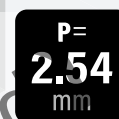


PCN12 Series

IEC603-2 / DIN41612 Standard Compliant Products



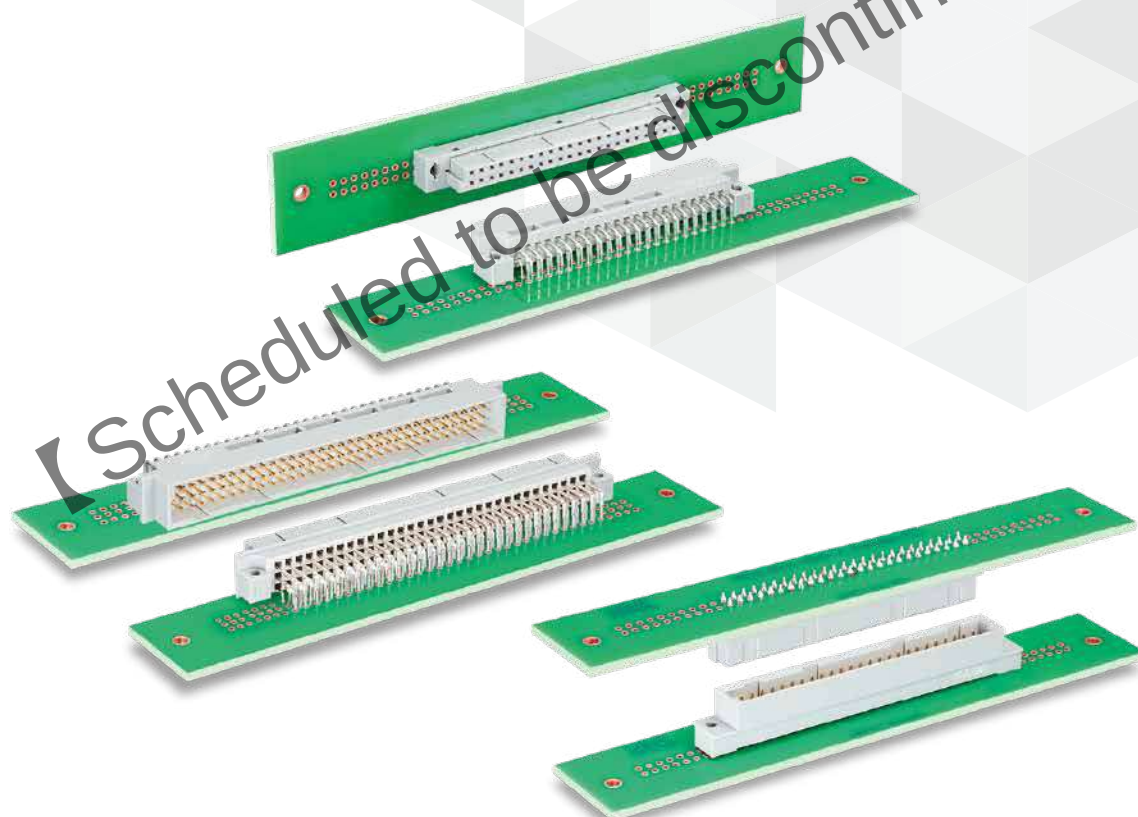
DIN Standard



P=2.54 mm



Wide Variation



Features

1. Complies with DIN Standard

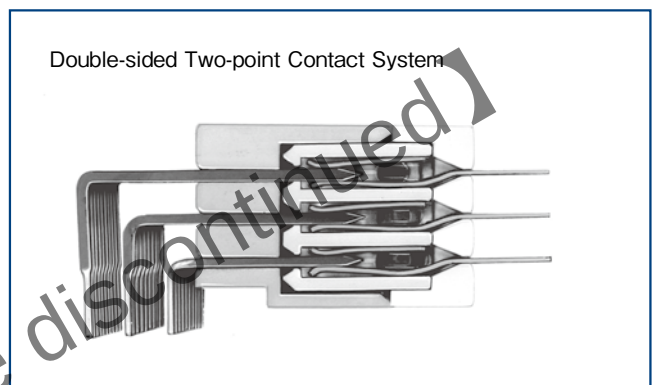
Complies with IEC603-2/DIN41612 standard.

2. Number of Positions

12 pin variations available : 10,16,20,24,28,32,44,50,64,90,96 and 100.

3. Two-point Contact Design

Highly reliable double-sided two point contacts.



Two-point Contact Design

4. Wide applications

DIN standard types of C is available.
The easy lock pin type for temporary board installation is available.

Applications

Computers, Control Equipment, Switches, Measuring Devices, etc.

Product Specifications

Rated Current	2A	Operating Temperature (Note 1)	-55 to +85°C
Rated Voltage	300V AC	Operating Humidity Range	85% Max.
		Storage Temperature Range (Note 2)	-10 to +60°C
		Storage Humidity Range (Note 2)	40 to 70%

Item	Specification	Condition
Insulation Resistance	10 ⁶ M Ω Min.	Measured at 100V DC
Withstanding Voltage	No flashover or insulation breakdown.	1000V AC for 1 min. (IDC, Crimp Type : 650V AC)
Contact Resistance	20m Ω Max.	Measured at 0.1A
Vibration	No electrical discontinuity of 10 μ s Min.	Frequency : 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
Humidity(Steady State)	Insulation resistance : 10 ⁶ M Ω Min.	96 hours at temperature of 40 ± 2°C and humidity of 90% to 95%
Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C : 30 minutes → 15 to 35°C : 5 minutes Max. → 125°C : 30 minutes → 15 to 35°C : 5 minutes Max.) 5 times
Mating Durability	Contact resistance : 20m Ω Max.	500 times
Soldering Heat Resistance	No deformation of components affecting performance.	Manual soldering : 350°C for 3 seconds

Note 1 : Includes 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. The operating temperature and humidity range applies to the non-energized state after board mounting and temporary storage during transportation.

Material / Finish

Component		Material	Color/Finish	Remarks
Contact	Insulator	PBT	Beige	UL94V-0
	Pin Header	Brass	Contact Area: Nickel Underplated+Gold Plated Remaining Areas: Nickel Underplated+Tin Plated	-
	Receptacle	Copper Alloy		

Product Number Structure

■ PCN12 Series (Pin Header)

PCN12 A - # P - 2.54 DS

①

②

③

④

⑤

⑥

① Series Name	PCN12	③ No. of Pos.	2 row : 10,16,20,24,28,32,44,50,64,90,100 3 row : 96
② Configuration	Blank : DIN Standard Type C (96pos.) A : Original Type E · EA : With Lock Pin for Temporary Board Installation	④ Connector Type	P : Pin Header
		⑤ Contact Pitch	2.54mm
		⑥ Contact Type	DS : Right Angle Through Hole Type

■ PCN12 Series (Receptacle)

PCN12 E - # S - 2.54 DSA

①

②

③

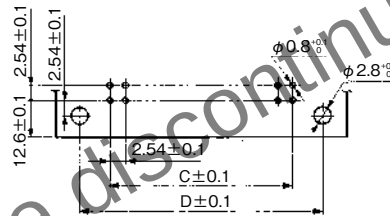
④

⑤

⑥

① Series Name	PCN12	③ No. of Pos.	2 row : 10,16,20,24,28,32,44,50,64,90,100 3 row : 96
② Configuration	Blank : Standard Type E : With Lock Pin for Temporary Board Installation	④ Connector Type	S : Receptacle
		⑤ Contact Pitch	2.54mm
		⑥ Contact Type	DSA : Straight Through Hhole Type

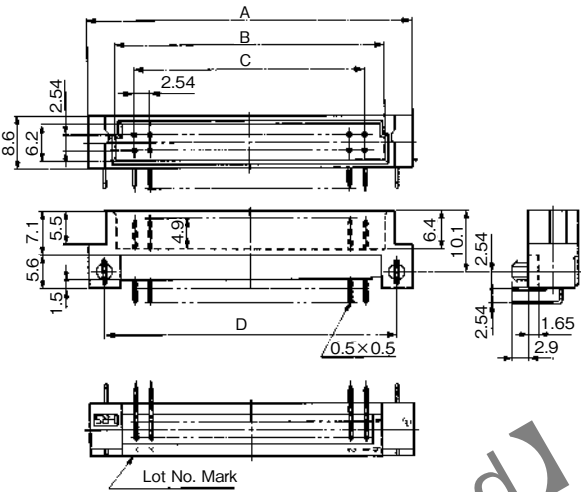
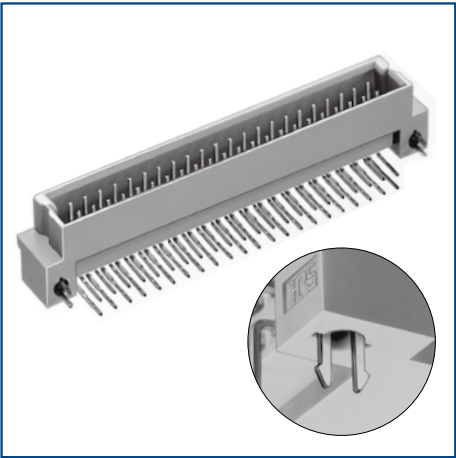
【Scheduled to be discontinued】



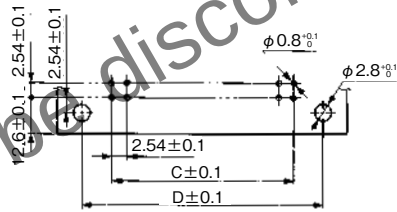
Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN12A-10P-2.54DS(71)	CL0583-2010-3-71	10	25.42	16.77	10.16	20.32	○	60pcs per tray
PCN12A-20P-2.54DS(71)	CL0583-2012-9-71	20	38.12	29.47	22.86	33.02		40pcs per tray
PCN12A-28P-2.54DS(71)	CL0583-2085-2-71	28	48.26	39.63	33.02	43.18		30pcs per tray
PCN12A-32P-2.54DS(71)	CL0583-2013-1-71	32	53.36	44.71	38.10	48.26		20pcs per tray
PCN12A-44P-2.54DS(71)	CL0583-2014-4-71	44	68.60	59.95	53.34	63.50		
PCN12A-50P-2.54DS(81)	CL0583-2015-7-81	50	76.22	67.57	60.96	71.12		
PCN12A-64P-2.54DS(71)	CL0583-2016-0-71	64	94.00	85.35	78.74	88.90		10pcs per tray

