# 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 up to +450 °C (+842 °F)
- Process pressure 80 to 110 kPa (0.8 to 1.1 bar) absolute
- Total length of the wave guide:
  - Straight version up to 1500 mm (59.06 in)
  - Angulated version up to approx. 3800 mm (149.61 in)
- Material: Stainless steel 1.4571 (316Ti)

#### Your benefits

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



People for Process Automation

# Performance characteristics

Operating conditions	<b>Process temperature</b> -40 to +450 °C (-40 to +842 °F)		
	<b>Process pressure</b> 80 to 110 kPa (0.8 to 1.1 bar) absolute		
	<b>NOTICE</b> The maximum allowable temperature at the device has to be observed in any case!		
Material	Stainless steel 1.4571 (316Ti)		
Device connection	Suitable for the devices of the Soliwave microwave barrier and the Solimotion flow indicator, the following threads are available: • R 1½ acc. to EN 10226 • 1½ NPT acc. to ANSI/ASME • G 1½ acc. to ISO 228-1		



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

## Mechanical construction



#### Weight

The weight depends on version and lengths, for example:

- FAR55-AAAACGAA2\*
  - Straight version, process connection without thread, L1 = 200 mm (7.87 in)Weight 2.0 kg (4.41 lbs)
- FAR55-BVE2DGDL2\*

Angulated version (90 °), process connection with thread  $1\frac{1}{2}$  NPT acc. to ANSI/ASME, L1 = 1500 mm (59.06 in), L2 = 2000 mm (78.74 in)

Weight 17.8 kg (39.24 lbs)

# Installation condition

Orientation	<ul> <li>The wave guide can be installed in any position.</li> <li>Enough space must be present for installation and removal of the wave guide and devices.</li> </ul>
Installation instructions	For utilisation of the Soliwave microwave barrier, take care that the pipes for transmitter and transceiver are positioned directly opposite of each other (see relevant Technical Information as well).
	The separation from the process is archieved by e.g. a customer-installed sight glass or plug that is suitable for microwaves (see for example accessories of the Soliwave microwave barrier or plug type FAR54 $\rightarrow$ TI01371F/97/EN).

#### NOTICE

All transition planes should be at a 90  $^\circ$  angle against the microwave path for optimal detection.

### Installation

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 ( $\bigcirc$ 4) which in turn are secured by hex nuts ( $\bigcirc$ 13)





On the inside of the receptacle, two o-rings hold the device; prior to installation, check that they are positioned in their respective grooves.

## **Ordering information**

#### **Product structure**

Detailed ordering information is available from the following sources:

In the Product Configurator on the Endress+Hauser website: www.endress.com → Select your country → Products → Select measuring technology, software or components → Select the product (picklists: measurement method, product family etc.) → Device support (right-hand column): Configure the selected product → The Product Configurator for the selected product opens.

• From your Endress+Hauser Sales Center: www.addresses.endress.com

010	Version	
Α	Straight	
В	Angulated 90 °	
020	Process connection	
AAA	Without	
VE2	Thread 1½ NPT, ANSI/ASME	
XF2	Thread R 1½, EN 10226	
030	Length L1	
CG	200 mm (7.87 in)	
CI	300 mm (11.81 in)	
CJ	400 mm (15.75 in)	
СК	500 mm (19.69 in)	
CL	600 mm (23.62 in)	
СМ	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)	
СК	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)	

050	Material
2	Stainless steel 1.4571 (316Ti)
060	Device connection
Α	Thread R 1½, EN 10226
В	Thread 1½ NPT, ANSI/ASME
С	Thread G 1½, ISO 228-1

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

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