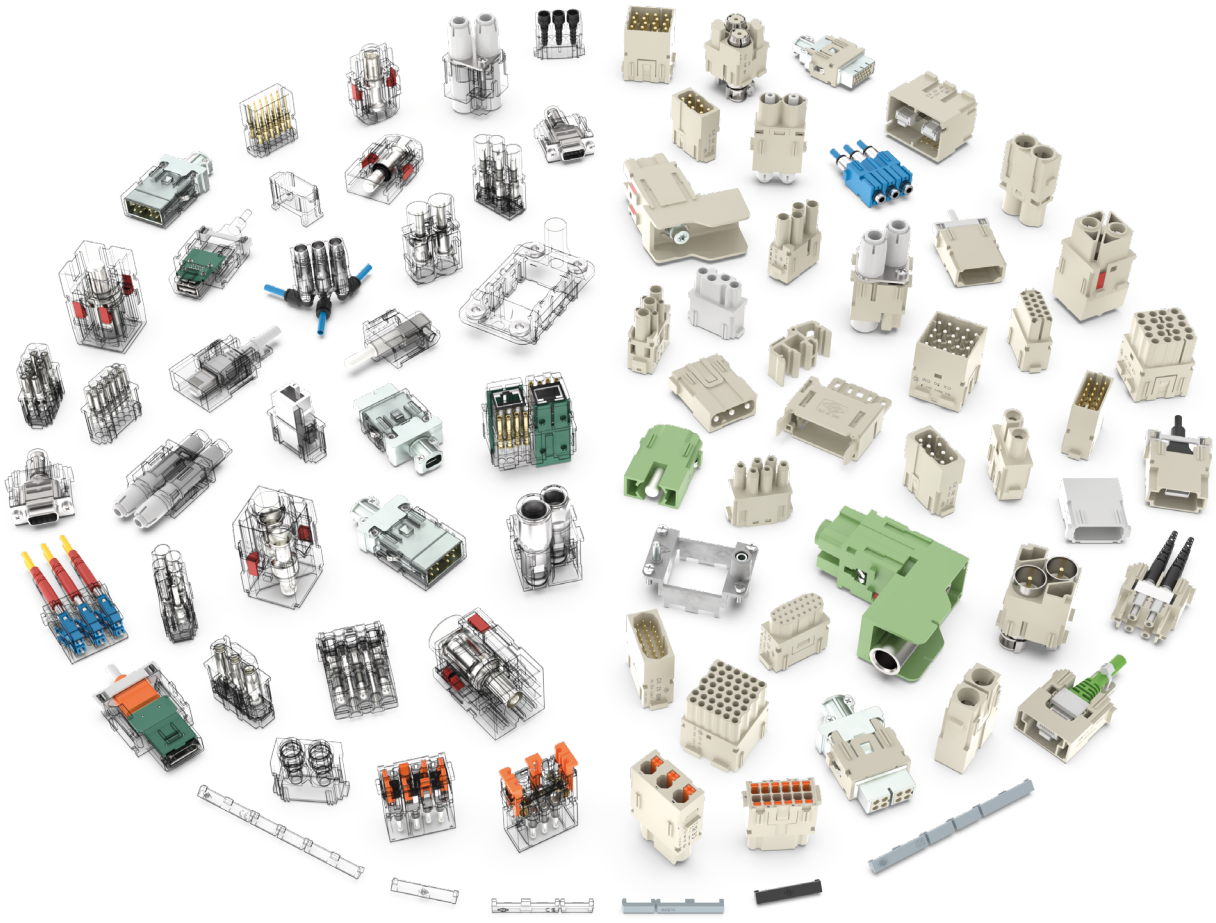
MIXO
MODULAR SYSTEM

Build your connector



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.

Modular flexibility is further enhanced with the **MIXO ONE** and **MIXO TWO** enclosures, which allow modules to be combined in a highly space-efficient and versatile manner.





MIXO ONE

The MIXO ONE are a rugged die-cast aluminium enclosures designed to house most of the MIXO range of 1-slot modules.

The enclosures are equipped with an M25 or M32 cable entry and include a screw type PE connection terminal.

In addition, a custom coding system is available with up to 16 different combinations to prevent incorrect module pairing.

MIXO TWO

The MIXO TWO enclosures are specifically designed to accommodate two 1-slot modules, expanding the possible configurations for compact, independent connectors.

