




# **Validation Test Report**

## **for Jumper Cables and SIMFix Connectors**



Telegärtner  
Karl Gärtner GmbH  
Lerchenstr. 35  
D-71144 Steinenbronn

Tel.: +49 (0) 7157/125-0  
Fax: +49 (0) 7157/125-5120  
Email: [info@telegaertner.com](mailto:info@telegaertner.com)

**Visit us online:**  
[www.telegaertner.com](http://www.telegaertner.com)

2017 © Copyright by Telegärtner  
**Reproduction of even a part only by express  
written permission. Technical changes reserved.**

# Content

<b>1</b>	<b>Equipment under test (EUT)</b>	<b>4</b>
	Tested components .....	4
	Summary of standard cable length.....	4
<b>2</b>	<b>Test setup</b>	<b>5</b>
	PIM equipment and S-parameter setup.....	5
<b>3</b>	<b>Test results</b>	<b>6</b>
	7-16 to 7-16 Jumper 1/2" Superflex - L00011D0185 .....	6
	7-16 to 7-16 90° Jumper 1/2" Superflex - L00011D0187 .....	7
	7-16 to 4.3-10 Jumper 1/2" Superflex - L00011A0461 .....	8
	4.3-10 to 4.3-10 Jumper 1/2" Superflex - L00011A0436 .....	9
	7-16 Straight Plug SIMFix Pro 1/2" Superflex - J01120G0085 .....	10
	4.3-10 Straight Plug Screw SIMFix Pro 1/2" Superflex - J01440A0007 .....	11
	7-16 Straight Plug SIMFix Pro 7/8" Superflex - J01120A0104 .....	12
	4.3-10 Straight Plug Screw SIMFix Pro 7/8" Superflex - J01440A0008.....	13
<b>4</b>	<b>Further information</b>	<b>14</b>
	Overview connector types and compatible cables.....	14
	Overview information material .....	15

# 1 Equipment under Test (EUT)

## Validation tests (PIM and S-Parameter) by an independent Test Lab

### Tested components

**Manufacturer:** Telegärtner (connectors)  
Draka (cables)

**Date of receipt:** 14/06/2016

**Period of testing:** 14/06/2016 - 24/10/2016

In the follow table is defined the EUT tested

Jumper	Cable type	Connector type	Length
L00011D0185	1/2" Superflex	7-16	2 m
L00011D0187	1/2" Superflex	7-16 / 7-16 90°	2 m
L00011D0461	1/2" Superflex	7-16 / 4.3-10	2 m
L00011A0436	1/2" Superflex	4.3-10	2 m

Product	Name	Connector Type	Cable size
Telegaertner connector	J01120G0085	7-16	1/2"
Telegaertner connector	J01440A0007	4.3-10	1/2"
Draka cable	RFA 1/2" - 50		1/2"
Telegaertner connector	J01120A0104	7-16	7/8"
Telegaertner connector	J01440A0008	4.3-10	7/8"
Draka cable	RFA 7/8" L-50		7/8"

## Summary of standard cable length

Cable	Sample 1
	Length (cm)
Jumper L00011D0185 connector 7-16	200
Jumper L00011D0187 connector 7-16 / 7-16 90°	200
Jumper L00011A0461 connector 7-16 / 4.3-10	200
Jumper L00011A0436 connector 4.3-10 / 4.3-10	200
Feeder 1/2" Draka cable RFA1/2"-50 with Telegartner connector - J01120G0085	80
Feeder 1/2" Draka cable RFA1/2"-50 with Telegartner connector - J01440A0007	90
Feeder 7/8" Draka cable RFA 7/8"L-50 with Telegartner connector - J01120A0104	90
Feeder 7/8" Draka cable RFA 7/8"L-50 with Telegartner connector - J01440A0008	78
Feeder 7/8" Draka cable RFA 7/8"AL-50 with Telegartner connector - J01120A0104	82
Feeder 7/8" Draka cable RFA 7/8"AL-50 with Telegartner connector - J01440A0008	92

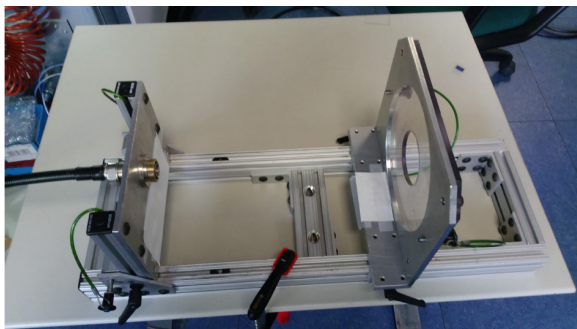
## Validation tests (PIM and S-Parameter) by an independent Test Lab

Static and Dynamic conditions PIM measurements: Measurements are carried out at different frequencies (GSM900, GSM1800 and UMTS2100) after and before the dynamic PIM test. The Dynamic PIM test is carried out only for B3 (1800MHz band). (Deflection for 1/2" e 1/2"sf is 66mm, for 7/8" is 102mm at distance 15\*D. D = cable diameter)

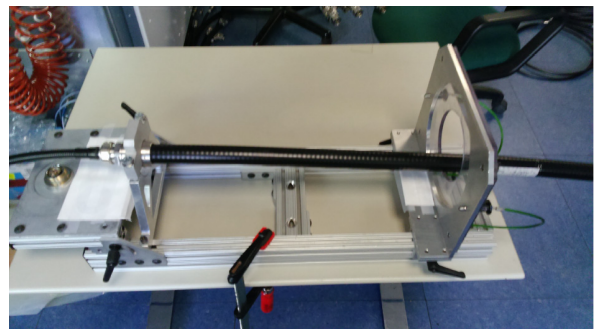
PIM EQUIPMENT	Model
Power Supply	Summitek SI100
Passive Intermodulation Distortion Analyser (890-960MHz)	Summitek SI900A
Passive Intermodulation Distortion Analyser (1710-1880MHz)	Summitek SI1800A
Passive Intermodulation Distortion Analyser (1920-2170MHz)	Summitek SI2000B
Low IM Termination	Summitek SI30A

Return loss and attenuation cable: Measurements are carried out after the calibration S-parameter set-up and plug-in the samples under test at the two ports of Agilent PNA.

