

More Than the Sum of its Parts: Individual System Solutions by Bürkert



Safe and prompt detection of leakages and short change-over times of welding tips are one of the most important challenges when it comes to highly productive robot welding systems. Based on a broad range of Bürkert sensors, valves and controllers to draw from, our design engineers configure the most effective solutions to detect and prevent leakage during the welding process. The Bürkert

patented system with pressure release cylinder enables the dry exchange of welding tips and shuts off the coolant flow within 300 msec in case of leakage.

Coolant Switching block – Electrically driven

Especially in applications where electrical welding guns are used, the electrically driven switching block is the right choice. Coolant flow setting and monitoring is effected by reliable optical or magnetic paddle wheel sensors. An optional integrated PT100 sensor in the flow meter transmits the temperature of the welding tips' return flow. The flow thresholds for detecting leakages can be easily set by remote programming.



Coolant Switching block – Pneumatically driven

The standard solution for flow monitoring of coolant in the automotive market. The casted body with 2 pneumatically driven On/Off valves and an optical flow switch in a robust industrial design enables the shut down of the coolant flow in less than 300 msec in case of leakage. Programming the thresholds for detecting the leakage: easily set at your finger tips.

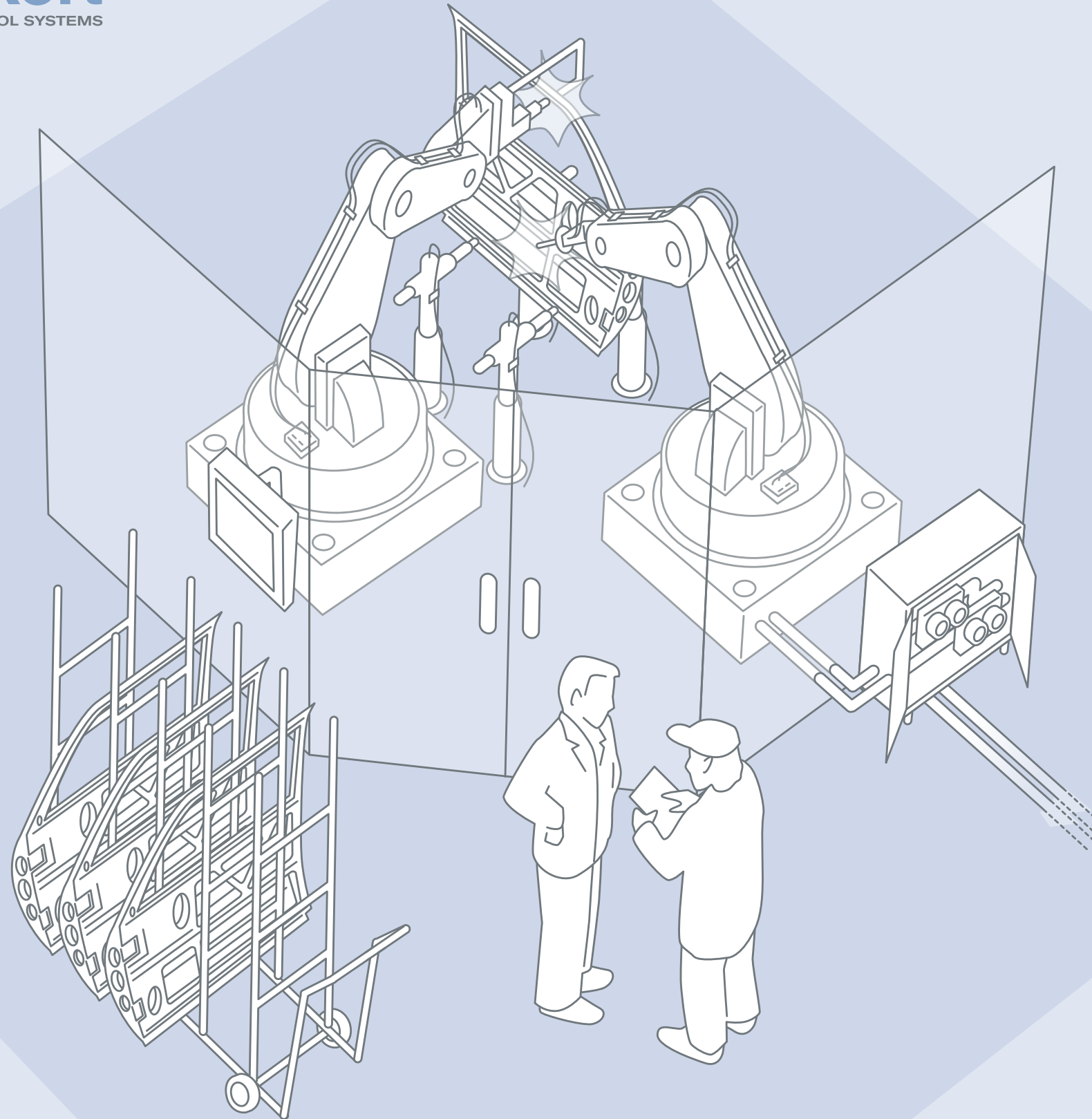


ARC Module for Gas Control and Cooling

Highly intergrated solution for setting the protection gas flow, monitoring the gas pressure and monitoring coolant flow and temperature. In combination with a CAN-Bus communication, the very compact and robust block can be integrated very close to the welding process. The ROI is insured only by reducing the amount of protection gas in relation to conventional systems.