Pin Header : 2-row Right Angle Type

●With Lock Pin for Temporary Board Installation



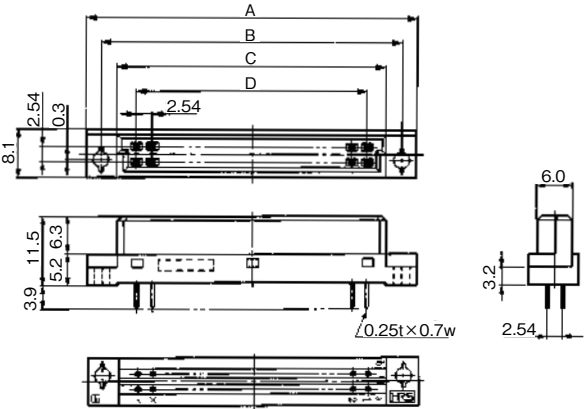
PCB Mounting Pattern



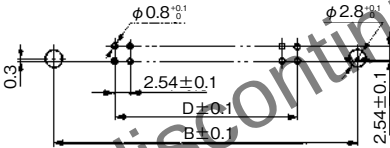
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN12EA-10P-2.54DS(71)	CL0583-2028-9-71	10	25.42	16.77	10.16	20.32	○	60pcs per tray
PCN12EA-16P-2.54DS(71)	CL0583-2029-1-71	16	33.04	24.39	17.78	27.94		40pcs per tray
PCN12EA-20P-2.54DS(71)	CL0583-2030-0-71	20	38.12	29.47	22.86	33.02		20pcs per tray
PCN12EA-32P-2.54DS(71)	CL0583-2031-3-71	32	53.36	44.71	38.10	48.26		
PCN12EA-44P-2.54DS(71)	CL0583-2032-6-71	44	68.60	59.95	53.34	63.50		10pcs per tray
PCN12EA-50P-2.54DS(71)	CL0583-2033-9-71	50	76.22	67.57	60.96	71.12		
PCN12EA-64P-2.54DS(71)	CL0583-2034-1-71	64	94.00	85.35	78.74	88.90		
PCN12EA-90P-2.54DS(71)	CL0583-2035-4-71	90	127.02	118.37	111.76	121.92		

Receptacle : Straight Type



PCB Mounting Pattern

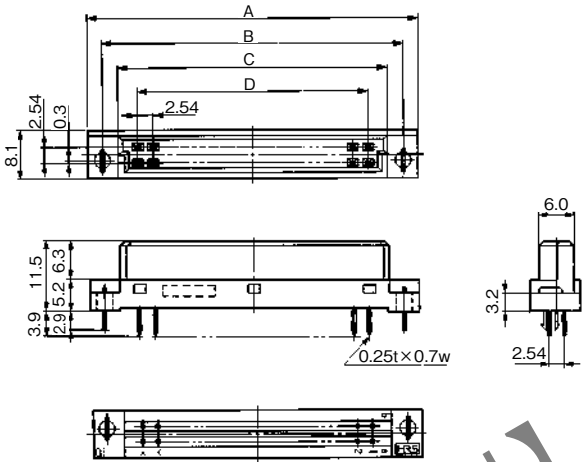
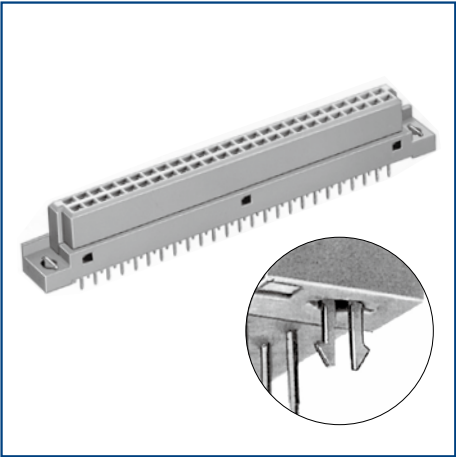


Unit : mm

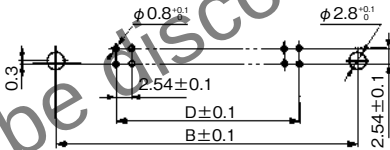
Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN12-10S-2.54DSA(71)	CL0583-2055-1-71	10	26.42	21.42	16.42	10.16	○	110pcs per tray
PCN12-16S-2.54DSA(71)	CL0583-2056-4-71	16	34.04	29.04	24.04	17.78		80pcs per tray
PCN12-20S-2.54DSA(71)	CL0583-2057-7-71	20	39.12	34.12	29.12	22.86		70pcs per tray
PCN12-24S-2.54DSA(71)	CL0583-2106-0-71	24	44.20	39.20	34.20	27.94		60pcs per tray
PCN12-28S-2.54DSA(71)	CL0583-2088-0-71	28	49.28	44.28	39.28	33.02		50pcs per tray
PCN12-32S-2.54DSA(71)	CL0583-2058-0-71	32	54.36	49.36	44.36	38.10		40pcs per tray
PCN12-44S-2.54DSA(71)	CL0583-2059-2-71	44	69.60	64.60	59.60	53.34		30pcs per tray
PCN12-50S-2.54DSA(71)	CL0583-2060-1-71	50	77.22	72.22	67.22	60.96		20pcs per tray
PCN12-64S-2.54DSA(71)	CL0583-2061-4-71	64	95.00	90.00	85.00	78.74		
PCN12-100S-2.54DSA(71)	CL0583-2063-0-71	100	140.72	135.72	130.72	124.46		

Receptacle : Straight Type

●With Lock Pin for Temporary Board Installation



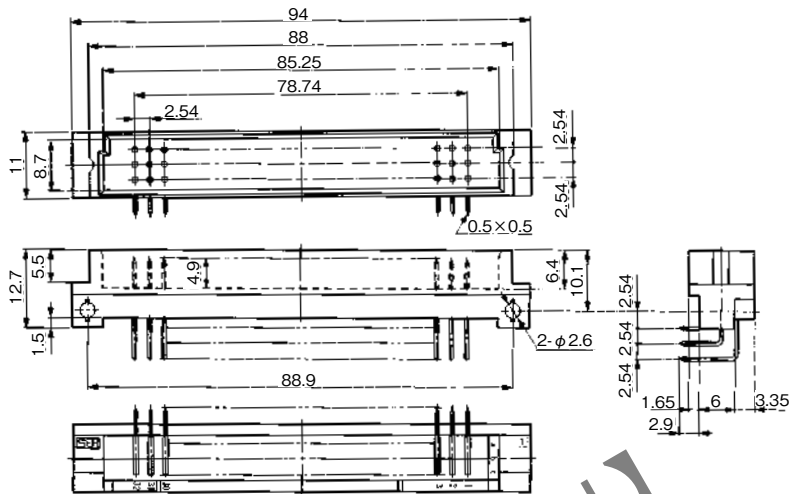
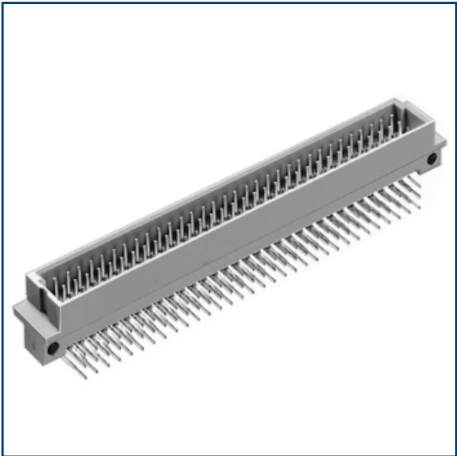
PCB Mounting Pattern



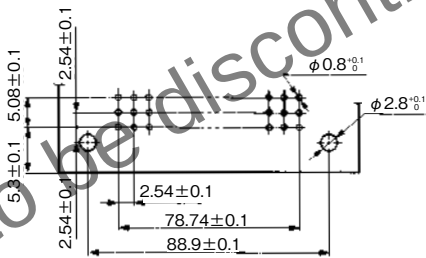
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN12E-10S-2.54DSA(71)	CL0583-2064-2-71	10	26.42	21.42	16.42	10.16	○	110pcs per tray
PCN12E-20S-2.54DSA(71)	CL0583-2066-8-71	20	39.12	34.12	29.12	22.86		70pcs per tray
PCN12E-32S-2.54DSA(71)	CL0583-2067-0-71	32	54.36	49.36	44.36	38.10		50pcs per tray
PCN12E-44S-2.54DSA(71)	CL0583-2068-3-71	44	69.60	64.60	59.60	53.34		40pcs per tray
PCN12E-50S-2.54DSA(71)	CL0583-2069-6-71	50	77.22	72.22	67.22	60.96		30pcs per tray
PCN12E-64S-2.54DSA(71)	CL0583-2070-5-71	64	95.00	90.00	85.00	78.74		
PCN12E-90S-2.54DSA(71)	CL0583-2071-8-71	90	128.02	123.02	118.02	111.76		20pcs per tray
PCN12E-100S-2.54DSA(71)	CL0583-2072-0-71	100	140.72	135.72	130.72	124.46		

Pin Header : 3-row Right Angle Type (DIN Standard Type C)



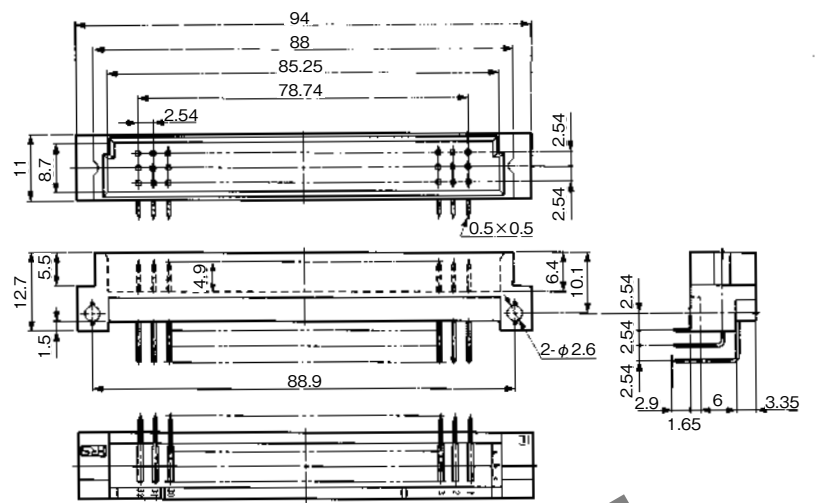
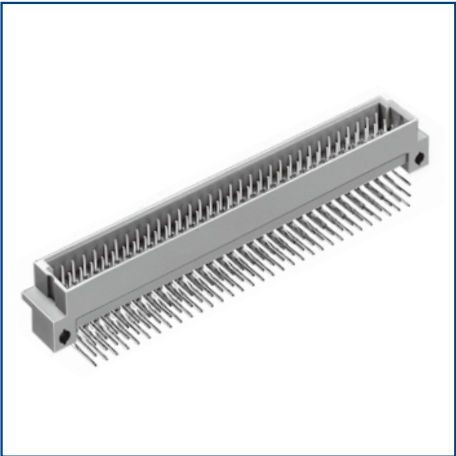
PCB Mounting Pattern