S-Parameter set-up	Model
Precision Network Analyser	Agilent PNA E8358A
Cables	Suhner sucoflex 100 sn.10098/4PE4 at port 1; Suhner sucoflex 100 sn.10104/4PEA at port 2;
Calibration kit for 7/16 type ports	Agilent 85038A



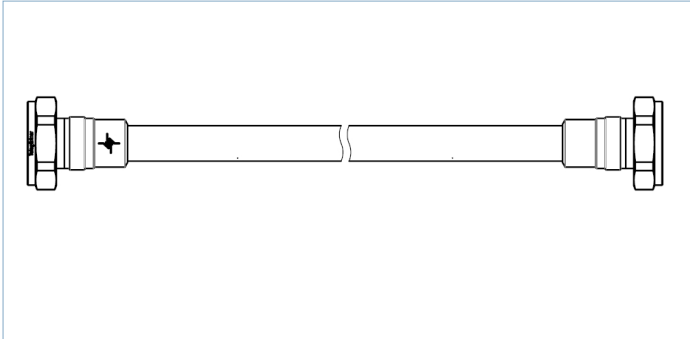
Set-up dynamic PIM measurement for 1/2" & 1/2" Superflex



Set-up dynamic PIM measurement for 7/8"

7-16 to 7-16 Jumper 1/2" Superflex

L00011D0185



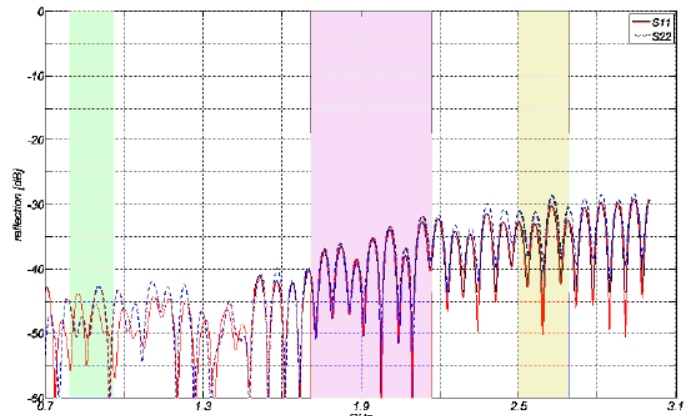
Technical Details

Cable type	1/2" Superflex Helically Corrugated
Outer conductor	Copper
Centre conductor	Copper-clad aluminium
Dielectric	Foam Polyethylene
Jacket	Black Polyethelene, Halogen free
Outer contact	Brass, Silver Plated
Centre contact	Brass (m), CuBe (f), Silver Plated
Coupling nut	Brass Hex Nut, Handscrew or Push-Pull - Nickel Plated
Sealing class	IP68 Unmated
Connector Gaskets	Silicone

Summary of Test Results

This section contains the measurements results, in particular

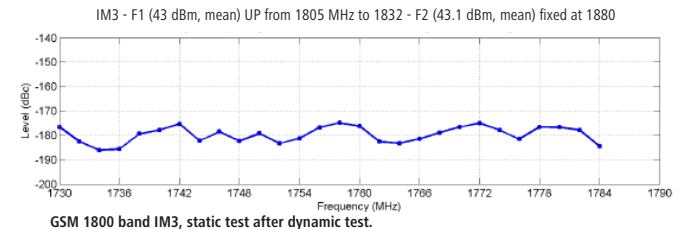
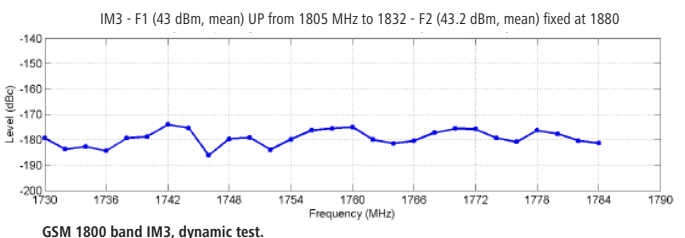
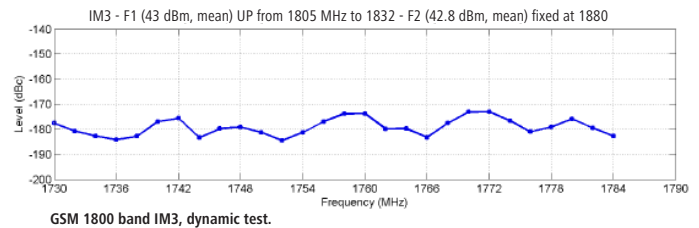
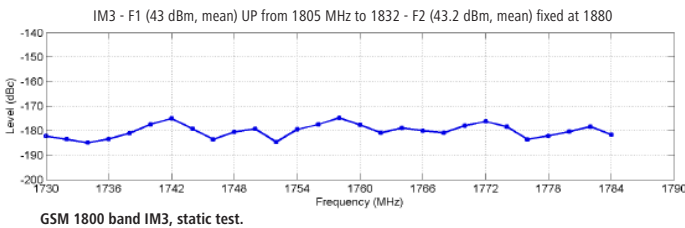
Jumper L00011D0185 connector 7-16					
Band IM3 /dBc	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-186.5	-185.4	-186.3	-167.0	Static PIM
max	-170.4	-170.1	-170.2	-159.5	
media	-178.7	-178.1	-178.1	-162.9	
min		-184.5	-187.4		Dynamic PIM
max		-168.7	-165.0		
media		-177.7	-177.2		
min		-187.7	-189.0		Static PIM after Dynamic PIM
max		-169.6	-169.6		
media		-177.7	-178.1		



Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -42.7	≥ -0.16	≤ -31.8	≥ -0.24	≤ -28.7	≥ -0.28

