

# ISH<sup>®</sup> (Horizontal Type)

High heat and vibration resistant, horizontal, SMT connector

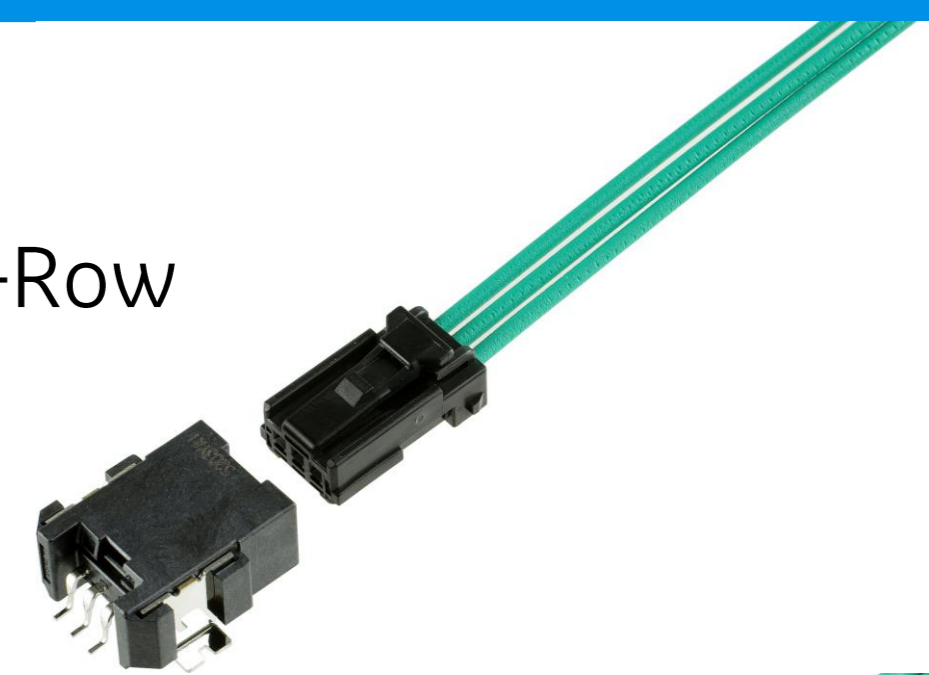
Product Specifications:		Single-row	Double-row
Pitch (mm max.)		2.0	
Contact Size (mm)		0.5 × 0.4(020)	
Mated Height (mm max.)		7.4	10.9
Width formula (mm)		8.9+2.0*?pin	(ISH)8.9+1.0*?pin (ISHV)10.1+1.0*?pin
Operating Temperature		-40 - 125°C	
Vibration Resistance		10G	
Current Rating		4.5A per pin	
Voltage Rating		100V	
Withstand Voltage		AC 1000V/minute	
Plating		Sn	
Housing		Male:glass-filled LCP, Female:PBT	
Pin counts	Range	Up to 20	Up to 40
	Available	3	6,8,12*,16*,20,32

**Applicable Cable Size:**  
AWG#22, #20  
\*Insulation Diameter 1.6 mm max.

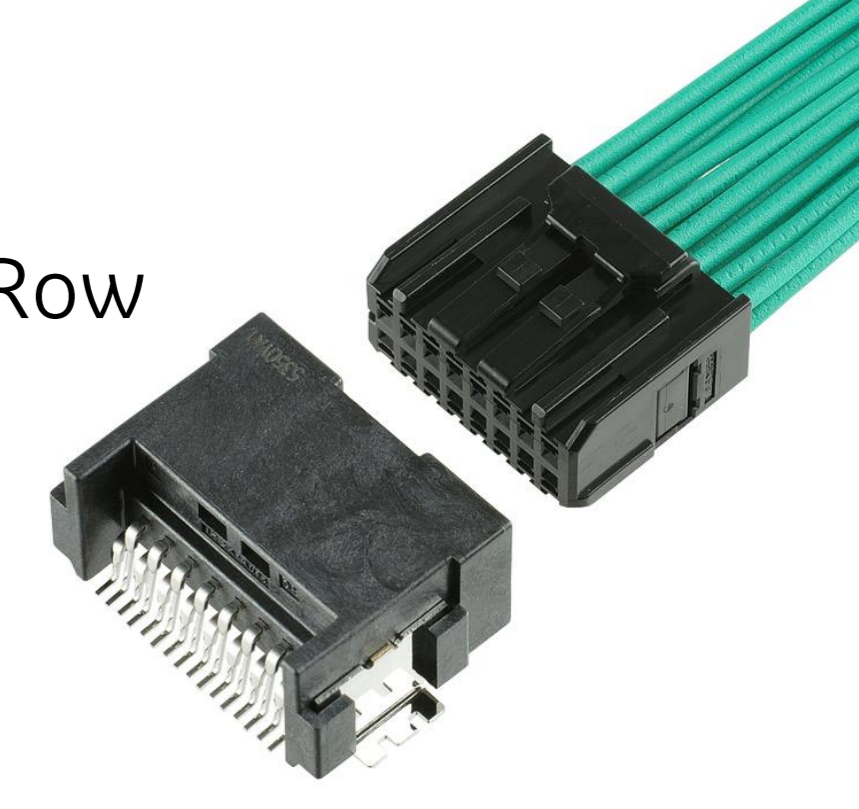
**Applicable Standards (Reference Only):**  
LV214 : 12P, 16P (optional)

\*Please inquire for pin counts not listed or outside of the pin count range.  
\*ISH V is available in 12P and 16P.

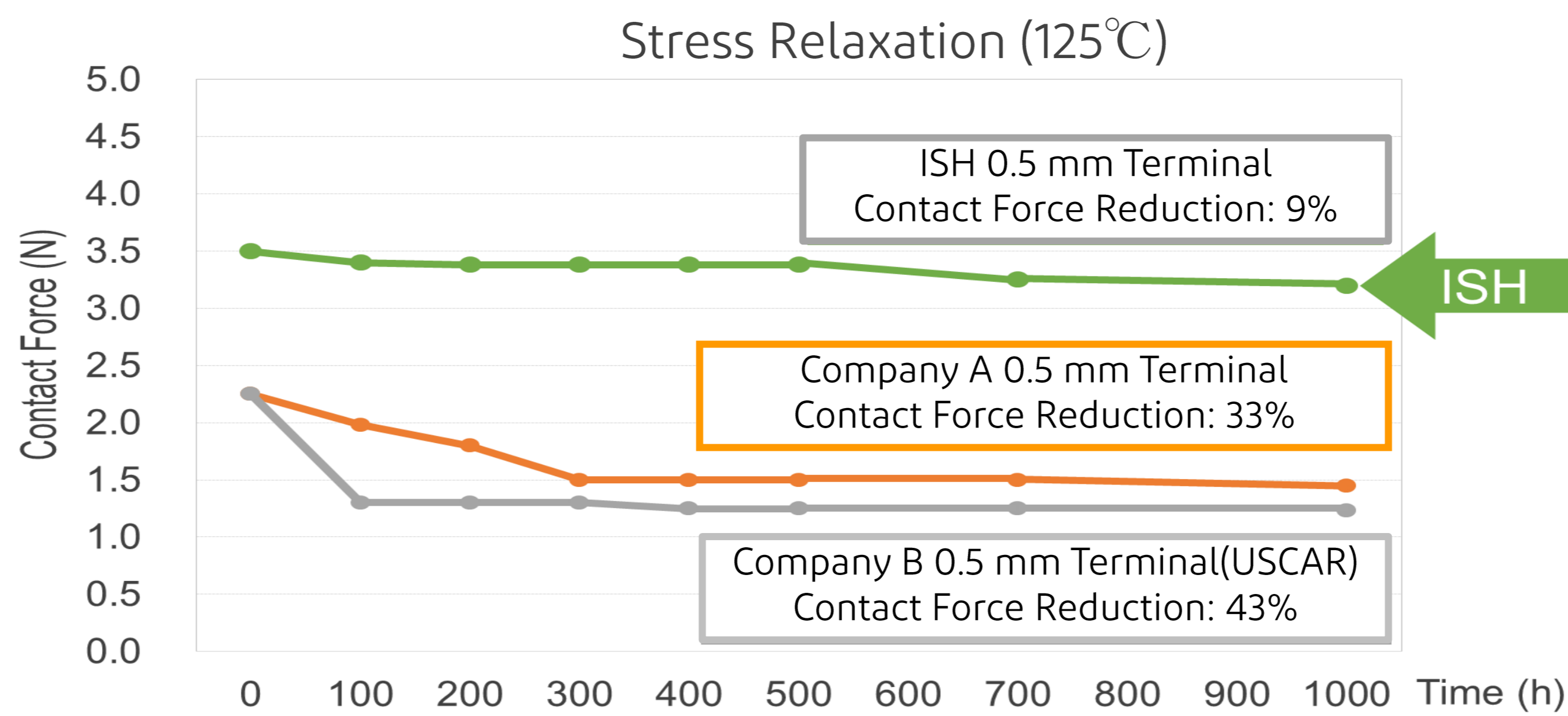
Single-Row



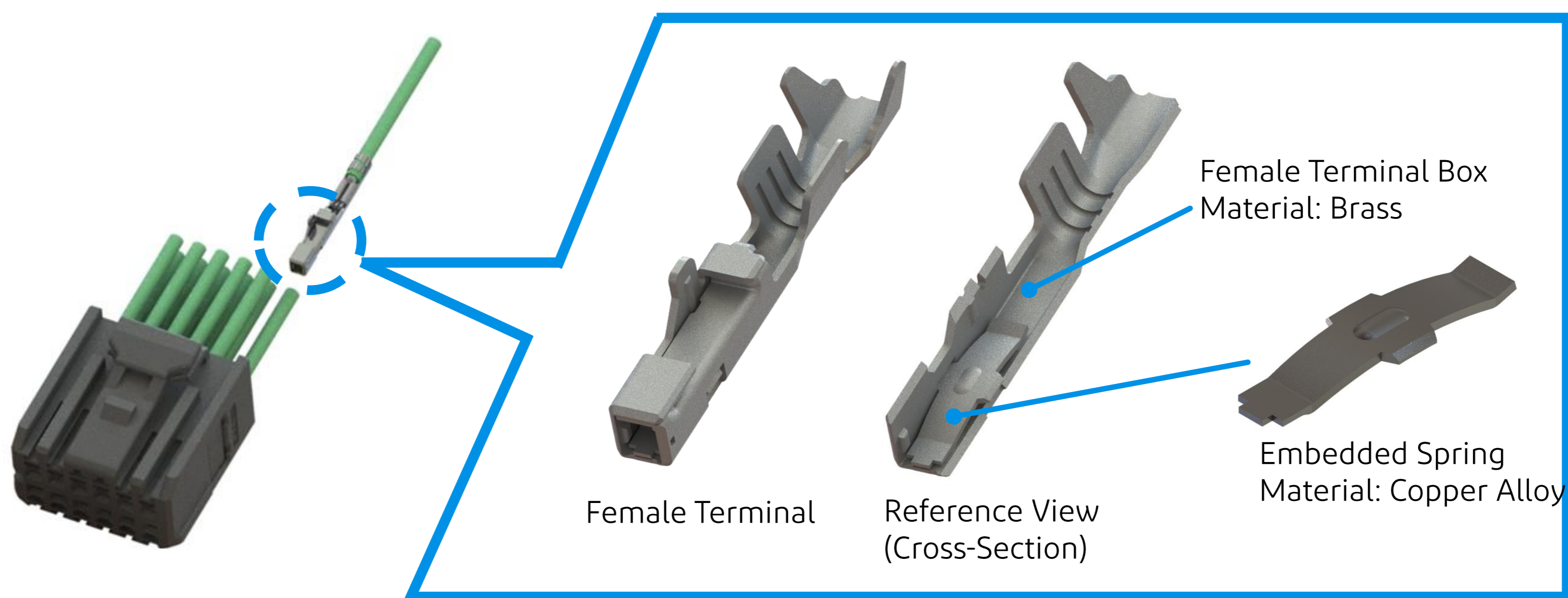
Double-Row



## ► High heat and strong vibration resistance for high-reliability applications



## ► Unique embedded spring terminals for long-term stable electrical connection



## ► Designed for automotive and industrial grade applications

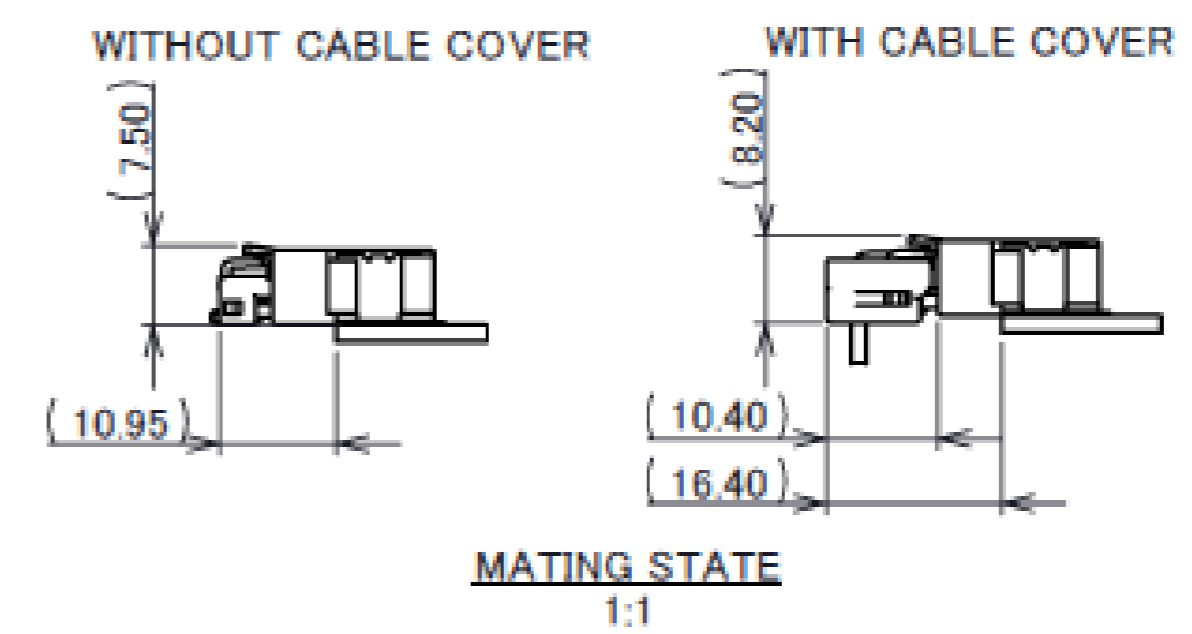
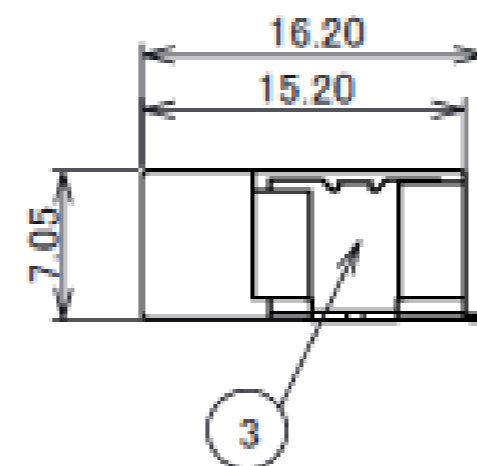
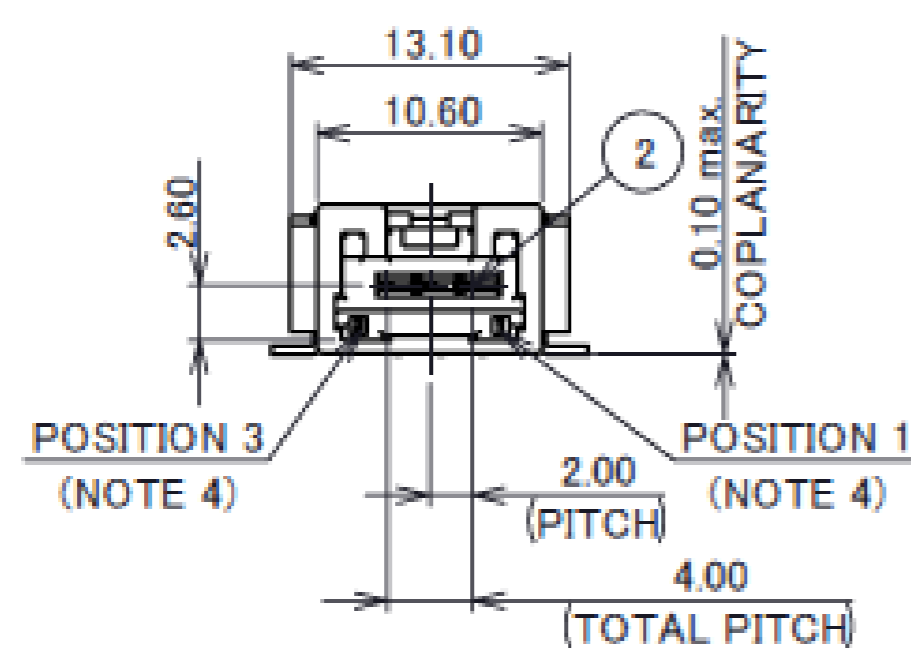
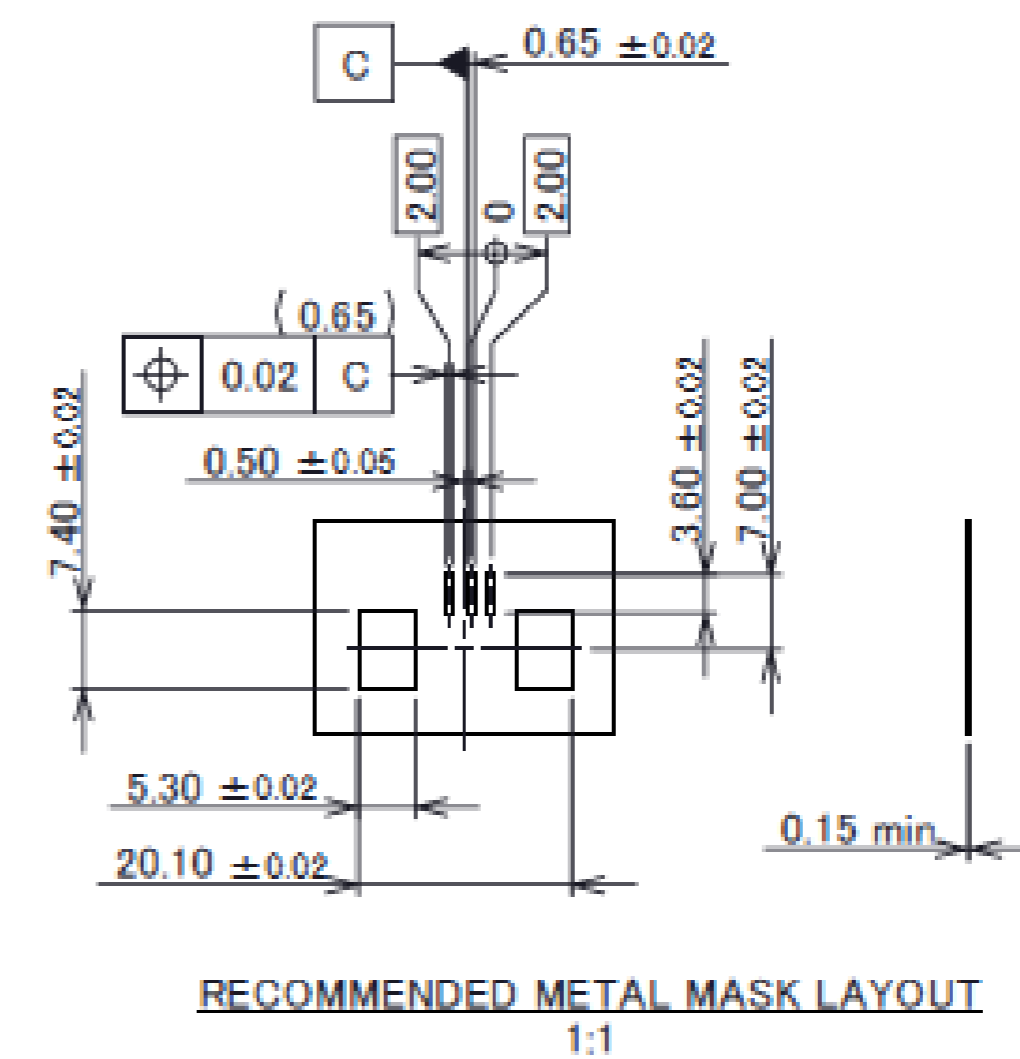
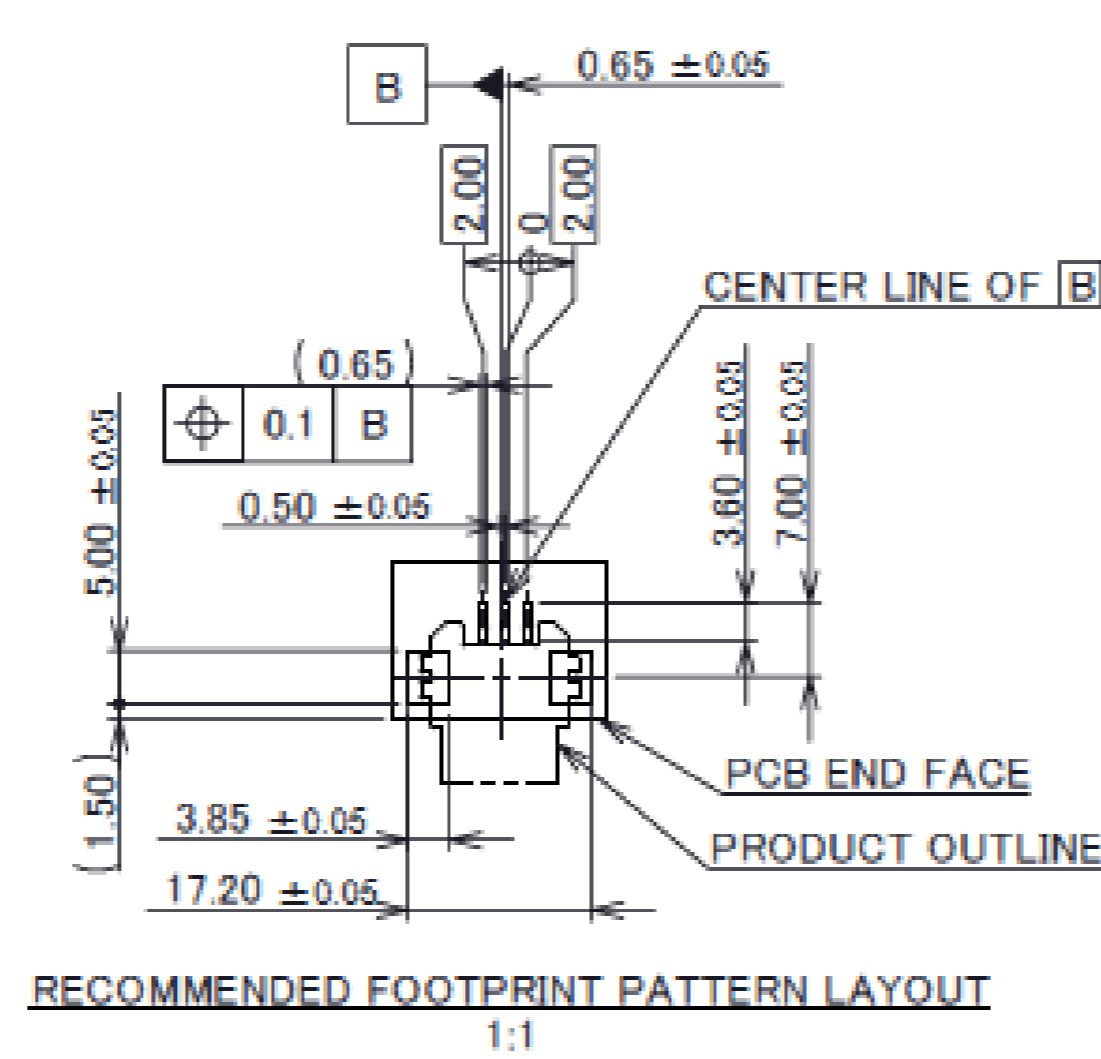
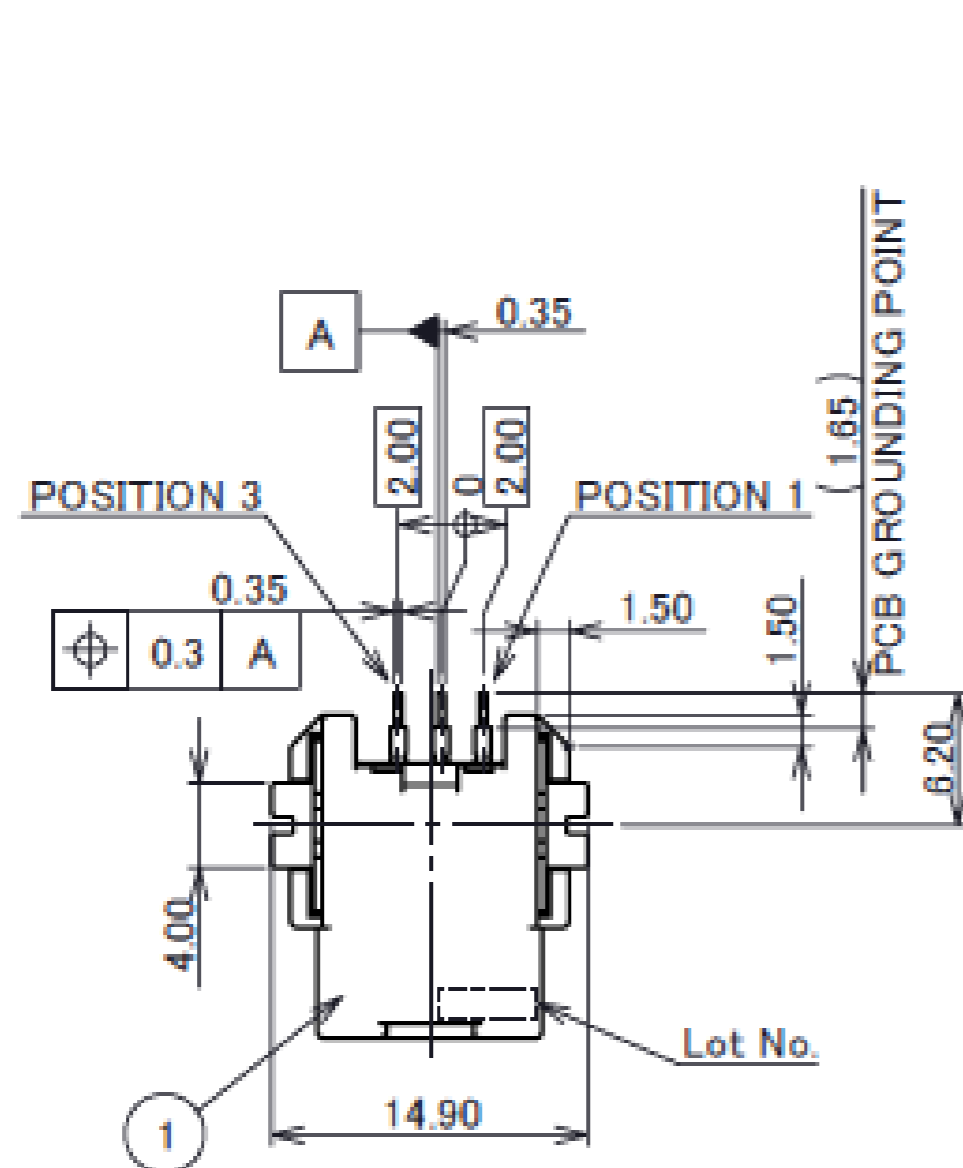


- Headlamp control unit
- Inverter & DC/DC converter
- Battery control module
- Rear view camera module
- Instrument cluster
- Robotic equipment
- Factory automation equipment, etc.

# Component Parts Details

## ISH® (Horizontal Type) MALE (3P):

PART NO.
V0111-003E-01

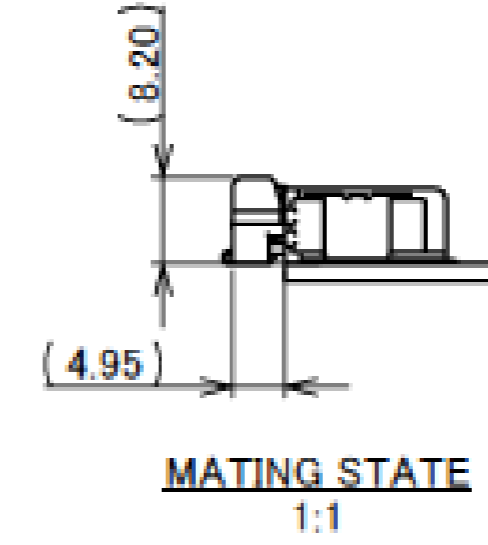
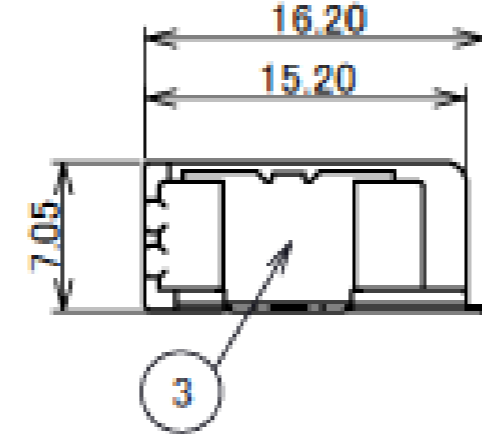
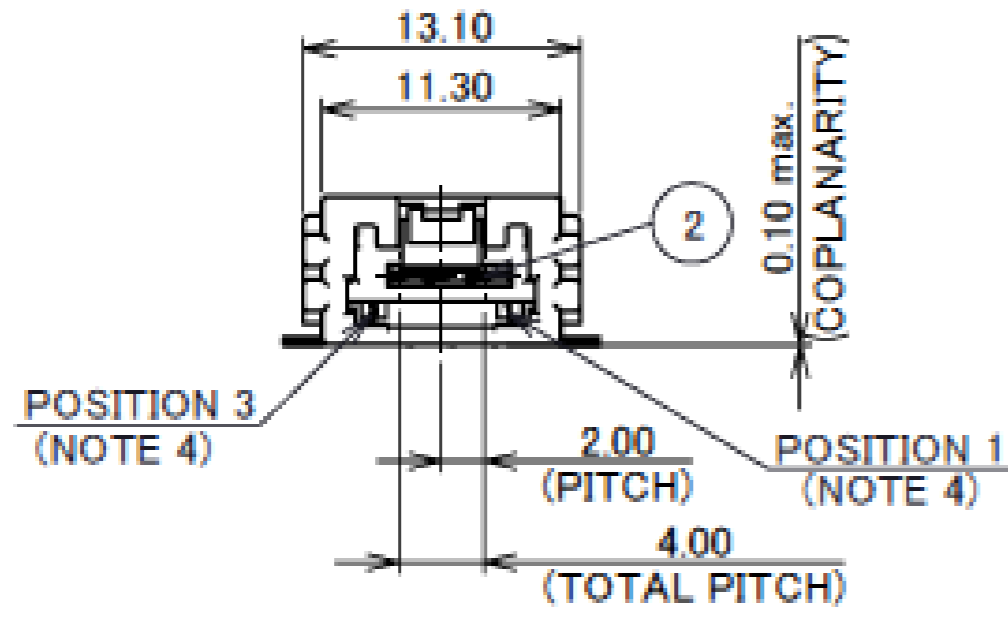
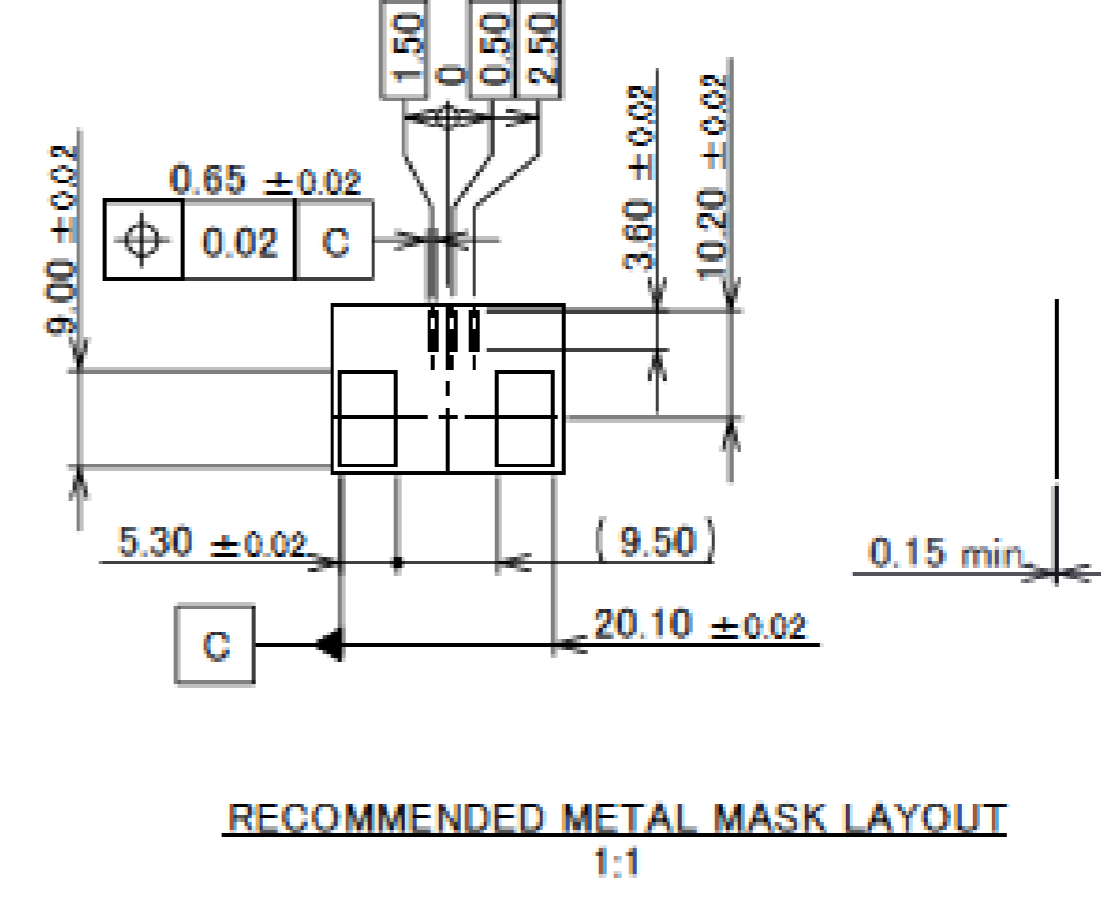
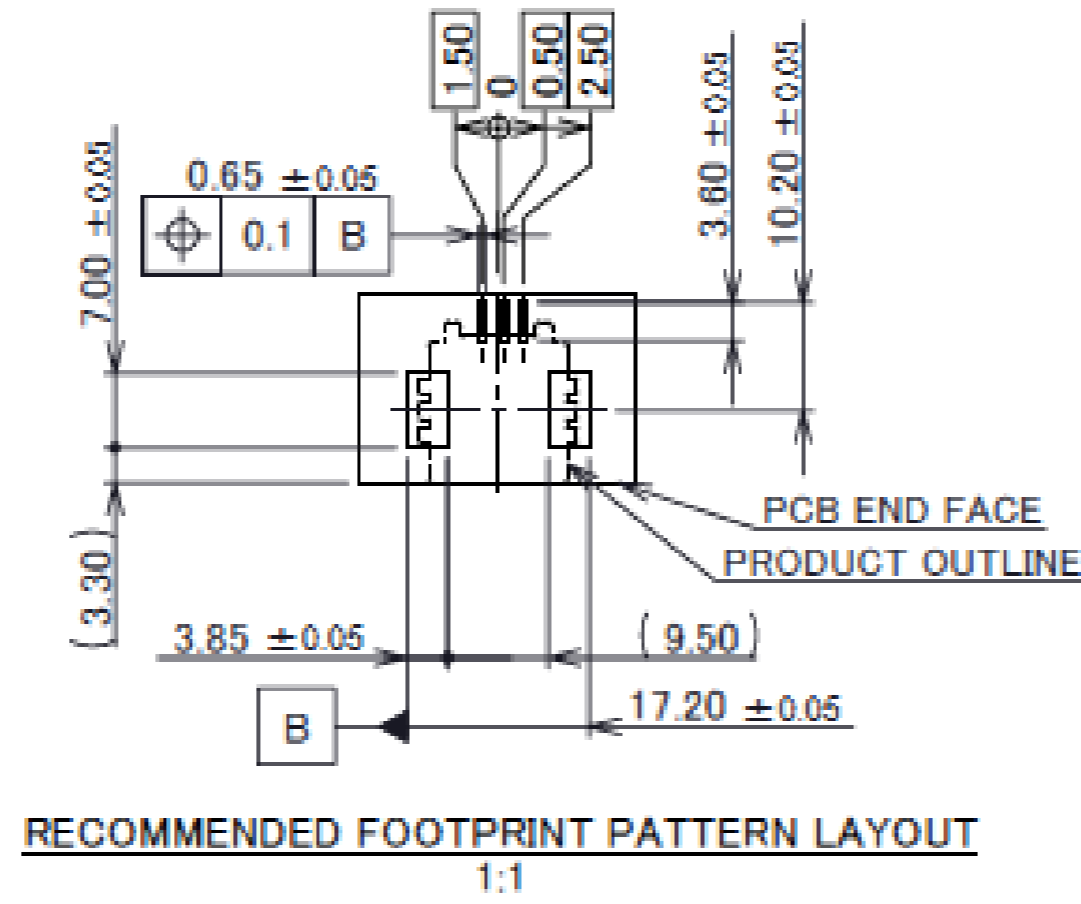
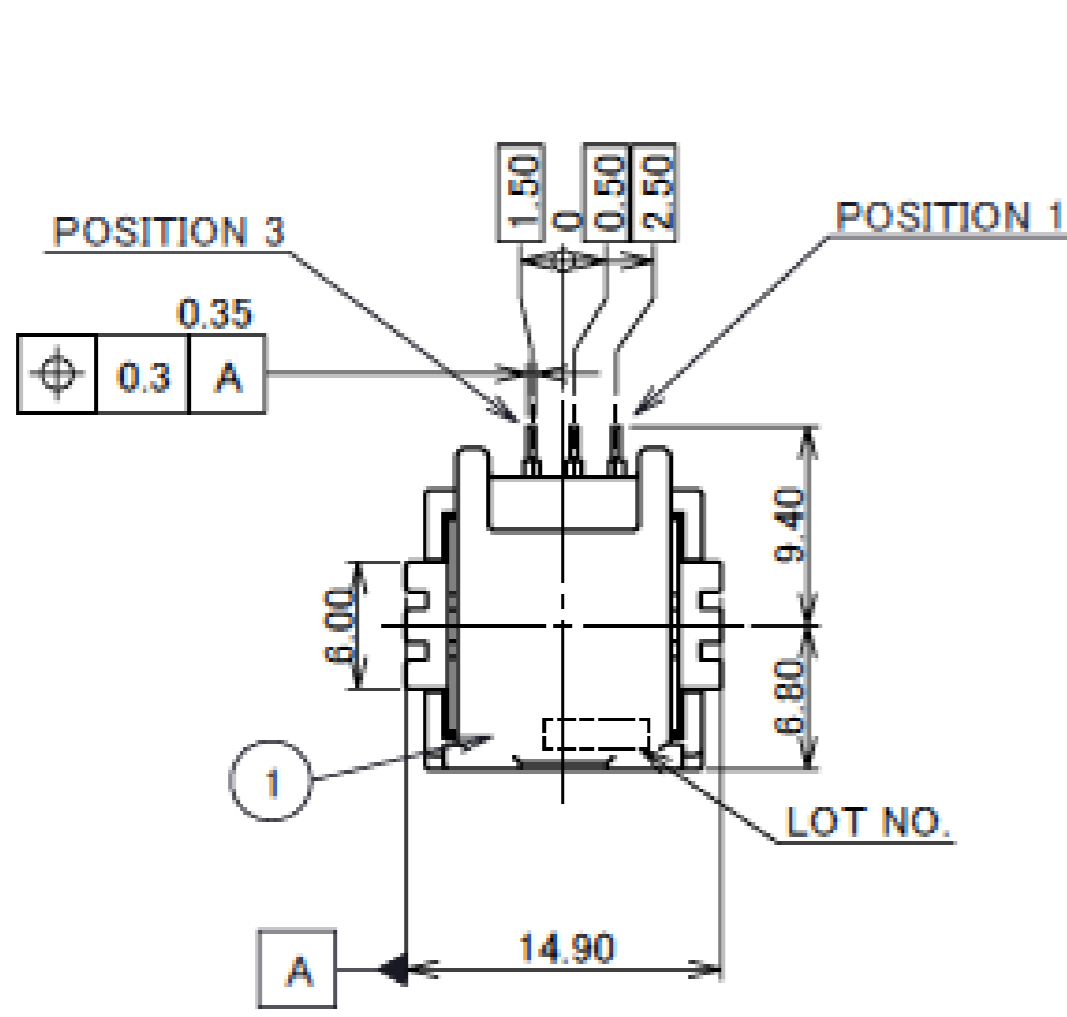


- NOTES
1. APPLICABLE PART NO.:  
 - FEMALE HOUSING...V0113-91003-01  
 - FEMALE TERMINAL...VT009-02  
 - CABLE COVER...V0113-93003-01
  2. COMPLY WITH ELV/RoHS
  3. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  4. POSITION NUMBERS ARE INDICATED.
  5. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
3	HOLD DOWN	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	HOUSING	GLASS-FILLED LCP	BLACK/UL94V-0

# ISH® (Horizontal Type) MALE (3P) ✕ISHVS:

PART NO.
V0085-003E-001



- NOTES
1. APPLICABLE PART NO.  
- FEMALE HOUSING: V0037-91003-211  
- FEMALE TERMINAL: VT009-03
  2. COMPLY WITH ELV/RoHS.
  3. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE CONNECTOR IS MOUNTED ON THE PCB.
  4. POSITION NUMBERS ARE INDICATED.
  5. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

3	HOLD DOWN	BRASS	S <sub>n</sub> REFLOW
2	MALE TERMINAL	BRASS	PLATING ALL IN UNDER LAYER, CONTACT AREA: Au PLATING SMT AREA: S <sub>n</sub> REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0

# ISH® (Horizontal Type) MALE (6P):

PART NO.	KEY CODING	COLOR
V0114-008E-01	KEY CODING-A	BLACK
V0114-008E-11	KEY CODING-B	NATURAL

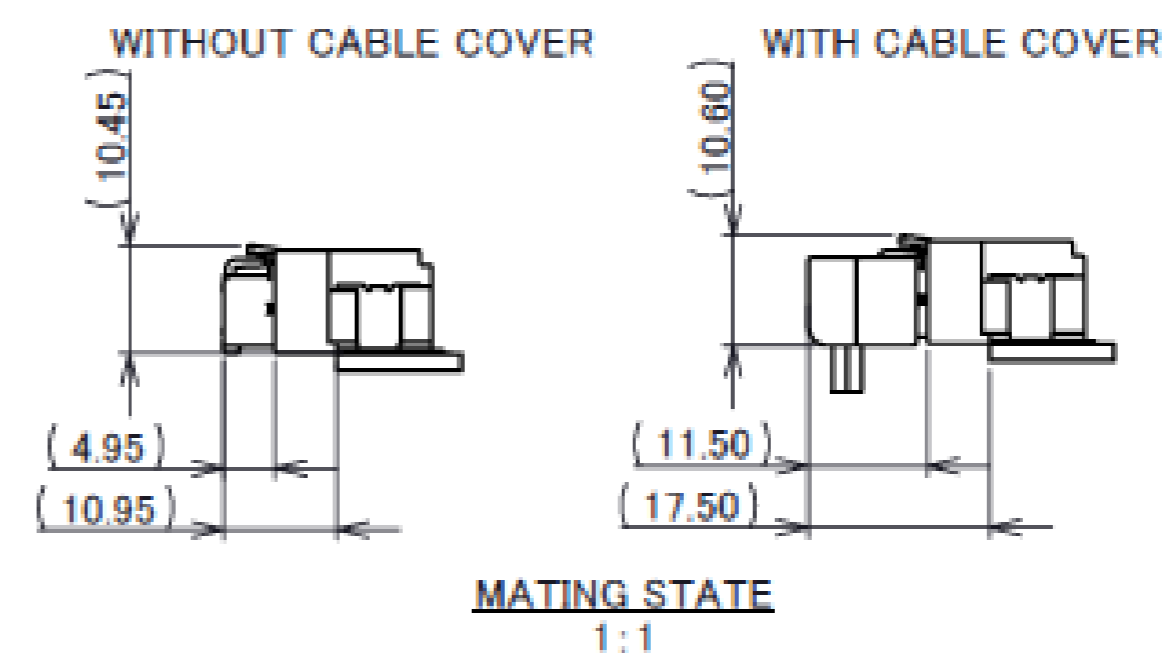
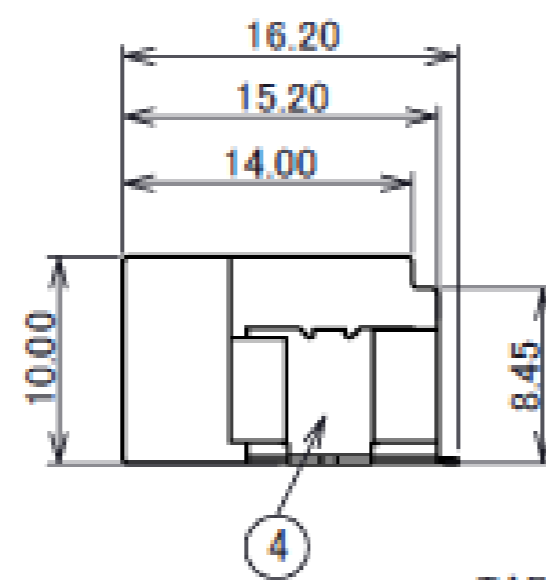
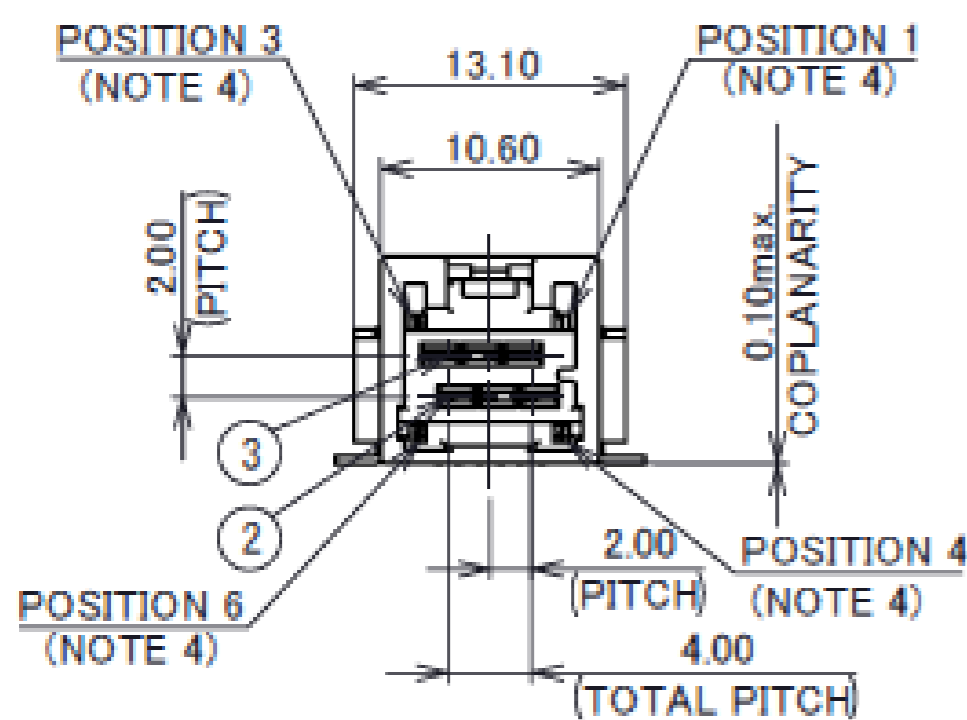
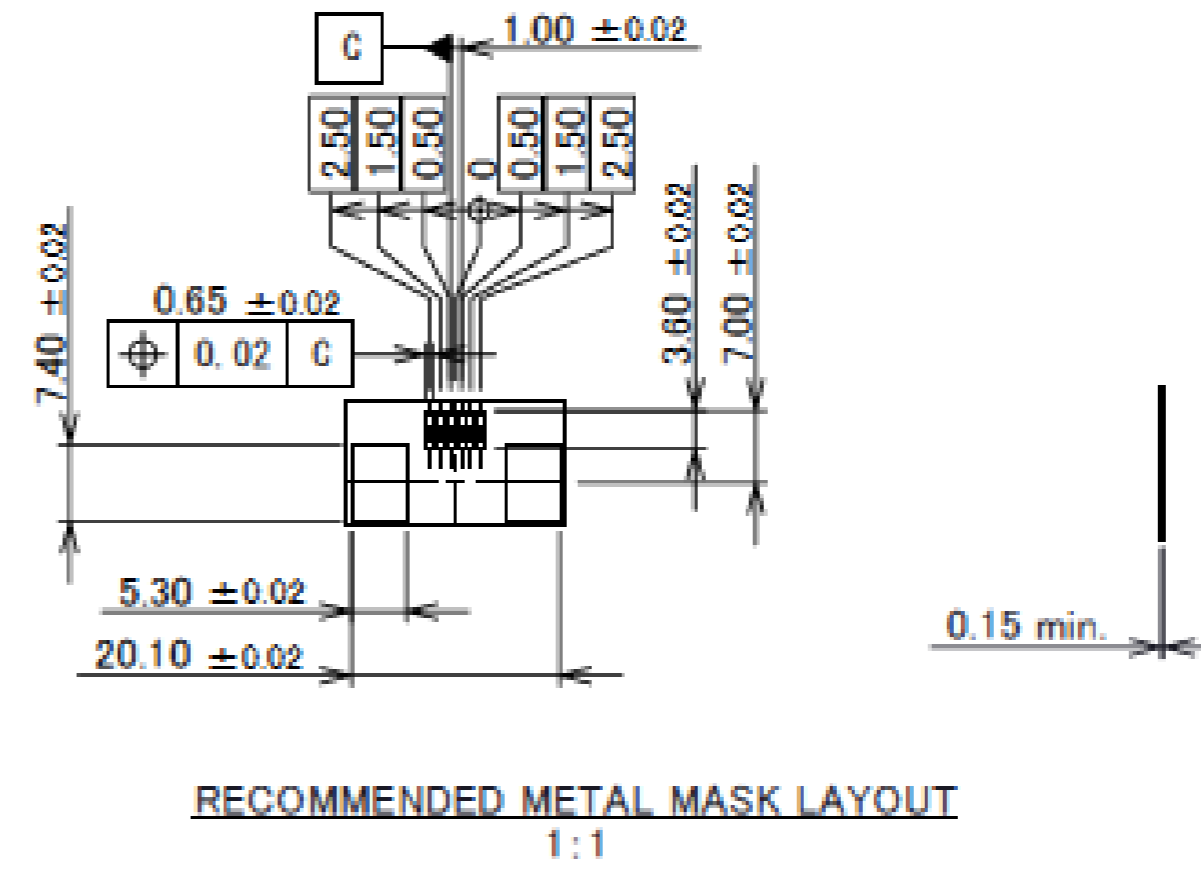
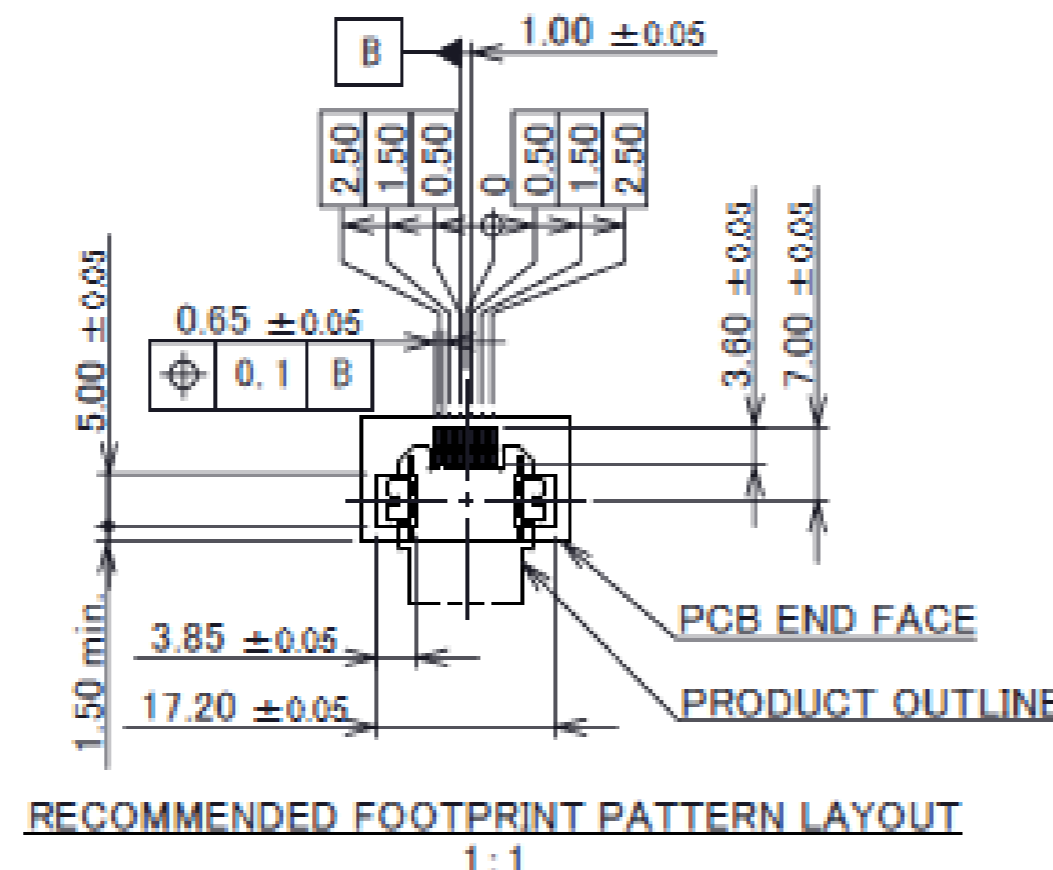
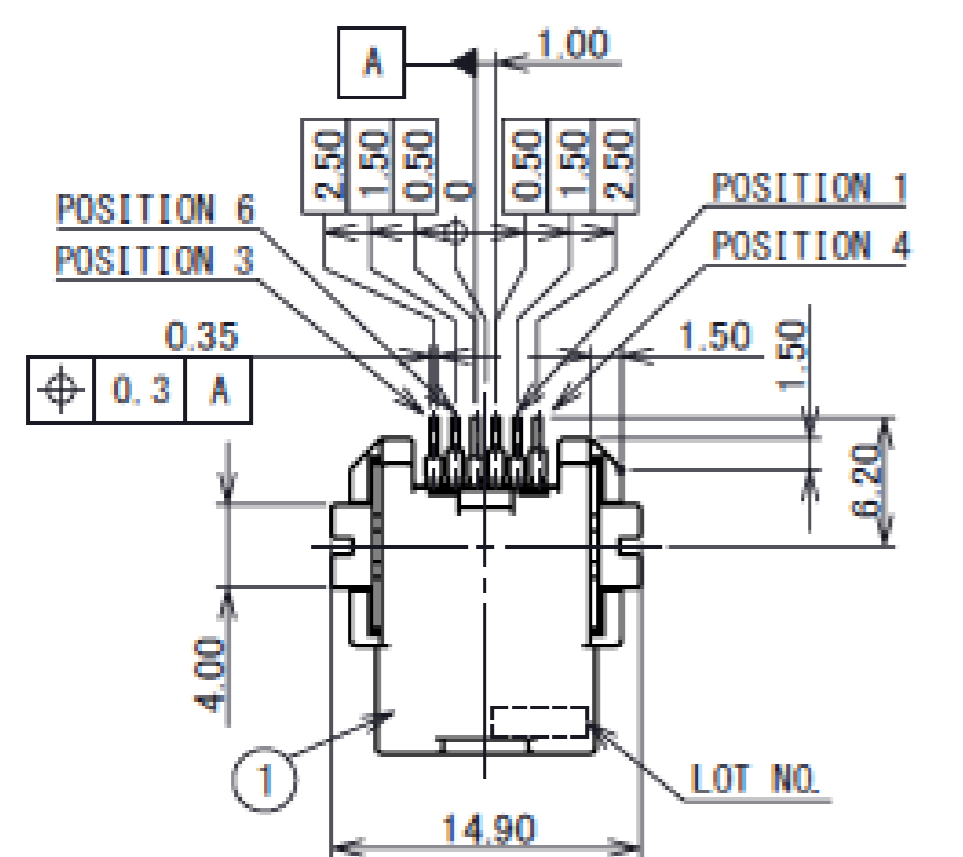
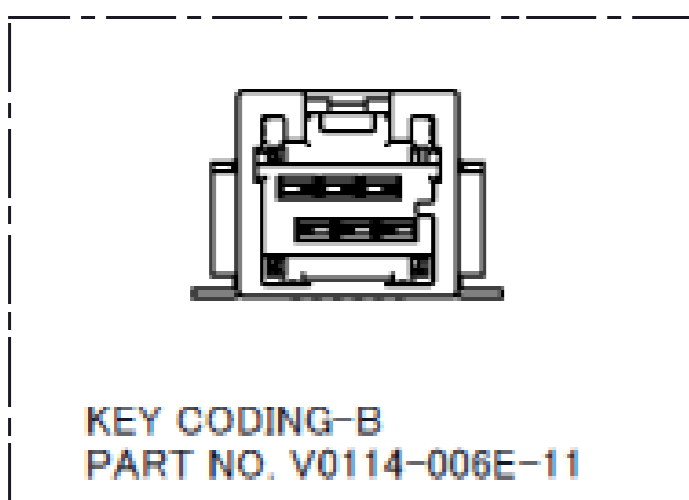


TABLE 1. COUNTERPARTS

COUNTERPARTS	MALE CONNECTOR	FEMALE HOUSING	FEMALE RETAINER	CABLE COVER	FEMALE TERMINAL				
	PART NO.	COLOR	PART NO.	COLOR	PART NO.	FINISH			
KEY CODING-A	V0114-008E-01	BLACK	V0118-91008-01	BLACK	V0118-92008-01	BLACK	V0118-93008-01(NATURAL) V0118-93008-02(BLACK)	VT008-02	S <sub>n</sub> REFLOW
KEY CODING-B	V0114-008E-11	NATURAL	V0118-91008-11	NATURAL					

4	HOLD DOWN	BRASS	S <sub>n</sub> REFLOW
3	MALE TERMINAL-2	BRASS	S <sub>n</sub> REFLOW
2	MALE TERMINAL-1	BRASS	S <sub>n</sub> REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	KEY CODING-A-BLACK KEY CODING-B-NATURAL / UL94V-0
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS



- NOTES
1. APPLICABLE PART NO. ARE SHOWN IN TABLE 1.
  2. COMPLY WITH ELV/RoHS
  3. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  4. POSITION NUMBERS ARE INDICATED
  5. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

Rev.0

# ISH® (Horizontal Type) MALE (8P):

PART NO.	LOCK TYPE	KEY CODING	COLOR
V0114-008E-02	INERTIA LOCK	KEY CODING-A	BLACK
V0114-008E-12		KEY CODING-B	NATURAL
V0114-008E-22		KEY CODING-C	BLACK
V0114-008E-32		KEY CODING-D	NATURAL

