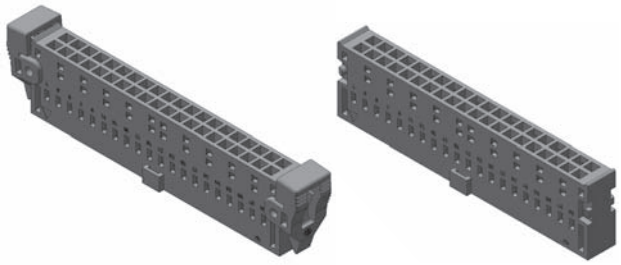
New Product

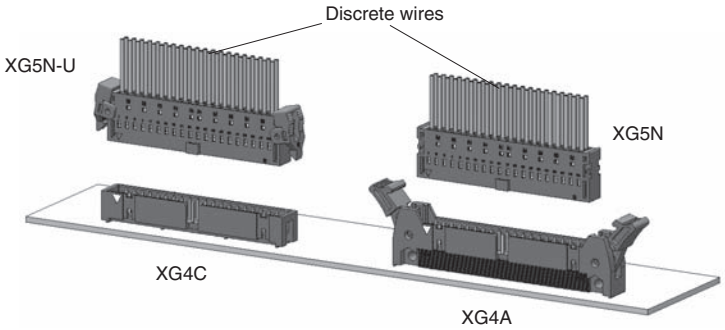
Crimped MIL Connector Sockets for Discrete Wires
XG5N/XG5N-U

Crimped Sockets for Discrete Wires Join the MIL Connector Series

- **XG5N-U Sockets with OMRON's unique lock enable one-hand insertion with a secure lock.**
  Save up to 24% of the space required for the XG4A.
- **See the "Standards certification / conformity list" for information on conformity to certification standards.**



■ Conceptual Application Diagram



■ Ratings and Characteristics

Rated current	3 A/contact (with AWG22 wire) 2 A/contact (with AWG24 wire) 1 A/contact (with AWG26 or AWG28 wire)
Rated voltage	250 VAC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	1,000 MΩ min. (at 500 V DC)
Withstand voltage	500 VAC for 60 s (leakage current: 1 mA max.)
Total insertion force	No. of contacts × 1.96 N max.
Individual pull-out force	0.29 N min.
Insertion durability	50 times
Ambient operating temperature	−55 to 105°C (with no icing at low temperature)

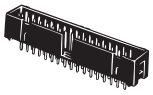
■ Materials and Finish

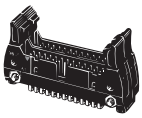
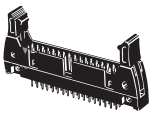
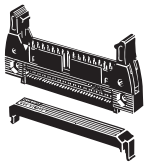
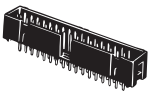
Housing		Fiber-glass reinforced PBT resin (UL94 V-2)/black
Lock Levers		POM resin (UL94 HB)/black
Contacts	Mating end	Phosphor bronze/nickel base, gold plated (0.15 μm)
	Crimped section	Phosphor bronze/nickel base, tin plated (2.0 μm)

■ Applicable Contacts and Wires

Applicable Contacts	Applicable wires	
	AWG No. (UL1007 twisted wires)	Conductor construction (elements/element diameter (mm))
XG5W-0231	22	17/0.16
	24	11/0.16
	26	7/0.16
XG5W-0232	24	11/0.16
	26	7/0.16
	28	7/0.127

■ Mating

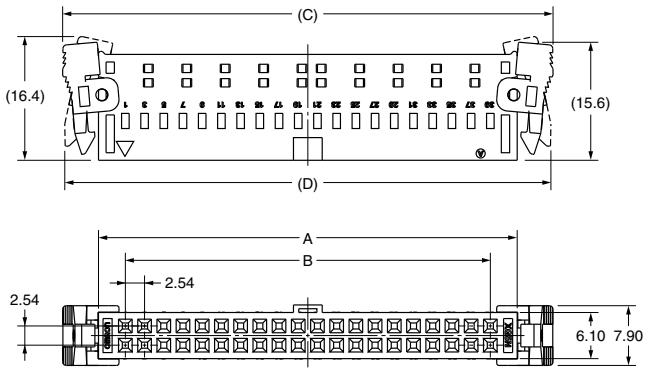
Sockets		Plugs
XG5N-U Discrete Wire Crimping Lock Levers 	Mates with ⟷	XG4C Box-type Plugs 

Sockets		Plugs				
XG5N Discrete Wire Crimping 	Mates with ⟷	XG4A 2-tier Plugs 	XG4A MIL Plugs with Long Locks 	XG4E IDC Plugs with Long Locks XG4S Strain Reliefs 	XG4C Box-type Plugs 	XG8W Original Plugs

■ Dimensions

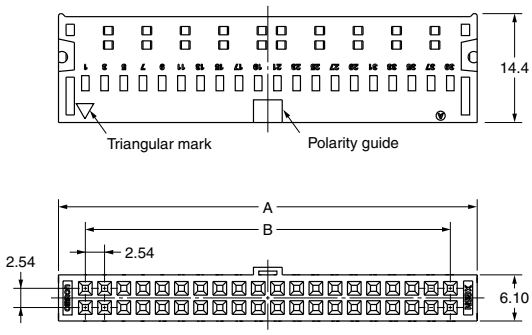
(Unit: mm)

XG5N-U (with Lock Levers Attached)