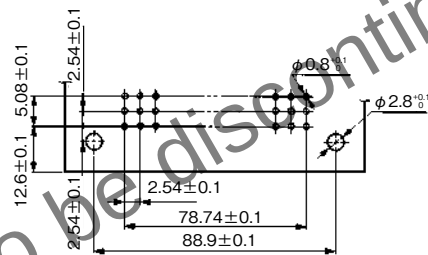
Unit : mm

Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12-96P-2.54DS(71)	CL0583-2090-2-71	96	○	24pcs per tray

Pin Header : 3-row Right Angle Type



PCB Mounting Pattern

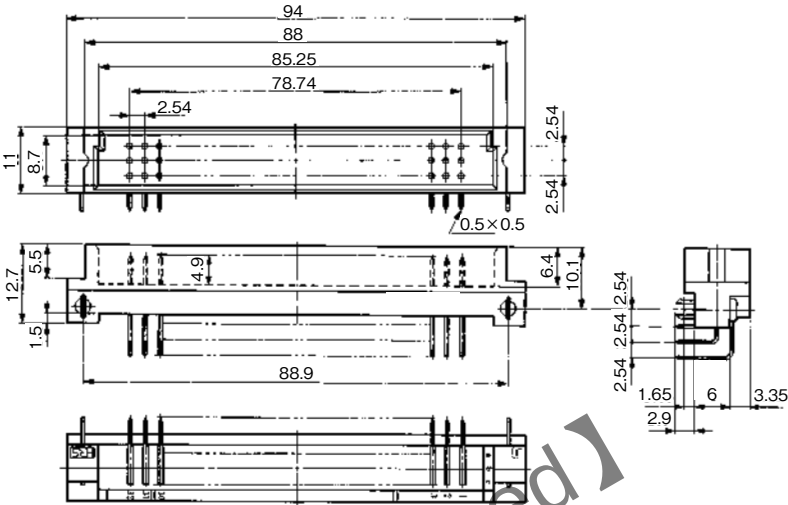
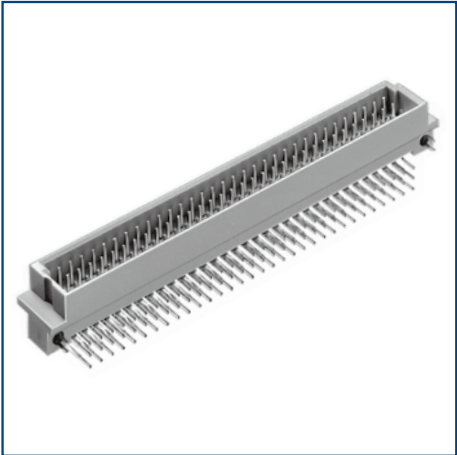


Unit : mm

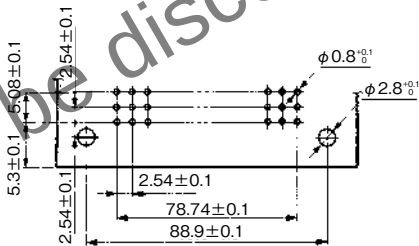
Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12A-96P-2.54DS (71)	CL0583-2091-5-71	96	○	24pcs per tray

Pin Header: 3-row Right Angle Type (Type C)

●With Lock Pin for Temporary Board Installation



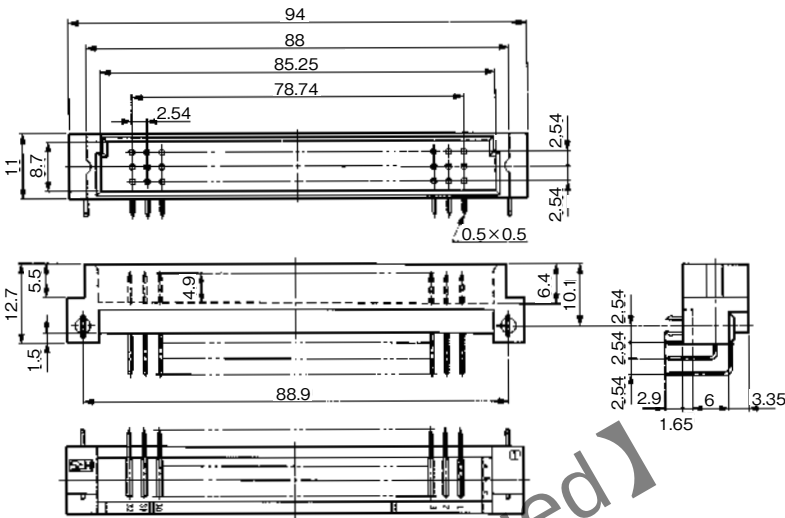
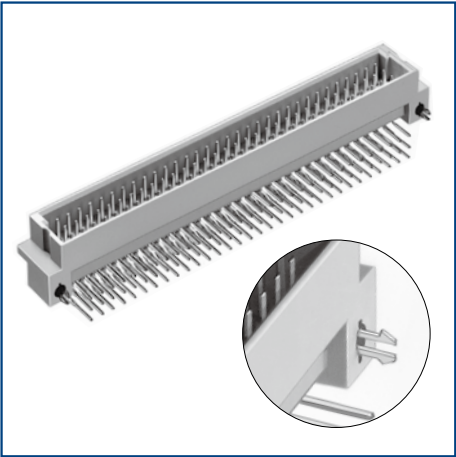
PCB Mounting Pattern



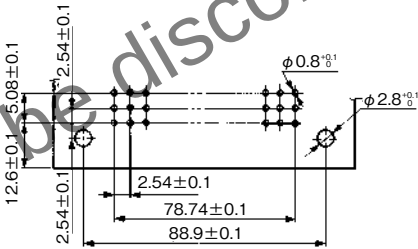
Unit : mm				
Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12E-96P-2.54DS(71)	CL0583-2092-8-71	96	○	24pcs per tray

Pin Header : 3-row Right Angle Type

●With Lock Pin for Temporary Board Installation



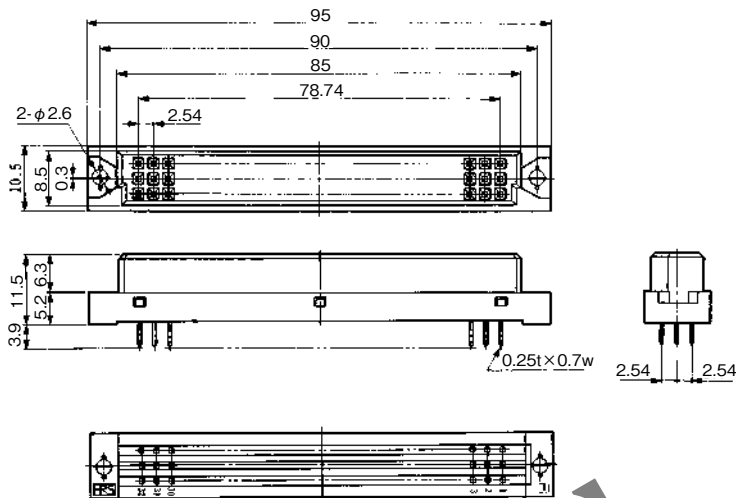
PCB Mounting Pattern



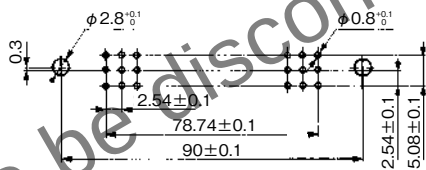
Unit : mm

Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12EA-96P-2.54DS (71)	CL0583-2093-0-71	96	○	24pcs per tray

Receptacle : 3-row Straight Type



PCB Mounting Pattern

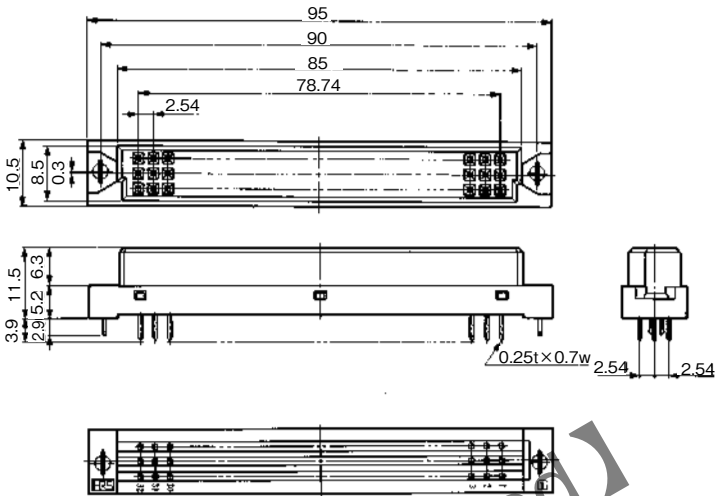
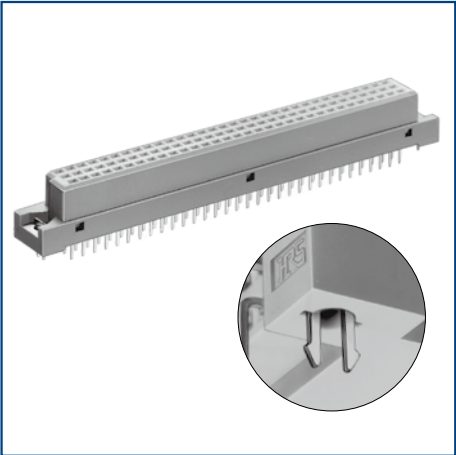


Unit : mm

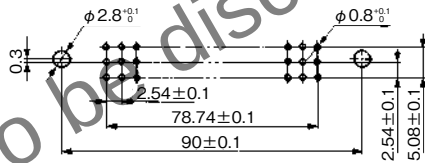
Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12-96S-2.54DSA (71)	CL0583-2096-9-71	96	○	15pcs per tray

Receptacle: 3-row Straight Type

●With Lock Pin for Temporary Board Installation



PCB Mounting Pattern



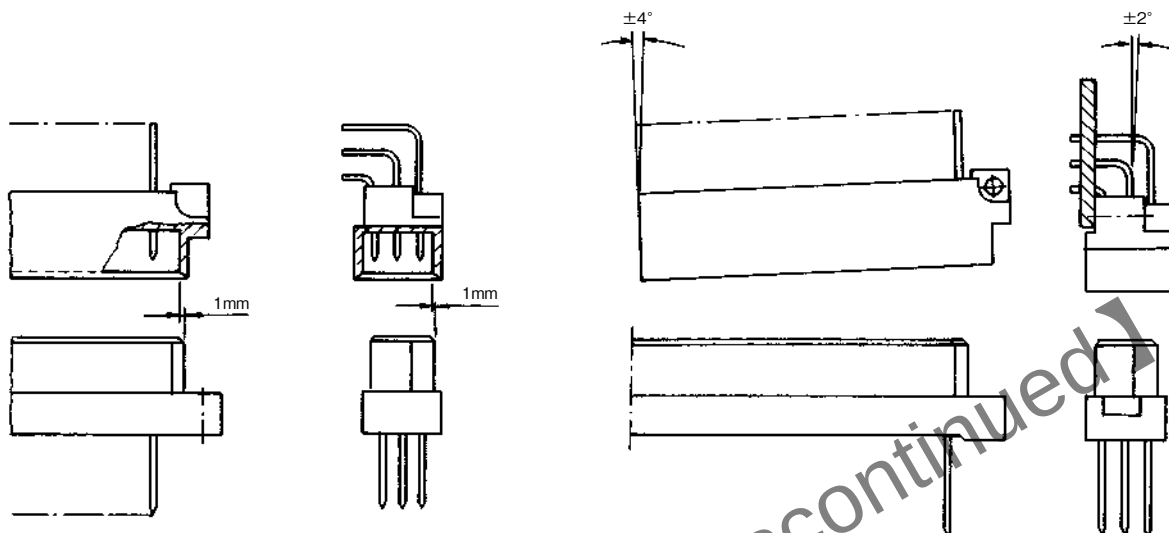
Unit : mm				
Part No.	HRS No.	No. of Pos.	RoHS	Purchase Unit
PCN12E-96S-2.54DSA (71)	CL0583-2097-1-71	96	○	15pcs per tray

Precautions

●DIN Connector Mating Conditions

Use Hirose DIN connectors within the following range.

