

## Shielded Circular Subminiature Connectors (TRIAD™ 01) Product Line Information

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# TRIAD™01 Shielded Subminiature Circular Connectors

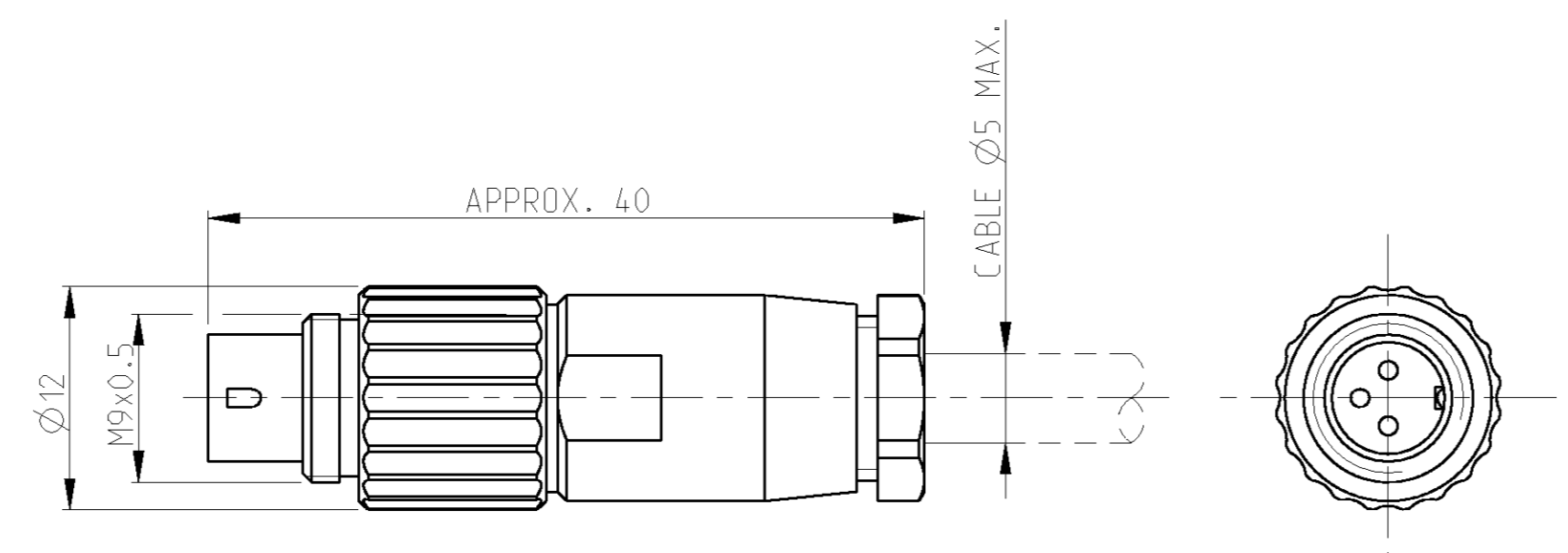
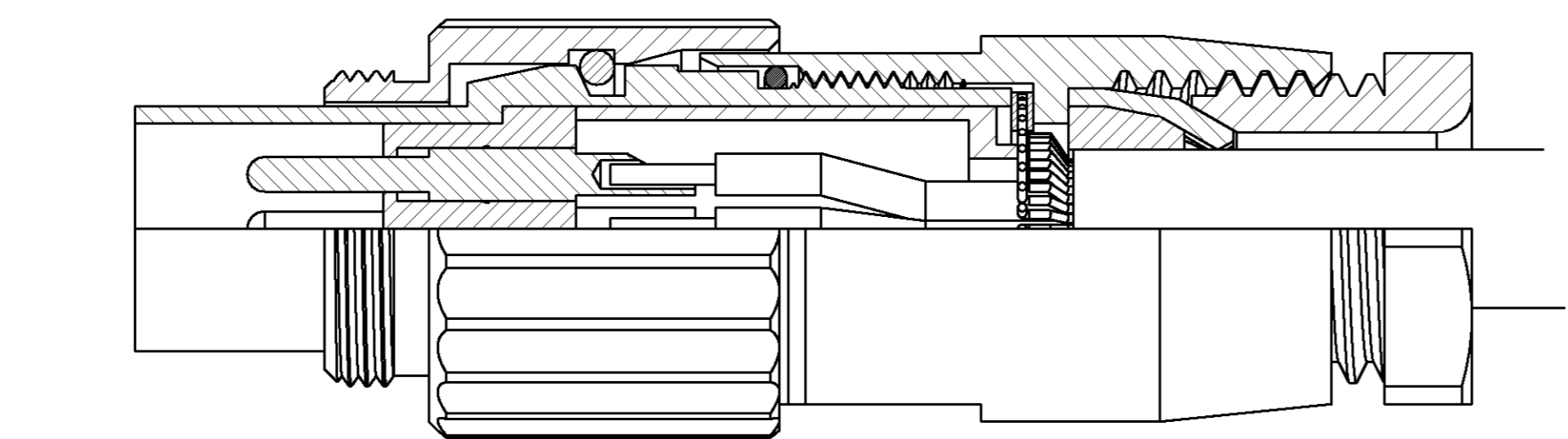
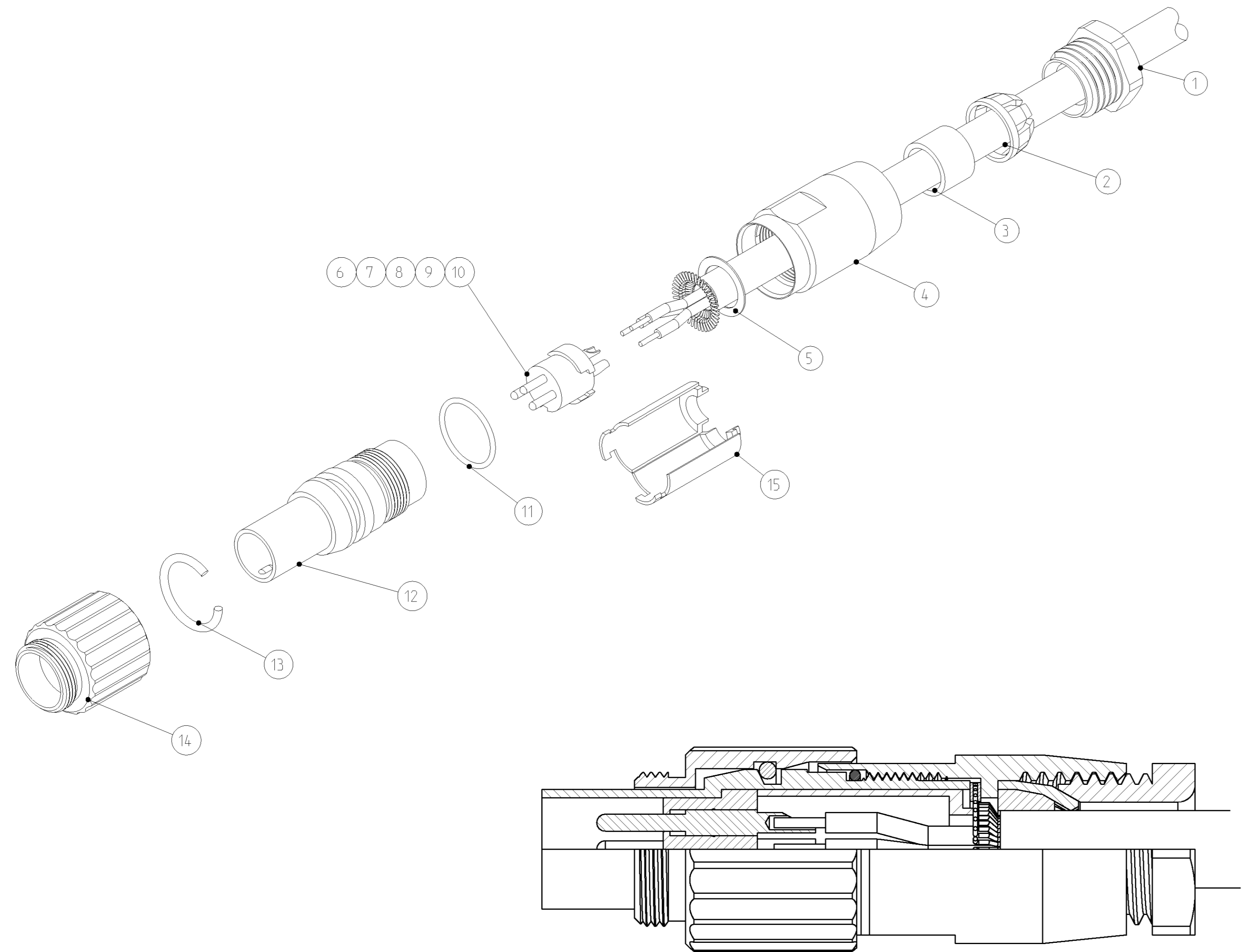
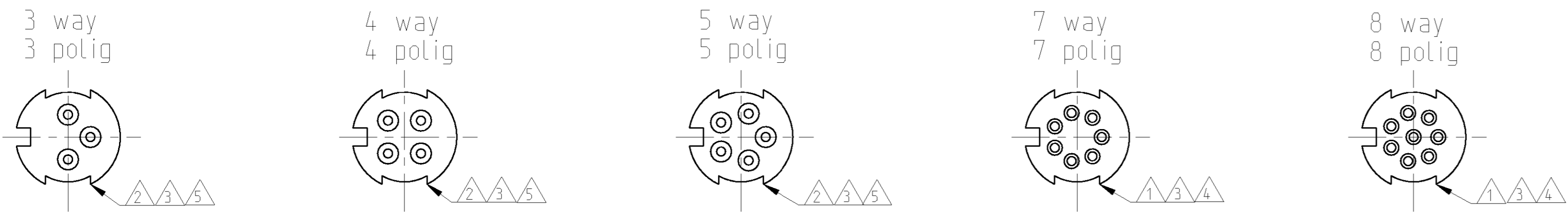


