

Universal plug connectors, for self-assembly

FESTO



Universal plug connectors, for self-assembly

Product range overview

FESTO

| Function | Design | Type | Connection technology | Connection cross section [mm ²] | Protection class | Bus protocol/actuation | → Page/ Internet |
|----------|---------------------------------|---------------------|-----------------------------------|--|------------------|------------------------|---------------------|
| Plug | Round plug connector M8 | | | | | | |
| | 3-pin | NECU-S-M8G3-HX | Harax® quick connection | 0.1 ... 0.14 0.14 ... 0.34 | IP65, IP67 | – | 4 |
| | 4-pin | NECU-S-M8G4-HX | Harax® quick connection | 0.14 ... 0.34 | IP65, IP67 | – | 6 |
| | | NECU-S-M8G4-C2 | Screw terminal | 0.14 ... 0.5 | IP67 | – | 6 |
| | Round plug connector M12 | | | | | | |
| | 3-pin | NECU-S-M12G3-HX | Harax® quick connection | 0.14 ... 0.34 0.34 ... 0.75 | IP65, IP67 | – | 8 |
| | 4-pin | NECU-M-S-A12G4 | Spring-loaded terminal | 0.14 ... 0.5 | IP65, IP67 | – | 10 |
| | | NECU-S-M12G4-HX | Harax® quick connection | 0.14 ... 0.34 0.34 ... 0.75 | IP65, IP67 | – | 10 |
| | | NECU-S-M12G4-...-IS | Screw terminal | 0.14 ... 0.5 0.75 | IP65, IP67 | – | 10 |
| | | NECU-M-S-D12G4 | Screw terminal, can be screened | 0.14 ... 0.75 | IP67 | Ethernet | 10 |
| | 5-pin | NECU-M-S-B12G5 | Screw terminal | 0.14 ... 0.75 | IP67 | PROFIBUS | 14 |
| | Square plug connector | | | | | | |
| | 4-pin | NECU-S-ECG4 | Insulation displacement connector | 0.14 | IP40 | – | 16 |
| | 8-pin | NECU-L8G3-C1 | Spring-loaded terminal | 0.2 ... 2.5 | – | – | 18 |
| | | NECU-L8G3-C2 | Screw terminal | 0.2 ... 2.5 | – | – | 18 |
| | Sub-D plug connector | | | | | | |
| | 9-pin | NECU-S1W9-C2-APB | IDC terminal | 0.08 ... 0.5 | IP20 | PROFIBUS | 20 |

Harax® is a registered trademark of its respective trademark holder in certain countries.

Universal plug connectors, for self-assembly

Product range overview

FESTO

| Function | Design | Type | Connection technology | Connection cross section [mm ²] | Protection class | Bus protocol/actuation | ➔ Page/ Internet |
|----------|--------------------------------------|------------------|---------------------------------|--|------------------|------------------------|---------------------|
| Socket | Round plug connector M8 | | | | | | |
| | 4-pin | NECU-M8G4 | Screw terminal | 0.14 ... 0.5 | IP67 | – | 22 |
| | | | | | | | |
| | Round plug connector M12 | | | | | | |
| | 4-pin | SIE | Screw terminal | 0.25 ... 0.75 | IP67 | – | 24 |
| | 5-pin | NECU-M-B12G5 | Screw terminal | 0.14 ... 0.75 | IP67 | – | 26 |
| | | | | | | | |
| | Round plug connector 7/8" | | | | | | |
| | 4-pin | NECU-G78G4 | Screw terminal | Max. 1.5 | IP67 | – | 28 |
| | 5-pin | NECU-G78G5 | Screw terminal | Max. 1.5 | IP67 | – | 30 |
| | | | | | | | |
| | AIDA push-pull plug connector | | | | | | |
| | 5-pin | NECU-M-PPG5 | Spring-loaded terminal | 0.75 ... 2.5 | IP65, IP67 | – | 32 |
| | | | | | | | |
| | Sub-D plug connector | | | | | | |
| | 9-pin | NECU-S1W9-C2-ACO | Screw terminal, can be screened | 0.14 ... 0.5 | IP20 | CANopen | 34 |

Plug, M8, 3-pin

Technical data

FESTO

Plug
NECU-S-M8G3

- Plug
- 3-pin
- Can be assembled with any cable lengths



| General technical data | | | |
|--|--------------------|-----------------------------------|----------------|
| Type | | NECU-S-M8G3-HX-Q3 | NECU-S-M8G3-HX |
| Electrical connection | | Straight plug, M8x1 | |
| | | 3-pin | |
| | | Insulation displacement connector | |
| Operating voltage range | [V DC] | 0 ... 32 | |
| | [V AC] | 0 ... 32 | |
| Surge resistance | [kV] | 0.8 | |
| Acceptable current load at 40 °C | [A] | 2 | 4 |
| | | | |
| Based on standard | | EN 61076-2-104 | EN 61076-2-104 |
| | | EN 61984 | EN 61984 |
| Permissible cable Ø | [mm] | 2.1 ... 3.5 | 2.5 ... 5.1 |
| Permissible individual wire Ø | [mm] | ≥ 0.05 | ≥ 0.1 |
| Connection cross section | [mm ²] | 0.1 ... 0.14 | 0.14 ... 0.34 |
| Permissible wire Ø | [mm] | 0.6 ... 1 | 0.9 ... 1.6 |
| Permissible wire insulation | | PP | PP |
| | | PVC | PVC |
| | | – | TPE-E |
| Connection frequency | | 3 | 3 |
| Max. tightening torque of locking clip | [Nm] | 0.3 | 0.3 |
| Protection class | | IP65 | IP65 |
| | | IP67 | IP67 |

| Materials | |
|-------------------|-----------------------------|
| Housing | Polyamide |
| | Nickel-plated die-cast zinc |
| Seals | Fluoro elastomer |
| | Polyurethane |
| Pin contact | Gold-plated |
| Note on materials | Free of copper and PTFE |
| | RoHS-compliant |


| Operating and environmental conditions | |
|--|-----------------------|
| Ambient temperature | [°C] –25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| Certification | cULus recognized (OL) |

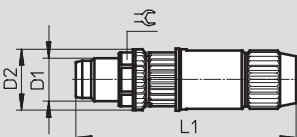
1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Plug, M8, 3-pin

Technical data

FESTO

| Pin allocation | | |
|---|-----|-------------|
| M8x1 | | |
| 3-pin | Pin | Wire colour |
|  | 1 | Brown |
| | 3 | Blue |
| | 4 | Black |
| | | |

| Dimensions | Download CAD Data → www.festo.com/us/cad |
|---|--|
|  | |

| Type | D1 | D2 | L1 | ⌀ |
|------------|------|------|------|---|
| NECU-S-M8G | M8x1 | 11.5 | 40.8 | 9 |

| Ordering data | | | | |
|---|--------------------------------|------------|----------|-------------------|
| Electrical connection | Connection cross section [mm²] | Weight [g] | Part No. | Type |
| Plug M8x1, 3-pin, straight, insulation displacement connector | 0.1 ... 0.14 | 7.8 | 564945 | NECU-S-M8G3-HX-Q3 |
| | 0.14 ... 0.34 | 7.8 | 562024 | NECU-S-M8G3-HX |

