



Pushing Performance



People | Power | Partnership

## **HARTING Han<sup>®</sup> ES Press** Simple Connection with a Click

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The connector for rapid multiplication of potentials

# Use its full Potential: HARTING Han<sup>®</sup> ES Press

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HARTING has expanded its Han E<sup>®</sup> series, the international standard, to include a real multi-talent: the Han<sup>®</sup> ES Press. Its conductor termination technology requires no tools and can be installed in the field, so that, compared with other termination technologies, conductors can be connected with up to 50% less time and effort.

The Han<sup>®</sup> ES Press plug-in jumpers also enable multiple contacts to be bridged directly at the connector. This terminal block functionality now has a space saving implementation on the connector.



**Safe and quick assembly  
up to 50 % quicker**



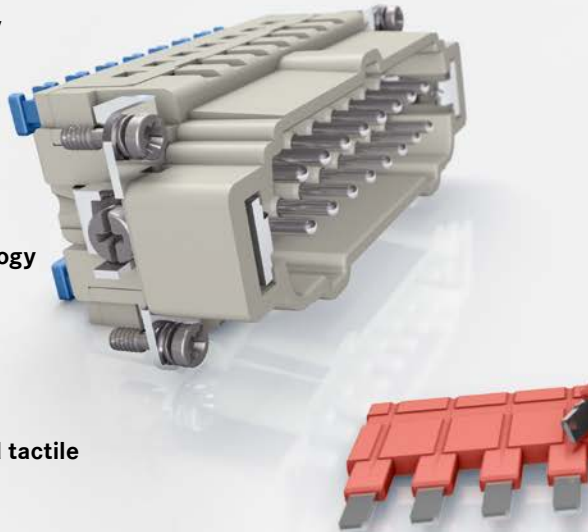
**Rapid termination technology  
without tools**



**Audible and tactile  
snap-in**



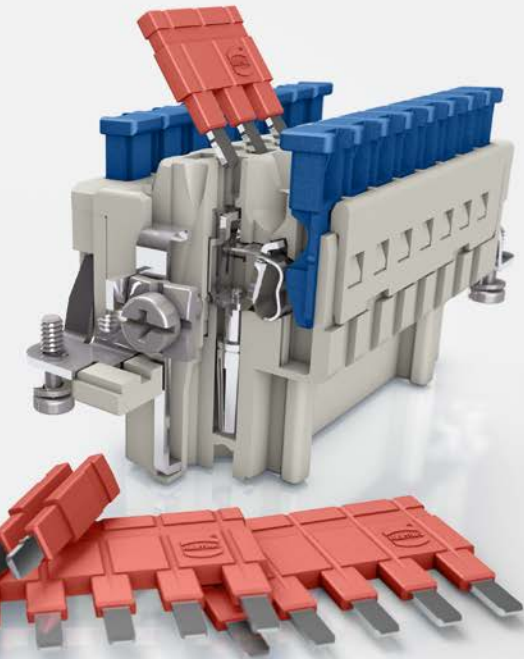
**Easy to bridge contacts  
for multiplication of potentials**



# Reliability in a Click: Han® ES Press Termination Technology

The innovative cage-clamp termination used in the Han® ES Press allows conductors to be installed without any tools, in a quick and vibration-resistant manner.

- Press-buttons and plug-in jumpers have an audible and tactile snap-in: for optimal process reliability.
- Conductors can be connected with or without ferrules, with conductor cross-sections from 0.14 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.
- No force needed to insert the conductor in the contact chamber (Zero Insertion Force).
- Can be assembled in the field.



