



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

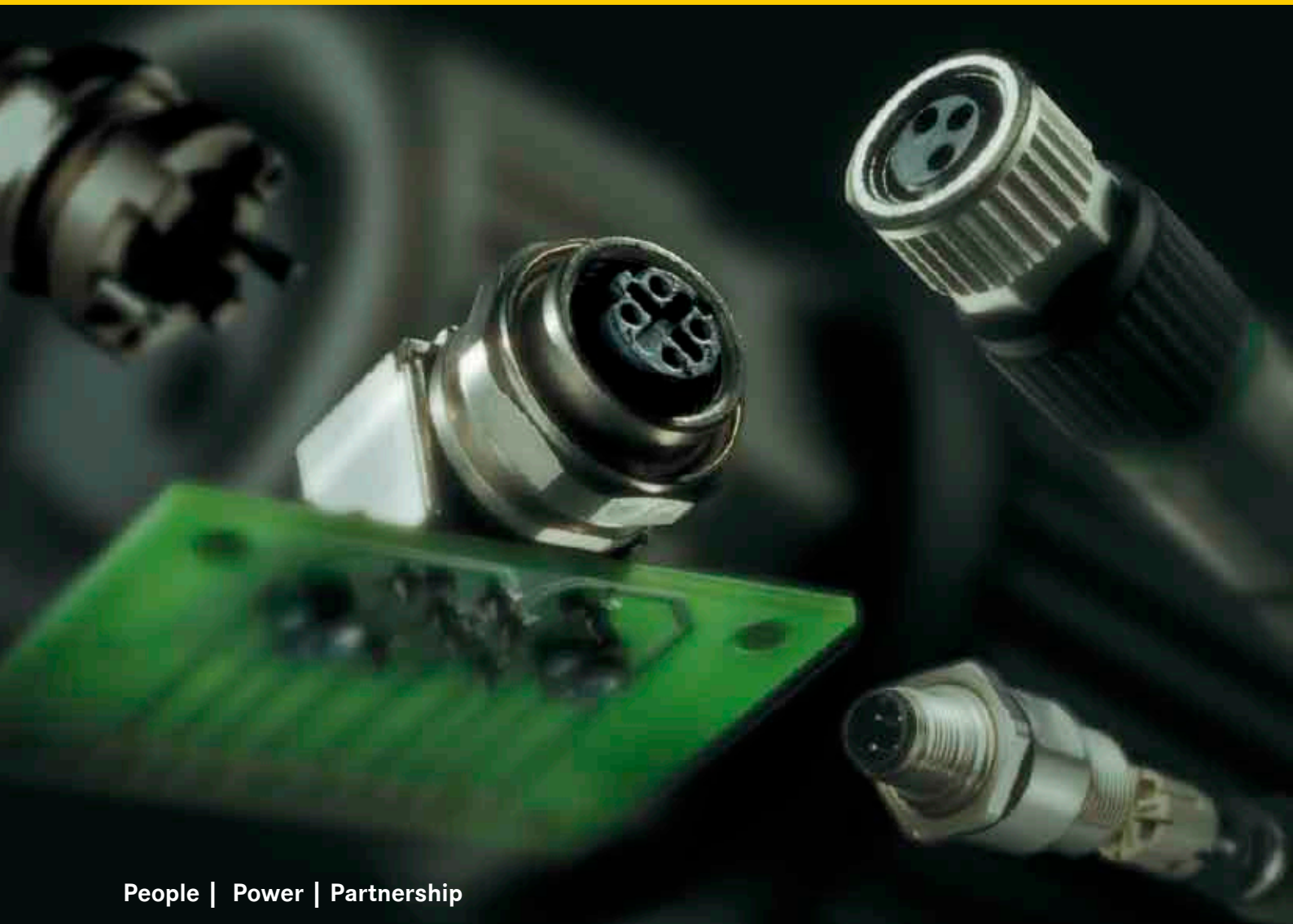
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Pushing Performance

# HARTING M8/M12 Circular Connectors



People | Power | Partnership

## Technical characteristics

Specifications

IEC 60352-4  
IEC 61076-2-101  
IEC 61076-2-104

Approval

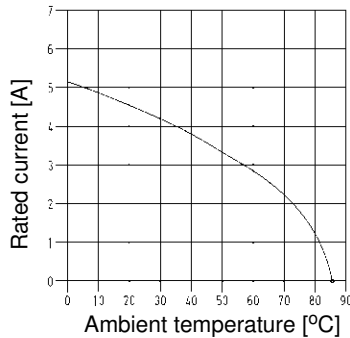


Construction type	HARAX® M8-S (0.08 mm <sup>2</sup> )	HARAX® M8-S/ M12-S	HARAX® M12 angled	HARAX® M12-L 3 poles, 4 poles	HARAX® M12-L 5 poles
Rated voltage	32 V	32 V	32 V	50 V	50 V
Rated current (see current carrying capacity)	2 A	4 A	4 A	6 A	4 A
Conductor cross section	0.08 - 0.14 mm <sup>2</sup> AWG 28 - 26	0.14 - 0.34 mm <sup>2</sup> AWG 26 - 22	0.25 - 0.5 mm <sup>2</sup> AWG 24/7 - 20	0.34 - 0.75 mm <sup>2</sup> AWG 22 - 18	0.25 - 0.34 mm <sup>2</sup> AWG 24 - 22 0.34 - 0.5 mm <sup>2</sup> AWG 22 - 20
Diameter of individual strands	≥ 0.05 mm	≥ 0.1 mm	≥ 0.1 mm	≥ 0.1 mm	≥ 0.1 mm
Conductor insulation material	PVC / PP / TPE	PVC / PP / TPE	PVC	PVC	PVC
Conductor diameter	0.6 - 1.0 mm	1.0 - 1.6 mm	1.2 - 1.6 mm	1.6 - 2.0 mm 2.0 - 2.6 mm	1.2 - 2.0 mm
Cable diameter	1.9 - 2.5 mm (transp.) 2.5 - 3.5 mm (grey)	M8-S: 2.5 - 5.1 mm M12-S: 2.9 - 4.0 mm (transp.) 4.0 - 5.1 mm (black)	4 - 5.1 mm	3 poles: 5.5 - 7.2 mm 4 poles: 6 - 8 mm	4.7 - 6 mm 6 - 8 mm
Limiting temperatures	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 40 °C / + 85 °C
Temperature during connection	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C
Degree of protection	IP 67	IP 67	IP 67	IP 65 / IP 67	IP 65 / IP 67
Termination cycles with the same cross section	10	10	10	10	10
Recommended tightening torque / Hexagonal wrench	0.4 Nm / SW 9	M8-S: 0.4 Nm / SW 9 M12-S: 0.6 Nm / SW 13	0.6 Nm / SW 13	0.6 Nm / SW 17	0.6 Nm / SW 17
Page	8	8 / 13	13	17	17

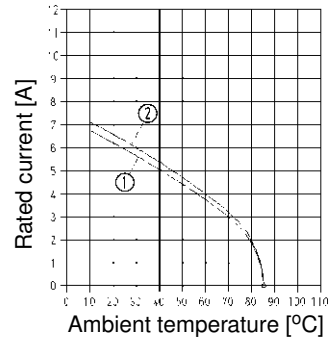
**Current carrying capacity** The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512-5.

