

Connecting cables NEBU, plug sockets with cable SIM

Product overview



- Connecting cables for standard, drag chain and robot applications
- Versions with switching status display
- Welding field immune designs
- Easy-to-clean designs approved for use in the food and packaging sector
- Cable length 0.1 ... 25 m freely selectable

Detailed product information

➔ www.festo.com/catalogue/nebu

| Product overview | | | | | | |
|----------------------------------|--------------|-----------------------|------------|-----------------|------------------|--------|
| Design | Type | Electrical connection | | Number of wires | Cable length [m] | ➔ Page |
| | | Left | Right | | | |
| Basic version | NEBU-M5 | Socket M5x0.5 | Open end | 3 | 5 | 232 |
| | | | Plug M8x1 | 3 | 1 | |
| | | | Plug M12x1 | 4 | 1 | |
| | NEBU-M8 | Socket M8x1 | Open end | 3, 4 | 0.1 ... 25 | 232 |
| | | | Plug M8x1 | | | |
| | | | Plug M12x1 | | | |
| | NEBU-M12 | Socket M12x1 | Open end | 3, 4, 5 | 0.1 ... 25 | 232 |
| Plug M8x1 | | | | | | |
| Plug M12x1 | | | | | | |
| SIM-M12-8 | Socket M12x1 | Open end | 8 | 2; 5 | 237 | |
| | | Plug M8x1 | | | | |
| | | Plug M12x1 | | | | |
| KSMH-1-M8-2-M8 | Socket M8x1 | Plug M8x1 | 4 | 2 | | |
| | | | | | | |
| | | | | | | |
| KM12-8 | Socket M12x1 | Plug M12x1 | 8 | 2 | | |
| | | | | | | |
| | | | | | | |
| With switching status display | NEBU-M8 | Socket M8x1 | Open end | 3 | 0.1 ... 25 | 232 |
| | | | Plug M8x1 | | | |
| | | | Plug M12x1 | | | |
| | NEBU-M12 | Socket M12x1 | Open end | 3 | 0.1 ... 25 | 232 |
| | | | Plug M8x1 | | | |
| Plug M12x1 | | | | | | |
| Welding field immune | SIM-M12-RS | Socket M12x1 | Open end | 3 | 3 | 237 |
| With clip-on socket | SIM-K | Socket, clip-on | Open end | 3 | 2.5; 5; 10 | 237 |
| | | | | 4 | 2.5; 5 | |
| For food industry, easy to clean | SIM-K-CDN | Socket, clip-on | Open end | 3 | 2.5; 5 | 237 |

