



# Industrial Connection System








 **Y-ON<sup>®</sup>RJ45**  
... SERIES

 **Y-ON<sup>®</sup>USB**  
... SERIES

 **Y-ON<sup>®</sup>IEEE**  
... SERIES

 **Y-ON<sup>®</sup>PROFI-NET**  
... SERIES

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### Part Number (Details)

Y-ConCover - 10 - \* - \*

|                |                |
|----------------|----------------|
| Series         |                |
| Design Number  |                |
| No Mark = Blue | B = Black      |
| No Mark = Std. | LT = Low Temp. |

| Part Number        | Colour | Low Temperature Type |
|--------------------|--------|----------------------|
| Y-ConCover-10      | Blue   | No                   |
| Y-ConCover-10-B    | Black  | No                   |
| Y-ConCover-10-LT   | Blue   | Yes                  |
| Y-ConCover-10-B-LT | Black  | Yes                  |

### Description:

**IP67/68/69K cover** for self assembly with Y-Con plugs and cables, complete with latches, seals and terminator cap

*IP67/68/69K-Steckergehäuse zur Selbstmontage mit Y-Con Kabelsteckern und Kabeln, komplett mit Rasthaken, Dichtungen und Abschlusskappe*

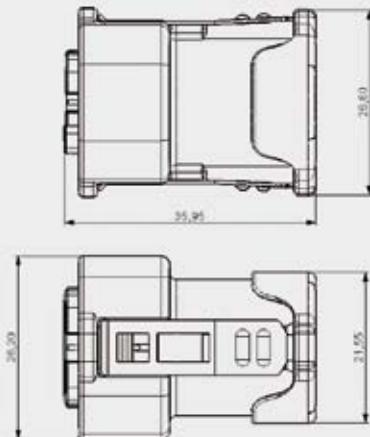
### Material:

|                           |                      |
|---------------------------|----------------------|
| Body<br>Gehäuse           | PBT, UL94V-0         |
| Seal<br>Dichtung          | FKM (Viton®) or HNBR |
| Fixing clips<br>Rasthaken | Stainless steel      |

### Specifications:

|                       |                |
|-----------------------|----------------|
| Operating Temp.: Std. | -20°C ~ +120°C |
| Betriebstemp. LT      | -40°C ~ +120°C |

### Outline Dimensions



### Accessories

Part No.: Y-ConCover-30

### Description:

Metal cover for retro-fitting to Y-ConCover-10-\* offering increased mechanical stability

*Metallisches Schutzgehäuse zur Nachrüstung auf Y-ConCover-10-\*, für erhöhte mechanische Stabilität*

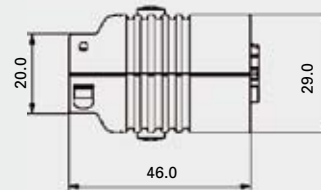


### Material:

|                           |                 |
|---------------------------|-----------------|
| Body + Buttons<br>Gehäuse | Die-cast zinc   |
| Screws<br>Schrauben       | Stainless Steel |

### Specifications:

Operating Temp.: -20°C ~ +120°C  
Betriebstemp.



### Accessories

Part No.: Y-ConAS-21

### Description:

IP67 protective transport cap for Y-ConCover-10-\* / Y-ConCover-40-\*

*IP67-Transportschutzabdeckung für Y-ConCover-10-\* / Y-ConCover-40-\**



### Material:

|                 |                        |
|-----------------|------------------------|
| Body<br>Gehäuse | PE (Transparent white) |
|-----------------|------------------------|

### Specifications:

Operating Temp.: -20°C ~ +80°C  
Betriebstemp.

# IP67/68/69K Protected Components



Part Number  
(Details)

Y-ConCover - 10 - \* - \* - E

Series

Design Number

No Mark = Blue B = Black

No Mark = Std. LT = Low Temp.

E = EMI Version

| Part Number          | Colour | Low Temperature Type | EMI Spring |
|----------------------|--------|----------------------|------------|
| Y-ConCover-10-E      | Blue   | No                   | Yes        |
| Y-ConCover-10-B-E    | Black  | No                   | Yes        |
| Y-ConCover-10-LT-E   | Blue   | Yes                  | Yes        |
| Y-ConCover-10-B-LT-E | Black  | Yes                  | Yes        |

## Description:

**IP67/68/69K cover EMI** version for self assembly with Y-Con plugs and cables, complete with latches, seals and terminator cap. Integrated EMI spring for improved EMI protection

**IP67/68/69K-Steckergehäuse EMV** Version zur Selbstmontage mit Y-Con Kabelsteckern und Kabeln, komplett mit Rasthaken, Dichtungen und Abschlusskappe. Integrierte EMV Feder für verbesserten EMV Schutz

## Material:

Body PBT, UL94V-0  
Gehäuse

Seal FKM (Viton®) or HNBR  
Dichtung

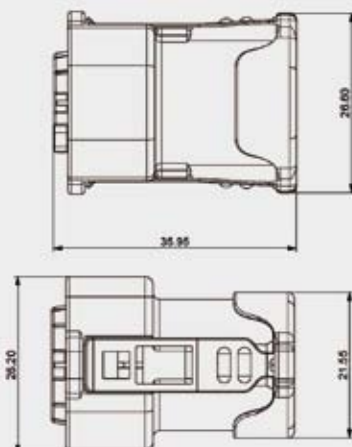
Fixing clips Stainless steel  
Rasthaken

EMI Spring Brass  
EMV Feder

## Specifications:

Operating Temp.: Std. -20°C ~ +120°C  
Betriebstemp. LT -40°C ~ +120°C

## Outline Dimensions



## Accessories

Part No.: Y-ConCover-30

## Description:

Metal cover for retro-fitting to Y-ConCover-10-\* offering increased mechanical stability

Metallisches Schutzgehäuse zur Nachrüstung auf Y-ConCover-10-\*, für erhöhte mechanische Stabilität



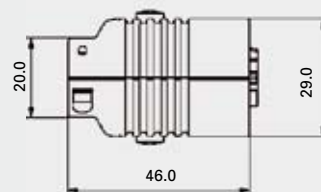
## Material:

Body + Buttons Die-cast zinc  
Gehäuse

Screws Stainless Steel  
Schrauben

## Specifications:

Operating Temp.: -20°C ~ +120°C  
Betriebstemp.



## Accessories

Part No.: Y-ConAS-21

## Description:

IP67 protective transport cap for Y-ConCover-10-\* / Y-ConCover-40-\*

IP67-Transportschutzabdeckung für Y-ConCover-10-\* / Y-ConCover-40-\*



## Material:

Body PE (Transparent white)  
Gehäuse

## Specifications:

Operating Temp.: -20°C ~ +80°C  
Betriebstemp.



Part Number (Details)

Y-ConCover - 40 - \*\*

|                |                |
|----------------|----------------|
| Series         |                |
| Design Number  |                |
| No Mark = Std. | LT = Low Temp. |

| Part Number      | Low Temperature Type |
|------------------|----------------------|
| Y-ConCover-40    | No                   |
| Y-ConCover-40-LT | Yes                  |

Description:

**IP67/68/69K metal cover** for self-assembly with Y-Con plugs and cables, with Twist-Lock open and close mechanism, complete with latches, seals and terminator cap

**IP67/68/69K-Metallgehäuse** (Twist-Lock) mit Schraubverschluss zur Selbstmontage mit Y-Con Kabelsteckern und Kabeln, komplett mit Rasthaken, Dichtungen und Abschlusskappe

Material:

|                           |                      |
|---------------------------|----------------------|
| Body<br>Gehäuse           | Die-cast zinc        |
| Seal<br>Dichtung          | FKM (Viton®) or HNBR |
| Fixing clips<br>Rasthaken | Stainless steel      |

Specifications:

|                       |                 |
|-----------------------|-----------------|
| Operating Temp.: Std. | - 20°C ~ +120°C |
| Betriebstemp. LT      | - 40°C ~ +120°C |

Accessories

Part No.: Y-ConAS-21

Description:

IP67 protective transport cap for Y-ConCover-10-\* / Y-ConCover-40-\*

IP67-Transportschutzabdeckung für Y-ConCover-10-\* / Y-ConCover-40-\*



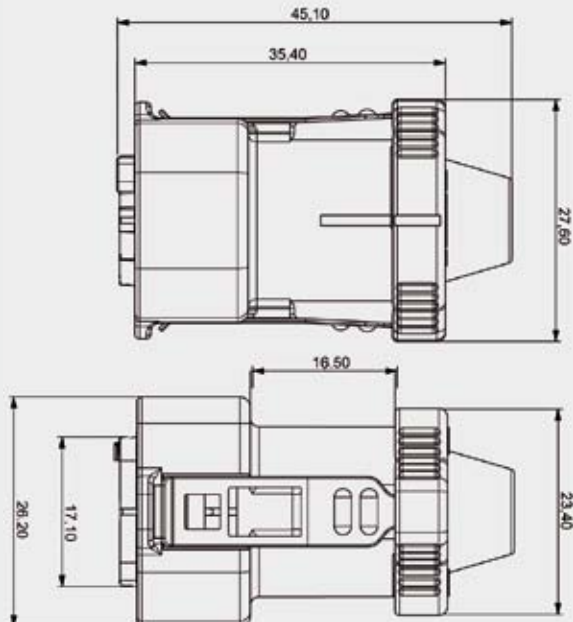
Material:

|                 |                   |
|-----------------|-------------------|
| Body<br>Gehäuse | PE                |
| Colour<br>Farbe | Transparent white |

Specifications:

Operating Temp.: -20°C ~+80°C  
Betriebstemp.

Outline Dimensions



# IP67/68/69K Protected Components



## Part Number (Details)

Y-ConCover - 40 - \*\* - E

Series

Design Number

No Mark = Std. LT = Low Temp

E = EMI Version

| Part Number        | Low Temperature Type | EMI Spring |
|--------------------|----------------------|------------|
| Y-ConCover-40-E    | No                   | Yes        |
| Y-ConCover-40-LT-E | Yes                  | Yes        |

## Description:

**IP67/68/69K metal cover EMI** version for self-assembly with Y-Con plugs and cables, with Twist-Lock open and close mechanism, complete with latches, seals and terminator cap. Assembled EMI spring and additional EMI washer for improved EMI protection

**IP67/68/69K-Metallgehäuse EMV** (Twist-Lock) mit Schraubverschluss zur Selbstmontage mit Y-Con Kabelsteckern und Kabeln, komplett mit Rasthaken, Dichtungen und Abschlusskappe. Assemblierte EMV Feder plus zusätzliche EMV Scheibe für verbesserten EMV Schutz

## Material:

|                           |                      |
|---------------------------|----------------------|
| Body<br>Gehäuse           | Die-cast zinc        |
| Seal<br>Dichtung          | FKM (Viton®) or HNBR |
| Fixing clips<br>Rasthaken | Stainless steel      |
| EMI Spring<br>EMV Feder   | Phosphor Bronze      |
| EMI Washer<br>EMV Scheibe | Phosphor Bronze      |

## Specifications:

|                                   |      |                 |
|-----------------------------------|------|-----------------|
| Operating Temp.:<br>Betriebstemp. | Std. | - 20°C ~ +120°C |
|                                   | LT   | - 40°C ~ +120°C |

## Accessories

Part No.: Y-ConAS-21

## Description:

IP67 protective transport cap for Y-ConCover-10-\* / Y-ConCover-40-\*

IP67-Transportschutzabdeckung für Y-ConCover-10-\* / Y-ConCover-40-\*



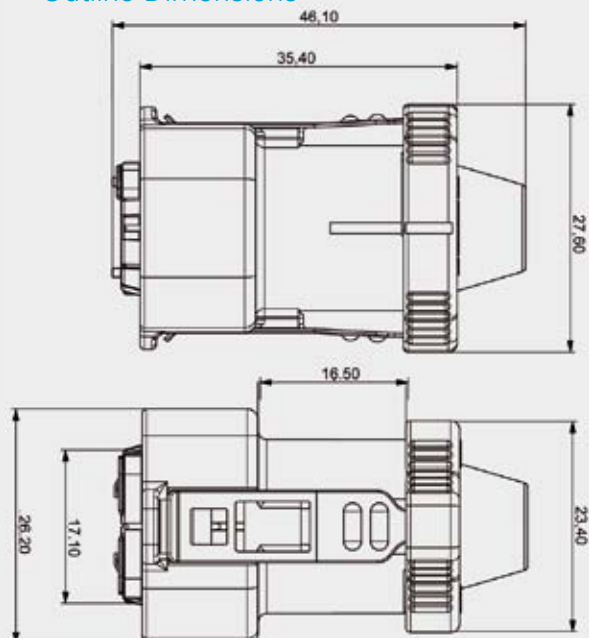
## Material:

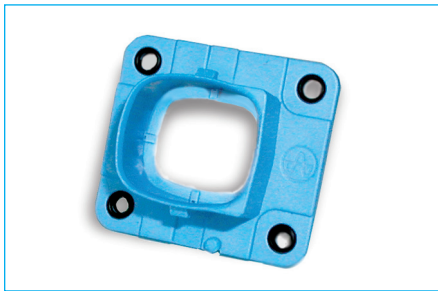
|                 |                   |
|-----------------|-------------------|
| Body<br>Gehäuse | PE                |
| Colour<br>Farbe | Transparent white |

## Specifications:

Operating Temp.: -20°C ~+80°C  
Betriebstemp.