Plug, M8, 4-pin

Technical data

FESTO

Plug
NECU-S-M8G4

- Plug
- 4-pin
- Can be assembled with any cable lengths



| General technical data | | | |
|--|--------------------|-----------------------------------|-------------------------------|
| Type | | NECU-S-M8G4-HX | NECU-S-M8G4-C2 |
| Electrical connection | | Straight plug, M8x1 | |
| | | 4-pin | |
| | | Insulation displacement connector | Screw terminal |
| Plug coding | | – | Coded via contact arrangement |
| Operating voltage range | [V DC] | 0 ... 32 | 0 ... 30 |
| | [V AC] | 0 ... 32 | 0 ... 30 |
| Surge resistance | [kV] | 0.8 | 0.8 |
| Acceptable current load at 40 °C | [A] | 4 | 4 |
| Based on standard | | EN 61076-2-104 | EN 61076-2-101 |
| | | EN 61984 | EN 61984 |
| Transmission characteristics | | – | DIN EN 50173/CAT 5 |
| Permissible cable Ø | [mm] | 2.5 ... 5.1 | 3.5 ... 5.0 |
| Permissible individual wire Ø | [mm] | ≥ 0.1 | – |
| Connection cross section | [mm ²] | 0.14 ... 0.34 | 0.14 ... 0.5 |
| Permissible wire Ø | [mm] | 0.9 ... 1.6 | – |
| Permissible wire insulation | | PP | – |
| | | PVC | – |
| | | TPE-E | – |
| Connection frequency | | 3 | – |
| Max. tightening torque of locking clip | [Nm] | 0.3 | – |
| Protection class | | IP65 | – |
| | | IP67 | IP67 |

| Materials | | |
|-------------------|-----------------------------|---------------------|
| Type | NECU-S-M8G4-HX | NECU-S-M8G4-C2 |
| Housing | Polyamide | – |
| | Nickel-plated die-cast zinc | – |
| Seals | Fluoro elastomer | – |
| | Polyurethane | – |
| Pin contact | Gold-plated | Gold-plated brass |
| Union nut | – | Nickel-plated brass |
| Note on materials | Free of copper and PTFE | – |
| | RoHS-compliant | RoHS-compliant |


Plug, M8, 4-pin

Technical data

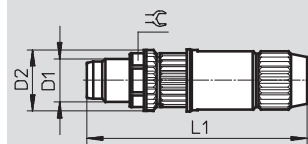
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| Operating and environmental conditions | | |
|--|-----------------------|----------------|
| Type | NECU-S-M8G4-HX | NECU-S-M8G4-C2 |
| Ambient temperature [°C] | -25 ... +85 | -25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 1 | 1 |
| Degree of contamination | 3 | 3 |
| Certification | cULus recognized (OL) | – |

- 1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

| Pin allocation | | |
|---|-----|-------------|
| M8x1 | | |
| 4-pin | Pin | Wire colour |
|  | 1 | Brown |
| | 2 | White |
| | 3 | Blue |
| | 4 | Black |

Dimensions Download CAD Data → www.festo.com/us/cad



| Type | D1 | D2 | L1 | ⌀ |
|----------------|------|------|------|---|
| NECU-S-M8G4-HX | M8x1 | 11.5 | 40.8 | 9 |
| NECU-S-M8G4-C2 | M8x1 | 12 | 49.6 | 9 |

| Ordering data | | | | | |
|----------------------------|-----------------------------------|--------------------------------|------------|----------|----------------|
| Electrical connection | | Connection cross section [mm²] | Weight [g] | Part No. | Type |
| Plug M8x1, 4-pin, straight | Insulation displacement connector | 0.14 ... 0.34 | 7.8 | 562025 | NECU-S-M8G4-HX |
| | Screw terminal | 0.14 ... 0.5 | 10.9 | 1068198 | NECU-S-M8G4-C2 |

Plug, M12, 3-pin

Technical data

FESTO

Plug

NECU-S-M12G3

- Plug
- 3-pin
- Can be assembled with any cable lengths



| General technical data | | | |
|--|--------|-----------------------------------|--------------------|
| Type | | NECU-S-M12G3-HX | NECU-S-M12G3-HX-Q7 |
| Electrical connection | | Straight plug, M12x1 | |
| | | 3-pin | |
| | | Insulation displacement connector | |
| Plug coding | | A-coded | |
| Operating voltage range | [V DC] | 0 ... 32 | 0 ... 48 |
| | [V AC] | 0 ... 32 | 0 ... 48 |
| Surge resistance | [kV] | 0.8 | 0.8 |
| Acceptable current load at 40 °C | [A] | 4 | 6 |
| Based on standard | | EN 61076-2-101 | EN 61076-2-101 |
| | | EN 61984 | EN 61984 |
| Permissible cable Ø | [mm] | 2.9 ... 5.1 | 4.7 ... 6.0 |
| Permissible individual wire Ø | [mm] | ≥ 0.1 | ≥ 0.1 |
| Connection cross section | [mm²] | 0.14 ... 0.34 | 0.34 ... 0.75 |
| Permissible wire Ø | [mm] | 0.9 ... 1.6 | 1.6 ... 2.0 |
| Permissible wire insulation | | PP | – |
| | | PVC | PVC |
| | | TPE-E | – |
| Connection frequency | | 3 | 3 |
| Max. tightening torque of locking clip | [Nm] | 0.5 | 0.5 |
| Protection class | | IP65 | IP65 |
| | | IP67 | IP67 |

| Materials | |
|-------------------|-----------------------------|
| Housing | Polyamide |
| | Nickel-plated die-cast zinc |
| Seals | Fluoro elastomer |
| | Polyurethane |
| Pin contact | Gold-plated |
| Note on materials | Free of copper and PTFE |
| | RoHS-compliant |

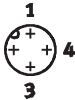
Plug, M12, 3-pin

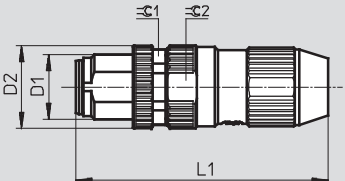
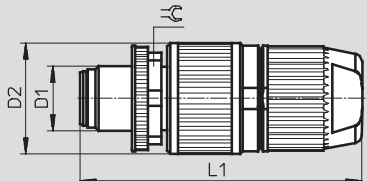
Technical data

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| Operating and environmental conditions | |
|--|-----------------------|
| Ambient temperature [°C] | −25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| Certification | cULus recognized (OL) |

- 1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

| Pin allocation | | |
|---|-----|-------------|
| M12x1 | | |
| 3-pin | Pin | Wire colour |
|  | 1 | Brown |
| | 3 | Blue |
| | 4 | Black |
| | | |

| Dimensions | Download CAD Data → www.festo.com/us/cad |
|--|---|
| NECU-S-M12G3-HX | NECU-S-M12G3-HX-Q7 |
|  |  |

| Type | D1 | D2 | L1 | ⌀G | ⌀G1 | ⌀G2 |
|--------------------|-------|------|-------|----|-----|-----|
| NECU-S-M12G3-HX | M12x1 | 15.3 | 46.75 | – | 13 | 14 |
| NECU-S-M12G3-HX-Q7 | M12x1 | 20.5 | 52.2 | 17 | – | – |

| Ordering data | | Connection cross section [mm²] | Weight [g] | Part No. | Type |
|-----------------------|-----------------------------|--------------------------------|------------|----------|--------------------|
| Electrical connection | Plug M12x1, 3-pin, straight | 0.14 ... 0.34 | 17.5 | 562027 | NECU-S-M12G3-HX |
| | | 0.34 ... 0.75 | 32.8 | 564946 | NECU-S-M12G3-HX-Q7 |