Connecting cables NEBU, plug sockets with cable SIM

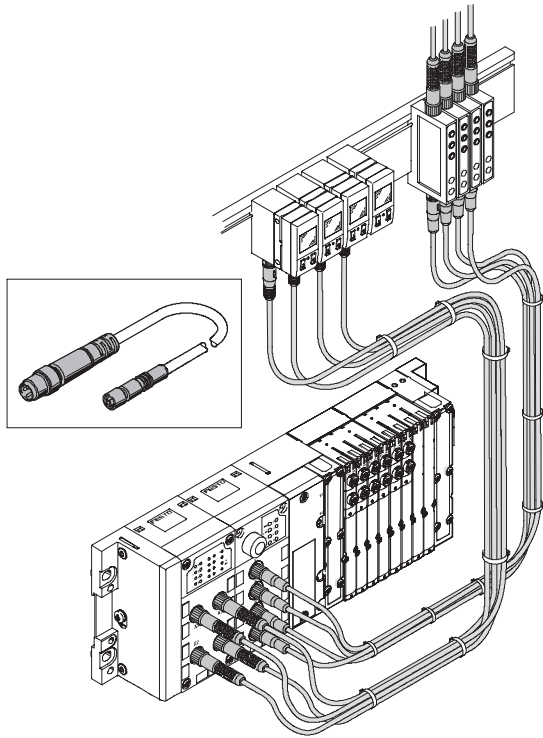
Key features



Cable quality

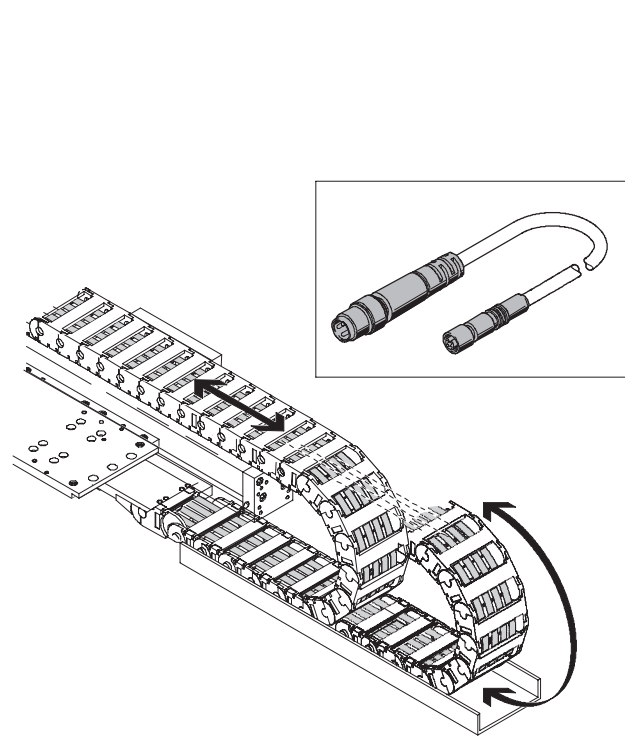
The sensor cables can be configured using the modular system. You can choose from qualities that are suited to standard, drag chain or robot applications.

Standard application



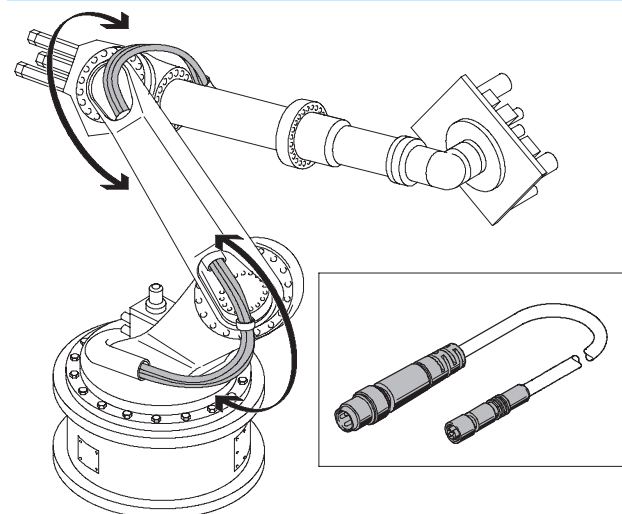
- Standard applications are characterised by fixed cable installation or low to average mechanical loads.

Drag chain application



- High mechanical loads occur in drag chain applications, particularly when very small radii are required.

Robot application



- High mechanical loads, which are primarily caused by torsion, occur in robot applications.

Connecting cables NEBU

Type codes

NEBU – M12 W 5 P – K – 2.5 – – – LE – 3

Function

| | |
|------|------------------|
| NEBU | Connecting cable |
|------|------------------|

Connection, left

| | |
|-----|--|
| M5 | Socket with connecting thread |
| M8 | Socket with connecting thread |
| M12 | Socket with connecting thread, A-coded |

Socket design

| | |
|---|----------|
| G | Straight |
| W | Angled |

Number of pins/wires (left)

| | |
|---|---|
| 3 | 3-pin (fitting for M8 plug) |
| 4 | 4-pin (fitting for M8 plug) |
| 5 | 5-pin (fitting for 3-, 4- and 5-pin M12 plug) |

Display

| | |
|---|------------------------|
| – | Without LED (standard) |
| P | LED, PNP |
| N | LED, NPN |

Cable quality

| | |
|---|-------------------------|
| K | Standard |
| E | Suitable for drag chain |
| R | Suitable for robots |

Cable length

| | |
|------------|--------------|
| 0.1 ... 25 | 0.1 ... 25 m |
|------------|--------------|

Alternative wire cross section

| | |
|----|---------------------------------|
| – | 0.25 mm ² (standard) |
| Q3 | 0.14 mm ² |

Cable designation

| | |
|---|--|
| – | With inscription label holder (standard) |
| N | Without inscription label holder |

Connection, right

| | |
|-----|--|
| LE | Open end |
| M8 | Socket with connecting thread |
| M12 | Socket with connecting thread, A-coded |

