

D-Sub /  
D-Sub cover /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Switches

Powerinlets  
Poweroutlets

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Pin header  
Female header  
Sockets / Jumper

Terminal Blocks

Memory Card  
connectors

FFC / FPC

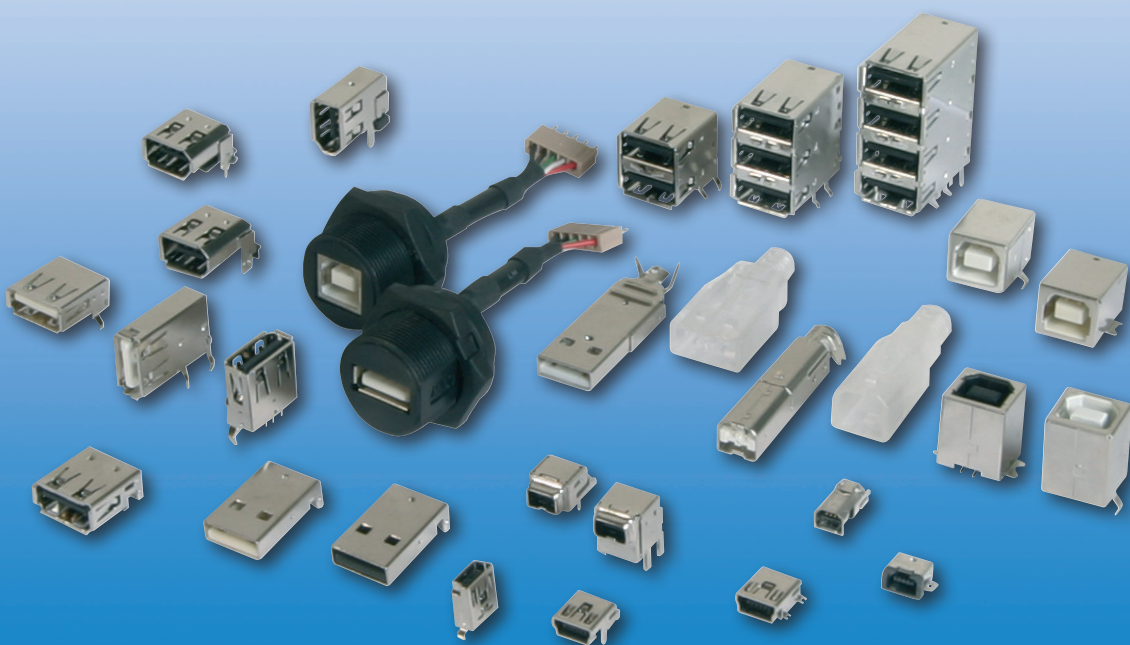
Micro -  
Miniature

USB Steckverbinder von ASSMANN WSW components sind verpolungssichere Steckverbinder die standardmäßig mit 4 Kontakten ausgerüstet sind. Die Einsatzgebiete für diesen I/O oder Schnittstellensteckverbinder sind vielfältig, finden sich jedoch vornehmlich im Computer- und Computerzubehörmarkt wieder, sowie in Geräten für den Consumer – Markt, z.B.: Einsatz in der Fototechnik ( Digitalkameras und Zubehör). Neben kundenspezifischen Lösungen, in Anpassung an spezielle Gerätekonfigurationen, erhalten Sie die Standardbauformen A gemäß DIN IEC 61076-3-107 und B gemäß DIN IEC 61076-3-108 ab Lager. Anwendungen mit reduziertem Einbauraum können mit den sogenannten MINI-USB Steckverbindern gelöst werden. Aus der Angebotspalette der ASSMANN WSW components erhalten Sie hier verschiedene Bauformen mit 4 oder 5 Anschlußkontakten. Darüber hinaus werden für den industriellen Einsatz Versionen des USB-12V und USB-24V Steckerverbinders angeboten.

IEEE 1394 Steckverbinder von ASSMANN WSW components basieren auf dem USB Steckverbinderkonzept, stellen jedoch deren Weiterentwicklung dar. Diese Schnittstellensteckverbinder werden überwiegend für den schnellen Datenaustausch zwischen Computern und zugehörigen Peripheriegeräten eingesetzt, aber auch in der Industrie- und Automobilelektronik finden diese Produkte verstärkt ihren Einsatz. Die gängigsten Anschlussarten sind hier THT und SMT. Natürlich bietet die ASSMANN WSW components aus ihrem Programm auch die passenden Gegensteckverbinder an.

USB connectors from ASSMANN WSW components are polarised connectors, which are loaded with 4 contacts. Various applications for these type of I/O or interface connector do exist, but primarily you will find these type of I/O connector in the EDP and computer accessory market, as well as in the consumer market, e.g.: designed into photo devices (digital cameras and accessories) . Beside some customer special connectors, designed for dedicated, very specific applications, the standard styles A according to DIN IEC 61076-3-107 and B according to DIN IEC 61076-3-108 are available of the shelf. For applications with reduced available space ASSMANN WSW components recommends to use MINI-USB connectors. The product range does include different product designs with 4 or 5 contacts. Furthermore ASSMANN WSW components offers an USB connector -12V and USB connector- 24V for industrial applications.

IEEE 1394 connectors from ASSMANN WSW components are based on the original USB connector design, but can be seen as an advanced technology. IEEE 1394 interface connectors are predominantly used for fast data exchange processes between computers and their peripheral devices, but do apply as well to other industrial and automotive applications. Standard contact types are THT and SMT. Certainly ASSMANN WSW components do offer out of the wide range of products a suitable mating half cable connector as a counterpart to the above mentioned PCB connectors.



## Produktbeschreibung

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D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature

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D-Sub cover /  
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DIN 41651

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USB  
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Poweroutlets

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Hard Metric

MiniDIN

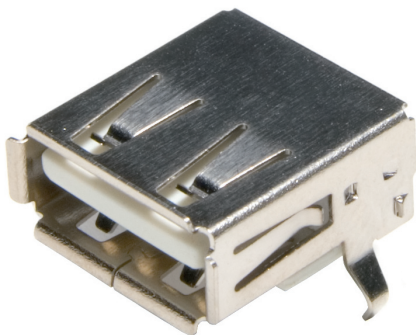
Pin header  
Female header  
Sockets / Jumper

Terminal Blocks

Memory Card  
connectors

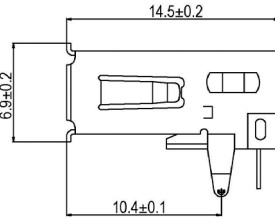
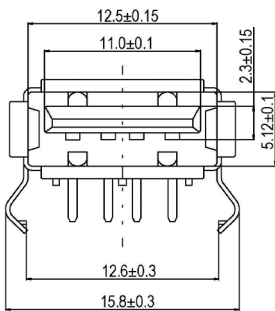
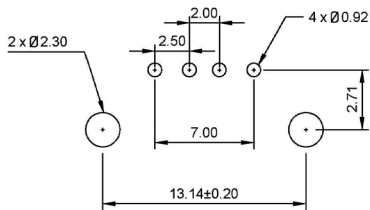
FFC / FPC

Micro -  
Miniature



**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Messing  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-55°C - +105°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Brass  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-55°C - +105°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



Bestellcode / Ordercode

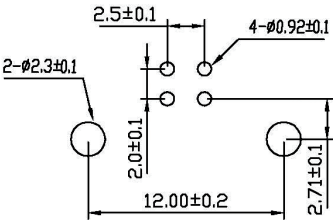
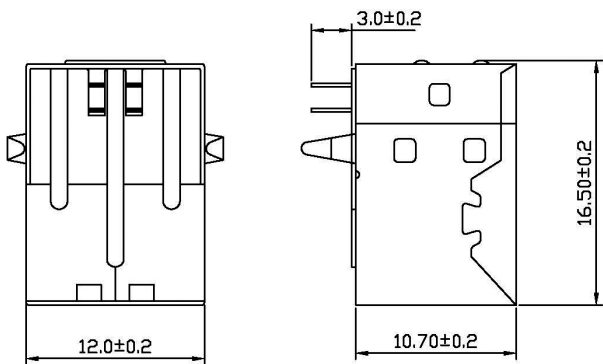
A - Bauform A

A - Style A

A USBS - A

**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-55°C - +105°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-55°C - +105°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



Bestellcode / [Ordercode](#)

B - Bauform B

B - Style B

A - USBS - B

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

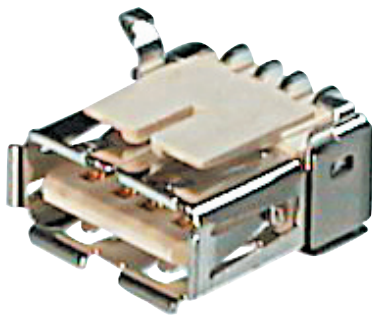
Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

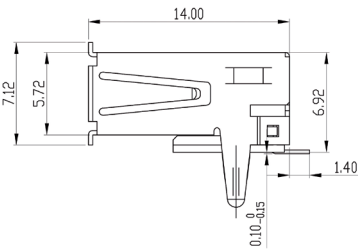
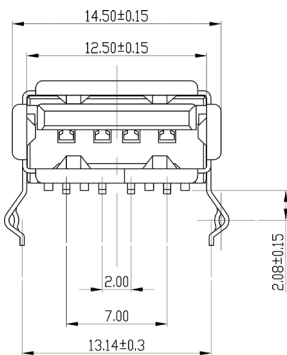
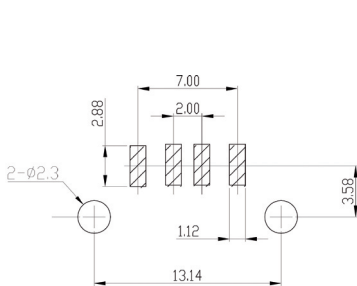
Micro-  
Miniature





