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# FL CAT5/6 PATCH

## Factory Line Ethernet Patch Cable AUTOMATIONWORX

Data Sheet  
7171\_en\_02



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### 1 Description

Pre-assembled Cat... patch cables with new bend protection are available in various lengths from 0.3 m to 20 m. They are suitable for fast installation of switches and hubs from the Factory Line product range at patch fields or termination devices within a control cabinet. With their high, seamless cabling quality for active and passive infrastructures, halogen-free FL Cat ... patch cables meet the requirements of the relevant cabling standards and the lead-free criterion according to EU directives.

FL patch cables feature extremely stable and uniform transmission values. These are achieved through the use of IDC terminal block connections, which have a considerably greater volume resistance compared to penetrating contacts, and as a result of the round strain relief, which does not change the cable geometry.

A wide range of accessories is available for FL patch cables. The FL patch cable can be color-coded using CCODE elements in order to more easily identify network services, secured with SAFE CLIP to prevent unintentional disconnection or mechanically locked using PATCH GUARD so that disconnection is only possible using a key. The FL SPOUT in conjunction with the FL FLANGE provides protection against harsh environmental conditions at the FL PATCH fields or SFN switches.

### 2 Features of Cat. 5e Cables

- Meet the Cat. 5e requirements of the relevant cabling standard (ISO/IEC 11801, EN 50173, EN 50168, and EIA/TIA 568A/B).
- Achieve the new test specifications of EIA/TIA 568A-B.2-1 (Patch Cord Qualification Test).
- Assembled using RJ45 connectors according to IEC 60603-7.
- Color coding of the FL PATCH cable using FL CCODE elements to identify the transmission path.
- Extended bend protection function according to ANSI/TIA/EIA 568A-B.1-1.
- Labeling or color coding supported.

### 3 Features of Cat. 6 Cables

- Meet the requirements of Cat. 6 Class E (250 MHz) according to the standards of ISO/IEC 11801 2nd Edition.
- Using the Cat. 6 connection module for FL PATCH fields, achieve Cat. 6 values of component standard IEC 60603-7-4 and IEC 60603-7-5.
- Assembled using RJ45 connectors according to IEC 60603-7.
- The transmission quality of jumpering cables is tested individually.
- Can also be used as Cat. 5e (backwards compatible).
- Color coding of the FL PATCH cable using FL CCODE elements to identify the transmission path.
- Extended bend protection function (ANSI/TIA/EIA 568A-B.1-1).
- Labeling and color coding supported.



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

## 4 Ordering Data

### Cat. 5e Cables

Description	Type	Order No.	Pcs./Pck.
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>0.24 m</b>	FL CAT5 PATCH 0,24	2700301	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>0.3 m</b>	FL CAT5 PATCH 0,3	2832250	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>0.5 m</b>	FL CAT5 PATCH 0,5	2832263	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>1.0 m</b>	FL CAT5 PATCH 1,0	2832276	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>1.5 m</b>	FL CAT5 PATCH 1,5	2832221	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>2.0 m</b>	FL CAT5 PATCH 2,0	2832289	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>3.0 m</b>	FL CAT5 PATCH 3,0	2832292	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>5.0 m</b>	FL CAT5 PATCH 5,0	2832580	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>7.5 m</b>	FL CAT5 PATCH 7,5	2832616	10
Patch cable, <b>Cat. 5</b> , pre-assembled, shielded, SF/UTP 4P, LSFROH, 1:1 (line), <b>10.0 m</b>	FL CAT5 PATCH 10,0	2832629	10

### Cat. 6 Cables

Description	Type	Order No.	Pcs./Pck.
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>0.3 m</b>	FL CAT6 PATCH 0,3	2891181	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>0.5 m</b>	FL CAT6 PATCH 0,5	2891288	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>1.0 m</b>	FL CAT6 PATCH 1,0	2891385	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>1.5 m</b>	FL CAT6 PATCH 1,5	2891482	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>2.0 m</b>	FL CAT6 PATCH 2,0	2891589	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>3.0 m</b>	FL CAT6 PATCH 3,0	2891686	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>5.0 m</b>	FL CAT6 PATCH 5,0	2891783	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>7.5 m</b>	FL CAT6 PATCH 7,5	2891880	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>10.0 m</b>	FL CAT6 PATCH 10,0	2891877	10
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>12.5 m</b>	FL CAT6 PATCH 12,5	2891369	5
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>15.0 m</b>	FL CAT6 PATCH 15,0	2891372	5
Patch cable, <b>Cat. 6</b> , pre-assembled, shielded, SF/FTP 4P, LSFROH, 1:1 (line), <b>20.0 m</b>	FL CAT6 PATCH 20,0	2891576	5

