# OMRON

# **DIN Twin-contact Connectors**

### XC5

# 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.
- 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 XC6-series connectors.
- Conform to UL standards (file no. E103202) and CSA standards (file no. LR 62678).

#### **RoHS Compliant**

#### Ratings and Characteristics

Rated current	2 A
Rated voltage	300 VAC
Contact resistance	20 m $\Omega$ max. (at 20 mV, 100 mA max.)
Insulation resistance	$10^6$ M $\Omega$ min. (at 100 VDC)
Dielectric strength	1,000 VAC for 1 min (leakage current: 1 mA max.)
Total insertion force	0.59 N max. per contact
Removal force	0.15 N min. (with test gauge, t = $0.56$ mm)
Insertion durability	200 times
Ambient operating temperature	Operating: -55 to 125°C (with no icing)



#### Materials and Finish

Item		Plugs (See note 2.)	Sockets		
Housings		Fiber-glass reinforced PBT resin (UL94V-0)/gr			
Contacts	Mating end	Brass/nickel base, 0.4-µm gold plating (See note 1.)	Phosphor bronze/nickel base, 0.4-µm gold plating (See note 1.)		
	Terminal	Brass/nickel base, 2.0-μm tin plating	Phosphor bronze/nickel base, 2.0-µm tin plating		
<ul> <li>Note: 1. For non-standard plating specifications, contact your OMRON representative.</li> <li>2. Wrap terminal contacts are made from phosphor bronze.</li> </ul>					

#### ■ 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

(unit: mm)



XC5A DIP terminal cross-section view

0.75 dia

Mounting holes (bottom view)



#### Dimensions

No. of	Dimensions (mm)					Coding Key positions	
contacts	Α	В	С	D	E	F	(contact No.)
20	37.9	32.1	22.86	33.02	28.1	29.3	3, 8
32	53.2	47.4	38.10	48.26	43.3	44.6	5, 12
44	68.4	62.6	53.34	63.50	58.5	59.8	4, 9, 14, 19
50	76.0	70.2	60.96	71.12	66.2	67.4	5, 10, 16, 21
64	93.8	88.0	78.74	88.90	83.9	85.2	6, 13, 20, 27
100	139.5	133.7	124.46	134.62	129.7	130.9	10, 20, 31, 41

### Ordering Information

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No. of contacts	Terminal type	Model
20*	Right-angle DIP	XC5A-2022
32	terminals	XC5A-3222
44*		XC5A-4422
50*		XC5A-5022
64		XC5A-6422
100*	7	XC5A-0122

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