

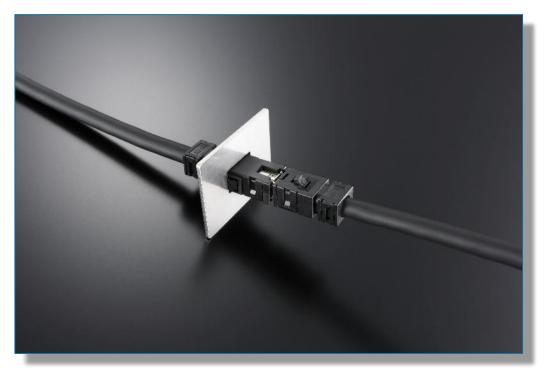
#### INDUSTRIAL MINI I/O CONNECTOR FIELD INSTALLABLE



**EVERY CONNECTION COUNTS** 

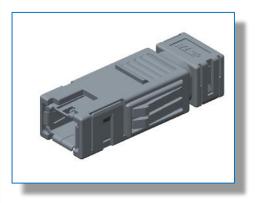
## Industrial Mini I/O – Field Installable

TE's Industrial Mini I/O connector provides innovative and timesaving wire-termination alongside serving as a space saving and reliable I/O solution for industrial environments.

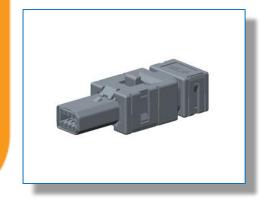




## Industrial Mini I/O – Field Installable



- Innovative and time-saving wire-termination
- Reliable connections in industrial and vibration-prone environments
- Space saving solution that allows for increased design flexibility



- Available in different versions for multiple applications
- Intermateable with receptacles in different configurations (TMT, SMT, right and straight angle)



## Industrial Mini I/O – Smaller than RJ45





#### ✤ Size advantage

- With only one quarter the size of conventional RJ45 plugs, the Industrial Mini I/O connector provides critical space saving.
- The limited space on the PCB can be used more efficiently.
- The Field Installable Mini I/O version offers an innovative piercing termination that additionally decreases the time usually needed to terminate the wires through soldering and with an easy to use hand tool.
- Field Installation of the Industrial Mini I/O is now possible in virtually any environment.

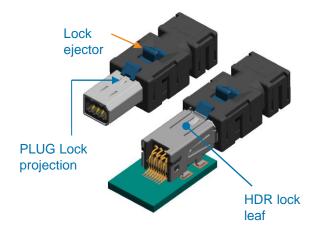
Traditional RJ45 vs Industrial Mini I/O connector

75%space saving





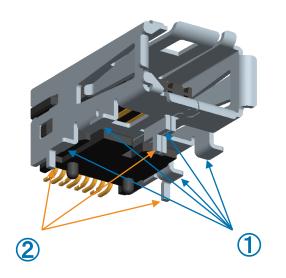
## Industrial Mini I/O – More reliable than RJ45



- Accidental unplugging of a network connection due to shock, vibration, pulling on cords, etc.
   causes expensive downtime in an industrial environment
- Industrial Mini I/O's unique locking system is specified to 100N of pull out force



## Industrial Mini I/O – More reliable than RJ45



① Solder pad at 5 points

2 Peg has through whole anchor (3/5)

Solder pads are used to fix the SMT connector to a PCB.

Generally this is done at 2 points.

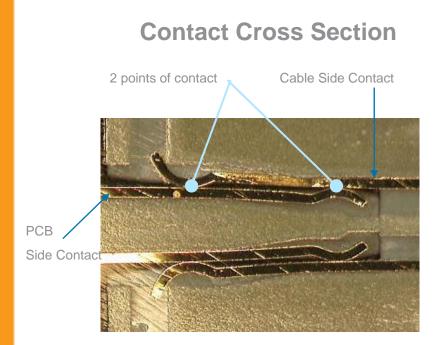
However, Industrial Mini I/O has 5 points which enhances the strength.

The second part to secure interface is proper board retention

- This header design has 2 features to enable required retention strength:
  - Solder pads at 5 points
  - 3 pegs with through hole anchor



# Industrial Mini I/O – More reliable than RJ45



- Contact System known as the "Fighting Snake Principle"
- Multiple points of contact reduce contact failures
- Au plated products improve conductivity and contact lifespan
- Overall design = Improved Reliability for Customer Networks



## Industrial Mini I/O – Field Installable

#### One trusted partner for your satisfaction

- One of the leading companies in connectivity, TE offers short lead times and dedicated service through a broad distribution network.
- With our global footprint and local sales teams in all regions, TE is able to offer the support you expect, making it easy to do business with us.
- Easy-to-use and easy-to-choose: At TE, you will find what you are looking for; and if you have any questions, our Technical experts are there for you – 24 hours a day.
- As one of the most innovative companies in the world, TE provides industry-leading products and technologies that help you solve your problems – now and in the future.