Plug design

| | |
|---|----------|
| G | Straight |
| W | Angled |

Number of pins/wires (right)

| | |
|---|-----------------------------------|
| 3 | 3-pin (fitting for M8/M12 socket) |
| 4 | 4-pin (fitting for M8/M12 socket) |
| 5 | 5-pin (fitting for M12 socket) |

Connecting cables NEBU

Technical data



| General technical data | | | |
|---|--|-------------------------|--------------|
| Electrical connection, left | Socket M5x0.5 | Socket M8x1 | Socket M12x1 |
| Design | | | |
| Cable length [m] | → Ordering data | 0.1 ... 25 | |
| Ready status display ¹⁾ | – | Green LED | |
| Switching status display ¹⁾ | – | Yellow LED | |
| Cable quality ¹⁾ | Standard | Standard | |
| | – | Suitable for drag chain | |
| | – | Suitable for robots | |
| Test conditions for standard cables | Chain link trunking: 5 million cycles, bending radius 75 mm | | |
| | Resistance to bending: To Festo standard; test conditions on request | | |
| Test conditions for suitability for chain link trunking | Chain link trunking: 5 million cycles, bending radius 28 mm | | |
| | Resistance to bending: To Festo standard; test conditions on request | | |
| Test conditions for suitability for robots | Chain link trunking: 5 million cycles, bending radius 28 mm | | |
| | Torsional strength: > 300,000 cycles, ±270°/0.1 m | | |
| | Resistance to bending: To Festo standard; test conditions on request | | |
| Operating and environmental conditions | | | |
| Ambient temperature [°C] | –25 ... +70 | –25 ... +80 | |
| Ambient temperature with flexible cable installation [°C] | –5 ... +70 | –5 ... +80 | |
| Protection class | IP65, IP67 | | |
| Materials | | | |
| Housing | Polyurethane | | |
| Cable sheath | Polyurethane | | |

1) If the relevant option is selected → Ordering table 233 and modular products234

| Electrical data – Socket M5x0.5 | | | |
|---------------------------------|--------------------------------|----------------------------|-----------------------------|
| Electrical connection, left | Straight socket, M5x0.5, 3-pin | | |
| Electrical connection, right | Cable, open end, 3-wire | Straight plug, M8x1, 3-pin | Straight plug, M12x1, 4-pin |
| Operating voltage range | AC [V] | 125 | 60 |
| | DC [V] | 125 | 75 |

| Electrical data – Socket M8x1 | | | |
|--|---|----------|---|
| Electrical connection, left ¹⁾ | Socket M8x1, 3-pin, straight or angled | | Socket M8x1, 4-pin, straight or angled |
| Electrical connection, right ¹⁾ | Plug M8x1 or M12x1 3-pin, straight or angled | | Plug M8x1 or M12x1 4-pin, straight or angled |
| | Open end, 3-wire | | Open end, 4-wire |
| Operating voltage range | AC [V] | 0 ... 60 | 0 ... 30 |
| | DC [V] | 0 ... 60 | 0 ... 30 |

1) Possible combinations → Ordering table 233 and modular products234

| Electrical data – Socket M12x1 | | | |
|--|---|-----------|---|
| Electrical connection, left ¹⁾ | Socket M12x1, 5-pin, straight or angled | | |
| Electrical connection, right ¹⁾ | Plug M8x1 or M12x1 3-pin, straight or angled | | Plug M8x1 or M12x1 5-pin, straight or angled |
| | Open end, 3-wire | | Open end, 4-wire |
| Operating voltage range | AC [V] | 0 ... 300 | 0 ... 60 |
| | DC [V] | 0 ... 300 | 0 ... 60 |

