

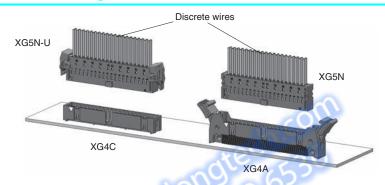
Crimped MIL Connector Sockets for Discrete Wires XG5N/XG5N-U

Crimped Sockets for Discrete Wires Join the MIL Connector Series

 XG5N-U Sockets with OMRON's unique lock enable onehand insertion with a secure lock.
 Save up to 24% of the space required for the XG4A.



Conceptual Application Diagram



Ordering Information

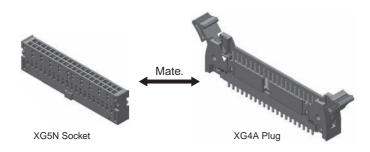
| | Appear- ance | Socket and Lock Set Note: The Locks and Sockets are provided separately. | Socket Housing | Lock Levers *1 | Crimp Contacts, Type 1 | Crimp Contacts, Type 2 |
|-----------------|------------------------|--|----------------|----------------|----------------------------------|----------------------------------|
| No. of contacts | No. of polarity guides | Model | Model | Model | Model | Model |
| | 0 | XG5N-100-U | XG5N-100 | | | |
| 10 | 1 | XG5N-101-U | XG5N-101 | | | XG5W-0232 (loose contacts) |
| 14 | 1 | XG5N-141-U | XG5N-141 | | | |
| 16 | 1 | XG5N-161-U | XG5N-161 | | | |
| 20 | 1 | XG5N-201-U | XG5N-201 | | XG5W-0231 (loose contacts) | |
| 26 | 1 | XG5N-261-U | XG5N-261 | | (10000 commune) | (ioooo oomiioio) |
| 30 | 1 | XG5N-301-U | XG5N-301 | | | |
| 34 | 1 | XG5N-341-U | XG5N-341 | XG5U-0001 | | |
| 40 | 1 | XG5N-401-U | XG5N-401 | | | |
| 50 | 1 | XG5N-501-U | XG5N-501 | | | |
| 50 | 2 | XG5N-502-U | XG5N-502 | | XG5W-0231-R*2 (reel contacts) | XG5W-0232-R*2 (reel contacts) |
| 60 | 1 | XG5N-601-U | XG5N-601 | | (reer contacts) | (reer contacts) |
| 60 | 2 | XG5N-602-U | XG5N602 | | | |
| 64 | 1 | XG5N-641-U | XG5N-641 | | | |
| 04 | 2 | XG5N-642-U | XG5N-642 | | | |

^{*1.} Each XG5N- Connector requires two Lock Levers.

Note: The pitch between the two polarity guides on Connectors with 50, 60, or 64 contacts is 22.86 mm.

^{*2.} Order the required number of reels (10,000 contacts).

Mating



Mate. XG5N-U Socket with Lock XG4C Plug

■ 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 m Ω max. (at 20 mV, 100 mA max.) | |
| Insulation resistance | 1,000 M Ω min. (at 500 V DC) | |
| Withstand voltage | 500 VAC for 60 s (leakage current: 1 mA max.) | |
| Total insertion force | No. of contacts \times 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) | |

■ Applicable Contacts and Wires

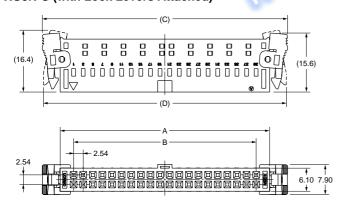
| Applicable wires | | |
|------------------------|---|--|
| AWG No. | Conductor construction | |
| (UL1007 twisted wires) | (elements/element diameter (mm)) | |
| 22 | 17/0.16 | |
| 24 | 11/0.16 | |
| 26 | 7/0.16 | |
| 24 | 11/0.16 | |
| 26 | 7/0.16 | |
| 28 | 7/0.127 | |
| | AWG No. (UL1007 twisted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

■ Materials and Finish

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

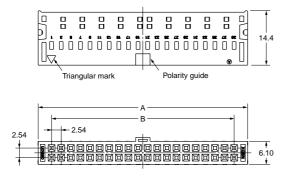
■ Dimensions (Unit: mm)

XG5N-U (with Lock Levers Attached)



| Dimension (mm) No. of contacts | А | В | С | 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



2 OMRON

Specified Tools

● Manual Crimping Tool XY2B-7007



| Model | Minimum ordering quantity (pieces) |
|-----------|------------------------------------|
| XY2B-7007 | 1 |

● Contact Removal Tool XY2E-0003



| Model | Minimum ordering quantity (pieces) |
|-----------|------------------------------------|
| XY2E-0003 | 1 |

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 | SCA-106700 *2 | |
| Crimp Contacts, Type 2 | future. *1 | 3CA-100700 - | |

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

Safety Precautions

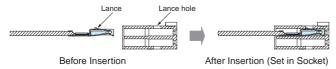
Crimping Method

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.



Contact Replacement Method

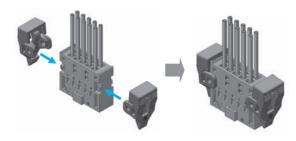
To remove contacts that have been incorrectly inserted, always use the XY2E-0003 Contact Removal Tool.

- (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

- 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.



Note: Do not use this document to operate the Unit.

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> OMRON ELECTRONIC COMPONENTS CO., LTD. 307, Teheran Office Bldg. #707-38, Yeoksam-dong, Gangnam-gu, Seoul, Korea Tel:(82)2-567-5020/Fax:(82)2-567-5804

Authorized Distributor:

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