**Isolierkörpermaterial**  
PA9T, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung oder  
Rollenverpackung

**Insulator material**  
PA9T, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing or  
Reel packing



Bestellcode / Ordercode

A - Bauform A

A - Style A

**Verpackung**  
- - Blister\*  
R - Rolle

**Packing**  
- - Tray\*  
R - Reel

A - USB / A - SMT - x

Bitte „x“ durch die geeignete Option ersetzen  
Please replace „x“ with appropriate option

\* Standard  
\* Standard

Isolierkörpermaterial

PA9T, UL94V-0

Kontaktmaterial

Messing

Kontaktoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-20°C - +85°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Blisterverpackung oder  
Rollenverpackung

Insulator material

PA9T, UL94V-0

Contact material

Brass

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-20°C - +85°C

Operating voltage

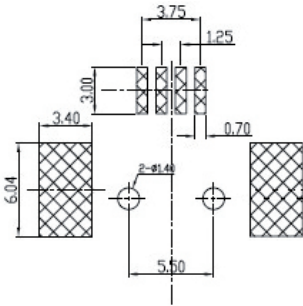
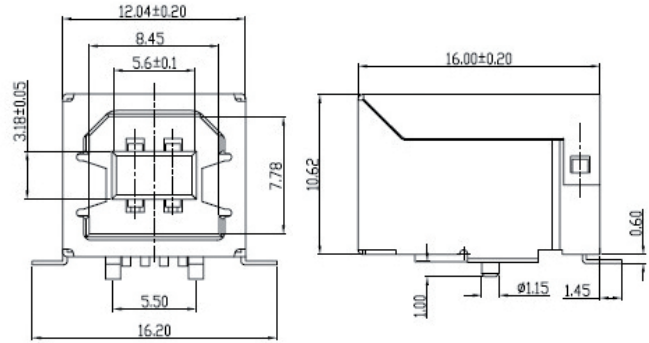
30V

Test voltage

500V

Packing

Tray packing or  
Reel packing



Bestellcode / Ordercode

B - Bauform B

B - Style B

Verpackung  
- - Blister\*  
R - Rolle

Packing  
- - Tray\*  
R - Reel

A - USB - B - SMT - x

Bitte „x“ durch die geeignete Option ersetzen  
Please replace „x“ with appropriate option

\* Standard  
\* Standard

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature

D-Sub /  
D-Sub cover /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Switches

Powerinlets  
Poweroutlets

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

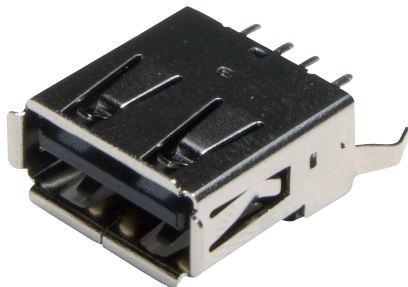
Pin header  
Female header  
Sockets / Jumper

Terminal Blocks

Memory Card  
connectors

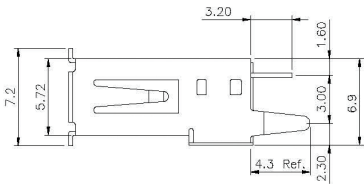
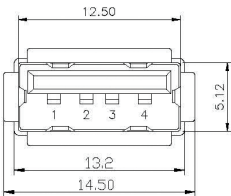
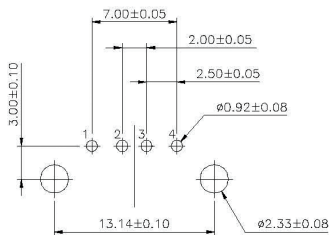
FFC / FPC

Micro -  
Miniature



**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



Bestellcode / Ordercode

A - Bauform A

TOP - Top entry (180°)

A - Style A

TOP - Top-entry (180°)

A - USB A - TOP - C

USB, Bauform B, Top entry, DIP  
USB, style B, top-entry, DIP

Isolierkörpermaterial

PBT, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontakttoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-20°C - +85°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Blisterverpackung

Insulator material

PBT, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-20°C - +85°C

Operating voltage

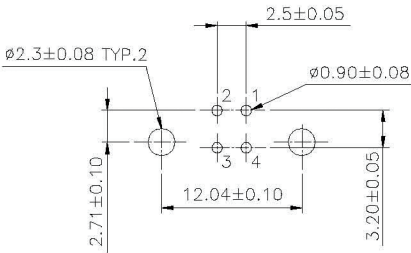
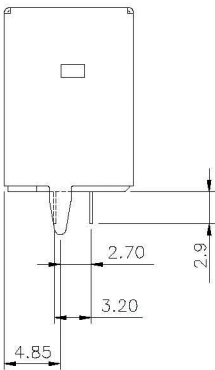
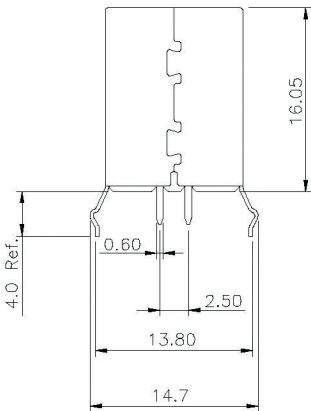
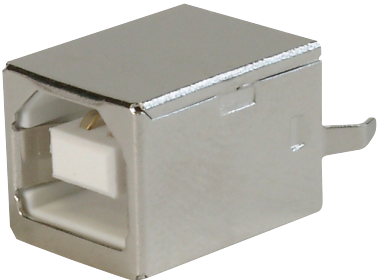
30V

Test voltage

500V

Packing

Tray packing



Bestellcode / Ordercode

B - Bauform B

B - Style B

TOP - Top entry (180°)

TOP - Top-entry (180°)

A - USB B - TOP - C

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Buchsenleisten  
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Steckverbinder

FFC / FPC

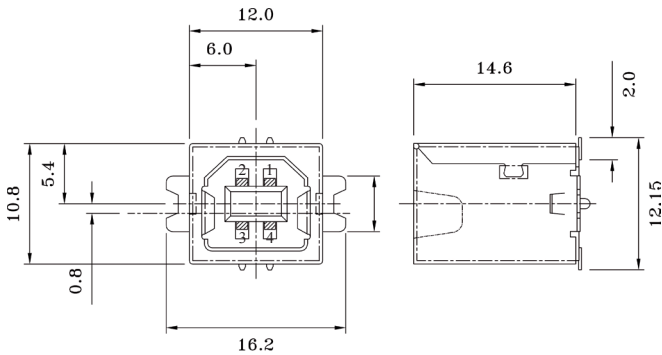
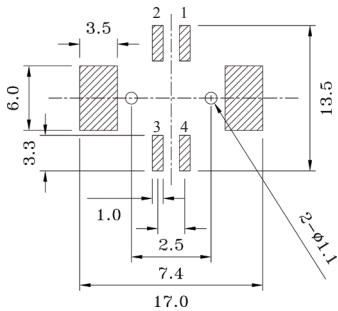
Micro-  
Miniature





**Isolierkörpermaterial**  
PA9T, UL94V-0  
**Kontaktmaterial**  
Messing  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PA9T, UL94V-0  
**Contact material**  
Brass  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



Bestellcode / Ordercode

B - Bauform B  
SMT - SMD  
TOP - Top entry (180°)

B - Style B  
SMT - SMD  
TOP - Top-entry (180°)

A - USB B - SMT - TOP

D-Sub /  
Centronics  
Multiflex -  
DIN 41651  
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MiniDIN  
Pin header  
Female header  
Sockets / Jumper  
Terminal Blocks  
Memory Card  
connectors  
FFC / FPC  
Micro -  
Miniature

Isolierkörpermaterial

PBT, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontakttoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-20°C - +85°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Stangenverpackung

Insulator material

PBT, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-20°C - +85°C

Operating voltage

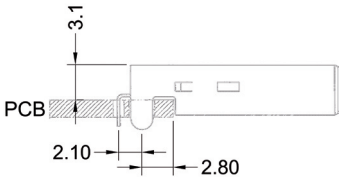
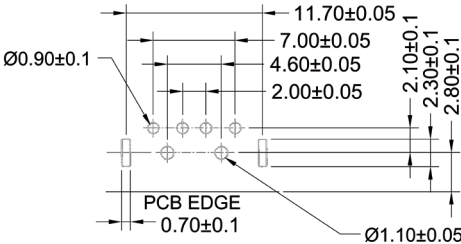
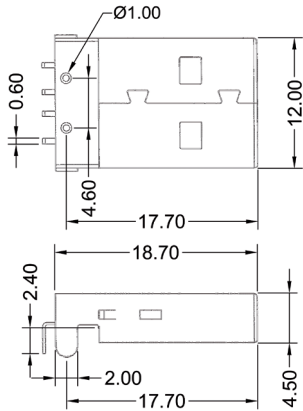
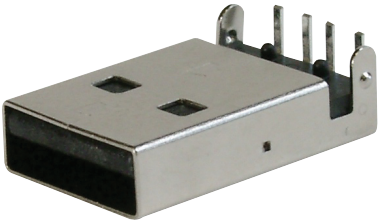
30V

Test voltage

500V

Packing

Tube packing



Bestellcode / Ordercode

A - Bauform A

A - Style A

Ausführung

- - DIP\*

SMT - SMD

Version

- - DIP\*

SMT - SMD

A - USB A - LP - x - C

Bitte „x“ durch die geeignete Option ersetzen  
Please replace „x“ with appropriate option

\* Standard  
\* Standard

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature



**Insulator material**  
PBT, UL94V-0

**Contact material**  
Phosphor bronze

**Plating**  
Ni, Au / Sn

**Contact resistance**  
30mΩ max

**Insulation resistance**  
1000MΩ min

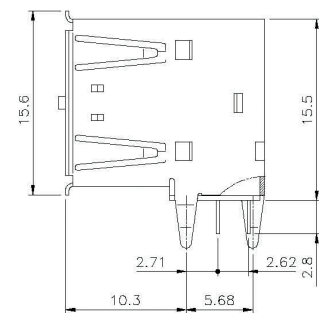
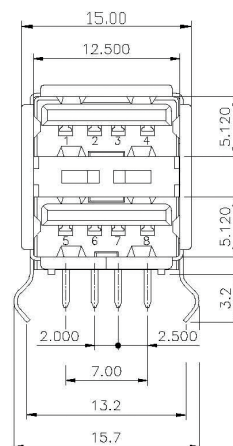
**Current rating**  
1A