## Product Facts

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- Small and lightweight, shielded round connector system
  - Panel mount PCB versions - 180° and 90°
  - Panel mount - Solder Cup - 180° versions
  - Field serviceable male and female connectors--crimp and solder version--for on site connections
  - Single and double ended overmoulded cable leads are available
  - Customized assemblies are possible to make upon request
  - Components for BUS applications available
-

SOLDERING SIDE  
LOETSEITE



| LOC | DIST | REV | DATE      | BY | APPD |
|-----|------|-----|-----------|----|------|
| A1  | -    | A1  | 18JUN2001 | NG | GF   |
|     |      | B1  | 23-FEB-04 | EW | GF   |

|   |    |
|---|----|
| MATERIAL / MATERIAL: PBT, UL-94 V2<br>SHELL MATERIAL / GEHAEUSEMATERIAL: CUZN<br>FINISH / BESCHICHTUNG: TRIBOR 4 µm | △6 |
| WIRE GAGE / DRAHTGROESSE IN mm <sup>2</sup> : 0.25  | △5 |
| WIRE GAGE / DRAHTGROESSE IN mm <sup>2</sup> : 0.14  | △4 |
| CONTACT RESISTANCE / KONTAKTWIDERSTAND: => 5 mΩ   | △3 |
| RATED CURRENT PER CONTACT / NENNSTROM PRO KONTAKT: 3 A  | △2 |
| RATED CURRENT PER CONTACT / NENNSTROM PRO KONTAKT: 1 A  | △1 |
| SHELL PROTECTION CLASS / SCHUTZKLASSE: IP 65 / DIN 40050  |    |
| TERMINATION: SOLDERING / VERBINDUNG: LOETKONTAKTE   |    |
| TEST VOLTAGE / PRUEFSPANNUNG: 500 VAC   |    |
| OPERATING VOLTAGE / BETRIEBSSPANNUNG: 60 VAC  |    |
| OPERATING TEMPERATURE: -40°C TO +80°C /<br>ARBEITSTEMPERATUR: -40°C BIS +80°C                                       |    |
| MATING CYCLES / STECKZYKLEN: 500 MAX.   |    |
| TECHNICAL DATA<br>TECHNISCHE DATEN  |    |

| TYCO NO. / TYCO-NR. | QTY REQD PER ASSY | DESCRIPTION<br>BESCHREIBUNG  | ITEM NO.<br>POS.-NR. |
|---------------------|-------------------|--|----------------------|
| 2-1437719-7         | 1                 | MOUNTING WRENCH /<br>MONTAGESCHLUESSEL   | 18                   |
| 2-1437719-4         | 1                 | COMPLETELY IN MINI-GRIP /<br>KOMPLETT IN MINI-GRIP: 70x100mm                               | 17                   |
| 2-1437719-1         | 1                 | MOUNTING INSTRUCTION /<br>MONTAGEANLEITUNG   | 16                   |
| 1-1437719-8         | 1                 | INSULATION TUBE /<br>ISOLIERHUELSE   | 15                   |
| 1-1437719-5         | 1                 | SCREWING TUBE /<br>SCHRAUBHUELSE   | 14                   |
|                     | 1                 | SPRING /<br>FEDER  | 13                   |
|                     | 1                 | TUBE /<br>INNENHUELSE  | 12                   |
|                     | 1                 | O-RING /<br>O-RING   | 11                   |
|                     | 1                 | CONTACT CARRIER 8 WAY /<br>STIFTSTECKER 8 POLIG  | 10                   |
|                     | 1                 | CONTACT CARRIER 7 WAY /<br>STIFTSTECKER 7 POLIG  | 9                    |
|                     | 1                 | CONTACT CARRIER 5 WAY /<br>STIFTSTECKER 5 POLIG  | 8                    |
|                     | 1                 | CONTACT CARRIER 4 WAY /<br>STIFTSTECKER 4 POLIG  | 7                    |
|                     | 1                 | CONTACT CARRIER 3 WAY /<br>STIFTSTECKER 3 POLIG  | 6                    |
|                     | 1                 | GROUNDING PLATE FOR 360°<br>SHIELDING CONNECTION/<br>MASSESCHIEBE FUER 360°<br>ABSCHIRMUNG | 5                    |
|                     | 1                 | HOUSING /<br>GEHAEUSE  | 4                    |
|                     | 1                 | CABLE SEALING /<br>KABELDICHTUNG   | 3                    |
|                     | 1                 | STRAIN RELIEF /<br>ZUGENTLASTUNGSKRONE   | 2                    |
|                     | 1                 | STRAIN RELIEF NUT /<br>ZUGENTLASTUNGSMUTTER  | 1                    |
|                     | -                 | REVISION OF EACH ASSY NO.<br>(WHEN BLANK, USE DWG REV.)                                    |                      |
|                     |                   | PARTS LIST<br>TEILELISTE   |                      |

