

8 ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱

Customer code
Ex.) 01 : General

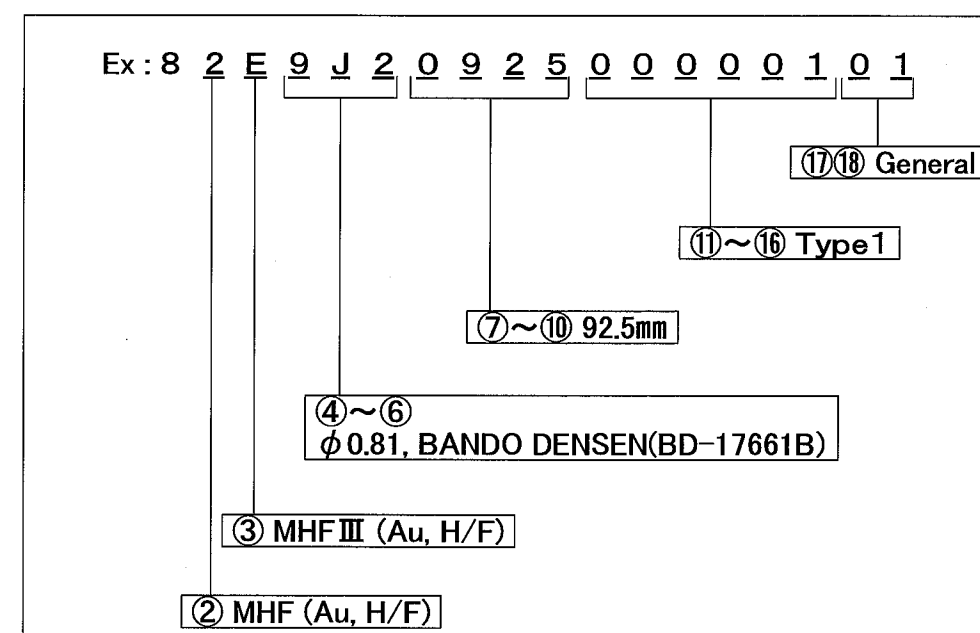
TYPE.1~6 ※See page.2, 6
(Only type.6 means X/Y/Z dimentions.)
⑪⑫→"X" length
⑬⑭→"Y" length
⑮⑯→"Z" length

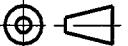
Cable length(L) ※See page.5

Cable specifications ※See page.4

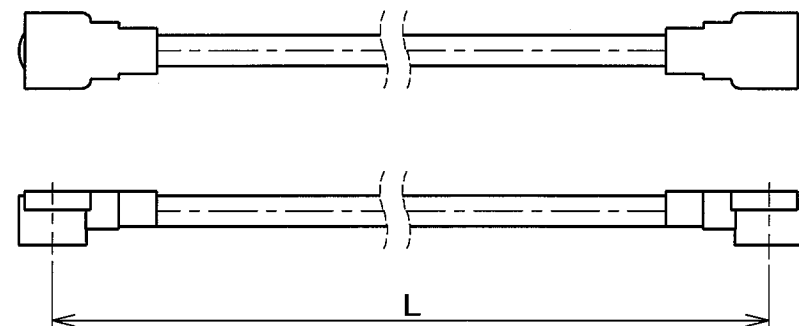
Connector-2 (RIGHT) ※See page.3

Connector-1 (LEFT) ※See page.3

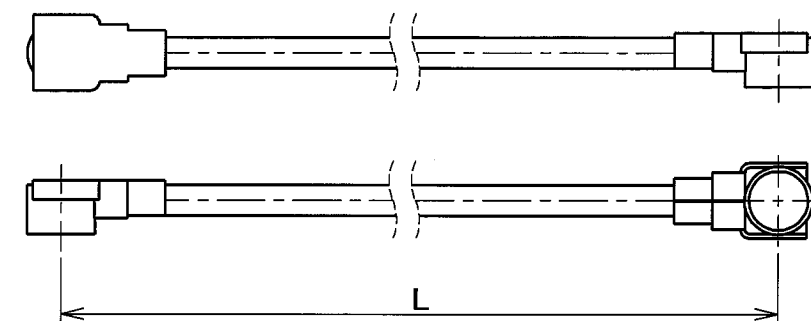


3	Z09077	T.H	Feb./09/09	EK	DESIGN'D BY	DATE	 Interconnect and Packaging Electronics TOKYO,JAPAN
2	Z09018	T.H	Jan./15/09	E.K	T.Hatamura	Dec./11/08	
1	Z08648	T.H	Dec./19/08	E.K	CHK'D BY	DATE	TITLE MHF Series cable ass'y
0	Z08612	T.H	Dec./11/08		APP'D BY	DATE	
REV	ECN	BY	DATE	APP	T.Harada	Dec./11/08	SCALE 5:1
REV.RECORD					CUSTOMER COPY	PROJECTION	UNIT
SERIES No.							mm
						DWG. No.	80271
						SHEET	1/8
						REV.	3

