Phoenix Contact Inc.
P.O. BOX 4100
Harrisburg, PA 17111-0100
Phone: 717-944-1300

Product Change Notification

PCN-IFC-9589-2024

Business Unit	Product Line Code	Type of Change	Action	Date of Issue
IFC - Industrial Field Connectivity	BF1	Product Change Notification	Notify Distributors and Field	3/21/2024

The following Phoenix Contact products have been modified. Existing specifications will be met or exceeded. Please review and acknowledge this document and inform your personnel as needed.

Description for Product Change Notification
The A-code Ethernet product range will be upgraded to Advanced Shielding Technology (AST). As a result, the previously used crimp shielding sleeves will be replaced by the AST design. The overmold will be somewhat thinner and the product technically improved. Advanced Shielding Technology from Phoenix Contact is the innovative shielding concept for data, sensor and power cabling. The large-area, material-bonding 360° shield connection is unique on the market and optimizes the current design of M8 and M12 connectors. Furthermore, the M12 SPEEDCON technology will be replaced by the M12 standard full-thread coupling nut. The new descriptions of each articles are included in the attached excel sheet.

Stock Status	
Can existing stock still be used?	Yes
Is mixture of stock acceptable?	Yes

Transaction Dates	
Date modification goes into effect from Germany:	8/15/2024
Expected first shipment (from Phoenix Contact) of the modified products(s):	8/15/2024

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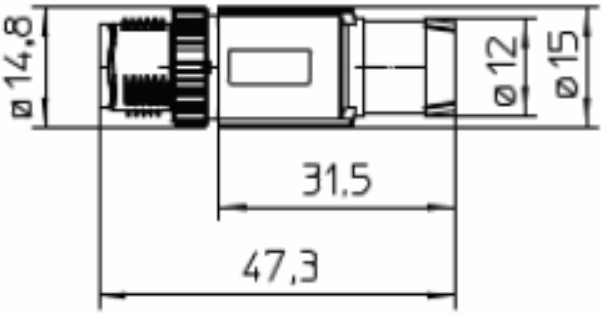
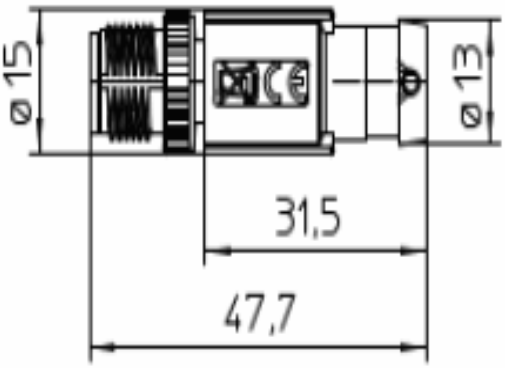
Product Change Notification

Previous Product	New Product
	
	