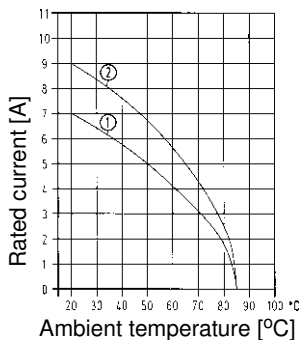
**M8-S, 3 poles** wire gauge 0.14 mm<sup>2</sup>



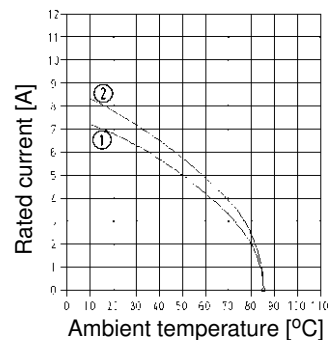
**M8-S, 4 poles** 1 = wire gauge 0.25 mm<sup>2</sup>  
**M12-S, 4 poles** 2 = wire gauge 0.34 mm<sup>2</sup>



**M12-L** 1 = wire gauge 0.34 mm<sup>2</sup>  
**3 poles, 4 poles** 2 = wire gauge 0.75 mm<sup>2</sup>



**M12, 4 poles, angled** 1 = wire gauge 0.25 mm<sup>2</sup>  
2 = wire gauge 0.5 mm<sup>2</sup>



## Technical characteristics

Specifications

IEC 60352-4  
IEC 61076-2-101  
IEC 61076-2-104

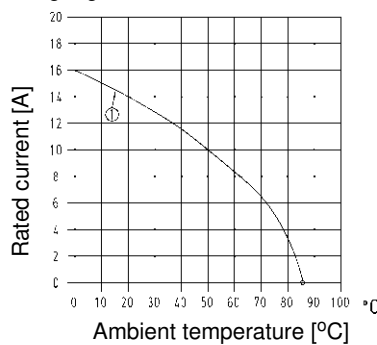
Approval



Construction type	HARAX® M12-L screened version, A-coded	HARAX® M12-L screened version PROFIBUS	HARAX® M12-L screened version Ethernet	Han® M12 Crimp	Han® 7/8"
Rated voltage	50 V	32 V	50 V	50 V	230 V / 400 V
Rated current (see current carrying capacity)	4 A	4 A	4 A	4 A	10 A
Conductor cross section	0.14 - 0.34 mm <sup>2</sup> AWG 26 - 22	0.25 - 0.34 mm <sup>2</sup> AWG 24 - 22	① 0.14 - 0.34 mm <sup>2</sup> AWG 26 - 22 ② 0.34 - 0.5 mm <sup>2</sup> AWG 22-20	0.34 - 0.5 mm <sup>2</sup> AWG 22 - 20	0.75 - 1.5 mm <sup>2</sup> AWG 18 - 16
Diameter of individual strands	≥ 0.1 mm	≥ 0.1 mm	≥ 0.1 mm		≥ 0.15 mm
Conductor insulation material	PVC	PVC, Zell-PE	PVC / PE		PVC, PP, TPE
Conductor diameter	1.2 - 1.6 mm	2 - 2.6 mm	1.2 - 2.0 mm	2.0 - 2.3 mm	≤ 2.8 mm
Cable diameter	7 - 8.8 mm	7 - 8.8 mm	① 5.5 - 7.2 mm (black) ② 7 - 8.8 mm (lightgrey)	4.5 - 5.4 mm (transparent) 7 - 8.8 mm (lightgrey)	6.8 - 9.5 mm (black) 9 - 12.5 mm (grey)
Limiting temperatures	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 25 °C / + 85 °C	- 40 °C / + 85 °C	- 40 °C / + 85 °C
Temperature during connection	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C	- 5 °C ... + 50 °C
Degree of protection	IP 67	IP 67	IP 67	IP 67	IP 65 / IP 67
Termination cycles with the same cross section	10	10	10		10
Recommended tightening torque / Hexagonal wrench	0.6 Nm / SW 17	0.6 Nm / SW 17	0.6 Nm / SW 17	0.6 Nm / SW 17	1.5 Nm / SW 22
Page	20	22	26	21 / 27	32

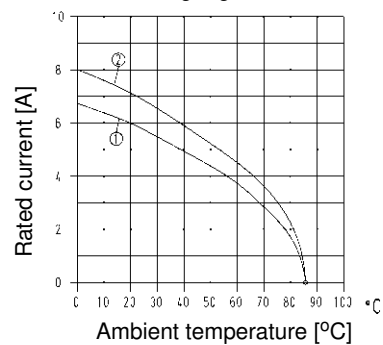
7/8"

1 = wire gauge 0.75 mm<sup>2</sup> / 1.5 mm<sup>2</sup>



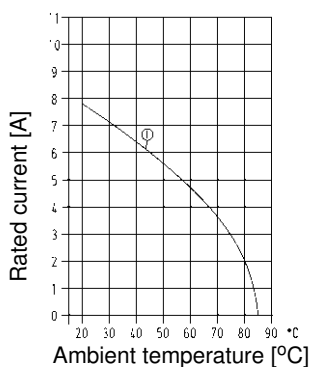
M12L, 5 poles

1 = wire gauge 0.25 mm<sup>2</sup>  
2 = wire gauge 0.34 mm<sup>2</sup>



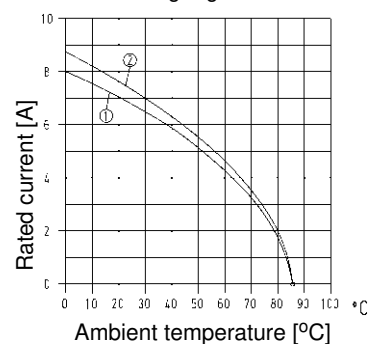
M12, Crimp

1 = wire gauge 0.34 mm<sup>2</sup> / 0.5 mm<sup>2</sup>

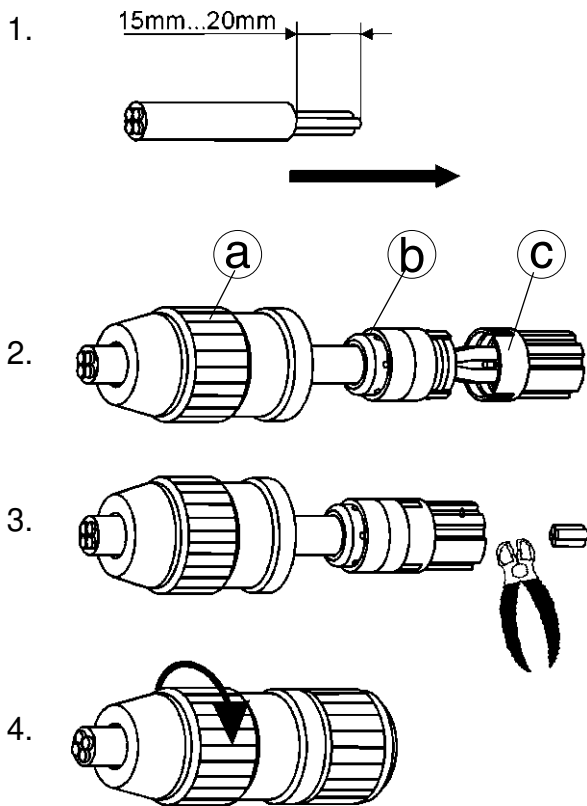


M12L, 5 poles

1 = wire gauge 0.34 mm<sup>2</sup>  
2 = wire gauge 0.5 mm<sup>2</sup>



## Assembly manual HARAX®, M8-S / M12-S unshielded



1. strip cable

2. assemble HARAX® elements

- Ⓐ Nut
- Ⓑ Strain relief
- Ⓒ Insert

3. cut off cable ends

Screw the nut onto the insert until a stop is noticeable.

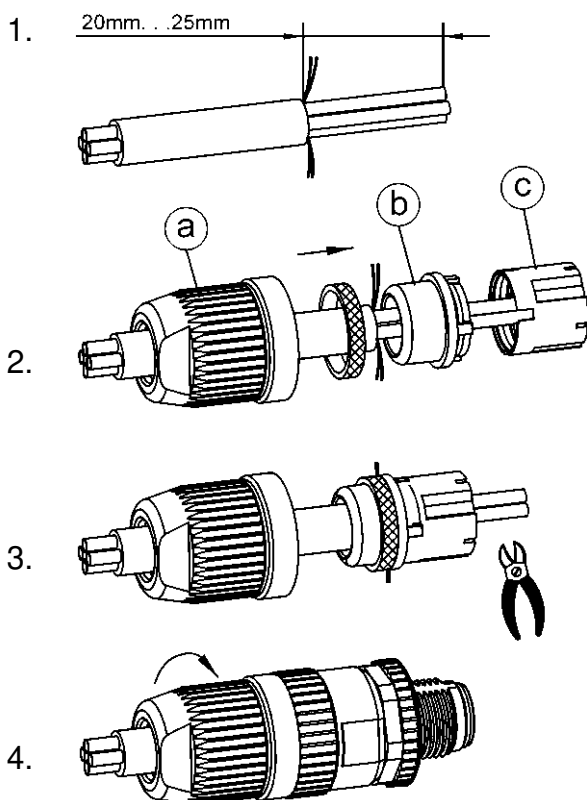
4. screw the connector

Note!

For reconnection cut off the used cable ends and repeat steps 1 to 4.

The seal has to be replaced when worn.

