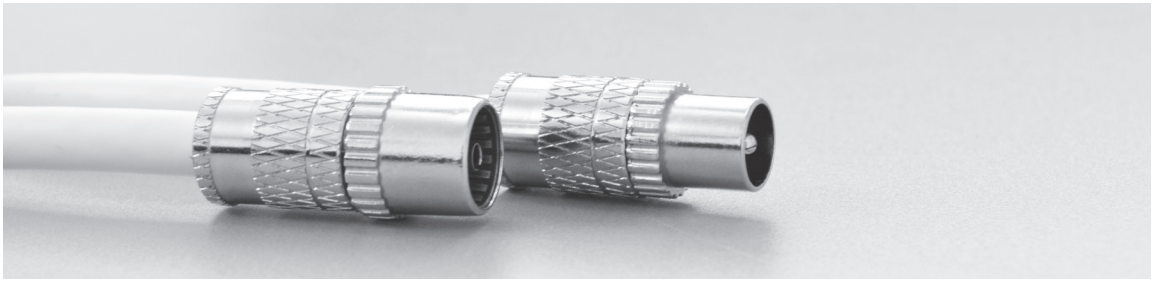


installation guide & datasheet for iec-connector

Introduction

The IM-DIY-S and IF-DIY-S IEC antenna connectors are designed for Do-It-Yourself installation and suitable for installation on DG135OHW, DG123OHW, SAT2, DG113ZH, 102/46SAL-TS, TS703JZH, SAT50M and DG 2-3ZH as well as various RG6 cable types.

The inner tube design and the full metal construction of the connector ensure superior screening performance and a mechanical durable connector.

The connector construction with a conic tube ensures firm clamping of the cable braiding to the inner tube, while a sleeve ensures firm clamping to different cable jacket diameters.

Cable stripping dimensions:

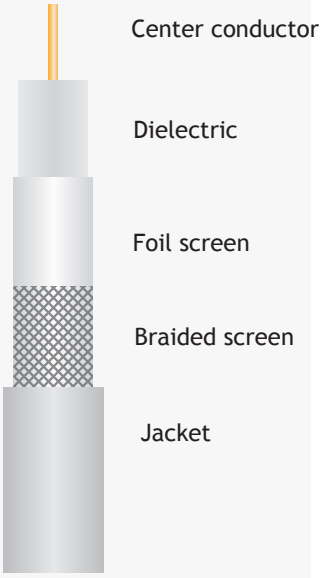
- Center conductor: 6mm
- Braided shield: 6mm

To ensure proper mechanical anchoring of the connector to the cable, the following mechanical dimensions must

	IM-DIY-S IF-DIY-S
Center conductor [mm]	1 - 1,3
Foil screen [mm]	4,75 - 5
Cable jacket [mm]	6,5 - 7,1

To obtain class A shielding performance, the chosen cable type must be at least class A or better.

Cable construction



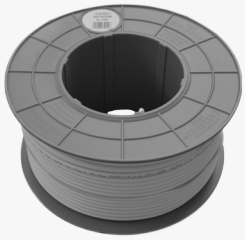
84028	IM-DIY-S
84029	IF-DIY-S
Impedance (Ohm)	75
Insertion loss (dB)	< 0.2 dB
Return loss [1]	Grade 1

[1] EN 60728-4 Grade 1 5 - 47 MHz > 22 dB
47 - 1006 MHz > 22 dB - 1.5 dB/oct.

[2] Screening effectiveness:
CENELEC 50083-2 Class A
5-30 MHz < 5 mΩ/m
30-1000 MHz > 85 dB 1000-3000 MHz > 75 dB

Assembly

To mount the connector the following items are required:



Coaxial cable

Stripping tool matching the chosen cable and connector stripping dimensions.

Alternative is to use a utility knife. Please note not to damage the braid during cable preparation.

November 4th-2014

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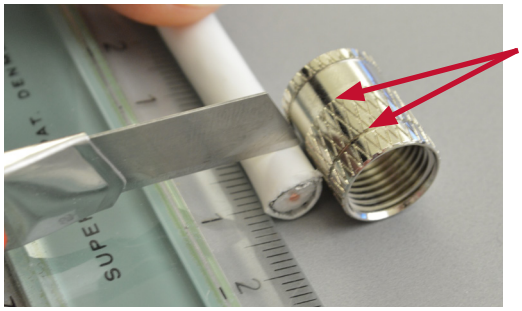
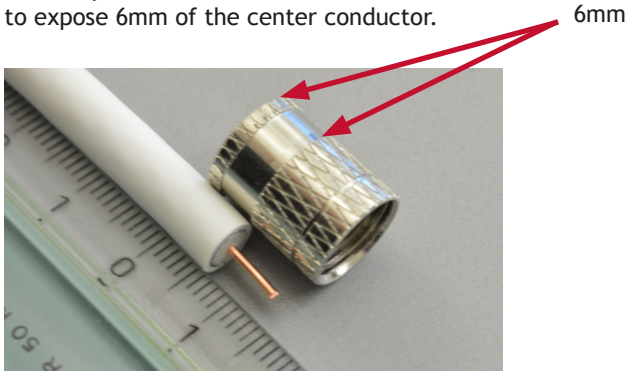
1. Stripping

Either use a stripping tool that ensures 6mm center conductor length and 6mm braid length, or use a utility knife. The connector sleeve can be used for measuring.



