



N- und SMA series



Factory Automation



WLAN



Smart-Metering

PUSH & CRIMP: FIELD ASSEMBLY WITHOUT COMPROMISE.

The complete solution – from connector to stripping tool to crimping tool.
All from a single source.

SMA & N-SERIES

Easy assembly, reliable connection, no compromises.

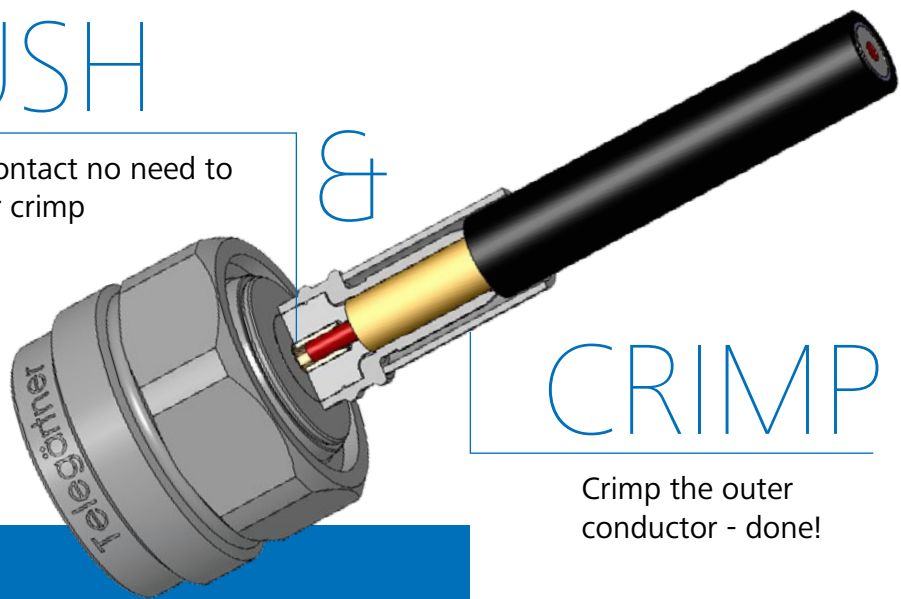
PUSH

Spring contact no need to solder or crimp

&

CRIMP

Crimp the outer conductor - done!