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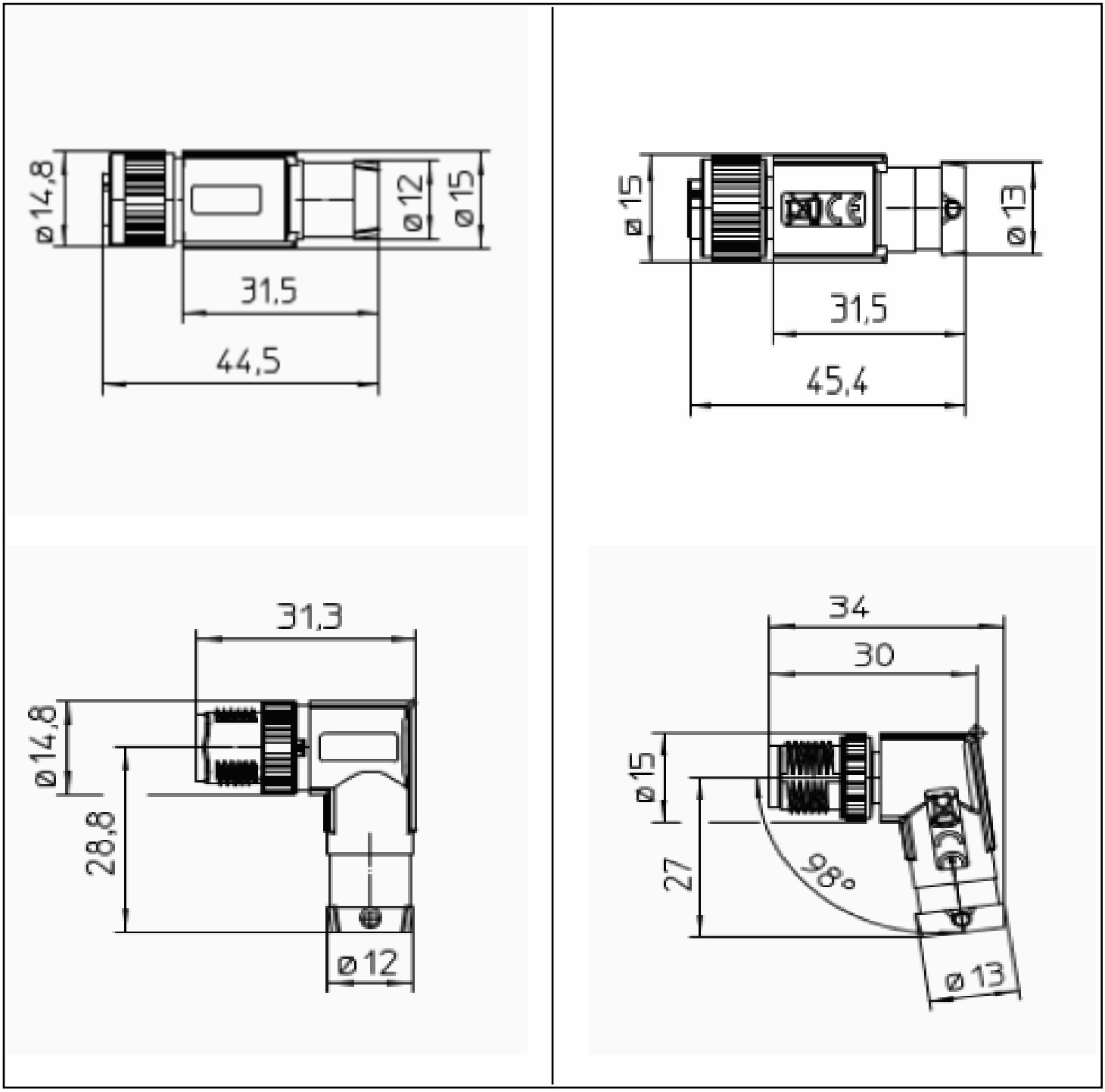

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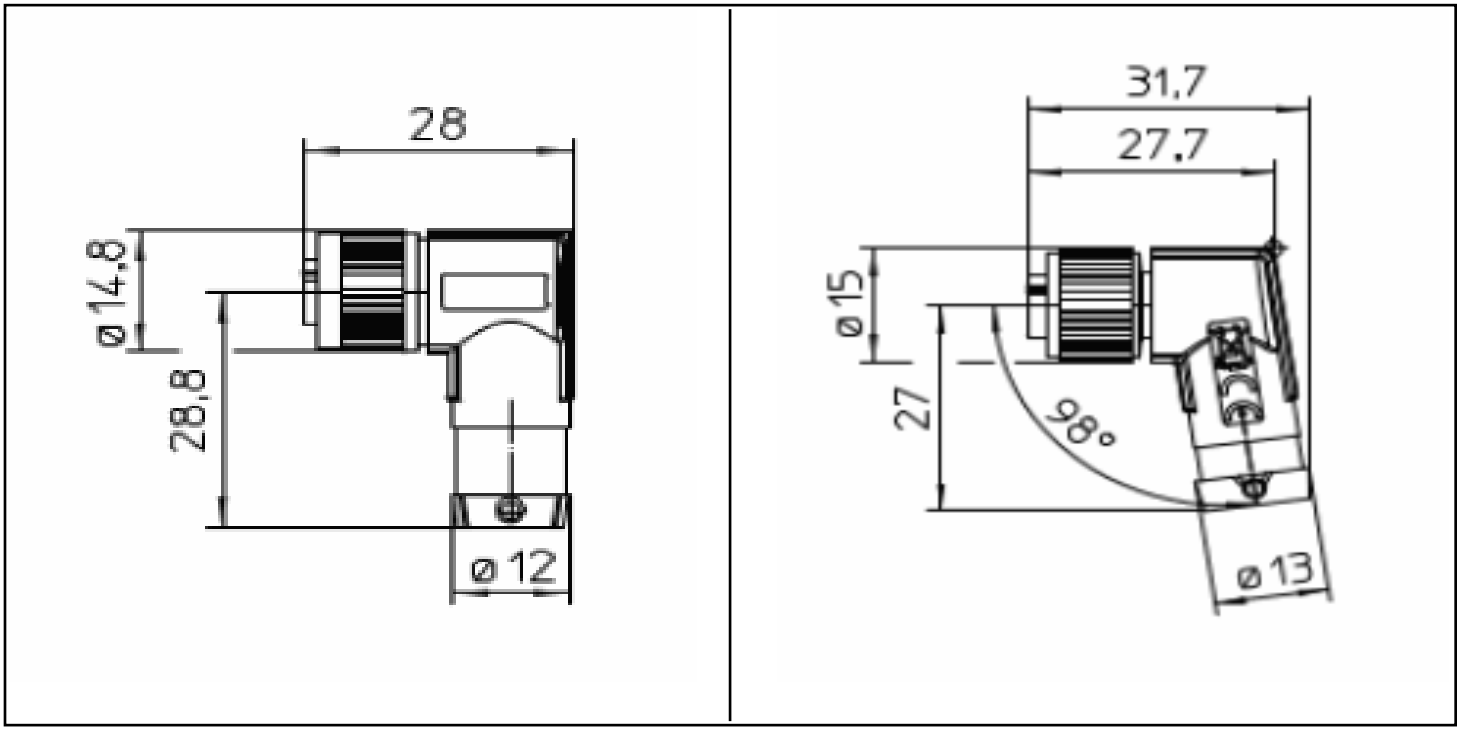

