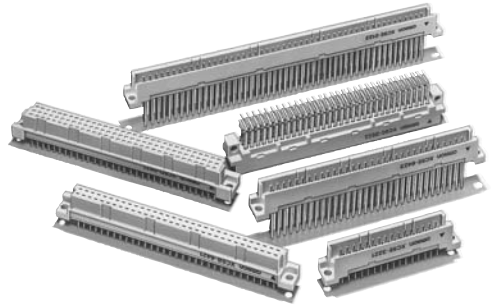


A Wide Variety of DIN Connectors That Conform to UL/CSA Standards.

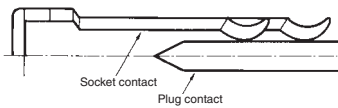


- Fully preserve the characteristics of normal DIN connectors while increasing the number of terminals available. (DIN-style mates with DIN)
- A wide product range to fit almost any application.
- Meeting world market needs with products ranging from one-piece connectors (card edge) to two-piece connectors.
- Use the twin-contact system for high reliability and low cost.
- Lower insertion force as a result of FEM analysis techniques.
- Mates with OMRON's XC2- and XC6-series connectors.
- Conform to UL standards (file no. E 103202) and CSA standards (file no. LR 62678).
- Mounting dimensions of DIN style-1 connectors are same as DIN connector (style-2 have widened dimensions for ease of mounting).
- Solderless fine-fit connector with W-shaped pins available (contact OMRON).

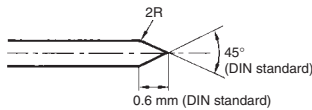


■ Structure

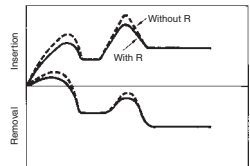
Twin Contacts
(2-point Contact System)



■ Low Insertion Force Design



The shape of the Plug contact tip is based on the DIN standard dimensions, however, a small radius, R, has been introduced between the shaft and the tip. This results in less force being required for insertion.




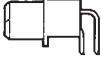


■ Comparison of Standard DIN and DIN-style Connectors

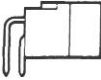
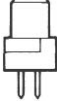
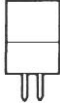


	Board mounting	Mounting hole dimensions	Characteristics	Differences
Standard DIN	 Stabilized by board edge	 Standard length	<ul style="list-style-type: none"> • Good for 19-inch racks 	<ul style="list-style-type: none"> • Plug contacts plated on both sides. • With flanges at the rear on the Socket side. • With Coding Key
DIN style 1	 Sits on top of the board	 Standard length	<ul style="list-style-type: none"> • Board-top mounting facilitates automated soldering. • Modified DIN B- and C-type Connectors 	<ul style="list-style-type: none"> • Plug contacts plated on one side (only on the mating end) • No flange at the rear on the Socket side.
DIN style 2	 Sits on top of the board	 $l_1 = \text{standard length} + 3.98 \text{ mm (XC5E)}$ $l_1 = \text{standard length} + 5.08 \text{ mm (XC5F)}$	<ul style="list-style-type: none"> • With wider mounting dimensions than style 1. • Modified DIN Q-type Connectors 	<ul style="list-style-type: none"> • No Coding Key • All other specifications are identical to those of standard DIN Connectors.

■ Connectors

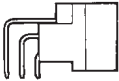



Double-row Connectors - DIN

Model	XC5A B type	XC5B B type	XC5E Q type	XC5F Q type
Appearance	Plug with right-angle terminals 	Socket with straight terminals 	Plug with straight terminals 	Socket with right-angle terminals 

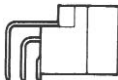

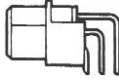
Double-row Connectors - DIN-style

Model	XC5A DIN style 1	XC5B DIN-style compatible	XC5E DIN style 2	XC5F DIN style 2	XC5K DIN style 2
Appearance	Plug right-angle terminals 	Socket straight terminals 	Plug straight terminals 	Socket right-angle terminals 	Plug large stacking straight terminals 

Triple-row Connectors - DIN

Model	XC5C C type	XC5D C type	XC5G R type	XC5H R type
Appearance	Plug with right-angle terminals 	Socket with straight terminals 	Plug with straight terminals 	Socket with right-angle terminals 

Triple-row Connectors - DIN style

Model	XC5C DIN style 1	XC5D DIN-style compatible	XC5H DIN style 2
Appearance	Plug right-angle terminals 	Socket straight terminals 	Socket right-angle terminals 

■ Ratings and Characteristics

Rated current	2 A
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	10 ⁹ MΩ min. (at 100 VDC)
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)
Connector insertion	0.59 N max. per contact
Connector removal	0.15 N min. (with test gauge, t = 0.56 mm)
Insertion tolerance	200 times (50 times for DIN-style)
Ambient temperature	Operating: -55 to 125°C (with no icing)

■ Materials and Finish

Item		Plugs	Sockets
Housings		Fiber-glass reinforced PBT resin (UL94V-0)/gray	
Contacts	Mating end	Brass/nickel base, 0.4-mm gold plating (See note 1.)	Phosphor bronze/nickel base, 0.4-mm gold plating (See note 1.)
	Terminal	Brass/nickel base, tin plating	Phosphor bronze/nickel base, tin plating

Note: 1. For non-standard plating specifications, contact your OMRON representative.

