CX Series

## **USB Type-C Connector**







# USB from Hirose Electric: Standard connections, inspired solutions.

## Overview

The CX Series connectors conform to the next-generation USB standard USB Type-C<sup>®</sup>. Its use as a standard interface is expected to spread to a wide variety of devices in the consumer, industrial machinery and automotive markets.

USB Type-C<sup>®</sup> is a registered trademark of USB Implementers Forum, Inc.

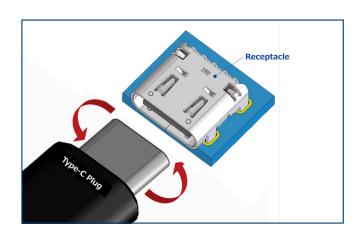
## **Features**

## USB Type-C compliant interface connector

- High speed transmission: 20Gbps / USB4 Gen.2x2 5Gbps / USB3.0 480Mbps / USB2.0

- Supports 5A, 48V, 240W (Products supporting 6A are also available.)

## 2. Reversible plug orientation ensures easy insertion



## 3. Clear Tactile Click (Excellent Lock Design)

The CX Series has a superior click feel when mating and is designed to prevent incomplete mating.

## 4. Wide Product Variation

#### Receptacle

- PCB Mounting Type
  - Mid-Mount
  - Top-Mount
- Mounting Methods
  - Right Angle Hybrid (SMT+THR\*) \*THR: Through Hole Reflow
  - Right Angle SMT (Double-row / Single-row)
  - Vertical SMT
- Water/Dust Resistant Type (IEC60529 Standard)
  - IP54, Test Conditions (Unmated)
  - \* Water Resistance: Spray 10L/min of water at 50-150Kpa for 10 minutes
  - \* Dust Resistance: Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75 µm
  - IP68, Test Conditions (Unmated) \* Water Resistance: Immersed in 1.5 meters water depth for 30 minutes
  - \* Dust Resistance: Left the connector in a test chamber containing 2 kg/m³ talcum powder(particles less than 75 μm) under a maximum decompression of 2 kPa for 8 hours
  - IP69K, Test Conditions (Unmated) \* Water Resistance: Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
  - \* Dust Resistance: Left the connector in a test chamber containing 2 kg/m³ talcum powder(particles less than 75 μm) under a maximum decompression of 2 kPa for 8 hours
- Available in a variety of options including space-saving, low profile and robust types



**Receptacle Variations** 

## Plug

- PCB Mounting Type
  - Top-Mount
- •Plug Unit, Plug Shell
- ·Slim Type
- Screw Locking Types
  - Dual screw
  - Single screw



No chlorine or bromine exceeding the standard value is used in the connector.

\* As defined by IEC 61249-2-21 Br: 900ppm max., Cl: 900ppm max., Br+Cl: 1500ppm max.



**Plug Variations** 

## **Product Specifications**

S/Rated Current		Power: 1.25A Max. (A1, A4, A9, A12, B1, B4, B5, B9, B12) Other: 0.25A	Operating Temperature (Note 1)	-40 to +105°C
Rated Current	6A	Power: 1.5A Max. (A1, A4, A9, A12, B1, B4, B5, B9, B12) Other: 0.25A	Operating Humidity Range	95% RH Max. (No condensation)
Dated Valtage	48V AC/DC Max.		Storage Temperature (Note 2)	-10 to +60°C
Rated Voltage			Storage Humidity Range (Note 2)	15 to 70% RH (No condensation)

Items	Specifications	Conditions	
Contact Resistance	40mΩ Max. (Initial)	Measured at 100mA (DC or 1000Hz)	
Withstanding Voltage No insulation breakdown		100V AC for 1 min.	
Mating Durability	Contact resistance : Increase by $10m\Omega$ or less from the initial value.	10000 insertion / extraction cycles	
Overall Insertion / Extraction Force	Insertion: 5-20N Extraction: 8-20N (Initial), 6-20N (After Testing)	Measured with applicable connector	

Note 1: Includes the temperature rise due to current flow.

Note 2: The term "storage" refers to products stored for long period of time prior to mounting and use.

Operating Temperature and Humidity Range are applicable when non-powered after PCB mounting and when temporarily stored during transportation.

Note 3: Information contained in this catalog represents general requirements for this Series. Please refer to product specifications sheet for detail each of products.

Materials / Finish

#### Receptacle

Component	Materials	Color / Finish	Remarks
Insulator	Thermoplastic	Black	UL94V-0
Contact	Copper Alloy	Gold Plating	-
Ground Plate	Stainless Steel	-	-
Mid Plate	Stainless Steel	Nickel Plating	-
Shell	Stainless Steel	Nickel Plating	-

#### Plug

Component	Materials	Color / Finish	Remarks
Insulator	Thermoplastic	Black	UL94V-0
Contact	Copper Alloy	Gold Plating	-
Lock Spring	Stainless Steel	Nickel Plating	-
Ground Spring	Stainless Steel	Nickel Plating	-
Shell	Stainless Steel	Nickel Plating	-

Note: Information contained in this catalog represents general requirements for this Series. Please refer to product drawing for details on each of the products.

## **Product Number Structure**

Refer to the chart below when determining the product specifications from the product number. Please select from the product numbers listed in this catalog when placing orders.

