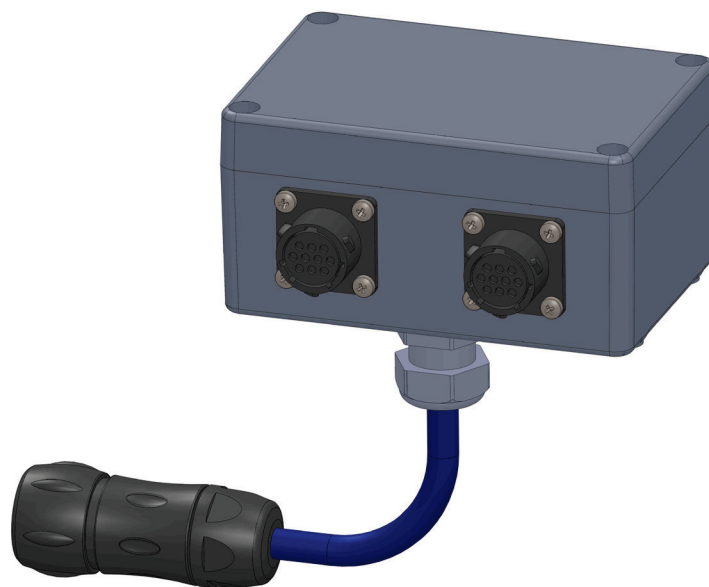


Technical Information

Adapter Box for Flow Measurement Transmitter NivuFlow Mobile 750



NivuFlow Mobile Firmware: as of 2.93

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Original Manual: German / rev. 00 as of 17.12.2018

Use with 3-Path Measurement

1 Functional description

The Adapter Box can be used to extend a 2-path measurement to a 3-path measurement on a NivuFlow Mobile 750.

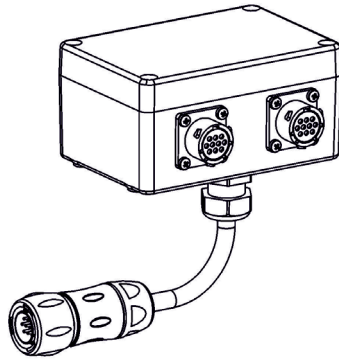


Fig. 1-1 Adapter Box



Basic information on how to connect the flow velocity sensor with level measurement

As soon as a flow velocity sensor with combined level measurement is to be used, this sensor shall be necessarily connected directly to the NivuFlow Mobile using the v1 socket.

2-Path Measurement

Two flow velocity sensors (one of them with level measurement) and one alternative level sensor can be connected directly to the NivuFlow Mobile 750:

- **v1 Socket:** 1 flow velocity sensor or 2 combi sensors (sensor with pressure measurement and/or water-ultrasonic level); all CSM, CSM-D and CSP versions
- **v2/h Socket:** 1 flow velocity sensor (or 1 combi sensor, level measurement without function here)
- **Multifunctional I/O Socket:** 1 alternative level sensor (4-20 mA ultrasonic or pressure sensor)

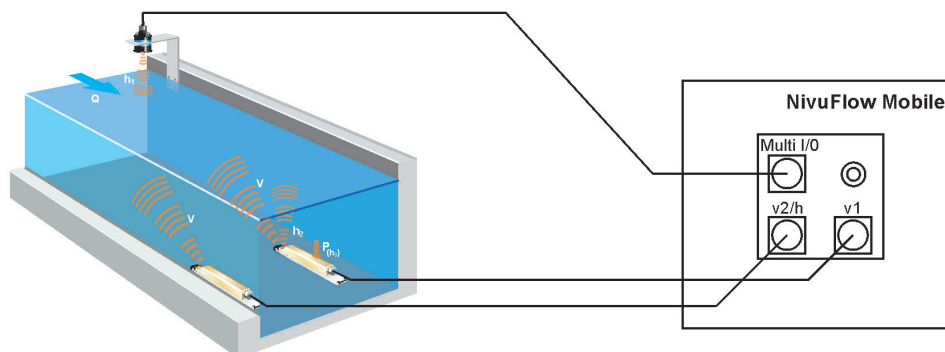


Fig. 1-2 Example of a 2-path measurement

3-Path Measurement

If an Adapter Box is used, one flow velocity sensor (with level measurement if required) and one alternative level sensor can be connected directly and two flow velocity sensors can be connected indirectly to the NivuFlow Mobile 750:

- **v1 Socket:** 1 flow velocity sensor or 1 combi sensor (sensor with pressure measurement and/or water-ultrasonic level); all CSM, CSM-D and CSP versions
- **Adapter Box on v2/h Socket:**
 - 2 flow velocity sensors
 - or 2 combi sensors (level measurement without function here)
 - or 1 flow velocity sensor and 1 combi sensor (level measurement without function here)
- **Multifunctional I/O Socket:** 1 alternative level sensor (4-20 mA ultrasonic or pressure sensor)