2. Wrap terminal contacts are made from phosphor bronze.

■ Applicable Wrap Post Wire Sizes

AWG30, AWG28, AWG26, or AWG24

(Solid wire: 0.25 to 0.51 mm dia.)

■ Wrap Post Length

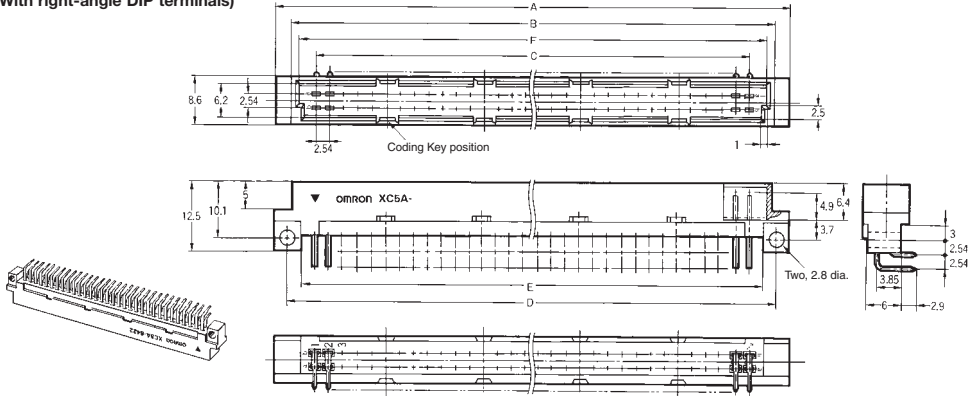
3 wires

XC5A Double-row Plugs, DIN B-type (Standard)

■ Dimensions

XC5A-□□22

(With right-angle DIP terminals)

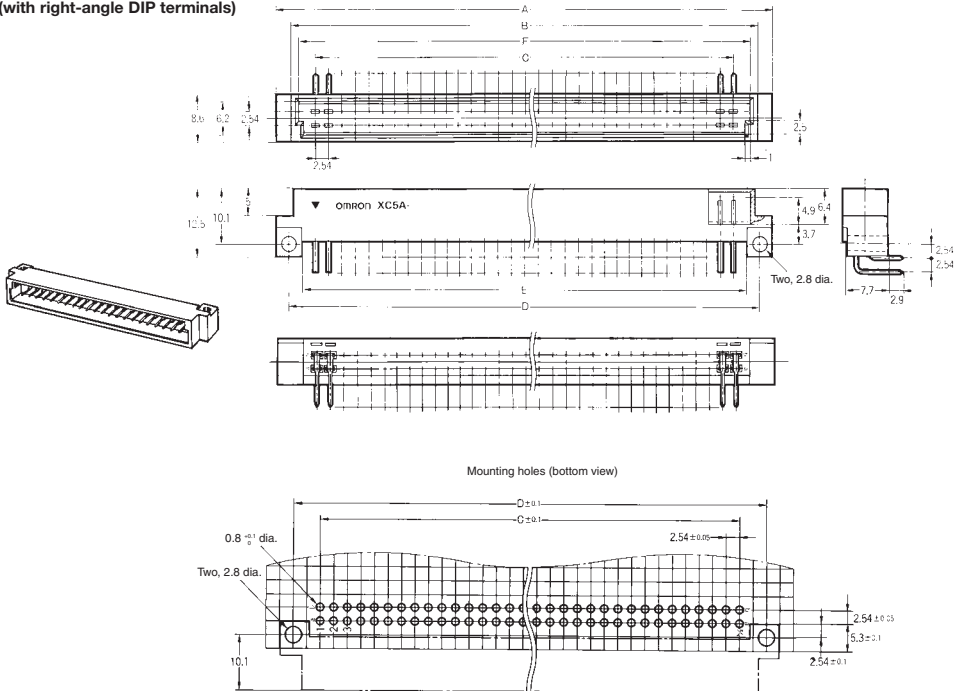


XC5A Double-row Plugs, DIN-Style 1 (with right-angle DIP terminals)

XC5A Double-Row Plugs, DIN-style 1

XC5A-□□82-1

(with right-angle DIP terminals)



