

# TOOL-LESS CONNECTORS

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Easy, fast and safe  
wiring

# THE TRADITION OF INNOVATION SINCE 1945

ILME designs and manufactures complete solutions for industrial connections.

Headquartered in Milan and with subsidiaries in the key countries driving the progress of automation, ILME is an industry leader in the main world markets.

People are vital to success and growth at ILME, sharing a passion for innovation, utmost responsibility and participation.

The Company is committed to developing technology in the areas that mostly impact the future of the industries it serves: safe and high quality wiring, research on the most suitable materials, rapid delivery time and readily available services, while striving for energy saving and environmental protection.



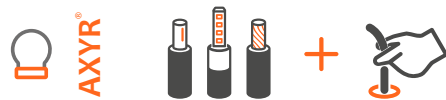
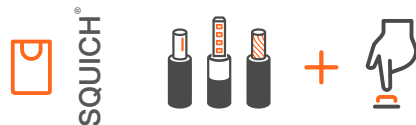
# ILME TOOL-LESS CONNECTION TECHNOLOGY OVERVIEW

When it comes to the assembly, connection and mounting of connectors, an easy and fast termination technology benefits the operator and the overall process performance.

By minimizing the risk of errors and requiring less time to build each connection, production and maintenance costs decrease significantly allowing more complete connectors to be ready in less time.

Tool-less wiring is the standard operation that ILME offers wherever possible, **just insert the wire and with a click the connection is made.** No need of specific tools or skills. As simple as that!

## FAST AND RELIABLE CONNECTIONS IN RECORD TIME!



## KEY FEATURES



### QUICK

Save time in the wiring process



### EASY

No specific know-how and no wiring tools required



### SAFE

Withstand the most demanding mechanical stresses and vibrations



### COMPATIBLE

Suitable for prepared, unprepared and solid wires

The cornerstone of ILME R&D activity focusing on easy installation and safe wiring gets its pioneering example in the SQUICH® technology.

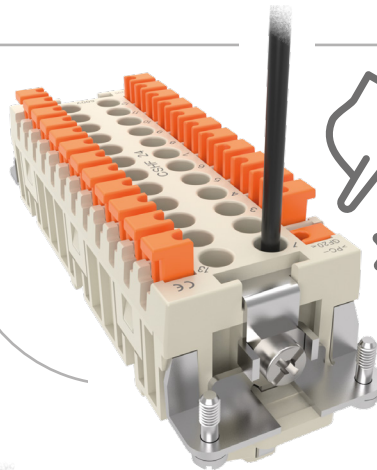
Based on well-known and proven spring technology, SQUICH® allows tool-free connection **at the push of a button**, while providing all the advantages of traditional springs, such as resistance to temperature changes, shock and vibration.

Compatible with prepared, unprepared and solid wires, any application benefits from a safe and reliable electrical connection.

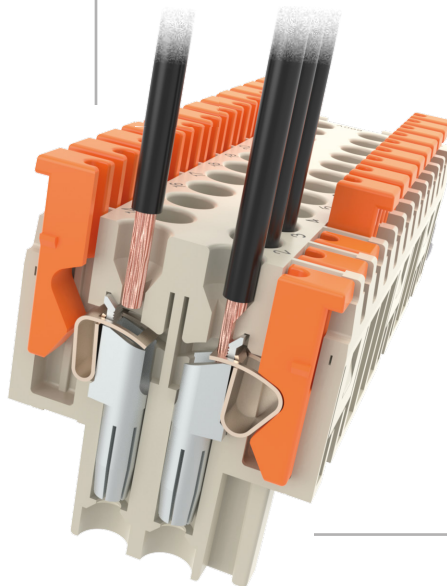


Watch  
our video

Insert the wire  
into the contact hole

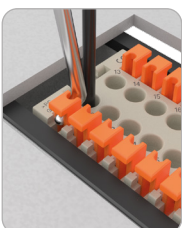


Just Push the  
actuator button



The spring clamp  
safely fixes the wire

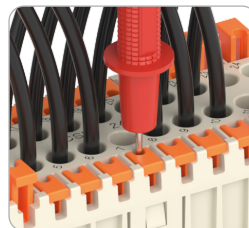
## Re-opening



**CSHES** allows the release of the connection from a SQUICH® terminal without disassembling the connector from the bulkhead mounting housing.

Not suitable for CKSH and CX 05 SH, whose re-opening can be done with a flat blade screwdriver.

## Probing slots



Easy to access probing slot  
on buttons for measuring devices,  
even with mounted connector.