Should you have any issues with the timeline or content of this product change, please contact Phoenix Contact using the information below. Customers should acknowledge receipt of the PCN within 30 days of delivery of the PCN; provided, however, that the failure to acknowledge receipt does not affect the product change or the effective date thereof.

Contact Info:
Yogi Patel
ypatel@phoenixcontact.com

Thank you,

Jeremy Andrews

Product Marketing Manager

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Product Change Notification

Part #	Type Description
1407404	NBC-MS/ 1,0-94B SCO
1407405	NBC-MS/ 2,0-94B SCO
1407406	NBC-MS/ 5,0-94B SCO
1407407	NBC-MS/10,0-94B SCO
1407414	NBC-MS/ 1,0-94B/R4AC SCO
1407415	NBC-MS/ 2,0-94B/R4AC SCO
1407416	NBC-MS/ 5,0-94B/R4AC SCO
1407417	NBC-MS/10,0-94B/R4AC SCO
1407434	NBC-MS/ 1,0-94B/MS SCO
1407435	NBC-MS/ 2,0-94B/MS SCO
1407436	NBC-MS/ 5,0-94B/MS SCO
1407438	NBC-MS/10,0-94B/MS SCO
1407439	NBC- 1,0-94B/FS SCO
1407440	NBC- 2,0-94B/FS SCO
1407441	NBC- 5,0-94B/FS SCO
1407442	NBC-10,0-94B/FS SCO
1407443	NBC-FS/ 1,0-94B/R4AC SCO
1407444	NBC-FS/ 2,0-94B/R4AC SCO
1407445	NBC-FS/ 5,0-94B/R4AC SCO
1407446	NBC-FS/10,0-94B/R4AC SCO
1407463	NBC-MS/ 1,0-94B/FS SCO
1407464	NBC-MS/ 2,0-94B/FS SCO
1407465	NBC-MS/ 5,0-94B/FS SCO
1407466	NBC-MS/10,0-94B/FS SCO
1408659	NBC-MS-FS SCO-IE/.../...
1408664	NBC-FS-R4AC SCO-IE/.../...
1408665	NBC-FS SCO-IE/.../...
1408676	NBC-MS-MS SCO-IE/.../...
1408681	NBC-MS-R4AC SCO-IE/.../...
1408682	NBC-MS SCO-IE/.../...

Advanced Shielding Technology

Designed by PHOENIX CONTACT

The new dimension of shielding for assembled M8 and M12 circular connectors

PHOENIX CONTACT
INSPIRING INNOVATIONS

CBF240009

Change of A-coded cable assemblies to Advanced shielding technology

Advanced Shielding Technology from Phoenix Contact is the innovative shielding concept for sensor/actuator cabling. The large-area, material-bonding 360° shield connection is unique on the market and optimizes the current design of M8 and M12 connectors.
With Advanced Shielding Technology you are investing in reliable data, signal, and power transmission for the factory automation of the future.

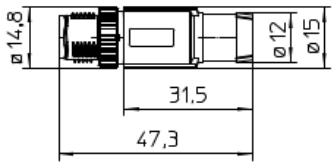
The next slides show you the change of the current design of A-coded cable assemblies and describe the advantages of the unique Advanced Shielding Technology.