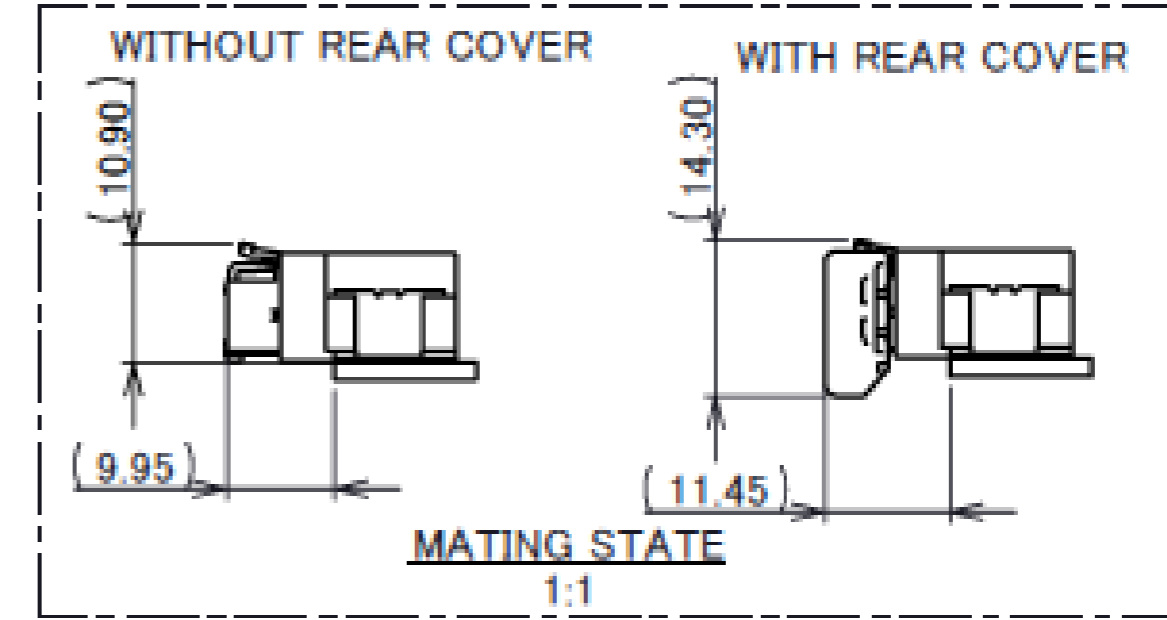
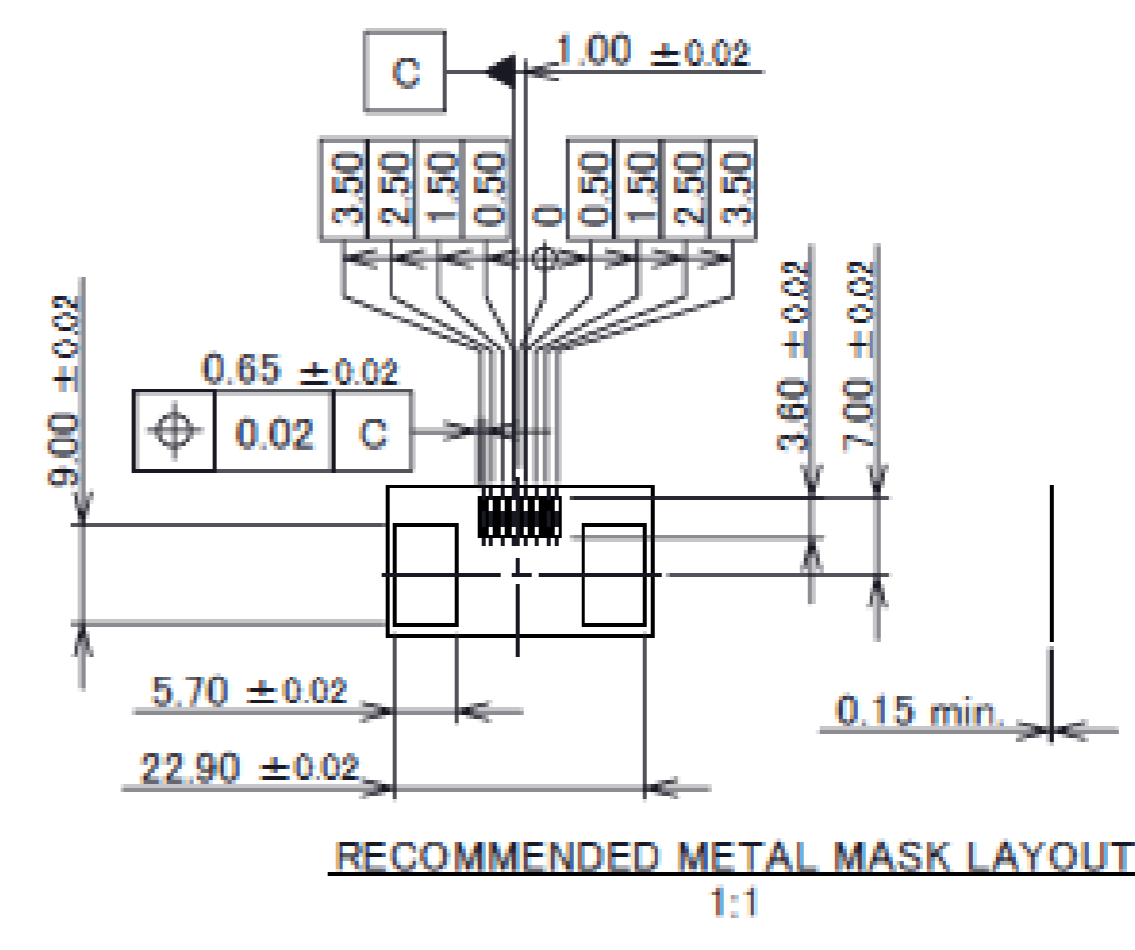
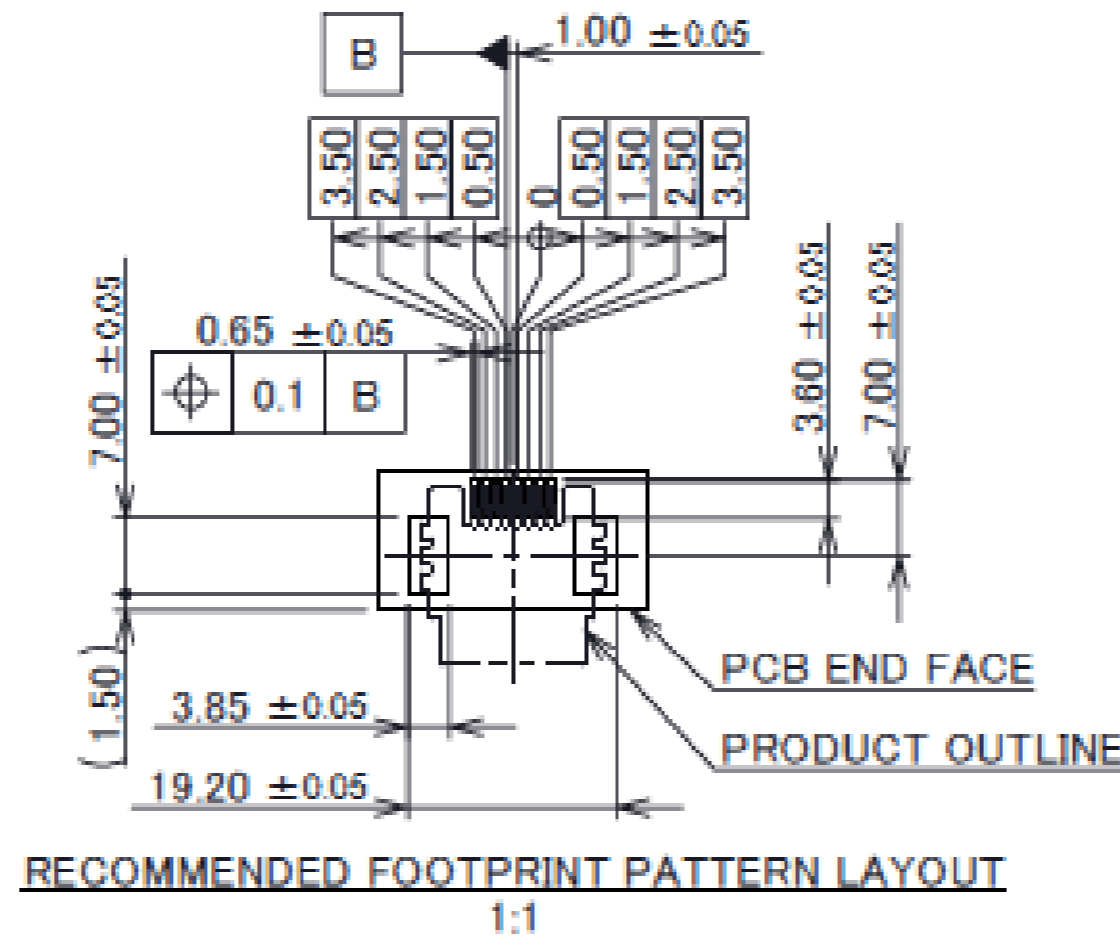
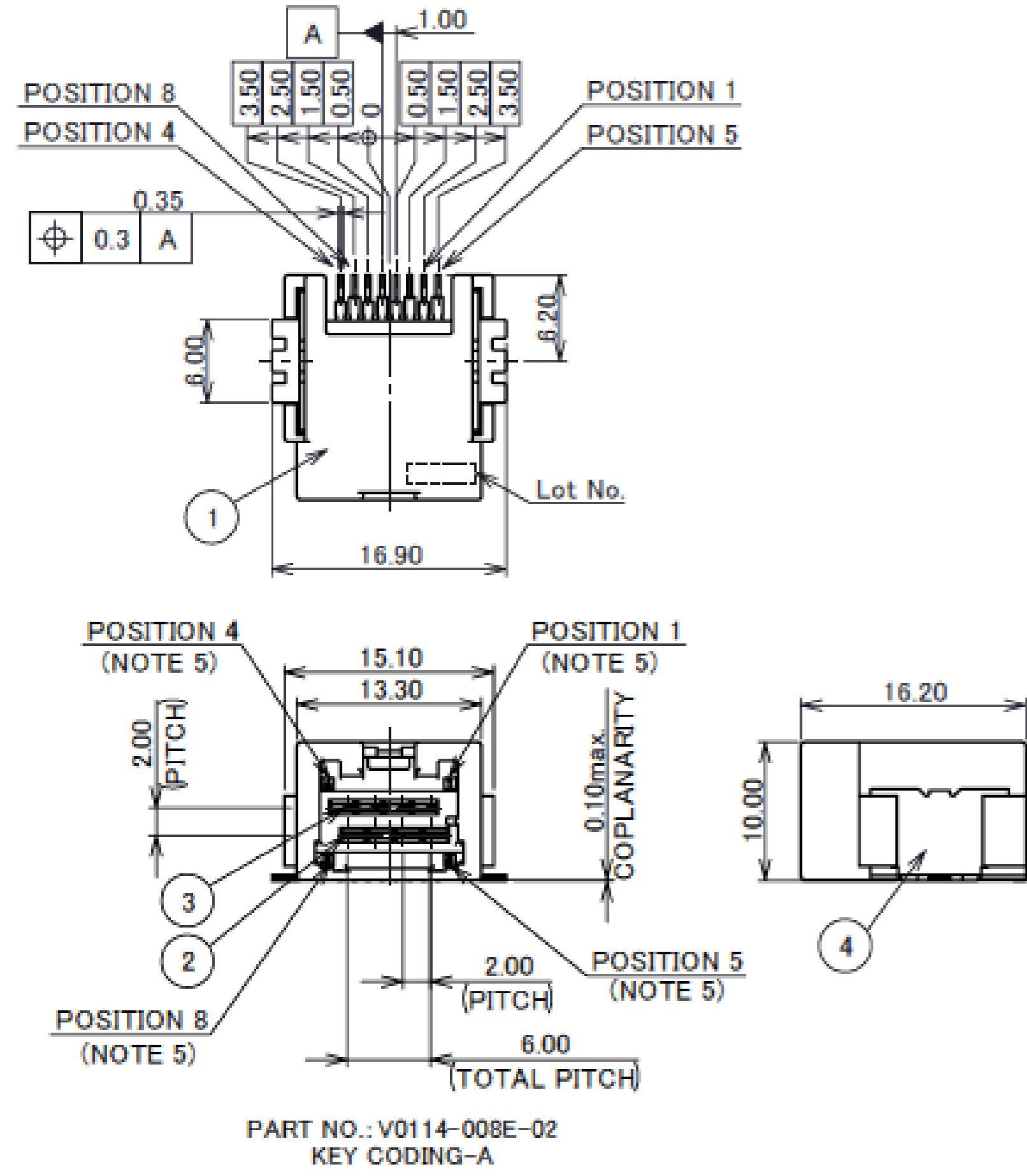


TABLE 1. COUNTERPARTS FOR MATING

MALE CONNECTOR				FEMALE HOUSING		FEMALE RETAINER		FEMALE TERMINAL		REAR COVER	
PART NO.	KEY CODING	LOCK TYPE	COLOR	PART NO.	COLOR	PART NO.	COLOR	PART NO.	FINISH	PART NO.	COLOR
V0114-008E-02	KEY CODING-A	INERTIA LOCK	BLACK	V0116-91008-02	BLACK	V0116-92008-01	BLACK	VT008-02	Sn REFLOW	-	-
V0114-008E-12	KEY CODING-B		NATURAL	V0116-91008-03	NATURAL					V0116-94008-01	BLACK
V0114-008E-22	KEY CODING-C		BLACK	V0116-91008-22	BLACK					-	-
V0114-008E-32	KEY CODING-D		NATURAL	V0116-91008-32	NATURAL					-	-

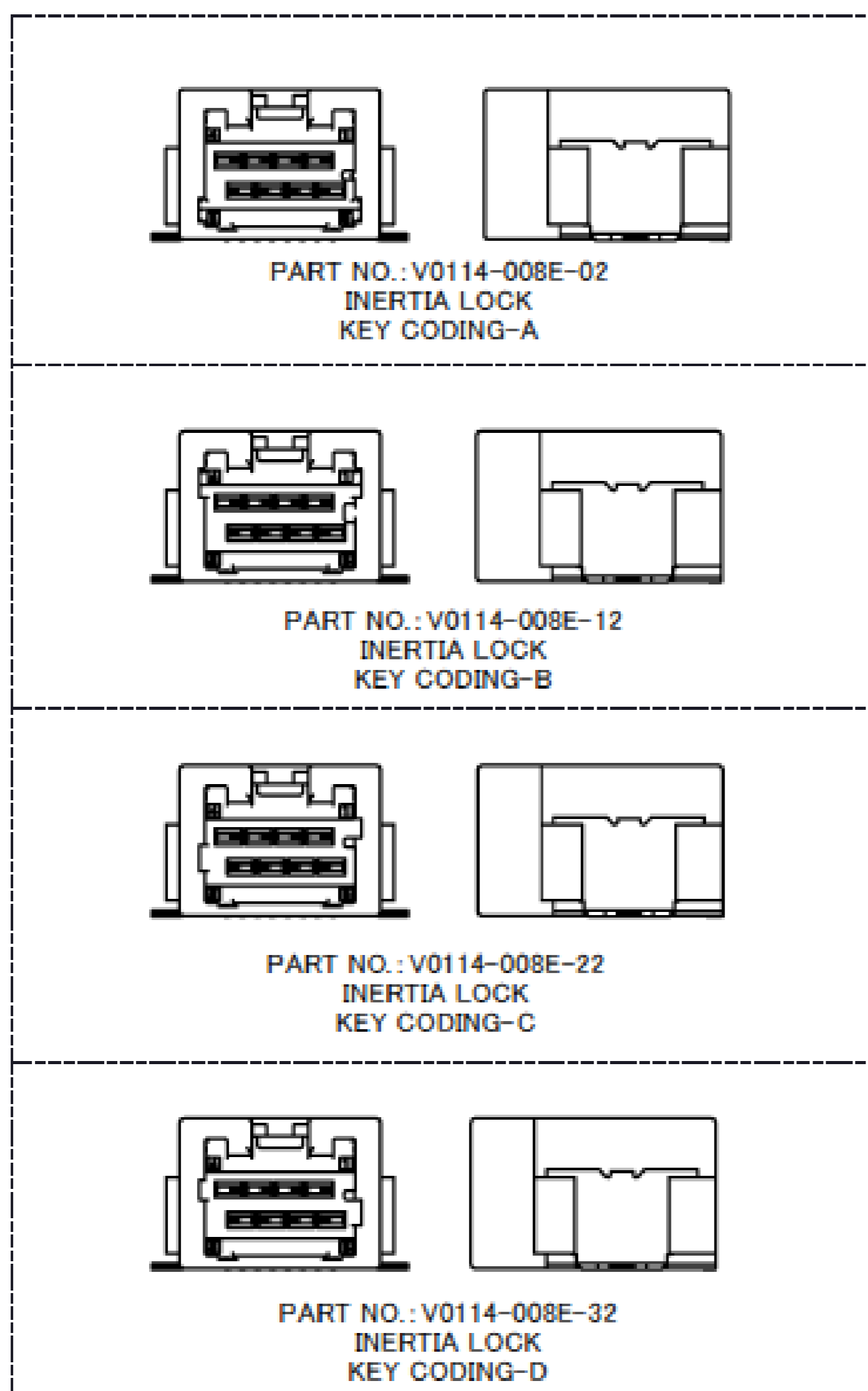
4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK, NATURAL/UL94V-0
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

- NOTES
1. APPLICABLE PART NO. ARE SHOWN IN TABLE 1.
  2. COMPLY WITH ELV/ROHS.
  3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL[HDM-0020]
  4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  5. POSITION NUMBERS ARE INDICATED.

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# ISH® (Horizontal Type) MALE (8P):

PART NO.	LOCK TYPE	KEY CODING	COLOR
V0114-008E-02	INERTIA LOCK	KEY CODING-A	BLACK
V0114-008E-12		KEY CODING-B	NATURAL
V0114-008E-22		KEY CODING-C	BLACK
V0114-008E-32		KEY CODING-D	NATURAL



Rev.0

# ISH® (Horizontal Type) MALE (12P):

PART NO.	LOCK TYPE	KEY CODING	COLOR
V0114-012E-01	NORMAL LOCK	KEY CODING-A	BLACK
V0114-012E-11		KEY CODING-B	NATURAL
V0114-012E-12	INERTIA LOCK	KEY CODING-C	BLUE
V0114-012E-21		KEY CODING-D	NATURAL
V0114-012E-31			GRAY

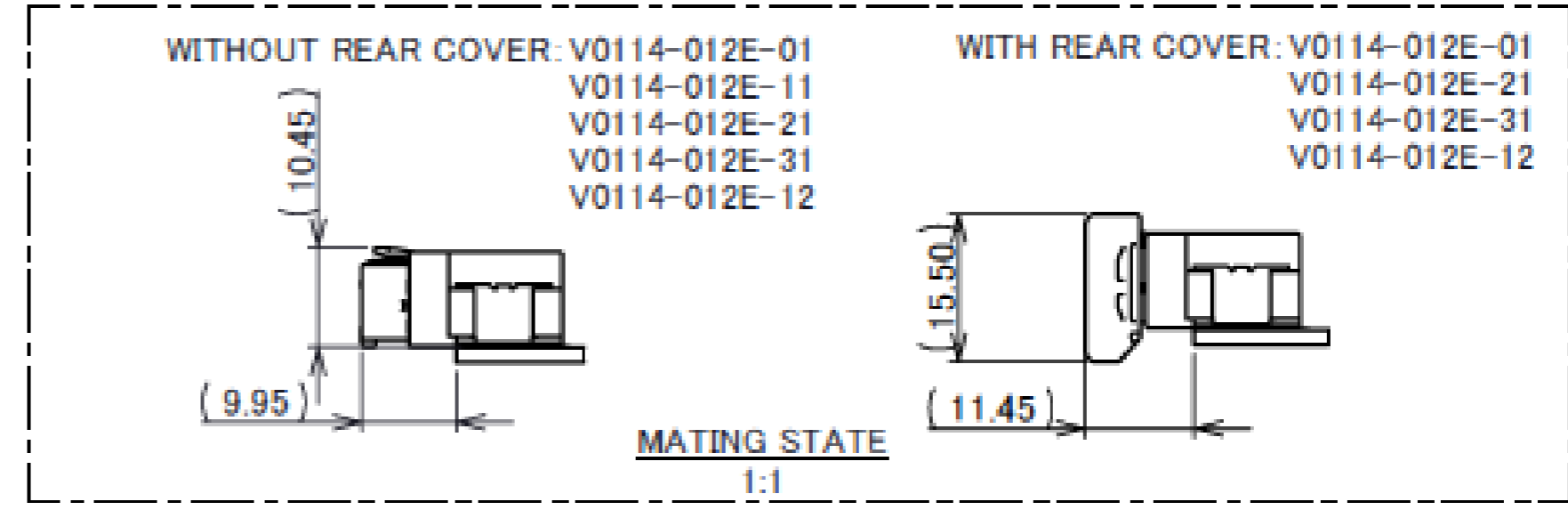
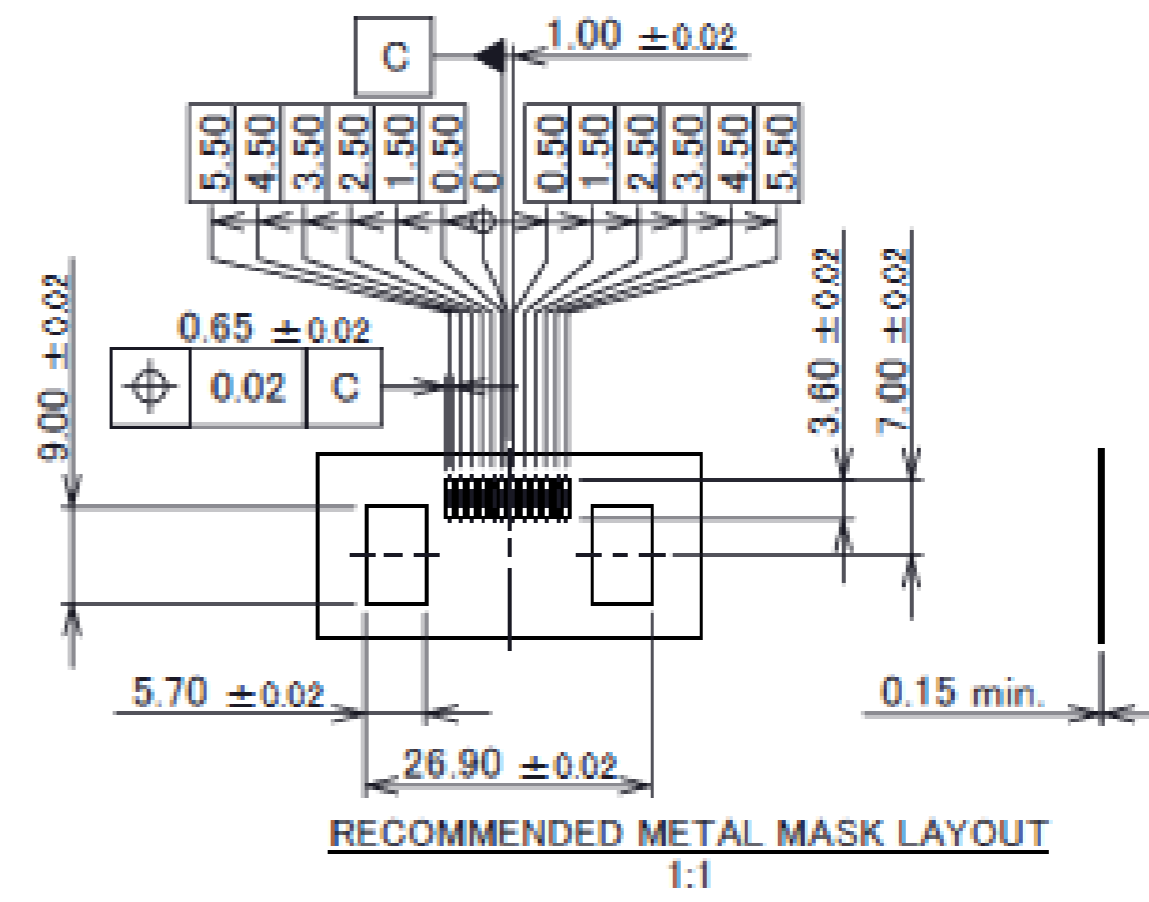
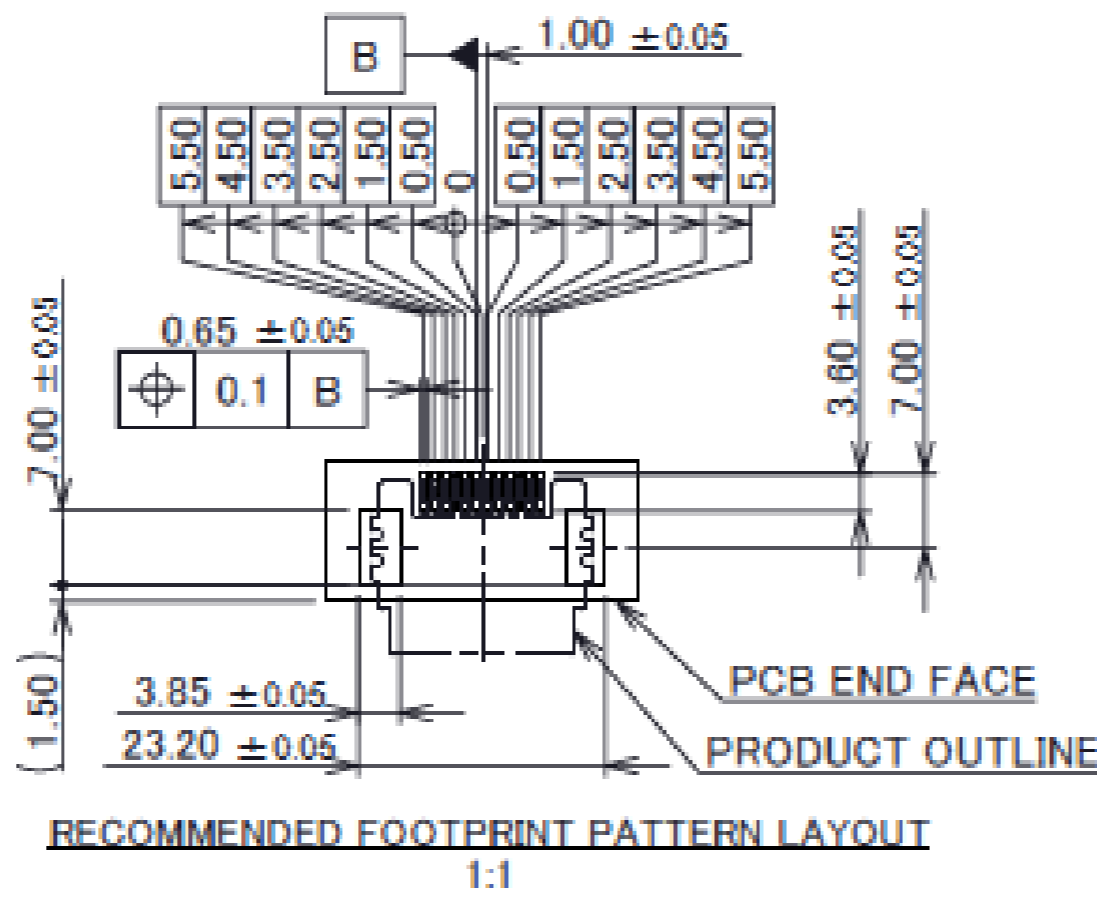
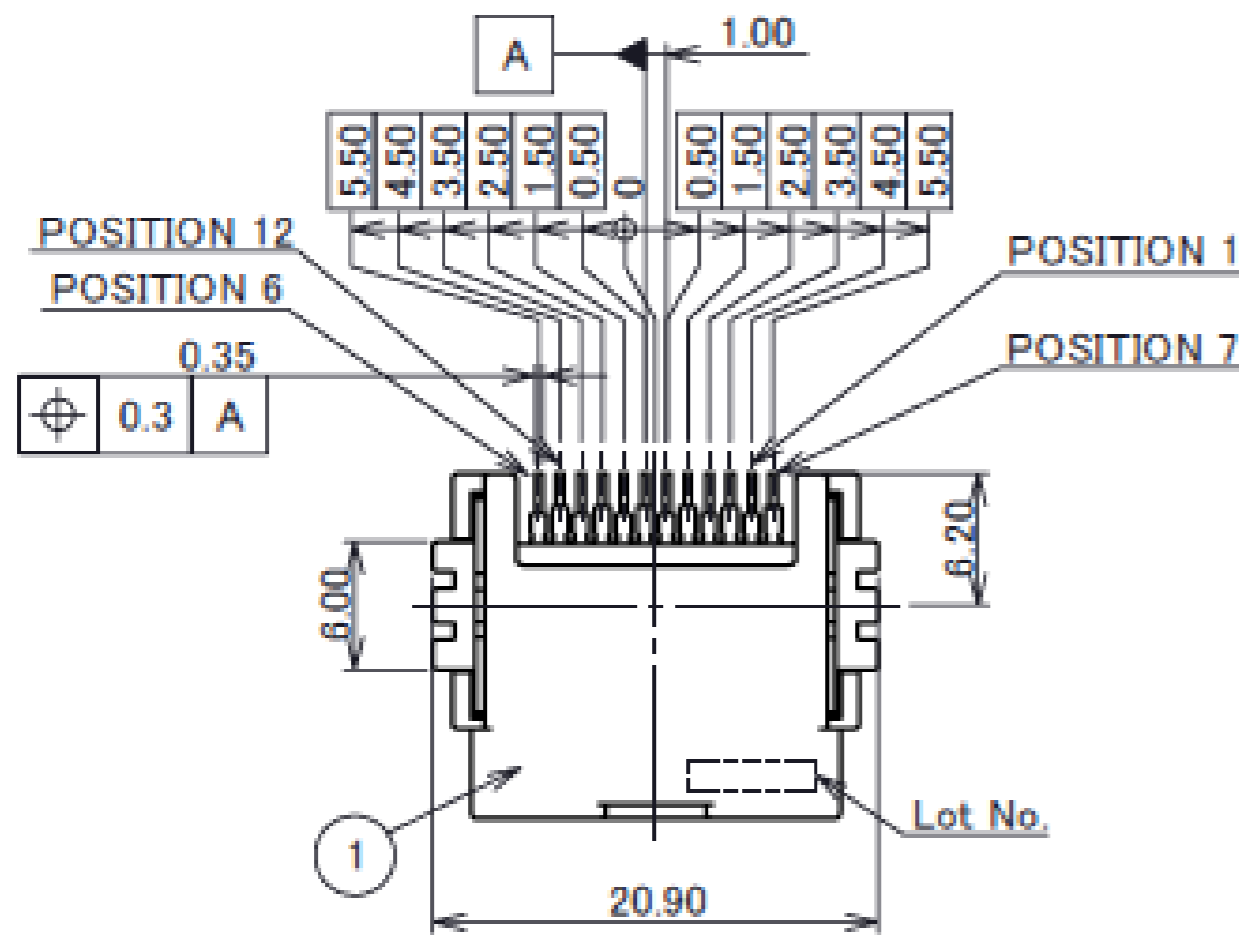
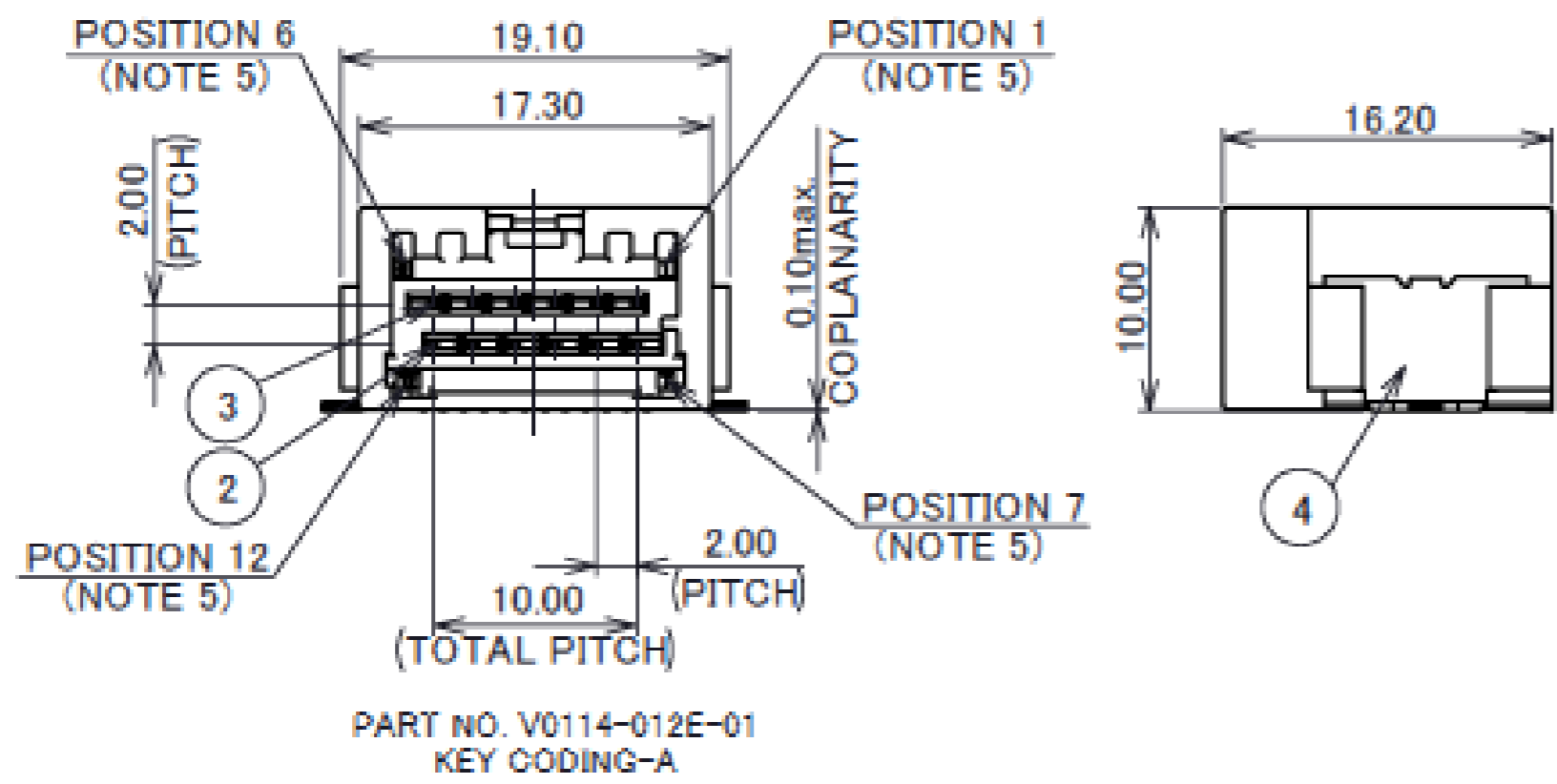


TABLE1 COUNTERPARTS FOR MATING

MALE CONNECTOR		FEMALE HOUSING		FEMALE RETAINER		FEMALE TERMINAL		REAR COVER	
PART NO.	COLOR	PART NO.	COLOR	PART NO.	COLOR	PART NO.	FINISH	PART NO.	COLOR
V0114-012E-01	BLACK	V0116-81012-01	BLACK	V0116-82012-01	BLACK	VT008-02	Sn REFLOW	-	
V0114-012E-11	NATURAL	V0116-81012-02	NATURAL					V0116-84012-01	BLACK
V0114-012E-21	NATURAL	V0116-81012-21	NATURAL	V0116-82012-01	BLACK	VT008-02	Sn REFLOW	-	
V0114-012E-31	GRAY	V0116-81012-22	GRAY					V0116-84012-01	BLACK
V0114-012E-12	BLUE	V0116-81012-11	BLUE						

4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK, NATURAL, BLUE, GRAY/UL94V-0
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS



PART NO. V0114-012E-01  
KEY CODING-A

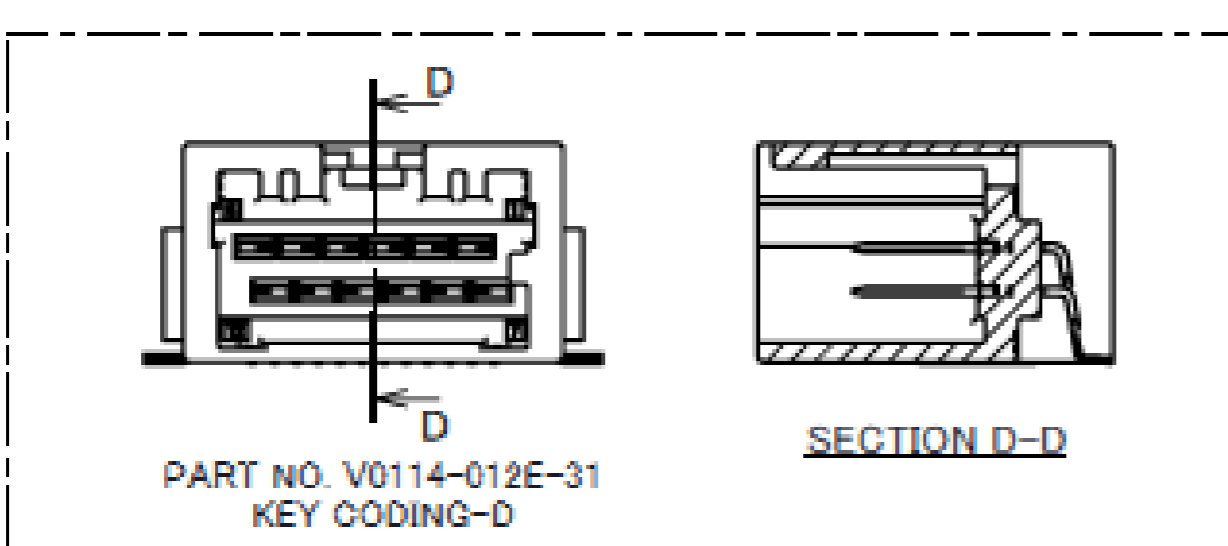
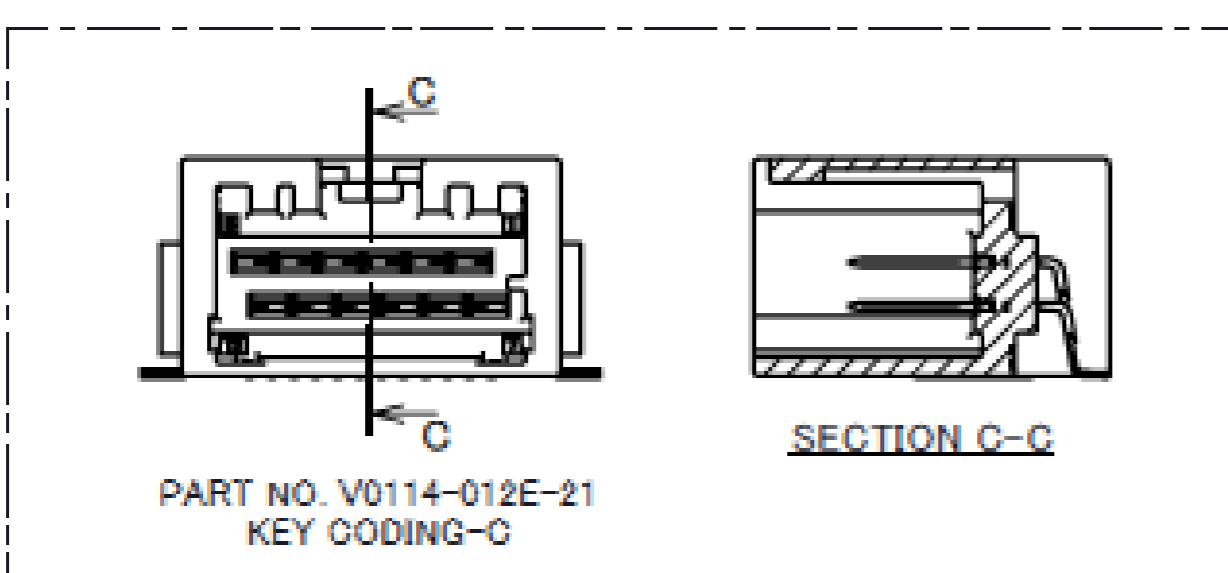
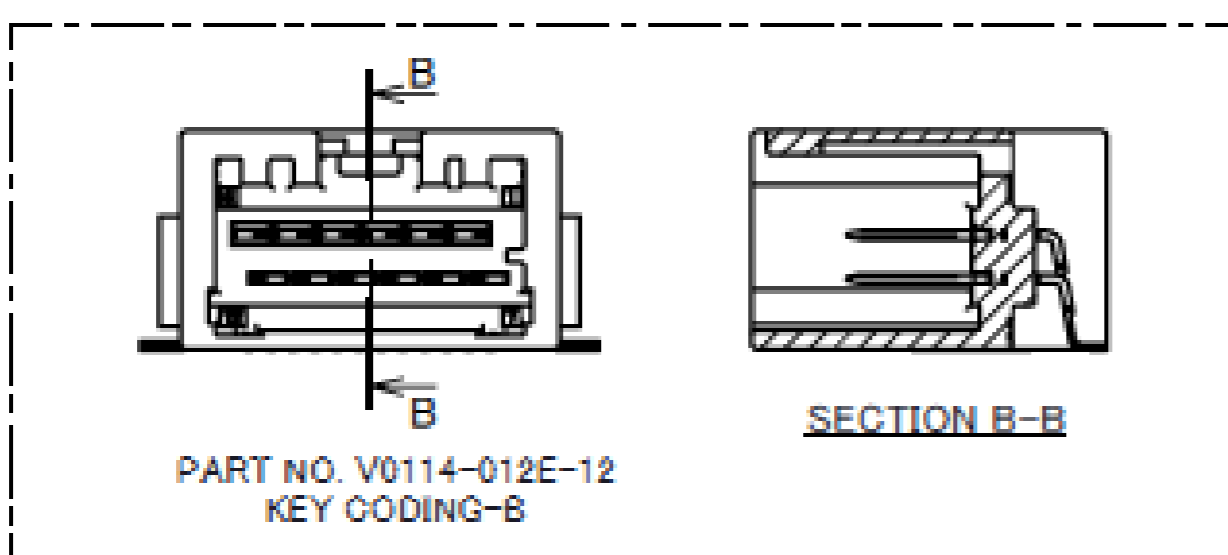
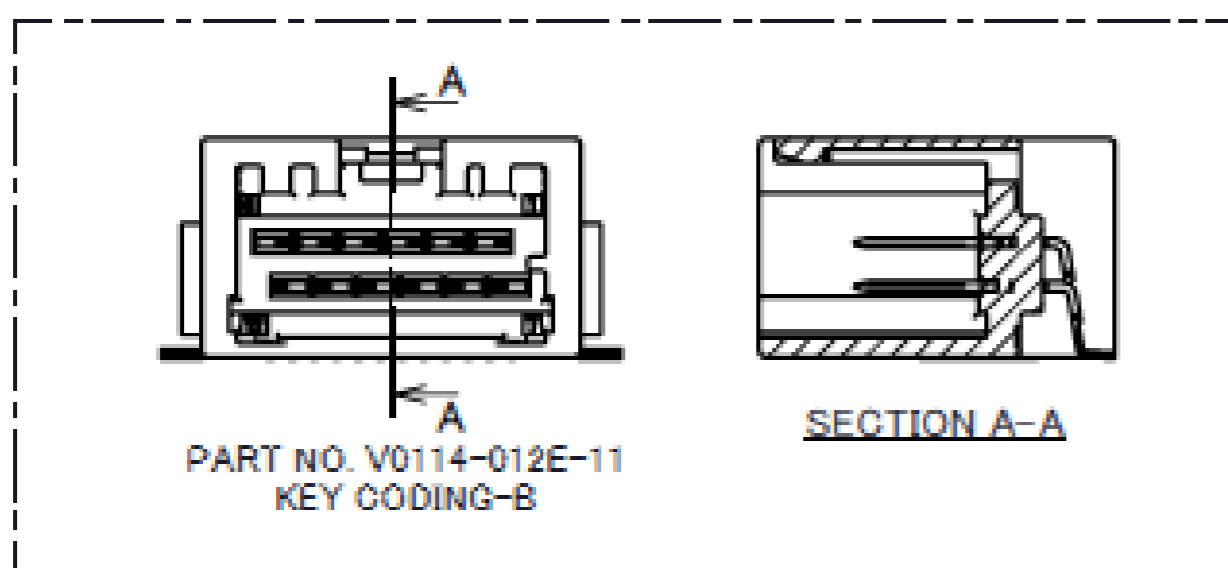
NOTES

1. APPLICABLE PART NO. ARE SHOWN IN TABLE1.
2. COMPLY WITH ELV/ROHS.
3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL[HDM-0020]
4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) MALE (12P):

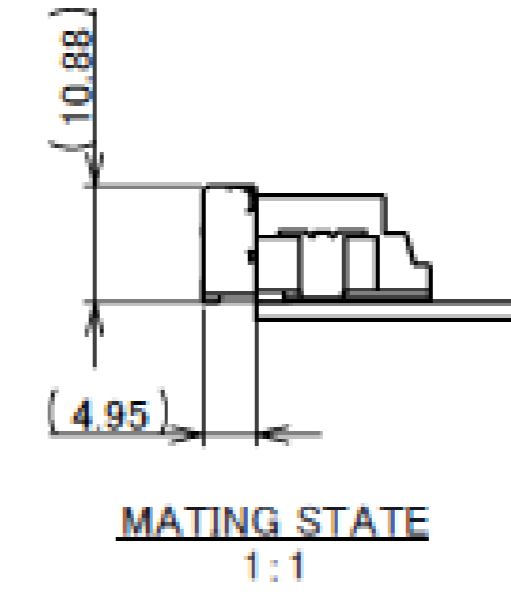
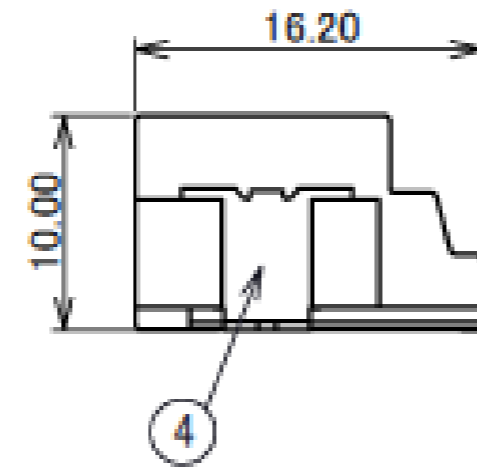
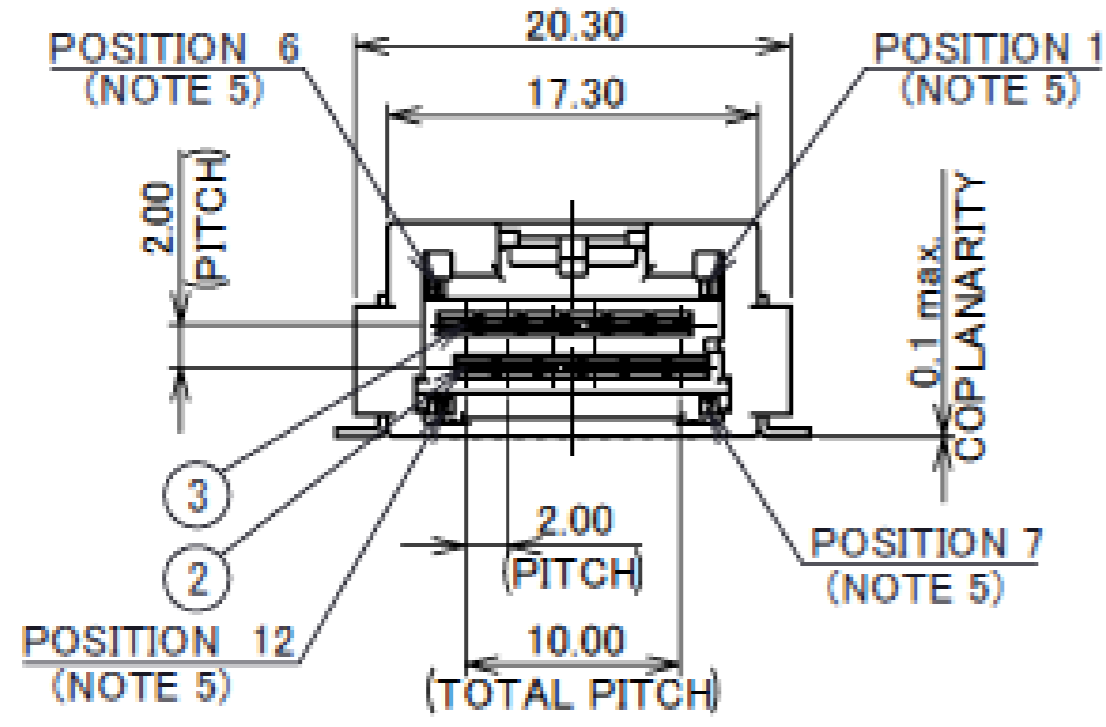
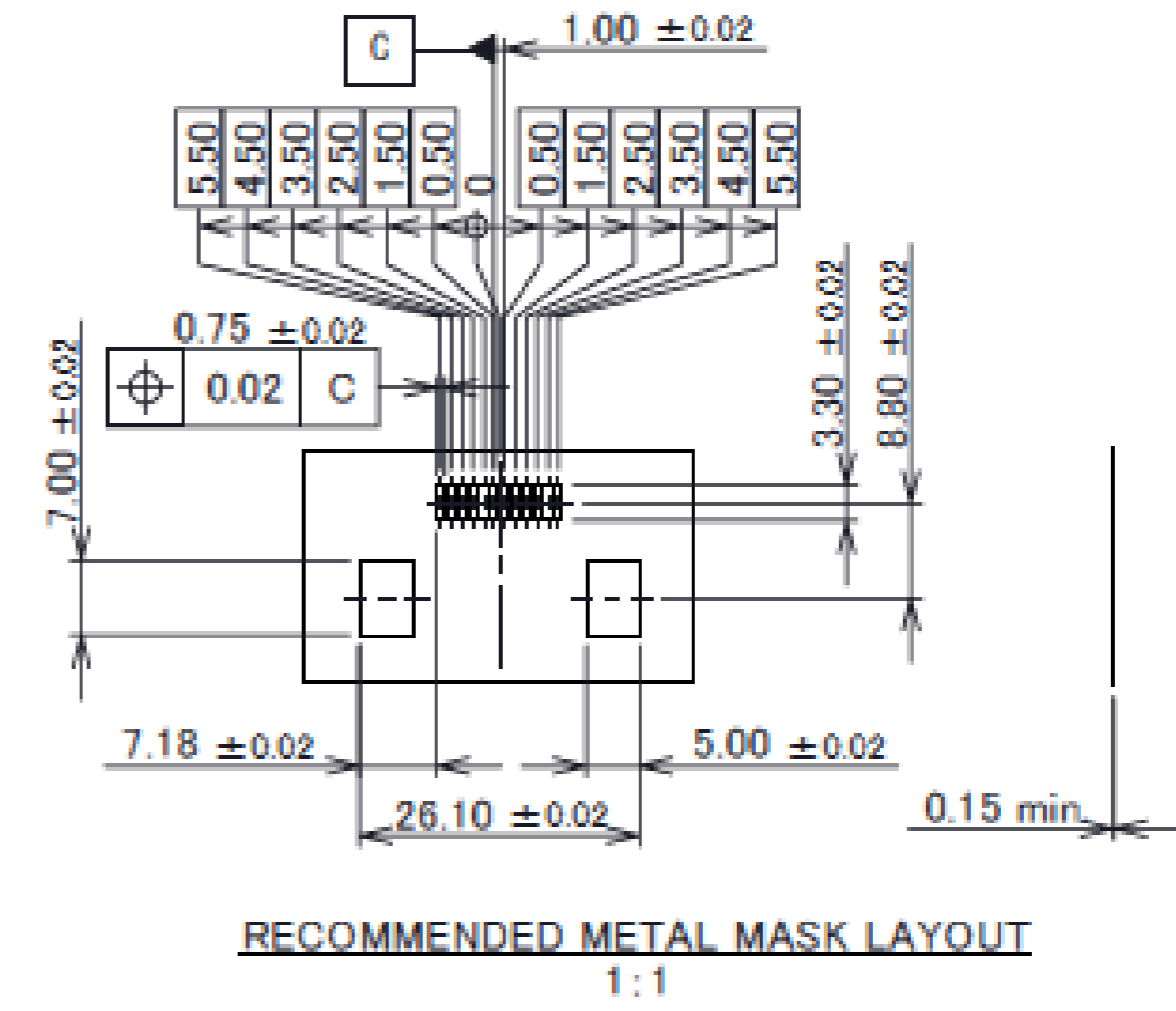
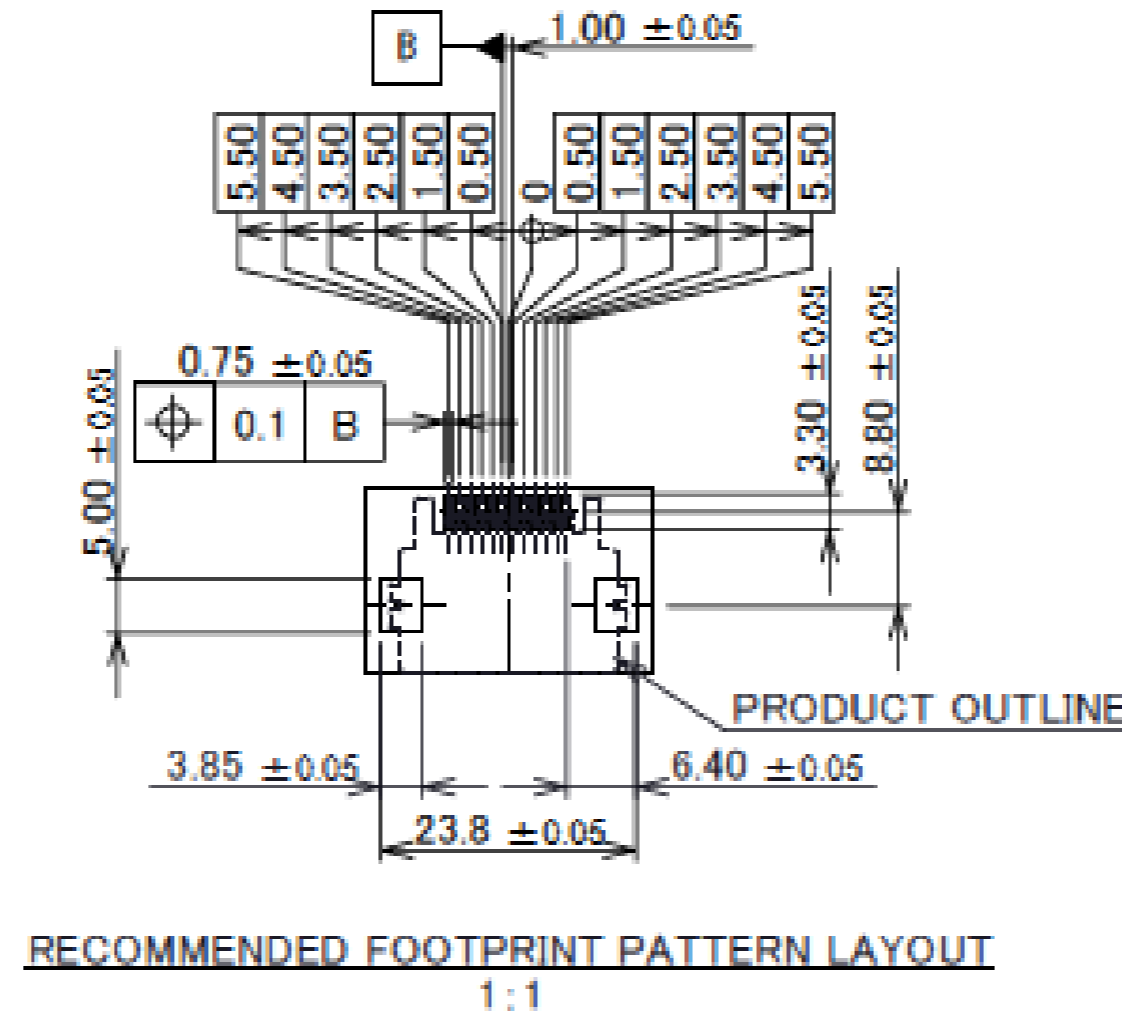
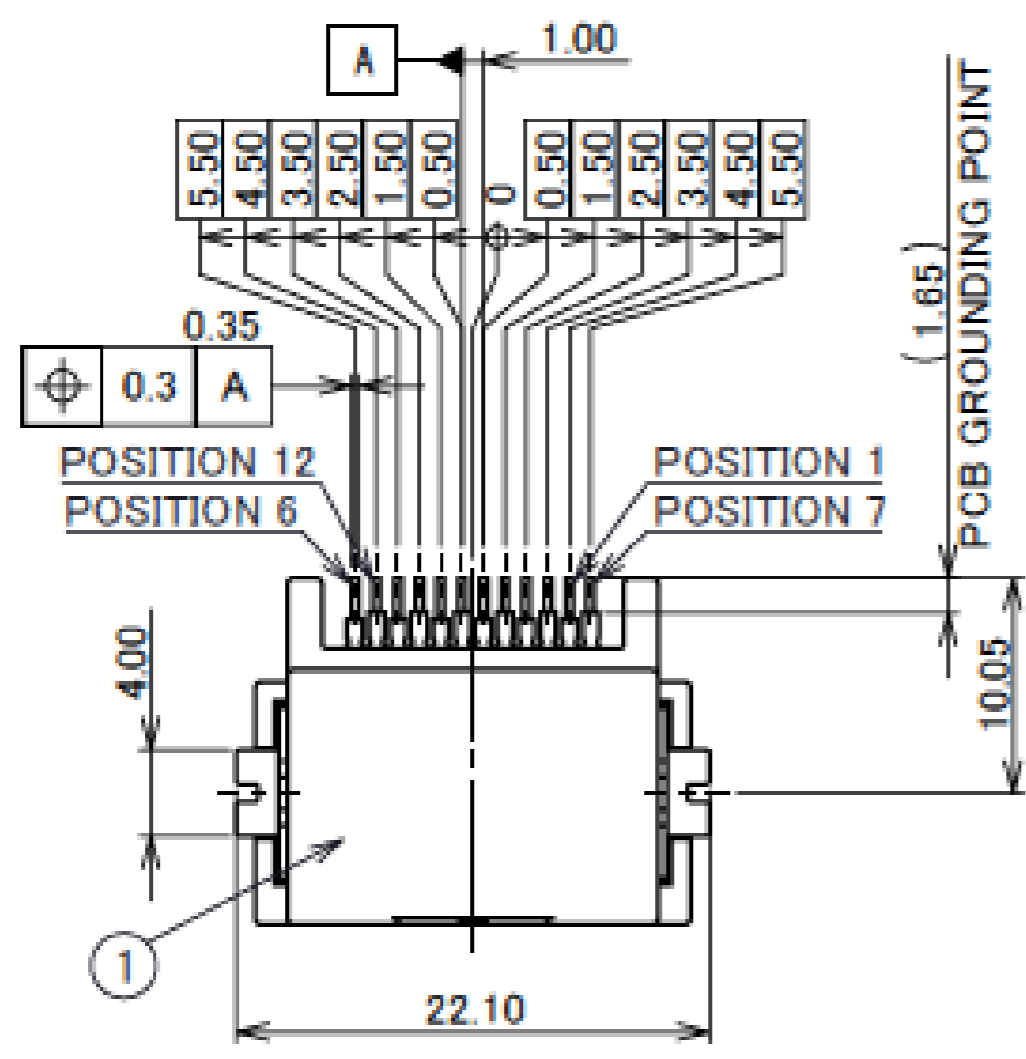
PART NO.	LOCK TYPE	KEY CODING	COLOR
V0114-012E-01	NORMAL LOCK	KEY CODING-A	BLACK
V0114-012E-11		KEY CODING-B	NATURAL
V0114-012E-12	INERTIA LOCK	KEY CODING-C	BLUE
V0114-012E-21		KEY CODING-D	NATURAL
V0114-012E-31			GRAY



Rev.0

# ISH® (Horizontal Type) MALE (12P) ※ISHV:

PART NO.
V0025-012E-001



- NOTES**
1. APPLICABLE PART NO. :  
 • FEMALE HOUSING ...V0027-91012-211  
 • FEMALE RETAINER ...V0027-92012-211  
 • FEMALE TERMINAL ...VT009-02
  2. COMPLY WITH ELV/RoHS.
  3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL[HDM-0020]
  4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  5. POSITION NUMBERS ARE INDICATED.