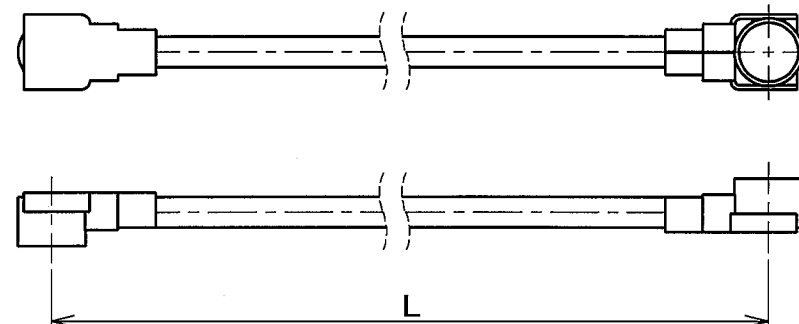
Type-1 PART NO.: 8□□□□□□□□□□ 0 0 0 0 0 1 □□



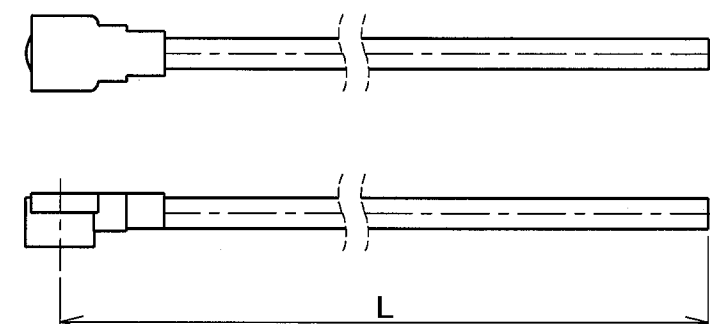
Type-4 PART NO.: 8□□□□□□□□□□ 0 0 0 0 0 4 □□



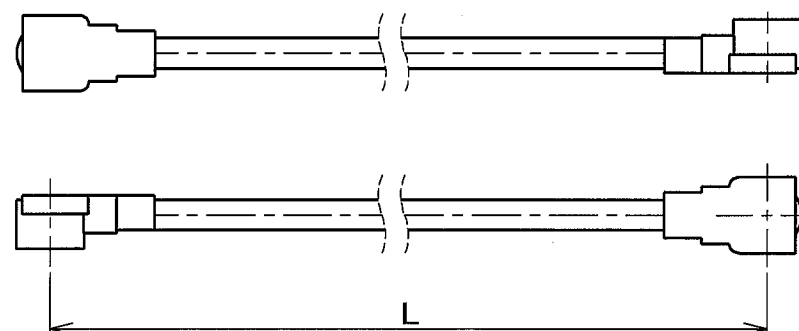
Type-2 PART NO.: 8□□□□□□□□□□ 0 0 0 0 0 2 □□



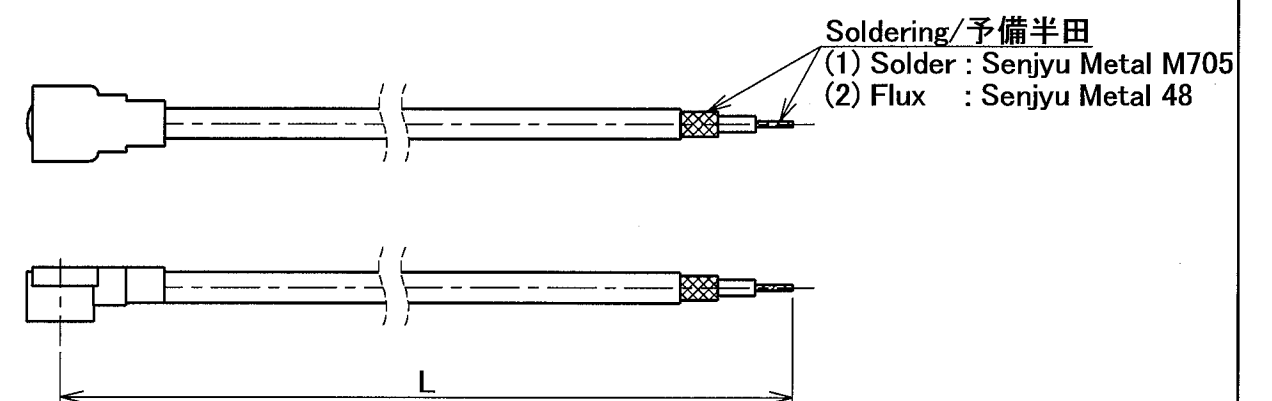
Type-5 PART NO.: 8□□□□□□□□□□ 0 0 0 0 0 5 □□



