



## CATALOGUE

## USB/Micro USB



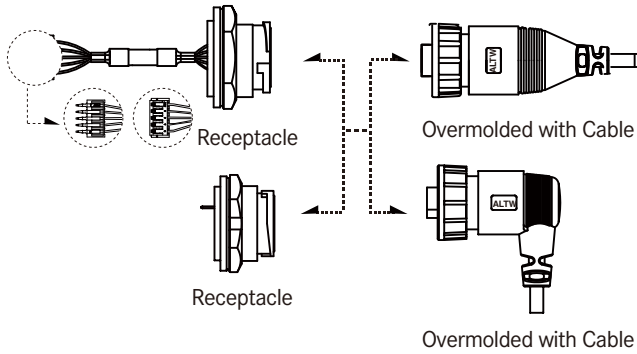
USB Type C



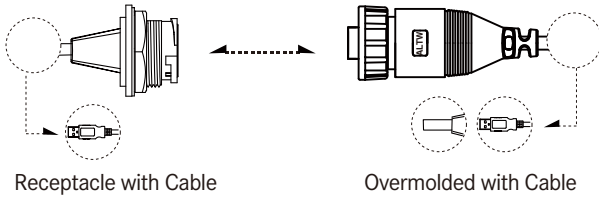
Micro USB

# Range Overview

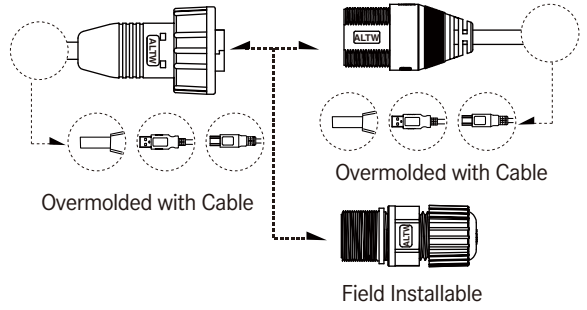
## Receptacle to Overmolded with Cable



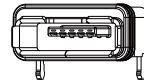
## Receptacle with Cable to Overmolded with Cable



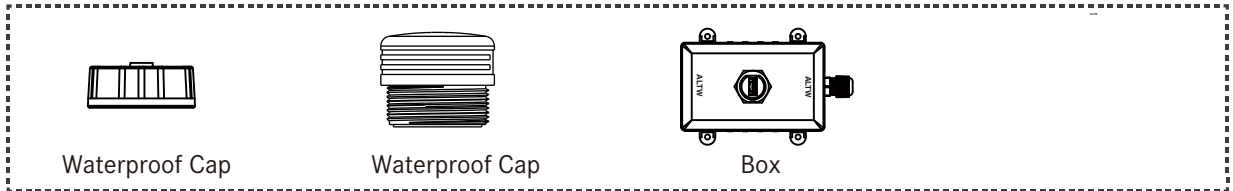
## In-Line



## Micro USB



## Accessories



【Note】 Design and specification are subject to change without notice.

## Specification | USB Type A/B

<b>Identifications</b>	USB Type A 3.0 USB Type A 2.0 USB Type B 2.0 Mini USB Type B 2.0
<b>Description</b>	Receptacle Receptacle With Cable Overmolded with Cable Field Installable
<b>Current Rating / Data</b>	USB 2.0: 1.5A USB 3.0: 1A
<b>Material</b>	Contacts: Copper Alloy, Gold Plated Connector Body (Housing): PBT, UL94V-0
<b>Waterproof Rating</b>	IP67/68
<b>Temperature Range</b>	Receptacle: Nylon+GF: -40°C~105°C M-PPE: -40°C~105°C ABS: -20°C~80°C Receptacle with cable: Nylon+GF: -20°C~105°C ABS: -20°C~80°C Overmolded with Cable: -20°C~80°C Field Installable: -20°C~80°C
<b>Contact Resistance</b>	≤ 30mΩ
<b>Insulation Resistance</b>	≥ 1000MΩ at DC500V
<b>More to know</b>	Standard Cable Length - USB 2.0: 1 ~ 5m - USB 3.0: 1 ~ 3m - Mini USB: 1 ~ 4m

## Specification | USB Type C

<b>Identifications</b>	USB Type C 3.1
<b>Description</b>	Receptacle Overmolded with Cable
<b>Current Rating / Data</b>	3A
<b>Material</b>	Contacts: Copper Alloy, Gold Plated Connector Body (Housing): PP, UL94V-0, f1 Rated
<b>Waterproof Rating</b>	IP68
<b>Temperature Range</b>	-40°C ~ 105°C
<b>Contact Resistance</b>	≤ 50mΩ
<b>Insulation Resistance</b>	≥ 100MΩ at DC500V
<b>More to know</b>	Standard Cable Length: 1 ~ 3m

【Note】 Design and specification are subject to change without notice.