Plug, M12, 4-pin

Technical data

FESTO

Plug

NECU-M-S-A12G4

NECU-S-M12G4

NECU-M-S-D12G4

- Plug
- 4-pin
- Can be assembled with any cable lengths



| General technical data | | | | |
|--|----------------------|------------------------|-----------------------------------|--------------------|
| Type | | NECU-M-S-A12G4-IS | NECU-S-M12G4-HX | NECU-S-M12G4-HX-Q7 |
| Electrical connection | Straight plug, M12x1 | | | |
| | 4-pin | | | |
| | | Spring-loaded terminal | Insulation displacement connector | |
| Plug coding | | A-coded | A-coded | |
| Operating voltage range | [V DC] | 0 ... 30 | 0 ... 32 | 0 ... 48 |
| | [V AC] | – | 0 ... 32 | 0 ... 48 |
| Surge resistance | [kV] | – | 0.8 | 0.8 |
| Acceptable current load at 40 °C | [A] | 4 | 4 | 6 |
| | | EN 61076-2-101 | EN 61076-2-101 | EN 61076-2-101 |
| Based on standard | | – | EN 61984 | EN 61984 |
| | | | | |
| Permissible cable Ø | [mm] | 4.0 ... 8.0 | 2.9 ... 5.1 | 4.7 ... 6.0 |
| Permissible individual wire Ø | [mm] | – | ≥ 0.1 | ≥ 0.1 |
| Connection cross section | [mm ²] | 0.14 ... 0.5 | 0.14 ... 0.34 | 0.34 ... 0.75 |
| Permissible wire Ø | [mm] | – | 0.9 ... 1.6 | 1.6 ... 2.0 |
| Permissible wire insulation | | – | PP, PVC, TPE-E | PVC |
| Connection frequency | | 100 | 3 | 3 |
| Max. tightening torque of locking clip | [Nm] | 0.8 | 0.5 | 0.5 |
| Protection class | | IP65 | IP65 | IP65 |
| | | IP67 | IP67 | IP67 |

| Materials | | | | |
|-------------------|--|-----------------------------|--------------------------------|--------------------------------|
| Type | | NECU-M-S-A12G4-IS | NECU-S-M12G4-HX | NECU-S-M12G4-HX-Q7 |
| Housing | | – | Polyamide | Polyamide |
| | | Nickel-plated die-cast zinc | Nickel-plated die-cast zinc | Nickel-plated die-cast zinc |
| Seals | | – | Fluoro elastomer, polyurethane | Fluoro elastomer, polyurethane |
| Pin contact | | Gold-plated bronze | Gold-plated | Gold-plated |
| Note on materials | | – | Free of copper and PTFE | Free of copper and PTFE |
| | | RoHS-compliant | RoHS-compliant | RoHS-compliant |

| Operating and environmental conditions | | | | |
|--|------|-------------------|-----------------------|-----------------------|
| Type | | NECU-M-S-A12G4-IS | NECU-S-M12G4-HX | NECU-S-M12G4-HX-Q7 |
| Ambient temperature | [°C] | –40 ... +85 | –25 ... +85 | –25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | | – | 1 | 1 |
| Degree of contamination | | 3 | 3 | 3 |
| Certification | | – | cULus recognized (OL) | cULus recognized (OL) |

1) Corrosion resistance class 1 according to Festo standard 940 070

Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Plug, M12, 4-pin

Technical data

FESTO

| General technical data | | | | | | |
|--|--------|-----------------------|-------------------|--------------------|--------------------|---------------------------------|
| Type | | NECU-S-M12G4-P1-Q6-IS | NECU-S-M12G4-D-IS | NECU-S-M12G4-P1-IS | NECU-S-M12G4-P2-IS | NECU-M-S-D12G4-C2-ET |
| Electrical connection | | Straight plug, M12x1 | | | | |
| | | 4-pin | | | | |
| | | Screw terminal | | | | Screw terminal, can be screened |
| Plug coding | | A-coded | | | | D-coded |
| Operating voltage range | [V DC] | 0 ... 30 | | | | 0 ... 250 |
| | [V AC] | – | | | | 0 ... 250 |
| Surge resistance | [kV] | 2.5 | | | | 2.5 |
| Acceptable current load at 40 °C | [A] | 4 | | | | – |
| Based on standard | | EN 61076-2-101 | | | | EN 61076-2-101 |
| | | EN 61984 | | | | EN 61984 |
| Transmission characteristics | | – | | | | DIN EN 50173/CAT 5 |
| Permissible cable Ø | [mm] | 2.5 ... 2.9 | 2x 3.0 or 2x 5.0 | 4.0 ... 6.0 | 6.0 ... 8.0 | 6.0 ... 8.0 |
| Connection cross section | [mm²] | 0.14 ... 0.5 | 0.75 | 0.75 | 0.75 | 0.14 ... 0.75 |
| Connection frequency | | 50 | | | | – |
| Max. tightening torque of locking clip | [Nm] | 0.5 | | | | – |
| Protection class | | IP65 | | | | – |
| | | IP67 | | | | IP67 |

| Materials | | |
|-------------------|---------------------|-----------------------------|
| Type | NECU-S-M12G4-...-IS | NECU-M-S-D12G4-C2-ET |
| Housing | Polyamide | Nickel-plated die-cast zinc |
| Pin contact | Brass | Gold-plated brass |
| | Coated white bronze | – |
| Note on materials | – | Free of copper and PTFE |
| | RoHS-compliant | RoHS-compliant |

| Operating and environmental conditions | | |
|--|---------------------|-----------------------------|
| Type | NECU-S-M12G4-...-IS | NECU-M-S-D12G4-C2-ET |
| Ambient temperature | [°C] | –25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | – | 1 |
| Degree of contamination | 3 | 3 |
| CE marking (see declaration of conformity) | – | To EU Low Voltage Directive |

- 1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Plug, M12, 4-pin

Technical data

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| Pin allocation | | |
|----------------|-----|-------------|
| M12x1 | | |
| 4-pin | Pin | Wire colour |
| | 1 | Brown |
| | 2 | White |
| | 3 | Blue |
| | 4 | Black |