## Assembly manual HARAX®, M12-L shielded



1. strip cable

2. assemble HARAX® elements

twist screening braid and push it into the sealing slot

- Ⓐ Nut
- Ⓑ Strain relief
- Ⓒ Insert

3. Slide ring over the sealing cut off cable ends and the screening braid

4. screw the connector

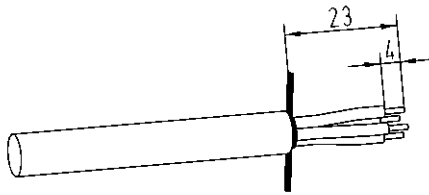
Note!

For reconnection cut off the used cable ends and repeat steps 1 to 4.

The seal has to be replaced when worn.

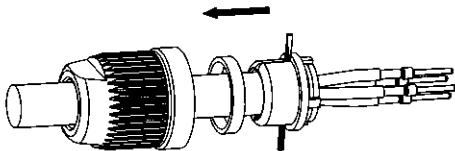
## Assembly manual Han® M12 Crimp

1.



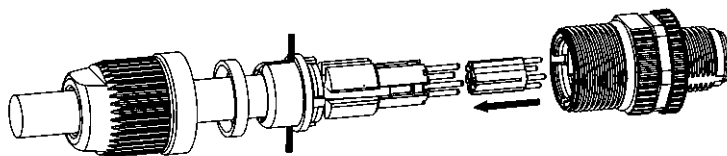
1. Remove cable jacket and strip cores. Twist screening braid as shown and crimp contacts.

2.



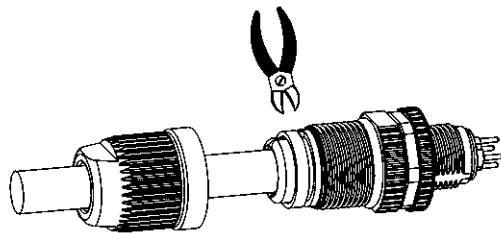
2. Slide screw cap, ring and sealing onto the cable. Push screening braid into the sealing slot.

3.



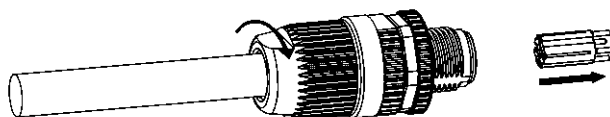
3. Insert contacts into locator from the side. Fix contacts with the aid of assembly aid. Slide locator into connector, pay attention to the coding.

4.



4. Sealing has to be flush with connector. Slide ring over the sealing and cut off screening braid.

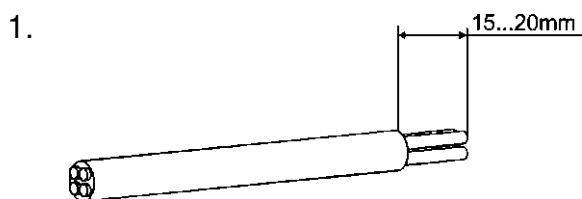
5.



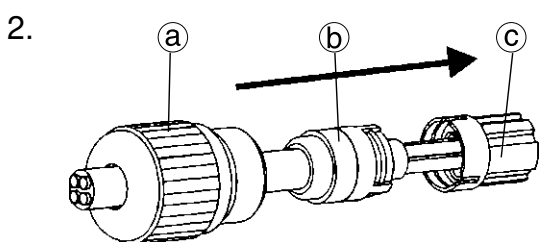
5. Tighten screw cap. Remove assembly aid.

The seal has to be replaced when worn.

Assembly manual HARAX® Pg 9 panel feed-through

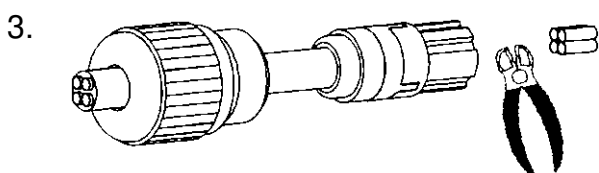


1. Strip cable jacket

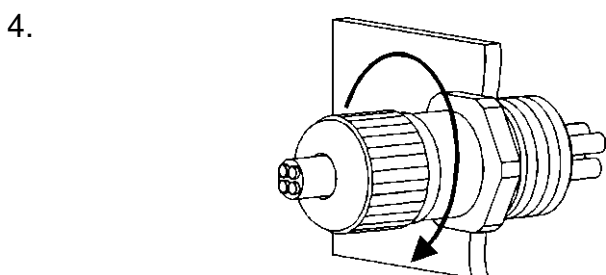


2. Assemble HARAX® elements

- Ⓐ Nut
- Ⓑ Strain relief
- Ⓒ Insert



3. Cut off cable ends



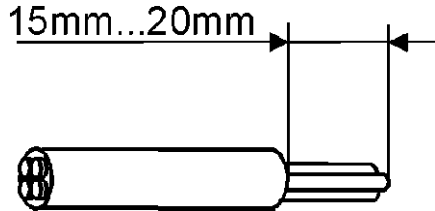
4. Twist the nut onto the insert until a stop is noticeable

Note!  
For reconnection cut off the used cable ends and repeat steps 1 to 4.

The seal has to be replaced when worn.

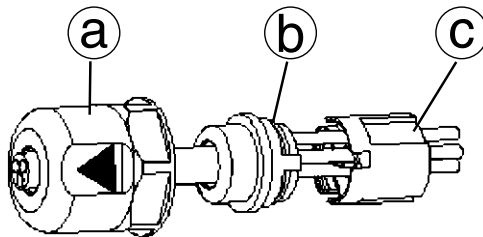
Assembly manual HARAX® Pg 13.5 / M20 panel feed-through

1.



1. Connection and disconnection of the cable must only be performed by suitably qualified persons when supply is isolated.

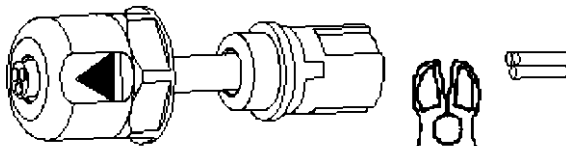
2.



2. HARAX® Pg 13.5 – 3 contacts – is supplied with either faston blades or solder terminals.

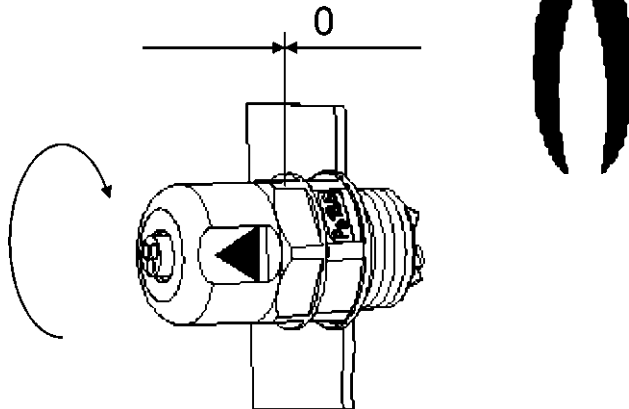
- (a) Nut
- (b) Strain relief
- (c) Insert

3.



3. HARAX® Pg 13.5 / M20 – 4 contacts – is supplied only with solder termination.

4.



4. The nut must be tightened completely down so that the notches engage on the contact carrier.

The opening of the gland always requires a wrench.

Note: For reconnection cut off the used cable ends and repeat steps 1 to 4.





Identification	Part No.		Drawing	Dimensions in mm
	Male	Female		
<b>HARAX® M8-S</b>				
straight version, 3 poles for 0,14 - 0,34 mm <sup>2</sup>	<b>21 02 151 1305</b>			
straight version, 4 poles for 0,14 - 0,34 mm <sup>2</sup>	<b>21 02 151 1405</b>			
straight version, 3 poles for 0,08 - 0,14 mm <sup>2</sup>	<b>21 02 159 1305</b>			
straight version, 3 poles for 0,14 - 0,34 mm <sup>2</sup>		<b>21 02 151 2305</b>		
straight version, 4 poles for 0,14 - 0,34 mm <sup>2</sup>		<b>21 02 151 2405</b>		
			View mating side: 3 poles, male version	View mating side: 4 poles, male version



System cables with  
Han® M8 Circular connector

## Technical characteristics

### Han® M8 Circular connector, without PE

Rated voltage	max. 60 V AC/DC
Rated current/contact	max. 4 A
Locking	Screw locking M8x1, self securing
Recommended torque	0.4 Nm
Temperature range (dependant on connected conductor)	-25 °C ... +85 °C
Degree of protection	IP 67
Number of wires / wire gauge	3 x 0.25 mm <sup>2</sup>
Conductor insulation	PP (br, bl, sw)
Arrangement of insulated strands	32 x 0.1 mm
Sheath	PUR (UL, CSA)
Outer diameter	appr. 4.1 mm
Bending radius	10 x outer diameter
Temperature range (working and storage)	-5 °C ... + 80 °C

