

## PROFINET with Media Redundancy Protocol

### ring increases availability

Modern Ethernet-based bus systems speedily transfer even comprehensive process data from the field to the control and vice versa. This requires that the line connection should be absolutely reliable.

Owing to the Media Redundancy Protocol, the availability for the safe rotary encoders CD\_75M is significantly increased. This is achieved by a simple trick: The end of a branch is reconnected to the trunk of the network. Within this ring, each user can reach the trunk along two physical pathways. In Ethernet networks, however, ambivalent connections from one point to another are not allowed. The solution is the Media Redundancy Protocol MRP: The ring is logically separated at any point desired. This means that there are two branches as seen from a network point of view. If one branch fails, the connection is re-closed. As a result, the users on either side of the fault are connected to the trunk, i.e., the system continues running.

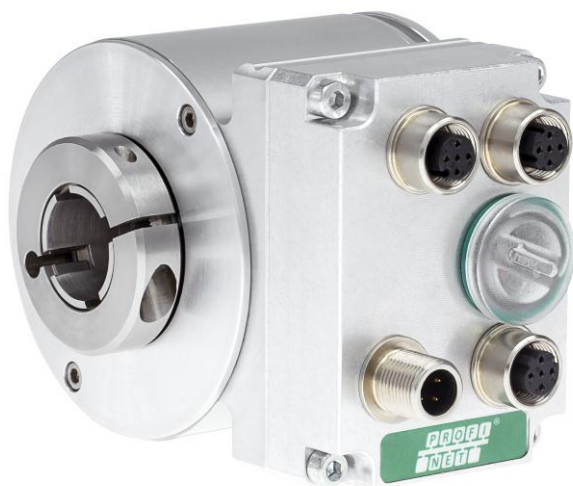
The safe rotary encoders CD\_75M and the corresponding ATEX versions AD\_75M (zone 2/22) and ADV88M (zone 1/21) are delivered with the extended MRP protocol. They can be configured such that they are running in this highly available operating mode with controls and/or PROFIBUS master assemblies which support MRP. When using PROFIsafe via PROFINET in combination with the MRP protocol, users profit both from the integrated safety of the position and velocity values up to SIL37PLe and from the increased availability – the system is safe and available even in case of a cable fault.

<http://www.tr-electronic.com/s/S011586>

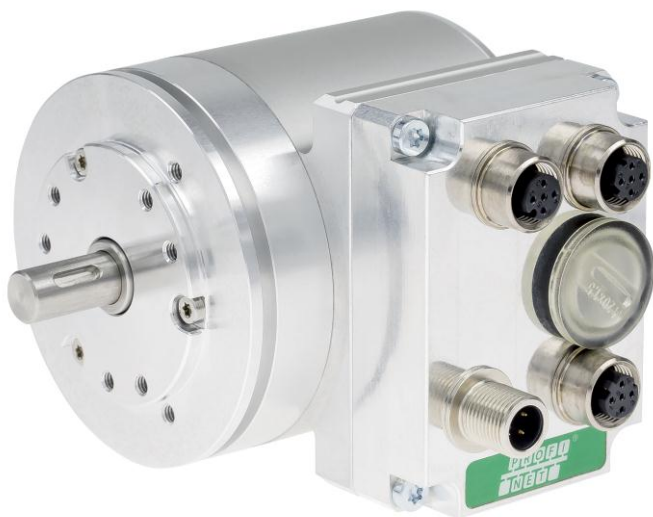
Read more

<http://www.tr-electronic.com/news/news.html>

TR-Electronic GmbH, 17.6.2016



Safe absolute rotary multiturn encoder with hollow shaft supporting  
Media Redundancy Protocol by TR-Electronic GmbH  
TR-Electronic - CDH75M EPN MRP.jpg



Safe absolute rotary multiturn encoder with solid shaft supporting  
Media Redundancy Protocol by TR-Electronic GmbH  
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