These enclosures feature a one-piece hood with a robust design and a large cable entry (up to M32).

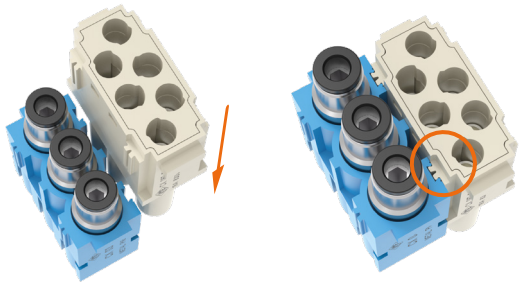
They also include a dedicated two-slot MIXO frame with sliding, captive module locking tabs and an integrated PE connection to simplify and quicken the wiring process.

MIXO SERIES
GENERAL OVERVIEW

The modular electrical connectors offer maximum flexibility for any interface required, allowing a virtually unique individual connector to be configured and installed.

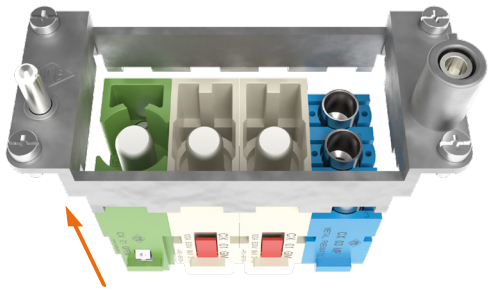
MIXO, ILME's modular connector for automation, is a simple block-based system. Over 80 different MIXO modules are available, offering a wide choice.

The range includes modules for power electrical, signal transmission, data transmission, fibre optics, video signals and even compressed air, providing a wide range of solutions that is constantly being expanded to allow ever-new configurations. Modularity and a wide range of options to allow users to create their own customised connector.

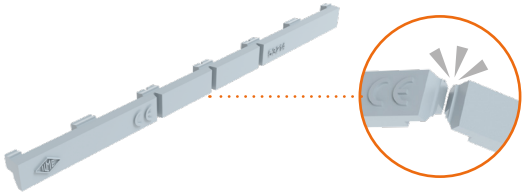


The ILME MIXO system is characterised by its simplicity and ease of use.

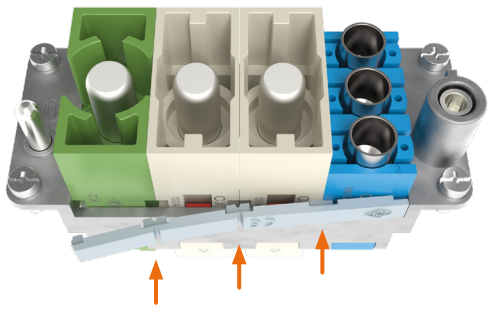
Individual MIXO modules are simply snapped together like building blocks, thanks to the patented 'dovetails' on the sides of the MIXO modules, to form a solid, monolithic unit.

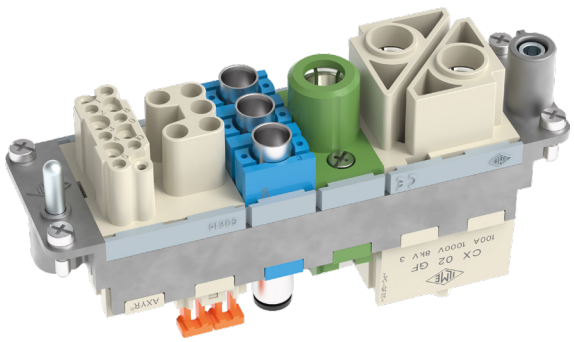


This block is then inserted into the corresponding frame and secured with the module locking tabs (only for use in metal frames),



which can be divided according to the number of modules used; they guarantee perfect stability of the modules during wiring and mating/unmating.





MIXO SERIES

The ILME MIXO series of modular connectors is an open connector system that offers versatile configuration to meet individual user requirements, giving the freedom to assemble a customised connector from a wide range of modules for power electrical, data transmission, optical signals or air.

