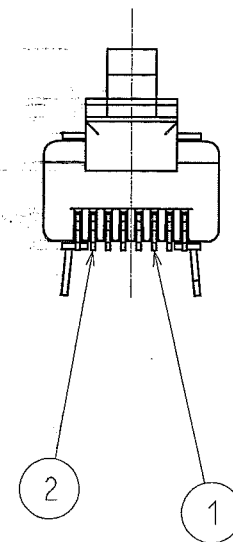
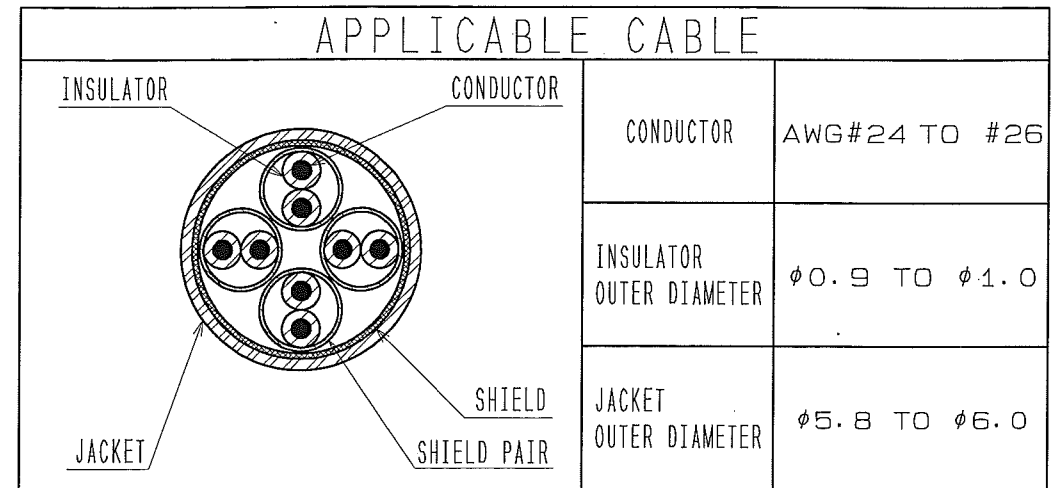
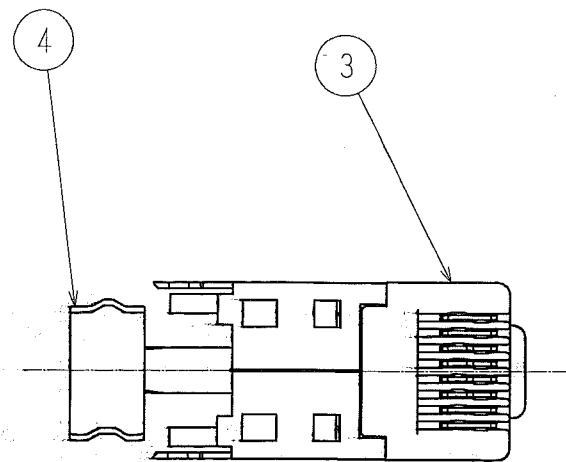
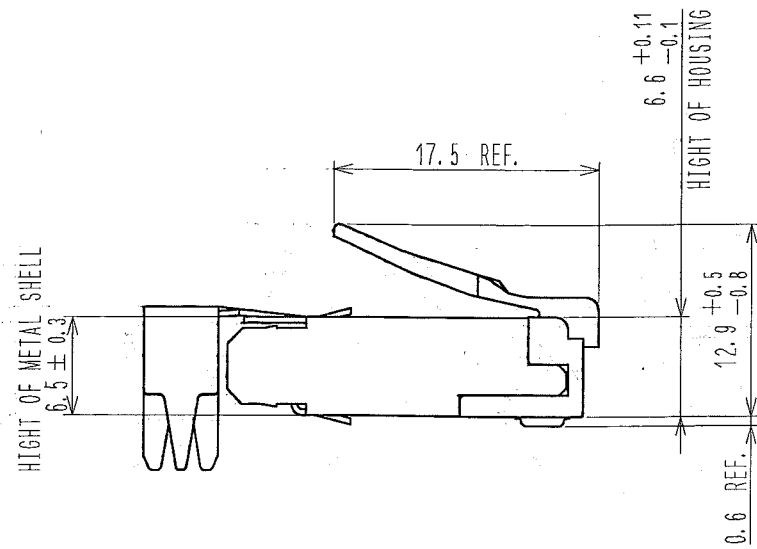
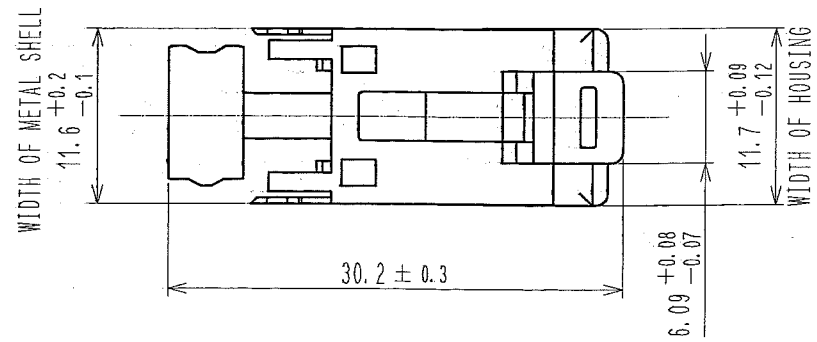
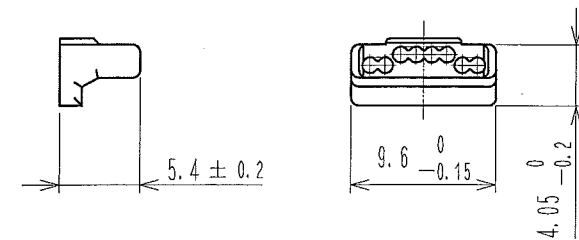


| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |
| △     |                          |    |      | ..   | △     |                          |    |      | ..   |



5 ATTACHED



| 1~2 | PHOSPHOR BRONZE | CONTACT: Au 1.27μm min<br>OTHER: Au 0.03μm min<br>UNDER: Ni 2μm min | 4   | POLYCARBONATE (CLEAR YELLOW) |                 |
|-----|-----------------|---|-----|------------------------------|-----------------|
|     |                 |   | 3   | STAINLESS STEEL Ni 0.5μm min |                 |
|     |                 |   | 2   | POLYCARBONATE (CLEAR YELLOW) |                 |
| NO. | MATERIAL        | FINISH, REMARKS   | NO. | MATERIAL                     | FINISH, REMARKS |

|  |                              |                    |                     |                    |                   |
|--|------------------------------|--------------------|---------------------|--------------------|-------------------|
| CODE NO.(OLD)                          | DRAWN                        | DESIGNED           | CHECKED             | APPROVED           | RELEASED          |
| DRAWING FOR REFERENCE OR PRELIMINARIES | M. Itano '08.07.18           | M. Itano '08.07.18 | H. Yamada '08.07.18 | Y. Enomi '08.07.18 | ENG '08.7.18 DEPT |
| SCALE 2:1                              | DRAWING NO. TEDC3-123817     | PART NO. TM31P-88P |                     |                    |                   |
| UNITS mm                               | HRS HIROSE ELECTRIC CO., LTD | CODE NO. CL222     | 1/1                 |                    |                   |

