

## Twisted Pair Patch Cable - Category 6<sub>A</sub> Class E<sub>A</sub> - S/FTP - PUR



✓ PUR (Polyurethan)

✓ Yellow colored plug for CAT 6<sub>A</sub>

✓ Perfect for industrial environment

✓ Oil- and UV resistant

### Abstract

CAT 6<sub>A</sub> Class E<sub>A</sub>, S/FTP, Twisted Pair Patch Cable, Cu, PUR, Draka UC900 SS raw cable, 2x Hirose TM31 plug

### Features

- 2x RJ45 plugs (8P8C); Hirose TM31
- Boots with kink protection, strain relief and latch protection
- Raw cable DRAKA UC 900 SS CAT 7 PUR
- Conductor: Cu (Copper)
- Shielding: S/FTP (complete braid shielding, pairs foil shielded)
- Structure: 4x 2 AWG 26/7, twisted pair
- Sheath: PUR (Polyurethan)
- Color: Red
- PoE+ ready

### Product Overview

The category 6<sub>A</sub>, S/FTP patch cables offer good reliability against oil with its PUR sheath. Therefore they are perfect for industrial applications. Further features of the PUR sheath are the UV resistance and the self-extinguishing fire behavior. The kink protection sleeve with latch protection prevents the snag of the cables and protects the latch against breaking. An easy identification of category 6<sub>A</sub> is possible due to transparent yellow colored plugs.

### Performance Overview

The category 6<sub>A</sub>, S/FTP patch cables with PUR sheath are manufactured and tested acc. to the EN-50173-1; EN-80288-4-2 and ISO/IEC 11801; IEC 61156-6 standard. The flame retardancy complies LSHF (FRNC) IEC 60332-1; IEC 60754-2; IEC 61034 (Information on base of Draka raw cable UC 900 SS27 Cat. 7 PUR).

### Chemical Resistance

Oil resistant against mineral oil, ASTM oil. The PUR sheath was tested with hydraulic oil. ARAL VITAM 32, Mobil DTE 13 M, Gear oil ARAL DEGOL BG Plus 320 and Tribol 1710/320.

### Performance- and Specification Overview

Conductor	Cu, AWG 27/7
Insulation	Foam-Skin Polypropylen, 0.98 mm nom.
Structure	4x 2 AWG 27/7, twisted pair
Pair shielding	Aluminum covered plastic bond foil
Overall shielding	Copper braid, tinned
Sheath	PUR, red
Bending radius	without tensile loading: $\geq 25$ mm; with tensile loading: $\geq 50$ mm
Installation temperature	-5 °C up to +50 °C
Operating temperature	-35 °C up to +75 °C
UV resistance of outer sheath	acc. IEC 60068-2-5
Ozone resistance	acc. EN 60811-2-1, clause 8
Smoke density	acc. EN 50268-2, IEC 61034-1 and 2
Corrosivity	acc. EN 50267-1 and 2, IEC 60754-1 and 2

(Information on base of Draka raw cable UC 900 SS27 Cat. 7 PUR)

### Electrical Properties

Loop resistance	$\leq 340 \Omega / \text{km}$
Resistance unbalance	$\leq 3\%$
Insulation resistance (500 V)	$\geq 2000 \text{ M}\Omega \cdot \text{km}$
Capacity at 800 Hz	Nom. 43 nF/km
Capacity unbalance (Pair/Earth)	$\leq 1500 \text{ pF/km}$
Characteristic impedance (100 MHz)	$100 \pm 5 \Omega$
Propagation velocity	ca. 79 %
Signal transit time	$\leq 427 \text{ ns}/100\text{m}$
Duration difference	$\leq 12 \text{ ns}/100\text{m}$
Test voltage (DC, 1 min)	
Cond./Cond. and Cond./Shielding	1000 V
Coupling resistance	at 1 MHz: 10m $\Omega$ /m; at 10 MHz: 10m $\Omega$ /m; at 30 MHz: 30m $\Omega$ /m
Coupling attenuation	75 dB

(Information on base of Draka raw cable UC 900 SS27 Cat. 7 PUR)

### Transmission Properties

Freq.	Attenuation	NEXT	PS-NEXT	ACR	ACRF	PS-ACRF	Return loss
1,0	0,3	90	87	87	80	77	23
4,0	0,6	90	87	84	80	77	24
10,0	1,0	90	87	80	80	77	25
16,0	1,3	90	87	77	76	73	25
20,0	1,4	90	87	76	74	71	25
31,20	1,8	90	87	72	70	67	25
62,50	2,6	90	87	64	64	61	23
100,0	3,2	87	84	55	60	57	21
125,0	3,6	85	82	49	58	55	20
200,0	4,6	82	79	36	54	51	18
300,0	5,6	80	77	24	50	47	17
450,0	6,9	77	74	8	47	44	17
600,0	7,9	75	72	-4	44	41	17

(Information on base of Draka raw cable UC 900 SS27 Cat. 7 PUR)

### Product Number Information

Item code	Description	Length	Color
DK-16PUR-010	CAT 6 <sub>A</sub> S-FTP patch cable DRAKA UC 900 SS PUR, TM31	1.0 m	Red
DK-16PUR-020		2.0 m	
DK-16PUR-030		3.0 m	
DK-16PUR-050		5.0 m	
DK-16PUR-075		7.5 m	
DK-16PUR-100		10.0 m	