Dimensions Download CAD Data → www.festo.com/us/cad

| | |
|-----------------------------|------------------------|
| <p>NECU-M-S-A12G4-IS</p> | <p>NECU-S-M12G4-HX</p> |
| <p>NECU-S-M12G4-HX-Q7</p> | <p>NECU-S-M12G4-P1</p> |
| <p>NECU-S-M12G4-D</p> | <p>NECU-S-M12G4-P2</p> |
| <p>NECU-M-S-D12G4-C2-ET</p> | |

| Type | D1 | D2 | L1 | ⌀ | ⌀1 | ⌀2 |
|----------------------|-------|------|-------|----|----|----|
| NECU-M-S-A12G4-IS | M12x1 | 19.2 | 61.1 | – | – | – |
| NECU-S-M12G4-HX | M12x1 | 15.3 | 46.75 | – | 13 | 14 |
| NECU-S-M12G4-HX-Q7 | M12x1 | 20.5 | 52.2 | 17 | – | – |
| NECU-S-M12G4-P1 | M12x1 | 20 | 59.6 | – | – | – |
| NECU-S-M12G4-D | M12x1 | 20 | 62.6 | – | – | – |
| NECU-S-M12G4-P2 | M12x1 | 20 | 59.6 | – | – | – |
| NECU-M-S-D12G4-C2-ET | M12x1 | 20 | 62.5 | – | – | – |

Plug, M12, 4-pin

Technical data

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| Ordering data | | | | | |
|-----------------------------|-----------------------------------|--|---------------|---------------|------------------------------|
| Electrical connection | | Connection cross section [mm ²] | Weight [g] | Part No. | Type |
| Plug M12x1, 4-pin, straight | Spring-loaded terminal | 0.14 ... 0.5 | 38 | 575719 | NECU-M-S-A12G4-IS |
| | Insulation displacement connector | 0.14 ... 0.34 | 17.5 | 562028 | NECU-S-M12G4-HX |
| | | 0.34 ... 0.75 | 33.3 | 564947 | NECU-S-M12G4-HX-Q7 |
| | Screw terminal | 0.14 ... 0.5 | 18 | 570955 | NECU-S-M12G4-P1-Q6-IS |
| | | 0.75 | 24 | 570956 | NECU-S-M12G4-D-IS |
| | | 0.75 | 17 | 570953 | NECU-S-M12G4-P1-IS |
| | | 0.75 | 18 | 570954 | NECU-S-M12G4-P2-IS |
| | Screw terminal, can be screened | 0.14 ... 0.75 | 45.3 | 543109 | NECU-M-S-D12G4-C2-ET |

Plug, M12, 5-pin

Technical data

FESTO

Plug

NECU-M-S-B12G5

- Plug
- 5-pin
- B-coded for PROFIBUS
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|---------------------------------|---------------|
| Electrical connection | Straight plug, M12x1 | |
| | 5-pin | |
| | Screw terminal, can be screened | |
| Plug coding | B-coded | |
| Operating voltage range | [V DC] | 0 ... 60 |
| | [V AC] | 0 ... 60 |
| Surge resistance | [kV] | 1.5 |
| Acceptable current load at 40 °C | [A] | 4 |
| Based on standard | EN 61076-2-101 | |
| | EN 61984 | |
| Transmission characteristics | DIN EN 50173/CAT 5 | |
| Permissible cable Ø | [mm] | 6 ... 8 |
| Connection cross section | [mm ²] | 0.14 ... 0.75 |
| Protection class | IP67 | |

| Materials | |
|-------------------|-----------------------------|
| Housing | Nickel-plated die-cast zinc |
| Pin contact | Gold-plated brass |
| Note on materials | Free of copper and PTFE |
| | RoHS-compliant |

| Operating and environmental conditions | |
|---|-----------------------------|
| Ambient temperature | [°C] -25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| CE marking (see declaration of conformity) | To EU Low Voltage Directive |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

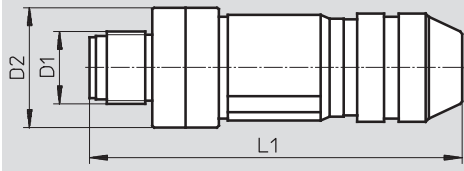
Plug, M12, 5-pin

Technical data

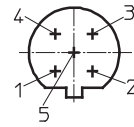
FESTO

Dimensions

NECU-M-S-B12G5



Pin allocation



Download CAD Data → www.festo.com/us/cad

| Type | D1 | D2 | L1 |
|----------------|-----|----|------|
| NECU-M-S-B12G5 | M12 | 20 | 62.5 |

Ordering data

| Electrical connection | | Connection cross section [mm ²] | Weight [g] | Part No. | Type |
|-----------------------------|---------------------------------|--|---------------|----------------|-----------------------------|
| Plug M12x1, 5-pin, straight | Screw terminal, can be screened | 0.14 ... 0.75 | 46 | 1066354 | NECU-M-S-B12G5-C2-PB |

Plug, square, 4-pin

Technical data

FESTO

Plug
NECU-S-ECG4

- Plug
- 4-pin
- Insulation displacement connector
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|--------------------|-----------------------------------|
| Electrical connection | | Straight plug, square design |
| | | 4-pin |
| | | Insulation displacement connector |
| Operating voltage range | [V DC] | 0 ... 30 |
| Surge resistance | [kV] | 0.8 |
| Acceptable current load at 40 °C | [A] | 3 |
| Permissible individual wire Ø | [mm] | ≥ 0.07 |
| Connection cross section | [mm ²] | 0.14 |
| Permissible wire Ø | [mm] | 0.8 ... 1.0 |
| Permissible wire insulation | | PP |
| | | PVC |
| | | TPE-E |
| Connection frequency | | 1 |
| Type of mounting | | Engaging |
| Protection class | | IP40 |

| Materials | |
|-------------------|----------------------------|
| Housing | Polybutylene terephthalate |
| | Polycarbonate |
| Pin contact | Gold-plated |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | |
|--|-----------------------|
| Ambient temperature | [°C] -20 ... +60 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 2 |
| Certification | cULus recognized (OL) |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

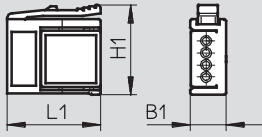
Plug, square, 4-pin

Technical data

FESTO

Dimensions

Download CAD Data → www.festo.com/us/cad



| Type | B1 | H1 | L1 |
|-------------|-----|------|------|
| NECU-S-ECG4 | 5.9 | 14.9 | 15.6 |

Ordering data

| Electrical connection | | Connection cross section [mm ²] | Weight [g] | Part No. | Type |
|-------------------------------------|-----------------------------------|--|---------------|----------|-------------------|
| Straight plug, square design, 4-pin | Insulation displacement connector | 0.14 | 3.6 | 570922 | NECU-S-ECG4-HX-Q3 |

