



QUICK-FIT, H+S ECO connectors and tools

UBER+SUHNER QUICK-FIT connectors are worldwide approved N and 7/16 connectors for foam dielectric corrugated copper tube cables. They offer a greatly simplified and economic approach to cable preparation and assembly. The product line meets the requirements of multi-carrier, high-channel-count transceivers such as base stations of today's mobile communication infrastructure networks.

Features

- Excellent RF performance
- Low, stable and reproducible PIM (Passive Intermodulation Product) - typically -165 dBc
- Safe assembly process performance - in-field termination with reproducible electrical performance
- Quick and easy assembly - 2 main connector parts, 4 steps in less than 4 minutes
- High IP rating - IP68
- Multi-brand, multi-design and multi-material cable compatibility
- Backward compatibility

Benefits

- Easy field installation
- Time saving
- Simplified logistics
- Low cost of ownership
- Support quality of a proven connector house
- Compatible with copper and aluminium cables

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QUICK-FIT coaxial connectors

Technical data

Electrical data	Requirements
Impedance	50 Ω
Frequency range (for connector interface)	N: DC ... 11 GHz 7/16: DC ... 7.5 GHz
VSWR	≤ 1.06 (RL ≥ 30 dB); f ≤ 2.7 GHz
PIM ¹⁾	better than -155 dBc

1) Carrier to 3rd order intermodulation product ratio with 2 x 20 W (43 dBm) carrier power, f ≤ 1.88 GHz

Mechanical data	Requirements
Recommended coupling nut torque IEC	N: 0.68 ... 1.13 Nm / 0.49 ... 0.82 ft lb. IEC 61169-16 7/16: 25 ... 30 Nm / 18.05 ... 21.66 ft lb. IEC 61169-4
Recommended coupling nut torque HUBER+SUHNER	N: 3 Nm / 2.2 ft lb. with 100 matings max.
Coupling nut retention force	N: ≥ 450 N / 101.2 lbs. 7/16: ≥ 1000 N / 225.0 lbs.
Centre contact	captivated
Durability (matings)	≥ 500

Environmental data	Requirements
Temperature range	- 40 °C ... + 85 °C / - 40 °F ... + 185 °F
IP rating	IP 68 (acc. to IEC 60529)

Material data		
Connector part	Material	Plating
Cable entry	brass	SUCOPLATE®
Connector head	brass	SUCOPLATE®
Outer contact	brass	SUCOPLATE®
Centre contact	spring bronze/brass	silver
Insulators	PTFE or PFA	
Gaskets	rubber	

Some connectors may have a specification that differs from the above mentioned data. The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.

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QUICK-FIT coaxial connectors

Suitable for SUCOFEED corrugated cables in the diameters below



1/2" _HF, 1/2" _HF_FR, 1/2" _HF_FR_UL

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Stripping tool	Item no. stripping tool
11_716-50-9-9	22660309	DIN 7/16 male	DOC-0000179418	74_Z-0-9-15	23001006
16_716-50-9-5	23007298	DIN 7/16 male right angle			
21_716-50-9-9	22660310	DIN 7/16 female			
11_N-50-9-9	22660311	N male			
16_N-50-9-6	23007299	N female right angle			
21_N-50-9-9	22660312	N female			

Cable compatibility list on request.



1/2", 1/2" _FR, 1/2" _FR_UL

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Stripping tool	Item no. stripping tool
11_716-50-12-50	84201175	DIN 7/16 male	DOC-0000179113	74_Z-0-12-15	23000319
16_716-50-12-50	84201179	DIN 7/16 male right angle			
21_716-50-12-50	84201177	DIN 7/16 female			
11_N-50-12-50	84201169	N male			
16_N-50-12-50	84201181	N female right angle			
21_N-50-12-50	84201173	N female			

Cable compatibility list on request.