|  |   |   |
|--|---|---|
| TYCO ELECTRONICS CORPORATION<br>1115 S. GARDNER ST. CHICAGO, IL 60642-1098<br>TEL: 773-399-1000 FAX: 773-399-1001<br>WWW.TYCOELECTRONICS.COM | DWN: H. GEISTER 18JUN2001<br>CHK: H. SCHERER 18JUN2001<br>APVD: E. FELDMEIER 18JUN2001<br>NAME: T01 MALE PLUG CONNECTOR SOLDER VERSION 3-8 POS.<br>T01 STIFTSTECKER LOETVERSION 3-8 POL.<br>PRODUCT SPEC: -<br>APPLICATION SPEC: -<br>VERARBEITUNGSSPEZ: -<br>MATERIAL: -<br>FINISH/BESCHICHTUNG/FARBE: -<br>WEIGHT/GEWICHT: -<br>CUSTOMER DRAWING: - | tyco Electronics AMP GmbH<br>D-64625 Bensheim<br>SCALE: 1:1<br>SHEET: 1 OF 1<br>REV: B1 |
|--|---|---|

1-1437719-5 AS SHOWN  
WIE GEZEICHNET

# Description

Where shielding is a requirement in medical or industrial applications there will be the use of TRIAD™01 a good decision. The small and lightweight system is available as panel mount headers with solid posts 180° and 90° for soldering on PC boards and also with solder cups for wire termination.

The PCB version has two board locks and the solder cup version has two solder tabs for grounding.

Through the three O-ring design on the panel mount connectors and in connection with the over-moulded cable assemblies, TRIAD™01 is a liquid and dust tight system according to IP65 protection class (DIN 40050). The reasonable shielding, the small diameters, the over-moulded connector with cable and the use of metallic parts makes TRIAD™01 also useable in harsh environments such as a factory where TRIAD™01 can be used in BUS applications such as CAN or MODULAR too.

Components such as T-Adapters and terminator plugs with a resistor are also available in different colors upon request (e.g. yellow and purple).

# Specifications

**Shell Protection Class (nested condition):** IP65 acc. DIN 40050

**Temperature Range:** -40°C to +85°C

**Mating Cycles:** ≤500

**Test Voltage:** 625 V AC

**Operating Voltage:** 60 V AC

**Contact Resistance:** < 6 m ohm

**Interlock:** Screw Type

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**TRIAD™ 01**

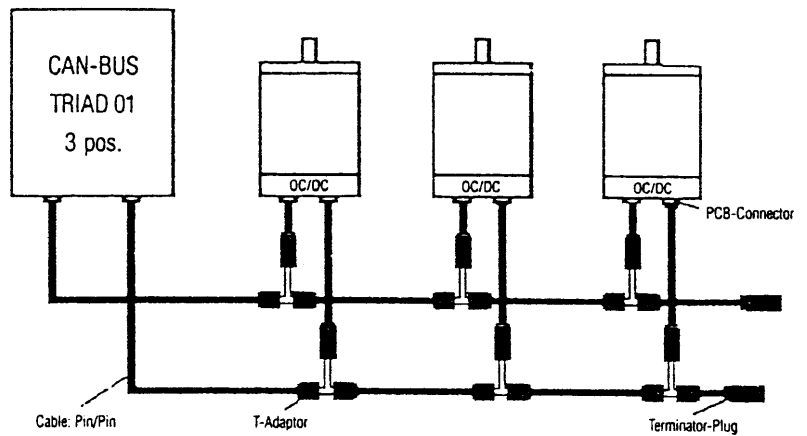
130-722 TO 131-090

TRIAD 01 is a subminiature circular connector system which can be used for applications where shielding is a requirement. Beside the excellent shielding properties of TRIAD01 there is also a good resistance against UV beams because of the OPTALOY® plating for all metal shell parts. TRIAD01 is a liquid- and dust-tight system according to IP65 protection-class (DIN 40050).

**4**

A 3xO-ring design of the TRIAD01 panel-mount-connectors is ideal for using the TRIAD01 system in smoke-analysis applications. Special T-adaptors with either a TRIAD01 connector or a SUB-D connector as Interface-Plug are offering the usage of TRIAD01 for BUS wiring like for a CAN- or for a MOD-BUS. Both systems consist of 3 items:

- 1 The T-Adaptor
- 2 The "Trunk"-Cable – an overmoulded cable with 2 male connectors
- 3 Terminator-Plug



131-027 to 090

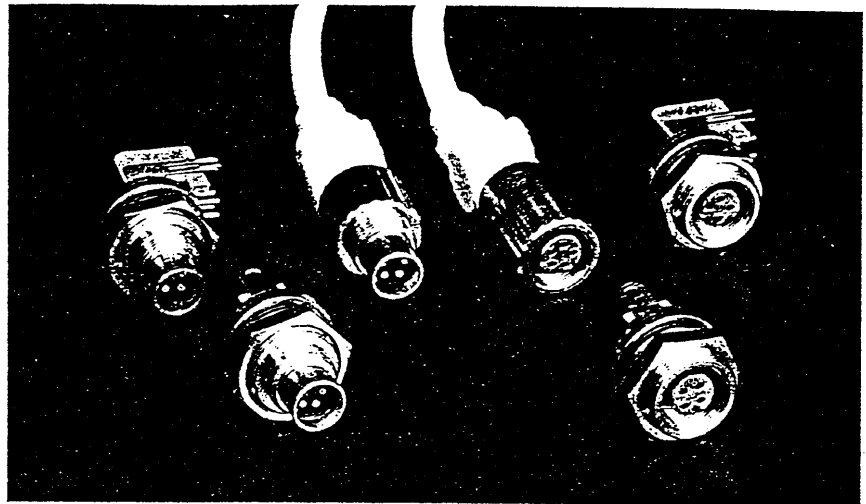
930  
941

# TRIAD™ 01

Shielded Subminiature

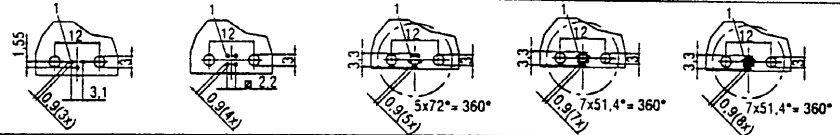
Circular Connectors

Panel Mount Version

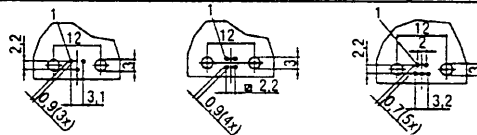


PCB layout for max. 1.6 mm thickness  
(only for PCB pinversions)

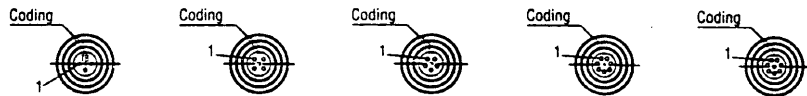
180°



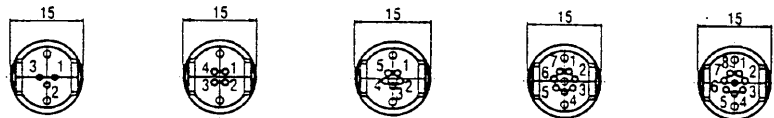
90°



Arrangement of Contacts/Mating side pinversion.