XC5A Double-row Plugs, DIN B-type (Standard)/DIN Style

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key positions (contact No. For DIN*)
		A	B	C	D	E	F	
DIN/DIN Style	20	37.9	32.1	22.86	33.02	28.1	29.3	3, 8
DIN/DIN Style	24	43.0	37.2	27.94	38.10	33.1	34.4	-
DIN/DIN Style	30	50.6	44.8	35.56	45.72	40.8	42.0	-
DIN/DIN Style	32	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN/DIN Style	44	68.4	62.6	53.34	63.50	58.5	59.8	4, 9, 14, 19
DIN/DIN Style	50	76.0	70.2	60.96	71.12	66.2	67.4	5, 10, 16, 21
DIN/DIN Style	64	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27
DIN/DIN Style	100	139.5	133.7	124.46	134.62	129.7	130.9	10, 20, 31, 41

*DIN-style connectors cannot be coded - There is no coding key available for them.

■ Ordering Information

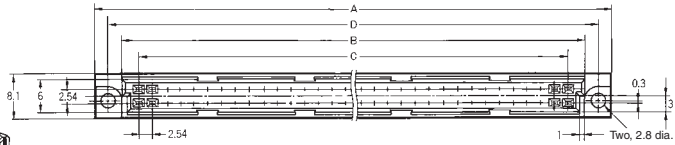
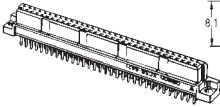
No. of contacts	Terminal type	DIN Model	DIN-style Model
20*	Right-angle DIP terminals	XC5A-2022	XC5A-2082-1
24		-	XC5A-2482-1
30		-	XC5A-3082-1
32		XC5A-3222	XC5A-3282-1
44*		XC5A-4422	XC5A-4482-1
50*		XC5A-5022	XC5A-5082-1
64		XC5A-6422	XC5A-6482-1
100*		XC5A-0122	XC5A-0182-1

*Marked items have an increased number of contacts while following DIN standards.

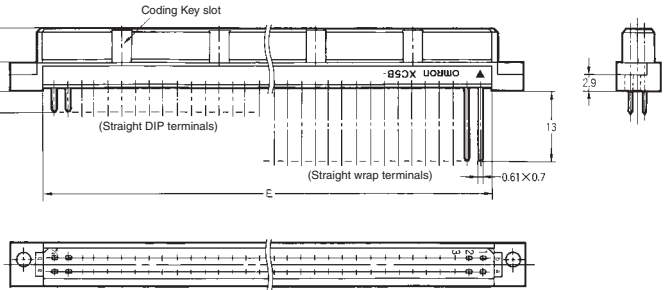
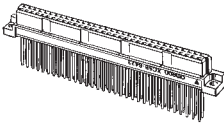
XC5B Double-row Sockets, DIN B-type (Standard)

■ Dimensions

XC5B-□□21
(With straight DIP terminals)

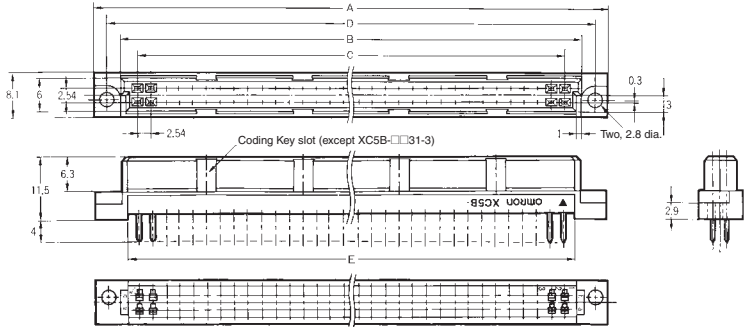
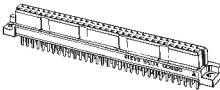


XC5A-□□23-1
(With Straight Wrap terminals)

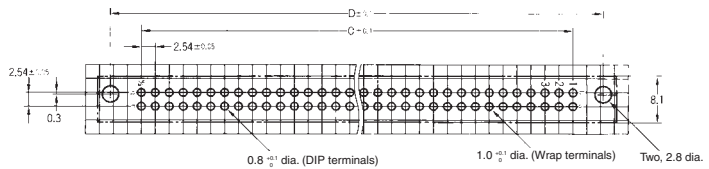


XC5B Double-row sockets, DIN style compatible

XC5B-□□31-0
XC5B-□□31-3
(With straight DIP terminals)



Mounting holes (bottom view)