1) Possible combinations → Ordering table 233 and modular products234


Connecting cables NEBU


Technical data



FESTO

| Ordering data – Basic version | | | | | |
|--------------------------------|------------------------------|------------------|----------|------------------------|--|
| Electrical connection, left | Electrical connection, right | Cable length [m] | Part No. | Type | |
| Straight socket, M5x0.5, 3-pin | Cable, open end, 3-wire | 5 | 539 508 | NEBU-M5G4-K-5-Q3-LE3 | |
| | Straight plug, M8x1, 3-pin | 1 | 539 510 | NEBU-M5G4-K-1-Q3-M8G3 | |
| | Straight plug, M12x1, 4-pin | 1 | 539 512 | NEBU-M5G4-K-1-Q3-M12G4 | |
| Straight socket, M8x1, 3-pin | Cable, open end, 3-wire | 2.5 | 541 333 | NEBU-M8G3-K-2.5-LE3 | |
| | | 5 | 541 334 | NEBU-M8G3-K-5-LE3 | |
| | | 10 | 541 332 | NEBU-M8G3-K-10-LE3 | |
| | Straight plug, M8x1, 3-pin | 0.5 | 541 346 | NEBU-M8G3-K-0.5-M8G3 | |
| | | 1 | 541 347 | NEBU-M8G3-K-1-M8G3 | |
| | | 2.5 | 541 348 | NEBU-M8G3-K-2.5-M8G3 | |
| | | 5 | 541 349 | NEBU-M8G3-K-5-M8G3 | |
| Angled socket, M8x1, 3-pin | Cable, open end, 3-wire | 2.5 | 541 338 | NEBU-M8W3-K-2.5-LE3 | |
| | | 5 | 541 341 | NEBU-M8W3-K-5-LE3 | |
| | | 10 | 541 335 | NEBU-M8W3-K-10-LE3 | |
| Straight socket, M8x1, 4-pin | Cable, open end, 4-wire | 2.5 | 541 342 | NEBU-M8G4-K-2.5-LE4 | |
| | | 5 | 541 343 | NEBU-M8G4-K-5-LE4 | |
| Angled socket, M8x1, 4-pin | Cable, open end, 4-wire | 2.5 | 541 344 | NEBU-M8W4-K-2.5-LE4 | |
| | | 5 | 541 345 | NEBU-M8W4-K-5-LE4 | |
| Straight socket, M12x1, 5-pin | Cable, open end, 3-wire | 2.5 | 541 363 | NEBU-M12G5-K-2.5-LE3 | |
| | | 5 | 541 364 | NEBU-M12G5-K-5-LE3 | |
| | Cable, open end, 4-wire | 2.5 | 530 326 | NEBU-M12G5-K-2.5-LE4 | |
| | | 5 | 541 328 | NEBU-M12G5-K-5-LE4 | |
| | Cable, open end, 5-wire | 2.5 | 541 330 | NEBU-M12G5-K-2.5-LE5 | |
| | | 5 | 541 331 | NEBU-M12G5-K-5-LE5 | |
| Angled socket, M12x1, 5-pin | Cable, open end, 3-wire | 2.5 | 541 367 | NEBU-M12W5-K-2.5-LE3 | |
| | | 5 | 541 370 | NEBU-M12W5-K-5-LE3 | |
| | Cable, open end, 4-wire | 2.5 | 530 325 | NEBU-M12W5-K-2.5-LE4 | |
| | | 5 | 541 329 | NEBU-M12W5-K-5-LE4 | |

| Ordering data – With switching status display | | | | | |
|---|------------------------------|---------------|------------------|----------|-----------------------|
| Electrical connection, left | Electrical connection, right | Switch output | Cable length [m] | Part No. | Type |
| Angled socket, M8x1, 3-pin | Cable, open end, 3-wire | PNP | 2.5 | 541 337 | NEBU-M8W5P-K-2.5-LE3 |
| | | | 5 | 541 340 | NEBU-M8W5P-K-5-LE3 |
| | | NPN | 2.5 | 541 336 | NEBU-M8W5N-K-2.5-LE3 |
| | | | 5 | 541 339 | NEBU-M8W5N-K-5-LE3 |
| Angled socket, M12x1, 5-pin | Cable, open end, 3-wire | PNP | 2.5 | 541 366 | NEBU-M12W5P-K-2.5-LE3 |
| | | | 5 | 541 369 | NEBU-M12W5P-K-5-LE3 |
| | | NPN | 2.5 | 541 365 | NEBU-M12W5N-K-2.5-LE3 |
| | | | 5 | 541 368 | NEBU-M12W5N-K-5-LE3 |

 Note
Additional variants can be configured and ordered via the NEBU modular product system → 234.

