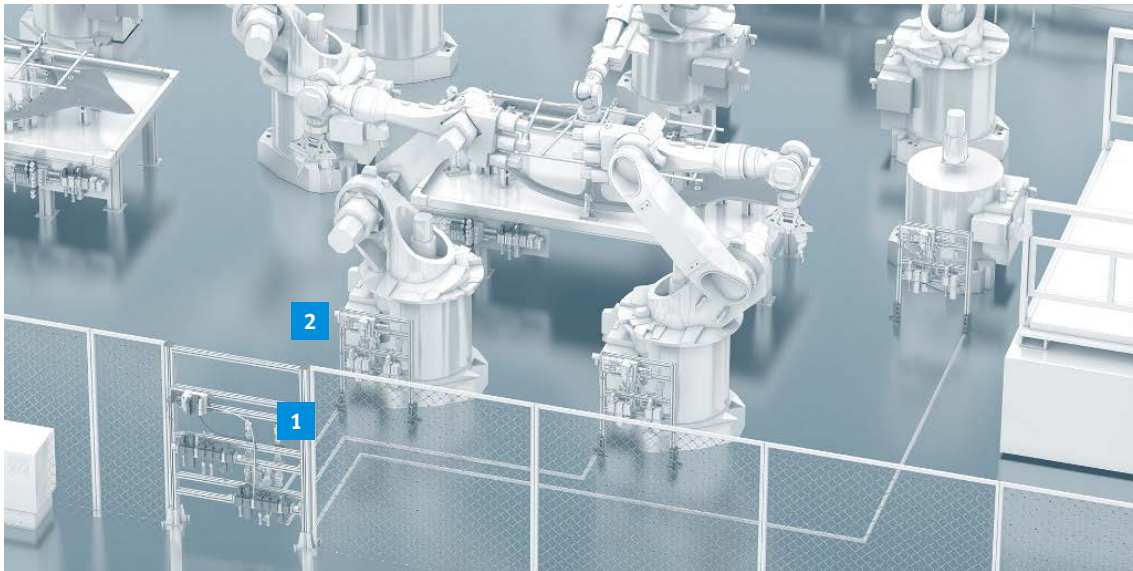


Compressed air and cooling water supply for welding guns



Highlights

- Equipment inline with the application: from basic functions to function integration with process monitoring and diagnostic management
- Tailor-made: design precisely matched to the customer requirements
- Compliance with the standards, directives, product releases and specific requirements applicable in the body-in-white environment
- Defined mechanical, pneumatic and electrical interfaces

Project idea

Ready-to-install complete solution for controlling and monitoring the compressed air and cooling water supply of complete welding lines or individual welding robots, with a focus on process reliability and efficient installation.

Requirements

- Integration into existing car body production plants
- Prevention of water leakage when replacing the electrode caps
- Quicker installation and less space required

Ready to install solutions

Application-specific complete solutions: pretested and with a structured, bundled media supply.

Using

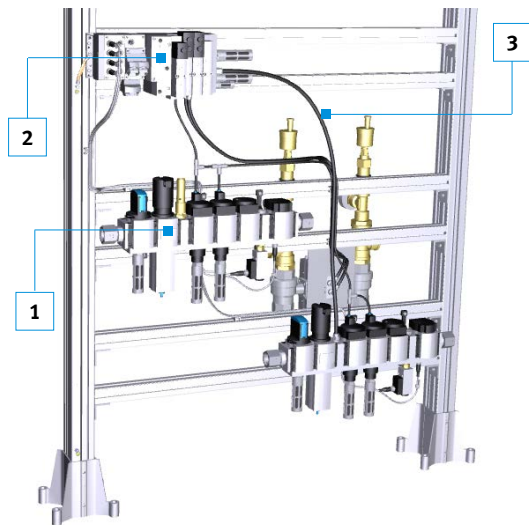
- 1** hall installation plates (HIP) and
- 2** robot installation plates (RIP)

compressed air and cooling water are supplied to the production cells in car body production plants.

Compressed air and cooling water supply for welding guns

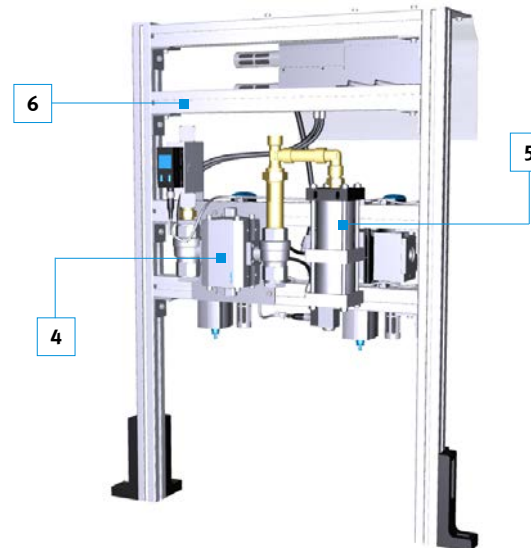
System set-up for hall installation plates (HIP) and robot installation plates (RIP)

Compressed air preparation:



- 1 Compressed air service unit
- 2 Valve terminal or individual valves
- 3 Accessories: cables, tubing and fittings

Cooling water supply:



- 4 Cooling water supply
- 5 Water withdrawal
- 6 Frame

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Compressed air and cooling water supply for welding guns