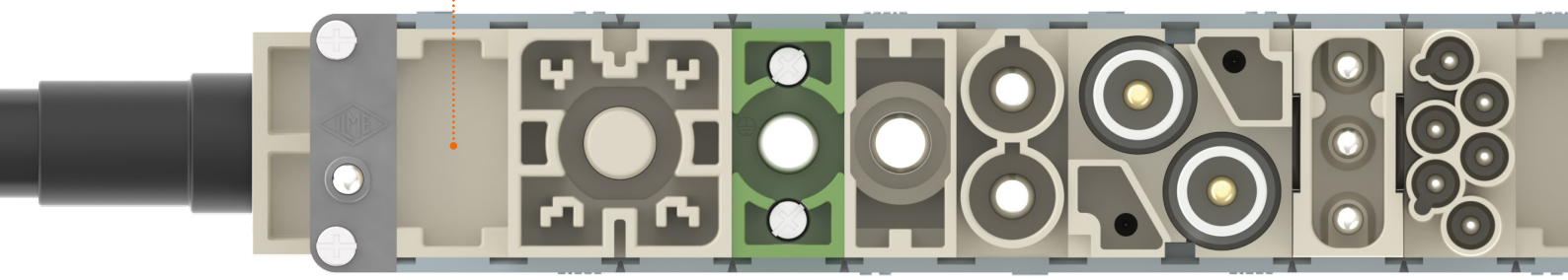
The range of modules is continuously being expanded, allowing new configurations to be implemented.

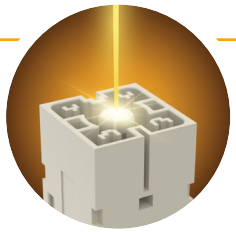
USER BENEFITS:

- Customised configurations
- Compatible with market standards
- Easy to install
- Easy to upgrade and repair
- Suitable for harsh environments



CX FM Dummy Module: use to fill an empty fram e slot





POWER

ILME robust **modular power connectors** are designed to provide reliable, user-friendly and secure connections for power transmission systems in a wide range of demanding applications. Designed to handle high power loads, these modules are capable to carry a nominal current rating of 300 A. They are typically used in applications requiring high current at higher voltage, such as power distribution systems, drive technology and industrial energy supply, but are also becoming the new standard for renewable energy applications, including industrial charging infrastructure and energy storage systems.

AT A GLANCE:

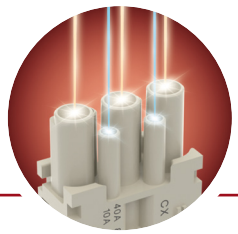
- **300 A** current carrying capacity for crimp contacts up to 120 mm² wires. 90° -angled screw terminal connection for DIN 46235 cable lugs.
- **2-slot modules** for IP2X finger-proof design on male and female contacts to guarantee maximum safety against accidental contacts.
- 2-slot **PE** modules and 1-slot compact PE modules for secure connection of protective earth wires up to 35 mm² / AWG 2.

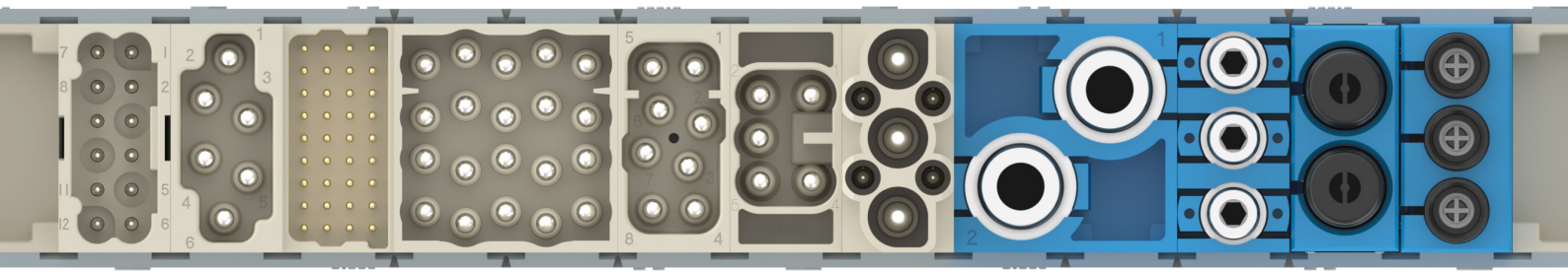
POWER / SIGNAL

These modules provide a **versatile and efficient solution** for modern electrical systems, covering a low to medium current carrying capacity range (70 A - 10 A and 5 A) for power and signal-based connections. By combining crimp and tool-less termination in compact 1-slot and 2-slot modules, the relevant number of available connections makes them essential in industrial automation, robot and control technology, and custom applications.

