Peripheral Devices

General-purpose Peripheral Devices

Peripheral Devices for DeviceNet Communications

Ordering Information

General-purpose Models

| Product | Appearance | Model | Specifica | ations | |
|------------------|------------|----------|--|---|--|
| | | DCN1-1NC | Cable wiring direction: Toward top Cable lock direction: From top Connector screw direction: From top | Provided with 3 parallel connectors with clamps (XW4G-05C1-H1-D), standard terminating resistor | |
| T-branch Tap for | | DCN1-1C | Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From side | Provided with 3 parallel connectors with screws | |
| 1 branch line | | (X | | (XW4B-05C1-H1-D), standard terminating resistor | |
| | | DCN1-2R | Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From top | Provided with 3 orthogonal connectors with screws (XW4B-05C1-VIR-D), standard terminating resistor | |
| | | DCN1-3NC | Cable wiring direction: Toward top Cable lock direction: From top Connector screw direction: From top | Provided with 5 parallel clamp connectors with screws (XW4G-05C1-H1-D), standard terminating resistor | |
| T-branch Tap for | | DCN1-3C | Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From side | Provided with 5 parallel connectors with screws (XW4B-05C1-H1-D), standard terminating resistor | |
| 3 branch lines | | DCN1-4C | Cable wiring direction: Toward top Cable screw direction: From side Connector screw direction: From top | | |
| | | DCN1-4R | Cable wiring direction: Toward side Cable screw direction: From top Connector screw direction: From top | Provided with 5 orthogonal clamp connectors with screws (XW4B-05C1-VIR-D), standard terminating resistor | |
| Power Supply Tap | | DCN1-1P | Tap provided with 2 connectors, standard terminating resistor, and fuse | | |

| Produ | ct | Appearance | Model | Specifications | | |
|--|----------------|---|-----------------|--|--|--|
| XW4G-05C1-H1-D Conn XW4G-05C4-TF-D Parall Conn Connectors Parall Conn Connectors | | | XW4G-05C1-H1-D | Parallel clamp connector with screws Connector insertion and wiring both performed horizontally. | | |
| | | | XW4G-05C4-TF-D | Parallel multi-branching clamp connector with screws Connector insertion and wiring performed in same direction. | | |
| | | | XW4B-05C1-H1-D | Parallel connector with screws Connector insertion and wiring performed in same direction. | | |
| | | Parallel, screw-less, multi-branching connector Connector insertion and wiring performed in same direction. | | | | |
| | | 00000 | XW4B-05C4-TF-D | Parallel, multi-branching connector with screws Connector insertion and wiring performed in same direction. | | |
| | | | XW4B-05C1-VIR-D | Orthogonal connector with screws Connector insertion and wiring performed at a right angle. | | |
| DeviceNet | Thin Cables | | DCA1-5C10(-B) | Outer diameter: 7.00 mm Length: 100 m DCA1-5C10-B: Cable color: Blue DCA1-5C10: Cable color: Gray | | |
| Standard Cables Thick Cables | | | DCA2-5C10(-B) | Outer diameter: 11.6 mm Length: 100 m DCA2-5C10-B: Cable color: Blue DCA2-5C10: Cable color: Gray | | |
| Terminal-bloc Terminator | k | | DRS1-T | Resistance of 121 Ω | | |

Peripheral Devices for Flat Cables

| Product | Appearance | Model | Specifications |
|--|------------|-----------|--|
| Connector for Flat Cable | | DCN4-SF4D | Connector with lock screws for crimping flat cable |
| Conversion Connector for Standard Thin Cable and Flat Cable | | DCN4-BR4D | Used as a set with a DCN4-TR4 when Thin Cable is branched on a branch line. |
| Power Supply Terminal Block with Terminating Resistance for Flat Cable | | DCN4-TP4D | Can be used to supply communications power from terminals when Flat Cable is used. |
| Flat Connector Socket | | DCN4-TR4 | Used as a set with a DCN4-BR4 Flat Connector Plug in the following applications. • Extending the trunk line • T-branching the trunk line into branch lines |
| | | | Used alone in the following applications. • Connecting a DCN4-TM4 Terminating Resistor to the trunk line |
| Flat Connector Plug | | DCN4-BR4 | Used as a set with a DCN4-TR4 Flat Connector Socket in the following applications. • Extending the trunk line • T-branching the trunk line into branch lines |
| Terminating Resistor | | DCN4-TM4 | Connector terminating resistor for flat cable. Attached to the DCN4-TR4 Flat Connector Socket at the end of the trunk line. |
| Flat Cable | | DCA4-4F10 | Four-core flat cable (UL 2555) Length: 100 m Conductor diameters: 0.75 mm² x 2, 0.5 mm² x 2 |
| Simple Manual Crimp Tool | | DWT-A01 | Crimping tool for DCN4-TR4 Flat Connector Socket or DCN4-BR4 Flat Connector Plug. |

Specifications

● General-purpose Models (T-branch Taps)

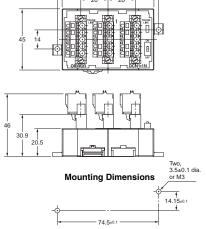
| Rated current | Between main lines: 8 A (power supply line) and 2 A (signal line) | | |
|-------------------------------|--|--|--|
| nateu current | Between main and branch lines: 3 A (power supply line) and 1 A (signal line) | | |
| Insulation resistance | 100 M Ω min. (at 500 VDC) | | |
| Dielectric strength | 500 VAC for 1 min, leakage current: 1 mA max. | | |
| Ambient operating temperature | 0°C to 55°C | | |

Dimensions (Unit: mm)

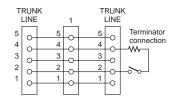
● General-purpose Models

T-branch Tap for 1 branch line DCN1-1NC (With Three Branching Connectors)





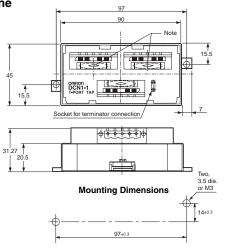
Internal Circuit



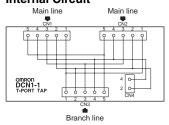
| Terminal No. | Name |
|--------------|-------|
| 1 | V- |
| 2 | CAN L |
| 3 | DRAIN |
| 4 | CAN H |
| 5 | V+ |

T-branch Tap for 1 branch line DCN1-1C (With Three Branching Connectors)





Internal Circuit

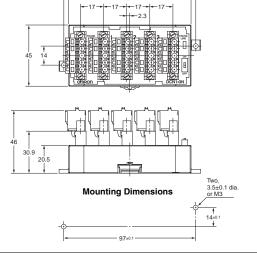


| Terminal No. | Name |
|--------------|-------|
| 1 | V- |
| 2 | CAN L |
| 3 | DRAIN |
| 4 | CAN H |
| 5 | V+ |
| | |

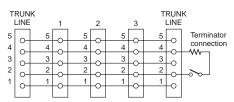
Note: When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisks is minimal.