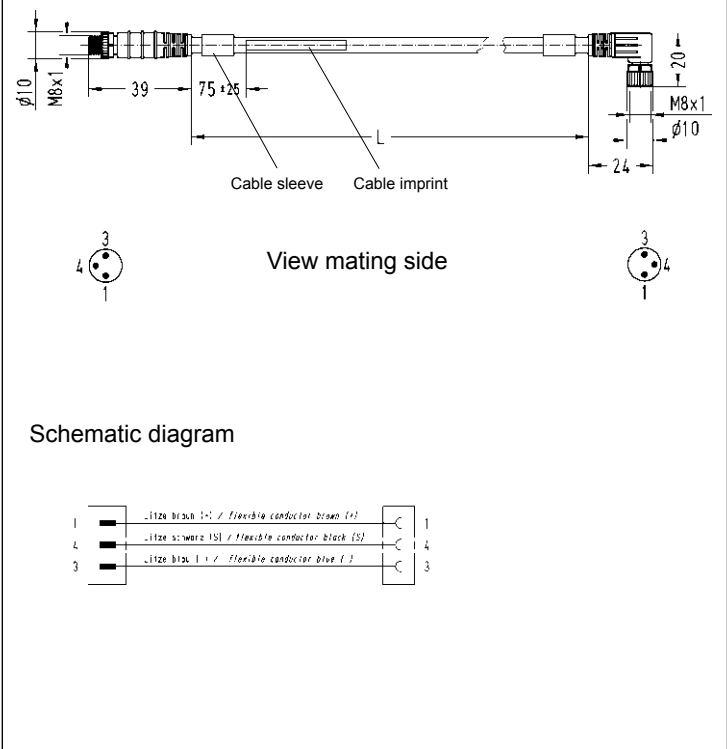


Identification	Part No.	Drawing	Dimensions in mm
----------------	----------	---------	------------------

**Han® M8 Circular connector**  
Female angled, Male straight

Length:    0.3 m  
              0.6 m  
              1.0 m  
              1.5 m  
              2.0 m

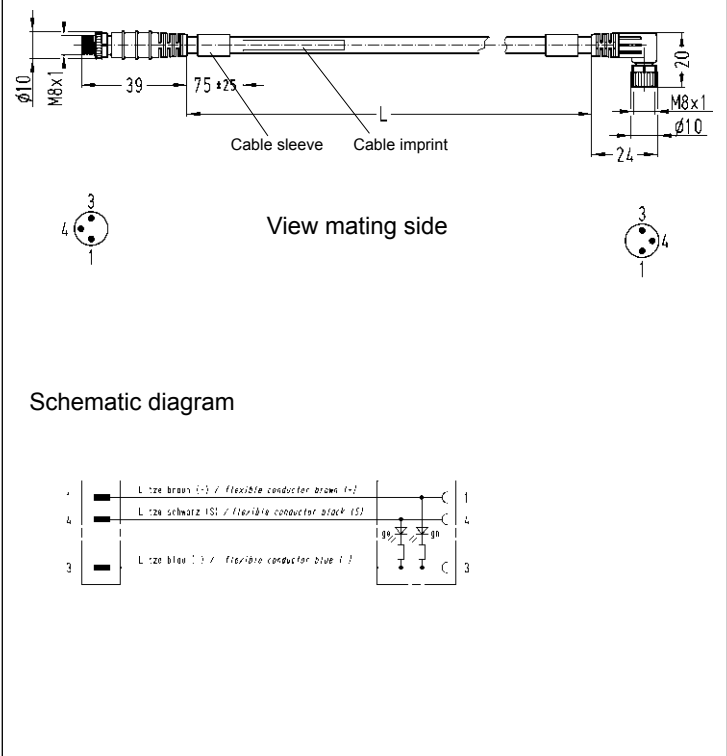
**21 02 454 5301**  
**21 02 454 5302**  
**21 02 454 5303**  
21 02 454 5304  
21 02 454 5305



**Han® M8 Circular connector**  
Female angled, with LED  
Male straight


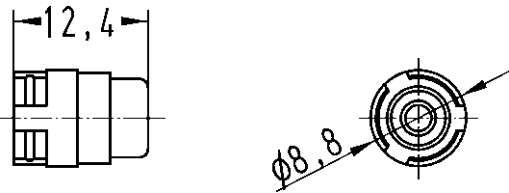



Length:    0.3 m  
              0.6 m  
              1.0 m  
              1.5 m  
              2.0 m

**21 02 454 7301**  
**21 02 454 7302**  
**21 02 454 7303**  
21 02 454 7304  
21 02 454 7305



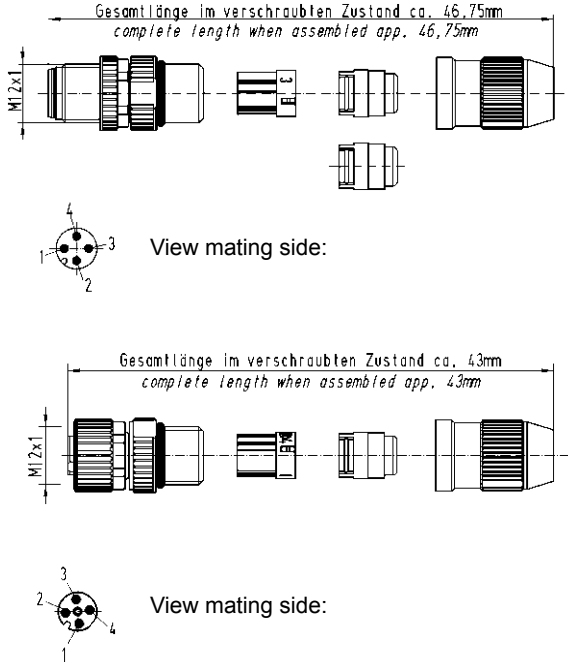


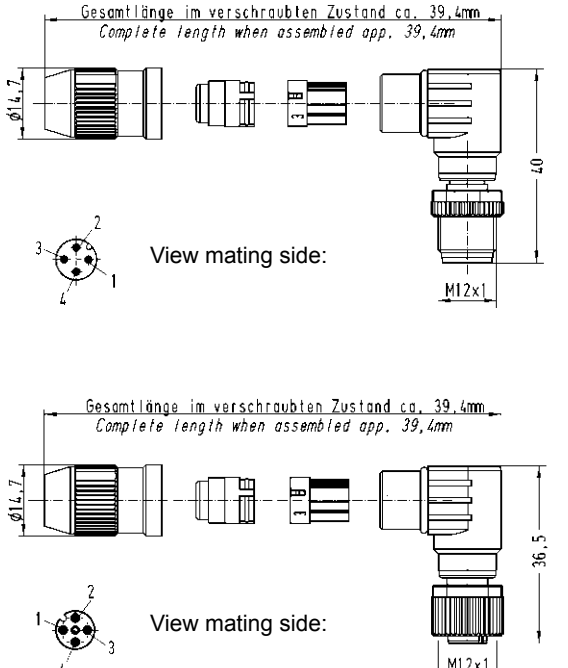


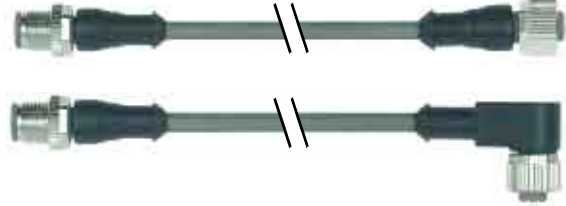
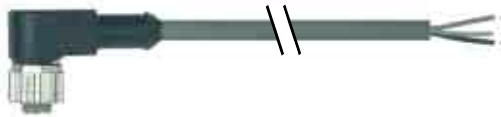