AT A GLANCE:

- **AXYR®** tool-less connection for 40 A, 16 A and 10 A modules, fully compatible with equivalent crimp version modules like CX 04 X (4 poles, 40 A), CX 12 D (12 poles, 10 A) and CX 08 CY (08 poles, 16 A).
- Combined modules like CX 3/4 X with three main contacts for currents up to **40 A** and four 10 A auxiliary contacts.
- 1-slot modules for 5 A signal application, with high connection density (CX 25 IB with 25 poles, or CX 36 I with **36 poles**).







PNEUMATIC

Pneumatic modules are used to connect pneumatic systems, providing a **stable and secure connection** between components in a compressed air system. Manufactured from durable plastic or metal, the internal contacts offer resistance to corrosion, wear and mechanical stress and can withstand high air pressures, making them suitable for a wide range of industrial environments and applications. Modular pneumatic connectors allow multiple tubes to be connected, simplifying the system and improving overall handling. Available in various sizes, options include either a barbed or quick-connect fitting to suit different requirements.

AT A GLANCE:

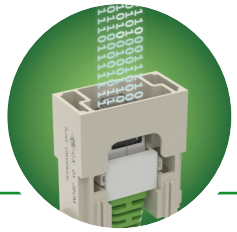
- Up to **10 bar** working pressure in an environment with ambient temperatures of -40 °C to +80 °C.
- Contacts with hose barbs and quick-fitting assembly for **inner diameter (ID) and outer diameter (OD) tubes.** Compatible up to 10 mm.
- Female contacts with an optional **shut-off valve** to avoid air leakage while opening the connector.

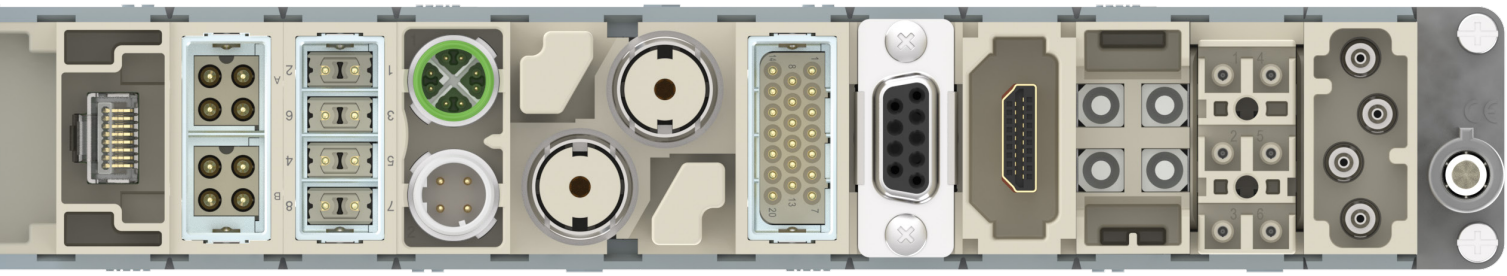
DATA

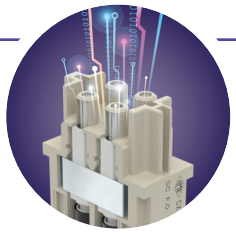
Digitalization is driving data growth in all industrial environments. Designed to support Industrial Ethernet and high-speed data transfer, MIXO **data modules** minimize signal degradation, ensuring reliable data transfer even at high frequencies. Features such as shielded designs, low-impedance contacts, and compatibility with twisted pair wires are often incorporated to reduce electromagnetic interference and crosstalk between signal paths, thereby enhancing data integrity.

AT A GLANCE:

- MIXO **adapter** for two shielded connector inserts for reliable data transmission via Industrial Ethernet and PROFINET (D-coded) or Gigabit and High-Speed Ethernet (X-coded). Available with crimp contacts or as a patch cable.
- MIXO 1-slot modules for **RJ45** connectors with different wiring termination, crimp, IDC or compatible patch cables.
- Modules with a standardized interface, **USB, D-SUB and HDMI** for data and video connections.