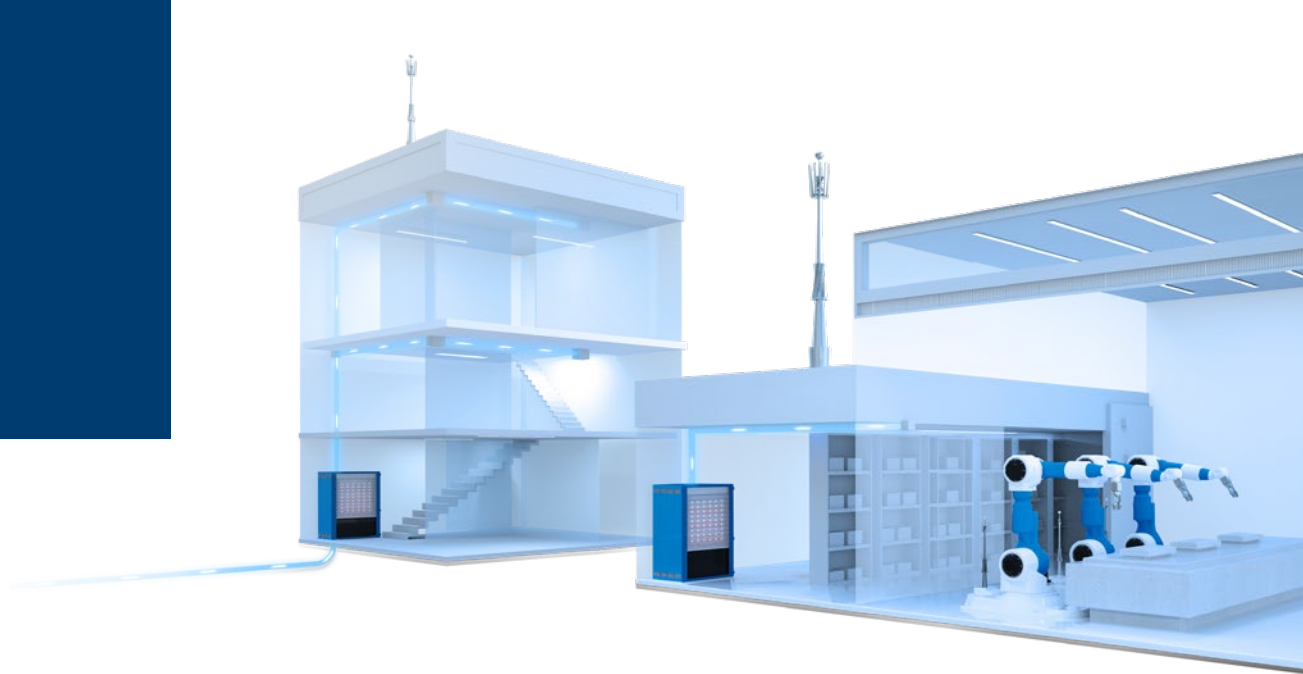


- 2-piece connector design
- Ideal for field termination
- Quick and easy installation
- Cable preparation tool available
- Excellent return loss performance
- IP67 with included heat-shrink sleeve

The Push & Crimp variants of Telegärtner's N and SMA series stand for simple, fast and reliable on-site assembly – with no need for pre-termination. Low Loss 195, 240 and 400 cables can be assembled in just a few minutes by inserting the inner conductor and crimping the outer conductor. Both series deliver excellent RF performance with 50-ohm impedance and are optimally protected against moisture and bending stress by the included heat-shrink sleeve.

Also included in the product range are angled versions – the perfect choice where space is limited, for defined cable routing and reduced bending stress. They offer the same performance and ease of installation as the straight versions.

The N series is also vibration-resistant and therefore particularly well suited for demanding industrial and outdoor applications. Push & Crimp – for those who can't afford to waste time.



Mechanical characteristics

	N series	SMA series
Durability (Matings)	≥ 500	≥ 500
Material: Inner conductor	Copper alloy	Copper alloy
Material: crimp ferrule	Cu	Cu
Material: other metal parts	Brass	Brass
Material: insulators	PTFE	PTFE
Material: gaskets	Silicone	Silicone
Material: adhesive shrink sleeve	Polyolefine	Polyolefine
Finish: Inner conductor	NiP-Au	NiP-Au
Finish: Outer conductor	CuSnZn3	CuSnZn3
Finish: Other metal parts	CuSnZn3	CuSnZn3

Climatic characteristics

Climatic category acc. to DIN IEC 60068 Part 1	40/105/21	40/105/21
--	-----------	-----------

Electrical characteristics

Contact resistance inner conductor	≤ 1,5 mΩ	≤ 3 mΩ
Contact resistance outer conductor	≤ 1 mΩ	≤ 2 mΩ
Insulation resistance	≥ 5 GΩ	≥ 5 GΩ
Voltage proof	1,2KV (LL195); 1,5KV (LL240); 2KV (LL400) eff/50 Hz	1 kV _{eff} /50 Hz
Impedance	50 Ω	50 Ω
Return loss: Straight style	typ.: -35 dB @ 2 GHz; -32 dB @ 4 GHz; -26 dB @ 6 GHz	typ.: -35 dB @ 2 GHz; -32 dB @ 4 GHz; -26 dB @ 6 GHz
Return loss: Angle style	typ.: -32 dB @ 2 GHz; -30 dB @ 4 GHz; -26 dB @ 6 GHz	typ.: -32 dB @ 2 GHz; -30 dB @ 4 GHz; -26 dB @ 6 GHz

ONE TOOL. TWO STEPS. PERFECT PREPARATION.

For fast and precise installation of Push & Crimp connectors, accurate cable preparation is key. With our compact stripping tool, this takes just two simple steps:

Step 1: Strip the inner conductor

Step 2: Remove the outer jacket

The result: perfectly prepared cable ends in the exact length – tailored to Telegärtner Push & Crimp connectors. Available in three versions for different cable sizes (Low Loss 195, 240 and 400). Thanks to the integrated belt ring, the tool is always on hand – ideal for use in the field.



Step 2

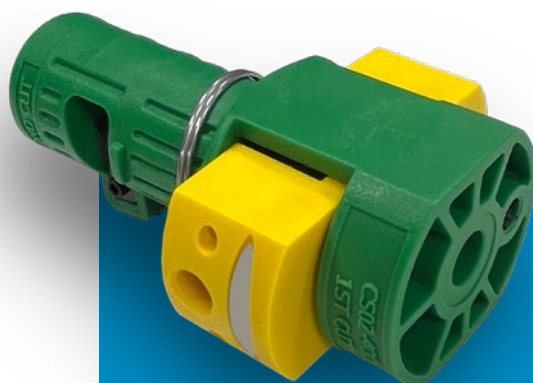
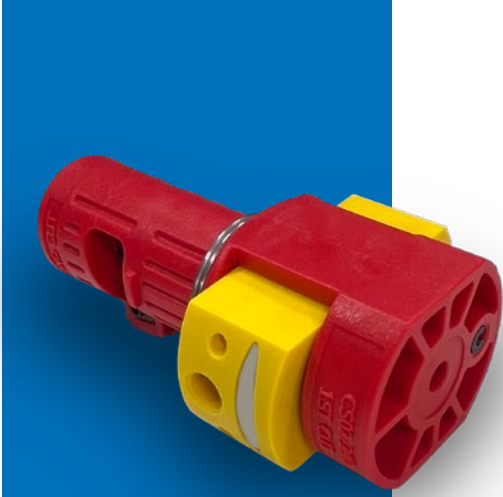