**Operating temperature**  
-20°C ~ +85°C

**Operating voltage**  
30V

**Test voltage**  
500V

**Packing**  
Tray packing



### Recommended P.C. Board Layout

Bestellcode / Ordercode

A - Bauform A  
2P - Dual-Port

A - Style A

2P - Dual port

**A - USB    A - 2P    C**

USB, Bauform A, vertikal, DIP  
USB, style A, vertical, DIP

Isolierkörpermaterial

PBT, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontaktoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-20°C - +85°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Blisterverpackung

Insulator material

PBT, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-20°C - +85°C

Operating voltage

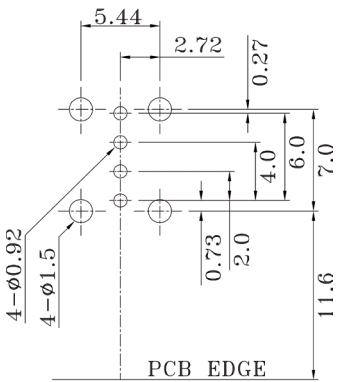
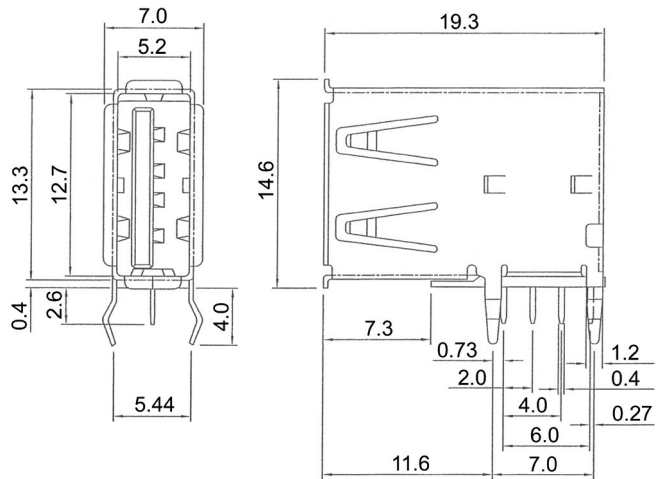
30V

Test voltage

500V

Packing

Tray packing



Bestellcode / Ordercode

A - Bauform A

E - Vertikal

A - Style A

E - Vertical

A - USB A - E

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

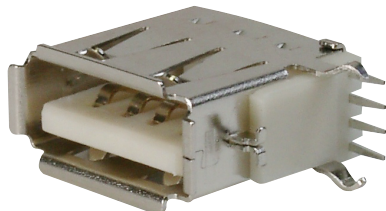
Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature



**Isolierkörpermaterial**  
PBT, UL94V-0

**Kontaktmaterial**  
Phosphorbronze

**Kontakttoberfläche**  
Ni, Au / Sn

**Kontaktwiderstand**  
30mΩ max

**Isolationswiderstand**  
1000MΩ min

**Strombelastbarkeit**  
1A

**Betriebstemperatur**  
-20°C - +85°C

**Betriebsspannung**  
30V

**Prüfspannung**  
750V

**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0

**Contact material**  
Phosphor bronze

**Plating**  
Ni, Au / Sn

**Contact resistance**  
30mΩ max

**Insulation resistance**  
1000MΩ min

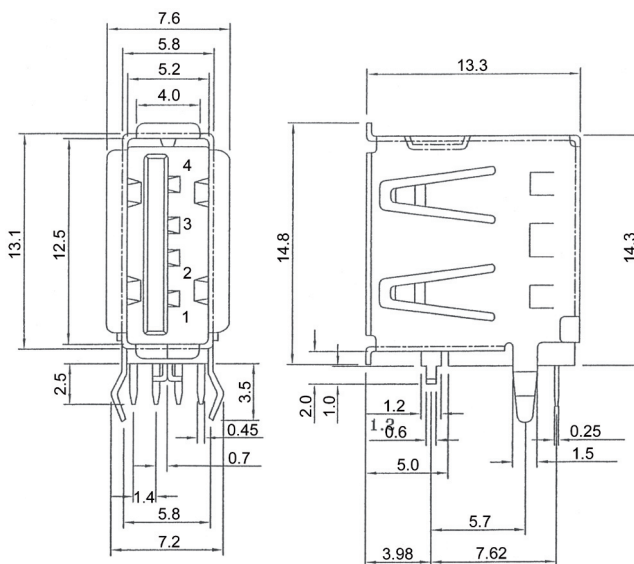
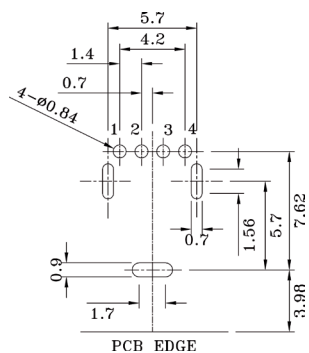
**Current rating**  
1A

**Operating temperature**  
-20°C - +85°C

**Operating voltage**  
30V

**Test voltage**  
750V

**Packing**  
Tray packing



Bestellcode / Ordercode

A - Bauform A

A - Style A

E/LP - Vertikal, kurze Ausführung

E/LP - Vertical, short version

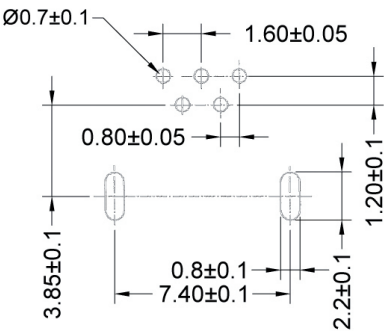
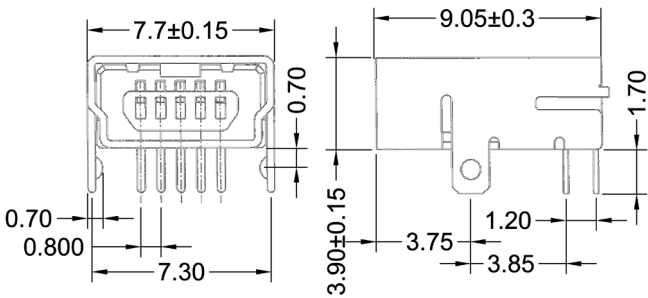
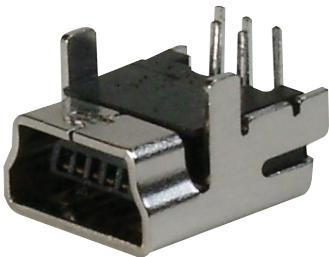
**A - USB A - E/LP**



USB, Bauform B-Mini, 5 polig, DIP  
USB, style B-Mini, 5 contacts, DIP

**Isolierkörpermaterial**  
LCP, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
750V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
LCP, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
750V  
**Packing**  
Tray packing



Bestellcode / [Ordercode](#)

B - Bauform B  
M5 - Mini, 5 polig

B - Style B  
M5 - Mini, 5 contacts

A - USB B - M5 - C

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

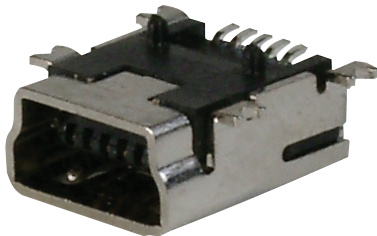
Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

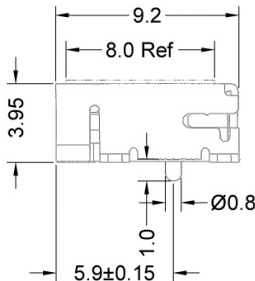
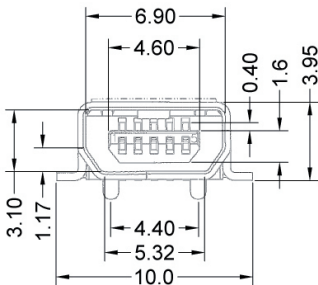
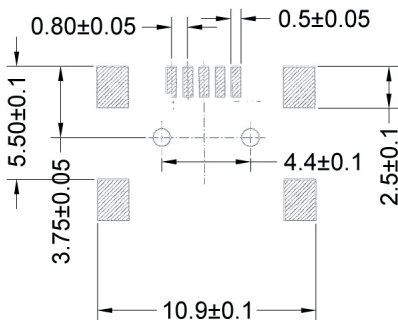
FFC / FPC

Micro-  
Miniature



**Isolierkörpermaterial**  
LCP, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
750V  
**Verpackung**  
Rollenverpackung

**Insulator material**  
LCP UL94V-0  
**Contact material**  
Phosphor Bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
750V  
**Packing**  
Reel packing