Types of configuration

Standard: compressed air and cooling water on different sides



Modular solution



Compressed air and cooling water on one side

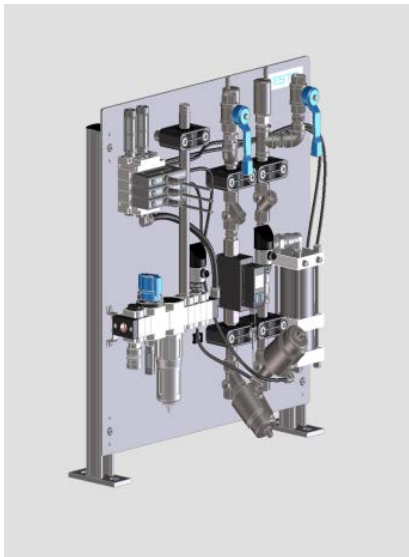


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Compressed air and cooling water supply for welding guns

Types of configuration

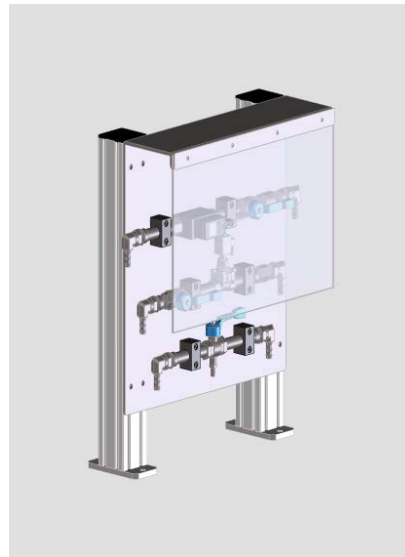
Installation
on a plate



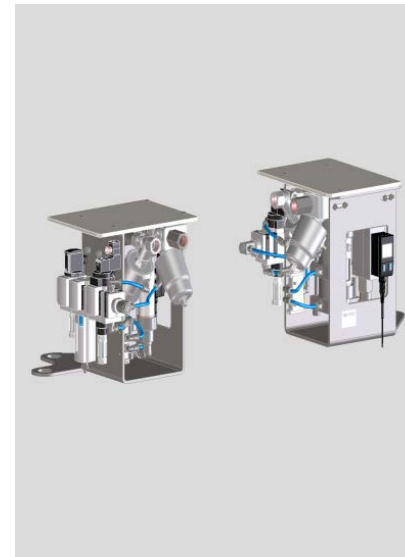
Installation
on a rail



Installation
on a frame



Direct installation
on the robot



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Compressed air and cooling water supply for welding guns

Products and solutions

FESTO



MS series service units

- A comprehensive concept for compressed air preparation
- For simple standard applications and application-specific solutions
- With integrated safety technology as well as pressure and flow sensors
- Maximum flow rates with minimum space requirement



Angle seat valve VZXF

- Sturdy: suitable for contaminated or gaseous media up to a viscosity of 600 mm²/s
- Stainless steel design with high thermal resistance
- Closes reliably when pressure drops thanks to N/C function
- Versions: Gas: closes with the media flow, Fluids: closes against the media flow



Withdrawal cylinder D63x2-64-SA

- For quick replacement of the electrode caps: cooling water is quickly withdrawn from the welding gun cooling water circuit and water inlet and outlet are reliably shut off
- Prevents water leakage when replacing the electrode caps
- Tandem cylinder



Standards-based valve terminal VTSA/VTSA-F

- Unique: mix of 5 valve sizes on one valve terminal
- Complete valve range: ISO size 3 with flow rate of up to 4000 l/min
- Complete range for vertical stacking and comprehensive diagnostics concept
- Vacuum generator with air saving function as module standard
- Safety@Festo: PROFIsafe module CPX-FVDA-P2 for PM-switching outputs up to 1.5 A



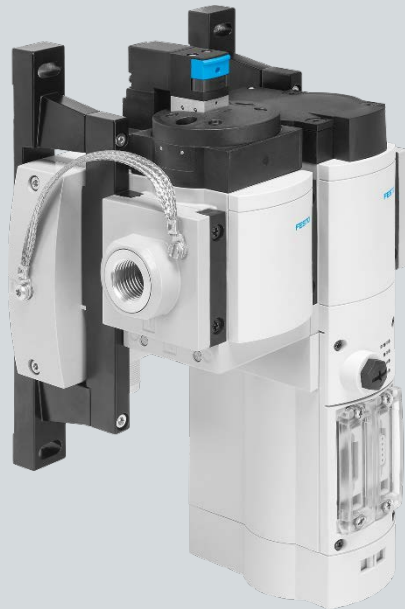
Flow sensors SFAW

- Cooling circuit monitoring: SFAW measures the volume, temperature and flow rate of liquid media
- Easy to install
- Sensor can be rotated through 360° in the direction of flow
- Monitoring for leaks and line breaks
- Rotatable display, which switches between red and blue for visual feedback on system status, making it easy to read off and operate after installation

Compressed air and cooling water supply for welding guns

Product highlight

FESTO



Energy efficiency module MSE6-E2M

This world first enables you to save compressed air and energy in your system. The energy efficiency module is a completely new, intelligent combination of service units, sensors and fieldbus technology.

The module monitors and regulates the compressed air supply fully automatically.

3 core functions:

- Automatic shut-off of the compressed air in stand-by mode
- Automatic detection and notification of leakages
- Condition and system monitoring via PROFIBUS