Arrangement of Contacts/  
Termination side pinversion.  
(For sockets, arrangement is mirror image of pin version)



No. of Contacts

3                      4                      5                      7                      8

Catalogue No.

|   |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|
| Panel Mount 180° PCB version, pin           | T01-0570-P03 | T01-0570-P04 | T01-0570-P05 | T01-0570-P07 | T01-0570-P08 |
| Panel Mount 180° PCB version, socket        | T01-0570-S03 | T01-0570-S04 | T01-0570-S05 | T01-0570-S07 | T01-0570-S08 |
| Panel Mount 90° PCB version, pin            | T01-0560-P03 | T01-0560-P04 | T01-0560-P05 | —            | —            |
| Panel Mount 90° PCB version, socket         | T01-0560-S03 | T01-0560-S04 | T01-0560-S05 | —            | —            |
| Panel Mount 180° Handsolder version, pin    | T01-0580-P03 | T01-0580-P04 | T01-0580-P05 | T01-0580-P07 | T01-0580-P08 |
| Panel Mount 180° Handsolder version, pocket | T01-0580-S03 | T01-0580-S04 | T01-0580-S05 | T01-0580-S07 | T01-0580-S08 |

Technical Data

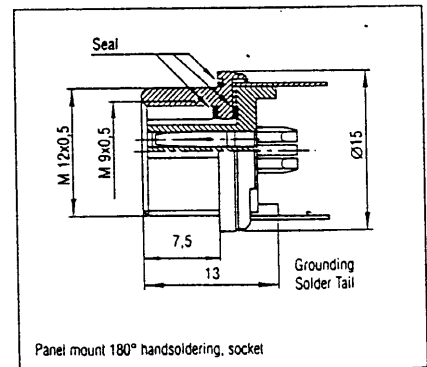
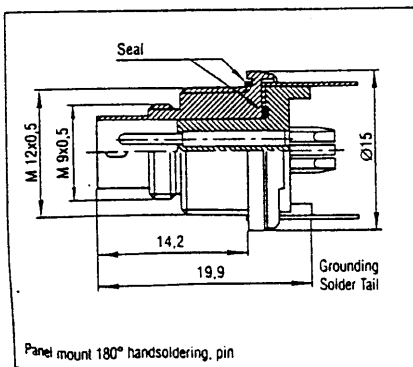
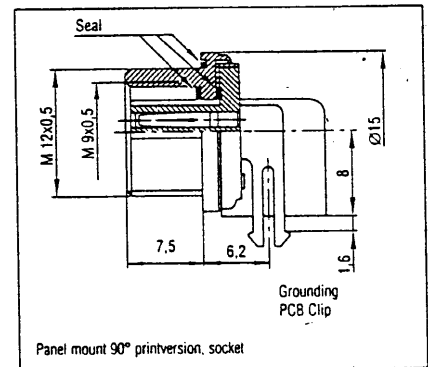
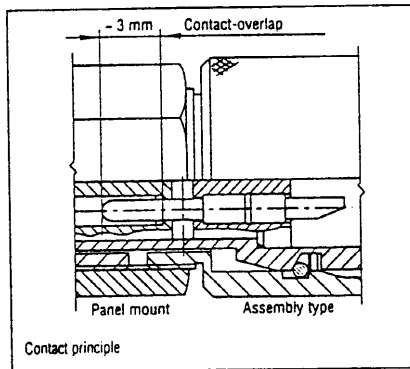
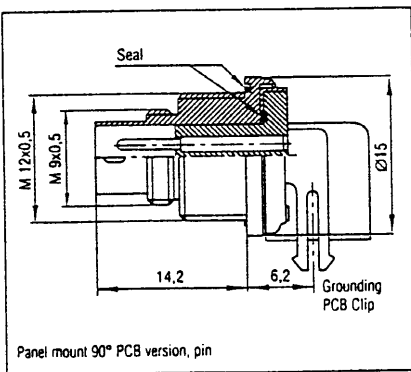
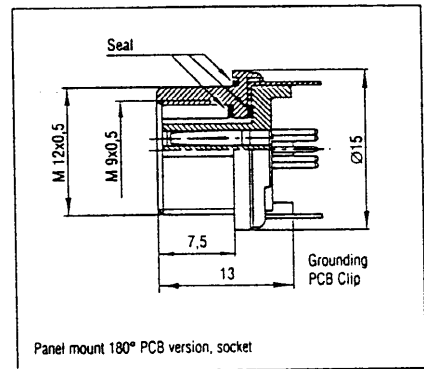
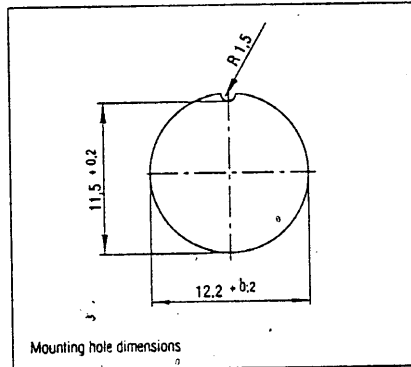
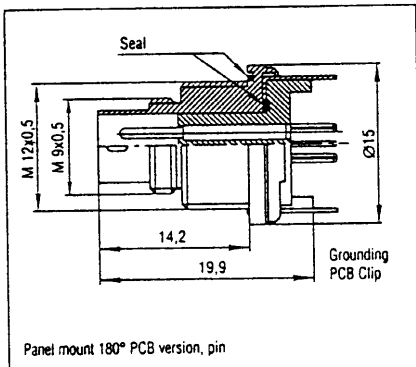
|                             |                           |  |                           |  |
|-----------------------------|---------------------------|--|---------------------------|--|
| Termination                 | Soldering                 |  |                           |  |
| Plating                     | Tribor 4 µm               |  |                           |  |
| Dielectric of insert        | PBT UL 94-V2              |  |                           |  |
| Shell protection class      | IP 65 acc. DIN 40050      |  |                           |  |
| Shell material              | CuZn                      |  |                           |  |
| Operating temperature range | -40 °C to +85 °C          |  |                           |  |
| Mating cycles               | > 500                     |  |                           |  |
| Wire gage                   | max. 0.25 mm <sup>2</sup> |  | max. 0.14 mm <sup>2</sup> |  |
| Rated current per contact   | 3 A                       |  | 1 A                       |  |
| Test voltage                | 500 V AC                  |  | 500 V AC                  |  |
| Operating voltage           | 60 V AC                   |  | 60 V AC                   |  |
| Contact resistance          | < 3 m Ω                   |  | < 5 m Ω                   |  |

Priority type available from stock

Minimum unit quantity: 25 pieces (500 pcs)