FIBRE OPTIC

When it comes to the fast-paced world of modern connectivity, where data transmission meets the speed of light, **modular connectors for fibre optic** applications are at the heart of industrial environments. Designed to meet the high-performance requirements of fibre optic data transmission systems, these modules facilitate the connection of fibre optic cables to various electronic and communications systems, enabling high-speed and secure data transmission over long distances. In addition to enabling high-density configurations, the modules are designed to ensure low signal loss and minimal degradation, which is critical to maintaining high-quality data integrity in fibre optic communications.

AT A GLANCE (GENERAL):

- Modules for standardized **SC** and **LC** fibre optic contacts.
- Compatibility with multi-mode and single-mode **glass fibre and Plastic Optical Fibre (POF).**
- Accessories and tools for **high-quality assembly** and installation.

MIXO FRAMES

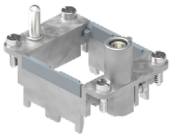
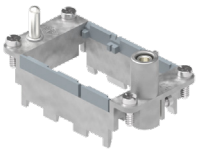
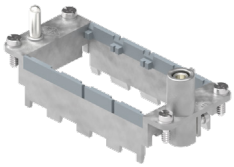
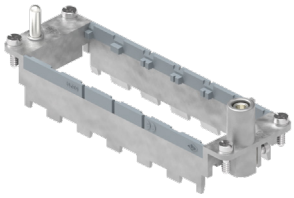
The inserts are arranged side-by-side to form a single compact block, which is inserted into metal frames and locked in place with special tabs, or into thermoplastic frames using a snap-in system for direct panel mounting. Depending on the number of MIXO modules or enclosure size, five frame options are available, ranging from a single-module version (except for thermoplastic version) to a frame that accommodates up to six modules.

NOTE: Standard locking tabs for MIXO modules are typically light grey, with the exception of specific modules that are supplied with locking tabs in different colours.

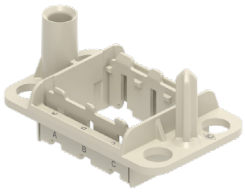
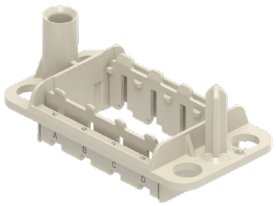
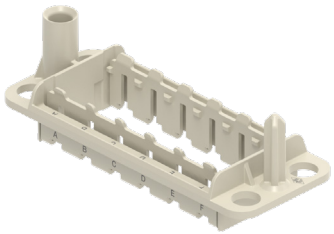
ENCLOSURE SIZE

49.16	44.27	57.27	77.27	104.27
1 slot	2 slots	3 slots	4 slots	6 slots

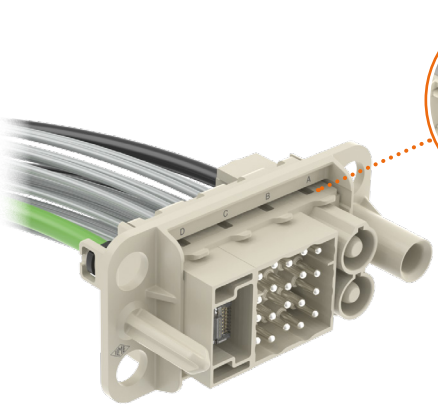
METAL

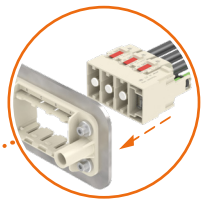
CX 01 TF/TM	CX 02 TF/TM	CX 03 TF/TM	CX 04 TF/TM	CX 06 TF/TM
				

THERMOPLASTIC

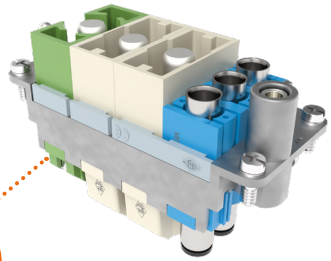
	CX 02 PDF/PDM	CX 03 PDF/PDM	CX 04 PDF/PDM	CX 06 PDF/PDM
				
	2 slots	3 slots	4 slots	6 slots

NOTE: MIXO thermoplastic docking frames cannot be mounted inside enclosures.





THERMOPLASTIC
Male/female frames with **elastic clips** for snap-in insertion, made of thermoplastic insulating UL 94 V-0 material.



METAL
Male/female module carrier frames with **obliged positioning** and polarization, in die-cast zinc alloy.



Listening.
Understanding.
Connecting.

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