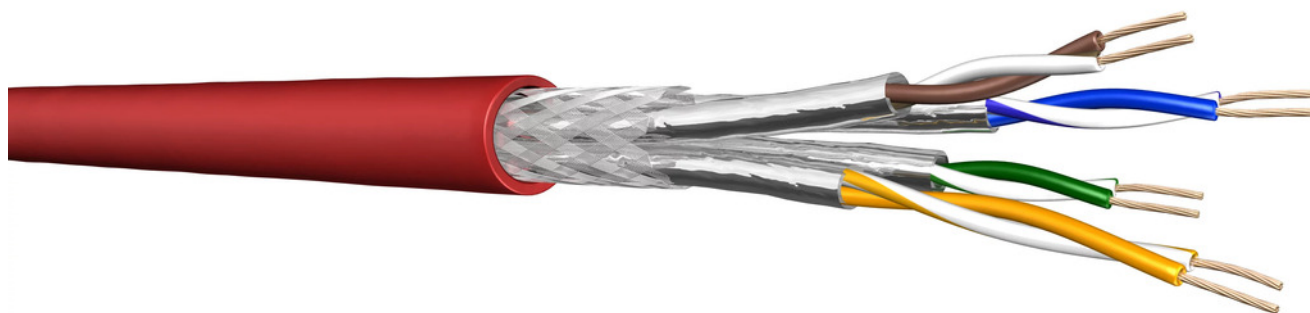


Draka - UC900 SS27 Cat.7 S/FTP 4P PUR for industrial applications



## UC Industrial cables

Especially in difficult industrial conditions electrical reserves are needed to ensure an operation of Industrial Ethernet in each case. The cable must withstand loads as follows:

- Chemical substances such as oils, solvents etc.
- Permanent movement or vibration such as the use in cable carriers
- Advanced ambient electromagnetic interference
- Both the cable and through the cable



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## Draka - UC900 SS27 Cat.7 S/FTP 4P PUR for industrial applications

### Technical Data

#### Application

Work area and patch cord cable

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 10GBase-T

IEEE 802.5 16 MB; ISDN; TPDDI; ATM

#### Standards

EIA/TIA 568A;

ISO/IEC 11801 2nd ed.; IEC 61156-6

EN 50173-1; EN 50288-4-2

#### Flame resistance

LSHF (FRNC): IEC 60332-1; IEC 60754-2; IEC 61034

#### Chemical resistance

Oil resistant against Mineral – oil, ASTM – oil

The sheath material is tested in Hydraulic oil

ARAL VITAM 32, Mobil DTE 13 M, Gear oil ARAL DEGOL BG Plus 320 and Tribol 1710/320.

#### Construction

Type	UC900 SS27 Cat.7 S/FTP
Conductor	Stranded bare copper wire Ø 0.42 mm (AWG 27/7)
Insulation	Foam Skin Polyethylene, Ø 0.98 mm
Twisting	2 cores to the pair
Pair screen	Al-laminated plastic foil
Cable lay up	4 pairs (PiMF) to the core
Screen	Copper braid, tinned
Sheath	PUR, red

#### Mechanical properties

Bending radius	Without load	≥ 25 mm
	With load	≥ 50 mm
Temperature range	During operation	-35°C to +75°C
	During installation	-5°C to +50°C
UV resistance of the jacket material		according to IEC60068-2-5
Ozone resistance		according to EN 60811-2-1, clause 8
Smoke density		according to EN 50268-2, IEC61034-1 and 2
Corrosivity		according to EN 50267-1 and 2, IEC 60754-1 and 2

## Draka - UC900 SS27 Cat.7 S/FTP 4P PUR for industrial applications

### Electrical properties at 20°C ± 5°C

Loop resistance		≤ 340 Ω/km
Resistance unbalance		≤ 3%
Insulation resistance	(500 V)	≥ 2000 MΩkm
Mutual capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Characteristic impedance	(1-100) MHz	(100 ± 15) Ω
	(100 - 250) MHz	(100 ± 18) Ω
	(250 - 600) MHz	(100 ± 25) Ω
Nominal velocity of propagation		ca. 79%
Propagation delay		≤ 427 ns/100m
Delay skew		≤ 12 ns/100m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	25 mΩ/m
	at 10 MHz	15 mΩ/m
	at 30 MHz	30 mΩ/m
Coupling attenuation		75 dB

### Electrical Data (nominal) acc. to Cat.7 (at 20°C)

F	Attenuation	NEXT	PS-NEXT	ACR	ELFEXT	PS-ELFEXT	Return loss
MHZ	dB/10m	dB	dB	dB/100m	dB/100m	dB/100m	dB
1.0	0.3	90	87	90	80	77	23
4.0	0.6	90	87	89	80	77	24
10.0	1.0	90	87	89	80	77	25
16.0	1.3	90	87	89	76	73	25
20.0	1.4	90	87	89	74	71	25
31.2	1.8	90	87	88	70	67	25
62.5	2.6	90	87	87	64	61	23
100.0	3.2	87	84	84	60	57	21
125.0	3.6	85	82	81	58	55	20
155.5	4.0	84	81	80	56	53	19
175.0	4.3	83	80	79	55	52	19
200.0	4.6	82	79	77	54	51	18
250.0	5.1	81	78	76	52	49	18
300.0	5.6	80	77	74	50	47	17
450.0	6.9	77	74	70	47	44	17
600.0	7.9	75	72	67	44	41	17
750.0	8.7	73	70	64	42	39	
900.0	9.7	72	69	62	41	38	
1000.0	10.2	71	68	61	40	37	

Outer diameter	5.9 mm
Fire load	383 MJ/km

## Draka - UC900 SS27 Cat.7 S/FTP 4P PUR for industrial applications

	0.106 kWh/m
Weight	34 kg/km
Copper content	24
Tensile force	100 N

## Product variants & accessories

Art.-No.	Description
UC900-SS27-4P-PUR-RT	Draka - UC900 SS27 Cat.7 S/FTP 4P PUR for industrial applications