# TRIAD™ 01

Shielded Subminiature  
Circular Connectors  
Panel Mount Version

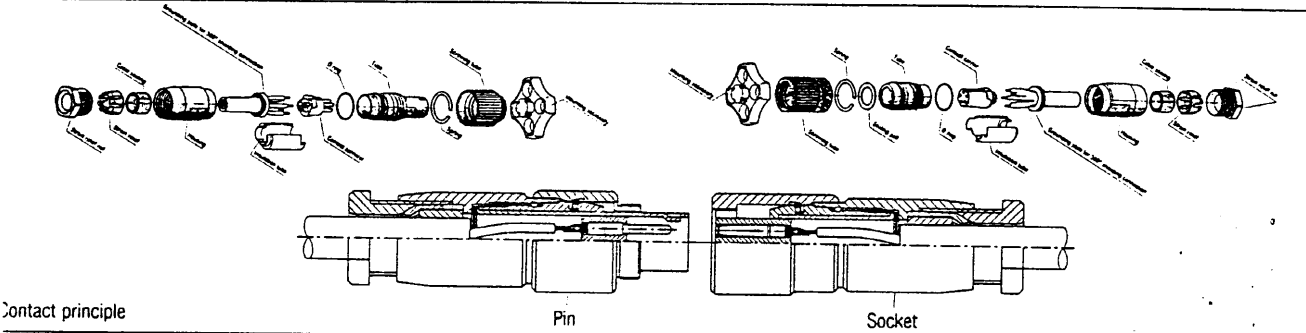
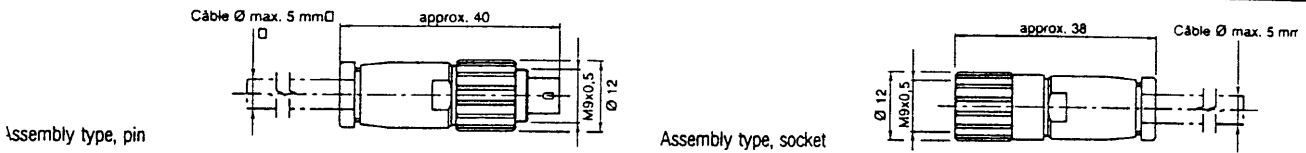
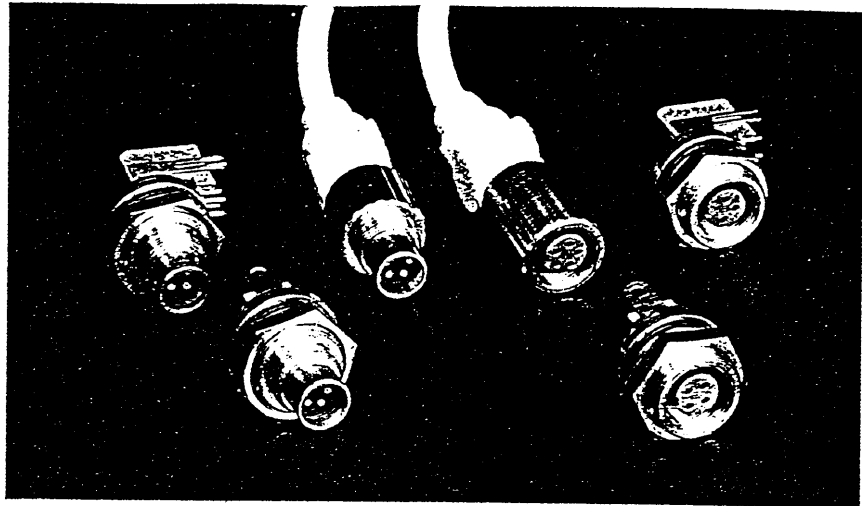


# TRIAD™ 01

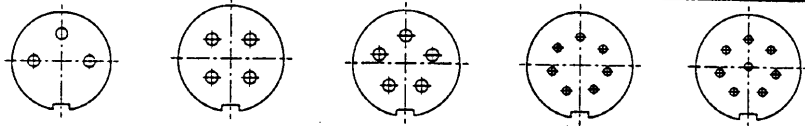
Shielded Subminiature

Circular Connectors

Cable Mount Plugs



Arrangement of Contacts



| No. of Contacts       | 3             | 4            | 5            | 7            | 8            |
|-----------------------|---------------|--------------|--------------|--------------|--------------|
|                       | Catalogue No. |              |              |              |              |
| Assembly type, pin    | T01-0550-P03  | T01-0550-P04 | T01-0550-P05 | T01-0550-P07 | T01-0550-P08 |
| Assembly type, socket | T01-0550-S03  | T01-0550-S04 | T01-0550-S05 | T01-0550-S07 | T01-0550-S08 |

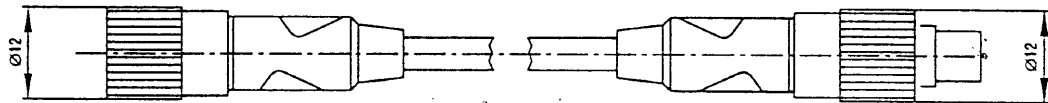
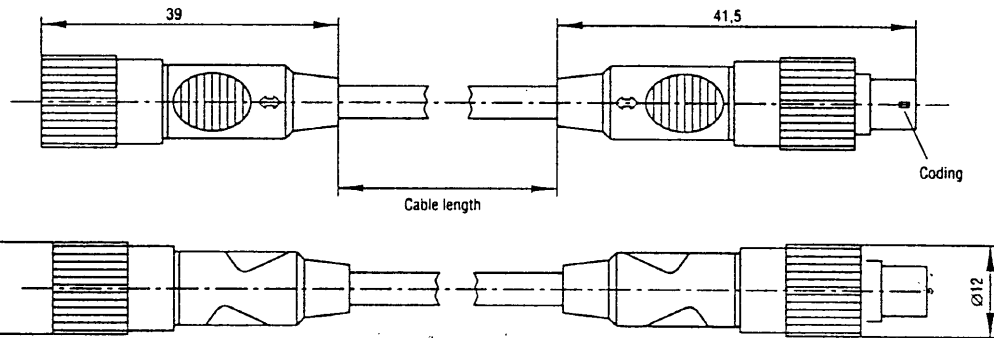
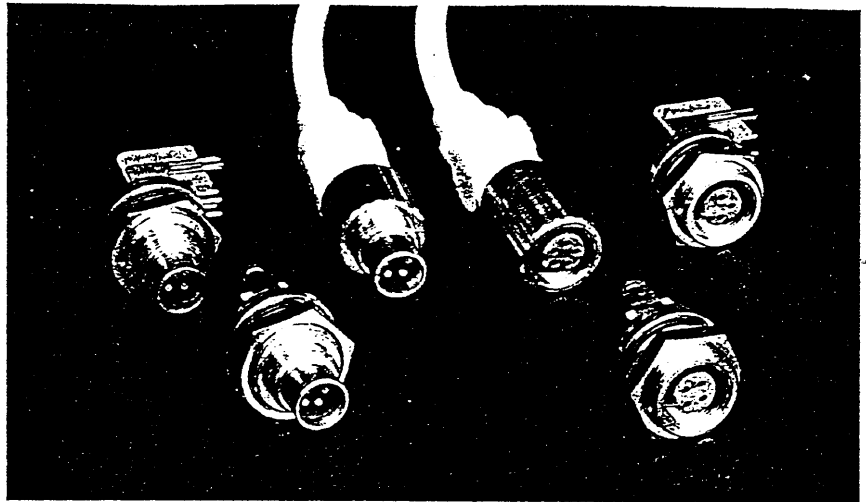
| Technical Data              | 3                   | 4                         | 5 | 7 | 8                         |
|-----------------------------|---------------------|---------------------------|---|---|---------------------------|
| Termination                 | Soldering           |                           |   |   |                           |
| Plating                     | Tribor 4 µm         |                           |   |   |                           |
| Dielectric of insert        | PBT UL 94-V2        |                           |   |   |                           |
| Shell protection class      | IP65 acc. DIN 40050 |                           |   |   |                           |
| Shell material              | CuZn                |                           |   |   |                           |
| Operating temperature range | -40 °C to +85 °C    |                           |   |   |                           |
| Mating cycles               | > 500               |                           |   |   |                           |
| Wire gage                   |                     | max. 0.25 mm <sup>2</sup> |   |   | max. 0.14 mm <sup>2</sup> |
| Rated current per contact   |                     | 3 A                       |   |   | 1 A                       |
| Test voltage                |                     | 500 VAC                   |   |   | 500 VAC                   |
| Operating voltage           |                     | 60 VAC                    |   |   | 60 VAC                    |
| Contact resistance          |                     | < 3 mΩ                    |   |   | < 5 mΩ                    |