Step 1



195

240



400

Cable types	Low Loss 195 (G1)	Low Loss 240 (G30)	Low Loss 400 (G37)
Ø Cable Jacket	4,95 + 0,25	5,9 + 0,4	10,3 + 0,2
Ø Braid	3,6 + 0,15	4,55 + 0,2	8,1 + 0,15
Ø Dielectric	2,9 + 0,1/-0,3	3,95 + 0,15	7,4 + 0,15
Ø Inner Conductor	0,9 + 0,1	1,42 + 0,05	2,75 + 0,05

Cables

alternative cables

Low Loss 195

LMR-195®, 7806A, CNT-195, HPF 195, KSR 195, WCX 195

Low Loss 240

LMR-240®, 1.4/3.8 AF, 7808A, CNT-240, HPF 240, MRC 240 AFB, S 04172 D, Speedfoam 240 HFJ, SX04172 B-60, TZC 500 25, WCX240

Low Loss 400

LMR-400®, 2.7/7.3 AF, 2.7/7.3 CF, 213CRT7 Low Loss, 7810A, 9913, C2FCP, C2FP, CNT-400, EC 400, HPF 400, MCR 400 AFB, Speedfoam 400 HFJ, TZC 500 32, WBC-400, WCX400.

QUICK AND EASY

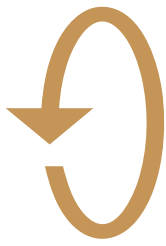
Reliable assembly with multiple advantages

- Simple and reliable on-site assembly
 - Spring contacts on the inner conductor allow solder- and crimp-free connection
 - Outer conductor designed for secure crimping
- Excellent return loss: Push & Crimp connectors ensure outstanding electrical performance with stable connections and low attenuation
- Fast and precise installation thanks to clean cable preparation in just two steps using the handy stripping tool



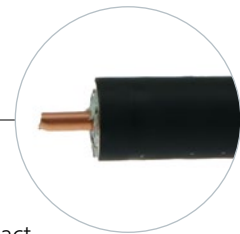
Complete installation solution:

Connectors, crimping tool and stripping tool – everything you need for fast, on-site installation from a single source.



PREPARE

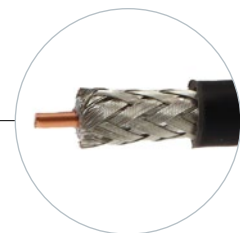
01



Exposing the inner conductor

Insert the cable fully into the tool and rotate it back and forth with light pressure. This cleanly removes the jacket and dielectric, exposing the inner conductor in the exact length required for Push & Crimp assembly.

02



Stripping the outer jacket

In the second step, the outer jacket is stripped to uncover the braid and dielectric. Simply insert the cable into the rear side of the tool and turn it clockwise with light pressure until the jacket is neatly removed. An integrated stop automatically ensures the correct stripping length.

PUSH



03



Flaring the braid

Slide the crimp sleeve onto the prepared cable. Spread the braid evenly and, optionally instead of slide the adhesive shrink sleeve over the cable beforehand.

04



Inserting the cable (Push)

Push the cable into the connector until it stops, then fold the braid back over the rear end of the connector. Finally, slide the crimp sleeve forward as far as it goes.



05



Crimping the cable

Crimp the outer conductor using the crimping tool.

06



Ready to go.

Optionally, shrink the adhesive shrink sleeve for IP67 sealing.

