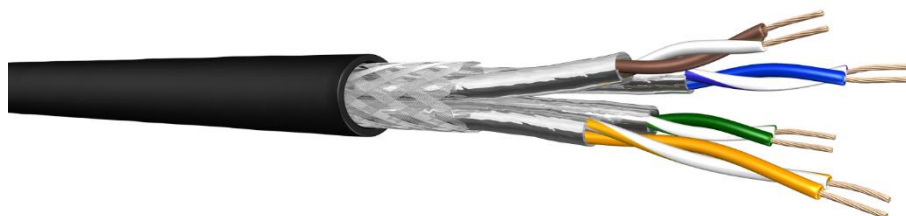


Media Flex Outdoor MFO 24

Studio Broadcast and MI for 10G/5G/2.5Gbps IP


HD
TV

UHD
4K

Application

This cable is a Cat 7 S/FTP patch cable for mobile application in tougher electrical and mechanical environment, designed for outside broadcast, MI and stage. **10GBASE-T (90m)**

Transmission length:

Digital Audio up to 200m

Control data like RS 422 up to 1200m

Analogue Audio up to 800m

Not for fixed installation for construction works

Standards

EN 50173-1; EN 50288-4-2

ISO/IEC 11801; IEC 61156-5

Power over Ethernet(PoE/PoE+)

Construction

Conductor	Stranded copper wire Ø 0.22 mm ² , AWG24
Insulation	PE, Ø 1.4 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs
Pair screen	Al-laminated plastic foil around each pair
Overall screen	Copper braid, tinned Ø 6,2 mm
Sheath	PUR rubber, black RAL 9005, meter marking + batch number
Printing	DRAKA MFO 24 MEDIA FLEX OUTDOOR 10Gig batch number + meter marking

Mechanical Properties

Bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	During operation	-40°C to + 85°C
	During installation	-15°C to + 50°C
Fire load	4 pair	515 MJ/km
Maximum tensile load	During operation	No load
	During installation	130 N

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Electrical Properties

at 20°C

DC loop resistance		$\leq 158 \Omega/\text{km}$
Resistance unbalance		$\leq 2\%$
Insulation resistance	(500 V)	$\geq 5000 \text{ M}\Omega \times \text{km}$
Capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair to ground)	$\leq 1500 \text{ pF/km}$
Mean Characteristic impedance	@ 100 MHz)	$100 \pm 5 \Omega$
Nominal velocity of propagation		0,75c
Propagation delay		$\leq 450 \text{ ns/100 m}$
Delay skew		$\leq 15 \text{ ns/100 m}$
Transfer impedance	at 1 MHz	$\leq 10 \text{ m}\Omega / \text{m}$
	at 10 MHz	$\leq 8 \text{ m}\Omega / \text{m}$
	at 30 MHz	$\leq 10 \text{ m}\Omega / \text{m}$
Coupling attenuation		$\geq 85 \text{ dB}$

Nominal Transmission characteristics

at 20°C

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACR (dB/100m)	Return loss (dB)	PS-NEXT (dB)	PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)
1	2,1	90	88		87	85	85	82
4	4,0	90	86	27	87	83	85	82
10	6,3	90	84	30	87	81	79	76
16	8,0	90	82	30	87	79	75	72
20	9,0	90	81	30	87	78	73	70
31.25	11,4	90	79	30	87	76	69	66
62.50	16,5	86	70	30	83	67	63	60
100	21,3	83	62	30	80	59	59	56
155.00	24,2	81	57	26	78	54	57	54
200.00	31,5	78	47	25	75	44	53	50
250.00	35,8	77	41	25	74	38	51	48
300.00	47,1	73	26	23	70	23	47	44
600.00	60,1	71	11	20	68	8	44	41

Technical data

Product code	Type	Brand name	Outer diameter mm	Fire load		Weight kg/km
				MJ/km	kWh/m	
60058146	CAT 7 S/FTP AWG24/7	MFO 24	8.2	515	0,143	65