4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK / UL94V-0
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0

# ISH® (Horizontal Type) MALE (16P):

PART NO.
V0114-018E-01

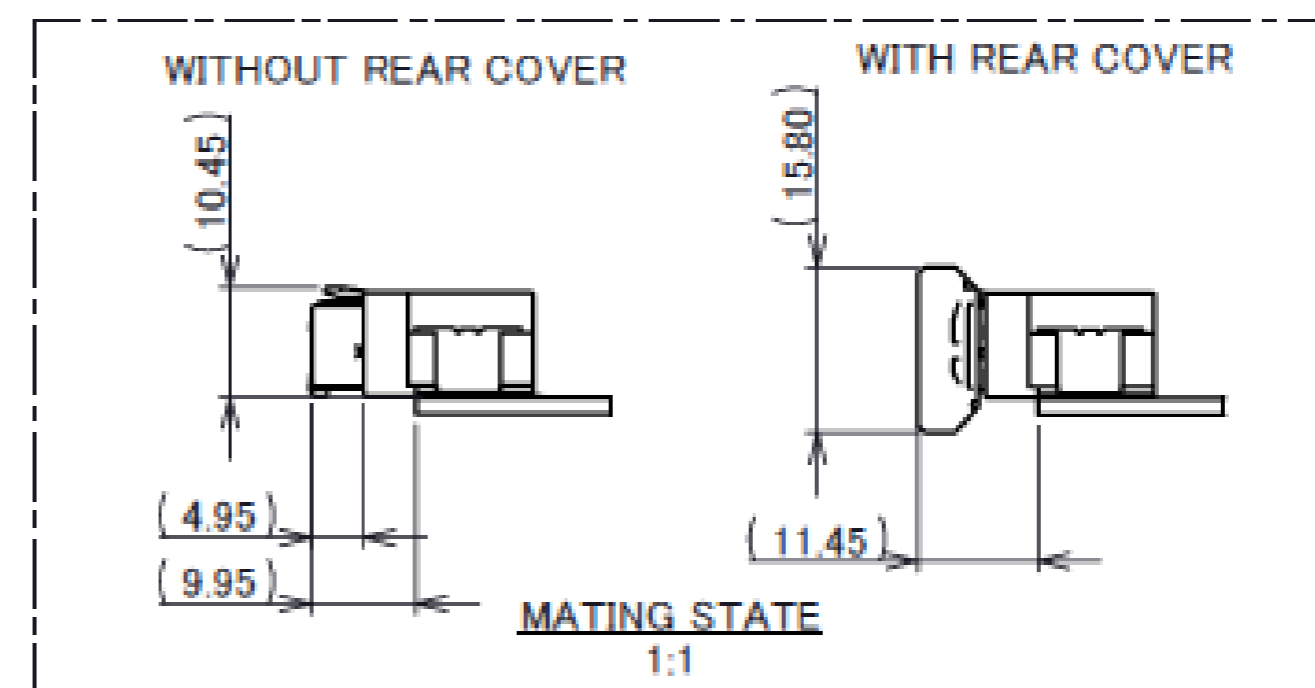
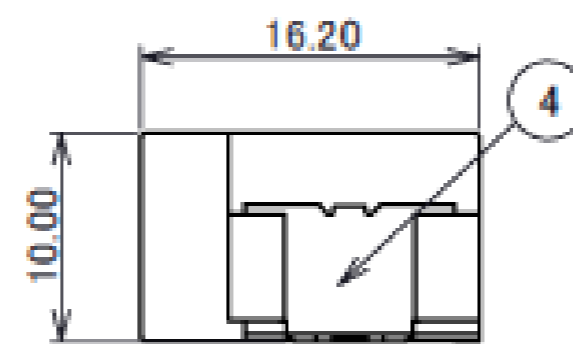
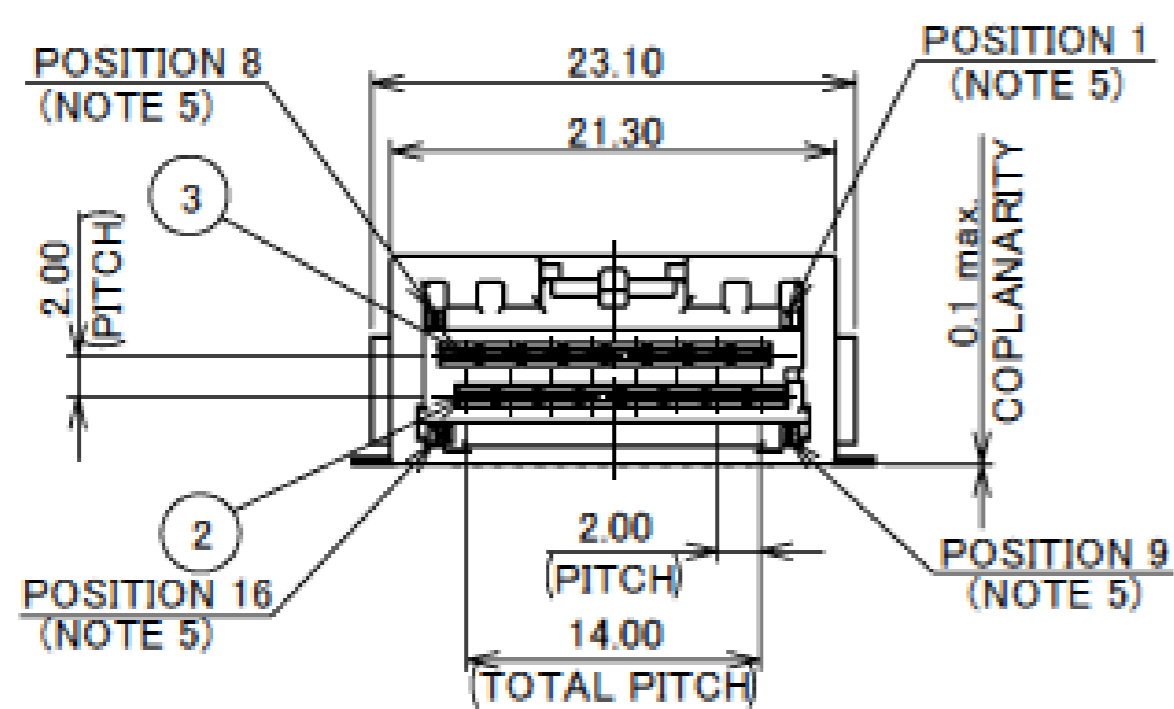
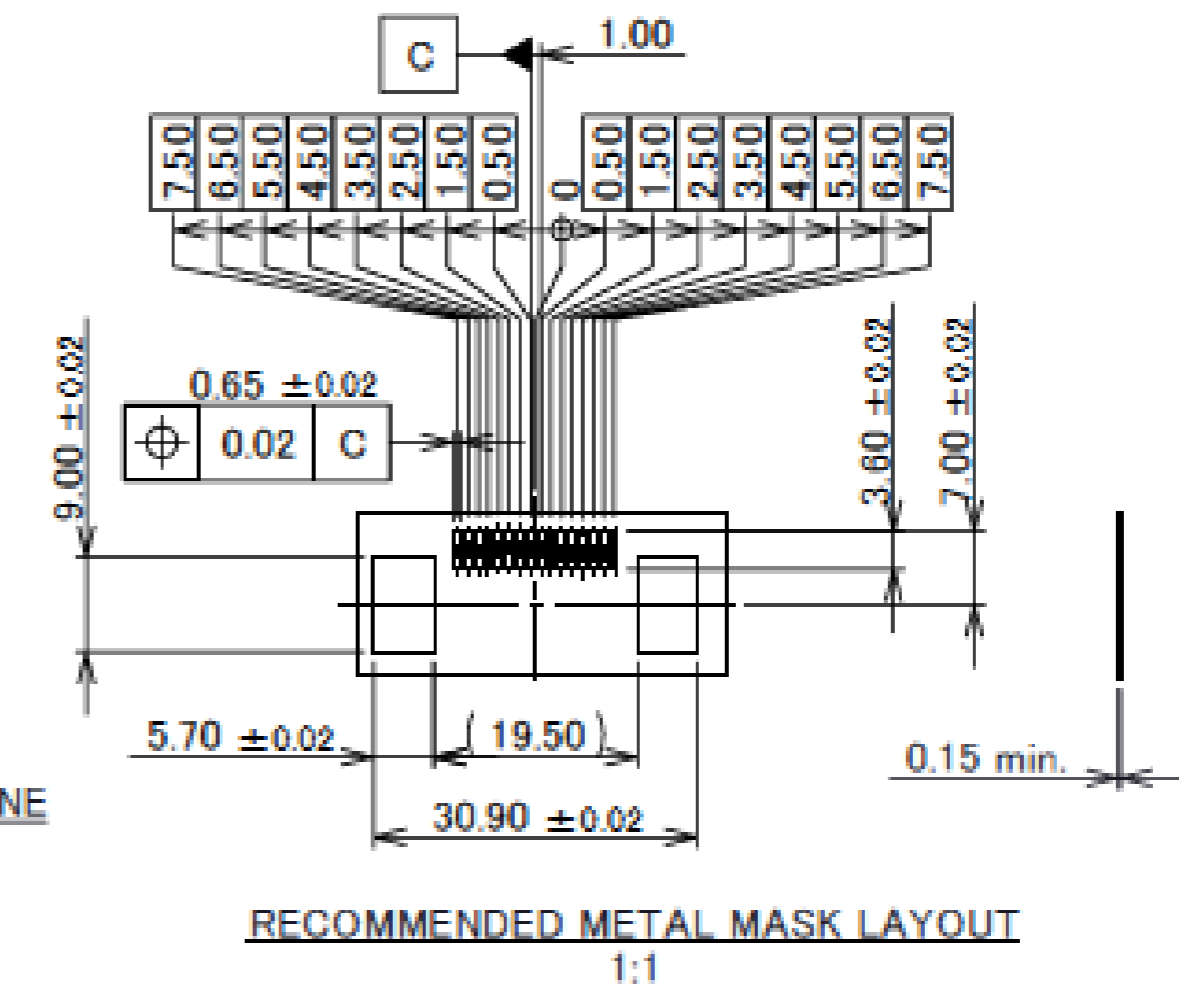
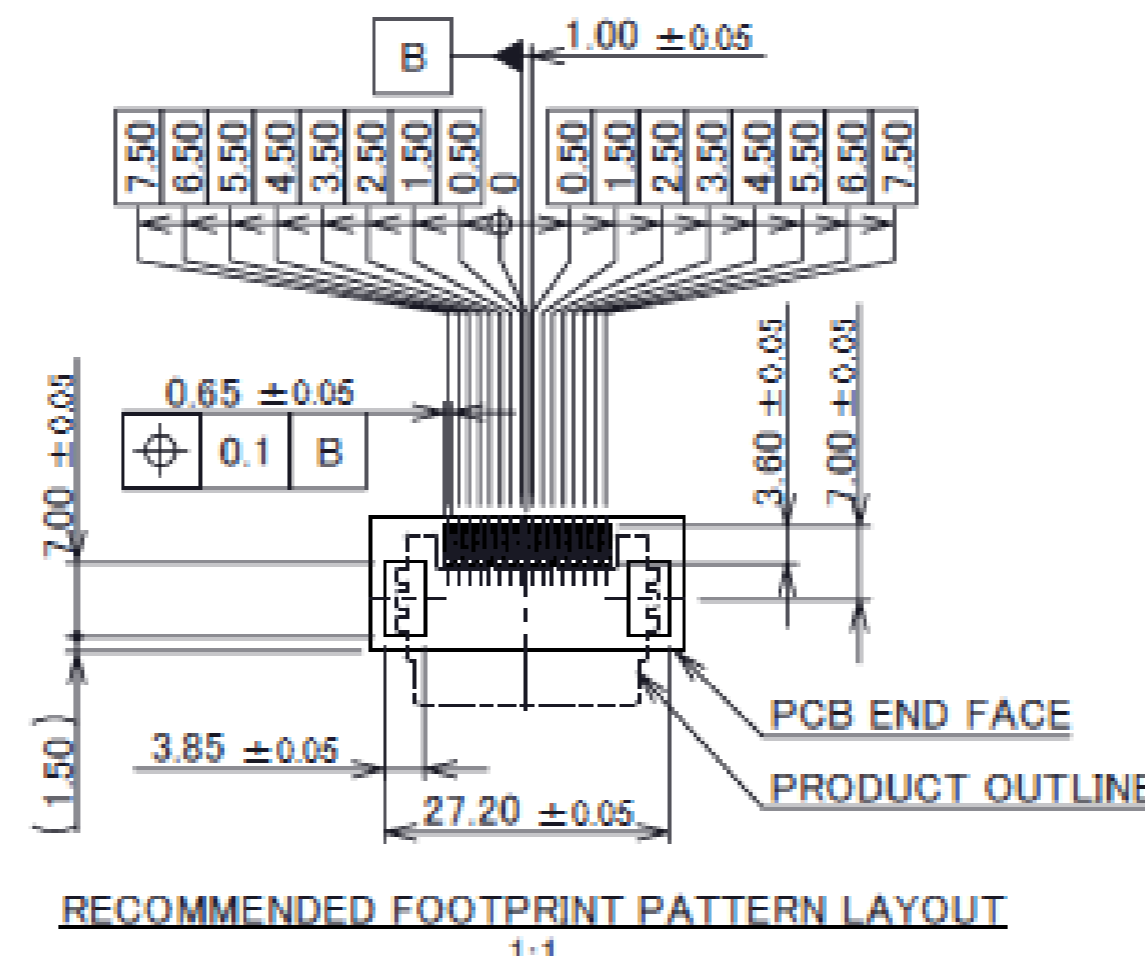
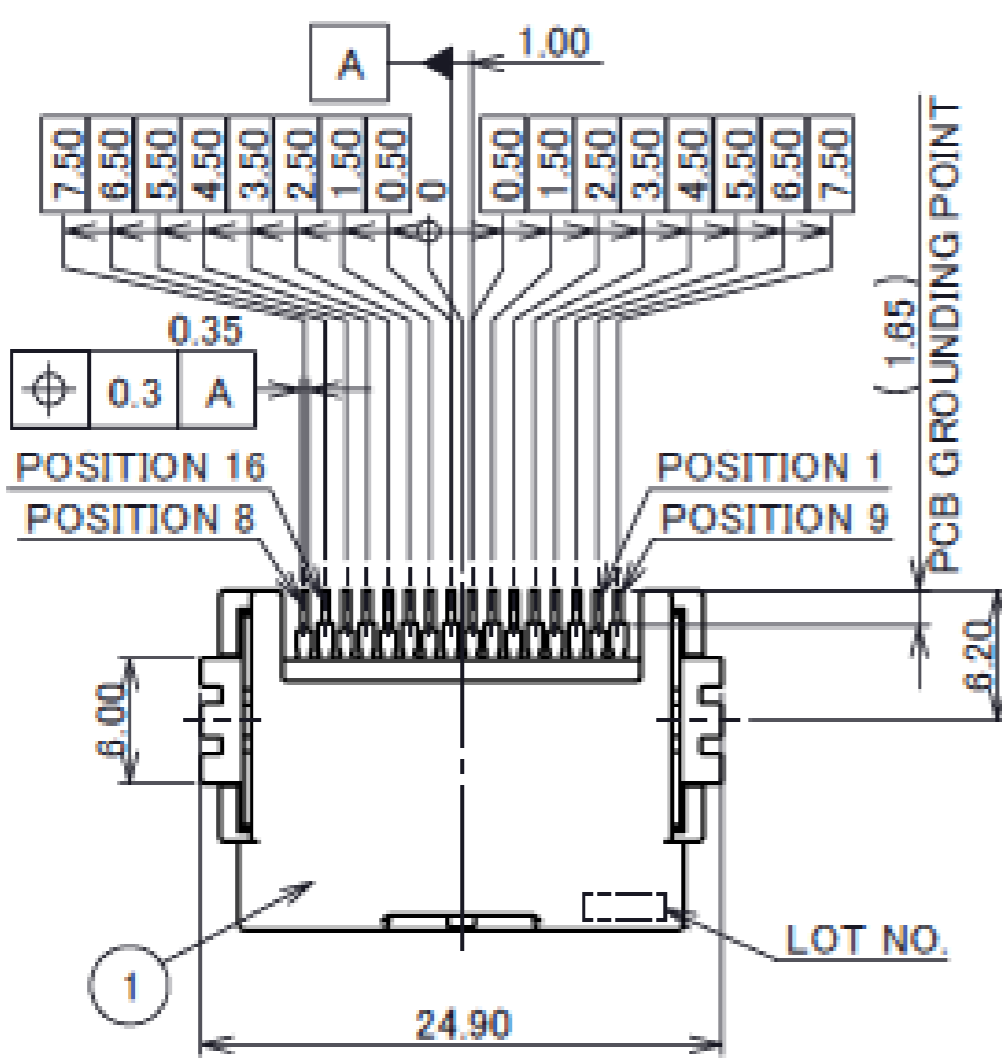


TABLE1. COUNTERPARTS FOR MATING

MALE CONNECTOR	FEMALE HOUSING	FEMALE RETAINER	FEMALE TERMINAL	REAR COVER
PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
V0114-018E-01	V0118-91018-01	V0118-92018-01	VT009-02	V0118-94018-01
BLACK	BLACK	BLACK	Sn REFLOW	BLACK

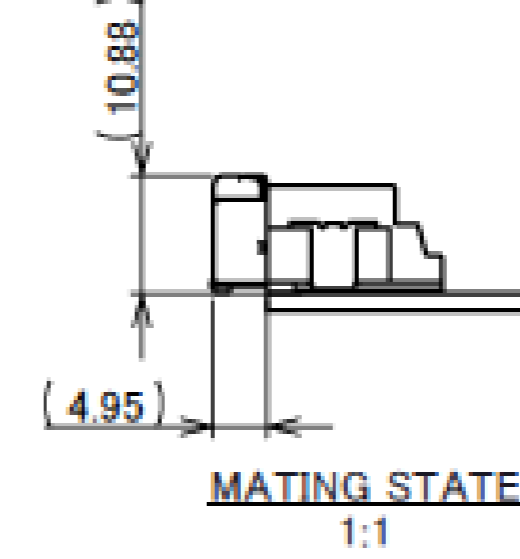
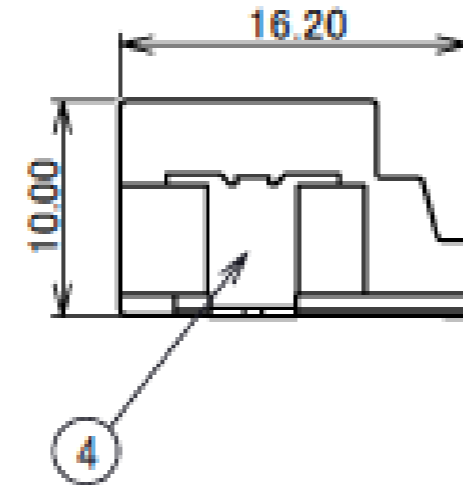
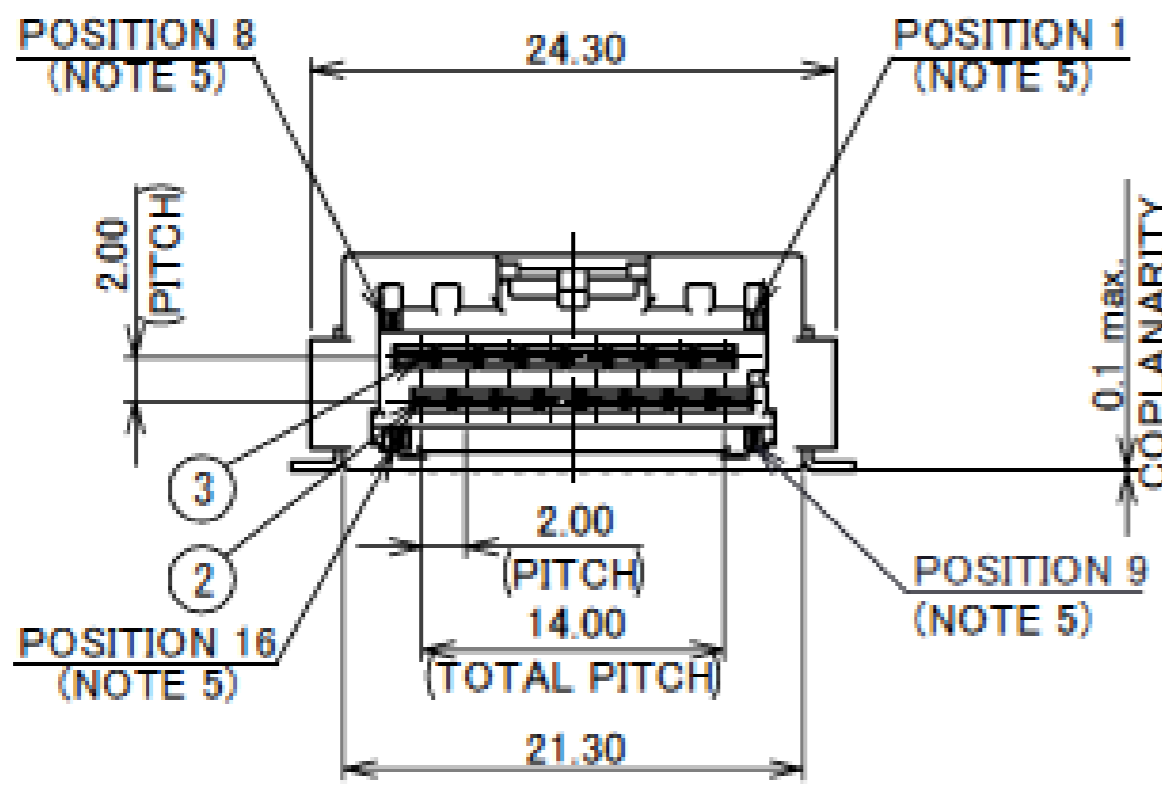
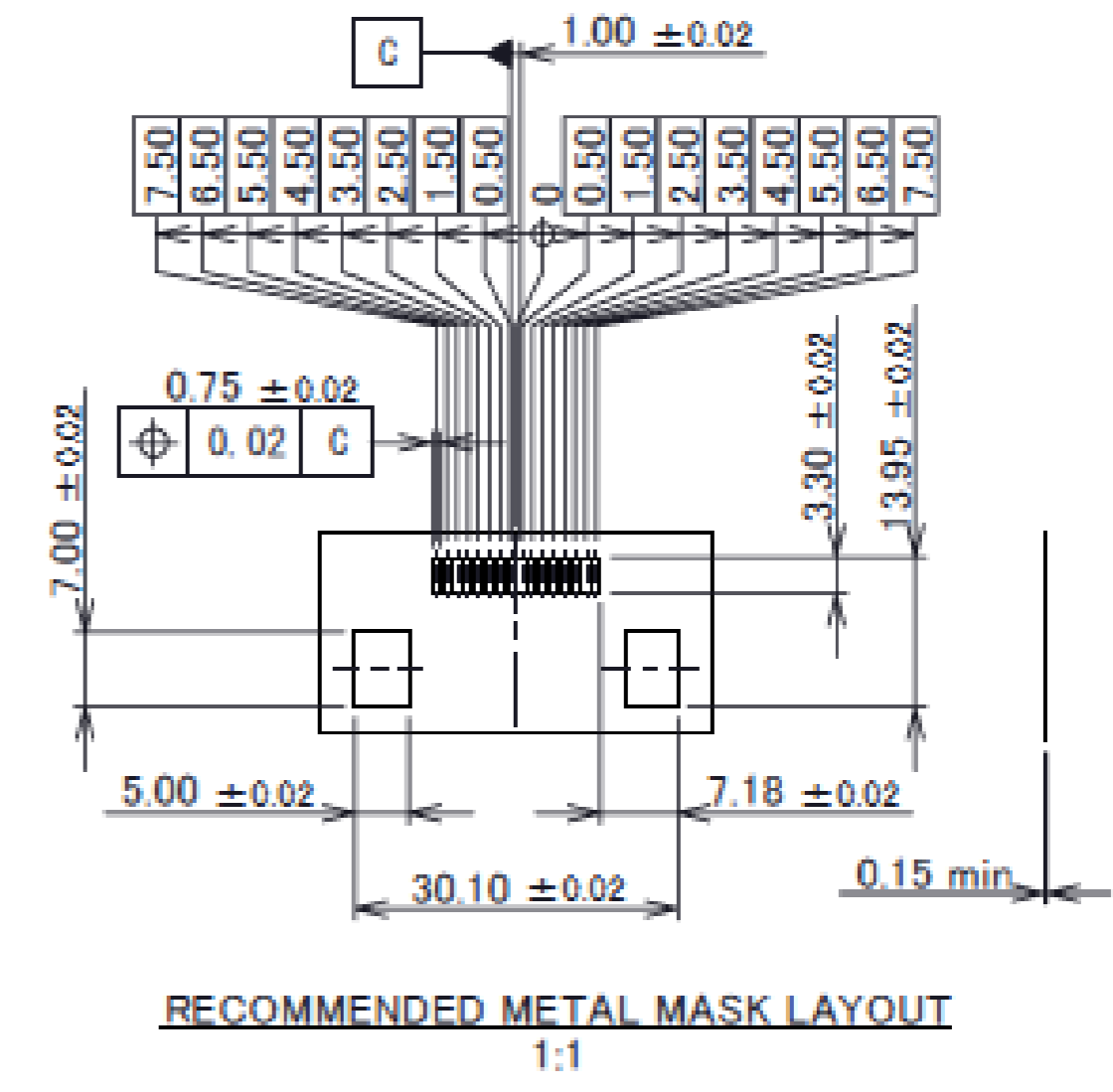
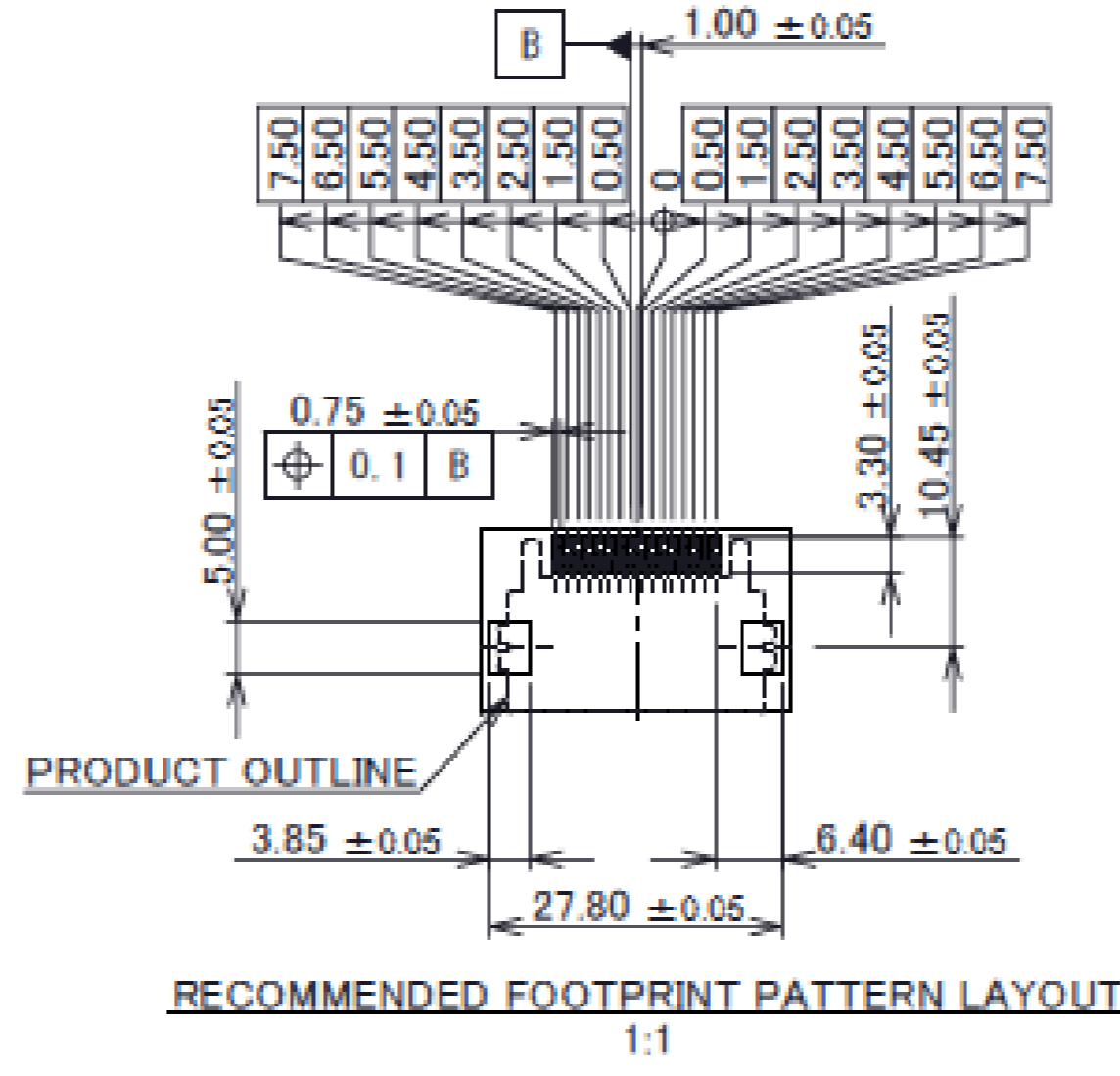
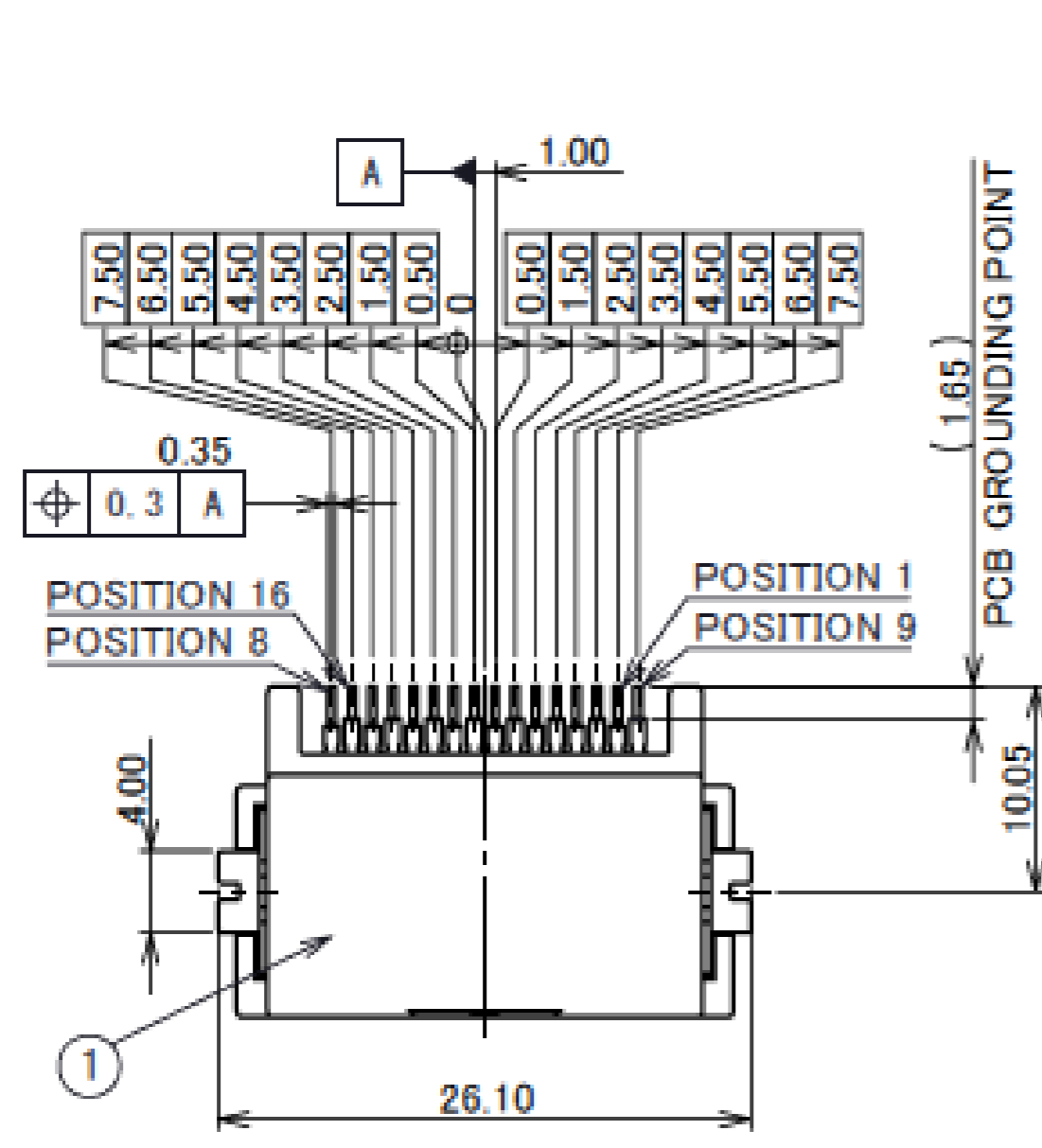
4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK/UL94V-0
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

- NOTES**
1. APPLICABLE PART NO. ARE SHOWN IN TABLE1.
  2. COMPLY WITH ELV/RoHS.
  3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL[HDM-0020]
  4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) MALE (16P) ※ISHV:

PART NO.  
V0025-018E-001



## NOTES

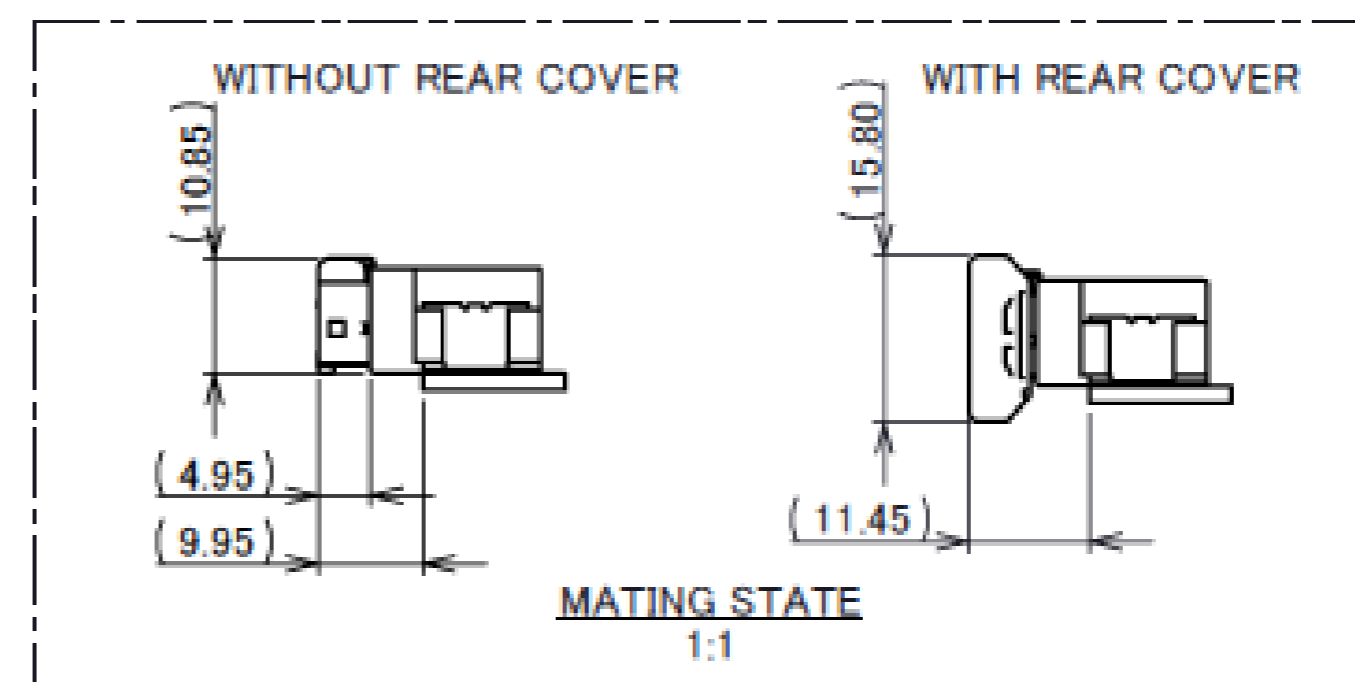
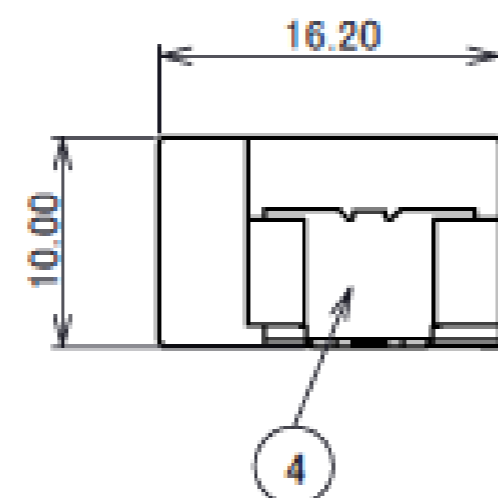
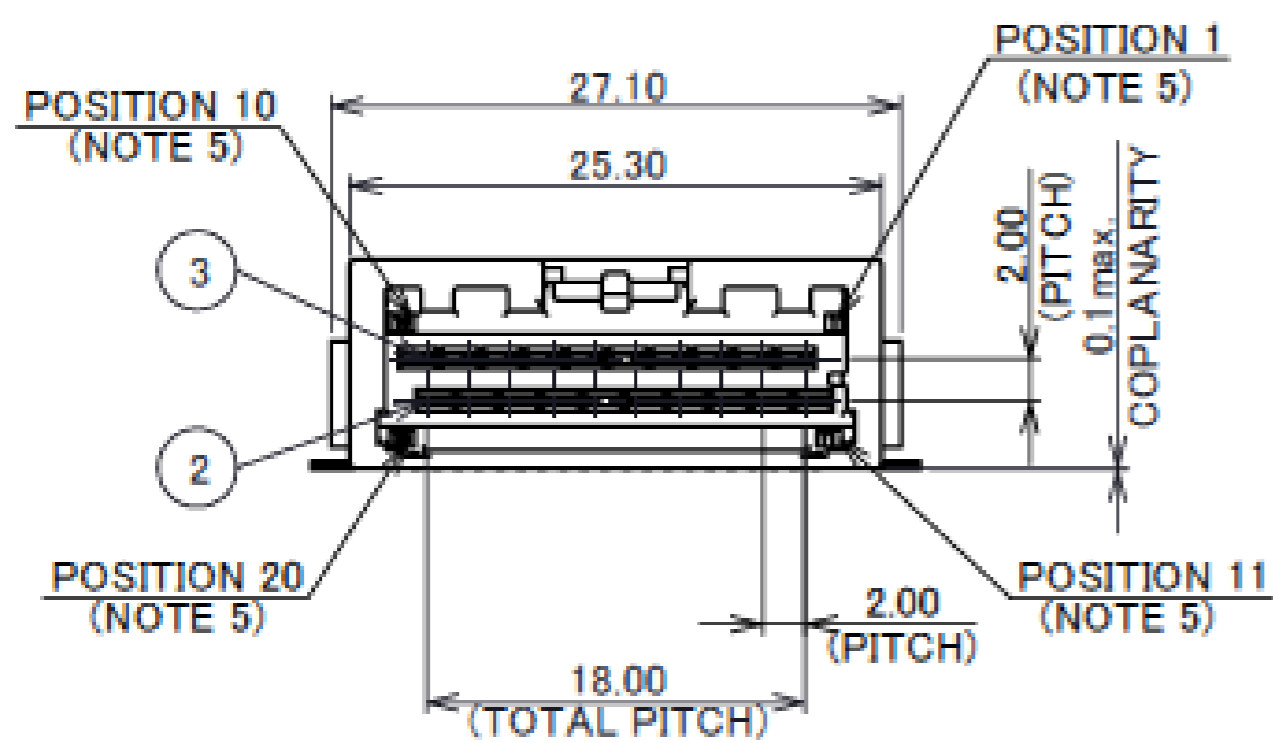
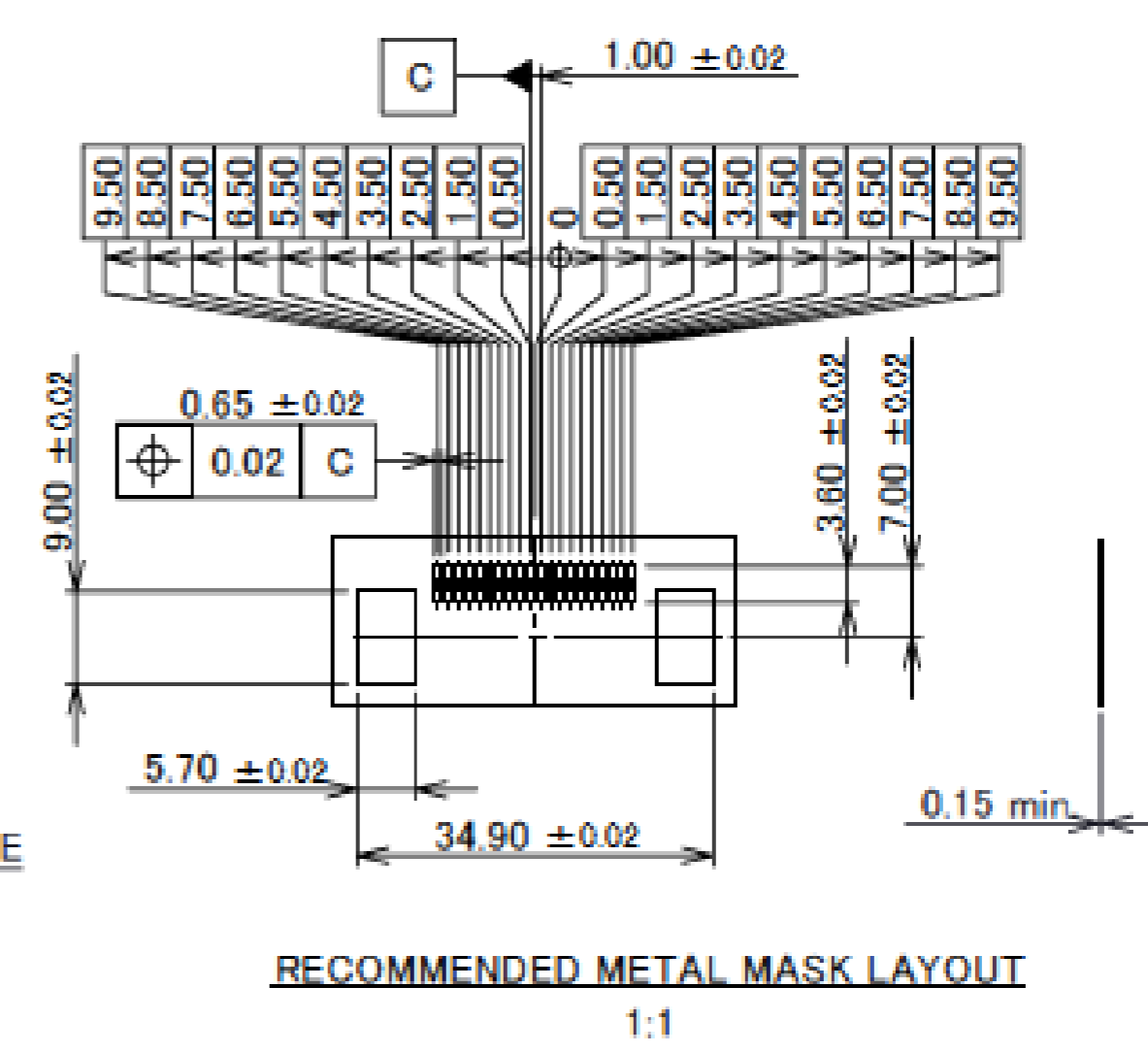
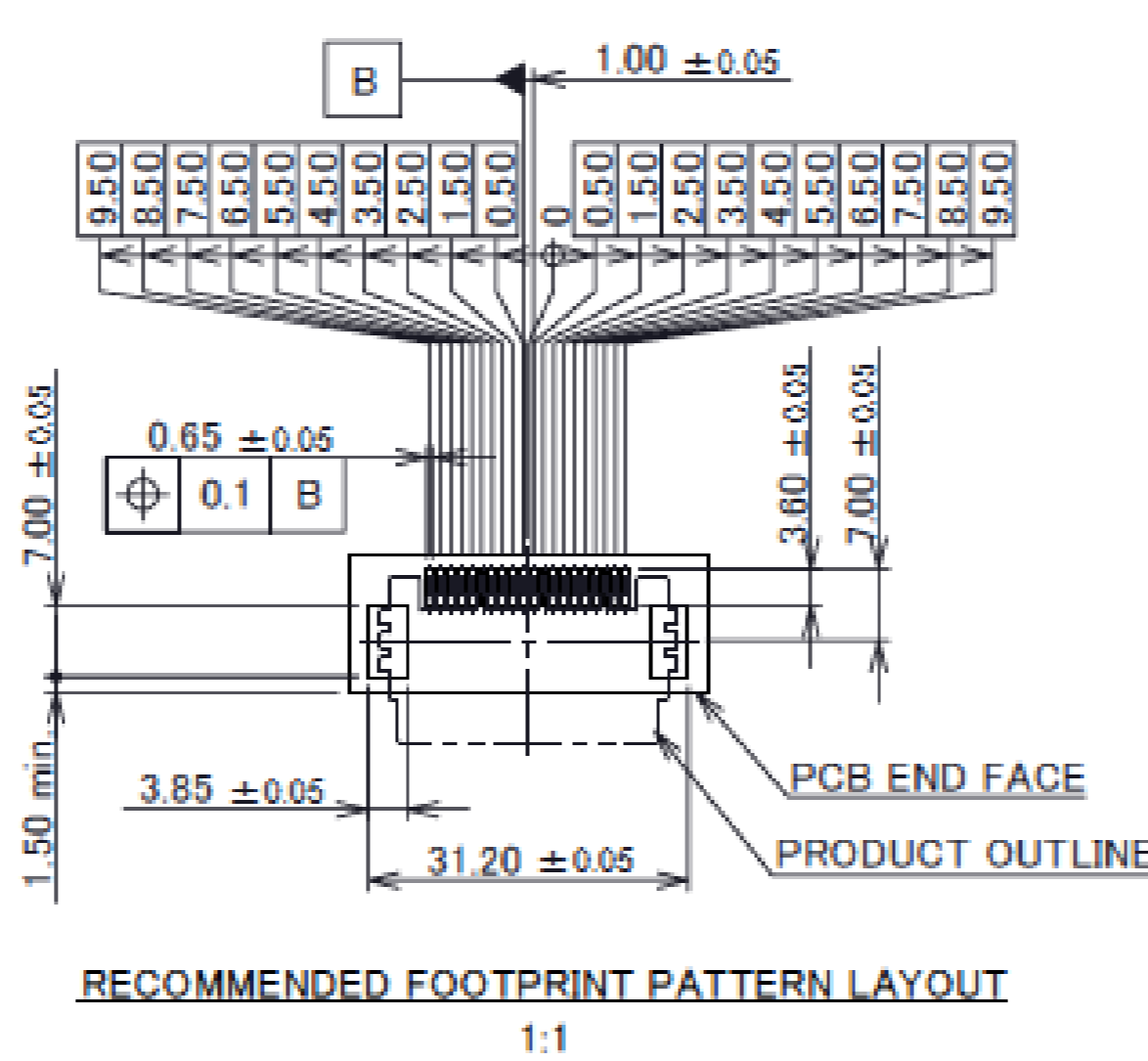
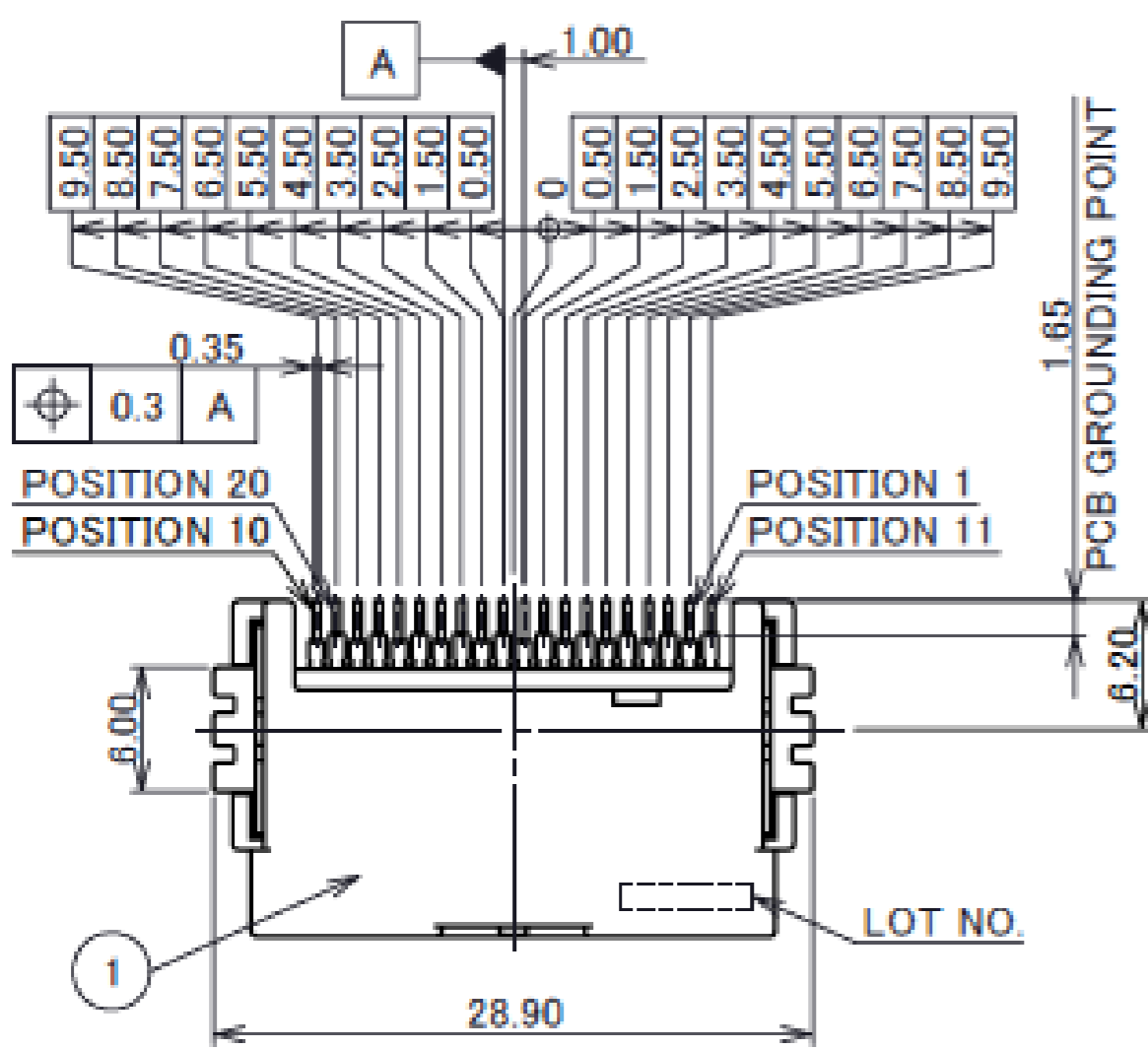
1. APPLICABLE PART NO.:  
 • FEMALE HOUSING : V0027-91016-211  
 • FEMALE RETAINER : V0027-92016-211  
 • FEMALE TERMINAL : VT009-02
2. COMPLY WITH ELV/RoHS
3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
5. POSITION NUMBERS ARE INDICATED

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK/UL94V-0

Rev.0

# ISH® (Horizontal Type) MALE (20P):

PART NO.  
V0114-020E-01



## NOTES

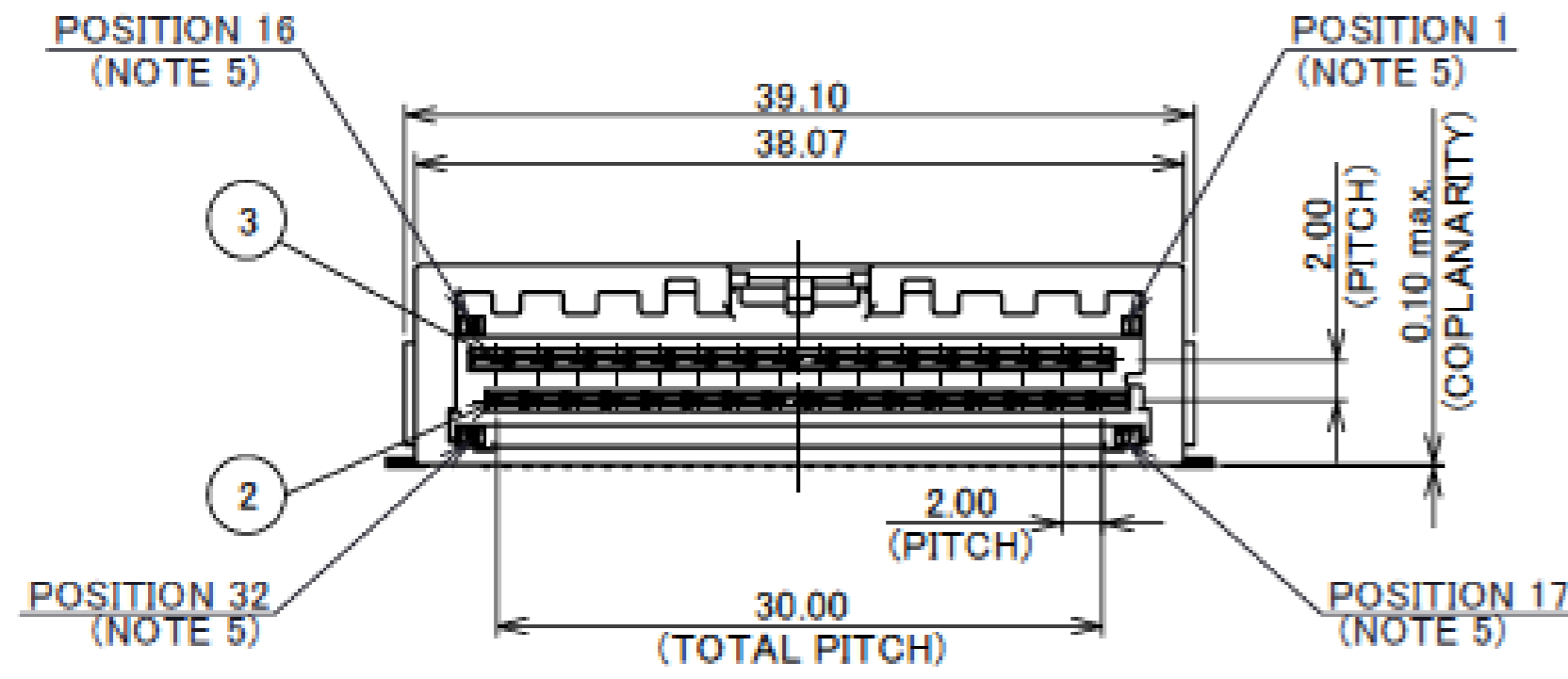
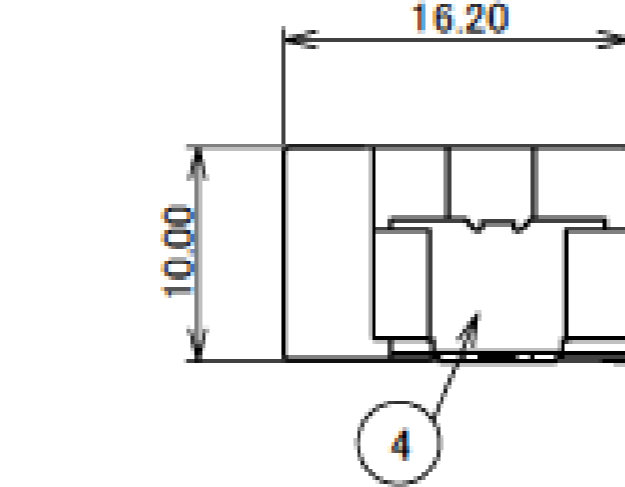
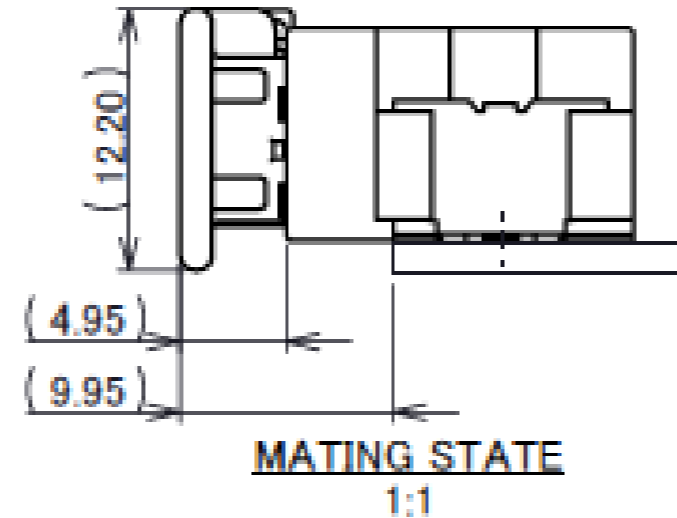
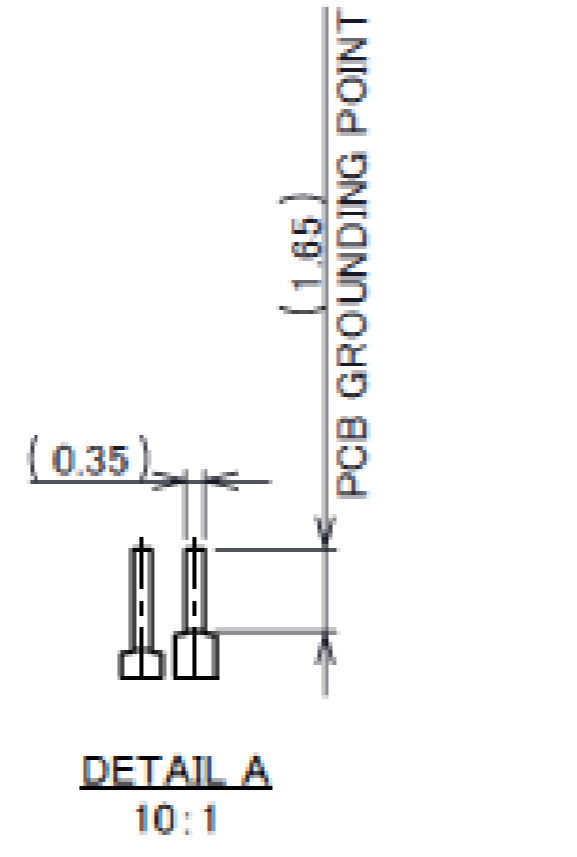
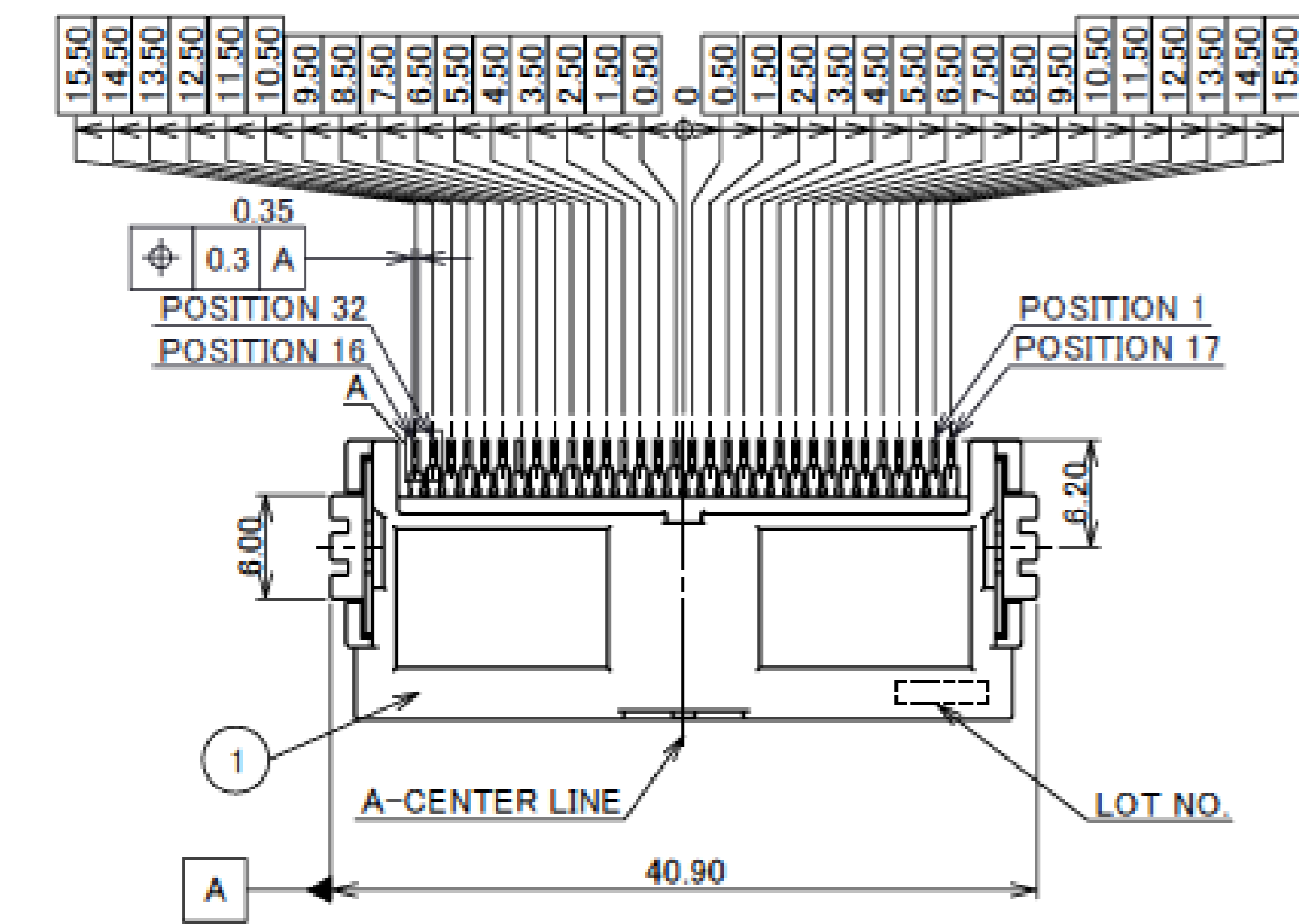
1. APPLICABLE PART NO.:  
 • FEMALE HOUSING : V0116-91020-01  
 • FEMALE RETAINER : V0116-92020-01  
 • FEMALE TERMINAL : VT009-02  
 • REAR COVER : V0116-94020-01
2. COMPLY WITH ELV/RoHS
3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
5. POSITION NUMBERS ARE INDICATED

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
4	HOLD DOWN	BRASS	Sn REFLOW
3	MALE TERMINAL-2	BRASS	Sn REFLOW
2	MALE TERMINAL-1	BRASS	Sn REFLOW
1	MALE HOUSING	GLASS-FILLED LCP	BLACK/UL94V-0

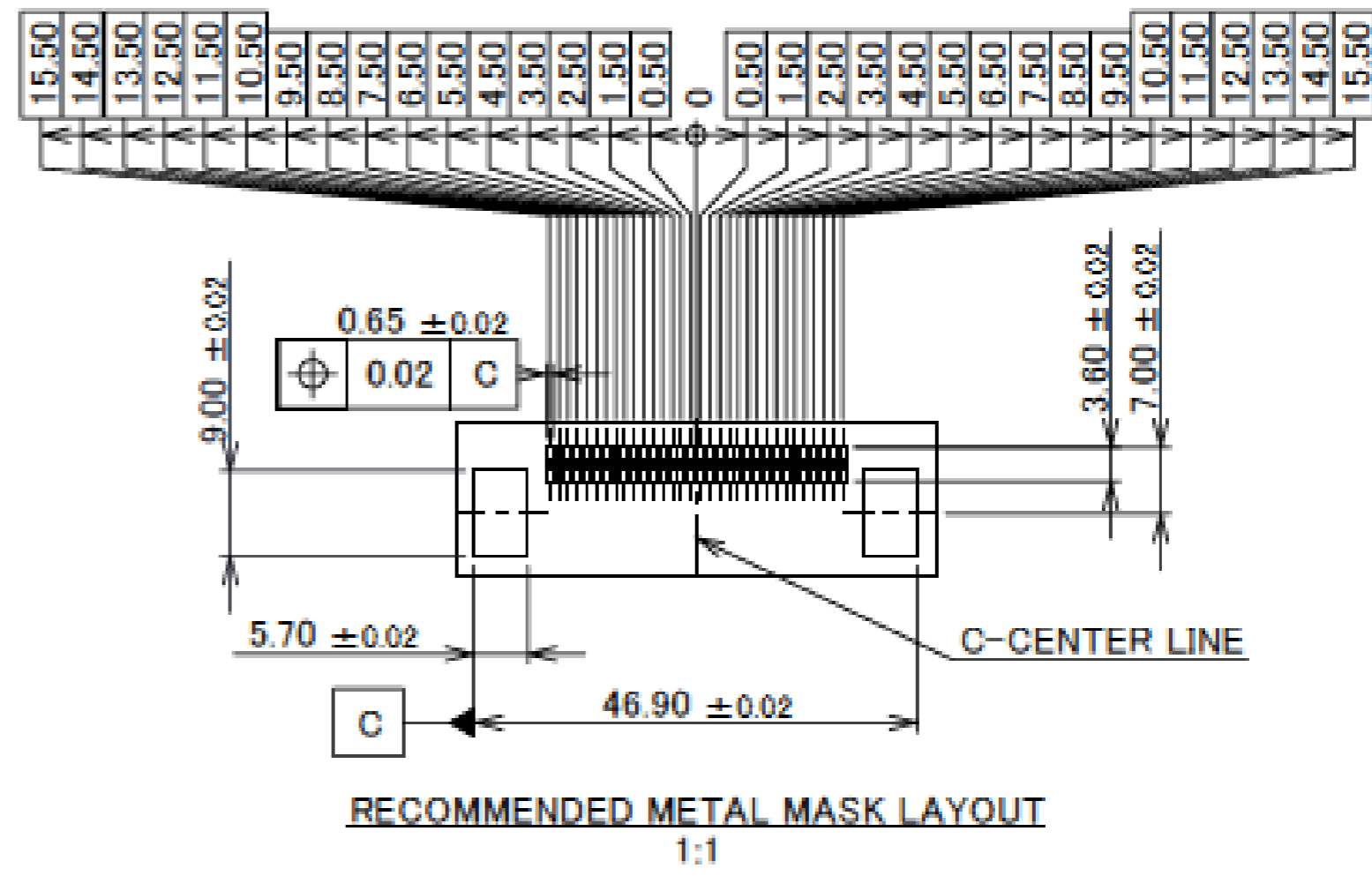
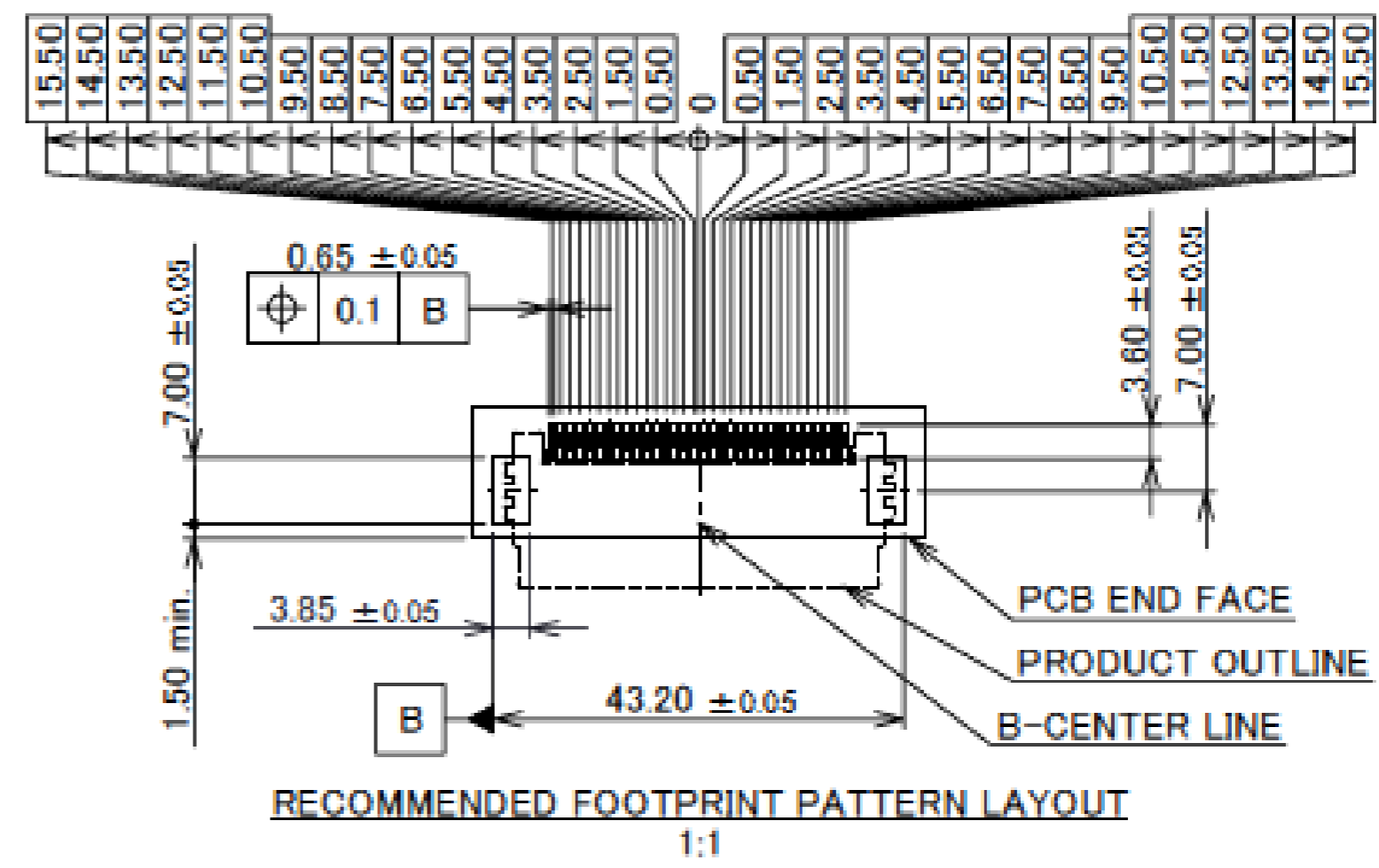
Rev.0

# ISH® (Horizontal Type) MALE (32P):

PART NO.
V0114-032E-02



- NOTES
1. APPLICABLE PART NO.
    - FEMALE HOUSING : V0116-91032-02
    - FEMALE RETAINER : V0116-92032-01
    - FEMALE TERMINAL : VT009-02
  2. COMPLY WITH ELV/ROHS
  3. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  4. USE METAL MASK WHICH HAS A THICKNESS OF 0.15mm MIN. WHEN THE MALE CONNECTOR IS MOUNTED ON THE PCB.
  5. POSITION NUMBERS ARE INDICATED.

