

# Data transmission connectors RJ45 Series



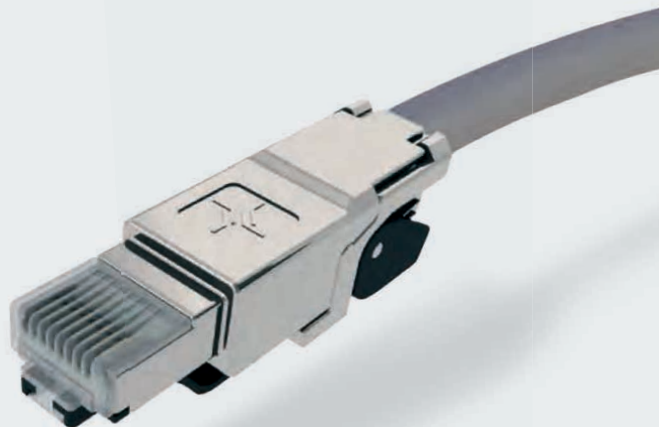
Cat.6<sub>A</sub> 10 GBE 500 MHz fully shielded PoE+

## RJ45 Cat.6<sub>A</sub>

Field assembly RJ45 plug series

## RJ45 Cat.6A applications

The field assembly RJ45 Cat.6<sub>A</sub> plug series is the number one choice whenever efficient and reliable connections are needed without major expense or effort, whether for classic cabling systems in office buildings, data centers, in industry or for home cabling systems. Needless to say, it also supports Power over Ethernet plus (PoE+).



### Office/premise cabling and data centers

With the RJ45 Cat.6<sub>A</sub> plug series, installers and network professionals now have access to RJ45 plugs which will enable them to respond with speed and flexibility, even at short notice, to any requirement, be it cabling for workstations, connections for equipment or backbone extensions.

Connections can be made with all standard cable types, even with transfer rates of 10 Gigabit Ethernet/s (10GBase-T), without requiring hours of preparation and the need for special tools. It is particularly cost-effective for connections in data centers where every centimeter counts. Space problems due to surplus cable are consigned to history books. Thanks to its compact design and suitability for multiport applications, the RJ45 Cat.6<sub>A</sub> can also be used where space is at an absolute premium.



### Industrial cabling (IP20)

Whether used in industrial control cabinets or distribution boxes in production, the RJ45 Cat.6<sub>A</sub> plug series can also be relied upon in industry. 360° shielding and full metal housing guarantee secure and reliable data transmission, including with 10 Gigabit Ethernet/s and even with outside electric interference. And the use of full range of cable types with solid or stranded conductors make it an universal product fit for all purposes, whether for PROFINET, EtherCAT, EtherNet/IP or CC-Link.



### Residential cabling

When it comes to home networks or cabling for the home-based office, adhering to a minimum footprint is normally a major requirement, and only very rarely is there an outlet just where one is needed. In order to be able to connect PC, router or printer quickly, easily and cheaply, a plug is needed which can be fitted without special tools to full range of cable types with solid or stranded wires. The RJ45 Cat.6<sub>A</sub> plug series enables to assemble and customise cables – as and where they are needed – and to establish efficient and reliable connections without spending a great deal of time and money.



# RJ45 Cat.6<sub>A</sub>



## Long release latch

Insertion and withdrawal made easy in confined spaces

## 360° shielding

Secure data transmission even with outside electrical interference

## Four-chamber wire manager

Available with colour code T568A, T568B, PROFINET

## Metallic cable strain relief

by means of screw-clamp connection. Suitable for cable dia. 5.5 mm to 10.0 mm

## Pre-assembled protection cap

Effective protection of contacts from dirt and damage in transit also whilst cable assembly.

## Robust zinc die-cast housing

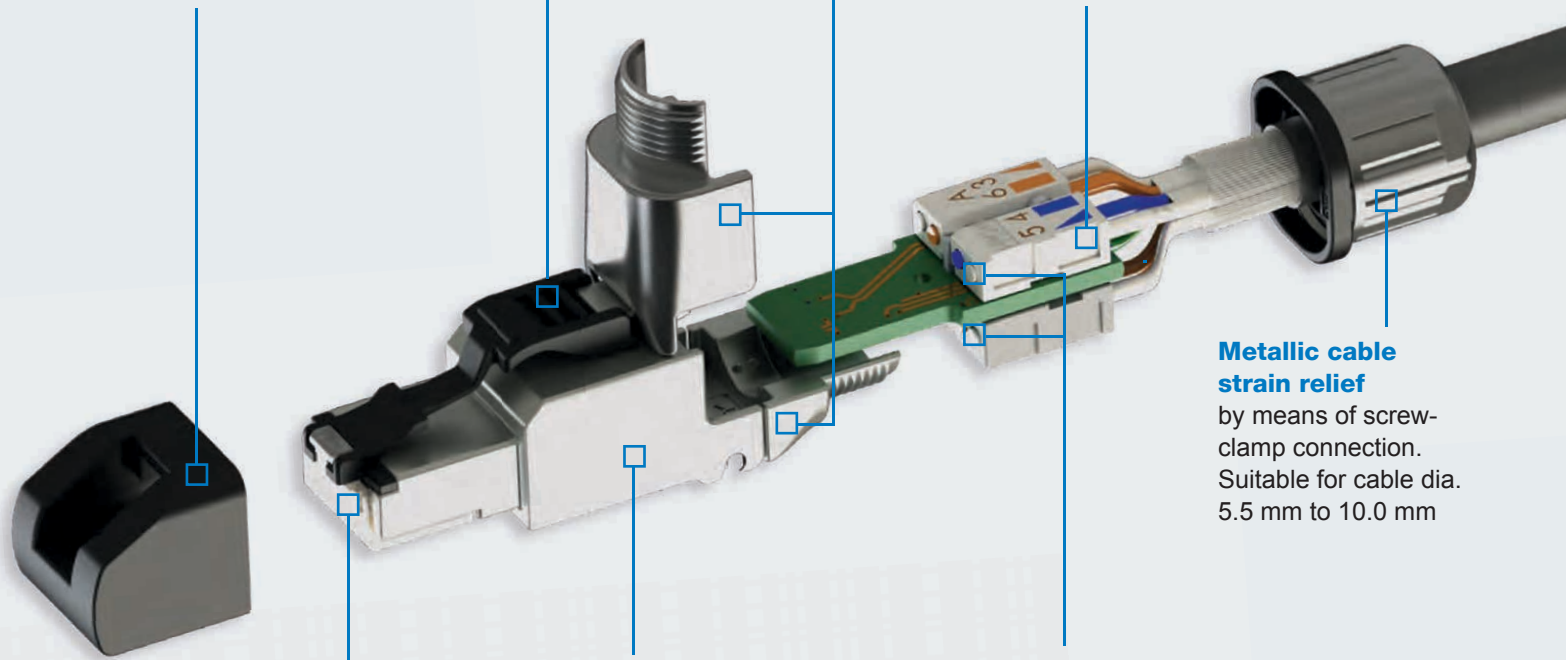
Hardened and tempered finish to prevent outside electrical interference