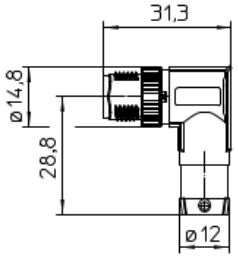
CBF240009

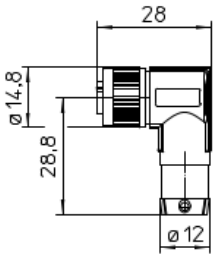
Change of A-coded cable assemblies to Advanced shielding technology

Size of the connector heads

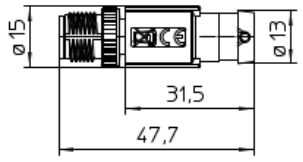
current design

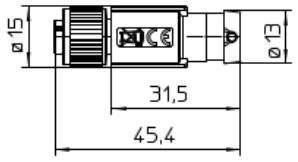


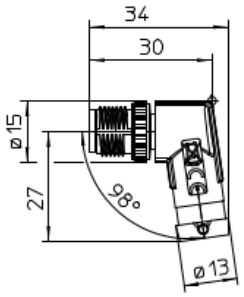


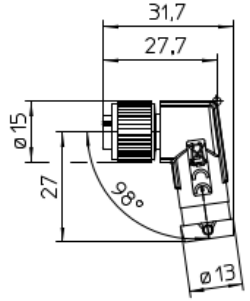


new AST design









PHOENIX CONTACT
INSPIRING INNOVATIONS

CBF240009

Change of A-coded cable assemblies to Advanced shielding technology

Speedcon to Standard M12 thread

Current design

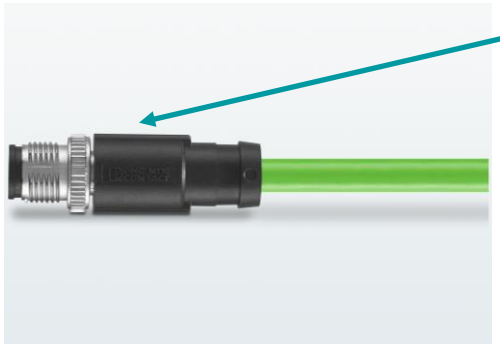
New design

CBF240009

Change of A-coded cable assemblies to Advanced shielding technology

CE and WEEE mark

Current design



New design

Additional to the brand logo of Phoenix Contact, the grip body gets the CE mark and the WEEE logo to be compliant with the european regulations.

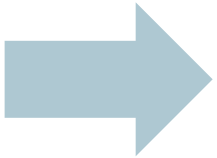
CBF240009

Change of A-coded cable assemblies to Advanced shielding technology

Article description from Speedcon to Standard M12

In case of the change from Speedcon to Standard M12 knurl,
the article description has to be changed.

Example:

NBC-MS/10,0-94B/FS SCO  NBC-M12MS/10,0-94B/M12FS

The new descriptions of each articles are included in the attached excel sheet.

