

Technical Information

FAR50

Weld-in nozzle with PTFE plug and counter flange with venting element



Standard adapter for welding,
simple maintenance

Application

- Process adapter for the Soliwave microwave and the Solimotion flow indicator
- Reliable separation of measuring device and process

Properties

- Process temperature up to +200 °C (+392 °F)
- Process pressure up to 80 to 110 kPa (0.8 to 1.1 bar) absolute
- Length of the adapter (nozzle) up to 300 mm (11.81 in)
- Materials:
 - Nozzle and counter flange: Steel or stainless steel
 - Plug: PTFE

Your benefits

- Simple maintenance through fast disassembly of counter flange and easy cleaning or replacement of the plug
- Devices of the Soliwave microwave barrier and the Solimotion flow indicator can easily be replaced during ongoing production
- Plug material ideally suited for microwaves
- Counter flange with venting element to prevent condensation
- No wear on the installed devices
- Special versions (dimensions and material) are available on request

Document information

Display conventions

Safety symbols

NOTICE

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

Symbols for certain types of information

 Permitted


Indicates procedures, processes or actions that are allowed.

 Forbidden

Indicates procedures, processes or actions that are forbidden.

 Tip

Indicates additional information.

 Reference to documentation

 Reference to page

 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 +200 °C (-40 to +392 °F)

Process pressure

80 to 110 kPa (0,8 to 1,1 bar) absolute

NOTICE

- The accepted continuous operating temperature for PTFE is -200 to +240 °C (-328 to +464 °F), however material deformation occurs below and above the defined process temperature.
- The maximum process temperature given is guaranteed for operation without noteworthy pressure strain (pressureless).
- The maximum allowable temperature at the device has to be observed in any case!

Material

- Nozzle: Stainless steel 1.4571 (316Ti) or steel 1.0345 (P235GH)
- Counter flange: Stainless steel 1.4571 (316Ti) or steel 1.0460 (P250GH)
- Plug: PTFE
- Mounting parts: Steel, galvanised

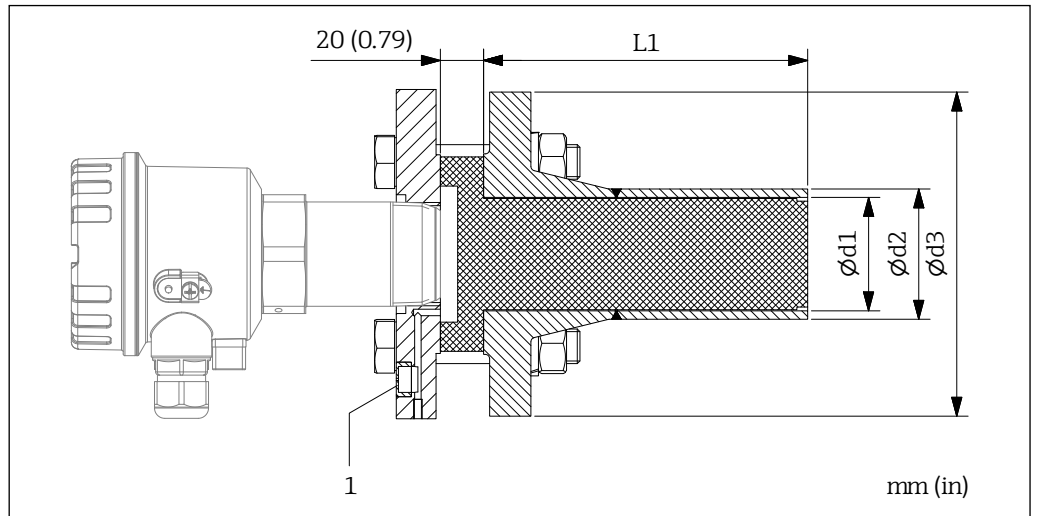
Device connection

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

Mechanical construction

Design, dimensions



1 Design, dimensions

1 Venting element

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Available weld-in nozzle	d1	d2	d3	L1
DN50 PN16	54,5 (2.15)	60,3 (2.38)	165,0 (6.50)	100 (3.94) 150 (5.91) 200 (7.87) 250 (9.84) 300 (11.81)
DN65 PN16	70,3 (2.77)	76,1 (3.00)	185,0 (7.28)	
DN80 PN16	82,5 (3.25)	88,9 (3.50)	200,0 (7.87)	
DN100 PN16	107,1 (4.22)	114,3 (4.50)	220,0 (8.66)	
2" 150lbs B16.5	52,6 (2.07)	60,3 (2.38)	152,4 (6.00)	
3" 150lbs B16.5	78,0 (3.07)	88,9 (3.50)	190,5 (7.50)	
4" 150lbs B16.5	102,4 (4.03)	114,3 (4.50)	228,6 (9.00)	

All dimensions in mm (in).