The contacts of the PCN10 Series receptacle rattle slightly in order to stabilize the contact installation but this does not represent a performance issue.



While Taking in Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please confirm 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, assurance will not be given.

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

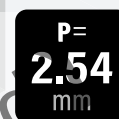
In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/ defense etc. Hirose must review before assurance of reliability can be given.

PCN13 Series

IEC603-2 / DIN41612 Standard Compliant Products



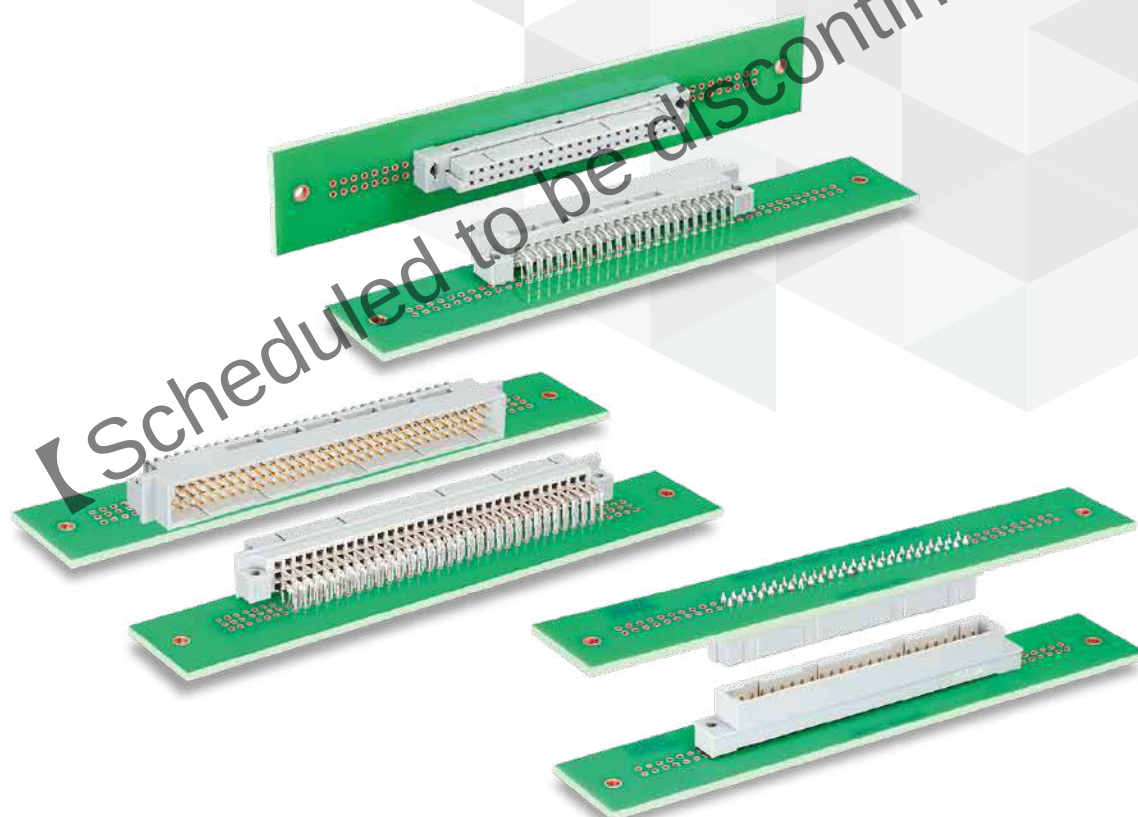
DIN Standard



P=2.54 mm



Wide Variation



Features

1. Complies with DIN Standard

Complies with IEC603-2/DIN41612 standard.

2. Number of Positions

12 pin variations available : 10, 16, 20, 30, 32, 44, 48, 50, 64, 90, 96 and 100.

3. Two-point Contact Design

High cost performance with the single-sided two point contact design.

Single-sided Two-point Contact System



Two-point Contact Design

4. Wide applications

The easy lock pin type for temporary board installation is available.

Applications

Computers, Control Equipment, Switches, Measuring Devices, etc.

Product Specifications

Rated Current	2A	Operating Temperature (Note 1)	-55 to +85°C
Rated Voltage	300V AC	Operating Humidity Range	85% Max.
		Storage Temperature Range (Note 2)	-10 to +60°C
		Storage Humidity Range (Note 2)	40 to 70%

Item	Specification	Condition
Insulation Resistance	10 ⁶ M Ω Min.	Measured at 100V DC
Withstanding Voltage	No flashover or insulation breakdown.	1000V AC for 1 min. (IDC, Crimp Type : 650V AC)
Contact Resistance	20m Ω Max.	Measured at 0.1A
Vibration	No electrical discontinuity of 10 μ s Min.	Frequency : 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
Humidity(Steady State)	Insulation resistance : 10 ⁶ M Ω Min.	96 hours at temperature of 40 ± 2°C and humidity of 90% to 95%
Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C : 30 minutes → 15 to 35°C : 5 minutes Max. → 125°C : 30 minutes → 15 to 35°C : 5 minutes Max.) 5 times
Mating Durability	Contact resistance : 20m Ω Max.	500 times
Soldering Heat Resistance	No deformation of components affecting performance.	Manual soldering : 350°C for 3 seconds

Note 1 : Includes 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. The operating temperature and humidity range applies to the non-energized state after board mounting and temporary storage during transportation.

Material / Finish

Component	Material	Color/Finish	Remarks
Insulator	PBT	Beige	UL94V-0
Contact	Receptacle Copper Alloy	Contact Area: Nickel Underplated+Gold Plated Remaining Areas: Nickel Underplated+Tin Plated	-

Product Number Structure

■ PCN13 Series (Receptacle)

PCN13 E - # S - 2.54 DSA

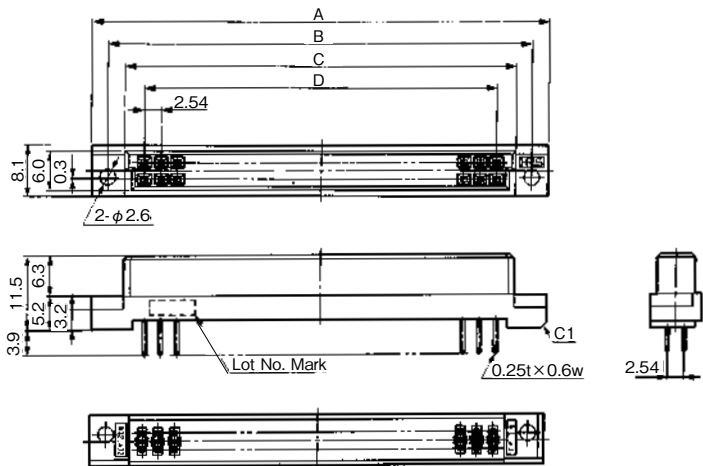
①②③④⑤⑥

① Series Name	PCN13	④ Connector Type	S : Receptacle
② Configuration	Blank : Standard Type E : With Lock Pin for Temporary Board Installation	⑤ Contact Pitch	2.54mm
③ No. of Pos.	2 row : 10,16,20,30,32,44,50,64,90,100 3 row : 48,96	⑤ Contact Pitch	DS : Right Angle Through Hole Type DSA : Straight Through Hole Type

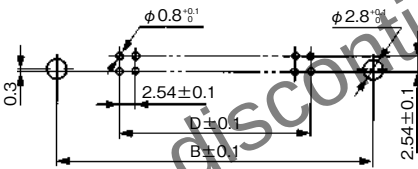
*PCN13 Series only includes socket connectors that mate with the PCN10 and PCN12 Series plugs.

【Scheduled to be discontinued】

Receptacle : 2-row Straight Type



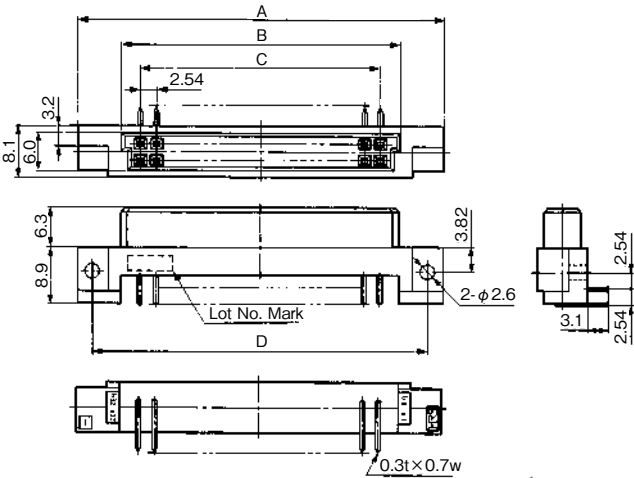
PCB Mounting Pattern



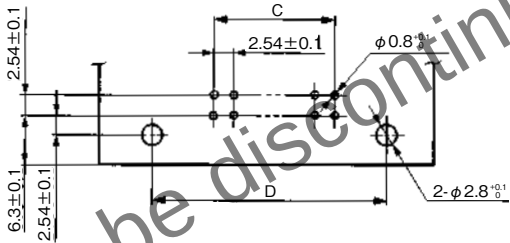
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN13-16S-2.54DSA(71)	CL0583-3001-8-71	16	34.04	29.04	24.04	17.78	○	80pcs per tray
PCN13-20S-2.54DSA(71)	CL0583-3002-0-71	20	39.12	34.12	29.12	22.86		70pcs per tray
PCN13-32S-2.54DSA(71)	CL0583-3004-6-71	32	54.36	49.36	44.36	38.10		50pcs per tray
PCN13-44S-2.54DSA(71)	CL0583-3005-9-71	44	69.60	64.60	59.60	53.34		40pcs per tray
PCN13-50S-2.54DSA(71)	CL0583-3006-1-71	50	77.22	72.22	67.22	60.96		30pcs per tray
PCN13-64S-2.54DSA(71)	CL0583-3007-4-71	64	95.00	90.00	85.00	78.74		20pcs per tray
PCN13-90S-2.54DSA(71)	CL0583-3008-7-71	90	128.02	123.02	118.02	111.76		
PCN13-100S-2.54DSA(71)	CL0583-3009-0-71	100	140.72	135.72	130.72	124.46		