How it all started

Current shielding concept

Cut cable

Brush shield

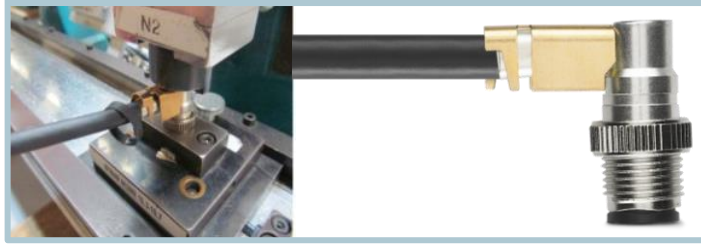
Push it over the cable jacket

Paste a foil on the cable

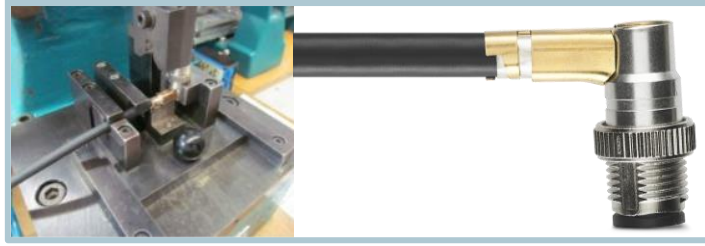
Cut the shield

Fit the shield sleeve on the cable

Prepare hand press



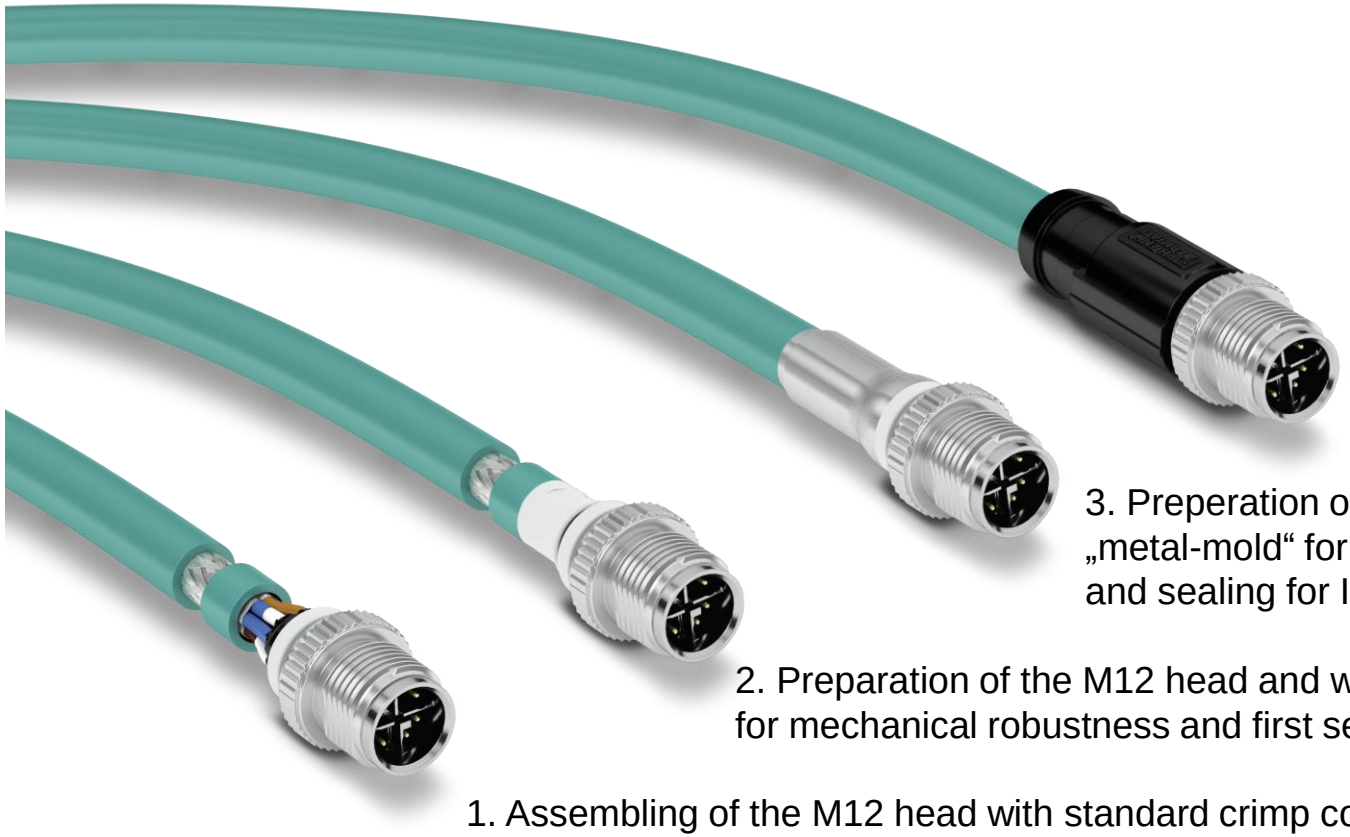
Crimp the lid



*Please note that the realization regarding the coding is the same even M12 x-coded is shown in the illustrations

Presentation of the new shielding concept

Realization



4. Preperation of the M12 handle body with standard overmolding

3. Preperation of the M12 head and cableshield with the special „metal-mold“ for 360° shielding connection, mechanical robustness and sealing for IP protection

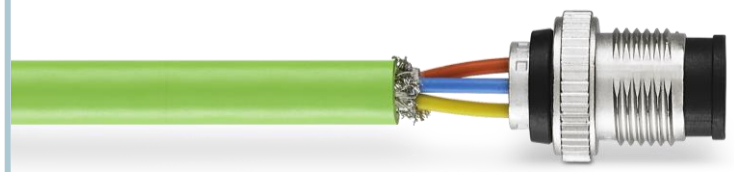
2. Preparation of the M12 head and wires with the special „pre-mold“ for mechanical robustness and first sealing for IP protection

