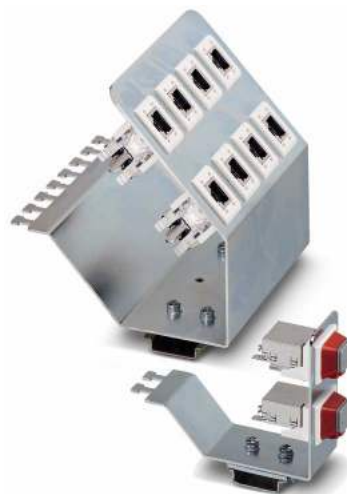


## FL PF/SEC 2/8TX

### Patch Box and Patch Angle for Ethernet Installation



### AUTOMATIONWORX

#### Data Sheet

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#### Description

- The Factory Line patch fields (patch angle / box) are Ethernet connection fields replacing the on-site assembly of RJ45 connectors.
- The field cabling is connected to the patch field without using tools. Pre-assembled patch cables realize the connection to the termination device or distributor.
- The patch field can either be latched onto a DIN rail or it can be mounted directly onto a panel.
- When first put into operation, it is possible to retrofit unoccupied slots without interrupting operation of the installed ports.
- In the lower part of the patch angles, cable ducts are integrated so that each installed cable can be clearly routed and strain-relieved using cable clips.
- All components meet the latest requirements of international standards. Especially with regard to the "4-conductor channel" in industrial environments where more than 2 passive coupling points are realized between 2 active components, full compatibility is given.
- Security functions on layer 1 can be realized via accessories included in this shipment. If required, further accessories are available as (FL SEC PAC 4TX) set for four RJ45 ports.
- Optionally, any port can be retrofitted so that SCRJ connections can be patched. Here, the SCRJ patch (see technical data / ordering data) is required.

#### Applications

The FL PF SEC 2/8TX is a patch field for industrial applications. The robust patch field can be mounted onto a DIN rail or directly onto a level surface without using any tools.



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A conversion table is available on the Internet at  
[www.download.phoenixcontact.com/general/7000\\_en\\_00.pdf](http://www.download.phoenixcontact.com/general/7000_en_00.pdf).



This data sheet is valid for the following products listed on the following page:

## Ordering Data

### Products

Description	Type	Order No.	Pcs./Pkt.
Patch angle with 2 ports in Cat5E	FL PF 2TX CAT5E	28 91 16 5	1
Patch angle with 8 ports in Cat5E	FL PF 8TX CAT5E	28 91 17 8	1
Patch angle with 2 ports in Cat6	FL PF 2TX CAT6	28 91 06 8	1
Patch angle with 8 ports in Cat6	FL PF 8TX CAT6	28 91 07 1	1
Patch angle with security elements for 2 ports in CAT5E	FL PF SEC 2TX	28 32 68 7	1
Patch angle with security elements for 8 ports in CAT5E	FL PF SEC 8TX	28 32 69 0	1

### Accessories

Description	Type	Order No.	Pcs./Pkt.
Security set for 4 RJ45 ports	FL SEC PAC 4TX	28 32 86 5	4
Using an SCRJ patch	VS SCRJ-GOF-KU	16 54 35 8	1
<b>Gray</b> RJ45 connector set for linear cable	FL PLUG RJ45 GR/2	27 44 85 6	2
<b>Green</b> RJ45 connector set for crossed cable	FL PLUG RJ45 GN/2	27 44 57 1	2
Universal end clamp	E/NS 35 N	08 00 88 6	50
Assembly tool for RJ45 connector	FL CRIMPTOOL	27 44 86 9	1
Startup / diagnostic software - Factory Manager	FL SWT	28 31 04 4	1
Network monitoring with HMI/SCADA systems	FL SNMP OPC SERVER	28 32 16 6	1
Patch box 8 x RJ45 CAT5e, pre-assembled, can be retrofitted	FL PBX 8TX	28 32 49 6	1
Patch box 6 x RJ45 CAT5e and 4 SC-RJ, glass pre-assembled, can be retrofitted	FL PBX 6TX/4FX	28 32 50 6	1
SCRJ patch cable on SC duplex 1 m	VS-PC-2X-GOD-50-SCRJ/SCDU-1	16 54 40 0	1
Patch cable, CAT 5, pre-assembled, 0.3 m long	FL CAT5 PATCH 0,3	28 32 25 0	10
Patch cable, CAT 5, pre-assembled, 0.5 m long	FL CAT5 PATCH 0,5	28 32 26 3	10
Patch cable, CAT 5, pre-assembled, 1.0 m long	FL CAT5 PATCH 1,0	28 32 27 6	10
Patch cable, CAT 5, pre-assembled, 1.5 m long	FL CAT5 PATCH 1,5	28 32 22 1	10
Patch cable, CAT 5, pre-assembled, 2.0 m long	FL CAT5 PATCH 2,0	28 32 28 9	10
Patch cable, CAT 5, pre-assembled, 3.0 m long	FL CAT5 PATCH 3,0	28 32 29 2	10
Patch cable, CAT 5, pre-assembled, 5.0 m long	FL CAT5 PATCH 5,0	28 32 58 0	10
Patch cable, CAT 5, pre-assembled, 7.5 m long	FL CAT5 PATCH 7,5	28 32 61 6	10
Patch cable, CAT 5, pre-assembled, 10.0 m long	FL CAT5 PATCH 10	28 32 62 9	10