Weight

The weight depends on diameter and length, for example:

- FAR50-GQ2CF22A
 Weld-in nozzle DN50 PN16 type B, flange EN 1092-1, L1 = 150 mm (5.91 in), device connection R 1½ acc. to EN 10226
 Weight 6.2 kg (13.7 lbs)
- FAR50-AG2CI22B
 Weld-in nozzle NPS 4" Cl. 150 RF, flange ASME B16.5, L1 = 300 mm (11.81 in), device connection 1½ NPT acc. to ANSI/ASME
 Weight 27.6 kg (60.4 lbs)

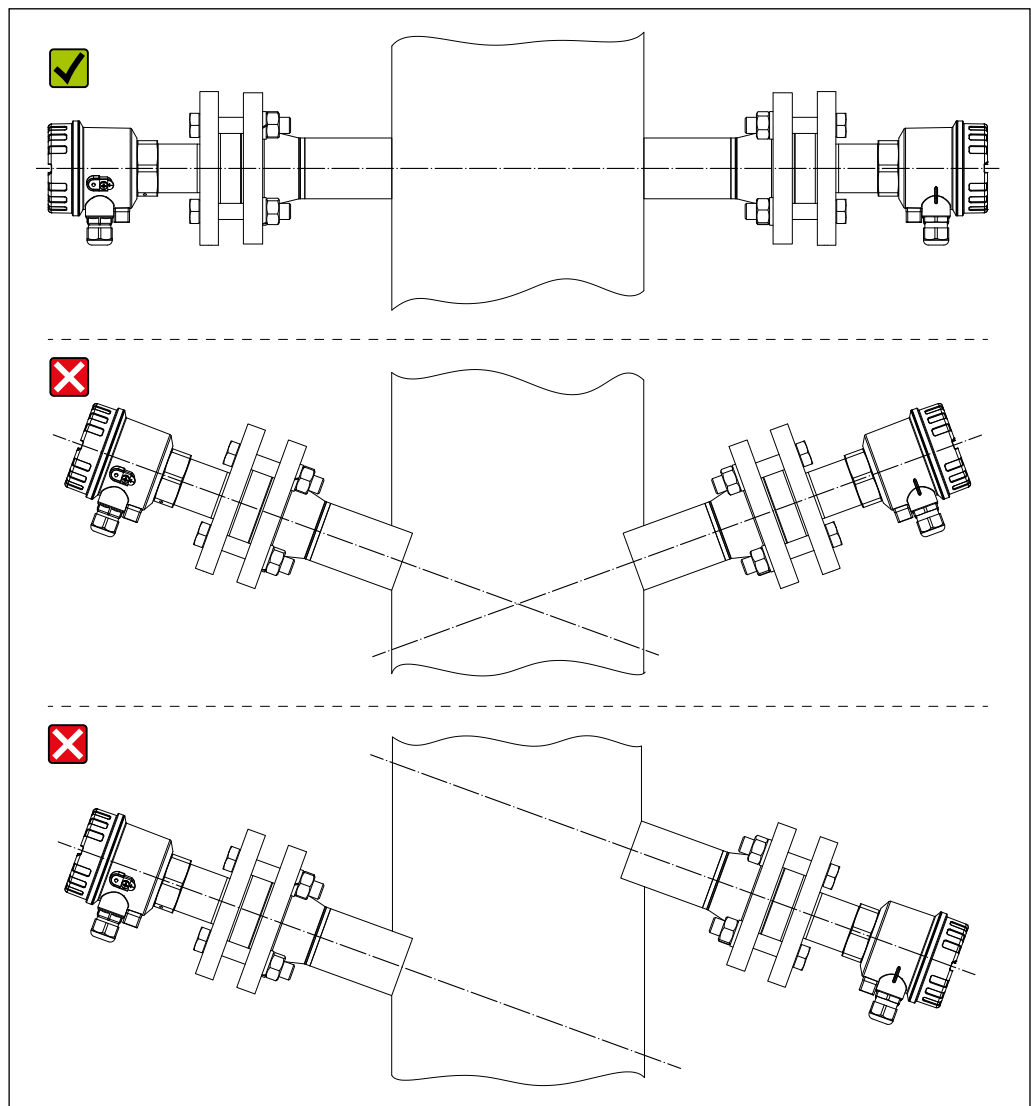
Installation conditions

Orientation

- The weld-in nozzle can be installed in any position.
- Enough space must be present for installation and removal of the plugs and devices.