XC5A Double-row Sockets, DIN B-type (Standard)/DIN Style

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key slot positions (contact No.)
		A	B	C	D	E	
DIN/DIN Style	10	26.2	16.4	10.16	21.42	14.4	-
DIN/DIN Style	14	31.3	21.5	15.24	26.50	19.4	-
DIN/DIN Style	16	33.8	24.0	17.78	29.04	22.0	-
DIN/DIN Style	20	38.9	29.1	22.86	34.12	27.1	3,8
DIN/DIN Style	24	44.0	34.2	22.94	39.20	32.1	-
DIN/DIN Style	30	51.6	41.8	35.56	46.82	39.8	-
DIN/DIN Style	32	54.2	44.4	38.10	49.36	42.3	5,12
DIN/DIN Style	44	69.4	59.6	53.34	64.60	57.5	4,9,14,19
DIN/DIN Style	50	77.0	67.2	60.96	72.22	65.2	5,10,16,21
DIN/DIN Style	64	94.8	85.0	78.74	90.0	82.9	6,13,20,27
DIN/DIN Style	80	115.1	105.3	99.06	110.32	103.3	-
DIN/DIN Style	100	140.5	130.7	124.46	135.72	128.7	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

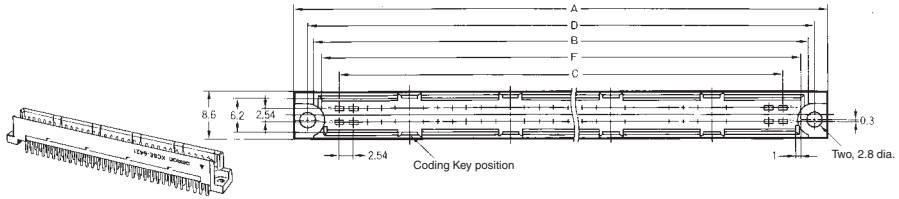
■ Ordering Information

No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
10		XC5B -1031-3	
14		XC5B -1431-3	
16		XC5B -1631 -3	
20	XC5B-2021	XC5B -2031-3	XC5B-2023
24		XC5B -2431-3	
30		XC5B -3031-3	
32	XC5B-3221	XC5B-3231-3	XC5B-3223
44	XC5B-4421	XC5B-4431-3	XC5B-4423
50	XC5B-5021	XC5B-5031-3	XC5B-5023
64	XC5B-5421	XC5B-6431-3	XC5B-6423
80		XC5B-8031-3	
100	XC5B-0121	XC5B-0131-3	XC5B-0123

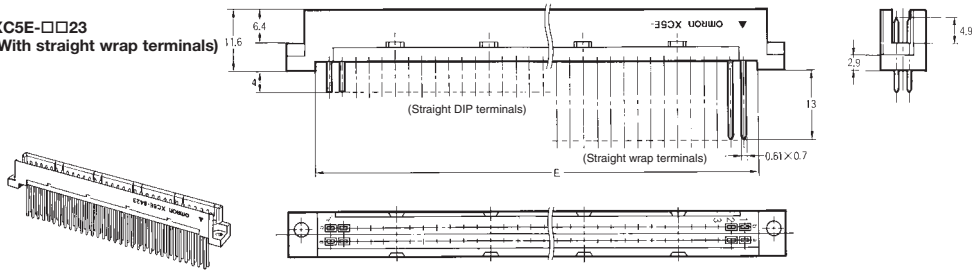
XC5E Double-row Plugs, DIN Q-type (Reverse)

■ Dimensions

XC5E-□□21
(With straight DIP terminals)

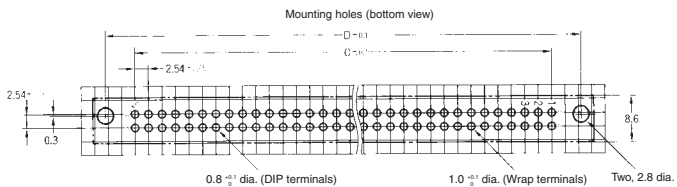
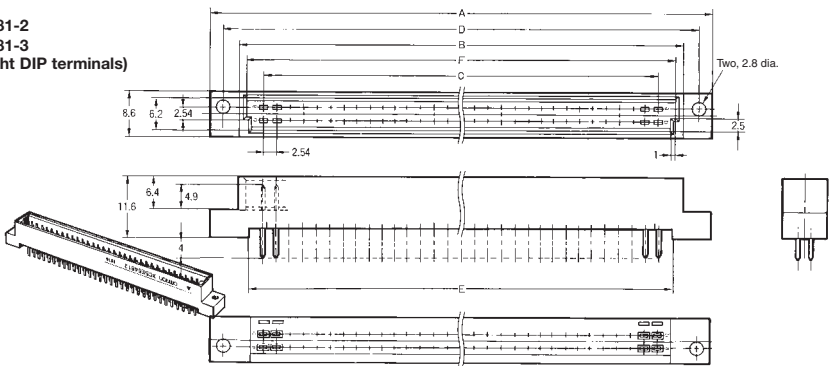


XC5E-□□23
(With straight wrap terminals)



XC5E Double-row Plugs, DIN Style 2

XC5E-□□-81-2
XC5E-□□-81-3
(With straight DIP terminals)



Note: Dimensions are given for XC5E-□□-81-2. The dimension and shape of the XC5E-□□-81-3 are different contact OMRON for further information.