## Product range for 16 A connections

Cross sectional area of either prepared or unprepared wires: 0,14 – 2,5 mm<sup>2</sup> / AWG 26 – AWG 14

### CSH

#### The original one

Rating  
16 A 500 V 6 kV 3  
16 A 400/690 V 6 kV 2

#### Variants

**JSH S** with stamped tin plated contacts  
**RSH** with gold plated contacts for HNM  
**CSH T** for thermocouple applications

#### CSH 06

#### CSH 10

#### CSH 16

#### CSH 24

Poles	6 + ⊕	10 + ⊕	16 + ⊕	24 + ⊕
Size	44.27	57.27	77.27	104.27

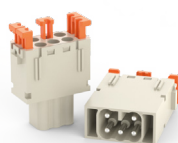


### CX 05 SH

#### MIXO Modular version

Poles 5  
Size 1 module

Rating  
16 A 400 V 6 kV 3  
16 A 500 V 6 kV 2



### CSAH

#### Slim size

Rating  
16 A 250 V 4 kV 3  
16 A 400 V 4 kV 2

Max. 1,5 mm<sup>2</sup> / AWG 16  
prepared stranded wires

#### CSAH 10

#### CSAH 16

Poles	10 + ⊕	16 + ⊕
Size	49.16	66.16



### CMSH

#### High voltage

Rating  
16 A 830 V 8 kV 3  
16 A 1000 V 8 kV 2  
16 A 720/1250 V 8 kV 2

Auxiliary contacts rating  
16 A 500 V 6 kV 3

#### CMSH 03

#### CMSH 06

#### CMSH 10

Poles	3 + 2 + ⊕	6 + 2 + ⊕	10 + 2 + ⊕
Size	57.27	77.27	104.27



## Product range for 10 A connections

Cross sectional area of unprepared wires: 0,14 – 2,5 mm<sup>2</sup> / AWG 26 – AWG 14

Cross sectional area of prepared wires: 0,14 – 1,5 mm<sup>2</sup> / AWG 26 – AWG 16

