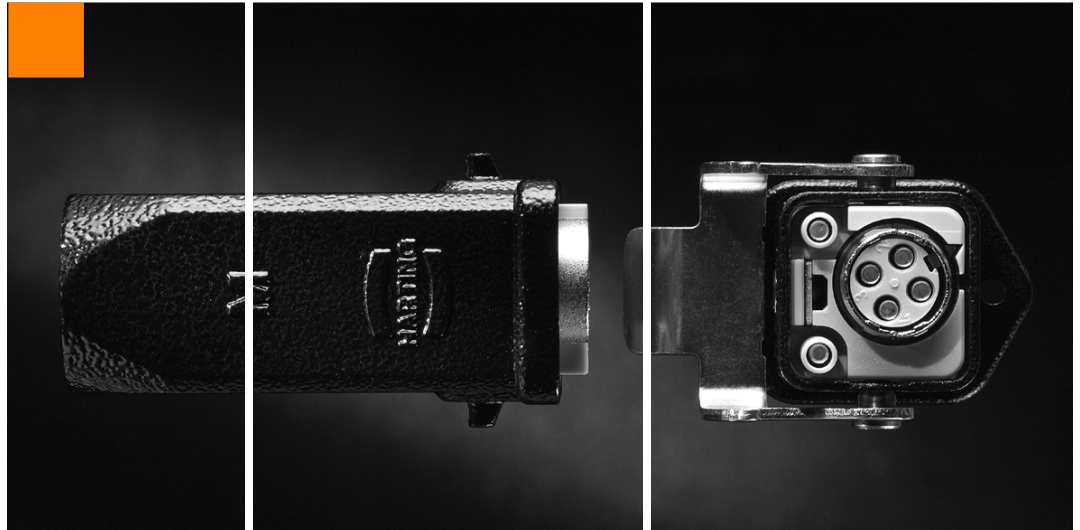
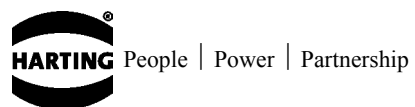


HARTING Electric



Han-Brid[®] Industrial Network Interfaces



Features

General Description

The Han-Brid® series allows the connection of a data interface and a power supply in a single space saving connector.

This means that it is now possible to provide data transmission and power to devices in a single bus structure.

This hybrid connector family includes provision for connection of a 50 V, 10 A power supply together with a range of inserts for connection of a variety of data protocols and transmission medias:

- Han-Brid® F.O. for plastic (POF) or for HCS®* optical fibre.
- Han-Brid® Cu for shielded twisted pair.
- Han-Brid® Quintax 3A for shielded 4 wire bus systems (2 pair STP).

Han-Brid® inserts fit into the standard plastic as well as metal hoods and housings of the Han® 3A series offering a degree of protection IP 65 according to DIN EN 60529. For harsher environments Han® 3 HPR hoods and housings with a degree of protection of IP 68 can be used.

* HCS® is a registered trade mark of SpecTran Corporation

Power Supply

- Han D® male and female are standard crimp contacts
- Rated current: 10 A
- Rated voltage: 50 V
- Wire gauge: 0.14 - 2.5 mm²
- Specification UL

Data Interfaces

Han-Brid® F.O.

- Is suitable for all HP Versatile Link (Horizontal Package) transmitters and receivers
 - Data rates: Standard 12MBit/s
 - suitable for all common fieldbus systems
- Insert allows integration of HP standard contacts: suitable for POF and HCS®* fibres
crimp for POF and HCS
crimpless for POF
- Temperature range: -40°C to +70°C

* HCS® is a registered trade mark of SpecTran Corporation

Han-Brid® Cu

- For termination of a shielded twisted pair
- Insert for 2 x Han D® male or female contacts
- Connection of the shield by means of shielding plate and fixing clamps
- Connection of the device side can be realized either by a printed circuit board as a modular version or as part of the appliance PCB
- Temperature range: -40°C to +125°C
- Insert for bulkhead mounted housing a the coupling housing are always equipped with an screening spring.