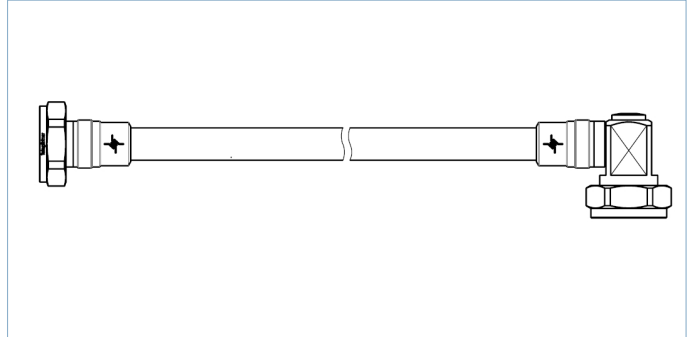
Detailed Test Reports



7-16 to 7-16 90° Jumper 1/2" Superflex

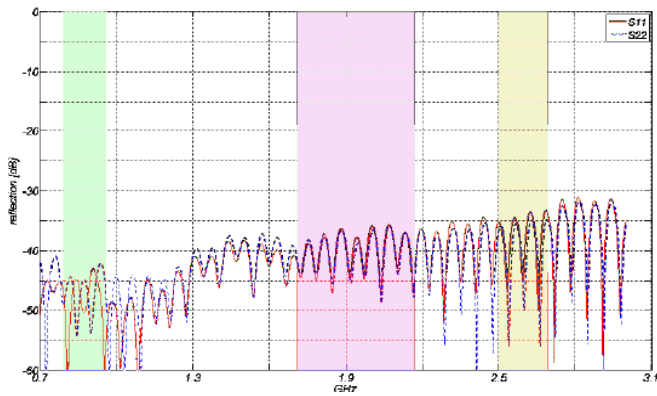
Technical Details	
Cable type	1/2" Superflex Hellically Corrugated
Outer conductor	Copper
Centre conductor	Copper-clad aluminium
Dielectric	Foam Polyethylene
Jacket	Black Polyethylene, Halogen free
Outer contact	Brass, Silver Plated
Centre contact	Brass (m), CuBe (f), Silver Plated
Coupling nut	Brass Hex Nut, Handscrew or Push-Pull - Nickel Plated
Sealing class	IP68 Unmated
Connector Gaskets	Silicone

L00011D0187



Summary of Test Results

This section contains the measurements results, in particular



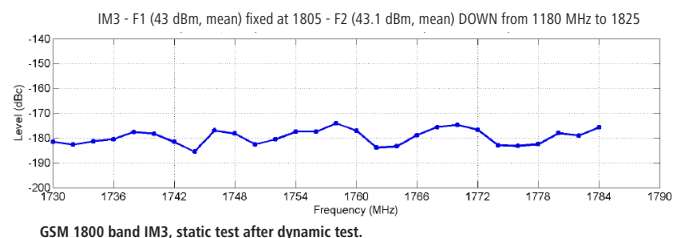
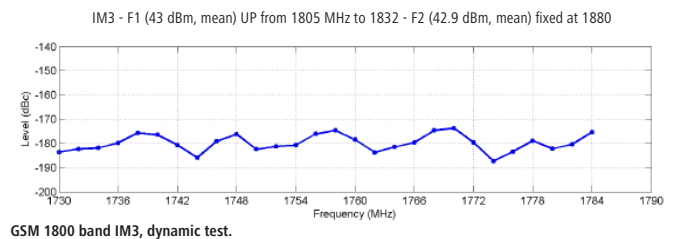
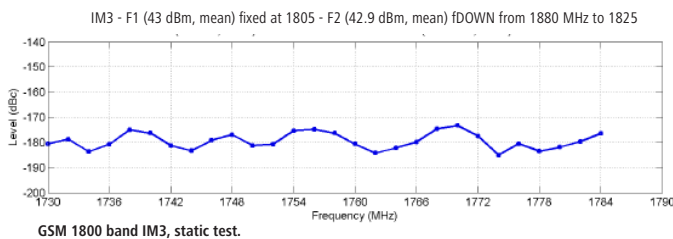
Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -42.1	≥ -0.20	≤ -35.8	≥ -0.31	≤ -33.3	≥ -0.36

Jumper L00011D0187 connector 7-16 / 7-16DRA

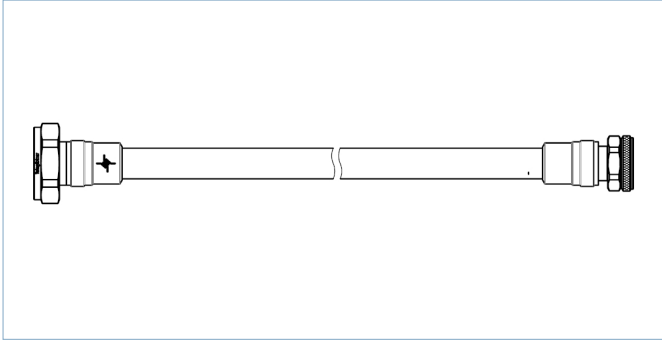
Band IM3 /dBc	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-165.3	-185.1	-187.6	-167.9	Static PIM
max	-160.6	-168.4	-167.5	-161.6	
media	-162.7	-177.6	-177.3	-164.2	
min		-187.3	NA		Dynamic PIM
max		-168.7			
media		-177.8			
min		-185.6	NA		Static PIM after Dynamic PIM
max		-169.1			
media		-177.9			

Detailed Test Reports



7-16 to 4.3-10 Jumper 1/2" Superflex

L00011A0461



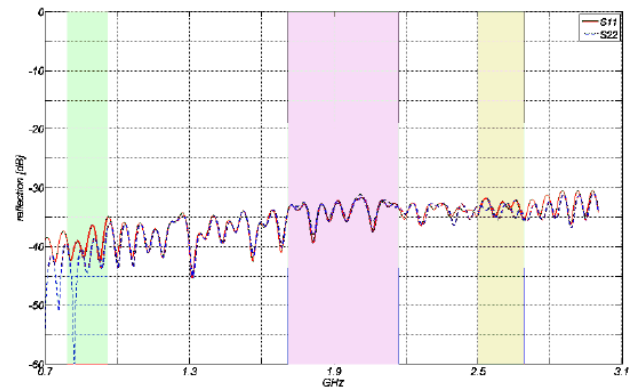
Technical Details

Cable type	1/2" Superflex Helicaly Corrugated
Outer conductor	Copper
Centre conductor	Copper-clad aluminium
Dielectric	Foam Polyethylene
Jacket	Black Polyethelene, Halogen free
Outer contact	Brass, Silver Plated
Centre contact	Brass (m), CuBe (f), Silver Plated
Coupling nut	Brass Hex Nut, Handscrew or Push-Pull - Nickel Plated
Sealing class	IP68 Unmated
Connector Gaskets	Silicone

Summary of Test Results

This section contains the measurements results, in particular

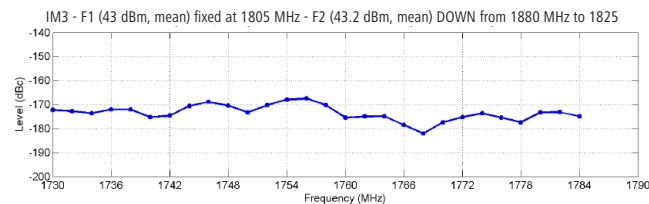
Jumper L00011A0461 connector 7-16 / 4.3-10					
Band IM3 /dBc)	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-186.5	-183.9	-184.7	-168.1	Static PIM
max	-170.4	-167.0	-167.1	-159.6	
media	-178.7	-174.1	-173.9	-163.0	
min		-185.3	-184.6		Dynamic PIM
max		-163.7	-164.7		
media		-176.6	-174.3		
min		-187.1	-187.8		Static PIM after Dynamic PIM
max		-165.8	-168.1		
media		-176.5	-177.0		