1. Assembling of the M12 head with standard crimp contacts

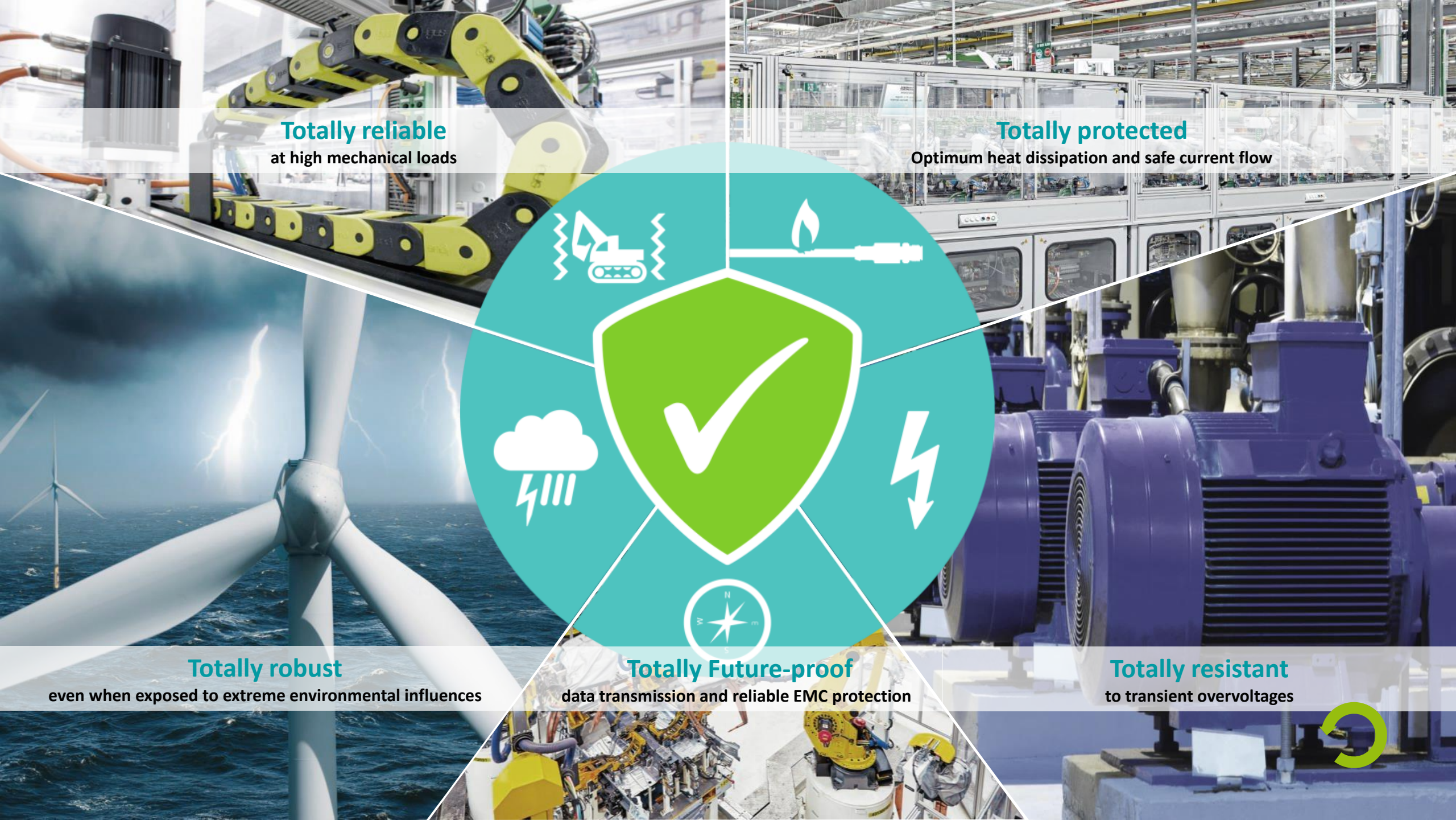
*Please note that the realization regarding the coding is the same even M12 x-coded is shown in the illustrations

Presentation of the new shielding concept

Realization

Cable Preparation	Pre-Mold	Metal-Mold
		

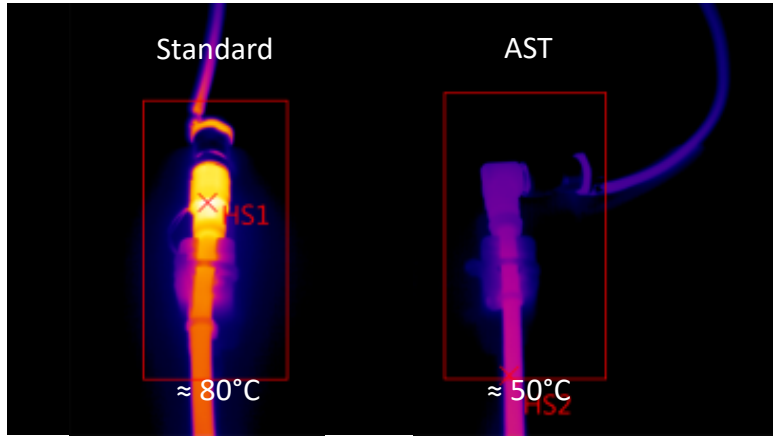
The ideal shield sleeve does not require a crimp