Receptacle : 2-row Right Angle Type



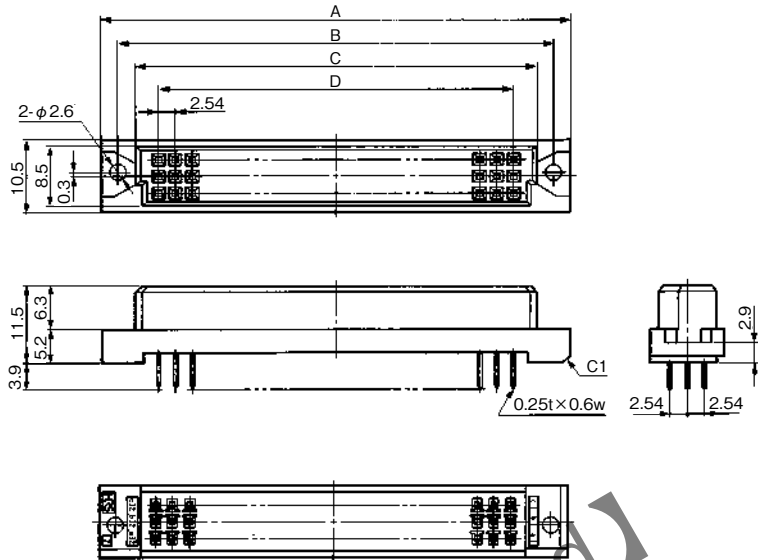
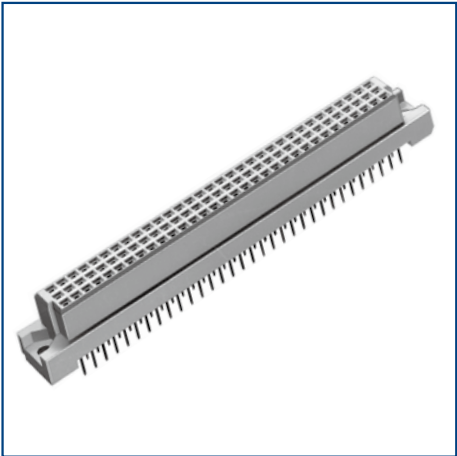
PCB Mounting Pattern



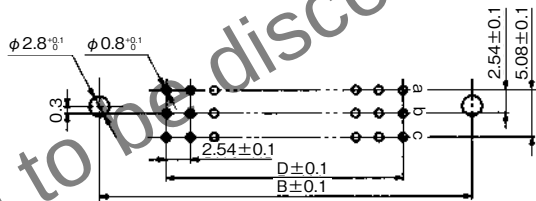
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN13-16S-2.54DS(71)	CL0583-3031-9-71	16	38.02	24.04	17.78	33.02	○	44pcs per box
PCN13-20S-2.54DS(71)	CL0583-3032-1-71	20	43.10	29.12	22.86	38.10		33pcs per tray
PCN13-30S-2.54DS(71)	CL0583-3033-4-71	30	55.80	41.82	35.56	50.80		22pcs per tray
PCN13-32S-2.54DS(71)	CL0583-3034-7-71	32	58.34	44.36	38.10	53.34		
PCN13-44S-2.54DS(71)	CL0583-3035-0-71	44	73.58	59.60	53.34	68.58		11pcs per tray
PCN13-50S-2.54DS(81)	CL0583-3036-2-81	50	81.20	67.22	60.96	76.20		
PCN13-64S-2.54DS(71)	CL0583-3037-5-71	64	98.98	85.00	78.74	93.98		
PCN13-90S-2.54DS(81)	CL0583-3038-8-81	90	132.00	118.02	111.76	127.00		
PCN13-100S-2.54DS(71)	CL0583-3039-0-71	100	144.70	130.72	124.46	139.70		

Receptacle : 3-row Straight Type



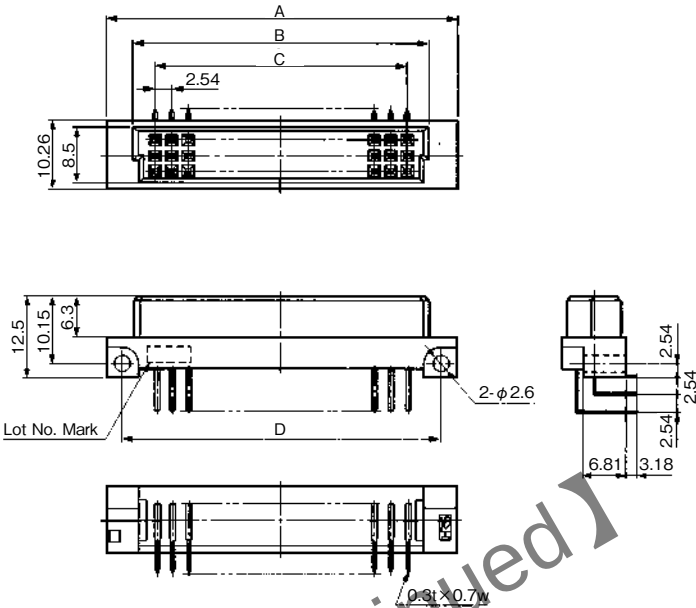
PCB Mounting Pattern



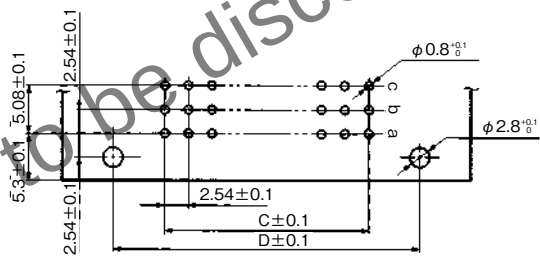
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN13-48S-2.54DSA(71)	CL0583-3010-9-71	48	54.36	50.00	44.36	38.10	○	20pcs per tray
PCN13-96S-2.54DSA(71)	CL0583-3011-1-71	96	95.00	90.00	85.00	78.74		15pcs per tray

Receptacle : 3-row Right Angle Type



PCB Mounting Pattern



Unit : mm

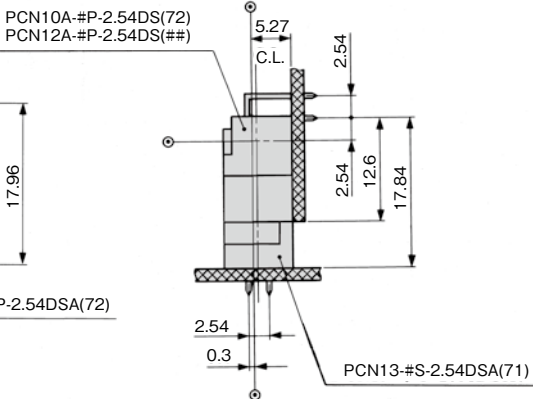
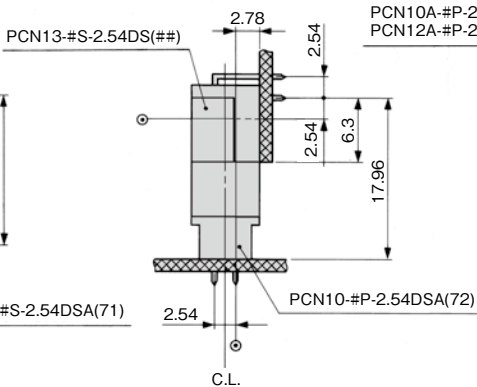
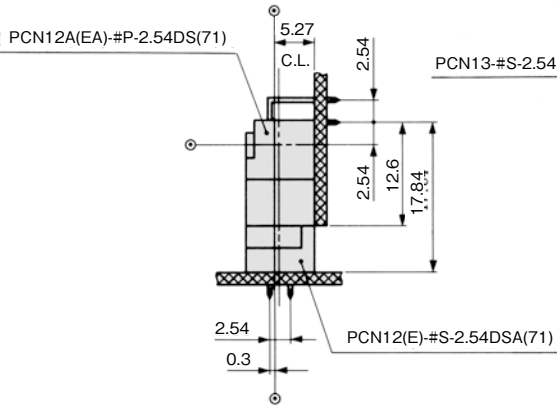
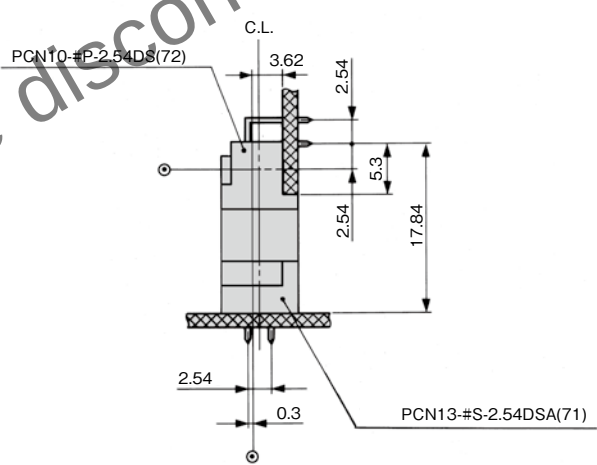
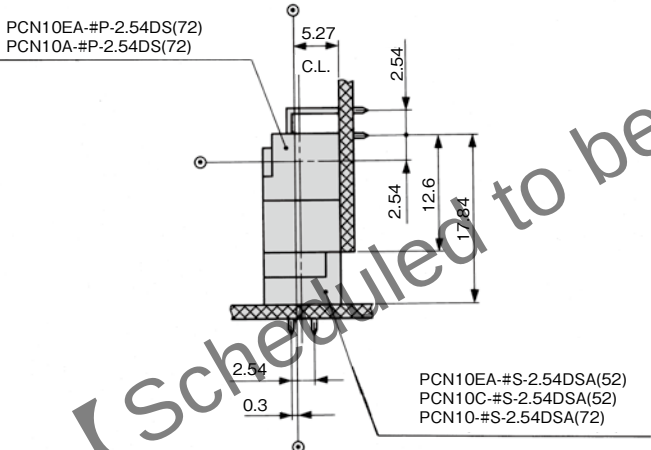
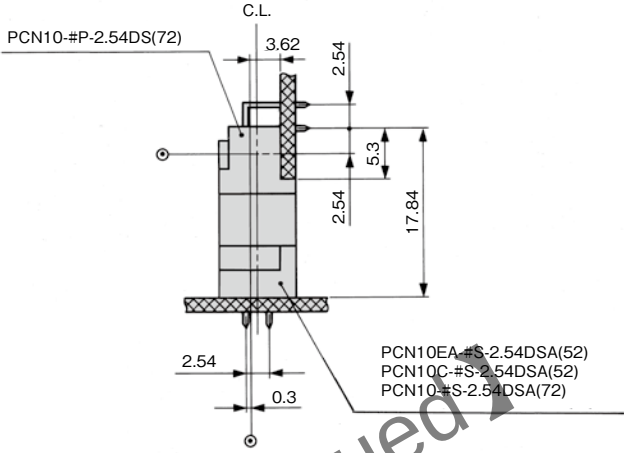
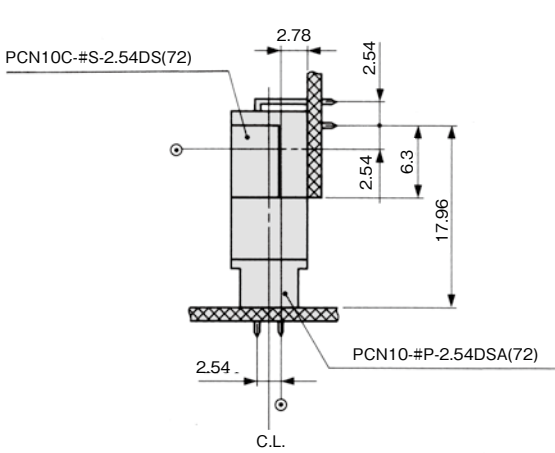
Part No.	HRS No.	No. of Pos.	A	B	C	D	RoHS	Purchase Unit
PCN13-48S-2.54DS(71)	CL0583-3040-0-71	48	53.36	44.36	38.10	48.26	○	48pcs per tray
PCN13-96S-2.54DS(71)	CL0583-3041-2-71	96	94.00	85.00	78.74	88.90		24pcs per tray