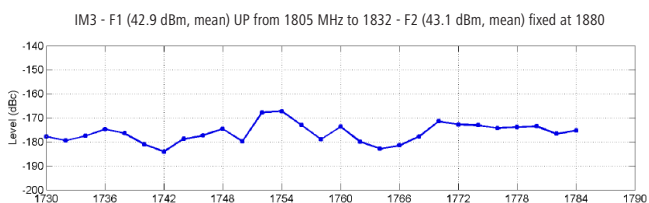
Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -35.1	≥ -0.21	≤ -31.2	≥ -0.33	≤ -31.8	≥ -0.37

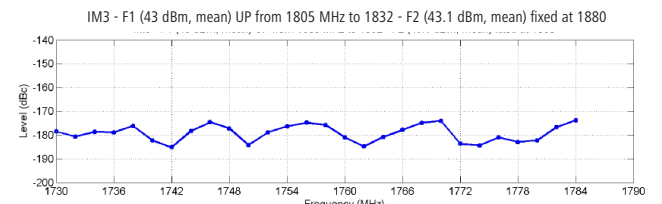
Detailed Test Reports



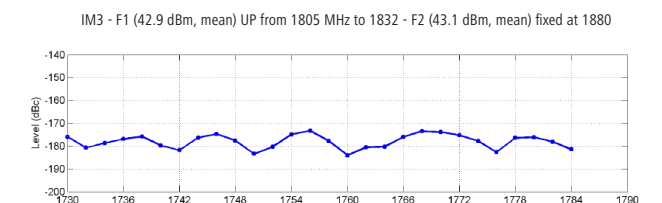
GSM 1800 band IM3, static test.



GSM 1800 band IM3, dynamic test.



GSM 1800 band IM3, dynamic test.



GSM 1800 band IM3, static test after dynamic test.

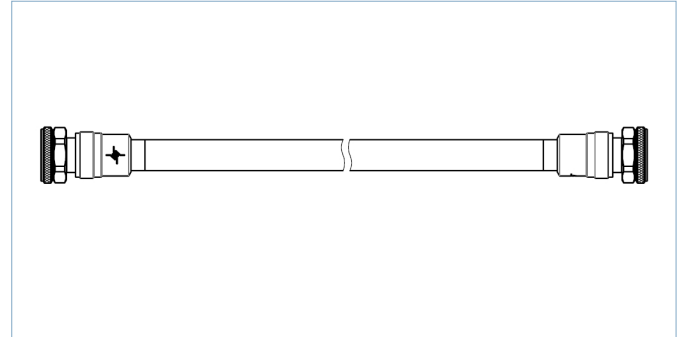


## 4.3-10 to 4.3-10 Jumper 1/2" Superflex

### Technical Details

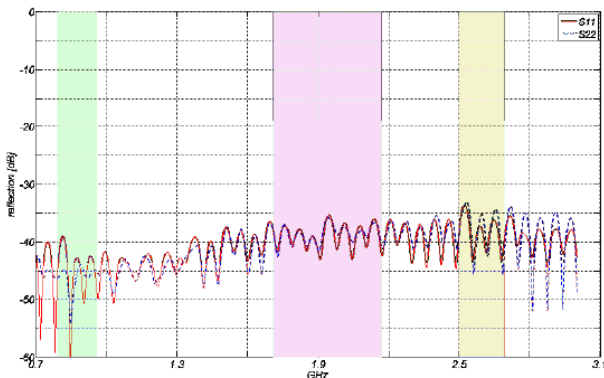
Cable type	1/2" Superflex Helically Corrugated
Outer conductor	Copper
Centre conductor	Copper-clad aluminium
Dielectric	Foam Polyethylene
Jacket	Black Polyethelene, Halogen free
Connector Type	4.3-10 (Screw / Push-Pull, Handscrew)
Outer contact	Brass, Silver Plated
Centre contact	Brass (m), CuBe (f), Silver Plated
Coupling nut	Brass Hex Nut, Handscrew or Push-Pull - Nickel Plated
Sealing class	IP68 Unmated
Connector Gaskets	Silicone

### L00011A0436



### Summary of Test Results

This section contains the measurements results, in particular



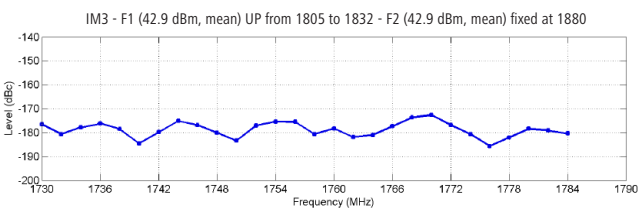
Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -39.0	≥ -0.18	≤ -35.4	≥ -0.28	≤ -33.1	≥ -0.32

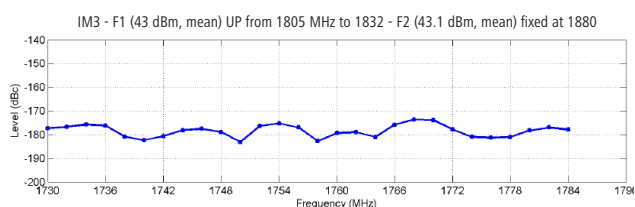
### Jumper L00011A0436 connector 4.3-10 / 4.3-10

Band IM3 / dBc)	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-188.9	-184.6	-185.7	-166.8	Static PIM
max	-171.0	-166.8	-169.0	-160.3	
media	-177.3	-176.3	-177.5	-163.9	
min		-186.6	-185.1		Dynamic PIM
max		-166.8	-168.5		
media		-176.7	-177.5		
min		-188.2	-188.0		Static PIM after Dynamic PIM
max		-167.5	-168.4		
media		-176.8	-177.6		

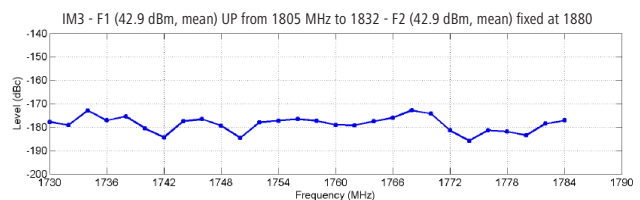
### Detailed Test Reports



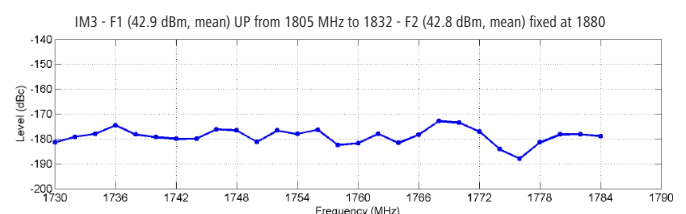
GSM 1800 band IM3, static test.