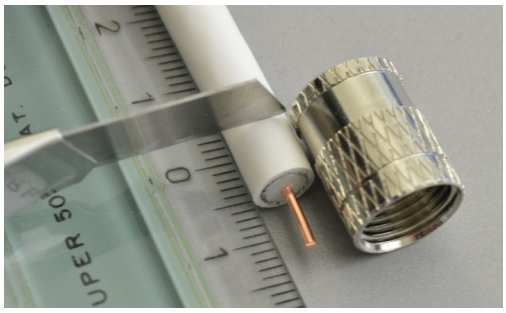
If utility knife is used

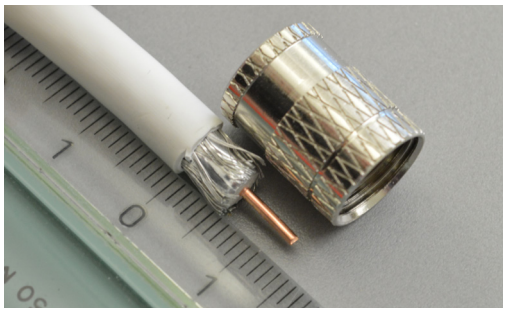
Cut away the Jacket Braid, foil and dielectric to expose 6mm of the center conductor.



Cut carefully half way through the cable jacket 12mm from the tip of the exposed center conductor. Remove the 6mm jacket.

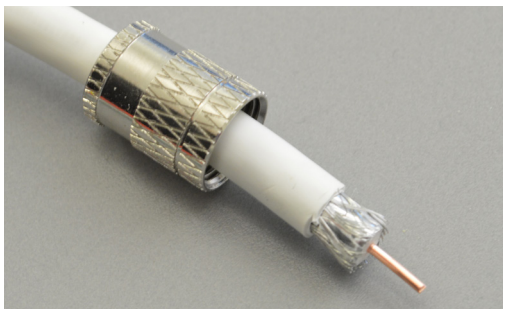
Please note: If the cut was too deep and braiding has been cut off, then start over again.





2. Fit the connector sleeve on the cable

Place the sleeve with the inner thread facing the tip of the cable.



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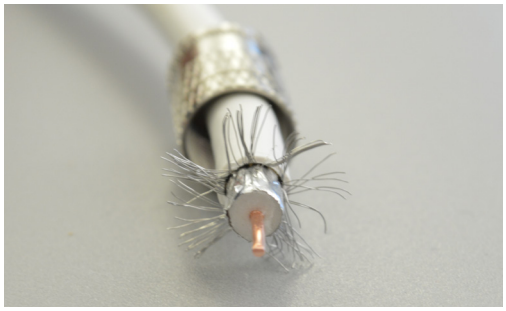
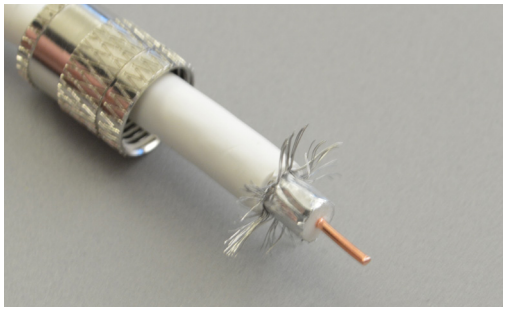
3. Prepare the braid for connector assembly

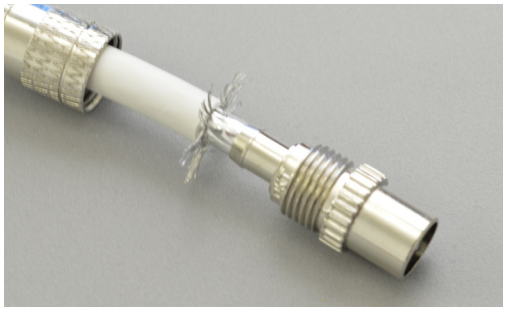
All braid cores are bend backward to a minimum angle of 90°. Check that the center conductor is straight, else it must be straightened.





4. Slide connector over the foil

Ensure that the foil is wrapped closely around the dielectric. If the foil is crumpled it must be straightened prior to connector assembly. Allow the shield tube to slide over the foil without crumbeling the foil.



5. Insert the cable into the connector

The cable jacket must be pushed over the shield tube, for cable types with ridgid jacket: Place the connector on a hard flat surface, hold the connector with one hand while pushing the cable all the way onto the shield tube.

6. Secure the cable

The sleeve is fastened firmly. Due to the construction of the connector, a gap between the connector body and sleeve can depending on cable jacket dimensions, occur without affecting screening performance.

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