## Receptacle

CX 90 M W 2 G - 24 P # 9

## Plug

CX 60 - 24 S - UNIT 10

CX 60 - SLDA

1 Series Name	CX	CX Series
<b>⊘</b> Mounting Type	60 70 80, 81 90	Paddle Card (PCB Wire Soldering) Right Angle Hybrid (SMT+THR) *THR:Through Hole Reflow Vertical SMT Right Angle SMT
PCB Mounting Type	B M	Top-Mount Mid-Mount
4 Special Specification I	Blank W WD	Standard Water/Dust Resistance Water/Dust Resistance with Drawn shell
<b>5</b> Serial No. I	-	None or 1, 2, 3,, 1A, 1B,
<b>6</b> Special Specification II	Blank G	Standard With Gasket
7 No. of Pos.	-	16,24
Contact Type	P S	Male Contacts Female Contacts
9 Serial No. II	-	None or 1, 2, 3,
<b>10</b> Plug Components	UNIT SLDA	Plug Unit Plug Shell
① Cable Length	1000	1000mm
<b>⑩</b> Cable Assembly Type	C CD CS	Type-C to Type-C, Standard (Non-Screw) Type-C to Type-C, Screw locking type (Dual screw) Type-C to Type-C, Screw locking type (Single screw)
● Serial No. III	-	None or 1, 2, 3,



## **Product Variation**

## **Water/Dust Resistant Receptacle**

PCB Mounting Type	Mounting Method	Part No.	Product Image	No. of Pos.	Transmission Speed	Rated Current	IP Code (Note)	Gasket
		CX90MW9-24P	NOS CHOCHNO 240		20Gbps USB4		IP54	With
	Right Angle SMT	CX90MW9-24P1	HG OKNOWNO JAPA	24pos.	Gen.2x2	ΕΛ		Gasket
	Double-row	CX90MWD2-24P	NS CROUNTES 200	24pos.	5Gbps	5A	IP68 & IP69K	Without Gasket
Mid-Mount		CX90MWD2G-24P	THE COMMUNICATION OF THE PARTY					
	Right Angle SMT & Screw Single-row	CX90MW6-16P	PAGE CHANGE TO THE PAGE OF THE			6A		
	Right Angle SMT	CX90MW8-16P	NG CASCIAND TO	16pos.	480Mbps	- 5A	IP54	
	Single-row	CX90MW8-16P1	HOS CHOCKARD 1500 1				IP68 & IP69K	With
	Right Angle	CX90BW1-24P	ASSOCIATION TO THE PROPERTY OF	24	20Gbps USB4 Gen.2x2		IP54	Gasket
Too Mount	SMT Double-row	CX90BW1-24P1	CASCISH - ZAS   Parket   Parke	24pos.			IP68 & IP69K	
Top-Mount	Right Angle SMT Single-row	CX90BW-16P(001)	IS STORY THE PROPERTY OF THE P	- 16pos.	os. 480Mbps		IP54	
		CX90BW-16P1	CASTON THE				IP68 & IP69K	

Note: Test Conditions (Unmated)

- IP54 : Water Resistance : Spray 10L/min of water at 50-150Kpa for 10 minutes

Dust Resistance : Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75 μm

- IP68 : Water Resistance  $\,\,$  : Immersed in 1.5 meters water depth for 30 minutes

Dust Resistance : Left the connector in a test chamber containing 2 kg/m³ talcum powder(particles less than 75 μm) under a maximum decompression of 2 kPa for 8 hours

- IP69K : Water Resistance : Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm

Dust Resistance : Left the connector in a test chamber containing 2 kg/m² talcum powder(particles less than 75 μm) under a maximum

decompression of 2 kPa for 8 hours

#### **Standard Receptacle** \*THR: Through Hole Reflow

PCB Mounting Type	Mounting Method	Part No.	Product Image	No. of Pos.	Transmission Speed	Rated Current	Features
		CX70M-24P1	185 CX CANADA				Space-Saving 8.35mm Depth
					5Gbps	5A	TID No. 5,200,000,077
	Right Angle Hybrid (SMT+THR*)	CX70M-24P2	SE COLUMN 2017	- 24pos.			Space-Saving 7.95mm Depth
Mid-Mount		CX70M1-24P	105 TOTAL SAFE	2 1003.	20Gbps USB4	6A	Space-Saving Shell Spring Design
	Right Angle SMT Double-row	CX90M3-24P	105 CHARLES AND THE STATE OF TH		Gen.2x2	5A	Space-Saving Shell Spring Design
	Right Angle	CX90M-16P	The summary of the su	16000	480Mbps	6A	Space-Saving Round Shell Type
	Single-row	CX90MF-16P	CREMA LINE	16pos.	10011505	UA	Space-Saving Flat Shell Type
	Vertical SMT	CX80B1-24P			20Gbps USB4 Gen.2x2	5A	Low Profile  TID No. 5,200,000,701
		CX80B2-24P	N N N N N N N N N N N N N N N N N N N				Low Profile Shell Spring Design
		CX90B1-24P	County Say	_			Robust Shell Through-Hole Height: 0.6mm
	Right Angle	CX90B1B-24P	The state of the s	24pos.			Robust Shell Through-Hole Height: 1.2mm
Top-Mount	SMT Double-row	CX90B2-24P		_			TID No. 4626  Shell Spring Design Shell Through-Hole Height: 1.2mm  TID No. 7365
		CX90B2-24P1	The Colors Star	-			Shell Spring Design Shell Through-Hole Height: 0.6mm
	Right Angle	CX90B-16P	The state of the s		480Mbps		Space-Saving Round Shell Type
	SMT Single-row	CX90B-16P1	The state of the s	16pos.			Space-Saving Shell Spring Design Flat Shell Type TID No. 9312

## Plug

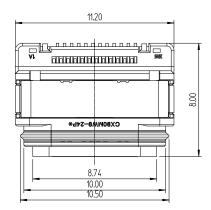
Туре	Style	Part No.	Product Image	No. of Pos.	Transmission Speed	Rated Current	Features
РСВ	Vertical	CX81B-24S	CHOLD 2AS Supplied shaped to Supplied shaped to Supplied shaped to Supplied to the supplied to Supplied to the supplied to the				Top-Mount With Lock Latch (Note)
Mounting	SMT	CX81B-24S1	1818-245	24pos.	20Gbps USB4 Gen.2x2	5A	Top-Mount Without Lock Latch (Note)
Plug Unit	Paddle Card SMT Double-row (PCB Wire Soldering)	CX60-24S-UNIT					Slim Type  TID No. 5,200,000,291
Plug Shell	-	CX60-SLDA			-		Slim Type
	-	CX60-24S-1000-C1			20Gbps USB4 Gen.2x2	5A	Double-Ended, Cable Length:1m Slim Type TID No. 5648
Cable Assembly		CX60-24S-1000-CD		24pos.			Double-Ended, Cable Length:1m Screw Locking Type [Dual Screw]
		CX60-24S-1000-CS					Double-Ended, Cable Length:1m Screw Locking Type [Single Screw]