# Ordering Information | USB & Mini USB

	1	2	3	4	5	6	7	8	9	10
<b>Specification</b>										
( <b>UA</b> ) USB Type A										
( <b>UB</b> ) USB Type B										
( <b>UC</b> ) USB Type C										
( <b>NUB</b> ) Mini USB Type B										
<b>Data Transfer Rate</b>										
( <b>20</b> ) 2.0										
( <b>30</b> ) 3.0										
( <b>31</b> ) 3.1 (Jack)										
( <b>G1</b> ) 3.1 Gen 1 (Plug)										
( <b>G2</b> ) 3.1 Gen 2 (Plug)										
<b>Connector Body (Style)</b>										
> For Receptacle										
( <b>P</b> ) Front Fastened										
> For Field installable										
( <b>B</b> ) Without Strain Relief										
> For Overmolded with Cable										
( <b>A</b> ) With Strain Relief										
( <b>B</b> ) Without Strain Relief										
<b>Connector (Housing) Gender</b>										
( <b>M</b> ) Male										
( <b>F</b> ) Female										
<b>Contact Gender</b>										
( <b>M</b> ) Male (Plug)										
( <b>F</b> ) Female (Jack)										
<b>Assemble Style</b>										
> For Receptacle										
( <b>P</b> ) 180° PCB Type										
( <b>R</b> ) 90° PCB Type										
( <b>J</b> ) Jack										
> For Overmolded with Cable										
( <b>M</b> ) Overmolded with Cable										
> For Field Installable										
( <b>A</b> ) Field installable (Solder)										
<b>Mating Style</b>										
( <b>S</b> ) Screw Thread										
( <b>N</b> ) 2 Points Lock Bayonet (Nut OD: 25.4mm)										
( <b>L</b> ) 2 Points Lock Bayonet (Nut OD: 28.5mm)										
( <b>Q</b> ) Quick Lock										
<b>Backshell</b>										
> For Receptacle										
( <b>C</b> ) Circular										
( <b>S</b> ) Square										
> For Overmolded with Cable										
( <b>L</b> ) Straight										
( <b>R</b> ) Right Angle										
> For Field Installable										
( <b>L</b> ) Straight										
<b>Waterproof Rating</b>										
( <b>7</b> ) IP 67										
( <b>8</b> ) IP 68										
<b>More Information</b>										
> For Receptacle										
( <b>001</b> ) Without Cable										
( <b>002</b> ) With Cable (Harness: 50mm)										
> For Overmolded with Cable										
(□)+(■) : Cable Type + Cable Length										
e.g. ( <b>A01</b> ) = USB 2.0 Cable + 1M										
□ : Cable Type										
( <b>A</b> ) USB 2.0 Cable										
( <b>B</b> ) USB 3.0 Cable										
( <b>C</b> ) USB 3.1 Cable										
■ : Cable Length										
USB 2.0: From 1m to 5m										
USB 3.0: From 1m to 3m										
Mini USB 2.0: From 1m to 4m										
e.g. ( <b>01</b> ) = 1M										

# Ordering Information | USB | Double-ended

ALTW waterproof connector to ALTW waterproof connector

ALTW waterproof connector to Standard USB connector (None Waterproof)

	1	2	3	4	5	6	7	8	9	
<b>Specification (1st End)</b>										
(UA) USB Type A			(UC) USB Type C							
(UB) USB Type B										
<b>Data Transfer Rate</b>										
(20) 2.0			(G1) 3.1 Gen 1 (Plug)							
(30) 3.0			(G2) 3.1 Gen 2 (Plug)							
(31) 3.1 (Jack)										
<b>Connector Body (Style)</b>										
> For Receptacle			> For Overmolded with Cable							
(P) Front Fastened			(A) With Strain Relief							
			(B) Without Strain Relief							
<b>Connector (Housing) Gender</b>										
(M) Male			(F) Female							
<b>Contact Gender</b>										
(M) Male (Plug)			(F) Female (Jack)							
<b>Mating Style</b>										
(S) Screw Thread			(L) 2 Points Lock Bayonet (Nut OD: 28.5mm)				(Q) Quick Lock			
<b>Specification (2nd End)</b>										
(A) USB Type A 2.0 (Plug, Non-waterproof)			(E) USB Type C 3.1 Gen1 (Plug, Waterproof)							
(B) USB Type B 2.0 (Plug, Non-waterproof)			(F) USB Type C 3.1 Gen2 (Plug, Waterproof)							
(D) USB Type A 3.0 (Plug, Non-waterproof)										
<b>Waterproof Rating</b>										
(6) IP 66										
(7) IP 67										
(8) IP 68										
<b>More Information</b>										
> For Receptacle with Cable			> For Overmolded with Cable							
(□)+(■) : Cable Type + Cable Length			(□)+(■) : Cable Type + Cable Length							
e.g. (BX15) = USB 3.0 Cable + 150mm			e.g. (A01) = USB 2.0 Cable + 1M							
(□) : Cable Type			(□) : Cable Type							
(■) : Cable Length			(■) : Cable Length							
(B) USB 3.0 Cable			(A) USB 2.0 Cable							
USB 3.0: From 150mm to 300 mm			USB 2.0: From 1m to 5m							
e.g. (15) = 150mm			USB 3.0: From 1m to 3m							
			e.g. (01) = 1M							
			(C) USB 3.1 Cable							

