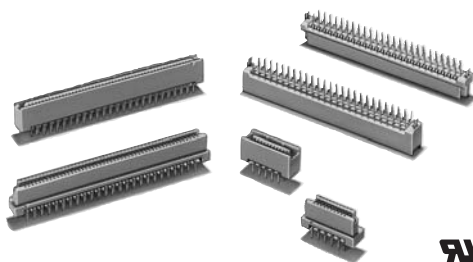


Screw Mount Eliminated to Save Space. Adjustable Stacking Space of 12 to 20 mm Adds Greater Flexibility.

- The stacking space can be adjusted from 12 to 20 mm in 1-mm increments.
- A pitch of 1.27 mm for high-density mounting in double-row arrangements.
- A quadruple-row staggered arrangement (1.27 x 1.905 mm) for board connection.
- All models incorporate fastening pins to secure the terminals, thus preventing floating or falling over during soldering.
- Leaf contact construction enables smooth mating and resistance to bending.
- Space saving mating length of 3.1 mm.
- Press fitting assures long-term contact quality. The gold/palladium plating has been improved for better contact reliability.
- The XH3 conforms to EN, IEC, UL (file no. E103202), and CSA (file no. LR62678).
- Not mated with XH2 and XH4 Half-pitch Connectors.
- A special finish improves flux resistance (Straight Terminals only, 3- and 4-mm Connectors not included).



Specifications

Rated current	0.5 A
Rated voltage	125 VAC
Contact resistance	30 mΩ max. (20 mV, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 VDC)
Dielectric strength	650 VAC for 1 min. (leakage current: 1 mA max.)
Overall insertion force	0.78 N max. per contact
Connector removal force	0.10 N min. per contact
Insertion tolerance	400 times
Ambient temperature	Operating: -55 to 105°C (with no icing)

Note: The contact resistance is for the XH3A-□□41 combined with the XH3B-□□41.

Materials and Finish

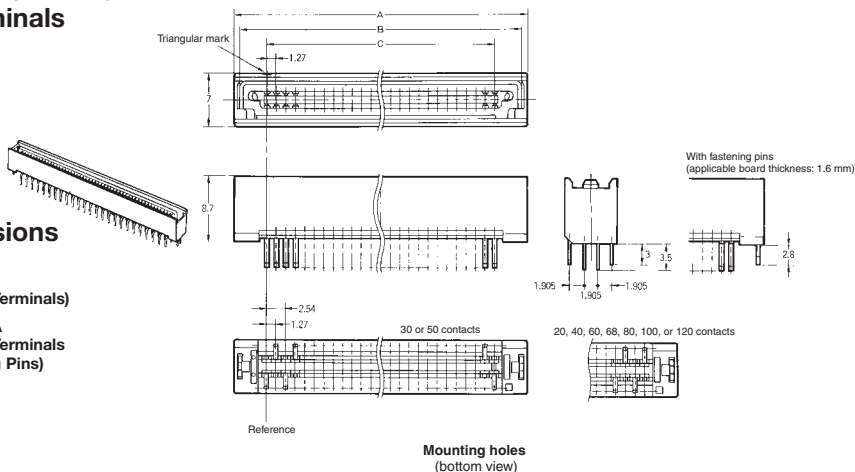
Item		Type	Plug	Socket
Housing			PBT resin with glass (UL94V-0)/grey	
Locator			PBT resin with glass (UL94V-0)/grey	
Contacts	Mating end		Phosphor bronze/nickel base, gold/palladium plating	Phosphor bronze/nickel base, gold/ palladium plating
	Terminal		Phosphor bronze/nickel base, gold, flash plating	Phosphor bronze/nickel base, gold, flash plating
Fastening pins			Phosphor bronze/tin plating	

XH3A Plug, Straight DIP Terminals

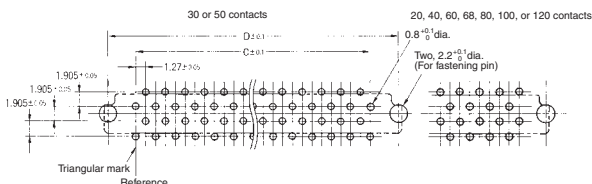
■ Dimensions

XH3A-□□41
XH3A-□□41
(Straight DIP Terminals)