## Outline Dimensions





### Part Number (Details)

Y-ConFlange - 10 - \*

|                |           |
|----------------|-----------|
| Series         |           |
| Design Number  |           |
| No Mark = Blue | B = Black |

| Part Number      | Colour |
|------------------|--------|
| Y-ConFlange-10   | Blue   |
| Y-ConFlange-10-B | Black  |

### Description:

Universal **mounting flange** with an integrated 2C seal (also in the screw area) to ensure IP6\* protection when mounted with Y-ConCover-10-\* and Y-ConCover-40-\*

*Universeller Gehäuseflansch mit integrierter 2K-Dichtung (auch im Schraubbereich). Damit sind für Y-ConCover-10-\* und Y-ConCover-40-\* im montierten Zustand die Schutzarten IP6\* gewährleistet*

### Material:

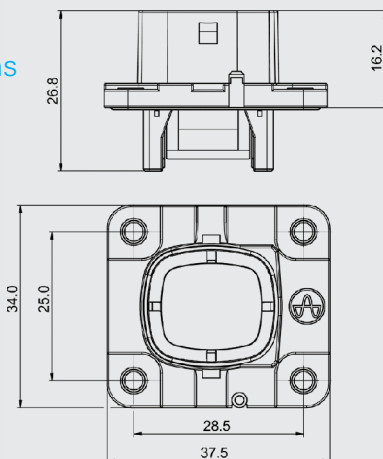
Flange Body PBT, UL94V-0  
Flanschgehäuse

Flange Seal TPE, UL94 HB  
Flanschdichtung

### Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

### Outline Dimensions



### Accessories

Y-ConAS-25

### Description:

Flange-head screws M3 Thread  
Schrauben (M3-Gewinde)



Material: Steel

### Accessories

Part No.: Y-ConAS-24

Part No.: Y-ConAS-24-LT <sup>1)</sup>

### Description:

IP67/68 protective cover for Y-ConFlange-10-\*

<sup>1)</sup> LT = Low temperature version with HNBR seal

*IP67-Schutzabdeckung für Y-ConFlange-10-\**

### Material:

Body PE  
Gehäuse

Colour Transparent white  
Farbe

Seal FKM (Viton®) or HNBR  
Dichtung

### Specifications:

Operating Temp.: Std. -20°C ~ +85°C  
Betriebstemp. LT -40°C ~ +85°C



### Accessories

Part No.: Y-ConFlange-Punch-1

### Description:

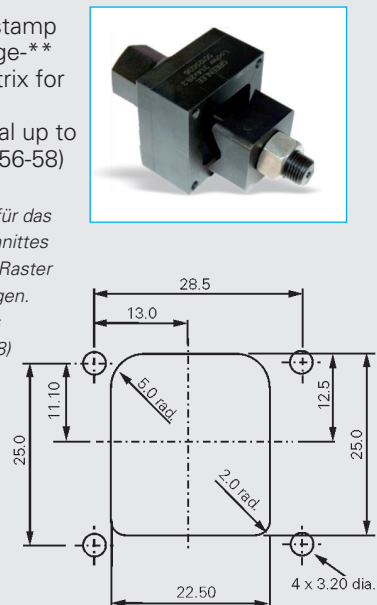
Manual punch to stamp out the Y-ConFlange-\*\* panel cut with matrix for 4 screw holes. For V2A plate metal up to 2.0mm (Rockwell 56-58)

*Manueller Blechlocher für das Ausstanzen des Ausschnittes für Y-ConFlange-\*\* mit Raster für 4 Schraubenbohrungen. Für V2A Metallblech bis 2,0 mm (Rockwell 56-58)*

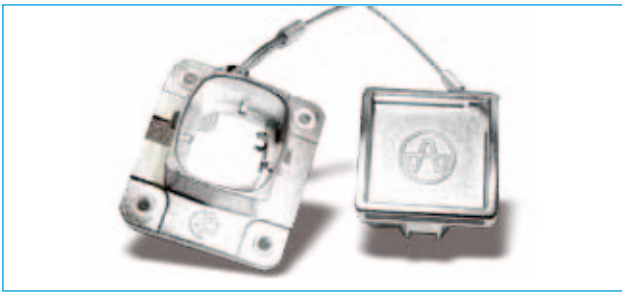
### Material:

Colour Black-  
Farbe

Panel Cut Dim. (incl. in Rittal Library)



# IP67/68/69K Protected Components



## Part Number (Details)

Y-ConFlange - 40 - \*

Series

Design Number

No Mark = Std. C = With Cap

| Part Number      | Protection Cap |
|------------------|----------------|
| Y-ConFlange-40   | No             |
| Y-ConFlange-40-C | Yes            |

## Description:

**Full metal mounting flange**, with integrated seal (also in the screw area) to ensure IP6\* protection when mounted with Y-ConCover-10-\* and Y-ConCover-40-\*. Also available with assembled IP6\* protection cap

**Vollmetal Gehäuseflansch** mit integrierter Dichtung (auch im Schraubbereich). Damit sind für Y-ConCover-10-\* und Y-ConCover-40-\* im montierten Zustand die Schutzarten IP6\* gewährleistet. Auch mit assembled IP6\* Schutzkappe verfügbar

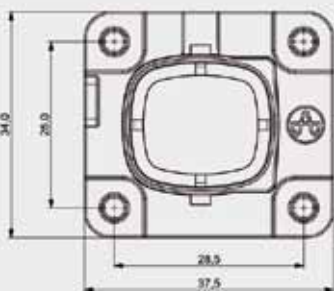
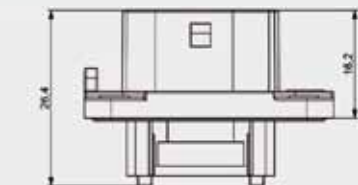
## Material:

|                                |                                       |
|--------------------------------|---------------------------------------|
| Flange Body<br>Flanschgehäuse  | Die-cast zinc                         |
| Flange Seal<br>Flanschdichtung | HNBR                                  |
| Protection Cap<br>Schutzkappe  | Die-cast Zinc                         |
| Seal<br>Dichtung               | HNBR                                  |
| Wire Rope<br>Draht             | Steel / Aluminium<br>(length = 180mm) |

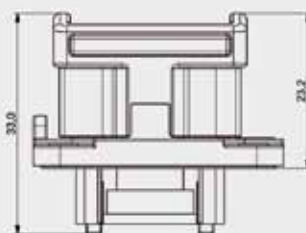
## Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

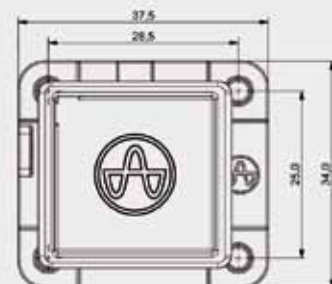
## Outline Dimensions



Y-ConFlange-40



Protection cap (already assembled by wire rope)



## Accessories

Part No.: Y-ConFlange-Punch-1

## Description:

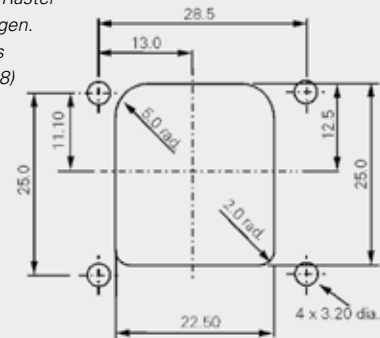
Manual punch to stamp out the Y-ConFlange-\*\* panel cut with matrix for 4 screw holes.  
For V2A plate metal up to 2.0mm (Rockwell 56-58)



Manueller Blechlocher für das Ausstanzen des Ausschnittes für Y-ConFlange-\*\* mit Raster für 4 Schraubenbohrungen.  
Für V2A Metallblech bis 2,0 mm (Rockwell 56-58)

Material: Steel  
Colour: Black  
Farbe

Panel Cut Dim.  
(incl. in Rittal Library)



## Accessories

Y-ConAS-25

## Description:

Flange-head screws M3 Thread  
Schrauben (M3-Gewinde)



Material: Steel





### Part Number (Details)

Y-ConPlug - \* 1

Series

Design Number

| Part Number  | Signal Contacts | Power Contacts |
|--------------|-----------------|----------------|
| Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConPlug-31 | 6               | 2              |
| Y-ConPlug-41 | 8               | 0              |
| Y-ConPlug-51 | 8               | 2              |

### Description:

**RJ45 cable plug**, Cat 5 with integrated cable guide, shielding and cable crimp preventing cable rotation. Ethernet/customised contact wiring, with or without power contacts

**RJ45 Kabelstecker** Cat 5 mit integrierter Kabelführung, Schirmung und Kabelcrimp, der das Verdrehen des Kabels verhindert. Ethernet/Kundenspezifische Kontaktverdrahtung mit oder ohne zusätzliche Kontakte für die Stromversorgung

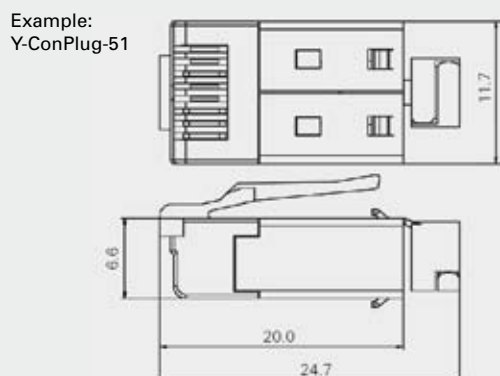
### Material:

|                             |                              |
|-----------------------------|------------------------------|
| Plug body<br>Steckergehäuse | PBT, UL94V-0                 |
| Shielding<br>Schirmung      | Nickel plated brass          |
| Contact<br>Kontakte         | Contact area 30µ" Au over Ni |

### Specifications:

|                                    |                              |
|------------------------------------|------------------------------|
| Operating Temp.:<br>Betriebstemp.  | -40°C ~ +120°C               |
| Durability:<br>Lebensdauer         | 1,500 mechanical cycles      |
| Current Rating:<br>Bemessungsstrom | 2.1A @ 70°C (power contacts) |

### Outline Dimensions



### Accessories

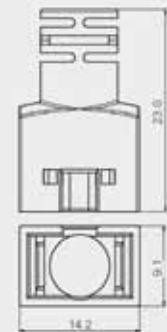
Part No.: Y-ConAS-11

### Description:

IP20 strain relief for use with all Y-Con plugs. The cable cage allows for flexing with the cable



IP20-Zugentlastung für den Einsatz mit allen Y-Con Kabelsteckern. Die Manschette der Zugentlastung unterstützt die Biegeflexibilität des Kabels



Material: PA66

### Specifications:

Operating Temp.: -20°C ~ +120°C  
Betriebstemp.

### Accessories

Part No.: Y-ConAS-12

IP20 protective transport cap for all Y-Con plugs.



IP20 Transportschutzabdeckung für alle Y-Con Kabelstecker.

Material: PE

Colour: Transparent white  
Farbe

### Specifications:

Operating Temp.: -20°C ~ +80°C  
Betriebstemp.

# IP20 Protected Components



Y-ConIP20Lock-10



Y-ConIP20Lock-20

## Part Number (Details)

Y-ConIP20Lock - \*\*

Series

10 = Standard Type  
20 = With Locking Slider

| Part Number      | Type                           |
|------------------|--------------------------------|
| Y-ConIP20Lock-10 | Standard                       |
| Y-ConIP20Lock-20 | With additional locking slider |

### Description:

**IP20 lock strain relief** with vibration resistant locking clips. Also available with additional locking slider for increased mechanical retention. For use with all Y-Con plugs

#### IP20-Zugentlastung mit vibrationsstabilen Rasthaken.

Auch mit zusätzlichem Schiebeverschluss für verbesserte mechanische Rückhaltekraft verfügbar. Für den Einsatz mit allen Y-Con Kabelsteckern

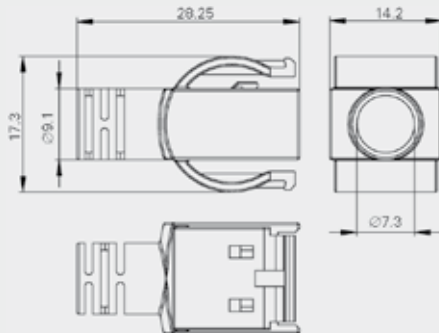
**Material:** PA66

**Colour:** Y-ConIP20Lock-10 (Black)  
Y-ConIP20Lock-20 (Black & White)

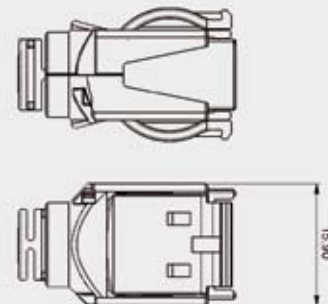
### Specifications:

**Operating Temp.:** -20°C ~ +120°C  
Betriebstemp.

### Outline Dimensions:



Y-ConIP20Lock-10



Y-ConIP20Lock-20



## Part Number (Details)

Y-ConIP20HFR - \*

Series

Number of Holding Frame

| Part Number     | No. of Holding Frames |
|-----------------|-----------------------|
| Y-ConIP20HFR-10 | 1                     |
| Y-ConIP20HFR-20 | 2                     |
| Y-ConIP20HFR-40 | 4                     |

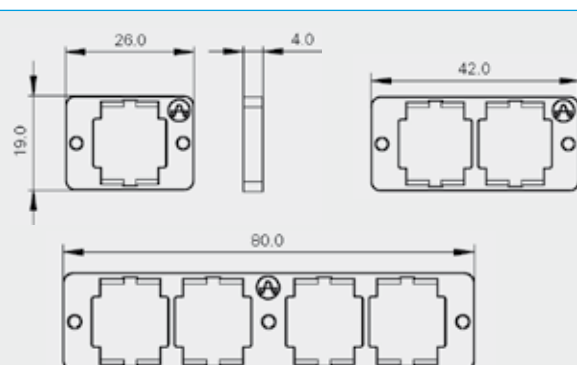
### Description:

**IP20 holding frames** 1x, 2x or 4x format. For use with all RJ45 and USB IP20Lock products

**IP20 Halterahmen** in 1x, 2x oder 4x Ausführung zur Verwendung mit allen RJ45 und USB IP20Lock Produkten

**Specifications:** Material PA66 (Black)

**Operating Temp.:** -20°C ~ +120°C  
Betriebstemp.





## Part Number (Details)

Y-ConCover - 20

Series

Design Number

### Description:

**IP20 EMI metal cover** against EMI interference, with integrated latch protection. For use with all Y-Con plugs

***IP20 EMV Metall Steckergehäuse** gegen elektromagnetische Beeinflussung, mit integriertem Verriegelungsschutz. Für den Einsatz mit allen Y-Con Kabelsteckern*

### Material:

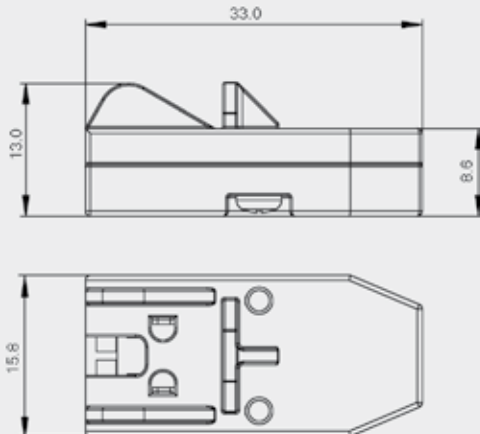
Cover Die-cast zinc  
Gehäuse

Screw Steel  
Schraube

### Specifications:

Operating Temp.: -40°C ~ +80°C  
Betriebstemp.

### Outline Dimensions



### Accessories

Part No.: Y-ConAS-12

IP20 protective transport cap for all Y-Con plugs

*IP20 Transportschutzabdeckung für alle Y-Con Kabelstecker.*



Material: PE

Colour.: Transparent white  
Farbe

### Specifications:

Operating Temp.: -20°C ~ +80°C  
Betriebstemp.