XC5A Double-row Plugs, DIN Q-type (Reverse/DIN Style 2)

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key slot positions (contact No.)
		A	B	C	D	E	F	
DIN/DIN Style	10 **	26.2	19.4	10.16	21.42	15.4	16.6	-
DIN/DIN Style	14 **	31.3	24.5	15.24	26.50	20.4	21.7	-
DIN/DIN Style	20	38.9	32.1	22.86	34.12	28.1	29.3	3,8
DIN/DIN Style	24 **	44.0	37.2	27.94	39.20	33.1	34.4	-
DIN/DIN Style	30 **	55.7	44.8	35.56	50.80	40.8	42.0	-
DIN/DIN Style	32	54.2	47.4	38.10	49.36	43.3	44.6	5,12
DIN/DIN Style	44	69.4	62.6	53.34	64.60	58.5	59.8	4,9,14,19
DIN/DIN Style	50	77.0	70.2	60.96	72.22	66.2	67.4	5,10,16,21
DIN/DIN Style	64	94.8	88.0	78.74	90.00	83.9	85.2	6,13,20,27
DIN/DIN Style	100	140.5	133.7	124.46	135.72	129.71	30.9	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

■ Ordering Information

No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
10		XC5E -1081-3	
14		XC5B -1481-3	
20*	XC5E-2021	XC5E -2081-2	XC5E-2023
24		XC5E -2481-3	
30		XC5E -3081-2	
32	XC5E-3221	XC5E-3281-2	XC5E-3223
44*	XC5E-4421	XC5E-4481-2	XC5E-4423
50*	XC5E-5021	XC5E-5081-2	XC5E-5023
64	XC5E-6421	XC5E-6481-2	XC5E-6423
100*	XC5E-0121	XC5B-0181-2	XC5E-0123

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

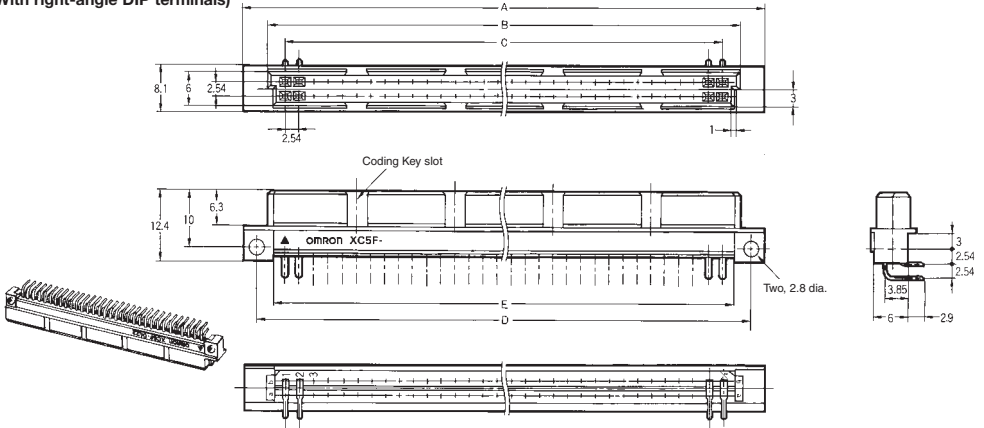
**Marked items have an increased number of contacts whilst following DIN standards.

XC5F Double-row Sockets, DIN Q-type (Reverse)

■ Dimensions

XC5F-□□22

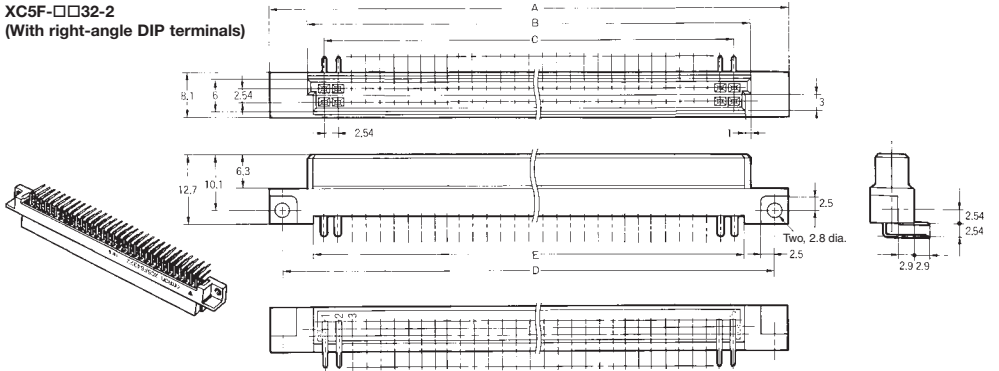
(With right-angle DIP terminals)