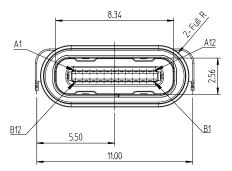
 $Note: The \ CX81B-24S \ and \ CX81B-24S1 \ have the same \ dimensions \ except \ with \ or \ without \ a \ lock \ latch.$ 

## Water/Dust Resistant Receptacle

## Mid-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, With Gasket



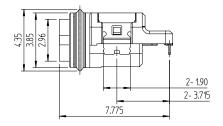


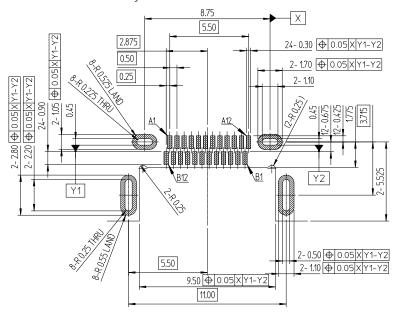


Part No.	Part No. HRS No.		Purchase Unit	
CX90MW9-24P	CL 0480-1040-0-00	IP54	140000000000000	
CX90MW9-24P1	CL 0480-1041-0-00	IP68 & IP69K	1400pcs per ree	

Unit: mm

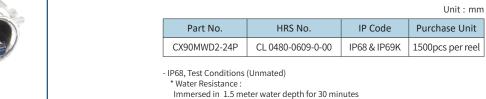
- IP54, Test Conditions (Unmated)
- \* Water Resistance
- Spray 10L/min of water at 50-150Kpa for 10 minutes
- \* Dust Resistance : Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75  $\mu$ m
- IP68, Test Conditions (Unmated)
- \* Water Resistance :
- Immersed in 1.5 meter water depth for 30 minutes
- \* Dust Resistance :
- Left the connector in a test chamber containing  $2 \, kg/m^3$  talcum powder (particles less than 75  $\mu$ m) under a maximum decompression of  $2 \, kPa$  for 8 hours.
- IP69K, Test Conditions (Unmated)
  - \* Water Resistance :
  - Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- \* Dust Resistance :
- Left the connector in a test chamber containing  $2 \, kg/m^3$  talcum powder (particles less than 75  $\mu$ m) under a maximum decompression of  $2 \, kPa$  for 8 hours.

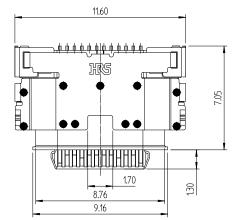




## Mid-Mount, Right Angle (SMT Double-row), 24pos., Supports 5Gbps & 5A, Without Gasket





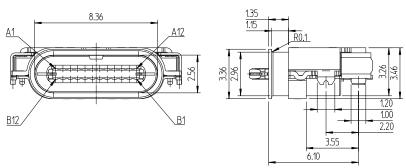


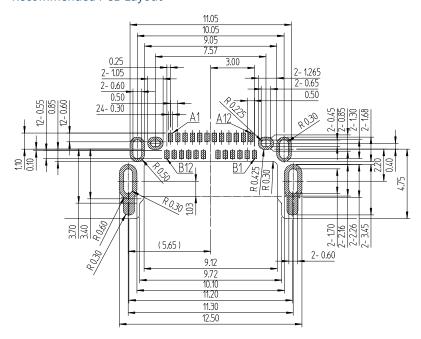
- IP69K, Test Conditions (Unmated)
- \* Water Resistance :

\* Dust Resistance :

- Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- \* Dust Resistance : Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu\text{m}$ ) under a maximum decompression of 2 kPa for 8 hours.

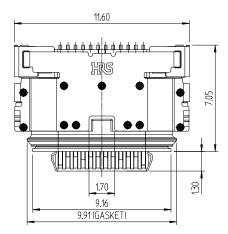
Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m)$  under a maximum decompression of 2 kPa for 8 hours.

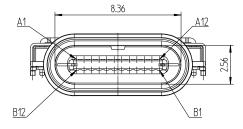




## Mid-Mount, Right Angle (SMT Double-row), 24pos., Supports 5Gbps & 5A, With Gasket





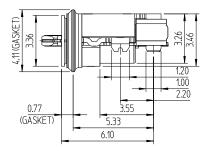


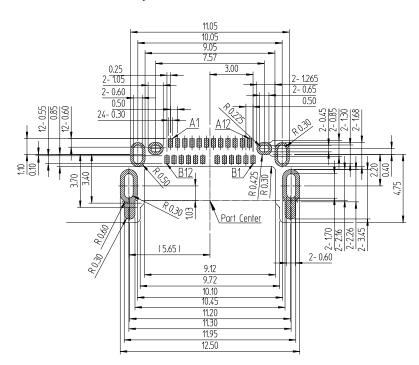
			Unit : mm
Part No.	HRS No.	IP Code	Purchase Unit
CX90MWD2G-24P	CL 0480-0770-0-00	IP68 & IP69K	1500pcs per reel

- IP68, Test Conditions (Unmated)
- \* Water Resistance :
- Immersed in 1.5 meter water depth for 30 minutes
- \* Dust Resistance :

Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu$ m) under a maximum decompression of 2 kPa for 8 hours.

- IP69K, Test Conditions (Unmated)
- \* Water Resistance :
- Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- \* Dust Resistance :
- Left the connector in a test chamber containing 2 kg/m² talcum powder (particles less than 75  $\mu$ m) under a maximum decompression of 2 kPa for 8 hours.