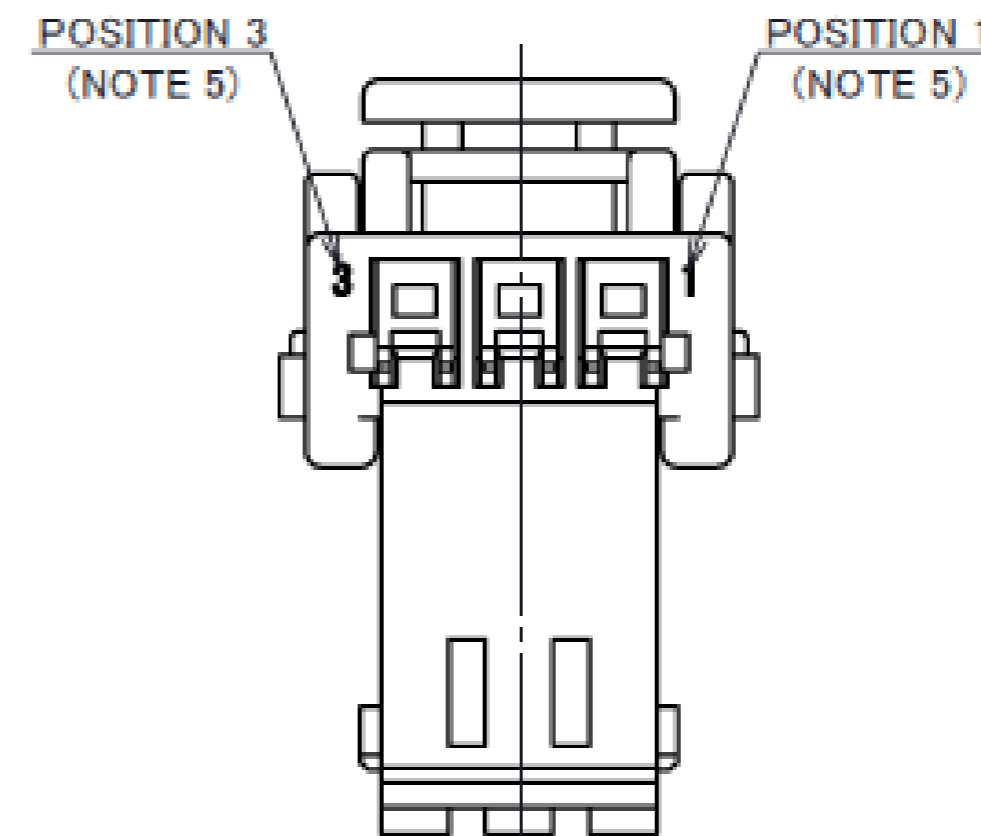
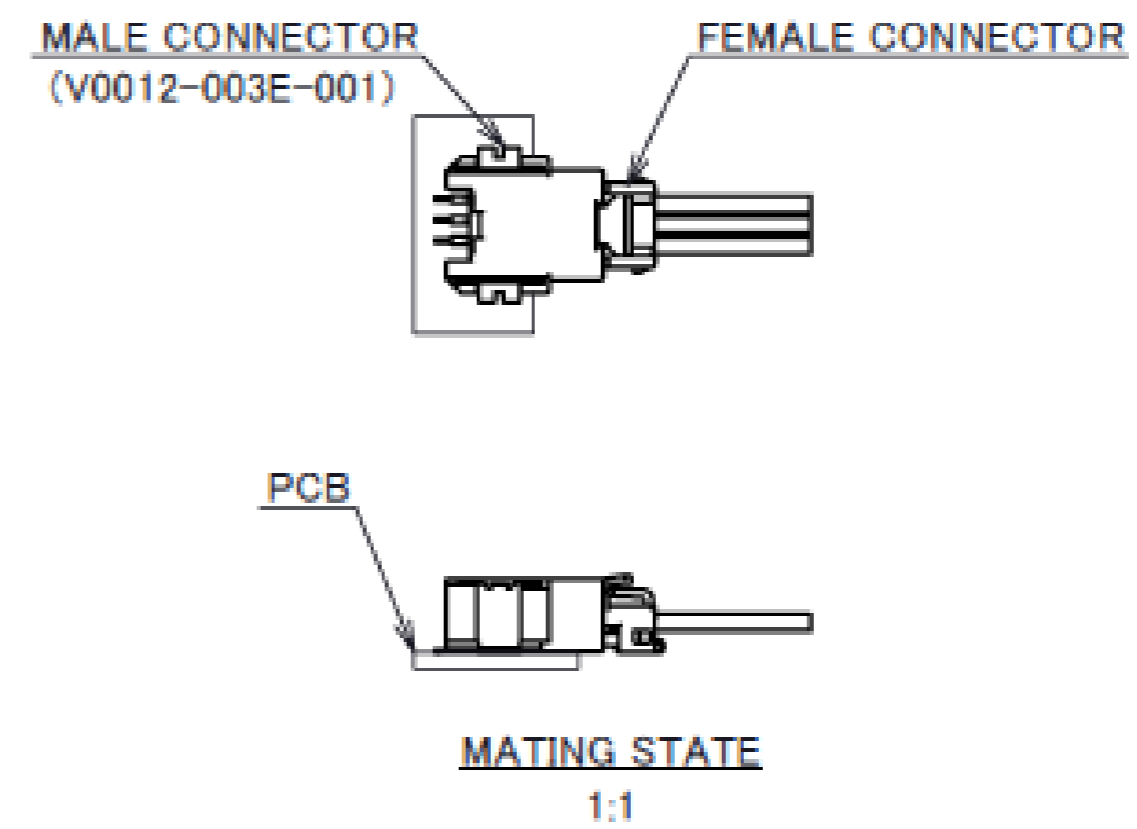
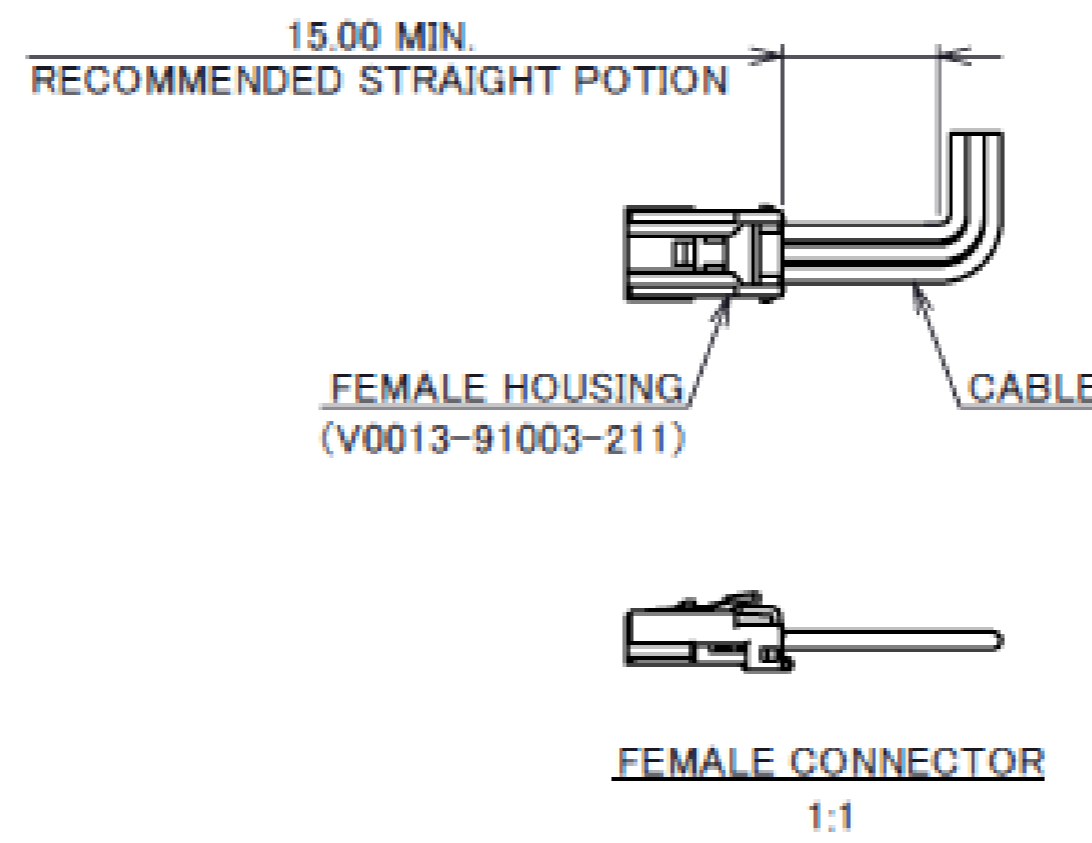
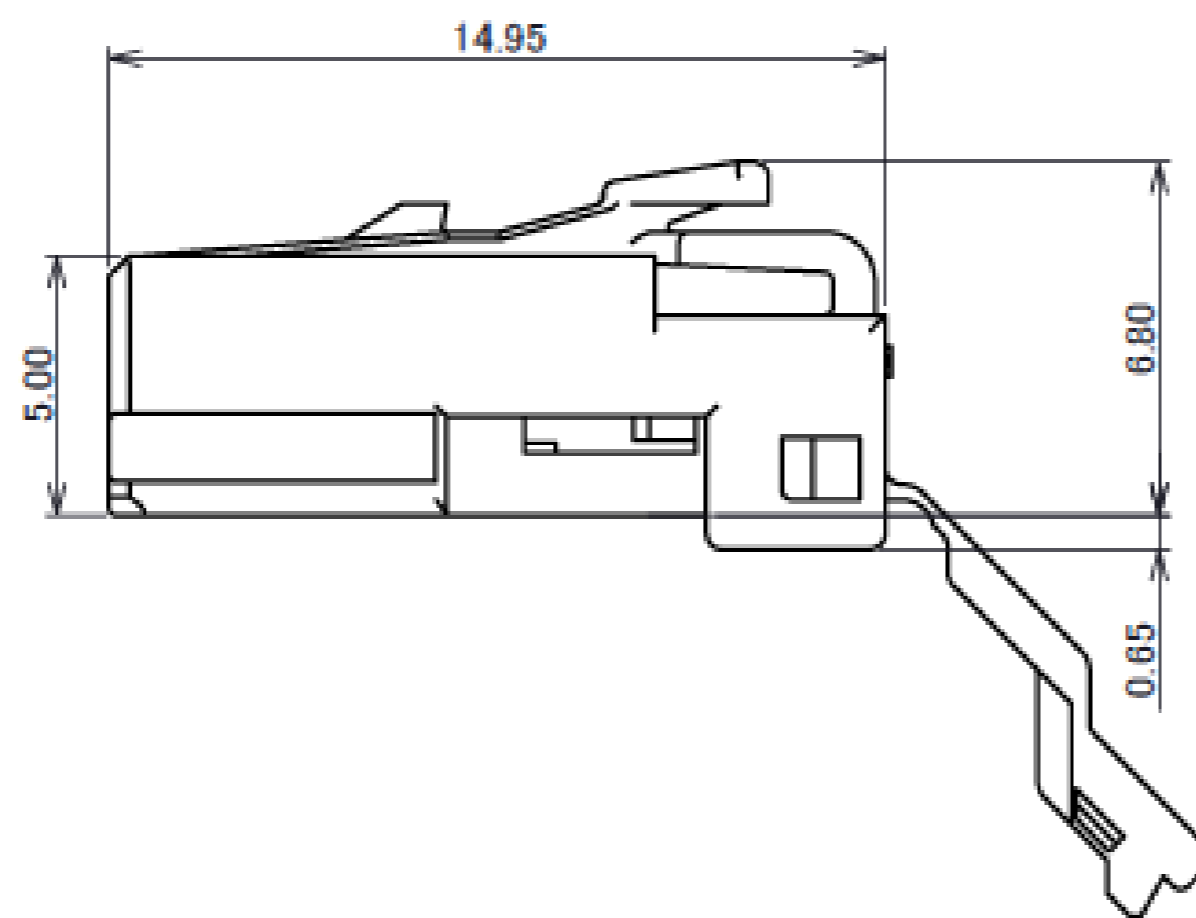
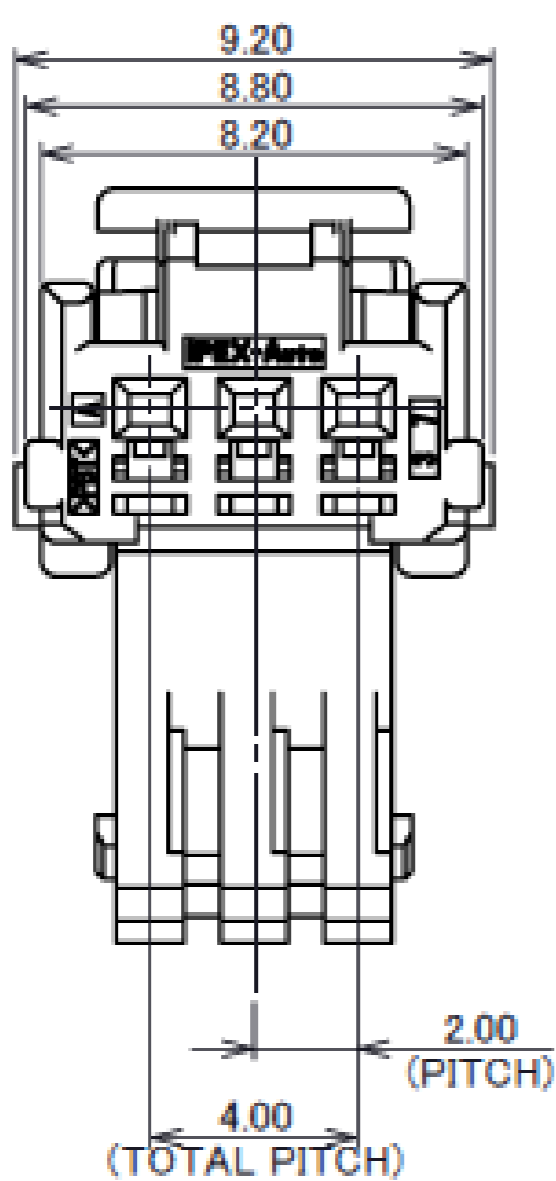
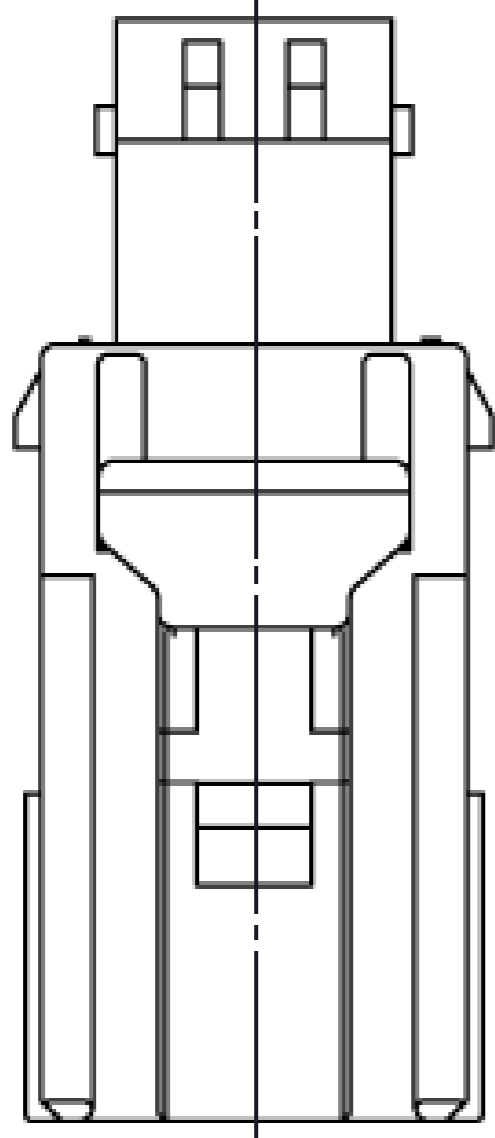


NO.	DESCRIPTION	QTY.	MATERIAL	FINISH/COLOR	REMARKS
4	HOLD DOWN	2	BRASS	Sn REFLOW	-
3	TERMINAL-2	16	BRASS	Sn REFLOW	-
2	TERMINAL-1	16	BRASS	Sn REFLOW	-
1	HOUSING	1	GLASS FILLED LCP	BLACK	-

Rev.1

# ISH® (Horizontal Type) FEMALE (3P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0113-91003-01	NORMAL ROCK	-	BLACK	N/A



NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

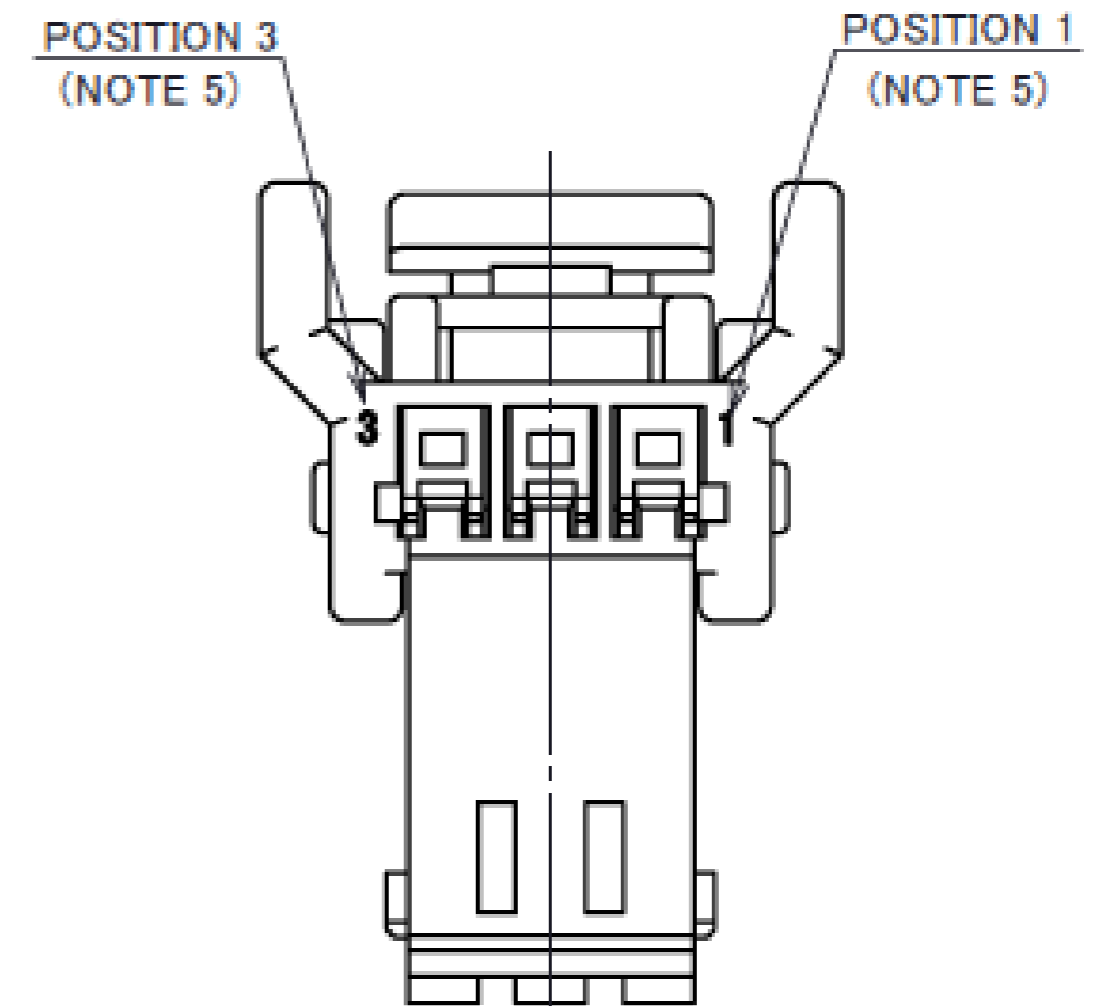
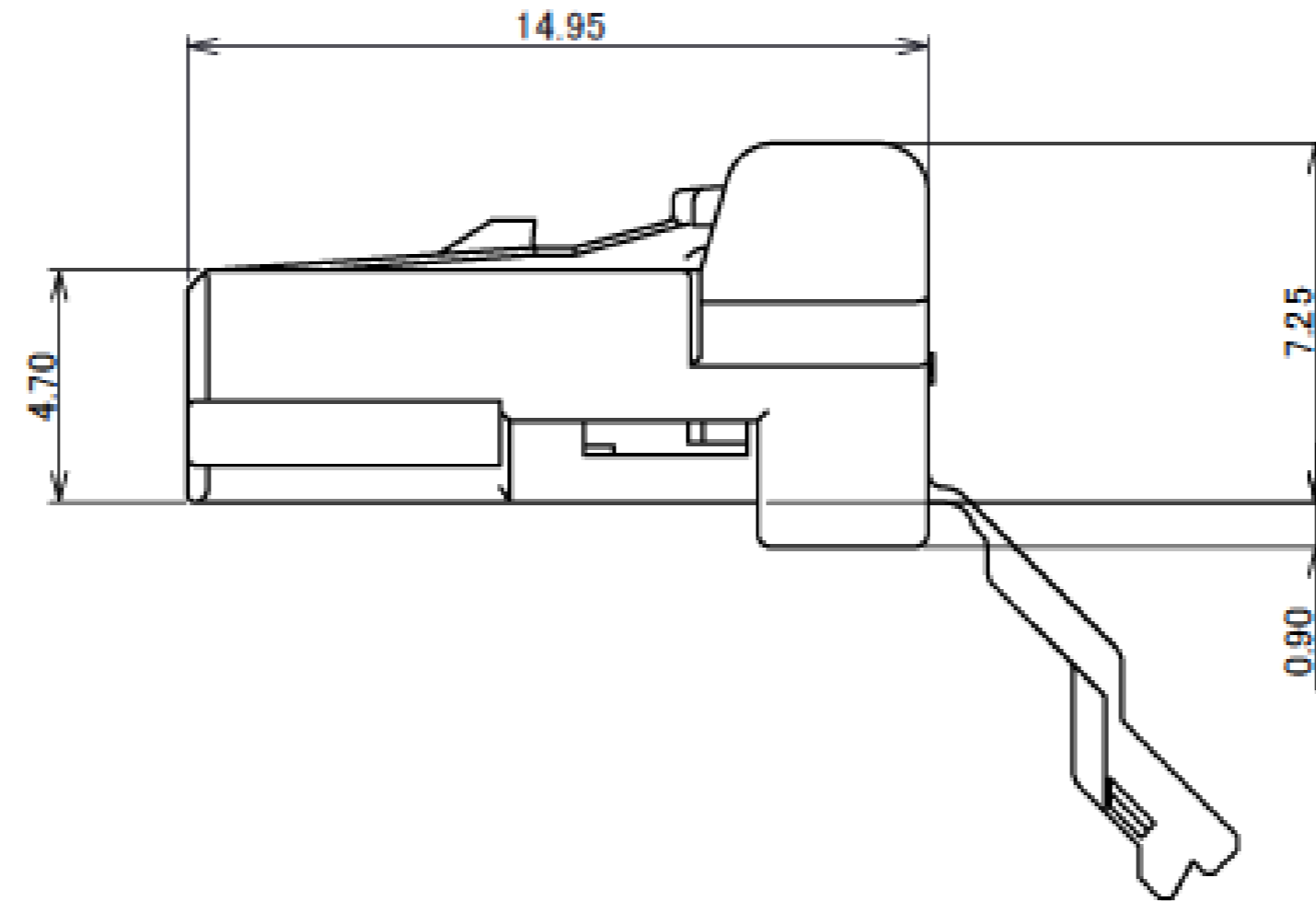
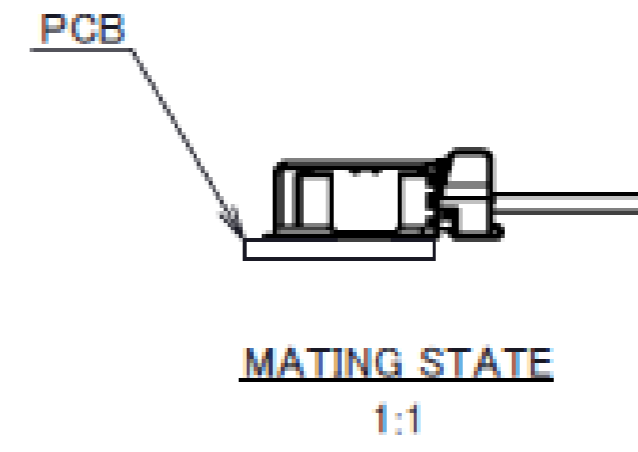
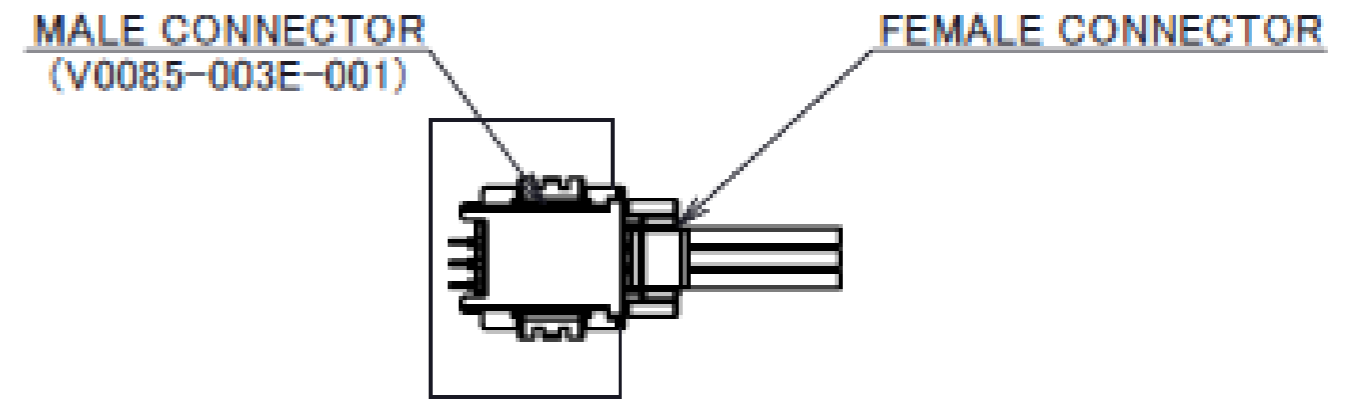
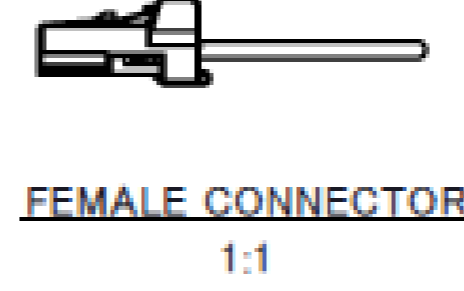
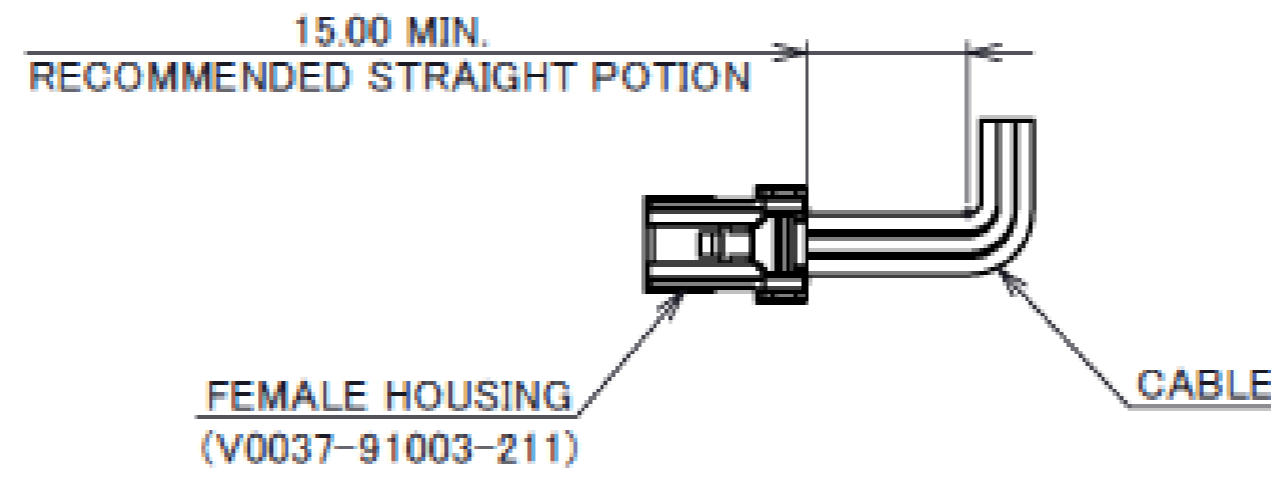
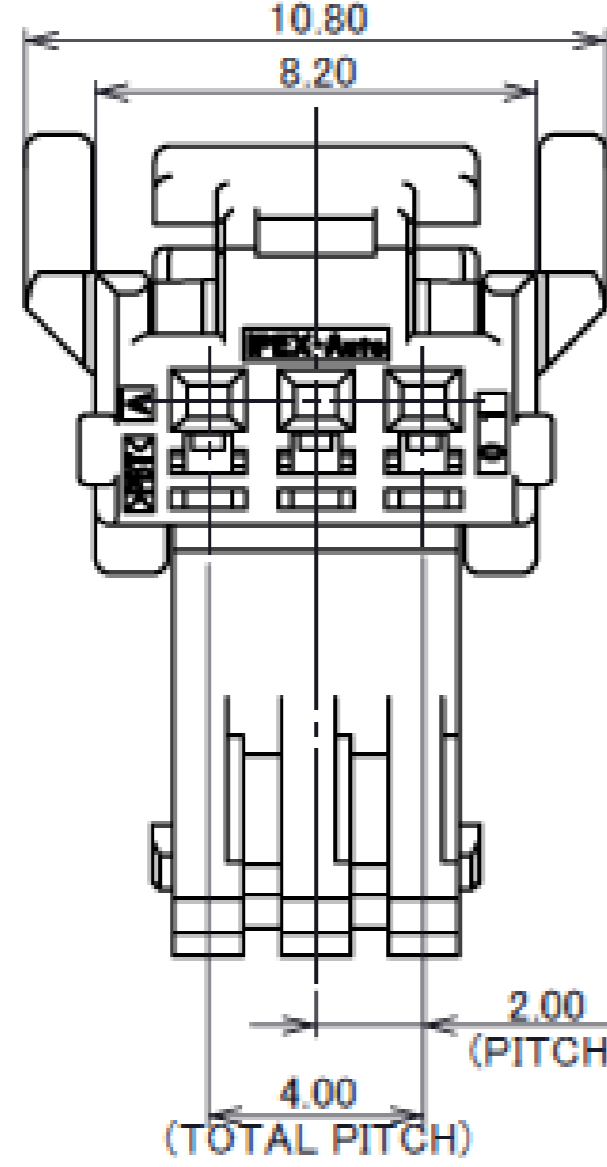
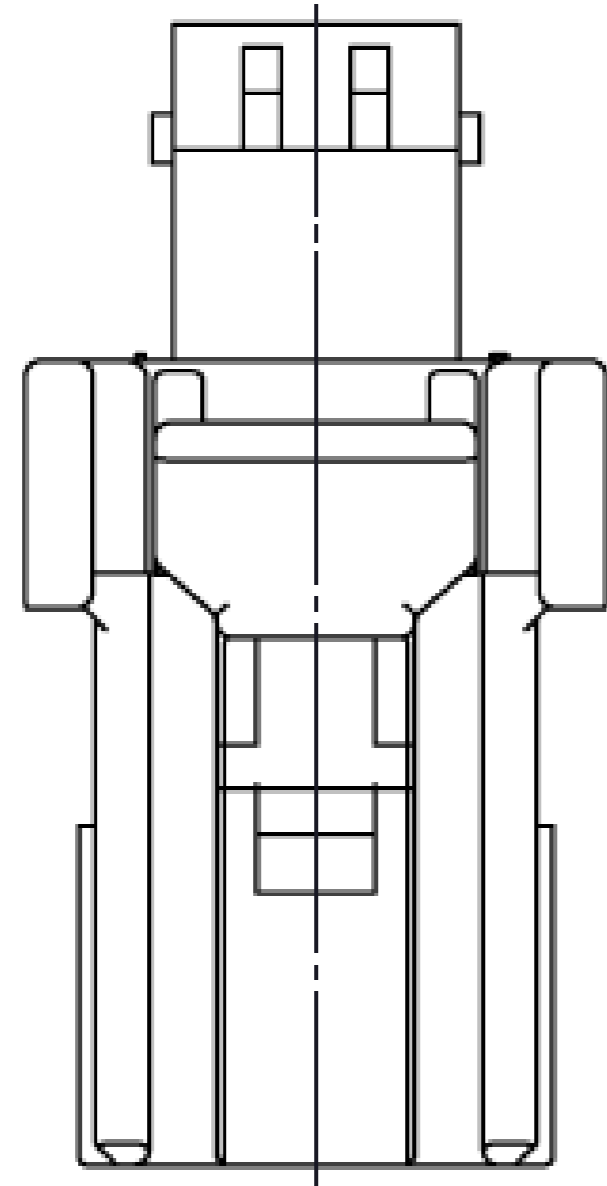
- NOTES
1. APPLICABLE PART NO.
    - FEMALE TERMINAL : VT009-02
    - CABLE COVER : V0113-93003-01
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/ROHS
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  5. POSITION NUMBERS ARE INDICATED.

Rev.0



# ISH® (Horizontal Type) FEMALE (3P) ※ISHVS:

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0037-91003-211	NORMAL ROCK	-	BLACK	N/A



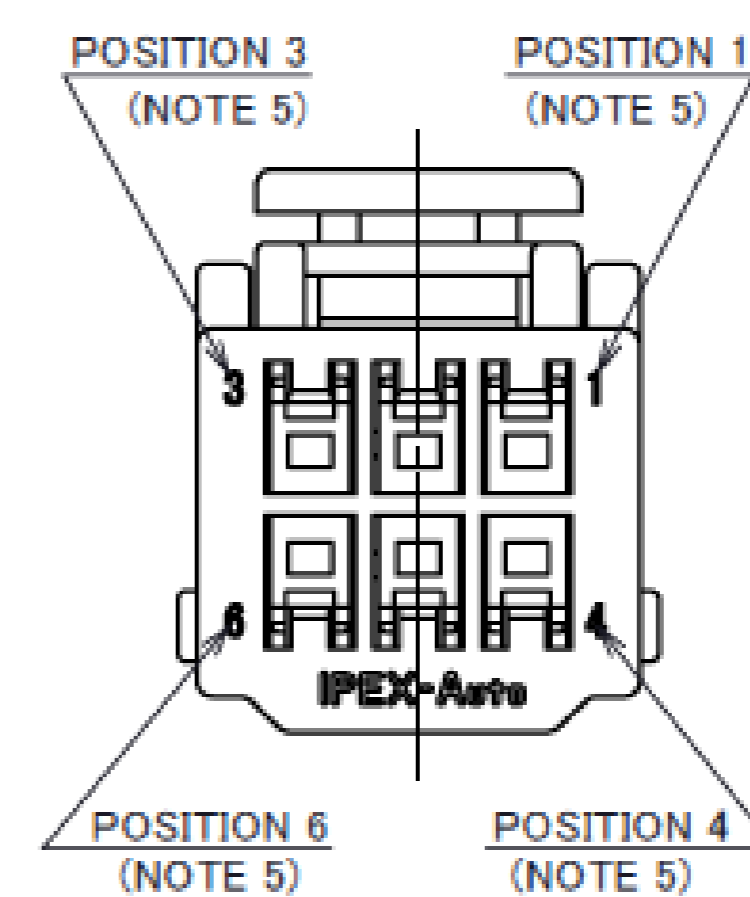
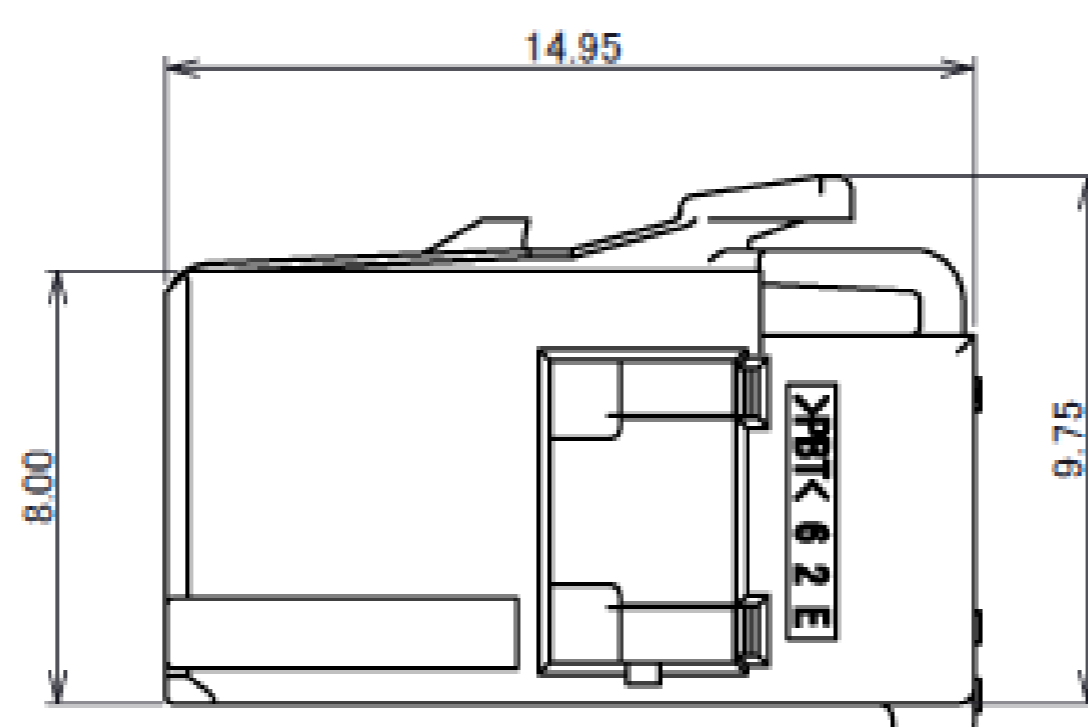
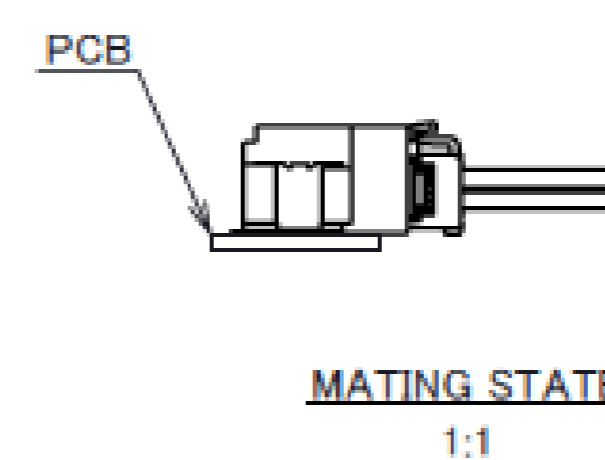
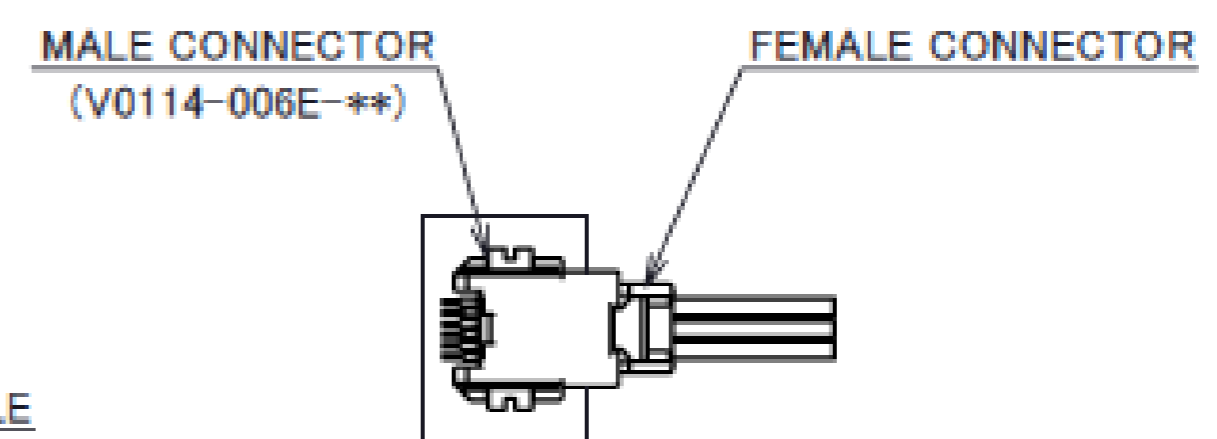
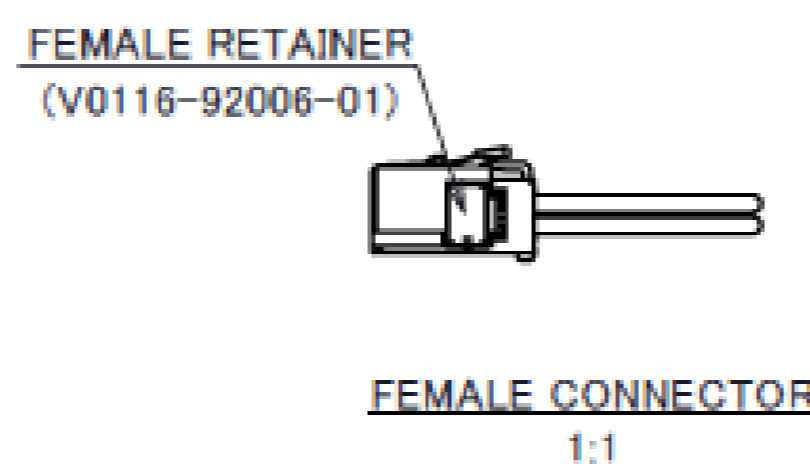
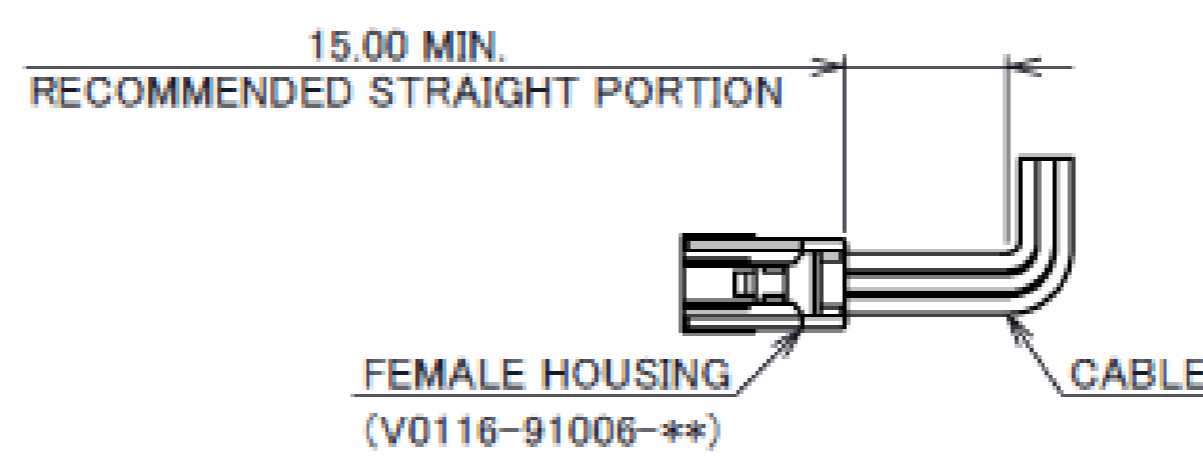
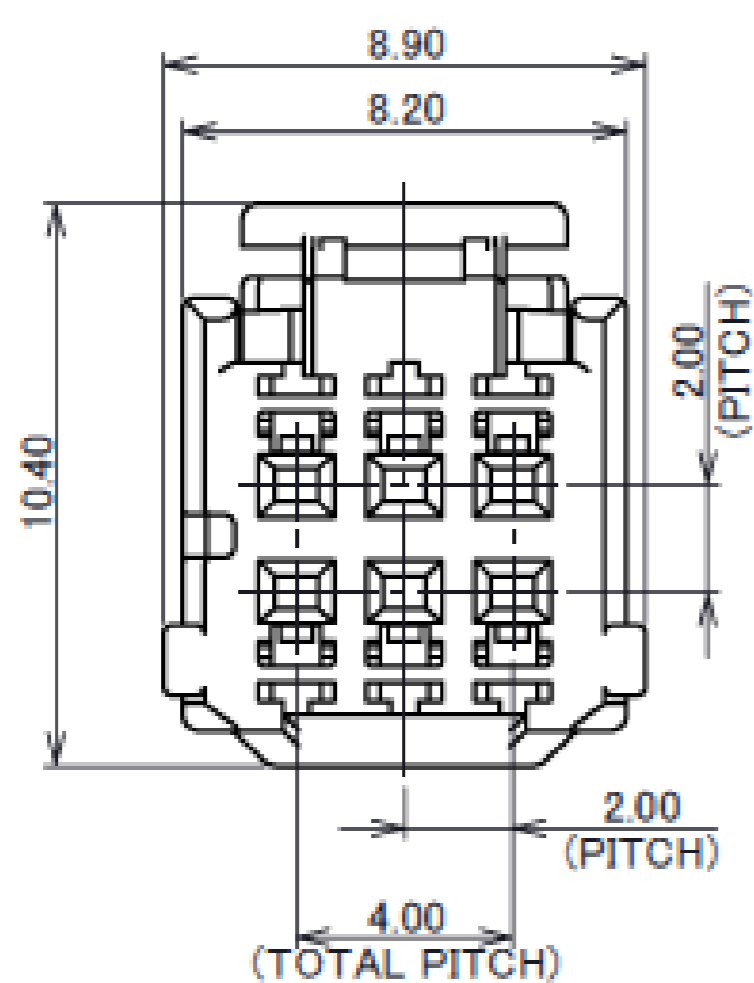
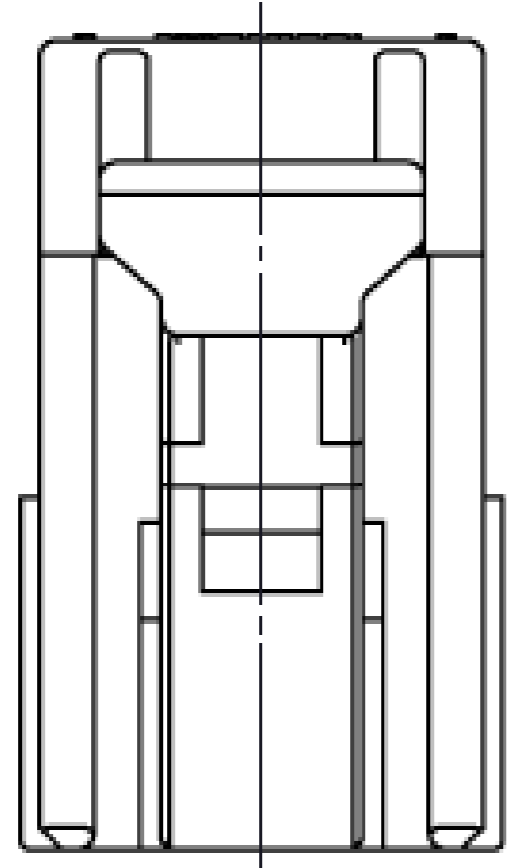
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES  
 1.APPLICABLE PART NO.:  
 -FEMALE TERMINAL --- VT009-03  
 2.MATERIAL: PBT  
 3.COMPLY WITH ELV/RoHS.  
 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]  
 5.POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (6P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91008-01	NORMAL ROCK	KEY CODING-A	BLACK	N/A
V0116-91008-11	NORMAL ROCK	KEY CODING-B	NATURAL	N/A



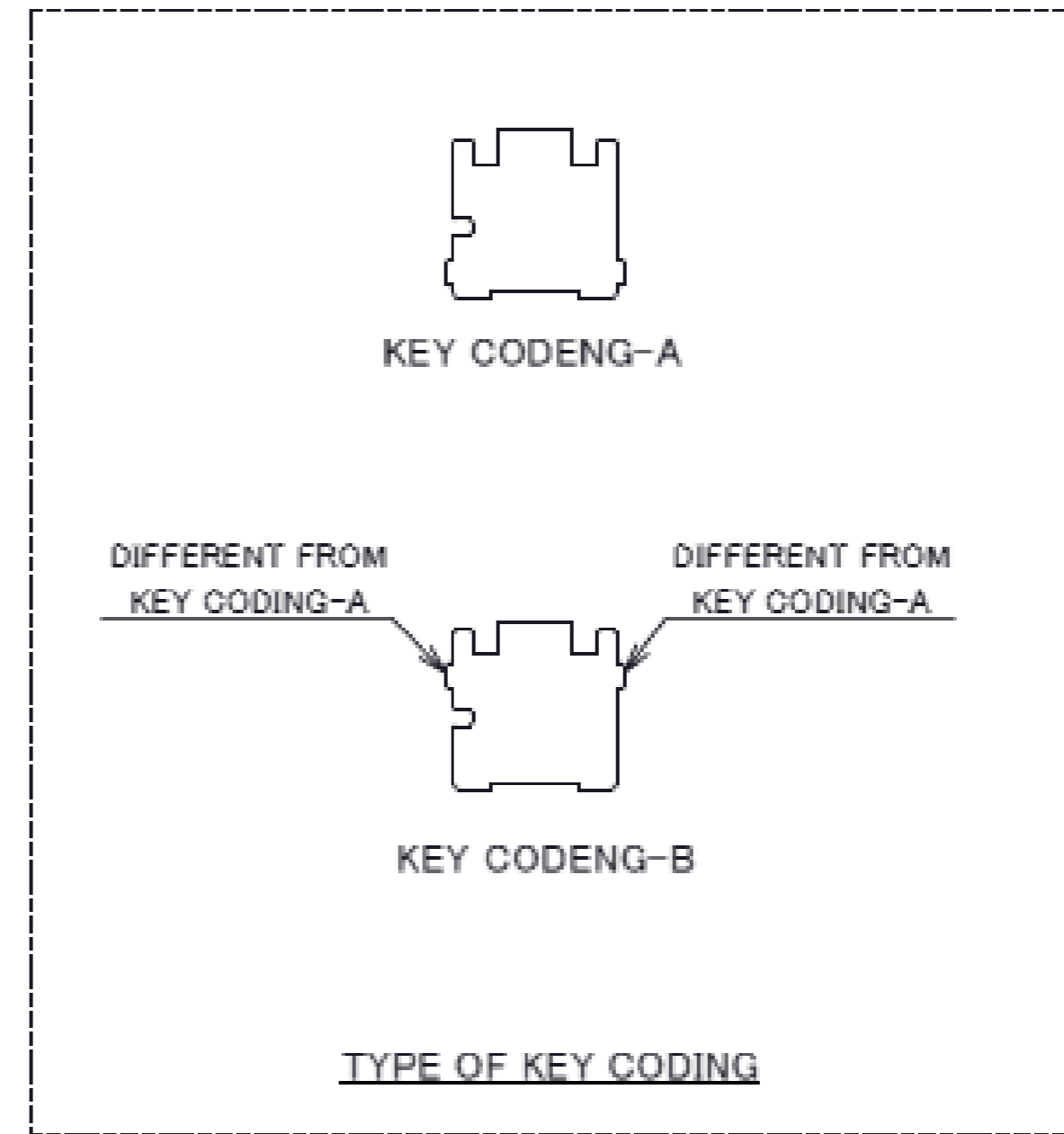
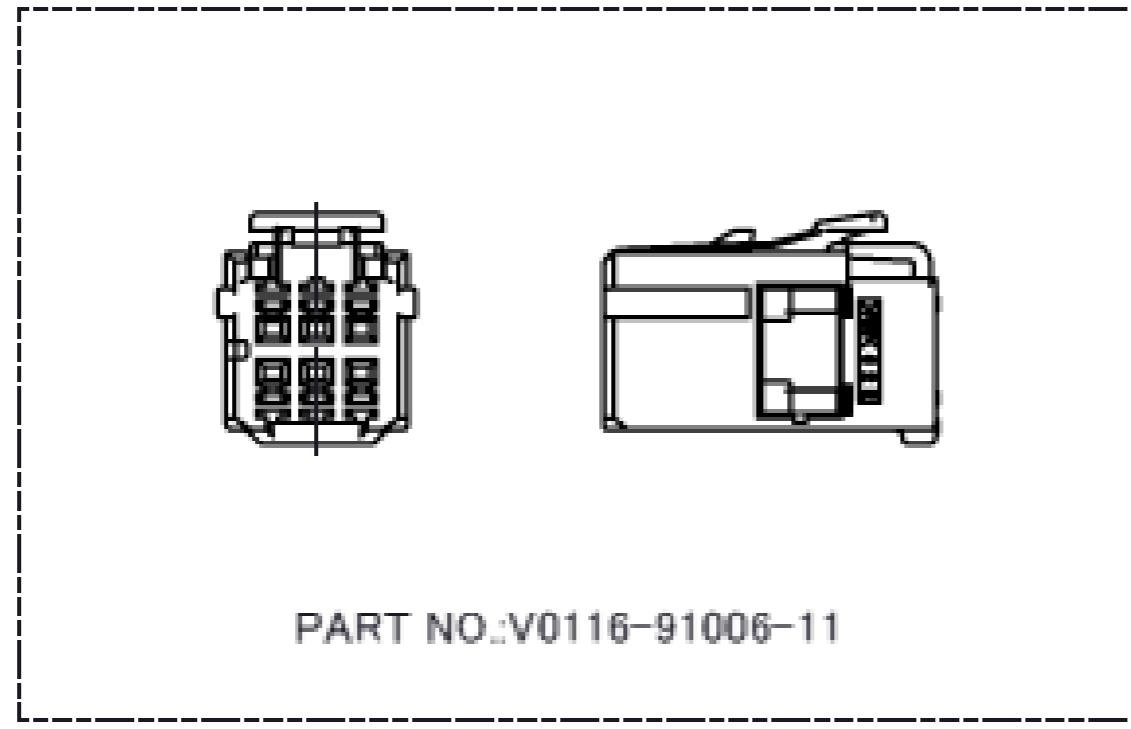
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK, NATURAL

- NOTES  
 1.APPLICABLE PART NO.:  
 -FEMALE TERMINAL --- VT009-02  
 -FEMALE RETAINER --- V0116-92006-01  
 -CABLE COVER --- V0116-93006-0\*  
 2.MATERIAL: PBT  
 3.COMPLY WITH ELV/RoHS.  
 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]  
 5.POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (6P):

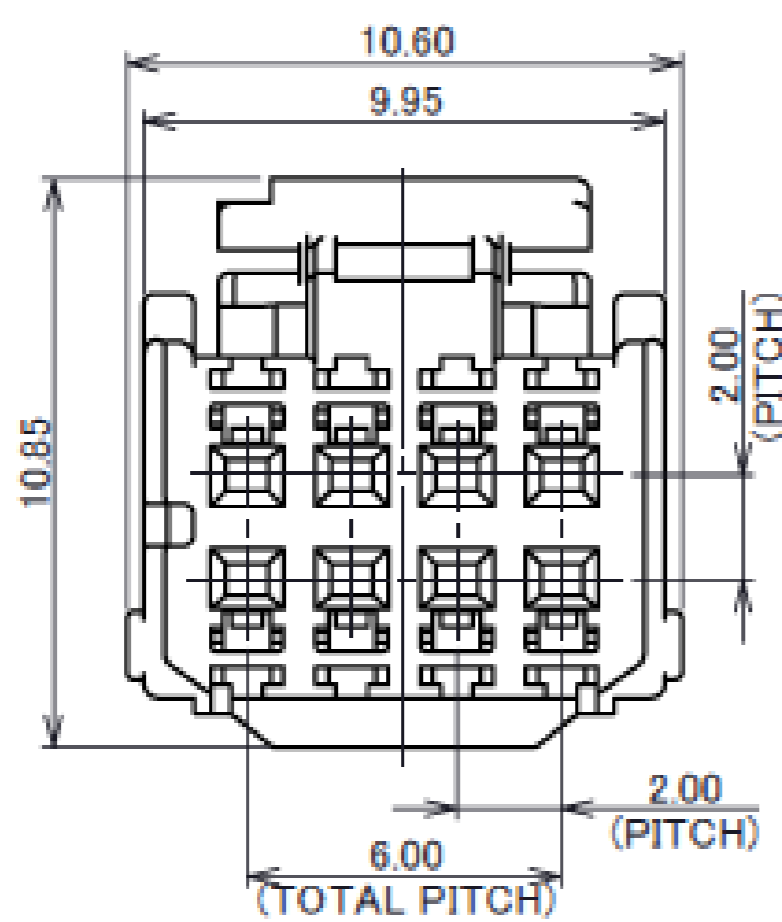
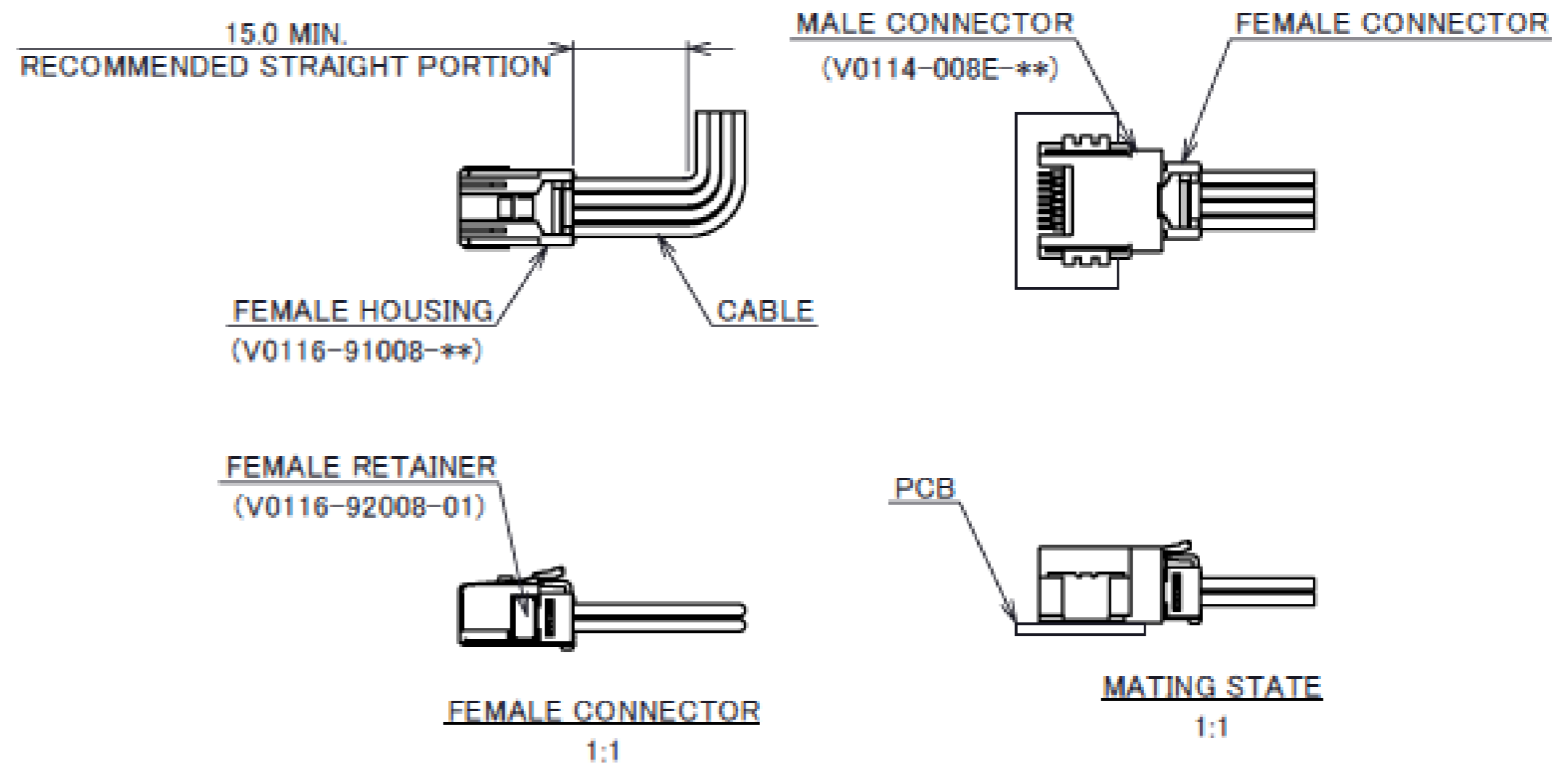
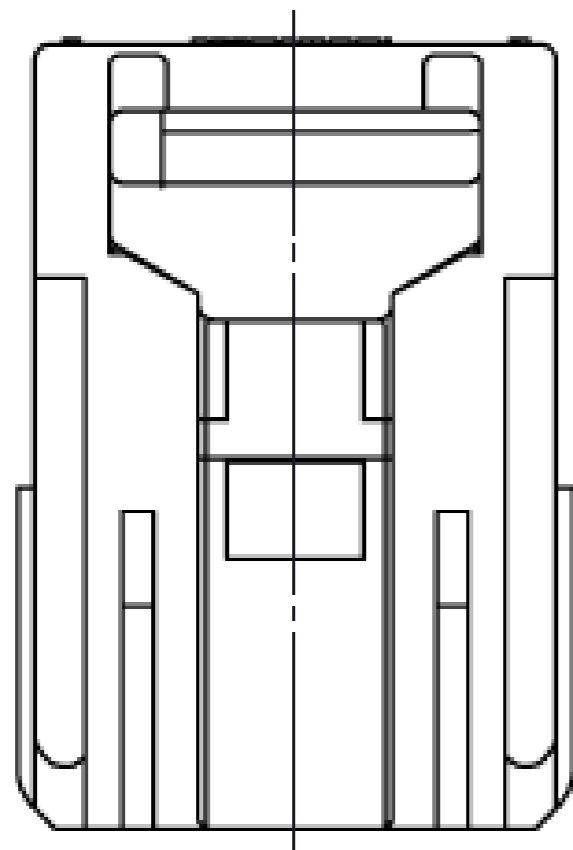
PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91006-01	NORMAL ROCK	KEY CODING-A	BLACK	N/A
V0116-91006-11	NORMAL ROCK	KEY CODING-B	NATURAL	N/A