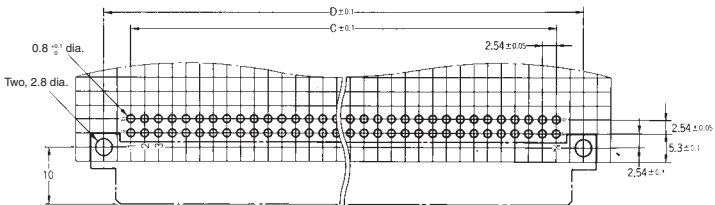
XC5F Double-row Sockets, DIN Style 2

XC5F-□□32-2

(With right-angle DIP terminals)



Mounting holes (bottom view)



XC5F Double-row Sockets, DIN Q-type (Reverse)/DIN Style 2

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key slot positions (contact No.)
		A	B	C	D	E	
DIN/DIN Style	20	37.9	29.1	22.86	33.02	27.1	3,8
DIN/DIN Style	30	55.7	41.8	35.56	50.80	39.7	-
DIN/DIN Style	32	53.2	44.4	38.10	48.26	42.3	5,12
DIN/DIN Style	44	68.4	59.6	53.34	63.5	57.5	4,9,14,19
DIN/DIN Style	50	76.0	67.2	60.96	71.12	65.2	5,10,16,21
DIN/DIN Style	64	93.8	85.0	78.74	88.90	82.9	6,13,20,27
DIN/DIN Style	100	139.5	130.7	124.46	134.62	128.7	10,20,31,41

Note: DIN Style connectors cannot be coded. There is no coding key available for them.

■ Ordering Information

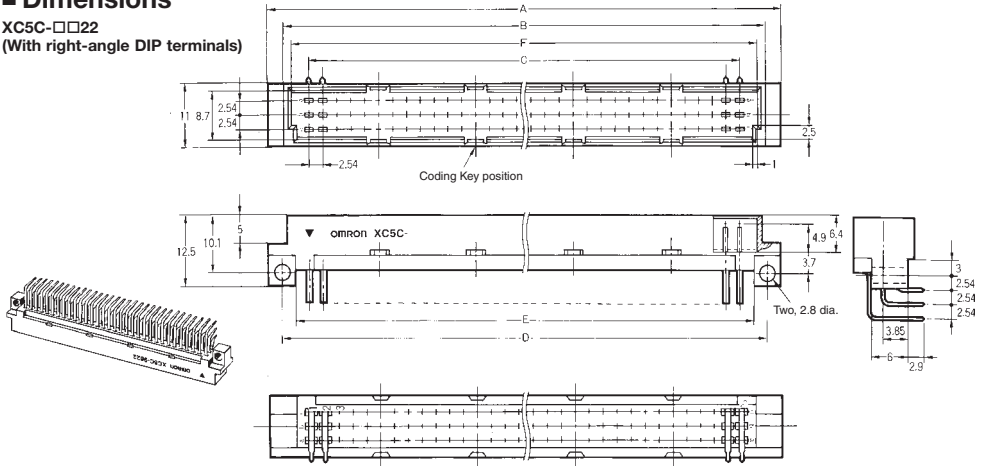
No. of contacts	Terminal type	DIN Model	DIN-style Model
20*	Right-angle DIP Terminals	XC5F-2022	XC5F-2032-2
30			XC5F-3032-2
32		XC5F-3222	XC5F-3232-2
44*		XC5F-4422	XC5F-4432-2
50*		XC5F-5022	XC5F-5032-2
64		XC5F-5422	XC5F-6432-2
100*		XC5F-0122	XC5F-0132-2

*Marked items have an increased number of contacts while following DIN standards.

XC5C Triple-row Plugs, DIN C-type (Standard)

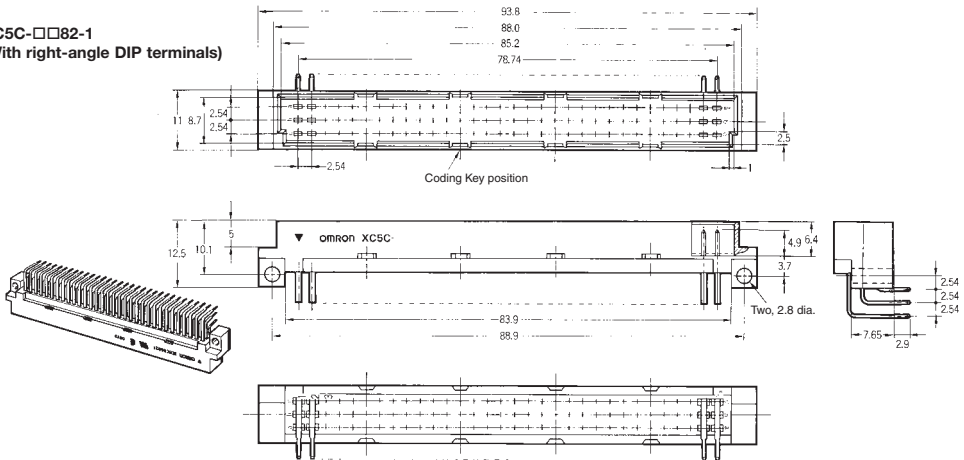
■ Dimensions

XC5C-□□22
(With right-angle DIP terminals)