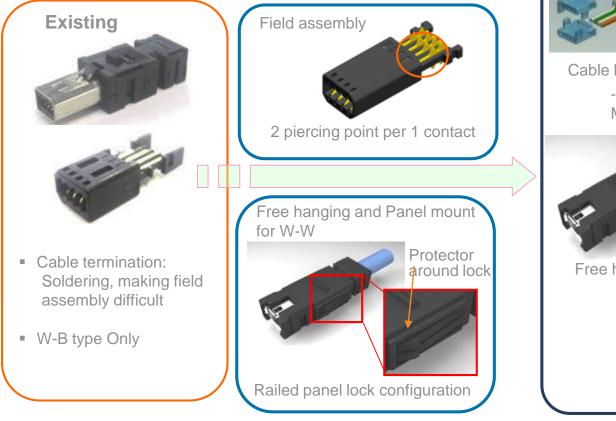


## The Idea Behind It

#### Feature of New development

- · Field assembly at an in-house of customer's factory
- W-W, W-B are available

• Common shape for free hanging and panel mount for W-W with railed panel lock configuration





page 9

## **Product Specifications**

- Product Specifications (Design Objectives)
  - Voltage Rating 30V
  - Current Rating 0.5A
  - Temperature Rating -40°C~70°C
  - Durability 750cycles
  - Meet transmission performance of Cat5e
  - Applicable Cable

AWG 24~26

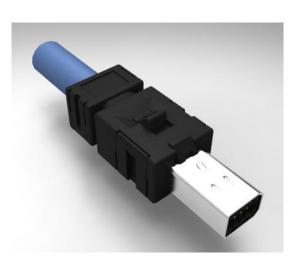
(Insulation Outside Diameter: Dia. 0.93~1.05&1.05~1.15mm)

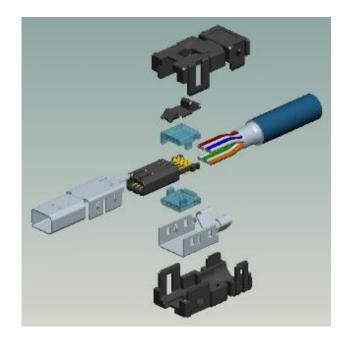
• Outer Cable Diameter 7.1mm Max



# Concept Plug Kit

#### Plug Kit

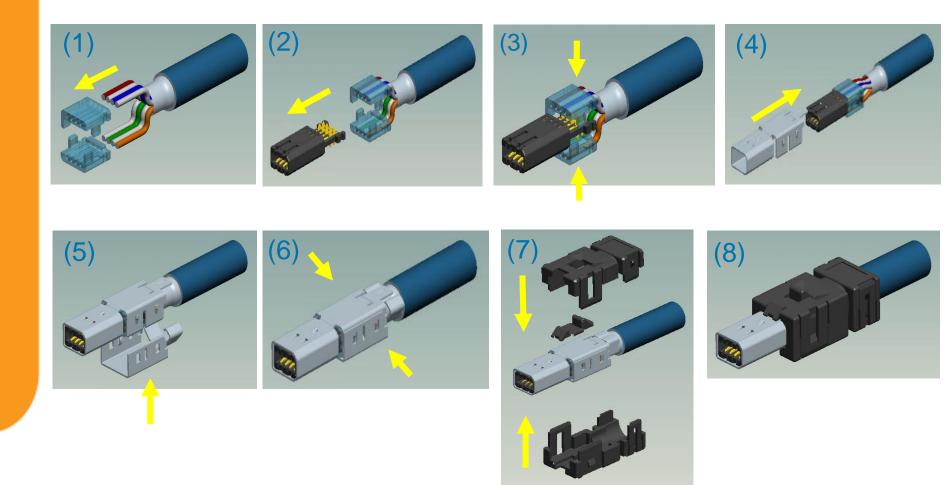




Pa Nu	ırt ımber	Name	Applicable wire
22	01855-1	Plug KIT Type I L size	AWG 24~26 Stranded Wire insulation OD: 1.05-1.15 Cable OD : 7.1Max
22	01855-2	Plug KIT Type I M size	AWG 24~26 Stranded Wire Insulation OD: 0.93-1.05 Cable OD : 7.1Max