Identification	Part No.	Drawing	Dimensions in mm
<p><b>Han® M8 Circular connector</b> Female angled pre-assembled on one end</p> <p>Length: 1.5 m 3.0 m 5.0 m 7.5 m 10.0 m</p>	<p>21 02 554 4301 21 02 554 4302 21 02 554 4303 21 02 554 4304 21 02 554 4305</p>	<p>Schematic diagram</p> <ul style="list-style-type: none"> <li>1 — Litze braun (+) / flexible conductor brown (+)</li> <li>4 — Litze schwarz (S) / flexible conductor black (S)</li> <li>3 — Litze blau (-) / flexible conductor blue (-)</li> </ul>	
<p><b>Han® M8 Circular connector</b> Female angled, with LED pre-assembled on one end</p> <p>Length: 1.5 m 3.0 m 5.0 m 7.5 m 10.0 m</p>	<p>21 02 554 7301 21 02 554 7302 21 02 554 7303 21 02 554 7304 21 02 554 7305</p>	<p>Schematic diagram</p> <ul style="list-style-type: none"> <li>1 — Litze braun (+) / flexible conductor brown (+)</li> <li>4 — Litze schwarz (S) / flexible conductor black (S)</li> <li>3 — Litze blau (-) / flexible conductor blue (-)</li> </ul>	
<p><b>HARAX® M8 cable-Set</b> without LED</p> <p>Delivery range: Han® M8 connector with individually adaptable cable and HARAX® M8-S</p> <p>Length: 1.5 m 3.0 m 5.0 m 7.5 m 10.0 m</p>	<p>21 82 554 4301 21 82 554 4302 21 82 554 4303 21 82 554 4304 21 82 554 4305</p>	<p>HARAX® M8-S (21 02 151 1305)</p>	
<p><b>HARAX® M8 cable-Set</b> with LED</p> <p>Delivery range: Han® M8 connector with individually adaptable cable and HARAX® M8-S</p> <p>Length: 1.5 m 3.0 m 5.0 m 7.5 m 10.0 m</p>	<p>21 82 554 7301 21 82 554 7302 21 82 554 7303 21 82 554 7304 21 82 554 7305</p>	<p>HARAX® M8-S (21 02 151 1305)</p>	

Identification	Part No.	Drawing	Dimensions in mm
<p><b>Seal M8</b></p> <p>for 2.5 - 3.5 mm cable Ø for 3.2 - 4.4 mm cable Ø for 4.2 - 5.4 mm cable Ø</p> 	<p>21 01 010 2008 21 01 010 2004 21 01 010 2005</p>		
<p><b>Set of 3 seals for HARAX® M8-S</b></p> <p>for 2.5 - 3.2 mm cable Ø for 3.2 - 4.0 mm cable Ø for 4.0 - 5.1 mm cable Ø</p> 	<p>21 01 010 2013</p>		
<p><b>Han® M8</b> dynamometric screwdriver</p> <p>SW 9</p>	<p>09 99 000 0380</p>		



Identification	Part No.		Drawing	Dimensions in mm
	Male	Female		
<b>HARAX® M12-S</b> straight version, 4 poles  	<b>21 03 111 1405</b>	<b>21 03 111 2405</b>		
<b>HARAX® M12</b> angled version, 4 poles  angled version, 4 poles 	<b>21 01 140 5081</b>	<b>21 01 140 5091</b>		



System cables with  
Han® M12 Circular connector, A-coded

## Technical characteristics

### Han® M12 Circular connector, without PE

Rated voltage	max. 250 V AC/DC, max. 30 V DC (with LED)
Rated current/contact	max. 4 A
Locking	Screw locking M12x1, self securing
Recommended torque	0.6 Nm
Temperature range (dependant on connected conductor)	- 25 °C ... +85 °C
Degree of protection	IP 67
Number of wires / wire gauge	4 x 0.34 mm <sup>2</sup>
Conductor insulation	PP (br, ws, bl, sw)
Arrangement of insulated strands	42 x 0.1 mm
Sheath	PUR (UL, CSA)
Outer diameter	appr. 4.7 mm
Bending radius	10 x outer diameter
Temperature range (working and storage)	-25 °C ... + 80 °C



Identification	Part No.	Drawing	Dimensions in mm												
<p><b>Han® M12 Circular connector</b> Female straight, Male straight</p> <p>Length:    0.3 m               0.6 m               1.0 m               1.5 m               2.0 m</p>	<p><b>21 03 415 2401</b> <b>21 03 415 2402</b> <b>21 03 415 2403</b> 21 03 415 2404 21 03 415 2405</p>	<p><b>View mating side</b></p> <p><b>Schematic diagram</b></p> <table border="1"> <tr> <td>1</td> <td>Litze braun 1-1 / flexible conductor brown 1-1</td> <td>1</td> </tr> <tr> <td>2</td> <td>Litze weiss 101 / flexible conductor white 101</td> <td>2</td> </tr> <tr> <td>4</td> <td>Litze schwarz 151 / flexible conductor black 151</td> <td>4</td> </tr> <tr> <td>3</td> <td>Litze blau 1-1 / flexible conductor blue 1-1</td> <td>3</td> </tr> </table>	1	Litze braun 1-1 / flexible conductor brown 1-1	1	2	Litze weiss 101 / flexible conductor white 101	2	4	Litze schwarz 151 / flexible conductor black 151	4	3	Litze blau 1-1 / flexible conductor blue 1-1	3	
1	Litze braun 1-1 / flexible conductor brown 1-1	1													
2	Litze weiss 101 / flexible conductor white 101	2													
4	Litze schwarz 151 / flexible conductor black 151	4													
3	Litze blau 1-1 / flexible conductor blue 1-1	3													
<p><b>Han® M12 Circular connector</b> Female angled, Male straight</p> <p>Length:    0.3 m               0.6 m               1.0 m               1.5 m               2.0 m</p>	<p><b>21 03 415 5401</b> <b>21 03 415 5402</b> <b>21 03 415 5403</b> 21 03 415 5404 21 03 415 5405</p>	<p><b>View mating side</b></p> <p><b>Schematic diagram</b></p> <table border="1"> <tr> <td>1</td> <td>Litze braun 1-1 / flexible conductor brown 1-1</td> <td>1</td> </tr> <tr> <td>2</td> <td>Litze weiss 101 / flexible conductor white 101</td> <td>2</td> </tr> <tr> <td>4</td> <td>Litze schwarz 151 / flexible conductor black 151</td> <td>4</td> </tr> <tr> <td>3</td> <td>Litze blau 1-1 / flexible conductor blue 1-1</td> <td>3</td> </tr> </table>	1	Litze braun 1-1 / flexible conductor brown 1-1	1	2	Litze weiss 101 / flexible conductor white 101	2	4	Litze schwarz 151 / flexible conductor black 151	4	3	Litze blau 1-1 / flexible conductor blue 1-1	3	
1	Litze braun 1-1 / flexible conductor brown 1-1	1													
2	Litze weiss 101 / flexible conductor white 101	2													
4	Litze schwarz 151 / flexible conductor black 151	4													
3	Litze blau 1-1 / flexible conductor blue 1-1	3													
<p><b>Han® M12 Circular connector</b> Female angled, with LED, Male straight</p> <p>Length:    0.3 m               0.6 m               1.0 m               1.5 m               2.0 m</p>	<p><b>21 03 415 7401</b> <b>21 03 415 7402</b> <b>21 03 415 7403</b> 21 03 415 7404 21 03 415 7405</p>	<p><b>View mating side</b></p> <p><b>Schematic diagram</b></p> <table border="1"> <tr> <td>1</td> <td>Litze braun 1-1 / flexible conductor brown 1-1</td> <td>1</td> </tr> <tr> <td>2</td> <td>Litze weiss 101 / flexible conductor white 101</td> <td>2</td> </tr> <tr> <td>4</td> <td>Litze schwarz 151 / flexible conductor black 151</td> <td>4</td> </tr> <tr> <td>3</td> <td>Litze blau 1-1 / flexible conductor blue 1-1</td> <td>3</td> </tr> </table>	1	Litze braun 1-1 / flexible conductor brown 1-1	1	2	Litze weiss 101 / flexible conductor white 101	2	4	Litze schwarz 151 / flexible conductor black 151	4	3	Litze blau 1-1 / flexible conductor blue 1-1	3	
1	Litze braun 1-1 / flexible conductor brown 1-1	1													
2	Litze weiss 101 / flexible conductor white 101	2													
4	Litze schwarz 151 / flexible conductor black 151	4													
3	Litze blau 1-1 / flexible conductor blue 1-1	3													



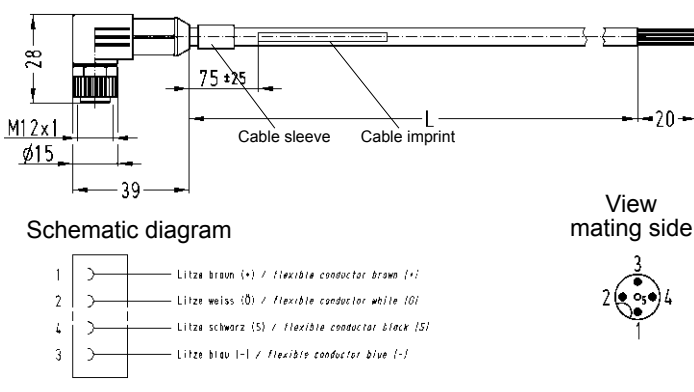


Identification	Part No.	Drawing	Dimensions in mm
----------------	----------	---------	------------------