T-branch Tap for 3 branch lines DCN1-3NC (With Five Branching Connectors)

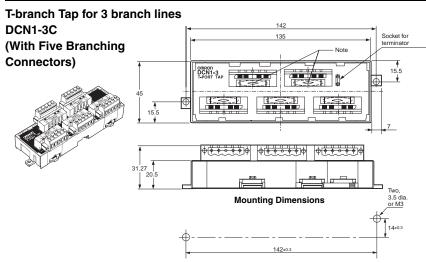




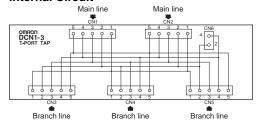
Internal Circuit



| Terminal No. | Name | |
|--------------|-------|--|
| 1 | V- | |
| 2 | CAN L | |
| 3 | DRAIN | |
| 4 | CAN H | |
| 5 | V+ | |



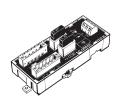
Internal Circuit

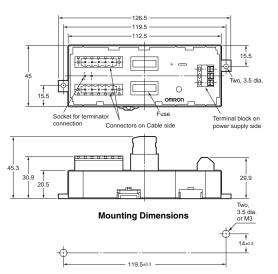


| Terminal No. | Name | |
|--------------|-------|--|
| 1 | V- | |
| 2 | CAN L | |
| 3 | DRAIN | |
| 4 | CAN H | |
| 5 | V+ | |

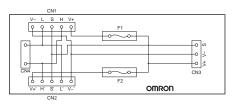
Note: When connecting a branch line to the main line, connect the main line to the connector marked with an asterisk because the resistance between the asterisked portion is minimal.

Power Supply Tap DCN1-1P (With Two Branching Connectors)





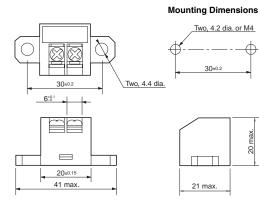
Internal Circuit



| Terminal No. | Name |
|--------------|-------|
| V- | V- |
| L | CAN L |
| S | DRAIN |
| Н | CAN H |
| V+ | V+ |

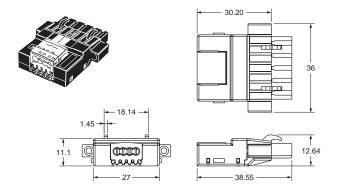
DRS1-T (Terminal-block Terminator)





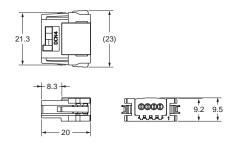
● Flat Cable

Connector for Flat Cable DCN4-SF4D



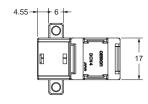
Conversion Connector for Standard Thin Cable and Flat Cable DCN4-BR4D

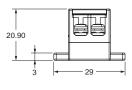


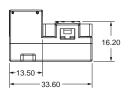


Power Supply Terminal Block with Terminating Resistance for Flat Cable



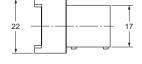




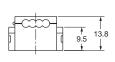


Flat Connector Socket DCN4-TR4



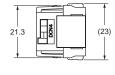






Flat Connector Plug DCN4-BR4









I/O Peripheral Devices

■ I/O Connectors for Connector Terminals

MIL Connectors

Applicable Connectors

| Туре | | Model | Remarks |
|---------------------------------------|--------------|-------------|-------------------------------|
| Flat Cable Pressure-welded Connectors | | XG4M-4030-T | |
| | Socket | XG5M-4032-N | Corresponding to 24 AWG |
| Pressure-welded Connectors with | | XG5M-4035-N | Corresponding to 28 to 26 AWG |
| Loose Wires | Semicover | XG5S-2001 | |
| | Hood Cover * | XG5S-4022 | |

^{*} DeviceNet connectors for multi-drop wiring cannot be used with the Hood Cover.

Cable Models

| Туре | Model | Connected device | Applicable models | |
|---|---------------|------------------|---------------------------|--|
| | G79-I□□-□□-D1 | | DRT2-ID32ML | |
| | G79-M□□-□□-D1 | | DRT2-MD32ML | |
| Cable with Connectors (1:2) | G79-O□□-□□-D1 | G7TC/G70D/G70A | DRT2-OD32ML/DRT1-OD32ML-1 | |
| | G79-I□□-□□-D2 | | DRT2-ID32ML-1 | |
| | G79-M□□-□□-D2 | | DRT2-MD32ML-1 | |
| Cable with Connector (1:1) | XW2Z-C□□K | | All models | |
| Cable with Loose Wires with Crimp Terminals | G79-Y□00C-D1 | | | |
| Cable with Loose Wires | G79-A□00C-D1 | | | |

Applicable Cables with Connectors

● Cables with Connectors (1-to-2 Connection)/G79-□□-□-D□

| Appearance | Cable length (mm) | | Model | |
|--|----------------------------|-----|-------|---------------|
| Appearance | | A | B | wodei |
| | | 500 | 250 | G79-I50-25-D1 |
| | | 750 | 500 | G79-I75-50-D1 |
| | (120) | 500 | 250 | G79-O50-25-D1 |
| | | 750 | 500 | G79-O75-50-D1 |
| | | 500 | 250 | G79-M50-25-D1 |
| | | 750 | 500 | G79-M75-50-D1 |
| | | 500 | 250 | G79-I50-25-D2 |
| The state of the s | - | 750 | 500 | G79-I75-50-D2 |
| | Length without any bending | 500 | 250 | G79-M50-25-D2 |
| | | 750 | 500 | G79-M75-50-D2 |

● Cables with Connectors (1-to-1 Connection)/XW2Z-C□□K

| Appearance | Cable length (mm) | Model | |
|------------|-------------------|-------|-----------|
| | | 250 | XW2Z-C25K |
| | | 500 | XW2Z-C50K |

