

Technical Information

FAR51

Insertion adapter with venting element



Universal insertion adapter for existing flange nozzles, suitable for high temperature applications

Application

- Process adapter for the Soliwave microwave barrier and the Solimotion flow indicator
- Reliable separation of measuring device and process if using the plug (feature 030)

Properties

- Process temperature up to +450 °C (+842 °F)
- Process pressure up to 80 to 510 kPa (0.8 to 5.1 bar) absolute
- Nozzle length up to 300 mm (11.81 in)
- Materials:
 - Insertion adapter: Stainless steel 1.4571 (316Ti)
 - Window transmission: PTFE or aluminium oxide ceramic

Your benefits

- Cost-effective adapter for existing flange nozzles
- Devices of the Soliwave microwave barrier and the Solimotion flow indicator can easily be replaced during ongoing production
- Suitable for high temperature applications
- Insertion adapter with venting element to prevent condensation
- No wear on the installed devices
- Special versions (dimensions and material) are available on request

Performance characteristics

Operating conditions

Process temperature

- -40 to +450 °C (-40 to +842 °F) for plug made of aluminium oxide ceramic or without plug
- -40 to +200 °C (-40 to +392 °F) for plug made of PTFE, pressureless
- -40 to +120 °C (-40 to +248 °F) for plug made of PTFE and maximum pressure

Process pressure

80 to 510 kPa (0.8 to 5.1 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

- Stainless steel 1.4571 (316Ti)
- Window transmission (optional): PTFE or aluminium oxide ceramic

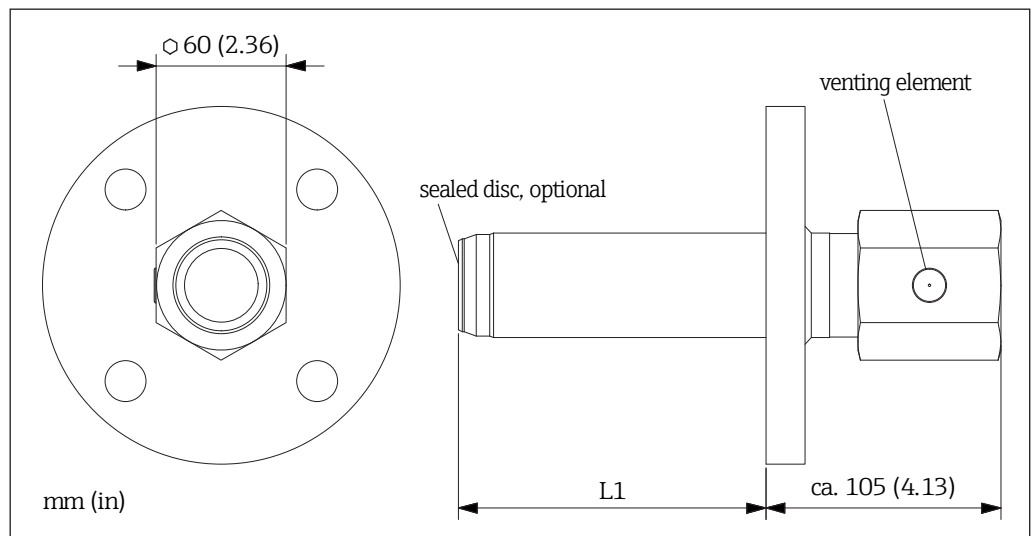
Device connection

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



Weight

The weight depends on type of flange and length, for example:

- FAR51-EQ2CA22A
 Insertion adapter DN50 PN16 form A, flange EN1092-1, L1 = 100 mm (3.94 in), plug made of PTFE, material insertion adapter stainless steel 1.4571 (316Ti), device connection thread R 1½, EN 10226
 Weight 5.1 kg (11.2 lbs)
- FAR51-AG2CI32C
 Insertion adapter NPS 4" Cl.150 RF, flange ASME B16.5, L1 = 300 mm (11.81 in), plug made of aluminium oxide ceramic, material insertion adapter stainless steel 1.4571 (316Ti), device connection thread G 1½, ISO 228-1
 Weight 10.2 kg (22.5 lbs)

