



Pushing Performance

HARTING *har-speed* M12



har-speed M12: The innovative solution

With *har-speed* M12 HARTING bases the Ethernet network on a sustainable M12 foundation. The *har-speed* M12 differs significantly from today's M12 connectors for Ethernet because it is based on a 4-pair connector face with paired shielding. This allows *har-speed* M12 to be used for Ethernet transfer rates up to 10 Gigabit. The new HARTING *har-speed* M12 connector is, therefore, capable of complying with the high requirements of the transfer class E_A, respectively the Cat. 6_A. For the first time an M12 cabling system can be used for relevantly high data performance and permanent sustainability.

The *har-speed* M12 connectors can be optimally used for applications with bandwidths in machine and facility engineering, but also for the IP 67 infrastructure. The basis for the new development is the new PAS 61076-2-10x that defines a uniform connector face for 8-pole M12 connectors.



The new connector face complies with the following requirements:

- Maximum data rates through the configuration of the contacts in conformance with Ethernet technology.
- Minimal interaction and perfect shielding through paired shielding of the contacts.
- Fault proof connection through coding of the connector face. A connection error with other 8-pole M12's is impossible.

Overmolded versions in different lengths and a crimp connector for the local cabling are the first system components for a comprehensive cabling infrastructure solution by HARTING.

Cabling instructions

<ol style="list-style-type: none"> 1. Remove cable sheath. 2. Draw up the braid. 3. Remove paired shielding. 4. Remove plastic foil. 5. Remove wire insulation. 6. Crimp contacts. 	<ol style="list-style-type: none"> 7. Attach locknut and seal. 8. Pull braid apart. 9. Attach shield element (braid lies between seal and shield element). 	<ol style="list-style-type: none"> 10. Place contact in insulator.
<ol style="list-style-type: none"> 11. Lock cover on insulator and insert insulator into housing. Observe coding! 	<ol style="list-style-type: none"> 12. Remove excess braid. 	<ol style="list-style-type: none"> 13. Tighten locknut.

har-speed M12 connector

CHARACTERISTICS

- Cabling with crimp technology
- Compact, robust design
- Fully shielded
- Transfer class E_A for 1 and 10 Gigabit Ethernet
- AWG 28 to AWG 24
- Temperature range -40 °C to 85 °C
- Protection class IP 65 / IP 67



Identification

Part number

har-speed M12 connector

21 03 881 5805

har-speed M12 PCB receptacle

CHARACTERISTICS

- Stable, industrial standard design
- Fully shielded
- Transfer class E_A for 1 and 10 Gigabit Ethernet
- Temperature range -40 °C to 70 °C
- Protection class IP 65 / IP 67



Identification

Part number

har-speed M12 PCB receptacle

21 03 381 2801

har-speed M12 system cable

CHARACTERISTICS

- Transfer class E_A for 1 and 10 Gigabit Ethernet
- Temperature range -40 °C to 70 °C

Length

Part number

1 m	21 03 483 1801
3 m	21 03 483 1803
5 m	21 03 483 1805
7 m	21 03 483 1807
10 m	21 03 483 1810



har-speed M12 accessories

Identification

Part number

Contacts	21 01 100 9014
Locator	61 03 600 0065
Crimping tool	09 99 000 0501



Further products and information under www.HARKIS.HARTING.com



Pushing Performance

www.HARTING.com