Application Pattern

● Right Angle Connection

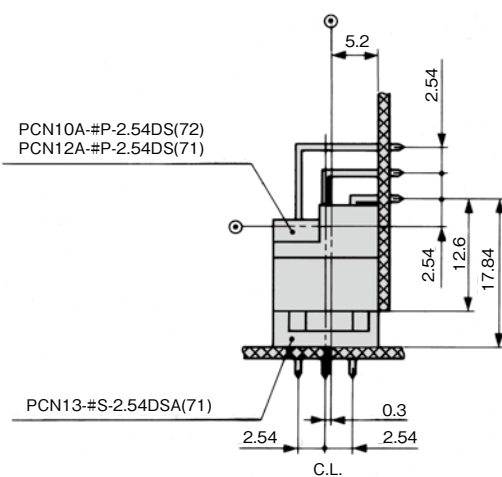
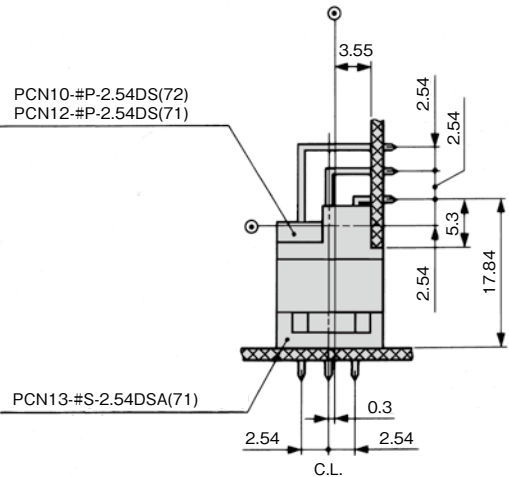
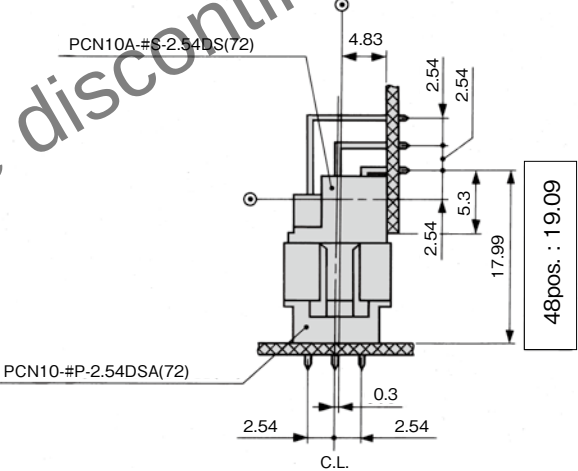
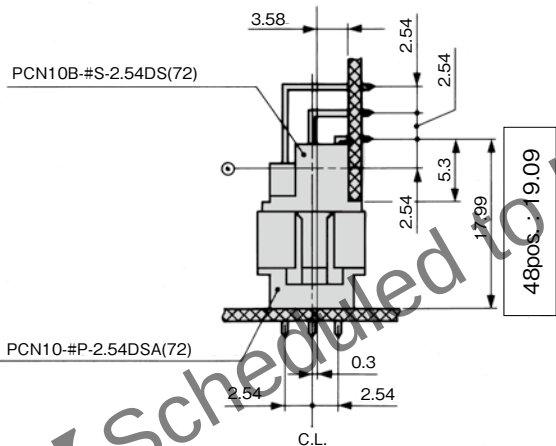
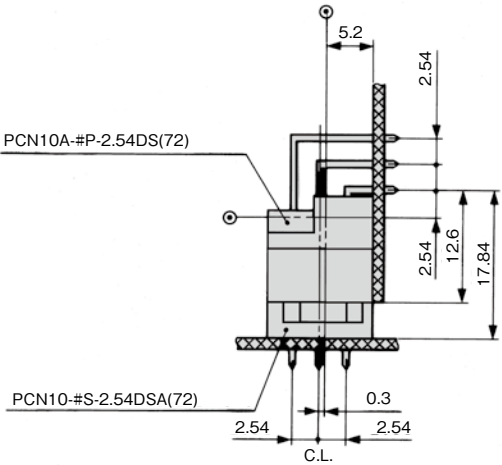
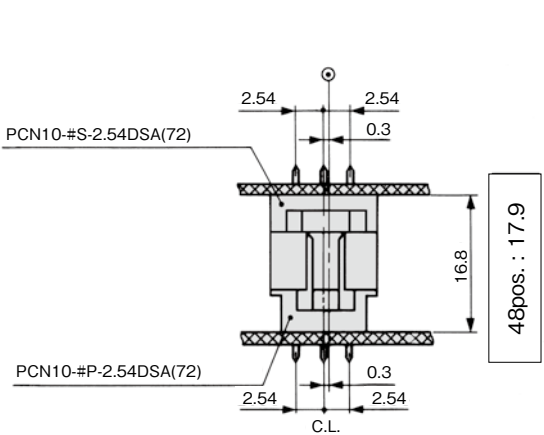
● 2-row Type

⊙ Mounting Hole Center
C.L. Center Line



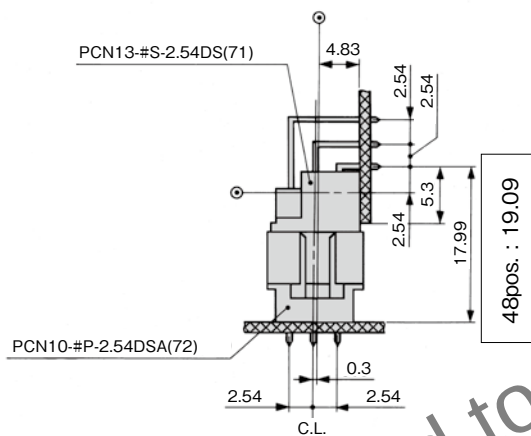
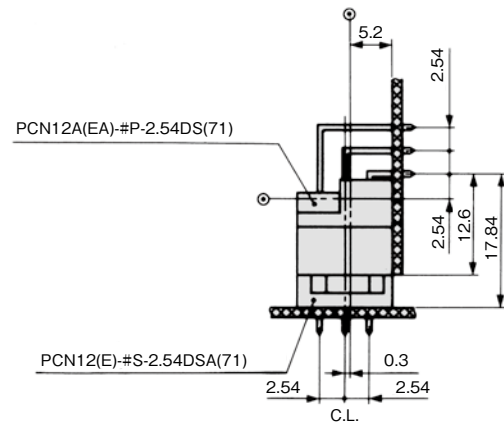
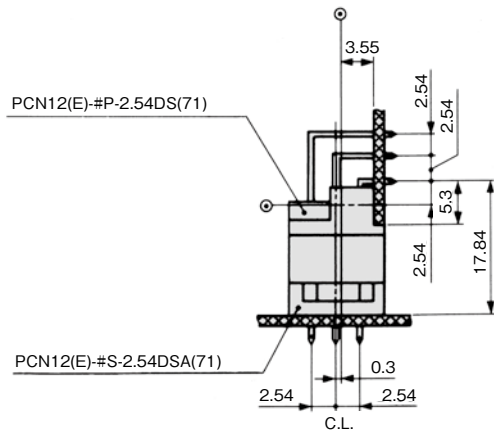
● 3-row Type