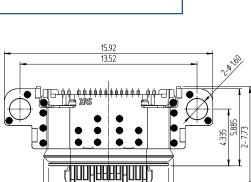




Unit: mm

## Mid-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 6A, With Gasket, Screw Mounting Design



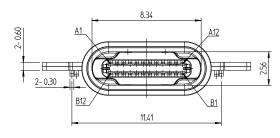


Part No.	HRS No.	IP Code	Purchase Unit
CX90MW6-16P	CL 0480-0857-0-00	IP68 & IP69K	1500pcs per reel

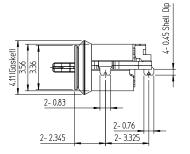
- IP68, Test Conditions (Unmated)
- \* Water Resistance :
- Immersed in 1.5 meter water depth for 30 minutes
- \* Dust Resistance :

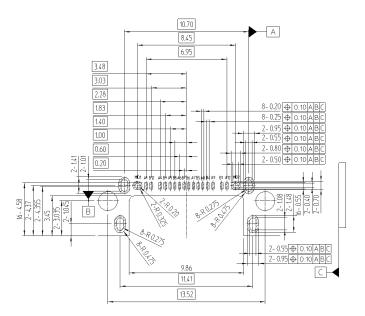
Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu\text{m})$  under a maximum decompression of 2 kPa for 8 hours.

- IP69K, Test Conditions (Unmated)
- \* Water Resistance :
- Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- \* Dust Resistance:
- Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu\text{m})$  under a maximum decompression of 2 kPa for 8 hours.



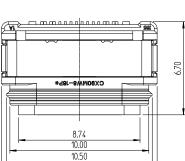
9.14 9.91 (Gasket)





## Mid-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 5A, With Gasket





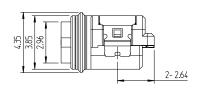
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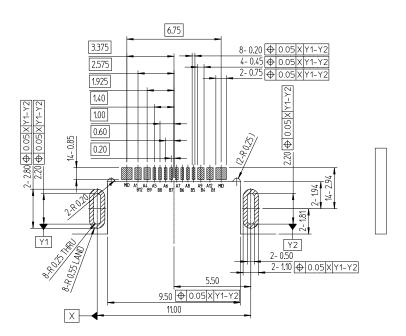
	8.34	, 4.33 C
<u>A1</u>		A12
		2.56 ±0.04
<u>B12</u>	11.00	<u>B1</u>

			Unit : mm	
Part No.	HRS No.	IP Code	Purchase Unit	
CX90MW8-16P	CL 0480-1036-0-00	IP54	1400000000000000	
CX90MW8-16P1	CL 0480-1037-0-00	IP68 & IP69K	1400pcs per ree	

- IP54, Test Conditions (Unmated)
- \* Water Resistance :
- Spray 10L/min of water at 50-150Kpa for 10 minutes
- \* Dust Resistance :
- Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75  $\mu m$
- IP68, Test Conditions (Unmated)

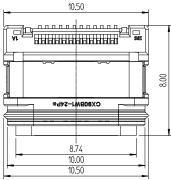
  \* Water Resistance:
- Immersed in 1.5 meter water depth for 30 minutes
- \* Dust Resistance :
- Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m)$  under a maximum decompression of 2 kPa for 8 hours.
- IP69K, Test Conditions (Unmated)
- \* Water Resistance :
- Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu\text{m}$ ) under a maximum decompression of 2 kPa for 8 hours.





## Top-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, With Gasket





10.30	
VI HHHHHHHHHHH SMI	
	8.00
CX80BM4-S4P*	
8.74	
10.50	

<u>A1</u>	8.34	7; the A12
		256
<u>B12</u>	8.75 9.90	B1

			Unit : mm
Part No.	HRS No.	IP Code	Purchase Unit
CX90BW1-24P	CL 0480-1038-0-00	IP54	1400 per per reel
CX90BW1-24P1	CL 0480-1039-0-00	IP68 & IP69K	1400pcs per reel

- IP54, Test Conditions (Unmated)
- \* Water Resistance :
- Spray 10L/min of water at 50-150Kpa for 10 minutes
- \* Dust Resistance :

Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75  $\mu m$ 

- IP68, Test Conditions (Unmated)

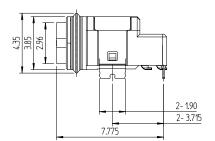
  \* Water Resistance:

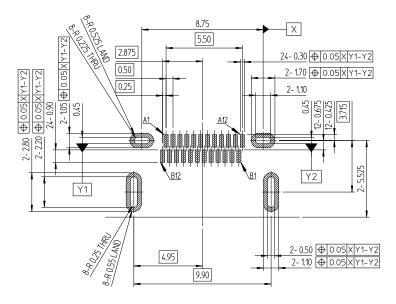
Immersed in 1.5 meter water depth for 30 minutes

\* Dust Resistance :

Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m)$  under a maximum decompression of 2 kPa for 8 hours.

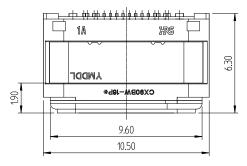
- IP69K, Test Conditions (Unmated)
  - \* Water Resistance :
- Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m$ ) under a maximum decompression of 2 kPa for 8 hours.