Plug, terminal strip, 8-pin

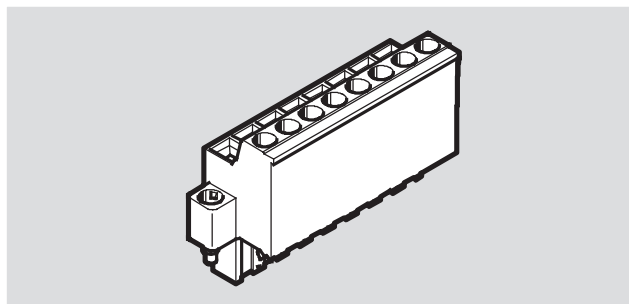
Technical data

FESTO

Terminal strip

NECU-L8G3

- Plug
- 8-pin
- Can be assembled with any cable lengths
- The plugs meet the requirements of IEC 60079-11 with regard to air, leakage paths and separation distances for the maximum intrinsically safe operating voltage of 30 V DC



| General technical data | | | |
|--|------------------------|--------------|----------------|
| Type | | NECU-L8G3-C1 | NECU-L8G3-C2 |
| Electrical connection | Straight plug | | |
| | 8-pin | | |
| | Spring-loaded terminal | | Screw terminal |
| Operating voltage range | [V DC] | 0 ... 30 | 0 ... 30 |
| Surge resistance | [kV] | 4 | 0.8 |
| Acceptable current load at 40 °C | [A] | 12 | 12 |
| Connection cross section | [mm ²] | 0.2 ... 2.5 | 0.2 ... 2.5 |
| Connection frequency | | 100 | 100 |
| Max. tightening torque of locking clip | [Nm] | – | 0.6 |
| Product weight | [g] | 20 | 20 |

| Materials | |
|-------------------|-------------------------|
| Housing | Polyamide |
| Pin contact | Tin-plated copper alloy |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | |
|--|------------------|
| Ambient temperature | [°C] –40 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 2 |
| Degree of contamination | 3 |

1) Corrosion resistance class 2 according to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

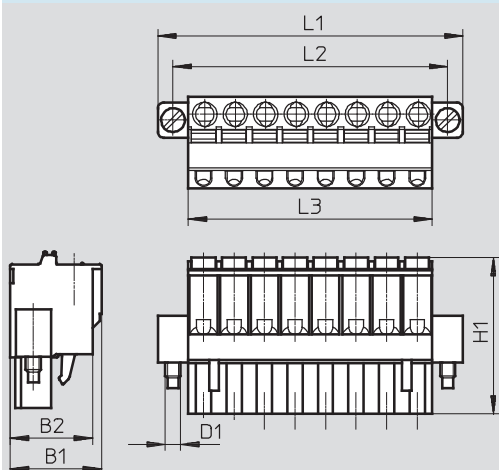
Plug, terminal strip, 8-pin

Technical data

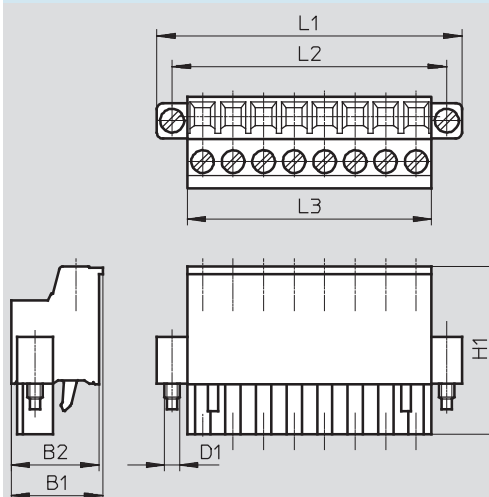
Dimensions

Download CAD Data → www.festo.com/us/cad

NECU-L3G8-C1



NECU-L3G8-C2



| Type | B1 | B2 | D1 | H1 | L1 | L2 | L3 |
|--------------|----|------|------|------|----|----|----|
| NECU-L3G8-C1 | 15 | 13.5 | M2.5 | 25.6 | 50 | 45 | 40 |
| NECU-L3G8-C2 | 15 | 14.4 | M2.5 | 27.5 | 50 | 45 | 40 |

Ordering data

| Electrical connection | | Housing colour | Part No. | Type |
|-----------------------|------------------------|----------------|---------------|------------------------|
| Plug, 8-pin, straight | Spring-loaded terminal | Black | 565712 | NECU-L3G8-C1 |
| | | Gentian blue | 565711 | NECU-L3G8-C1-IS |
| | Screw terminal | Black | 565710 | NECU-L3G8-C2 |
| | | Gentian blue | 565709 | NECU-L3G8-C2-IS |

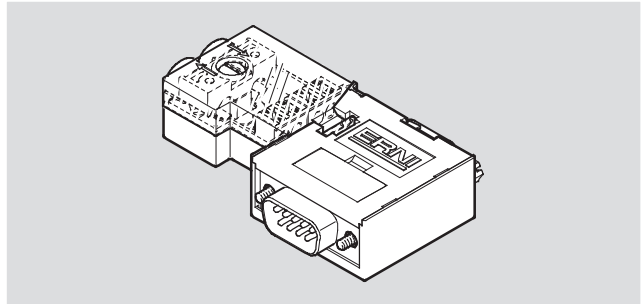
Plug, Sub-D, 9-pin

Technical data

FESTO

Plug
NECU-S1W9

- Plug
- 9-pin
- Can be assembled with any cable lengths
- Plug for PROFIBUS with terminating resistor and programming interface



| General technical data | | |
|--------------------------|--------------------|--------------|
| Electrical connection | | Sub-D plug |
| | | 9-pin |
| | | IDC terminal |
| Programming interface | | Sub-D socket |
| | | 9-pin |
| Baud rate | [Mbps] | 12 |
| Permissible cable Ø | [mm] | 8 |
| Connection cross section | [mm ²] | 0.08 ... 0.5 |
| Type of mounting | | 4-40UNC |
| Protection class | | IP20 |

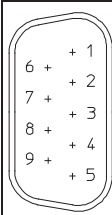
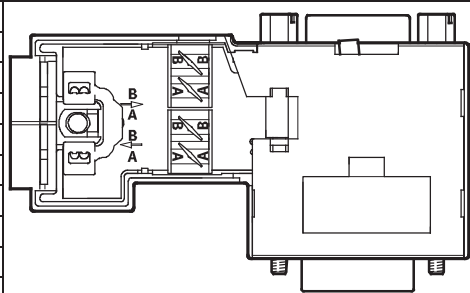
| Materials | |
|-------------------|--------------------------|
| Housing | Reinforced polycarbonate |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | | |
|--|------|-------------|
| Ambient temperature | [°C] | -20 ... +70 |
| Corrosion resistance class CRC ¹⁾ | | 1 |
| Relative air humidity | [%] | 75 at 25 °C |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Plug, Sub-D, 9-pin

Technical data

| Pin allocation | | | | |
|--|---------|-------------|---------------------|----------|
| Sub-D | | | | |
| 9-pin | Pin | Wire colour | Signal | Terminal |
| Sub-D plug | | | | |
|  | 1 | – | – | – |
| | 2 | – | – | – |
| | 3 | Red | RxD/TxD-P | B |
| | 4 | – | – | – |
| | 5 | – | CAN | – |
| | 6 | – | VP (supply voltage) | – |
| | 7 | – | – | – |
| | 8 | Green | RxD/TxD-N | A |
| | 9 | – | – | – |
| | Housing | – | – | – |
|  | | | | |

Dimensions

Download CAD Data ➔ www.festo.com/us/cad

Technical drawing of a Festo Sub-D plug, showing front and side views with dimensions and callouts.

Front View (Left):

- B1:** Width of the main body.
- D1:** Width of the base.
- H1:** Total height of the main body.
- 3:** Callout pointing to the internal contact pins.

