

Technical Information

FAR55

Wave guide



Wave guide for separation of process and measuring device

Application

- Process adapter for the Soliwave microwave barrier and the Solimotion flow indicator
- Spatial separation of process and device

Properties

- Process temperature: -40 to +450 °C (-40 to +842 °F)
- Process pressure: 0.8 to 1.1 bar (12 to 16 psi) absolute
- Total length of the wave guide:
 - Straight version up to 1500 mm (59.06 in)
 - Angulated version up to 1500/2000 mm (59.06/78.74 in) per leg
- Material: Stainless steel

Your benefits

- Individual configuration possibilities of total and leg lengths
- Cost-effective solution for spatial separation
- No wear on the installed devices
- Special versions (dimensions and material) are available on request

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About this document

Symbols

Safety symbols



This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.



This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.



This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.



This symbol contains information on procedures and other facts which do not result in personal injury.

Symbols for certain types of information



Permitted
Procedures, processes or actions that are permitted.



Forbidden
Procedures, processes or actions that are forbidden.



Tip
Indicates additional information



Reference to documentation



Reference to another section



Reference to graphic



1, 2, 3 ... Series of steps

Symbols in graphics

A, B, C ... View

1, 2, 3 ... Item numbers

Performance characteristics

Operating conditions

Process temperature

-40 to +450 °C (-40 to +842 °F)

Process pressure

0.8 to 1.1 bar (12 to 16 psi) absolute



The maximum allowable temperature at the device has to be observed in any case!

Material

- Stainless steel 316Ti (1.4571)
- Stainless steel 316L (1.4404)

Process connection

- Without
- 1½ NPT in accordance with ANSI/ASME
- R 1½ in accordance with EN 10226
- G 1½ in accordance with ISO 228-1, with counter nut

Device connection

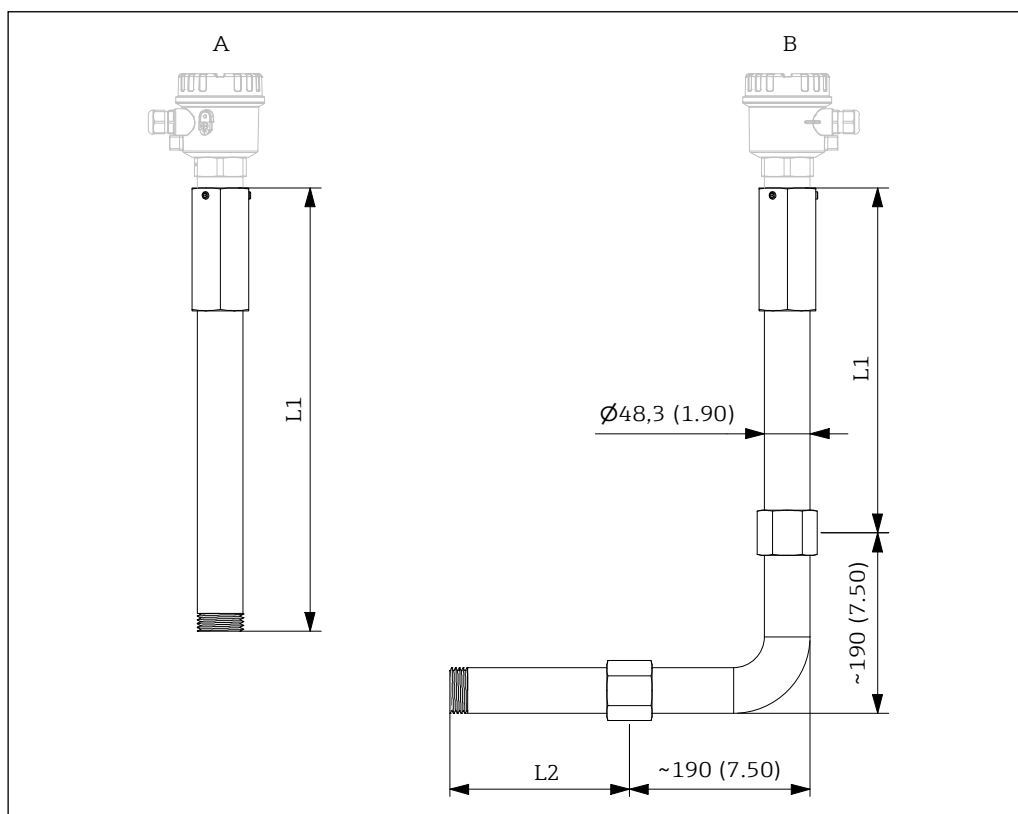
Suitable for the devices of the Soliwave microwave barrier and the Solimotion flow indicator, the following threads are available:

- 1½ NPT in accordance with ANSI/ASME
- R 1½ in accordance with EN 10226
- G 1½ in accordance with ISO 228-1



The device receptacle of the wave guide is suited for all of these threads.

Mechanical construction

Dimensions

1 Dimensions. Unit of measurement mm (in)

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A Straight version

B Angulated version

Weight

The weight depends on version and process connection, for example:

- FAR55-AAAACGAA*
Straight version, process connection without thread, L1 = 200 mm (7.87 in)
Weight 2.0 kg (4.41 lb)
- FAR55-BVE2DGD*
Angulated version, process connection with thread 1½ NPT in accordance with ANSI/ASME, L1 = 1500 mm (59.06 in), L2 = 2000 mm (78.74 in)
Weight 17.8 kg (39.24 lb)

Installation conditions

Mounting position

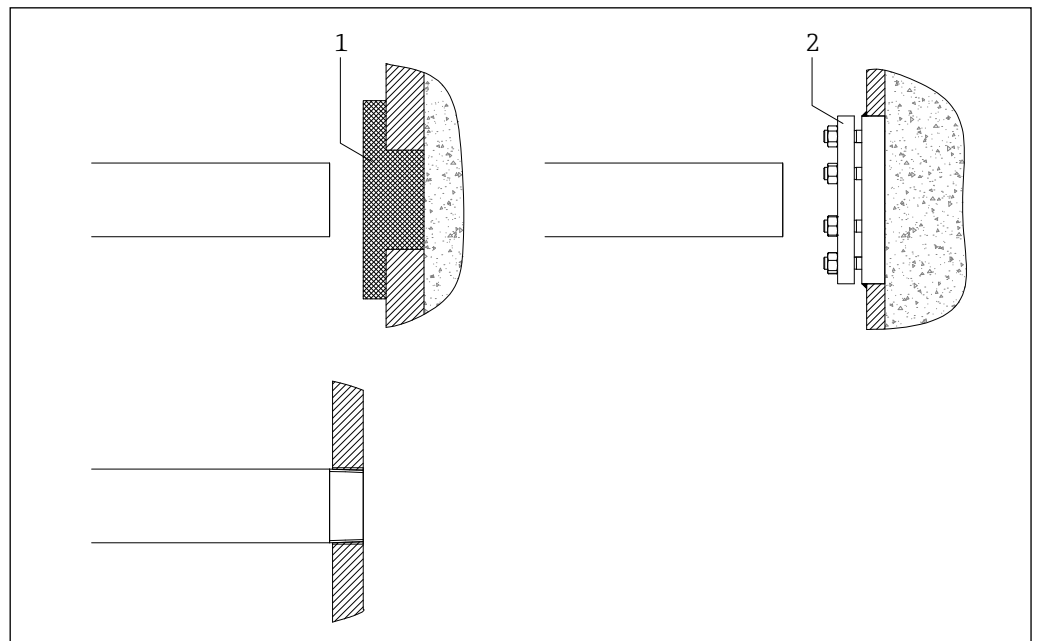
- The wave guide can be installed in any position.
- Provide suitable clearance for installation and removal of the adapter and measuring devices.
- Due to the weight of the longer wave guides, they have to be supported in a suitable manner.

