

**HARTING**  
 Electronics GmbH  
 D-32339 Espelkamp  
 info@HARTING.com

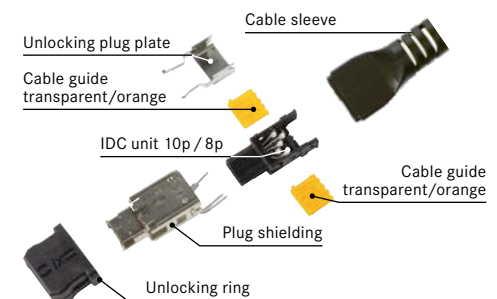
ENGLISH

**HARTING ix Industrial®**  
**IP20 PushPull**

**Part numbers**  
 0945 182 2561 ix Industrial 10A-PP-3 plug SL-I26  
 0945 182 2563 ix Industrial 8A-PP-3 plug SL-I22  
 0945 182 9001 ix Industrial 10B-PP-3 plug SL-I26  
 0945 182 9003 ix Industrial 8B-PP-3 plug SL-I22  
 0945 182 3501 ix Industrial 10C-PP-3 plug SL-I26  
 0945 182 3503 ix Industrial 8C-PP-3 plug SL-I22

**www.HARTING.com**

I. Components Names

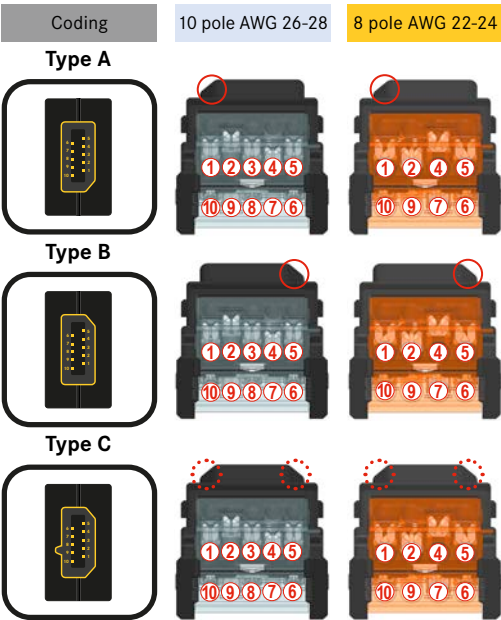


II. Tools



Please refer to instruction manual 09 45 800 0185 for tool handling.

III. Contact number assignment of IDC unit / Cable guide



IV. Wire arrangement

Type A & C – In case of Ethernet applications

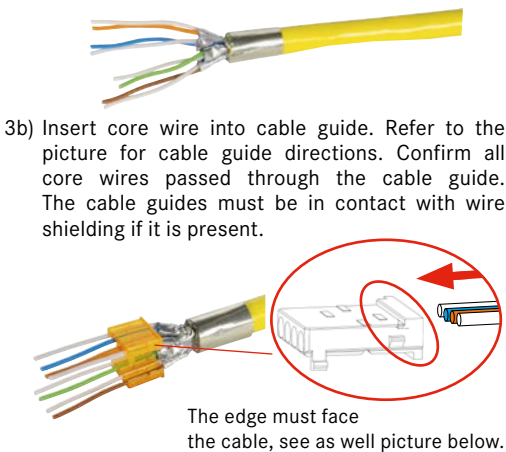
ix	10/100 Mbit/s	1/10 Gbit/s	TIA		PROFINET
			568 A	568 B	
1	TX+	BI_DA+	White/Green	White/Orange	Yellow
2	TX-	BI_DA-	Green	Orange	Orange
3	N.C	N.C	N.C	N.C	N.C
4	N.C	BI_DC+	Blue	Blue	N.C
5	N.C	BI_DC-	White/Blue	White/Blue	N.C
6	RX+	BI_DB+	White/Orange	White/Green	White
7	RX-	BI_DB-	Orange	Green	Blue
8	N.C	N.C	N.C	N.C	N.C
9	N.C	BI_DD+	White/Brown	White/Brown	N.C
10	N.C	BI_DD-	Brown	Brown	N.C



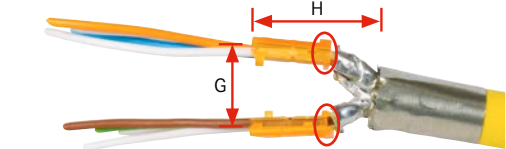
Type B – There is no contact assignment except for Ethernet applications.