 Note
Pin allocations and circuit diagrams → www.festo.com

| Ordering data – Inscription labels, safety clips | | | | | | |
|---|---------------|---|---------|----------|-------------|------------------|
| | Material | Use | Size | Part No. | Type | PU ¹⁾ |
|  | Polycarbonate | For insertion in the inscription label holder | 18x4 mm | 546 111 | ASLR-L-418 | 57 |
| | | | 23x4 mm | 541 598 | ASLR-L-423 | 51 |
|  | Polyamide | For protecting push-in connectors from inadvertent disconnection (no tool needed) | M8 | 548 067 | NEAU-M8-GD | 1 |
| | | | M12 | 548 068 | NEAU-M12-GD | 1 |

1) Packaging unit in quantity per frame

Connecting cables NEBU, M8/M12

Ordering data – Modular products



| M Mandatory data | | | | | O Options → |
|----------------------|----------|------------------|---------------|-----------------------------|-------------|
| Module No. | Function | Connection, left | Socket design | Number of pins/wires (left) | Display |
| 539 052 | NEBU | M8 M12 | G W | 3 4 5 | – P N |
| Order example | | | | | |
| 539 052 | NEBU | – M12 | W | 5 | P |

| Ordering table | | Condi- tions | Code | Enter code |
|----------------|-----------------------------|---|------|---------------|
| M | Module No. | 539 052 | | |
| | Function | Connecting cable | NEBU | NEBU |
| | | | – | – |
| | Connection, left | Socket with connecting thread | M8 | |
| | | Socket with connecting thread, A-coded | M12 | |
| | Socket design | Straight | G | |
| | | Angled | W | |
| | Number of pins/wires (left) | 3-pin (fitting for M8 plug) | 3 | |
| | | 4-pin (fitting for M8 plug) | 4 | |
| | | 5-pin (fitting for 3-, 4- and 5-pin M12 plug) | 5 | |
| O | Display | Without LED (standard) | | |
| | | LED, PNP | 1 | P |
| | | LED, NPN | 1 | N |

1 P, N Only in combination with M8 connection technology at left-hand end with socket design W and number of pins/wires (left-hand end) 3
or
only in combination with M12 connection technology at left-hand end with socket design W and number of pins/wires (left-hand end) 5 and number of pins/wires (right-hand end) 3.

Transfer order code

| | | | | | | |
|---------|------|---|--|--|--|--|
| 539 052 | NEBU | – | | | | |
|---------|------|---|--|--|--|--|

Connecting cables NEBU, M8/M12

Ordering data – Modular products

| | | | | | |
|-------------------------|--------------|-------------------|-------------------|-------------|------------------------------|
| M Mandatory data | | O Options | M | O | M |
| Cable quality | Cable length | Cable designation | Connection, right | Plug design | Number of pins/wires (right) |
| K E R | 0.1 ... 25 | - N | LE M8 M12 | G W | 3 4 5 |
| - E | - 3.5 | - N | - M8 | - G | - 3 |

| Ordering table | | | | | | |
|----------------|------------------------------|--|-----|-----------------|------|---------------|
| Module No. | 539 052 | | | Condi- tions | Code | Enter code |
| M | Cable quality | Standard | | | K | - |
| | | Suitable for drag chain | | | E | |
| | | Suitable for robots | | | R | |
| | | | | | - | - |
| | Cable length | 0.1 ... 25 m (0.1 ... 2.5 m in 0.1 m increments, 2.5 ... 25 m in 0.5 m increments) | | | ... | |
| O | | | | | - | - |
| | Cable designation | With inscription label holder (standard) | | | | |
| | | Without inscription label holder | | | N | |
| M | | | | | - | - |
| | Connection, right | Open end | | | LE | |
| | | Plug with connecting thread | | | M8 | |
| | | Plug with connecting thread, A-coded | | | M12 | |
| O | Plug design | Straight | [2] | | G | |
| | | Angled | [2] | | W | |
| M | Number of pins/wires (right) | 3-pin (fitting for M8/M12 socket) | [3] | | 3 | |
| | | 4-pin (fitting for M8/M12 socket) | [4] | | 4 | |
| | | 5-pin (fitting for M12 socket) | [5] | | 5 | |

- [2] **G, W** Must be selected with M8, M12 connection technology at right-hand end.
Not in combination with LE connection technology at right-hand end.
- [3] **3** Not in combination with M8 connection technology at left-hand end, number of pins/wires (left-hand end) 4 and LE, M12 connection technology at right-hand end.
- [4] **4** Not in combination with M8 connection technology at left-hand end, number of pins/wires (left-hand end) 3 and LE, M12 connection technology at right-hand end.
Only in combination with LE, M12 connection technology at right-hand end.
- [5] **5** Not in combination with M8 connection technology at left-hand end and LE, M12 connection technology at right-hand end.