● Cables with Crimp Terminals (at the End of Loose Wires)/G79-Y□C-D1

| Appearance | Cable length (mm) | Model | |
|--|-----------------------|-------|--------------|
| To the state of th | Terminal A Terminal B | 1,000 | G79-Y100C-D1 |
| | Connected to device | 2,000 | G79-Y200C-D1 |
| | 1 300 L | 5,000 | G79-Y500C-D1 |

● Cables with Loose Wires/G79-A□C

| Appearance | Cable length (mm) | Model | |
|--|-----------------------|-------|--------------|
| | Terminal A Terminal B | 2,000 | G79-A200C-D1 |
| 13 and 15 | to device | 5,000 | G79-A500C-D1 |

■ I/O Connectors for MULTIPLE I/O TERMINALs

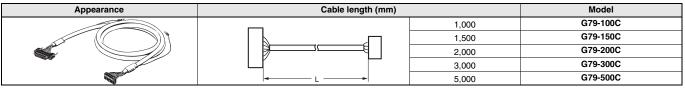
Applicable Connectors

| | Туре | | Model | Remark | Connectable model |
|-------------------------------|-------------------|---------------------------|-------------------------------|-------------------------------|---|
| | | Housing | 50-57-9403 | | |
| | | Chain terminal | 16-02-0069 | Corresponding to 24 to 30 AWG | Digital I/O Units |
| | | Chain terminal | 16-02-0086 | Corresponding to 22 to 24 AWG | GT1-ID16MX(-1)/GT1-OD16MX(-1) |
| Molex connector | Crimped terminals | Loose terminal | 16-02-0096 | Corresponding to 24 to 30 AWG | |
| | terminais | Loose terminal | 16-02-0102 | Corresponding to 22 to 24 AWG | Analog I/O Units GT1-AD08MX/GT1-DA04MX |
| | Press-fit tool | 57036-5000 | Corresponding to 22 to 26 AWG | GTT-AD06WIX/GTT-DA04WIX | |
| | | Fless-III tool | 57037-5000 | Corresponding to 24to 30 AWG | |
| | Soldered termin | nals | FCN361J024-AU | | |
| Fujitsu connector (16 points) | Pressure-welde | d terminals | FCN367J024-AU/F | | |
| (10 points) | Crimped termin | als | FCN363J024-AU | | |
| | Soldered termin | nals | FCN361J040-AU | | |
| (32 points) | Pressure-welde | Pressure-welded terminals | | | Digital I/O Units GT1-ID32ML(-1)/GT1-OD32ML(-1) |
| | Crimped termin | als | FCN363J040-AU | | arribozwie (1)/arr obozwie (1) |
| OMRON | Pulg | Pulg | | | Digital I/O Units |
| D-sub connector Hood | | | XM2S-2513 | #4-40UNC inch screws | GT1-ID16DS(-1)/GT1-OD16DS(-1) |

Applicable Cables with Connectors (Fujitsu Connectors)

| I/O classification | Model | Connectable model |
|---------------------------|-----------|-------------------|
| Digital input, 16 points | XW2Z-□□□A | Digital I/O Units |
| Digital input, 10 points | G79-□C | GT1-ID16ML(-1) |
| Digital output 16 points | XW2Z-□□□A | Digital I/O Units |
| Digital output, 16 points | G79-□C | GT1-OD16ML(-1) |
| Digital input, 32 points | XW2Z-□□□B | Digital I/O Units |
| Digital input, 32 points | G79-I□C□ | GT1-ID32ML(-1) |
| Digital output, 32 points | XW2Z-□□□B | Digital I/O Units |
| Digital output, 32 points | G79-O□C□ | GT1-OD32ML(-1) |

● Cables with Connectors (1-to1 Connection)/G79-□C For Digital Input/Output (16 Points)



● Cables with Connectors (1-to-2 Connection)/G79-O□C-□, G79-I□C-□ For Digital Input/Output (32 Points)

| Annogrange | Cable length (mm) | | | Model | |
|------------|----------------------------|-------|-------|---------------|---------------|
| Appearance | | A | B | Input | Output |
| | A | 1,000 | 750 | G79-I100C-75 | G79-O100C-75 |
| | | 1,500 | 1,250 | G79-I150C-125 | G79-O150C-125 |
| | | 2,000 | 1,750 | G79-I200C-175 | G79-O200C-175 |
| | | 3,000 | 2,750 | G79-I300C-275 | G79-O300C-275 |
| | Length without any bending | 5,000 | 4,750 | G79-I500C-475 | G79-O500C-475 |

For Digital Input/Output (16 Points)

| Appearance | Cable length (mm) | Model | |
|------------|-------------------|-------|-----------|
| | | 500 | XW2Z-050A |
| | | 1,000 | XW2Z-100A |
| | | 1,500 | XW2Z-150A |
| | | 2,000 | XW2Z-200A |
| | | 3,000 | XW2Z-300A |
| | | 5,000 | XW2Z-500A |

For Digital Input/Output (32 Points)

| Appearance | Cable length (mm) | Model | |
|------------|-------------------|-------|-----------|
| | | 500 | XW2Z-050B |
| | | 1,000 | XW2Z-100B |
| | | 1,500 | XW2Z-150B |
| | | 2,000 | XW2Z-200B |
| | | 3,000 | XW2Z-300B |
| | - | 5,000 | XW2Z-500B |

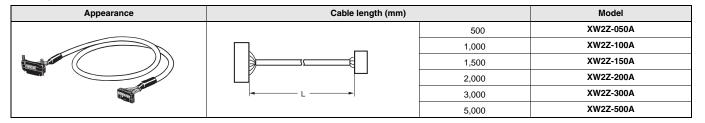
■ I/O Connector for Programmable Slaves

Applicable Connector Terminal Conversion Units

| Applicable cable | Connected product | Remarks |
|------------------|-------------------|---|
| XW2Z-□□□A | XW2D-20G6 | Slim type (with M3 screw terminals) |
| AVVZZ-UUJA | XW2B-20G4 | Flat cable connectors (with M3 terminal screws for flat-blade screwdriver) |

Applicable Cables with Connectors

● Cables with Connectors/XW2Z For Digital Input/Output (16 Points)