### CDSH

#### The highest density

Rating  
10 A 400 V 6 kV 3  
10 A 400/690 V 6 kV 2

#### Coding System OPTIONAL



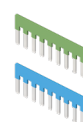
**CR K03** for CDSH

#### Variants

**RDSH** with gold plated contacts for HNM

**CDSH 06 NC** insert featuring 3 contact pairs with **AutoShort NC** element on each pair of female connector

#### Accessories



Parallel bridges for CDSH for extra-low voltage applications

Rating  
10 A 50 V 0,8 kV 3

#### CDSH 09

#### CDSH 18

#### CDSH 27

#### CDSH 42

Poles	9 + ⊕	18 + ⊕	27 + ⊕	42 + ⊕
Size	44.27	57.27	77.27	104.27



### CKSH

#### Compact size 21.21

Rating  
10 A 400 V 4 kV 3  
10 A 690 V 4 kV 2

#### Coding System OPTIONAL



**CR K03** for CKSH 03



**CR K04R** for CKSH 04  
**CR K04G** for CKSH 04

#### CKSH 03

#### CKSH 04

Poles	3 + ⊕	4 + ⊕
Size	21.21	21.21



Green button for PE contact





**AXYR®**

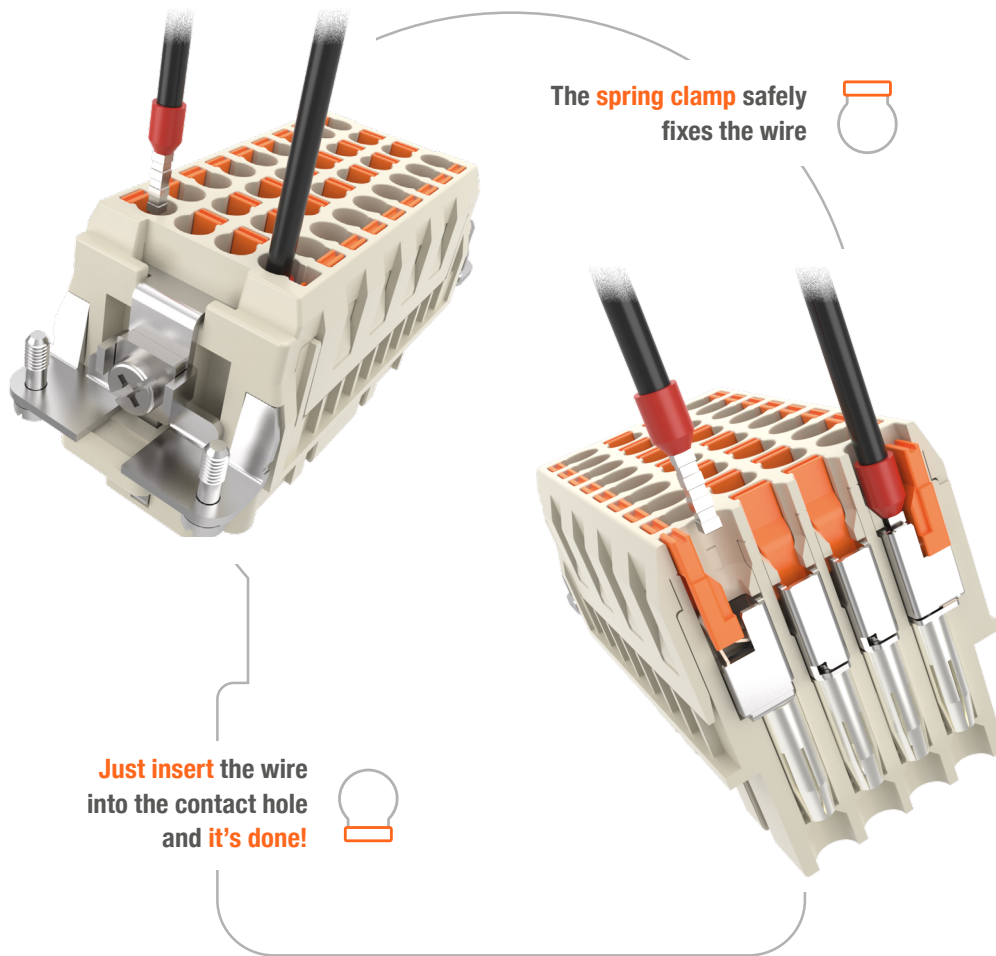
AXYR® is the new rapid connection technology developed by ILME to optimize work times and methods, enabling industries of all sectors to reach their automation targets more effectively.

An **extremely compact push-in spring termination** which equals crimp connectors in high density, therefore guaranteeing an equivalent electrical performance.

Wiring in axis is the formula that recaps the technology strongpoint as it enables **straightforward tool-less wiring**. Operations require one simple step: wire insertion.



Watch  
our video



### Re-opening



Push down the actuator button by a flat-blade screwdriver (0,5 × 3 mm max.) to remove the wire.

### Accessories

Coding Systems  
OPTIONAL



CR Q08E

Coding pins for **CQEY** and **CQY 08E** for up to 6 unique configurations.



CR CPC

Coding pins for **CPY 06** for up to 6 unique configurations.

## Product range for 40 A and 35 A connections

Cross sectional area of prepared wires: 1,5 – 6 mm<sup>2</sup> / AWG 16 – AWG 10  
Cross sectional area of unprepared wires: 1,5 – 6 mm<sup>2</sup> / AWG 16 – AWG 10

### MIXO Modular versions

#### 40 A inserts

	CX 02 4Y	CX 03 4Y	CX 04 XY
Poles	2	3	4
Size	1 module	1 module	1 module

**i**  
Cross sectional area of prepared wires:  
1,5 – 4 mm<sup>2</sup> /  
AWG 16 – AWG 12



Rating 40 A 1000 V 8 kV 3 40 A 690 V 8 kV 3 40 A 830 V 8 kV 3

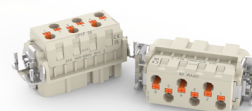
### CPY 06

#### 35 A inserts

Poles	6 + ⊕
Size	77.27

Coding System  
OPTIONAL

**CR CPC**  
coding pins



Rating  
35 A 400 / 690 V 6 kV 3

## Product range for 16 A connections

Cross sectional area of prepared wires: 0,25 – 2,5 mm<sup>2</sup> / AWG 24 – AWG 14  
Cross sectional area of unprepared wires: 0,25 – 4,0 mm<sup>2</sup> / AWG 24 – AWG 12

### CQEY

#### High contacts density

Rating  
16 A 500 V 6 kV 3  
16 A 830 V 8 kV 2



Coding System  
OPTIONAL  
**CR Q08E** coding pins

	CQEY 10	CQEY 18	CQEY 32	CQEY 46
Poles	10 + ⊕	18 + ⊕	32 + ⊕	46 + ⊕
Size	44.27	57.27	77.27	104.27