○ Mounting Hole Center
C.L. Center Line

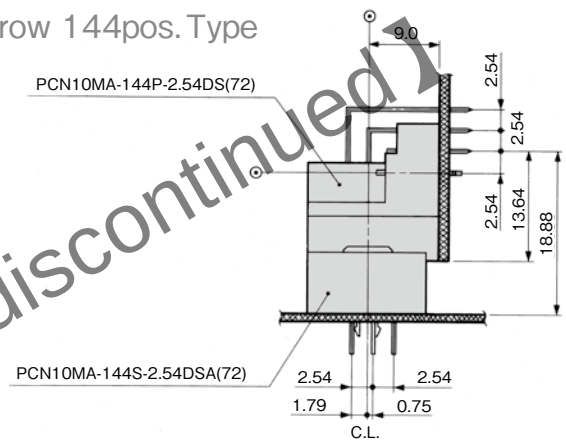


【Scheduled to be discontinued】

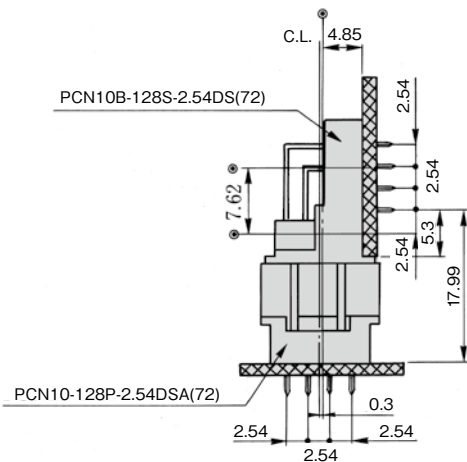
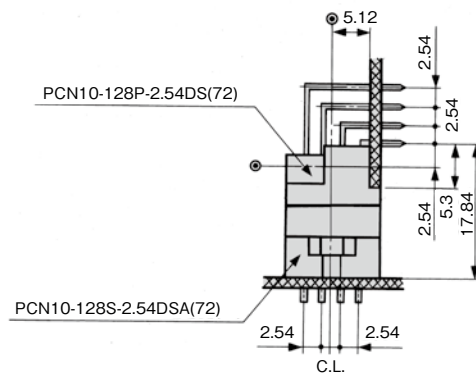
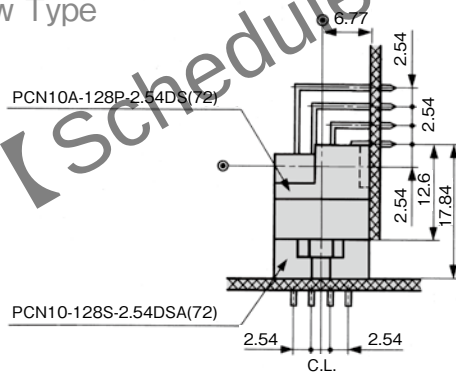
○ Mounting Hole Center
C.L. Center Line



● 3-row 144pos. Type



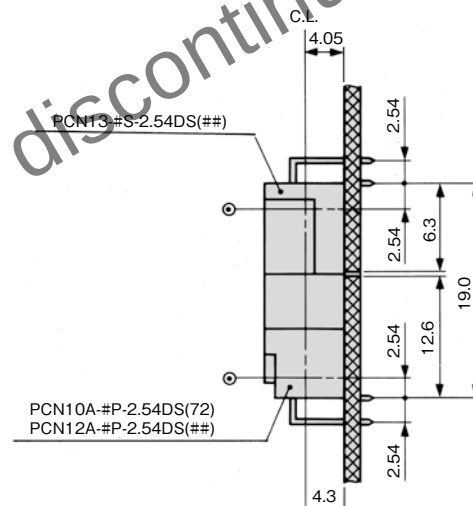
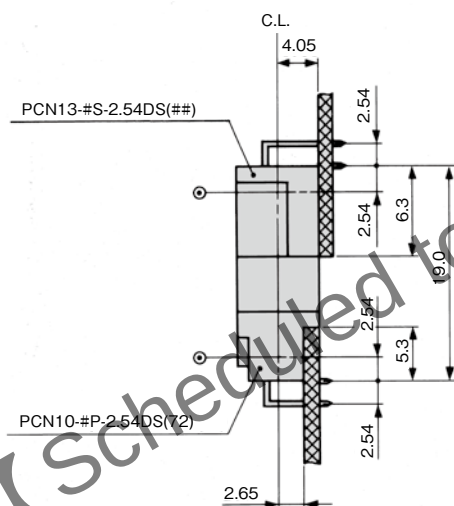
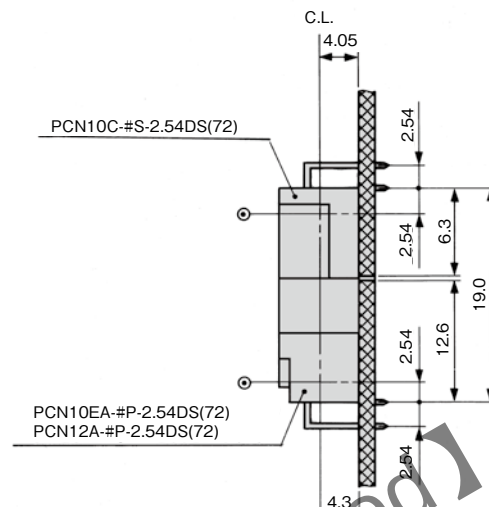
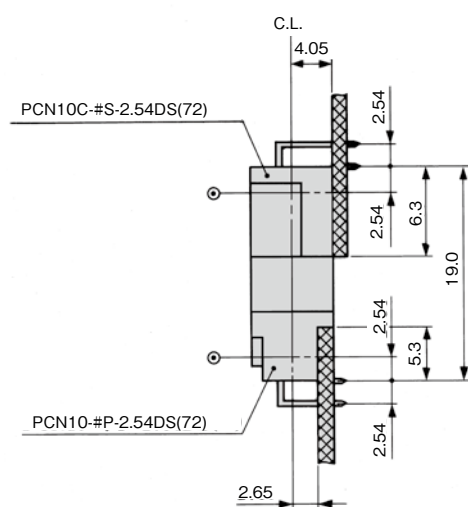
● 4-row Type



● Coplanar Connection

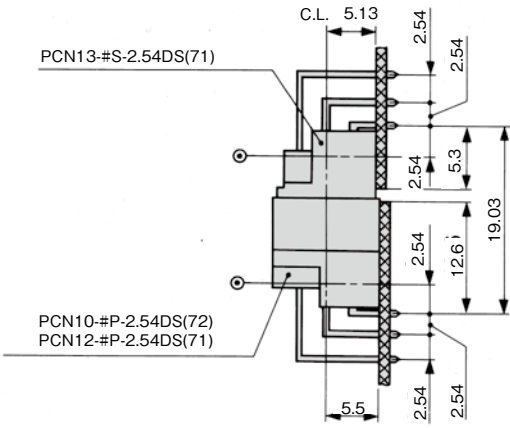
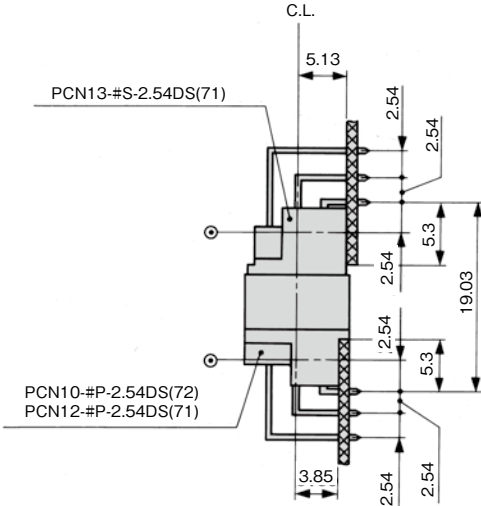
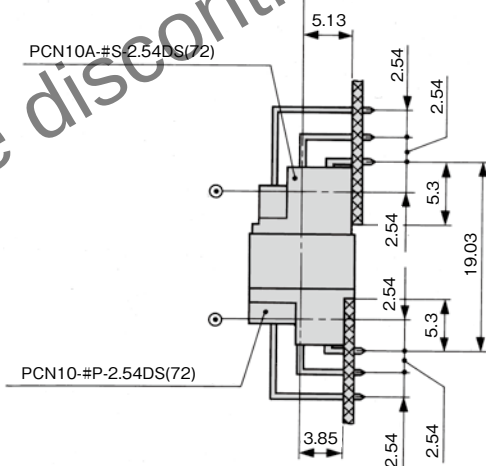
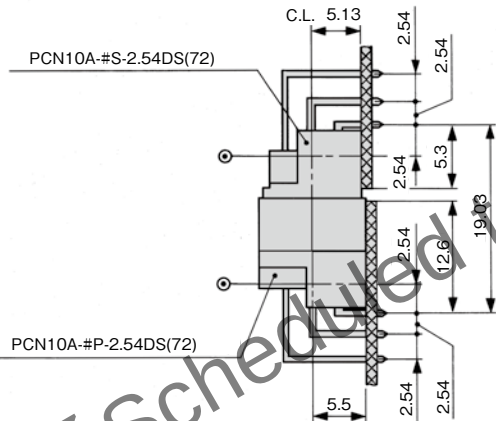
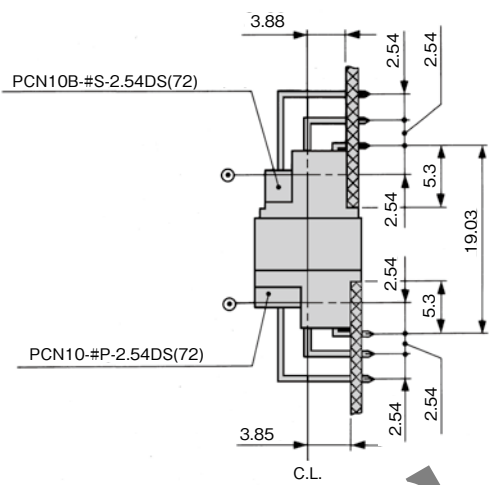
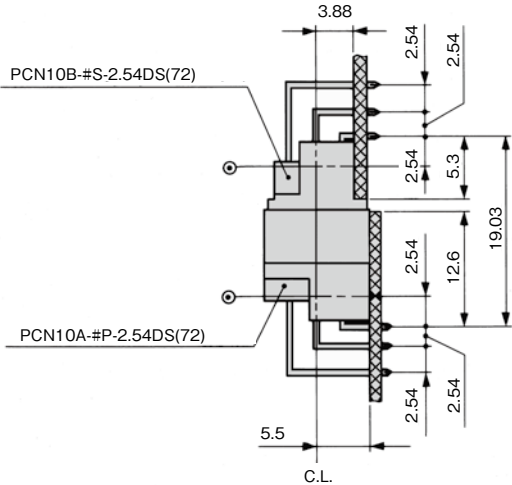
● 2-row Type

○ Mounting Hole Center
C.L. Center Line



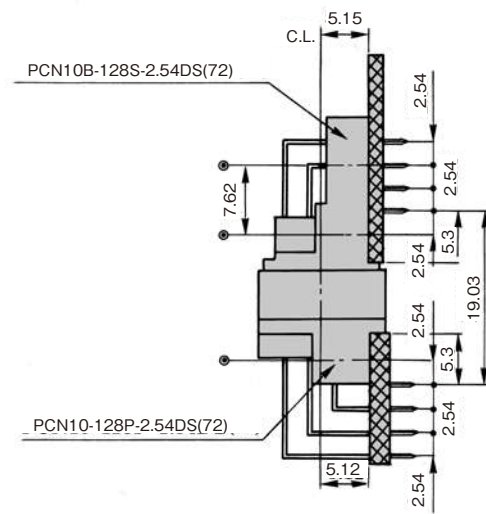
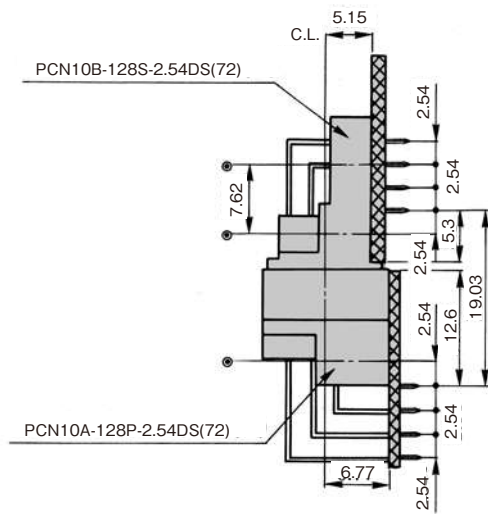
● 3-row Type