Bus Terminator

- Active bus terminator in male and female version
- Standard Han® 3A hoods and housings
- Power supply to the termination network via electrical contacts of Han-Brid®
- Integrated, galvanically separated DC/DC converter 24V / 5V

Han-Brid® Quintax 3A

- Possibility to terminate shielded 4 wires conductors (2 pair STP)
- Suitable for all 4 wires bus systems
- Suitable for shielded cable conductor diameter 3 - 9.5 mm
- Transmission of shielding separately from the hood's ground
- Connections are carried out acc. to DIN EN 50 173, cat. 5
- Temperature range: -40°C to +70°C


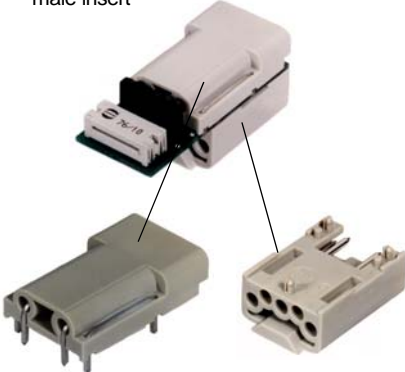
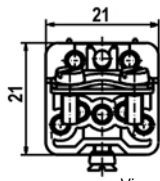
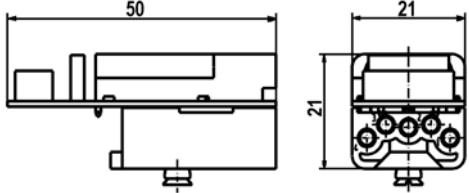

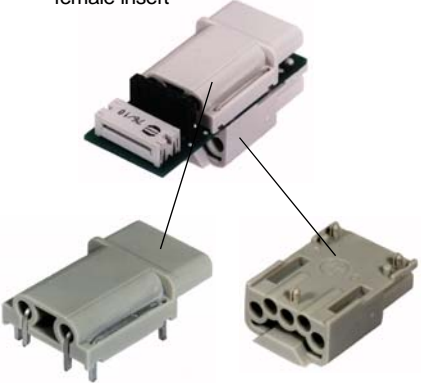
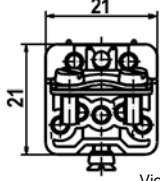
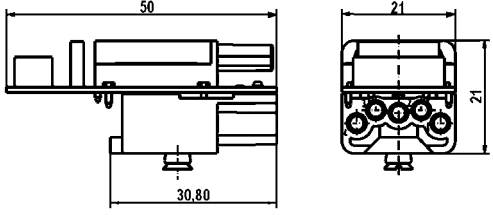
Hybrid Field Bus Connector
for shielded twisted pair


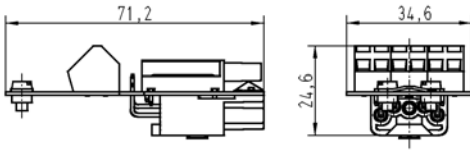
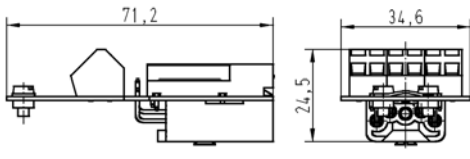

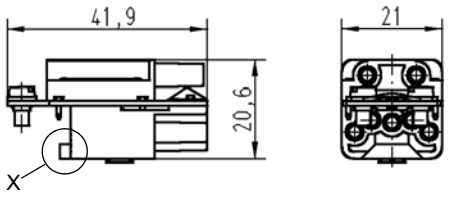
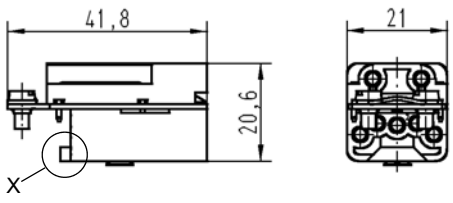


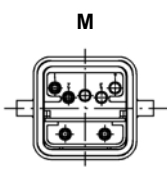
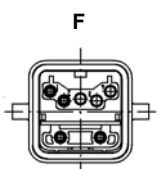
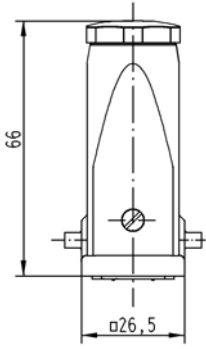
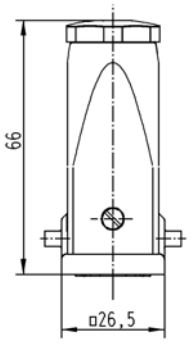
+ 4 electrical contacts 10A
with option for PE