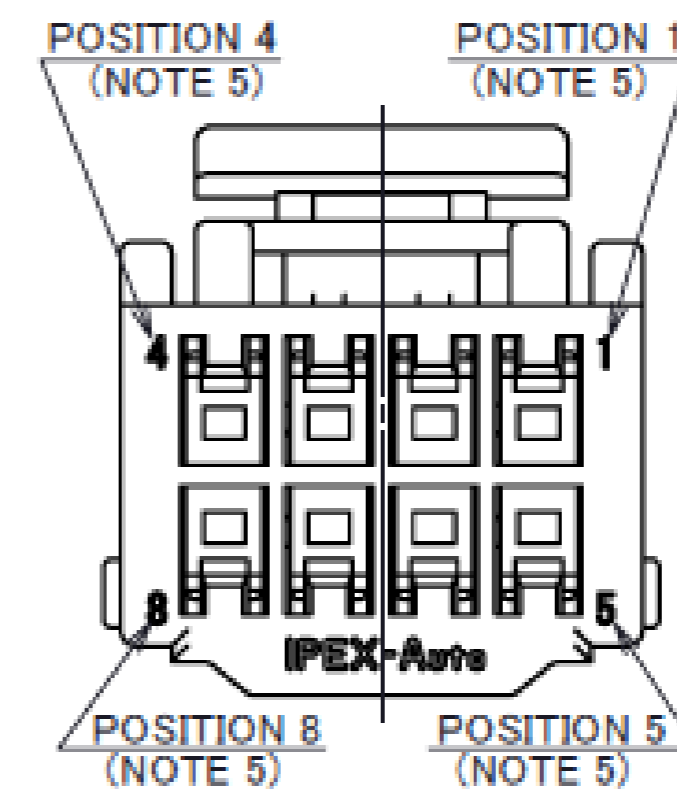
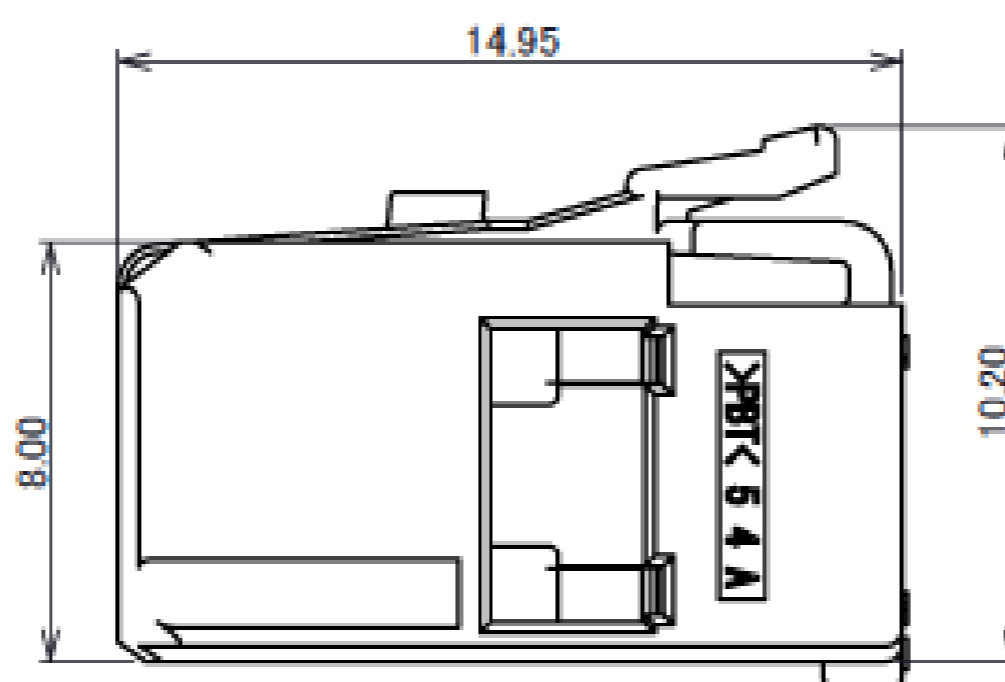
Rev.0

# ISH® (Horizontal Type) FEMALE (8P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91008-02	INERTIA LOCK	KEY CODING-A	BLACK	N/A
V0116-91008-03		KEY CODING-B	NATURAL	APPLICABLE
V0116-91008-12		KEY CODING-C	BLACK	N/A
V0116-91008-22		KEY CODING-D	NATURAL	



PART NO.: V0116-91008-02



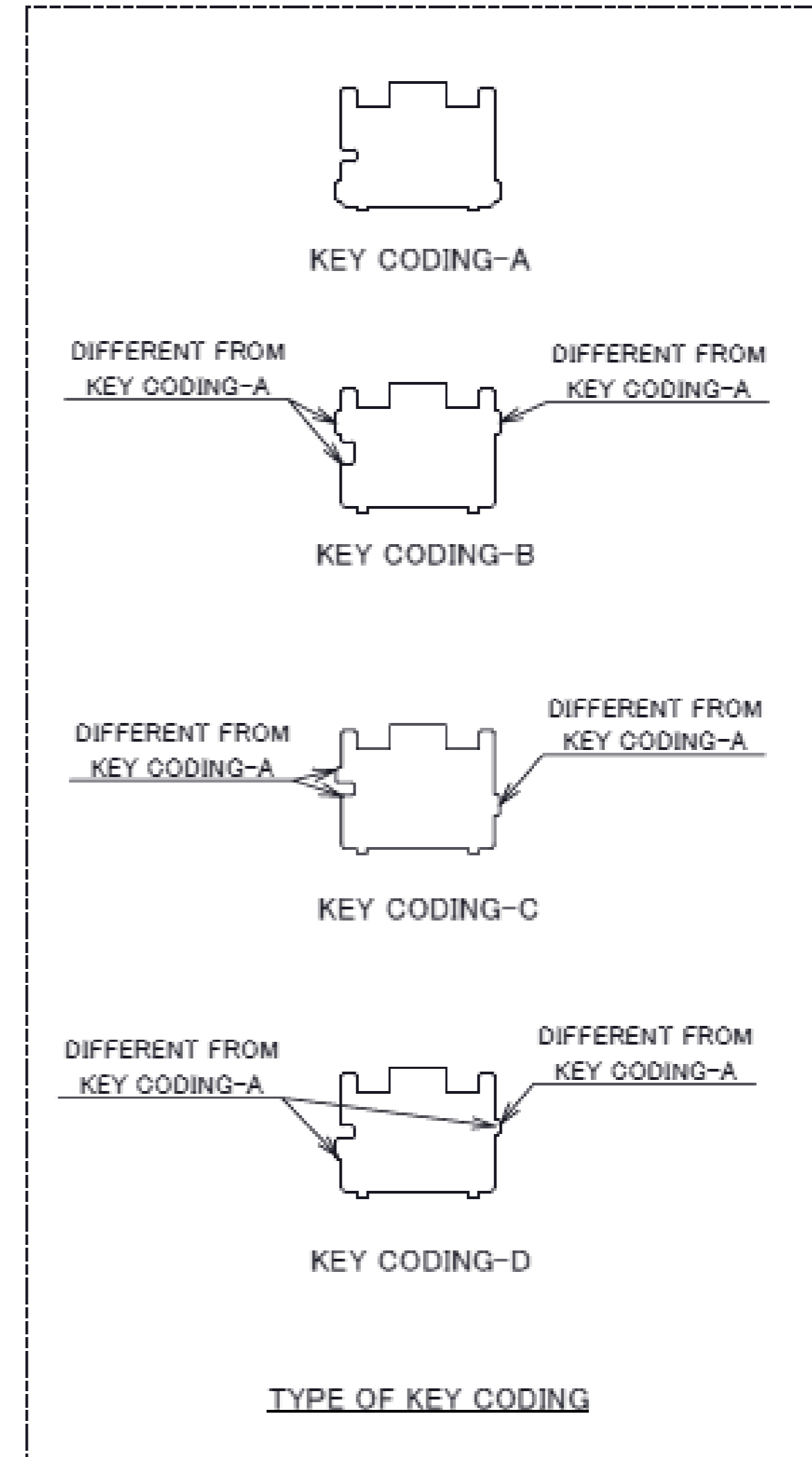
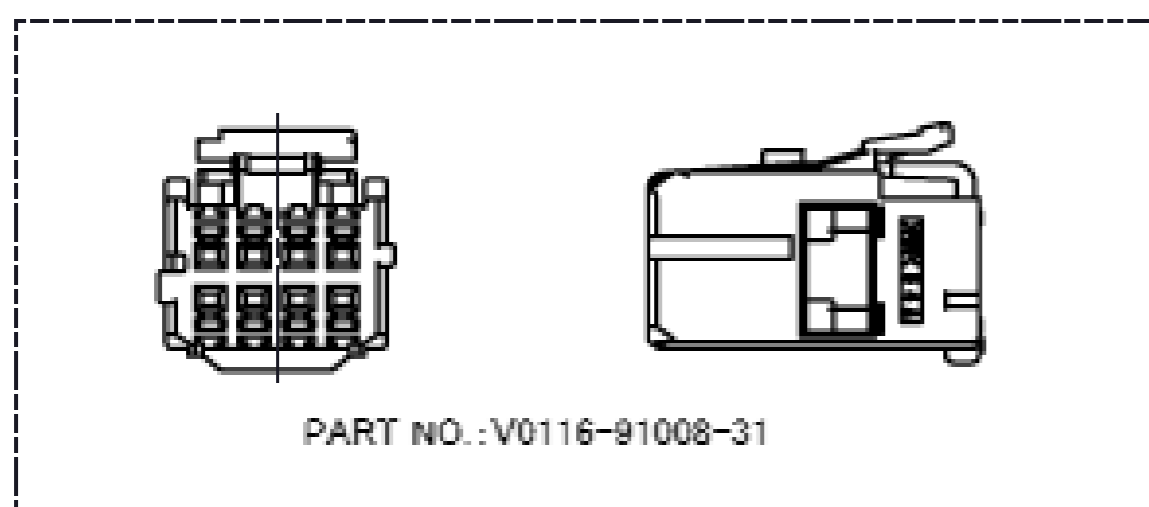
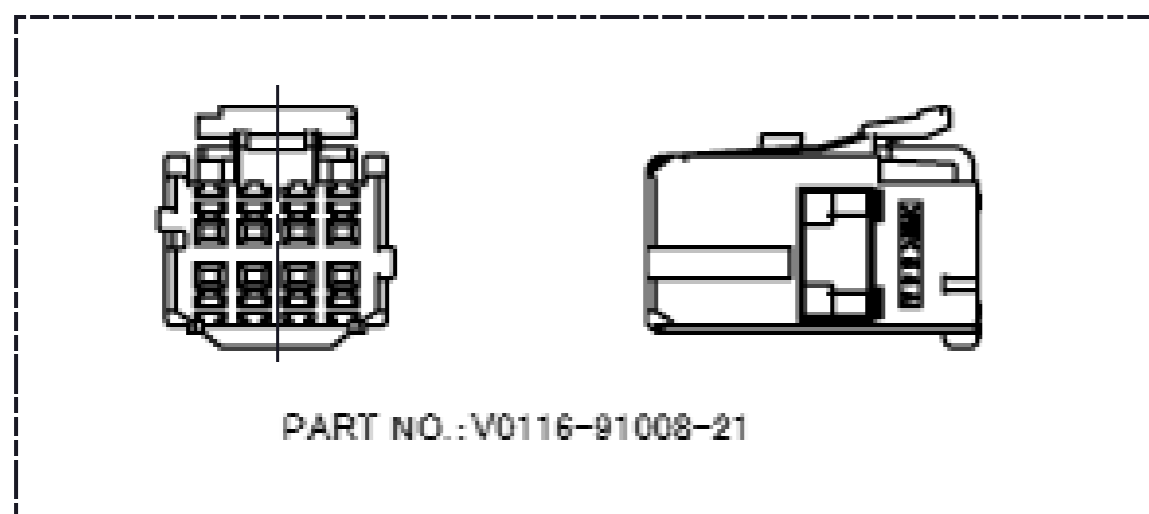
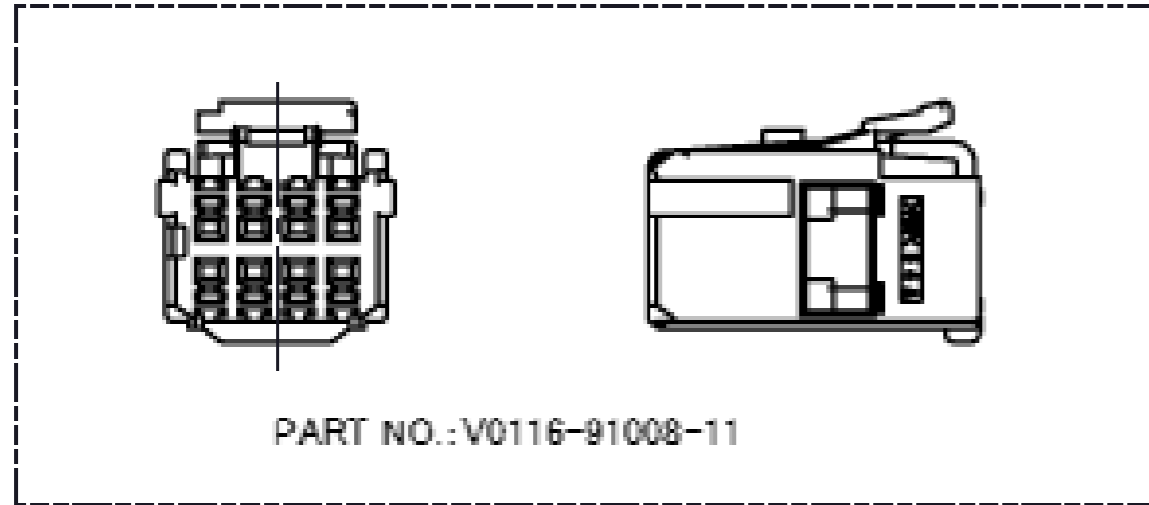
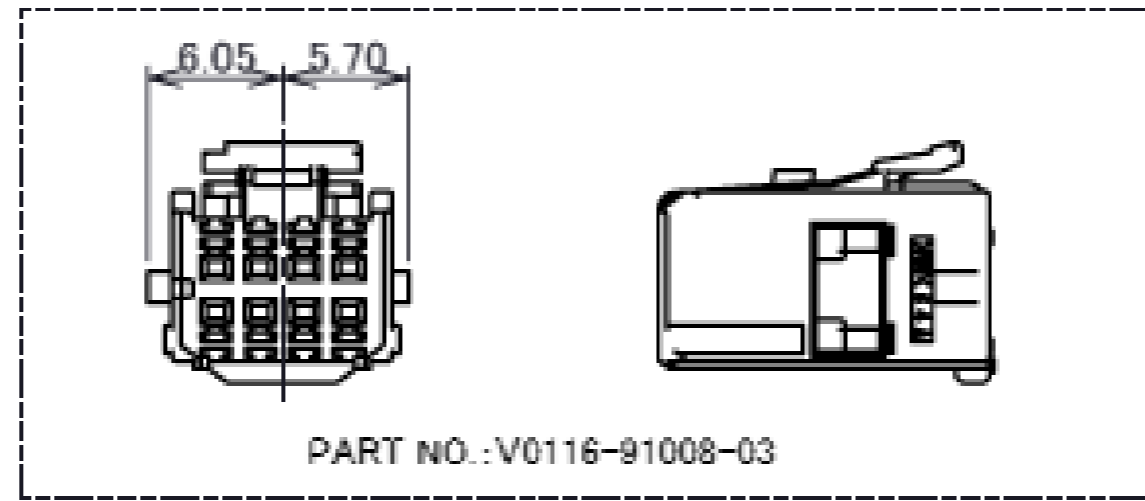
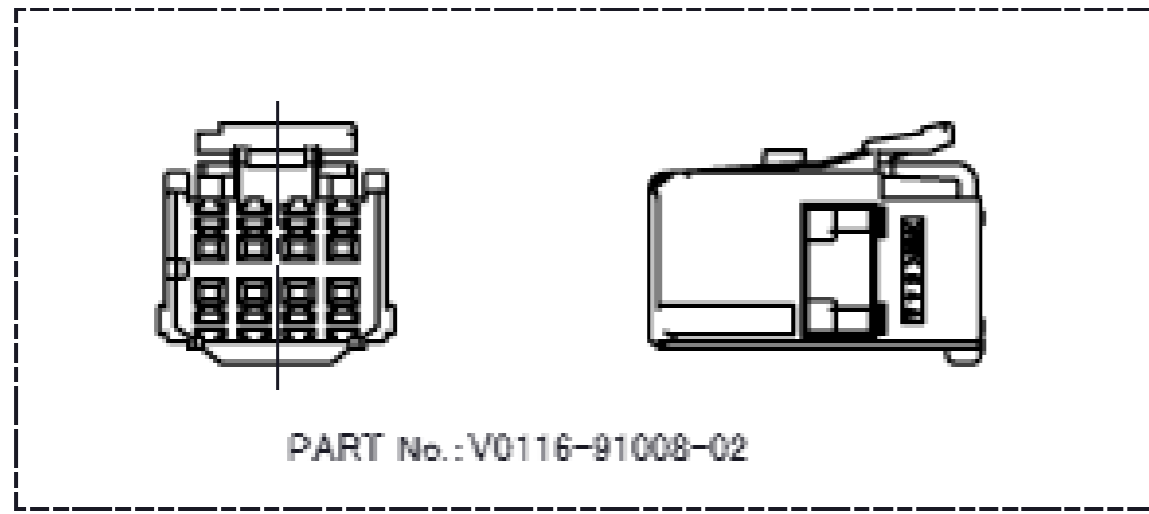
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	MALE HOUSING	PBT	BLACK, NATURAL

- NOTES
1. APPLICABLE PART NO.:  
- FEMALE TERMINAL --- VT009-02  
- FEMALE RETAINER --- V0116-92008-01  
- REAR COVER --- V0116-94008-01
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/REHS.
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (8P):

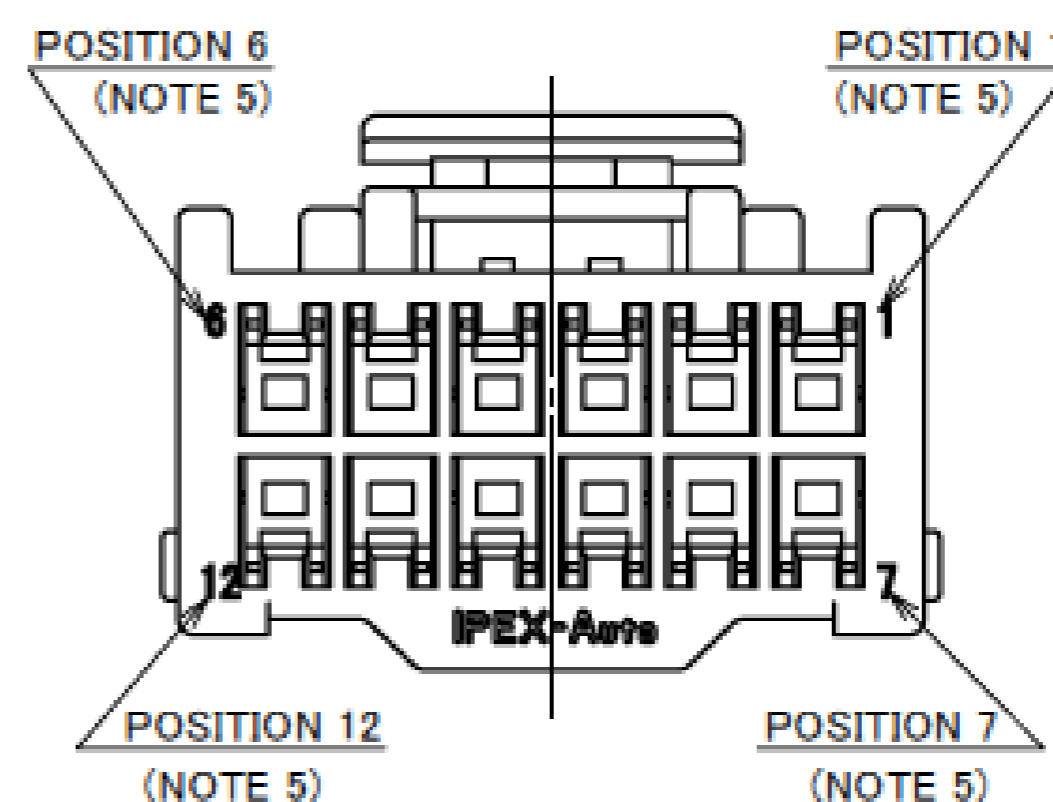
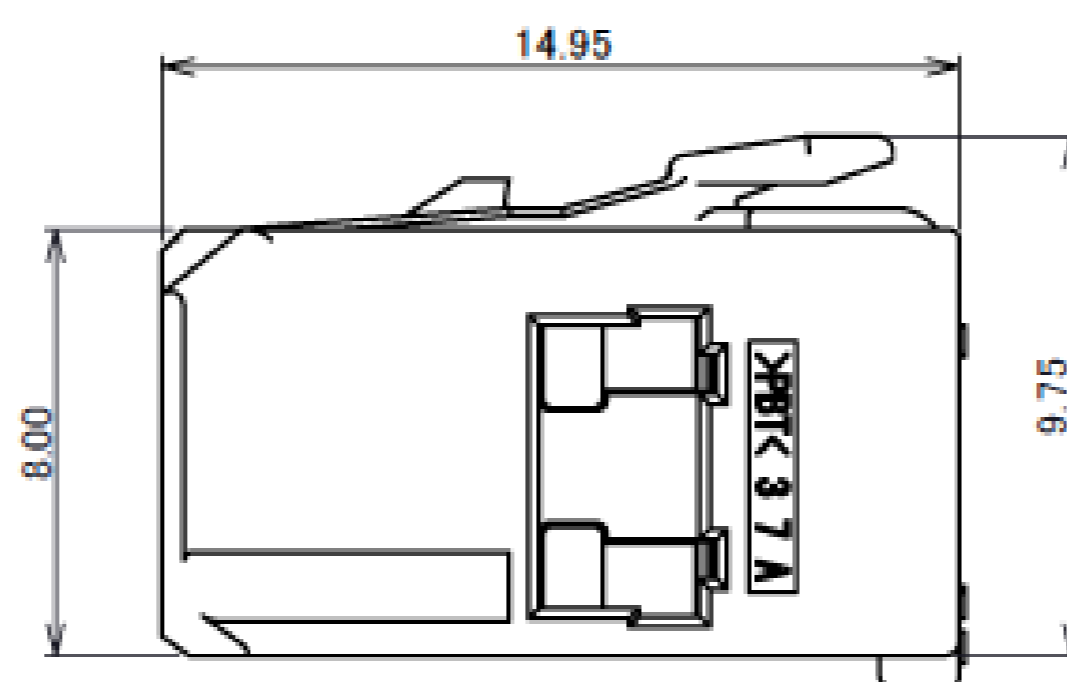
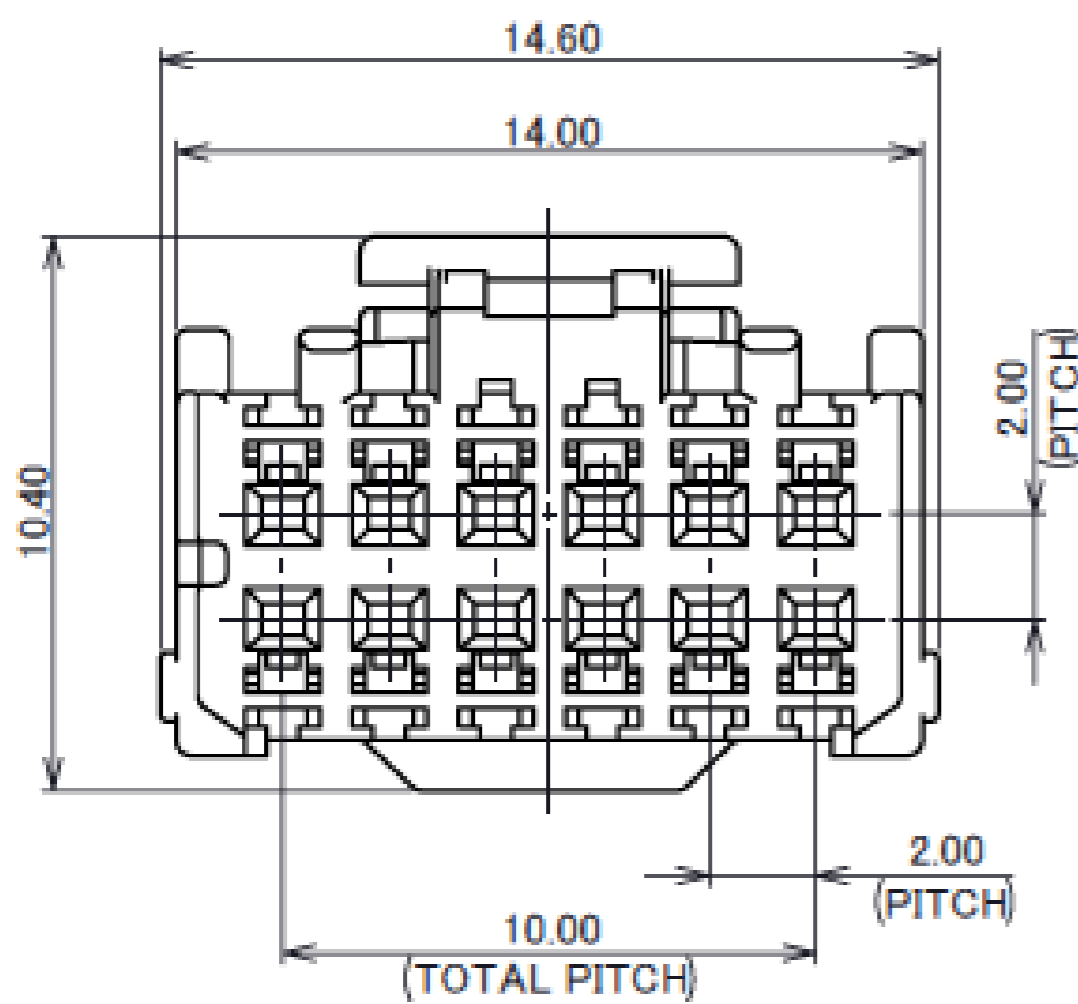
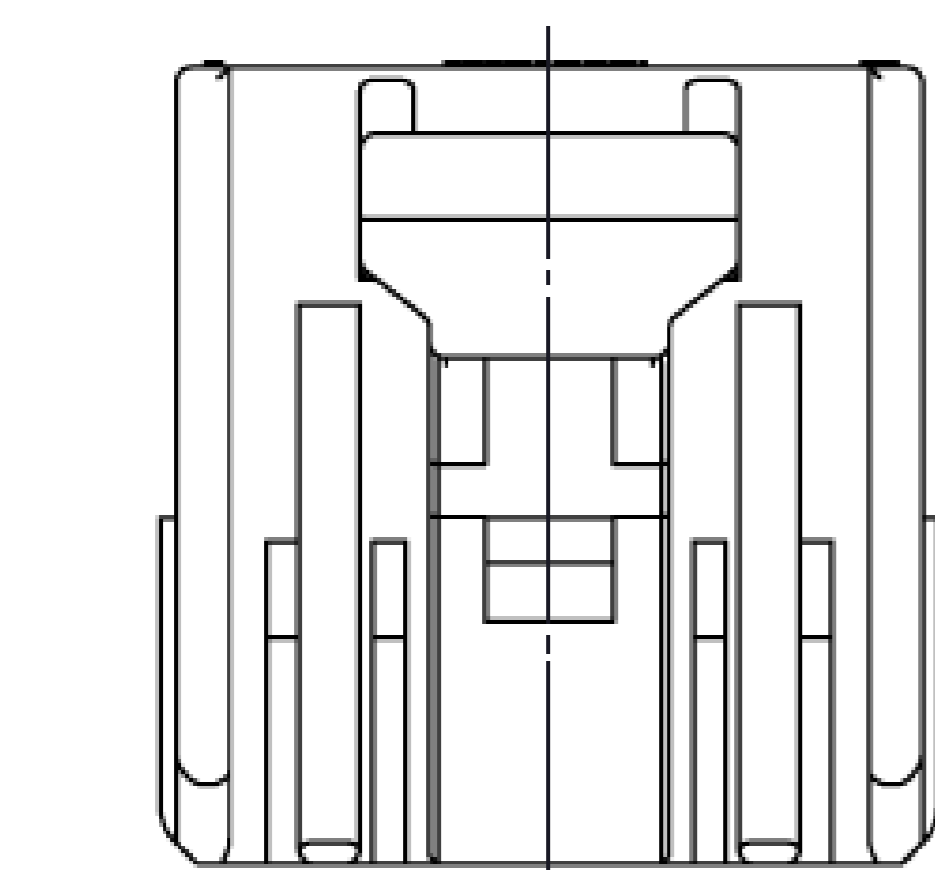
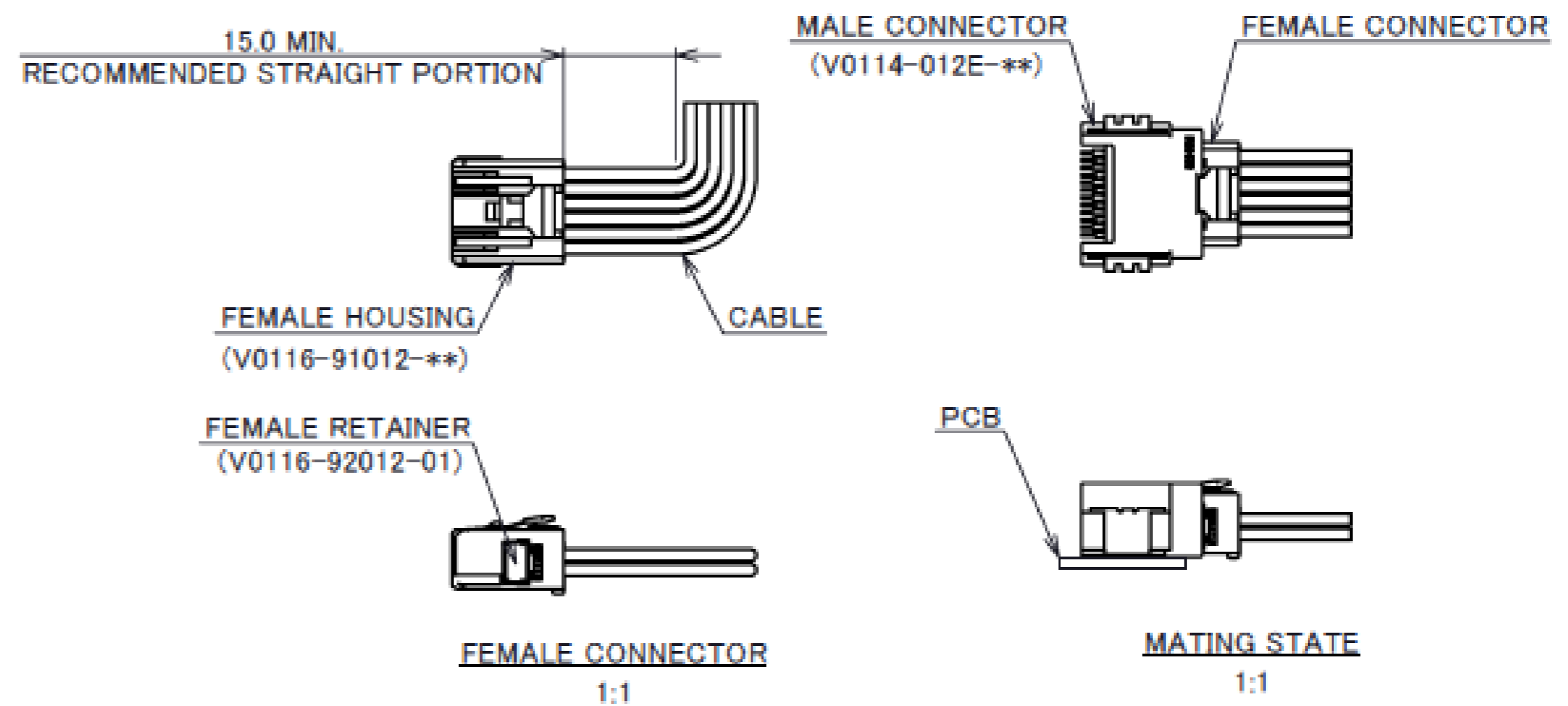
PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91008-02	INERTIA LOCK	KEY CODING-A	BLACK	N/A
V0116-91008-03		KEY CODING-B	NATURAL	APPLICABLE
V0116-91008-12		KEY CODING-C	BLACK	N/A
V0116-91008-22		KEY CODING-D	NATURAL	N/A



Rev.0

# ISH® (Horizontal Type) FEMALE (12P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91012-01	NORMAL LOCK	KEY CODING-A	BLACK	N/A
V0116-91012-02		KEY CODING-B	NATURAL	APPLICABLE
V0116-91012-11		KEY CODING-C	BLUE	N/A
V0116-91012-12	INERTIA LOCK	KEY CODING-D	NATURAL	APPLICABLE
V0116-91012-21		KEY CODING-A	GRAY	N/A
V0116-91012-22		KEY CODING-B	GRAY	APPLICABLE



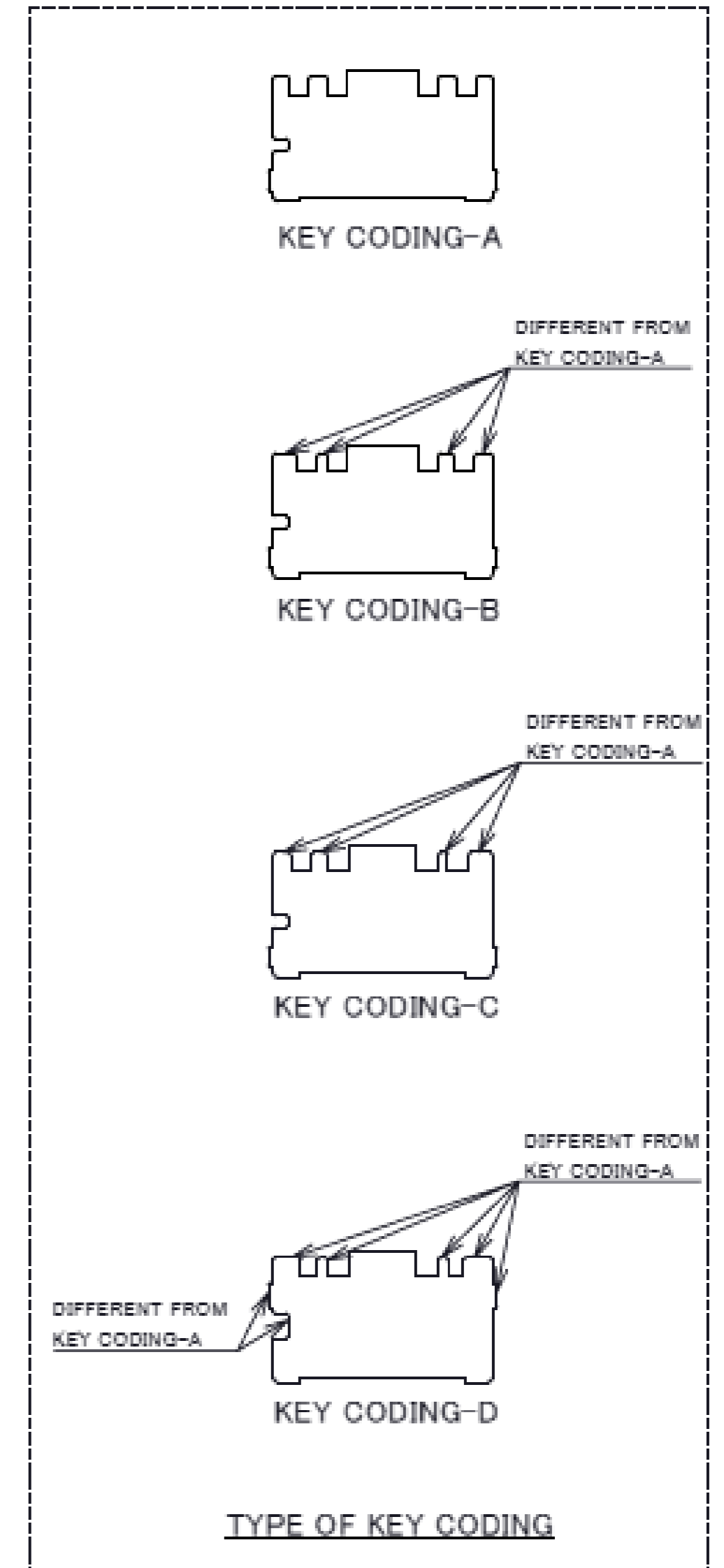
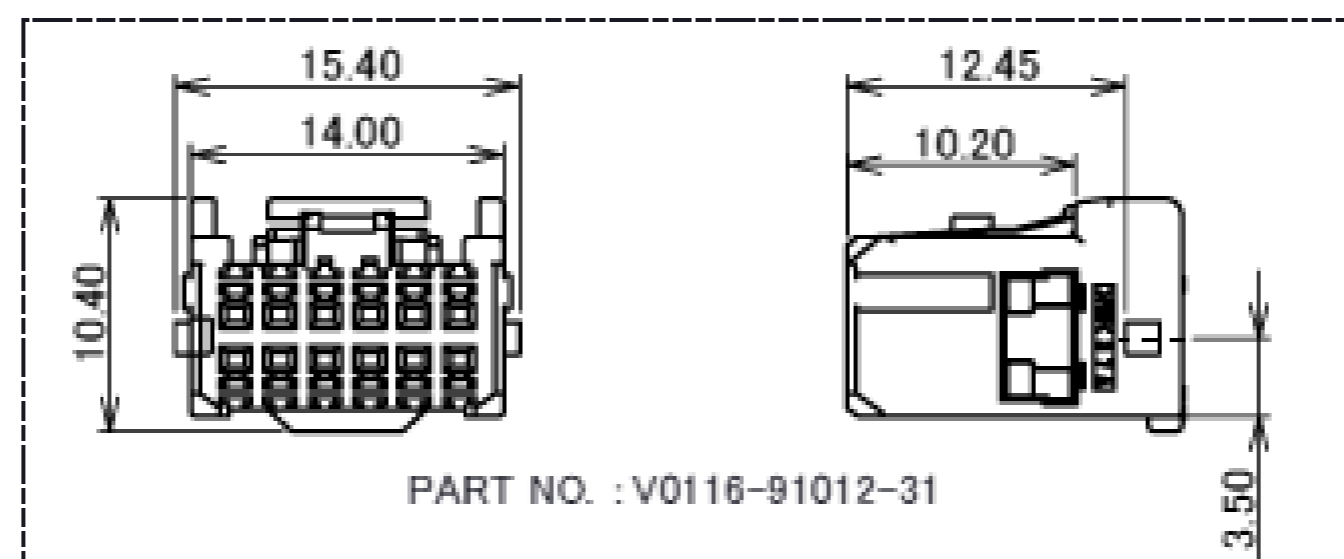
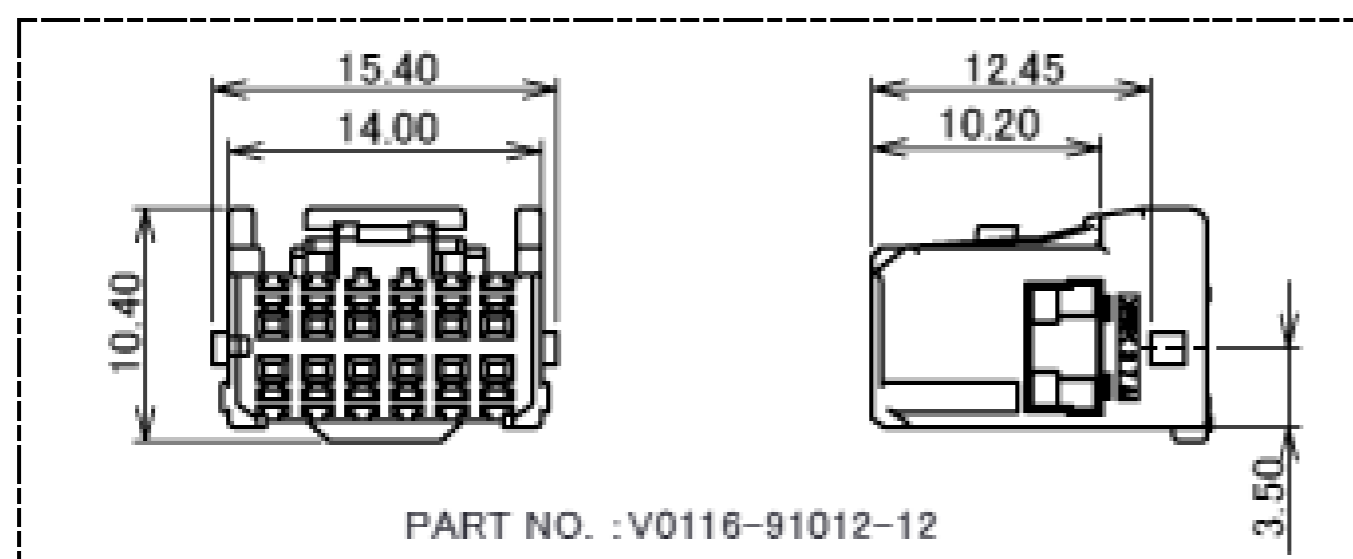
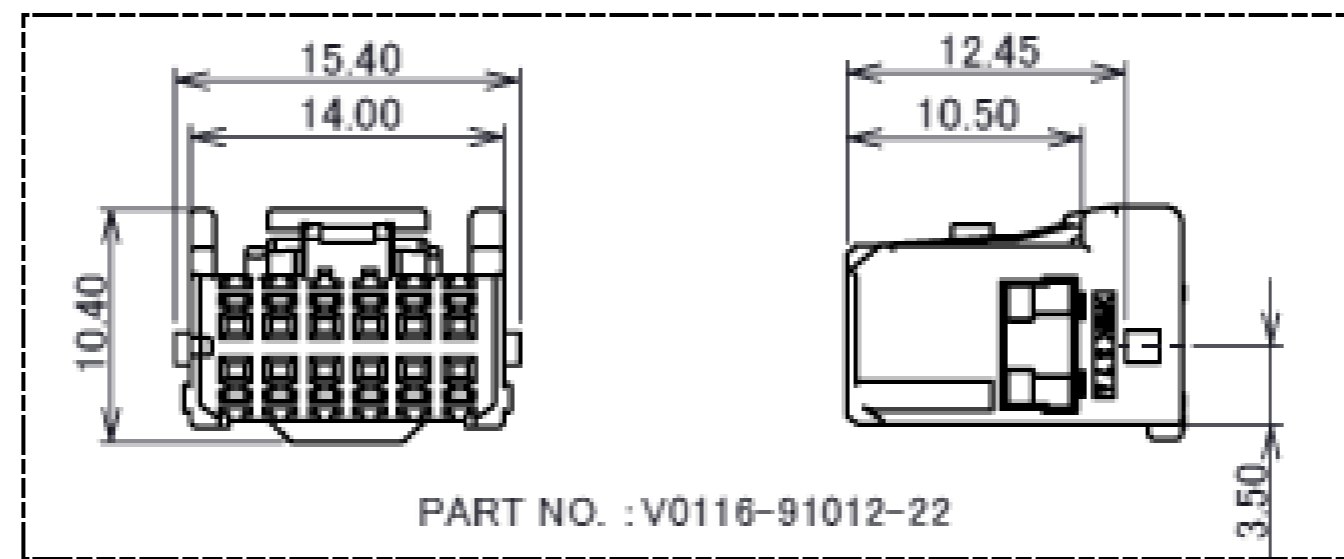
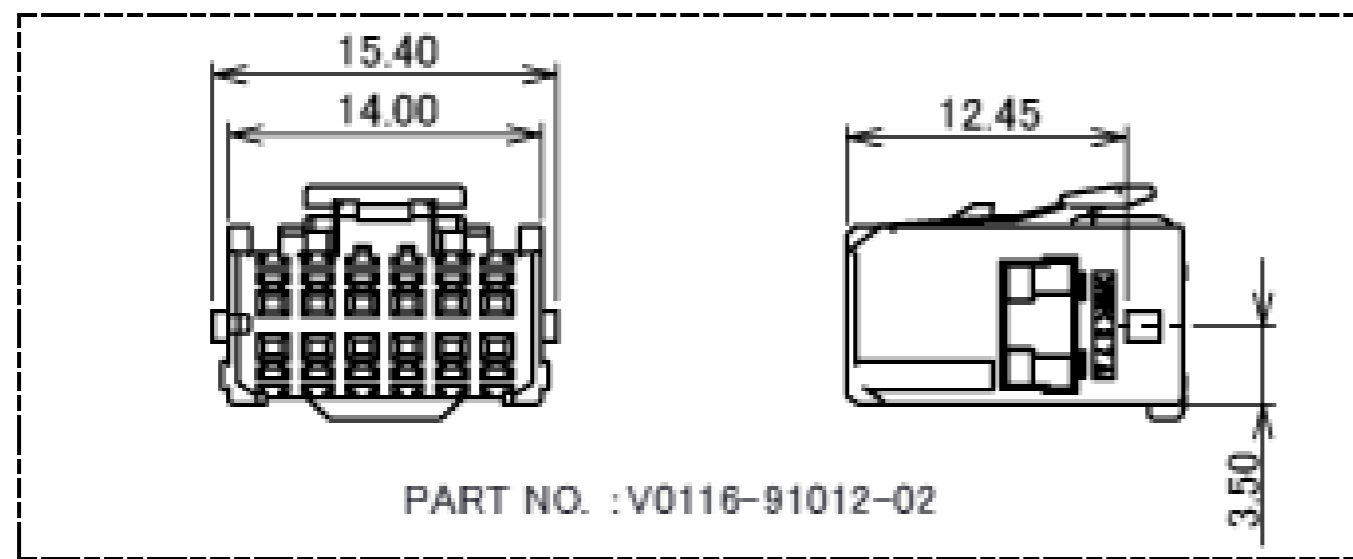
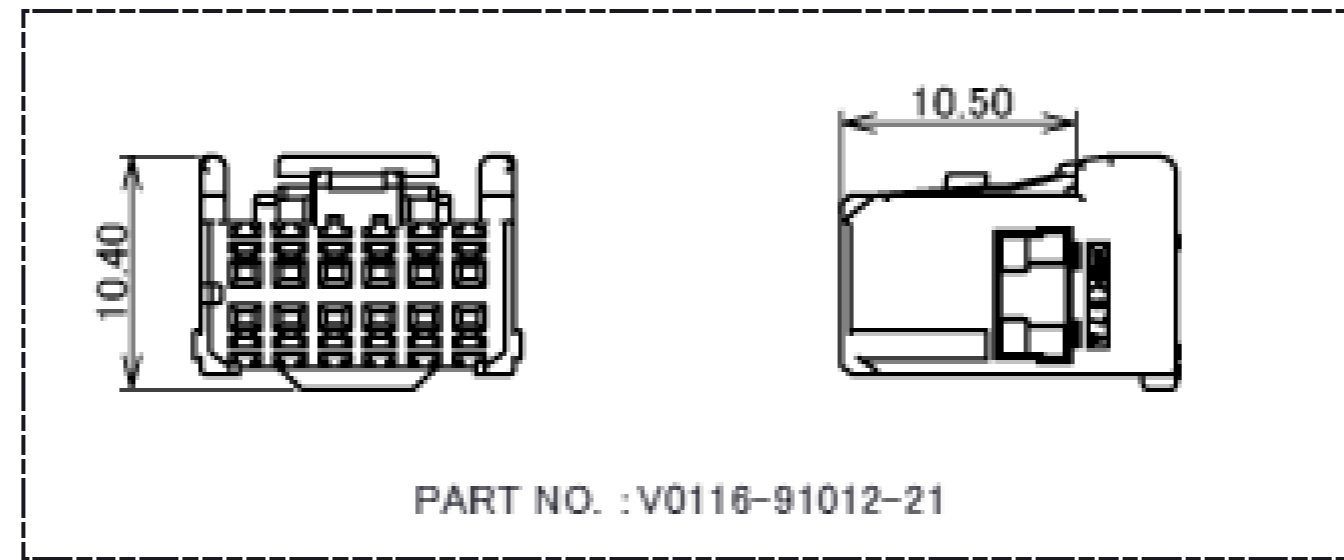
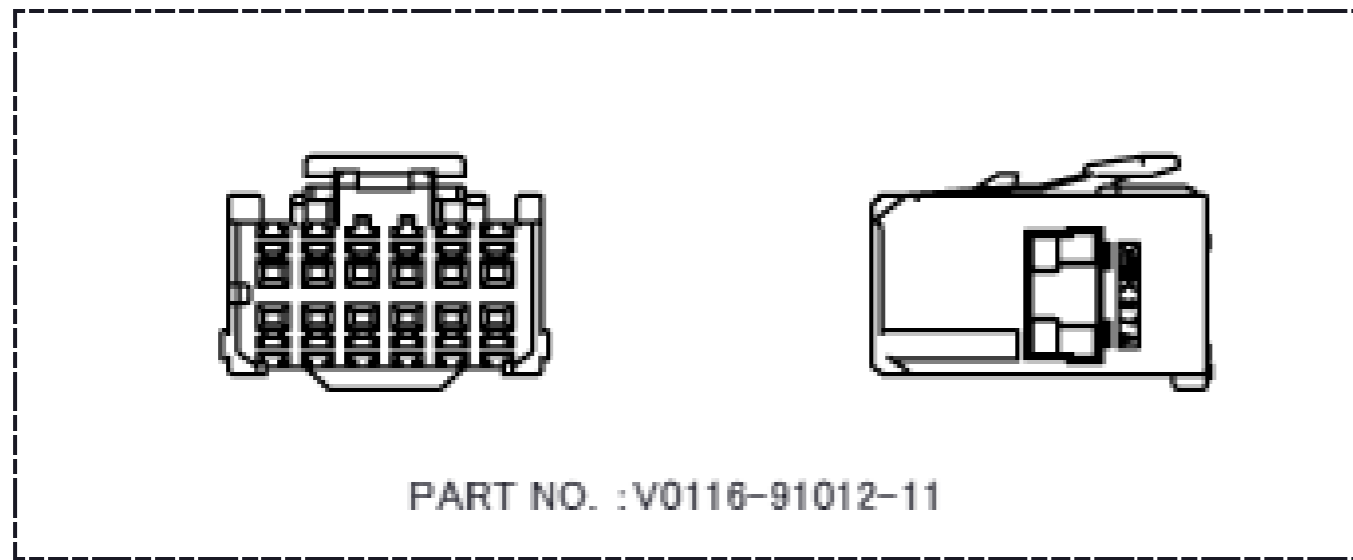
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES
- APPLICABLE PART NO.:
    - FEMALE TERMINAL --- VT009-02
    - FEMALE RETAINER --- V0116-92012-01
    - REAR COVER --- V0116-94012-01
  - MATERIAL: PBT
  - COMPLY WITH ELV/RoHS.
  - HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  - POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (12P):

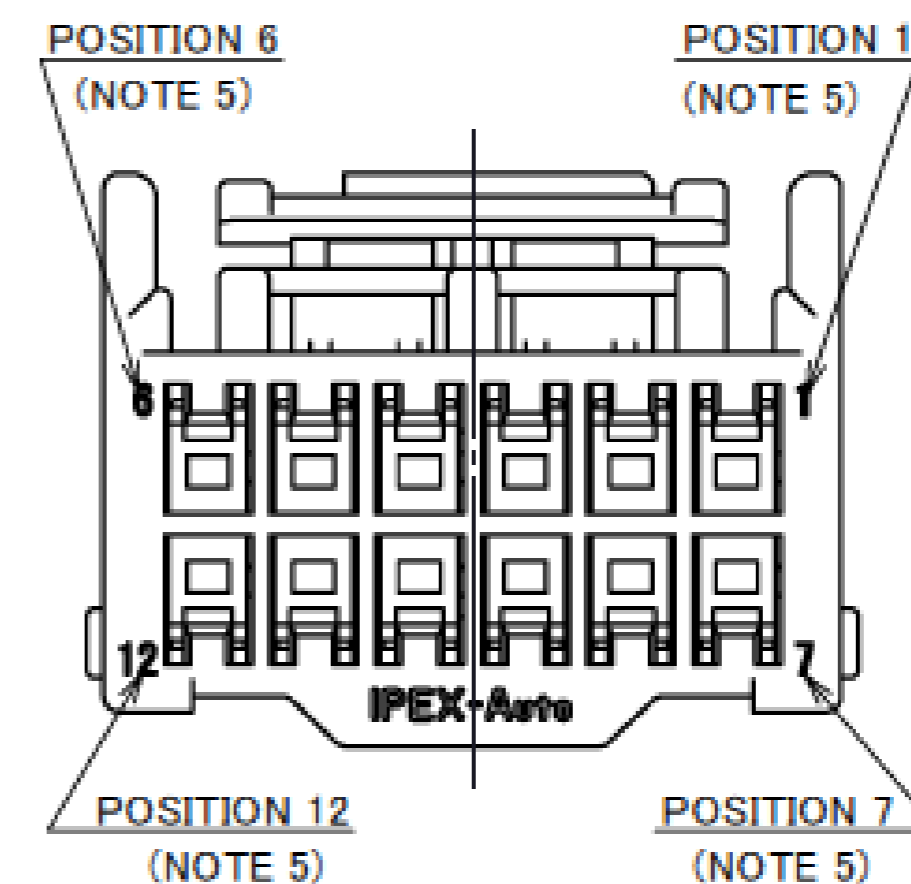
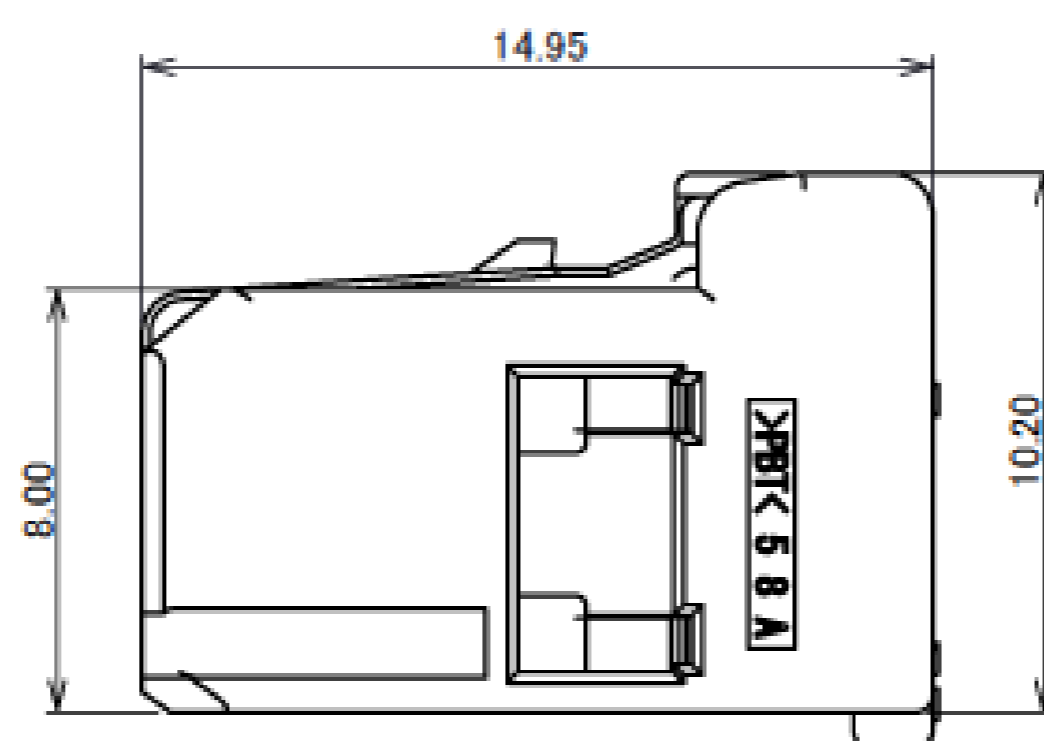
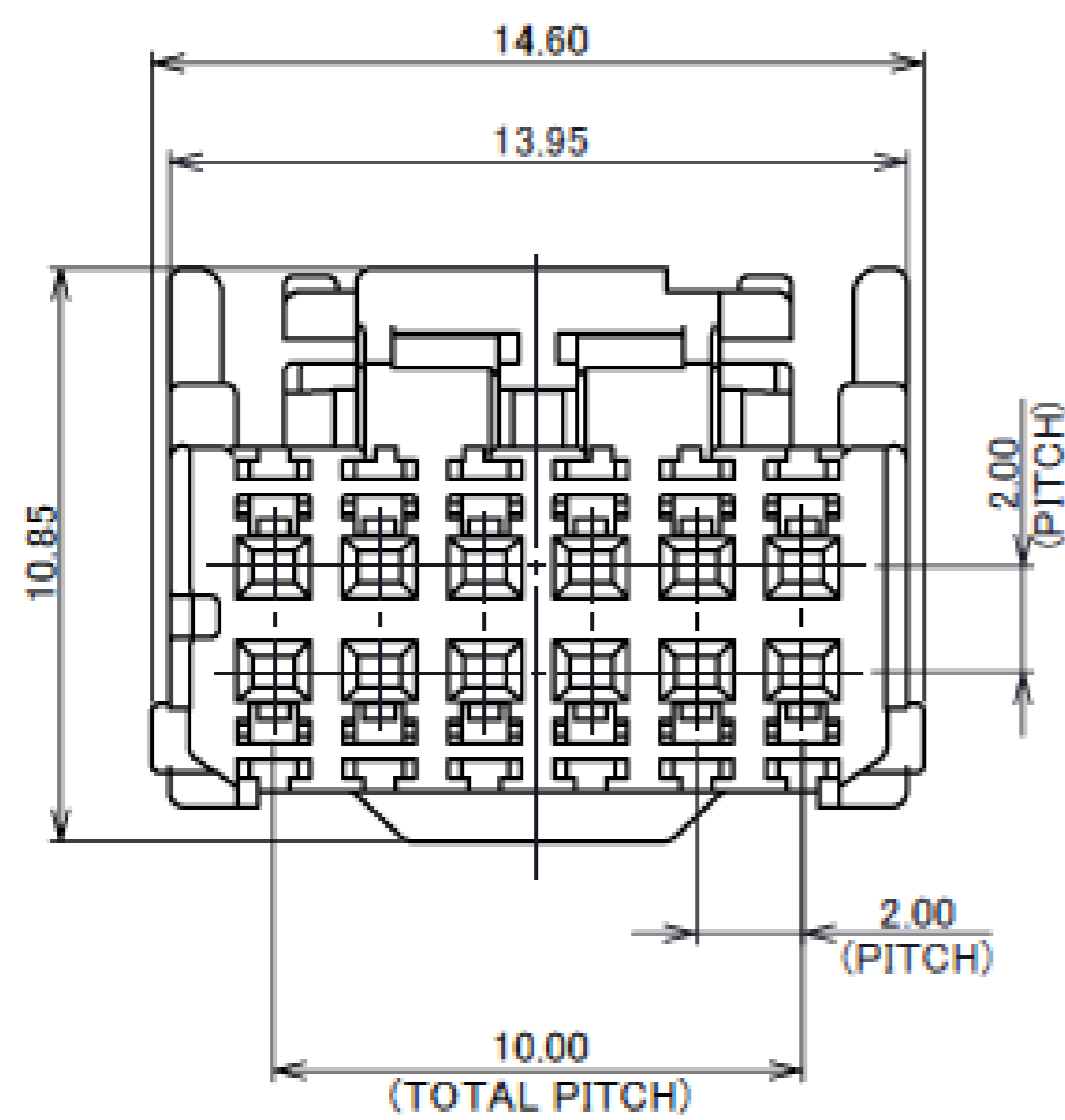
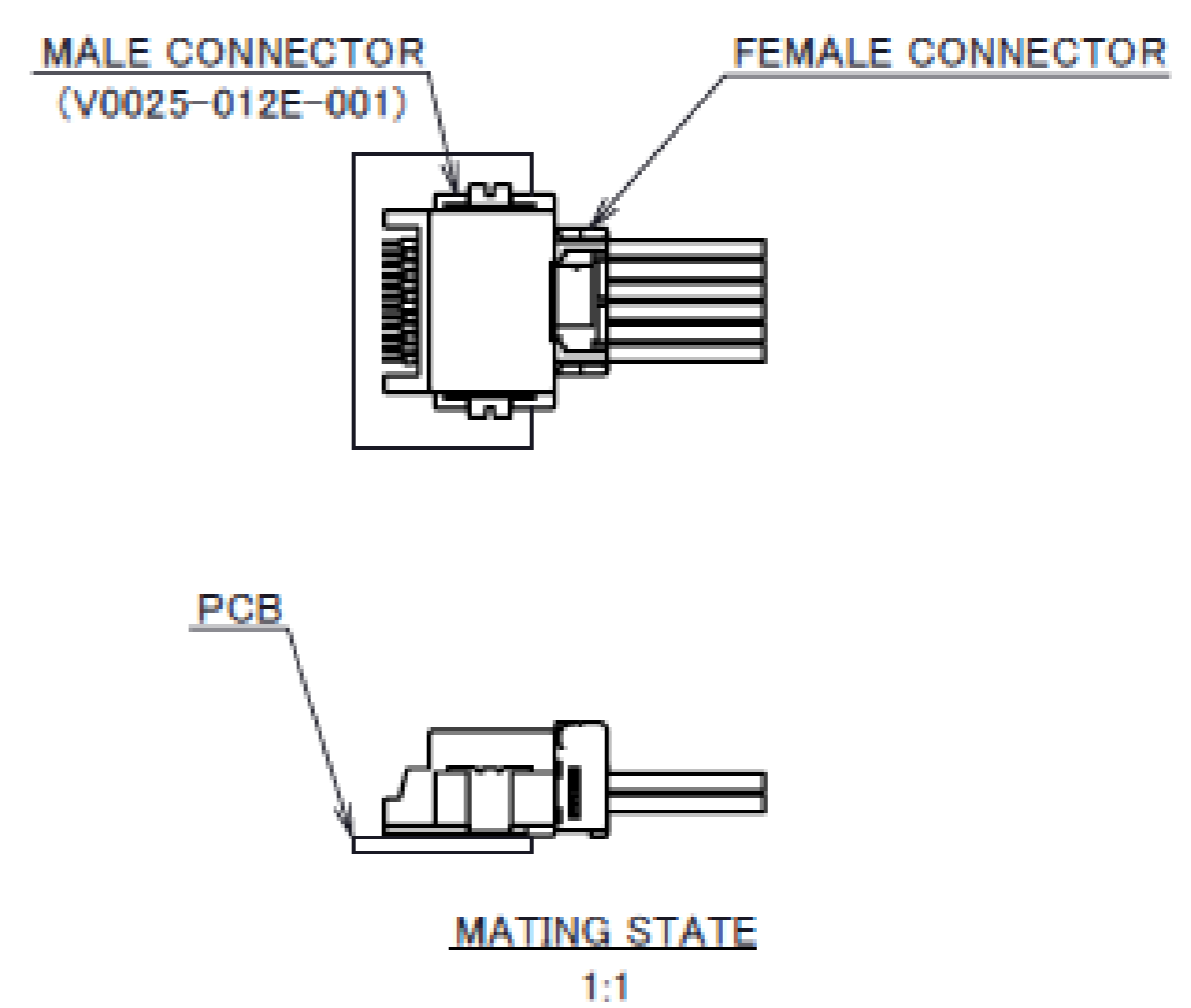
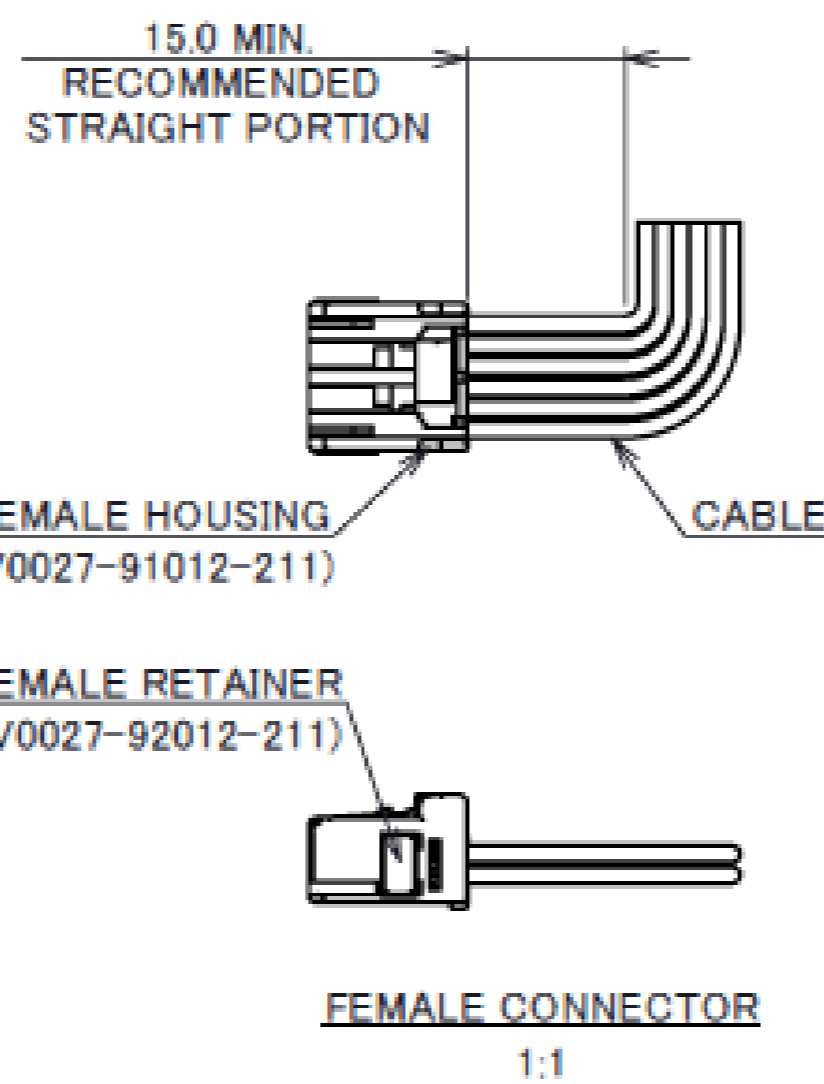
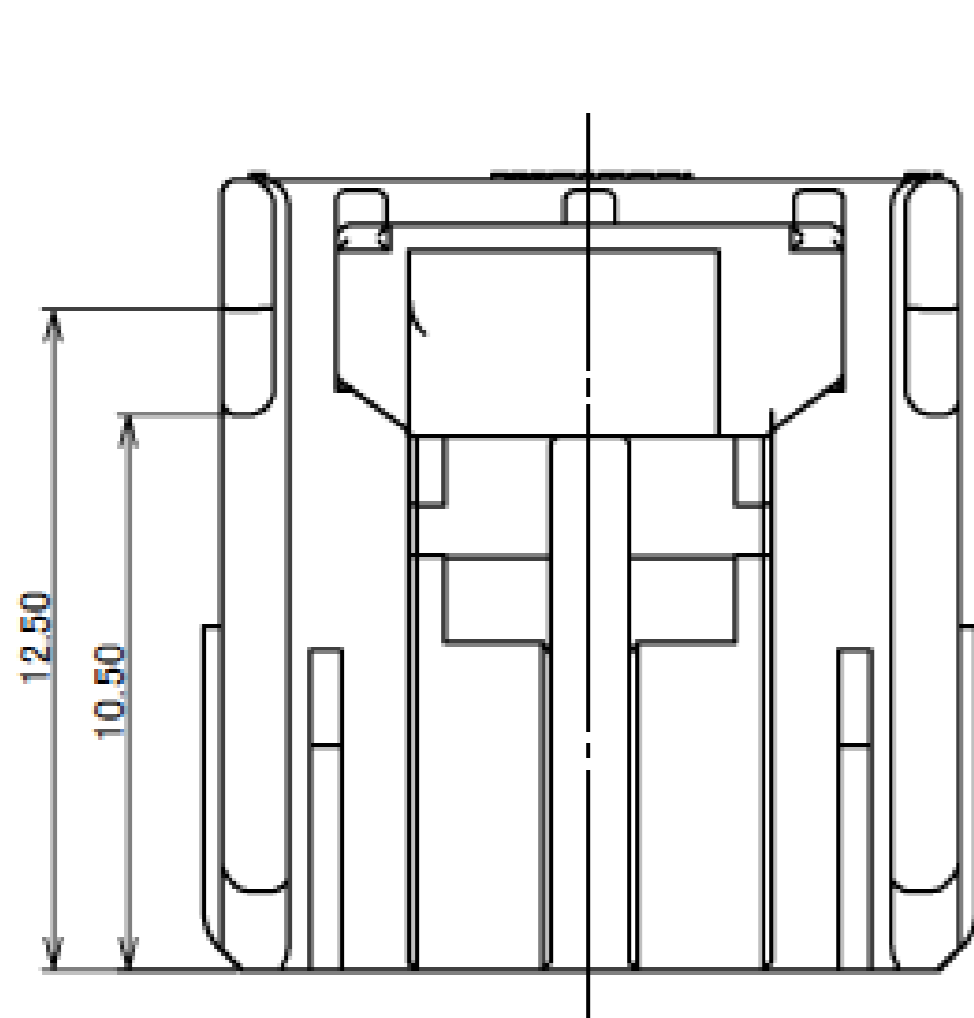
PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91012-01	NORMAL LOCK	KEY CODING-A	BLACK	N/A
V0116-91012-02			APPLICABLE	
V0116-91012-11		KEY CODING-B	NATURAL	N/A
V0116-91012-12	INERTIA LOCK	KEY CODING-B	BLUE	APPLICABLE
V0116-91012-21			NATURAL	N/A
V0116-91012-22		KEY CODING-C	NATURAL	N/A
V0116-91012-31		KEY CODING-D	GRAY	APPLICABLE