Transfer order code

- - - -

Plug sockets with cable SIM

Type codes

| | | | | | | | | | | | | | | | |
|-------------------------------|---------------------------------------|-----|---|-----|---|----|---|---|----|---|---|---|--|---|--|
| | | SIM | - | M12 | - | RS | - | 3 | GD | - | 3 | - | | - | |
| Type | | | | | | | | | | | | | | | |
| SIM | Plug socket with cable for sensors | | | | | | | | | | | | | | |
| Electrical connection | | | | | | | | | | | | | | | |
| M12 | M12x1 locknut | | | | | | | | | | | | | | |
| K | Clip-on plug | | | | | | | | | | | | | | |
| Welding field immunity | | | | | | | | | | | | | | | |
| | Basic type, no welding field immunity | | | | | | | | | | | | | | |
| RS | Welding field immune | | | | | | | | | | | | | | |
| Number of wires | | | | | | | | | | | | | | | |
| | 3-wire | | | | | | | | | | | | | | |
| 4 | 4-wire | | | | | | | | | | | | | | |
| 8 | 8-wire | | | | | | | | | | | | | | |
| Connection direction | | | | | | | | | | | | | | | |
| GD | In-line | | | | | | | | | | | | | | |
| WD | Angled | | | | | | | | | | | | | | |
| Cable length | | | | | | | | | | | | | | | |
| 2 | 2 m | | | | | | | | | | | | | | |
| 2.5 | 2.5 m | | | | | | | | | | | | | | |
| 3 | 3 m | | | | | | | | | | | | | | |
| 5 | 5 m | | | | | | | | | | | | | | |
| 10 | 10 m | | | | | | | | | | | | | | |
| Material, cable sheath | | | | | | | | | | | | | | | |
| PU | Polyurethane | | | | | | | | | | | | | | |
| Easy cleaning | | | | | | | | | | | | | | | |
| | Basic version | | | | | | | | | | | | | | |
| CDN | Clean Design, suitable for foodstuffs | | | | | | | | | | | | | | |

Plug sockets with cable SIM, KSMH, KM12

Technical data

| Technical data – Connecting cables M8x1, M12x1 | | | |
|--|--------|------------------------------|-------------------------------|
| Type | | KSMH | KM12 |
| Cable attribute | | Standard | |
| Electrical connection, left | | Straight socket, M8x1, 4-pin | Straight socket, M12x1, 8-pin |
| Electrical connection, right | | Straight plug, M8x1, 4-pin | Straight plug, M12x1, 8-pin |
| Operating voltage range | DC [V] | ≤ 75 | ≤ 70 |
| | AC [V] | ≤ 60 | ≤ 45 |
| Ambient temperature | [°C] | -5 ... +70 | -25 ... +80 |
| Protection class | | IP68 | |

| Technical data – Plug sockets with cable M12x1, 8-pin | | | |
|---|--------|-------------------------------|--|
| Cable attribute | | Standard | |
| Electrical connection, left | | Straight socket, M12x1, 8-pin | |
| Electrical connection, right | | Cable, open end, 8-wire | |
| Operating voltage range | DC [V] | ≤ 70 | |
| | AC [V] | ≤ 45 | |
| Ambient temperature | [°C] | -25 ... +80 | |
| Protection class | | IP68 | |

| Technical data – Plug sockets with cable M12x1, welding field immune | | | |
|--|--------|---|--|
| Cable attribute | | Standard | |
| Electrical connection, left | | Straight or angled socket, M12x1, 3-pin | |
| Electrical connection, right | | Cable, open end, 3-wire | |
| Operating voltage range | DC [V] | ≤ 70 | |
| | AC [V] | ≤ 45 | |
| Ambient temperature | [°C] | -25 ... +80 | |
| Ambient temperature with flexible cable installation | [°C] | 0 ... +80 | |
| Protection class | | IP65, IP67 | |

