

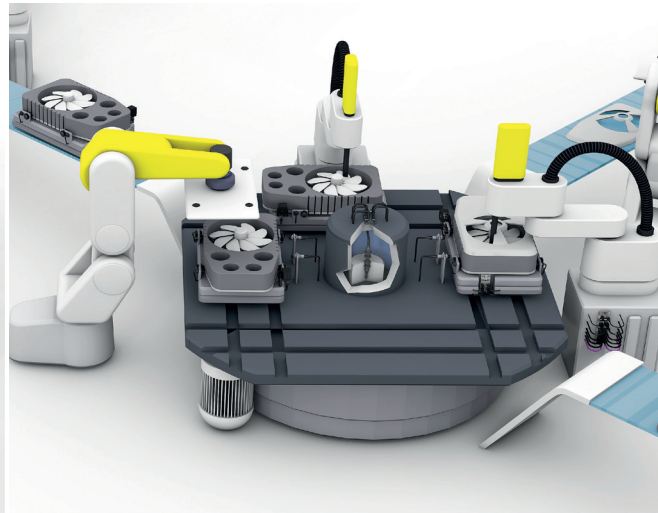
Connecting and Networking – Non-contact transmission

HOW NON-CONTACT DATA TRANSPORT WORKS

In some applications, cables, connectors and contacts are subject to great stress. In other applications, such as moving machine members, fixed wiring is not ideal. We will show you how to meet these challenges using non-contact transmission systems.



Non-contact signal transmission between gripper and robot arm



Non-contact signal transmission between rotary index table and PLC

A robot is often required to handle different workpieces, which in turn requires different grippers. This means the gripper needs to be exchanged often. If a non-contact transmission system is used between the robot arm and gripper, this exchange can be made automatically. This is because no plugging and unplugging of the connection cable is required.

A rotary index table is often used to perform different work steps at various stations. The correct workpiece position is detected on the rotary index table using sensors. The signals are transmitted to the PLC using non-contact transmission systems.



Tubular non-contact transmission system (Remote)



Tubular non-contact transmission system (Base)



Block-style non-contact transmission system (Remote)



Block-style non-contact transmission system (Base)

A non-contact transmission system consists of two components: Remote and Base. The Remote is installed on the moving side of the application. It connects sensors and actuators with the coupling system. The Base is installed on the fixed side of the application. It transmits power to the Remote and receives the status information for the sensors, which it in turn passes on to the controller. Various form factors are available depending on the ambient conditions.