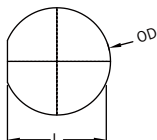
【Note】 Design and specification are subject to change without notice.

# Physical Dimension | USB

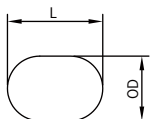
## Receptacle

Panel Cut-Out

Type A/B



Type C

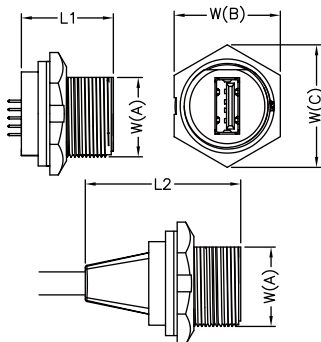


Type		Mating Style	Housing Gender	L	OD
USB2.0	Type A	Screw Thread	Male	19.4	20.8
		2 Points Lock Bayonet		19.4	20.8
	Type B	Screw Thread		19.4	20.8
		2 Points Lock Bayonet		23.6	25.6
USB3.0	Type A	Screw Thread		19.4	20.8
		2 Points Lock Bayonet		23.6	25.6
Mini USB	-	Screw Thread	14.8	15.6	
USB3.1	Type C	Quick	Female	16.7	11.3

\* Maximum Panel Thickness: USB: 4mm | Mini USB: 2.5mm

Unit: mm

Connector Dimension



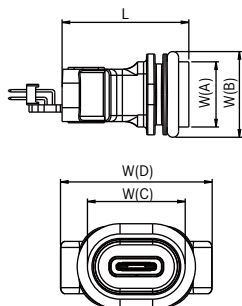
Receptacle with Cable

Type	Mating Style	Housing Gender	W(A)	W(B)	W(C)	L1	L2
USB2.0	Type A	Screw Thread	19.0	25.4	29.3	22.0	-
		2 Points Lock Bayonet	23.2	28.5	32.9	20.3	-
	Type B	Screw Thread	19.0	25.4	29.3	22.0	-
		2 Points Lock Bayonet	23.2	28.5	32.9	20.3	-
USB3.0	Type A	Screw Thread	19.0	25.4	29.3	-	37.2
		2 Points Lock Bayonet	23.2	28.5	32.9	-	37.5
Mini USB	-	Screw Thread	14.5	20.6	23.5	15.0	-

\* USB: Screw | Middle Size (13/16"-28 UNS)  
2 Points Lock Bayonet | Large Size (1"20 UNEF)

\*Mini USB: Screw | Standard Size (5/8"-27 UNS)

Unit: mm



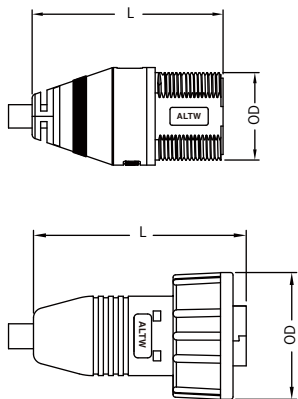
Type	Mating Style	Housing Gender	W(A)	W(B)	W(C)	W(D)	L1	
USB3.1	Type C	Quick	Female	10.8	14.2	19.6	25.1	21.0

\*Recommended Screw Size: M2x0.4x10mmL (min.)