Installation instructions

- For utilization of the Soliwave microwave barrier, take care that the weld-in nozzles for transmitter and transceiver are positioned directly opposite of each other (see relevant Technical Information as well).
- Take notice of the chemical durability of the PTFE plug for the process conditions.



2 Installation instructions

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Installation

Installation

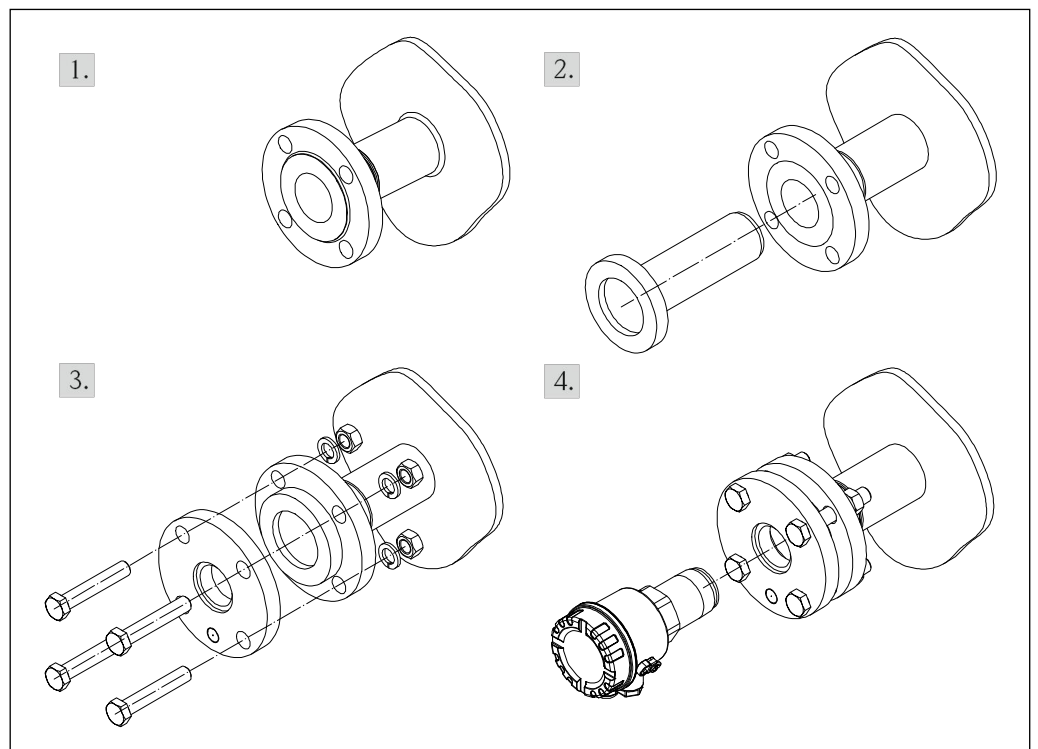
The installation of the weld-in nozzle is done in four steps:

1. Weld the nozzle into the process wall

NOTICE

Please take notice of the general information regarding installation and arrangement of process adapters in the Technical Information on the device to be connected.

2. Insert PTFE plug carefully
3. Install counter flange
4. Install and arrange the devices of the Soliwave microwave barrier or the Solimotion flow indicator.



3 Installation

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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	Flange nozzle
AD2	NPS 2" Cl.150 RF, flange ASME B16.5
AF2	NPS 3" Cl.150 RF, flange ASME B16.5
AG2	NPS 4" Cl.150 RF, flange ASME B16.5
GQ2	DN50 PN16 Form B1, flange EN1092-1
GR2	DN65 PN16 Form B1, flange EN1092-1
GS2	DN80 PN16 Form B1, flange EN1092-1
GT2	DN100 PN16 Form B1, flange EN1092-1
020	Nozzle length L1
CA	100 mm (3.94 in)
CF	150 mm (5.91 in)
CG	200 mm (7.87 in)
CH	250 mm (9.84 in)
CI	300 mm (11.81 in)
030	Material plug
2	PTFE
040	Material flange nozzle
1	Steel 1.0345 (P235GH) / 1.0460 (P250GH)
2	Stainless steel 1.4571 (316Ti)
050	Device connection
A	Thread R 1½, EN 10226
B	Thread 1½ NPT, ANSI/ASME
C	Thread G 1½, ISO 228-1



Special versions (dimensions and material) are available on request.

www.addresses.endress.com