Side View (Right):

- L1:** Total length of the main body.
- H2:** Total height of the main body.
- H3:** Height of the main body from the base.
- H4:** Height of the base.
- H5:** Height of the main body from the base (excluding the base).
- H6:** Height of the base.
- L2:** Total length of the base.
- L3:** Length of the base.
- L4:** Length of the main body.
- 1:** Callout pointing to the top of the main body.
- 2:** Callout pointing to the base.

| Type | B1 | D1 | H1 | H2 | H3 | H4 | H5 | H6 | L1 | L2 | L3 | L4 |
|------------------|------|---------|------|------|----|----|----|-----|------|------|------|----|
| NECU-S1W9-C2-APB | 16.2 | 4-40UNC | 40.7 | 44.2 | 28 | 12 | 10 | 5.2 | 72.8 | 53.1 | 35.1 | 25 |

| Ordering data | | | |
|-----------------------|--|-------------------------------|-------------------------|
| Electrical connection | | Connection cross section [mm] | Part No. Type |
| Sub-D plug, 9-pin | | IDC terminal | 574589 NECU-S1W9-C2-APB |

Socket, M8, 4-pin

Technical data

FESTO

Socket

NECU-M8G4

- Socket
- 4-pin
- Can be assembled with any cable lengths



| General technical data | | |
|--|--------------------|-----------------------|
| Electrical connection | | Straight socket, M8x1 |
| | | 4-pin |
| Operating voltage range | [V DC] | 0 ... 30 |
| | [V AC] | 0 ... 30 |
| Surge resistance | [kV] | 0.8 |
| Acceptable current load at 40 °C | [A] | 3 |
| Based on standard | | EN 61984 |
| Permissible cable Ø | [mm] | 3.5 ... 5.0 |
| Connection cross section | [mm ²] | 0.14 ... 0.5 |
| Connection frequency | | 500 |
| Max. tightening torque of locking clip | [Nm] | 0.3 |
| Protection class | | IP67 |

| Materials | |
|-------------------|----------------------------|
| Housing | Polybutylene terephthalate |
| | Nickel-plated brass |
| Housing colour | Black |
| Pin contact | Gold-plated brass |
| Union nut | Nickel-plated brass |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | | |
|--|------|-------------|
| Ambient temperature | [°C] | -40 ... +80 |
| Storage temperature | [°C] | -40 ... +80 |
| Corrosion resistance class CRC ¹⁾ | | 2 |
| Degree of contamination | | 3 |

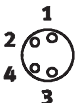
1) Corrosion resistance class 2 according to Festo standard 940 070

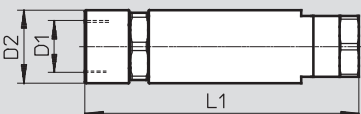
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Socket, M8, 4-pin

Technical data

FESTO

| Pin allocation | | |
|---|-----|-------------|
| M8x1 | | |
| 4-pin | Pin | Wire colour |
|  | 1 | Brown |
| | 2 | White |
| | 3 | Blue |
| | 4 | Black |

| Dimensions | Download CAD Data → www.festo.com/us/cad |
|---|--|
|  | |

| Type | D1 | D2 | L1 |
|----------|------|----|----|
| NECU-M8G | M8x1 | 12 | 45 |

| Ordering data | | | | | |
|------------------------------|----------------|--|---------------|---------------|------------------|
| Electrical connection | | Connection cross section [mm ²] | Weight [g] | Part No. | Type |
| Socket M8x1, 4-pin, straight | Screw terminal | 0.14 ... 0.5 | 9.5 | 544392 | NECU-M8G4 |

Socket, M12, 4-pin

Technical data

FESTO

Socket

SIE-GD

SIE-WD-TR

- Socket
- 4-pin
- Can be assembled with any cable lengths



| General technical data | | |
|--|------------------------|----------------------|
| Type | SIE-GD | SIE-WD-TR |
| Electrical connection | Straight socket, M12x1 | Angled socket, M12x1 |
| | 4-pin | 4-pin |
| Operating voltage range | [V DC] | 0 ... 250 |
| | [V AC] | 0 ... 250 |
| Surge resistance | [kV] | 2.5 |
| Acceptable current load at 40 °C | [A] | 4 |
| Based on standard | EN 61076-2-101 | EN 61076-2-101 |
| | EN 61984 | EN 61984 |
| Permissible cable Ø | [mm] | 4 ... 6 |
| Connection cross section | [mm ²] | 0.25 ... 0.75 |
| Max. tightening torque of locking clip | [Nm] | 0.5 |
| Protection class | IP67 | IP67 |

| Materials | |
|-------------------|----------------|
| Housing | Polyamide |
| Union nut | Polyamide |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | |
|--|-----------------------------|
| Ambient temperature | [°C] -25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 4 |
| Degree of contamination | 3 |
| CE marking (see declaration of conformity) | To EU Low Voltage Directive |

1) Corrosion resistance class 4 to Festo standard 940 070
Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Socket, M12, 4-pin

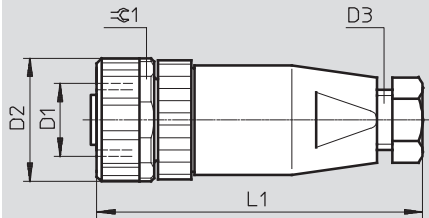
Technical data

FESTO

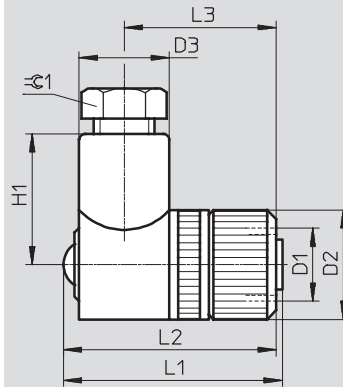
Dimensions

Download CAD Data → www.festo.com/us/cad

SIE-GD



SIE-WD-TR



| Type | D1 | D2 | D3 | H1 | L1 | L2 | L3 | ≈C1 |
|-----------|-------|------|------|------|----|----|----|-----|
| SIE-GD | M12x1 | 20.2 | Pg7 | – | 54 | – | – | 18 |
| SIE-WD-TR | M12x1 | 18 | 14.8 | 20.5 | 36 | 35 | 25 | 13 |

Ordering data

| Electrical connection | | Connection cross section [mm ²] | Part No. | Type |
|-----------------------|----------|--|--------------|------------------|
| Socket M12x1, 4-pin | Straight | 0.25 ... 0.75 | 18494 | SIE-GD |
| | Angled | 0.25 ... 0.75 | 12956 | SIE-WD-TR |

Socket, M12, 5-pin

Technical data

FESTO

Socket

NECU-M-B12G5

- Socket
- 5-pin
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|---------------------------------|---------------|
| Electrical connection | Straight socket, M12x1 | |
| | 5-pin | |
| | Screw terminal, can be screened | |
| Plug coding | B-coded | |
| Operating voltage range | [V DC] | 0 ... 125 |
| | [V AC] | 0 ... 125 |
| Surge resistance | [kV] | 1.25 |
| Acceptable current load at 40 °C | [A] | 4 |
| Based on standard | EN 61076-2-101 | |
| | EN 61984 | |
| Transmission characteristics | DIN EN 50173/CAT 5 | |
| Permissible cable Ø | [mm] | 6 ... 8 |
| Connection cross section | [mm ²] | 0.14 ... 0.75 |
| Protection class | IP67 | |

| Materials | |
|-------------------|-----------------------------|
| Housing | Nickel-plated die-cast zinc |
| Pin contact | Gold-plated brass |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | |
|---|-----------------------------|
| Ambient temperature | [°C] -25 ... +85 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| CE marking (see declaration of conformity) | To EU Low Voltage Directive |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