| Technical data – Plug sockets with cable, clip-on | | | |
|--|--------|---|---|
| Type | | SIM-K | SIM-K-4 |
| Cable attribute | | Standard | |
| Electrical connection, left | | Straight or angled socket, clip-on, 3-pin | Straight or angled socket, clip-on, 4-pin |
| Electrical connection, right | | Cable, open end, 3-wire | Cable, open end, 4-wire |
| Operating voltage range | DC [V] | ≤ 70 | |
| | AC [V] | ≤ 45 | |
| Ambient temperature | [°C] | -40 ... +70 | |
| Ambient temperature with flexible cable installation | [°C] | -5 ... +70 | |
| Protection class | | IP65, IP67 | |


| Technical data – Plug sockets with cable, clip-on, Clean Design | | | |
|---|--------|---|--|
| Cable attribute | | Standard | |
| Electrical connection, left | | Straight or angled socket, clip-on, 3-pin | |
| Electrical connection, right | | Cable, open end, 3-wire | |
| Operating voltage range | DC [V] | ≤ 70 | |
| | AC [V] | ≤ 45 | |
| Ambient temperature | [°C] | -30 ... +70 | |
| Ambient temperature with flexible cable installation | [°C] | -5 ... +70 | |
| Protection class | | IP65, IP67, IP69 | |

Plug sockets with cable SIM, KSMH, KM12

Technical data



| Ordering data | | | | |
|---|------------------------------|------------------|----------|-------------------|
| Electrical connection, left | Electrical connection, right | Cable length [m] | Part No. | Type |
| Connecting cable | | | | |
| Straight socket, M8x1, 4-pin | Straight plug, M8x1, 4-pin | 2 | 175 714 | KSMH-1-M8-2-M8 |
| Straight socket, M12x1, 8-pin | Straight plug, M12x1, 8-pin | 2 | 525 617 | KM12-8GD8GS-2-PU |
| Plug socket with cable M12x1, basic version | | | | |
| Straight socket, M12x1, 8-pin | Cable, open end, 8-wire | 2 | 525 616 | SIM-M12-8GD-2-PU |
| | | 5 | 525 618 | SIM-M12-8GD-5-PU |
| Plug socket with cable M12x1, welding field immune | | | | |
| Straight socket, M12x1, 5-pin | Cable, open end, 3-wire | 2.5 | 30 450 | SIM-M12-RS-3GD-3 |
| Angled socket, M12x1, 5-pin | Cable, open end, 3-wire | 2.5 | 30 451 | SIM-M12-RS-3WD-3 |
| Plug socket with cable, clip-on, basic version | | | | |
| Straight socket, clip-on, 3-pin | Cable, open end, 3-wire | 2.5 | 164 257 | SIM-K-GD-2,5-PU |
| | | 5 | 164 256 | SIM-K-GD-5-PU |
| | | 10 | 192 962 | SIM-K-GD-10-PU |
| Angled socket, clip-on, 3-pin | Cable, open end, 3-wire | 2.5 | 164 255 | SIM-K-WD-2,5-PU |
| | | 5 | 164 254 | SIM-K-WD-5-PU |
| | | 10 | 192 963 | SIM-K-WD-10-PU |
| Straight socket, clip-on, 4-pin | Cable, open end, 4-wire | 2.5 | 164 250 | SIM-K-4-GD-2,5-PU |
| | | 5 | 164 251 | SIM-K-4-GD-5-PU |
| Angled socket, clip-on, 4-pin | Cable, open end, 4-wire | 2.5 | 164 252 | SIM-K-4-WD-2,5-PU |
| | | 5 | 164 253 | SIM-K-4-WD-5-PU |
| Plug socket with cable, clip-on, Clean Design | | | | |
| Straight socket, clip-on, 3-pin | Cable, open end, 3-wire | 2.5 | 525 259 | SIM-K-GD-2,5-CDN |
| | | 5 | 525 260 | SIM-K-GD-5-CDN |
| Angled socket, clip-on, 3-pin | Cable, open end, 3-wire | 2.5 | 525 261 | SIM-K-WD-2,5-CDN |
| | | 5 | 525 262 | SIM-K-WD-5-CDN |

| Ordering data – Safety clip | | | | | |
|---|-----------|---|------|----------|-------------|
| | Material | Use | Size | Part No. | Type |
|  | Polyamide | For protecting push-in connectors from inadvertent disconnection (no tool needed) | M8 | 548 067 | NEAU-M8-GD |
| | | | M12 | 548 068 | NEAU-M12-GD |