GSM 1800 band IM3, dynamic test.



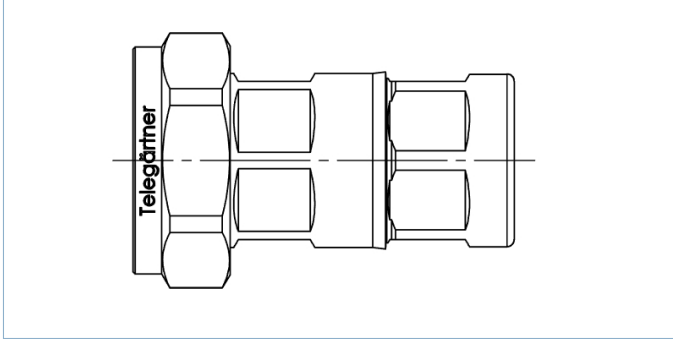
GSM 1800 band IM3, dynamic test.



GSM 1800 band IM3, static test after dynamic test.

7-16 Straight Plug SIMFix Pro 1/2"

J01120G0085



Technical Details

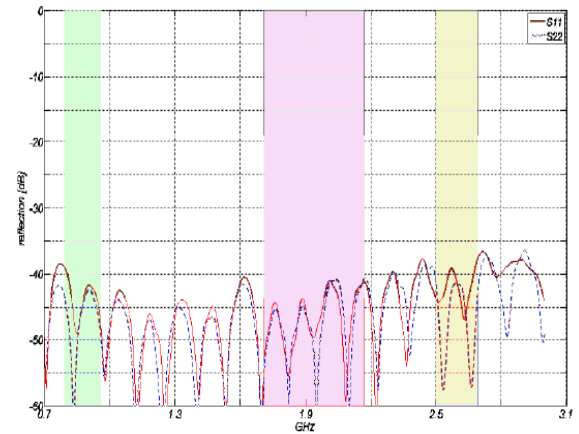
Compatible Cables	G21(1/2"): 5128 1/2"-LD Eupen, Flexline 1/2" R Leoni, HFC 12D LS Cable, HPL 50-1/2 Acome, LCF 50A Andrew, RFA 1/2"-50 Draka, RFX 1/2"-50 Draka, SUCCOFEED_1/2
Centre conductor	clamp
Outer conductor	clamp
Mating life	> 500
Frequency	0 - 3 GHz
Operating temperature	-40 °C - +85 °C
Protection class	IP68 (IEC 60529)

Summary of Test Results

This section contains the measurements results, in particular

Feeder 1/2" Draka cable RFA1/2"-50 with Telegartner connector J01120G0085

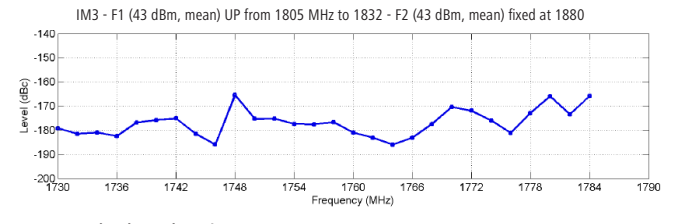
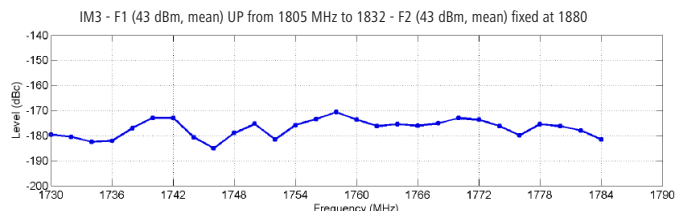
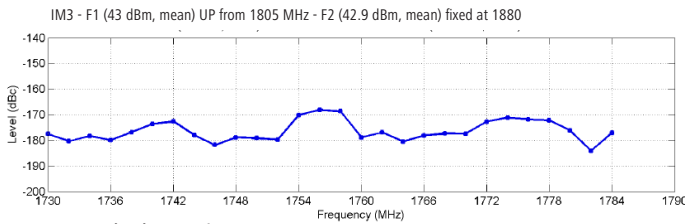
Band IM3 /dBc	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-184.4	-184.9	-184.7	-167.2	Static PIM
max	-163.9	-166.6	-167.7	-158.3	
media	-178.0	-175.7	-176.0	-162.2	
min		-179.4	-187.0		Dynamic PIM
max		-158.8	-151.3		
media		-169.6	-172.5		
min		-184.5	-185.9		Static PIM after Dynamic PIM
max		-168.9	-168.6		
media		-176.1	-176.1		



Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -38.9	≥ -0.04	≤ -40.8	≥ -0.05	≤ -37.8	≥ -0.06

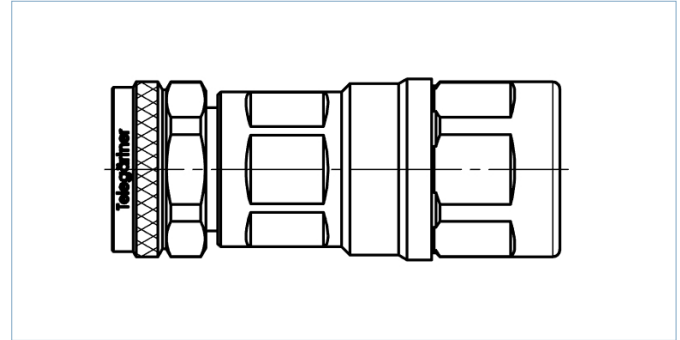
Detailed Test Reports



4.3-10 Straight Plug Screw SIMFix Pro 1/2"

