP 1228.00/14) to satisfy the requirements of ISO 13849-1 Type-B for use in pneumatic safety related applications. The Zoned Safety Manifold is part of a Safety System as a Safety Related Part (SRP) and can be used in Safety Systems up to Category 4 PL_e, with appropriate external safety control functionality (e.g. monitoring, timing, pulse test, etc.) and insuring that adherence to all related Safety Standards are met. Per ISO 13849, the end user or third party organization must evaluate and certify adherence of the complete Control System (CS) including all SRPs. Reliability data of our pneumatic components can be given upon request. More details on sample applications and technical information can be found in our technical manual available on our website.