Peripheral Devices for Environment-resistive Slaves

Peripheral Devices for DeviceNet Communications

Ordering Information

● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

| Product | Appea | arance | Model | | Specifications |
|--|--------|--------------|-----------------|---|--|
| Sealed Assembling-type Connector (male) | | | XS2G-D5S7 | For communications (plu | ig) |
| Sealed Assembling-type Connector (female) | | | XS2C-D5S7 | For communications (so | cket) |
| Sealed T-branch Connector | | | DCN2-1 | For 1 branch line | |
| Sealed Connector with | | | DRS2-1 | Plug | |
| Terminating Resistor | | | DRS2-2 | Socket | |
| | | | DCA1-5CNC5W1 | Length (L): 0.5 m | |
| | | | DCA1-5CN01W1 | Length (L): 1 m | |
| | | | DCA1-5CN02W1 | Length (L): 2 m | 1 |
| | | L | DCA1-5CN03W1 | Length (L): 3 m | Cable with connectors on both ends |
| | | | DCA1-5CN05W1 | Length (L): 5 m | |
| | | | DCA1-5CN10W1 | Length (L): 10 m | |
| | | | DCA1-5CNC5F1 | Length (L): 0.5 m | |
| | | | DCA1-5CN01F1 | Length (L): 1 m | |
| Cables with Sealed | | | DCA1-5CN02F1 | Length (L): 2 m | 1 |
| Connectors | | 4 L → 50 mm | DCA1-5CN03F1 | Length (L): 3 m | Cable with connector on one end (socket) |
| | | | DCA1-5CN05F1 | Length (L): 5 m | |
| | | | DCA1-5CN10F1 | Length (L): 10 m | |
| | L Somm | | DCA1-5CNC5H1 | Length (L): 0.5 m | |
| | | DCA1-5CN01H1 | Length (L): 1 m | | |
| | | DCA1-5CN02H1 | Length (L): 2 m | 1 | |
| | | L | DCA1-5CN03H1 | Length (L): 3 m | Cable with connector on one end (plug) |
| | | | DCA1-5CN05H1 | Length (L): 5 m | |
| | | | DCA1-5CN10H1 | Length (L): 10 m | |
| Shielded Panel-mounting Connectors (female) | | | DCA1-5CNC5P1 | Panel-mounting connect | or (socket) with 0.5-m cable |
| , , | 6 | | XS2P-D522-2 | Panel-mounting connector socket | |
| Shielded Panel-mounting Connectors (male) | | | DCA1-5CNC5M1 | Panel-mounting connect | or (plug) with 0.5-m cable |
| Connectors (mate) | | | XS2M-D524-4 | Panel-mounting connector (plug) with solder-cup terminals | |
| Waterproof cover (for socket) | | | XS2Z-22 | Used to cover an unuser | d connector section |
| Dust cover (for socket) | | | XS2Z-15 | - Used to cover an unused connector section | |

Environment-resistive Models (for Thin Wires and M12 Micro Connectors) Smartclick

| Product | Appearance | | Model | | Specifications |
|---------------------------|--------------------|-------------|--------------|----------------------|--|
| Sealed T-branch Connector | | | DCN2-1S | For 1 branch line | |
| Sealed Assembling type | | | DRS2-1S | Plug | |
| Connector (female) | | | DRS2-2S | Socket | |
| | | | DCA1-5CSC5W1 | Length (L): 0.5 m | |
| | | | DCA1-5CS01W1 | Length (L): 1 m | |
| | | | DCA1-5CS02W1 | Length (L): 2 m | Cable with connectors on both ends |
| | | _ L | DCA1-5CS03W1 | Length (L): 3 m | Cable with connectors on both ends |
| | 6 7 | | DCA1-5CS05W1 | Length (L): 5 m | |
| | | | DCA1-5CS10W1 | Length (L): 10 m | |
| | | L So mm | DCA1-5CSC5F1 | Length (L): 0.5 m | |
| | | | DCA1-5CS01F1 | Length (L): 1 m | |
| Connectors with Shielded | | | DCA1-5CS02F1 | Length (L): 2 m | Cable with connector on one end (socket) |
| Cables | | | DCA1-5CS03F1 | Length (L): 3 m | Cable with connector on one end (socket) |
| | | | DCA1-5CS05F1 | Length (L): 5 m | |
| | | | DCA1-5CS10F1 | Length (L): 10 m | 1 |
| | | | DCA1-5CSC5H1 | Length (L): 0.5 m | |
| | | | DCA1-5CS01H1 | Length (L): 1 m | |
| | | | DCA1-5CS02H1 | Length (L): 2 m | Cable with connector on one end (plug) |
| | | - L → 50 mm | DCA1-5CS03H1 | Length (L): 3 m | Cable with connector on one end (plug) |
| | | | DCA1-5CS05H1 | Length (L): 5 m | |
| | | | DCA1-5CS10H1 | Length (L): 10 m | |
| | d Branch Relay Box | | DCN2-S4C5H1 | 4 ports, 0.5-m cable | |
| Shielded Branch Relay Box | | | DCN2-S8C5H1 | 8 ports, 0.5-m cable | |

● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

| Product | Appea | arance | Model | | Specifications |
|---|------------|---------|--------------|--|--|
| Sealed T-branch Connector | | | DCN3-11 | T-branch Connector | |
| Coded 1 Station Commencer | | | DCN3-12 | T-branch Connector (Br | ranch connector is M12.) |
| Sealed Connector with Terminating Resistor | | | DRS3-1 | Plug | |
| | | | DCA2-5CN01W1 | Length (L): 1 m | |
| | 610 | | DCA2-5CN02W1 | Length (L): 2 m | Cable with connectors on both ends |
| | | L | DCA2-5CN05W1 | Length (L): 5 m | Cable with connectors on both ends |
| | 3 | | DCA2-5CN10W1 | Length (L): 10 m | |
| | | | DCA2-5CN01F1 | Length (L): 1 m | |
| | | L 50 mm | DCA2-5CN02F1 | Length (L): 2 m | Cable with connector on one and (socket) |
| | | | DCA2-5CN05F1 | Length (L): 5 m | Cable with connector on one end (socket) |
| Cables with Sealed | | | DCA2-5CN10F1 | Length (L): 10 m | |
| Connectors | | 50 | DCA2-5CN01H1 | Length (L): 1 m | |
| | | | DCA2-5CN02H1 | Length (L): 2 m | Cable with connector on one and (plus) |
| | | | L 30 | DCA2-5CN05H1 | Length (L): 5 m |
| | | | DCA2-5CN10H1 | Length (L): 10 m | |
| | | | DCA1-5CN01W5 | Length (L): 1 m | |
| | | | DCA1-5CN02W5 | Length (L): 2 m | Cable with connectors on both ends Thin cable |
| | | L —— | DCA1-5CN05W5 | Length (L): 5 m | M12 socket |
| | ● DE | | DCA1-5CN10W5 | Length (L): 10 m | |
| Panel-mounting Connector (female) | | | DCA2-5CNC5P1 | Panel-mounting connect | ctor (socket) with 0.5-m cable |
| Panel-mounting Connector (male) | | | DCA2-5CNC5M1 | Panel-mounting connector (plug) with 0.5-m cable | |
| Panel-mounting Connector (male) | | | XS4M-D521-1 | Panel-mounting connect DIP terminals | ctor (plug) |
| Waterproof Cap (for Plug) | | - | XS4Z-11 | | |
| Waterproof Cap (for Socket) | | - | XS4Z-12 | Used to cover an unused connector section. | |