V. Cable termination

- Push cable sleeve over the cable.
- Strip cable with stripping tool 09 45 800 0000 and prepare shielding. Then fix the cable braid with copper foil 09 45 800 0200.
- Cable termination to the IDC unit.



- 3a) Arrange the wires (for Ethernet according IV – Type A) in two rows with four wires in each row for easy insertion to cable guide.
- 3b) Insert core wire into cable guide. Refer to the picture for cable guide directions. Confirm all core wires passed through the cable guide. The cable guides must be in contact with wire shielding if it is present.
- 3c) Set the distance between cable guides to G = 8-9 mm.



VI. Cable guide insertion to the IDC unit

AWG28-24: The use of the assembly positioner 09 45 800 0180 is optional (follow VI. a). Its use can support the assembly process.

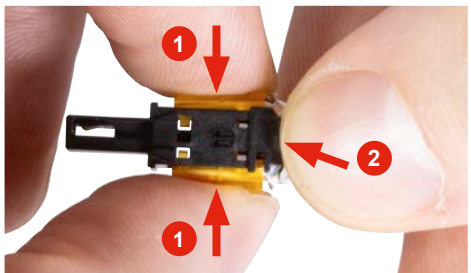
AWG22: The use of the assembly positioner 09 45 800 0180 is mandatory (follow VI. b).

VI. a) Without assembly positioner

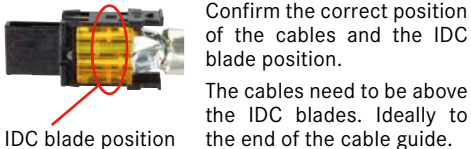
- Pre-position the two cable guides in the correct arrangement in the IDC unit. Check the alignment between IDC unit and cable guide openings for the IDC. Caution: The cable guide can be inserted in either direction. Re-check the contact assignment (III. Contact number assignment of IDC unit).



- Temporarily press the cable guides into the IDC unit with your fingers (1). Press the flanks (2) of the IDC unit together lightly at the same time to ensure good positioning. Make sure the wires do not slip out of the cable manager and remain in position.



- Check the cable guide does not come off, even when the fingers release.

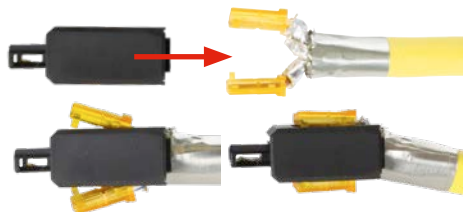


## VI. b) With assembly positioner 09 45 800 0180

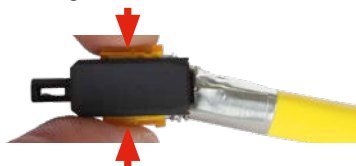
1. Insert the IDC unit into assembly positioner as far as it will go.



2. Pre-position the two cable guides in the correct arrangement on the assembly positioner.  
**Caution:** The cable guide can be inserted in either direction. Re-check the contact assignment (III. Contact number assignment of IDC unit).



3. Check the alignment between IDC unit, assembly positioner and cable guide. The extended guidance of the assembly positioners support the correct positioning.
4. Press the cable guides temporarily with your fingers on the IDC unit. Check the wires do not slip off from cable guide while insertion.



5. Check the cable guide does not come off, even when the fingers release.

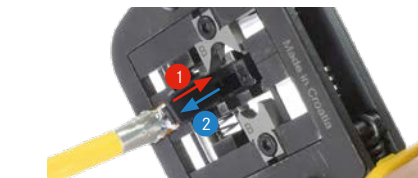


IDC blade position

Confirm the correct position of the cables and the IDC blade position. The cables need to be above the IDC blades. Ideally to the end of the cable guide.

## VII. Insulation displacement with hand tool

1. Insert the prepared assembly group from step VI. a) Without assembly positioner **or** VI. b) With assembly positioner 09 45 800 0180 into the hand tool as far as it will go (1). Then press the hand tool together. Make sure that the assembly group is positioned correctly in the hand tool during compression. Close the hand tool completely. After opening, remove assembly group with the connected cable (2).