Type-3 PART NO.: 8□□□□□□□□□□ 0 0 0 0 0 3 □□



Type-6 PART NO.: 8□□□□□□□□□□ * * * * * □□



PART NO.: 8□□□□□□□□□□ ⑪⑫⑬⑭⑮⑯ □□

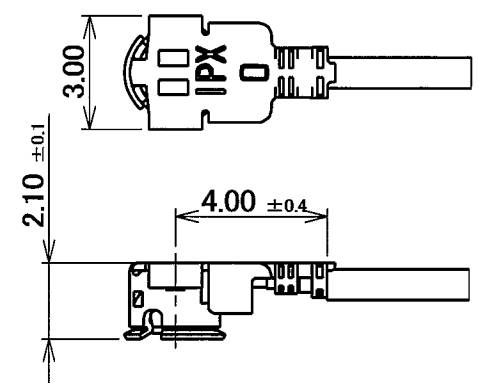
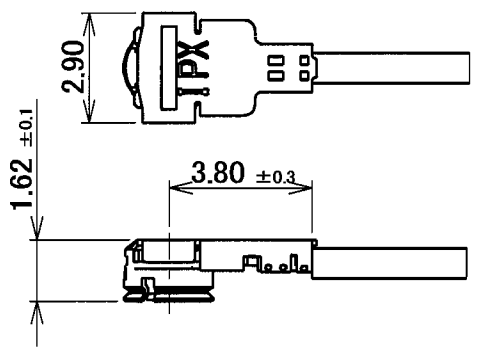
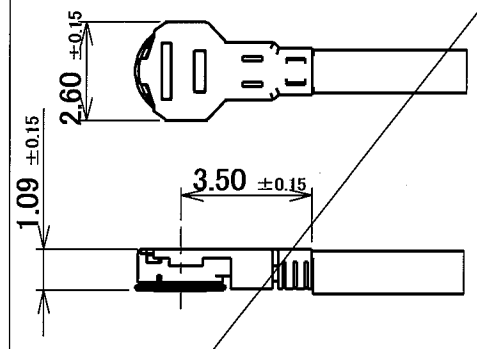
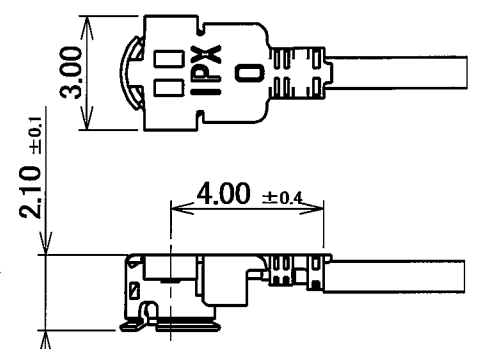
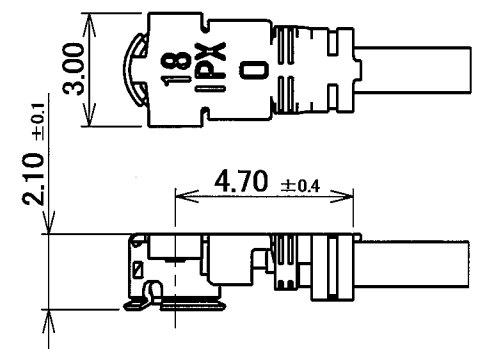
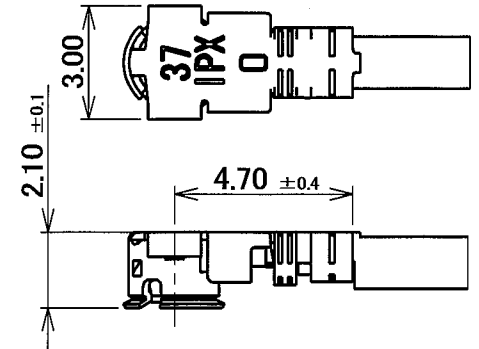
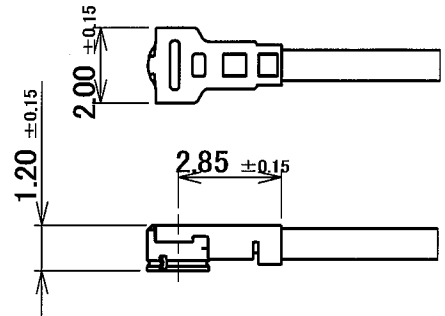
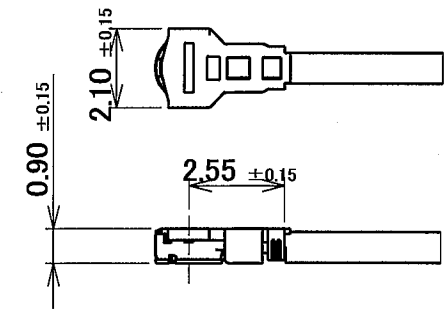
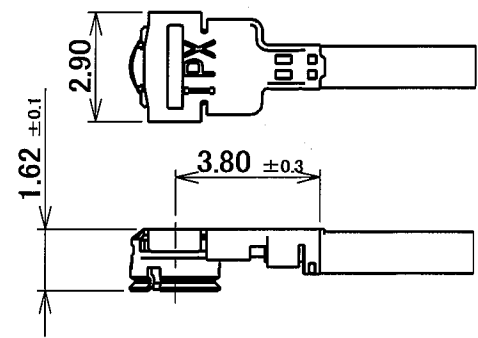
TYPE1~6