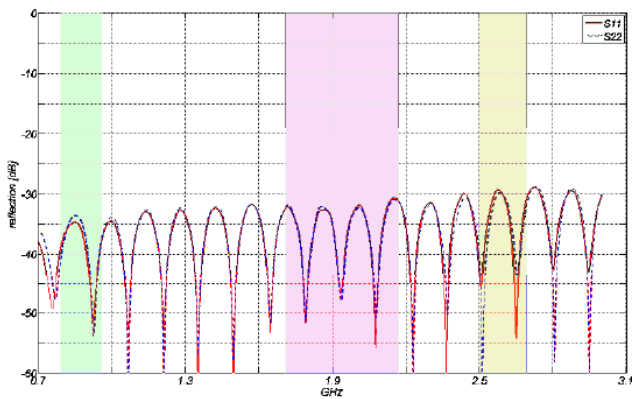
Technical Details	
Compatible Cables	G21(1/2"): 5128 1/2"-LD Eupen, Flex-line 1/2" R Leoni, HFC 12D LS Cable, HPL 50-1/2 Acome, LCF 50A Andrew, RFA 1/2"-50 Draka, RFX 1/2"-50 Draka, SUCOFEED_1/2
Centre conductor	clamp
Outer conductor	clamp
Mating life	> 100
Frequency	0 - 3 GHz
Operating temperature	-40 °C - +85°C
Protection class	IP68 (IEC 60529)

J01440A0007



Summary of Test Results

This section contains the measurements results, in particular



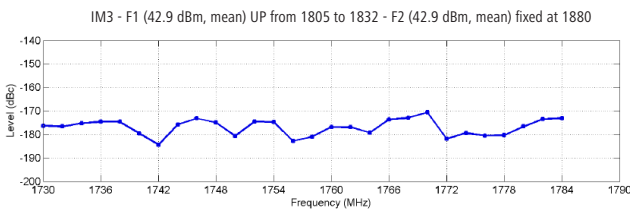
Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -33.6	≥ -0.01	≤ -30.7	≥ -0.01	≤ -29.3	≥ -0.02

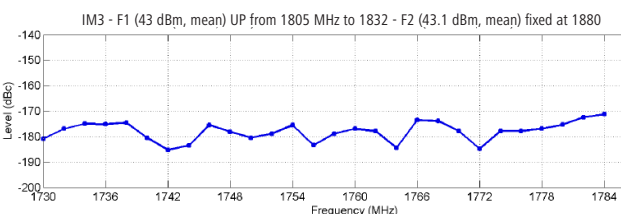
Feeder 1/2" Draka cable RFA1/2"-50 with Telegartner connector J01440A0007

Band IM3 /dBc)	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-181.3	-186.1	-184.5	-174.5	Static PIM
max	-162.2	-164.6	-167.3	-160.9	
media	-173.8	-176.1	-175.3	-165.6	
min		-183.9	-186.5		Dynamic PIM
max		-164.1	-147.5		
media		-174.4	-174.3		
min		-185.2	-185.4		Static PIM after Dynamic PIM
max		-164.5	-167.4		
media		-175.3	-175.8		

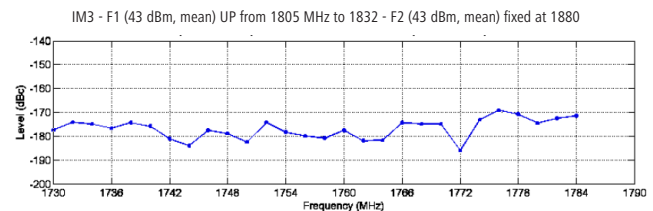
Detailed Test Reports



GSM 1800 band IM3, static test.



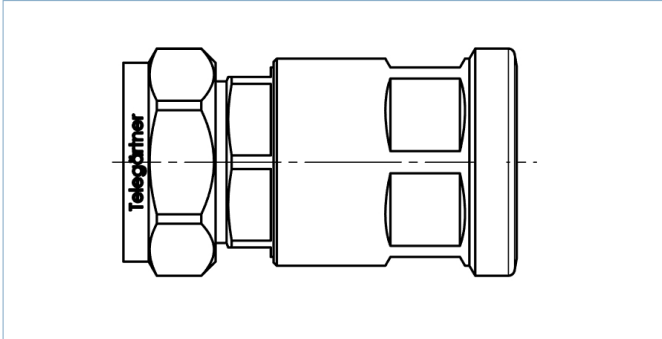
GSM 1800 band IM3, static test after dynamic test.



GSM 1800 band IM3, dynamic test.

7-16 Straight Plug SIMFix Pro 7/8"

J01120A0104



Technical Details

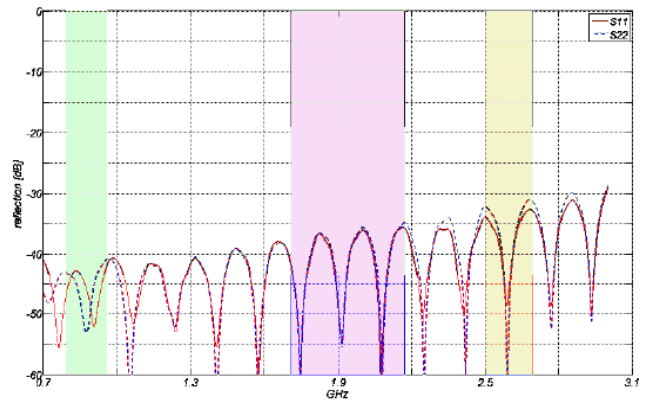
Cables G24(7/8")	RFA 7/8"-50, RFX 7/8"-50, LCF78-50JA, LDF5-50A, AVA5-50, 5228 7/8"-LD, 5228A 7/8"-LD, HPL 50-7/8, HFC 22D, FlexLine 7/8" R, Sucofeed_7/8, VXL5-50
Cables G52(7/8" Alu)	RFA 7/8"-50 AL, HPL 50-7/8 AL, AL5-50
Centre conductor	clamp
Outer conductor	clamp
Mating life	> 500
Frequency	0 - 3 GHz
Operating temperature	-40°C - +85°C
Protection class	IP68 (IEC 60259)

Summary of Test Results

This section contains the measurements results, in particular

Feeder 7/8" Draka cable RFA 7/8"L-50 with Telegartner connector J01120A0104

Band IM3 /dBc)	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-182.7	-185.4	-185.7	-167.8	Static PIM
max	-163.1	-169.6	-169.2	-160.4	
media	-176.9	-177.8	-178.2	-163.3	
min		-185.4	-187.2		Dynamic PIM
max		-168.2	-150.3		
media		-177.7	-177.0		
min		-186.3	-186.5		Static PIM after Dynamic PIM
max		-169.0	-169.2		
media		-178.1	-178.6		