Unit: mm



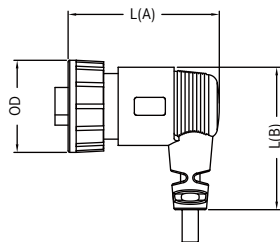
↳ **Overmolded with Cable**



Type		Mating Style	Housing Gender	L	OD
USB2.0	Type A	Screw Thread	Female	42.6	25.4
			Male	45.0	20.6
		2 Points Lock Bayonet	Female	73.3	28.5
			Male	-	-
	Type B	Screw Thread	Female	42.6	25.4
			Male	45.0	20.6
2 Points Lock Bayonet		Female	73.3	28.5	
		Male	-	-	
USB3.0	Type A	Screw Thread	Female	42.6	42.6
			Male	45.0	20.6
		2 Points Lock Bayonet	Female	75.0	28.5
			Male	-	-

\* USB: Screw | Middle Size (13/16"-28 UNS)  
 2 Points Lock Bayonet | Large Size (1"20 UNEF)  
 \*Mini USB: Screw | Standard Size (5/8"-27 UNS)

Unit: mm



Type		Mating Style	Housing Gender	L(A)	L(B)	OD
USB2.0	Type A	Screw Thread	Female	-	-	-
		2 Points Lock Bayonet		46.8	44.1	28.5
	Type B	Screw Thread		-	-	-
		2 Points Lock Bayonet		46.8	44.1	28.5
USB3.0	Type A	Screw Thread		-	-	-
		2 Points Lock Bayonet		-	-	-
Mini USB	-	Screw Thread		-	-	-

\* USB: Screw | Middle Size (13/16"-28 UNS)  
 2 Points Lock Bayonet | Large Size (1"20 UNEF)

Unit: mm

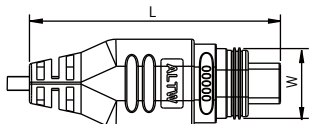
【Note】 Design and specification are subject to change without notice.

# USB/Micro USB | Physical Dimension

USB Type A/B/C | Mini USB Type B

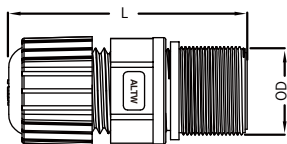
Receptacle | Overmolded with Cable | Field Installable

**IP 67 . 68**  
Unmated or Mated



Type		Mating Style	Housing Gender	W	L
USB2.0/3.0	Type C	Quick Lock	Male	14.2	51.1

Unit: mm



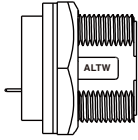
Type		Mating Style	Housing Gender	L	OD	
USB2.0	Type A	Screw Thread	Male	56.0	20.6	
		2 Points Lock Bayonet		-	-	
	Type B	Screw Thread		56.0	20.6	
		2 Points Lock Bayonet		-	-	
USB3.0	Type A	Screw Thread		-	-	
		2 Points Lock Bayonet		-	-	
Mini USB	-	Screw Thread			45.0	15.45

Unit: mm

- \* USB: Screw | Middle Size (13/16"-28 UNS)  
2 Points Lock Bayonet | Large Size (1"20 UNEF)
- \* Mini USB: Screw | Standard Size (5/8"-27 UNS)

# Product Features | USB

## Receptacle



**Backshell 8**

Circular (C)

**Mating Style 7**

Screw Thread (S)

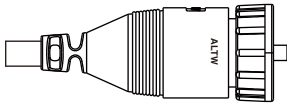
2 Points Lock Bayonet (L)  
(Nut OD: 28.5mm)

2 Points Lock Bayonet (N)  
(Nut OD: 25.4mm)

**Connector Body (Style) 3**

Front Fastened (P)

## Overmolded with Cable



**Backshell 8**

Straight (L)

Right Angle (R)

**Mating Style 7**

Screw Thread (S)

2 Points Lock Bayonet (L)  
(Nut OD: 28.5mm)

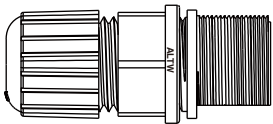
2 Points Lock Bayonet (N)  
(Nut OD: 25.4mm)

**Connector Body (Style) 3**

With Strain Relief (A)

Without Strain Relief (B)

## Field Installable



**Backshell 8**

Straight (L)

**Mating Style 7**

Screw Thread (S)


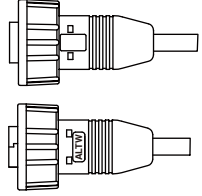
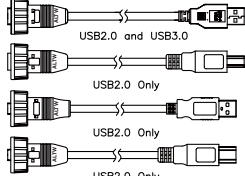
**Connector Body (Style) 3**

Without Strain Relief (B)


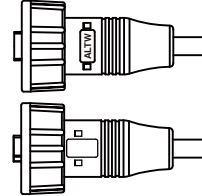
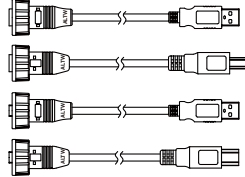
【Note】 Design and specification are subject to change without notice.