## Top-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 5A, With Gasket





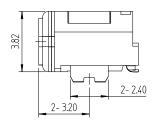
<del>  -</del>	8.3	34	<del>-</del> -	
<u>A1</u>			A12	
				2.56
<u>B12</u>			\ <u>B1</u>	

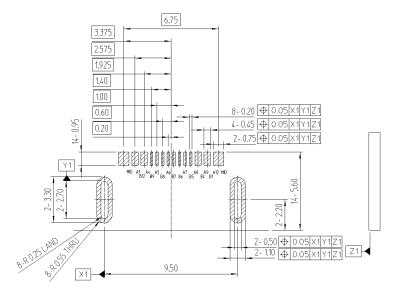
			Unit : mm	
Part No.	HRS No.	IP Code	Purchase Unit	
CX90BW-16P(001)	CL 0480-1034-0-00	IP54	1400 p.cs por rool	
CX90BW-16P1	CL 0480-1035-0-00	IP68 & IP69K	1400pcs per ree	

- IP54, Test Conditions (Unmated)
- \* Water Resistance
- Spray 10L/min of water at 50-150Kpa for 10 minutes
- \* Dust Resistance :
- Left the connector in a test chamber containing talcum powder with a density of 2 kg/m³ and particle size less than 75  $\mu m$
- IP68, Test Conditions (Unmated)

  \* Water Resistance:

  - Immersed in 1.5 meter water depth for 30 minutes
- \* Dust Resistance :
- Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m)$  under a maximum decompression of 2 kPa for 8 hours.
- IP69K, Test Conditions (Unmated)
  - \* Water Resistance :
  - Spray 80°C water at 8-10Mpa for 30 seconds in each of 4 angles from 10-15cm
- - Left the connector in a test chamber containing 2 kg/m³ talcum powder (particles less than 75  $\mu m$ ) under a maximum decompression of 2 kPa for 8 hours.





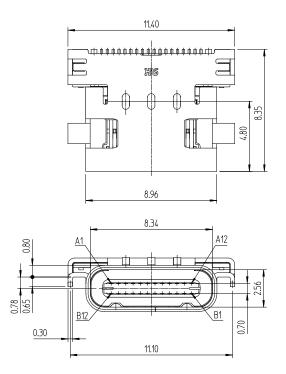
## **Standard Receptacle**

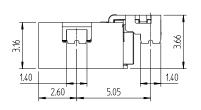
## Mid-Mount, Right Angle Hybrid (SMT+THR\*), 24pos., Supports 5Gbps & 5A, 8.35mm Depth

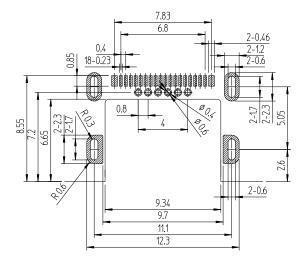


		Unit : mm
Part No.	HRS No.	Purchase Unit
CX70M-24P1	CL 0480-0304-0-00	1500pcs per reel

- TID No. 5,200,000,077 \* THR: Through Hole Reflow







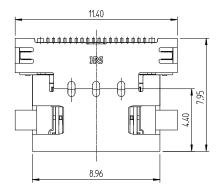
## Mid-Mount, Right Angle Hybrid (SMT+THR\*), 24pos., Supports 5Gbps & 5A, 7.95mm Depth

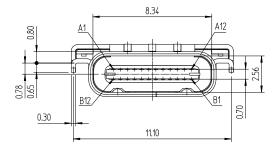


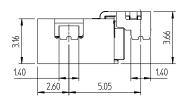
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rchac	<u> </u>	In			1

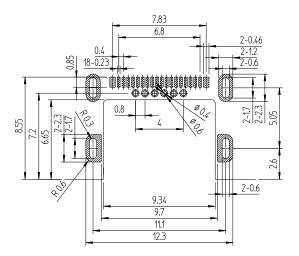
Part No.	HRS No.	Purchase Unit
CX70M-24P2	CL 0480-0329-0-00	1500pcs per reel

\* THR: Through Hole Reflow









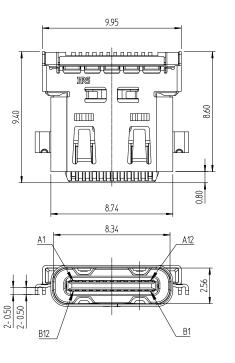
## Mid-Mount, Right Angle Hybrid (SMT+THR\*), 24pos., Supports 20Gbps & 6A, Shell Spring Design

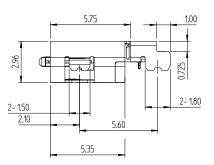


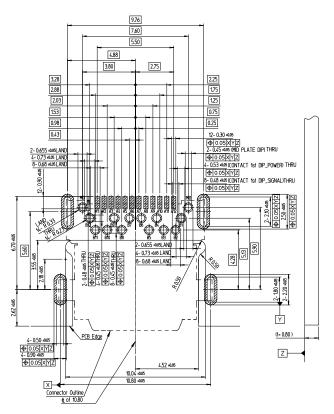
L	Init	:	mm

Part No.	HRS No.	Purchase Unit	
CX70M1-24P	CL 0480-0691-0-00	1400pcs per reel	

\* THR: Through Hole Reflow





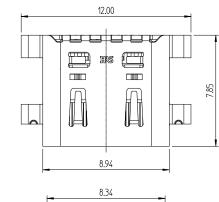


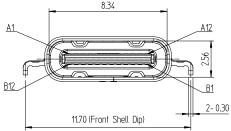
## Mid-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, Shell Spring Design

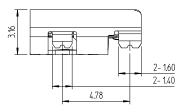


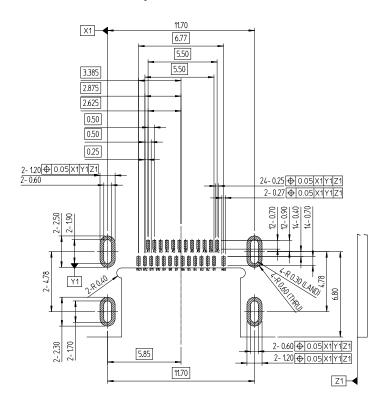
Unit : mm

Part No.	HRS No.	Purchase Unit
CX90M3-24P	CL 0480-0919-0-00	1500pcs per reel





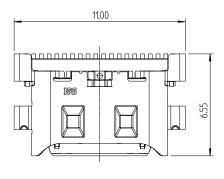


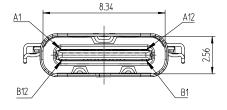


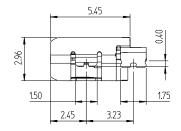
## Mid-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 6A, Round Shell Type