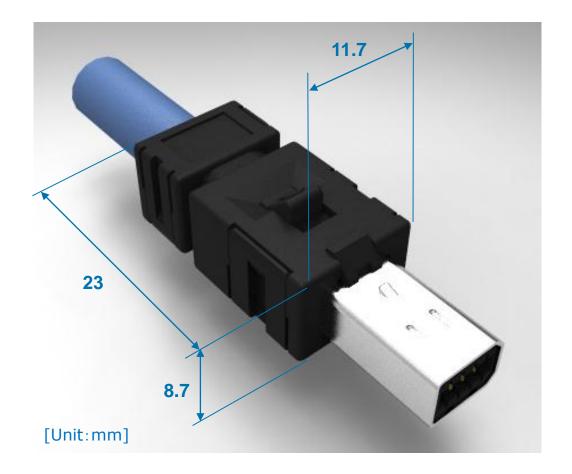


### Plug cable connector assembly





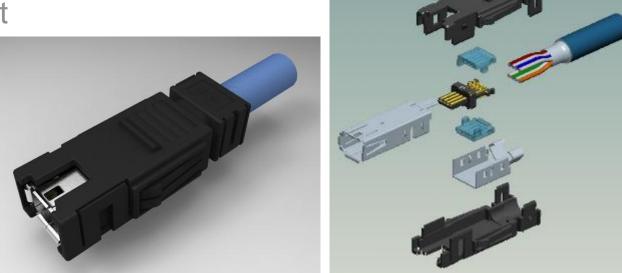
## Plug dimensions





### **Concept Receptacle Kit**

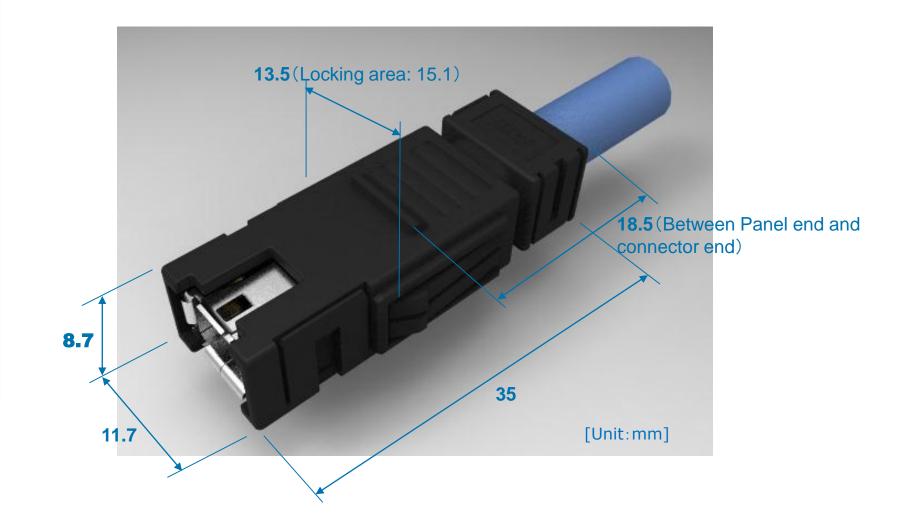
#### **Receptacle Kit**



Part Number	Name	Applicable wire
2201864-1	REC KIT Type I L size	AWG 24~26 Stranded Wire insulation OD: 1.05-1.15 Cable OD : 7.1Max
2201864-2	REC KIT Type I M size	AWG 24~26 Stranded Wire Insulation OD: 0.93-1.05 Cable OD : 7.1Max

