

## SIMFIX connectors for highly flexible 1/2" corrugated cables and cutting tool



7/16 SIMFix® plug and cutting tool



7/16 SIMFix® plug



Only 2 single parts

The SIMFix-connectors are screwable, resilient connectors made to suit high-performance transmission applications for mobile radio base stations. As well as that, they excel with very good RF-characteristics, particularly with regard to return loss and intermodulation.

Using only two single parts the connectors of the SIMFix series for 1/2" jumper cables (RFF 1/2"-50, FSJ4-50B, Eupen 5092, HPL 50-1/2SF, HCF1/2"Cu2Y-50) can be quickly and simply assembled. They are longitudinally waterproof in (up to 2,5 bars), and that without the use of additional sealants.

To make possible a quick assembly even on building sites, when the exact length of the jumper cable needed has not already been known, special cutting tools for the cable preparation for the SIMFix connectors were developed. Indeed, the spiral shape of the outer conductor represents a particular challenge for cutting tools at on-site assembly work. A rigid setting of the cutting blades can lead to their destruction through the cross powers which occur at the outer conductor.

To effectively cope with this problem the cutting tools have the cutting blades in a moveable setting, for which a patent has been applied for. This realises a more precise cable preparation and, at the same time, prolongs the life of the cutting blades.

Consequently, quick and reliable on-site assembly of jumper cables is guaranteed.

### Performance characteristics

#### Connectors

- Proven, low intermodulation products
- Waterproof **without** sleeving, tape or other additional sealings (up to 2.5 bars)
- Longitudinally waterproof
- Only two parts to assemble
- VSWR typ. < 1.02 / 2 GHz
- Tool for cable preparation available

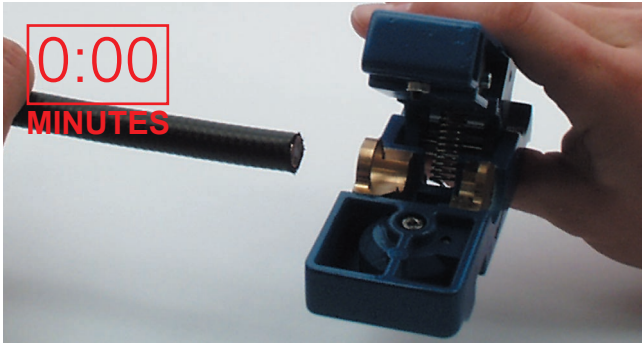
#### Cutting Tool

- Precise cable outer jacket removal
- Precise cutting of outer conductor, dielectric and inner conductor

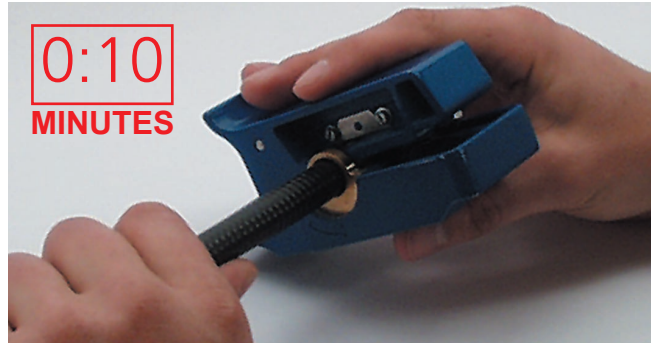
### Order information

Oder N°	Short description
J01120A0073	7/16 Plug
J01121A0114	7/16 Jack
J01020A0098	N Plug
J01021A0156	N Jack
N00091A0004	Cutting tool
N00099A0001	Spare blades (1 round, 1 small)

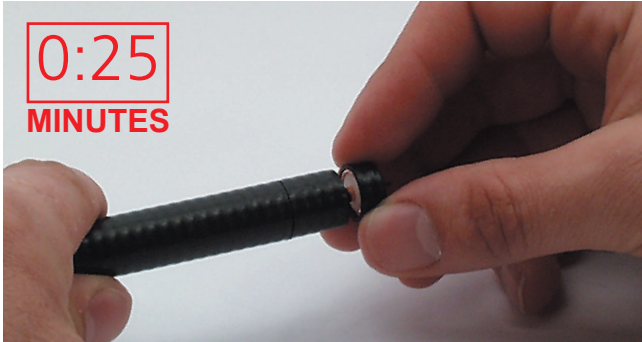
## Assembly



Leading the cable into the cutting tool



Cutting into the cable jacket, outer conductor and dielectric



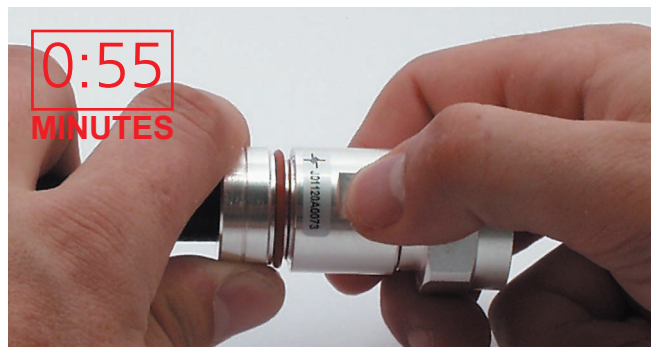
Removal of the cut cable parts



Deburring the inner conductor



Screwing on the cable clamp



Mounting the connector

## Technical data

### Mechanical characteristics

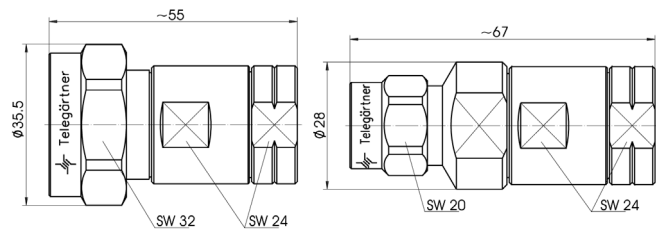
Spring contact	CuBe2, Cu2Ag5
Other metal parts	CuZn39Pb3, Cu2Ag5
Insulator	PTFE
Gasket	Silicon, longitudinally water-proof (2.5 bar)

### Electrical characteristics

Frequency	Return loss (typ.)
870-970 MHz	42 dB
1700-1900 MHz	40 dB
Intermodulation	
Intermodulation products 3. order (typ.)	
2 unmodulated test-signals at 43dBm (20W)	
at 800-1000 MHz	-117dBm/-160dBc
at 1600-2000 MHz	-112dBm/-155dBc
Insertion loss	≤ 0.05 dB up to 2 GHz

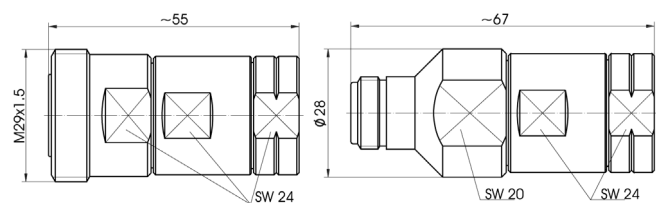
### Cable

FSJ4-50B  
HCF 1/2" Cu2Y-50 RFS  
HCF 1/2" Cu2Y-50 AlCu RFS  
RFF 1/2"-50  
5092 1/2"-Hilfex  
HPL50-1/2 SF



7/16 Plug

N Plug



7/16 Jack

N Jack

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