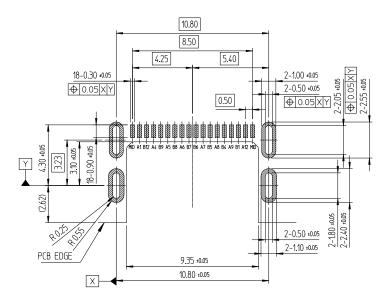


		Unit : mm
Part No.	HRS No.	Purchase Unit
CYOOM 16D	CL 0480 0513 0 00	1600pcs por rool





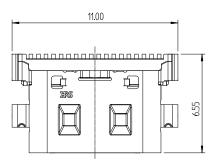


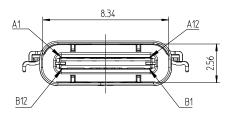


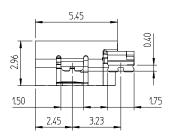
## Mid-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 6A, Flat Shell Type

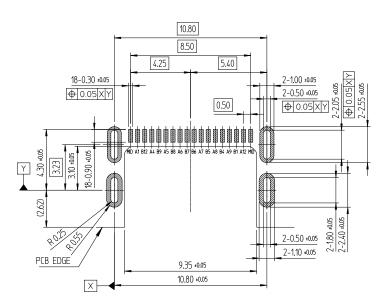


	Unit : mm		
Part No.	HRS No.	Purchase Unit	
CX90MF-16P	CL 0480-0985-0-00	1600pcs per reel	









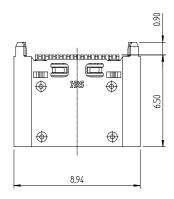
## Top-Mount, Vertical (SMT), 24pos., Supports 20Gbps & 5A

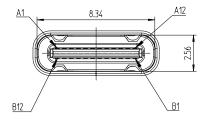


Unit : mm

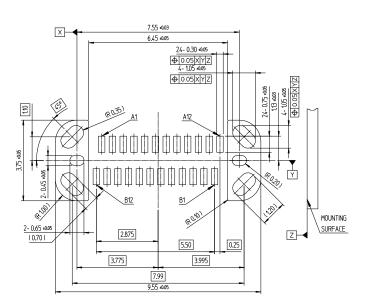
Part No.	HRS No.	Purchase Unit
CX80B1-24P	CL 0480-0625-0-00	600pcs per reel

- TID No. 5,200,000,701









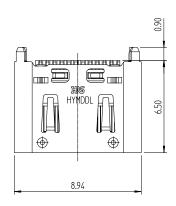
## Top-Mount, Vertical (SMT), 24pos., Supports 20Gbps & 5A, Shell Spring Design

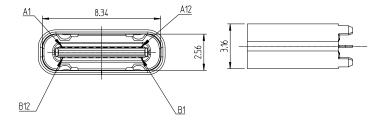


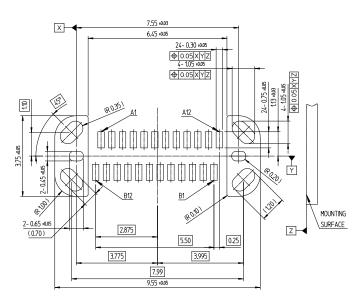
Unit: mm

Part No.	HRS No.	Purchase Unit
CX80B2-24P	CL 0480-0897-0-00	600pcs per reel

- TID No. 8295







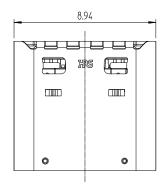
## Top-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, Shell Through-Hole Height: 0.6mm

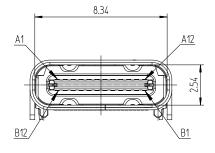


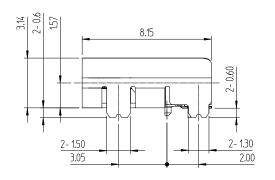
Unit: mm

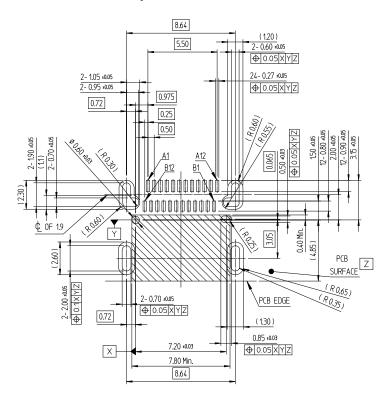
Part No.	HRS No. Purchase Unit	
CX90B1-24P	CL 0480-0497-0-00	1500pcs per reel

- TID No. 5,200,000,499









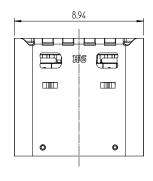
## Top-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, Shell Through-Hole Height: 1.2mm

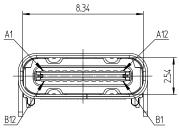


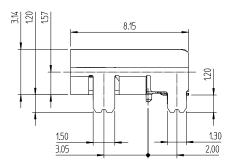
Unit : mm

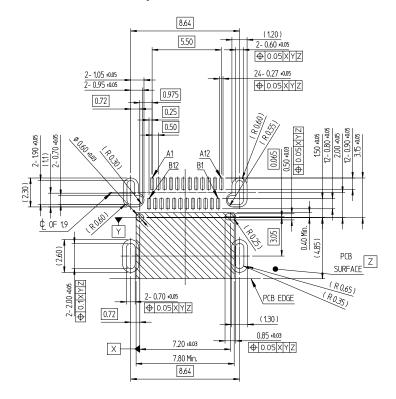
Part No.	HRS No.	Purchase Unit
CX90B1B-24P	CL 0480-0809-0-00	1500pcs per reel