# Find Our Standard Products | USB

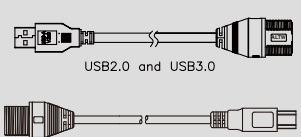
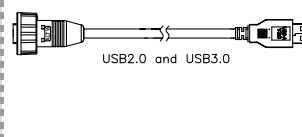
## USB > In-line

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Middle Size (13/16"-28 UNS)</li> </ul>	<p>Overmolded with Cable-----&gt;</p> 	<p>Overmolded with Cable -----&gt;</p> 	<p>Overmolded with Cable (Double-Ended)</p>  <p>Non-Waterproof</p>
	<p>** USB 2.0: Choose the cable length from 01~05m ** USB 3.0: Choose the cable length from 01~03m</p>	<p>** USB 2.0: Choose the cable length from 01~05m ** USB 3.0: Choose the cable length from 01~03m</p>	<p>** USB 2.0: Choose the cable length from 01~05m ** USB 3.0: Choose the cable length from 01~03m</p>
Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)	Female Connector (F) Male Contacts (M)
USB Type A 2.0	UA-20AMFM-SL7AXX**	UA-20BFMM-SL7AXX**	UA-20BFM-SA7AXX** UA-20BFM-SB7AXX**
USB Type B 2.0	UB-20AMFM-SL7AXX**	UB-20BFMM-SL7AXX**	UB-20BFM-SA7AXX** UB-20BFM-SB7AXX**
USB Type A 3.0	UA-30AMFM-SL7BXX**	UA-30BFMM-SL7BXX**	UA-30BFM-SD7BXX**

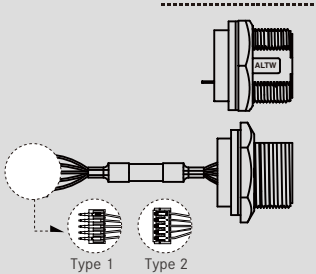
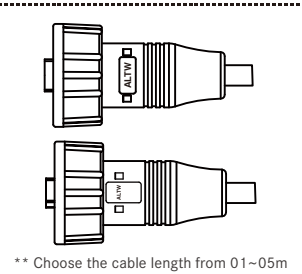
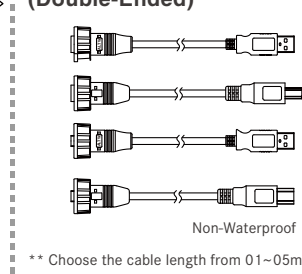
## USB > In-line

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Middle Size (13/16"-28 UNS)</li> </ul>	<p>Field Installable -----&gt;</p> 	<p>Overmolded with Cable -----&gt;</p> 	<p>Overmolded with Cable (Double-Ended)</p>  <p>Non-Waterproof</p>
		<p>** USB 2.0: Choose the cable length from 01~05m</p>	<p>** USB 2.0: Choose the cable length from 01~05m</p>
Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)	Female Connector (F) Male Contacts (M)
USB Type A 2.0	UA-20BMFA-SL8001	UA-20BFMM-SL7AXX**	UA-20BFM-SA7AXX** UA-20BFM-SB7AXX**
USB Type B 2.0	UB-20BMFA-SL8001	UB-20BFMM-SL7AXX**	UB-20BFM-SA7AXX** UB-20BFM-SB7AXX**

↳ **USB > In-line**

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Middle Size (13/16"-28 UNS)</li> </ul>	<p><b>Overmolded with Cable (Double-Ended)</b></p>  <p>USB2.0 and USB3.0</p>	<p><b>Overmolded with Cable (Double-Ended)</b></p>  <p>USB2.0 and USB3.0</p>	<p><b>Field Installable</b></p>
	<p>** USB 2.0: Choose the cable length from 01~05m ** USB 3.0: Choose the cable length from 01~03m</p>		
Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)	Female Connector (F) Male Contacts (M)
USB Type A 2.0	UA-20AMF-SA7AXX** UA-20AMF-SB7AXX**	UA-20BFM-SA7AXX** UA-20BFM-SA7AXX**	-
USB Type A 3.0	UA-30AMF-SD7BXX**	UA-30BFM-SD7BXX**	-
USB Type B 2.0	UB-20AMFM-SA7AXX** UB-20AMFM-SB7AXX**	UB-20BFM-SA7AXX** UB-20BFM-SB7AXX**	-