XH3A-□□41-A
(Straight DIP Terminals
with Fastening Pins)



Mounting holes
(bottom view)



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.7	11.43	18.54
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34
120		83.5	82.2	74.93	82.04

■ Ordering Information

No. of contacts	Model	Plug/Straight DIP Terminals	Plug/Straight DIP Terminals with fastening pins (See note.)
20		XH3A-2041	XH3A-2041-A
30		XH3A-3041	XH3A-3041-A
40		XH3A-4041	XH3A-4041-A
50		XH3A-5041	XH3A-5041-A
60		XH3A-6041	XH3A-6041-A
68		XH3A-6841	XH3A-6841-A
80		XH3A-8041	XH3A-8041-A
100		XH3A-0141	XH3A-0141-A
120		XH3A-0241	XH3A-0241-A

Note: Applicable board thickness is 1.6 mm.

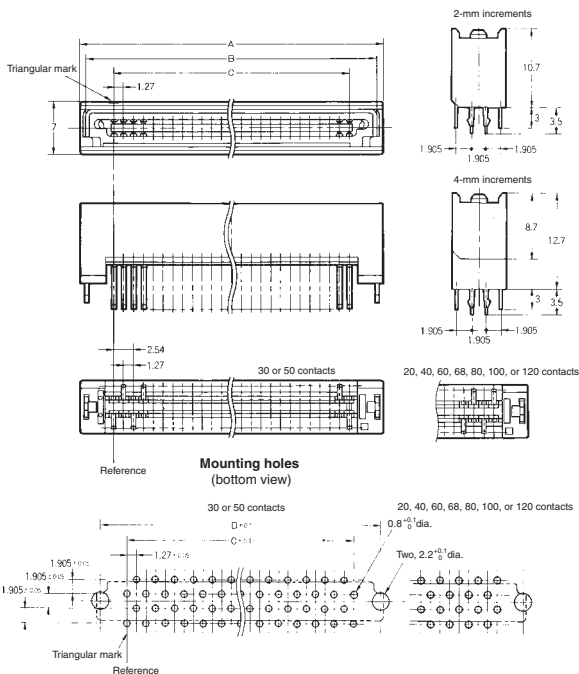
XH3A Plug, Straight DIP Terminals. Stacking Space Adjustable in Increments of 2 or 4 mm



■ Dimensions

XH3A-□□41
(Straight DIP Terminals)

XH3A-□□41-A
(Straight DIP Terminals
with Fastening Pins)



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.7	11.43	18.54
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34
120		83.5	82.2	74.93	82.04

■ Ordering Information

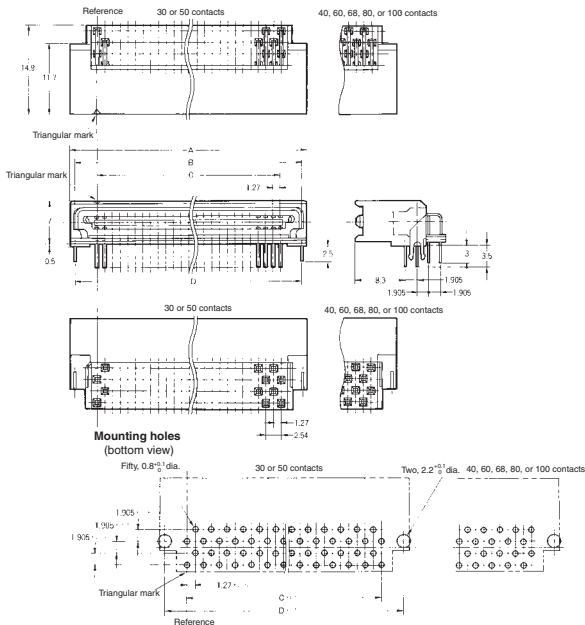
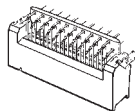
Model	Plug/Straight DIP Terminals with fastening pins (2-mm Increments) (See note.)	Plug/Straight DIP Terminals with fastening pins (4-mm Increments) (See note.)
No. of contacts		
20	XH3A-2041-2A	XH3A-2041-4A
30	XH3A-3041-2A	XH3A-3041-4A
40	XH3A-4041-2A	XH3A-4041-4A
50	XH3A-5041-2A	XH3A-5041-4A
60	XH3A-6041-2A	XH3A-6041-4A
68	XH3A-6841-2A	XH3A-6841-4A
80	XH3A-8041-2A	XH3A-8041-4A
100	XH3A-0141-2A	XH3A-0141-4A
120	XH3A-0241-2A	XH3A-0241-4A

Note: Applicable board thickness is 1.6 mm.