※ See page.6

REV ECN BY DATE APP					DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO,JAPAN				
					CHK'D BY	DATE					
					APP'D BY	DATE					
					REV.RECORD						
SERIES No.					CUSTOMER COPY	PROJECTION	SCALE	UNIT	DWG. No.	SHEET	REV.
							5:1	mm	80271	2/8	3

②③ Connector			
Code	Connector	Plating	HSG
0	Nothing	—	—
1			
2	MHF	Au	H/F
3			Non H/F
4			
5			H/F
6		Ag	Non H/F
7	MHF-A13	Au	H/F
8			
9			
A	MHF II	Au	H/F
B		Ag	H/F
C			
D			
E	MHF III	Au	H/F
F			
G			
H	MHF4	Au	H/F
J			
K			
L			
M	MHF-U	Au	H/F
N			
P			
Q			
R			
S			
T			
U			
V			
W			
X			
Y			
Z			

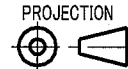
◆ mark means under development.

Au			Ag
MHF	MHF II	MHF-A13	MHF
 20278-***R-08 20278-***R-13 20278-***R-32	 20311-011R-08	 20428-001R	 20308-***R-13 20308-***R-32
 20278-***R-18			
 20351-***R-37			
Au			Ag
MHF III	MHF4	MHF4	MHF II
 20367-001R	 20448-001R-081		 20312-011R-08 ◆ 20312-011R-10 ◆ mark means under development.

PART NO. 8②③□□□□□□□□□□□□□□□□

Right position : CONNECTOR-2 (EX. E = MHF III(Au, H/F))
Left position : CONNECTOR-1 (EX. 2 = MHF(Au, H/F))

※ Please input the upper number or alphabet on the chart for "CONNECTOR-1(left position)".
For example, For input "1" and "E", Don't input "E" on left.

<table border="1"> <tr> <td>REV</td><td>ECN</td><td>BY</td><td>DATE</td><td>APP</td></tr> <tr> <td colspan="5">REV.RECORD</td></tr> <tr> <td colspan="5">SERIES No.</td></tr> </table>					REV	ECN	BY	DATE	APP	REV.RECORD					SERIES No.					DESIGN'D BY	DATE	 Interconnect and Packaging Electronics TOKYO,JAPAN
					REV	ECN	BY	DATE	APP													
					REV.RECORD																	
SERIES No.																						
CHK'D BY	DATE																					
APP'D BY	DATE																					
CUSTOMER COPY					PROJECTION	SCALE	UNIT	DWG. No.	SHEET	REV.												
						5:1	mm	80271	3/8	3												

P/N of cable ケーブル品番	Outside diamater 外径	Plating cable's outer conductor 外部導体メッキ	Plating cable's outer conductor 中心導体メッキ	Cable maker メーカー	Color 色	④+⑤+⑥ 番号
FWS-5020	0.81	Ag	Ag	Kurabe	white	92S
					black	92T
					gray	92U
					brown	92V
FWS-5033		Sn	Ag	Kurabe	white	9JS
					black	9JT
					gray	9JU
					brown	9JV
RF-MF5010		Ag	Ag	Nissei	white	927
					black	928
					gray	929
					brown	92A
BD-17661		Sn	Ag	Bando	white	9J1
					black	9J2
					gray	9J3
					brown	-
FWS-5022	1.13	Ag	Ag	Kurabe	white	E3S
					black	E3T
					gray	E3U
					brown	E3V
FWS-5030		Sn	Ag	Kurabe	white	EKS
					black	EKT
					gray	EKU
					brown	EKV
RF-MF5016		Ag	Ag	Nissei	white	E37
					black	E38
					gray	E39
					brown	E3A
RF-MF50161		Sn	Ag	Nissei	white	EK7
					black	EK8
					gray	EK9
					brown	EKA
BD-17057		Sn	Ag	Bando	white	EH1
					black	EH2
					gray	EH3
					brown	-
0.7DS-PBE(TA)		Sn	Ag	Sumitomo	white	EH4
					black	EH5
					gray	EH6
					brown	-
					blue	-
0.7DS-PBE		Ag	Ag	Sumitomo	white	E14
					black	E15
					gray	E16
					brown	-
					blue	-

