

# **Euromap/SPI**

# **Application equipment for the Plastics Industry**

# Plug and Play for the Plastics Industry

Euromap/SPI is the best signal interface between robot and injection moulding machine for speeding up the installation of a cell. This is a true plug and play solution based on international standards and safety regulations.

## Based on international standards

Euromap/SPI is the standardized hardware signal interface between robot and injection moulding machine. It is used for all the hand-shaking signals such as "machine is open", "machine is closed", "robot is inside the machine" etc.

The Euromap (European Committee of Machinery Manufacturers for the Plastics and Rubber Industries) and SPI (Society of Plastics Industry) are based on respective international standard.

# Euromap/SPI for IRC5 robot controller

To connect the robot with the injection moulding machine, simply plug in the Euromap cable into the Euromap connector mounted on the connector board of the IRC5 robot controller. To adapt to Euromap12/SPI, a converter box is plugged on the Euromap67 connector.





The Euromap/SPI input and output signals are easily configured in RobotWare, the robot controller software, using the provided IO-configuration files. In robot test mode when the machine is disconnected, the controller jumper plug is very useful.

## The right option for your machine

Depending on your injection moulding machine, choose the suitable option:

- Euromap67 is the standard in Europe, which offers double channel security from the injection moulding machine. This means that it supports Machine safety category 2 and has a redundancy of safety gate and Emergency Stop signals.
- Euromap12 is used for retrofit of older injection moulding machines that offer only single channel security.
- SPI offers single channel security and is used in the Americas.



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# Ways of controling the robot position

There are several ways to control that the robot is actually outside the machine (the Euromap/SPI signal "Mould area free"):

- World zones is a software solution to geometrically define when the robot is outside the machine.
- Position switches on the robot axis 1 and 2 can be combined to control the robot position.
- ABB's new electronic position switches "Safe-Move" is a more flexible solution to determine the robot's position.

## Facts about the ABB Euromap kit

- Based on international standards and safety regulations.
- Safe transfer of the signal exchange between robot and machine.
- Euromap67 Machine safety category 2.
- Euromap67 Redundancy of safety gate and Emergency stop signals.
- Euromap12/SPI available as options for retrofitting older machines.
- Plug and Play solution.
- Euromap/SPI is available for all machine tending robots with the IRC5 controller.



# Euromap and RobotWare Plastics Mould for easy programing

The Euromap/SPI is excellent for combining with the application software RobotWare Plastics Mould. The machine modules of RobotWare Plastics Mould is pre-defined with the Euromap/SPI signals, making the robot programming of the part extraction from the machine very easy and quick.