XH3A Plug, Right-angle DIP Terminals.

■ Dimensions

XH3-□□42-A
(Right-angle DIP Terminals
with Fastening Pins)



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
30		26.4	25.1	17.78	24.89
40		32.7	31.4	24.13	31.24
50		39.1	37.8	30.48	37.59
60		45.4	44.1	36.83	43.94
68		50.5	49.2	41.91	49.02
80		58.1	56.8	49.53	56.64
100		70.8	69.5	62.23	69.34

■ Ordering Information

Model	Plug/Right-angle DIP Terminals with fastening pins (See note.)
No. of contacts	
30	XH3A-3042-A
40	XH3A-4042-A
50	XH3A-5042-A
60	XH3A-6042-A
68	XH3A-6842-A
80	XH3A-8042-A
100	XH3A-0142-A

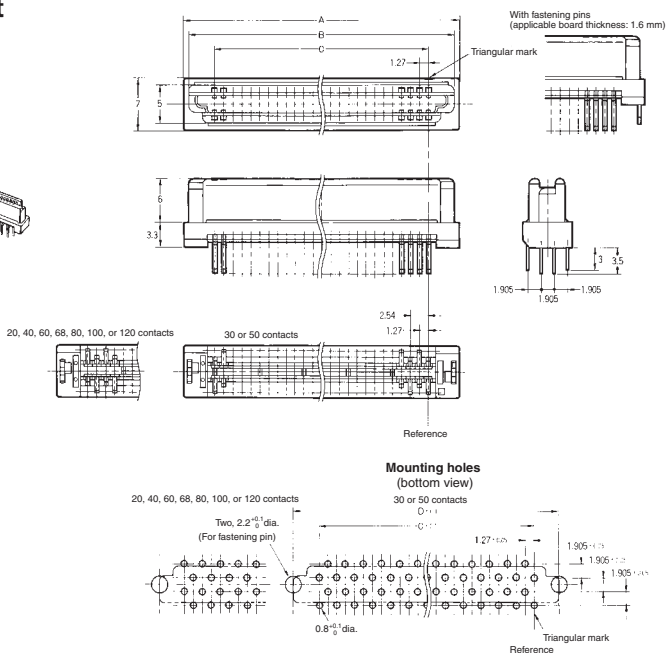
Note: Applicable board thickness is 1.6 mm.

XH3B Socket, Straight DIP Terminals

■ Dimensions

XH3B-□□41
(Straight DIP Terminals)

XH3B-□□41-A
(Straight DIP Terminals with
Fastening Pins)



Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

■ Ordering Information

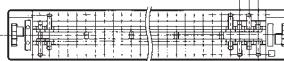
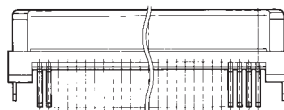
Model	Socket/Straight DIP Terminals	Socket/Straight DIP Terminals with fastening pins (See note.)
No. of contacts		
20	XH3B-2041	XH3B-2041-A
30	XH3B-3041	XH3B-3041-A
40	XH3B-4041	XH3B-4041-A
50	XH3B-5041	XH3B-5041-A
60	XH3B-6041	XH3B-6041-A
68	XH3B-6841	XH3B-6841-A
80	XH3B-8041	XH3B-8041-A
100	XH3B-0141	XH3B-0141-A
120	XH3B-0241	XH3B-0241-A

Note: Applicable board thickness is 1.6 mm.