↳ **USB > Receptacle and Mating Pair**

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Middle Size (13/16"-28 UNS)</li> </ul>	<p><b>Receptacle</b></p>  <p>Type 1 Type 2</p>	<p><b>Overmolded with Cable</b></p>  <p>** Choose the cable length from 01~05m</p>	<p><b>Overmolded with Cable (Double-Ended)</b></p>  <p>Non-Waterproof ** Choose the cable length from 01~05m</p>
	<p>** Choose the cable length from 01~05m</p>		
Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)	Female Connector (F) Male Contacts (M)
USB Type A 2.0	UA-20PMFP-SC8001 UA-20PMFP-SC8002 Type1 UA-20PMFP-SC8003 Type2	UA-20BFMM-SL7AXX**	UA-20BFM-SA7AXX** UA-20BFM-SB7AXX**
USB Type B 2.0	UB-20PMFP-SC8001 UB-20PMFP-SC8002 UB-20PMFP-SC8003	UB-20BFMM-SL7AXX**	UB-20BFM-SA7AXX** UB-20BFM-SB7AXX**

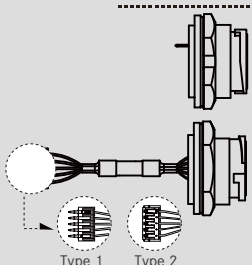
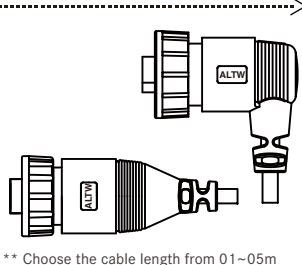
[Note] Design and specification are subject to change without notice.

**USB Type A | Type B**

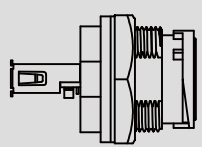
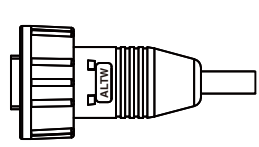
Receptacle and Mating Pair  
2 Points Lock Bayonet  
Large Size

**IP 67 . 68**  
Unmated or Mated

↳ **USB > Receptacle and Mating Pair**

<ul style="list-style-type: none"> <li>• <b>Male Connector (Housing)</b></li> <li>• <b>Female Contacts</b></li> <li>• <b>2 Points Lock Bayonet</b> (Nut OD: 28.5mm)</li> <li>• <b>Large Size</b> (1"20 UNEF)</li> </ul>	<p>Receptacle -----&gt;</p>  <p>Type 1    Type 2</p>	<p>Overmolded with Cable -----&gt;</p>  <p>** Choose the cable length from 01~05m</p>	Field Installable
	Speed	Male Connector <b>(M)</b> Female Contacts <b>(F)</b>	Female Connector <b>(F)</b> Male Contacts <b>(M)</b>
USB Type A 2.0	UA-20PMFP-LC7001 UA-20PMFP-LC7002 Type1 UA-20PMFP-LC7003 Type2	UA-20AFMM-LL7A <u>XX</u> ** UA-20AFMM-LR7A <u>XX</u> **	-
USB Type B 2.0	UB-20PMFP-LC7001 UB-20PMFP-LC7002 UB-20PMFP-LC7003	UB-20AFMM-LL7A <u>XX</u> ** UB-20AFMM-LR7A <u>XX</u> **	-

↳ **USB > Receptacle and Mating Pair**

<ul style="list-style-type: none"> <li>• <b>Male Connector (Housing)</b></li> <li>• <b>Female Contacts</b></li> <li>• <b>2 Points Lock Bayonet</b> (Nut OD: 25.4mm)</li> <li>• <b>Large Size</b> (13/16-28 UN)</li> </ul>	<p>Receptacle -----&gt;</p> 	<p>Overmolded with Cable -----&gt;</p>  <p>** Choose the cable length from 01~05m</p>	Field Installable
	Speed	Male Connector <b>(M)</b> Female Contacts <b>(F)</b>	Female Connector <b>(F)</b> Male Contacts <b>(M)</b>
USB Type A 2.0	UA-20PMFJ-NC7001	UA-20BFMM-NL7A <u>XX</u> **	-

### ➤ USB > Receptacle with Cable and Mating Pair

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• 2 Points Lock Bayonet (Nut OD: 28.5mm)</li> <li>• Large Size (1"20 UNEF)</li> </ul>	<p><b>Receptacle with Cable (Double-Ended)</b></p> <p>Non-Waterproof</p> <p>* USB 3.0: Choose the cable length from 150~300mm</p>	<p><b>Overmolded with Cable</b></p> <p>** USB 3.0: Choose the cable length from 01~03m</p>	<p><b>Overmolded with Cable (Double-Ended)</b></p> <p>** USB 3.0: Choose the cable length from 01~03m</p>
	Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
USB Type A 3.0	UA-30PMF-LD7BXX* UA-30PMF-SD7BXX*	UA-30AFMM-LL7BXX** UA-30BFMM-SL7BXX**	UA-30BFM-SD7BXX** UA-30AFM-LD7BXX**