○ Mounting Hole Center
C.L. Center Line



【Scheduled to be discontinued】

●4-row Type

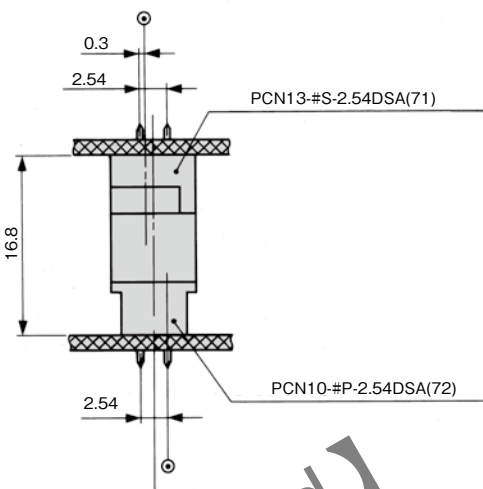
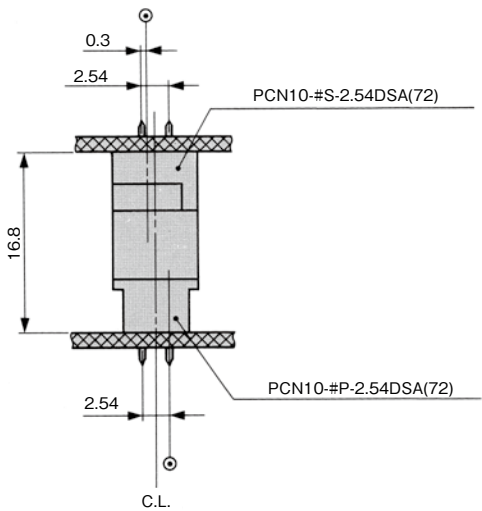


【Scheduled to be discontinued】

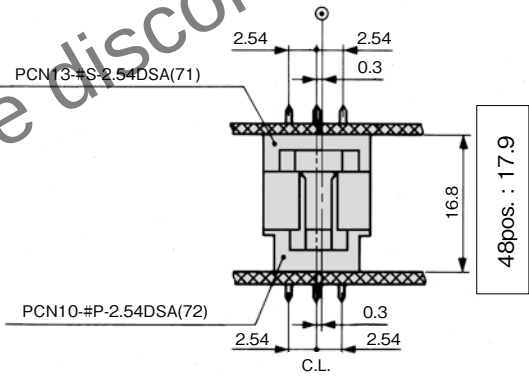
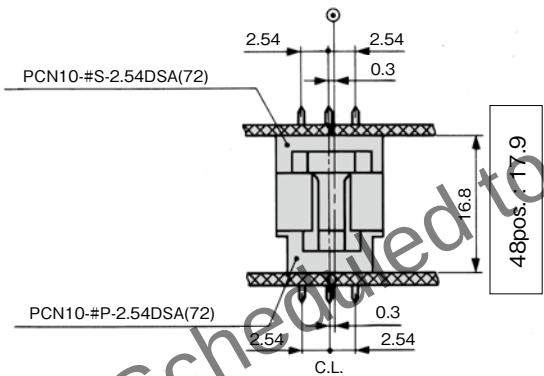
●Parallel Connection

●2-row Type

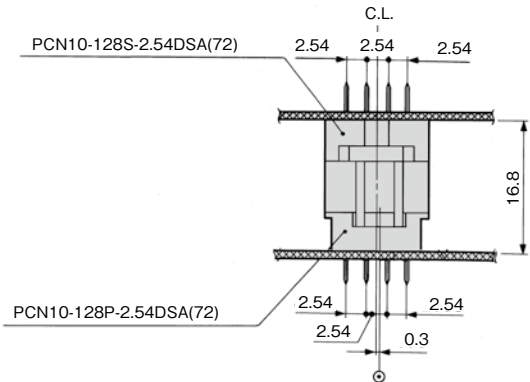
○ Mounting Hole Center
C.L. Center Line



●3-row Type

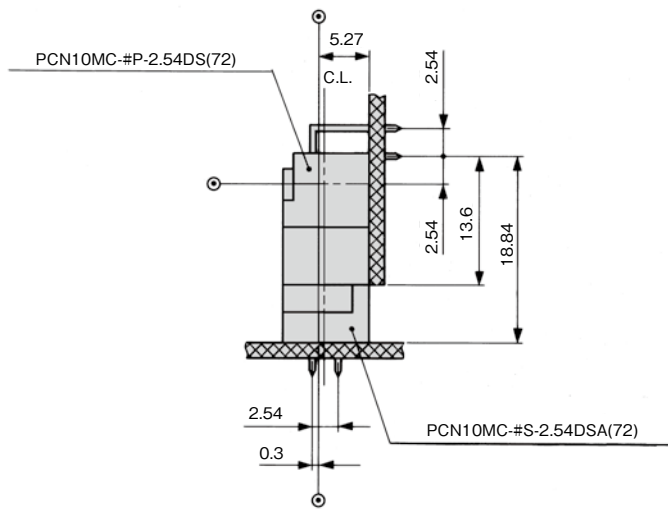


●4-row Type



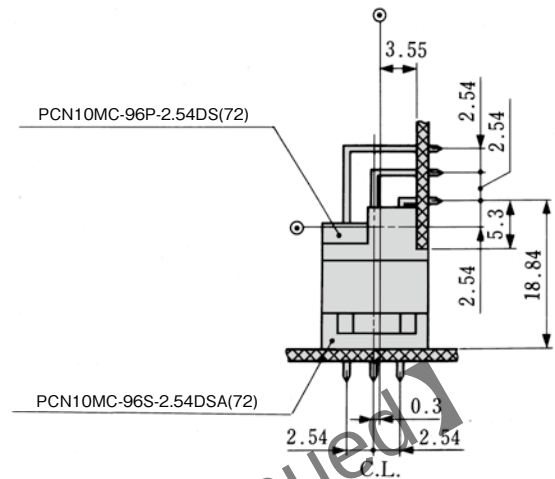
●Circuit Protection Type

●2-row Type



64pos. : The sequential contacts are indicated at 22 points from contact No.1 to 4 and 26 to 32 in both rows a and b.
100pos. : The sequential contact is indicated at 22 points from contact No.1 to 4 and 44 to 50 in both rows a and b.

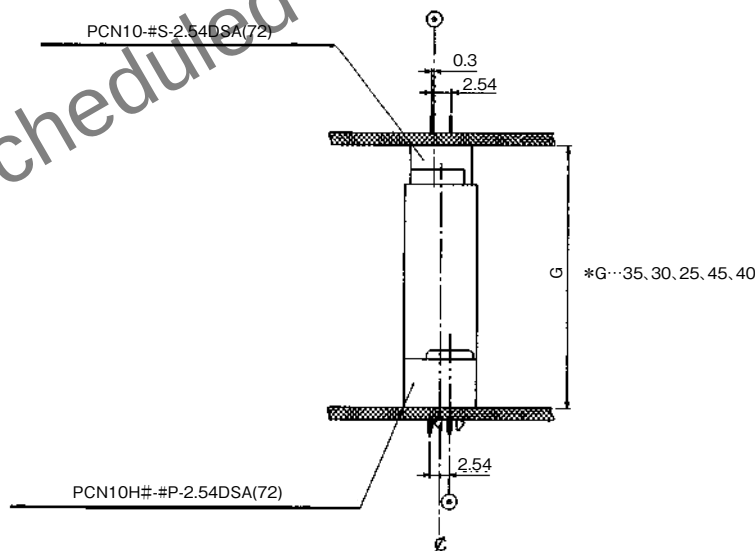
●3-row Type



The sequential contacts are located at 2 points: a1 and a32.

⊙ Mounting Hole Center
C.L. Center Line

●Stacking Connector



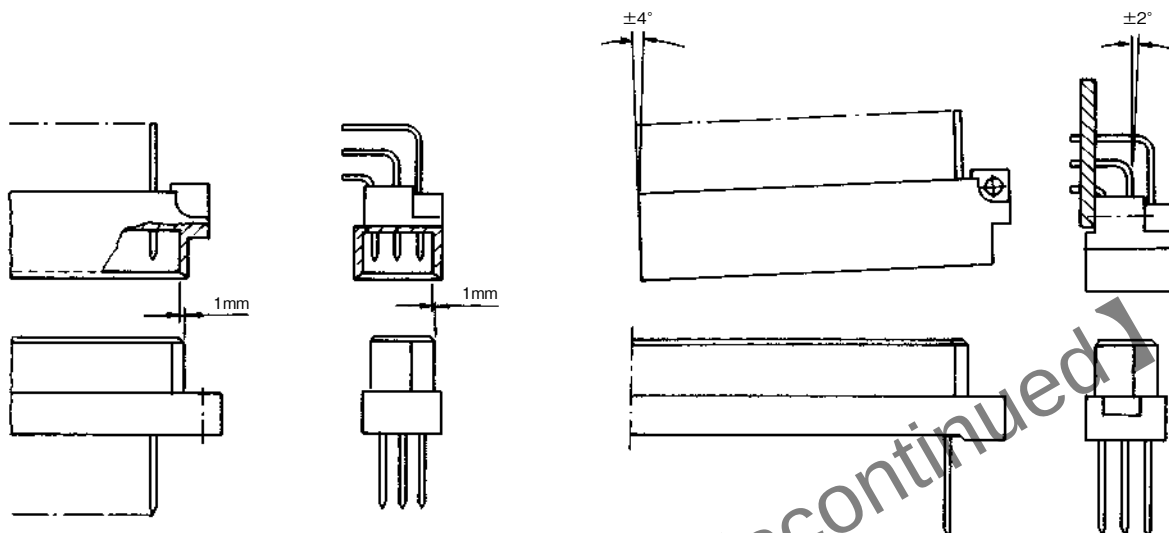
⊙ Mounting Hole Center
C.L. Center Line

Precautions

●DIN Connector Mating Conditions

Use Hirose DIN connectors within the following range.

The contacts of the PCN10 Series receptacle rattle slightly in order to stabilize the contact installation but this does not represent a performance issue.



While Taking in Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please confirm 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, assurance will not be given.

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.