1 2 3 4 5 6 7 8

A B C D E F

mm

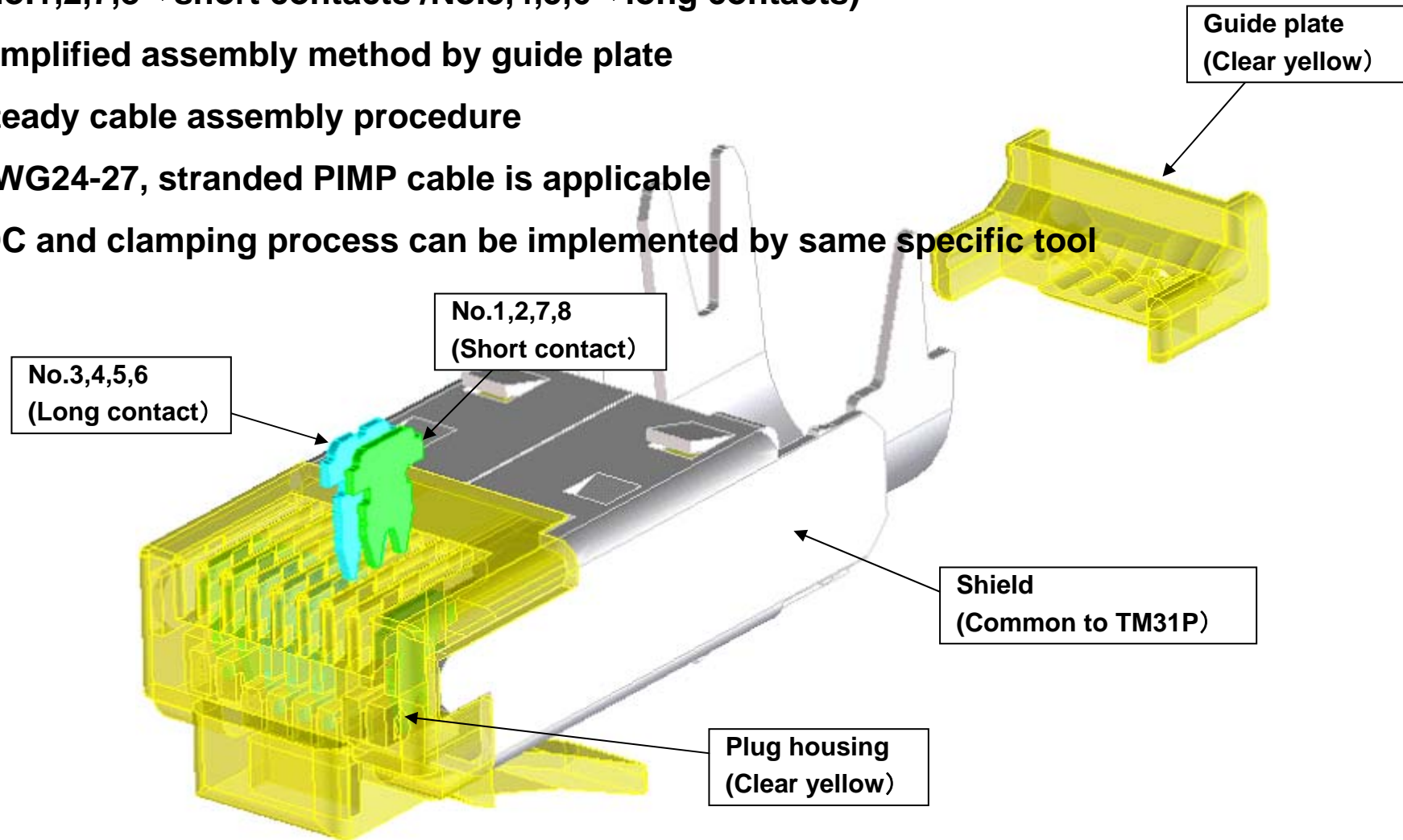
1 2 3 4 5 6 7 8

FORM NO. 229

# Plug : TM31P-TM-88P



1. Plug design satisfying CAT6a performance  
(No.1,2,7,8⇒short contacts /No.3,4,5,6⇒long contacts)
2. Simplified assembly method by guide plate
3. Steady cable assembly procedure
4. AWG24-27, stranded PIMP cable is applicable
5. IDC and clamping process can be implemented by same specific tool



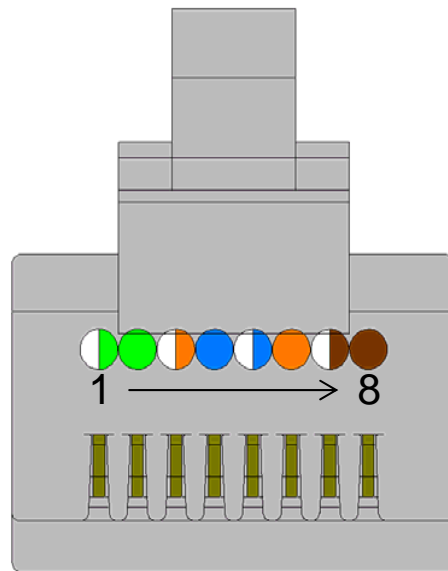
# Plug : TM31P-TM-88P



## Plug design satisfying CAT6a requirements

### 1) Unique contact arrangement

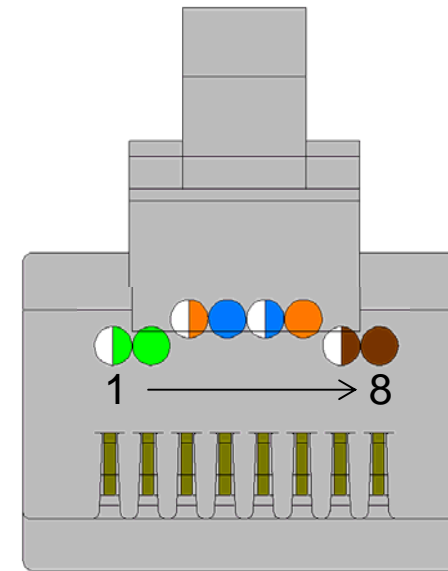
CAT6 Plug (TM21DP-TM-88P)