# IP20 Protected Components



## Part Number Example

Y-ConC- R \*\* 2U - \*\*\*\* - \*\*\*\* - \*



For Part number details: see page 12

For Holding frames: see page 9

## Description:

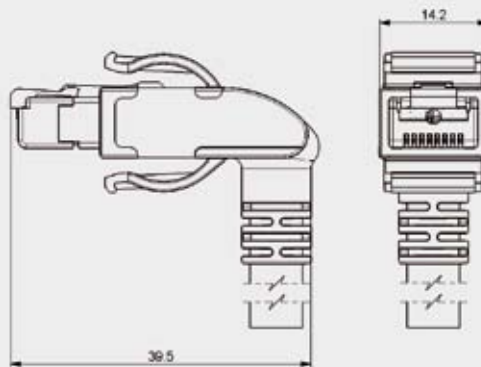
**IP20Lock 90° molded cable assembly,** with option for an additional colour coded locking slider for increased mechanical retention. Available with various Y-Con plug and cable combinations

*IP20Lock 90° umspritzte Kabelkonfektion mit optionalem-zusätzlichem Schiebeverschluss (farbcodiert) für verbesserte mechanische Rückhaltekraft. Erhältlich in verschiedenen Y-Con Stecker- und Kabelkombinationen*

**Material:** PA66

## Specifications:

Operating Temp.: -20°C ~ +120°C  
Betriebstemp.



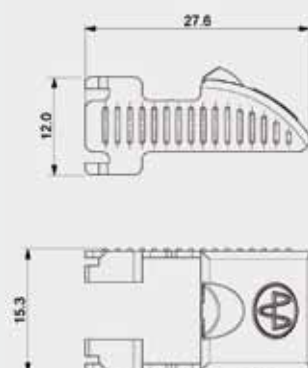
## Part Number (Details)

Y-ConIP20Lock-Clip - \*



| Part Number          | Available Colours |
|----------------------|-------------------|
| Y-ConIP20Lock-Clip-1 | Red (R-030)       |
| Y-ConIP20Lock-Clip-2 | Orange (OR-005)   |
| Y-ConIP20Lock-Clip-3 | Yellow (GE-013)   |
| Y-ConIP20Lock-Clip-4 | Green (GR-041)    |
| Y-ConIP20Lock-Clip-5 | Blue (BL-012)     |
| Y-ConIP20Lock-Clip-6 | Grey (G-038)      |
| Y-ConIP20Lock-Clip-7 | White (W-040)     |

## Outline Dimensions



## Description:

**Colour coded locking slider** for Y-ConC-R\*\*2U-\*\*\*\*-\*\*\*\*-\*

*Farbcodierter Schiebeverschluss für Y-ConC-R\*\*2U-\*\*\*\*-\*\*\*\*-\**

**Material:** PA66

## Specifications:

Operating Temp.: -20°C ~ +120°C  
Betriebstemp.

## Part Number Example for RJ45 Cable Assemblies

|        |   |                        |                  |   |      |                         |   |              |   |             |
|--------|---|------------------------|------------------|---|------|-------------------------|---|--------------|---|-------------|
| Y-ConC | - | R40                    | 6M               | - | RJ   | 2S                      | - | 2000         | - | A           |
| Series |   | RJ45 with 4+0 contacts | IP67 metal cover |   | RJ45 | IP20 with strain relief |   | Length in mm |   | Wiring Plan |

### Part Number (Details)

|  |   |     |    |   |    |    |   |      |   |   |
|--|---|-----|----|---|----|----|---|------|---|---|
| Y-ConC   | - | *** | ** | - | ** | ** | - | **** | - | * |
| Series   |   |     |    |   |    |    |   |      |   |   |
| Interface side 1   |   |     |    |   |    |    |   |      |   |   |
| R40 = RJ45, 4+0 contacts   |   |     |    |   |    |    |   |      |   |   |
| R42 = RJ45, 4+2 contacts   |   |     |    |   |    |    |   |      |   |   |
| R60 = RJ45, 6+0 contacts   |   |     |    |   |    |    |   |      |   |   |
| R62 = RJ45, 6+2 contacts   |   |     |    |   |    |    |   |      |   |   |
| R80 = RJ45, 8+0 contacts   |   |     |    |   |    |    |   |      |   |   |
| R82 = RJ45, 8+2 contacts   |   |     |    |   |    |    |   |      |   |   |
| Protection side 1  |   |     |    |   |    |    |   |      |   |   |
| 6P = IP67 plastic cover  |   |     |    |   |    |    |   |      |   |   |
| 6M = IP67 metal cover  |   |     |    |   |    |    |   |      |   |   |
| 2S = IP20 strain relief  |   |     |    |   |    |    |   |      |   |   |
| 2L = IP20Lock strain relief  |   |     |    |   |    |    |   |      |   |   |
| 2U = IP20Lock 90° molded   |   |     |    |   |    |    |   |      |   |   |
| 2M = IP20 metal cover  |   |     |    |   |    |    |   |      |   |   |
| CU = customer specific   |   |     |    |   |    |    |   |      |   |   |
| Interface side 2   |   |     |    |   |    |    |   |      |   |   |
| RJ = RJ45  |   |     |    |   |    |    |   |      |   |   |
| CU = customer specific   |   |     |    |   |    |    |   |      |   |   |
| FE = free end (cut only)   |   |     |    |   |    |    |   |      |   |   |
| Protection side 2  |   |     |    |   |    |    |   |      |   |   |
| 6P = IP67 plastic cover  |   |     |    |   |    |    |   |      |   |   |
| 6M = IP metal cover  |   |     |    |   |    |    |   |      |   |   |
| 2S = IP20 strain relief  |   |     |    |   |    |    |   |      |   |   |
| 2L = IP20Lock strain relief  |   |     |    |   |    |    |   |      |   |   |
| 2U = IP20Lock 90° moulded  |   |     |    |   |    |    |   |      |   |   |
| 2M = IP20 metal cover  |   |     |    |   |    |    |   |      |   |   |
| CU = customer specific   |   |     |    |   |    |    |   |      |   |   |
| Length in mm   |   |     |    |   |    |    |   |      |   |   |
| Wiring Plan A = T568A 1:1, B = T568A crossover, C = T568B 1:1, D = T568B crossover, F = Custom |   |     |    |   |    |    |   |      |   |   |

## Possible Cover Variations



IP6\* plastic cover



IP6\* metal cover



IP20 strain relief



Y-ConPlug-\*\*  
for all these  
Y-Con covers



IP20Lock strain relief



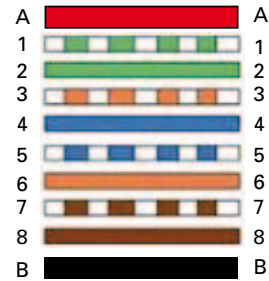
IP20Lock 90° molded



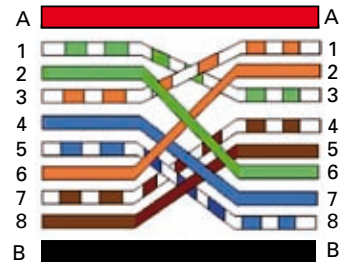
IP20 metal cover

## Possible Wiring Diagrams

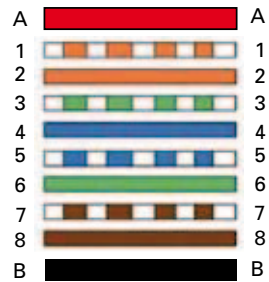
T568A 1 : 1



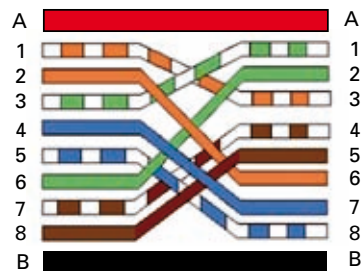
T568A Crossover



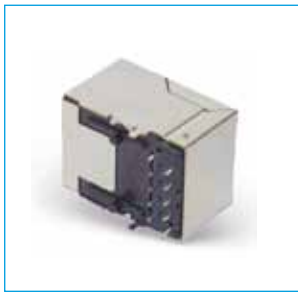
T568B 1 : 1



T568B Crossover



Note: Y-ConPlug-11, -12 and -31 use only signal contacts 1, 2, 3 & 6.  
A and B are optional power contacts



### Part Number (Details)

Y-ConJack

- \* \* - \*

Series

Power Contacts 1 = without 2 = with

1 = 90° 2 = 180°

See remarks in table below

| Part Number       | Signal Contacts | Power Contacts | Orientation | Remarks            |
|-------------------|-----------------|----------------|-------------|--------------------|
| Y-ConJack-11      | 8               | 0              | 90°         | PCB-Lock           |
| Y-ConJack-21      | 8               | 2              | 90°         | PCB-Lock           |
| Y-ConJack-21-PP   | 8               | 2              | 90°         | Positioning pins   |
| Y-ConJack-12      | 8               | 0              | 180°        | Positioning pins   |
| Y-ConJack-22-THR  | 8               | 2              | 180°        | for THR soldering  |
| Y-ConJack-22-WAVE | 8               | 2              | 180°        | for Wave soldering |

### Description:

**RJ45 jack** 90° and 180°, Cat 5, with improved shielding. Available with additional power contacts. For use with all Y-Con plugs

***RJ45 Buchse** 90° und 180°, Cat 5, mit verbesserter Schirmung. Auch mit zusätzlichen Kontakten für die Stromversorgung verfügbar. Für den Einsatz mit allen Y-Con Kabelsteckern*

### Material:

Jack body PA, UL94V-0  
Isolierkörper

Shielding Nickel plated brass  
Schirmung

Contact Contact area 30µ" Au/50µ" Ni  
Kontakte Solder area 80µ" Sn/50µ" Ni

### Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

Solder Temp: Reflow max. 260°C / 10sec.  
Löttemp. Wave min. 235°C / 3 sec.  
(only for Y-ConJack-21-PP and Y-ConJack-22- WAVE)

Durability: 1,500 mechanical cycles  
Lebensdauer

Current Rating: 2.1A @ 70°C (power contacts)  
Bemessungsstrom

### Accessories

Part No.: Y-ConAS-13

### Description:

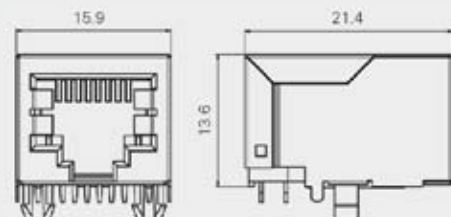
IP20 dummy plug for all RJ45 jacks



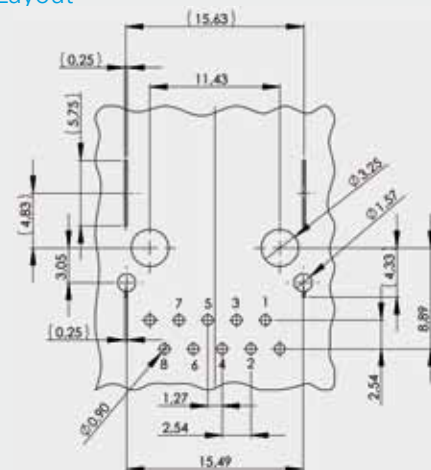
*IP20 Dummy-Stecker für alle RJ45 Buchsen*

### Outline Dimensions

Y-ConJack-11

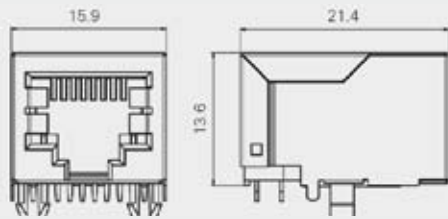


### PCB Layout

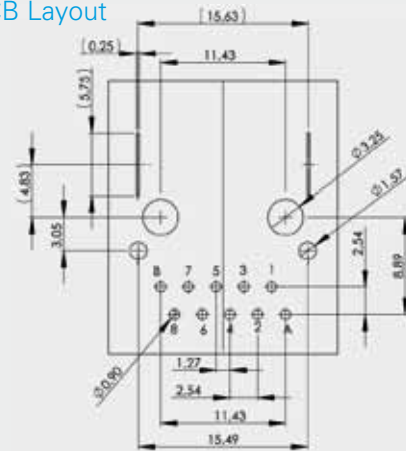


## Outline Dimensions

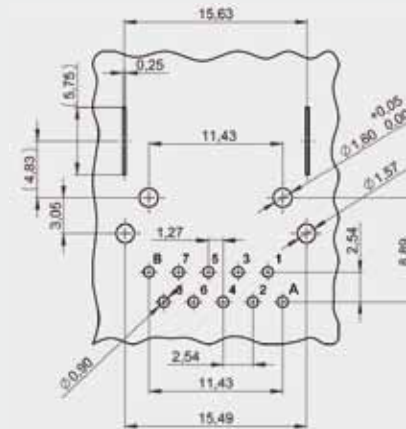
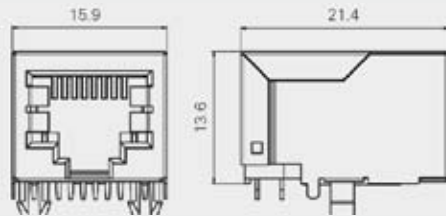
Y-ConJack-21



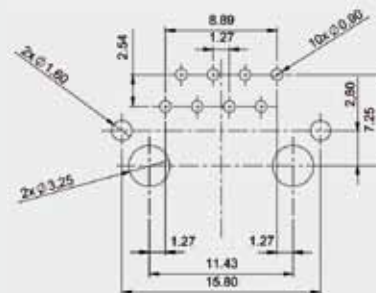
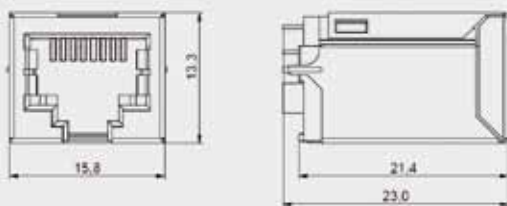
## PCB Layout



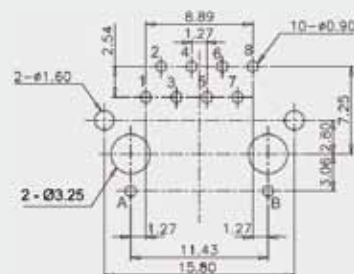
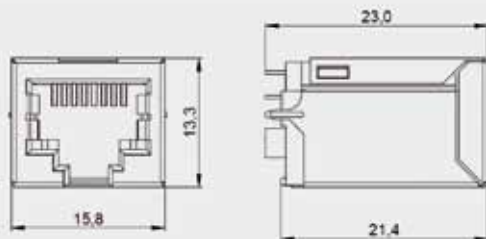
Y-ConJack-21-PP



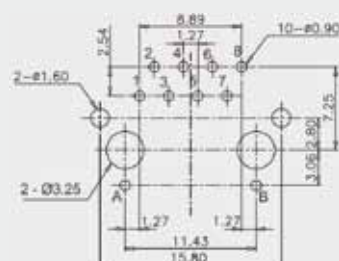
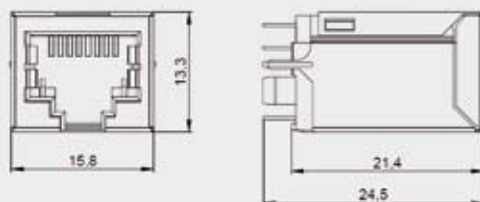
Y-ConJack-12



Y-ConJack-22-THR



Y-ConJack-22-WAVE







### Part Number (Details)

Y-ConJack - 3 \*

Series

3 = 90°

See table below

| Part Number  | Signal Contacts | Power Contacts | Orientation | Magnetics | Light Pipes |
|--------------|-----------------|----------------|-------------|-----------|-------------|
| Y-ConJack-31 | 8               | 2              | 90°         | Yes       | Yes         |
| Y-ConJack-32 | 8               | 2              | 90°         | Yes       | No          |
| Y-ConJack-33 | 8               | 2              | 90°         | No        | Yes         |
| Y-ConJack-34 | 8               | 2              | 90°         | No        | No          |
| Y-ConJack-35 | 8               | 0              | 90°         | Yes       | Yes         |
| Y-ConJack-36 | 8               | 0              | 90°         | Yes       | No          |

### Description:

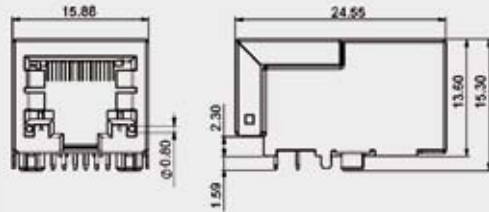
#### RJ45 jack 90° with magnetics and light pipes.