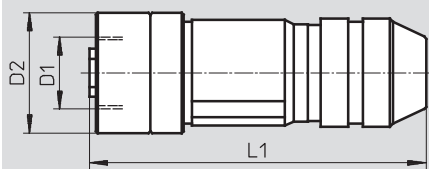
Socket, M12, 5-pin

Technical data

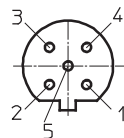
FESTO

Dimensions

NECU-M-B12G5



Pin allocation



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| Type | D1 | D2 | L1 |
|--------------|-----|----|----|
| NECU-M-B12G5 | M12 | 20 | 56 |

Ordering data

| Electrical connection | Connection cross section [mm ²] | Part No. | Type |
|-------------------------------|--|---------------|-----------------------------------|
| Socket M12x1, 5-pin, straight | Screw terminal | 0.14 ... 0.75 | 1067905 NECU-M-B12G5-C2-PB |

Socket, 7/8", 4-pin

Technical data

FESTO

Socket
NECU-G78G4

- Socket
- 4-pin
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|-----------------------|-----------|
| Electrical connection | Straight socket, 7/8" | |
| | 4-pin | |
| | Screw terminal | |
| Plug coding | ODVA AutoSIG | |
| Operating voltage range | [V DC] | 0 ... 250 |
| | [V AC] | 0 ... 250 |
| Surge resistance | [kV] | 2.5 |
| Acceptable current load at 40 °C | [A] | 10 |
| Based on standard | EN 61984 | |
| Permissible cable Ø | [mm] | 6 ... 12 |
| Connection cross section | [mm ²] | Max. 1.5 |
| Protection class | IP67 | |

| Materials | |
|-------------------|-----------------------------|
| Housing | Polyamide |
| Housing colour | Black |
| Seals | Fluoro elastomer |
| | Nitrile rubber |
| Pin contact | Gold-plated copper alloy |
| Union nut | Nickel-plated die-cast zinc |
| Note on materials | Free of copper and PTFE |
| | RoHS-compliant |

| Operating and environmental conditions | |
|---|-----------------------------|
| Ambient temperature | [°C] -25 ... +80 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| CE marking (see declaration of conformity) | To EU Low Voltage Directive |
| Certification | c CSA us (OL) |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

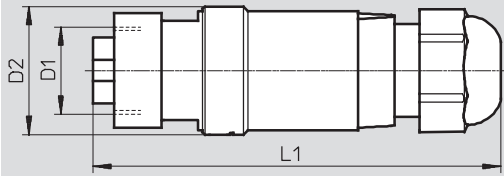
Socket, 7/8", 4-pin

Technical data

FESTO

Dimensions

Download CAD Data → www.festo.com/us/cad



| Type | D1 | D2 | L1 |
|---------------|------|----|----|
| NECU-G78G4-C2 | 7/8" | 28 | 89 |

Ordering data

| Electrical connection | | Connection cross section [mm ²] | Part No. | Type |
|------------------------------|----------------|--|----------|---------------|
| Socket 7/8", 4-pin, straight | Screw terminal | Max. 1.5 | 543108 | NECU-G78G4-C2 |

Socket, 7/8", 5-pin

Technical data

FESTO

Socket
NECU-G78G5

- Socket
- 5-pin
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|-----------------------|-----------|
| Electrical connection | Straight socket, 7/8" | |
| | 5-pin | |
| | Screw terminal | |
| Plug coding | NFPA/T3.5.29 R1-2003 | |
| Operating voltage range | [V DC] | 0 ... 250 |
| | [V AC] | 0 ... 250 |
| Surge resistance | [kV] | 2.5 |
| Acceptable current load at 40 °C | [A] | 8 |
| Based on standard | EN 61984 | |
| Permissible cable Ø | [mm] | 6 ... 12 |
| Connection cross section | [mm ²] | Max. 1.5 |
| Protection class | IP67 | |

| Materials | |
|-------------------|-----------------------------|
| Housing | Polyamide |
| Housing colour | Black |
| Seals | Fluoro elastomer |
| | Nitrile rubber |
| Pin contact | Gold-plated copper alloy |
| Union nut | Nickel-plated die-cast zinc |
| Note on materials | Free of copper and PTFE |
| | RoHS-compliant |

| Operating and environmental conditions | |
|---|-----------------------------|
| Ambient temperature | [°C] -25 ... +80 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| CE marking (see declaration of conformity) | To EU Low Voltage Directive |
| Certification | c CSA us (OL) |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

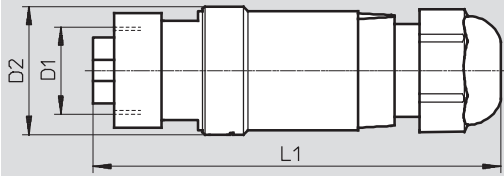
Socket, 7/8", 5-pin

Technical data

FESTO

Dimensions

Download CAD Data → www.festo.com/us/cad



| Type | D1 | D2 | L1 |
|---------------|------|----|----|
| NECU-G78G5-C2 | 7/8" | 28 | 89 |

Ordering data

| Electrical connection | | Connection cross section [mm ²] | Weight [g] | Part No. | Type |
|------------------------------|----------------|--|---------------|----------|---------------|
| Socket 7/8", 5-pin, straight | Screw terminal | Max. 1.5 | 10.9 | 543107 | NECU-G78G5-C2 |

Socket, AIDA push-pull, 5-pin

Technical data

FESTO

Plug

NECU-M-PPG5

- Socket
- 5-pin
- Can be assembled with any cable lengths



| General technical data | | |
|----------------------------------|---------------------------------|--------------|
| Electrical connection | Straight socket, AIDA push-pull | |
| | 5-pin | |
| | Spring-loaded terminal | |
| Plug coding | Black insulator | |
| Operating voltage range | [V DC] | 0 ... 24 |
| Surge resistance | [kV] | 2.5 |
| Acceptable current load at 40 °C | [A] | 16 |
| Based on standard | EN 61984 | |
| Permissible cable Ø | [mm] | 9 ... 13 |
| Connection cross section | [mm ²] | 0.75 ... 2.5 |
| Protection class | IP65 | |
| | IP67 | |

| Materials | |
|-------------------|--|
| Housing | Nickel-plated die-cast zinc |
| Seals | Nitrile rubber |
| | Thermoplastic elastomer |
| Pin contact | Nickel-plated and gold-plated copper alloy |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | |
|--|-------------------|
| Ambient temperature | [°C] -40 ... +100 |
| Corrosion resistance class CRC ¹⁾ | 1 |
| Degree of contamination | 3 |
| Fire protection classification to UL 94 | V0 |

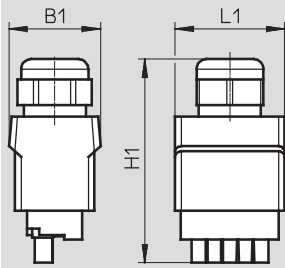
1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Socket, AIDA push-pull, 5-pin