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FLUID CONTROL SYSTEMS



Type 8039 Flow Sensor / Flow Switch

The unique Bürkert paddle wheel flow meter concept switches off the coolant flow in less than 300 msec in case of leakage. The switching point for alarm can be set individually via the 3 button panel within easy reach. The reliable optical measuring principle and the modular concept with pipe sizes between 6mm and 50mm enable flexible design of customized solutions.

Type 8311 / 8314 Pressure Sensor

In flow compact pressure sensor with or without display and remote alarm contacts. Exceptionally easy to use and boasting a large display, pressure indication, transmission and external set point changes at your finger tips.



Type 8011 / 8012 Flow Sensor / Flow Switch

Paddle-wheel flow sensor for economic integration in pipe systems without any additional piping or for integrating into customized manifolds. The very reliable optical or magnetic measuring principle for integration into pipe sizes from 6mm to 50mm is very established in the automotive market.

Type 5282 Servo assisted solenoid valve

Long service life is assured with separating diaphragm which isolates solenoid from operating fluid. Lockable manual override. Servo assisted brass valve design. Less sensitive to slightly contaminated fluids.



Type 8032 Flow Controller

Indication, monitoring, transmitting and On/Off control in one device. The switching point for alarm can be set individually via the 3 button panel at your finger tips.

Type 8081 Ultrasonic Flow Meter

This flow meter enables flow measuring without moving parts at a high accuracy. As no straight upstream and downstream distances are necessary, the sensor can be integrated in compact customized systems.

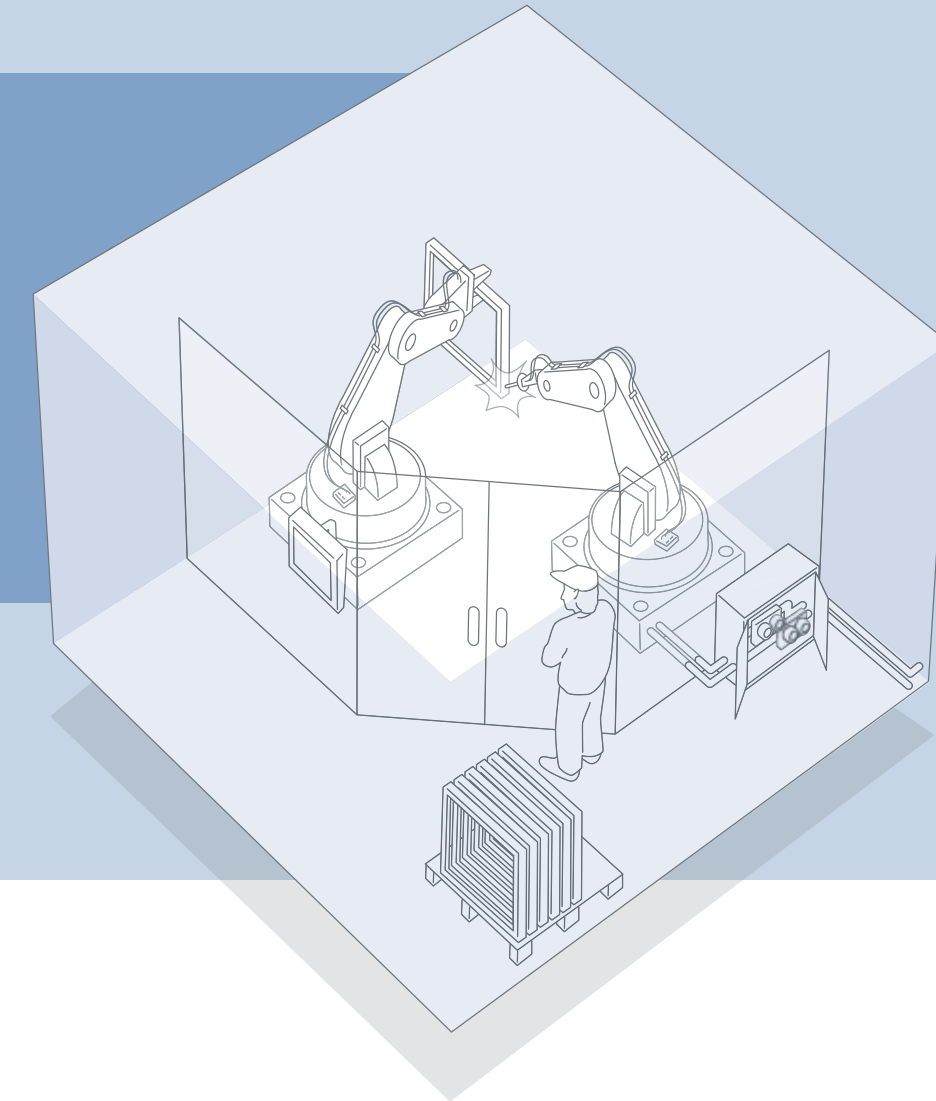




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Cooling Systems: Robot Welding

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Bürkert provides ground-breaking cooling and gas control system solutions for your robot welding process, helping you to detect coolant leakages, to reduce the change-over time for exchanging welding tips and to set the gas flow for an optimal MIG welding process. In summary, it helps you to speed up your production lines while still saving precious energy. Modern robot welding systems for welding high-precision automotive parts are more complex than ever, demanding high standards with regard to welding quality. This is where Bürkert can add value and offer you solutions tailored to your world. With over 60 years of expertise in the cooling industry, Bürkert is the best partner of choice to enhance your efficiency.