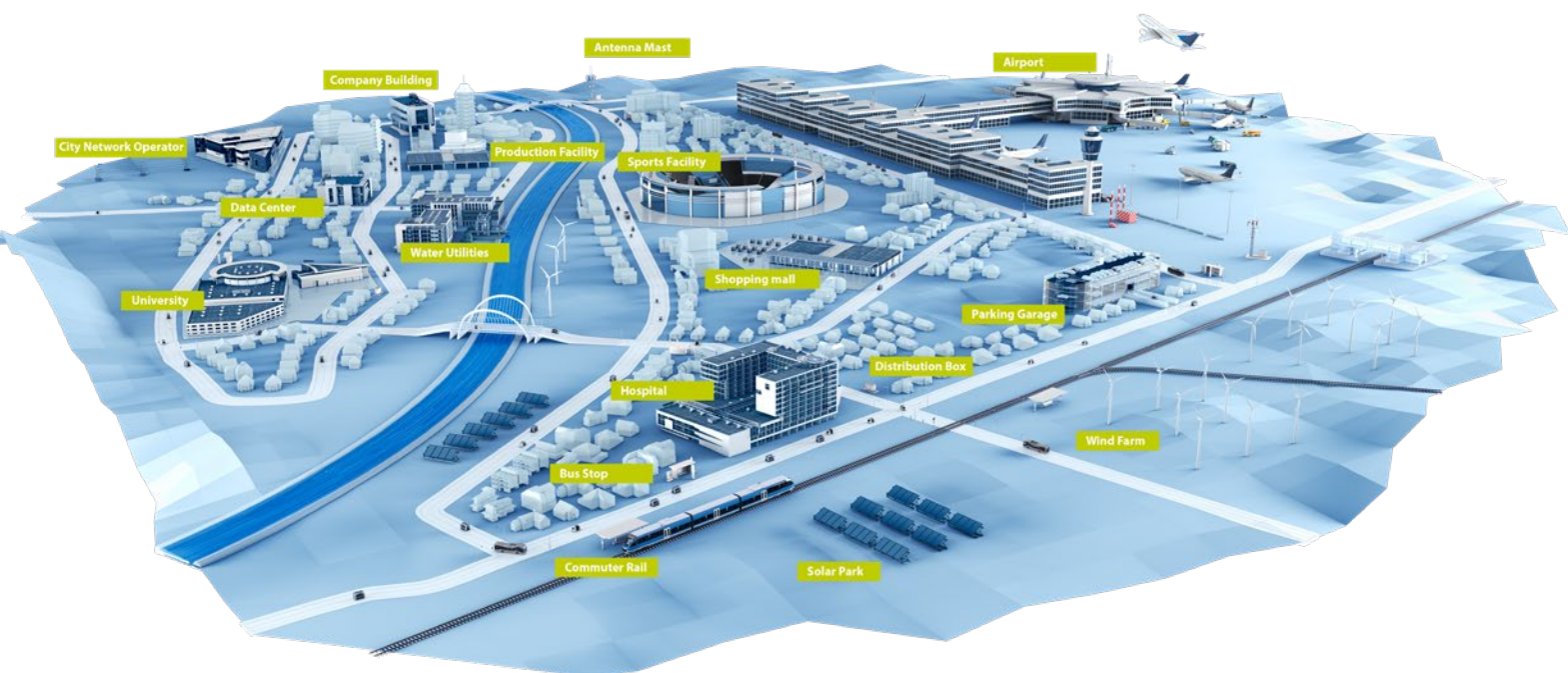
You can find the
assembly video
here:



VERSATILE APPLICATIONS

Our Push & Crimp versions of the N and SMA coaxial connectors offer flexible use across a wide range of industries and applications:

- Factory automation & cabling
- Emergency & service vehicles
- Defence (e.g. drones)
- Robotics & dynamic connections
- Smart Metering
- Renewable energy (including solar)
- RFID antennas
- Tractors, special-purpose & construction machinery
- WLAN antennas in public and campus-wide networks
- Data logging



Order Overview

N series

Straight style



Cable type Low Loss 195

Low Loss 240

Low Loss 400

Part No. 100120692

100120698

100120705

Angle style



Cable type

Low Loss 240

Low Loss 400

Part No.

100135109

100135111

SMA series

Straight style



Cable type Low Loss 195

Low Loss 240

Low Loss 400

Part No. 100123495

100123501

100128534

Angle style



Cable type Low Loss 195

Low Loss 240

Low Loss 400

Part No. 100135112

100135115

100135117

Adhesive shrink sleeve included with all connector types. Additional connectors available on request.

Stripping tool



Cable type Low Loss 195

Low Loss 240

Low Loss 400

Part No. 100130895

100130897

100130899

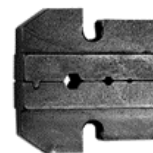
Tool



Type Crimp tool (without crimp die)

Part No. 100025796

Crimp dies



Cable type Low Loss 195

Low Loss 240

Low Loss 400

Part No. 100025879

100025892

100025897



Telegärtner
Karl Gärtner GmbH

Lerchenstr. 35
71144 Steinenbronn GERMANY

Tel. +49 71 57/125-0
Fax +49 71 57/125-5120

info@telegaertner.com
www.telegaertner.com