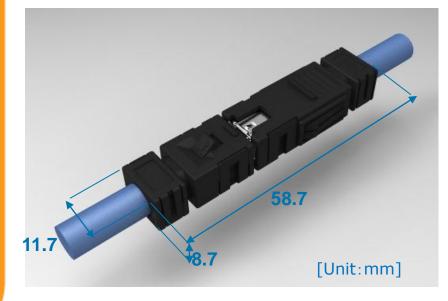


#### **Receptacle dimensions**

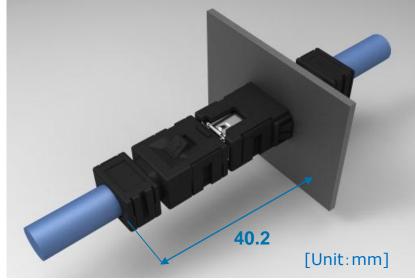




#### Mating overview

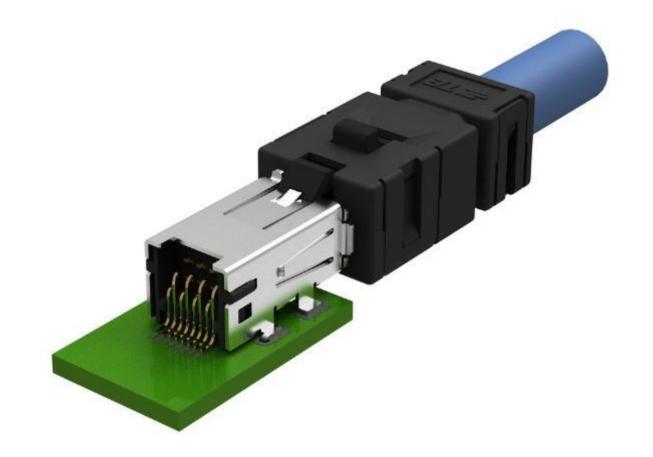


#### With Panel





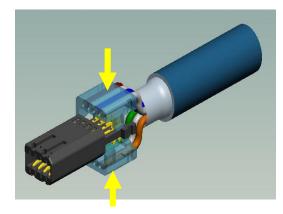
#### Compatible with other Mini I/O headers



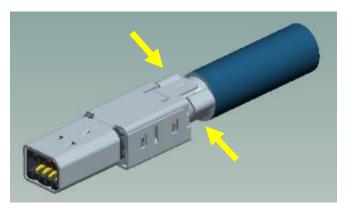


### Hand Tool for Field Installation

#### Wire termination and cable crimp is available with one hand tool



Wire termination



Cable crimp



#### Find more at...

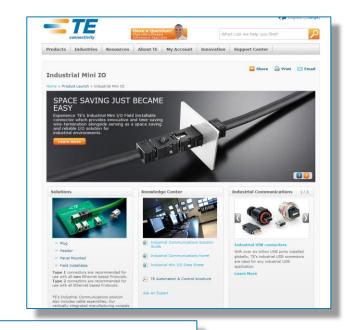
#### Mini I/O homepage

#### te.com/products/mini-io

- **Product information** -
- **Further documents**
- Order samples -

#### Mini I/O flyer

- Complete overview of product portfolio
- Part numbers and drawings -





KEY FEATURI Small Compact Size

#### Introducing Industrial Mini I/O connector, ield Installable version

wire-termination	<ul> <li>8 position</li> </ul>	Wire-to-board     O.635 mm pitch				
strial and ts	30 V rated	Current rating: 0.5 AMPS				
llows for	MATERIALS	MATERIALS				
is for multiple	Shell: Copper all	oy  Contact: Copper alloy Housing: Them	oplastic			
les in different	n different STANDARDS AND SPECIFICATIONS					
angle)	<ul> <li>Meets CatSe requirements when used in an Ethernet application product specification: 108-78855</li> </ul>					
	Application spec	ification: 114-5506				
savings)	PRODUCT OFF	ERING				
on .	Part Number	Description				
tions	2201855-1	MIN (/D PLUG KIT TYPE I L				
les of various	1-2201855-1	MINI VO PLUG KIT TYPE II L				
TMT)	2201855-2	MINI (/D PLUG KIT TYPE I M				
nis-mating	1-2201855-2	MINI VO PLUS KIT TYPE II M				
	2201855-3	MINI (/O PLUG KIT TYPE I LM MIX				
	2201864-1	MINI VO REC KIT TYPE I L				
	1-2201864-1	MINI (/O REC KIT TYPE II L				
	2201864-2	MINI VO REC KIT TYPE I M				
	1-2201864-2	MINI VO REC KIT TYPE I M				
	2201864-3	MINI VO REC KIT TYPE I LM MIX				
	2229737-1	HAND TOOL				
	2260170-1	CARLE FITTING				
*C to +85 *C	PRODUCT DIM	ENSIONS				
	- Plug Kit: 11.62 x 34 x 8.7 mm					
lokg)						
eret II warne fo ight only or i st, induling her set limited to are in	distant t faid-ratio stands gid wratia d nedatkilk o fa	no de 11 métores des restancians envels est es proceeden contra l'a seguit plantere en la procedure pour la formania in fina in la land demonse nel delar politicana.				

 Detention Consenting in T. Consenting Vol. of manager, Millight Reserved.
 USE 1400-522-4522
 Labs/G. Reveiter, 44(2):15-4025-2026
 Ferrors, 42(2):15-4025-4086

 March M. Consenting Hoge analysismic, Dire logs, analysismic
 Casadar, 4-548-457-5022
 Garranger, 4-65 (15-551-503-506)
 Ferrors, 42(2):15-505-4086

 March M. Forder, March M. Strateger, analysismic
 Casadar, 4-548-457-5022
 Garranger, 4-65 (15-551-503-506)
 Ferrors, 42(2):15-505
 Ferrors, 42(2):15-505</td



Making Every Connection Count. Especially The One We Make With You.

