



1/2" Soldered Jumper Cables

EUPEN offers jumper cables manufactured with

1/2"-HIFLEX cable (EC4-50-HF / 5092) or

1/2" standard cable (EC4-50 / 5128)

and soldered **DIN 7-16, 4.3-10** and **N type connectors** in straight or right angle version.



interface 4.3-10

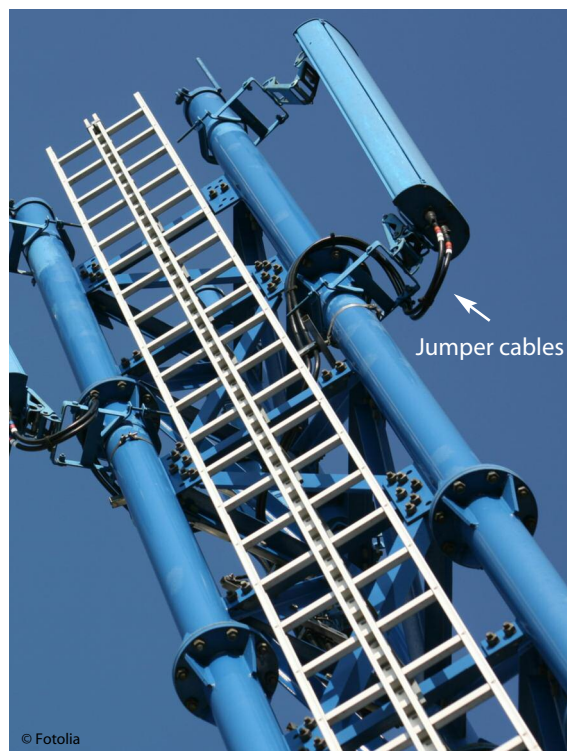
These jumper cables are also available (on request) with **HLFR** cable (Halogen free Low smoke Fire Retardant).

The high quality connectors are designed for watertight applications and optimized for optimum performances.

Standard jumper cables are black. Grey 1/2"-HIFLEX jumper cables are available on request.

FEATURES AND BENEFITS

- *easy, fast and reliable installation*
- *excellent return loss (VSWR) values*
- *high screening effectiveness*
- *low level and stable 3rd order intermodulation products (IM3)*
- *watertight according to IP 68(mated): the cable outer conductor is soldered over 360° to the connector body*
- *high mechanical stability: mechanical reinforcement by the overmolding around the cable/connector junction*
- *LTE compliant*



Jumper cables

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GSM Base station



TECHNICAL DATA SHEET

Jumper Cables

Kabelwerk | **EUPEN** AG

Jumper12-12x
Rev.: 08/2017-03-08

cable

2/3

1/2" Soldered Jumper Cables

TECHNICAL DATA

Cable type	EC4-50-HF (5092) 1/2"-HIFLEX			EC4-50 (5128) 1/2"			
Electrical							
• Nominal impedance [Ω]	50 \pm 1						
• Frequency range [MHz]	10 - 2700						
• PIM ratio (2 x 20 W carrier) [dBc]	\leq -155 (Typical -163)						
• Attenuation per m at 20 °C [dB] - without connectors*							
960 MHz	0.105			0.070			
1880 MHz	0.150			0.101			
2200 MHz	0.164			0.110			
2600 MHz	0.179			0.121			
• RF Voltage rating (Peak) [V]	1130			1600			
• Relative propagation velocity [%]	82			88			
Mechanical							
• Minimum bending radius [mm]							
- single / repeated	30 / 30			70 / 125			
• Connector torque (nominal) [Nm]							
- DIN 7-16 connector	25-30						
- N type connector	12						
- 4.3-10 connector	5-8						
Environmental							
• Temperature range [°C]							
- installation	-40 to +60						
- operating	-55 to +85						
• Protection against water ingress	Water tightness acc. to IP 68 (0.5 bar / 24 h)						
• General environmental	Corrosion and UV resistant						
• RoHS compliance (EU Directive 2011/65/EU)	YES						
Maximum power rating [W]**							
Connector 1	Connector 2	0.38-1.0 GHz	1.7-2.2 GHz	2.5-2.7 GHz	0.38-1.0 GHz	1.7-2.2 GHz	2.5-2.7 GHz
7-16	7-16	880	560	500	1090	710	630
4.3-10	7-16 or 4.3-10	700	470	420	700	470	420
N	7-16 or 4.3-10 or N	640	400	350	640	400	350
Return Loss [dB]***							
Connector 1	Connector 2	0.38-1.0 GHz	1.7-2.2 GHz	2.5-2.7 GHz	0.38-1.0 GHz	1.7-2.2 GHz	2.5-2.7 GHz
straight	straight	\geq 32	\geq 28	\geq 28	\geq 32	\geq 28	\geq 28
straight	right angle	\geq 30	\geq 28	\geq 28	\geq 30	\geq 28	\geq 28
right angle	right angle	\geq 28	\geq 26	\geq 26	\geq 28	\geq 26	\geq 26

List of available interfaces :

	DM DIN 7-16 male	DF DIN 7-16 female	DML DIN 7-16 male right angle	NM N male	NML N male right angle	43M 4.3-10 male	43ML 4.3-10 male right angle
cable EC4-50-HF (1/2" HIFLEX)	✓	✓	✓	✓	✓	✓	✓
cable EC4-50 (1/2")	✓	✓		✓		✓	

* Typical values without connectors, the typical connector attenuation (2 connectors) is less than 0.02 [dB].

** Ambient temperature = 40 °C; Temperature of inner conductor = 100 °C; VSWR = 1.0; no solar loading.

*** These values of return loss are given for a length of jumper less than 7 meters. See our specific datasheet for jumpers up to 20 meters.



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cable

3/3

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PRODUCT REFERENCE SYSTEM

EC4-HF-S-xxx-DyzDyz

Cable type: **EC4-HF:** 1/2"-HIFLEX - EC4-50-HF (5092)
EC4: 1/2" - EC4-50 (5128)
EC4-HF-FR: 1/2"-HIFLEX HLFLEX - EC4-50-HF-FR (5092-HLFLEX)
EC4-FR: 1/2" HLFLEX - EC4-50-FR (5128-HLFLEX)

Connector version: **(none):** screwed version
S: soldered connectors

xxx = Length in cm: **030:** 30 cm **150:** 150 cm **300:** 300 cm
050: 50 cm **200:** 200 cm **xxx:** xxx cm
100: 100 cm **250:** 250 cm

Connector 1: **D:** DIN 7-16 **43:** 4.3-10
N: N Type

y = Connector 1 - type: **F:** female (DIN 7-16 only)
M: male

z = Connector 1 - style: **(none):** straight version
L: right angle version

Connector 2: **D:** DIN 7-16 **43:** 4.3-10
N: N Type

y = Connector 2 - type: **F:** female (DIN 7-16 only)
M: male

z = Connector 2 - style: **(none):** straight version
L: right angle version

EXAMPLES :

Cable type			EC4-50-HF (5092) 1/2"-HIFLEX	EC4-50-(5128) 1/2"
Connector 1	Connector 2	Length		
DIN 7-16 male	DIN 7-16 male	150 cm	EC4-HF-S-150-DMDM	EC4-S-150-DMDM
DIN 7-16 male	4.3-10 male right angle	200 cm	EC4-HF-S-200-DM43ML	-

Versions with **HLFLEX** cable: EC4-HF-**FR**-S-xxx-yyyy and EC4-**FR**-S-xxx-yyyy.

1/2"-HIFLEX available in grey colour.