P/N of cable ケーブル品番	Outside diamater 外径	Plating cable's outer conductor 外部導体メッキ	Plating cable's outer conductor 中心導体メッキ	Cable maker メーカー	Color 色	④+⑤+⑥ 番号
RF-MF5013	1.32	Sn	Ag	Nissei	white	MN7
					black	MN8
					gray	MN9
					brown	MNA
RF-MF50141	1.37	Sn	Ag	Nissei	white	QK7
					black	QK8
					gray	QK9
					brown	QKA
RG178B/U	1.8	Ag	Ag	Kurabe	white	Y3S
					black	Y3T
					gray	Y3U
					brown	Y3V
RG-178		Ag	Ag	Nissei	white	Y37
					black	Y38
					gray	Y39
					brown	Y3A
0.4DS-PBA	0.81	Sn	Ag	Sumitomo	white	9J4
					black	9J5
					gray	9J6
					brown	-
					blue	-

Part No.8□□④⑤⑥□□□□□□□□□□□□□□□□

Cable specifications

					DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO,JAPAN							
					CHK'D BY	DATE								
					APP'D BY	DATE								
REV	ECN	BY	DATE	APP	REV.RECORD		CUSTOMER COPY		PROJECTION	SCALE	UNIT	DWG. No.	SHEET	REV.
SERIES No.									⊕	5:1	mm	80271	4/8	3

Part No.8□□□□□⑦⑧⑨⑩□□□□□□□□

Cable length (30mm ≤ L ≤ 999.9mm)				
	⑦ 3rd	⑧ 2nd	⑨ 1st	⑩ the 1st. decimal
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

Ex : L=80.5mm
P/N: 8□□□□□0805□□□□□□□□

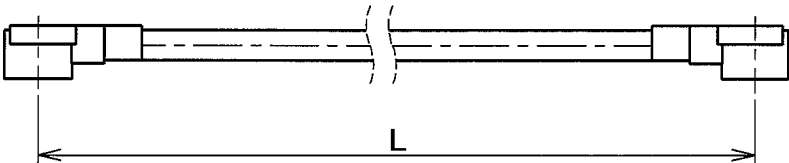
L=600.0mm
P/N: 8□□□□□6000□□□□□□□□

Cable length (100cm ≤ L ≤ 999cm)				
	⑦	⑧ 3rd.	⑨ 2nd.	⑩ 1st.
0	-	0	0	0
1	-	1	1	1
2	-	2	2	2
3	-	3	3	3
4	-	4	4	4
5	-	5	5	5
6	-	6	6	6
7	-	7	7	7
8	-	8	8	8
9	-	9	9	9
A	A	-	-	-

Ex : L=125cm
P/N: 8□□□□□A125□□□□□□□□

L=999cm
P/N: 8□□□□□A999□□□□□□□□

- ◆ mark means under development.
- ※ "A" means different units.
(Aは単位の違い(cm)を意味する)
- ※ When it's more than 1000mm, we order by 1cm units.
(1000mm以上の場合は、1cm単位とする。)



Tolerance of cable length(L)	
30mm ≤ L ≤ 200mm	±1.0mm
200mm < L ≤ 400mm	±4.0mm
400mm < L ≤ 600mm	±5.0mm
600mm < L ≤ 800mm	±7.0mm
800mm < L ≤ 999mm	±9.0mm
100cm < L ≤ 999cm	±1%

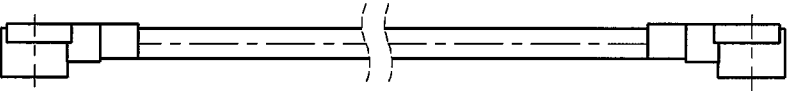
					DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN							
					CHK'D BY	DATE								
					APP'D BY	DATE								
REV	ECN	BY	DATE	APP	REV.RECORD		CUSTOMER COPY		PROJECTION	SCALE	UNIT	DWG. No.	SHEET	REV.
SERIES No.										-	mm	80271	5/8	3