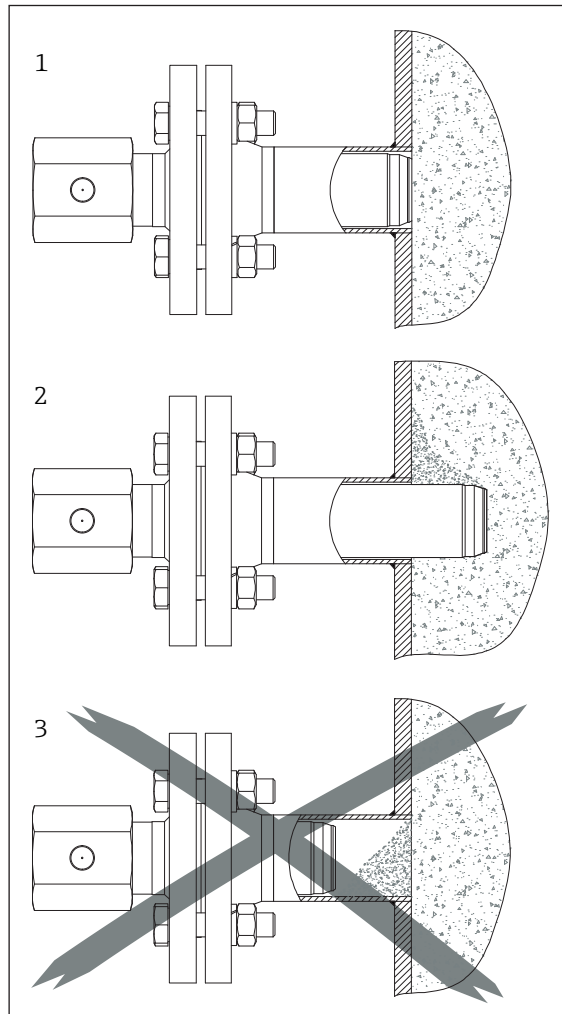
Installation conditions

Orientation

- The insertion adapter can be installed in any position.
- Enough space must be present for installation and removal of the adapter 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 transmission window made of PTFE for the process conditions.

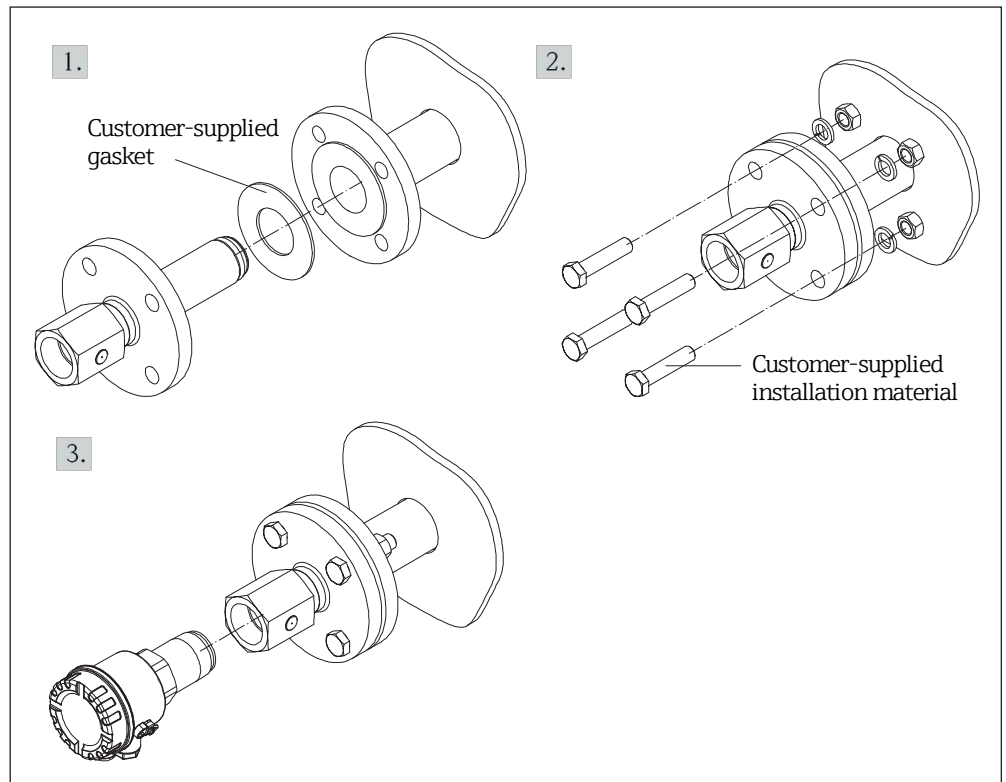


The adapter length should be chosen in such a way, that it is flush with the inner vessel wall (1). Alternatively, the adapter can protrude slightly into the process (2), as long as he stands no risk of being damaged by falling media. A recessed position (3) must be avoided, because media can accumulate there, impairing the function of the devices.

Installation

The installation is done in three steps:

1. Insert the adapter carefully inside the nozzle
2. Install adapter on the nozzle
3. Install and arrange the devices of the Soliwave microwave barrier or the Solimotion flow indicator



NOTICE

The flat gasket between insertion adapter and flange nozzle as well as the installation screws are not part of delivery. Please select these depending on the process conditions.

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
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
EQ2	DN50 PN16 form A, flange EN1092-1
ER2	DN65 PN16 form A, flange EN1092-1
ES2	DN80 PN16 form A, flange EN1092-1
ET2	DN100 PN16 form A, flange EN1092-1
020	Nozzle length L1
CA	100 mm (3.94 in)
CB	110 mm (4.33 in)
CC	120 mm (4.73 in)
CD	130 mm (5.12 in)
CE	140 mm (5.51 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	Window transmission
1	Without
2	PTFE
3	Aluminium oxide ceramic
040	Material insertion adapter
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.

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