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7/8", 7/8" _FR, 7/8" _LA, 7/8" _LA_FR

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Stripping tool	Item no. stripping tool
11_716-50-23-44	84069135	DIN 7/16 male	DOC-0000295365	74_Z-0-23-18	84074476
21_716-50-23-44	84069194	DIN 7/16 female			
11_N-50-23-43	84124063	N male			
21_N-50-23-43	84124062	N female			

Cable compatibility list on request.



1_1/4", 1_1/4" _FR

HUBER+SUHNER type	Item no.	Connector style	Assembly instruction	Stripping/flairing tool	Item no. stripping tool
11_716-50-32-4	84116088	DIN 7/16 male	DOC-0000341341	74_Z-0-32-14/ 74_Z-0-32-15	23010533/ 84120843
21_716-50-32-4	84116150	DIN 7/16 female			

Cable compatibility list on request.



1_5/8" _LA

HUBER+SUHNER type	Item no.	Connector style	Assembly instruction	Stripping/flairing tool	Item no. stripping tool
11_716-50-42-4	84079343	DIN 7/16 male	DOC-0000299051	74_Z-0-42-14/ 74_Z-0-42-15	23010534/ 84085074
21_716-50-42-4	84079305	DIN 7/16 female			

Cable compatibility list on request.

QUICK-FIT, H+S ECO connectors and tools

HUBER+SUHNER ECO connectors

Description

The ECO Connectors are an economic business approach for Cell Site applications. They comprise straight connectors for 1/2", 7/8", 1 1/4" and 1 5/8" corrugated antenna feeder installations.

Due to certain restriction regarding environmental specifications and in comparison with our QUICK-FIT connectors our ECO connectors are ideally suitable for indoor DAS applications.

Features

- Quick and easy cable termination
- Good RF performance
- Multi design and multi material cable compatibility (copper and aluminium cables)

Benefit

- Cost efficient sourcing



QUICK-FIT, H+S ECO connectors and tools

HUBER+SUHNER ECO connectors

General technical data

Electrical data	Requirements
Impedance (Ω)	50
Return loss*	DC to 2.5 GHz: ≥ 30 dB; 2.5 to 2.7 GHz: ≥ 28 dB
IM**	typical -155 dBc, better than -150 dBc

* Single connector detail specification is the reference

** Carrier to 3rd order intermodulation product ratio with 2 x 20 W (43 dBm) carrier power

Mechanical data	Requirements
Recommended coupling nut torque IEC	N: 0.68 ... 1.13 Nm / 0.49 ... 0.82 ft lb. IEC 61169-16 7/16: 25 ... 30 Nm / 18.05 ... 21.66 ft lb. IEC 61169-4
Recommended coupling nut torque HUBER+SUHNER for series N	N: 3 Nm / 2.2 ft lb. with 100 matings max.
Coupling nut retention force	N: ≥ 450 N / 101.2 lbs 7/16: ≥ 1000 N / 225.0 lbs
Centre contact	captivated
Durability (matings)	≥ 500

Environmental data	Requirements
Temperature range	-40 °C ... +85 °C / -40 °F ... +185 °F
IP rating	IP67 (acc. to IEC 60529) with taping or similar measures IP68

Material data		
Connector part	Material	Plating
Outer contacts / connector bodies	brass	SUCOPLATE®
Cable entries / coupling nuts	brass	nickel
Centre contacts	bronze or copper beryllium / brass	silver
Insulators	PTFE or TPX	
Gaskets	EPDM	

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Suitable for SUCOFEED corrugated cables in the diameters below



1/2"

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Stripping tool	Item no. stripping tool
11_716-50-12-100	84125745	DIN 7/16 male	DOC-0000364681	74_Z-0-12-100	84133923
21_716-50-12-100	84125740	DIN 7/16 female			
11_N-50-12-100	84125756	N male	DOC-0000364683		
21_N-50-12-100	84125770	N female			



7/8", 7/8" _LA

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Stripping tool	Item no. stripping tool
11_716-50-23-100	84124984	DIN 7/16 male	DOC-0000363432	74_Z-0-23-100 74_Z-0-23-20 74_Z-0-23-18	84133924 84117046 84074476
21_716-50-23-100	84124988	DIN 7/16 female			
11_N-50-23-100	84125762	N male			
21_N-50-23-100	84125871	N female			



