



Tool-less and quick connection for industrial applications

# 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 most 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.

# SQUICH® TOOL-LESS CONNECTION



The cornerstones of **ILME R&D** activity are original solutions, easy installation and safe wiring: a pioneering example is the **SQUICH®** proprietary technology.

Wiring without tools is the "new standard" operation ILME pursues on connectors. Insert the wire and just push. As simple as that!



#### **QUICK**

#### REDUCED WIRING TIME

Save up to 50% in wiring time, just push the buttons and the installation process is optimized and practically error-free.



#### **EASY**

### NO NEED FOR WIRING TOOLS

Just push the buttons for a clever connection, with no need for specific screwdrivers and torque control.



#### SAFE

#### VIBRATION RESISTANCE

**SQUICH®** spring technology withstands the mechanical stresses and vibrations of even the most demanding applications.



#### **UNIVERSAL**

#### SUITABLE FOR ANY WIRE

Suitable for both solid and stranded wires, either un-ferruled or ferruled\*, with a cross-sectional area range of 0,14 to 2,5 mm<sup>2</sup>/AWG 26 - 14.

 Ferruled stranded wires up to 1,5 mm<sup>2</sup> / AWG 16 in CKSH, CDSH and CSAH series.



### **SQUICH® SERIES AT A GLANCE**

### **JUST PUSH!**

## CKSH-



### **Compact size**

### Easy wiring in a small dimension

Characteristics according to EN 61984	10 A 400 V 4kV 3 10 A 690 V 4kV 2
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14*
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	CAUS DNV VISION FRE COC
Coding pins	CR K03  Proprietary coding
	CR K04R CR K04G System

 $<sup>^{\</sup>bullet}$  max 1,5  $\text{mm}^2$  / AWG 16 with crimped ferrule





4

Number of poles +  $\oplus$ 

## **CX 05 SH** —



#### **Modular version**

### SQUICH® technology for modular inserts

Characteristics according to EN 61984	16 A 400 V 6kV 3 16 A 500 V 6kV 2
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	calus ECBT2-ECBT8, a PVVA2
	DNA METER [H[ Céc
MIXO series video	



5

Number of poles

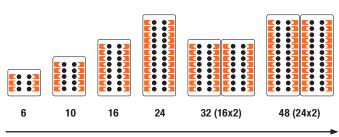
#### **CSH**



### The original one

#### Save up to 50% in wiring time

Characteristics according to EN 61984	16 A 500 V 6kV 3 16 A 400 V / 690 V 6kV 2
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	c Sus ECBT2-ECBT8, PVVA2-PVVA8
	ENI (B) COC
	Valid for standard version, see data sheet for variants
Variants	CSHF/M S stamped contacts, silver-plated
	RSHF/M HNM High number of matings, gold (6, 10, 16, 24 poles only)



Number of poles +  $\oplus$ 

### **CDSH**

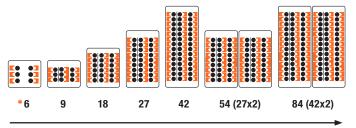


### The highest density

#### 70% more contacts in the standard size

Characteristics according to EN 61984	10 A 400 V 6kV 3 10 A 400 V / 690 V 6kV 2
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14°
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	CALUS DNV WARMS [H[ COC
Variant	RDSHF/M HNM High number of matings, gold (9, 18, 27, 42 poles only)
Parallel bridges for low voltage applications	10 A 50 V 0,8kV 3
Coding pin	CR CDS Proprietary coding System
Special version	CDSH 06 NC* with 3 pairs of contacts with AutoShort NC element on each pair

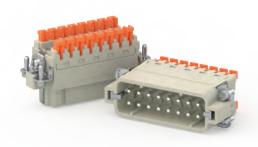
 $^{\bullet}$  max 1,5  $mm^2$  / AWG 16 with crimped ferrule



of female connector

Number of poles +  $\oplus$ 

# **CSAH**

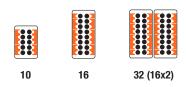


#### **Slim size**

#### SQUICH® concept in a miniaturized version

Characteristics according to EN 61984	16 A 250 V 4kV 3 16 A 400 V 4kV 2
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14*
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	CRUS DNV WILLIAM ERE (D) (CC)

<sup>\*</sup> max 1,5 mm² / AWG 16 with crimped ferrule



Number of poles +  $\oplus$ 

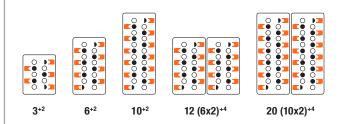
# **CMSH**



### **High voltage**

## For voltages up to 830 V, suitable for any enclosure

Characteristics according to EN 61984	16 A 830 V 8kV 3 16 A 1000 V 8kV 2 16 A 720 V / 1250 V 8kV 2
Auxiliary contacts	16 A 500 V 6kV 3
UL/CSA voltage rating	600 V
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Wire cross-section	0,14 - 2,5 mm <sup>2</sup> / AWG 26 - 14
Mating cycles	≥ 500
Operating temperature range	-40 °C +125 °C
UL 94 flammability rating	V-0
Certifications	CALUS DAY PERMAN FRE COC

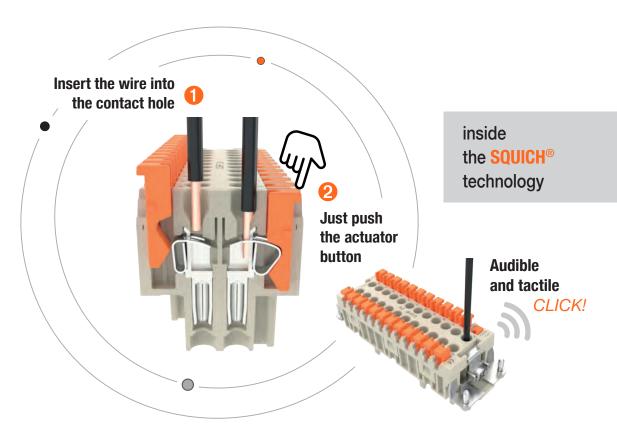


Number of poles + aux +  $\oplus$ 



#### **SQUICH®**

Spring technology for reliable and vibration-proof connection in any condition





**Quick identification** of cabled and non-cabled terminals.



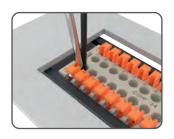
Easy to access probing slot on buttons for measuring devices, even with mounted connector.



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.

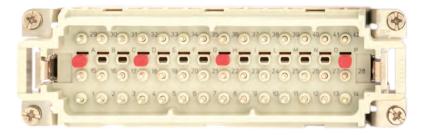
#### **CSHES**

















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