DESINA conforming product

For more information conc. DESINA: www.desina.com

| Inserts | Part-Number | Drawing | Dimensions in mm |
|---|---|--|--|
| <p>Cable side female insert</p>  <p>Device side male insert</p>  | <p>09 12 006 3111</p> <p>09 12 006 2611</p> <p>also available as single parts</p> <p>loaded 09 12 002 2611</p> <p>unloaded 09 12 002 3011 09 12 004 3011</p> |  <p>View termination side</p>  | <p>21</p> <p>28,6</p> <p>21</p> <p>50</p> <p>21</p> |
| <p>Cable side male insert</p>  <p>Device side female insert</p>  | <p>09 12 006 3001</p> <p>09 12 006 2701</p> <p>also available as single parts</p> <p>loaded 09 12 002 2701</p> <p>unloaded 09 12 002 3101 09 12 004 3101</p> |  <p>View termination side</p>  | <p>21</p> <p>28,9</p> <p>21</p> <p>50</p> <p>21</p> <p>30,80</p> |


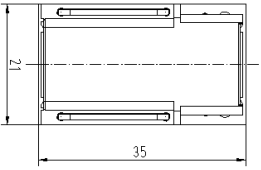
| Inserts | Part-Number | | Drawing | Dimensions in mm |
|---|----------------|----------------|--|------------------|
| | Female Insert | Male Insert | | |
| <p>Panel feed through with cage clamp</p>  | 09 12 006 2795 | 09 12 006 2695 | <p>Drawing 09 12 006 2795</p>  <p>Drawing 09 12 006 2695</p>  | |
| <p>Coupling / Panel feed through</p>  <p>X = Cutting off the fin allows the use in cable to cable housings</p> | 09 12 006 2794 | 09 12 006 2694 | <p>Drawing 09 12 006 2794</p>  <p>Drawing 09 12 006 2694</p>  | |
| <p>Bus terminator</p> <p>Plastic version</p>  <p>Metal version</p>  | 09 12 006 2791 | 09 12 006 2691 | <p>M</p>  <p>F</p>    | |



Panel Feed Through

Description

- Han-Brid® USB port for the use in control cabinets etc.
- Possibility to connect printers, webcams and other computer devices.
- The port can be closed with a cover and thus IP 65 can be reached.

| Han-Brid® USB | Part-Number | Drawing | Dimensions in mm |
|---|-----------------------|---|---|
| <p>Panel Feed Through</p>  | <p>09 12 001 2794</p> |  |  |

Number of contacts

4 + Shielding
+ 2 Power Contacts

Suitable for Han® 3A metric hoods and housings

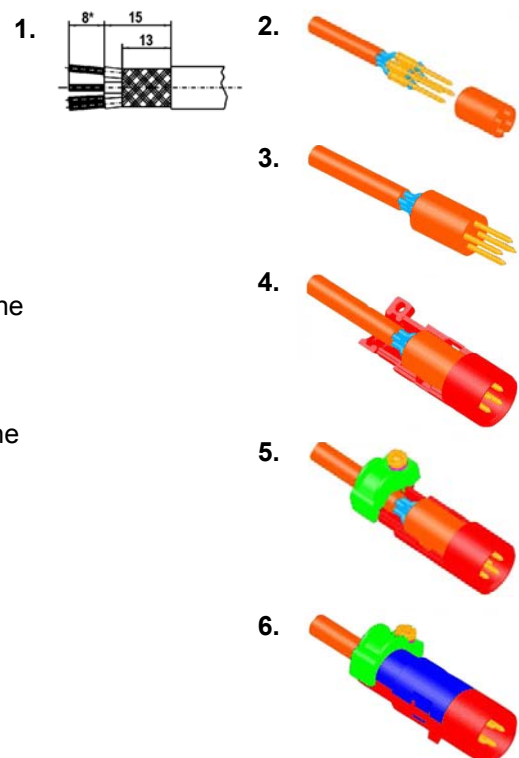


| Reference | Cable Ø mm | Part-Number Male Insert | Part-Number Female Insert | Drawing | Dimensions in mm |
|--|---------------|--|------------------------------|---------|------------------|
| Quintax-Insert | — | 09 15 003 3001 | | | |
| | — | | 09 15 003 3101 | | |
| Quintax-Z-Contact Zinc alloy Crimp contacts order separately | 3 - 9,5 | 09 15 004 3013 | 09 15 004 3113 | | |
| | | Special clamp for cable diameter 3 - 6 and 6 - 9.5 mm included in delivery range | | | |

Assembly Manual

Quintax-Z-contact

- Strip cable acc. to drawing 1 and fold the shielding over the cable.
- Crimp Han® D contacts onto the wires.
- Insert Han® D contacts into corresponding cavities of insulator until they are snapped in.
- Fit the insert including the cable into the opened shielded bushing. The coding pin of the shielded bushing has to meet the groove of the insulator.
- Clamp the tilt over the shielding onto the cable by means of the special clamp (small opening for cable diameter of 3 - 6 mm, large opening for cable diameter of 6 - 9.5 mm).
- Check the wiring.
- Close the shielded bushing with the cover and insert it into the corresponding cavity of the Quintax Module as usual.