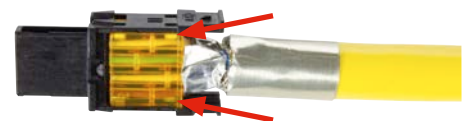
2. In case of: VI. b) With assembly positioner 09 45 800 0180 - push the IDC unit with assembled cable out of the assembly positioner.



3. Please check the 3 points after IDC completion.
  - a) Check that both sides have the same height for the IDC unit and the cable guide.



- b) Cable guide is correctly snapped into IDC unit -> there is no gap between the IDC unit and the cable guide.

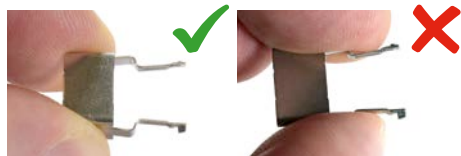


- c) Contacts are in the correct position. Contacts have a slight visibility in the openings. No deformations. No misalignment.

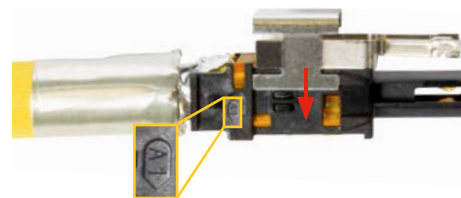


## VIII. Shield shell assembly

**Important for the next steps:** Only handle/grip the unlocking plug plate by the rear, non-flexible wider part. Please ensure that you do not handle the component by the locking spring arms. Do not apply any force to the spring arms, as there is a risk of deformation. If handled incorrectly, there is a risk that the locking mechanism (latching hooks) will not function properly.

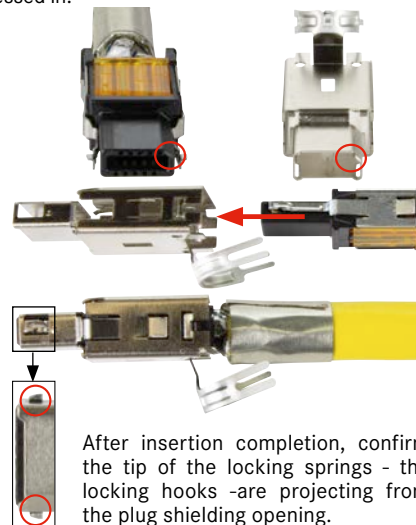


1. Mounting of the unlocking plug plate. An Arrow on the IDC unit shows the mounting direction. Push the unlocking plug plate on the IDC unit.

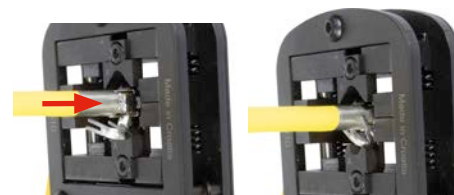


2. Push the assembled IDC unit into the shield shell until it engages with an audible "click". Note the contour shape of the individual parts.

**Important!** Do not compress the spring arms during assembly manually. The design ensures that the spring arms slide into the plug shielding when the IDC unit is pressed in.



3. Place the assembly into the crimping mechanism of the hand tool as far as it will go. Press the hand tool all the way together. Check that the cable crimp is positioned right and is aligned with the cable while squeezing the hand tool. Use the correct cable crimping inserts depending on the cable diameter.



4. After crimping check the cable crimp.



## IX. Cover fully assembly

1. Push the cable sleeve over the plug element until it is latched.



2. Push the unlocking ring over the plug element until it catches into the shielding shell.

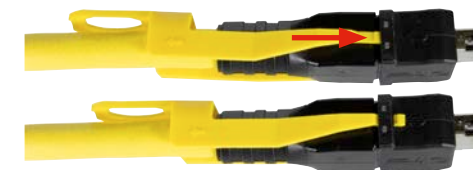


## X. Plug and unplug

1. Plug (*Push*) the connector into your device.
2. To unplug / unlock the connector, *Pull* the unlocking ring. Hint: If needed, hold the cable at the same time.



3. For perfect unlocking, especially in tight spaces, HARTING offers the **ix Industrial® unlocking latch** (P/N 09 45 800 1181). Position the unlocking latch over the cable and connector. Press the arms into the openings of the unlocking ring.



4. To unplug / unlock the connector, *Pull* the unlocking latch. Hint: If needed, hold the cable at the same time.