Rev.0

# ISH® (Horizontal Type) FEMALE (12P) ※ISHV:

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0027-91012-211	NORMAL LOCK	-	BLACK	N/A



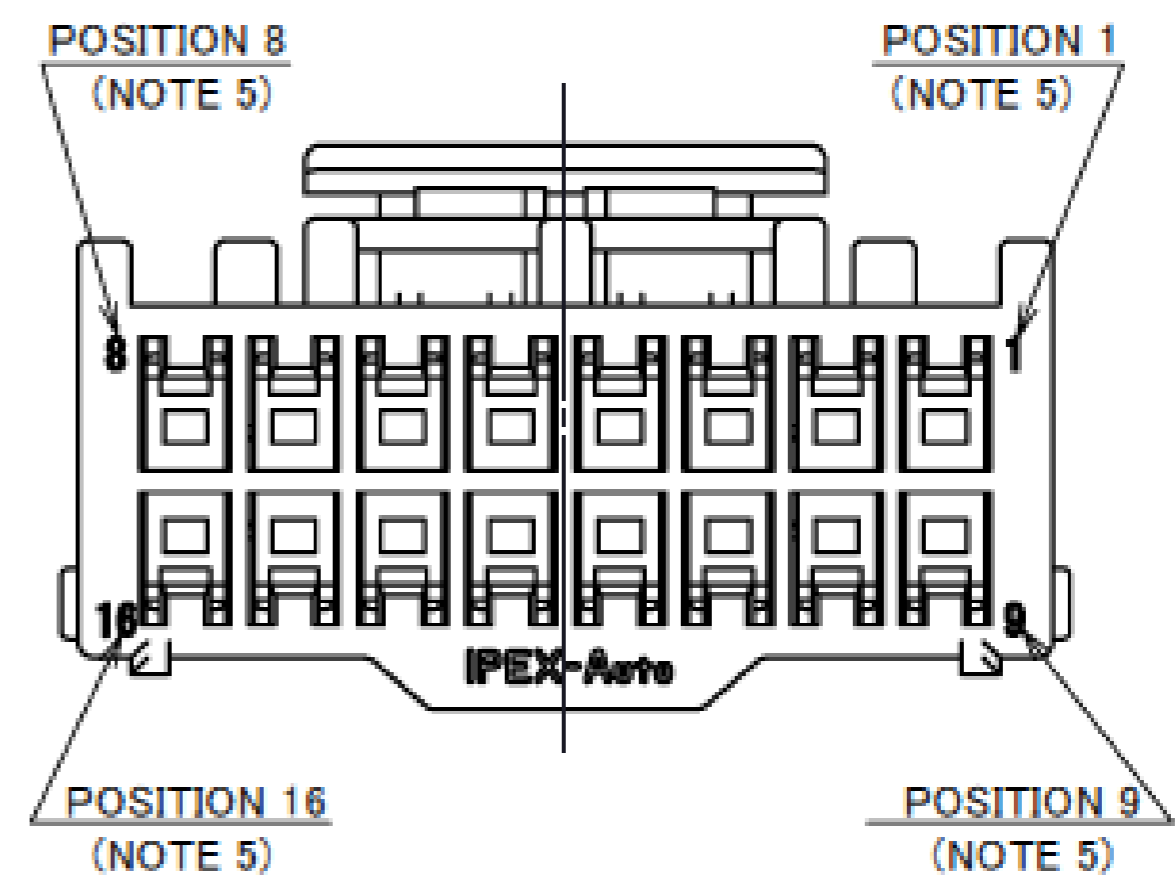
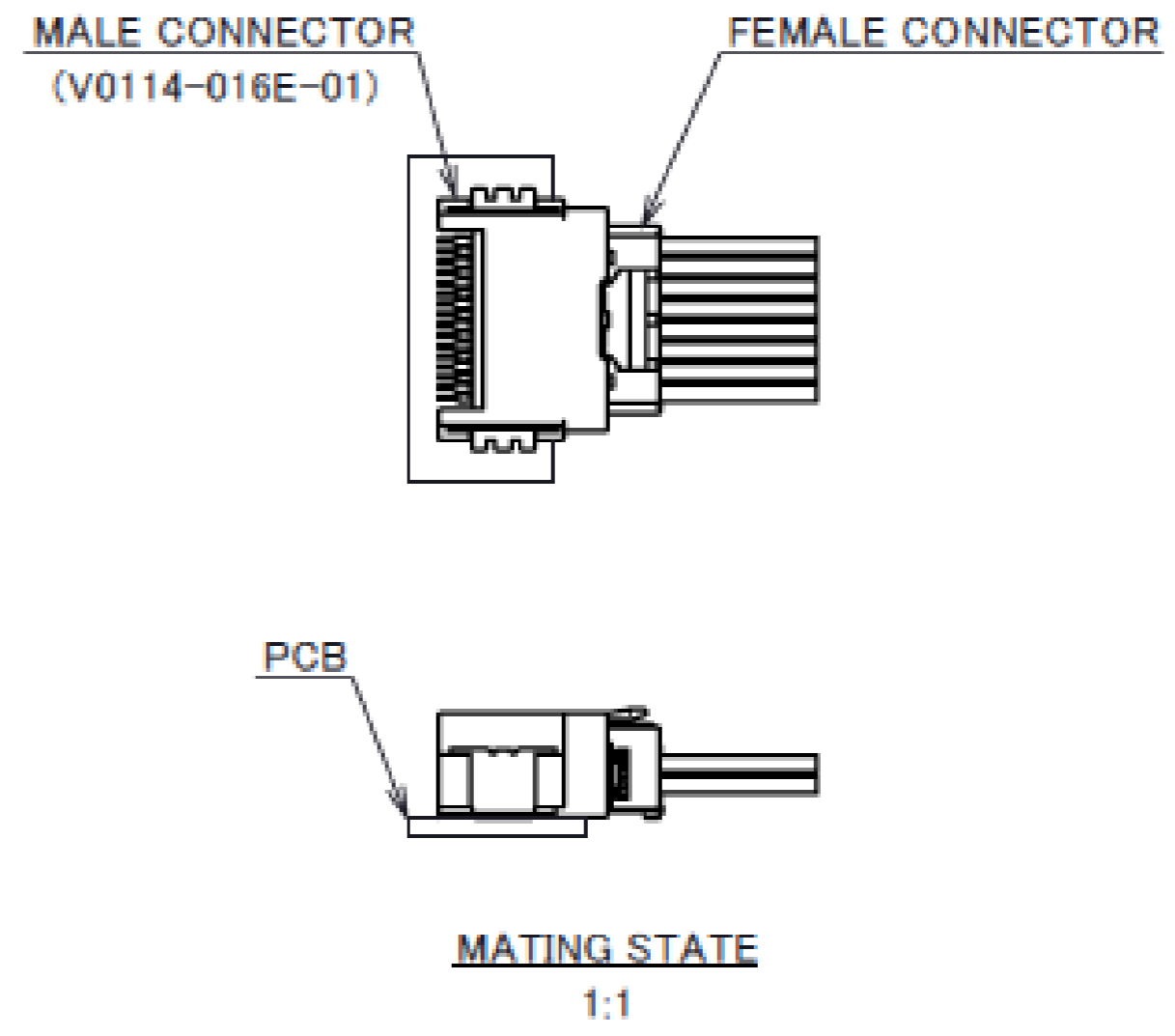
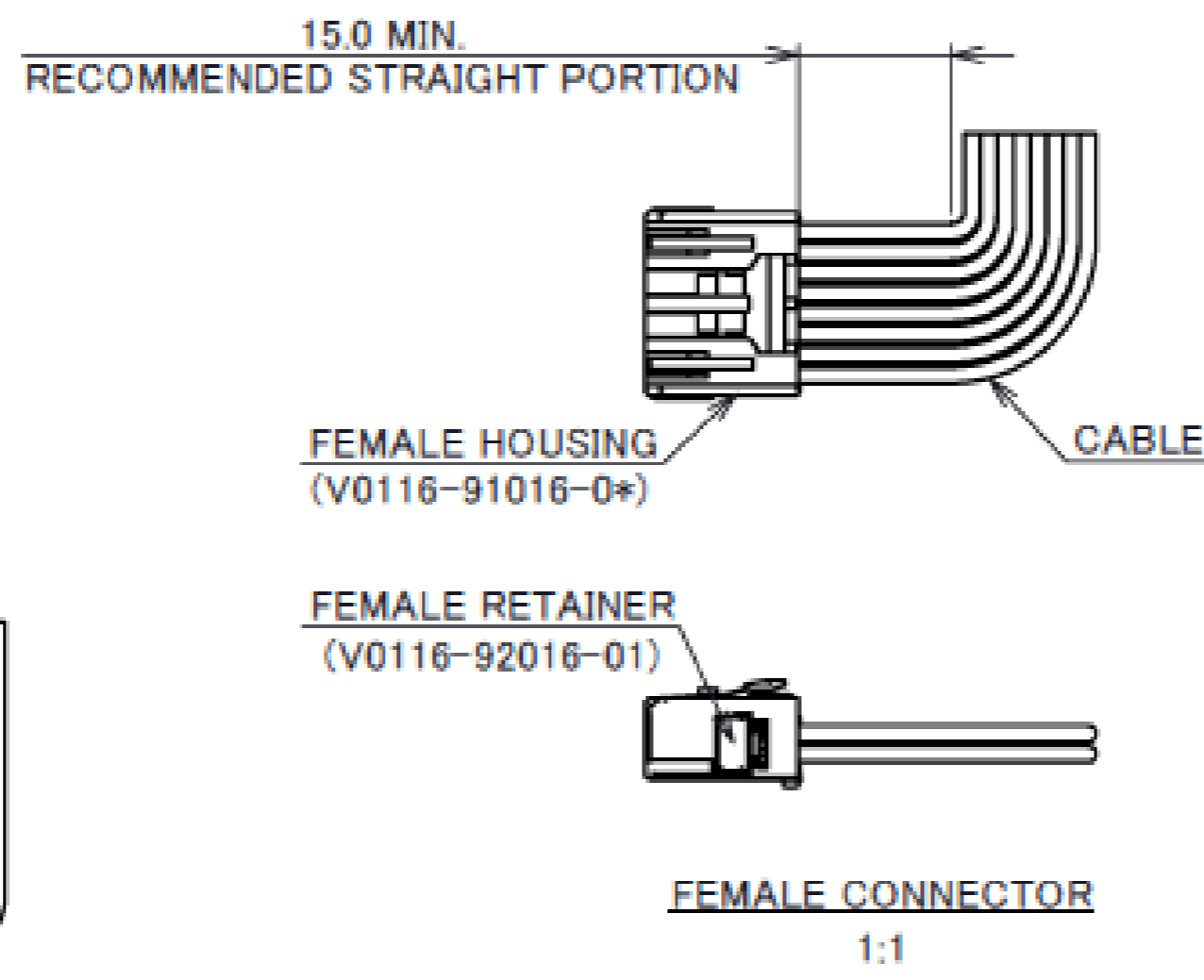
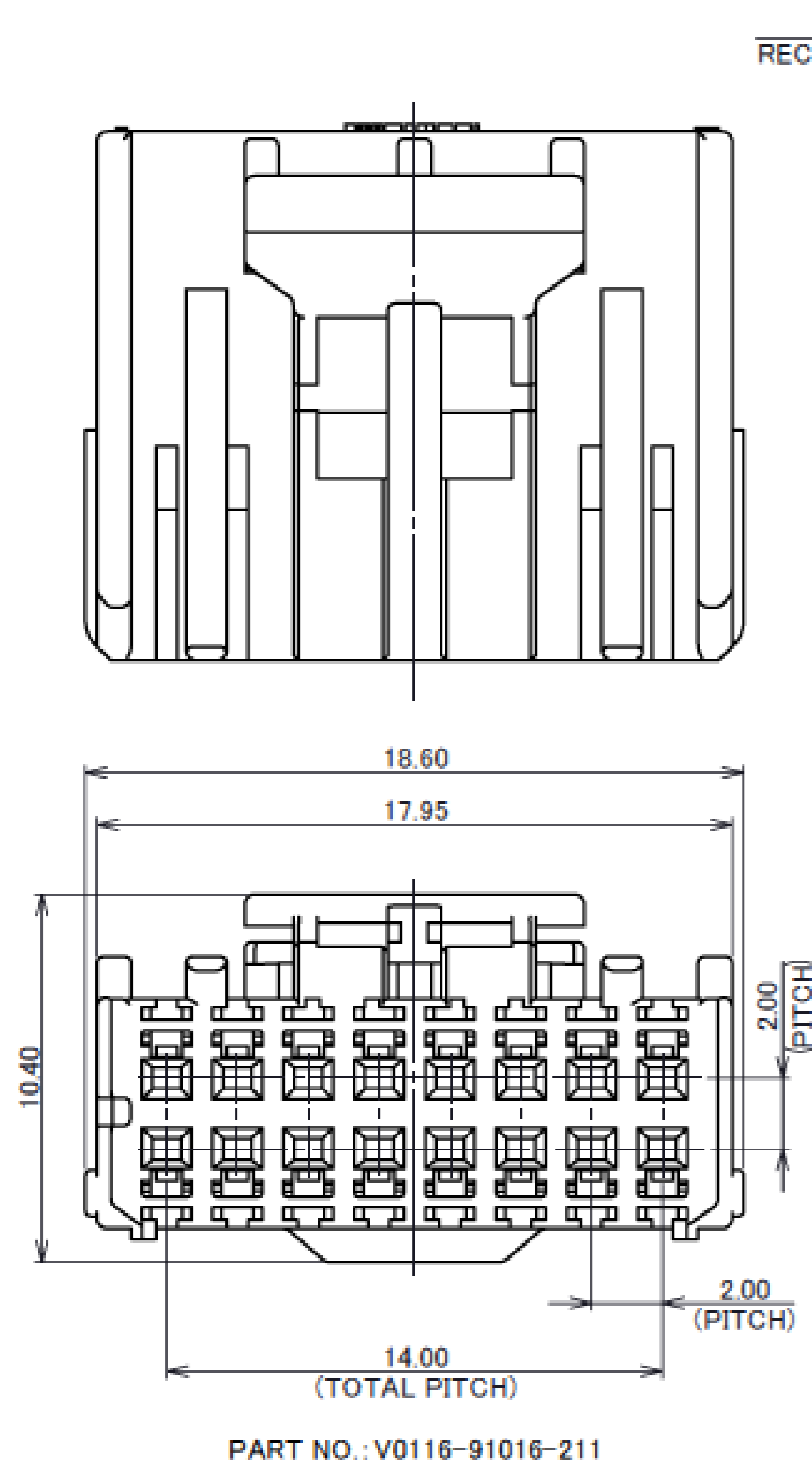
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES
1. APPLICABLE PART NO.:  
 - FEMALE TERMINAL: V0009-02  
 - FEMALE RETAINER: V0027-92012-211
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/ROHS.
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020].
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (16P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91016-01	INERTIA LOCK	-	BLACK	N/A
V0116-91016-02	INERTIA LOCK	-	BLACK	APPLICABLE



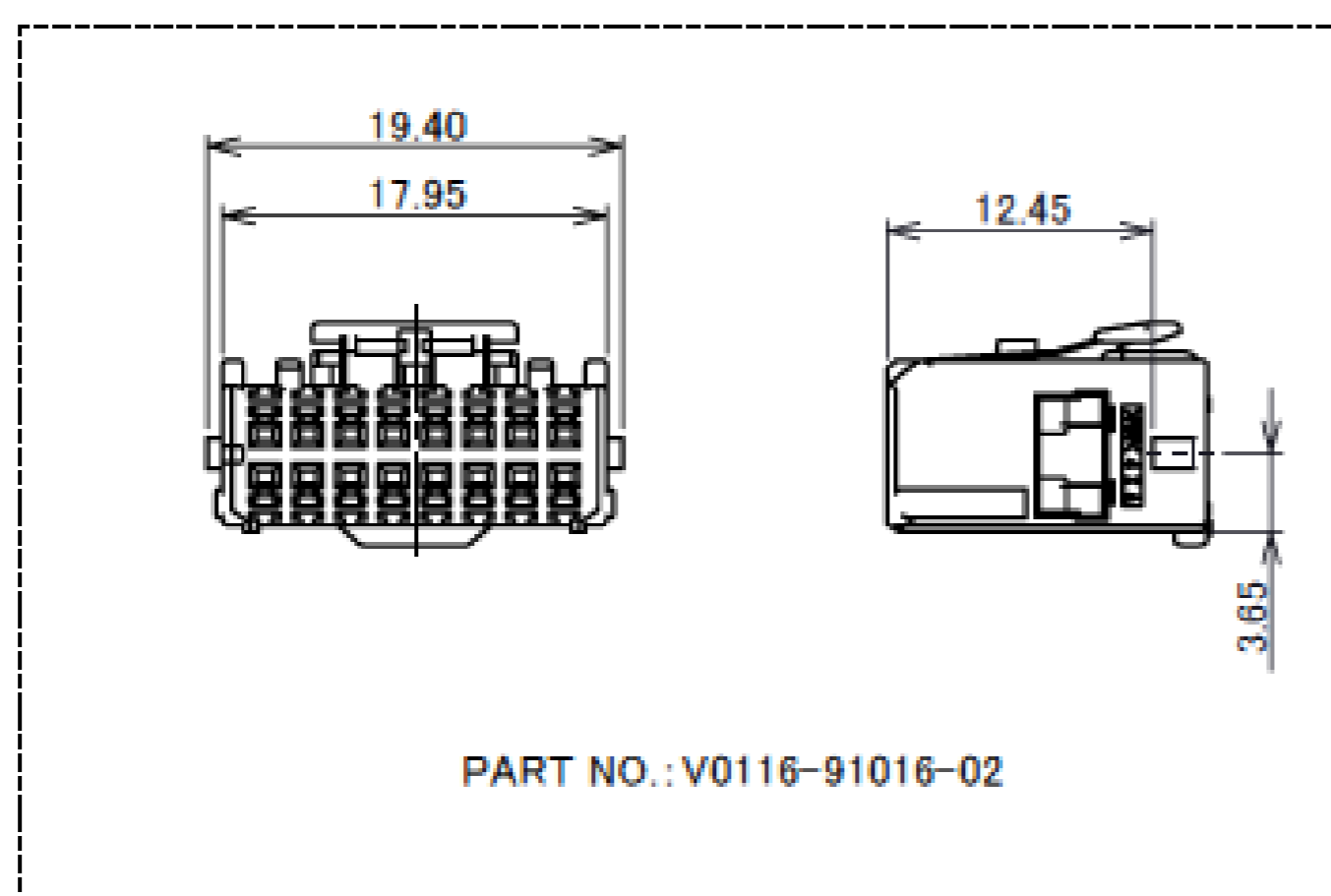
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES
1. APPLICABLE PART NO.:
    - FEMALE TERMINAL --- VT009-02
    - FEMALE RETAINER --- V0116-92016-01
    - REAR COVER --- V0116-94016-01
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/RoHS.
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (16P):

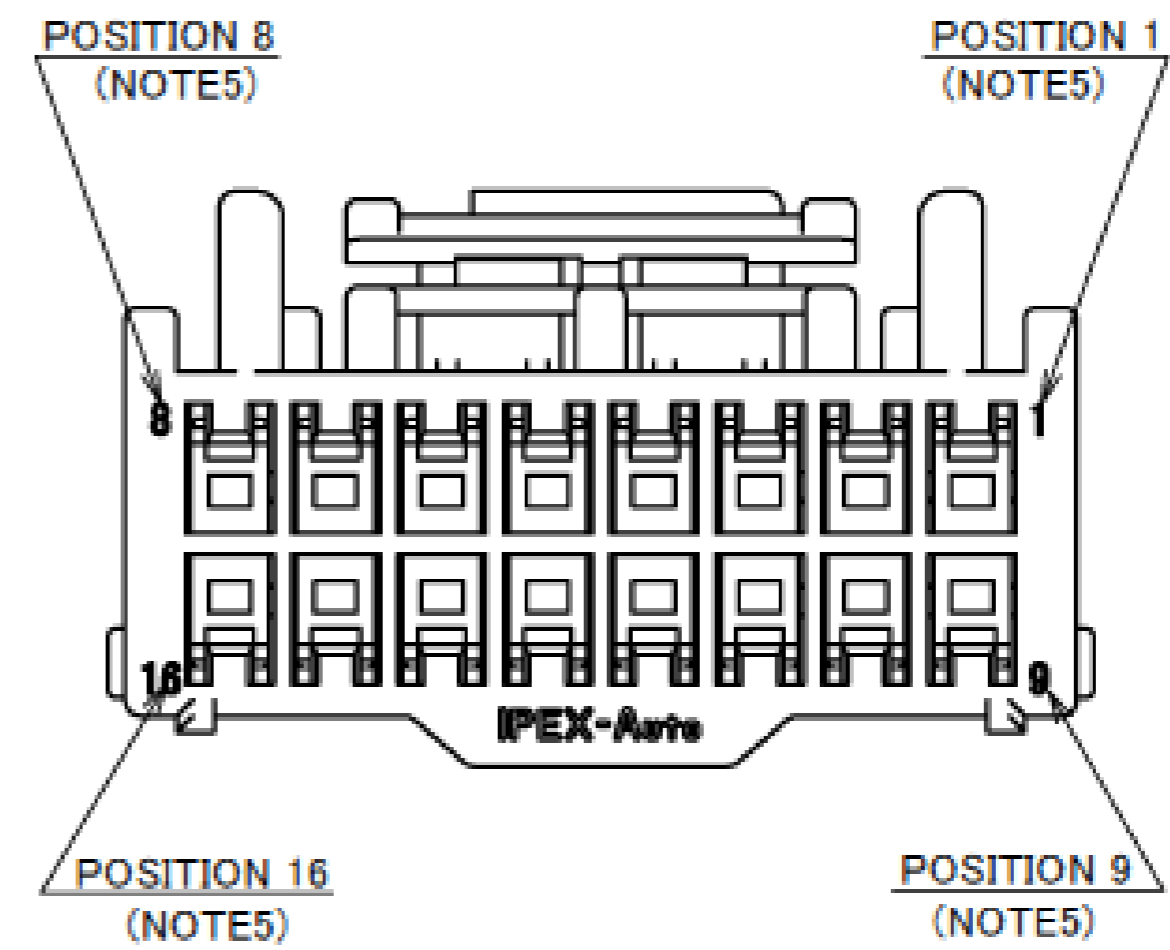
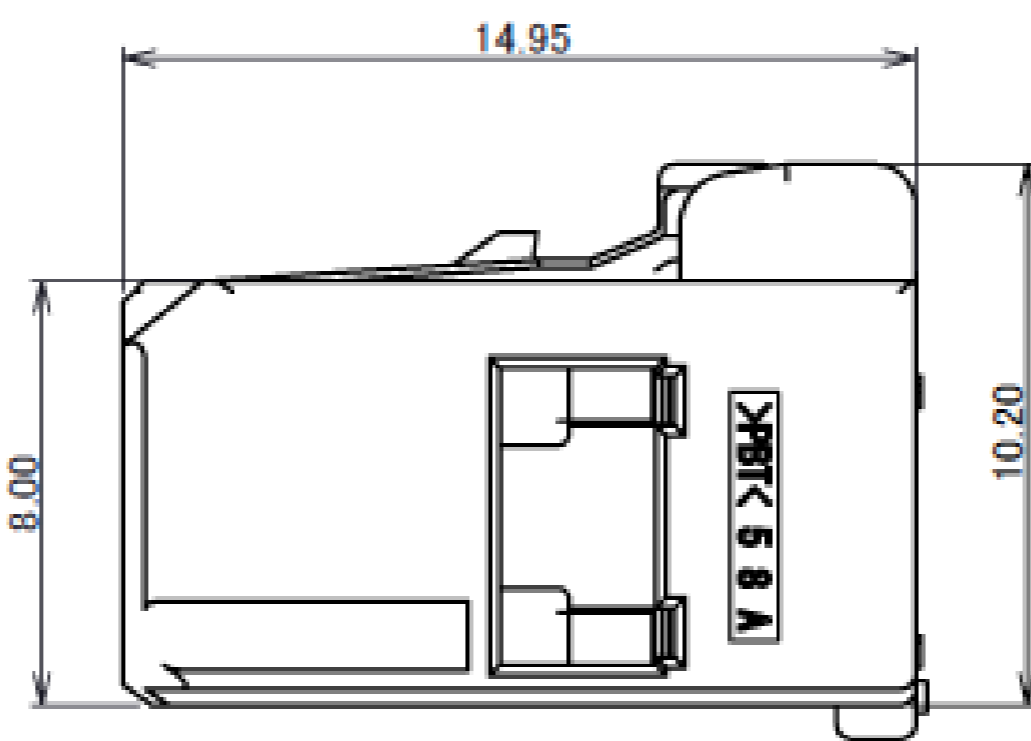
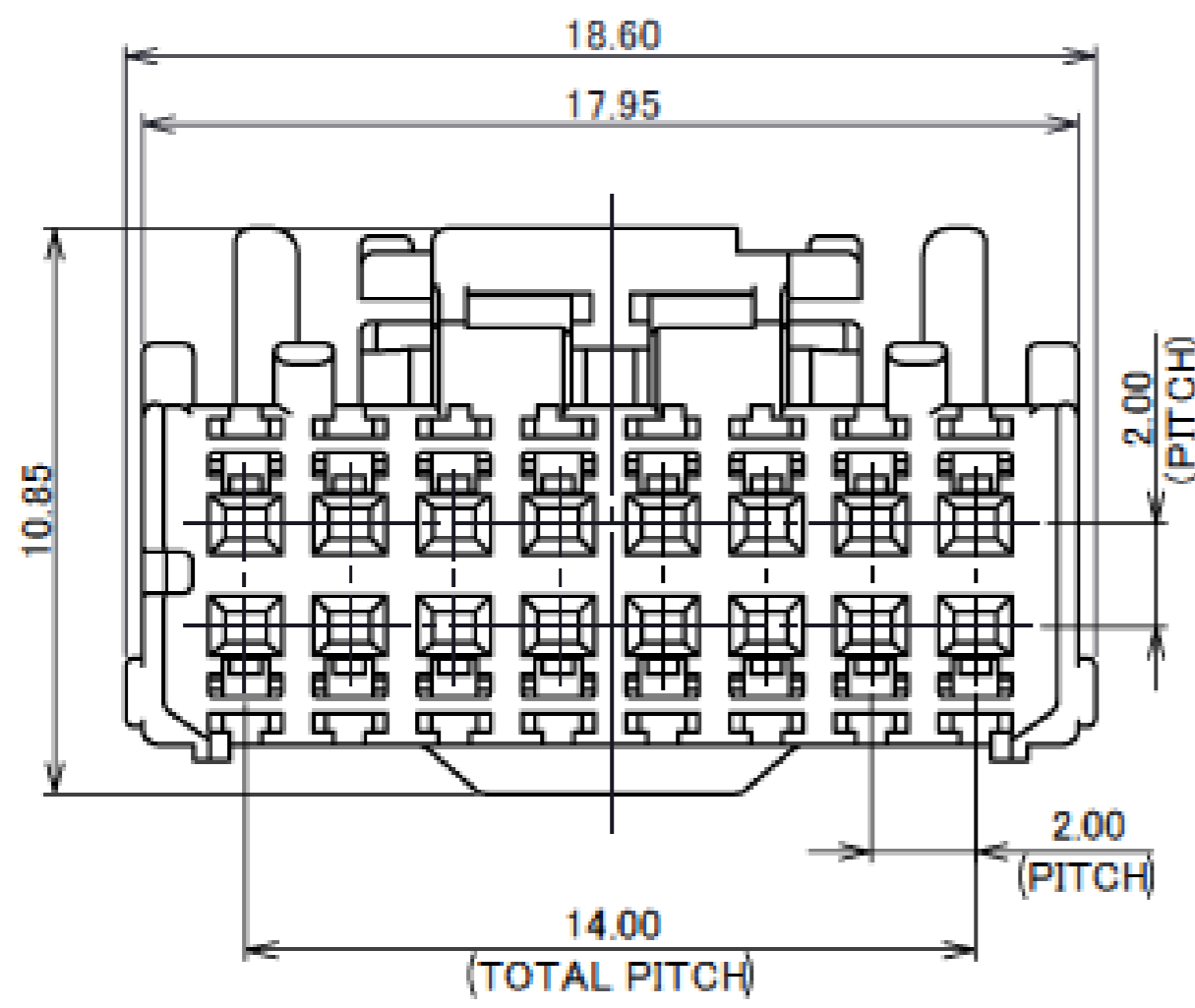
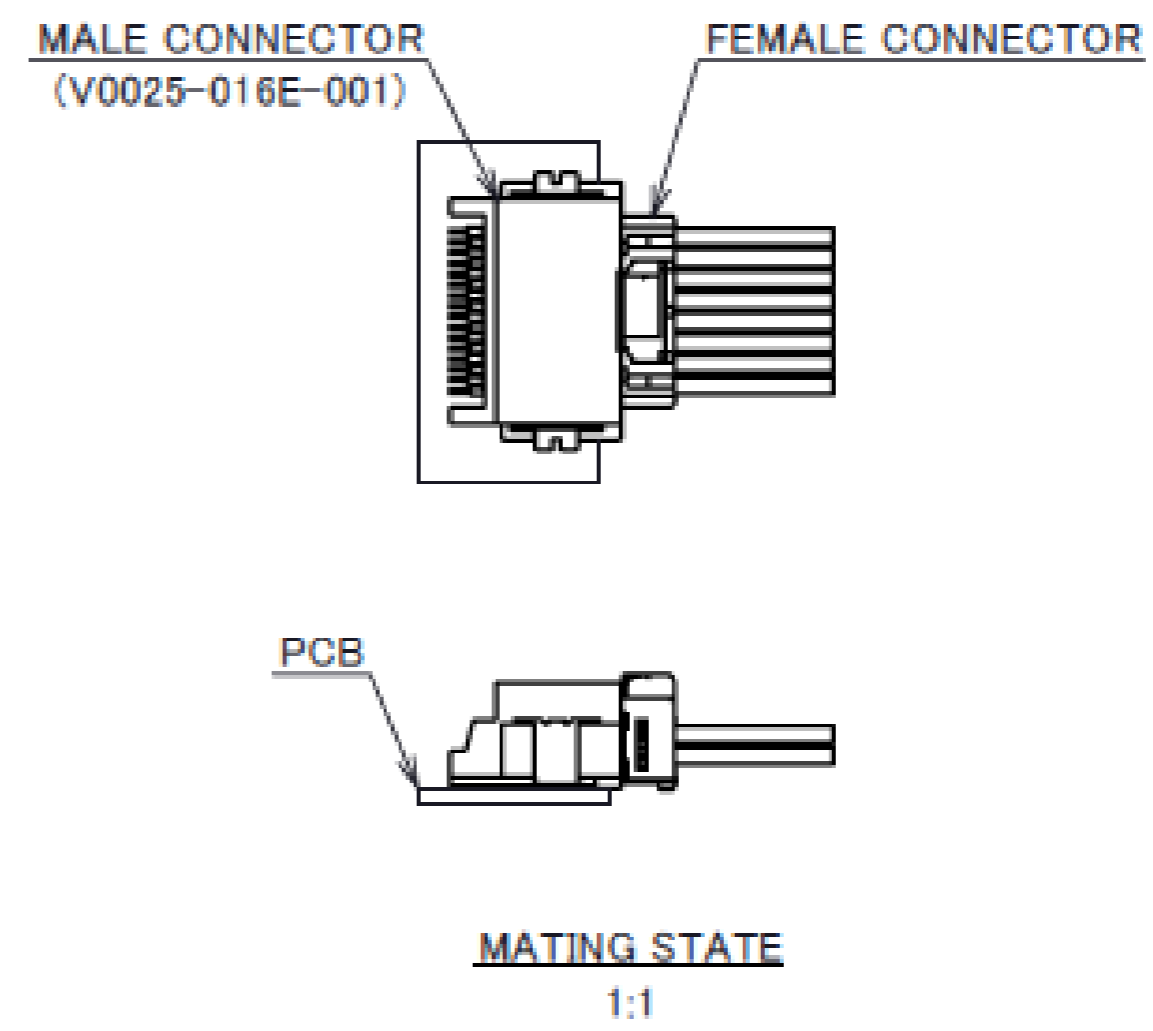
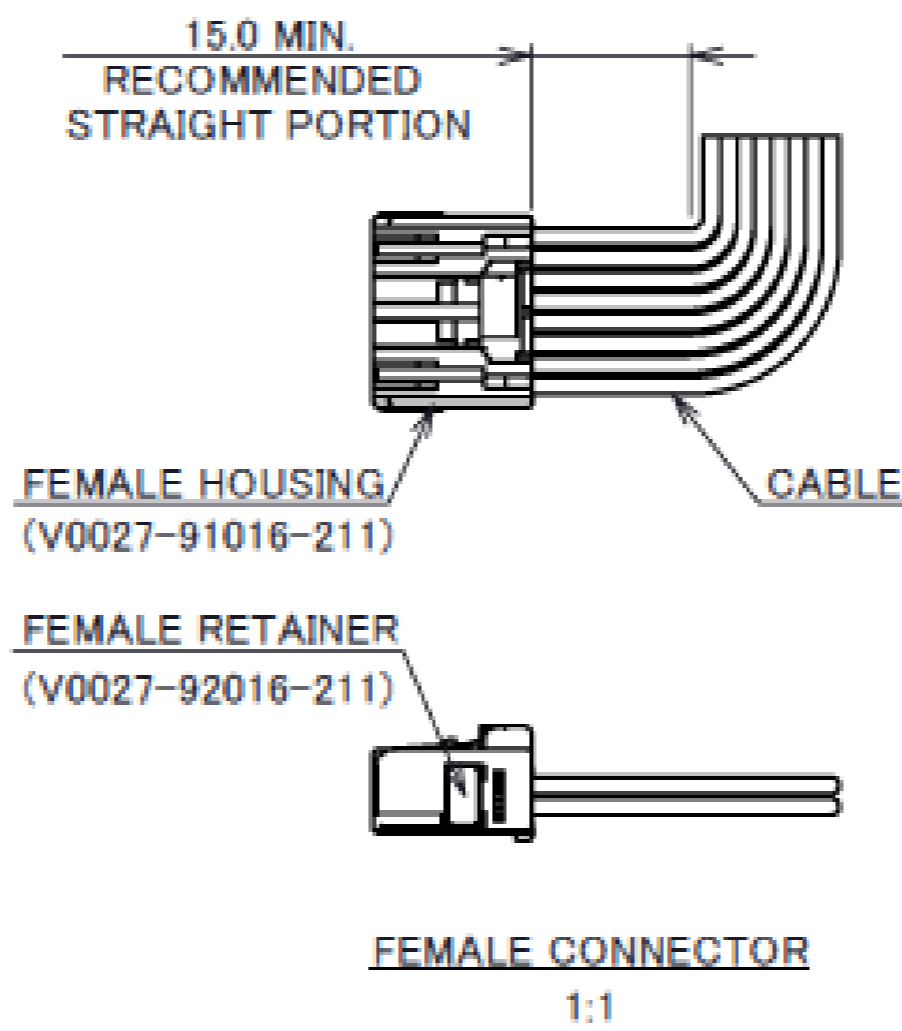
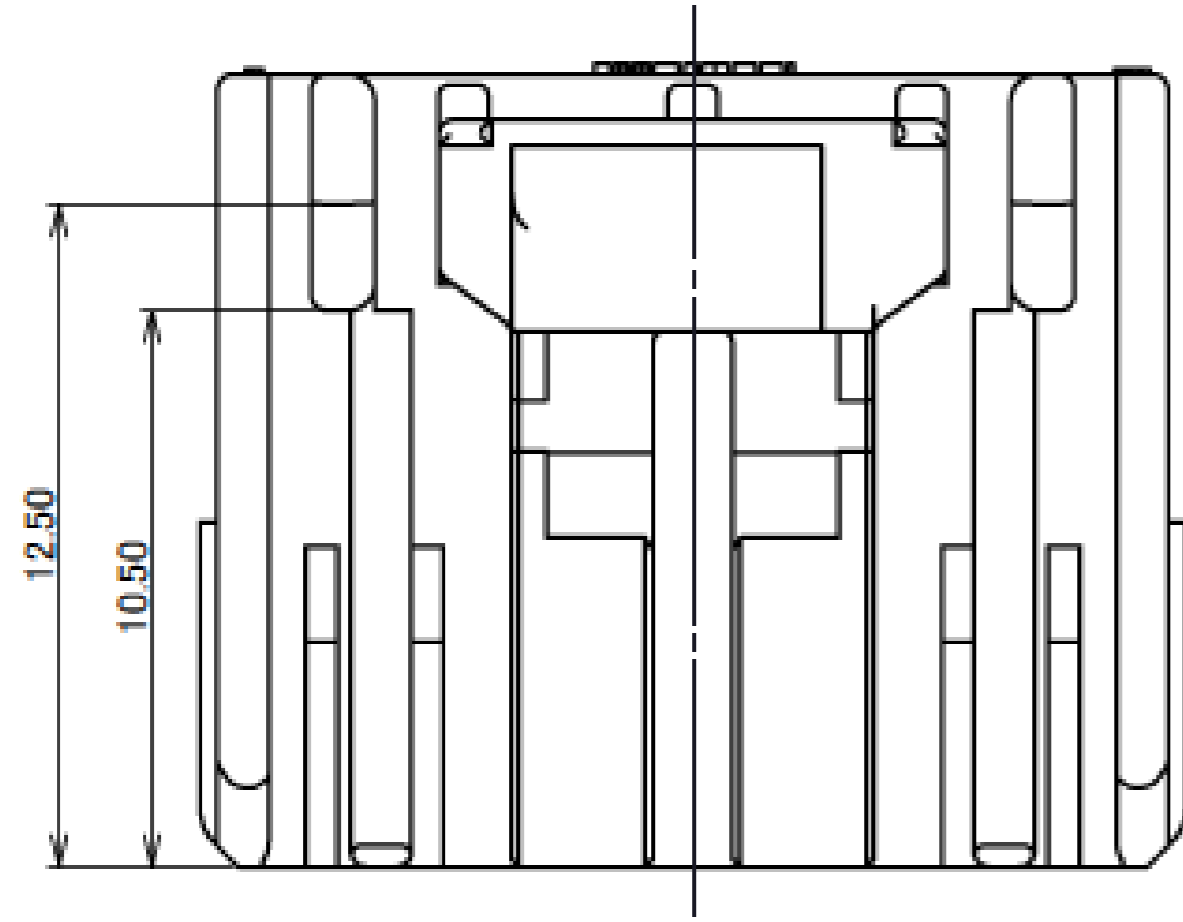
PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91016-01	INERTIA LOCK	-	BLACK	N/A
V0116-91016-02	INERTIA LOCK	-	BLACK	APPLICABLE



Rev.0

# ISH® (Horizontal Type) FEMALE (16P) ※ISHV:

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0027-91016-211	NORMAL ROCK	-	BLACK	N/A



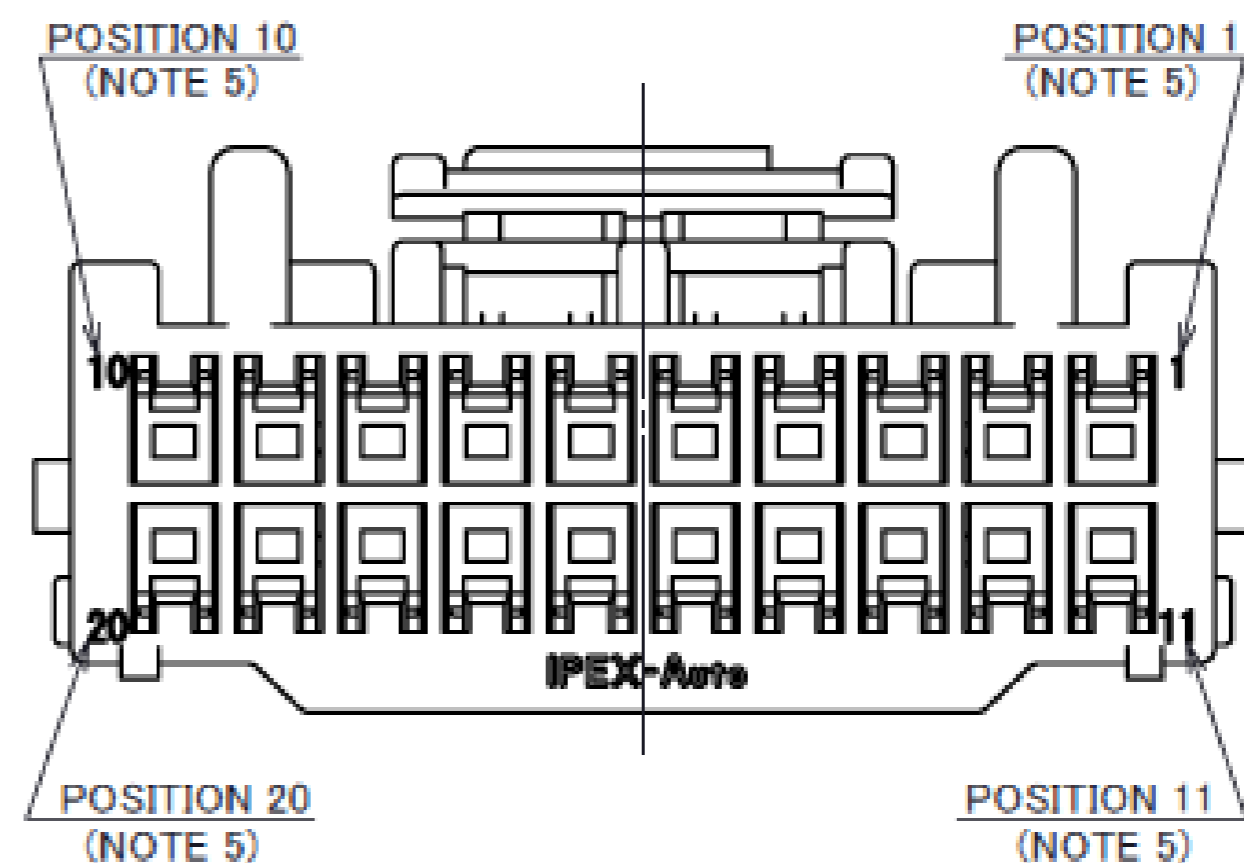
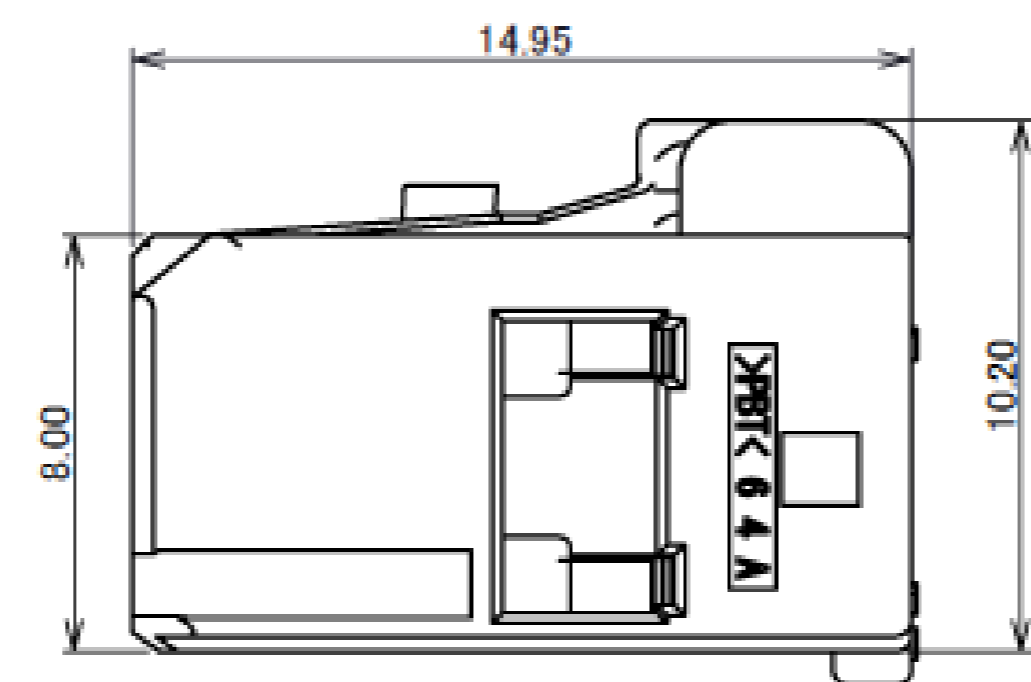
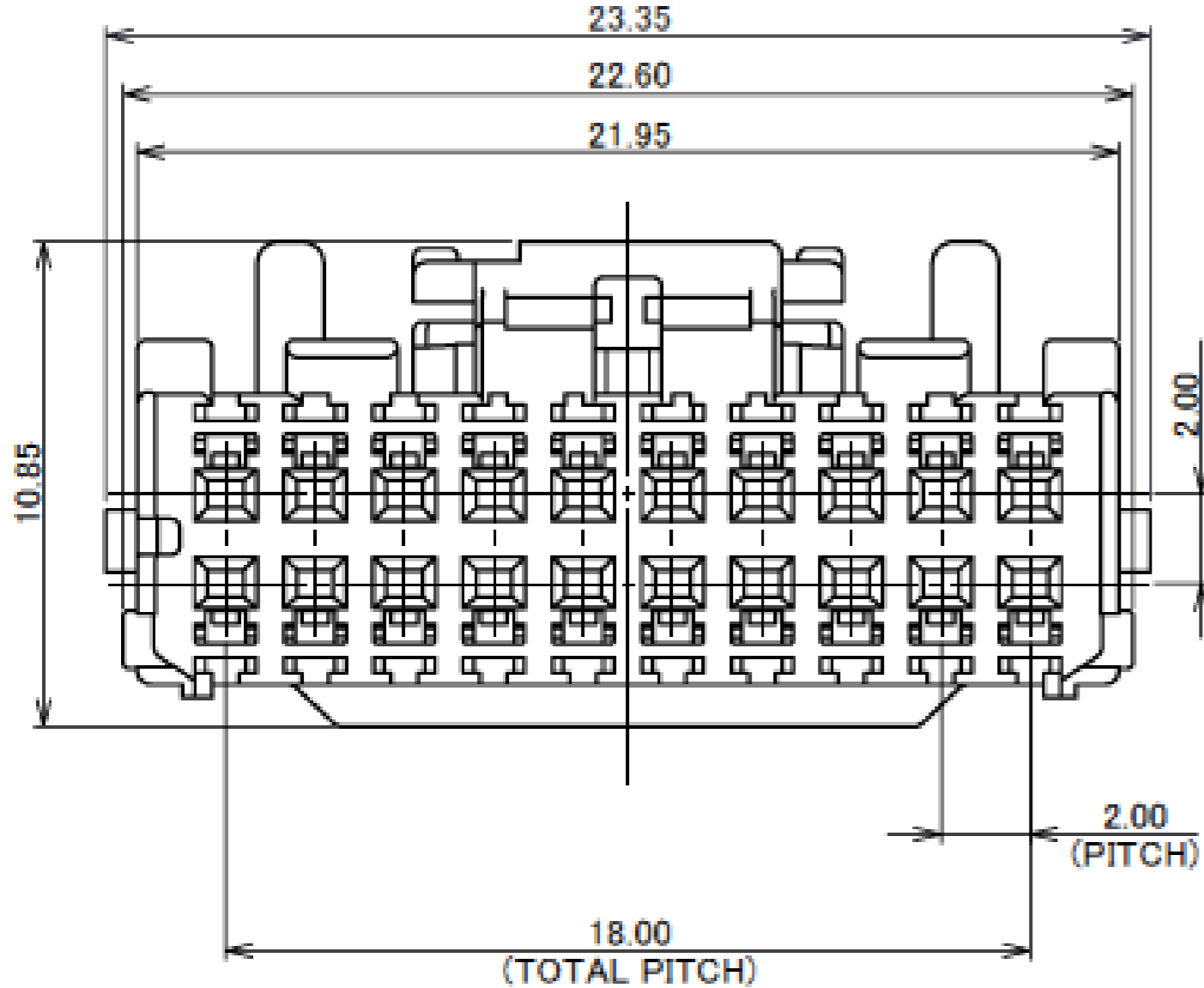
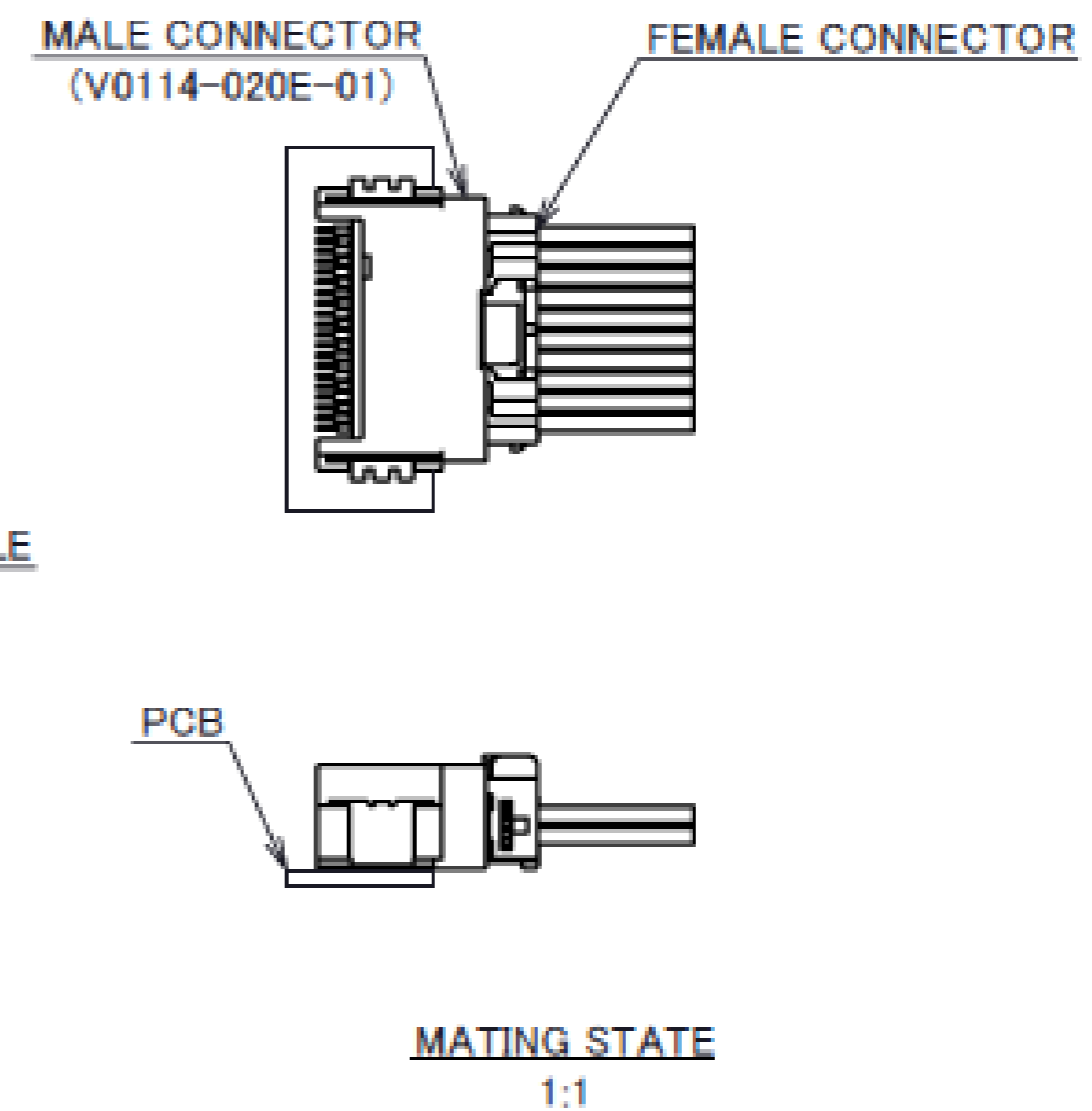
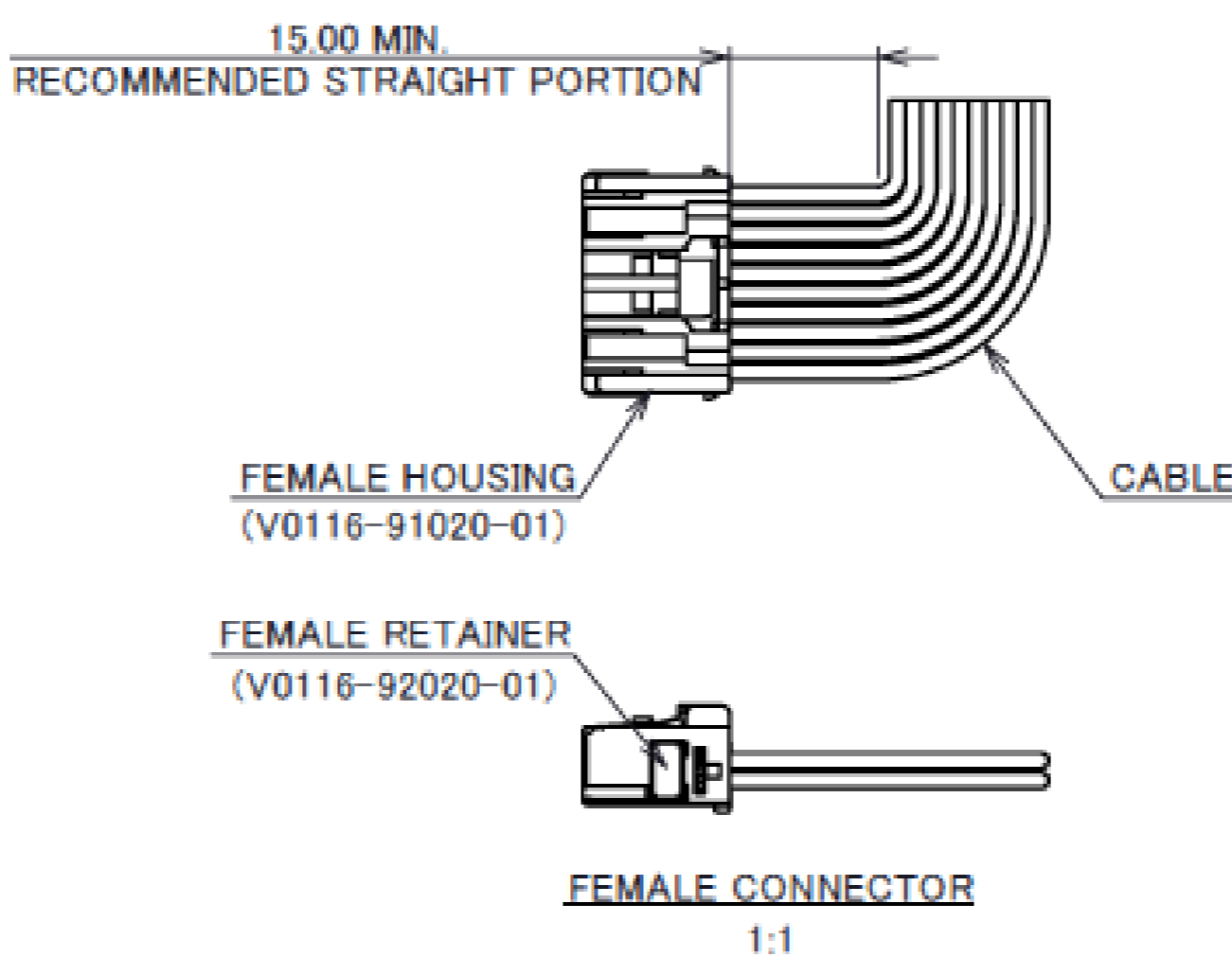
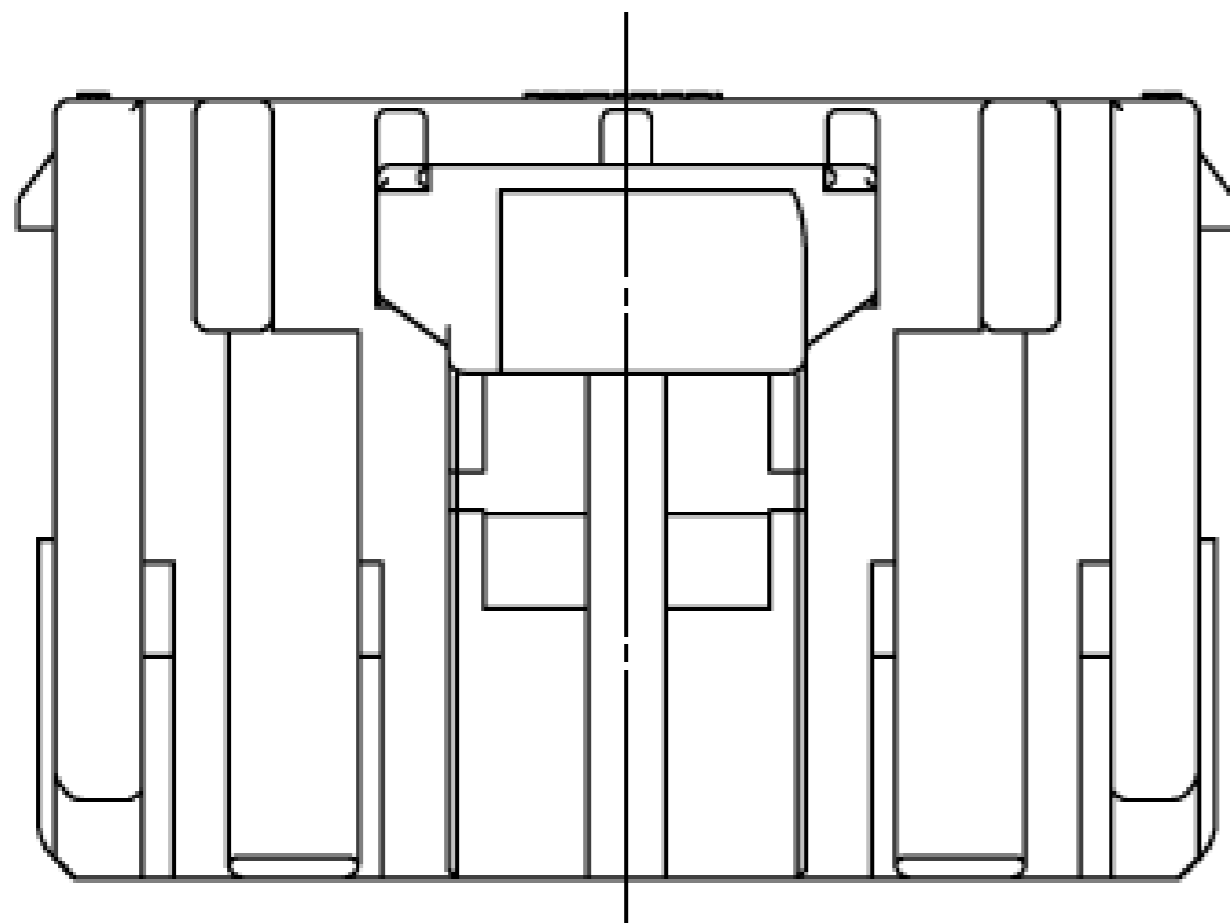
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES
1. APPLICABLE PART NO.:  
 - FEMALE TERMINAL --- VT009-02  
 - FEMALE RETAINER --- V0027-92016-211
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/RoHS.
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (20P):

PART NO.	LOCK TYPE	KEY CODING	COLOR	FOR REAR COVER
V0116-91020-01	INERTIA ROCK	-	BLACK	APPLICABLE



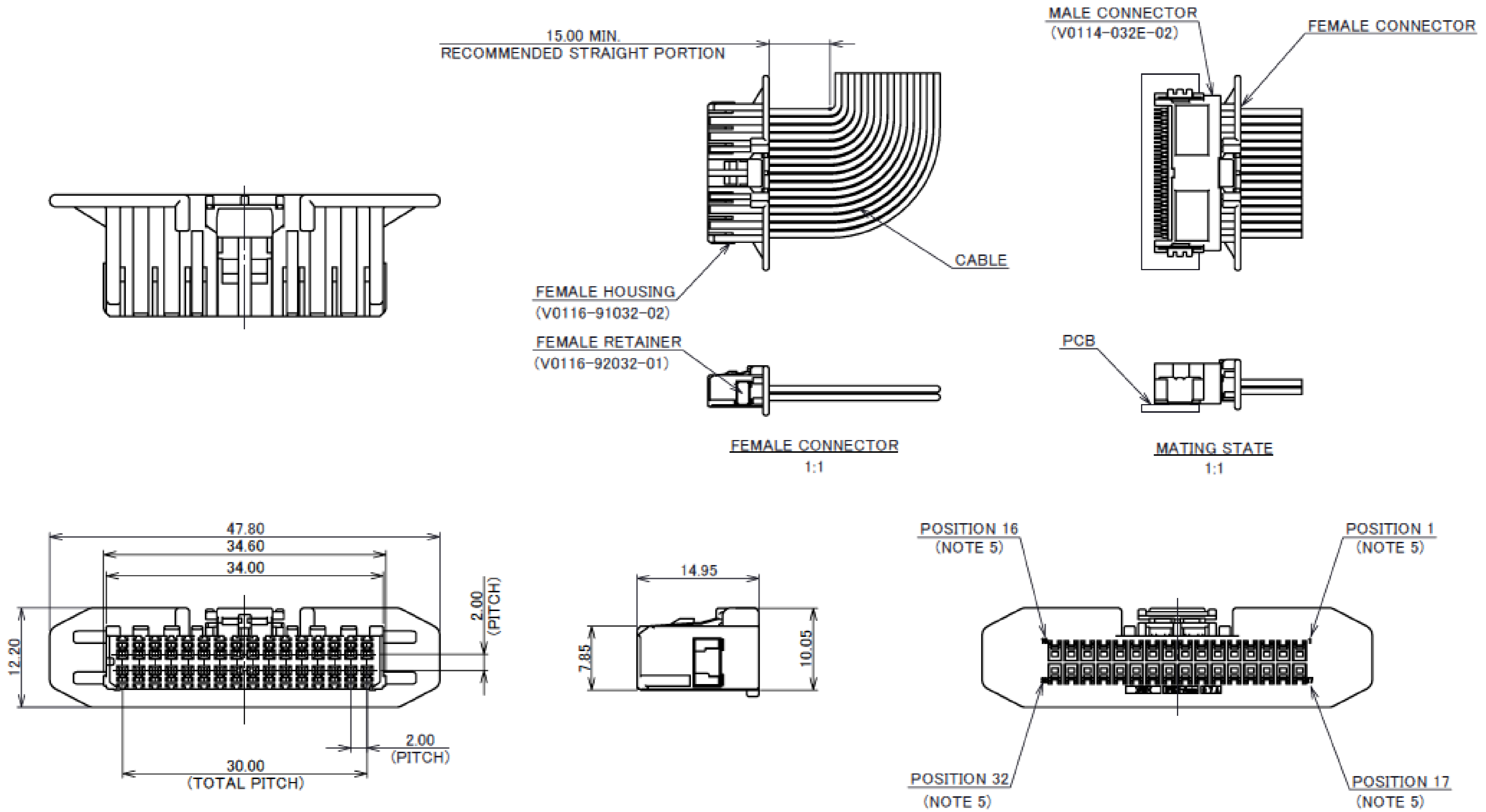
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE HOUSING	PBT	BLACK

- NOTES
1. APPLICABLE PART NO.:  
 - FEMALE TERMINAL --- VT009-02  
 - FEMALE RETAINER --- V0116-92020-01  
 - REAR COVER --- V0116-94020-01
  2. MATERIAL: PBT
  3. COMPLY WITH ELV/RoHS.
  4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
  5. POSITION NUMBERS ARE INDICATED.