1_1/4", 1_1/4_HF

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Flaring tool	Item no. flaring tool
11_716-50-32-100	84127325	DIN 7/16 male	DOC-0000364680	74_Z-0-32-15	84120843
21_716-50-32-100	84127329	DIN 7/16 female			
11_N-50-32-100	84132614	N male			
21_N-50-32-100	84132616	N female			

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1_5/8"

HUBER+SUHNER type	Item no.	Interface	Assembly instruction	Flaring tool	Item no. flaring tool
11_716-50-42-100	84132564	DIN 7/16 male	DOC-0000375031	74_Z-0-42-15	84085074
21_716-50-42-100	84132566	DIN 7/16 female			
11_N-50-42-100	84132618	N male			
21_N-50-42-100	84132620	N female			

QUICK-FIT, H+S ECO connectors and tools

Tools



Automating rotation stripping tools (can be used manually as well)

Automating rotation stripping tools		Cable type	Connector		Picture and remarks
Type no.	Item no.		Type no.	Item no.	
74_Z-0-9-15	23001006	SUCOFEEED_1/2_HF SUCOFEEED_1/2_HF_FR SUCOFEEED_1/2_HF_FR_UL	11_716-50-9-9	22660309	
			16_716-50-9-5	23007298	
			21_716-50-9-9	22660310	
			11_N-50-9-9	22660311	
			16_N-50-9-6	23007299	
			21_N-50-9-9	22660312	
74_Z-0-12-11	84147226	SUCOFEEED_1/2 SUCOFEEED_1/2_FR SUCOFEEED_1/2_FR_UL SUCOFEEED_1/2_LW	11_716-50-12-50	84201175	
			16_716-50-12-50	84201179	
			21_716-50-12-50	84201177	
			11_N-50-12-50	84201169	
			16_N-50-12-50	84201181	
74_Z-0-12-17	84147227	SUCOFEEED_1/2 SUCOFEEED_1/2_FR SUCOFEEED_1/2_FR_UL SUCOFEEED_1/2_LW	11_716-50-12-100	84125745	
			21_716-50-12-100	84125740	
			11_N-50-12-100	84125756	
			21_N-50-12-100	84125770	
74_Z-0-23-21	84147228	SUCOFEEED_7/8_HF SUCOFEEED_7/8 SUCOFEEED_7/8_FR	11_716-50-23-44	84069135	
			21_716-50-23-44	84069194	
			11_N-50-23-43 (Q2 2012)	84124063	
			21_N-50-23-43 (Q2 2012)	84124062	
74_Z-0-23-22	84147229	SUCOFEEED_7/8_LA SUCOFEEED_7/8_LA_FR SUCOFEEED_7/8_LW_LA	11_716-50-23-100	84124984	Available as from Q2 2012
			21_716-50-23-100	84124988	
			11_N-50-23-100	84125762	
			21_N-50-23-100	84125871	
74_Z-0-32-14	23010533	SUCOFEEED_1_1/4 SUCOFEEED_1_1/4_FR SUCOFEEED_1_1/4_LW	11_716-50-32-4	84116088	
			21_716-50-32-4	84116150	
			11_716-50-32-100	84127325	
			21_716-50-32-100	84127329	
			11_N-50-32-100	84132614	
74_Z-0-42-14	23010534	SUCOFEEED_1_5/8 SUCOFEEED_1_5/8_FR SUCOFEEED_1_5/8_LA SUCOFEEED_1_5/8_LA_FR SUCOFEEED_1_5/8_LW_LA	11_716-50-42-4	84079343	
			21_716-50-42-4	84079305	
			11_716-50-42-100	84132564	
			21_716-50-42-100	84132566	
			11_N-50-42-100	84132618	
			21_N-50-42-100	84132620	