For THR soldering. Also available with power contacts. For different combinations please see table above. Light pipes enable the usage of the same jack even for different LED colours. For use with all Y-Con plugs

*RJ45-Buchse 90° mit Magnetic-Baustein und Lichtleiter für THR-Verlötung. Auch mit zusätzlichen Kontakten für die Stromversorgung. Verschiedene Kombinationsmöglichkeiten siehe lt. Tabelle. Lichtleiter ermöglicht die Verwendung der identischen Buchse für verschiedenfarbige LEDs.*

### Outline Dimensions

Y-ConJack-31



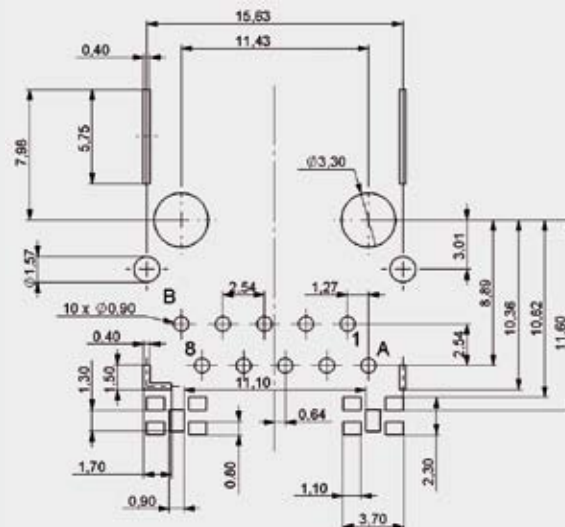
### Material:

Jack body PA, UL94V-0  
Isolierkörper

Shielding Nickel plated brass  
Schirmung

Contact Contact area 30µ" Au/50µ" Ni  
Kontakte Solder area 80µ" Sn/50µ" Ni

### PCB Layout



### Specifications:

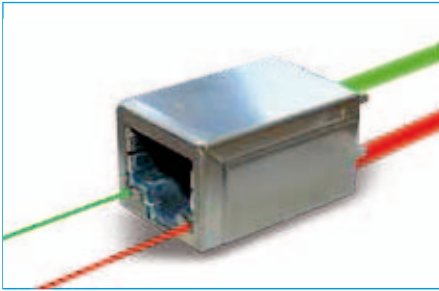
Oper. Temp.: -40°C ~ +120°C  
Betriebstemp.

Solder Temp: Reflow max. 260°C / 10sec.  
Löttemp.

Durability: 1,500 mechanical cycles  
Lebensdauer

Current Rating: 2.1A @ 70°C (power contacts)  
Bemessungsstrom

# Industrial RJ45 Jacks



## Part Number (Details)

Y-ConJack - 5 \*

Series

5 = 180°

See table below

| Part Number  | Signal Contacts | Power Contacts | Orientation | Magnetics | Light Pipes |
|--------------|-----------------|----------------|-------------|-----------|-------------|
| Y-ConJack-51 | 8               | 2              | 180°        | Yes       | Yes         |
| Y-ConJack-52 | 8               | 2              | 180°        | Yes       | No          |
| Y-ConJack-53 | 8               | 2              | 180°        | No        | Yes         |
| Y-ConJack-54 | 8               | 2              | 180°        | No        | No          |
| Y-ConJack-55 | 8               | 0              | 180°        | Yes       | Yes         |
| Y-ConJack-56 | 8               | 0              | 180°        | Yes       | No          |

## Description:

### RJ45 jack 180° with magnetics and light pipes.

For THR soldering. Also available with power contacts. For different combinations please see table above. Light pipes enable the usage of the same jack even for different LED colours. For use with all Y-Con plugs

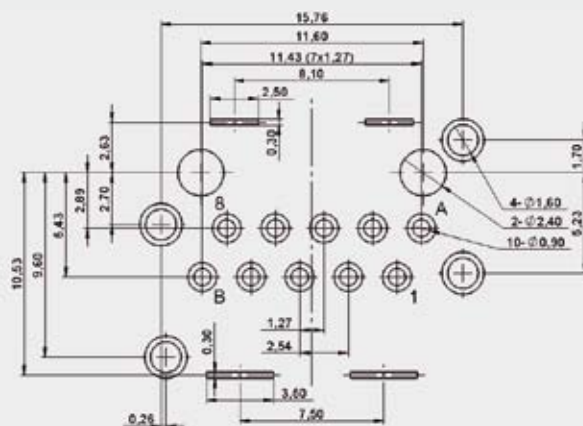
**RJ45-Buchse 180° mit Magnetic-Baustein und Lichtleiter für THR-Verlötung.** Auch mit zusätzlichen Kontakten für die Stromversorgung. Verschiedene Kombinationsmöglichkeiten siehe lt. Tabelle. Lichtleiter ermöglicht die Verwendung der identischen Buchse für verschiedenfarbige LEDs.

## Outline Dimensions

Y-ConJack-51



## PCB Layout



## Material:

Jack body  
Isolierkörper PA, UL94V-0

Shielding  
Schirmung Nickel plated brass

Contact  
Kontakte Contact area 30µ" Au/50µ" Ni  
Solder area 80µ" Sn/50µ" Ni

## Specifications:

Oper. Temp.: -40°C ~ +120°C  
Betriebstemp.

Solder Temp.: Reflow max. 260°C / 10sec.  
Löttemp.

Durability: 1,500 mechanical cycles  
Lebensdauer

Current Rating: 2.1A @ 70°C (power contacts)  
Bemessungsstrom



### Part Number (Details)

Y-ConJack - \* 1 - 3C - \*

Series

Power Contacts 1 = without 2 = with

1 = 90°

3C = EMI version \* = Shielding (see table below)

| Part Number       | Signal Contacts | Power Contacts | Orientation | Shielding Orientation |
|-------------------|-----------------|----------------|-------------|-----------------------|
| Y-ConJack-11-3C-1 | 8               | 0              | 90°         | left                  |
| Y-ConJack-11-3C-2 | 8               | 0              | 90°         | top                   |
| Y-ConJack-11-3C-3 | 8               | 0              | 90°         | right                 |
| Y-ConJack-11-3C-4 | 8               | 0              | 90°         | left + top            |
| Y-ConJack-11-3C-5 | 8               | 0              | 90°         | right + top           |
| Y-ConJack-11-3C-6 | 8               | 0              | 90°         | right + left          |
| Y-ConJack-11-3C-7 | 8               | 0              | 90°         | left + top + right    |
| Y-ConJack-21-3C-1 | 8               | 2              | 90°         | left                  |
| Y-ConJack-21-3C-2 | 8               | 2              | 90°         | top                   |
| Y-ConJack-21-3C-3 | 8               | 2              | 90°         | right                 |
| Y-ConJack-21-3C-4 | 8               | 2              | 90°         | left + top            |
| Y-ConJack-21-3C-5 | 8               | 2              | 90°         | right + top           |
| Y-ConJack-21-3C-6 | 8               | 2              | 90°         | right + left          |
| Y-ConJack-21-3C-7 | 8               | 2              | 90°         | left + top + right    |

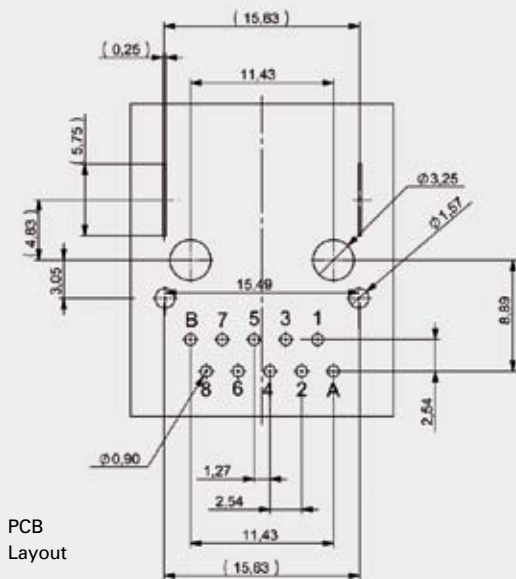
#### Description:

**RJ45 EMI jack**, Cat 5, 90° for THR soldering.  
Available also with power contacts. Additional shield clips for improved EMI performance.  
For use with all Y-Con plugs

**RJ45 EMV Buchse** Cat 5, 90° für THR-Verlötung.  
Auch mit Kontakten für die Stromversorgung. Zusätzliche Schirmfedern verbessern die EMV Eigenschaften.  
Für den Einsatz mit allen Y-Con Kabelsteckern

#### Outline Dimensions / PCB Layout

Example Y-ConJack-21-3C-7



#### Material:

Jack body PA, UL94V-0  
*Isolierkörper*

Shielding Nickel plated brass  
Shield Clips Stainless Steel  
*Schirmung*

Contact Contact area 30µ" Au/50µ" Ni  
Kontakte Solder area 80µ" Sn/50µ" Ni

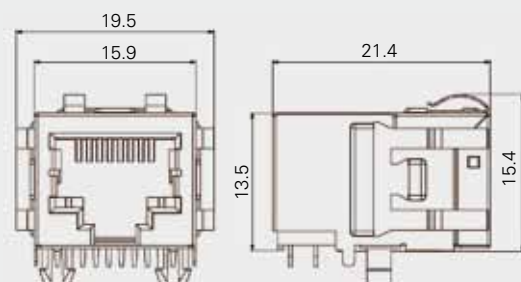
#### Specifications:

Oper. Temp.: -40°C ~ +120°C  
*Betriebstemp.*

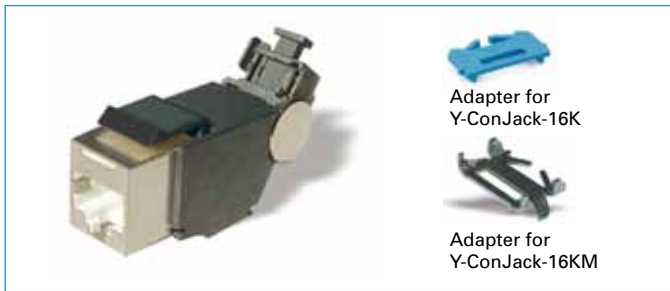
Solder Temp: Reflow max. 260°C / 10sec.  
*Löttemp.*

Durability: 1,500 mechanical cycles  
*Lebensdauer*

Current Rating: 2.1A @ 70°C (power contacts)  
*Bemessungsstrom*



# Industrial RJ45 Jacks



## Part Number (Details)

Y-ConJack - 16 K M

Series

Design Number

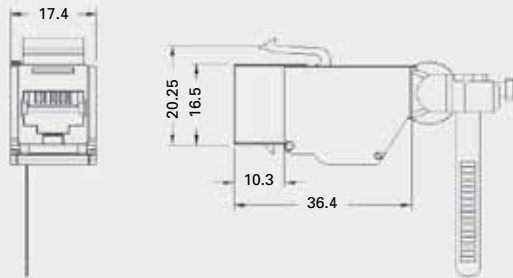
K = for use with Y-ConFlange-10-\* only

KM = for use with Y-ConFlange-40-\* only

### Description:

**RJ45, Cat 6, shielded Keystone jack** 8 pin tool free. (Cat 6 i.a.w. ANSI / TIA / EIA 568-B.2-1) For AWG 24-26 (insulation Ø1.0 - 1.6mm). For use with Y-ConFlange-10-\* or Y-ConFlange-40-\*

**RJ45, Cat 6, geschirmte Buchse** 8-polig, werkzeuglos. (Cat 6 nach ANSI / TIA / EIA 568-B.2-1). Für AWG 24-26 (Isolation Ø1.0 - 1.6mm). Für den Einsatz mit Y-ConFlange-10-\* oder Y-ConFlange-40-\*



### Material

Jack body Die-cast zinc  
RJ45 body PA46  
*Isolierkörper*

RJ45 shield Tin Plated Brass  
*Schirmung*

RJ45 contact 40µ" Au/CuBe  
IDC contact CuZn37  
*Kontakte*

### Specifications:

Operating Temp.: -40°C ~ +80°C  
*Betriebstemp.*

Durability: 750 mechanical cycles  
*Lebensdauer*



## Part Number (Details)

Y-ConJack - 16 M

Series

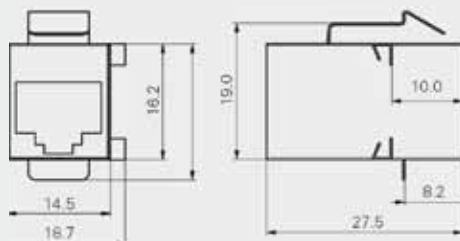
16 = for use with Y-ConFlange-10-\* only

M = for use with Y-ConFlange-40-\* only

### Description:

**RJ45 180° coupler jack**, Cat 5, with 8 pin 1:1 wiring, (including flange adapter and locking clip). For use with Y-ConFlange-10-\* or Y-ConFlange-40-\*

**RJ45 180°-Verbindungsbuchse**, Cat 5, mit 8-poliger 1:1-Verdrahtung (inklusive Flansch-Adapter und Stopper-Keil). Für den Einsatz mit Y-ConFlange-10-\* oder Y-ConFlange-40-\*



### Material

Jack body PBT, UL94V-0  
*Isolierkörper*

Shielding Stainless Steel  
*Schirmung*

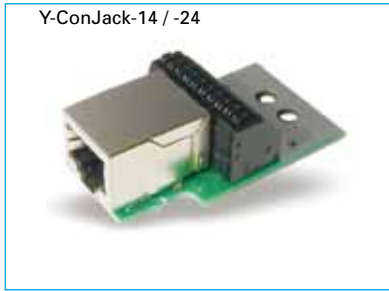
Contact Contact area Au/Ni  
*Kontakte*

Adapter / Locking Clip PBT, UL94V-0  
PA, UL94V-0

### Specifications:

Operating Temp.: -20°C ~ +80°C  
*Betriebstemp.*

Durability: 750 mechanical cycles  
*Lebensdauer*



Part Number (Details)