## Piercing contacts IPC

suitable for:  
AWG27/7 – 22/7  
AWG26/1 – 22/1  
AWG26/19 – 24/19\*

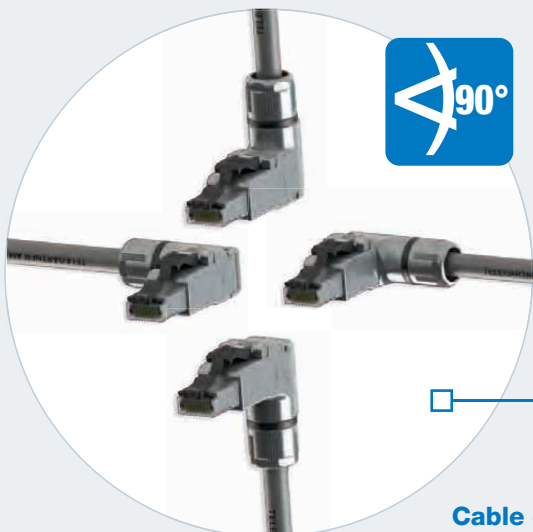
## Standardised plug interface

acc. to EN 60603-7-51



\* approval of cable by IL.M.E. SpA required

# RJ45-4x90 Cat.6<sub>A</sub>



90°

**360° shielding**  
Secure data transmission even with outside electrical interference

**Cable entry from 4 directions in 4x90° steps**  
with option for belated changes

**Four-chamber wire manager**  
Available with colour code T568A, T568B, PROFINET

**Long release latch**  
Insertion and withdrawal made easy in confined spaces



**Standardised plug interface**  
acc. to EN 60603-7-51

**Robust zinc die-cast housing**  
Hardened and tempered finish to prevent outside electrical interference

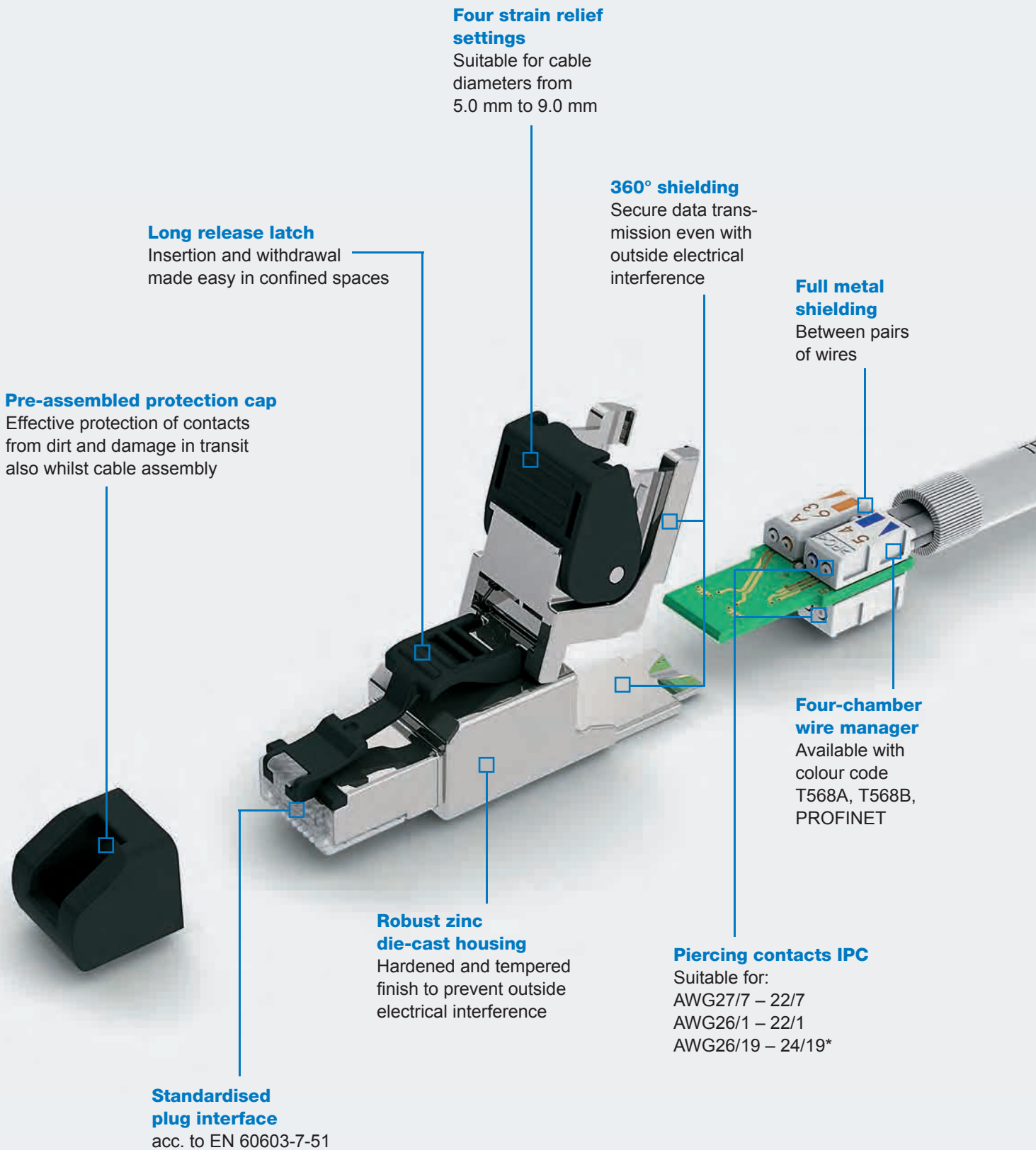


**Piercing contacts IPC**  
suitable for:  
AWG27/7 – 22/7  
AWG26/1 – 22/1  
AWG26/19 – 24/19\*

**Metallic cable strain relief**  
by means of screw-clamp connection. Suitable for cable Ø 5.5 - 10.0 mm

\* approval of cable by IL.M.E. SpA required

# RJ45 Cat.6<sub>A</sub>



**Four strain relief settings**  
Suitable for cable diameters from 5.0 mm to 9.0 mm

**360° shielding**  
Secure data transmission even with outside electrical interference

**Full metal shielding**  
Between pairs of wires

**Four-chamber wire manager**  
Available with colour code T568A, T568B, PROFINET

**Piercing contacts IPC**  
Suitable for:  
AWG27/7 – 22/7  
AWG26/1 – 22/1  
AWG26/19 – 24/19\*

**Robust zinc die-cast housing**  
Hardened and tempered finish to prevent outside electrical interference

**Long release latch**  
Insertion and withdrawal made easy in confined spaces

**Pre-assembled protection cap**  
Effective protection of contacts from dirt and damage in transit also whilst cable assembly

**Standardised plug interface**  
acc. to EN 60603-7-51

\* approval of cable by IL.M.E. SpA required

## Specifications RJ45 Cat.6<sub>A</sub>:


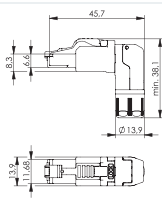


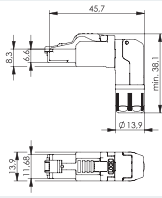

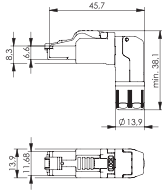


- Category 6<sub>A</sub> acc. to ISO/IEC 11801
- Plug: IEC 60603-7-51 compliant
- Life: ≥ 750 mating cycles
- Contact finish material: Ni1.2Au0.8
- Shielding housing material: die-cast nickel-plated zinc
- **Cu conductor diameter: (White)<sup>1)</sup>**  
solid 0.51 – 0.64 mm (AWG24/1 – 22/1)  
stranded 0.46 – 0.76 mm (AWG27/7 – 22/7)  
stranded 0.61 – 0.78 mm (AWG24/19 – 22/19)\*  
core diameter: 1.0 – 1.6 mm
- **Cu conductor diameter: (Grey)<sup>2)</sup>**  
solid 0.41 – 0.51 mm (AWG26/1 – 24/1)  
stranded 0.46 – 0.61 mm (AWG27/7 – 24/7)  
stranded 0.51 (AWG26/19)\*  
core diameter: 0.85 – 1.1 mm
- Outer diameter: 5.5 – 10.0 mm
- Reusable IPC: ≤ 4 cycles
- Temperature range: -40°C to +85°C
- Power over Ethernet plus (PoE+) acc. to IEEE 802.3at
- IP20
- Cable strain relief: AF13