**Integrated opening for measuring probe**



**Compatible with Han E®, Han® ES and Han® ESS – the international standards**

# Technical Characteristics

## Han<sup>®</sup> ES Press Inserts

### Inserts / Electrical data acc. to DIN EN 60 664-1 and DIN EN 61 984

Contacts	6, 10, 16, 24
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	$\geq 10^{10} \Omega$
Material	polycarbonate
Limiting temperatures	-40 °C ... +125 °C
Flammability acc. to UL 94	V 0
Mating cycles	$\geq 500$

### Contacts

Material power contacts	copper alloy
Surface	silver plated
Contact resistance	$\leq 3.0 \text{ m}\Omega$
Cage-clamp termination	0.14 ... 2.5 mm <sup>2</sup>
Max. insulation diameter	5.0 mm
Stripping length	9 ... 11 mm

For more information see data sheet:  
[www.HARTING.com/hanespress](http://www.HARTING.com/hanespress)

# Technical Characteristics

## Han® ES Press Inserts


	Identification	Figure	Drawings
Han® 6 ES Press	Male insert (M) Part No.: 09 33 006 2648		
	Female insert (F) Part No.: 09 33 006 2748		
Han® 10 ES Press	Male insert (M) Part No.: 09 33 010 2648		
	Female insert (F) Part No.: 09 33 010 2748		
Han® 16 ES Press	Male insert 1-16 (M) Part No.: 09 33 016 2648		
	Male insert 17-32 (M) Part No.: 09 33 016 2688		
	Female insert 1-16 (F) Part No.: 09 33 016 2748		
	Female insert 17-32 (F) Part No.: 09 33 016 2788		
Han® 24 ES Press	Male insert 1-24 (M) Part No.: 09 33 024 2648		
	Male insert 25-48 (M) Part No.: 09 33 024 2688		
	Female insert 1-24 (F) Part No.: 09 33 024 2748		
	Female insert 25-48 (F) Part No.: 09 33 024 2788		

For more information see data sheet:  
[www.HARTING.com/hanespress](http://www.HARTING.com/hanespress)

# Technical Characteristics

## Han<sup>®</sup> ES Press Plug-in Jumpers

### Plug-in jumpers

<b>Contacts</b>	2, 3, 5, 8, 12
<b>Colour jumpers</b>	 RAL 3018    RAL 5012    RAL 5004
<b>Rated current</b>	16 A
<b>Rated voltage</b>	500 V
<b>Rated impulse voltage</b>	6 kV
<b>Pollution degree</b>	3
<b>Limiting temperatures</b>	-40 °C ... +125 °C
<b>Flammability acc. to UL 94</b>	V 0
<b>Mating cycles</b>	≥ 5 mating cycles
<b>Material insulation</b>	polyamide
<b>Insulation resistance</b>	≥ 10 <sup>10</sup> Ω
<b>Material power contacts</b>	copper alloy
<b>Surface</b>	tin plated
<b>Contact resistance</b>	≤ 1.0 mΩ

For more information see data sheet:  
[www.HARTING.com/hanespress](http://www.HARTING.com/hanespress)

# Technical Characteristics

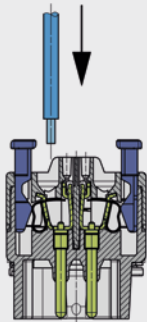
## Han<sup>®</sup> ES Press Plug-in Jumpers

Identificaiton	Figure	Drawings
Plug-in jumper 2 × 1 red Part No.: 09 33 000 9820 Plug-in jumper 2 × 1 blue Part No.: 09 33 000 9821 Plug-in jumper 2 × 1 black Part No.: 09 33 000 9822		
Plug-in jumper 1×2 red Part No.: 09 33 000 9830 Plug-in jumper 1×2 blue Part No.: 09 33 000 9841 Plug-in jumper 1×2 black Part No.: 09 33 000 9852		
Plug-in jumper 1 × 3 red Part No.: 09 33 000 9831 Plug-in jumper 1 × 3 blue Part No.: 09 33 000 9842 Plug-in jumper 1 × 3 black Part No.: 09 33 000 9853		
Plug-in jumper 1 × 5 red Part No.: 09 33 000 9833 Plug-in jumper 1 × 5 blue Part No.: 09 33 000 9844 Plug-in jumper 1 × 5 black Part No.: 09 33 000 9855		
Plug-in jumper 1 × 8 red Part No.: 09 33 000 9836 Plug-in jumper 1 × 8 blue Part No.: 09 33 000 9847 Plug-in jumper 1 × 8 black Part No.: 09 33 000 9858		
Plug-in jumper 1 × 12 red Part No.: 09 33 000 9840 Plug-in jumper 1 × 12 blue Part No.: 09 33 000 9851 Plug-in jumper 1 × 12 black Part No.: 09 33 000 9862		