Y-ConJack - \* \*

Series

Power Contacts 1 = w/o. 2 = with

Design Number

| Part Number  | Signal Contacts | Power Contacts | Orientation | PCB              |
|--------------|-----------------|----------------|-------------|------------------|
| Y-ConJack-13 | 8               | 0              | 90°         | with solder pads |
| Y-ConJack-23 | 8               | 2              | 90°         | with solder pads |
| Y-ConJack-14 | 8               | 0              | 90°         | with terminals   |
| Y-ConJack-24 | 8               | 2              | 90°         | with terminals   |

Description:

**RJ45 PCB mounted jacks**, Cat 5, with or without power contacts. For use with Y-ConFlange-10-\*, Y-ConFlange-40-\* and all Y-Con plugs

**RJ45 Buchse auf PCB**, Cat 5, mit oder ohne zusätzliche Kontakte für die Stromversorgung. Für den Einsatz mit Y-ConFlange-10-\*, Y-ConFlange-40-\* und allen Y-Con Kabelsteckern

Material:

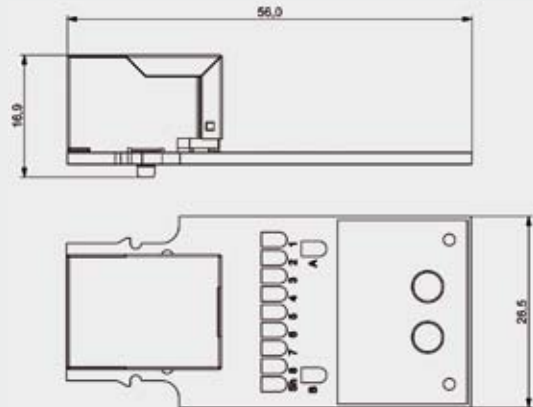
|                                   |                              |
|-----------------------------------|------------------------------|
| Jack body<br><i>Isolierkörper</i> | PA, UL94V-0                  |
| Shielding<br><i>Schirmung</i>     | Nickel plated brass          |
| Contact<br><i>Kontakte</i>        | Contact area 30µ" Au/50µ" Ni |
| PCB                               | FR4, UL94V-0                 |

Specifications:

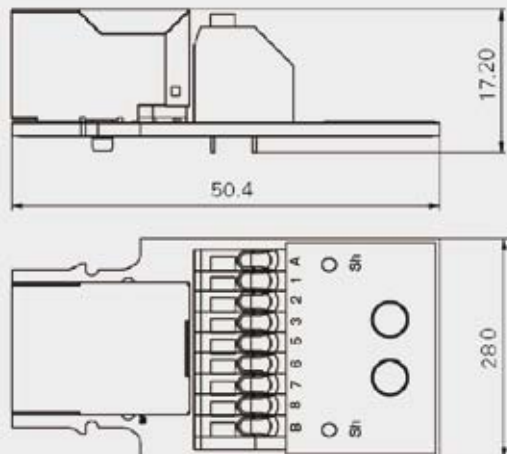
|   |                              |
|---|------------------------------|
| Oper. Temp.:<br><i>Betriebstemp.</i>      | -40°C ~ +120°C               |
| Durability:<br><i>Lebensdauer</i>         | 1,500 mechanical cycles      |
| Current Rating:<br><i>Bemessungsstrom</i> | 2.1A @ 70°C (power contacts) |

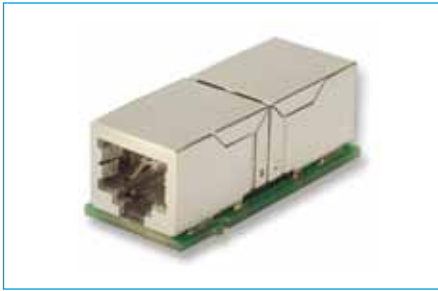
Outline Dimensions

Y-ConJack-13 / -23



Y-ConJack-14 / -24





## Part Number (Details)

Y-ConJack - \* \*

Series

Power Contacts 1 = without 2 = with

Design Number

| Part Number  | Signal Contacts | Power Contacts | Orientation | PCB                             |
|--------------|-----------------|----------------|-------------|---------------------------------|
| Y-ConJack-15 | 4               | 0              | 90°         | Coupler Jack (wiring crossover) |
| Y-ConJack-25 | 4               | 2              | 90°         | Coupler Jack (wiring crossover) |

## Description:

**RJ45 coupler jacks** PCB mounted, Cat 5, with 4 pin crossover wiring, with or without power contacts. For use with Y-ConFlange-10-\*, Y-ConFlange-40-\* and all Y-Con plugs

**RJ45 Verbindungsbuchse** auf PCB, Cat 5, mit 4-poliger Crossover-Verdrahtung, mit oder ohne zusätzliche Kontakte für die Stromversorgung. Für den Einsatz mit Y-ConFlange-10-\*, Y-ConFlange-40-\* und allen Y-Con Kabelsteckern

## Material:

|                                   |                              |
|-----------------------------------|------------------------------|
| Jack body<br><i>Isolierkörper</i> | PA, UL94V-0                  |
| Shielding<br><i>Schirmung</i>     | Nickel plated brass          |
| Contact<br><i>Kontakte</i>        | Contact Area 30µ" Au/50µ" Ni |
| PCB                               | FR4, UL94V-0                 |

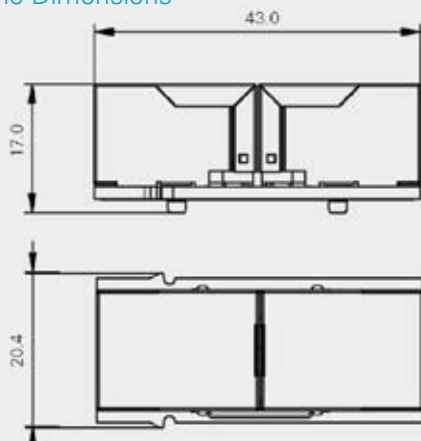
## Specifications:

Oper. Temp.: -40°C ~ +120°C  
*Betriebstemp.*

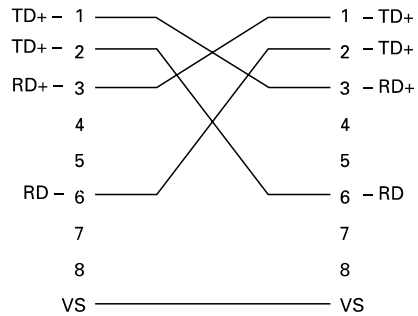
Durability: 1,500 mechanical cycles  
*Lebensdauer*

Current Rating: 2.1A @ 70°C (power contacts)  
*Bemessungsstrom*

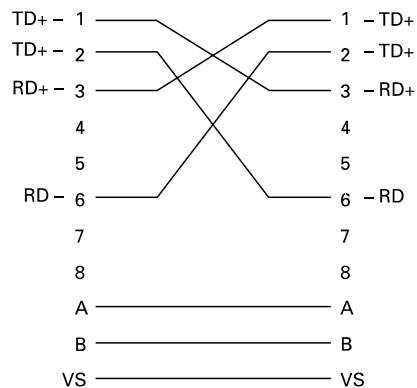
## Outline Dimensions

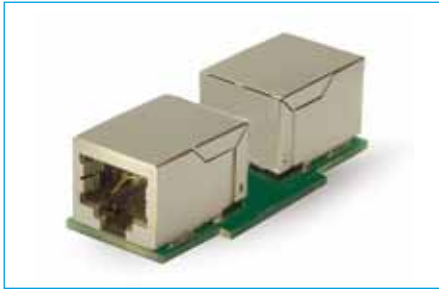


Wiring Diagram for Y-ConJack-15



Wiring Diagram for Y-ConJack-25





### Part Number (Details)

Y-ConJack - 2 \*C

|                     |  |
|---------------------|--|
| Series              |  |
| With Power Contacts |  |
| Design Number       |  |

| Part Number   | Signal Contacts | Power Contacts | Orientation | PCB                             |
|---------------|-----------------|----------------|-------------|---------------------------------|
| Y-ConJack-25C | 4               | 2              | 90°         | Coupler Jack (wiring crossover) |
| Y-ConJack-26C | 8               | 2              | 90°         | Coupler Jack (wiring 1: 1)      |

### Description:

**RJ45 coupler jacks** PCB mounted Cat 5.  
With power contacts and crossover or 1:1 wiring.  
For use with Y-ConCoupler-10-\*

*RJ45 Verbindungsbuchse auf PCB, Cat 5, Crossover oder 1 : 1 Vedrahtung. Mit zusätzlichen Kontakten für die Stromversorgung. Für den Einsatz mit Y-ConCoupler-10-\**

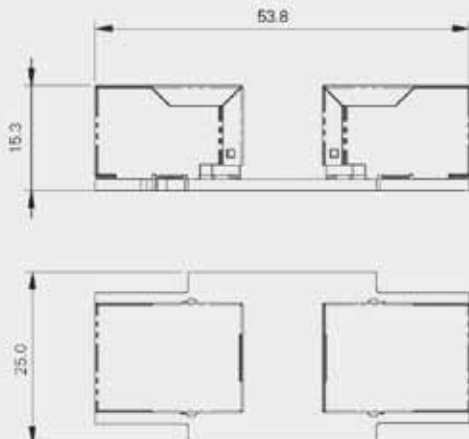
### Material:

|                                   |                              |
|-----------------------------------|------------------------------|
| Jack body<br><i>Isolierkörper</i> | PA, UL94V-0                  |
| Shielding<br><i>Schirmung</i>     | Nickel plated brass          |
| Contact<br><i>Kontakte</i>        | Contact Area 30µ" Au/50µ" Ni |
| PCB                               | FR4, UL94V-0                 |

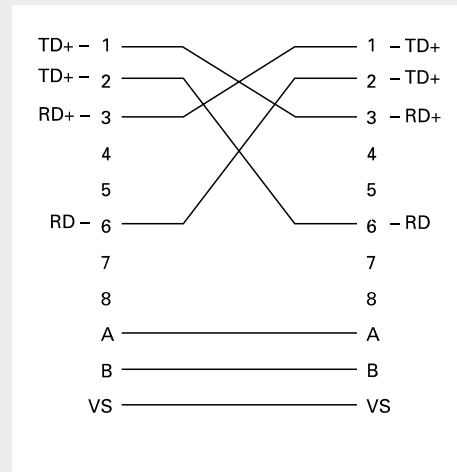
### Specifications:

|   |                              |
|---|------------------------------|
| Oper. Temp.:<br><i>Betriebstemp.</i>      | -40°C ~ +120°C               |
| Durability:<br><i>Lebensdauer</i>         | 1,500 mechanical cycles      |
| Current Rating:<br><i>Bemessungsstrom</i> | 2.1A @ 70°C (power contacts) |

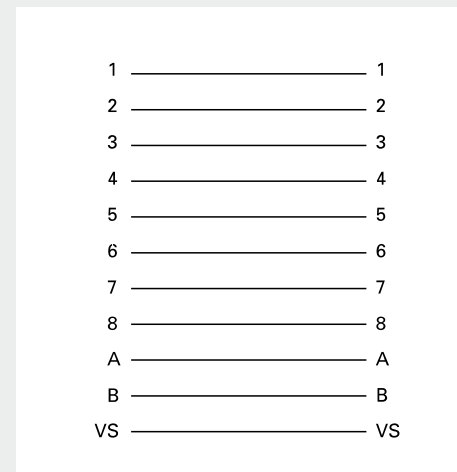
### Outline Dimensions Y-ConJack-25C / -26C



Wiring Diagram for Y-ConJack-25C



Wiring Diagram for Y-ConJack-26C



## Part Number Y-ConTool-11

### Description:

1-step crimp tool for all Y-Con RJ45 plugs.  
Crimps all contacts and fixes the square crimp in one action

*Einstufige Crimpzange für alle Y-Con RJ45 Stecker.  
Crimpt alle Kontakte und die quadratische  
Zugentlastung in einem Arbeitsgang*



## Part Number Y-ConTool-20

### Description:

Cable stripping tool with adjustable blades

*Abisolierwerkzeug für die Kabelummantelung  
mit verstellbaren Klingen*



## Part Number Y-ConTool-30

### Description:

Cable-to-Plug assembly tool

*Hilfswerkzeug für die Steckermontage*



For assembly instructions please see our web site under:

⇒ Products - Y-Con Industrial Series - Assembly Instructions  
(including films and the PDF file [www.yamaichi.de/fdhtml/442\\_fdhtml/crimptool11.pdf](http://www.yamaichi.de/fdhtml/442_fdhtml/crimptool11.pdf))

*Montageanleitungen stehen auf unserer Website zur Verfügung unter:*

⇒ Products - Y-Con Industrial Series - Assembly Instructions  
(mit Filmen sowie der PDF-Datei [www.yamaichi.de/fdhtml/442\\_fdhtml/crimptool11.pdf](http://www.yamaichi.de/fdhtml/442_fdhtml/crimptool11.pdf))



**Description:**

100 Mbit, Cat 5 (Cat 5e), digital signal cable.  
Silicon and CFC free

100 Mbps, Cat 5 (Cat 5e), Kabel für digitale Signale.  
Silikon- und FCKW frei

**Part Number (Details)**

**Y-ConCable - \***

Series

See table below



**Part Number Y-ConCable-1**

Suitable for Y-ConPlug-21

| Signal                          | Power                            | Jacket | Temp.         | Cable OD | Cable Chain | Bending Radius       | Bending Cycles |
|---------------------------------|----------------------------------|--------|---------------|----------|-------------|----------------------|----------------|
| 2 x 2                           | 2                                | PVC    | -20°C ~ +80°C | 6.9mm    | No          | 125mm multiple turns | max. 100,000   |
| AWG 24/7<br>0.22mm <sup>2</sup> | AWG 22/19<br>0.38mm <sup>2</sup> | Green  |               | (+0.1)   |             | 35mm single turn     |                |



**Part Number Y-ConCable-2**

Suitable for Y-ConPlug-11

| Signal                          | Power | Jacket | Temp.         | Cable OD  | Cable Chain | Bending Radius        | Bending Cycles |
|---------------------------------|-------|--------|---------------|-----------|-------------|-----------------------|----------------|
| 2 x 2                           | 0     | PVC    | -20°C ~ +80°C | 6.85mm    | No          | min. 50mm single turn | -              |
| AWG 24/7<br>0.22mm <sup>2</sup> |       | Grey   |               | (+/-0.15) |             |                       |                |