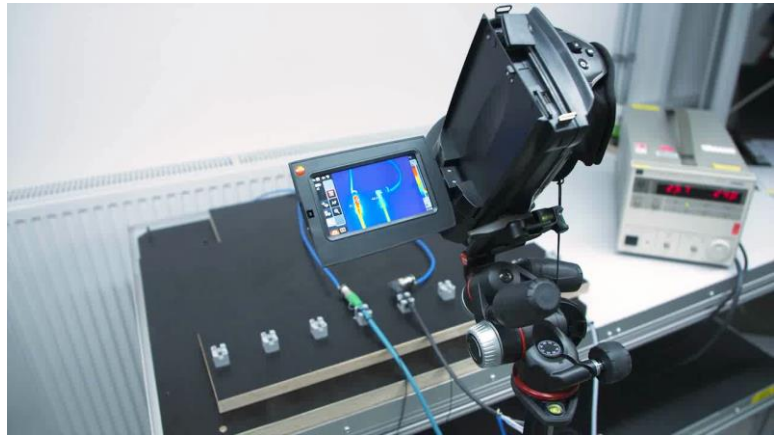

Totally reliable
at high mechanical loads
Totally protected
Optimum heat dissipation and safe current flow
Totally robust
even when exposed to extreme environmental influences
Totally Future-proof
data transmission and reliable EMC protection
Totally resistant
to transient overvoltages

Advanced Shielding Technology

Totally protected

If there is a short circuit in the machine parts, Advanced Shielding Technology can be used to enable a current to flow via the shield until the fuses are triggered. Thanks to the minimal generation of heat, the large-area shielding ensures greater safety and reduces the risk of fire.





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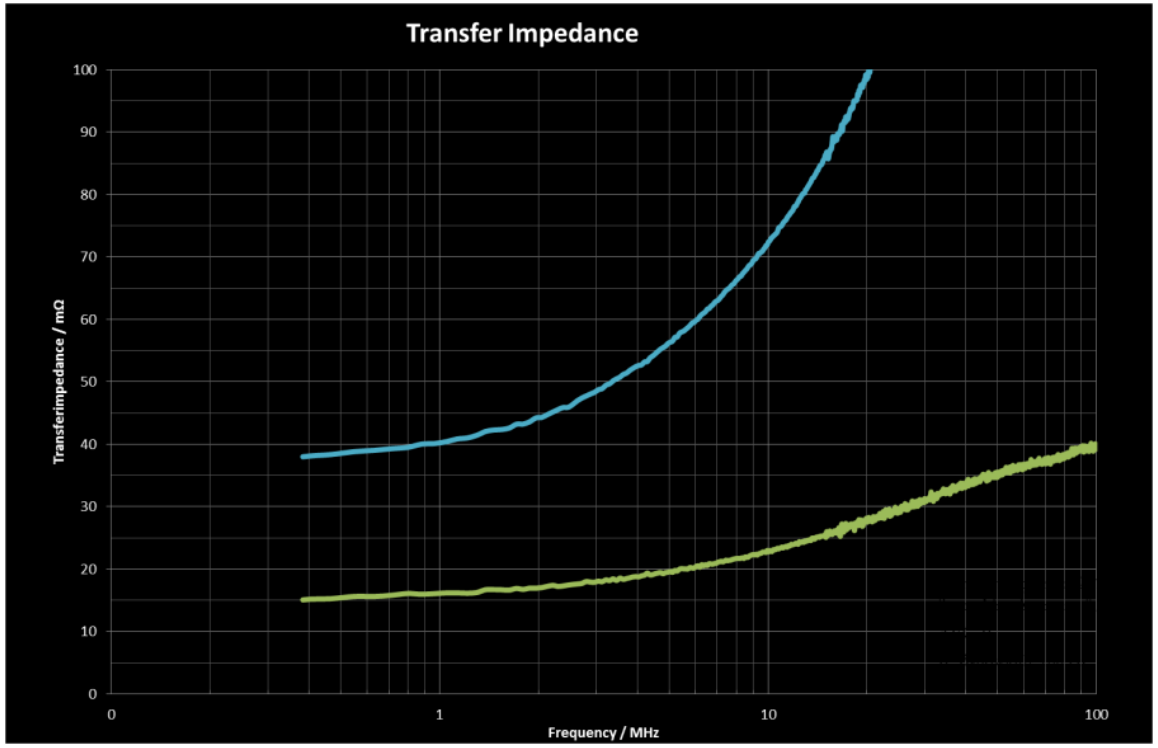
INSPIRING INNOVATIONS