RJ45 Cat.6 <sub>A</sub> for AWG24-22/1; AWG27-22/7; AWG22/19*	Order no.	Description	PU
 	DTJ 8A IM1 <sup>1)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
	DTJ 8B IM1 <sup>1)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
 	DTJ 8A IM1K <sup>1)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
	DTJ 8B IM1K <sup>1)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
RJ45 Cat.6 <sub>A</sub> for AWG26-24/1; AWG27-24/7; AWG26/19*	Order no.	Description	PU
 	DTJ 8A IM1G <sup>2)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
	DTJ 8B IM1G <sup>2)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
 	DTJ 8A IM1GK <sup>2)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
	DTJ 8B IM1GK <sup>2)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
RJ45 for PROFINET	Order no.	Description	PU
 	DTJ 8P IM1 <sup>1)</sup>	RJ45 PROFINET incl. pre-assembled protection cap	1 / 10 in carton
	DTJ 8P IM1K <sup>1)</sup>	RJ45 PROFINET incl. pre-assembled protection cap blister package	10
RJ45 Wire Manager	Order no.	Description	PU
	DTJ 8A RIM <sup>1)</sup>	RJ45 wire manager T568A AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8B RIM <sup>1)</sup>	RJ45 wire manager T568B AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8P RIM <sup>1)</sup>	RJ45 wire manager PROFINET AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8A RIMG <sup>2)</sup>	RJ45 wire manager T568A AWG26/1-AWG24/1, AWG27/7-AWG24/7	30
	DTJ 8B RIMG <sup>2)</sup>	RJ45 wire manager T568B AWG26/1-AWG24/1, AWG27/7-AWG24/7	30

\* approval of cable by I.L.M.E. SpA required

## Specifications RJ45-4x90 Cat.6<sub>A</sub>:

- Cable entry from 4 directions (4x90°)
- Category 6<sub>A</sub> acc. to ISO/IEC 11801
- Plug: IEC 60603-7-51 compliant
- Life: ≥ 750 cycles
- Contact finish material: Ni1.2Au0.8
- Shielding housing material: die-cast nickel-plated zinc
- **Cu conductor diameter: (White)<sup>1)</sup>**  
solid 0.51 – 0.64 mm (AWG24/1 – 22/1)  
stranded 0.46 – 0.76 mm (AWG27/7 – 22/7)  
stranded 0.61 – 0.78 mm (AWG24/19 – 22/19)\*  
core diameter: 1.0 – 1.6 mm
- **Cu conductor diameter: (Grey)<sup>2)</sup>**  
solid 0.41 – 0.51 mm (AWG26/1 – 24/1)  
stranded 0.46 – 0.61 mm (AWG27/7 – 24/7)  
stranded 0.51 (AWG26/19)\*  
core diameter: 0.85 – 1.1 mm
- Outer diameter: 5.5 – 10.0 mm
- Reusable IDC: ≤ 4 cycles
- Temperature range: -40°C to +85°C
- Power over Ethernet plus (PoE+) acc. to IEEE 802.3at
- IP20; UL listed
- Cable strain relief: AF13

RJ45-4x90 Cat.6 <sub>A</sub> for AWG24-22/1; AWG27-22/7; AWG22/19*	Order no.	Description	PU
 	DTJ 8A IMA <sup>1)</sup>	RJ45-4x90 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
	DTJ 8B IMA <sup>1)</sup>	RJ45-4x90 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
 	DTJ 8A IMAK <sup>1)</sup>	RJ45-4x90 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
	DTJ 8B IMAK <sup>1)</sup>	RJ45-4x90 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
RJ45-4x90 Cat.6 <sub>A</sub> for AWG26-24/1; AWG27-24/7; AWG26/19*	Order no.	Description	PU
 	DTJ 8A IMAG <sup>2)</sup>	RJ45-4x90 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
	DTJ 8B IMAG <sup>2)</sup>	RJ45-4x90 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
 	DTJ 8A IMAGK <sup>2)</sup>	RJ45-4x90 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
	DTJ 8B IMAGK <sup>2)</sup>	RJ45-4x90 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
RJ45-4x90 for PROFINET	Order no.	Description	PU
 	DTJ 8P IMA <sup>1)</sup>	RJ45-4x90 PROFINET incl. pre-assembled protection cap	1 / 10 in carton
	DTJ 8P IMAK <sup>1)</sup>	RJ45-4x90 PROFINET incl. pre-assembled protection cap blister package	10
RJ45 Wire Manager	Order no.	Description	PU
	DTJ 8A RIM <sup>1)</sup>	RJ45 wire manager T568A AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8B RIM <sup>1)</sup>	RJ45 wire manager T568B AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8P RIM <sup>1)</sup>	RJ45 wire manager PROFINET AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
	DTJ 8A RIMG <sup>2)</sup>	RJ45 wire manager T568A AWG26/1-AWG24/1, AWG27/7-AWG24/7	30
	DTJ 8B RIMG <sup>2)</sup>	RJ45 wire manager T568B AWG26/1-AWG24/1, AWG27/7-AWG24/7	30

\* approval of cable by I.L.M.E. SpA required

## Specifications RJ45 Cat.6<sub>A</sub>:

- Category 6<sub>A</sub> acc. to ISO/IEC 11801
- Plug: IEC 60603-7-51 compliant
- Life: ≥ 750 mating cycles
- Contact finish material: Ni1.2Au0.8
- Shielding housing material: die-cast nickel-plated zinc
- **Cu conductor diameter: (White)<sup>1)</sup>**  
solid 0.51 – 0.64 mm (AWG24/1 – 22/1)  
stranded 0.46 – 0.76 mm (AWG27/7 – 22/7)  
stranded 0.61 – 0.78 mm (AWG24/19 – 22/19)\*  
core diameter: 1.0 – 1.6 mm
- **Cu conductor diameter: (Grey)<sup>2)</sup>**  
solid 0.41 – 0.51 mm (AWG26/1 – 24/1)  
stranded 0.46 – 0.61 mm (AWG27/7 – 24/7)  
stranded 0.51 (AWG26/19)\*  
core diameter: 0.85 – 1.1 mm
- Outer diameter: 5.0 – 9.0 mm
- Reusable IPC: ≤ 4 cycles
- Temperature range: -40°C to +85°C
- Power over Ethernet plus (PoE+) acc. to IEEE 802.3at
- IP20; UL listed