Priority type available from stock

Minimum unit quantity: 25 pieces

# TRIAD™ 01

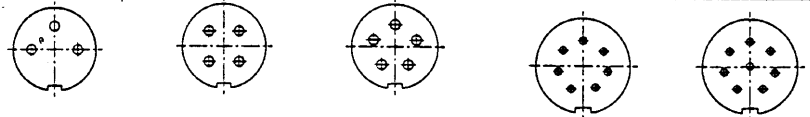
Shielded Subminiature  
Circular Connectors  
Cable assemblies  
with overmoulded Connectors



Cable with overmoulded connector

**4**

Arrangement of Contacts



| No. of Contacts             | Catalogue No.         |                           |                       |                       |                           |
|-----------------------------|-----------------------|---------------------------|-----------------------|-----------------------|---------------------------|
|                             | 3                     | 4                         | 5                     | 7                     | 8                         |
| Cable length 1 m            | T01-0599-B03-A        | T01-0599-B04-A            | T01-0599-B05-A        | T01-0599-B07-A        | T01-0599-B08-A            |
| Cable length 3 m            | <b>T01-0599-B03-B</b> | <b>T01-0599-B04-B</b>     | <b>T01-0599-B05-B</b> | <b>T01-0599-B07-B</b> | <b>T01-0599-B08-B</b>     |
| Cable length 5 m            | T01-0599-B03-C        | T01-0599-B04-C            | T01-0599-B05-C        | T01-0599-B07-C        | T01-0599-B08-C            |
| <b>Technical Dat</b>        | <b>3</b>              | <b>4</b>                  | <b>5</b>              | <b>7</b>              | <b>8</b>                  |
| Termination                 |                       |                           |                       | Soldering             |                           |
| Plating                     |                       |                           |                       | Tribor 4 µm           |                           |
| Dielectric of insert        |                       |                           |                       | PBT UL 94-V2          |                           |
| Shell protection class      |                       |                           |                       | IIP65 acc. DIN 40050  |                           |
| Shell material              |                       |                           |                       | CuZn                  |                           |
| Operating temperature range |                       |                           |                       | -40 °C to +85 °C      |                           |
| Mating cycles               |                       |                           |                       | > 500                 |                           |
| Wire gage                   |                       | max. 0.25 mm <sup>2</sup> |                       |                       | max. 0.14 mm <sup>2</sup> |
| Rated current per contact   |                       | 3 A                       |                       |                       | 1 A                       |
| Test voltage                |                       | 500 VAC                   |                       |                       | 500 VAC                   |
| Operating voltage           |                       | 60 VAC                    |                       |                       | 60 VAC                    |
| Contact resistance          |                       | < 3 mΩ                    |                       |                       | < 5 mΩ                    |

Priority type available from stock

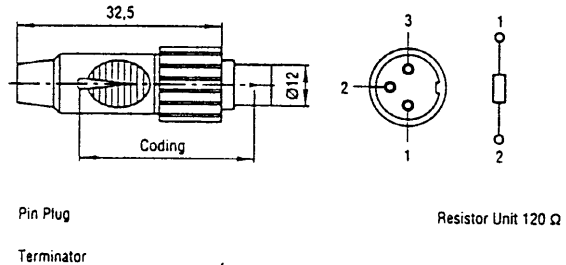
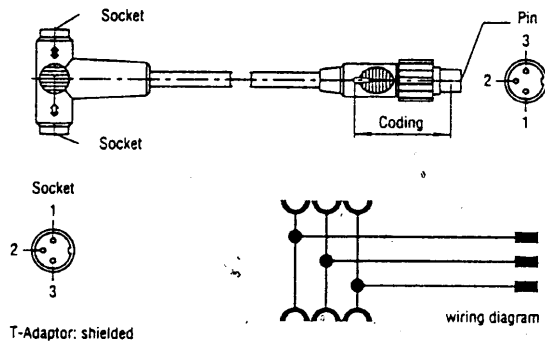
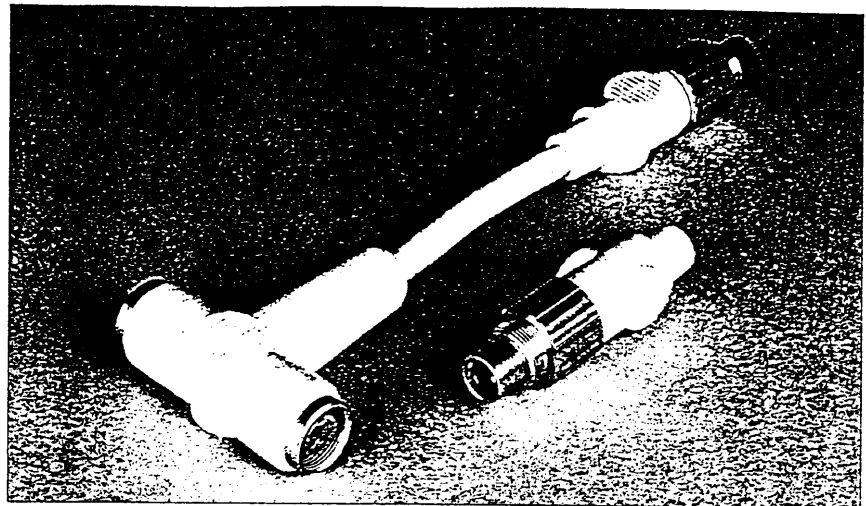
Minimum unit quantity: 10 pieces



472-046  
972-058

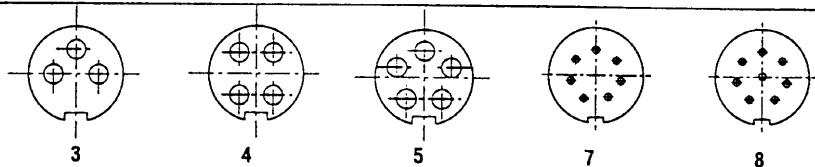
# TRIAD™ 01

Shielded Subminiature  
Circular Connectors  
Accessories and Specials  
CAN-BUS Components:  
Non-interrupted Power  
Supply for Network Devices