Hybrid Field Bus Connector with FOC transmitter and receiver


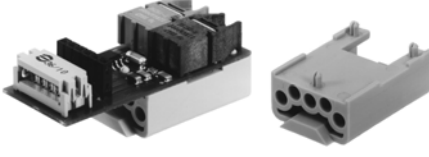
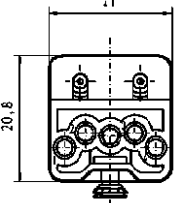
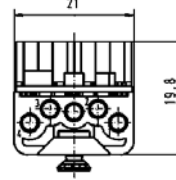
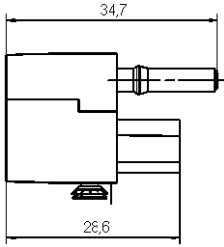
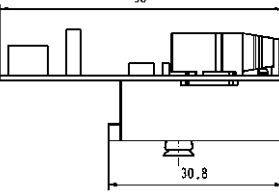
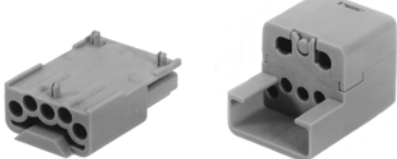
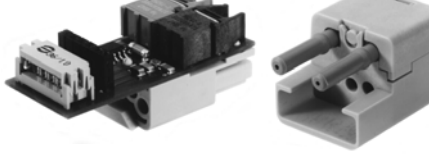
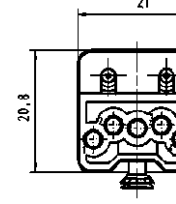
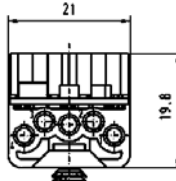
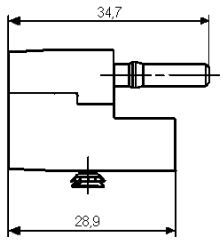
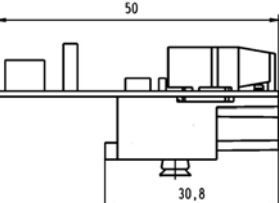
+ 4 electrical contacts 10A
+ option for PE



DESINA conforming product

For more information conc. DESINA: www.desina.de



| Inserts | Part-Number | Drawing | Dimensions in mm |
|--|---|--|---|
| <p>Cable side FOC(m) + Han-D®(f)</p>  <p>Please order POF contacts separately, see page10.</p> <p>Device side FOC(f) + Han-D®(m)</p>  | <p>also available without FO devices</p> <p>for POF 09 12 004 2711 09 12 004 3111</p> <p>for POF crimpless 09 12 004 2713 09 12 004 3113</p> <p>for HCS®* Fibre 09 12 004 2716 09 12 004 3116</p> <p>* HCS® is a registered trade mark of Spectran Corporation</p> <p>for POF 09 12 004 2611 09 12 004 3011</p> <p>for POF crimpless 09 12 004 2611 09 12 004 3011</p> <p>for HCS®* Fibre 09 12 004 2611 09 12 004 3011</p> |  <p>View termination side</p>  |   |
| <p>Cable side FOC(m) + Han-D®(m)</p>  <p>Please order FO contacts separately, see page10.</p> <p>Device Side FOC(f) + Han-D®(f)</p>  | <p>also available without FO devices</p> <p>for POF 09 12 004 2601 09 12 004 3001</p> <p>for POF crimpless 09 12 004 2603 09 12 004 3003</p> <p>for HCS®* Fibre 09 12 004 2606 09 12 004 3006</p> <p>for POF 09 12 004 2701 09 12 004 3101</p> <p>for POF crimpless 09 12 004 2701 09 12 004 3101</p> <p>for HCS®* Fibre 09 12 004 2701 09 12 004 3101</p> |  <p>View termination side</p>  |   |