Specifications

● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

| Type | Connectors with Cables DCA1-5CN□□□1 | T-branch Connector DCN2-1 | Assembling-type Connector XS2□-D5S7 | Connectors with Terminating Resistor DRS2-□ | | |
|---------------------------------|--|--|--|---|--|--|
| Rated current | 3 A | 3A | | | | |
| Rated voltage | 125 VDC | | | | | |
| Contact resistance (connector) | 40 m Ω max. (at 20 mVDC max. and | 90 mΩ max. (at 20 mVDC max. and 100 mA max.) | | | | |
| Insulation resistance | ,000 M Ω min. (at 500 VDC) | | | | | |
| Dielectric strength (connector) | 1,500 VAC for 60 seconds (leakage current: 1 mA max.) | | | | | |
| Ambient operating temperature | -20°C to 65°C | | | | | |
| Storage temperature range | -25°C to 70°C | | | | | |
| Degree of protection | IEC IP67 | | | | | |
| Insertion durability | 200 times | | | | | |
| Cable strength | 98 N for 15 s | | | | | |
| Vibration resistance | No current interruptions of more than 1 µs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller | | | | | |

● Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

| Туре | Connectors with Cables DCA1-5CS□□□1 | T-branch Connector DCN2-1S | Connectors with Terminating Resistor | Branch Relay Box DCN2-S□C5H | | |
|---------------------------------|--|---|---|--------------------------------|--|--|
| Item | DOA 1-3000001 | DON2-10 | DRS2-□S | DONZ-OLIOSIT | | |
| Rated current | 3 A | | | | | |
| Rated voltage | 125 VDC | | | | | |
| Contact resistance (connector) | 40 m Ω max. (at 20 mVDC max. and | 0 mΩ max. (at 20 mVDC max. and 100 mA max.) | | | | |
| Insulation resistance | 1,000 MΩ min. (at 500 VDC) | ,000 M Ω min. (at 500 VDC) | | | | |
| Dielectric strength (connector) | 1,500 VAC for 60 seconds (leakage current: 1 mA max.) 1,000 VAC for 60 seconds | | | | | |
| Ambient operating temperature | -20°C to 65°C | | | | | |
| Storage temperature range | -25°C to 70°C | | | | | |
| Degree of protection | EC IP67 | | | | | |
| Insertion durability | 200 times | | | | | |
| Cable strength | 98 N for 15 s | | | | | |
| Vibration resistance | No current interruptions of more than 1 µs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller | | | | | |
| Lock strength | Pulling: 100 N/15 s, Rotating: 1 N·m/15 s | | | | | |
| Lock force | 0.1 to 0.25 N·m | | | | | |

● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

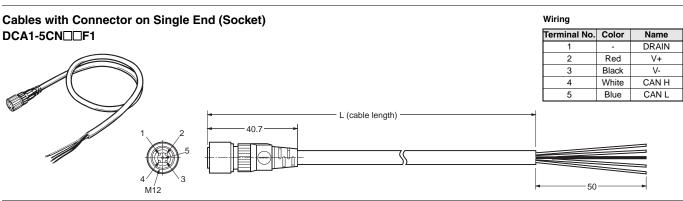
| Type Item | Connectors with Thick Cables DCA2-5CN□□□1 | Connectors with Thin Cables DCA1-5CN□□W5 | T-branch Connector DCN3-11 | T-branch Connector DCN3-12 | Connectors with Terminating Resistor DRS3-1 | Panel Mounting Connector DCA2-5CNC5P1 | Panel Mounting Connector XS4M-D521-1 |
|---------------------------------|--|--|----------------------------------|----------------------------------|---|---|--|
| Rated current | 8 A | 3 A | 8 A | 3 A * | 8 A | | |
| Rated voltage | 125 VDC | 25 VDC | | | | | |
| Contact resistance (connector) | 30 mΩ max. (at 20 n | 0 mΩ max. (at 20 mVDC max. and 100 mA max.) | | | | | |
| Insulation resistance | 1,000 M Ω min. (at 50 | ,000 MΩ min. (at 500 VDC) | | | | | |
| Dielectric strength (connector) | ,500 VAC for 60 seconds (leakage current: 1 mA max.) | | | | | | |
| Ambient operating temperature | 20°C to 65°C | | | | | | |
| Storage temperature range | -25°C to 70°C | | | | | | |
| Degree of protection | IEC IP67 | IEC IP67 | | | | | |
| Insertion durability | 200 times | | | | | | |
| Cable strength | 98 N for 15 s | 98 N for 15 s 98 N for 15 s | | | | | |
| Vibration resistance | No current interruptions of more than 1 µs while performing simple vibrations at either 10 to 500 Hz with 1.52-mm full amplitude or at acceleration 100 m/s², whichever is smaller | | | | | | |

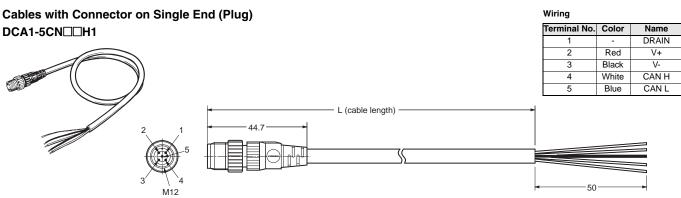
^{*} The rated current between thick wires is 8 A.