RJ45 Cat.6 <sub>A</sub> for AWG24-22/1; AWG27-22/7; AWG22/19*		Order no.	Description	PU
		DTJ 8A IM <sup>1)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
		DTJ 8B IM <sup>1)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG24/1 - 22/1, AWG27/7-22/7	1 / 10 in carton
		DTJ 8A IMK <sup>1)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
		DTJ 8B IMK <sup>1)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG24/1 - 22/1, AWG27/7-22/7	10
RJ45 Cat.6 <sub>A</sub> for AWG26-24/1; AWG27-24/7; AWG26/19*		Order no.	Description	PU
		DTJ 8A IMG <sup>2)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
		DTJ 8B IMG <sup>2)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembled protection cap AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	1 / 10 in carton
		DTJ 8A IMGK <sup>2)</sup>	RJ45 T568A Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
		DTJ 8B IMGK <sup>2)</sup>	RJ45 T568B Cat.6 <sub>A</sub> incl. pre-assembly protection cap, blister package AWG26/1-24/1, AWG27/7-24/7, AWG26/19*	10
RJ45 for PROFINET		Order no.	Description	PU
		DTJ 8P IM <sup>1)</sup>	RJ45 PROFINET incl. pre-assembled protection cap	1 / 10 in carton
		DTJ 8P IMK <sup>1)</sup>	RJ45 PROFINET incl. pre-assembled protection cap blister package	10
RJ45 Wire Manager		Order no.	Description	PU
		DTJ 8A RIM <sup>1)</sup>	RJ45 wire manager T568A AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		DTJ 8B RIM <sup>1)</sup>	RJ45 wire manager T568B AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		DTJ 8P RIM <sup>1)</sup>	RJ45 wire manager PROFINET AWG24/1-AWG22/1, AWG27/7-AWG22/7	30
		DTJ 8A RIMG <sup>2)</sup>	RJ45 wire manager T568A AWG26/1-AWG24/1, AWG27/7-AWG24/7	30
		DTJ 8B RIMG <sup>2)</sup>	RJ45 wire manager T568B AWG26/1-AWG24/1, AWG27/7-AWG24/7	30

\* approval of cable by I.L.M.E. SpA required

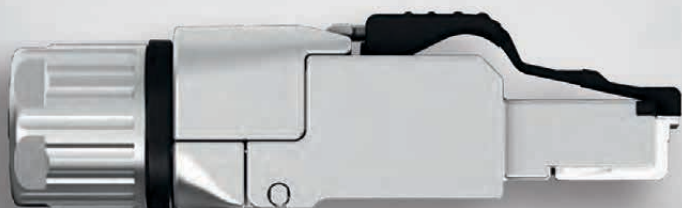




## RJ45 Cat.6<sub>A</sub>

Full-metal RJ45 field-assembly plug featuring four-step cable relief.

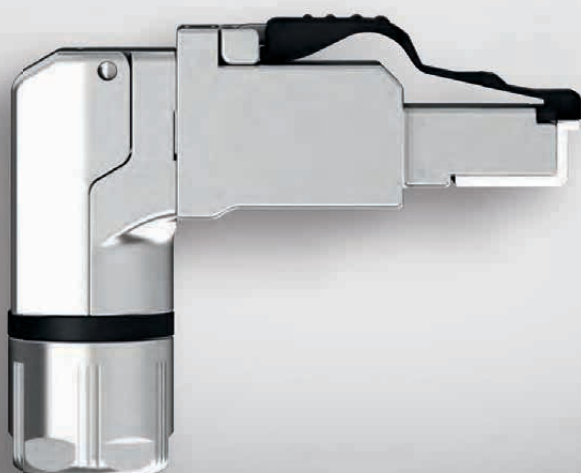
Most suited for data center, enterprise and residential cabling.



## RJ45 Cat.6<sub>A</sub>

Full-metal RJ45 field-assembly plug featuring metallic cable strain relief for cable outer diameter up to 10 mm.

Most suited for assembly with various kinds of industrial, installation or patch cables.



## RJ45-4x90 Cat.6<sub>A</sub>

Full-metal RJ45 field-assembly plug featuring right-angle cable entry from four directions and metallic cable strain relief.

Most suited in confined spaces like sitch or control cabinets.

All in common: easiest field-assembly without any special tools

## Connecting Cables:



<b>RJ45 CAT 6<sub>A</sub></b>	<b>2xRJ45 Cable Plug</b> Cable: S/FTP CAT. 6 <sub>A</sub> 4x2xAWG 27/7 (PUR)* - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: S/FTP CAT. 6 <sub>A</sub> 4x2xAWG 27/7 (PVC) - SHIELDED Colour Outer jacket green	<b>M12x1 Cable Plug black</b> "overmoulded IP67 to RJ45 Plug Crimp IP20 Cable: S/FTP, 4x2xAWG 26/7, Cat. 7, PUR " Colour Outer jacket green
Length 0.5 m	DTW J6 0.5M		DTW XJ0.5M
Length 1.0 m	DTW J6 1M	DTWC J6 1M	DTW XJ1M
Length 2.0 m	DTW J6 2M	DTWC J6 2M	DTW XJ2M
Length 3.0 m	DTW J6 3M	DTWC J6 3M	DTW XJ3M
Length 5.0 m	DTW J6 5M	DTWC J6 5M	DTW XJ5M
Length 7.5 m	DTW J6 7.5M	DTWC J6 7.5M	DTW XJ7.5M
Length 10.0 m	DTW J6 10M	DTWC J6 10M	DTW XJ10M
Length 15.0 m	DTW J6 15M	DTWC J6 15M	



<b>RJ45 CAT 5</b>	<b>2xRJ45 Cable Plug</b> Cable: SF/UTP CAT. 5 4x2xAWG 26/7 (PUR)* - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: SF/UTP CAT. 5 4x2xAWG 26/7 (PVC) - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug - PROFINET</b> Cable: SF/UTP CAT. 5 2x2xAWG 22/7 (PUR)* - SHIELDED Colour Outer jacket green
Length 1.0 m	DTW J5 1M	DTWC J5 1M	DTW JP 1M
Length 2.0 m	DTW J5 2M	DTWC J5 2M	DTW JP 2M
Length 3.0 m	DTW J5 3M	DTWC J5 3M	DTW JP 3M
Length 5.0 m	DTW J5 5M	DTWC J5 5M	DTW JP 5M
Length 7.5 m	DTW J5 7.5M	DTWC J5 7.5M	DTW JP 7.5M
Length 10.0 m	DTW J5 10M	DTWC J5 10M	DTW JP 10M
Length 15.0 m	DTW J5 15M	DTWC J5 15M	DTW JP 15M



<b>RJ45 CAT 6<sub>A</sub>- CAT 5e</b>	<b>2xRJ45 Cable Plug</b> Cable: CAT. 6 <sub>A</sub> - Wiring 1:1 S/FTP (LSHZ) - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> "1x90° - 1x180° cable boot Cable: CAT. 6 <sub>A</sub> Wiring 1:1 - S/FTP (LSHZ) - SHIELDED" Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: CAT. 5e - Wiring 1:1 SUTP (LSHZ) - SHIELDED Colour Outer jacket green
Length 0.25 m	DTWH J6 0.25M		
Length 0.5 m	DTWH J6 0.5M	DTWH J6 0.5MA	DTWH JE 0.5M
Length 1.0 m	DTWH J6 1M	DTWH J6 1MA	DTWH JE 1M
Length 2.0 m	DTWH J6 2M	DTWH J6 2MA	DTWH JE 2M
Length 3.0 m	DTWH J6 3M	DTWH J6 3MA	DTWH JE 3M
Length 5.0 m	DTWH J6 5M	DTWH J6 5MA	DTWH JE 5M
Length 7.5 m	DTWH J6 7.5M	DTWH J6 7.5MA	DTWH JE 7.5M
Length 10.0 m	DTWH J6 10M	DTWH J6 10MA	DTWH JE 10M
Length 15.0 m	DTWH J6 15M		DTWH JE 15M