Limited performance due to the contact arrangement in a single row

Improved Transmission Characteristics

CAT6a Plug (TM31P-TM-88P)



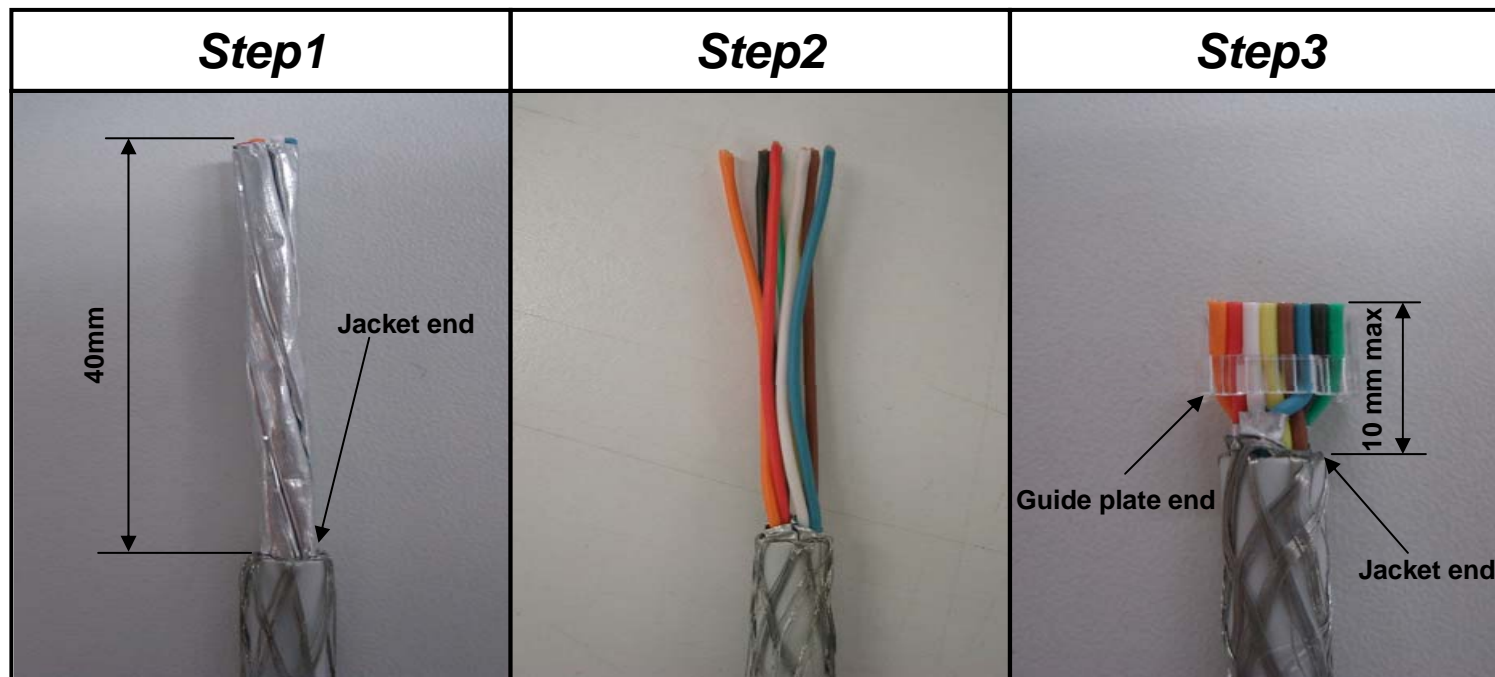
The contact arrangement in two rows makes performance improved (No3, 4, 5, 6 contacts are isolated from No1, 2, 7, 8 contacts)

# Plug : TM31P-TM-88P



Cable assembly method to have CAT6a performance

Plug design makes it possible for users to lengthen jacket end and have steady CAT6a performance.