Plug sockets and push-in T-connectors

Product overview



- Customised fabrication of cables
- Connection sizes M8 and M12
- Interconnection of signals

Detailed product information

→ www.festo.com/catalogue/nedu

| Product overview | | | |
|---------------------|------|------------------------------|---|
| Variant | Type | Electrical connection | |
| | | Left | Right |
| Plug | SEA | Straight plug, M8x1, 3-pin | Screw terminals |
| | | | Solder lugs |
| Plug socket | SIE | Straight socket, M8x1, 4-pin | Screw terminals |
| | | Angled socket, M8x1, 4-pin | |
| Cable socket | NECU | Straight socket, M8x1, 4-pin | Screw terminals |
| Push-in T-connector | NEDU | Sockets, M8x1, 3-pin | Plug, M8x1, 4-pin |
| | | Sockets, M12x1, 3-pin | Plug M12x1, 4-pin Plugs, M12x1, A-coded, 4-pin |

| General technical data – SEA | | | |
|--|------|--------------|-----------|
| Type | | SEA-3GS-M8-S | SEA-GS-M8 |
| Operating and environmental conditions | | | |
| Ambient temperature | [°C] | -40 ... +85 | |
| Protection class | | IP65 | IP67 |
| Materials | | | |
| Housing | | Polyamide | |

Plug sockets and push-in T-connectors

Technical data



| General technical data – SIE | | |
|--|------|-------------|
| Operating and environmental conditions | | |
| Ambient temperature | [°C] | –40 ... +85 |
| Protection class | | IP67 |
| Materials | | |
| Housing | | Polyamide |

| General technical data – NECU | | |
|--|------|--------------------------|
| Operating and environmental conditions | | |
| Ambient temperature | [°C] | –40... +80 |
| Protection class | | IP67 |
| Materials | | |
| Housing | | Polybutene terephthalate |

| General technical data – NEDU | | | |
|--|----------------|-------------------------|------------------|
| Type | NEDU-M8D3-M8T4 | NEDU-M8D3-M12T4 | NEDU-M12D5-M12T4 |
| Operating and environmental conditions | | | |
| Ambient temperature | [°C] | –25 ... +85 | |
| Protection class | | IP65, IP67 | |
| Materials | | | |
| Housing | Polyamide | Reinforced polyurethane | |
| Circuit | | | |
| | | | |

| Technical data and order codes | | | | | | |
|---------------------------------|-------------------------------|-----------------------------|-------------------------|----------|----------|------------------|
| | Electrical connection | | Operating voltage range | | Part No. | Type |
| | Left | Right | [V DC] | [V AC] | | |
| Plug SEA | | | | | | |
| | Straight plug, M8x1, 3-pin | Screw terminals | ≤ 75 | ≤ 48 | 192 009 | SEA-3GS-M8-S |
| | | Solder lugs | ≤ 75 | ≤ 60 | 18 696 | SEA-GS-M8 |
| Plug socket SIE | | | | | | |
| | Straight socket, M12x1, 4-pin | Screw terminals | ≤ 150 | ≤ 125 | 18 494 | SIE-GD |
| | Angled socket, M8x1, 4-pin | | ≤ 150 | ≤ 125 | 12 956 | SIE-WD-TR |
| Cable socket NECU | | | | | | |
| | Straight socket, M8x1, 4-pin | Screw terminals | 0 ... 60 | 0 ... 60 | 544 392 | NECU-M8G4 |
| Push-in T-connector NEDU | | | | | | |
| | Socket, M8x1, 3-pin | Plug, M8x1, 4-pin | 32 | 32 | 544 391 | NEDU-M8D3-M8T4 |
| | | Plug, M12x1, 4-pin | 60 | 60 | 541 597 | NEDU-M8D3-M12T4 |
| | Socket, M12x1, 3-pin | Plug, M12x1, A-coded, 4-pin | 250 | 250 | 541 596 | NEDU-M12D5-M12T4 |