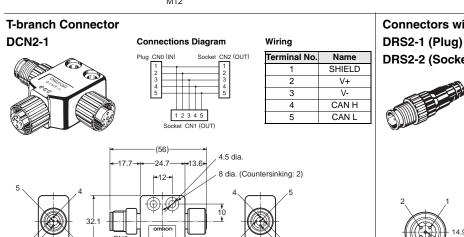
Dimensions

● Environment-resistive Connection Products (for Thin Cable, M12 Micro Connectors)

Cables with Connectors on Both Ends Wiring Terminal No. Color DCA1-5CN□□W1 Name DRAIN Red V+ Black White CAN H CAN L Blue L (cable length)







Connectors with Terminating Resistance

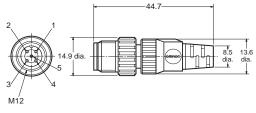
Wiring

DRS2-2 (Socket)



| ierminai No. | | Name |
|--------------|-------|-----------|
| 1 | DRAIN | : NC |
| 2 | V+ | : NC |
| 3 | V- | : NC |
| 4 | CAN H | : → 121 Ω |
| 5 | CAN L | : '-' '-' |

Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.

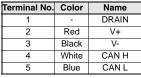


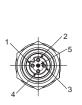
Note: The diagram shows the DRS2-1 (plug).

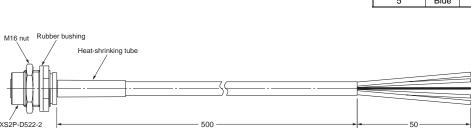
Panel-mounting Connector (Socket) with 0.5 m Cable DCA1-5CNC5P1

Wiring





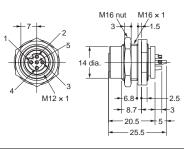


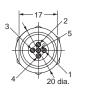


Panel-mounting Connector (Socket), Solder-cup Terminals XS2P-D522-2









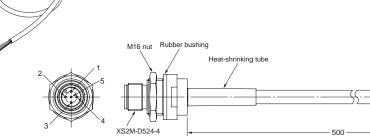


Panel-mounting Connector (Plug) with 0.5 m Cable DCA1-5CNC5M1

Wiring



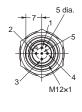


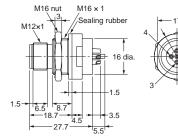


Panel-mounting Connector (Socket), Solder-cup Terminals XS2M-D524-4

Panel Cutout Dimensions





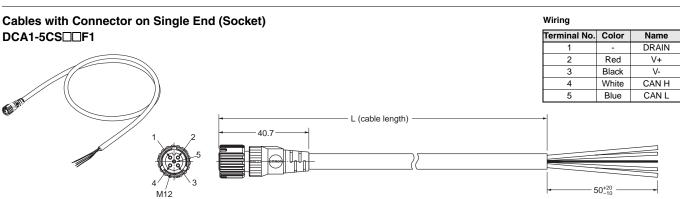


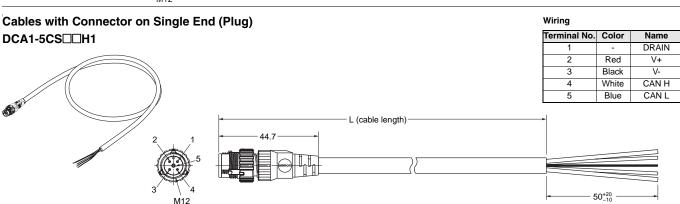


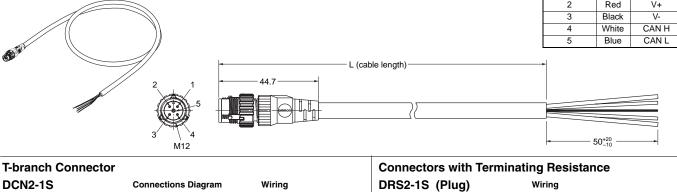


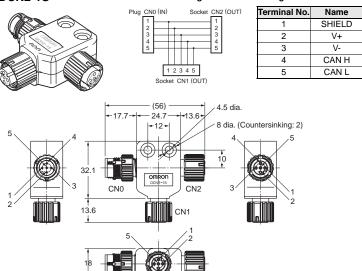
● Environment-resistive Models (for Thin Wires and M12 Micro Connectors)

Cables with Connectors on Both Ends Wiring Terminal No. Color DCA1-5CS□□W1 Name DRAIN Red V+ Black White CAN H CAN L Blue L (cable length)









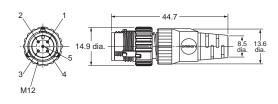
DRS2-2S (Socket)



| Wiring |
|--------|
|--------|

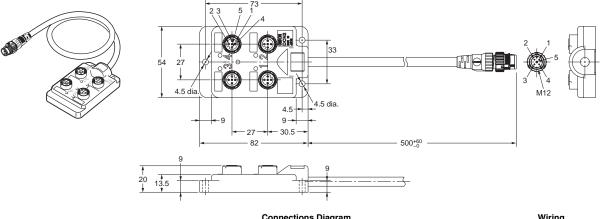
| Terminal No. | | Name |
|--------------|-------|-----------------|
| 1 | DRAIN | : NC |
| 2 | V+ | : NC |
| 3 | V- | : NC |
| 4 | CAN H | : → 121 Ω |
| 5 | CAN L | : - 2 ' 2 ' 3 2 |

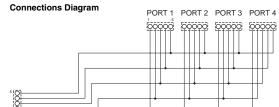
Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



Note: The diagram shows the DRS2-1 (plug).

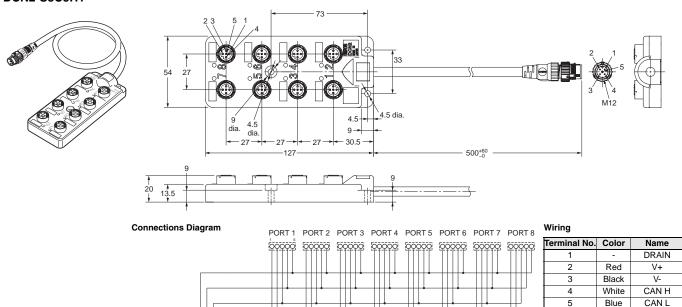
Shielded Branch Relay Box with Four Ports DCN2-S4C5H1





| Wiring | | | | | |
|--------------|-------|-------|--|--|--|
| Terminal No. | Color | Name | | | |
| 1 | - | DRAIN | | | |
| 2 | Red | V+ | | | |
| 3 | Black | V- | | | |
| 4 | White | CAN H | | | |
| 5 | Blue | CAN L | | | |
| | | | | | |

Shielded Branch Relay Box with Eight Ports DCN2-S8C5H1

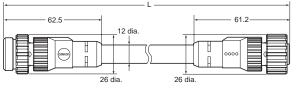


● Environment-resistive Models for Thick Wires with 7/8-16UN Mini Connectors

Thick Cable with Connectors on Both Ends (5 Conductors for Communications) DCA2-5CN□□W1