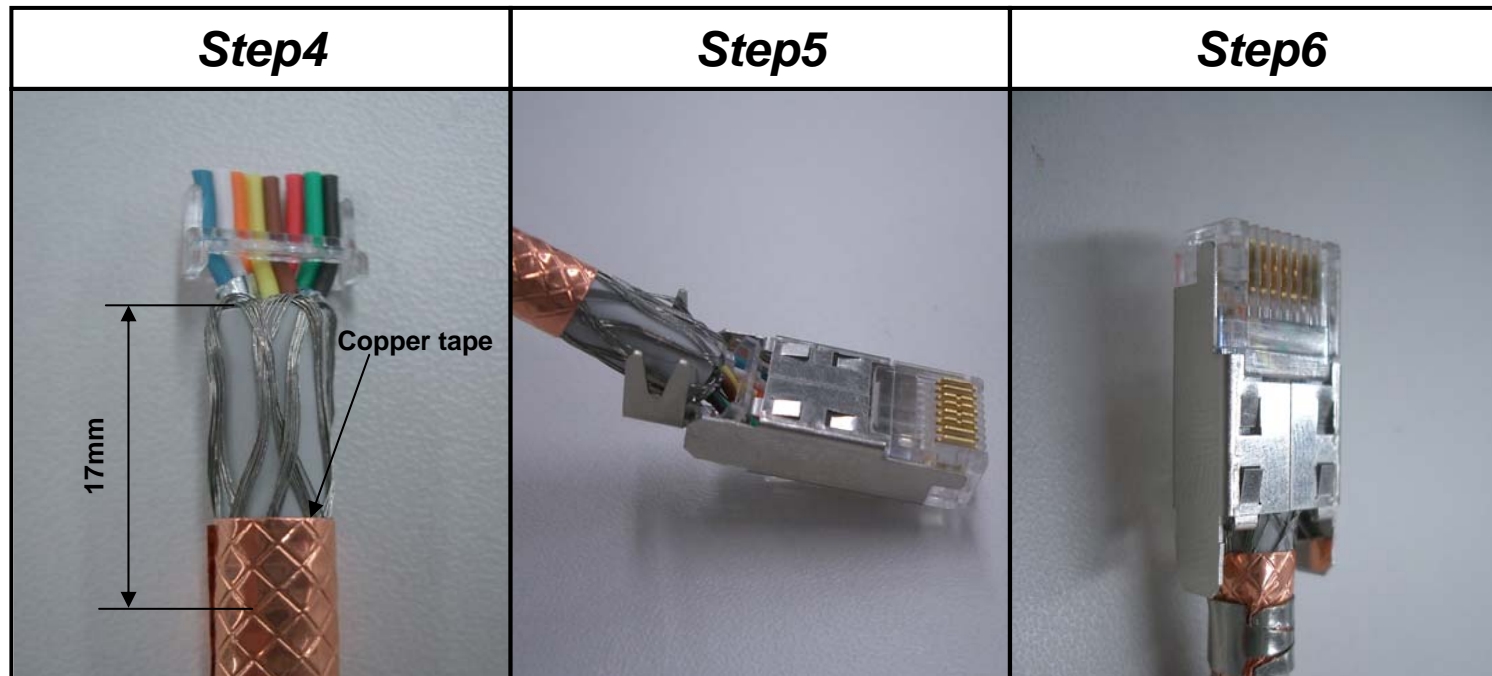


# Plug : TM31P-TM-88P



Cable assembly method to have CAT6a performance

Plug design makes it possible for users to lengthen jacket end and have steady CAT6a performance.