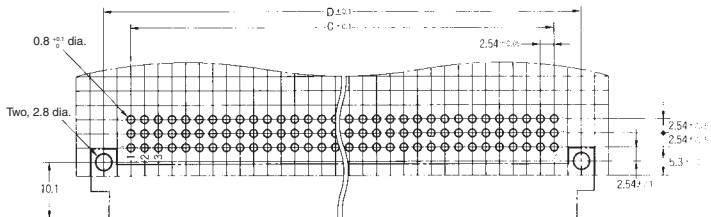


XC5C Triple-row Plugs, DIN Style 1

XC5C-□□82-1
(With right-angle DIP terminals)



Mounting holes (bottom view)



XC5C Triple-row Plugs, DIN C-type (Standard)/DIN Style 1

Dimensions

Style	No. of contacts	Dimensions (mm)						Coding Key positions (contact No.)
		A	B	C	D	E	F	
DIN	32*	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN	48	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
DIN/DIN Style	64*	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27
DIN/DIN Style	96	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27

*Has no center row (row b).

■ Ordering Information

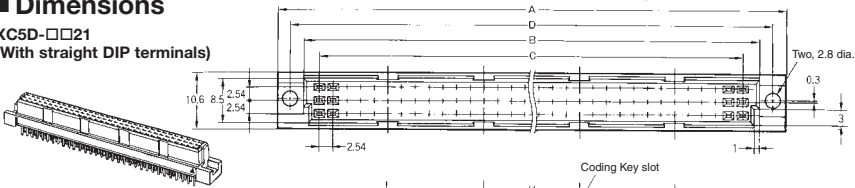
No. of contacts	Terminal type	DIN Model	DIN-style Model
32	Right angle DIP terminals	XC5C-3222	-
48		XC5C-4822	-
64*		XC5C-6422	XC5C-6482-1
96		XC5C-9622	XC5C-9682-1

*Has no center row (row b).

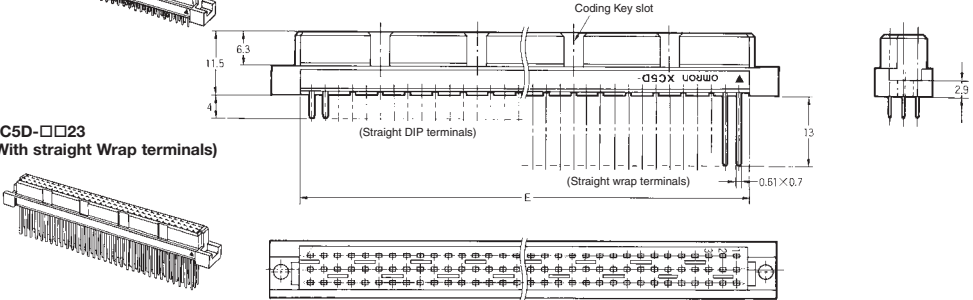
XC5D Triple-row Sockets, DIN C-type (Standard)

■ Dimensions

XC5D-□□21
(With straight DIP terminals)

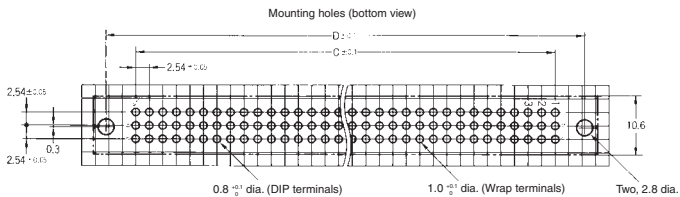
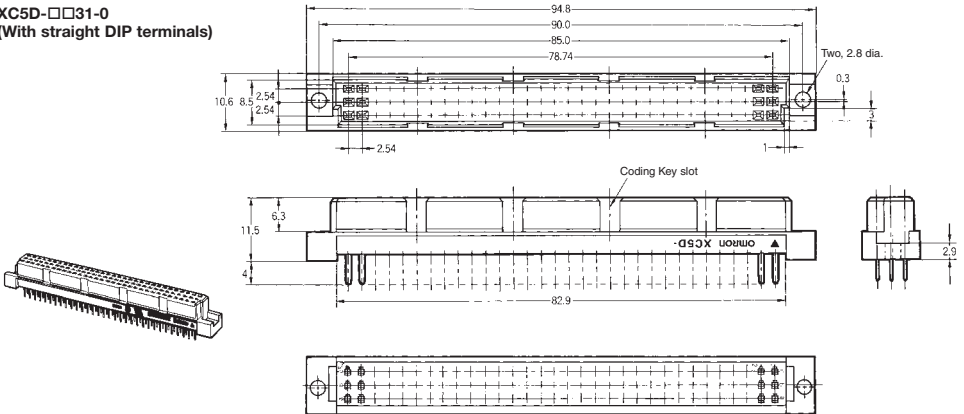