**Han® M12 Circular connector**  
 Female angled  
 pre-assembled on one end

Length: 1.5 m  
 3.0 m  
 5.0 m  
 7.5 m  
 10.0 m

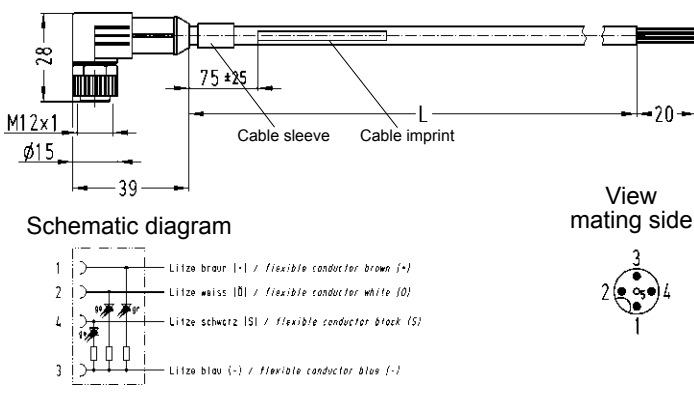
**21 03 515 4401**  
**21 03 515 4402**  
**21 03 515 4403**  
 21 03 515 4404  
 21 03 515 4405



**Han® M12 Circular connector**  
 Female angled, with LED  
 pre-assembled on one end

Length: 1.5 m  
 3.0 m  
 5.0 m  
 7.5 m  
 10.0 m

**21 03 515 7401**  
**21 03 515 7402**  
**21 03 515 7403**  
 21 03 515 7404  
 21 03 515 7405

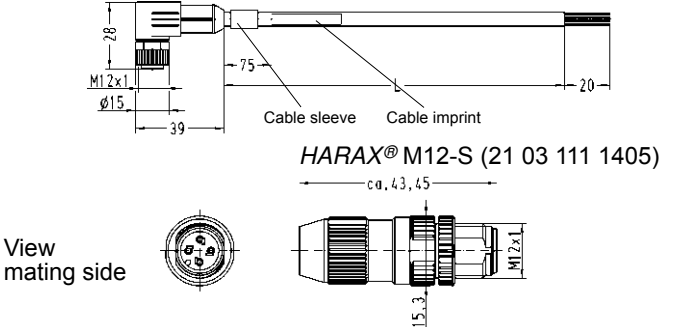


**HARAX® M12 cable-Set**  
 without LED

Delivery range: Han® M12 connector  
 with individually adaptable cable and  
**HARAX® M12-S**

Length: 1.5 m  
 3.0 m  
 5.0 m  
 7.5 m  
 10.0 m

**21 83 515 4401**  
**21 83 515 4402**  
**21 83 515 4403**  
 21 83 515 4404  
 21 83 515 4405

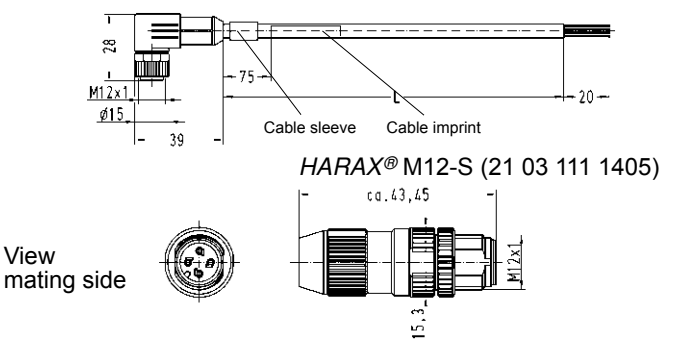


**HARAX® M12 cable-Set**  
 with LED

Delivery range: Han® M12 connector  
 with individually adaptable cable and  
**HARAX® M12-S**

Length: 1.5 m  
 3.0 m  
 5.0 m  
 7.5 m  
 10.0 m

**21 83 515 7401**  
**21 83 515 7402**  
**21 83 515 7403**  
 21 83 515 7404  
 21 83 515 7405




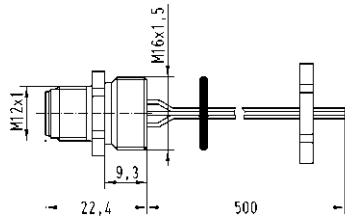
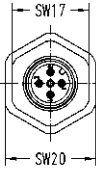

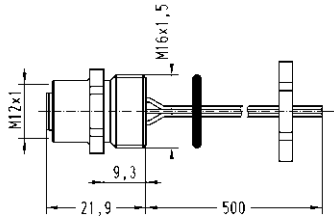
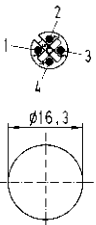

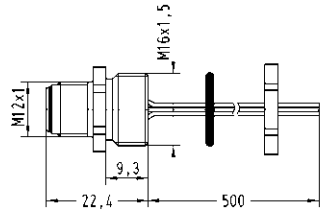
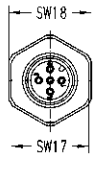

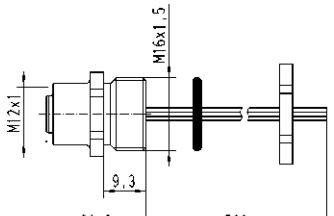








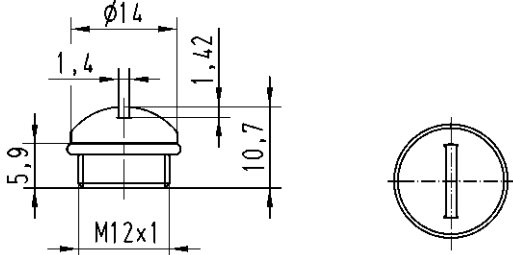

Identification	Part No.		Drawing	Dimensions in mm
	Male	Female		
<b>HARAX® M12-L</b>  3 poles, A-coded, with pre-leading contact (assignment 3, 4, 5) 3 poles, A-coded (assignment 1, 3, 4) 4 poles, A-coded (assignment 1, 2, 3, 4) 4 poles, A-coded, to 2.6 mm core diameter (assignment 1, 2, 3, 4)	21 03 212 1400 21 03 212 1306 <b>21 03 212 1305</b> 21 03 212 1407		<p>Gesamtlänge im verschraubten Zustand ca. 52,2mm Complete length when assembled app. 52,2mm</p> <p>Gesamtlänge im verschraubten Zustand ca. 52,2mm Complete length when assembled app. 52,2mm</p> <p>Gesamtlänge im verschraubten Zustand ca. 48,8mm Complete length when assembled app. 48,8mm</p> <p>Gesamtlänge im verschraubten Zustand ca. 48,8mm Complete length when assembled app. 48,8mm</p>	
3 poles, A-coded (assignment 3, 4, 5) 3 poles, A-coded (assignment 1, 3, 4) 4 poles, A-coded (assignment 1, 2, 3, 4) 4 poles, A-coded, to 2.6 mm core diameter (assignment 1, 2, 3, 4)		21 03 212 2400 21 03 212 2306 <b>21 03 212 2305</b> <b>21 03 212 2407</b>	<p>Gesamtlänge im verschraubten Zustand ca. 48,8mm Complete length when assembled app. 48,8mm</p>	View mating side, male version: <b>HARAX® M12-L</b> 3 poles with pre-leading contact
5 poles, A-coded, 0.25 - 0.34 mm <sup>2</sup> , AWG 24 - 22 Cable diameter: 4.7 - 6 mm	<b>21 03 271 1505</b>	<b>21 03 271 2505</b>	<p>Gesamtlänge im verschraubten Zustand ca. 52,2mm Complete length when assembled app. 52,2mm</p>	3 poles      4 poles 
5 poles, A-coded, 0.34 - 0.5 mm <sup>2</sup> , AWG 22 - 20 Cable diameter: 6 - 8 mm	<b>21 03 272 1505</b>	<b>21 03 272 2505</b>	<p>Gesamtlänge im verschraubten Zustand ca. 49mm Complete length when assembled app. 49mm</p>	