Cable assemblies, with overmoulded connectors: shielded

Arrangement of Contacts



No. of Contacts

Catalogue No.

|                          |                 |                 |                 |                 |                 |
|--------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| T-Adaptor                | T01-05T-SSP03-T | T01-05T-SSP04-T | T01-05T-SSP05-T | T01-05T-SSP07-T | T01-05T-SSP08-T |
| Terminator Resistor Unit | T01-05R-P03-120 | -               | -               | -               | -               |
| <b>Technical Data</b>    | <b>3</b>        | <b>4</b>        | <b>5</b>        | <b>7</b>        | <b>8</b>        |

|                             |                           |  |  |                           |  |
|-----------------------------|---------------------------|--|--|---------------------------|--|
| Termination                 | Soldering                 |  |  |                           |  |
| Plating                     | Tribor 4 µm               |  |  |                           |  |
| Dielectric of insert        | PBT UL 94-V2              |  |  |                           |  |
| Shell protection class      | IP65 acc. DIN 40050       |  |  |                           |  |
| Shell material              | CuZn                      |  |  |                           |  |
| operating temperature range | -40 °C to +85 °C          |  |  |                           |  |
| Mating cycles               | > 500                     |  |  |                           |  |
| Wire gage                   | max. 0.25 mm <sup>2</sup> |  |  | max. 0.14 mm <sup>2</sup> |  |
| Rated current per contact   | 3 A                       |  |  | 1 A                       |  |
| Test voltage                | 500 VAC                   |  |  | 500 VAC                   |  |
| Operating voltage           | 60 VAC                    |  |  | 60 VAC                    |  |
| Contact resistance          | < 3 mΩ                    |  |  | < 5 mΩ                    |  |

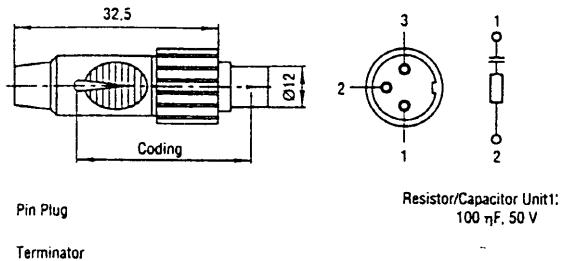
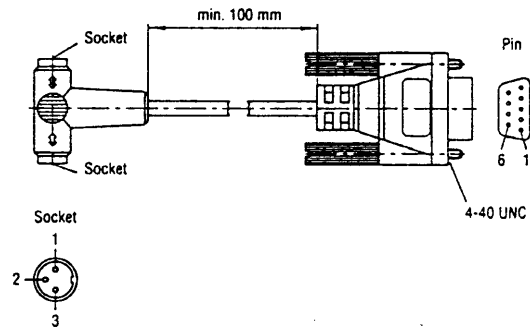
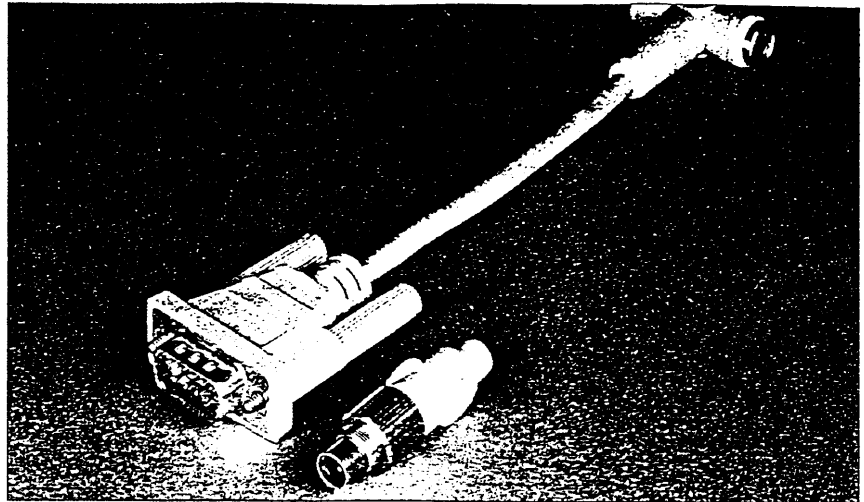
Priority type available from stock

Minimum unit quantity: 25 pieces



# TRIAD™ 01

Shielded Subminiature  
Circular Connectors  
Accessories and Specials  
MOD-BUS Components

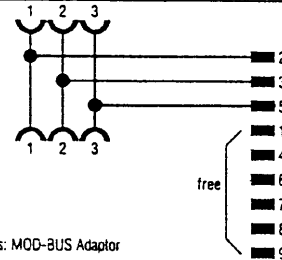
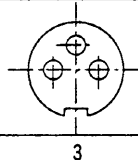


MOD-BUS-Adaptor: shielded

Cable assemblies, with overmoulded connectors: shielded



Arrangement of Contacts



|                                    |                 |
|------------------------------------|-----------------|
| No. of Contacts                    | 3               |
|                                    | Catalogue No.   |
| MOD-BUS Adaptor                    | T01-05T-MOD03-T |
| Terminator Resistor/Capacitor Unit | T01-05R-P03-RC  |

Assignment of Contacts: MOD-BUS Adaptor

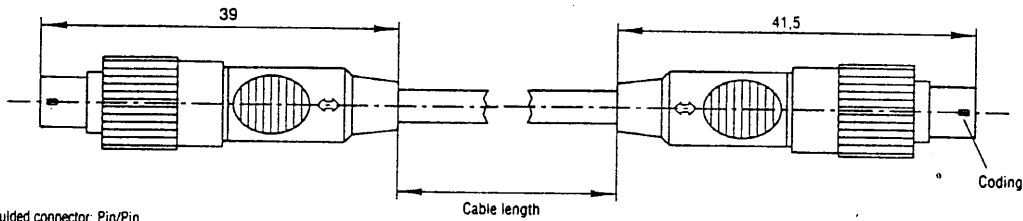
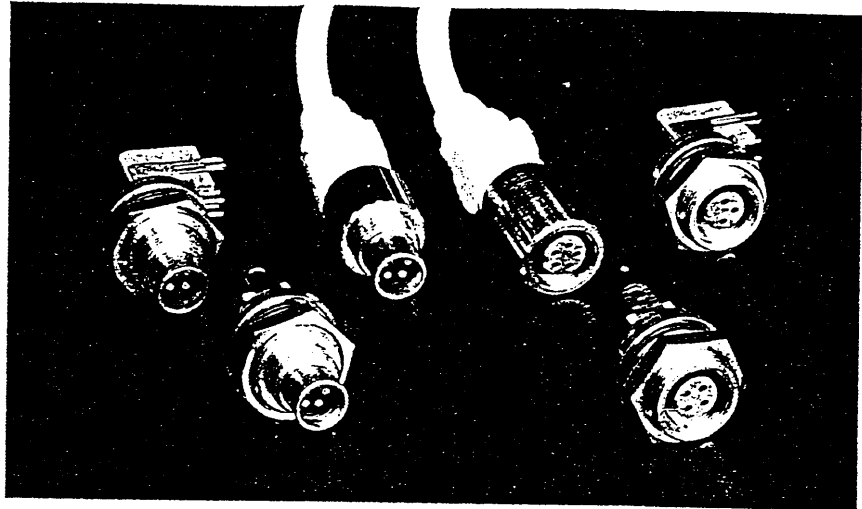
**Technical Data**