Totally future-proof

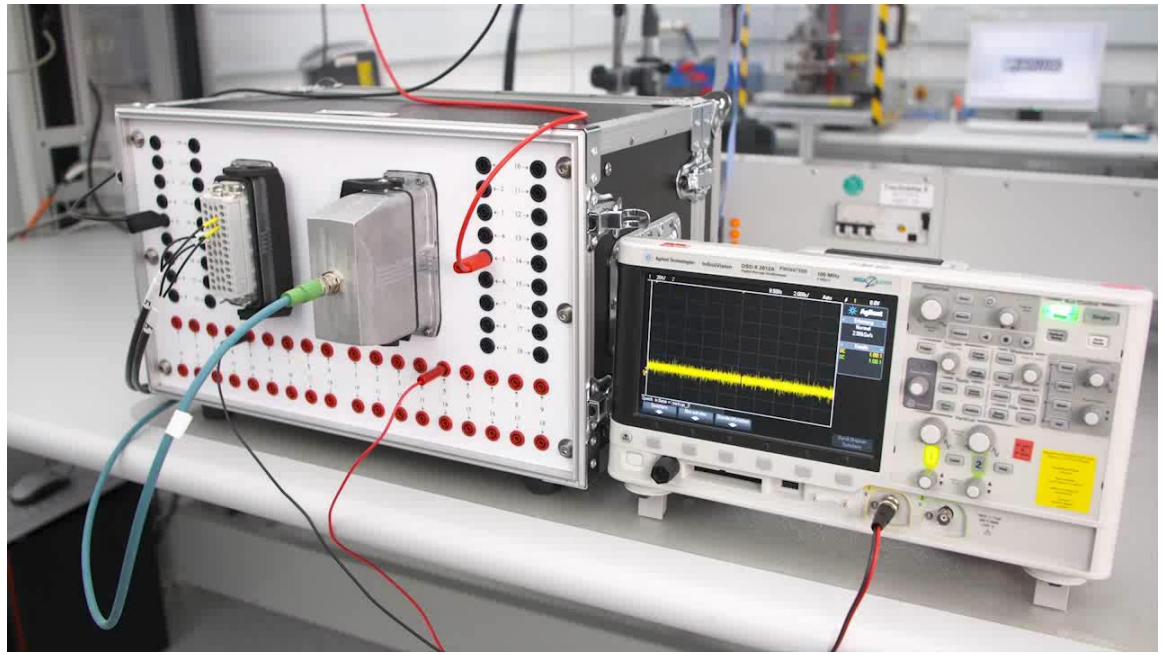
In the field of intelligent production plants and industrial networks, Advanced Shielding Technology realizes the future-proof transmission of high data volumes and continuously increasing transmission rates of up to 40 Gbps. The improved shield dissipation thus provides secure protection against electromagnetic interferences.

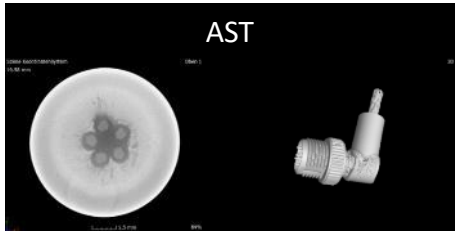


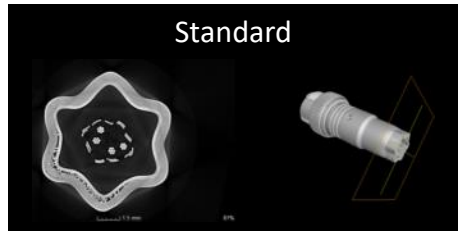
Advanced Shielding Technology

Totally reliable

Advanced Shielding Technology guarantees shock- and vibration-resistance at high mechanical loads in torsion, drag chain or robotic applications.







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Advanced Shielding Technology

Totally resistant

High voltages are briefly generated when switching inductive loads such as motors. Thanks to the continuous connection between the shielding braid and plug, assembled connectors with Advanced Shielding Technology are resistant to transient overvoltages and guarantee a higher level of system availability.

Advanced Shielding Technology

Totally robust

Thanks to the robust connection and 360° shield cover, connectors with Advanced Shielding Technology will easily even withstand lightning strikes and current peaks up to 20 kA. They are thus particularly suitable for use in outdoor applications.

Advanced Shielding Technology

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The new dimension of shielding for assembled M8 and M12 circular connectors

Further information under:
www.phoenixcontact.com/webcode/#2253

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