**Part Number Y-ConCable-3**

Suitable for Y-ConPlug-21

| Signal                          | Power                           | Jacket | Temp.         | Cable OD | Cable Chain | Bending Radius      | Bending Cycles |
|---------------------------------|---------------------------------|--------|---------------|----------|-------------|---------------------|----------------|
| 2 x 2                           | 2                               | PUR    | -20°C ~ +80°C | 6.8mm    | Yes         | 70mm multiple turns | max. 1 million |
| AWG 26/7<br>0.14mm <sup>2</sup> | AWG 22/7<br>0.34mm <sup>2</sup> | Green  |               | (+0.2)   |             | 35mm single turn    |                |



**Part Number Y-ConCable-4**

Suitable for Y-ConPlug-41

| Signal                          | Power | Jacket | Temp.         | Cable OD      | Cable Chain | Bending Radius | Bending Cycles |
|---------------------------------|-------|--------|---------------|---------------|-------------|----------------|----------------|
| 4 x 2                           | 0     | PUR    | -20°C ~ +70°C | 6.8mm         | Yes         | 68mm           | max. 1 million |
| AWG 26/7<br>0.14mm <sup>2</sup> |       | Green  |               | (+0.1/-0.3mm) |             |                |                |



**Part Number Y-ConCable-7**

**for ProfiNet**

Suitable for Y-ConPlug-15

| Signal                          | Power | Jacket | Temp.         | Cable OD | Cable Chain | Bending Radius       | Bending Cycles   |
|---------------------------------|-------|--------|---------------|----------|-------------|----------------------|------------------|
| 4 *                             | 0     | PUR    | -20°C ~ +80°C | 6.8mm    | Yes         | 102mm multiple turns | max. 2.5 million |
| AWG 22/7<br>0.34mm <sup>2</sup> |       | Green  |               | (+0.2)   |             |                      |                  |



**Part Number Y-ConCable-10**

Suitable for Y-ConPlug-51

| Signal                          | Power                            | Jacket | Temp.         | Cable OD | Cable Chain | Bending Radius      | Bending Cycles |
|---------------------------------|----------------------------------|--------|---------------|----------|-------------|---------------------|----------------|
| 4 x 2                           | 2                                | PUR    | -20°C ~ +70°C | 6.9mm    | Yes         | 70mm multiple turns | max. 1 million |
| AWG 26/7<br>0.14mm <sup>2</sup> | AWG 23/19<br>0.25mm <sup>2</sup> | Green  |               | (+0.1)   |             |                     |                |

| Conductor Resistance                   | Insulation Resistance                   | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame Resistance | Halogen Free |
|--|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 90\Omega \times \text{km}$  | $\geq 1\text{G}\Omega \times \text{km}$ | 500V / 50Hz         | 50nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | IEC 332-1        | No           |
| Power $\leq 55\Omega \times \text{km}$ |   | for 1 min           | at 800Hz    | at 1Mhz to 100Mhz        | > 32dB / 100m      |                  |              |

| Conductor Resistance                  | Insulation Resistance                   | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame Resistance | Halogen Free |
|---------------------------------------|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 90\Omega \times \text{km}$ | $\geq 1\text{G}\Omega \times \text{km}$ | 500V / 50Hz         | 50nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | IEC 332-1        | No           |
|                                       |   | for 1 min           | at 800Hz    | at 1Mhz to 100Mhz        | > 32dB / 100m      |                  |              |

| Conductor Resistance                   | Insulation Resistance                   | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame Resistance | Halogen Free |
|--|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 140\Omega \times \text{km}$ | $\geq 1\text{G}\Omega \times \text{km}$ | 500V / 50Hz         | 50nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | IEC 332-1        | Yes          |
| Power $\leq 62\Omega \times \text{km}$ |   | for 1 min           | at 800Hz    | at 1Mhz to 100Mhz        | > 32dB / 100m      |                  |              |

| Conductor Resistance                   | Insulation Resistance                     | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame Resistance | Halogen Free |
|--|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 140\Omega \times \text{km}$ | $\geq 140\text{M}\Omega \times \text{km}$ | 700V / 50Hz         | 48nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | UL- Style 20963  | Yes          |
|  |   | for 1 min           | at 1,000Hz  | at 1Mhz to 100Mhz        | > 32dB / 100m      |                  |              |

| Conductor Resistance                  | Insulation Resistance                     | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame Resistance | Halogen Free |
|---------------------------------------|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 60\Omega \times \text{km}$ | $\geq 500\text{M}\Omega \times \text{km}$ | 2,000V / 50Hz       | 53nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | UL- Style 20963  | Yes          |
|                                       |   | for 1 min           | at 800Hz    | at 1Mhz to 100Mhz        | > 50dB / 100m      |                  |              |

| Conductor Resistance                   | Insulation Resistance                     | Dielectric Strength | Capacitance | Characteristic Impedance | Near-end Crosstalk | Flame resistance | Halogen Free |
|--|---|---------------------|-------------|--------------------------|--------------------|------------------|--------------|
| Data $\leq 140\Omega \times \text{km}$ | $\geq 150\text{M}\Omega \times \text{km}$ | 1,000V / 50Hz       | 48nF / km   | 100 +/- 15 $\Omega$      | 100Mhz             | UL- Style 20963  | Yes          |
| Power $\leq 75\Omega \times \text{km}$ |   | for 1 min           | at 1,000Hz  | at 1Mhz to 100Mhz        | > 35dB / 100m      |                  |              |

## IP67 / 68 / 69K Field Kits



### Description:

IP67/68/69K RJ45  
field kit for self-assembly

### Part Number (Details)

**Y-ConKit - 2\***

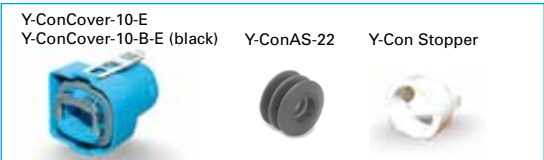
Series

See table below

*IP67/68/69K RJ45 Konfektionierungs-Kit zur Selbstmontage*

| Part Number      | Cover              | Terminator Cap | Plug         | Signal Contacts | Power Contacts |
|------------------|--------------------|----------------|--------------|-----------------|----------------|
| Y-ConKit-20      | Y-ConCover-10      | Y-ConAS-23     | Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConKit-20-B    | Y-ConCover-10-B    | Y-ConAS-23-B   | Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConKit-21      | Y-ConCover-10      | Y-ConAS-23     | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-21-B    | Y-ConCover-10-B    | Y-ConAS-23-B   | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-21-B-LT | Y-ConCover-10-B-LT | Y-ConAS-23-B   | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-23      | Y-ConCover-10      | Y-ConAS-23     | Y-ConPlug-31 | 6               | 2              |
| Y-ConKit-24      | Y-ConCover-10      | Y-ConAS-23     | Y-ConPlug-41 | 8               | 0              |
| Y-ConKit-24-B    | Y-ConCover-10-B    | Y-ConAS-23-B   | Y-ConPlug-41 | 8               | 0              |
| Y-ConKit-24-B-LT | Y-ConCover-10-B-LT | Y-ConAS-23-B   | Y-ConPlug-41 | 8               | 0              |
| Y-ConKit-26      | Y-ConCover-10      | Y-ConAS-23     | Y-ConPlug-51 | 8               | 2              |

## IP67 / 68 / 69K Field Kits (EMI)



### Description:

IP67/68/69K EMI RJ45  
Field kit for self-assembly

### Part Number (Details)

**Y-ConKit - 2\***

Series

See table below

*IP67/68/69K EMV RJ45 Konfektionierungs-Kit zur Selbstmontage*

| Part Number     | Cover             | Terminator Cap | Plug         | Signal Contacts | Power Contacts |
|-----------------|-------------------|----------------|--------------|-----------------|----------------|
| Y-ConKit-21-E   | Y-ConCover-10-E   | Y-ConAS-23     | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-21-B-E | Y-ConCover-10-B-E | Y-ConAS-23-B   | Y-ConPlug-21 | 4 (Ethernet)    | 2              |

## IP67 / 68 / 69K Flange Field Kits



### Description:

IP67/68/69K RJ45  
Flange field kit for  
self-assembly

### Part Number (Details)

**Y-ConKit - 3\***

Series

See table below

*IP67 RJ45 Flansch Konfektionierungs-Kit zur Selbstmontage*

| Part Number   | Flange           | Protection Cap |
|---------------|------------------|----------------|
| Y-ConKit-30   | Y-ConFlange-10   | Y-ConAS-24     |
| Y-ConKit-30-B | Y-ConFlange-10-B | Y-ConAS-24     |

## IP67 / 68 / 69K Field Kits



### Description:

IP67/68/69K RJ45 Field kit for self-assembly (metal)

*IP67/68/69K RJ45 Konfektionierungs Kit zur Selbstmontage*

### Part Number (Details)

**Y-ConKit - 4\***

Series

See table below

| Part Number | Cover         | Plug         | Signal Contacts | Power Contacts |
|-------------|---------------|--------------|-----------------|----------------|
| Y-ConKit-40 | Y-ConCover-40 | Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConKit-41 | Y-ConCover-40 | Y-ConPlug-21 | 4 (Ethernet)    | 2              |

## IP67 / 68 / 69K Metal Field Kits (EMI)



### Description:

IP67/68/69K EMI RJ45 Field kit for self-assembly (metal)

*IP67/68/69K EMV RJ45 Konfektionierungs-Kit zur Selbstmontage (Metalversion)*

### Part Number (Details)

**Y-ConKit - 4\***

Series

See table below

| Part Number   | Cover           | Plug         | Signal Contacts | Power Contacts |
|---------------|-----------------|--------------|-----------------|----------------|
| Y-ConKit-40-E | Y-ConCover-40-E | Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConKit-41-E | Y-ConCover-40-E | Y-ConPlug-21 | 4 (Ethernet)    | 2              |

## IP20 Field Kits



### Description:

IP20 RJ45 Field kit for self-assembly

*IP20 RJ45 Konfektionierungs-Kit zur Selbstmontage*

### Part Number (Details)

**Y-ConKit - 1\***

Series

See table below

| Part Number | Strain Relief | Plug         | Signal Contacts | Power Contacts |
|-------------|---------------|--------------|-----------------|----------------|
| Y-ConKit-10 | Y-ConAS-11    | Y-ConPlug-11 | 4 (Ethernet)    | 0              |
| Y-ConKit-11 | Y-ConAS-11    | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-12 | Y-ConAS-11    | Y-ConPlug-51 | 8               | 2              |
| Y-ConKit-13 | Y-ConAS-11    | Y-ConPlug-31 | 6               | 2              |
| Y-ConKit-14 | Y-ConAS-11    | Y-ConPlug-41 | 8               | 0              |

## IP20 Field Kits (EMI)



### Description:

IP20 EMI RJ45 Field kit for self-assembly (Metal)

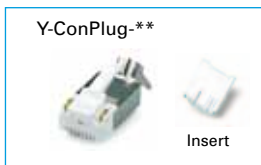
*IP20 EMI RJ45 Konfektionierungs-Kit zur Selbstmontage (Metalversion)*

### Part Number (Details)

**Y-ConKit - 1\***

Series

See table below



| Part Number | Protection Cap | Cover Type    | Plug Type    | Signal Contacts | Power Contacts |
|-------------|----------------|---------------|--------------|-----------------|----------------|
| Y-ConKit-15 | Y-ConAS-12     | Y-ConCover-20 | Y-ConPlug-21 | 4 (Ethernet)    | 2              |
| Y-ConKit-16 | Y-ConAS-12     | Y-ConCover-20 | Y-ConPlug-51 | 8               | 2              |
| Y-ConKit-17 | Y-ConAS-12     | Y-ConCover-20 | Y-ConPlug-11 | 4 (Ethernet)    | 0              |



### Part Number (Details)

Y-ConOutlet - \*\*

Series

Design Number  
(see table below)

| Part Number    | Cable Outlet Diameter Size |
|----------------|----------------------------|
| Y-ConOutlet-10 | 5.0 to 9.0mm               |
| Y-ConOutlet-11 | 6.0 to 13.0mm              |

#### Description:

**IP67 industrial outlets** for structured cabling, including Y-ConFlange-10-\* and cable fixing

*IP67-geschützte Anschlussdosen für strukturierte Verkabelung, mit montiertem Y-ConFlange-10-\* und Kabelverschraubung*

#### Material:

Housing Aluminium  
*Gehäuse*

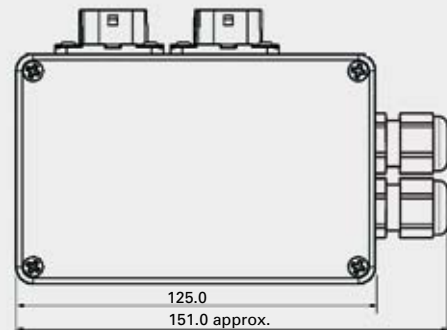
Flange PBT, UL94V-0  
*Flansch*

Cable gland Nylon 6, UL94V-0  
*Kabelverschraubung*

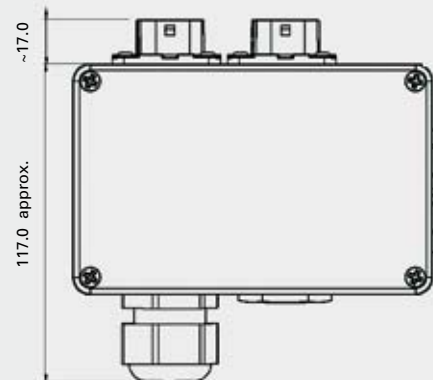
#### Specifications:

Operating Temp.: -20°C ~ +80°C  
*Betriebstemp.*

Y-ConOutlet-10



Y-ConOutlet-11



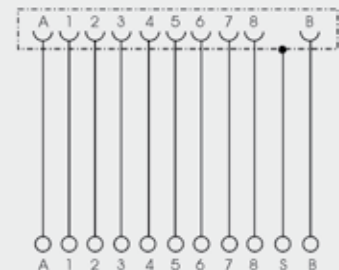
### Part Number (Details)

Y-ConTerminal -10

Series

Design Number

#### Wiring Diagram



**Cat 5 rail mounted terminal box** for cabinet wiring, RJ45 / cage clamp incl. Y-ConJack-22 (with power contacts)

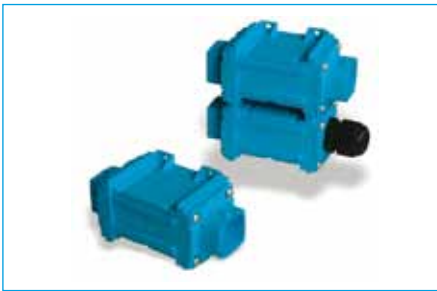
*Cat 5 Hutschienen-Kabelverteiler für die Schaltschrankverdrahtung. RJ45 / Klemmschluss inkl. Y-ConJack-22 (mit 2 Kontakten für die Stromversorgung)*

#### Specifications:

Operating Temp.: -20°C ~ +80°C  
*Betriebstemp.*

Durability: 1,000 mechanical cycles  
*Lebensdauer*

Current Rating: 2.1A @ 70°C  
*Bemessungsstrom (power contacts)*



## Part Number (Details)

Y-ConCoupler - \*\* \*

Series

Design Number  
(see table below)

No Mark = Blue B = Blac

| Part Number       | No. of Y-ConFlange-10*           | Colour |
|-------------------|----------------------------------|--------|
| Y-ConCoupler-10   | 2                                | Blue   |
| Y-ConCoupler-10-B | 2                                | Black  |
| Y-ConCoupler-11   | 1 (plus cable gland Ø5.0 -9.0mm) | Blue   |
| Y-ConCoupler-11-B | 1 (plus cable gland Ø5.0 -9.0mm) | Black  |

### Description:

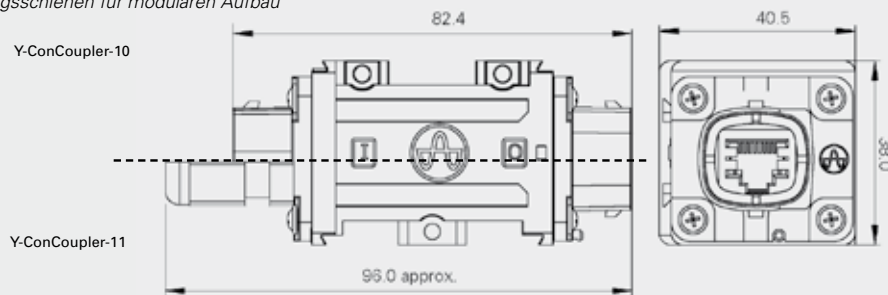
**IP67 coupler module** (w/o electronics) screw mount, guide rails for modular assembly

**IP67 Kupplungsmodul** (ohne Elektronik) mit Schraubhalterung und Führungsschienen für modularen Aufbau

**Material:** PBT, UL94V-0

### Specifications:

Operating Temp.: -30°C ~ +120°C  
Betriebstemp.