## Technical characteristics: Han® M12 panel feed-through

Degree of protection	IP 67 when mated and screwed
Rated current	max. 4 A (each contact)
Rated voltage	50 V
Mating cycles	max. 100
Limiting temperature	-25 °C ... +85 °C

Identification	Part No.	Drawing	Dimensions in mm
 <p><b>Han® M12 panel feed-through</b> Male, A-coded, 50 cm conductors, 0.5 mm<sup>2</sup></p>	<b>21 03 311 1402</b>		
 <p><b>Han® M12 panel feed-through</b> Female, A-coded, 50 cm conductors, 0.5 mm<sup>2</sup></p>	<b>21 03 311 2400</b>		
 <p><b>Han® M12 panel feed-through</b> Male, A-coded, 50 cm conductors, 0.5 mm<sup>2</sup>, 5 poles</p>	<b>21 03 311 1501</b>		
 <p><b>Han® M12 panel feed-through</b> Female, A-coded, 50 cm conductors, 0.5 mm<sup>2</sup>, 5 poles</p>	<b>21 03 311 2501</b>		

Identification	Part No.	Drawing	Dimensions in mm
<p><b>Seal M12</b> 2.9 - 4.0 mm 4 - 5.1 mm</p> 	<p>21 01 010 2011 21 01 010 2001</p>		
<p><b>Seal M12-L</b> 3 poles: 5.5 - 7.2 mm 4 + 5 poles: 6 - 8 mm</p> 	<p>21 01 010 2003 21 01 010 2007</p>		
<p><b>Cap M12</b></p> 	<p><b>21 01 000 0003</b></p>		
<p><b>Han® M8</b> dynamometric screwdriver</p> <p>for M12-S    SW 13</p> <p>for M12-L    SW 17</p>	<p><b>09 99 000 0382</b></p> <p><b>09 99 000 0384</b></p>		

# Circular connector M12 shielded, A-coded



Part No.

Identification

Male

Female

Drawing

Dimensions in mm

## HARAX® M12-L, screened version

4 poles, A-coded  
0.14 - 0.34 mm<sup>2</sup> / AWG 26 - 22



**21 03 221 1405**

4 poles, A-coded  
0.14 - 0.34 mm<sup>2</sup> / AWG 26 - 22



**21 03 221 2405**

## HARAX® panel feed-through

4 poles, A-coded  
0.14 - 0.34 mm<sup>2</sup> / AWG 26 - 22  
5.5 - 7.2 mm



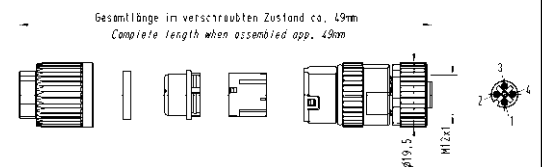
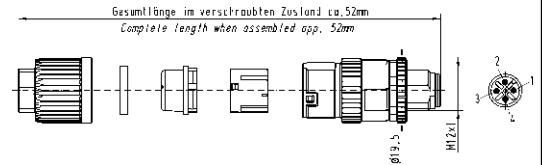
**21 03 321 1425**

4 poles, A-coded  
0.14 - 0.34 mm<sup>2</sup> / AWG 26 - 22

5.5 - 7.2 mm

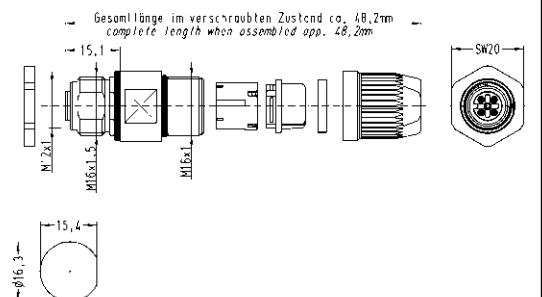
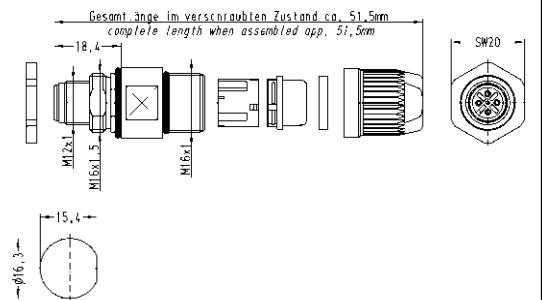
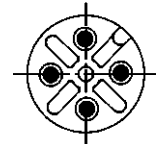


**21 03 321 2425**



View mating side, male version:  
HARAX® M12-L, screened version

4 poles  
A-coded



# Circular connector M12 shielded, A-coded



Identification		Part No.		Drawing	Dimensions in mm
		Male	Female		
<b>Han® M12 Crimp</b> 4 poles, A-coded 4.5 - 5.4 mm / 7 - 8.8 mm		<b>21 03 812 1405</b>			
4 poles, A-coded 4.5 - 5.4 mm / 7 - 8.8 mm			<b>21 03 812 2405</b>		
<b>Han® M12 panel feed-through Crimp</b> 4 poles, A-coded 5.5 - 7.2 / 7 - 8.8 mm		<b>21 03 822 1425</b>			
4 poles, A-coded 5.5 - 7.2 / 7 - 8.8 mm			<b>21 03 822 2425</b>		

# Circular connector M12 shielded, B-coded



Part No.

Identification

Male

Female

Drawing

Dimensions in mm

**HARAX® M12-L, screened version**

2 poles, B-coded  
2 poles and shield, B-coded

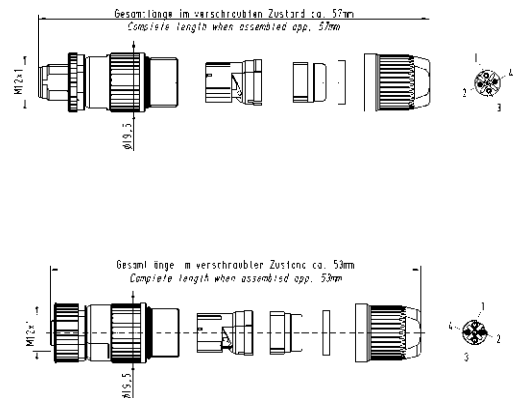


**21 03 241 1301**  
**21 03 241 1300**

2 poles, B-coded  
2 poles and shield, B-coded



**21 03 241 2301**  
**21 03 241 2300**

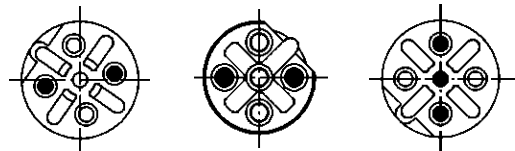


View mating side, male version:  
**HARAX® M12-L, screened version**

2 poles  
**21 03 241 1301**  
B-coded

2 poles  
**21 03 241 2301**  
B-coded

3 poles  
**PROFIBUS**  
B-coded



**HARAX® panel feed-through**

2 poles and shield, B-coded



5.5 - 7.2 mm

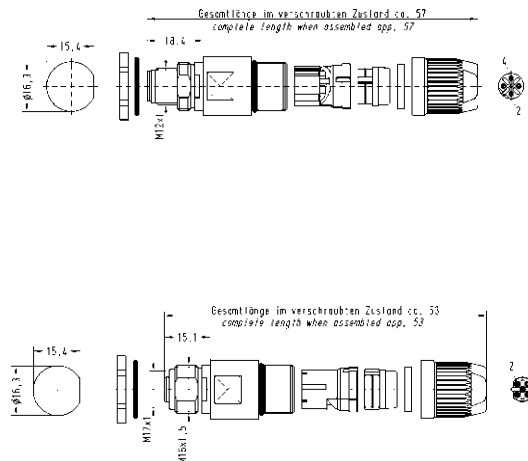
**21 03 341 1425**

2 poles and shield, B-coded



5.5 - 7.2 mm

**21 03 341 2425**



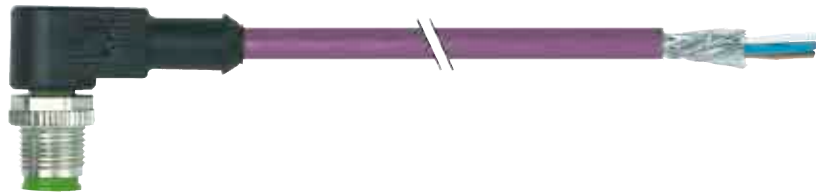


## Technical characteristics

Rated voltage	max. 125 V AC/ DC
Rated current/contact	max. 4 A
Locking	Screw locking M12 x 1 mm, self securing
Recommended torque	0.6 Nm
Temperature range (male) °C	-25 °C ... +85 °C (dependant on connected conductor)
Degree of protection	IP 67
Number of wires / wire gauge	4 x 0.64 mm <sup>2</sup>
Conductor insulation	PUR (rt, gn)
Arrangement of insulated strands	19 x 0.13 mm
Sheath	PUR (UL/CSA)
Outer diameter	appr. 7.8 mm
Bending radius	65 x outer diameter
Temperature range °C (applicate with fixed cable)	-30 °C ... + 80 °C