Double end type (両端タイプ) 8□□□□□□□□□□00000⑩□□
Single end type-5 (片端タイプ-5) 8□□□□□□□□□□000005□□
Single end type-6 (片端タイプ-6) 8□□□□□□□□□□⑪⑫⑬⑭⑮⑯□□

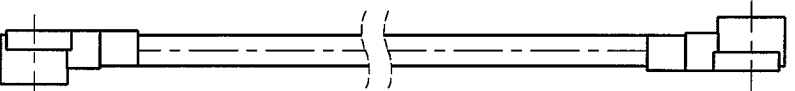
Type-6 Strip length						
Length(X)		Length(Y)		Length(Z)		
⑪(Integral)	⑫(Decimals)	⑬(Integral)	⑭(Decimals)	⑮(Integral)	⑯(Decimals)	
0	0	0	0	0	0	
1	1	1	1	1	1	
2	2	2	2	2	2	
3	3	3	3	3	3	
4	4	4	4	4	4	
5	5	5	5	5	5	
6	6	6	6	6	6	
7	7	7	7	7	7	
8	8	8	8	8	8	
9	9	9	9	9	9	
A	10	-	10	-	10	
B	11	-	11	-	11	
C	12	-	12	-	12	
D	13	-	13	-	13	
E	14	-	14	-	14	
F	15	-	15	-	15	
G	16	-	16	-	16	
H	17	-	17	-	17	
J	18	-	18	-	18	
K	19	-	19	-	19	
L	20	-	20	-	20	
M	21	-	21	-	21	
N	22	-	22	-	22	
P	23	-	23	-	23	
Q	24	-	24	-	24	
R	25	-	25	-	25	
S	26	-	26	-	26	
T	27	-	27	-	27	
U	28	-	28	-	28	
V	29	-	29	-	29	
W	30	-	30	-	30	
X	31	-	31	-	31	
Y	32	-	32	-	32	
Z	33	-	33	-	33	

◆mark means under development.

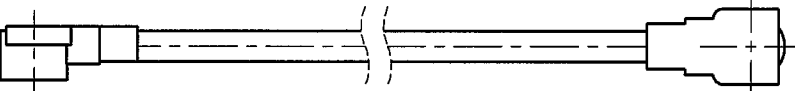
両端:Type1→ 000001



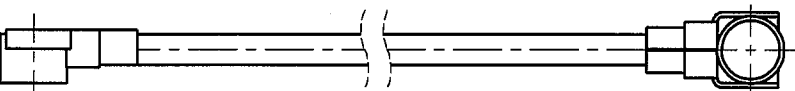
Type2→ 000002



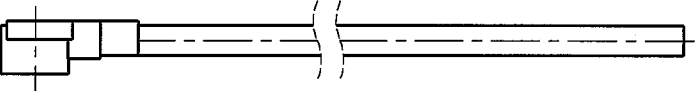
Type3→ 000003



Type4→ 000004



片端:Type5→ 000005

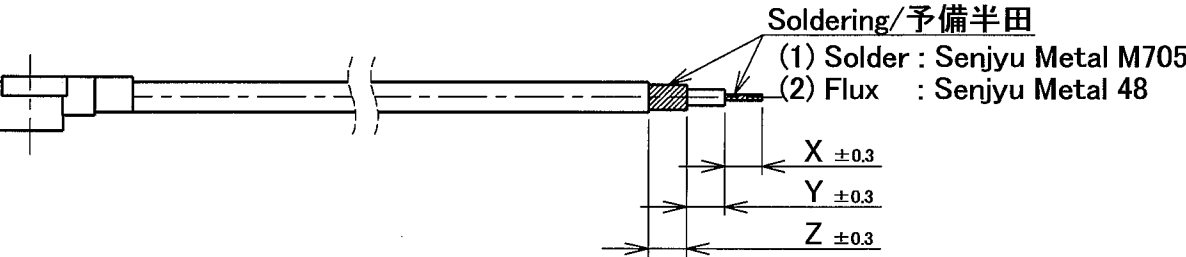


Type6→ *****

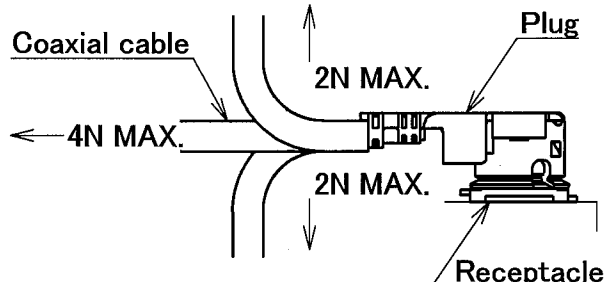
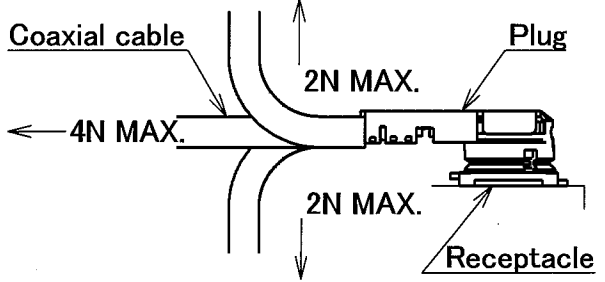
Type6 Ex : 101010 → X=1.0 Y=1.0 Z=1.0

