

# Safety valves \* MS..-SV-.. with soft-start and exhaust function

FESTO



## Safety compliance!

### Highlights

- From low-cost solutions to the maximum safety level: PL c, d, e
- Officially certified for PL e, ready for immediate use: MS6-SV-E
- Connection for AS-Interface with MS6-SV-E
- Cost-efficient variant MS6-SV-D
- Integrated soft-start function
- Flow rate: up to 16,500 l/min.

Protection for people and machines with the MS..-SV-E, -D and -C. They ensure that safety-critical system components are exhausted and de-energised as quickly as possible in the event of an emergency. The safe state reliably prevents danger. Furthermore, all valves MS..-SV have an integrated soft-start function in order to start up your system gently and safely.

### Unique and ready for immediate use: MS6-SV-E

Performance level e is achieved immediately without any additional, time-consuming programming of the controller – this is only possible with the MS6-SV-E. Approved by the German Institute for Occupational Safety and Health (IFA) in accordance with DIN EN ISO 13849-1, category 4, performance level e. Certified so that you can be sure that the machine operator is protected in case of emergency. MS6-SV-E-ASIS also allows simple and convenient connection to an AS Interface bus, including switching status sensing and diagnostic functions.

### Best price/performance ratio: MS6-SV-D

Ideal for manufacturers of series-produced machines with high safety requirements up to PL e. In contrast to the MS6-SV-E, appropriate programming is required on the safety PLC.

### Good, inexpensive, high performance: MS6-SV-C or MS9-SV-C

Ideal for applications with medium safety requirements up to Performance Level c. The single-channel design ensures safe, fast exhausting – and is very cost-effective as well.

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## Flexible and modular system: seamless integration into the service unit combination MS

As is the case with all components from the MS series, the safety valves MS..-SV-E, -D und -C can also be configured as components of the modular system MSB, either as stand-alone devices or as part of a

service unit, e.g. with the filter regulator LFR, fine and micro filters LFM and the flow sensor SFAM. The compact dimensions support flexible use, as do the integrated, traditional on/off and soft-start functions which make

standalone operation possible. Tamper-proof covers are optionally available.



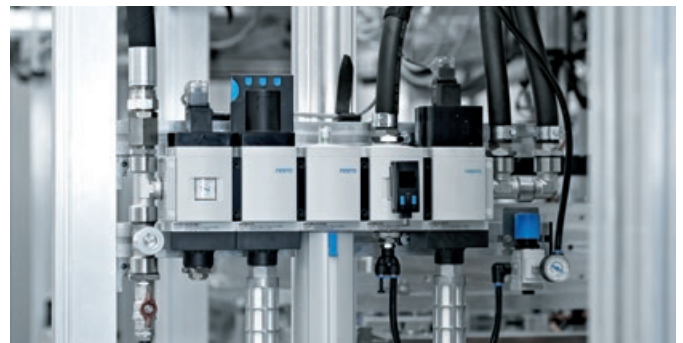
Service unit combination with MS6-SV-E

## Quick exhausting, gentle start-up

The integrated functions of the safety valves MS..-SV.. are setting standards. Systems can be de-energised in a matter of seconds thanks to reliable quick exhaust with zero residual pressure. The sturdy and reliable on/off and exhaust valve combines minimal size with a high exhaust flow rate.

### Gentle pressure build-up thanks to the soft-start valve

Increased safety is also ensured during start-up as the gentle pressure build-up protects key pneumatic components as well as axes and shock absorbers. In line with the, the valve is switched to maximum flow when the pressure switchover point is reached.



Service unit combination with MS9-SV-C in action

### Technical data

	MS6-SV-C	MS9-SV-C	MS6-SV-D	MS6-SV-E	MS6-SV-E-ASIS
Safety to EN ISO 13849-1	Cat. 1, PL c, single-channel	Cat. 1, PL c, single-channel	Cat. 3 PL d to cat. 4, PL e, 2-channel	Cat. 4, PL e, 2-channel with self-monitoring	Cat. 4, PL e, 2-channel with self-monitoring
Standard nominal flow rate (1 → 2) $q_{nN}$	5.700 l/min	16.500 l/min	4.300 l/min	4.300 l/min	4.300 l/min
Exhaust rate (2 → 3) $q_n$	7.600 l/min	20.500 l/min	9.000 l/min	9.000 l/min	9.000 l/min
Electrical control	Direct actuation of the coil	Direct actuation of the coil	Two safe enable signals (0 V/24 V).	Two safe enable signals (0 V/24 V).	AS-Interface Safety at Work, spec. 3.0, profile 7.5.5
Soft-start function	x	x	x	x	x
Adjustable pressure switchover point	x	x	–	–	–
Supply-air flow control valve	x	x	x	x	x

### Tested safety

MS6-SV-E: certified in accordance with DIN EN ISO 13849-1, category 4, Performance Level e



MS6-SV-E-ASIS: certified by TÜV NORD

\* In accordance with EC Machinery Directive 2006/42/EC

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Adresse

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