Bestellcode / Ordercode

B - Bauform B

M5 - Mini, 5 polig

SMT - SMD

B - Style B

M5 - Mini, 5 contacts

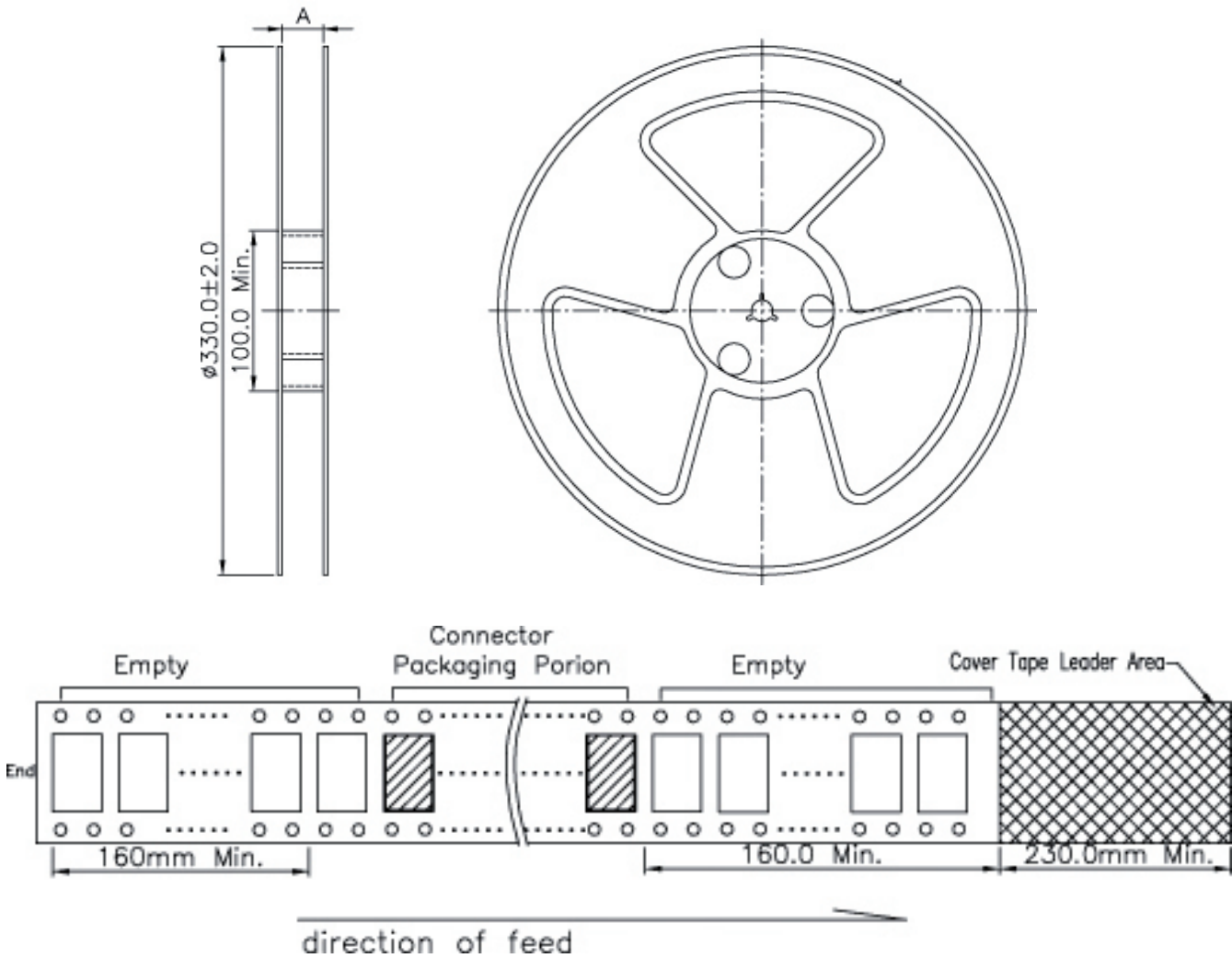
SMT - SMD

A - USB B - M5 - SMD - C

D-Sub /  
Centronics  
Multiflex -  
DIN 41651  
Modular  
USB  
IEEE 1394  
Switches  
Powerinlets  
Poweroutlets  
DIN 41612  
DIN 41617  
Hard Metric  
MiniDIN  
Pin header  
Female header  
Sockets / Jumper  
Terminal Blocks  
Memory Card  
connectors  
FFC / FPC  
Micro -  
Miniature

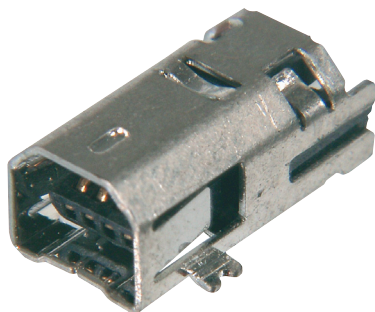
Verpackung entspricht  
EIA-481-C.

Packing according with  
EIA-481-C.



| No. of contacts | A    | Qty per Reel |
|-----------------|------|--------------|
| 5               | 24.5 | 700          |

- D-Sub / D-Sub Hauben / Centronics
- Multiflex - DIN 41651
- Modular
- USB IEEE 1394
- Schalter
- Einbaustecker Einbaubuchsen
- DIN 41612 DIN 41617 Hard Metric
- MiniDIN
- Stiftleisten Buchsenleisten Sockel / Jumper
- Klemmleisten
- Speicherkarten Steckverbinder
- FFC / FPC
- Micro-Miniature



#### Isolierkörpermaterial

LCP, UL94V-0

#### Kontaktmaterial

Phosphorbronze

#### Kontaktoberfläche

Ni, Au / Sn

#### Kontaktwiderstand

30mΩ max

#### Isolationswiderstand

1000MΩ min

#### Strombelastbarkeit

1A

#### Betriebstemperatur

-20°C - +85°C

#### Betriebsspannung

30V

#### Prüfspannung

750V

#### Verpackung

Rollenverpackung

#### Insulator material

LCP, UL94V-0

#### Contact material

Phosphor bronze

#### Plating

Ni, Au / Sn

#### Contact resistance

30mΩ max

#### Insulation resistance

1000MΩ min

#### Current rating

1A

#### Operating temperature

-20°C - +85°C

#### Operating voltage

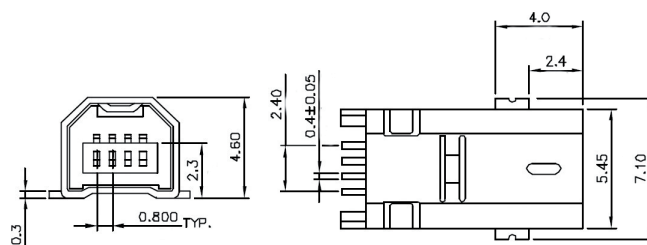
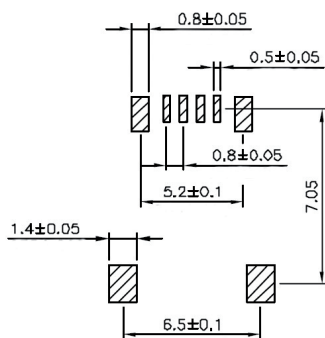
30V

#### Test voltage

750V

#### Packing

Reel packing



#### Bestellcode / Ordercode

B - Bauform B

M4 - Mini, 4 polig

M - Ausführung M

B - Style B

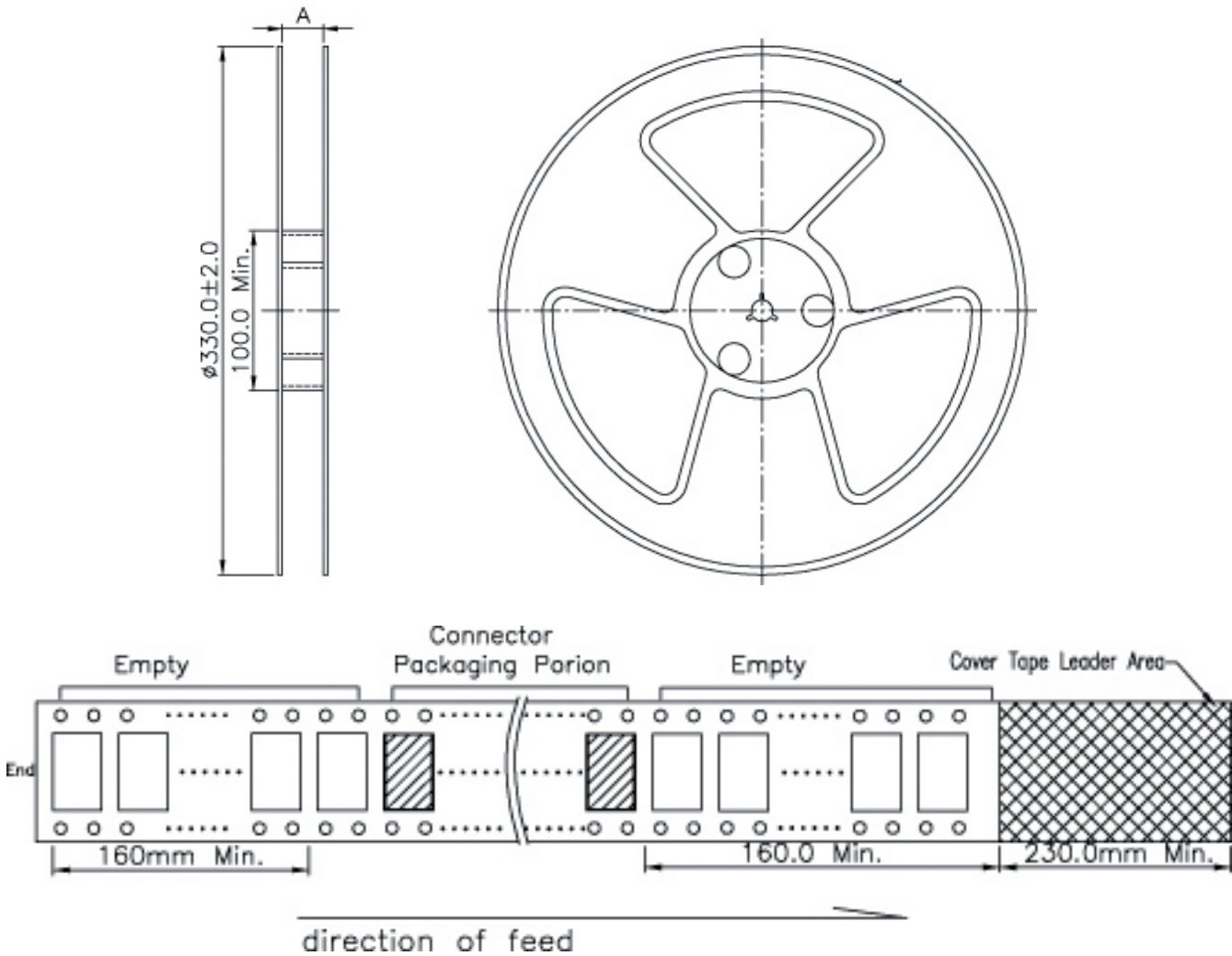
M4 - Mini, 4 contacts

M - Version M

**A - USB B - M4 - M - C**

Verpackung entspricht  
EIA-481-C.