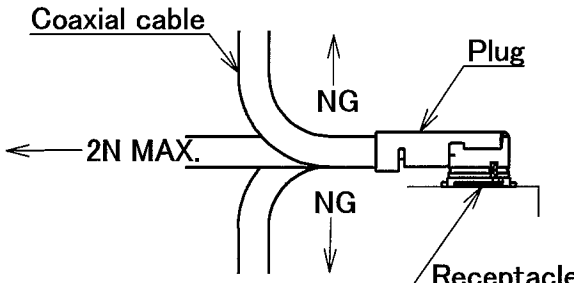
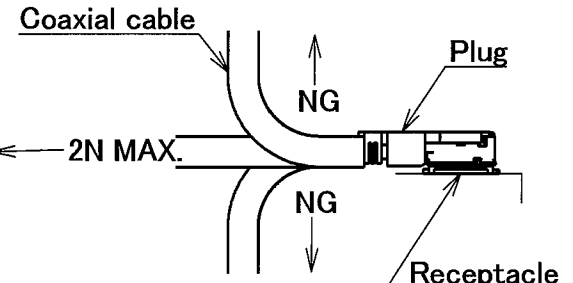
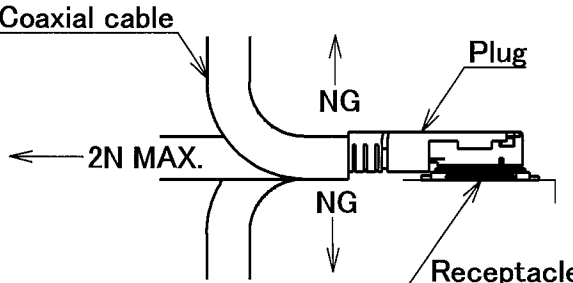
151930 → X=1.5 Y=1.9 Z=3.0

※ Strip length (max.)
X (3.0mm max.) + Y (3.0mm max.) + Z (3.0mm max.) = 9.0mm max.



REV ECN BY DATE APP					DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO,JAPAN		TITLE MHF Series cable ass'y				SCALE —	UNIT mm	DWG. No. 80271	SHEET 6/8	REV. 3
					CHK'D BY	DATE											
					APP'D BY	DATE											
					REV.RECORD		CUSTOMER COPY		PROJECTION								
SERIES No.																	

1.Material of connector P/N	MHF(Au) 20278-***R-**, 20351-***R-37	MHF(Ag) 20308-***R-**	MHF II (Au) 20311-***R-08	MHF II (Ag) 20312-***R-**
(1) Housing	PBT , UL94V-0	PBT , UL94V-0, Black	LCP , UL94V-0, Natural	LCP , UL94V-0, Natural
(2) Contact	phosphor bronze	phosphor bronze	phosphor bronze	phosphor bronze
	gold plating 0.1 μ m MIN.	gold plating 0.1 μ m MIN.	Au 0.1 μ m MIN.	Au 0.1 μ m MIN.
	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.
(3) Ground contact	phosphor bronze	phosphor bronze	phosphor bronze	phosphor bronze
	gold plating 0.05 μ m MIN.	silver plating 3 μ m MIN.	Au 0.05 μ m MIN.	Ag 2.5 μ m MIN.
	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.
2.Packing	bag	bag	bag	bag
3.Mating partner part No.	20279-001E-01	20314-001E-01	20279-001E-01	20314-001E-01
4. Permissible load of cable at mating				

1.Material of connector P/N	MHF III 20367-001R	MHF4 20448-001R-081	MHF A13 20428-001R
(1) Housing	LCP , UL94V-0, Natural	LCP , UL94V-0, Black	PBT , UL94V-0, Black
(2) Contact	phosphor bronze	phosphor bronze	phosphor bronze
	Au 0.1 μ m MIN.	gold plating 0.3 μ m MIN.	gold plating 0.3 μ m MIN.
	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.0 μ m MIN.
(3) Ground contact	phosphor bronze	phosphor bronze	phosphor bronze
	Au 0.05 μ m MIN.	gold plating 0.05 μ m MIN.	gold plating 0.05 μ m MIN.
	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.	over nickel 1.27 μ m MIN.
2.Packing	bag	bag	bag
3.Mating partner part No.	20369-001E-01	20449-001E	20249-001E
4. Permissible load of cable at mating			

