



HIRSCHMANN

A **BELDEN** BRAND

NR series connectors
for identification systems.

Machine Building

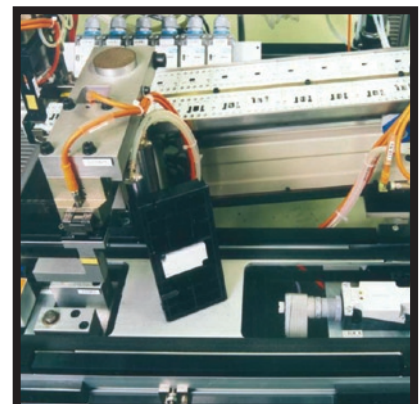
RF identification systems for
automation systems



Siemens A&D manufactures MOBY RF identification systems for automation systems at its facility in Fürth, Germany. These devices are used in logistics, on assembly lines, in production and in materials handling to identify pallets, containers, component transporters, product

carriers or monorail suspended conveyors. The MOBY identification systems control and optimize material flow. They provide reliable identification and store data directly on the product.

SIEMENS



Use of MOBY devices on an assembly line producing SIRIUS contactors at Siemens Amberg



6-pin equipment connector
N6R AM 2 D



11-pin equipment connector
N11R AM 2 D



6-pin angled socket
N6R FF



11-pin angled socket
N11R FF



Project details

In its new MOBY-U generation of devices Siemens places its trust in the tried and proven NR series from Hirschmann. The power supply and the data on the reader/writer units are routed via the equipment connector N6R AM 2 D, and for service functions the 11-pin N11R AM 2 D is used. The MOBY identification systems comprise:

- Mobile data storage
- Reader/writer unit
- Interface module

Project parameter

The mobile data storage devices are mounted on the product and receive all application-specific data by non-contact transfer. Up to 32 kB of data can be stored and then read and edited as required on the individual stations. The reader/writer units provide the data transfer between the mobile data storage and higher-level systems. The data, and the power, is transmitted inductively by way of an alternating electromagnetic field generated by the reader/writer unit. The interface module integrates the MOBY identification systems into any higher-level systems.

Requirements

Both the existing MOBY devices and the new MOBY-U systems should be capable of being fitted with the same connectors. Based on the different housings and differing Siemens manufacturing methods, the equipment connectors must meet the following requirements:

- To save space, the angled sockets N6R FF and N11R FF must have a defined cable outlet. This requires fitting of an anti-rotation edge to the housing surfaces of equipment connectors N6R AM 2 D and N11R AM 2 D, taking account of the differing orientation of the PEs to the anti-rotation element surface in the 6-pin version relative to the 11-pin version.
- There are two common methods of attaching the equipment connectors in the MOBY housings:
 - by lock nuts
 - the connectors are screwed into the housing. For this, the threads should be designed to provide the defined cable outlet.
- As the housings are no longer cast, the hexagonal outer contour of the standard version is to be replaced by a rounded shape, in order to prevent unauthorized fitting.

Solution

Hirschmann is producing new tools in order to meet the customer's needs with regard to the NR series.

Why Hirschmann?

In summary, the following factors favor use of the Hirschmann connectors:

- Robust, industrial-standard connector series
- Pins fitted liquid-tight
- 6-pin and 11-pin versions available
- Flexibility to meet customer's needs