### ➤ USB > Receptacle and Mating Pair

<ul style="list-style-type: none"> <li>• Female Connector (Housing)</li> <li>• Female Contacts</li> <li>• Quick Lock</li> <li>• Speed of Jack: USB Type C 3.1</li> </ul>	<p><b>Receptacle</b></p>	<p><b>Overmolded with Cable (Double-Ended)</b></p> <p>1st End                      2nd End</p> <p>② Choose the data transfer rate (G1) 3.1 Gen 1 or (G2) 3.1 Gen 2 *XX: Choose the cable length from 01~03m</p>	<p><b>Field Installable</b></p>
	Speed of Plug	Female Connector (F) Female Contacts (F)	Male Connector (M) Male Contacts (M)
1st End: USB Type C 3.1 Gen 1/Gen 2 2nd End: USB Type C 3.1 Gen 1/Gen 2	UC-31PFFP-QS8001	UC-② AMM-QE8CXX* UC-② AMM-QF8CXX*	-
1st End: USB Type C 2.0 2nd End: USB Type A 2.0	-	UC-20AMM-QA8AXX*	-
1st End: USB Type C 3.0 2nd End: USB Type B 2.0	-	UC-30AMM-QD8BXX*	-

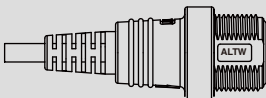
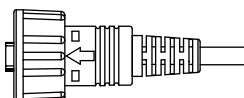
[ Note ] Design and specification are subject to change without notice.

Mini USB Type B

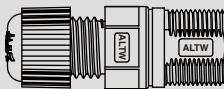
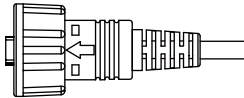
In-line  
Screw Thread  
Standard Size

**IP 67 . 68**  
Unmated or Mated

↳ Mini USB > In-line

<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Standard Size (5/8"-27 UNS)</li> </ul>	<p>Overmolded with Cable-----&gt;</p>  <p>** Choose the cable length from 01~04m</p>	<p>Overmolded with Cable-----&gt;</p>  <p>** Choose the cable length from 01~04m</p>	Field Installable
	Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
Mini USB Type B 2.0	NUB-20AMFM-SL7AXX**	NUB-20AFMM-SL7AXX**	-

↳ Mini USB > In-line

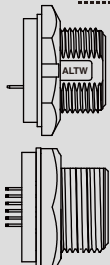
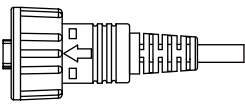
<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Standard Size (5/8"-27 UNS)</li> </ul>	<p>Field Installable -----&gt;</p> 	<p>Overmolded with Cable-----&gt;</p>  <p>** Choose the cable length from 01~04m</p>	Field Installable
	Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)
Mini USB Type B 2.0	NUB-20BMFA-SL7001	NUB-20AFMM-SL7AXX**	-



**Mini USB Type B**

Receptacle and Mating Pair  
Screw Thread  
Standard Size

↳ **Mini USB > Receptacle and Mating Pair**

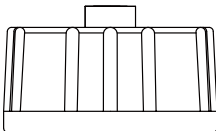
<ul style="list-style-type: none"> <li>• Male Connector (Housing)</li> <li>• Female Contacts</li> <li>• Screw Thread</li> <li>• Standard Size (5/8"-27 UNS)</li> </ul>	<p>Receptacle -----&gt;</p> 	<p>Overmolded with Cable -----&gt;</p> 	<p>Field Installable</p>
	<p>** Choose the cable length from 01-04m</p>		
Speed	Male Connector (M) Female Contacts (F)	Female Connector (F) Male Contacts (M)	Female Connector (F) Male Contacts (M)
Mini USB Type B 2.0	NUB-20PMFP-SC7001 NUB-20PMFR-SC7001	NUB-20AFMM-SL7A <u>XX</u> **	-

【Note】 Design and specification are subject to change without notice.

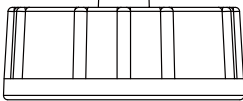
# Accessories

## USB A/B Type > Waterproof Cap

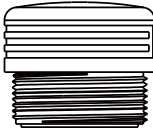
■ Customized - Upon Request



\* USB Screw (Mating Pair: Male)



2 Points Lock Bayonet



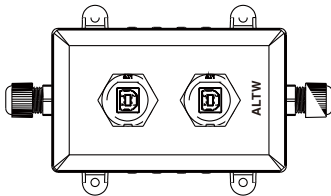
\* USB Screw (Mating Pair: Female)

⑥ More to choose: None (A) / With Chain (B) / With Rubber Lead (C) / With Fish Line (D)