### Accessories

Description	Type	Order No.	Pcs./Pck.
Security element for FL CAT ... PATCH ...	FL PATCH SAFE CLIP	2891246	20
Lockable security element for FL PATCH ... (each pack includes a key)	FL PATCH GUARD	2891424	20
Color coding for FL PATCH GUARD, <b>black</b>	FL PATCH GUARD CCODE BK	2891136	12
Color coding for FL PATCH GUARD, <b>blue</b>	FL PATCH GUARD CCODE BU	2891233	12
Color coding for FL PATCH GUARD, <b>green</b>	FL PATCH GUARD CCODE GN	2891631	12
Color coding for FL PATCH GUARD, <b>orange</b>	FL PATCH GUARD CCODE OG	2891330	12
Color coding for FL PATCH GUARD, <b>red</b>	FL PATCH GUARD CCODE RD	2891738	12

## Accessories (Continued)

Description	Type	Order No.	Pcs./Pck.
Color coding for FL PATCH GUARD, <b>turquoise</b>	FL PATCH GUARD CCODE TQ	2891534	12
Color coding for FL PATCH GUARD, <b>violet</b>	FL PATCH GUARD CCODE VT	2891835	12
Color coding for FL PATCH GUARD, <b>yellow</b>	FL PATCH GUARD CCODE YE	2891437	12
Key for FL PATCH GUARD	FL PATCH GUARD KEY	2891521	1
Color coding for FL CAT ... PATCH ..., <b>black</b>	FL PATCH CCODE BK	2891194	20
Color coding for FL CAT ... PATCH ..., <b>brown</b>	FL PATCH CCODE BN	2891495	20
Color coding for FL CAT ... PATCH ..., <b>blue</b>	FL PATCH CCODE BU	2891291	20
Color coding for FL CAT ... PATCH ..., <b>green</b>	FL PATCH CCODE GN	2891796	20
Color coding for FL CAT ... PATCH ..., <b>gray</b>	FL PATCH CCODE GY	2891699	20
Color coding for FL CAT ... PATCH ..., <b>red</b>	FL PATCH CCODE RD	2891893	20
Color coding for FL CAT ... PATCH ..., <b>violet</b>	FL PATCH CCODE VT	2891990	20
Color coding for FL CAT ... PATCH ..., <b>yellow</b>	FL PATCH CCODE YE	2891592	20
IP54 protection with color coding for SFN switches and patch cables, <b>blue</b>	FL IP 54 FLANGE BU	2891628	10
IP54 protection with color coding for SFN switches and patch cables, <b>green</b>	FL IP 54 FLANGE GN	2891822	10
IP54 protection with color coding for SFN switches and patch cables, <b>red</b>	FL IP 54 FLANGE RD	2891932	10
IP54 protection with color coding for SFN switches and patch cables, <b>white</b>	FL IP 54 FLANGE WH	2891961	10
IP54 protection with color coding for SFN switches and patch cables, <b>yellow</b>	FL IP 54 FLANGE YE	2891725	10
IP54 protection for patch cables, used in conjunction with FL IP 54 FLANGE ...	FL IP 54 SPOUT	2891440	10
Assembly tool for FL IP 54	FL IP 54 ASSEMBLY TOOL	2891547	10

## 5 Technical Data

General Data	Cat. 5	Cat. 6
Connector housing	UL 94-V0 polycarbonate (PC)	UL 94-V0 polycarbonate (PC)
Contacts	Bronze (CuSn6)	Bronze (CuSn6)
Contact refinement	1.2 µm gold	1.2 µm gold
Shield	Hot tin-plated	Hot tin-plated
Electrical Properties		
Nominal current	1.5 A (maximum) at 25°C	1.5 A (maximum) at 25°C
Nominal voltage	150 V <sub>rms</sub> (maximum)	150 V <sub>rms</sub> (maximum)
Dielectric strength	1000 V <sub>rms</sub> , 1 min. (60 Hz)	1000 V <sub>rms</sub> , 1 min. (60 Hz)
Insulation resistance	500 MΩ (minimum)	500 MΩ (minimum)
Ambient Conditions		
Operating temperature	-10°C to +60°C	-10°C to +60°C
Mechanical Properties - Connector		
Tolerance and Dimensions	Meets IEC 60603-7	Meets IEC 60603-7
Mechanical Properties - Cable		
Inner conductor		
Material	Copper litz wire	Copper litz wire
Cross-section	0.14 mm <sup>2</sup> (26 AWG)	0.14 mm <sup>2</sup> (26 AWG)
Conductor pairs		
Number	4	4
Shield per pair	No	Al/polyester foil
Outer shield	Cu shielding + Al/polyester foil	Cu shielding
Outer cable sheath		
Material	LSFROH	LSFROH
Diameter	5.5 mm	6.0 mm
Bending radius	30 mm	30 mm