Packing according to  
EIA-481-C.



| No. of contacts | A    | Qty per Reel |
|-----------------|------|--------------|
| 4               | 24.5 | 1000         |

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

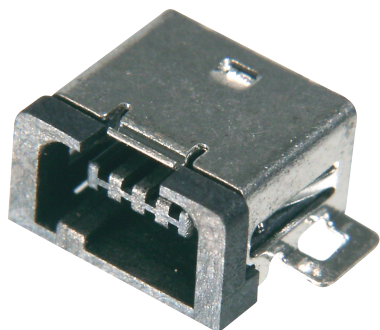
Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature





#### Isolierkörpermaterial

LCP, UL94V-0

#### Kontaktmaterial

Phosphorbronze

#### Kontaktoberfläche

Ni, Au / Sn

#### Kontaktwiderstand

30mΩ max

#### Isolationswiderstand

1000MΩ min

#### Strombelastbarkeit

1A

#### Betriebstemperatur

-20°C - +85°C

#### Betriebsspannung

30V

#### Prüfspannung

750V

#### Verpackung

Stangenverpackung

#### Insulator material

LCP, UL94V-0

#### Contact material

Phosphor Bronze

#### Plating

Ni, Au / Sn

#### Contact resistance

30mΩ max

#### Insulation resistance

1000MΩ min

#### Current rating

1A

#### Operating temperature

-20°C - +85°C

#### Operating voltage

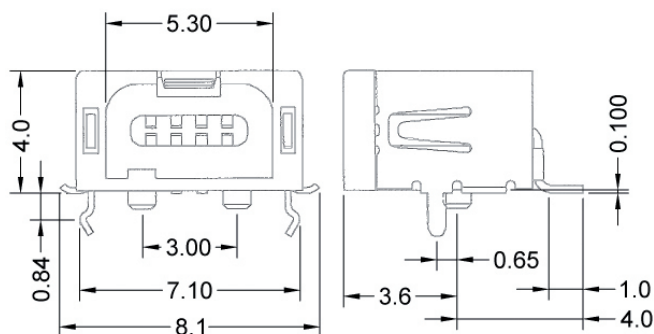
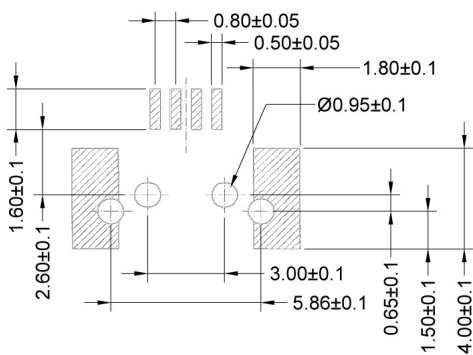
30V

#### Test voltage

750V

#### Packing

Tube packing



#### Bestellcode / Ordercode

B - Bauform B

M4 - Mini, 4 polig

H - Ausführung H

B - Style B

M4 - Mini, 4 contacts

H - Version H

**A - USB B - M4 - H - C**

USB, Bauform B-Mini, 5 polig, Top entry  
USB, style B-Mini, 5 contacts, top-entry

Isolierkörpermaterial

PA6T, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontakttoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-55°C - +105°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Blisterverpackung

Insulator material

PA6T, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-55°C - +105°C

Operating voltage

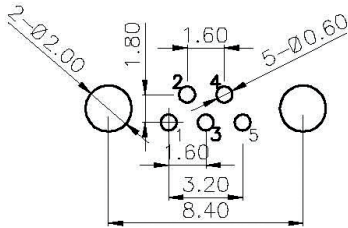
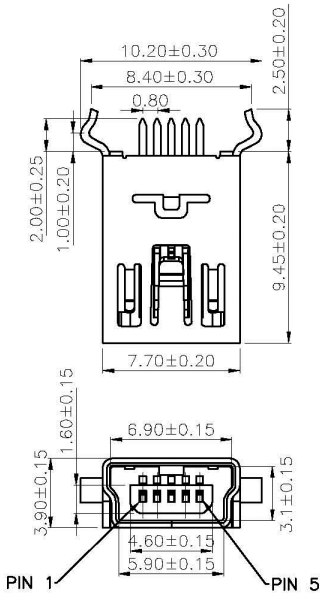
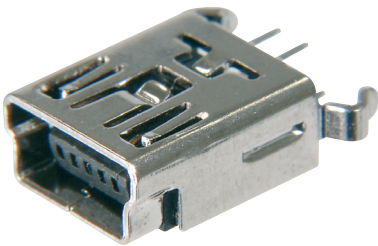
30V

Test voltage

500V

Packing

Tray packing



Bestellcode / Ordercode

B - Bauform B

M5 - Mini, 5 polig

TOP - Top entry (180°)

B - Style B

M5 - Mini, 5 contacts

TOP - Top-entry (180°)

A - USB B - M5 - TOP

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature



**Isolierkörpermaterial**  
PBT, UL94V-0

**Kontaktmaterial**  
Messing

**Kontaktüberfläche**  
Ni, Au / Sn

**Kontaktwiderstand**  
30mΩ max

**Isolationswiderstand**  
1000MΩ min

**Strombelastbarkeit**  
1A

**Betriebstemperatur**  
-20°C - +85°C

**Betriebsspannung**  
30V

**Prüfspannung**  
750V

**Verpackung**  
Kunststoffbeutelverpackung

**Insulator material**  
PBT, UL94V-0

**Contact material**  
Brass

**Plating**  
Ni, Au / Sn

**Contact resistance**  
30mΩ max

**Insulation resistance**  
1000MΩ min

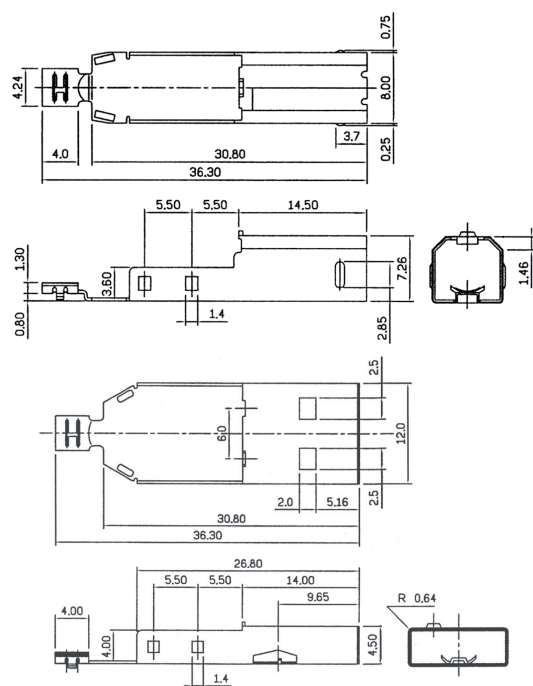
**Current rating**  
1A

**Operating temperature**  
-20°C - +85°C

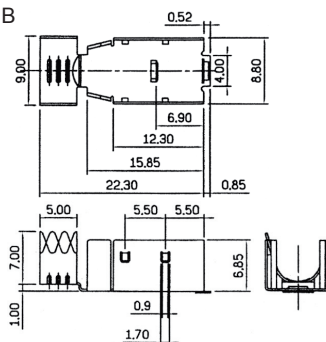
**Operating voltage**  
30V

**Test voltage**  
750V

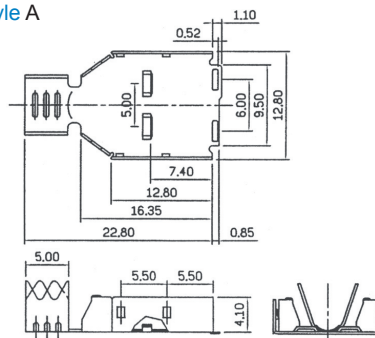
**Packing**  
Polybag packing



Bauform / Style B



Bauform / Style A



Bestellcode / Ordercode

**Ausführung**

- A - Bauform A
- B - Bauform B

**Version**

- A - Style A
- B - Style B

**A - USBP - x - N**

Hauben für USB-Konfigurations-Version / Hoods for USB-Assembly-Type

**A-USBPA-HOOD-N** (Style A)

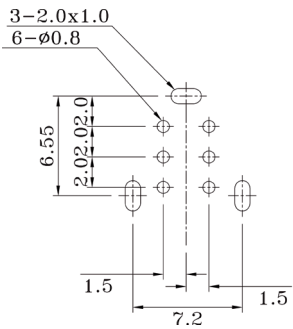
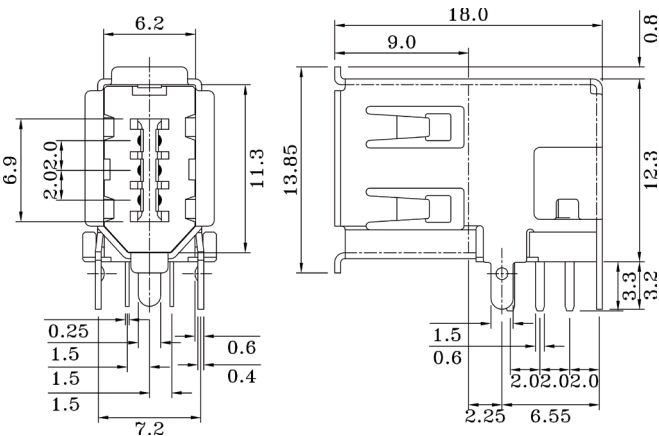
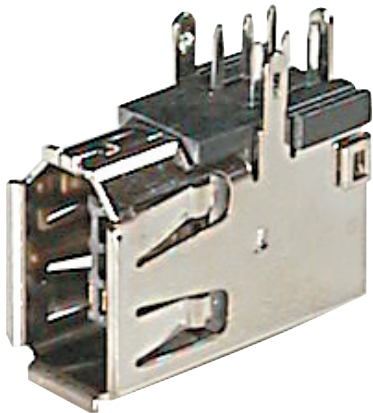
**A-USBPB-HOOD-N** (Style B)