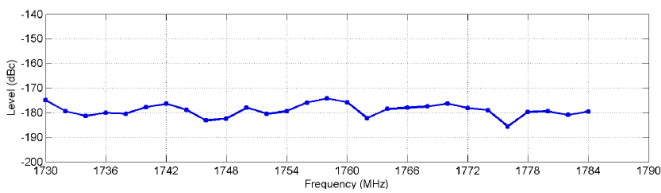


Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -40.9	≥ -0.04	≤ -34.9	≥ -0.06	≤ -31.3	≥ -0.07

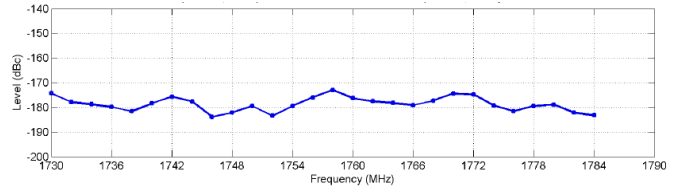
Detailed Test Reports

IM3 - F1 (42.9 dBm, mean) UP from 1805 MHz to 1832 - F2 (42.9 dBm, mean) fixed at 1880



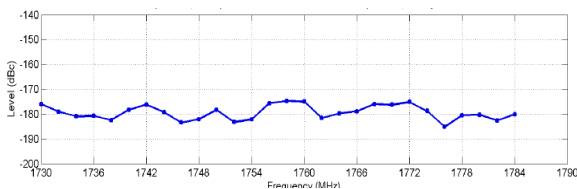
GSM 1800 band IM3, static test.

IM3 - F1 (43 dBm, mean) UP from 1805 MHz to 1832 - F2 (43 dBm, mean) fixed at 1880



GSM 1800 band IM3, dynamic test.

IM3 - F1 (43 dBm, mean) UP from 1805 MHz to 1832 - F2 (43 dBm, mean) fixed at 1880

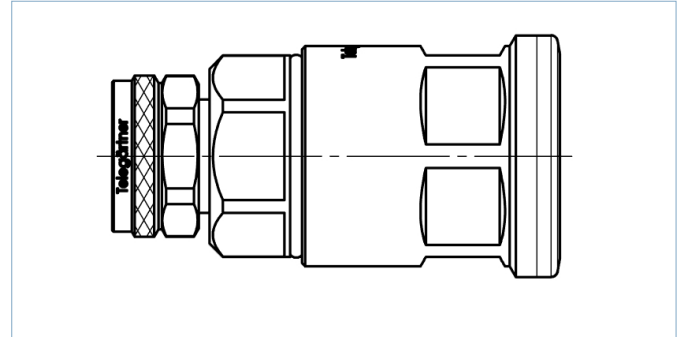


GSM 1800 band IM3, static test after dynamic test.

4.3-10 Straight Plug Screw SIMFix Pro 7/8"

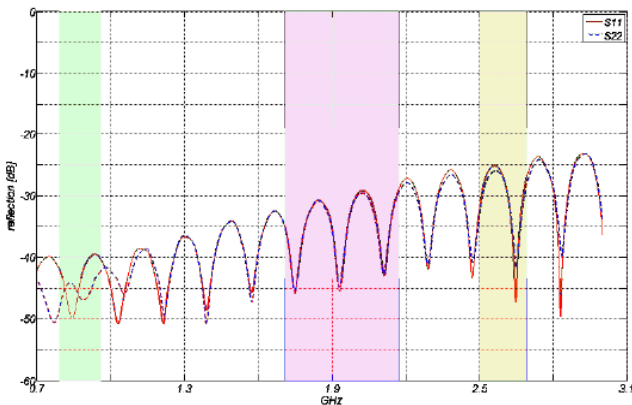
Technical Details	
Cables G24(7/8")	RFA 7/8"-50, RFX 7/8"-50, LCF78-50JA, LDF5-50A, AVA5-50, 5228 7/8"-LD, 5228A 7/8"-LD, HPL 50-7/8, HFC 22D, FlexLine 7/8" R, Sucofeed_7/8, VXL5-50
Cables G52(7/8" Alu)	RFA 7/8"-50 AL, HPL 50-7/8 AL, L5-50
Centre conductor	clamp
Outer conductor	clamp
Mating life	> 100
Frequency	0 - 3 GHz
Operating temperature	-40 °C - +85 °C
Protection class	IP68 (IEC 60529)

J01440A0008



Summary of Test Results

This section contains the measurements results, in particular



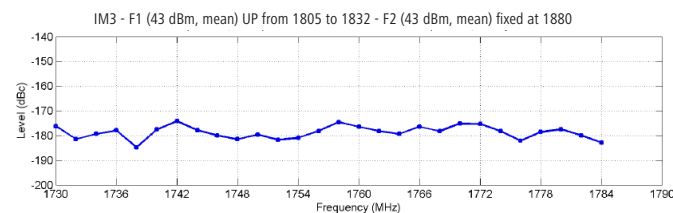
Reflection and transmission coefficients

Extended low broadband		Broadband		LTE2600	
Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]	Refl. [dB]	Tx [dB]
≤ -39.5	≥ -0.04	≤ -29.1	≥ -0.06	≤ -25.2	≥ -0.08

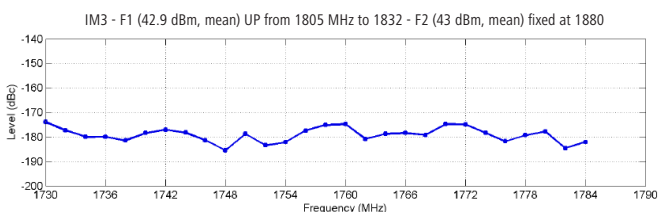
Feeder 7/8" Draka cable RFA 7/8"L-50 with Telegartner connector J01440A0008

Band IM3 /dBc)	GSM 900	GSM 1800 Connector 1	GSM 1800 Connector 2	UMTS 2100	Note
min	-183.3	-185.2	-185.6	-166.6	Static PIM
max	-164.5	-169.4	-168.5	-160.6	
media	-176.5	-177.0	-177.3	-162.9	
min		-186.3	-186.5		Dynamic PIM
max		-164.3	-150.2		
media		-177.4	-176.5		
min		-185.1	-185.6		Static PIM after Dynamic PIM
max		-170.3	-168.9		
media		-178.3	-178.1		

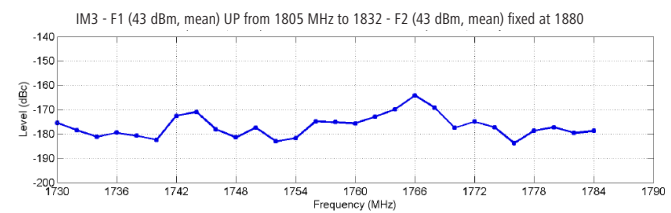
Detailed Test Reports



GSM 1800 band IM3, static test.