# RJ45

Telecommunications Outdoor Connectors IP68



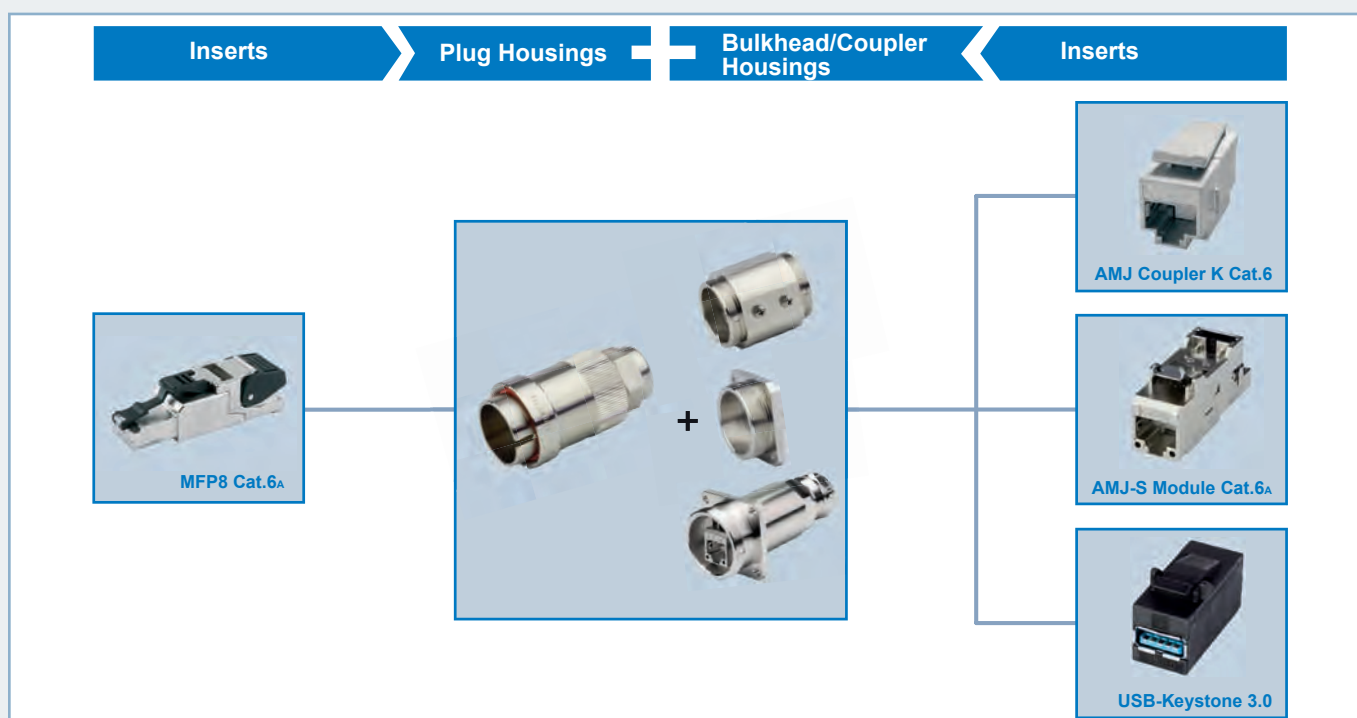
## RJ45 Series

The RJ45 series coming with the field-assembly RJ45 plug MFP8 Cat.6<sub>A</sub> and RJ45 keystone AMJ-S Module Cat.6<sub>A</sub> is available as a set. They can be attached to solid and stranded conductor cables with cable outer diameter max. 9.5 mm on site without the need for special tools. For line extensions, the Coupler IP68 is your first choice. It can be easily integrated with no negative effects on performance of the connection.

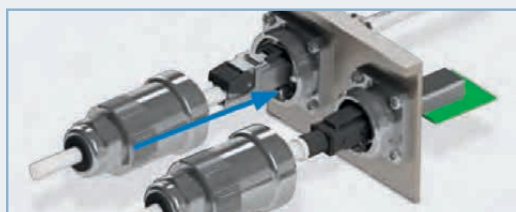
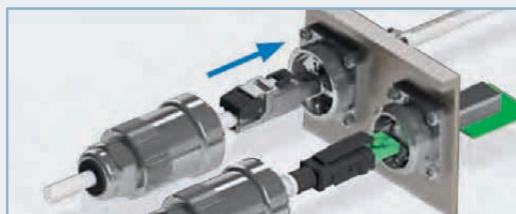
Performance Characteristics RJ45 Series
<ul style="list-style-type: none"> <li>• suitable for 10 Gigabit Ethernet acc. to IEEE 802.3an</li> <li>• suitable for PoE+ acc. to IEEE 802.3at</li> <li>• 360° shielding</li> <li>• temperature range: -40° C to +85° C*</li> <li>• protection class IP68 acc. to IEC 60529</li> <li>• protection cap with protection class IP68</li> </ul>
Bulkhead set IP68 / Bulkhead outlet IP68
<ul style="list-style-type: none"> <li>• RJ45 AMJ-S Module Cat.6<sub>A</sub> acc. to IEC 60603-7-51 (500 MHz)</li> <li>• Cu-conductor: solid: 0.41-0.64 mm (AWG26/1 – AWG22/1) stranded: 0.46-0.76 mm (AWG27/7 – AWG22/7)</li> <li>• insulation diameter: 0.9-1.6 mm</li> <li>• RJ45 AMJ-S Module Cat.6<sub>A</sub> UL listet (E244889)</li> </ul>

Plug set IP68 MFP8 T568B Cat.6 <sub>A</sub>
<ul style="list-style-type: none"> <li>• RJ45 plug MFP8 Cat.6<sub>A</sub> acc. to IEC 60603-7-51 (500 MHz)</li> <li>• RJ45 plug MFP8 Cat.6<sub>A</sub> UL listed (E244889)</li> <li>• Cu-conductor: solid: 0.51-0.64 mm (AWG24/1 – AWG22/1) stranded: 0.46-0.76 mm (AWG27/7 – AWG22/7)</li> <li>• insulation diameter: 1.0-1.6 mm</li> <li>• cable outer diameter: 4.0 - 9.5 mm</li> </ul>
Coupler IP68 AMJ Coupler K
<ul style="list-style-type: none"> <li>• RJ45 AMJ Coupler K acc. to IEC 60603-7-5 (500 MHz)</li> <li>• RJ45 jack to RJ45 jack</li> <li>• suitable for TOC plug set RJ45 IP68</li> <li>• mounting on DIN rail TH35 by means of adaptors</li> </ul>

\* Operating temperature depending on choice of cable and wire/fiber design



## RJ45 Series Assembly Steps



### Step 1: Slide plug into bulkhead

Slide plug into bulkhead insert regardless of the connector alignment.

### Step 2: Push housing over plug insert

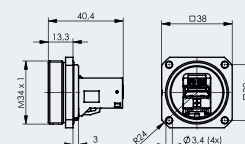
Push the plug housing over the plug insert.

### Step 3: Lock - Seal - Relief of strain

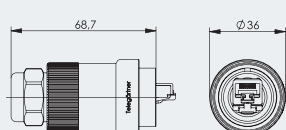
Screw the plug to the bulkhead - interface is locked, sealed and relieved of strain by one turning movement.