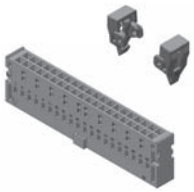


Dimension (mm) No. of contacts	A	B	C	D
10	17.26	10.16	26.80	26.20
14	22.34	15.24	31.88	31.28
16	24.88	17.78	34.42	33.82
20	29.96	22.86	39.50	38.90
26	37.58	30.48	47.12	46.52
30	42.66	35.56	52.20	51.60
34	47.74	40.64	57.28	56.68
40	55.36	48.26	64.90	64.30
50	68.06	60.96	77.60	77.00
60	80.76	73.66	90.30	89.70
64	85.84	78.74	95.38	94.78

XG5N



■ Ordering Information

Appearance		Socket and Lock Set Note: The Locks and Sockets are provided separately. 	Socket Housing	Lock Levers *1	Crimp Contacts, Type 1	Crimp Contacts, Type 2
No. of contacts	No. of polarity guides	Model	Model	Model	Model	Model
10	0	**XG5N-100-U**	**XG5N-100**	**XG5U-0001**	**XG5W-0231 (loose contacts)** **XG5W-0231-R *2 (reel contacts)**	**XG5W-0232 (loose contacts)** **XG5W-0232-R *2 (reel contacts)**
	1	**XG5N-101-U**	**XG5N-101**			
14	1	**XG5N-141-U**	**XG5N-141**			
16	1	**XG5N-161-U**	**XG5N-161**			
20	1	**XG5N-201-U**	**XG5N-201**			
26	1	**XG5N-261-U**	**XG5N-261**			
30	1	**XG5N-301-U**	**XG5N-301**			
34	1	**XG5N-341-U**	**XG5N-341**			
40	1	**XG5N-401-U**	**XG5N-401**			
50	1	**XG5N-501-U**	**XG5N-501**			
	2	**XG5N-502-U**	**XG5N-502**			
60	1	**XG5N-601-U**	**XG5N-601**			
	2	**XG5N-602-U**	**XG5N602**			
64	1	**XG5N-641-U**	**XG5N-641**			
	2	**XG5N-642-U**	**XG5N-642**			

*1. Each XG5N-□□□ Connector requires two Lock Levers.
*2. Order the required number of reels (10,000 contacts).
Note: The pitch between the two polarity guides on Connectors with 50, 60, or 64 contacts is 22.86 mm.

■ Specified Tools

● Manual Crimping Tool

XY2B-7007

Model
XY2B-7007

● Contact Removal Tool

XY2E-0003

Model
XY2E-0003

● Automatic Applicator

Use an Applicator that is manufactured by Japan Automatic Machine Co., Ltd. Contact information is provided below.

Japan:
Japan Automatic Machine Co., Ltd.
TEL 03-3756-1434

China:
Japan Automatic Machine Technology (Huizhou) Ltd.
6-1-B,Songshan Industrial Park, Huizhou Zhongkai Hi-Tech Industrial Development Zone, Huizhou,Guangdong,China
TEL(86-752)2771-614 FAX(86-752)2771-619

South-eastern Asia:
Japan Automatic Machine Singapore Pte. Ltd.
HB Centre 12 Tannery Road #04-02, Singapore 347722
TEL 65-6545-8140 FAX 65-6545-8141

USA, Europe:
Toyojamco, Ltd.
8370 Burnahm Road Suite 200 EL Paso, TX 79907 USA
TEL (915)595-8825 FAX (915)595-8794

	Crimping Machine	Strip Crimper
Crimp Contacts, Type 1	Planned for the near future. *1	SCA-106700 *2
Crimp Contacts, Type 2		

*1. Inquire for details.
*2. This model number is for standard specifications. Inquire for other specifications.

■ Safety Precautions

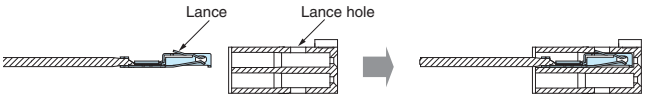
● Crimping Method

Always use the specified Crimping Tool or Applicator to wire the crimped contacts.

Refer to the instruction sheet that is provided separately for details.

● Contact Insertion Method

Confirm the orientation of the crimped contacts and then insert them all the way to the back of the Socket. After insertion, confirm that the lances are securely set in the lance holes on the socket housing.

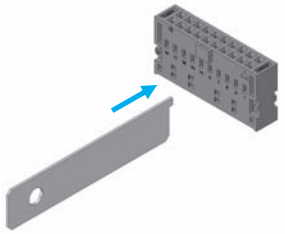


Before Insertion　　After Insertion (Set in Socket)

● Contact Replacement Method

To remove contacts that have been incorrectly inserted, always use the XY2E-0003 Contact Removal Tool.

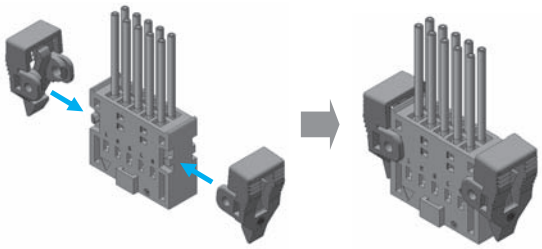
(1) Insert the end of the Removal Tool into the lance hole in the socket housing and press the lance all the way inside the socket housing.
(2) While pressing in on the lance, pull out the Contact.
(3) Insert a new Contact.



Note: Do not use any Contacts that have been removed.

● Attaching the Lock Levers

Attach the holes in the Lock Levers to the protrusions on both sides of the housing and make sure that they are set securely.



● Precautions for Correct Use

When mating the Sockets with XG4C Box Plugs, always use the XG5U-0001 Lock Levers. Otherwise the Connectors may become disconnected due to vibration or shock.

● Storage

(1) Do not store the Sockets in locations subject to dust or high humidity.
(2) Do not store the Sockets in locations close to sources of gasses such ammonia gas or sulfide gas.

Please check each region's Terms & Conditions by region website.

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Electronic and Mechanical Components Company

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Cat. No. G023-E1-07
1021(0112)