## Technical Data

### General Data

Transmission speed	100 Mbps, up to 1,000 Mbps for CAT6
Connection cable	Twisted pair, shielded, CAT5 or better
Transmission length	80 m plus 2 x 10 m patch cable
Connector	RJ45
Cable cross section	10 mm, max.
Admissible wire diameter	0.5 up to 0.65 mm
Admissible insulation diameter	0.8 up to 1.6 mm
Insertion/withdrawal cycles	More than 750
Connection cycles of the installation cable	More than 20
Dimensions in mm (W x H x D)	38 x 115 x 87 (FL PF SEC 2TX) 124 x 130 x 138 (FL PF SEC 8TX) 35 x 115 x 87 (FL PF 2TX CAT5e) 35 x 115 x 87 (FL PF 2TX CAT6) 124 x 130 x 138 (FL PF 8TX CAT6) 124 x 130 x 138 (FL PF SEC 8TX)

## Security Elements

With the help of the security accessories, the security can be realized on layer 1. Security accessories prevent the disconnection of a patch cable as well as unauthorized access onto non-occupied ports by unauthorized persons. Plugged connections and covers can only be removed by authorized persons.

### Installation and Mounting/Removal

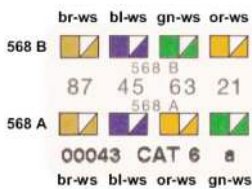
Install the patch field on a clean DIN rail. End clamps can be mounted on both sides of the module to stop the modules from slipping on the DIN rail.

#### Mounting:

- Place the module onto the DIN rail from above. The upper holding keyway of the module must be hooked onto the top edge of the DIN rail.
- Push the module from the front towards the mounting surface.
- Once the module has been snapped on properly, check that it is fixed securely on the DIN rail.

#### Terminal Assignment

Color coding of the IDC terminal blocks at the RJ45 sockets.



	D	E	F	I
br	Braun	Brown	Brun	Marrone
bl	Blau	Blue	Bleu	Blu
or	Orange	Orange	Orange	Arancio
gn	Grün	Green	Vert	Verde
ws	Weiß	White	Blanc	Bianco

Figure 1 Color coding of the sockets

The scope of supply of the FL PF SEC 2/8TX patch fields also includes the security accessories. Further patch fields and boxes can be retrofitted using the FL SEC PAC 4TX set. This set contains all necessary elements to secure 4 TX ports.

#### Removal:

- Pull the module towards you, away from the mounting surface.
- Lift the module from the DIN rail.

#### Conductor Pair Preparation

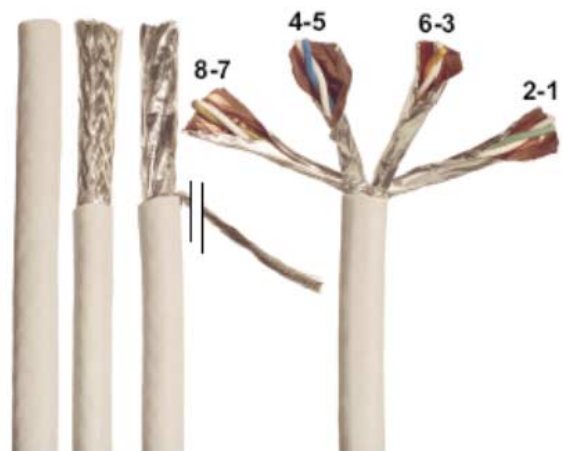


Figure 2 Conductor pair preparation

### Connecting the Conductors to the IDC Terminal Blocks

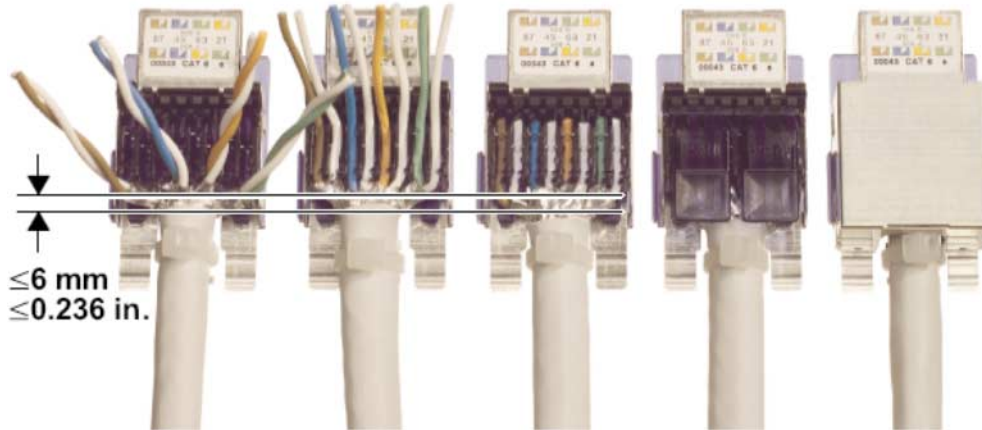


Figure 3 Connecting the conductors to the IDC terminal blocks

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