## Part Number (Details)

Y-ConSwitch-1U7P

Series

Design Number

### Description:

**IP67 Ethernet switch\***, 10BaseT / 100BaseTX, 7 data and 1 power port, unmanaged, Store/Forward, non-blocking, full or half duplex, auto-negotiated data control, screw mounted

**IP67 Ethernet-Schalter\***, 10BaseT/100BaseTX, 7 Datenports, 1 Stromversorgungsbuchse, unmanaged, Store / Forward, non-blocking, Voll- oder Halbduplexbetrieb, Auto-negotiated Data control, Wandbefestigung

\* i.a.w. IEEE 802.3  
IEEE 1588

### Material:

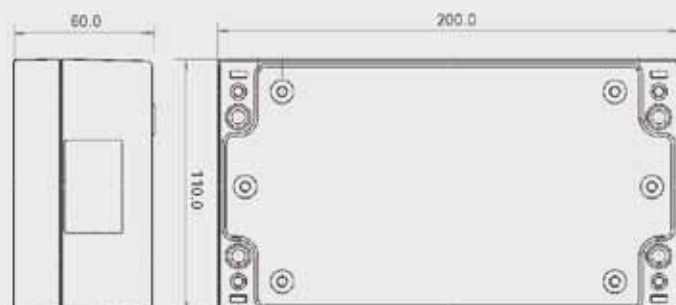
Housing Aluminium  
Gehäuse

Flange PBT, UL94V-0  
Flansch

### Specifications

Operating Temp.: -40°C ~ +85°C  
Betriebstemp.

Electrical specifications (on request)



Industrial Ethernet connected to sensors, actuators and encoders by **Y-Con RJ45 - M8/M12** converter cables.

M8/M12 features:

- Male and female versions 90° and 180°, PUR overmolded
- 360° shield for advanced shield connection
- Metal screw with vibration resistant locking

Industrial Ethernet verbunden mit Sensoren, Aktoren und Encodern über **Y-Con RJ45 - M8/M12** Verbindungskabel.

M8/M12 Merkmale:

- Stecker und Buchsen in 90° und 180° Versionen, PUR Umspritzung
- 360° Schirmanbindung für optimale Schirmeigenschaften
- Metallischer Drehverschluss mit vibrationsicherem Mechanismus

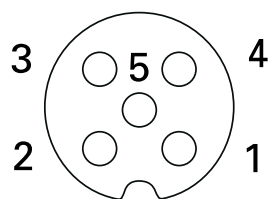


### Table of available versions for M8 / M12 products

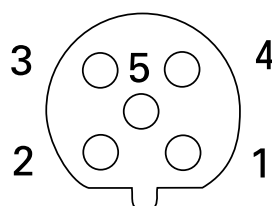
| Connector Type | Cable Mount | Panel Mount | Male | Female | 90° | 180° | Coding | Pin Count  | Shielded |
|----------------|-------------|-------------|------|--------|-----|------|--------|------------|----------|
| M8             | 0           |             | 0    |        |     | 0    |        | 3, 4       | 0        |
| M8             | 0           |             |      | 0      |     | 0    |        | 3, 4       | 0        |
| M8             | 0           |             | 0    |        | 0   |      |        | 3, 4       | 0        |
| M8             | 0           |             |      | 0      | 0   |      |        | 3, 4       | 0        |
| M12            | 0           |             | 0    |        |     | 0    | A      | 3, 4, 5, 8 | 0        |
| M12            | 0           |             |      | 0      |     | 0    | A      | 3, 4, 5, 8 | 0        |
| M12            | 0           |             | 0    |        | 0   |      | A      | 3, 4, 5, 8 | 0        |
| M12            | 0           |             |      | 0      | 0   |      | A      | 3, 4, 5, 8 | 0        |
| M12            | 0           |             | 0    |        |     | 0    | B, D   | 3, 4, 5    | 0        |
| M12            | 0           |             |      | 0      |     | 0    | B, D   | 3, 4, 5    | 0        |
| M12            | 0           |             | 0    |        | 0   |      | B, D   | 3, 4, 5    | 0        |
| M12            | 0           |             |      | 0      | 0   |      | B, D   | 3, 4, 5    | 0        |

| Connector Type | Cable Mount | Panel Mount | Male | Female | 90° | 180° | Coding | Pin Count  | Shielded |
|----------------|-------------|-------------|------|--------|-----|------|--------|------------|----------|
| M12            |             | 0           | 0    |        |     | 0    | A      | 3, 4, 5, 8 | 0        |
| M12            |             | 0           |      | 0      |     | 0    | A      | 3, 4, 5, 8 | 0        |
| M12            |             | 0           | 0    |        | 0   |      | A      | 3, 4, 5, 8 | 0        |
| M12            |             | 0           |      | 0      | 0   |      | A      | 3, 4, 5, 8 | 0        |
| M12            |             | 0           | 0    |        |     | 0    | B, D   | 3, 4, 5    | 0        |
| M12            |             | 0           |      | 0      |     | 0    | B, D   | 3, 4, 5    | 0        |
| M12            |             | 0           | 0    |        | 0   |      | B, D   | 3, 4, 5    | 0        |
| M12            |             | 0           |      | 0      | 0   |      | B, D   | 3, 4, 5    | 0        |

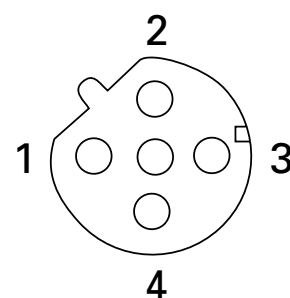
Max. cable diameter 8.50 / max. wire thickness 0.54mm<sup>2</sup>



A-Coding  
(IEC 60947-2)  
Female



B-Coding  
(INTERBUS and PROFIBUS)  
Female



D-Coding  
(4 pin Ethernet)  
Female

# Y-Con + M8 /M12 Series

## Part Number Example for RJ45 with M8 and M12

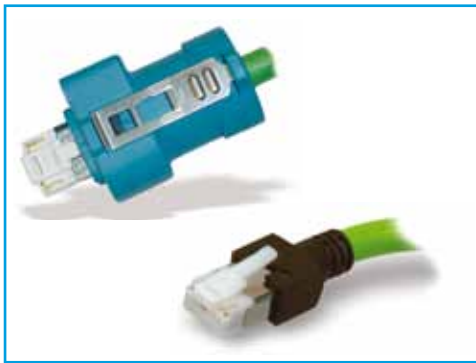
|        |   |                        |                    |   |                       |               |   |                    |   |                  |
|--------|---|------------------------|--------------------|---|-----------------------|---------------|---|--------------------|---|------------------|
| Y-ConC | - | R40                    | 6P                 | - | MA                    | 4D            | - | 2000               | - | A                |
| Series |   | RJ45 with 4+0 contacts | IP67 plastic cover |   | M8 male shielded 180° | 4 pins Code D |   | Cable length in mm |   | Wiring T568A 1:1 |

### Part Number (Details)

Y-ConC - \*\*\* \*\* - \*\* \* \* - \*\*\*\* - \*

|                  |   |    |   |    |   |   |   |      |   |   |
|------------------|---|----|---|----|---|---|---|------|---|---|
| Series           | ***   | ** | - | ** | * | * | - | **** | - | * |
| Interface Side 1 | <p>R40 = RJ45, 4+0 contacts<br/> R42 = RJ45, 4+2 contacts<br/> R60 = RJ45, 6+0 contacts<br/> R62 = RJ45, 6+2 contacts<br/> R80 = RJ45, 8+0 contacts<br/> R82 = RJ45, 8+2 contacts</p> <p>Protection side 1</p> <p>6P = IP67 plastic cover<br/> 6M = IP67 metal cover<br/> 2S = IP20 strain relief<br/> 2L = IP20Lock strain relief<br/> 2U = IP20Lock 90° moulded<br/> 2M = IP20 metal Cover-20<br/> CU = Customer specific</p> |    |   |    |   |   |   |      |   |   |
| Interface side 2 | <p>MA = M8 male shielded 180°<br/> MB = M8 female shielded 180°<br/> MC = M8 male shielded 90°<br/> MD = M8 female shielded 90°<br/> ME = M12 male shielded 180°<br/> MF = M12 female shielded 180°<br/> MG = M12 male shielded 90°<br/> MH = M12 female shielded 90°</p> <p>Pin counts 3, 4, 5 and 8</p> <p>Coding A, B and D</p>  |    |   |    |   |   |   |      |   |   |
| Length in mm     | 2000  |    |   |    |   |   |   |      |   |   |
| Wiring Plan      | A = T568A 1:1, B = T568A crossover, C = T568B 1 :1, D = T568B crossover, F = Custom   |    |   |    |   |   |   |      |   |   |





Building on the success of ProfiBus, the ProfiNet transmission standard is set to become one of the most important for industrial automation applications. The Y-Con ProfiNet connector employs piercing contacts, and the plug mating face conforms to the RJ45 standard. It can thereby be used with standard RJ45 jacks and is backwards compatible.

*Aufbauend auf dem Erfolg von ProfiBus ist der ProfiNet Übertragungsstandard dabei, einer der wichtigsten Verkabelungsstandards für Anwendungen der industriellen Automation zu werden. Der Y-Con ProfiNet Stecker verwendet Piercing-Kontakte. Das Steckgesicht ist identisch mit dem RJ45-Steckertyp. Somit ist er auch mit Standard RJ45-Buchsen anwendbar und abwärts kompatibel.*



Part Number Y-ConPlug-15

**Material:**

Plug PBT, UL94V-0  
Steckergehäuse

Shield: Nickel plated brass  
Schirm

Contact Area: 30µ" Au over Ni  
Kontakt

**Description:**

**RJ45 Cat 5 plug for use in ProfiNet** applications, with cable guide, shielding and cable crimp. 4 data contacts. Suitable for AWG22 cable with a lead  $\leq \varnothing 1.40\text{mm}$

***RJ45 Cat 5 Kabelstecker für ProfiNet-Anwendungen** mit Kabelführung, Schirmung und Kabelcrimp. 4 Datenkontakte. Passend zu AWG22-Kabel mit Einzelader  $\leq \varnothing 1,40\text{mm}$*

**Specifications:**

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

Durability: 1,500 mechanical cycles  
Lebensdauer



Part Number Y-ConCable-7

**Description:**

**100 Mbit, Cat 5e ES**, digital signal cable for use with Y-ConPlug-15 in ProfiNet applications, with 4 data lines,

***100 Mbps, Cat 5e ES**, Kabel für digitale Signale, für den Einsatz mit Y-Con-Plug15 bei ProfiNet-Anwendung mit 4 Datenleitungen,*

**Material:**

Jacket: PUR  
Mantel

Bending Radius: 49mm multiple turns  
Biegeradius 21mm single turn

Operating Temp.: -20°C ~ +80°C  
Betriebstemp.

Colour: Green  
Farbe

For more Y-ConCable-7 specifications see page 24



### Part Number (Details)

Y-ConUSB-Stick - 3

Series

3 = 2MB

| Part Number       | Memory Size |
|-------------------|-------------|
| *Y-ConUSB-Stick-3 | 2GB         |

### Description:

IP67/68/69K, USB stick with 2GB of flash memory.  
For use with Y-ConFlange-\*\*-\*

*IP67/68/69K USB-Stick mit 2GB Flash-Speicher.  
Für den Einsatz mit Y-ConFlange-\*\*-\**

### Material:

Body PBT, UL94V-0  
*Gehäuse*

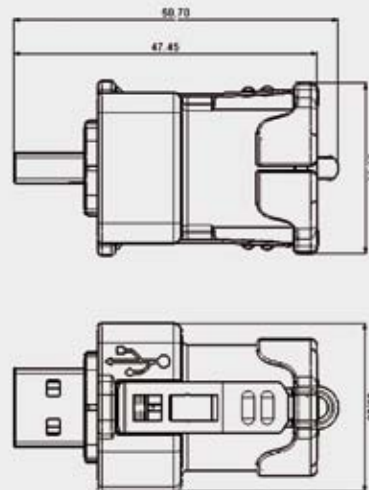
Seal FKM (Viton®)  
*Dichtung*

Moulding Macromelt, halogen free  
*Vergussmasse*

Fixing clips Stainless Steel  
*Rasthaken*

Colour: Blue  
*Farbe*

### Outline Dimensions



### Specifications:

Operating Temp.: -25°C ~ +80°C  
*Betriebstemp.*

\* For minimum order quantity please contact Yamaichi



Part Number (Details)

Y-ConFlange - 10 - \*

|                |           |
|----------------|-----------|
| Series         |           |
| Design Number  |           |
| No Mark = Blue | B = Black |

| Part Number      | Colour |
|------------------|--------|
| Y-ConFlange-10   | Blue   |
| Y-ConFlange-10-B | Black  |

Description:

Universal **mounting flange** with an integrated 2C seal (also in the screw area) to ensure IP6\* protection when mounted with Y-ConCover-10-\*

Universeller **Gehäuseflansch** mit integrierter 2K-Dichtung (auch im Schraubbereich). Damit sind für Y-ConCover-10-\* im montierten Zustand die Schutzarten IP6\* gewährleistet

Material:

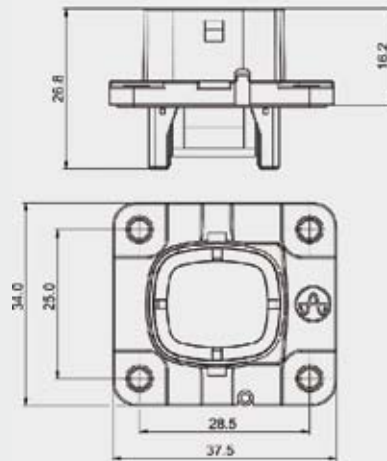
Flange Body PBT, UL94V-0  
Flanschgehäuse

Flange Seal TPE, UL94 HB  
Flanschdichtung

Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

Outline Dimensions



Part Number (Details)

Y-ConUSB-Adapter - \*\*

|                   |  |
|-------------------|--|
| Series            |  |
| Design Number     |  |
| (see table below) |  |

| Part Number         | Adapter Use           |
|---------------------|-----------------------|
| Y-ConUSB-Adapter-10 | for all USB-A modules |
| Y-ConUSB-Adapter-20 | for all USB-B modules |

Description:

**Y-ConFlange adapter modules** for use with Y-ConUSB-PCB-\*\* Jacks

**Y-ConFlange Adaptergehäuse** für die Y-ConUSB-PCB-\*\* Buchsen

Material: PBT, black

Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.

