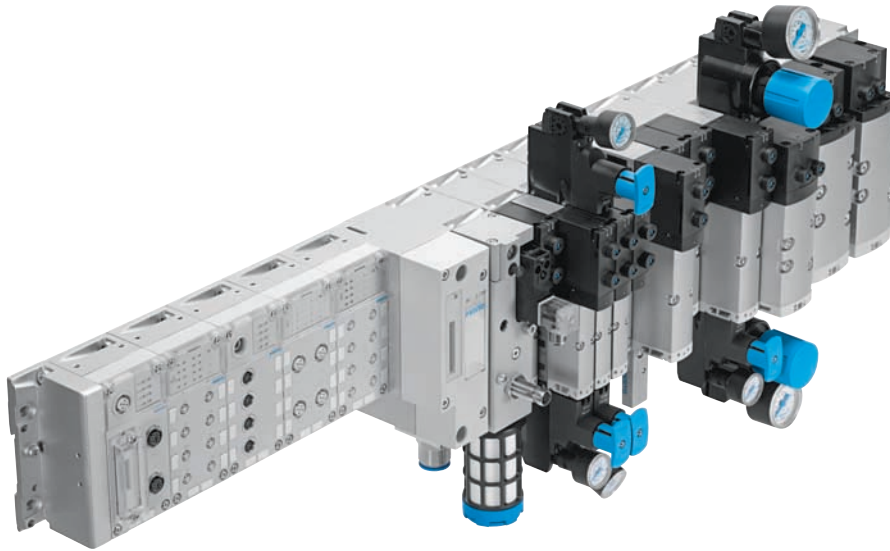


# Valve Manifolds VTSA/VTSA-F

## Plug-in Valves with Fieldbus, Multi-pin, Terminal Box, and M12 Connectivity



### Valve Series Offering the Highest Degree of Custom Integration Within a Standardized Valve Manifold

#### Integration

The VTSA/VTSA-F valve manifold integrates into all current fieldbus systems and Ethernet links via a CPX terminal and can interface to numerous I/O modules. CPX features the Festo plug & work® design that eliminates the installation costs associated with hardwiring I/O to pneumatic valves.

#### Flexible and Modular

The VTSA/VTSA-F valve manifold offers the highest degree of flexibility and modularity in both the pneumatic and electric circuits. All components – I/O modules, manifold bases, and valves – can be easily changed or expanded to meet your most complex system requirements.

#### Complete Diagnostics

The VTSA/VTSA-F valve manifold supports a full diagnostic concept. Perform point level diagnostics such as missing coil and shorted coil, and module level diagnostics such as no power to coil or module failure. Identify faults locally via LED functions or using a CPX-MMI handheld diagnostic unit. With CPX, diagnostic information can be relayed through the fieldbus back to the master controller. Valve with integrated spool position sensing in size 01 can provide detailed diagnostic information for the most critical of machine functions.

#### Standardization

The VTSA valve manifold conforms fully to the ISO 15407-2 and ISO 5599-2 standards, regardless of electrical interface desired. With conformance to an international standard, global compatibility of the valve and manifold system is ensured. VTSA also offers the ability to use the best sized valve for the application by using any of four possible valve sizes in any combination.

#### Performance

When higher flow is needed in a smaller package (18 and 26 mm), the VTSA-F manifold is the answer. The VTSA-F is a non-standard subbase that offers an increased flow rate of up to 40% over the ISO standard base. VTSA-F offers all the flexibility and modularity of the VTSA plus higher flow.