IEEE 1394, 6 polig, vertikale Ausführung, DIP  
IEEE 1394, 6 contacts, vertical version, DIP

**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Messing  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
750V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Brass  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
750V  
**Packing**  
Tray packing



Bestellcode / Ordercode

IEE - IEEE 1394,  
Vertikale Ausführung

IEE - IEEE 1394,  
vertical version

A - IEE - DIP

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

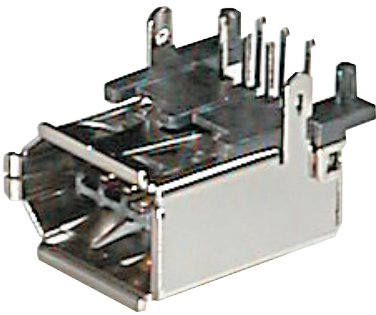
Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

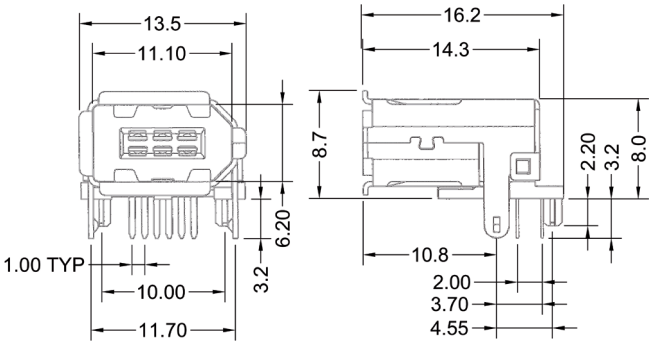
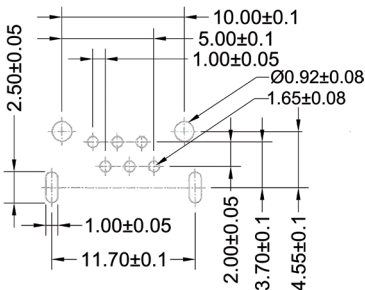
FFC / FPC

Micro-  
Miniature



**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
750V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
750V  
**Packing**  
Tray packing



Bestellcode / Ordercode

IES - IEEE 1394,  
Horizontale Ausführung

IEE - IEEE 1394,  
horizontal version

A - IES - DIP - C

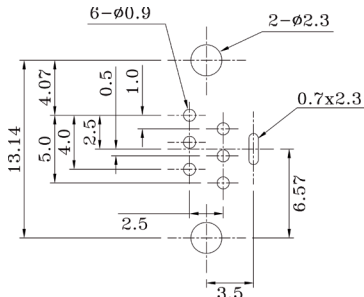
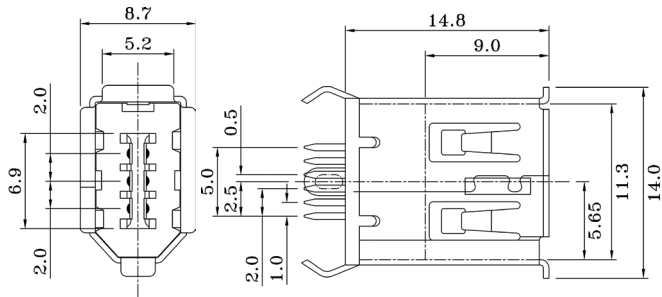
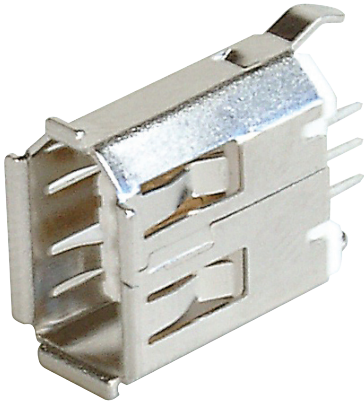
D-Sub /  
Centronics  
Multiflex -  
DIN 41651  
Modular  
USB  
IEEE 1394  
Switches  
Powerinlets  
Poweroutlets  
DIN 41612  
DIN 41617  
Hard Metric  
MiniDIN  
Pin header  
Female header  
Sockets / Jumper  
Terminal Blocks  
Memory Card  
connectors  
FFC / FPC  
Micro -  
Miniature



IEEE 1394, 6 polig, Top entry, DIP  
IEEE 1394, 6 contacts, top-entry, DIP

**Isolierkörpermaterial**  
PBT, UL94V-0  
**Kontaktmaterial**  
Messing  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-55°C - +105°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PBT, UL94V-0  
**Contact material**  
Brass  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-55°C - +105°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



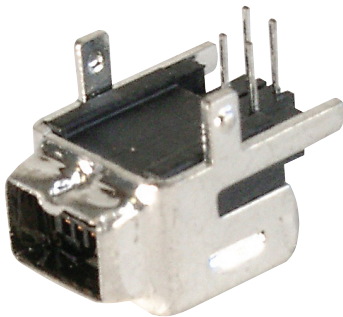
Bestellcode / Ordercode

TOP - Top entry (180°)

TOP - Top-entry (180°)

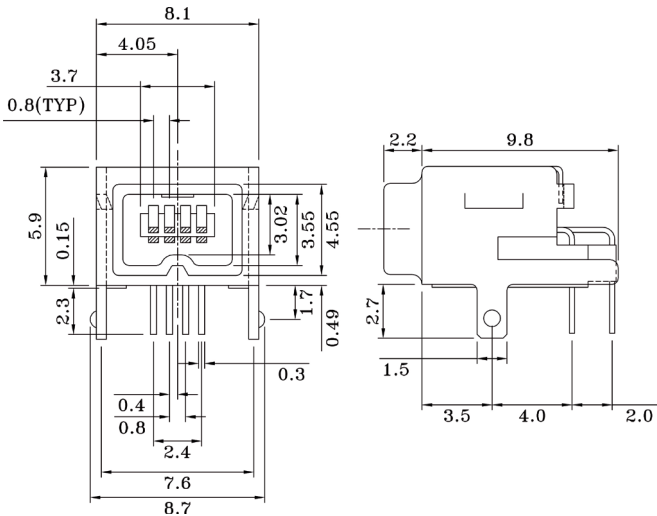
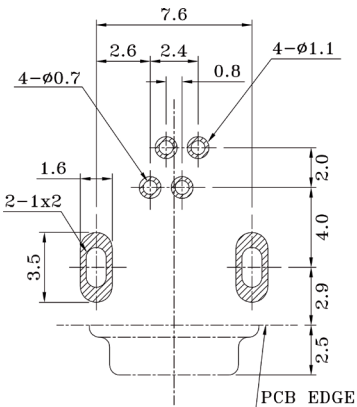
A - IEE - TOP

- D-Sub / D-Sub Hauben / Centronics
- Multiflex - DIN 41651
- Modular
- USB IEEE 1394
- Schalter
- Einbaustecker Einbaubuchsen
- DIN 41612 DIN 41617 Hard Metric
- MiniDIN
- Stiftleisten Buchsenleisten Sockel / Jumper
- Klemmleisten
- Speicherkarten Steckverbinder
- FFC / FPC
- Micro-Miniature



**Isolierkörpermaterial**  
PA9T, UL94V-0  
**Kontaktmaterial**  
Phosphorbronze  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-55°C - +105°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Blisterverpackung

**Insulator material**  
PA9T, UL94V-0  
**Contact material**  
Phosphor bronze  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-55°C - +105°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Tray packing



Bestellcode / Ordercode

M4P - Mini, 4 polig

M4P - Mini, 4 contacts

A - IEE - M4P

D-Sub /  
Centronics  
Multiflex -  
DIN 41651  
Modular  
USB  
IEEE 1394  
Switches  
Powerinlets  
Poweroutlets  
DIN 41612  
DIN 41617  
Hard Metric  
MiniDIN  
Pin header  
Female header  
Sockets / Jumper  
Terminal Blocks  
Memory Card  
connectors  
FFC / FPC  
Micro -  
Miniature

Isolierkörpermaterial

PA9T, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontaktfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-55°C - +105°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Blisterverpackung

Insulator material

PA9T, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-55°C - +105°C

Operating voltage

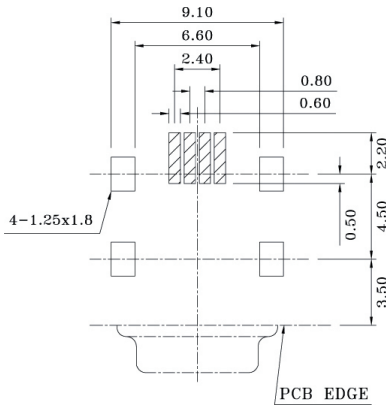
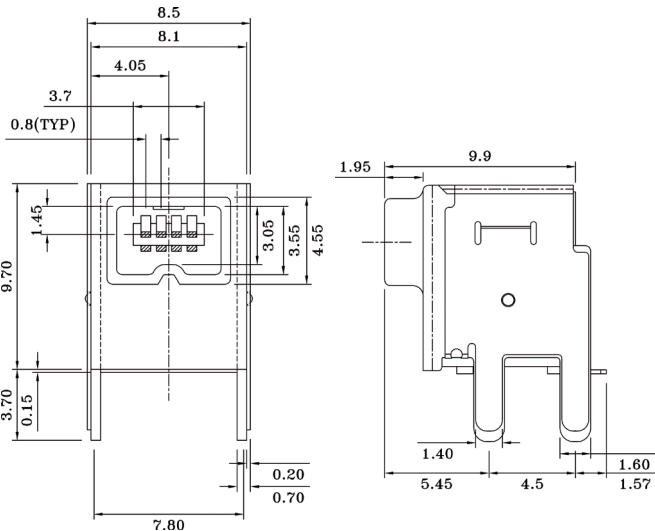
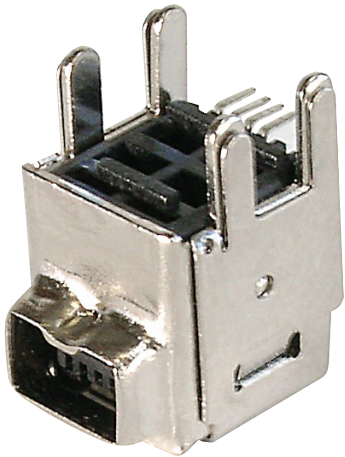
30V