## RJ45 Series

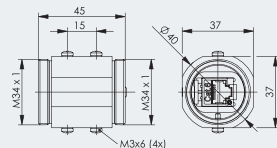
Order No.	Short name	Description
DTO JIF	bulkhead set IP68	AMJ-S Module T568B Cat.6 <sub>A</sub>
DTO JF	bulkhead set IP68	AMJ Coupler K Cat.6 Class E <sub>A</sub>
DTO UF	bulkhead set IP68	USB-Keystone 3.0 (f-f) Type A
DTO JM	plug set IP68	MFP8 T568B Cat. 6 <sub>A</sub> AWG22-27
DTO JFF	coupler IP68	AMJ Coupler K Cat.6 Class E <sub>A</sub>
DTO JFE	bulkhead outlet IP68	AMJ-S Module T568B Cat.6 <sub>A</sub>
DTO B	bracket	gauge 38 mm and TH35



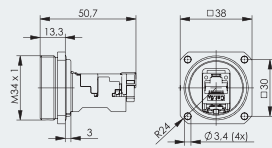
bulkhead set USB-Keystone



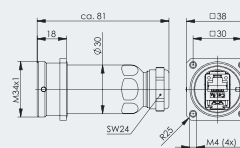
plug set



coupler



bulkhead set AMJ-S Module



bulkhead outlet

Order No.	Short name	Description
DTO FC	bulkhead protection cap IP68	nickel-plated brass, with chain
DTO MC	plug protection cap IP68	nickel-plated brass, with chain

## CW Connecting Cables for MIXO RJ45 Series



<b>RJ45 CAT 6<sub>A</sub></b>	<b>2xRJ45 Cable Plug</b> Cable: S/FTP CAT. 6 <sub>A</sub> 4x2xAWG 27/7 (PUR)* - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: S/FTP CAT. 6 <sub>A</sub> 4x2xAWG 27/7 (PVC) - SHIELDED Colour Outer jacket green	<b>M12x1 Cable Plug black</b> "overmoulded IP67 to RJ45 Plug Crimp IP20 Cable: S/FTP, 4x2xAWG 26/7, Cat. 7, PUR " Colour Outer jacket green
Length 0.5 m			CW XJ0.5M
Length 1.0 m	CW J6 1M	CWC J6 1M	CW XJ1M
Length 2.0 m	CW J6 2M	CWC J6 2M	CW XJ2M
Length 3.0 m	CW J6 3M	CWC J6 3M	CW XJ3M
Length 5.0 m	CW J6 5M	CWC J6 5M	CW XJ5M
Length 7.5 m	CW J6 7.5M	CWC J6 7.5M	CW XJ7.5M
Length 10.0 m	CW J6 10M	CWC J6 10M	CW XJ10M
Length 15.0 m	CW J6 15M	CWC J6 15M	



<b>RJ45 CAT 5</b>	<b>2xRJ45 Cable Plug</b> Cable: SF/UTP CAT. 5 4x2xAWG 26/7 (PUR)* - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: SF/UTP CAT. 5 4x2xAWG 26/7 (PVC) - SHIELDED Colour Outer jacket green
Length 1.0 m	CW J5 1M	CWC J5 1M
Length 2.0 m	CW J5 2M	CWC J5 2M
Length 3.0 m	CW J5 3M	CWC J5 3M
Length 5.0 m	CW J5 5M	CWC J5 5M
Length 7.5 m	CW J5 7.5M	CWC J5 7.5M
Length 10.0 m	CW J5 10M	CWC J5 10M
Length 15.0 m	CW J5 15M	CWC J5 15M



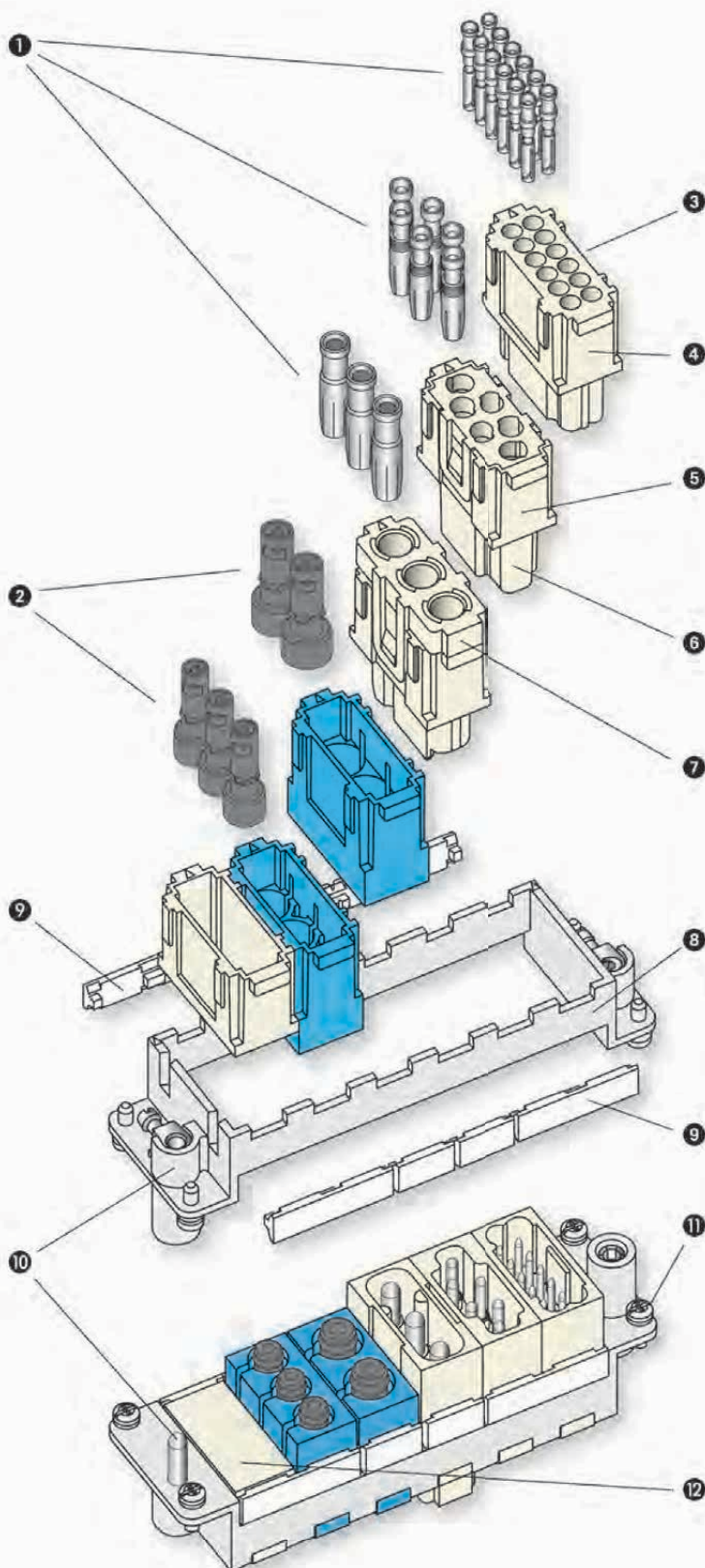
<b>RJ45 CAT 6<sub>A</sub> - CAT 5e</b>	<b>2xRJ45 Cable Plug</b> Cable: CAT. 6 <sub>A</sub> - Wiring 1:1 S/FTP (LSHZ) - SHIELDED Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> "1x90° - 1x180° cable boot Cable: CAT. 6 <sub>A</sub> Wiring 1:1 - S/FTP (LSHZ) - SHIELDED" Colour Outer jacket green	<b>2xRJ45 Cable Plug</b> Cable: CAT. 5e - Wiring 1:1 S/FTP (LSHZ) - SHIELDED Colour Outer jacket green
Length 0.25 m	CWH J6 0.25M		
Length 0.5 m	CWH J6 0.5M	CWH J6 0.5MA	CWH JE 0.5M
Length 1.0 m	CWH J6 1M	CWH J6 1MA	CWH JE 1M
Length 2.0 m	CWH J6 2M	CWH J6 2MA	CWH JE 2M
Length 3.0 m	CWH J6 3M	CWH J6 3MA	CWH JE 3M
Length 5.0 m	CWH J6 5M	CWH J6 5MA	CWH JE 5M
Length 7.5 m	CWH J6 7.5M	CWH J6 7.5MA	CWH JE 7.5M
Length 10.0 m	CWH J6 10M	CWH J6 10MA	CWH JE 10M
Length 15.0 m	CWH J6 15M		CWH JE 15M