3

|                             |                           |
|-----------------------------|---------------------------|
| Termination                 | Soldering                 |
| Plating                     | Tribor 4 µm               |
| Dielectric of insert        | PBT UL 94-V2              |
| Shell protection class      | IP65 acc. DIN 40050       |
| Shell material              | CuZn                      |
| Operating temperature range | -40 °C to +85 ° C         |
| Mating cycles               | > 500                     |
| Wire gage                   | max. 0.25 mm <sup>2</sup> |
| Rated current per contact   | 3 A                       |
| Test voltage                | 500 VAC                   |
| Operating voltage           | 60 VAC                    |
| Contact resistance          | < 3 mΩ                    |

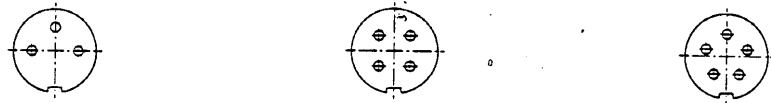
# TRIAD™ 01

Shielded Subminiature  
Circular Connectors  
Accessories and Specials  
BUS-Cable Assemblies  
with Overmoulded Connectors



Cable with overmoulded connector: Pin/Pin

Arrangement of Contacts



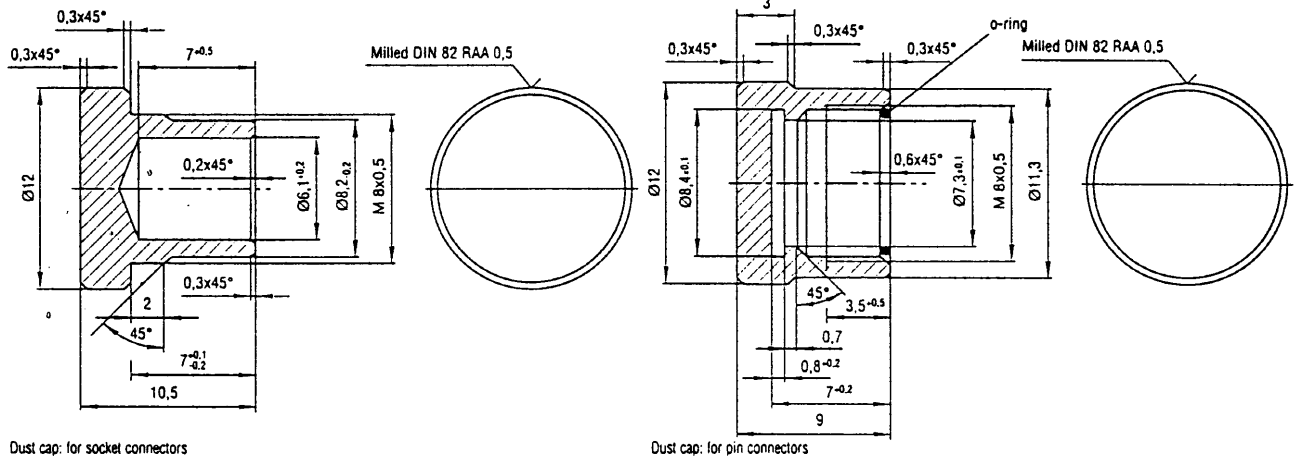
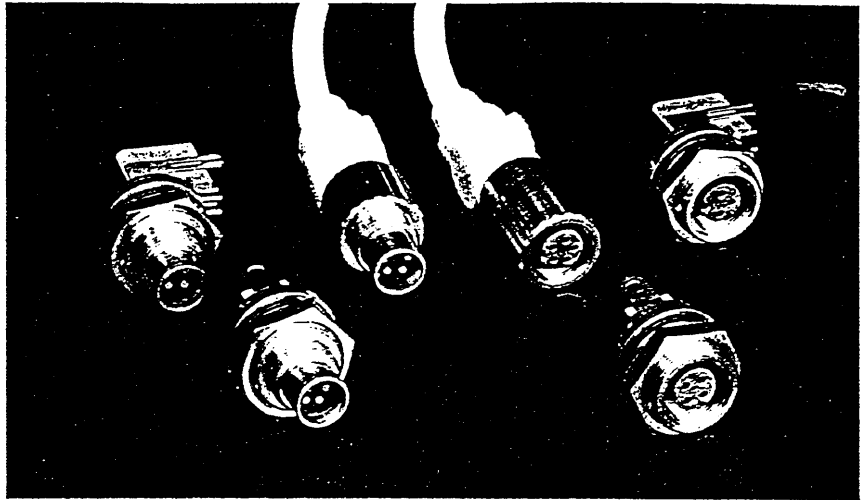
| No. of Contacts    | 3               | 4               | 5               |
|--------------------|-----------------|-----------------|-----------------|
|                    |                 | Catalogue No.   |                 |
| Cable length 0.5 m | T01-0599-PP03-F | T01-0599-PP04-F | T01-0599-PP05-F |
| Cable length 1 m   | T01-0599-PP03-A | T01-0599-PP04-A | T01-0599-PP05-A |
| Cable length 2 m   | T01-0599-PP03-E | T01-0599-PP04-E | T01-0599-PP05-E |
| Cable length 5 m   | T01-0599-PP03-C | T01-0599-PP04-C | T01-0599-PP05-C |

| Technical Data              | 3 | 4                         | 5 |
|-----------------------------|---|---------------------------|---|
| Termination                 |   | Soldering                 |   |
| Plating                     |   | Tribor 4 µm               |   |
| Dielectric of insert        |   | PBT UL 94-V2              |   |
| Shell protection class      |   | IP65 acc. DIN 40050       |   |
| Shell material              |   | CuZn                      |   |
| Operating temperature range |   | -40 °C to +85 °C          |   |
| Mating cycles               |   | > 500                     |   |
| Wire gage                   |   | max. 0.25 mm <sup>2</sup> |   |
| Rated current per contact   |   | 3 A                       |   |
| Test voltage                |   | 500 VAC                   |   |
| Operating voltage           |   | 60 VAC                    |   |
| Contact resistance          |   | < 3 mΩ                    |   |

Priority type available from stock  
Minimum unit quantity: 25 pieces

**TRIAD™ 01**

Shielded Subminiature  
Circular Connectors  
Accessories and Specials  
Dust Caps



|                             |                      |   |   |   |   |
|-----------------------------|----------------------|---|---|---|---|
| No. of Contacts             | 3                    | 4 | 5 | 7 | 8 |
|                             | Catalogue No.        |   |   |   |   |
| For Pin Plugs               | T01-0500-P           |   |   |   |   |
| For Socket Connectors       | T01-0500-S           |   |   |   |   |
| <b>Technical Data</b>       | 3                    | 4 | 5 | 7 | 8 |
| Shell protection class      | IP 65 acc. DIN 40050 |   |   |   |   |
| Shell material              | CuZn                 |   |   |   |   |
| Operating temperature range | -40 °C to +85 °C     |   |   |   |   |

Priority type available from stock  
Minimum unit quantity: 25 pieces



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.