### CQY 08E

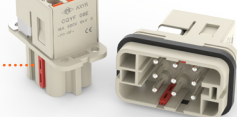
#### Compact size with integrated PE plate

Poles 8 + ⊕  
Size 32.13



Green button  
for PE contact

**CR Q08E** coding pin  
(up to 4 pins)  
OPTIONAL



Rating  
16 A 500 V 6 kV 3  
16 A 400 / 690 V 8 kV 2

### CQY 05

#### Compact size 21.21

Poles 5 + ⊕  
Size 21.21



Green button  
for PE contact



Rating 16 A 230 / 400 V 4 kV 3

### CX 06 CY and CX 08 CY

#### MIXO Modular versions

Poles 6  
Size 1 module



Rating 16 A 500 V 6 kV 3

Poles 8  
Size 1 module



Rating 16 A 400 V 6 kV 3

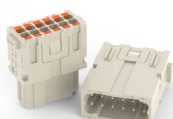
## Product range for 10 A connections

Cross sectional area of prepared wires: 0,14 – 1,5 mm<sup>2</sup> / AWG 26 – AWG 16  
Cross sectional area of unprepared wires: 0,14 – 2,5 mm<sup>2</sup> / AWG 26 – AWG 14

### CX 12 DY

#### MIXO Modular version

Poles 12  
Size 1 module



Rating 10 A 250 V 4 kV 3

### CDY 07

#### Compact size 21.21

Poles 7 + ⊕  
Size 21.21



Green button  
for PE contact

Rating 10 A 250 V 4 kV 3  
10 A 230 / 400 V 4 kV 2

### CDY 08

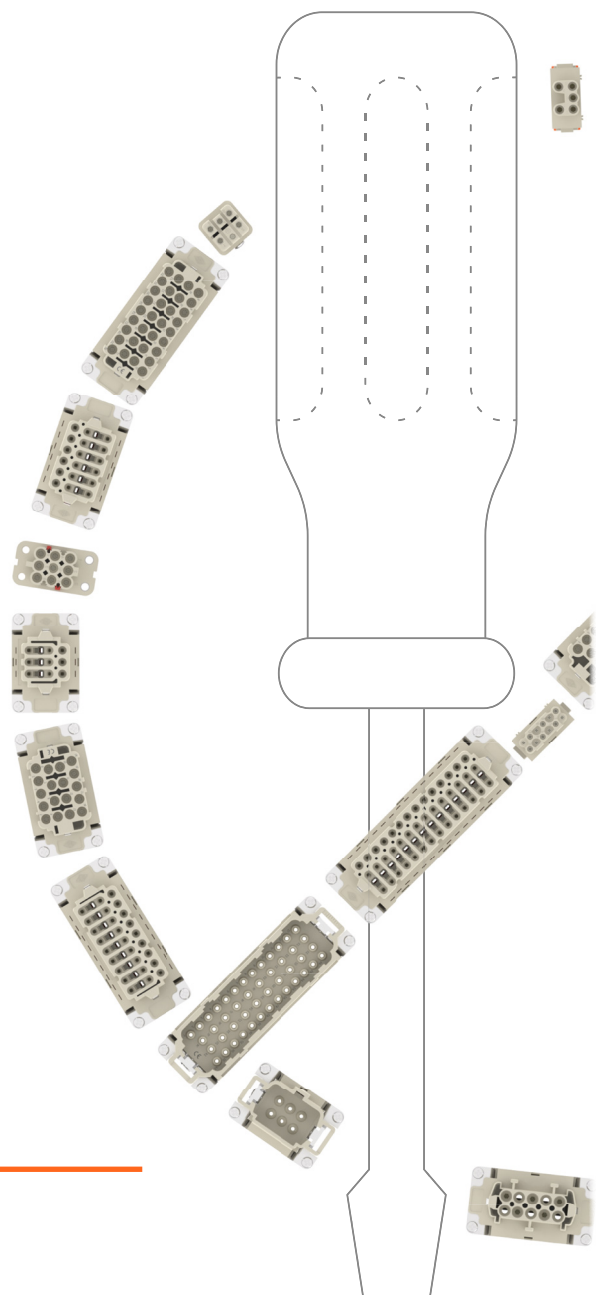
#### Compact size 21.21

Poles 8  
Size 21.21

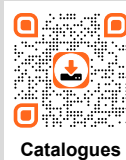


Rating 10 A 50 V<sub>AC</sub> / 120 V<sub>DC</sub> 0,8 kV 3





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**XDG TLS 325**



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