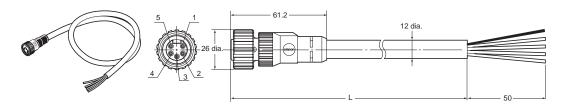




Wiring

| = | | | | |
|-----------------|-------|-------|--|--|
| Terminal No. | Color | Name | | |
| 1 | - | DRAIN | | |
| 2 | Red | V+ | | |
| 3 | Black | V- | | |
| 4 | White | CAN H | | |
| 5 | Blue | CAN L | | |

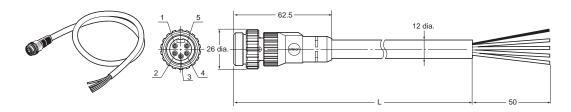
Thick Cable with Connector Socket on One End (5 Conductors for Communications) DCA2-5CN□□F1



Wiring

| Terminal No. | Color | Name | | |
|-----------------|-------|-------|--|--|
| 1 | - | DRAIN | | |
| 2 | Red | V+ | | |
| 3 | Black | V- | | |
| 4 | White | CAN H | | |
| 5 | Blue | CAN L | | |

Thick Cable with Connector Plug on One End (5 Conductors for Communications) DCA2-5CN□□H1



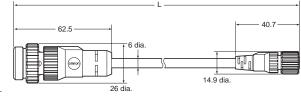
Wiring

| Terminal No. | Color | Name |
|-----------------|-------|-------|
| 1 | - | DRAIN |
| 2 | Red | V+ |
| 3 | Black | V- |
| 4 | White | CAN H |
| 5 | Blue | CAN L |

Thin Cable with Connectors on Both Ends (5 Conductors for Communications) DCA1-5CN□□W5







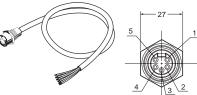


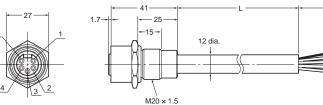
Wiring

| Terminal No. | Color | Name |
|-----------------|-------|-------|
| 1 | - | DRAIN |
| 2 | Red | V+ |
| 3 | Black | V- |
| 4 | White | CAN H |
| 5 | Blue | CAN L |

Thin Cable with Panel-mounting Connector Socket on One End (5 Conductors for Communications)

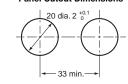
DCA2-5CNC5P1





Note: A rubber seal and nut for panel mounting are included.

Panel Cutout Dimensions

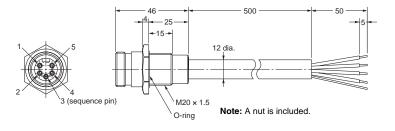


Wiring

| Terminal No. | Color | Name |
|-----------------|-------|-------|
| 1 | - | DRAIN |
| 2 | Red | V+ |
| 3 | Black | V- |
| 4 | White | CAN H |
| 5 | Blue | CAN L |

Panel-mounting Connector (Plug) with 0.5 m Cable DCA2-5CNC5M1



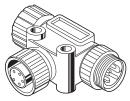


Wiring

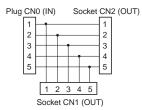
| Terminal No. | Color | Name |
|-----------------|-------|-------|
| 1 | - | DRAIN |
| 2 | Red | V+ |
| 3 | Black | V- |
| 4 | White | CAN H |
| 5 | Blue | CAN L |

T-branch Connector (5 Conductors for Communications, Thick Wire Branch Line)

DCN3-11

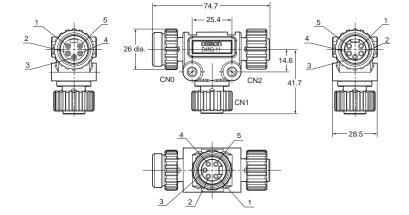


Connections Diagram



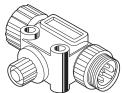
Wiring

| Terminal No. | Name |
|--------------|-------|
| 1 | DRAIN |
| 2 | V+ |
| 3 | V- |
| 4 | CAN H |
| 5 | CAN L |

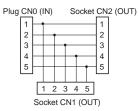


T-branch Connector (5 Conductors for Communications, Thin Wire Branch Line)

DCN3-12

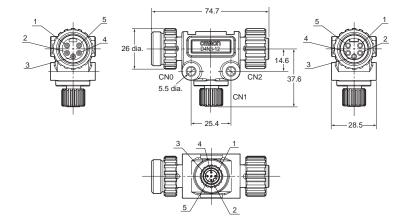


Connections Diagram



Wiring

| Terminal No. | Name |
|--------------|-------|
| 1 | DRAIN |
| 2 | V+ |
| 3 | V- |
| 4 | CAN H |
| 5 | CAN L |



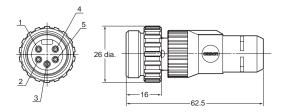
Connector (Plug) with Terminating Resistance DRS3-1



Wiring

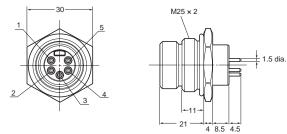
| Terminal No. | | Name |
|--------------|-------|-----------|
| 1 | DRAIN | : NC |
| 2 | V+ | : NC |
| 3 | V- | : NC |
| 4 | CAN H | ⋮_} 121 Ω |
| 5 | CAN L | : |

Note: Terminating resistance (121 Ω) is connected between terminals 4 and 5.



Panel-mounting Connector (5 Pins for Communications) XS4M-D521-1





Panel Cutout Dimensions

PCB Processing Dimensions 25 dia. 2 +0.1 5, 1.8 dia 37 min.

Note: A rubber seal and nut for panel mounting are included.