Rev.0

# ISH® (Horizontal Type) FEMALE (32P):

PART NO.
V0116-91032-02



1	FEMALE HOUSING	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

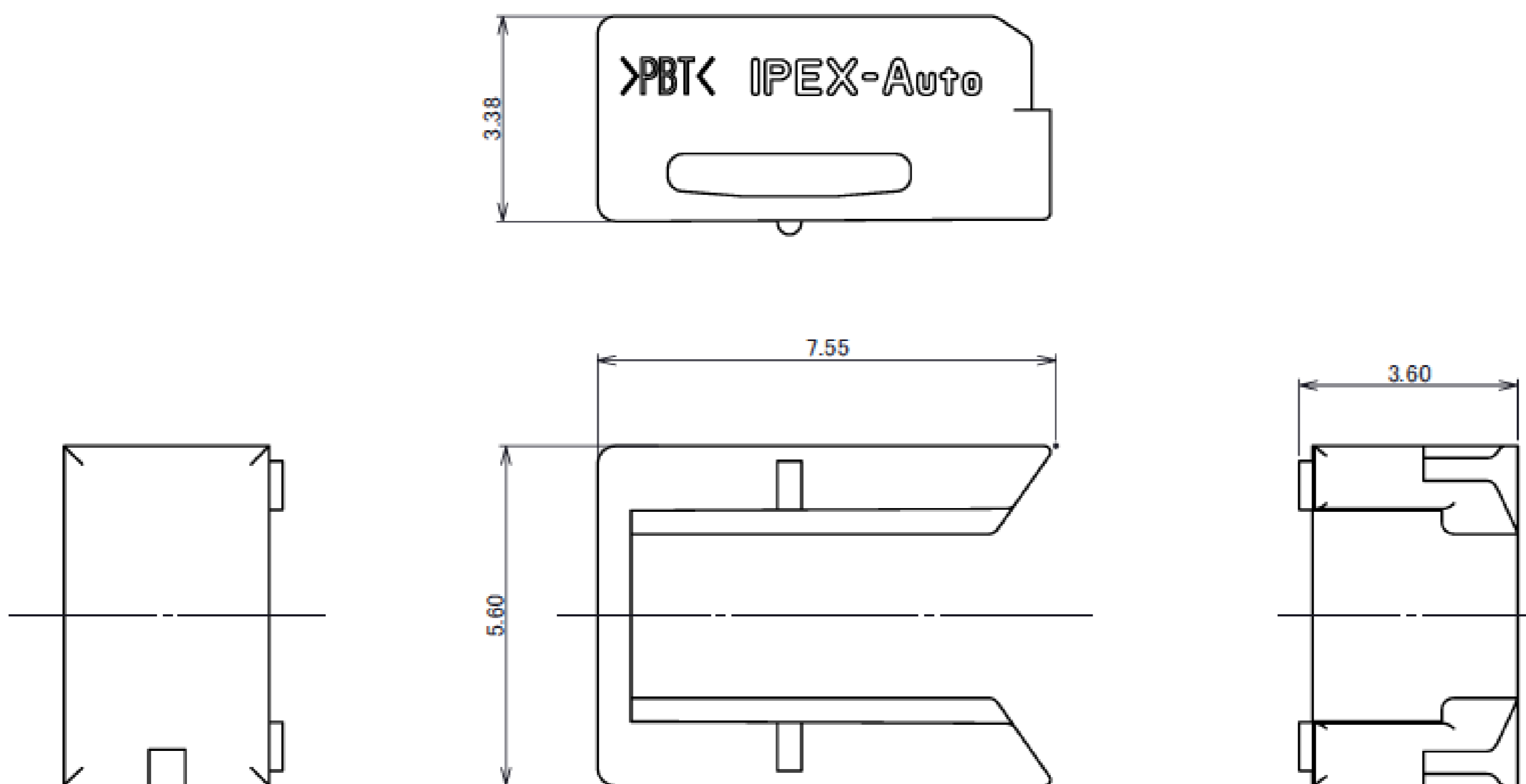
**NOTES**

1. APPLICABLE PART NO.:  
 - FEMALE TERMINAL --- VT009-02  
 - FEMALE RETAINER --- V0116-92032-01
2. MATERIAL: PBT
3. COMPLY WITH ELV/RoHS.
4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
5. POSITION NUMBERS ARE INDICATED.

Rev.1

# ISH® (Horizontal Type) FEMALE RETAINER (6P):

PART NO.
V0116-92006-01



**NOTES**

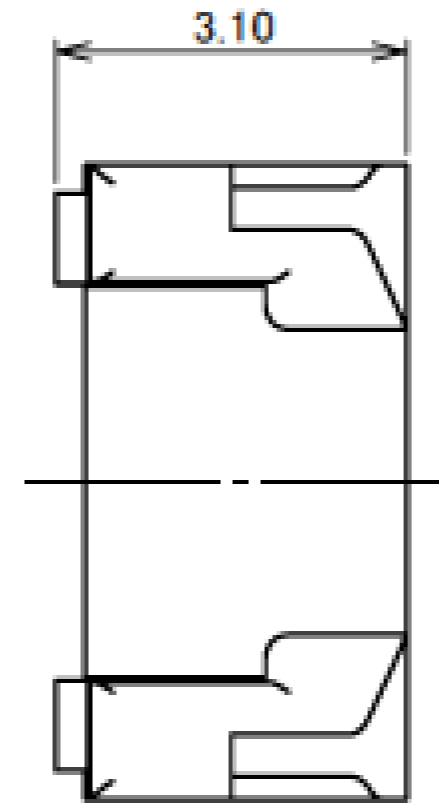
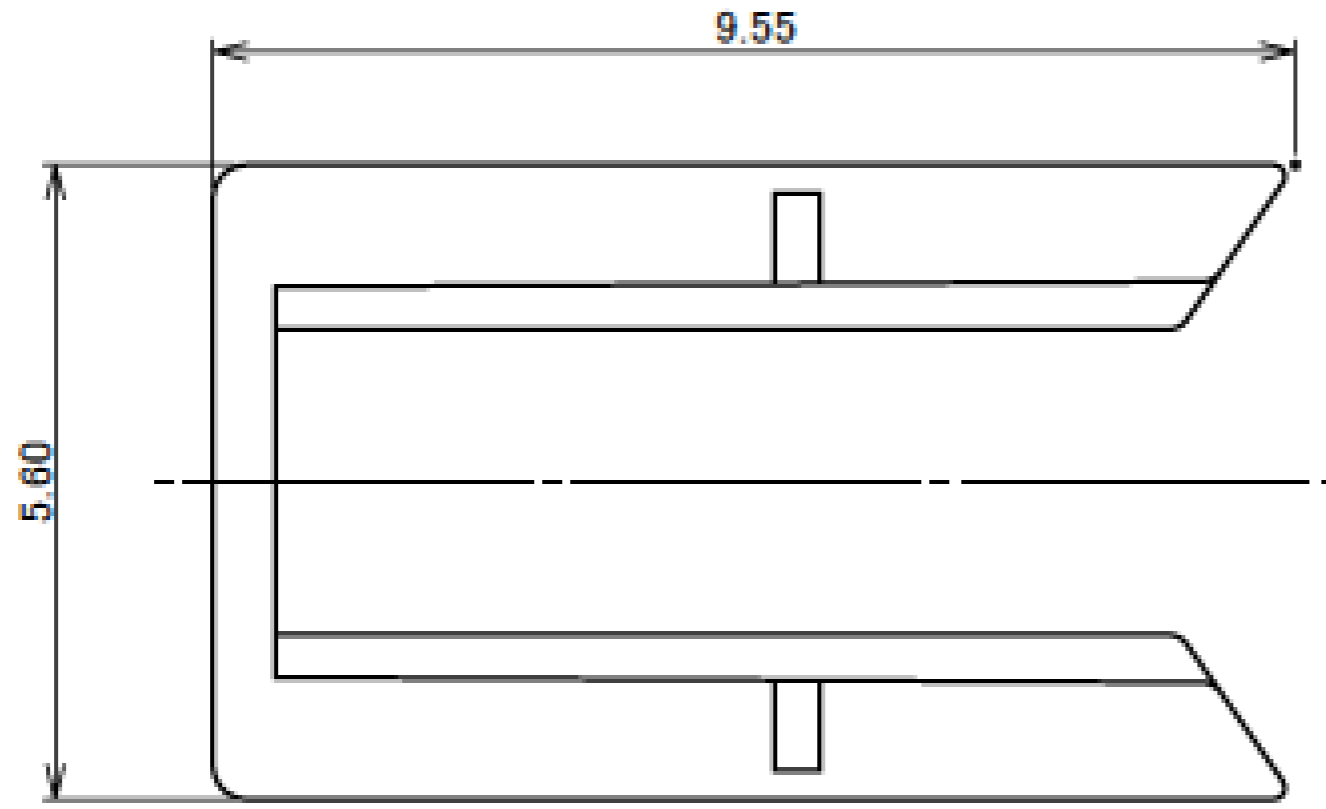
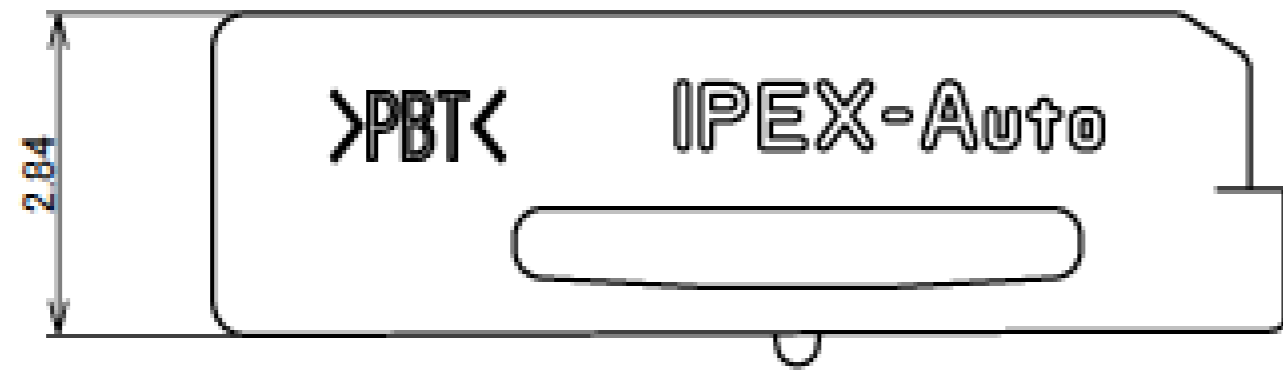
1. APPLICABLE PART NO.:  
 - FEMALE HOUSING --- V0116-91006-01 (KEY CODING-A)  
 V0116-91006-11 (KEY CODING-B)
2. MATERIAL: PBT
3. COMPLY WITH ELV/RoHS
4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

1	FEMALE RETAINER	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (8P):

PART NO.
V0116-92008-01



**NOTES**

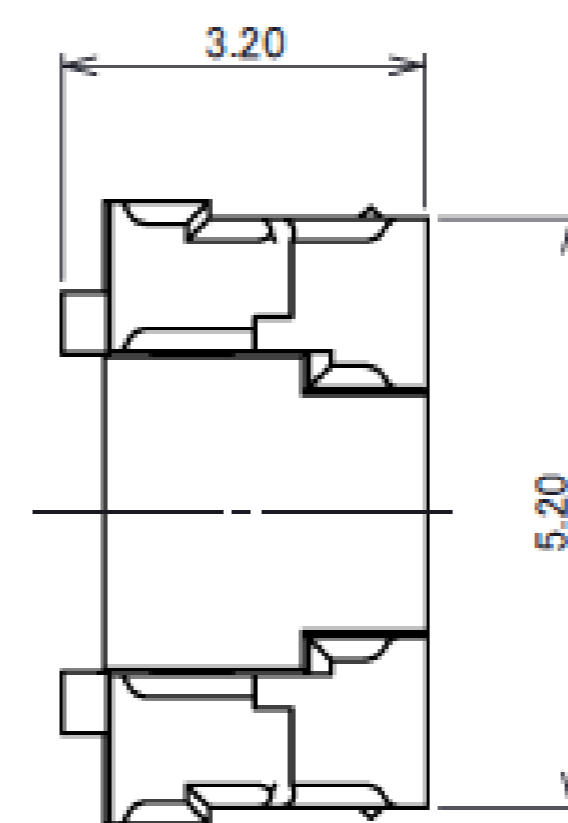
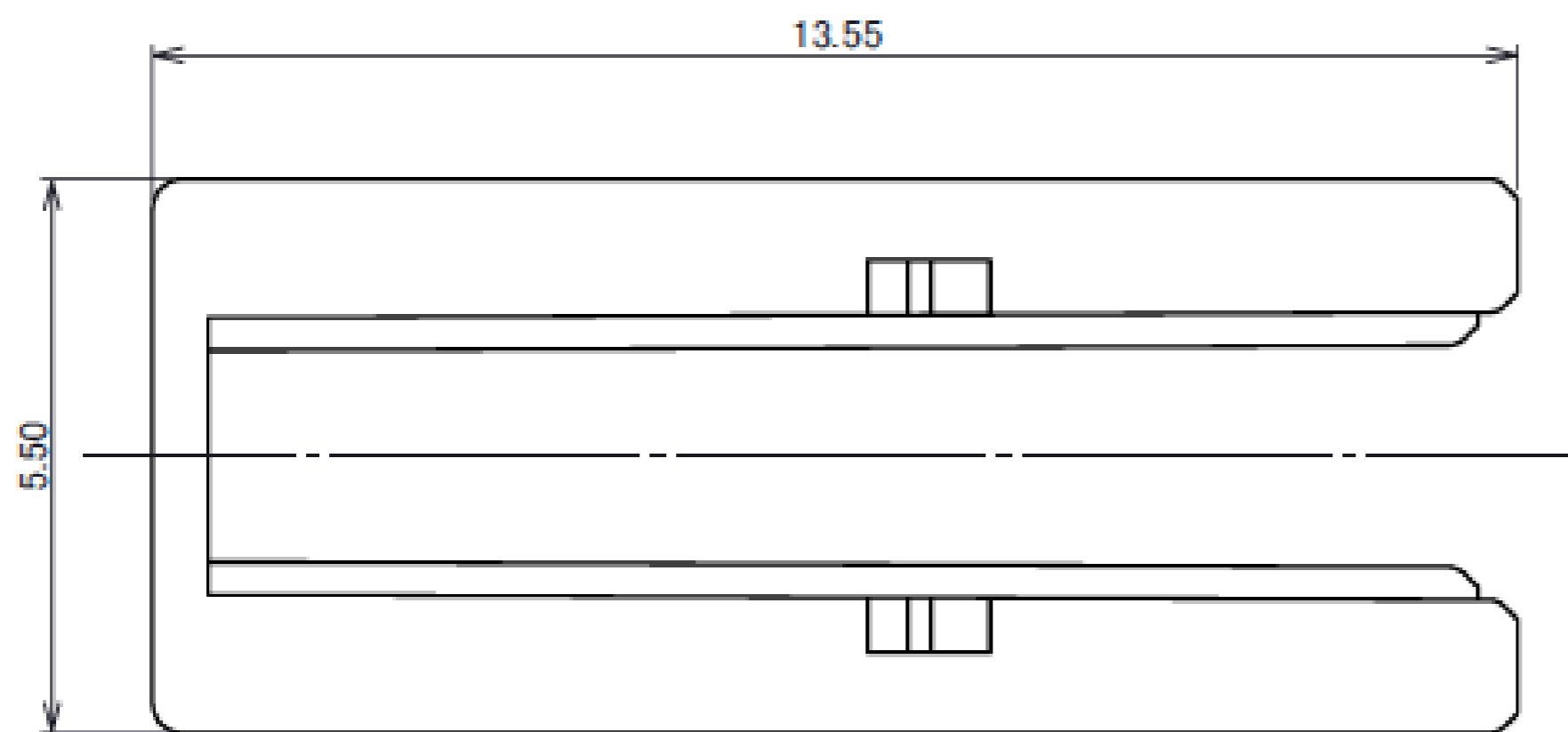
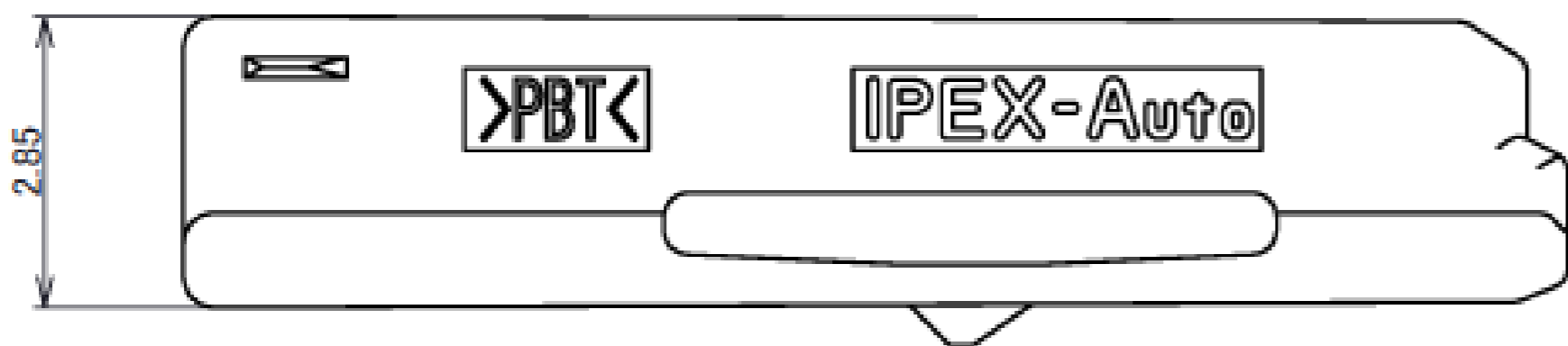
- 1.APPLICABLE PART NO.:  
 \*FEMALE HOUSING\*\*V0116-91008-\*\*  
 V0027-91008-211
- 2.MATERIAL: PBT
- 3.COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

1	FEMALE RETAINER	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (12P):

PART NO.
V0116-92012-01



**NOTES**

- 1.APPLICABLE PART NO.:  
 \*FEMALE HOUSING\*\*V0116-91012-\*\*
- 2.MATERIAL: PBT
- 3.COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

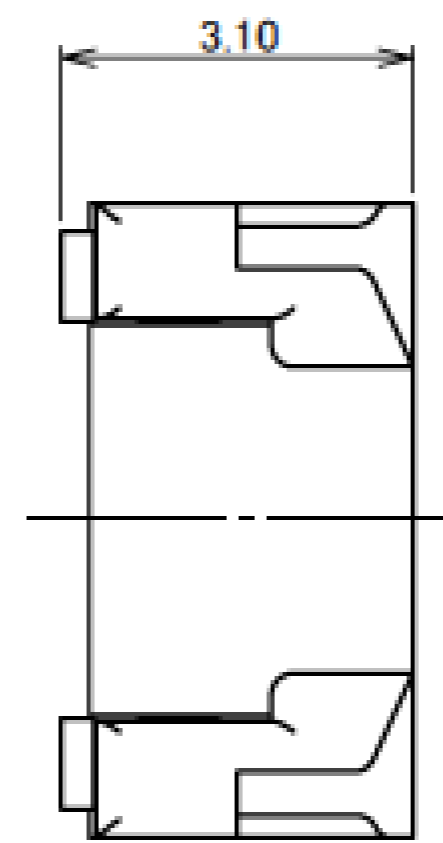
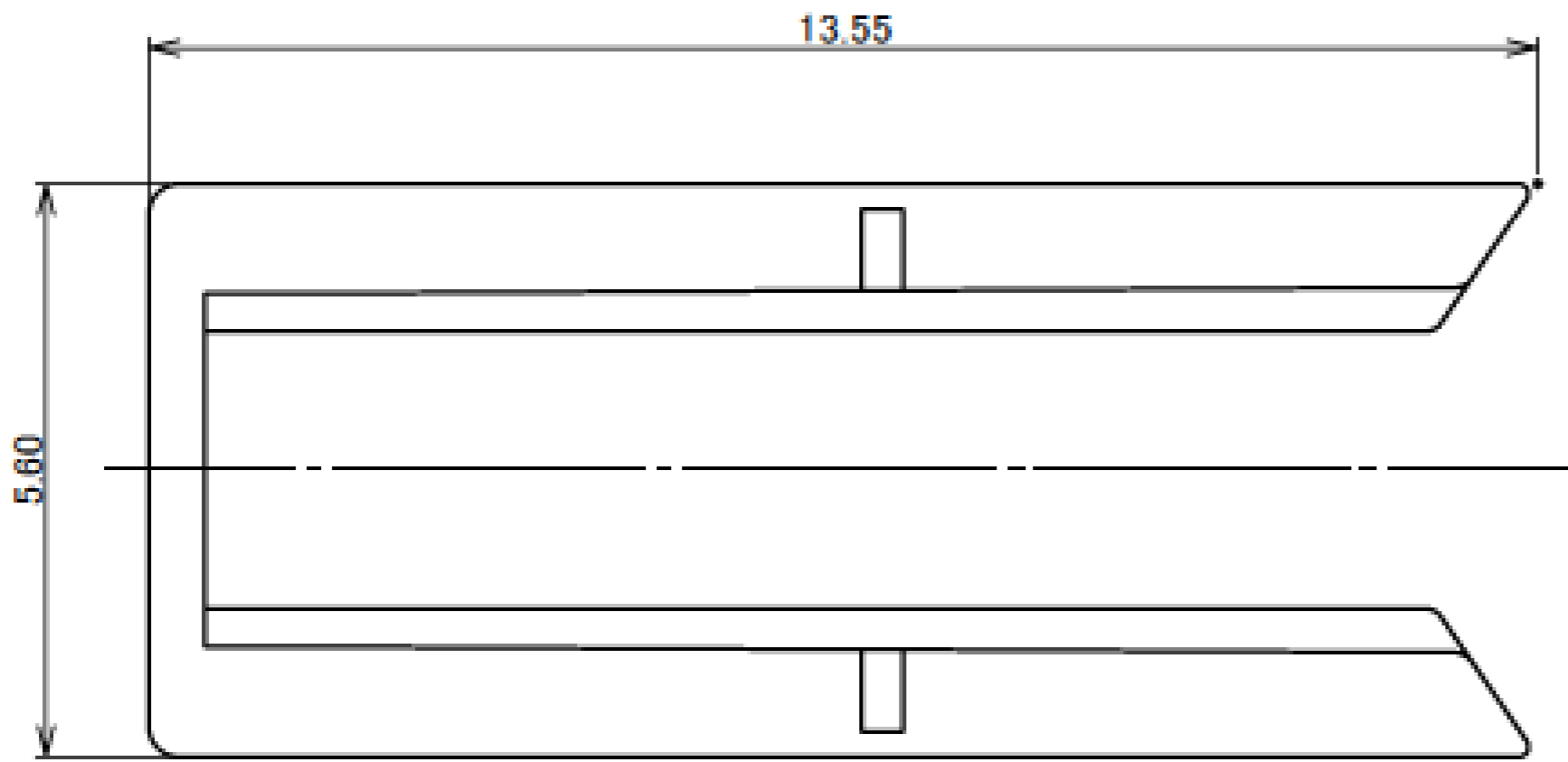
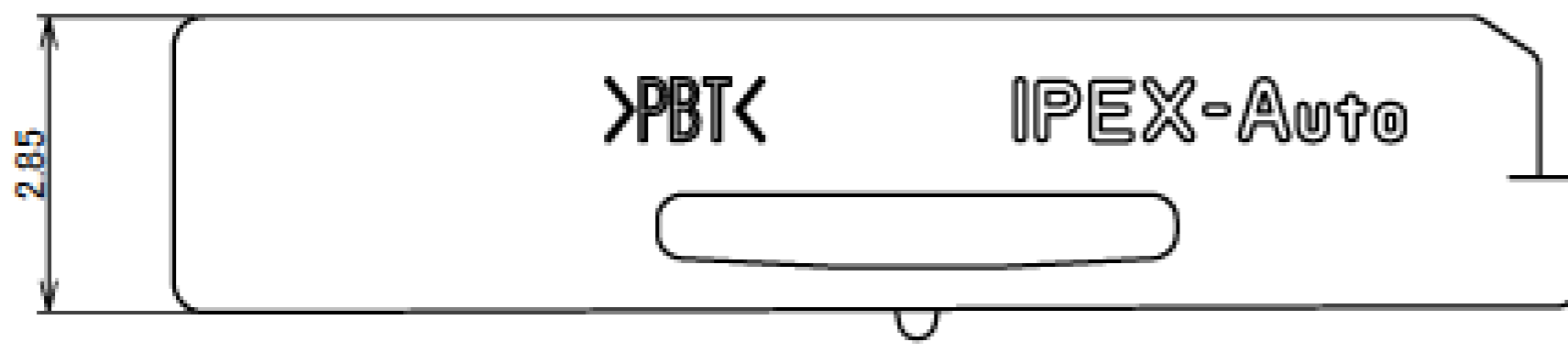
1	FEMALE RETAINER	PBT	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0



# ISH® (Horizontal Type) FEMALE RETAINER (12P) ※ISHV:

PART NO.
V0027-92012-211



## NOTES

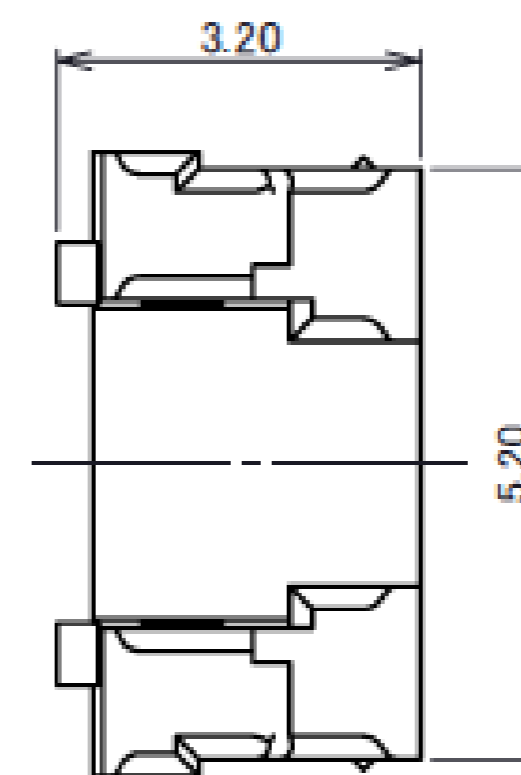
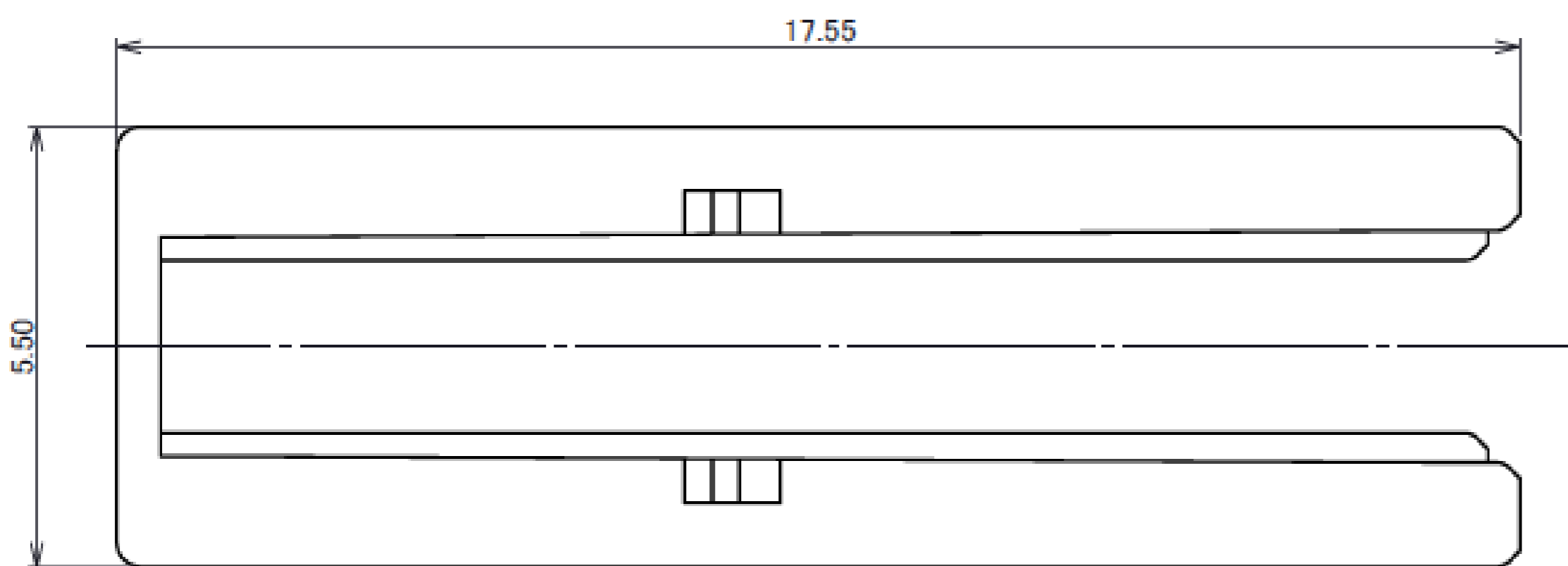
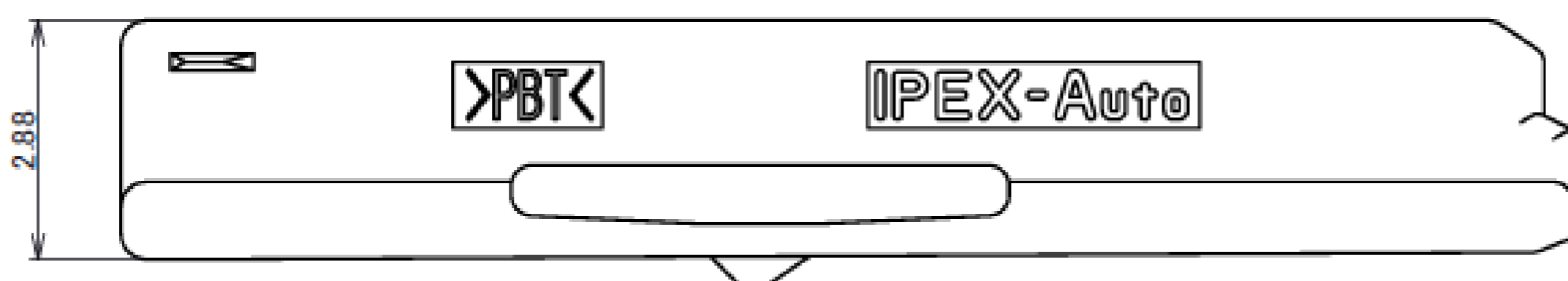
- 1.APPLICABLE PART NO.:  
•FEMALE HOUSING...V0027-91012-211
- 2.MATERIAL:PBT
- 3.COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020].

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE RETAINER	PBT	BLACK

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (16P):

PART NO.
V0116-92016-01



## NOTES

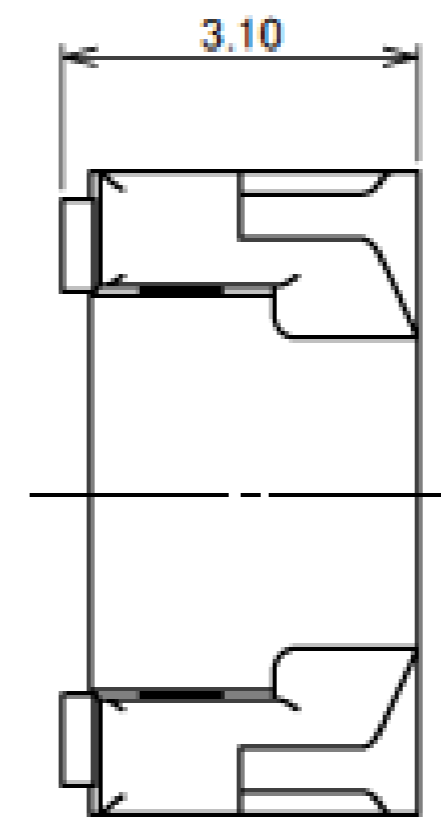
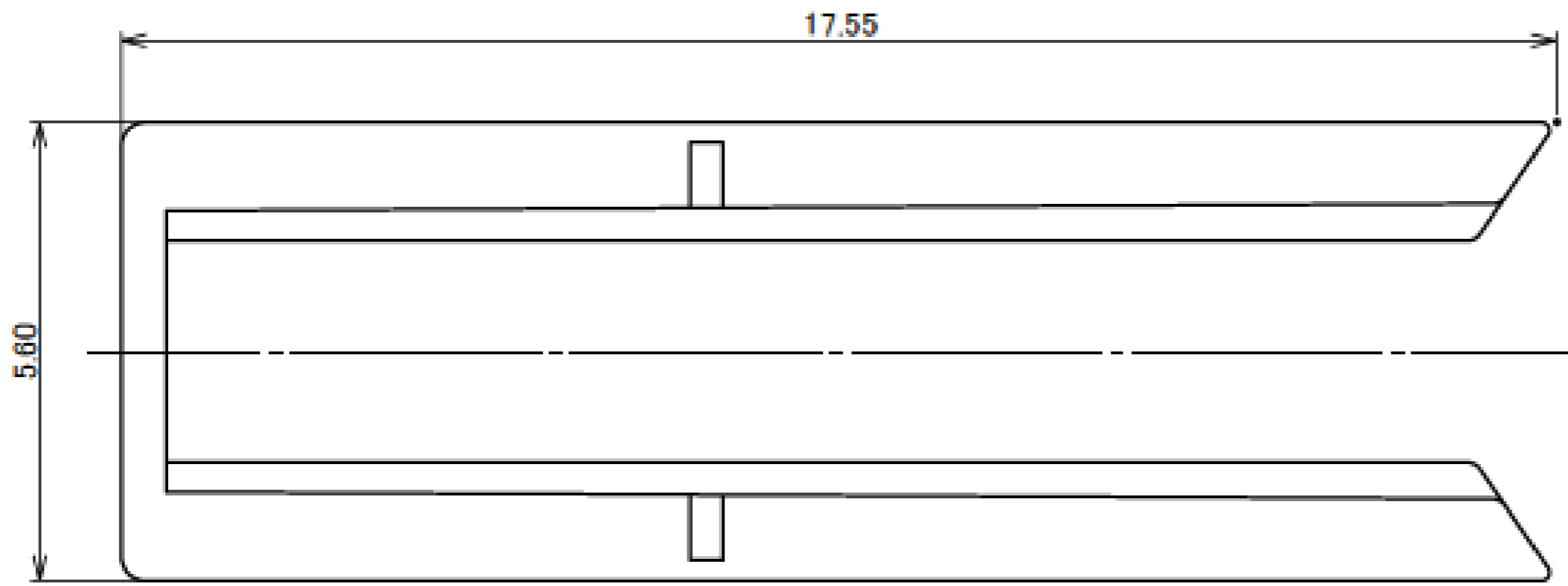
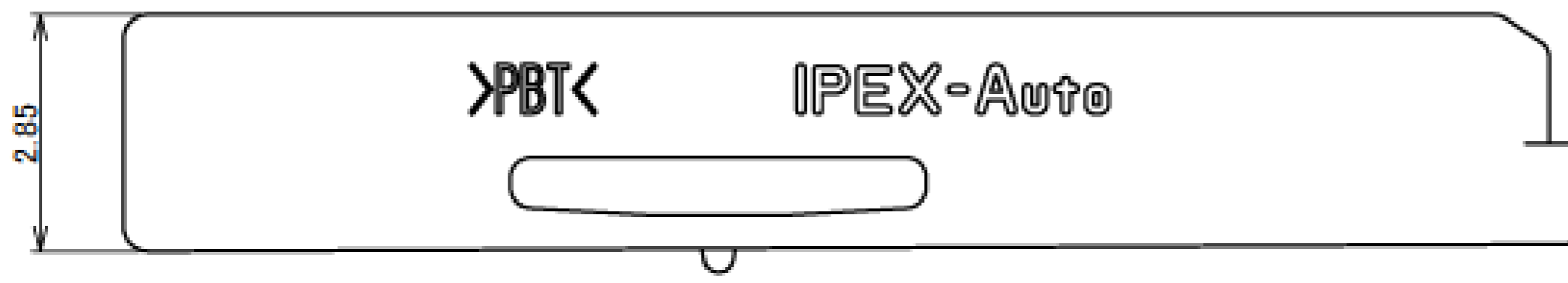
- 1.APPLICABLE PART NO.:  
•FEMALE HOUSING...V0116-91016-01  
V0116-91016-02
- 2.MATERIAL:PBT
- 3.COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020].

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE RETAINER	PBT	BLACK

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (16P) ※ISHV:

PART NO.
V0027-92016-211



**NOTES**

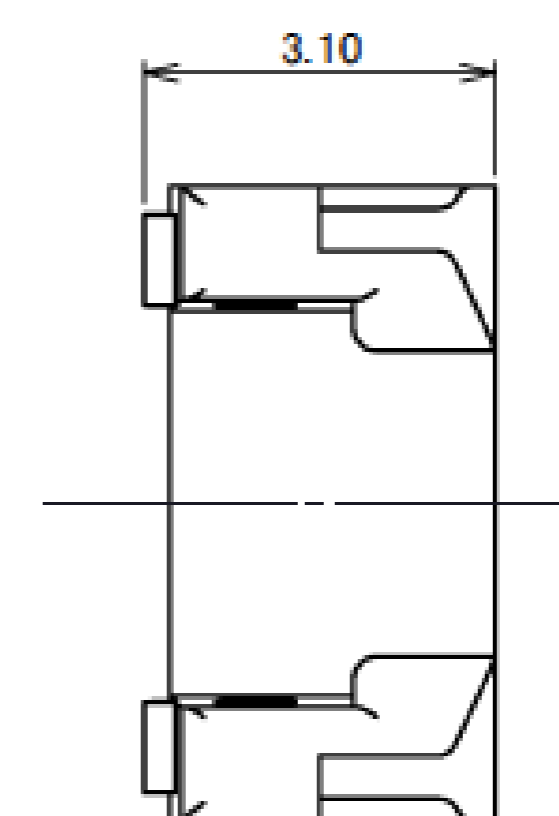
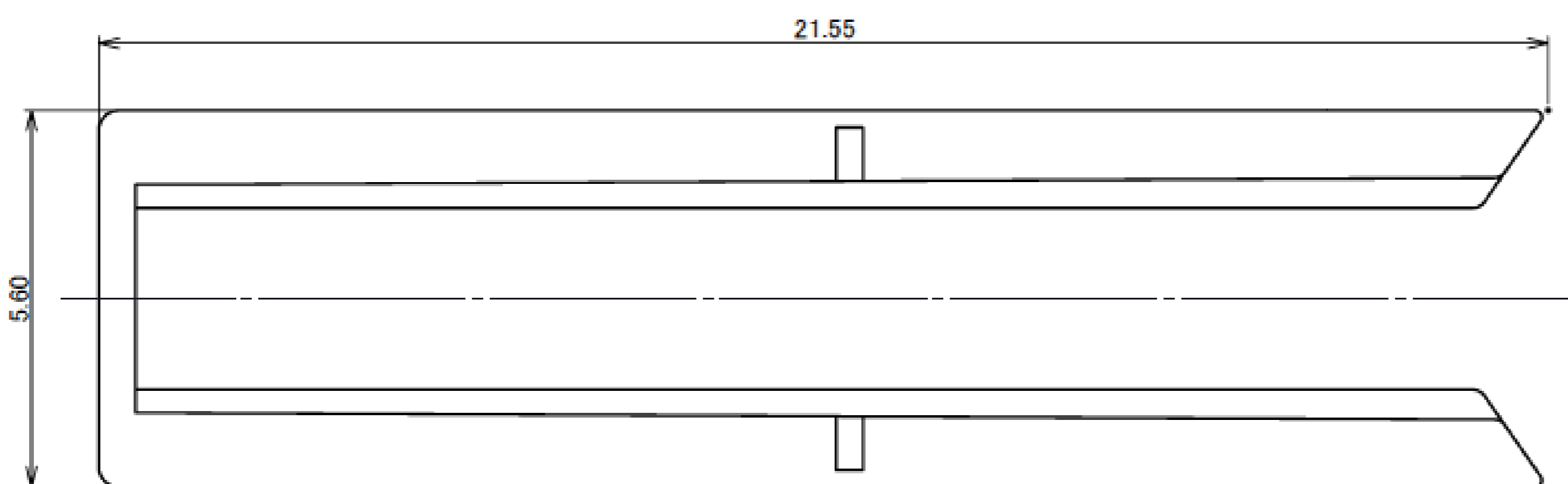
- 1.APPLICABLE PART NO.:  
-FEMALE HOUSING\*\*\*V0027-91016-211
- 2.MATERIAL:PBT
- 3.COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE RETAINER	PBT	BLACK

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (20P):

PART NO.
V0116-92020-01



**NOTES**

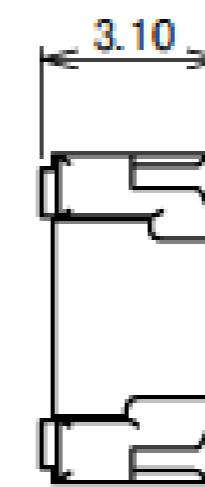
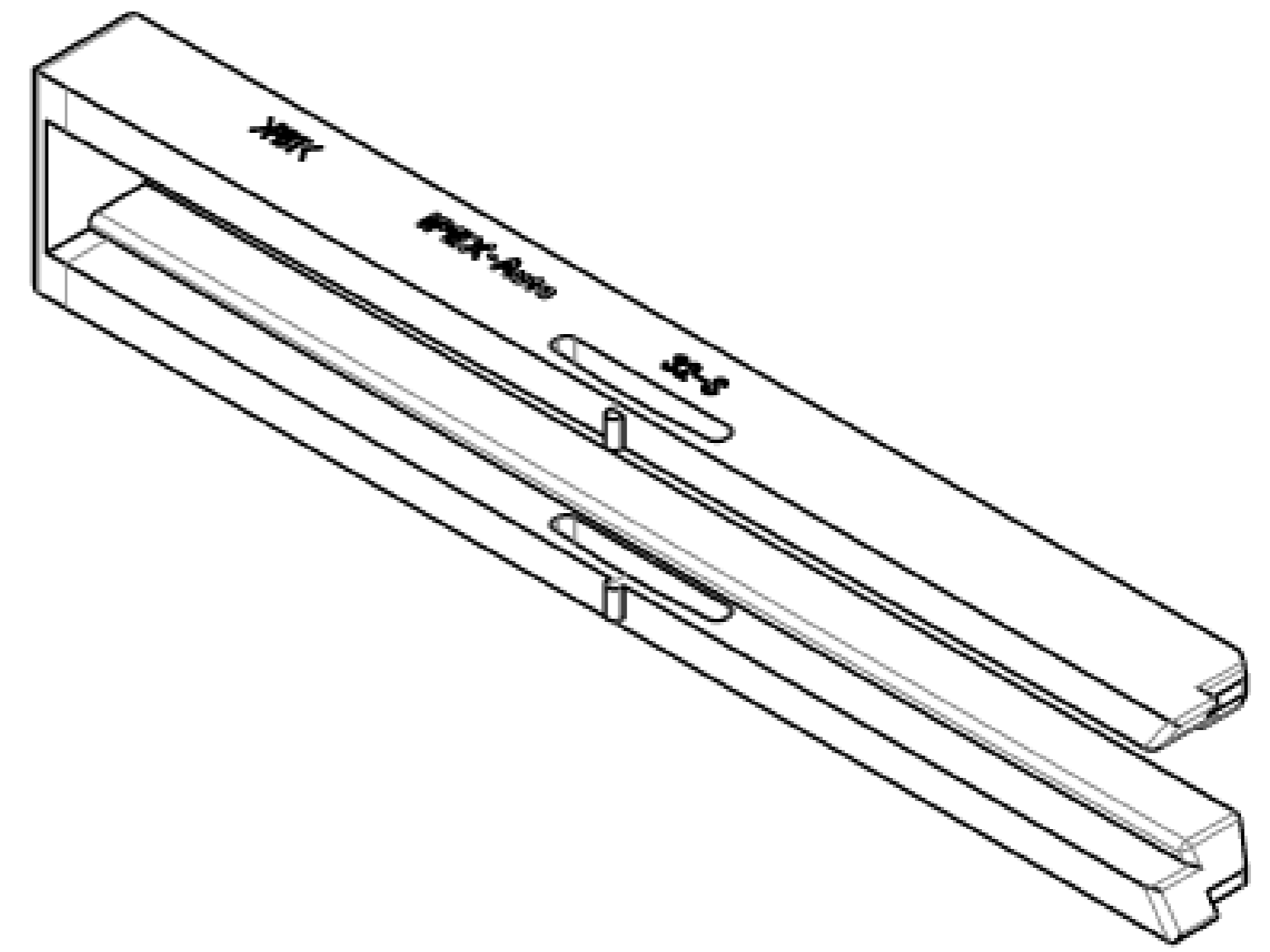
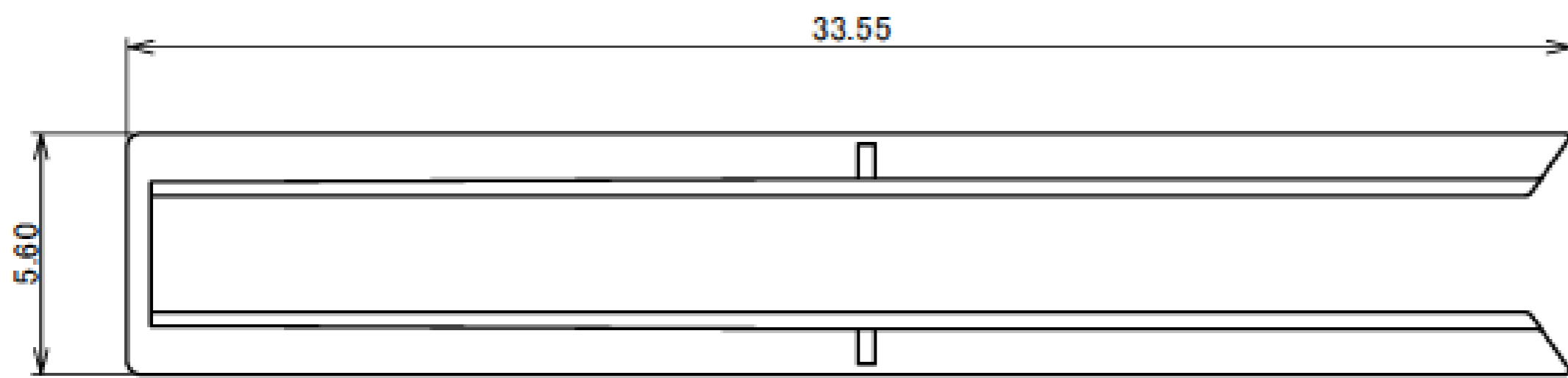
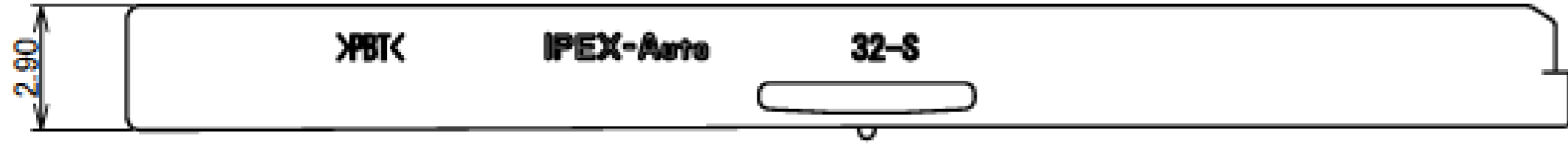
- 1.APPLICABLE PART NO.:  
-FEMALE HOUSING\*\*\*V0116-91020-01
- 2.MATERIAL:PBT
- 3.COMPLY WITH ELV/RoHS
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	FEMALE RETAINER-S	PBT	BLACK

Rev.0

# ISH® (Horizontal Type) FEMALE RETAINER (32P):

PART NO.
V0115-92032-01

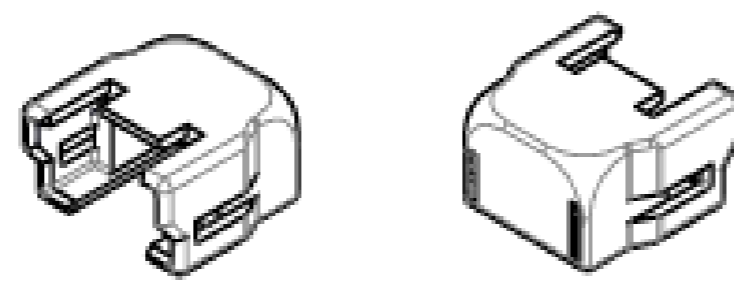
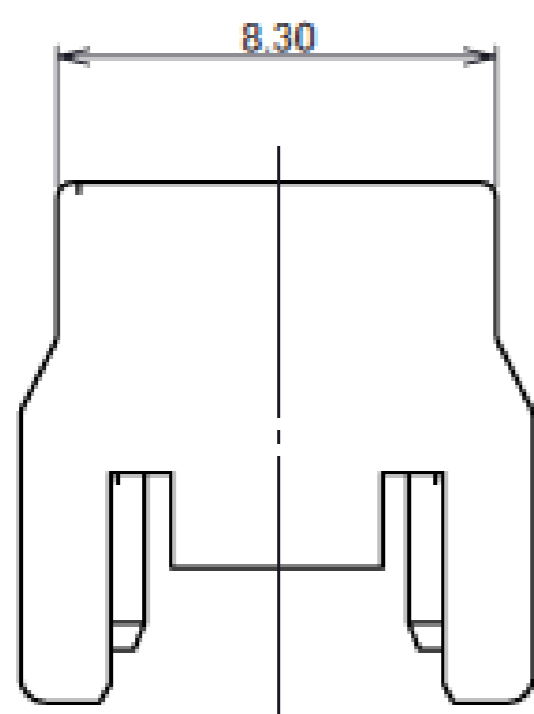


NOTE  
 1.MATERIAL:PBT  
 2.COMPLY WITH ELV/RoHS

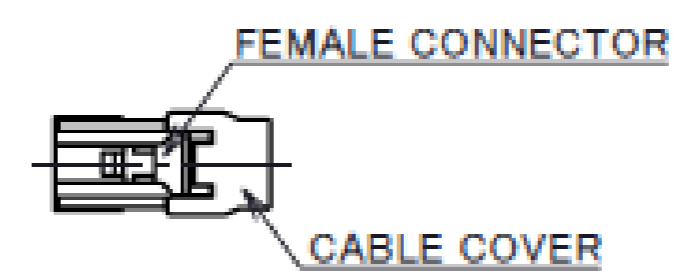
Rev.0

# ISH® (Horizontal Type) CABLE COVER (3P):

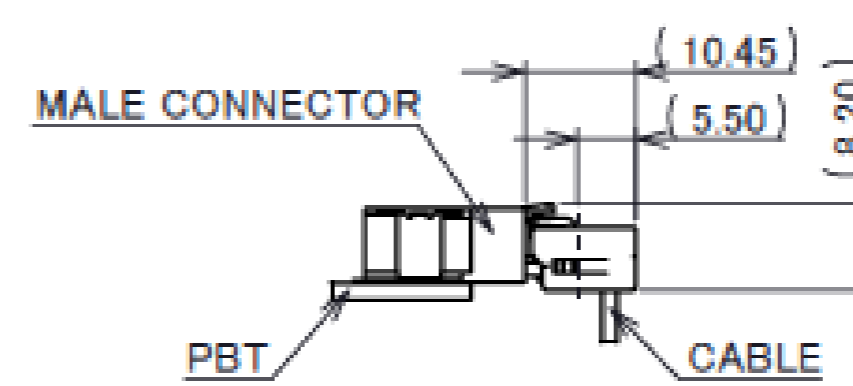
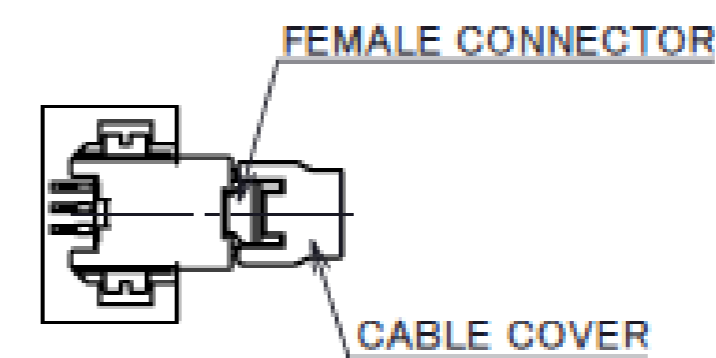
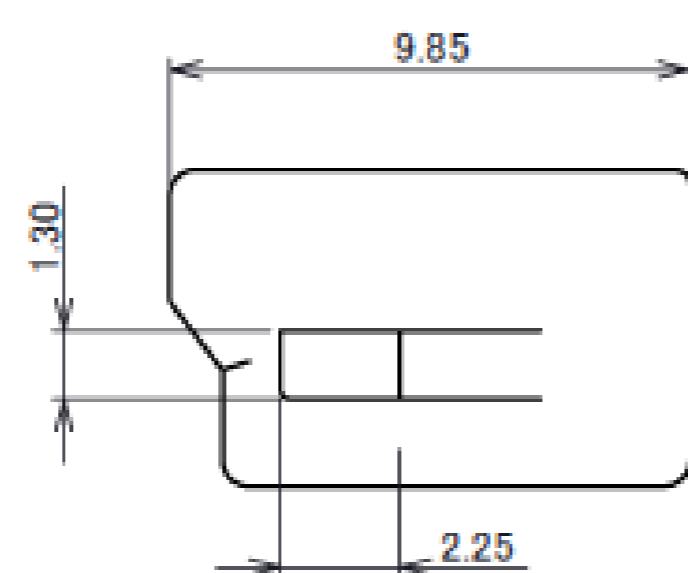
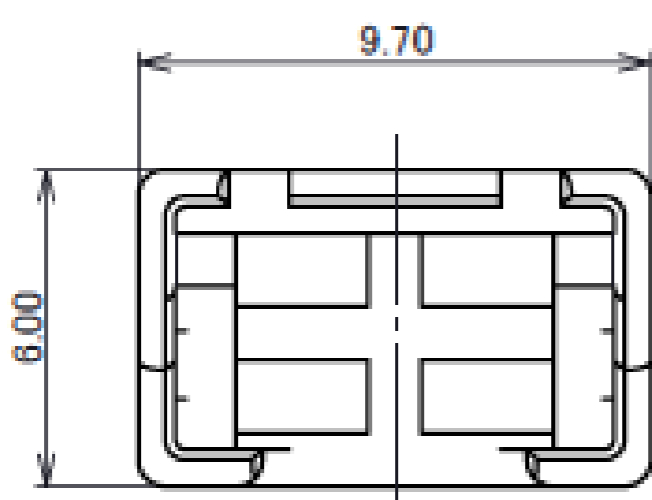
PART NO.
V0113-93003-01