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Tools

Manual stripping tools

Manual stripping tools		Cable type	Connector		Picture	
Type no.	Item no.		Type no.	Item no.		
74_Z-0-12-100	84133923	SUCOFEED_1/2 SUCOFEED_1/2_FR SUCOFEED_1/2_FR_UL SUCOFEED_1/2_LW	11_716-50-12-100	84125745		
			21_716-50-12-100	84125740		
			11_N-50-12-100	84125756		
			21_N-50-12-100	84125770		
74_Z-0-23-100 74_Z-0-23-20 74_Z-0-23-18	84133924 84117046 84074476	SUCOFEED_7/8_HF SUCOFEED_7/8 SUCOFEED_7/8_FR SUCOFEED_7/8_LA SUCOFEED_7/8_LA_FR SUCOFEED_7/8_LW_LA	11_716-50-23-44	84069135		
			21_716-50-23-44	84069194		
			11_N-50-23-43 (Q2 2012)	84124063		
			21_N-50-23-43 (Q2 2012)	84124062		
			11_716-50-23-100	84124984		
			21_716-50-23-100	84124988		
			11_N-50-23-100	84125762		
	21_N-50-23-100	84125871				

Flaring tools

Flaring tools		Cable type	Connector		Picture
Type no.	Item no.		Type no.	Item no.	
74_Z-12-8	85006446	SUCOFEED_1/2 SUCOFEED_1/2_FR SUCOFEED_1/2_FR_UL SUCOFEED_1/2_LW	11_716-50-12-50	84201175	
			16_716-50-12-50	84201179	
			21_716-50-12-50	84201177	
			11_N-50-12-50	84201169	
			16_N-50-12-50	84201181	
			21_N-50-12-50	84201173	
74_Z-0-42-15	84085074	SUCOFEED_1_5/8 SUCOFEED_1_5/8_FR SUCOFEED_1_5/8_LA SUCOFEED_1_5/8_LA_FR SUCOFEED_1_5/8_LW_LA	11_716-50-42-4	84079343	
			21_716-50-42-4	84079305	
			11_716-50-42-100	84132564	
			21_716-50-42-100	84132566	
			11_N-50-42-100	84132618	
			21_N-50-42-100	84132620	

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Spare parts for cable stripping tools

H+S type	Item no.	Part description
74_Z-0-0-359	23014976	handle (for stripping tools)
74_Z-0-0-402	22652193	abrasive paper 320
74_Z-0-0-424	23001952	spanner AF 17 mm
74_Z-0-0-425	23001953	spanner AF 18 mm
74_Z-0-0-426	23001954	spanner AF 19 mm
74_Z-0-0-427	23001955	spanner AF 21 mm
74_Z-0-0-428	23001956	spanner AF 22 mm
74_Z-0-0-429	23001957	spanner AF 24 mm
74_Z-0-0-415	22652206	counter sink
74_Z-0-0-418	22652209	stanley knife
74_Z-0-0-420	22652211	steel brush
74_Z-0-0-422	22652213	steel measure 200 mm
74_Z-0-0-432	23002005	screw driver
74_Z-0-0-433	23002007	screw driver
74_Z-0-0-12	22642718	small metal saw
74_Z-0-0-434	23002166	monkey wrench
74_Z-0-0-347	23000937	blade (cutting corrugated copper tube) for 74_Z-0-12-15
74_Z-0-0-349	23001008	blade (cutting corrugated copper tube) for 74_Z-0-9-15
74_Z-0-0-355	23008264	blade (cutting jacket) for 74_Z-0-32-14
74_Z-0-0-356	23010537	blade (cutting jacket) 74_Z-0-42-14
74_Z-0-0-416	22652207	allen wrench AF 2.5 mm/.098 in. for 74_Z-0-9-15, 74_Z-0-12-15, 74_Z-0-32-14 and 74_Z-0-42-14
74_Z-0-0-423	23000311	allen wrench AF 4 mm/.157 in. for removing the BIT adaptor
74_Z-0-0-421	22652212	screwdriver, Torx 1 (Torx T7) for changing the triangle knife 74_Z-0-0-348