Technical data

FESTO

Dimensions



| Type | B1 | H1 | L1 |
|----------------|----|------|----|
| NECU-M-PPG5-C1 | 30 | 66.9 | 36 |

Ordering data

| Electrical connection | Connection cross section [mm ²] | Part No. | Type |
|--|--|----------|----------------|
| AIDA push-pull socket, 5-pin, straight | 0.75 ... 2.5 | 563059 | NECU-M-PPG5-C1 |

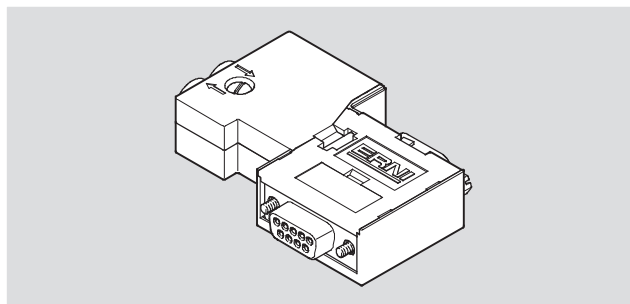
Socket, Sub-D, 9-pin

Technical data

FESTO

Socket
NECU-S1W9

- Socket
- 9-pin
- Can be assembled with any cable lengths
- Socket for CANopen with terminating resistor and programming interface



| General technical data | | |
|--------------------------|--------------------|---------------------------------|
| Electrical connection | | Sub-D socket |
| | | 9-pin |
| | | Screw terminal, can be screened |
| Programming interface | | Sub-D plug |
| | | 9-pin |
| Baud rate | [Mbps] | 1 |
| Permissible cable Ø | [mm] | 8 |
| Connection cross section | [mm ²] | 0.14 ... 0.5 |
| Type of mounting | | 4-40UNC |
| Protection class | | IP20 |

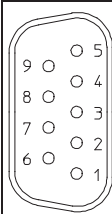
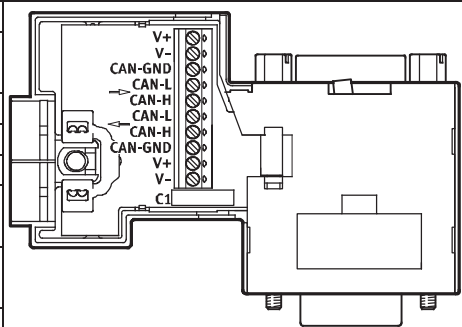
| Materials | |
|-------------------|--------------------------|
| Housing | Reinforced polycarbonate |
| Note on materials | RoHS-compliant |

| Operating and environmental conditions | | |
|--|------|-------------|
| Ambient temperature | [°C] | –20 ... +70 |
| Corrosion resistance class CRC ¹⁾ | | 1 |
| Relative air humidity | [%] | 75 at 25 °C |

1) Corrosion resistance class 1 according to Festo standard 940 070
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

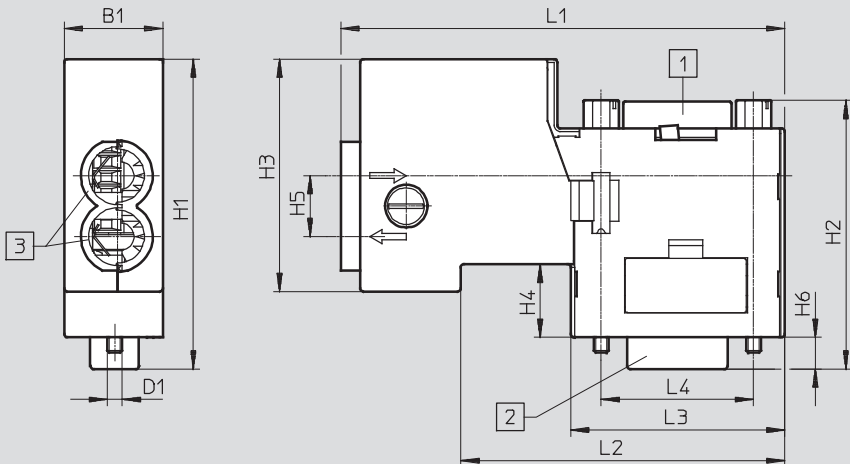
Socket, Sub-D, 9-pin

Technical data

| Pin allocation | | | | |
|--|---------|-------------|--------------------------------|----------|
| Sub-D | | | | |
| 9-pin | Pin | Wire colour | Signal | Terminal |
| Sub-D plug | | | | |
|  | 1 | – | – | – |
| | 2 | White | Received/transmitted data low | C-L |
| | 3 | Screening | 0 V CAN interface | GND |
| | 4 | – | – | – |
| | 5 | – | – | – |
| | 6 | Optional | Optional screened connection | V– |
| | 7 | Brown | Received/transmitted data high | C-H |
| | 8 | – | – | – |
| | 9 | Optional | 24 V DC supply CAN interface | V+ |
| | Housing | – | – | – |
|  | | | | |

Dimensions

Download CAD Data → www.festo.com/us/cad



Technical drawing of a Festo Sub-D connector showing three views: front, side, and top.

Front View (Left): Shows the connector's profile with dimensions B1 (width), H1 (height), and D1 (bottom flange width). A label '3' points to the internal contact area.

Side View (Top): Shows the connector's side profile with dimensions L1 (total length), H3 (total height), H5 (height to top flange), H4 (height to bottom flange), L4 (width of bottom flange), L3 (width of main body), L2 (width of mounting base), and H2 (height of main body). A label '1' points to the top flange.

Top View (Bottom): Shows the connector's top profile with dimensions L1 (total length), L4 (width of bottom flange), L3 (width of main body), L2 (width of mounting base), and H2 (height of main body). A label '2' points to the mounting base.

| Type | B1 | D1 | H1 | H2 | H3 | H4 | H5 | H6 | L1 | L2 | L3 | L4 |
|------------------|------|---------|------|------|------|----|----|-----|------|------|------|----|
| NECU-S1W9-C2-ACO | 16.2 | 4-40UNC | 50.8 | 43.8 | 38.1 | 12 | 10 | 5.2 | 72.8 | 53.1 | 35.1 | 25 |

| Ordering data | | | |
|-----------------------|--|---------------------------------|---|
| Electrical connection | | Connection cross section [mm] | Part No. Type |
| Sub-D socket, 9-pin | | Screw terminal, can be screened | 0.14 ... 0.5 574588 NECU-S1W9-C2-ACO |

Universal plug connectors SIE, for self-assembly

Accessories

FESTO

Operational status indicator SIE-LP-LED-GR

Used to indicate the ready status of a proximity sensor SIE connected via the angled socket SIE-WD-TR. It does this by illuminating a green LED.



| Ordering data | | | |
|-----------------------------------|-----------------------------|----------|---------------|
| Operating voltage range [V DC] | Ambient temperature [°C] | Part No. | Type |
| 10 ... 30 | -25 ... +70 | 12957 | SIE-LP-LED-GR |

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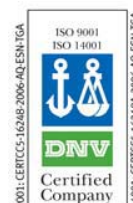
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