Installation instructions

When using the adapter with the microwave barrier Soliwave, it is essential to ensure that the devices FDR and FQR can be mounted directly opposite each other (see relevant Technical Information as well).



For optimum signal quality, arrange the customer-side passing surfaces (here, for example, a plug and sight glass) at right angles to the microwave path.



2 Installation instructions

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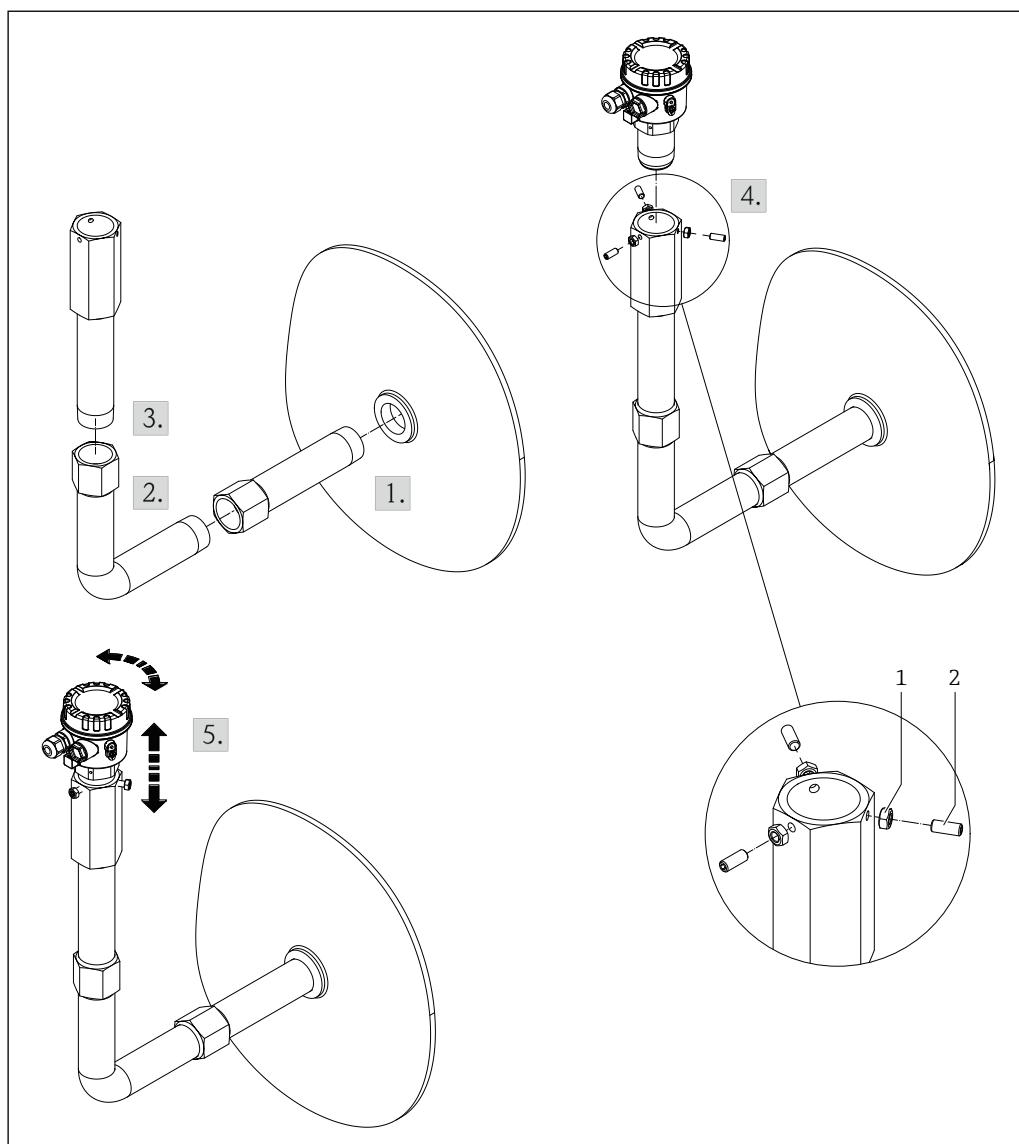
- 1 Plug
2 Sight glass fitting