- TID No. 4626









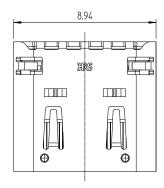
## Top-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, Shell Through-Hole Height: 1.2mm, **Shell Spring Design**

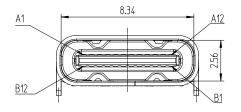


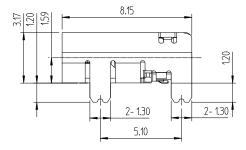
Unit: mm

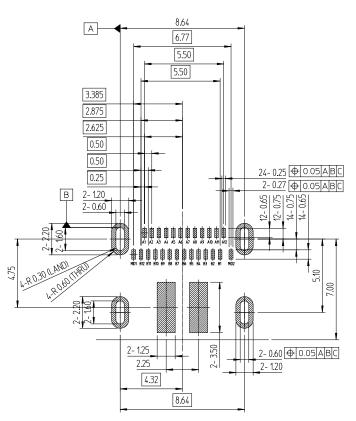
Part No.	HRS No.	Purchase Unit
CX90B2-24P	CL 0480-0889-0-00	1500pcs per reel

- TID No. 7365







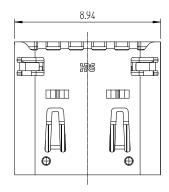


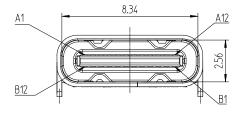
## Top-Mount, Right Angle (SMT Double-row), 24pos., Supports 20Gbps & 5A, Shell Through-Hole Height: 0.6mm, Shell Spring Design

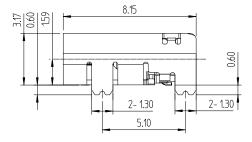


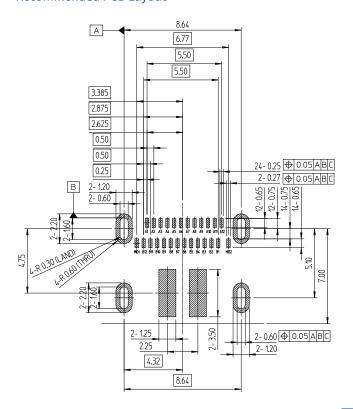
Unit : mm

Part No.	HRS No.	Purchase Unit	
CX90B2-24P1	CL 0480-1058-0-00	1500pcs per reel	







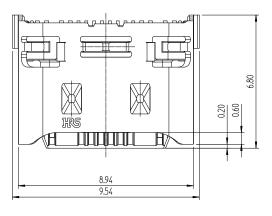


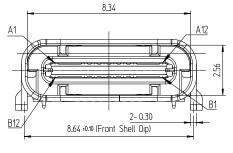
## Top-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 5A, Round Shell Type

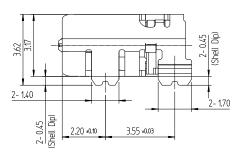


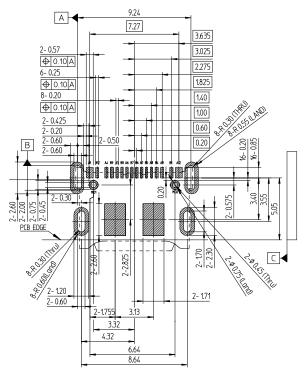
Unit: mm

Part No.		HRS No.	Purchase Unit
	CX90B-16P	CL 0480-0755-0-00	1500pcs per reel









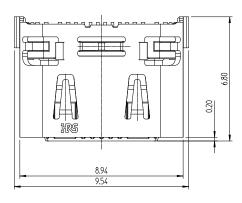
## Top-Mount, Right Angle (SMT Single-row), 16pos., Supports 480Mbps & 5A, Shell Spring Design, Flat Shell Type

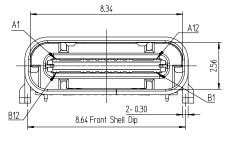


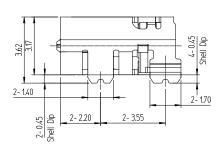
Unit: mm

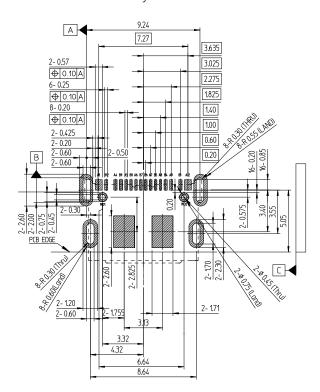
Part No.	HRS No.	Purchase Unit	
CX90B-16P1	CL 0480-0986-0-00	1500pcs per reel	

- TID No. 9312









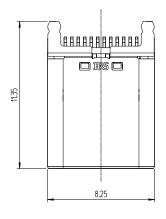
## Plug

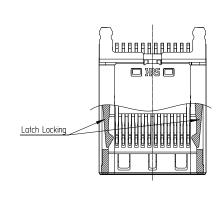
## Top-Mount, Vertical (SMT), 24pos., Supports 20Gbps & 5A, With Lock Latch

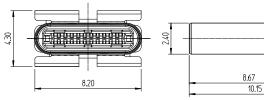


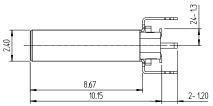
			Unit : mm
Part No.	HRS No.	Remarks	Purchase Unit
CX81B-24S	CL 0480-1044-0-00	With Lock Latch	400pcs per reel

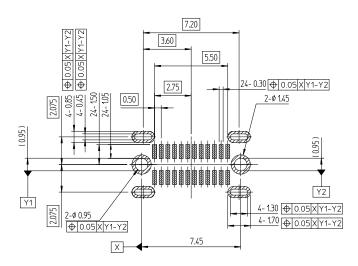
- PCB Mounting Type The CX81B-24S and CX81B-24S1 have the same dimensions except with or without a lock latch.