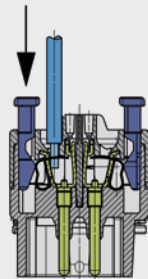
# Assembly Instructions

## Conductors

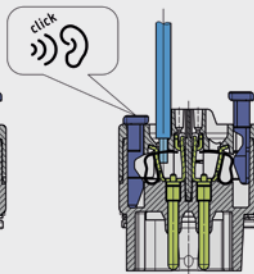
**Quick installation: assembly and removal of conductors – with or without ferrules.**



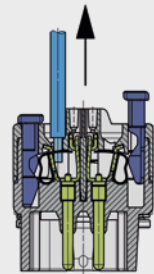
Insert the prepared conductor (with or without ferrule) into the contact chamber, using no extra force.



Press in the actuator using gentle finger pressure.

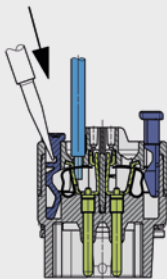


The actuator snaps in with a clearly audible click sound.

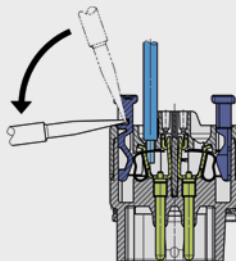


Pull gently on the conductor to ensure that it has been installed securely.

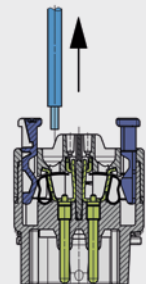
- Before processing further, make sure that all actuators are closed -



A conventional screwdriver (2.5 mm blade width) can be inserted into the actuator diagonally from above.



Use a gentle levering motion to lift the actuator out of the contact chamber.



The conductor can be easily pulled out of the unlocked cage-clamp termination.

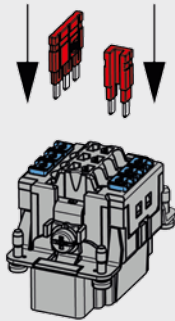


# Assembly Instructions

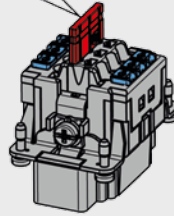
## Plug-in Jumpers

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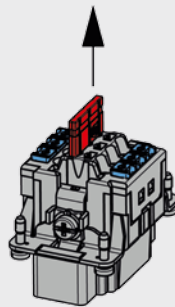
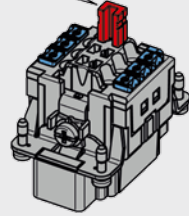
Easy to bridge: assembling the plug-in jumpers.



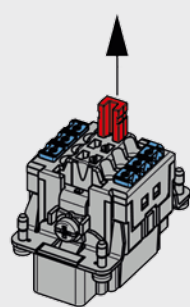
Gently press the plug-in jumpers into the appropriate jumper openings.



The jumpers snap in with a clearly audible click sound.