GSM 1800 band IM3, static test after dynamic test.



GSM 1800 band IM3, dynamic test.

## Overview Connector Types and compatible cables

### 4.3-10 Connectors Overview

Ø	Cable	Cable Type	Design	Order no.	Type	IP Class	Weight
1/2" Flex	1/2"-Hiflex Eupen, FSJ4-50B FlexLine 1/2"S, HFSC 12D LS, HPL 50-1/2 SF, RFF 1/2"-50, SCF 12-50 J RFS	J	Straight plug, screw	J01440A0005	SIMFix Pro	IP68	135 g
			Straight plug, push-pull	J01440A3005	SIMFix Pro	IP68	135 g
			Angle plug, screw	J01440A0013	SIMFix Pro	IP68	210 g
			Straight jack	J01441A0010	SIMFix Pro	IP68	145 g
1/2"	RFA 1/2"-50, LCF 50A, 5128 1/2"-LD Eupen, SUCOFEED_1/2 HPL50-1/2, Flexline 1/2" R, HFC 12D LS, RFX 1/2"-50	F/X	Straight plug, screw	J01440A0007	SlmFix Pro	IP68	100 g
			Straight plug, push-pull	J01440A3007	SIMFix Pro	IP68	100 g
			Angle plug, screw	J01440A0014	SIMFix Pro	IP68	220 g
			Straight jack	J01441A0008	SIMFix Pro	IP68	90 g
7/8"	RFA 7/8"-50 (AL), RFX 7/8"-50, 5228A 7/8"-LD, 5228 7/8"-LD, HPL50-7/8 (AL), LCF78-50JA, HFC 22D, FlexLine 7/8"R, AVA5-50, LDF5-50A, AL5-50, Succofeed_7/8, VXL5-50	F/X	Straight plug, screw	J01440A0008	SimFix CA-Pro	IP68	155 g
			Straight jack	J01441A0009	SIMFix CA-Pro	IP68	140 g

### 7-16 (DIN) Connectors Overview

Ø	Cable	Cable Type	Design	Order no.	Type	IP Class	Weight
~10 mm	RG213, RG214 G37(2.7/7.25), G42(2.7/7.1) G37(2.7/7.25), G42(2.7/7.1)	B	Straight plug	J01120A0101	Solder/Clamp	IP67	80 g
			Straight jack	J01121A0177	Solder/Clamp	IP67	87 g
	B	Straight plug	J01120A0103	Clamp/Clamp	IP67	80 g	
1/2" Flex	RFF 1/2"-50; FSJ4-50B; SCF 12-50J; Flexline 1/2"S Eupen 5092; HPL50-1/2-SF HFSC 12D	J	Straight plug	J01120B0077	SIMFix Pro	IP68	170 g
			Straight plug	J01120B0073	SIMFix ST	IP67	170 g
			Angle plug	J01120A0094	SIMFix Pro	IP68	250 g
			Straight jack	J01121B0120	SIMFix Pro	IP68	160 g
			Straight jack	J01121B0114	SIMFix ST	IP67	160 g
1/2"	RFA 1/2"-50, LCF 50A, 5128 1/2"-LD Eupen, SUCOFEED_1/2 HPL50-1/2, Flexline 1/2" R, HFC 12D LS, RFX 1/2"-50	F/X	Straight plug	J01120G0085	SIMFix Pro	IP68	120 g
			Straight plug	J01120H0085	SIMFix ST	IP67	110 g
			Angle plug	J01120B0026	SIMFix Pro	IP68	230 g
			Straight jack	J01121G0136	SIMFix Pro	IP68	110 g
			Straight jack	J01121H0136	SIMFix ST	IP67	100 g
7/8"	RFA 7/8"-50 (AL), RFX 7/8"-50, 5228A 7/8"-LD, 5228 7/8"-LD, HPL50-7/8 (AL), LCF78-50JA, HFC 22D, FlexLine 7/8"R, AVA5-50, LDF5-50A, AL5-50, Succofeed_7/8, VXL5-50	F/X	Straight plug	J01120A0104	SIMFix CA Pro	IP68	160 g
			Straight plug	J01120B0104	SIMFix CA ST	IP67	150 g
			Straight jack	J01121A0180	SIMFix CA Pro	IP68	155 g
			Straight jack*	J01121B0180	SIMFix CA ST	IP67	145 g
1 1/4"	RFA 1 1/4"-50; LCFS114-50JA; 5328 A 1 1/4"-GL; LDF6-50; RFX 1 1/4"-50; 5328A 1 1/4"-GL; FlexLine 1 1/4"R, SUCOFEED_1_1/4	F	Straight plug	J01120G0087	SIMFix Pro	IP68	540 g
			Straight plug	J01120H0087	SIMFix ST	IP67	530 g
			Straight jack	J01121G0138	SIMFix Pro	IP68	530 g
			Straight jack	J01121H0138	SIMFix ST	IP67	520 g
1 5/8"	RFA 1 5/8"-50; LCF 158-50JA; 5438A 1 5/8"-LD; LDF7-50A; HPL50-1-5/8; HFC 42D; AVA7-50; FlexLine 1 5/8"R; SUCOFEED_1_5/8	F	Straight plug	J01120G0088	SIMFix Pro	IP68	700 g
			Straight jack	J01121G0139	SIMFix Pro	IP68	690 g



#### Packaging:

Individually packed in PE foil.

**B:** Braided Cable

**F:** Feeder Cable (with annular corrugated outer conductor)

**J:** Jumper Cable (with spiral corrugated outer conductor)

**X:** Radiating Cable



**Telegärtner**  
**Karl Gärtner GmbH**

Lerchenstr. 35  
D-71144 Steinenbronn

Tel: +49 (0) 7157/125-0  
Fax: +49 (0) 7157/125-5120

E-Mail: [info@telegaertner.com](mailto:info@telegaertner.com)  
Web: [www.telegaertner.com](http://www.telegaertner.com)