# MIXO series

## Modular units for multipole connectors

### Characteristics

- ❶ Electric contacts in silver-plated or gold-plated brass with connections to the conductors via crimping, spring clamp or axial screw.
- ❷ Pneumatic contacts in plastic with insertion tube connection.
- ❸ Modular inserts of identical size with insertion system for forming the complete module and frame lock tab.
- ❹ Inserts in self-extinguishing thermoplastic material, reinforced with glass fibre, UL 94-V0 approved, with a working temperature range of -40 °C to +125 °C.
- ❺ Inserts in conformance with the requirements of the EN 61984 standard and certified and marked with the UL, CSA, CCC, DNV-GL, EAC marks.
- ❻ Inserts with asymmetric guide rails to prevent incorrect coupling.
- ❼ Position of contacts identified with numbers or codes on both sides of every insert.
- ❽ Male/female module carrier frames with mandatory housings and polarity, in die-cast zinc alloy.
- ❾ Module lock tab, may be divided according to the number of modules used; guarantees a perfect stability of the modules during wiring and coupling/uncoupling of the connectors.
- ❿ Asymmetric earth contacts (two for frame) with wide contact surface to prevent incorrect coupling; when two or more identical connectors of the MIXO series are used, coded pins prevent incorrect coupling.
- ⓫ Captive frame fastening screws, with flexible spring washer.
- ⓬ Dummy module for unused frame slots.



The modular inserts must be installed in suitable frames which are then mounted in traditional housings or COB panel support.

frames for modular units .. page: 214 - 215 <sup>1)</sup>

- characteristics according to EN 61984:
- **1A 50V 0,8kV 3**
- insulation resistance: ≥ 10 GΩ
- are made of self-extinguishing thermoplastic resin UL 94 V0
- mechanical life: ≥ 500 cycles
- temperature range: from -40 °C to +70 °C
- we recommend to fix the cable with cable tie
- for contact crimping instructions see the crimping tool on page 554 and 555 <sup>1)</sup>

**WARNING:**  
inserts can be used on high enclosures or bulkhead housings only.

<sup>1)</sup> refer to catalogue page CN.16

housing for RJ45 male connectors, RJ45 female connectors



crimp and IDC termination, RJ45 male connectors



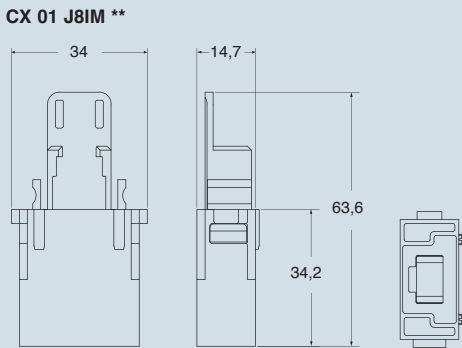
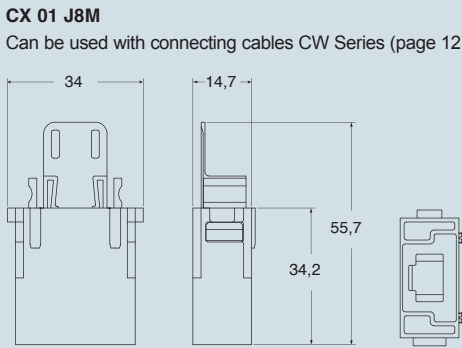
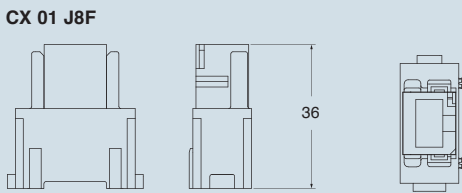
description	part No.	part No.
- female insert with 1 RJ45 female connector, - male insert for 1 RJ45 male crimp connector (without RJ45 connector, to be ordered separately) or connecting cables - male insert for 1 RJ45 male IDC connector, (without RJ45 connector, to be ordered separately)	<b>CX 01 J8F</b> <b>CX 01 J8M</b>	
	<b>CX 01 J8IM **</b>	
- RJ45 male crimp connector, 8 data contacts - RJ45 male IDC connector, 8 data contacts		<b>CX 8 J6M</b> <b>CX 8 J6IM</b>

**CX 01 J8F technical data:**  
- RJ45 female insert, Cat. 6 Class E<sub>A</sub>  
- shielding housing: zinc diecast  
- housing finish: nickel-plated  
- current carrying capacity at 50 °C: 1A  
- adequate for Power over Ethernet: PoE according to IEEE 802.3af  
- connectors: IEC 60603-7-5  
- adequate for 10 Gigabit Ethernet: 10 Gigabit Ethernet acc. to IEEE 802.3an  
- custom-designed cabling systems: PROFINET Installation Guideline  
- generic cabling systems: ANSI/TIA/EIA-568-C.2  
ISO/IEC 11801  
EN 50173-1  
ISO/IEC 24702  
EN 61918  
- class E<sub>A</sub> (channel): ISO/IEC 11801, EN 50173-1

**CX 8 J6M technical data:**  
- RJ45 male crimp connectors Cat. 6<sub>A</sub>  
- crimp pliers: **CJPZ T**  
- screened cable stripper: **CJST**  
- Cu-conductor diameter solid: 0,40 - 0,51 mm (AWG 26/1 - 24/1)  
stranded: 0,46 - 0,61 mm (AWG 27/7 - 24/7)  
- insulation diameter: 0,85 - 1,05 mm  
- cable diameter: 5,0 - 6,6 mm  
- connectors: IEC 60603-7-51  
- 10 Gigabit Ethernet acc. to IEEE 802.3an: adequate for 10 Gigabit Ethernet  
- category 6<sub>A</sub>: ISO/IEC 11801; EN 50173-1  
- class E<sub>A</sub>: ISO/IEC 11801; EN 50173-1  
- category 6<sub>A</sub>: ANSI/TIA/EIA-568-C.2