## Plug : TM31P-TM-88P

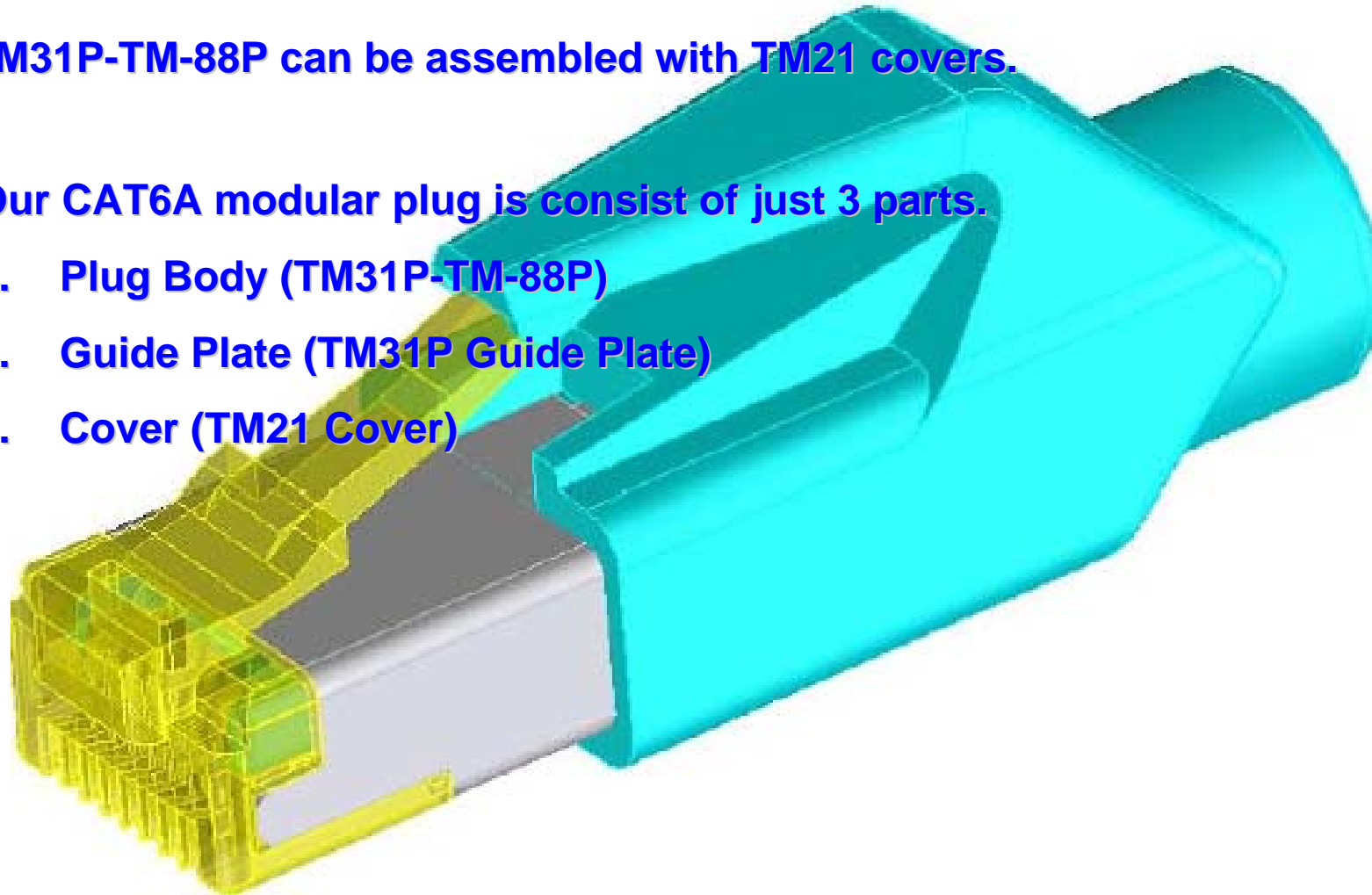


Outer Appearance of TM31P-TM-88P with cover

TM31P-TM-88P can be assembled with TM21 covers.

Our CAT6A modular plug is consist of just 3 parts.

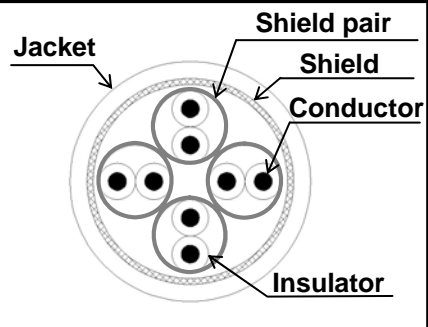
1. Plug Body (TM31P-TM-88P)
2. Guide Plate (TM31P Guide Plate)
3. Cover (TM21 Cover)



# Plug : TM31P-TM-88P



## Applicable Cable

|   |                         |                             |
|---|-------------------------|-----------------------------|
|  | <b>Conductor</b>        | <b>AWG 24 stranded wire</b> |
|   |                         | <b>AWG 27 stranded wire</b> |
|   | <b>O/D of Insulator</b> | $\phi$ 0.9 to $\phi$ 1.0    |
|   | <b>O/D of Jacket</b>    | $\phi$ 5.8 to $\phi$ 6.0    |

## Cable Assembly Tool

Cable Assembly Tool of TM21DP-TM-88P  
can be also used for TM31P-TM-88P



# Plug : TM31P-TM-88P



CAT6a Performance Measurement : Plug single TM31P Model sample

Measurement Method : Direct Probe Method  
Measurement Equipment : Network Analyzer  
(Agilent E8357A)

Frequency : 10~500MHz