Identification	Part No.	Drawing
<p><b>Han® M12 Circular connector, Male, straight</b> pre-assembled on one end, useable as trailing cable</p> <p>Length:    1.5 m    <b>21 03 549 1301</b>               3.0 m    <b>21 03 549 1302</b>               5.0 m    <b>21 03 549 1303</b>               7.5 m    <b>21 03 549 1304</b>               10.0 m   <b>21 03 549 1305</b></p>		
<p><b>Han® M12 Circular connector, Male, angled</b> pre-assembled on one end, useable as trailing cable</p> <p>Length:    1.5 m    <b>21 03 549 3301</b>               3.0 m    <b>21 03 549 3302</b>               5.0 m    <b>21 03 549 3303</b>               7.5 m    <b>21 03 549 3304</b>               10.0 m   <b>21 03 549 3305</b></p>		





Identification

Part No.

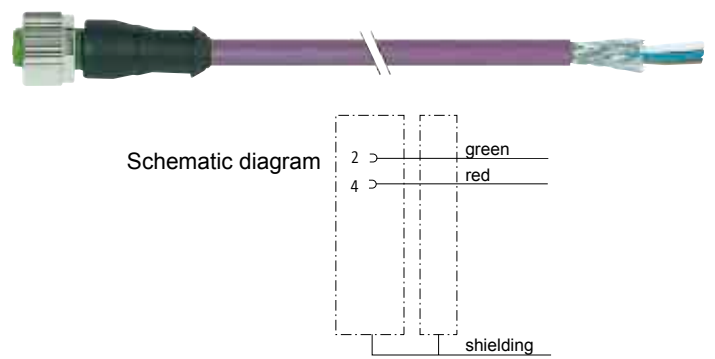
Drawing

**Han® M12 Circular connector, Female, straight**

pre-assembled on one end,  
useable as trailing cable

Length: 1.5 m  
3.0 m  
5.0 m  
7.5 m  
10.0 m

21 03 549 2301  
21 03 549 2302  
21 03 549 2303  
21 03 549 2304  
21 03 549 2305

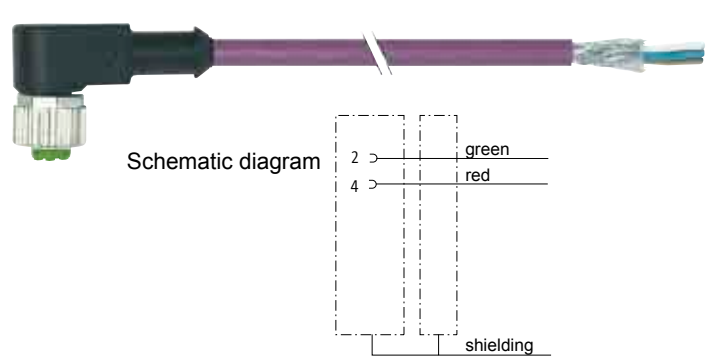


**Han® M12 Circular connector, Female, angled**

pre-assembled on one end,  
useable as trailing cable

Length: 1.5 m  
3.0 m  
5.0 m  
7.5 m  
10.0 m

21 03 549 4301  
21 03 549 4302  
21 03 549 4303  
21 03 549 4304  
21 03 549 4305

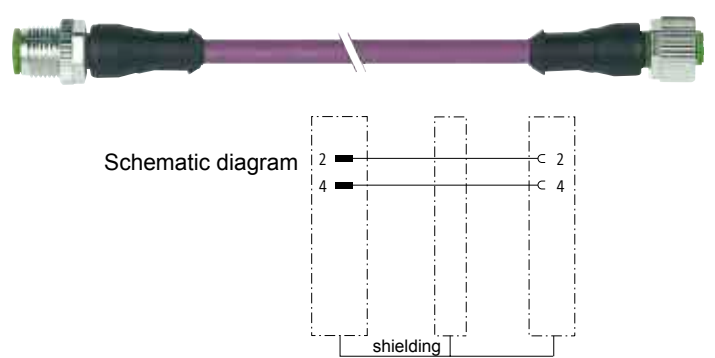


**Han® M12 Circular connector, Male, straight  
Female, straight**

pre-assembled on one end,  
useable as trailing cable

Length: 0.3 m  
0.6 m  
1.0 m  
1.5 m  
2.0 m

21 03 449 4301  
21 03 449 4302  
21 03 449 4303  
21 03 449 4304  
21 03 449 4305

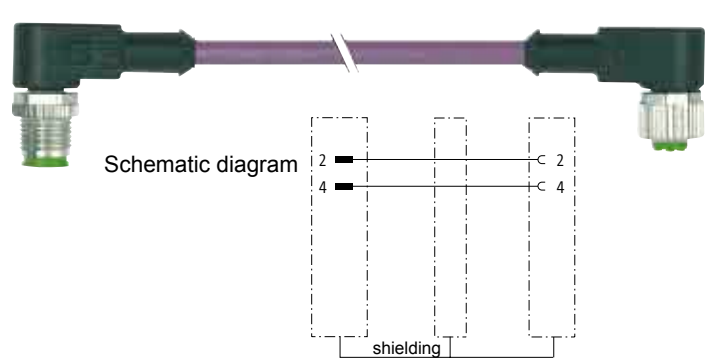


**Han® M12 Circular connector, Male, angled  
Female, angled**

pre-assembled on one end,  
useable as trailing cable


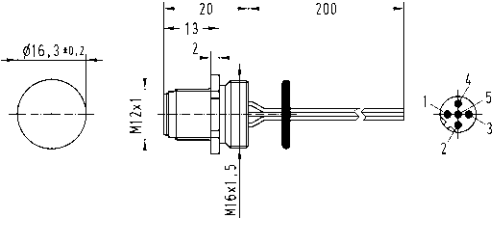

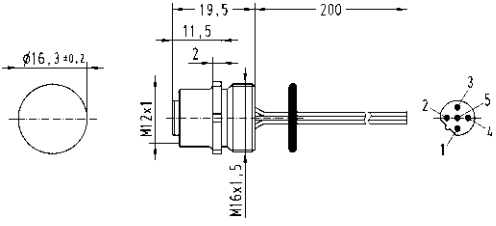

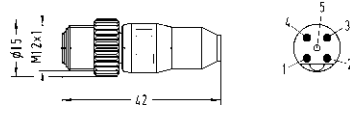

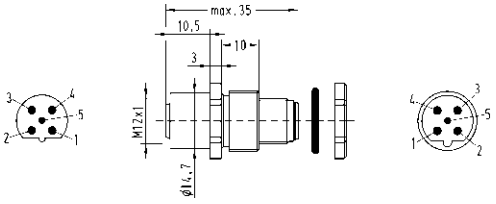
Length: 0.3 m  
0.6 m  
1.0 m  
1.5 m  
2.0 m

21 03 449 6301  
21 03 449 6302  
21 03 449 6303  
21 03 449 6304  
21 03 449 6305



## Technical characteristics: Han® M12 panel feed-through

Degree of protection	IP 67 in locked position
Rated current	max. 4 A (each contact)
Rated voltage	250 V AC/DC
Mating cycles	max. 100
Limiting temperatures	-25 °C ... +85 °C
Termination	solder, with pigtails (TPE insulation) assembled

Identification	Part No.		Drawing	Dimensions in mm
	Male	Female		
<p><b>Han® M12-panel feed-through</b> Male, B-coded, 20 cm conductor, 0.25 mm<sup>2</sup></p> 	<b>21 03 339 1301</b>			
<p><b>Han® M12-panel feed-through</b> Female, B-coded, 20 cm conductor, 0.25 mm<sup>2</sup></p> 		<b>21 03 339 2301</b>		
<p><b>Han® M12-male moving load</b> B-coded</p> 		21 03 030 1300		
<p><b>Han® M12-male/female panel feed-through</b> B-coded</p> 		21 03 330 1300		<p>Rated voltage      24 V AC/DC Thread                M16 x 1,5</p>