ISOMETRIC VIEW  
2:1



CABLE COVER ASSEMBLY  
1:1



MATING STATE  
1:1

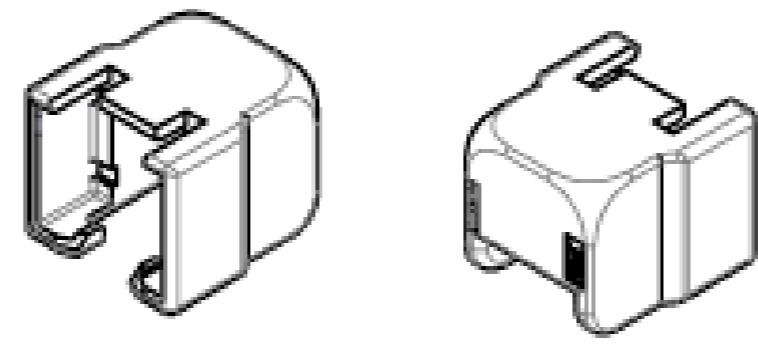
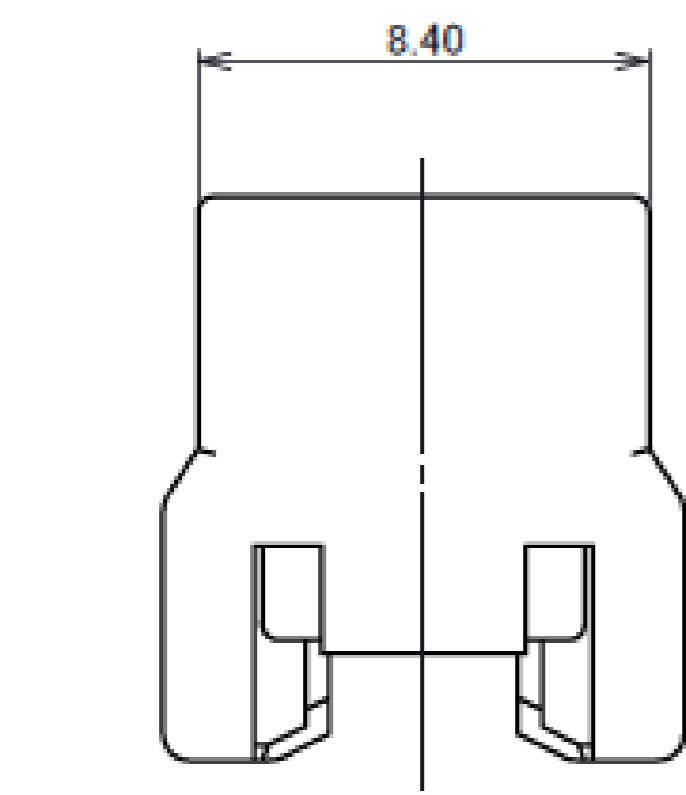
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	CABLE COVER	PBT	NATURAL

NOTES  
 1.APPLICABLE PART NO.:  
 \*FEMALE HOUSING\*\*\*V0113-91003-01  
 2.MATERIAL:PBT  
 3.BURR:0.1MAX  
 4.COMPLY WITH ELV/RoHS

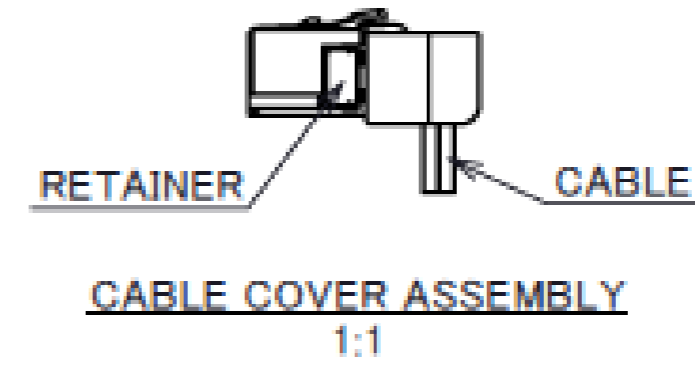
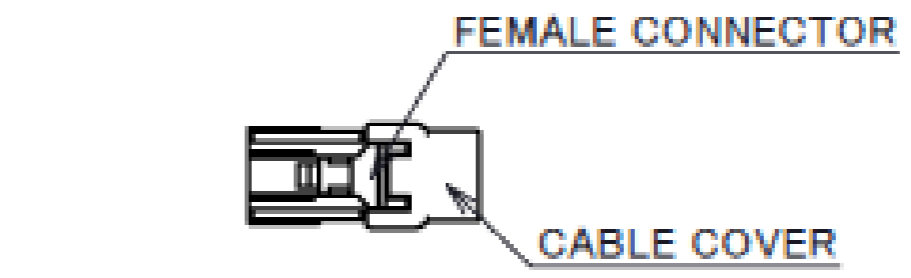
Rev.0

# ISH® (Horizontal Type) CABLE COVER (6P):

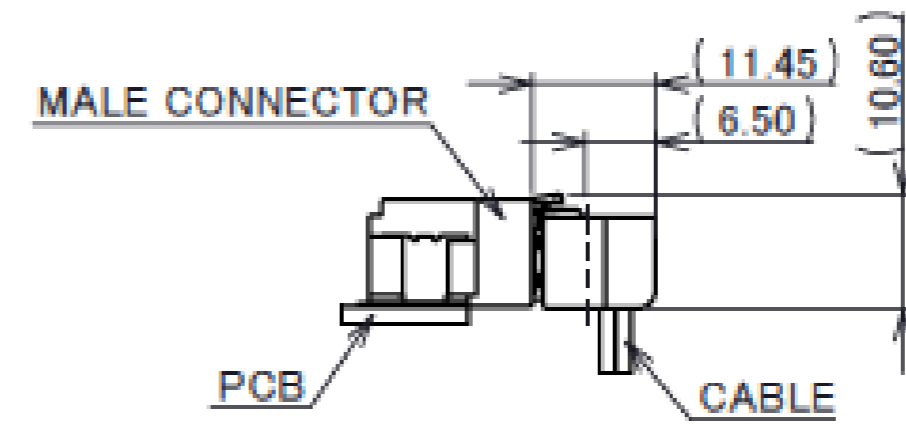
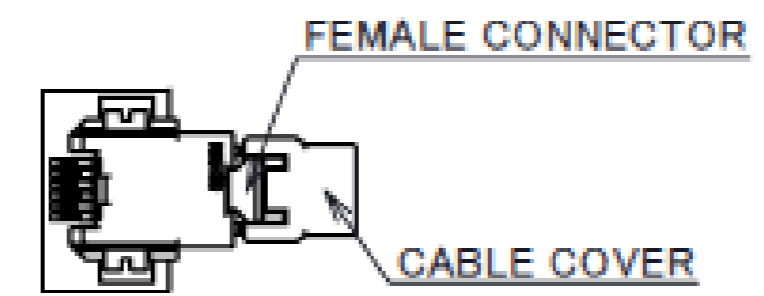
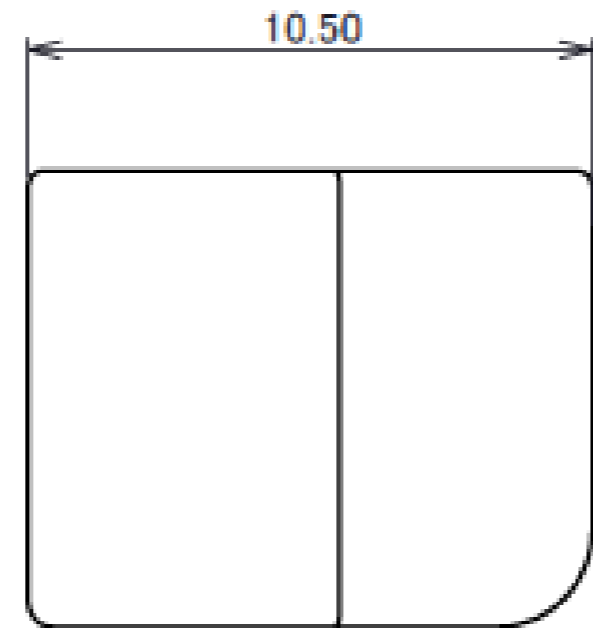
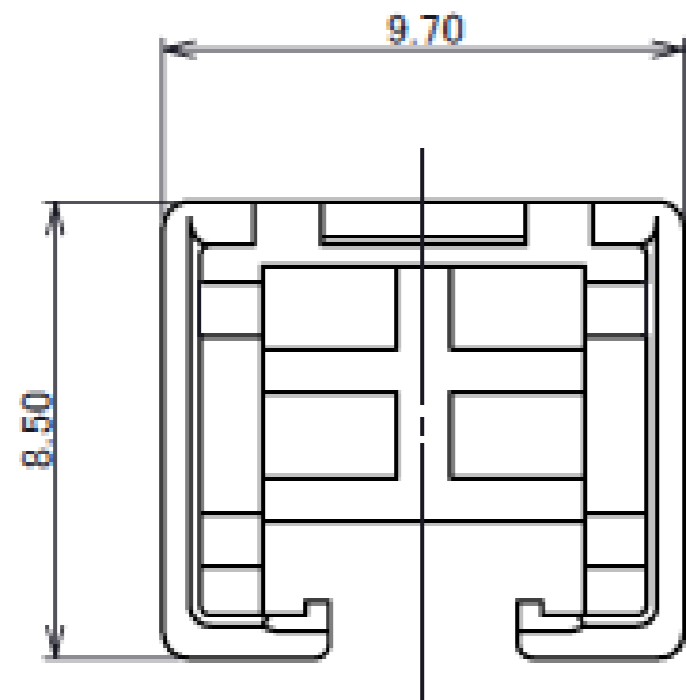
PART NO.	COLOR
V0116-93008-01	NATURAL
V0116-93008-02	BLACK



ISOMETRIC VIEW  
2:1



CABLE COVER ASSEMBLY  
1:1



MATING STATE  
1:1

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	CABLE COVER	PBT	NATURAL or BLACK

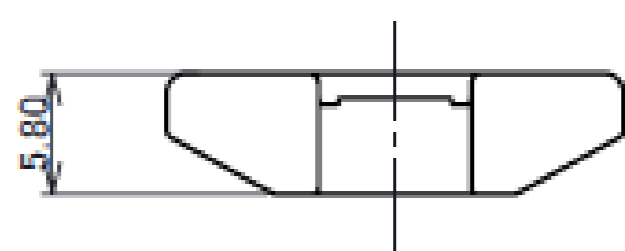
NOTES

- 1.APPLICABLE PART NO.:  
-FEMALE HOUSING--- V0116-91006-01 (KEY CODING-A)  
V0116-91006-11 (KEY CODING-B)
- 2.MATERIAL-PBT
- 3.COMPLY WITH ELV/RoHS

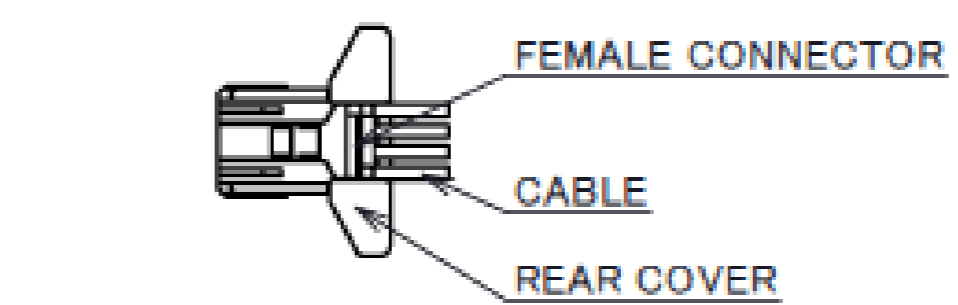
Rev.0

# ISH® (Horizontal Type) REAR COVER (8P):

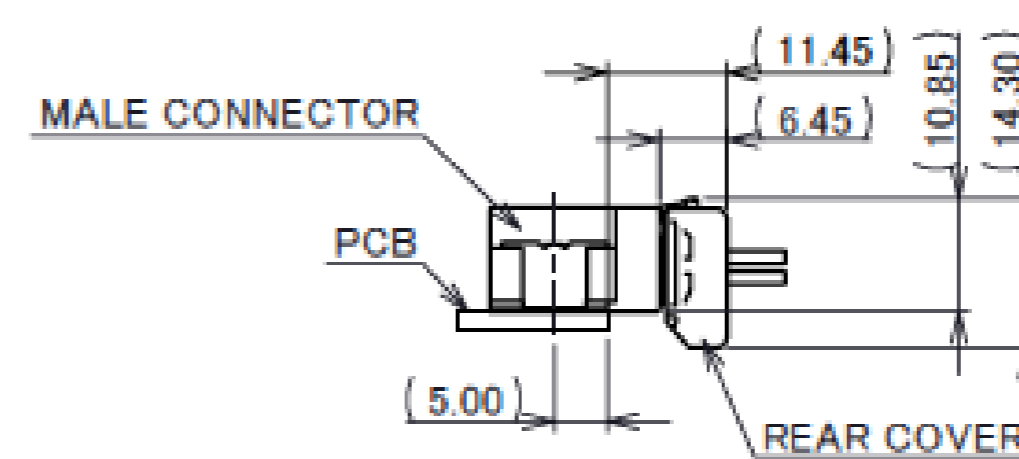
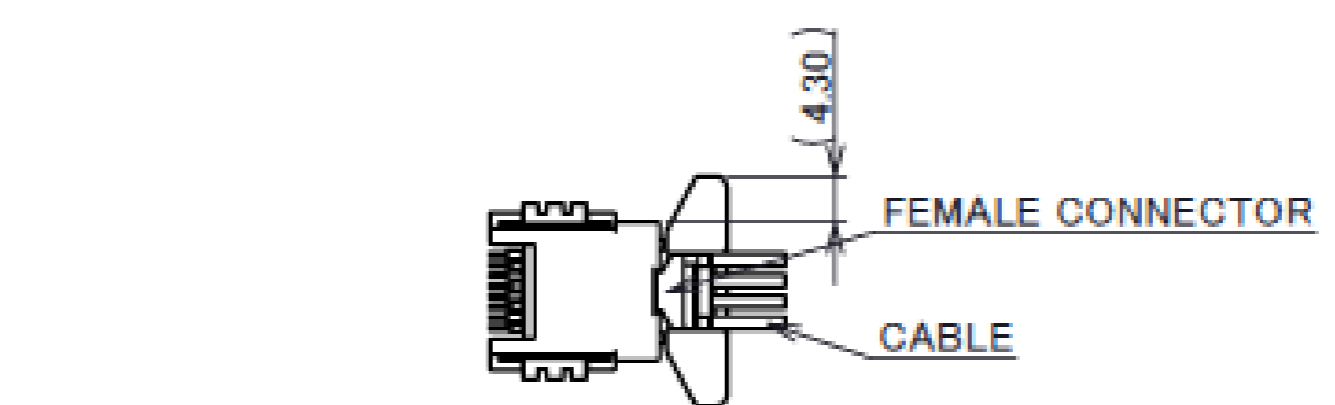
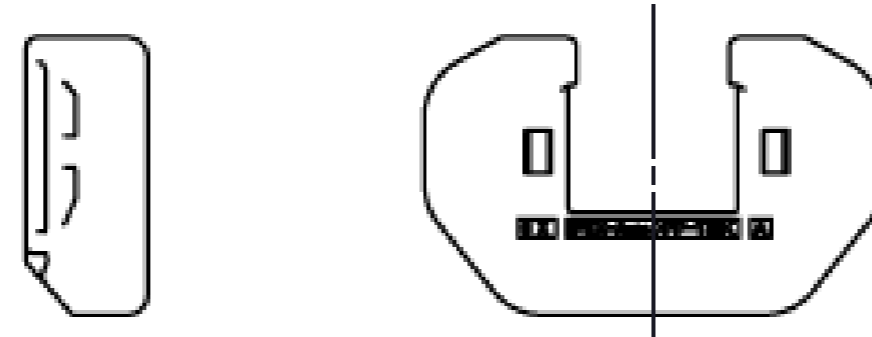
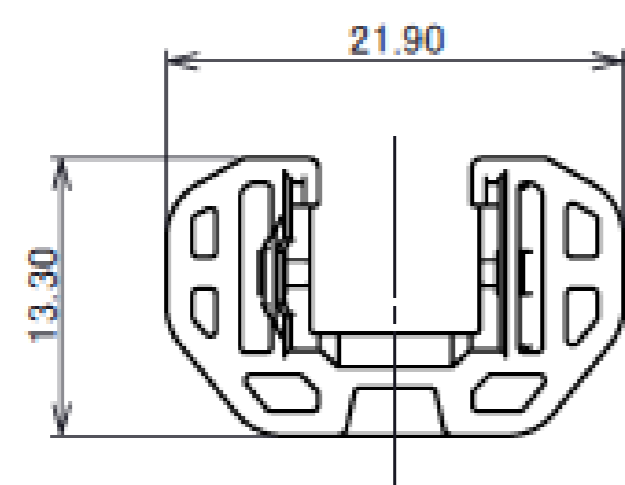
PART NO.
V0116-94008-01



ISOMETRIC VIEW  
1:1



REAR COVER ASSEMBLY  
1:1



MATING STATE  
1:1

NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS
1	REAR COVER	PP-T30	BLACK

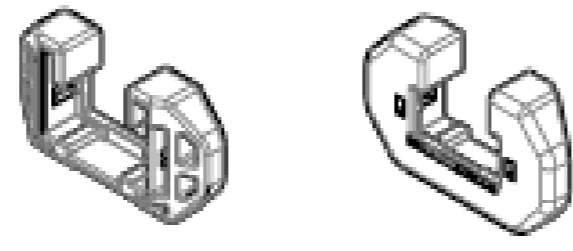
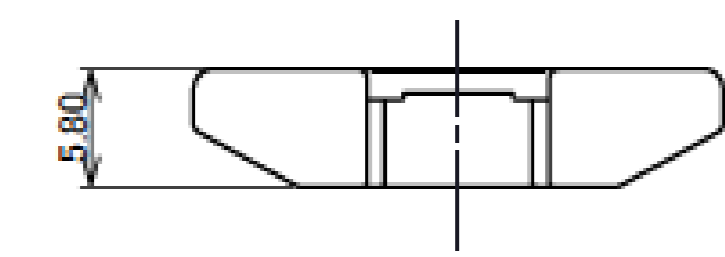
NOTES

- 1.APPLICABLE PART NO.:  
-FEMALE HOUSING---V0116-91008-03
2. MATERIAL : PP-T30
3. COMPLY WITH ELV/RoHS.
- 4.HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL[HDM-0020]
5. INSERTION FORCE TO FEMALE HOUSING : 55N MAX.  
REMOVAL FORCE FROM FEMALE HOUSING : 30N MIN.

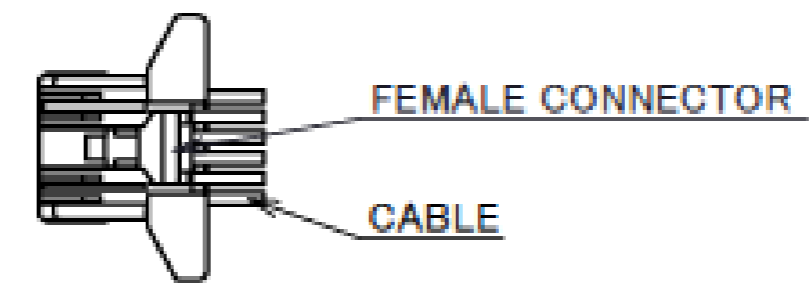
Rev.0

# ISH® (Horizontal Type) REAR COVER (12P):

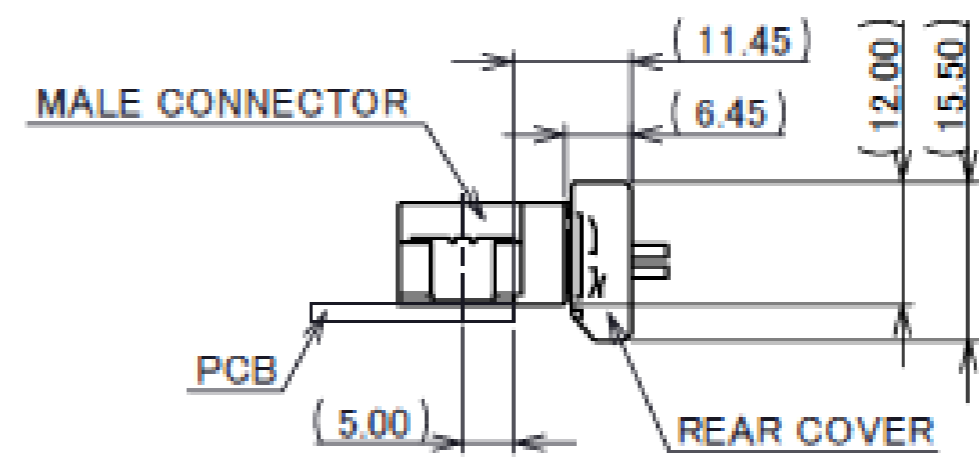
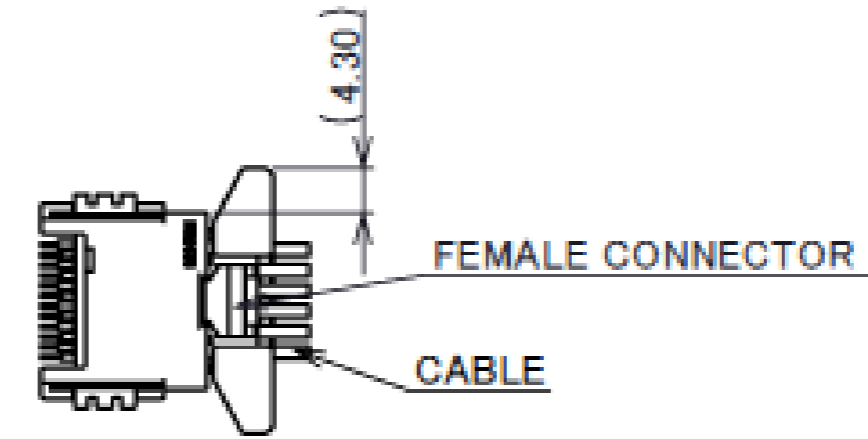
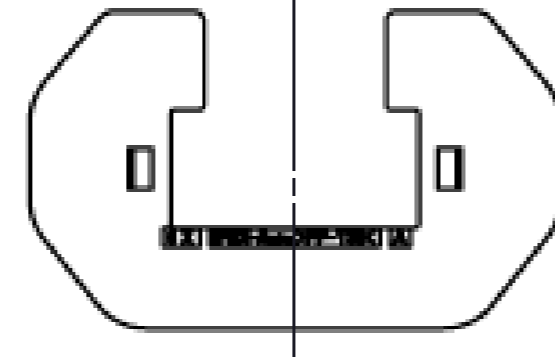
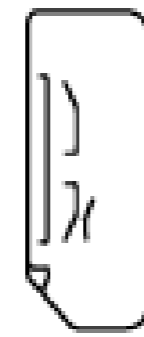
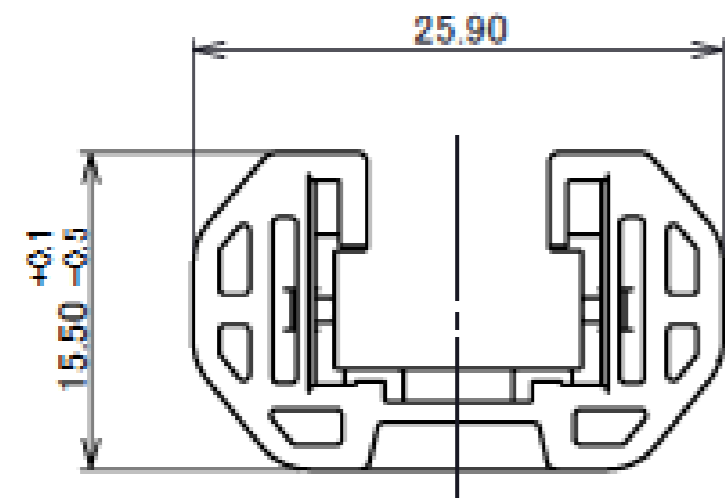
PART NO.
V0116-94012-01



ISOMETRIC VIEW  
1:1



FEMALE ASSEMBLY  
1:1



MATING STATE  
1:1

1	REAR COVER	PP-T30	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

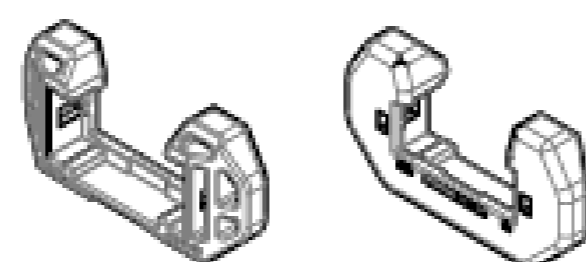
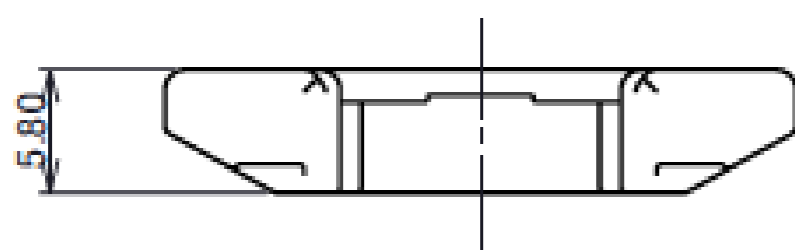
NOTES

1. APPLICABLE PART NO.:  
· FEMALE HOUSING: V0116-91012-02, V0116-91012-12, V0116-91012-22, V0116-91012-31
2. MATERIAL: PP-T30
3. COMPLY WITH ELV/RoHS.
4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
5. MATING FORCE TO FEMALE HOUSING: 55N MAX.  
UNMATING FORCE FROM FEMALE HOUSING: 30N MIN.

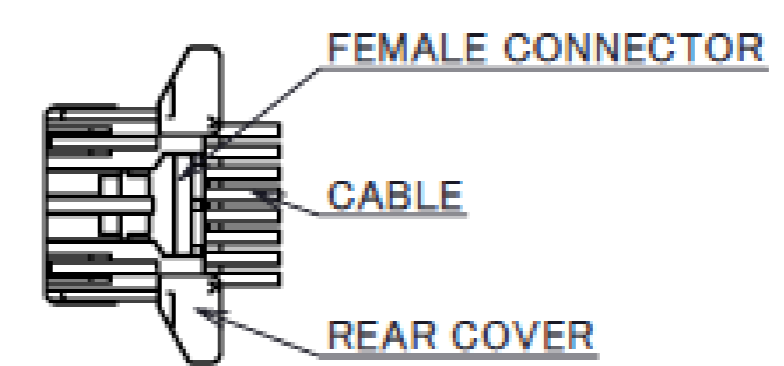
Rev.0

# ISH® (Horizontal Type) REAR COVER (16P):

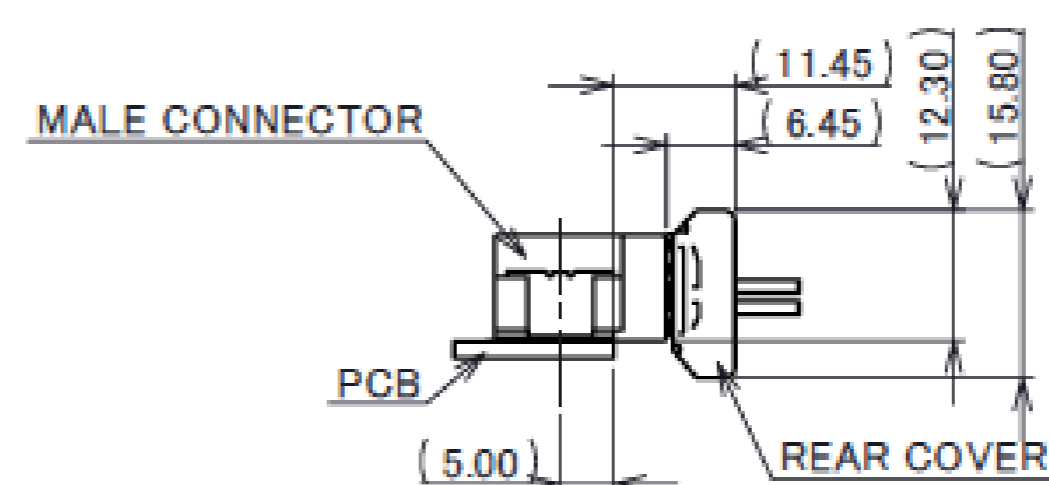
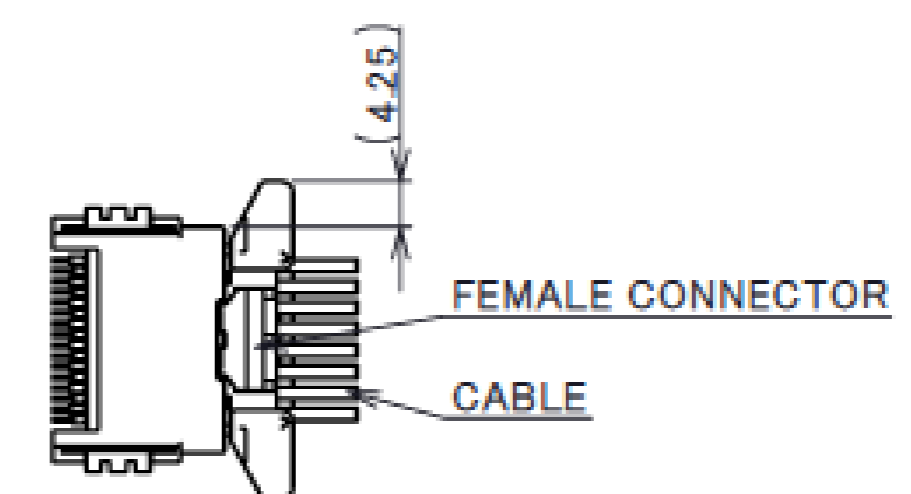
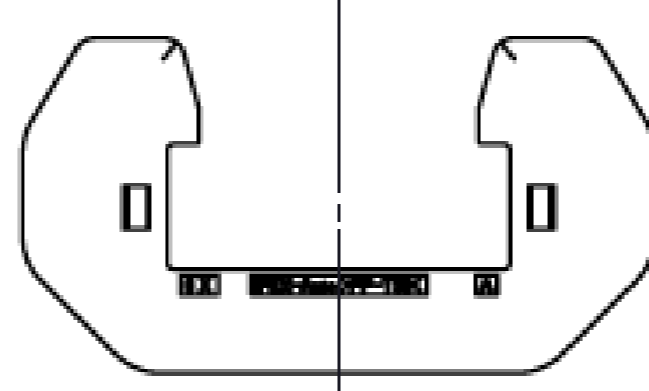
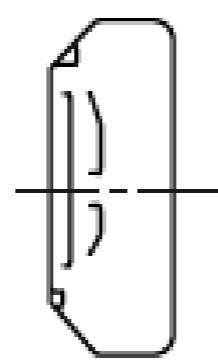
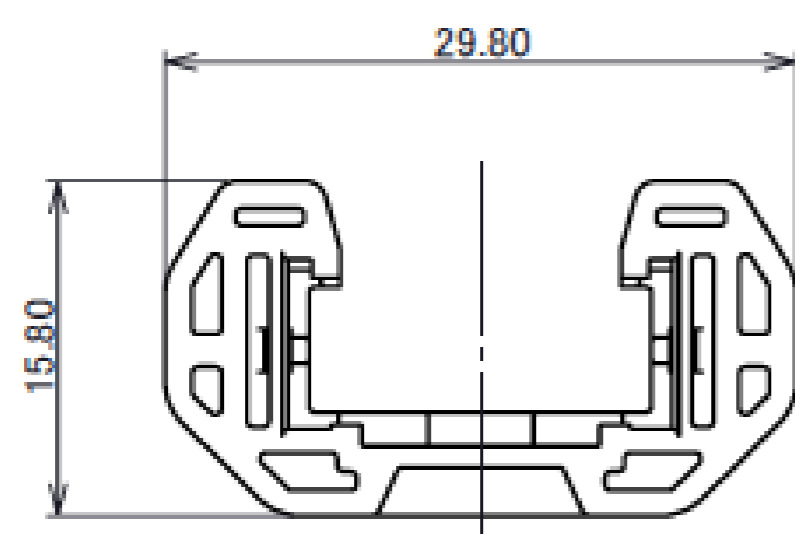
PART NO.
V0116-94016-01



ISOMETRIC VIEW  
1:1



REAR COVER ASSEMBLY  
1:1



MATING STATE  
1:1

1	REAR COVER	PP-T30	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

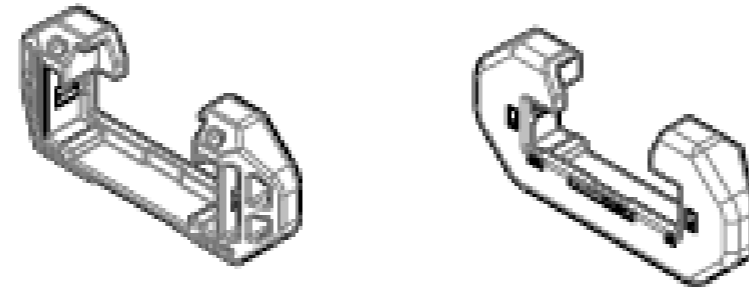
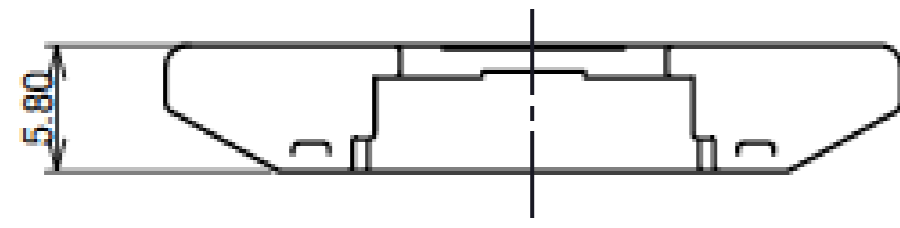
NOTES

1. APPLICABLE PART NO.:  
· FEMALE HOUSING: V0116-91016-02
2. MATERIAL: PP-T30
3. COMPLY WITH ELV/RoHS.
4. HANDLE OF PRODUCT IN COMPLIANCE WITH HANDLING MANUAL [HDM-0020]
5. INSERTION FORCE TO FEMALE HOUSING: 55N MAX.  
REMOVAL FORCE FROM FEMALE HOUSING: 30N MIN.

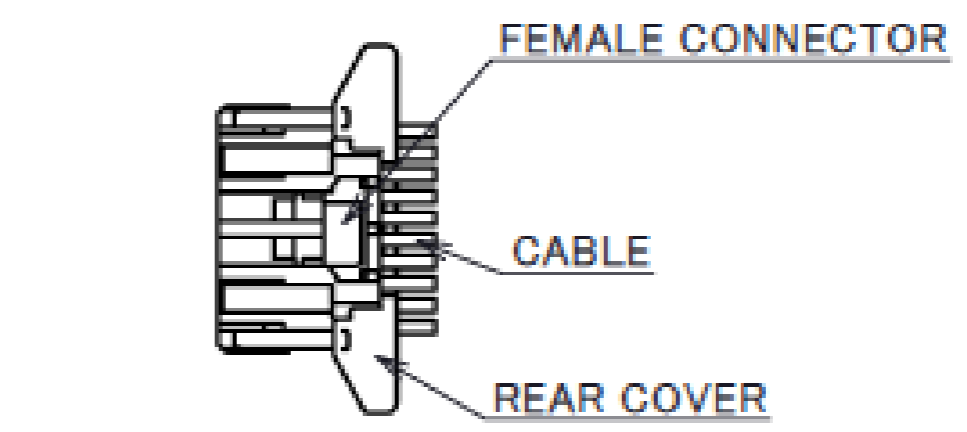
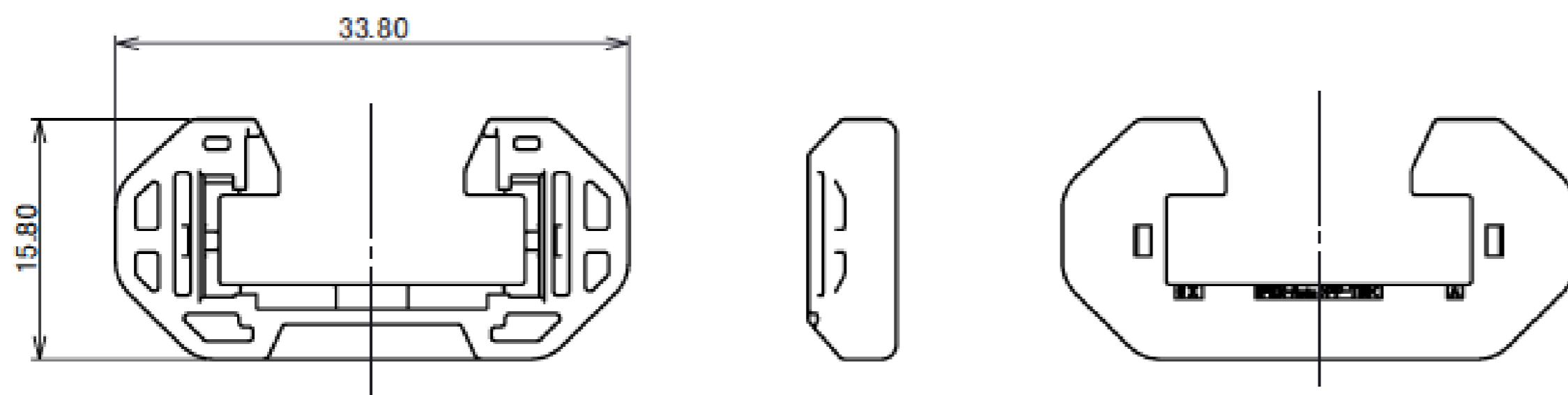
Rev.0

# ISH® (Horizontal Type) REAR COVER (20P):

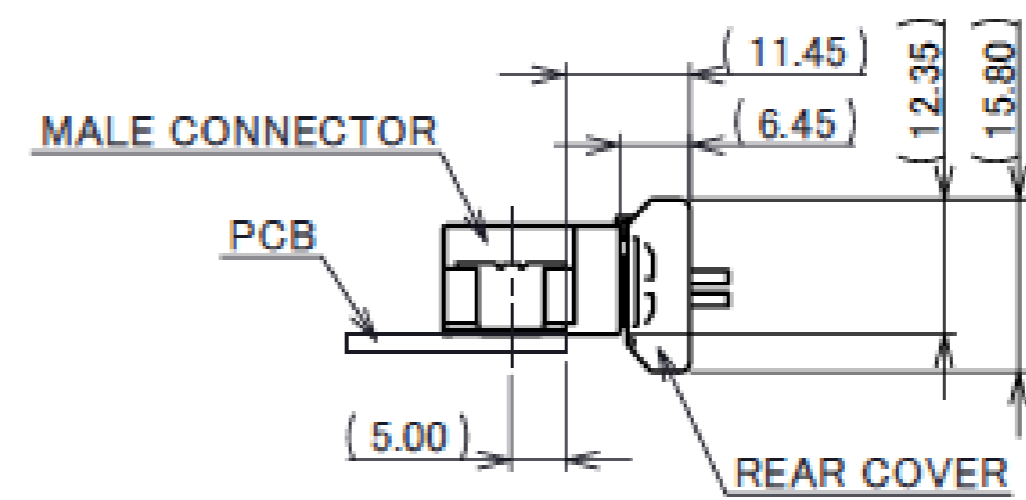
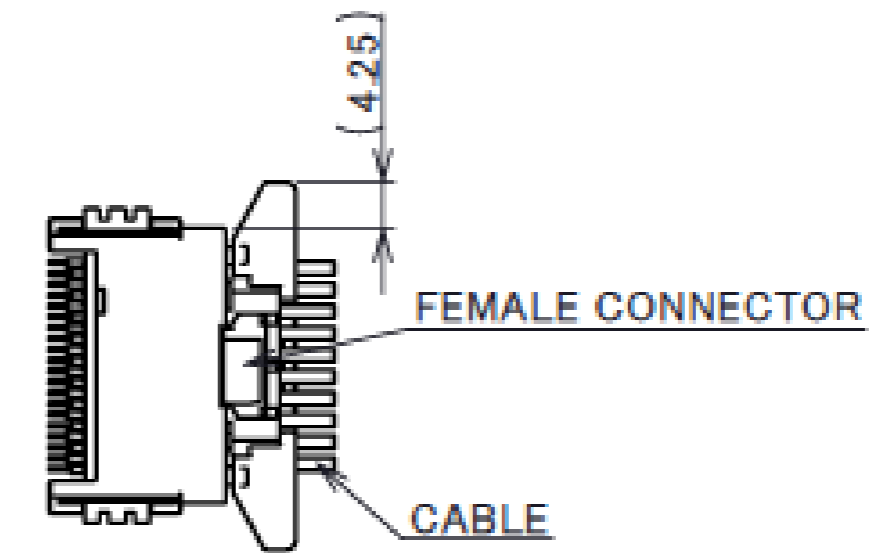
PART NO.
V0116-94020-01



ISOMETRIC VIEW  
1:1



REAR COVER ASSEMBLY  
1:1



MATING STATE  
1:1

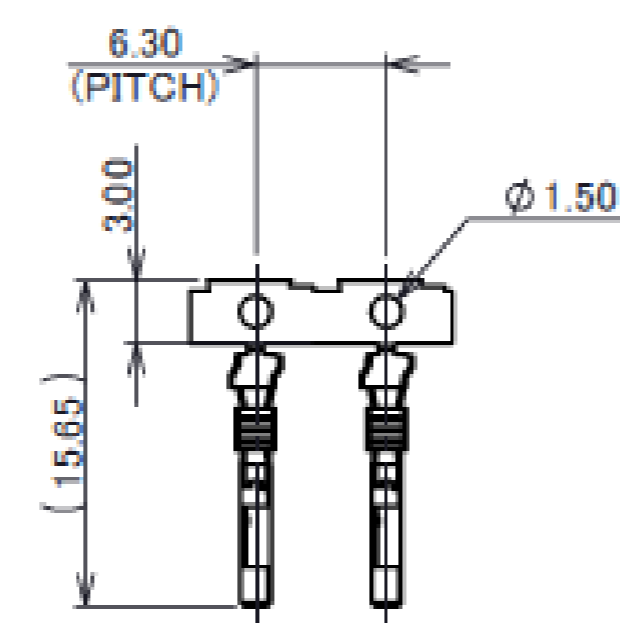
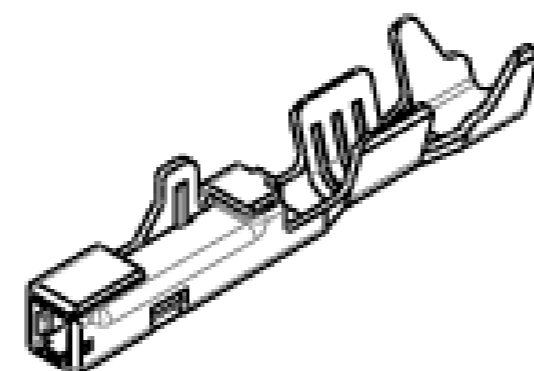
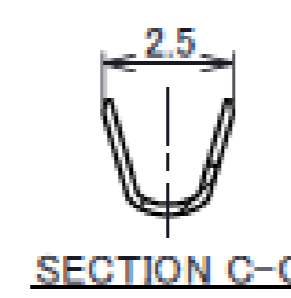
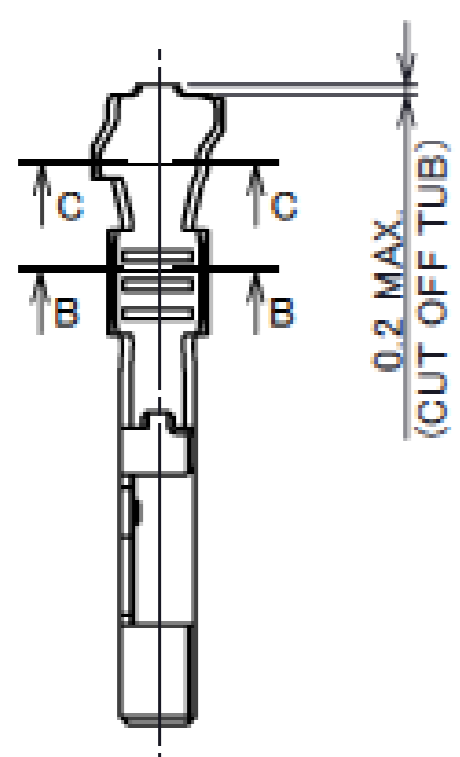
1	REAR COVER	PP-T30	BLACK
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

- NOTES
1. APPLICABLE PART NO.:  
• FEMALE HOUSING: V0116-91020-01
  2. MATERIAL: PP-T30
  3. COMPLY WITH ELV/RoHS
  4. MATING FORCE TO FEMALE HOUSING: 55N MAX.  
UNMATING FORCE FROM FEMALE HOUSING: 30N MIN.

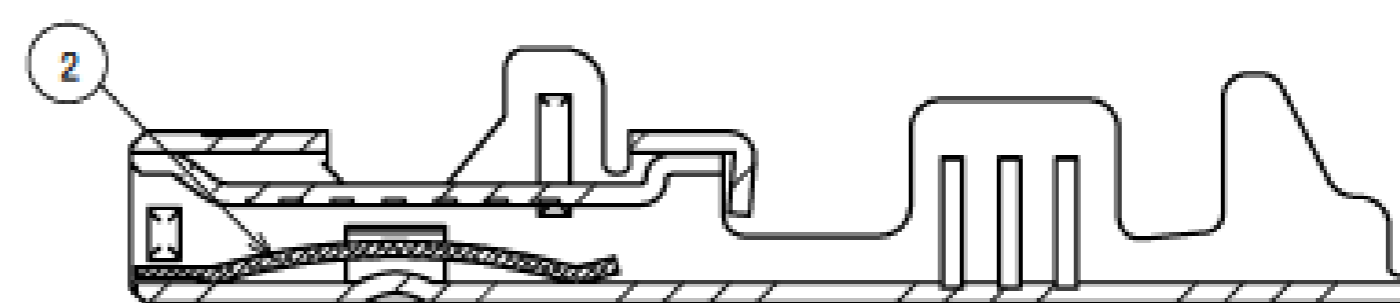
Rev.0

# ISH® (Horizontal Type) TERMINAL:

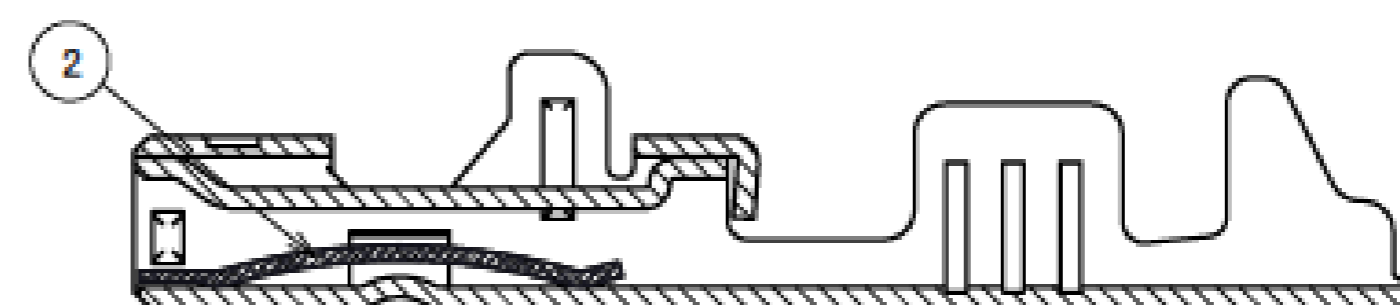
PART NO.	PLATING
VT009-02	Sn REFLOW
VT009-03	CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW



CARRIER  
2:1

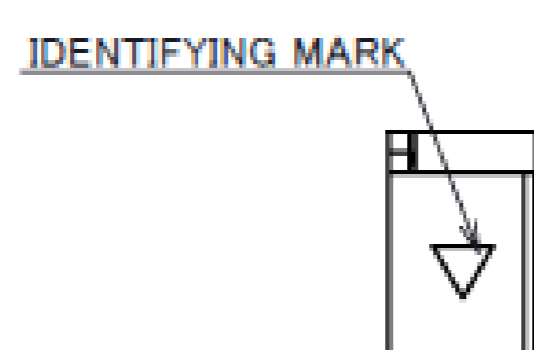
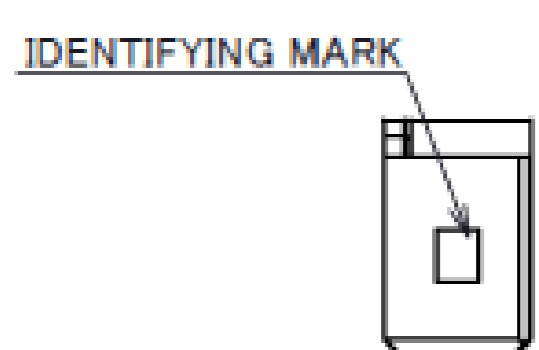
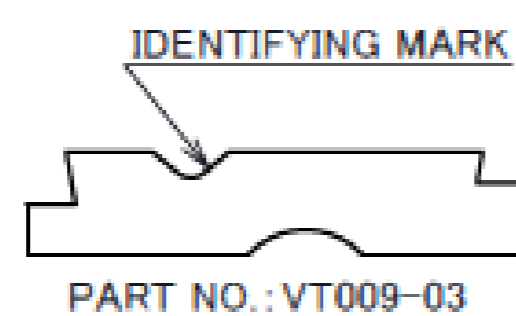
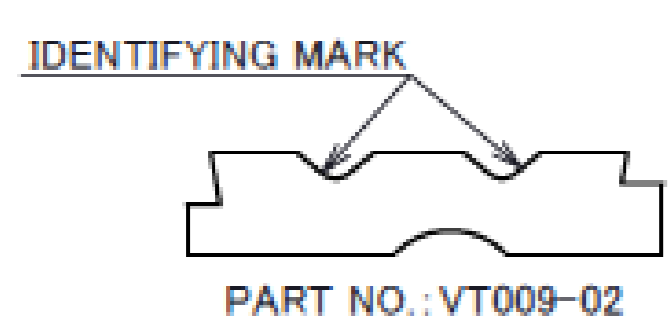
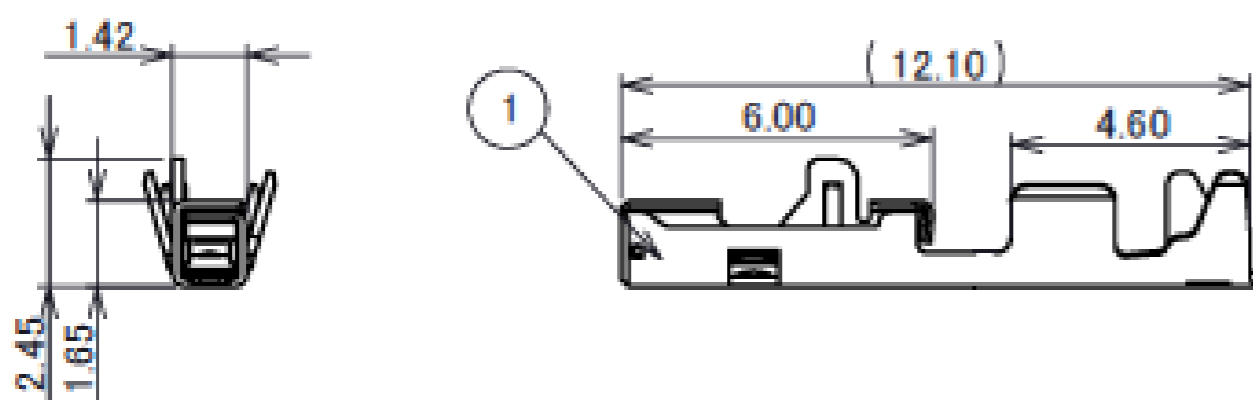


PART NO.: VT009-02



PART NO.: VT009-03

SECTION A-A  
10:1



PART NO.: VT009-02

PART NO.: VT009-03

- NOTE
1. APPLICABLE FEMALE HOUSING: ISH CONNECTOR SERIES
  2. APPLICABLE CABLE SIZE: 0.3mm<sup>2</sup> / 0.5mm<sup>2</sup> (FINISHED  $\phi$  1.60mm MAX.)
  3. COMPLY WITH ELV/RoHS.
  4. TERMINAL CRIMP SPECIFICATION MUST BE COMPLIANT WITH HANDLING MANUAL [HDM-0020].

2	SPRING	COPPER ALLOY	VT009-02 PLATING : Sn REFLOW VT009-03 PLATING : Au PLATING
1	BODY	BRASS	VT009-02 PLATING : Sn REFLOW VT009-03 PLATING : Au PLATING CONTACT AREA : Au PLATING CRIMPING AREA : Sn REFLOW
NO.	DESCRIPTION	MATERIAL	FINISH/COLOR/REMARKS

Rev.0

# Custom Products Available

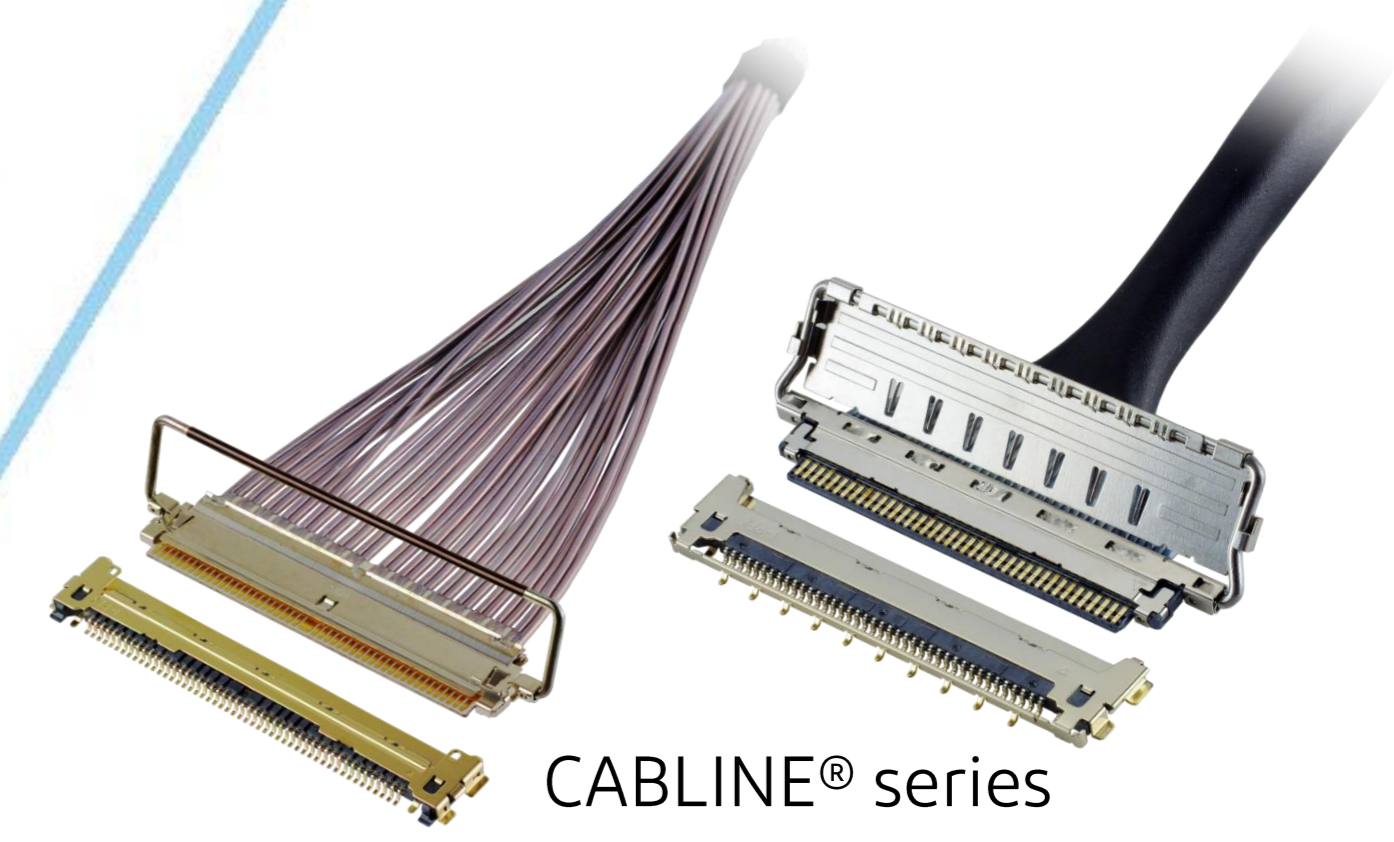
## RF Connector

MHF® series



## Micro-coaxial/Twinax/Discrete Wire Connector

CABLINÉ® series

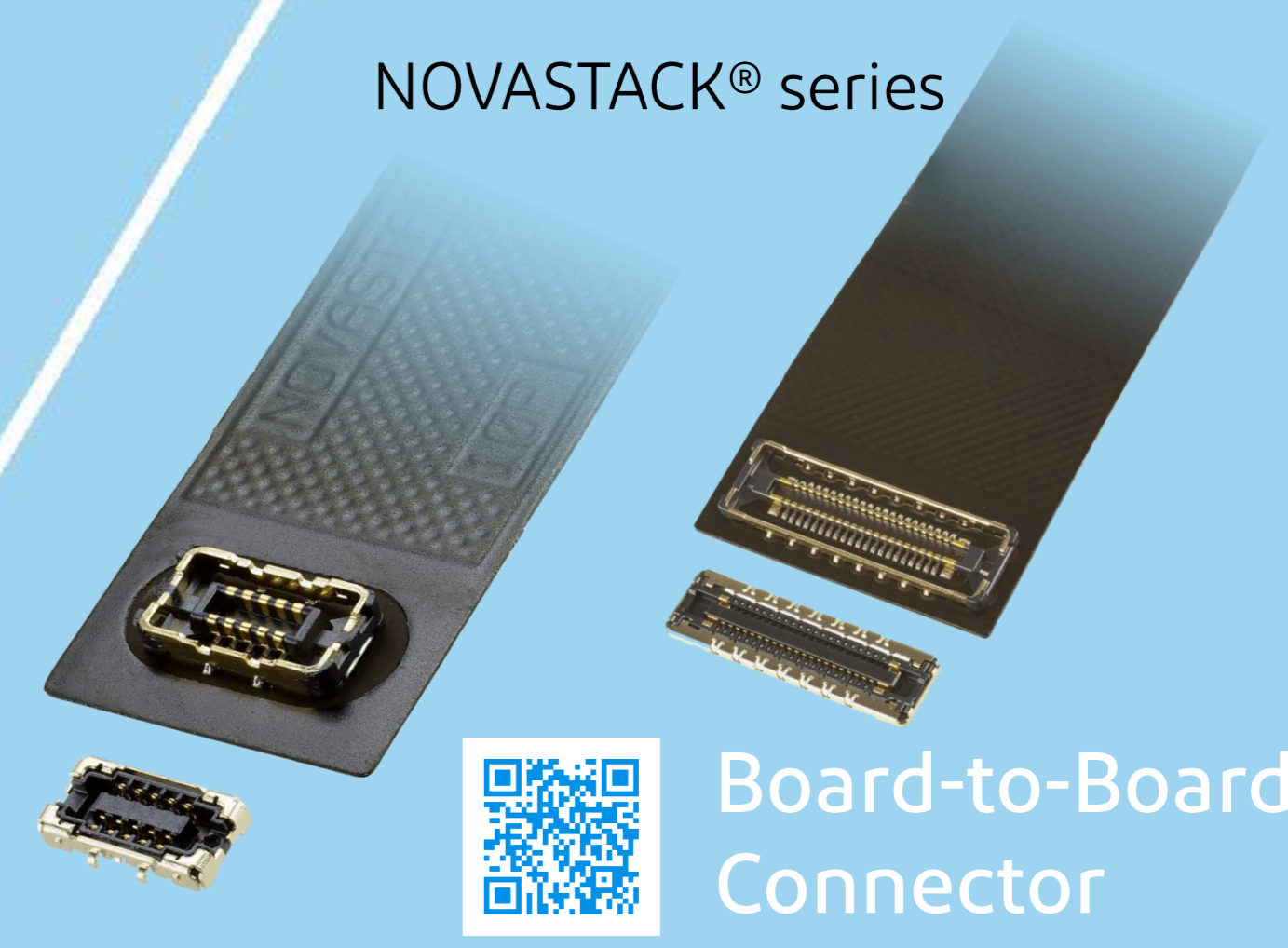


## Optical Module

LIGHTPASS® series



NOVASTACK® series



## Board-to-Board Connector



## Power Connector/Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



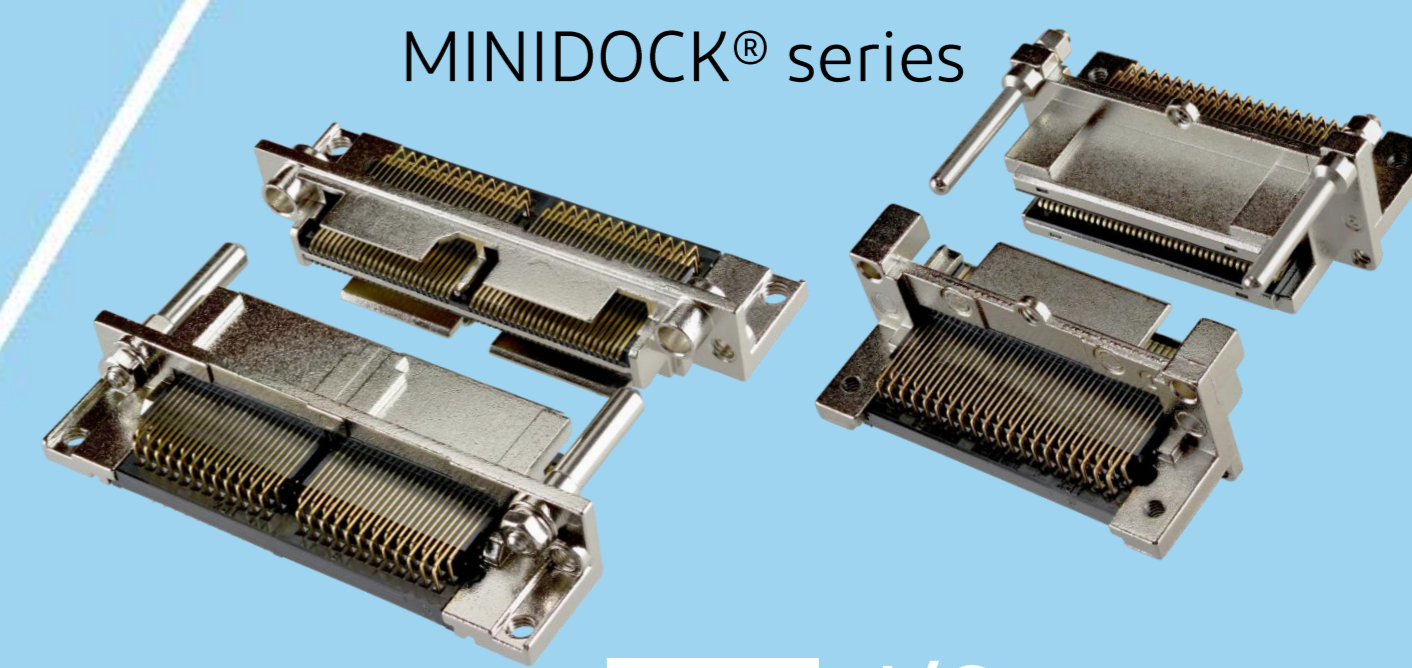
## FPC FFC Connector



Inquiry



MINIDOCK® series



## I/O Connector

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Contact your sales representative or more detailed information.

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