



# DIY CONNECTOR ASSEMBLY GUIDE

How to assemble cable & connector for model SR20 / IR20 yourself

When ordering Hukseflux pyranometer SR20 and pyrgeometer IR20 the total cable length can be specified in multiples of 5 metres. However, some users of these instruments might choose to use their own cable. This Do-it-yourself guide provides basic instructions on how to assemble the cable and the M16 connector.



## Introduction DIY replacement /extension

The sensor cable of SR20 / IR20 is equipped with a M16 straight connector. In case of cable replacement, it is recommended to purchase a new cable with connector at Hukseflux. In case of cable extension, the user may choose between purchasing a new cable with connector and extending the existing cable.

## Connector assembly instructions

If you want to use your own cable, follow the instructions below for the connector assembly. Please take the necessary safety precautions and please note that Hukseflux does not provide support for DIY cable assembly. Consult the SR20, SR20-D1 or IR20 user manual for the preferred cable type specifications and for the pin layout used in the electrical connection of these sensors.

The connector is a M16 straight connector from Hummel AG. This connector can be purchased from Hukseflux or from a Hummel AG distributor.

See Table 1 for the required specifications when ordering and for the tools needed for connector assembly.

Follow the Hummel M16 connector assembly instructions via the Hummel.com website. Go to Hummel homepage > Service > Technology Center > Circular Connectors > Assembly Instruction > Connector M16 > Female / Male Threaded Connector. At the moment of writing these instructions can be found via this [hyperlink](#).

The pin layout is according to the electrical connection in the user manual of SR20, SR20-D1 and IR20. The shield has to be connected to pin 9 and to the connector housing. The shield has to be split in two. For bridging the distance between the outer cable sheath and the 10-pole insert, use a heat shrink. Connect the second half of the shield according to the Hummel instructions.

**Table 1** Ordering requirements and tools needed

### REQUIREMENTS ORDERING VIA HUMMEL AG

Article No.	Item
7.810.300.00M*	straight connector, female thread, for cable 3 to 6 mm
7.003.910.102	10-pole insert without contacts (sockets)
7.010.981.002	crimp socket 1 mm, machined, 0.08 to 0.75 mm <sup>2</sup>

### REQUIREMENTS ORDERING VIA HUKSEFLUX

Article No.	Item
040013	M16 connector kit for cable 3 to 6 mm (including 10-pole insert and 10 pieces crimp socket)

### TOOLS REQUIRED FOR ASSEMBLY

Article No.	Item
7.000.900.904	Hummel connectors crimp tool
Not applicable	2 x spanner 15 mm

\* Model M has a reduced diameter compared to the standard model