REV ECN BY DATE APP DESIGN'D BY DATE CHK'D BY DATE APP'D BY DATE					Interconnect and Packaging Electronics TOKYO,JAPAN										
							TITLE MHF Series cable ass'y								
									CUSTOMER COPY	PROJECTION 	SCALE — mm	UNIT mm	DWG. No. 80271	SHEET 7/8	REV. 3
SERIES No.															

Notes

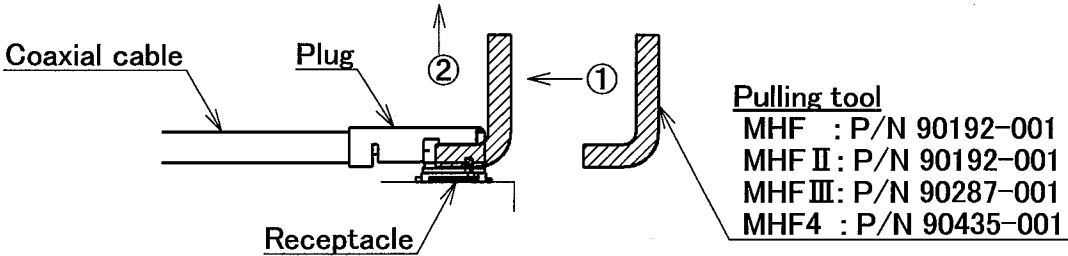
5. Suggestions for mating & unmating operation.

5-1 Mating.

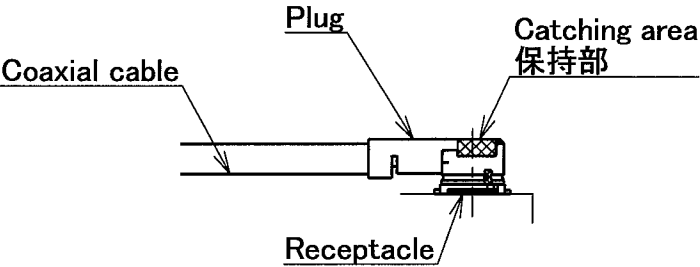
By the hand
Please mate the connector straightly to vertical direction as much as possible, adjusting the mating axis of plug and receptacle.
As excessive slant angle mating may break the connector, please don't do it.

5-2 Unmating.

5-2-1
In case of unmating by pulling tool.
Please use the pulling tool as the following drawing, and please pull plug to vertical direction as directly as possible.



5-2-2
In case of unmating directly by hand
Please catch the catching area of plug, and please pull plug to vertical direction as directly as possible.



5. コネクタかん合時および抜去時の注意

5-1 コネクタ挿入時

手で挿入する場合
PlugとReceptacleのかん合軸を合わせ、できるだけ垂直に挿入して下さい。
極端な斜め挿入は行わないで下さい。
コネクタ破損の原因となりますので、過度なこじり挿抜は行わないで下さい。

5-2 コネクタ抜去時

5-2-1
抜去ジグを用いる場合
下図のようにできるだけ垂直に引き抜いて下さい。

5-2-2
手で直接引き抜く場合
下図の保持部をつかみ、できるだけ垂直に引き抜いて下さい。

5-3 Crimp over standards of outer conductor

Standards: Less than 10% from total numbers of outer conductor (Numbers of outer conductor's crimp over from outer conductor's barrel)

5-4 Caution about Heat shrinkage tubes

Please be careful not to melt housing when using heat shrinkage tubes. It will become cause of open circuit.

6. This is "Pb-free" connector.

5-3 外部導体はみ出し量

外部導体はみ出し量規定
:外部導体トータル本数の10%以下
(外部導体バレルの外にはみ出した量)

5-4 熱収縮チューブについての注意
熱収縮チューブで外部導体を覆う場合は、導通不良の原因になりますので、熱によりハウジングを溶融させないように注意してください。

6. 本コネクタは"Pb-free"である

					DESIGN'D BY	DATE	I-PEX Interconnect and Packaging Electronics TOKYO, JAPAN				
					CHK'D BY	DATE					
					APP'D BY	DATE					
REV	ECN	BY	DATE	APP			TITLE MHF Series cable ass'y				
REV. RECORD					CUSTOMER COPY	PROJECTION 	SCALE	UNIT	DWG. No.	SHEET	REV.
SERIES No.							-	mm	80271	8/8	3