Test voltage

500V

Packing

Tray packing



Bestellcode / Ordercode

M4P - Mini, 4 polig

SMD - SMD

M4P - Mini, 4 contacts

SMD - SMD

A - IEE - M4P - SMD

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

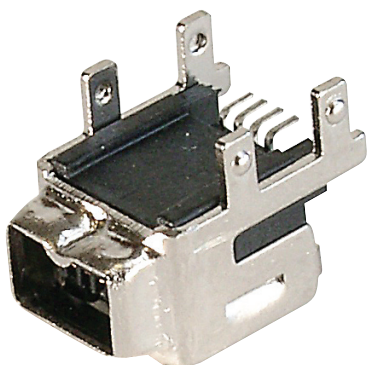
Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature



**Isolierkörpermaterial**  
PA9T, UL94V-0

**Kontaktmaterial**  
Phosphorbronze

**Kontaktoberfläche**  
Ni, Au / Sn

**Kontaktwiderstand**  
30mΩ max

**Isolationswiderstand**  
1000MΩ min

**Strombelastbarkeit**  
1A

**Betriebstemperatur**  
-55°C - +105°C

**Betriebsspannung**  
30V

**Prüfspannung**  
500V

**Verpackung**  
Blisterverpackung

**Insulator material**  
PA9T, UL94V-0

**Contact material**  
Phosphor bronze

**Plating**  
Ni, Au / Sn

**Contact resistance**  
30mΩ max

**Insulation resistance**  
1000MΩ min

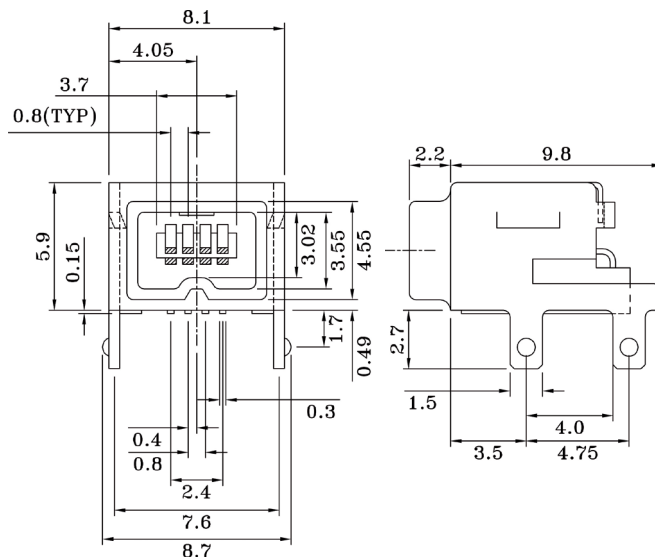
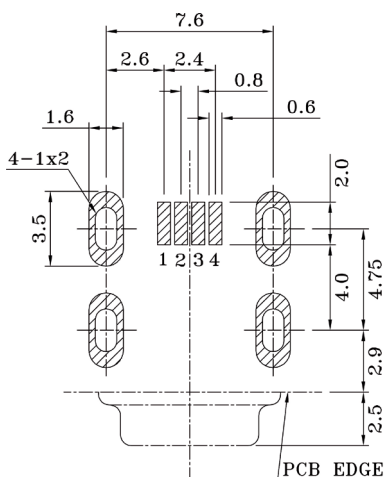
**Current rating**  
1A

**Operating temperature**  
-55°C - +105°C

**Operating voltage**  
30V

**Test voltage**  
500V

**Packing**  
Tray packing



Bestellcode / Ordercode

M4P - Mini, 4 polig

SMD - SMD

LP - Flache Ausführung

M4P - Mini, 4 contacts

SMD - SMD

LP - Flat version

**A - IEE - M4P - SMD - LP**

Isolierkörpermaterial

PA9T, UL94V-0

Kontaktmaterial

Phosphorbronze

Kontaktoberfläche

Ni, Au / Sn

Kontaktwiderstand

30mΩ max

Isolationswiderstand

1000MΩ min

Strombelastbarkeit

1A

Betriebstemperatur

-20°C - +85°C

Betriebsspannung

30V

Prüfspannung

500V

Verpackung

Kunststoffbeutelverpackung

Insulator material

PA9T, UL94V-0

Contact material

Phosphor bronze

Plating

Ni, Au / Sn

Contact resistance

30mΩ max

Insulation resistance

1000MΩ min

Current rating

1A

Operating temperature

-20°C - +85°C

Operating voltage

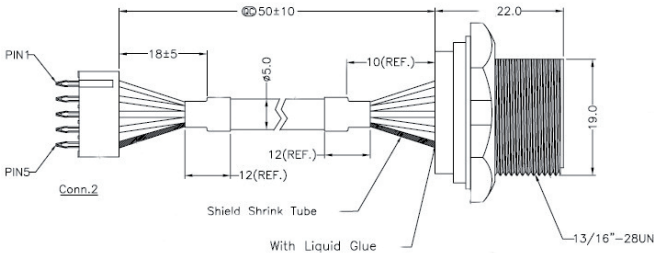
30V

Test voltage

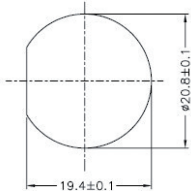
500V

Packing

Polybag packing



| Terminal Layout |       |       |        |
|-----------------|-------|-------|--------|
| Conn.2          |       |       | Conn.1 |
| 1               | Red   | AWG24 | 1      |
| 2               | White | AWG28 | 2      |
| 3               | Green | AWG28 | 3      |
| 4               | Black | AWG24 | 4      |
| 5               | Drain | AWG28 | Shell  |



Bestellcode / [Ordercode](#)

A - USB - APFS

D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature

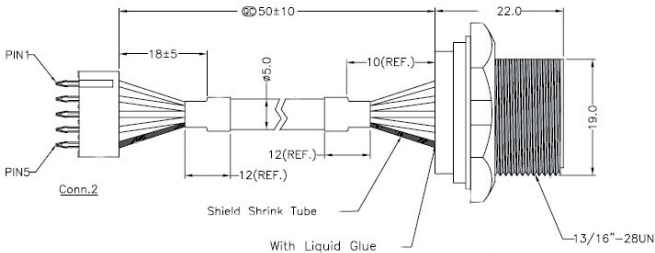
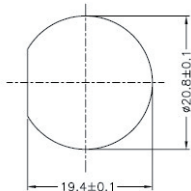




**Isolierkörpermaterial**  
PA9T, UL94V-0  
**Kontaktmaterial**  
Messing  
**Kontaktoberfläche**  
Ni, Au / Sn  
**Kontaktwiderstand**  
30mΩ max  
**Isolationswiderstand**  
1000MΩ min  
**Strombelastbarkeit**  
1A  
**Betriebstemperatur**  
-20°C - +85°C  
**Betriebsspannung**  
30V  
**Prüfspannung**  
500V  
**Verpackung**  
Kunststoffbeutelverpackung

**Insulator material**  
PA9T, UL94V-0  
**Contact material**  
Brass  
**Plating**  
Ni, Au / Sn  
**Contact resistance**  
30mΩ max  
**Insulation resistance**  
1000MΩ min  
**Current rating**  
1A  
**Operating temperature**  
-20°C - +85°C  
**Operating voltage**  
30V  
**Test voltage**  
500V  
**Packing**  
Polybag packing

| Terminal Layout |       |       |  |        |
|-----------------|-------|-------|--|--------|
| Conn.2          |       |       |  | Conn.1 |
| 1               | Red   | AWG24 |  | 1      |
| 2               | White | AWG28 |  | 2      |
| 3               | Green | AWG28 |  | 3      |
| 4               | Black | AWG24 |  | 4      |
| 5               | Drain | AWG28 |  | Shell  |



Bestellcode / Ordercode

A - USB - BPFS

Neben Standardkabeln fertigen wir Kabelkonfektionen speziell nach Kundenspezifikation.

Ein äußerst flexibles und kostengünstiges System von automatischer und manueller Fertigung bietet Ihnen

- wettbewerbsfähige Preise
- hohe Qualität mit 100% elektrischer Prüfung und Zertifizierung auf Wunsch
- Bedruckung von Kabel und Steckern