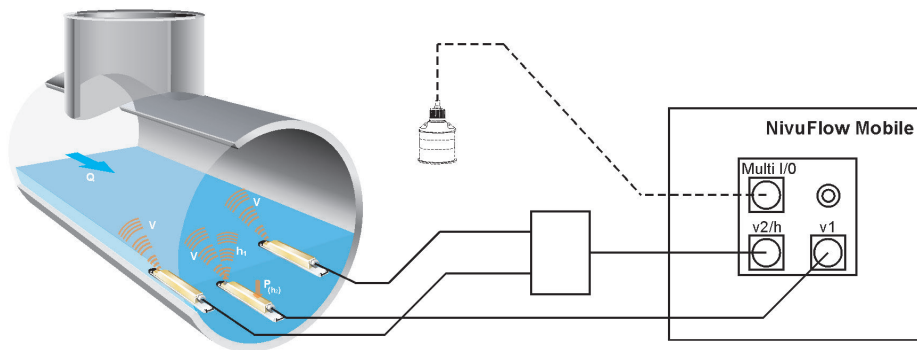


Fig. 1-3 Example of a 3-path measurement

2 Fastening and Connecting the Adapter Box to NFM

The Adapter Box either can be connected directly to the NivuFlow Mobile by using the hoop guards (Fig. 2-1 no. 2) or can be fastened/put on another place. The Adapter Box shall be secured separately as soon as it is not fastened on the NFM in case of flood events occurring.

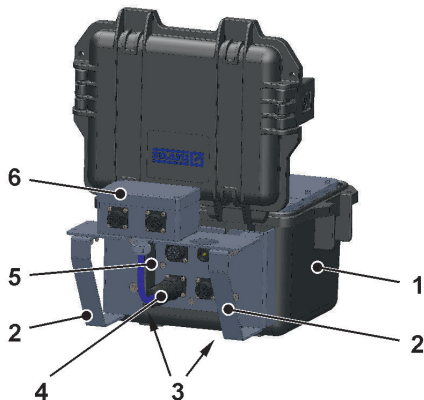



Fig. 2-1 NFM with Adapter Box

🌀 How to fasten the Adapter Box on the NivuFlow Mobile:

1. Remove the rubber buffers (not depicted) from the reverse side of the NivuFlow Mobile (Fig. 2-1 no. 1). Both fastening plates (now loose, Fig. 2-1 no. 3) within the screw channels (Fig. 2-1 no. 5) are already required for the next step.

2. Fasten the hoop guards (Fig. 2-1 no. 2) on the NivuFlow Mobile by using the accompanying screws.
3. Fasten the Adapter Box (Fig. 2-1 no. 6) on the hoop guards by using the accompanying screws.
4. Insert the plugs of both sensors into the Adapter Box.
5. Plug (Fig. 2-1 no. 4) the connection cable from the Adapter Box into the v2/h socket on the NivuFlow Mobile.


 For article numbers see current price list.

3 Connecting the Sensors to the Adapter Box and the NFM

The sensors are equipped with a cable and a plug for the sockets on the Adapter Box / the NFM.

After sensors and cables are installed correctly the sensors can be connected accordingly:

- Connect both flow velocity sensors (with inactive level measurement) to socket 1 or 2 of the Adapter Box and connect the Adapter Box to the v2/h socket of the NFM. You are free to choose which of both sensors is connected to socket 1 or 2.
- Connect the flow velocity sensor or the combi sensor with level measurement to the NFM through the v1 socket and
- connect the alternative level sensor to the multifunctional I/O socket of the NFM.

 See also chapter "1 Functional description".

4 Settings at the flow measurement transmitter NFM 750

The flow measurement transmitter automatically detects two of three connected flow velocity/combi sensors, the third sensor must be assigned manually.



Expert Knowledge required

Expert knowledge and experience in dealing with the NivuFlow Mobile are needed to set the parameters correctly.

- ➡ Set the flow measurement transmitter's parameters as described in the according instruction manual.

5 Cleaning

WARNING



Disconnect the systems from mains

Maintenance, cleaning and/or repairs (by qualified personnel only) may only be performed when de-energised.

Disregarding may lead to electric shocks.

When closed and locked the enclosure of the Adapter Box complies with IP67 protection degree and hence is less sensitive. Do not use high-pressure cleaners however.

Do not use sharp cleansing agents or solvents. Light household cleaners or soapy water can be used instead.