XC5D-□□23
(With straight Wrap terminals)



XC5D Triple-row Sockets, DIN Style compatible

XC5D-□□31-0
(With straight DIP terminals)



XC5D Triple-row Sockets, DIN C-type (Standard)/DIN Style Compatible

Dimensions

Style	No. of contacts	Dimensions (mm)					Coding Key positions (contact No.)
		A	B	C	D	E	
DIN	32*	54.2	44.4	38.10	49.36	42.3	5, 12
DIN	48	54.2	44.4	38.10	49.36	42.3	5, 12
DIN/DIN Style	64*	94.8	85.0	78.74	90.00	82.9	6, 13, 20, 27
DIN/DIN Style	96	94.8	85.0	78.74	90.00	82.9	6, 13, 20, 27

*Has no center row (row b).

■ Ordering Information

No. of contacts	Terminal type		
	Straight DIP terminals (DIN)	Straight DIP Terminals (DIN Style)	Straight wrap terminals (DIN)
32*	XC5D-3221	-	-
48	XC5D-4821	-	XC5D-4823
64*	XC5D-6421	XC5D-6431-0	XC5D-6423
96	XC5D-9621	XC5D-9631-0	XC5D-9623

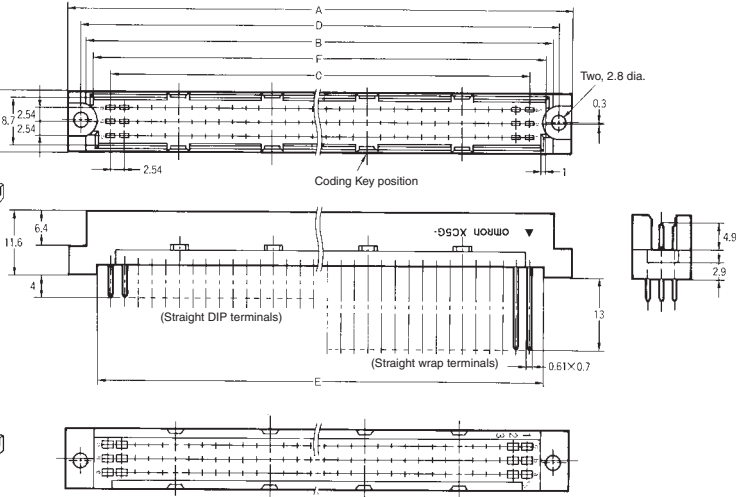
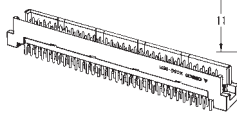
*Has no center row (row b).

XC5G Triple-row Plugs, DIN R-type (Reverse)

■ Dimensions

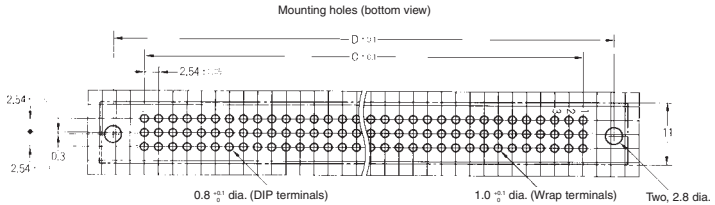
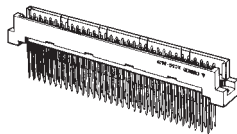
XC5G-□□21

(With straight DIP terminals)



XC5G-□□23

(With straight wrap terminals)



Dimensions

No. of contacts	Dimensions (mm)						Coding Key positions (contact No.)
	A	B	C	D	E	F	
48	54.2	47.4	38.10	49.36	43.3	44.6	5, 12
64*	94.8	88.0	78.74	90.00	83.9	85.2	6, 13, 20, 27
96	94.8	88.0	78.74	90.00	83.9	85.2	6, 13, 20, 27

*Has no centre row (row b).

■ Ordering Information

No. of contacts	Terminal type	
	Straight DIP terminals	Straight wrap terminals
48	XC5G-4821	XC5G-4823
64*	XC5G-6421	XC5G-6423
96	XC5G-9621	XC5G-9623

*Has no center row (row b).