Part Number Y-ConUSB-PCB-11

**USB-A Hi-Speed PCB mounted jack with PCB terminals<sup>1)</sup>**, including shield connection and fixing for cable straps. For use with Y-ConUSB-Adapter-10 and Y-ConFlange-10-\*

**USB-A Hi-Speed Buchse auf PCB mit Leiterplattenklemme<sup>1)</sup>** inkl. Schirmanschluss und Bohrung für Kabelbinder. Für den Einsatz mit Y-ConUSB-Adapter-10 und Y-ConFlange-10-\*

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.



<sup>1)</sup> cable according to Y-Con recommendation - on request  
Kabellänge gemäß Y-Con Empfehlung - auf Anfrage

Part Number Y-ConUSB-PCB-12

**USB-A / USB-A Hi-Speed PCB mounted coupler jack**, for use with Y-ConUSB-Adapter-10 and Y-ConFlange-10-\*

**USB-A / USB-A Hi-Speed Buchse auf PCB.** Für den Einsatz mit Y-ConUSB-Adapter-10 und Y-ConFlange-10-\*

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.



Part Number Y-ConUSB-PCB-21

**USB-B Hi-Speed PCB mounted jack with PCB terminals<sup>1)</sup>**, including shield connection and fixing for cable straps. For use with Y-ConUSB-Adapter-20 and Y-ConFlange-10-\*

**USB-B Hi-Speed Buchse auf PCB mit Leiterplattenklemme<sup>1)</sup>** inkl. Schirmanschluss und Bohrung für Kabelbinder. Für den Einsatz mit Y-ConUSB-Adapter-20 und Y-ConFlange-10-\*

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.



<sup>1)</sup> cable according to Y-Con recommendation - on request  
Kabellänge gemäß Y-Con Empfehlung - auf Anfrage

Part Number Y-ConUSB-PCB-22

**USB-B / USB-A Hi-Speed PCB mounted coupler jack**, for use with Y-ConUSB-Adapter-20 and Y-ConFlange-10-\*

**USB-B / USB-A Hi-Speed Buchse auf PCB.** Für den Einsatz mit Y-ConUSB-Adapter-20 und Y-ConFlange-10-\*

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.



Part Number Y-ConUSB-PCB-32

**USB-B / USB-B Hi-Speed PCB mounted coupler jack**, for use with Y-ConUSB-Adapter-20 and Y-ConFlange-10-\*

**USB-B / USB-B Hi-Speed Buchse auf PCB.** Für den Einsatz mit Y-ConUSB-Adapter-20 und Y-ConFlange-10-\*

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.



**Description:**

**Y-Con USB-A**, IP67 / 68 / 69K and IP20 cable assembly in various configurations

*Y-Con USB-A, IP67 / 68 / 69K und IP20 Kabelkonfektion in verschiedenen Konfigurationen*

**Material:**

Cable Jacket: PUR, black  
Mantel

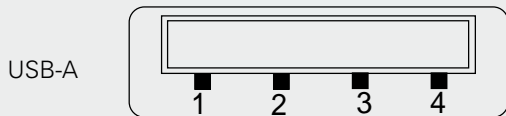
**Specifications:**

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.

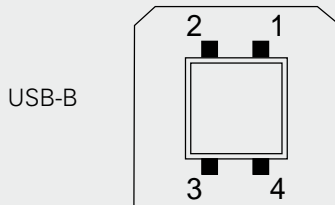
Other cable lengths and raw cable specifications on request  
Andere Kabellängen und Kabelspezifikation auf Anfrage erhältlich



**Wiring Information (standard)**



| Pin No. | Name | Color | Notes                 |
|---------|------|-------|-----------------------|
| 1       | VBUS | Red   | Power                 |
| 2       | D-   | White | Data - (Twisted pair) |
| 3       | D+   | Green | Data + (Twisted pair) |
| 4       | GND  | Black | Ground                |



| Pin No. | Name | Color | Notes                 |
|---------|------|-------|-----------------------|
| 1       | VBUS | Red   | Power                 |
| 2       | D-   | White | Data -                |
| 3       | D+   | Green | Data + (Twisted pair) |
| 4       | GND  | Black | Ground                |

**Description:**

**Y-Con USB-B**, IP67 / 68 / 69K and IP20 cable assembly in various configurations

*Y-Con USB-B, IP67 / 68 / 69K und IP20 Kabelkonfektion in verschiedenen Konfigurationen*

**Material:**

Cable Jacket: PUR, black  
Mantel

**Specifications:**

Operating Temp.: -25°C ~ +80°C  
Betriebstemp.

Other cable lengths and raw cable specifications on request  
Andere Kabellängen und Kabelspezifikation auf Anfrage erhältlich



# Y-ConUSB Cable Assemblies

## Part Number Example for USB Cable Assemblies

|        |   |                       |                    |   |                       |                         |   |              |   |          |
|--------|---|-----------------------|--------------------|---|-----------------------|-------------------------|---|--------------|---|----------|
| Y-ConC | - | UA4                   | 6P                 | - | UB                    | 2S                      | - | 2000         | - | E        |
| Series |   | USB A with 4 contacts | IP67 plastic cover |   | USB B with 4 Contacts | IP20 with strain relief |   | Length in mm |   | Standard |

### Part Number (Details)

Y-ConC - \*\*\* \*\* - \*\* \*\* - \*\*\*\*\* - \*

|                   |   |    |   |    |    |   |       |   |   |
|-------------------|---|----|---|----|----|---|-------|---|---|
| Series            | ***   | ** | - | ** | ** | - | ***** | - | * |
| Interface Side 1  | UA4 = USB A, 4 contacts<br>UB4 = USB B, 4 contacts  |    |   |    |    |   |       |   |   |
| Protection Side 1 | 6P = IP67 plastic cover<br>2S = IP20 strain relief<br>2F = IP20 flat<br>2L = IP20Lock strain relief                           |    |   |    |    |   |       |   |   |
| Interface Side 2  | UA4 = USB A, 4 contacts<br>UB4 = USB B, 4 contacts<br>CU = customer specific<br>FE = free end (cut only)                      |    |   |    |    |   |       |   |   |
| Protection Side 2 | 6P = IP67 plastic cover<br>2S = IP20 strain relief<br>2F = IP20 flat<br>2L = IP20Lock strain relief<br>CU = customer specific |    |   |    |    |   |       |   |   |
| Length in mm      |   |    |   |    |    |   |       |   |   |
| Wiring Plan       | E = Standard USB    F = Custom  |    |   |    |    |   |       |   |   |



Part Number (Details)

Y-ConC - IE6 \*\* - \*\* \*\* - \*\*\*\* - E

|                   |  |
|-------------------|--|
| Series            | Y-ConC   |
| Interface side 1  | IE6 = IEEE, 6 contacts   |
| Protection side 1 | 6P = IP67 plastic cover<br>2S = IP20 strain relief                           |
| Interface side 2  | IE = IEEE<br>CU = customer specific<br>FE = free end (cut only)              |
| Protection side 2 | 6P = IP67 plastic cover<br>2S = IP20 strain relief<br>CU = customer specific |
| Length in mm      |  |
| Wiring Plan       | E = Standard IEEE F = Custom   |

Description:

**IEEE1394b (800 Mbit/s) cable assembly**  
Standard length = 2.0 meters.

**IEEE1394b (800 Mbit/s) Kabelkonfektionen**  
Standardlänge = 2.0 Meter.

Other cable lengths and cable specifications available on request  
*Andere Kabellängen und Kabelspezifikation auf Anfrage erhältlich*

Material:

Jacket: PUR, black  
Mantel

Specifications:

Operating Temp.: -10°C ~ +70°C  
Betriebstemp.





## Part Number (Details)

Y-ConFlange - 10 \*

Series

Design Number

No Mark = Blue B = Black

| Part Number      | Colour |
|------------------|--------|
| Y-ConFlange-10   | Blue   |
| Y-ConFlange-10-B | Black  |

### Description:

Universal **mounting flange** with an integrated 2C seal (also in the screw area) to ensure IP6\* protection when mounted with Y-ConCover-10-\*

(see page 6 for more details)

Universeller **Gehäuseflansch** mit integrierter 2K-Dichtung (auch im Schraubbereich), damit sind für Y-ConCover-10-\* im montierten Zustand die Schutzarten IP6\* gewährleistet



## Part Number (Details)

Y-ConIEEE - Adapter - 10

Series

Design Number

### Description:

**Y-ConIEEE adapter** module for use with Y-ConFlange-10-\* and Y-ConIEEE-PCB-11

**Y-ConIEEE Adaptergehäuse** für den Einsatz mit Y-ConFlange-10-\* und Y-ConIEEE-PCB-11

**Material:** PBT, black UL94V-0

### Specifications:

Operating Temp.: -40°C ~ +120°C  
Betriebstemp.



## Part Number (Details)

Y-ConIEEE - PCB-11

Series

Design Number

### Description:

**IEEE1394b PCB mounted jack** with PCB terminals, incl. shield connection and fixing for cable straps. For use with Y-ConIEEE-Adapter-10 and Y-ConFlange-10-\*

**IEEE1394b Buchse auf PCB mit Leiterplattenklemme** inkl. Schirmanschluss und Bohrung für Kabelbinder. Für den Einsatz mit Y-ConIEEE-Adapter-10 und Y-ConFlange-10-\*

### Specifications:

Operating Temp.: -10°C ~ +70°C  
Betriebstemp.

For further details please contact Yamaichi



| Test                         | Requirement   | Standards                     |
|------------------------------|---|-------------------------------|
| Vibration                    | 10-500Hz, 50g, no contact interrupt >30ns   | DIN IEC 60068-2-6             |
| Shock                        | 1 mio. shocks at 50g  | –                             |
| Mating / Unmating Force IP20 | < 20N   | DIN EN 60603-7                |
| Effectiveness of lock        | 50N for 60sec   | DIN EN 60603-7                |
| Rapid change of temperature  | -40 ~ +85°C for 100 cycles  | DIN IEC 60068-2-14            |
| Dry heat                     | 80°C + 120°C for 1,000 hrs  | DIN IEC 60068-2-2             |
| Damp heat                    | 40°C, 93% humidity for 56 days  | DIN IEC 60068-2-78            |
| Industrial atmosphere        | 4 gases for 10 days   | DIN IEC 60068-2-60 (method 4) |
| Electrical load              | 1.5A for 1,000 hrs  | DIN IEC 60512-5               |
| Current rating               | 2.1A at 70°C  | DIN IEC 60512-5-2             |
| Strain relief                | 80N static + 30N dynamic  | DIN 57472-625                 |
| Drag Chain                   | min. 100,000 up to max. 1 mio. cycles   | –                             |
| Ultraviolet radiation        | 40°C, 16 hrs at 700W + 16 hrs at 0W   | DIN IEC 60068-2-9             |
| Salt spray                   | 48 hrs  | DIN IEC 60068-2-11            |
| Dust test                    | 20mbar for 8 hrs  | DIN EN60068-2-68              |
| IP67                         | 0.1 bar (= 1.0m depth) for 30 minutes   | DIN 40050-9                   |
| IP68                         | 0.1 bar (= 1.0m depth) for 48 hrs   | DIN 40050-9                   |
| IP69K                        | High pressure water jet (80 bar)<br>from 4 positions x 30 seconds<br>80°C water temperature | DIN 40050-9                   |

## Part Number Details

|                                      |               |                            |    |                           |           |
|--------------------------------------|---------------|----------------------------|----|---------------------------|-----------|
| Y-ConAS-11 .....                     | 8, 27         | Y-ConIP20Lock-Clip-1 ..... | 11 | Y-ConKit-10 .....         | 27        |
| Y-ConAS-12 .....                     | 8, 10, 27     | Y-ConIP20Lock-Clip-2 ..... | 11 | Y-ConKit-11 .....         | 27        |
| Y-ConAS-13 .....                     | 14            | Y-ConIP20Lock-Clip-3 ..... | 11 | Y-ConKit-12 .....         | 27        |
| Y-ConAS-21 .....                     | 2, 3, 4, 5    | Y-ConIP20Lock-Clip-4 ..... | 11 | Y-ConKit-13 .....         | 27        |
| Y-ConAS-23 .....                     | 26            | Y-ConIP20Lock-Clip-5 ..... | 11 | Y-ConKit-14 .....         | 27        |
| Y-ConAS-23-B .....                   | 26            | Y-ConIP20Lock-Clip-6 ..... | 11 | Y-ConKit-15 .....         | 27        |
| Y-ConAS-24 .....                     | 6, 26         | Y-ConIP20Lock-Clip-7 ..... | 11 | Y-ConKit-16 .....         | 27        |
| Y-ConAS-24-LT .....                  | 6             | Y-ConJack-11 .....         | 14 | Y-ConKit-17 .....         | 27        |
| Y-ConAS-25 .....                     | 6, 7          | Y-ConJack-11-3C-1 .....    | 18 | Y-ConKit-20 .....         | 26        |
| Y-ConCable-1 .....                   | 24            | Y-ConJack-11-3C-2 .....    | 18 | Y-ConKit-20-B .....       | 26        |
| Y-ConCable-2 .....                   | 24            | Y-ConJack-11-3C-3 .....    | 18 | Y-ConKit-21 .....         | 26        |
| Y-ConCable-3 .....                   | 24            | Y-ConJack-11-3C-4 .....    | 18 | Y-ConKit-21-B .....       | 26        |
| Y-ConCable-4 .....                   | 24            | Y-ConJack-11-3C-5 .....    | 18 | Y-ConKit-21-B-E .....     | 26        |
| Y-ConCable-7 .....                   | 24, 32        | Y-ConJack-11-3C-6 .....    | 18 | Y-ConKit-21-B-LT .....    | 26        |
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