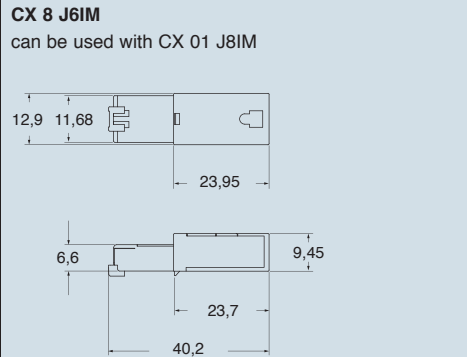
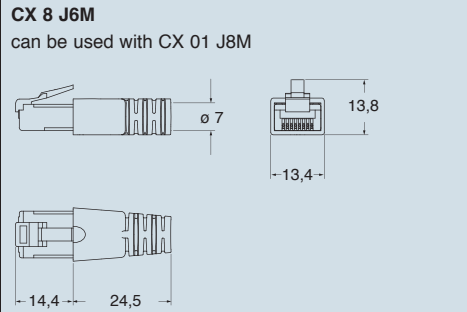
**CX 8 J6IM technical data:**  
- RJ45 male IDC connectors Cat. 6 Class E<sub>A</sub>  
- Cu-conductor diameter solid: 0,41 - 0,64 mm (AWG 26/1 - 22/1)  
stranded: 0,48 - 0,76 mm (AWG 26/7 - 22/7)  
- insulation diameter: 0,85 - 1,6 mm  
- cable diameter: 5,5 - 7,3 mm  
- connectors: IEC 60603-7-5  
- category 6<sub>A</sub>: ISO/IEC 11801; DIN EN 50173-1  
- wrenches pliers for CX 8 J6IM: **CJPW K**  
- 10 Gigabit Ethernet acc. to IEEE 802.3an: adequate for 10 Gigabit Ethernet  
- class E<sub>A</sub>: ISO/IEC 11801; EN 50173-1  
- category 6: ANSI/TIA/EIA-568-C.2  
- custom-designed cabling systems: according to PROFINET Installation Guideline

dimensions in mm



\*\* CX 01 J8IM: to be used with high enclosures (T-TYPE hood M32/M40 only and CZAV/MZAV top entry hood only), bulkhead housings or COB ... BC/TCQ/TSF/TSFS only.

dimensions in mm



dimensions shown are not binding and may be changed without notice



manual IDC pliers



manual crimp pliers



description

part No.

part No.

wrenches pliers for connectors CX 8 J6IM

**CJPW K**

crimp pliers for connectors CX 8 J6M

**CJPZ T**

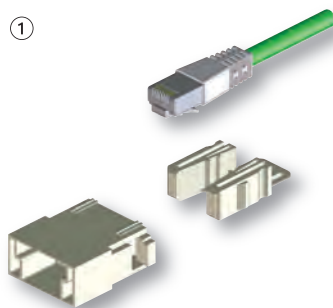
RJ45 PIN No.	Connection Colour Code T568		DIN 47100	Industrial PROFINET	Application			Upo/TEL
	A	B			10BT/ 100BT	1 Gigabit 10 Gigabit Ethernet	Token Ring ISDN/So	
1	WH-GN	WH-OG	WH	YE	•	•		
2	GN	OG	BN	OG	•	•		
3	WH-OG	WH-GN	GN	WH	•	•	•	
4	BU	BU	YE	-		•	•	•
5	WH-BU	WH-BU	GY	-		•	•	•
6	OG	GN	PK	BU	•	•	•	
7	WH-BN	WH-BN	BU	-		•		
8	BN	BN	RD	-		•		

**Legend**

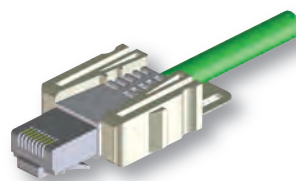
- BN** = brown
- BU** = blue
- GN** = green
- GY** = grey
- OG** = orange
- PK** = pink
- RD** = red
- WH** = white
- YE** = yellow

CW connecting cables (page 12)

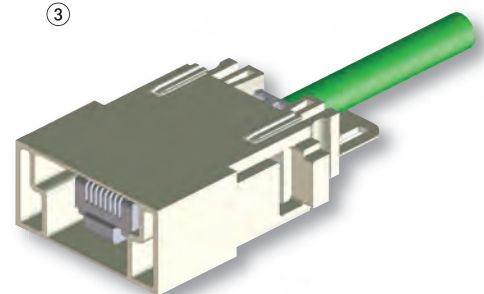
①



②



③



# Data transmission connectors M12 Series



## Circular connectors M12x1 IP67

Connector series for industrial applications

## The company and the product

I.L.M.E. SpA - **INDUSTRIA LOMBARDA MATERIALE ELETTRICO** - has been operating in Milan since 1938, in particular in the electrotechnical sector for the manufacture of equipment for industrial installations.

ILME reflects the traditional **entrepreneurial spirit of Lombardy**, and has enjoyed continuous expansion for over half a century. The company has carved an important role for itself in the principal world markets, also operating directly in the countries that have assumed world leadership in the field of automation, including Germany and Japan.

In the **electrical connection** sector with applications in industrial automation, characterised by **top performance** and utmost **reliability** needs, ILME is today the acknowledged partner of many leading companies worldwide.



The company's fundamental values are: **Product innovation**, original solutions, excellent **price-quality ratio**, acustomer-oriented **service**, ethical behaviour and respect for the environment.

To promote the continuing improvement of its qualitative **results**, ILME has always encouraged its collaborators to work with maximum **responsibility and participation**.

The company focuses on a series of benefits to the user, including research into the most suitable materials, high quality and safe cabling, a rapid turnaround and readily available services.



ISO 9001 certification: 2008  
Design, manufacture and distribution  
of industrial electrical equipment (IAF 19)  
Certificate No. 50 100 11133 - Rev. 01

## CE marking

As from 1<sup>st</sup> January 1997, in order to launch electrical products on the European market the manufacturer must ensure these bear the relevant CE mark, in line with the Low Voltage Directive 73/23/EEC\* (implemented in Italy as L. D. 18-10-1977 no. 791) and its modification 93/68/EEC\* (implemented in Italy as L.D. 25-11-1996 no. 626/96, published in the supplement to the Gazzetta Ufficiale of 14-12-1996).

The mark must be visible on the product or, if this is not possible, on the packaging, the instructions for use or on the warranty certificate. It acts as a declaration by the manufacturer that the product complies with all relevant EU directives regarding its field of application.

**ILME products bear the CE mark on the actual product or its packaging.**

Almost all ILME products fall within the field of application of the Low Voltage Directive. A declaration of conformity is required in order to be able to apply the CE mark. This declaration, to which the market is not directly entitled, must be made available to the controlling authorities (in Italy, the Ministry for Industry, Commerce and Handicraft) at all times. In it, the manufacturer declares the technical safety standard(s) followed in the manufacture of the product. These standards must be, in decreasing order of preference:

- a European standard (EN prefix)
- a European harmonisation document (HD prefix)
- an international IEC standard
- a national standard
- in the absence of reference standards, the manufacturer's internal specifications guaranteeing compliance with the basic safety requirements of the directive.

Compliance with harmonised technical standards (i.e. ratified by CENELEC) also constitutes presumption of compliance with the basic safety requirements of the directives.

The CE marking of ILME products results from the declaration of conformity of the product to harmonised standards or international IEC standards.

Through the CE mark, ILME declares full compliance, not merely with the directive's basic safety requirements, but also with those international or national EU standards on which voluntary safety certification markings are based (e.g. IMQ and VDE). In this way, ILME intends to give the CE mark the value of self-certification in terms of safety, given the loss in legal value of voluntary certifications issued by third parties, ratified by directive 93/68/EEC\*.

Notwithstanding the above, practically all ILME products still bear voluntary conformity markings.

**This EC declaration of conformity becomes null and void when the assembly of products includes one or more components not manufactured by us and without EC approval.**

**\*Note:** The next legal reference for the Low Voltage Directive was 2006/95/EC, as consolidation of the original Directive 73/23/EEC + Directive 93/68/EEC.

On 29<sup>th</sup> March 2014, the Official Journal of the European Union published the new Low Voltage directive 2014/35/EU dd. 26<sup>th</sup> February 2014, a recast version of directive 2006/95/EC, which is in force since on 20<sup>th</sup> April 2016.

The information contained in this catalogue is not binding and may be changed without notice.

www.ilme.com

XDG RJ45 317



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Catalogues