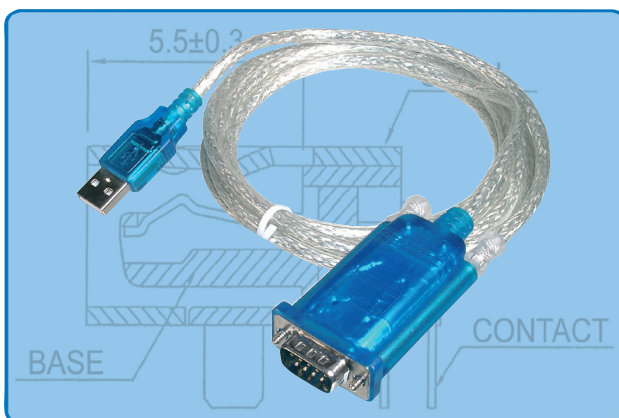
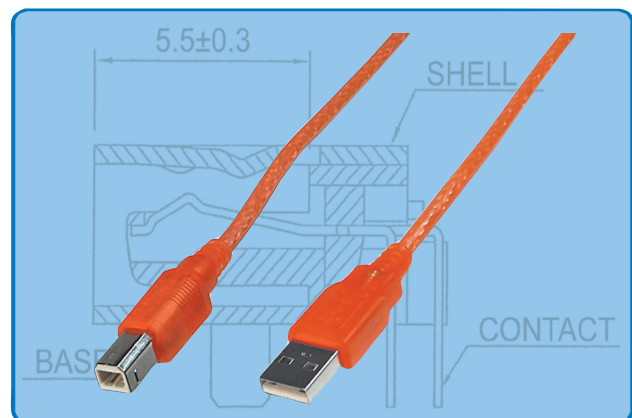
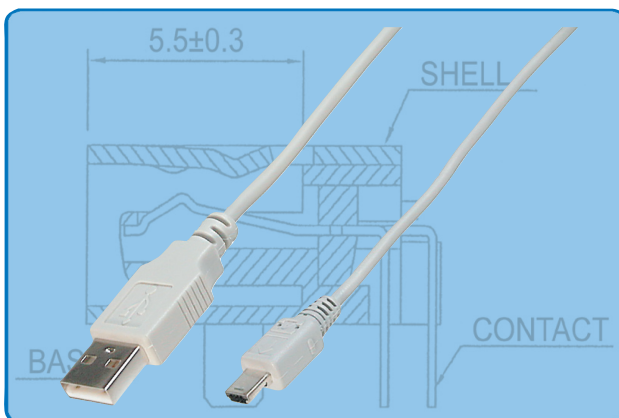
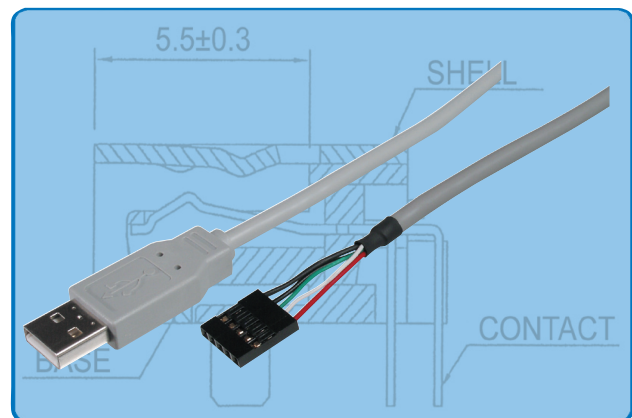
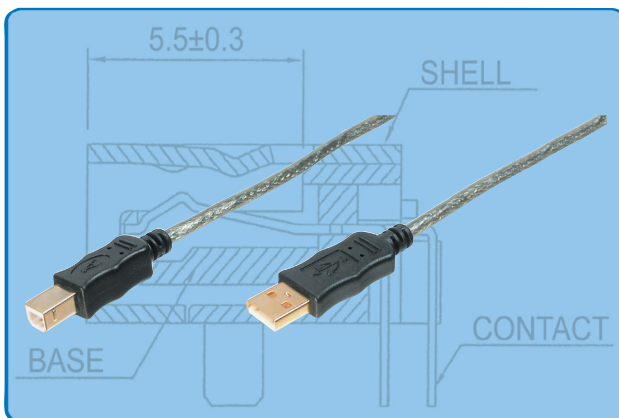
**Senden Sie uns Ihre Anfrage.**

Apart from standard cables, special cables can be assembled according to customers specification.

An extremely flexible and cost-effective system of automatic and manual production offers you

- competitive pricing
- high quality with 100% electrical testing and certification on request
- printing on cables and connectors

**Please send your enquiry**



D-Sub /  
D-Sub Hauben /  
Centronics

Multiflex -  
DIN 41651

Modular

USB  
IEEE 1394

Schalter

Einbaustecker  
Einbaubuchsen

DIN 41612  
DIN 41617  
Hard Metric

MiniDIN

Stiftleisten  
Buchsenleisten  
Sockel / Jumper

Klemmleisten

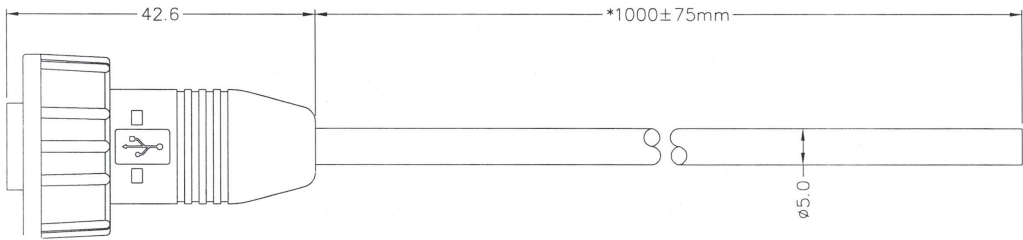
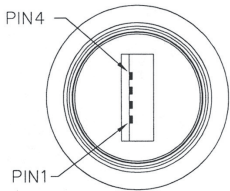
Speicherkarten  
Steckverbinder

FFC / FPC

Micro-  
Miniature



| Shield  | Drain         |
|---------|---------------|
| 4       | BLACK (24AWG) |
| 3       | GREEN (28AWG) |
| 2       | WHITE (28AWG) |
| 1       | RED (24AWG)   |
| Conn    | Wire Color    |
| Pin Out |               |



Bestellcode / Ordercode

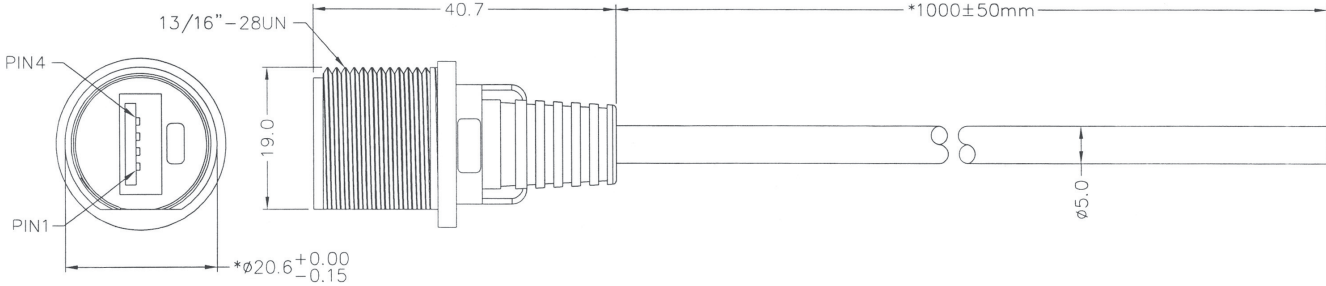
MS - Stecker  
1M - 1 Meter Kabel

MS - Male  
1M - 1 meter cable

A - KAB - USBA - MS - 1M



| Shield  | Drain         |
|---------|---------------|
| 4       | BLACK (24AWG) |
| 3       | GREEN (28AWG) |
| 2       | WHITE (28AWG) |
| 1       | RED (24AWG)   |
| Conn    | Wire Color    |
| Pin Out |               |



Bestellcode / Ordercode

FS - Buchse  
1M - 1 Meter Kabel

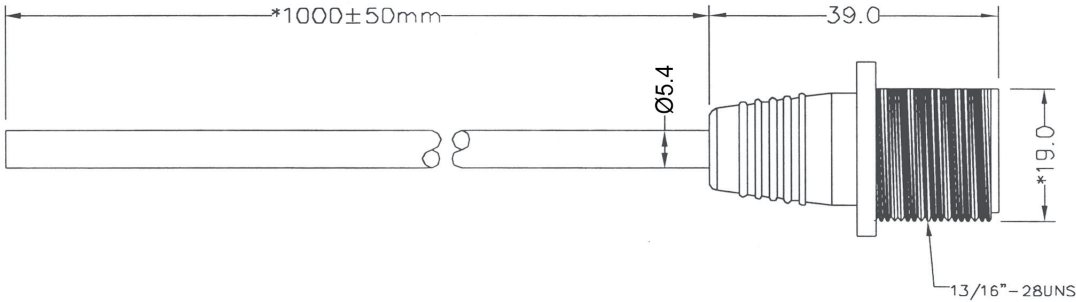
FS - Female  
1M - 1 meter cable

A - KAB - USBA - FS - 1M

USB, Bauform B, Stecker + Buchse, Konfektioniert mit Kabel 1m, IP67  
USB, style B, male + female, assembled with cable 1m, IP67

| Shield  | Drain         |
|---------|---------------|
| 4       | BLACK (24AWG) |
| 3       | GREEN (28AWG) |
| 2       | WHITE (28AWG) |
| 1       | RED (24AWG)   |
| Conn    | Wire Color    |
| Pin Out |               |

Twist Twist



Bestellcode / Ordercode

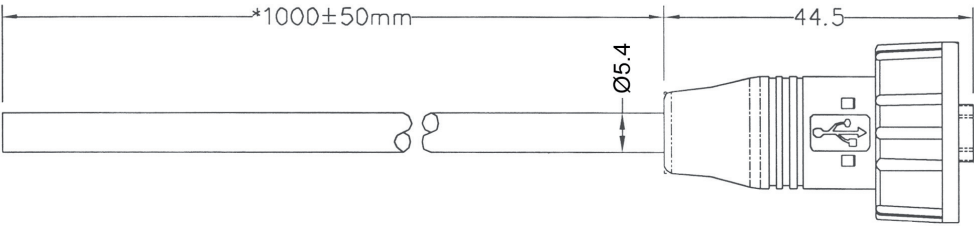
FS - Buchse  
1M - 1 Meter Kabel

FS - Female  
1M - 1 meter cable

A - KAB - USBB - FS - 1M

| Shield  | Drain         |
|---------|---------------|
| 4       | BLACK (24AWG) |
| 3       | GREEN (28AWG) |
| 2       | WHITE (28AWG) |
| 1       | RED (24AWG)   |
| Conn    | Wire Color    |
| Pin Out |               |

Twist Twist



Bestellcode / Ordercode

MS - Stecker  
1M - 1 Meter Kabel

MS - Male  
1M - 1 meter cable

A - KAB - USBB - MS - 1M

- D-Sub / D-Sub Hauben / Centronics
- Multiflex - DIN 41651
- Modular
- USB IEEE 1394
- Schalter
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- DIN 41612 DIN 41617 Hard Metric
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- Stiftleisten Buchsenleisten Sockel / Jumper
- Klemmleisten
- Speicherkarten Steckverbinder
- FFC / FPC
- Micro-Miniature