I/O Peripheral Devices

Applicable Connectors

● Assembly Connector Plugs for M12 Microconnectors

| Appearance | Applicable cable | Cable direction N | Number of | | | | |
|------------|---|-------------------|-----------|--------------|-----------|-----------|-----------|
| Арреагансе | diameter (mm) | Cable direction | poles | Crimping | Soldering | Screws | |
| | For 6 dia. | Straight | | XS2G-D4C1 | XS2G-D421 | XS2G-D4S1 | |
| | (5 to 6 dia.) | L-shaped | | | XS2G-D422 | XS2G-D4S2 | |
| | For 5 dia. (4 to 5 dia.) For 3 dia. | Straight | 4 | XS2G-D4C3 | XS2G-D423 | XS2G-D4S3 | |
| | | L-shaped | | | | XS2G-D424 | XS2G-D4S4 |
| | | Straight | | XS2G-D4C5 | XS2G-D425 | XS2G-D4S5 | |
| | (3 to 4 dia.) | L-shaped | | | XS2G-D426 | XS2G-D4S6 | |
| | For 7 dia. (6 to 7 dia.) | (6 to 7 dia.) | | | | XS2G-D4S9 | |
| | For 8 dia. (7 to 8 dia.) | Straight | | - | - | XS2G-D4S7 | |

Applicable Cables with Connectors

● Cables with Connector (Socket/Plug) on Both Ends (M12 Microconnectors for Power Supply and I/O)

| Appearance | Cable direction | Number of core wires | Cable length (m) | Standard cable | Robot (earthquake-resistant) cable | | | | | | | |
|------------|--------------------------------------|----------------------|------------------|-----------------|------------------------------------|---|---|---|---|---|---|-----------------|
| | | 4 | 1 | XS2W-D421-C81-A | XS2W-D421-C81-R | | | | | | | |
| | Straight/Straight | | 2 | XS2W-D421-D81-A | XS2W-D421-D81-R | | | | | | | |
| | | | 5 | XS2W-D421-G81-A | XS2W-D421-G81-R | | | | | | | |
| | L-shaped/L-shaped Straight/L-shaped | | 4 | 2 | XS2W-D422-D81-A | | | | | | | |
| | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | XS2W-D422-G81-A |
| | | | 2 | XS2W-D423-D81-A | | | | | | | | |
| | | | 5 | XS2W-D423-G81-A | - - | | | | | | | |
| | L chanad/Straight | | 2 | XS2W-D424-D81-A | | | | | | | | |
| | L-shaped/Straight | | 5 | XS2W-D424-G81-A | | | | | | | | |

● Cables with connector plug on One End (M12 Microconnectors for I/O)

| Appearance | Cable direction | Number of core wires | Cable length (m) | Standard cable |
|------------|-----------------|----------------------|------------------|-----------------|
| | Straight _ | 3 | 0.3 | XS2H-D421-AC0-A |
| | | 4 | | XS2H-D421-A80-A |
| | S. a.g. ii | 3 | 1 | XS2H-D421-CC0-A |
| | | 4 | | XS2H-D421-C80-A |

● Plugs and Sockets on Y-shaped Joints (M12 Microconnectors for I/O)

| Appearance | Cable Connector | Connector | DC models | | |
|------------|-----------------|---|------------------|-----------------|--|
| Appearance | | Connector | Cable length (m) | Model | |
| | With cable | Connectors on both ends Connector on one end | 0.5 | XS2R-D426-B11-F | |
| | | | 1 | XS2R-D426-C11-F | |
| | | | 2 | XS2R-D426-D11-F | |
| | | | 3 | XS2R-D426-E11-F | |
| | | | 2 | XS2R-D426-D10-F | |
| | | | 5 | XS2R-D426-G10-F | |
| | Without cable | Connectors on both ends | | XS2R-D426-1 | |

 $\textbf{Note:} \ \, \textbf{Use is supported only for Environment-resistive Terminals (DRT2-\squareD16C(L)(-1))}.$

● Connector Cover for M12 Microconnectors

| Appearance | Product | Model | Application |
|------------|---------------------------|---------|------------------------------------|
| | Waterproof cover (socket) | XS2Z-22 | For covering unused I/O connectors |

Power Supply Peripheral Devices

Applicable Cables with Connectors

● Power Supply Connectors (7/8-16UN Miniconnectors)

| Appearance | Product | Cable length L (mm) | Model |
|------------|---|---------------------|-----------------|
| | | 1 | XS4W-D421-101-A |
| | | 2 | XS4W-D421-102-A |
| | ← L → | 5 | XS4W-D421-105-A |
| O The | | 10 | XS4W-D421-110-A |
| | | 1 | XS4F-D421-101-A |
| | | 2 | XS4F-D421-102-A |
| | L 50 mm | 5 | XS4F-D421-105-A |
| | | 10 | XS4F-D421-110-A |
| | | 1 | XS4H-D421-101-A |
| ave () | | 2 | XS4H-D421-102-A |
| | L 50 mm | 5 | XS4H-D421-105-A |
| | | 10 | XS4H-D421-110-A |
| | T-branch Connector | | XS4R-D424-5 |
| 0 V | Panel mounting connector socket Cable: 50 cm | | XS4P-D421-1C5-A |
| | Panel mounting connector plug DIP terminals | | XS4M-D421-1 |
| - | Waterproofing Cap for Plug | | XS4Z-11 |
| - | Waterproofing Cap for Socket | | XS4Z-12 |

Read and Understand This Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

LIMITATIONS OF LIABILITY

OMRON SHALL NOT BE RESPONSIBLE FOR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY.

In no event shall the responsibility of OMRON for any act exceed the individual price of the product on which liability is asserted.

IN NO EVENT SHALL OMRON BE RESPONSIBLE FOR WARRANTY, REPAIR, OR OTHER CLAIMS REGARDING THE PRODUCTS UNLESS OMRON'S ANALYSIS CONFIRMS THAT THE PRODUCTS WERE PROPERLY HANDLED, STORED, INSTALLED, AND MAINTAINED AND NOT SUBJECT TO CONTAMINATION, ABUSE, MISUSE, OR INAPPROPRIATE MODIFICATION OR REPAIR.

Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

At the customer's request, OMRON will provide applicable third party certification documents identifying ratings and limitations of use that apply to the products. This information by itself is not sufficient for a complete determination of the suitability of the products in combination with the end product, machine, system, or other application or use.

The following are some examples of applications for which particular attention must be given. This is not intended to be an exhaustive list of all possible uses of the products, nor is it intended to imply that the uses listed may be suitable for the products:

- Outdoor use, uses involving potential chemical contamination or electrical interference, or conditions or uses not described in this catalog.
- Nuclear energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject to separate industry or government regulations.
- Systems, machines, and equipment that could present a risk to life or property.

Please know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.

It is our practice to change model numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the products may be changed without any notice. When in doubt, special model numbers may be assigned to fix or establish key specifications for your application on your request. Please consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON Warranty and Limitations of Liability.

ERRORS AND OMISSIONS

The information in this document has been carefully checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical, or proofreading errors, or omissions.

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In the interest of product improvement, specifications are subject to change without notice.





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ИНН 7805602321 КПП 780501001 P/C 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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