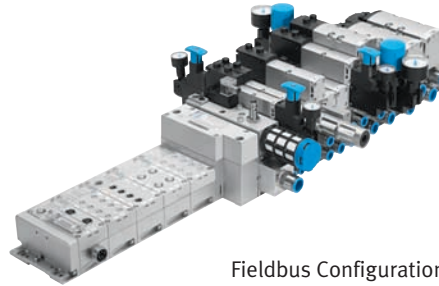
# Valve Manifolds VTSA/VTSA-F

## Plug-in Valves with Fieldbus, Multi-pin, Terminal Box, and M12 Connectivity

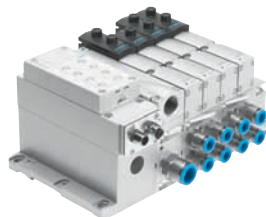
### Features

- Easy modification and expansion due to high degree of modularity  
Fast connection of the subbases by means of four screws.
- Fully modular system allows the combination of ISO 15407-2 standard 18 mm (Size 02), 26 mm (Size 01), ISO 5599-2 standard 42 mm (Size 1), and standard 52 mm (Size 2) valves on the same manifold without the need for any transition/adapter plate
- Similarly VTSA-F offers high flow subbases for 18 and 26 mm valves that are combinable on the same manifold
- Change direction of working ports with easy-to-install angle plate
- Easy-to-create pressure zones by means of gaskets placed between subbases
- Complete range 3- and 5-way valves for all applications
- Soft-start for gradual supply and fast exhaust of the complete valve manifold or for specific sections of the manifold
- 26 mm (Size 01) valve with integrated spool position sensor
- Complete range of vertical sandwich components such as pressure regulators, flow control valve, individual pressure supply, shut-off plate (hot swap)
- Manual override options of momentary, locking, or hidden (non-accessible)
- Durable low cost identification by label holder on the valve or label holder on the subbase
- Standard air qualities: with 40 µm grade of filtration, lubricated or non-lubricated air, inert gases

### Seamless Concept for all 4 Valve Sizes



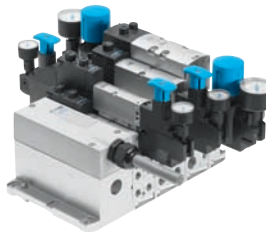
Fieldbus Configuration



AS-i Configuration



Individual Connections



Multi-pin Configuration



Single Subbase Version

Technical Data						
Electrical/Mechanical						
Valve operating voltages	24 V DC and 110 V AC					
Indicator	Yellow LED					
Number of valve solenoids	Max. 32					
Degrees of protection	IP20, IP65, and NEMA 4 depending on connection system					
Approvals/Certificates	CE					
Fieldbus Connection						
Fieldbus nodes	AS-i, Interbus, DeviceNet™, Profibus DP, CANopen, CC-Link via CPX terminal					
Ethernet	Modbus/TCP, EtherNet/IP™, Profinet, TCP/IP via CPX terminal					
Digital I/O modules	4DI, 4DO, 8DI, 8DO, 8DI/8DO, 16DI per module					
Analog I/O modules	2AI, 2AO, 4AI, 4AI-T per module					
Technology modules	FEC controller, CPI installation system, servo pneumatic, electromechanical					
Number of I/O, modules	512 In/512 Out, 10 Electronic Modules + Pneumatic Interface					
Power supply	24 VDC, max. 16 A					
Pneumatic Valves						
	VTSA (ISO 15407-2)		VTSA (ISO 5599-2)		VTSA-F (Non Standard)	
ISO size	02 (18 mm)	01 (26 mm)	1 (42 mm)	2 (52 mm)	02 (18 mm)	01 (26 mm)
Flow rate [l/min]	500	1,000	1,500	2,900	700	1,400
Working ports	G1/8, 1/8 NPT	G1/4, 1/4 NPT	G3/8, 3/8 NPT	G1/2, 1/2 NPT	G1/8, 1/8 NPT	G1/4, 1/4 NPT
Operating pressure	2 ... 10 bar with internal auxiliary pilot air					
	-0.9 ... 10 bar with external auxiliary pilot air at 2 ... 10 bar					

### Festo Corporation

For ordering assistance, or to find your nearest Festo Distributor,  
**Call:** 1.800.99.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** customer.service@us.festo.com  
**Visit:** www.festo.com/us

For technical support,  
**Call:** 1.866.GO.FESTO  
**Fax:** 1.800.96.FESTO  
**Email:** product.support@us.festo.com