XH3B Socket, Straight DIP Terminals. Stacking Space Adjustable in Increments of 1, 3, and 4 mm

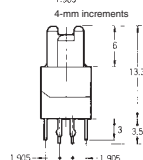
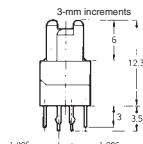
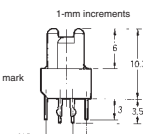
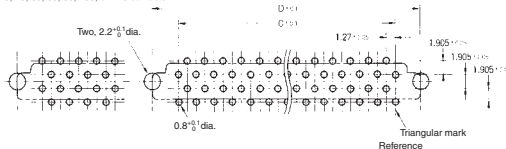


20, 40, 60, 68, 80, 100, or 120 contacts



Mounting holes
(bottom view)

20, 40, 60, 68, 80, 100, or 120 contacts 30 or 50 contacts



■ Dimensions

XH3B-□□41-1A (1-mm Increment)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-3A (3-mm Increments)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-4A (4-mm Increments)
(Straight DIP Terminals with Fastening Pins)

Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

■ Ordering Information

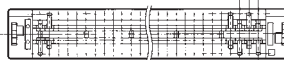
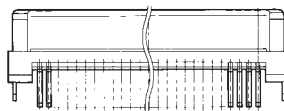
Model	Socket/Straight DIP Terminals with fastening pins (1-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (3-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (4-mm increments) (See note.)
No. of contacts			
20	XH3B-2041-1A	XH3B-2041-3A	XH3B-2041-4A
30	XH3B-3041-1A	XH3B-3041-3A	XH3B-3041-4A
40	XH3B-4041-1A	XH3B-4041-3A	XH3B-4041-4A
50	XH3B-5041-1A	XH3B-5041-3A	XH3B-5041-4A
60	XH3B-6041-1A	XH3B-6041-3A	XH3B-6041-4A
68	XH3B-6841-1A	XH3B-6841-3A	XH3B-6841-4A
80	XH3B-8041-1A	XH3B-8041-3A	XH3B-8041-4A
100	XH3B-0141-1A	XH3B-0141-3A	XH3B-0141-4A
120	XH3B-0241-1A	XH3B-0241-3A	XH3B-0241-4A

Note: Applicable board thickness is 1.6 mm.

XH3B Socket, Straight DIP Terminals. Stacking Space Adjustable in Increments of 1, 3, and 4 mm

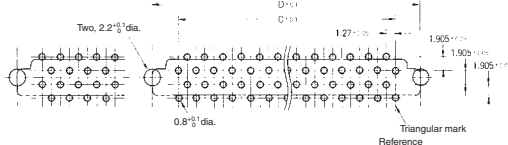
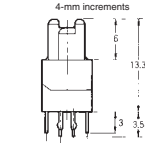
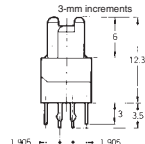
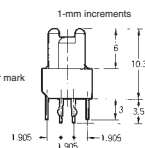


20, 40, 60, 68, 80, 100, or 120 contacts


Mounting holes
(bottom view)

20, 40, 60, 68, 80, 100, or 120 contacts

30 or 50 contacts


Triangular mark
Reference


Dimensions

XH3B-□□41-1A (1-mm Increment)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-3A (3-mm Increments)
(Straight DIP Terminals with Fastening Pins)

XH3B-□□41-4A (4-mm Increments)
(Straight DIP Terminals with Fastening Pins)

Dimensions

No. of contacts	Dimensions (mm)	A	B	C	D
20		20.0	18.6	11.43	18.54
30		26.4	25.0	17.78	24.89
40		32.7	31.3	24.13	31.24
50		39.1	37.7	30.48	37.59
60		45.4	44.0	36.83	43.94
68		50.5	49.1	41.91	49.02
80		58.1	56.7	49.53	56.64
100		70.8	69.4	62.23	69.34
120		83.5	82.1	74.93	82.04