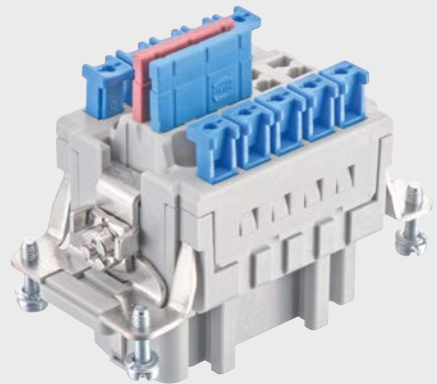
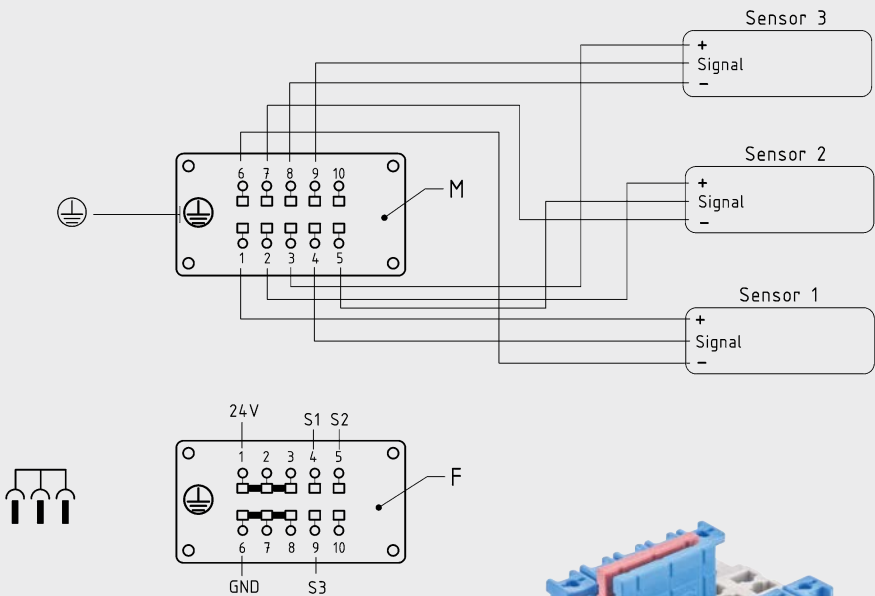


The plug-in jumpers can be removed by hand from the jumper openings. No special tool is required.



# A Connection Example for Multiplication of Potentials

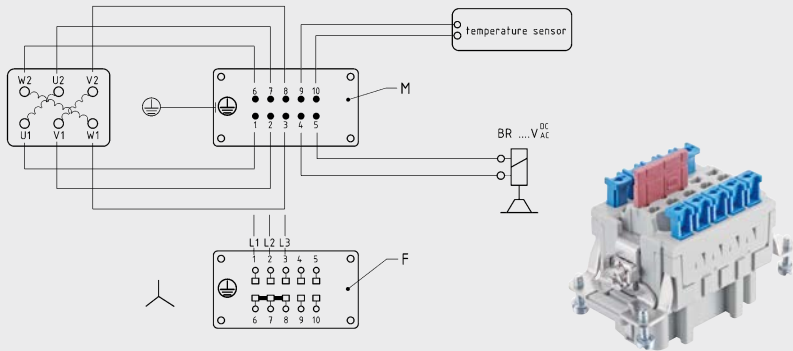
With the Han® ES Press plug-in jumpers, you can quickly and easily bridge contacts directly in the connector.



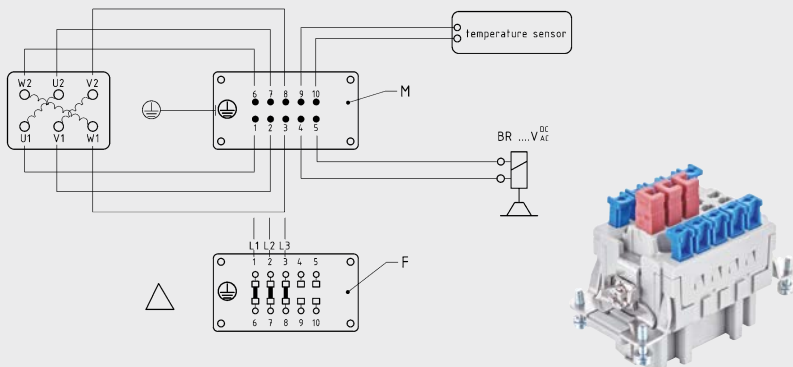
# An Application Example for Motor Connection Circuits

The star and delta connections can be easily implemented using the three-way lengthwise plug-in jumpers and the two-way cross-link plug-in jumpers.

## Star connection



## Delta connection





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## HARTING.com – the gateway to your country website

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