| Contacts | Wire gauge mm ² | Part-Number | | Drawing | Dimensions in mm |
|------------------------------------|-------------------------------|----------------|----------------|---------|------------------|
| | | Male contact | Female contact | | |
| Crimp contacts order separately | 0.14-0.37 | 09 15 000 6104 | 09 15 000 6204 | | |
| | 0.5 | 09 15 000 6103 | 09 15 000 6203 | | |
| | 0.75 | 09 15 000 6105 | 09 15 000 6205 | | |
| | 1 | 09 15 000 6102 | 09 15 000 6202 | | |
| | 1.5 | 09 15 000 6101 | 09 15 000 6201 | | |
| | 2.5 | 09 15 000 6106 | 09 15 000 6206 | | |
| silver plated | 0.14-0.37 | 09 15 000 6124 | 09 15 000 6224 | | |
| | 0.5 | 09 15 000 6123 | 09 15 000 6223 | | |
| | 0.75 | 09 15 000 6125 | 09 15 000 6225 | | |
| | 1 | 09 15 000 6122 | 09 15 000 6222 | | |
| | 1.5 | 09 15 000 6121 | 09 15 000 6221 | | |
| | 2.5 | 09 15 000 6126 | 09 15 000 6226 | | |
| gold plated | 0.14-0.37 | 09 15 000 6124 | 09 15 000 6224 | | |
| | 0.5 | 09 15 000 6123 | 09 15 000 6223 | | |
| | 0.75 | 09 15 000 6125 | 09 15 000 6225 | | |
| | 1 | 09 15 000 6122 | 09 15 000 6222 | | |
| | 1.5 | 09 15 000 6121 | 09 15 000 6221 | | |
| | 2.5 | 09 15 000 6126 | 09 15 000 6226 | | |

| Wire gauge mm ² | AWG | Ø | Stripping length |
|-------------------------------|-------|---------|---------------------|
| 0.14-0.37 | 26-22 | 0.90 mm | 8 mm |
| 0.5 | 20 | 1.10 mm | 8 mm |
| 0.75 | 18 | 1.30 mm | 8 mm |
| 1 | 18 | 1.45 mm | 8 mm |
| 1.5 | 16 | 1.75 mm | 8 mm |
| 2.5 | 14 | 2.25 mm | 6 mm |

| F.O. contacts | Part-Number | | Drawing | Dimensions in mm |
|--|--------------|----------------|---------|------------------|
| Single connector for Han-Brid® F.O. | Crimp POF | 20 10 001 7111 | | |
| | Crimless POF | 20 10 001 7112 | | |
| | HCS® | 20 10 230 7111 | | |

* HCS® is a registered trade mark of SpecTran Corporation

Hoods and housings

- Han® 3A housings with glued sealing: IP 65
IP 67
- Plastic version
- Metal version
- EMC version
- Han® HPR (pressure tight, EMC tight) protection degree: IP 68
- Han-Brid® Quintax only suitable for metric hoods

For further information concerning cable glands as well as hoods and housings with Pg see chapter 30, concerning metric hoods and housings see chapter 31 in the main catalogue of the HARTING Electric.

| Han® 3A | Part-Numbers | | | | |
|-------------------------|---------------------|--------------------------------|--------------------------------|--------------------------------|----------------|
| | Versions | Plastic grey | Plastic black | Metal | HPR |
| | Hood top entry + Pg | 09 20 003 0423 ¹⁾²⁾ | 09 20 003 0426 ¹⁾²⁾ | 09 20 003 1443 ¹⁾²⁾ | 09 40 003 0402 |
| | metric | 19 20 003 0423 ¹⁾ | 19 20 003 0426 ¹⁾ | 19 20 003 1443 ¹⁾ | 19 40 003 0402 |
| Hood angled + Pg | | 09 20 003 0623 ¹⁾²⁾ | 09 20 003 0626 ¹⁾²⁾ | 09 20 003 1643 ¹⁾ | - |
| | metric | 19 20 003 0623 ¹⁾ | 19 20 003 0626 ¹⁾ | 19 20 003 1643 ¹⁾ | - |
| Bulkhead mounted + Pg | | 09 20 003 0320 ¹⁾ | 09 20 003 0327 ¹⁾ | 09 20 003 0301 ¹⁾ | 09 40 003 0301 |
| Coupling housing metric | | 19 20 003 0720 | 19 20 003 0727 | 19 20 003 1750 | - |

1) Hoods with glued sealing
2) Cable glands are included in the delivery range

| Cable gland | Pg 11 ø 7.0 - 9.5 - 12.0 mm | | metric, M 20 cable ø 5 - 9 mm | |
|-------------|--------------------------------|----------------|----------------------------------|--|
| | Plastic black, IP 65 | 09 00 000 5182 | 19 00 000 5180 | |
| | Metal, IP 65 | 09 00 000 5183 | 19 00 000 5080 | |



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Representatives – worldwide



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