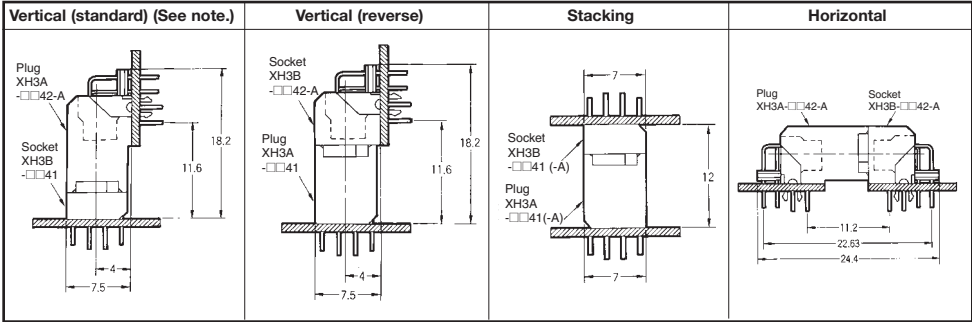
Ordering Information

Model	Socket/Straight DIP Terminals with fastening pins (1-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (3-mm increments) (See note.)	Socket/Straight DIP Terminals with fastening pins (4-mm increments) (See note.)
No. of contacts			
20	XH3B-2041-1A	XH3B-2041-3A	XH3B-2041-4A
30	XH3B-3041-1A	XH3B-3041-3A	XH3B-3041-4A
40	XH3B-4041-1A	XH3B-4041-3A	XH3B-4041-4A
50	XH3B-5041-1A	XH3B-5041-3A	XH3B-5041-4A
60	XH3B-6041-1A	XH3B-6041-3A	XH3B-6041-4A
68	XH3B-6841-1A	XH3B-6841-3A	XH3B-6841-4A
80	XH3B-8041-1A	XH3B-8041-3A	XH3B-8041-4A
100	XH3B-0141-1A	XH3B-0141-3A	XH3B-0141-4A
120	XH3B-0241-1A	XH3B-0241-3A	XH3B-0241-4A

Note: Applicable board thickness is 1.6 mm.

■ Mating Diagram

Vertical/Horizontal/Stacking



Note: The function of the standard and reverse models is the same as that of the standard XC5 DIN Connectors.

Stacking Space Adjustable Models

Stacking space	12 mm	13 mm	14 mm	15 mm	16 mm
Mating diagram					
Stacking space	17 mm	18 mm	19 mm	20 mm	
Mating diagram					

Combinations

Plug	Socket	XH3B-□□41 XH3B-□□41-A	1-mm increment XH3B-□□41-1A	3-mm increments XH3B-□□41-3A	4-mm increments XH3B-□□41-4A
XH3A-□□41, XH3A-□□1-A		12 mm	13 mm	(15 mm) (See note.)	(16 mm) (See note.)
2-mm increment XH3A-□□41-2A		14 mm	15 mm	(17 mm) (See note.)	18 mm
4-mm increment XH3A-□□41-4A		16 mm	17 mm	19 mm	20 mm

Note: Combinations marked with parentheses must be avoided if possible.

■ Contact Numbers

Item Model	Mated diagram	Mounting holes (bottom view)
Plug, Straight Terminals		
Socket, Straight Terminals		

- Contact numbers are not printed on the connectors. Use the triangular mark (▼) as a guide when designing and mounting to boards.
- On the mating side, the row of terminals on the triangular mark side are called row a, and the row on the other side is called row b. The numbers are in the order shown.
- The triangular marks on the plug and socket must be aligned when mated. The contact numbers on both sides must match.

■ Precautions

Correct Use

Mating Compatibility

XH3 Half-pitch Connectors do not mate with XH2 or XH4 Half-pitch Connectors.

Special Finish for Preventing Flux Rise

XH3 Connectors (i.e., Straight Terminals and standard size, 1-, and 2-mm increments) have a special finish that prevents flux rise. (The Connectors are designed for automated soldering. Brush coating flux from the back of the board applies too much flux and may nullify the special finish. Never use this method to apply flux.)

Soldering

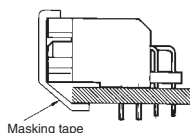
Automated soldering

Use tape to mask the Right-angle Terminal Connector prior to automated soldering.

Automated Soldering Conditions

(Jet Flow)

1. Soldering temperature: $250 \pm 5^{\circ}\text{C}$
2. Continuous soldering time: Within 5 s
(Be sure to wash the board after continuous soldering is completed.)



ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.

To convert millimetres into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.