Mounting

Mounting

The installation of the wave guide is done in five steps (step 2 and 3 are not applicable on straight version):

1. Install the wave guide part L1 (straight version) or L2 (angulated version) into the existing thread on the process
2. Install and arrange the angulated part (angulated version) to the part L2
3. Install and arrange the part L1 (angulated version) to the angulated part
4. Insert the devices of the Soliwave microwave barrier or the Solimotion flow indicator carefully into the device receptacle
5. Arrange the device and position it via three set screws M8 (4 mm) which in turn are secured by counter nuts (wrench opening 13 mm)



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3 Mounting

- 1 Counter nut M8
2 Set screw M8 with hexagon socket

- i** On the inside of the receptacle, two o-rings hold the device; prior to installation, check that they are positioned in their respective grooves.
- Due to the weight of the longer wave guides, they have to be supported in a suitable manner.
- The general notes on the installation and alignment of process adapters in the technical information of the device to be connected must be observed.

Ordering information

Detailed ordering information is available from the following sources:

- In the Product Configurator on the Endress+Hauser website: www.endress.com → Click "Corporate" → Select your country → Click "Products" → Select the product using the filters and search field → Open product page → The "Configure" button to the right of the product image opens the Product Configurator.
- Endress+Hauser sales center: www.addresses.endress.com

- i** Special versions (dimensions and material) are available on request

| | |
|------------|--|
| 015 | Version |
| A | Straight version |
| B | Angulated version |
| 020 | Process connection |
| AAA | Without |
| GG2 | Thread G 1½ in accordance with ISO 228-1, with counter nut |
| VE2 | Thread 1½ NPT in accordance with ANSI/ASME |
| XF2 | Thread R 1½ in accordance with EN 10226 |
| 030 | Length L1 |
| CG | 200 mm (7.87 in) |
| CI | 300 mm (11.81 in) |
| CJ | 400 mm (15.75 in) |
| CK | 500 mm (19.69 in) |
| CL | 600 mm (23.62 in) |
| CM | 700 mm (27.56 in) |
| CN | 800 mm (31.50 in) |
| CP | 900 mm (35.43 in) |
| DA | 1000 mm (39.37 in) |
| DB | 1100 mm (43.31 in) |
| DC | 1200 mm (47.24 in) |
| DE | 1300 mm (51.18 in) |
| DF | 1400 mm (55.12 in) |
| DG | 1500 mm (59.06 in) |
| 040 | Length L2 |
| AA | Without |
| CG | 200 mm (7.87 in) |
| CI | 300 mm (11.81 in) |
| CJ | 400 mm (15.75 in) |
| CK | 500 mm (19.69 in) |
| CL | 600 mm (23.62 in) |
| CM | 700 mm (27.56 in) |
| CN | 800 mm (31.50 in) |
| CP | 900 mm (35.43 in) |
| DA | 1000 mm (39.37 in) |
| DB | 1100 mm (43.31 in) |
| DC | 1200 mm (47.24 in) |
| DE | 1300 mm (51.18 in) |
| DF | 1400 mm (55.12 in) |
| DG | 1500 mm (59.06 in) |
| DH | 1600 mm (62.99 in) |
| DI | 1700 mm (66.93 in) |
| DJ | 1800 mm (70.87 in) |
| DK | 1900 mm (74.80 in) |
| DL | 2000 mm (78.74 in) |
| 060 | Material |
| 2 | Stainless steel 316Ti (1.4571) |
| 3 | Stainless steel 316L (1.4404) |
| 070 | Device connection |
| A | Thread R 1½ in accordance with EN 10226 |
| B | Thread 1½ NPT in accordance with ANSI/ASME |
| C | Thread G 1½ in accordance with ISO 228-1 |

www.addresses.endress.com