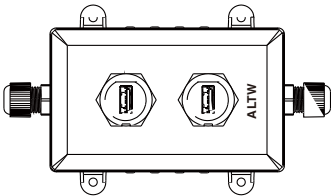
Type	Mating Pair	Mating Style	Mating Pair (Gender)	P/N
USB 2.0 Type A USB 2.0 Type B USB 3.0 Type A	Receptacle	Screw Thread	Male	CAP-WACMSP ⑥ 1
		2 Points Lock Bayonet (1"20 UNEF)	Male	CAP-WADMLP ⑥ 1
	Receptacle and Overmolded with Cable	Screw Thread	Male	CAP-WACMSMA1
		2 Points Lock Bayonet (1"20 UNEF)	Male	CAP-WADMLMA1
Overmolded with Cable	Screw Thread	Female	CAP-WUSFSCC1	
USB 2.0 Type A	Receptacle	2 Points Lock Bayonet (13/16"-28 UNS)	Male	CAP-WCCMLMA1 CAP-WCCMLPB1 CAP-WCCMLPC1

## USB A/B Type > Box

■ Customized - Upon Request



USB Type B 2.0



USB Type A 2.0

Type	Ports	P/N
USB Type A 2.0	1	BOX-USA11
	2	BOX-USA22
	4	BOX-USA44
USB Type B 2.0	1	BOX-USB11
	2	BOX-USB22
	4	BOX-USB44

## Specification | Micro USB

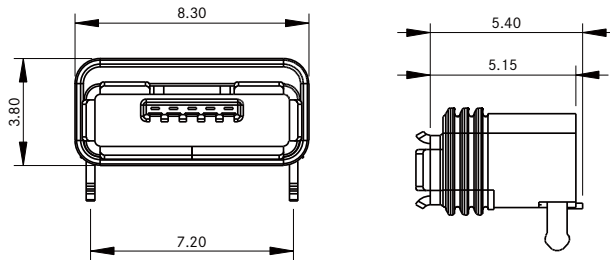
<b>Identifications</b>	Micro USB: AB Type
<b>Description</b>	Receptacle
<b>Current Rating</b>	1pin & 5pin: 1.8A 2pin, 3pin & 4pin: 1A
<b>Materials</b>	Contacts: Copper Alloy, Gold Plated Connector Body (Housing): Nylon, Black Shell: Stainless, Gold Plated Inner Gasket: Silicone, Transparent Outside Gasket: Silicone, Transparent
<b>Waterproof Rating</b>	IP67/68
<b>Temperature Range</b>	-30°C ~ 85°C
<b>Contact Resistance</b>	≤30mΩ
<b>Insulation Resistance</b>	≥ 1000MΩ at 100Vdc
<b>Durability</b>	10,000 Cycles
<b>More to Know</b>	SMT Temperature & Time: 260°C/5Sec

【Note】 Design and specification are subject to change without notice.

# Ordering Information | Micro USB

	1	2	3	4	5	6	7	8	9	10
<b>Specification</b>										
<b>(MUC) Micro USB</b>										
<b>Data Transfer Rate</b>										
<b>(20) 2.0</b>										
<b>Connector Body (Style)</b>										
> <u>For Receptacle</u>										
<b>(P) Front Fastened</b>										
<b>Connector (Housing) Gender</b>										
<b>(F) Female</b>										
<b>Contact Gender</b>										
<b>(F) Female (Jack)</b>										
<b>Assemble Style</b>										
> <u>For Receptacle</u>										
<b>(R) 90° PCB Type</b>										
<b>Mating Style</b>										
<b>(J) For Joint</b>										
<b>Backshell</b>										
> <u>For Receptacle</u>										
<b>(S) Square</b>										
<b>Waterproof Rating</b>										
<b>(70) IP67 (1M depth of water in 30min)</b>										
<b>(8A) IP68 (1M depth of water in 24hrs)</b>										
<b>(8B) IP68 (5M depth of water in 24hrs)</b>										
<b>(8C) IP68 (10M depth of water in 3hrs)</b>										
<b>More information</b>										
<b>(01), (02)....</b>										
Without Cable: Different Versions										

## Physical Dimension | Micro USB



Unit: mm

## Find Our Standard Products | Micro USB

### Micro USB

Waterproof Rating	Part Number
IP67 (1M, 30mins)	MUC-20PFFR-JS7002
IP68 (1M, 24hrs)	MUC-20PFFR-JS8A02
IP68 (5M, 24hrs)	MUC-20PFFR-JS8B02
IP68 (10M, 3hrs)	MUC-20PFFR-JS8C02

【Note】 Design and specification are subject to change without notice.

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