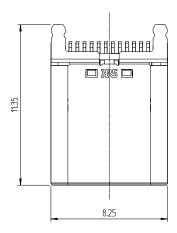
## Top-Mount, Vertical (SMT), 24pos., Supports 20Gbps & 5A, Without Lock Latch

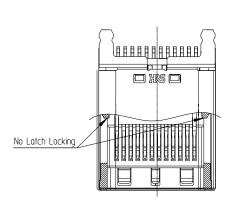


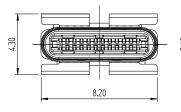
Unit: mm

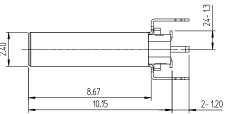
Part No.	HRS No.	Remarks	Purchase Unit
CX81B-24S1	CL 0480-1110-0-00	Without Lock Latch	400pcs per reel

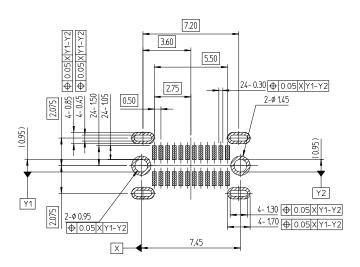
- PCB Mounting Type
   The CX81B-24S and CX81B-24S1 have the same dimensions except with or without a lock latch.









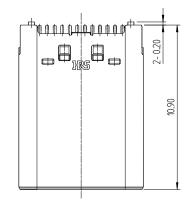


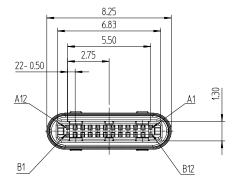
## Plug Unit, Paddle Card (SMT Double-row), 24pos., Supports 20Gbps & 5A



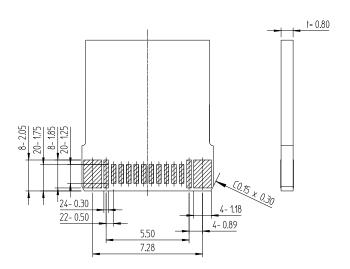
		Unit : mm
Part No.	HRS No.	Purchase Unit
CX60-24S-UNIT	CL 0480-0465-0-00	150pcs per tray

- TID No. 5,200,000,291
- PCB Wire Soldering Type









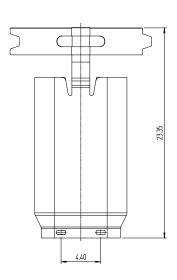
## Plug Shell

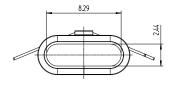


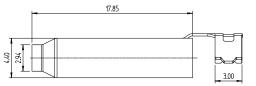
Unit : mm

Part No.	HRS No.	Purchase Unit
CX60-SLDA	CL 0480-0522-0-00	3000pcs per reel

- Cable Diameter: ø4.8







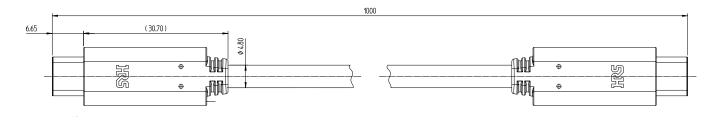
## Cable Assembly, Slim Type, Cable Length 1m, 24pos., Supports 20Gbps & 5A



Unit : mm

Part No.	HRS No.	Purchase Unit
CX60-24S-1000-C1	CL 0480-0823-0-00	1pc per bag

- TID No. 5648

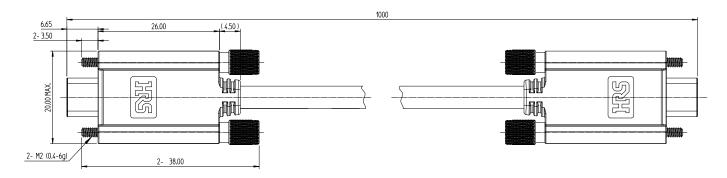


## Cable Assembly, Screw Locking Type [Dual Screw], Cable Length 1m, 24pos., Supports 20Gbps & 5A



Unit: mm

Part No.	HRS No.	Purchase Unit	
CX60-24S-1000-CD	CL 0480-0777-0-00	1pc per bag	

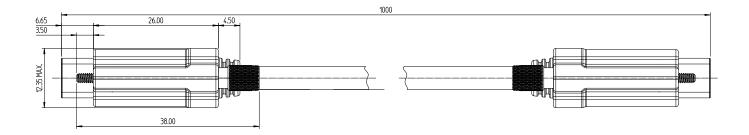


## Cable Assembly, Screw Locking Type [Single Screw], Cable Length 1m, 24pos., Supports 20Gbps & 5A



Unit: mm

Part No.	HRS No.	Purchase Unit
CX60-24S-1000-CS	CL 0480-0778-0-00	1pc per bag



<sup>\*</sup>Screw locking type products comply with the "Universal Serial Bus Type-C Locking Connector Specification Revision 1.0". Please refer to the standard for details.

 $https://www.usb.org/sites/default/files/documents/usb\_type-c\_locking\_connector\_specification\_rev\_1\_0\_20160309\_0.pdf$ 

## **Usage Precautions**

- 1. Please handle connectors with care. Excessive external force may damage the connectors.
- 2. To extract the plug, hold the plug body itself and remove straight from the receptacle. Do not pull on the cable to extract the plug as this may damage the connector.
- 3. Due to the assembly process there may be some abrasions on the surface of the receptacle or plug. This does not have a negative impact on the performance of the product.
- 4. Since the surface of the receptacle is plated, the appearance may differ from lot to lot but this does not affect the product performance.

## While Taking into Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please review the Drawing and Product Specifications sheets.

Use an appropriate cable when using the connector in combination with cables.

If considering usage of a non-specified cable, please contact your sales representative.

If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.

If considering usage for below mentioned applications, please contact your sales representative.

In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/defense etc. Hirose must review before assurance of reliability can be given.

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