

Isokinetic Instack Sampling Probe

Instack dividable probe

Main Characteristics

- Compliant with international testing methods: EN13284-1, US EPA M17, ISO9096...
- Built-in AISI 316 stainless steel or titanium
- Probe is built by screwing vertical or horizontal sampling termination with 1m long prolongation tube, enabling to adapt the length of the probe to any stack diameter with an easy transport to any location of sampling port.
- Compatible with all instack accessories (filterholders, impactors,).

Vertical Filterholder Sampling



The curve of 90° allows assembling the filterholder in parallel in the gas flow, that enables simple sampling and reduced rinsed volume, which reduces uncertainty for low concentration measurement.

Sampling termination

Equipped with handgrip for easy handling and position control, and connector for flexible tubes. Length: 500 mm.

Filterholder kit

47mm filterholder designed according to EN13284-1.

Kit of 7 nozzles Ø 4,5,6,7,8,10,12mm.



	Stainless steel	Titanium
Complete sampling kit 1.5m	ES204-1000	ES204-1100
Sampling termination	ES204-0000	ES204-0110
Isokinetic kit	ES299-1102	ES299-1202
Filterholder	ES299-0000	ES299-0100
Nozzles kit	ES299-0001	ES299-0101

Horizontal filterholder Sampling

The straight termination tube enables to sample with horizontal filterholder, that is easier to introduce in small stack ports and less subject to sample loss.



Sampling termination

Equipped with handgrip for easy handling and position control, and connector for flexible tubes. Length: 1 m.



Ref.: ES203-0000

Filterholder kit

Sampling termination is compatible with all instack filters and thimble holders. See data sheet EL.301.04 for more information.



	Stainless steel	Titanium
Complete sampling kit 2m	ES203-1000	ES203-1100
Sampling termination	ES203-0000	ES203-1110
Isokinetic kit	See datasheet EL 1.301.04	
Filterholder	See datasheet EL 1.301.04	
Nozzles kit	See datasheet EL 1.301.04	

Instack dividable probes accessories

Prolongation tube

Prolongation tubes are connected to termination tube and to each others to build desired length probe.

Length: 1m

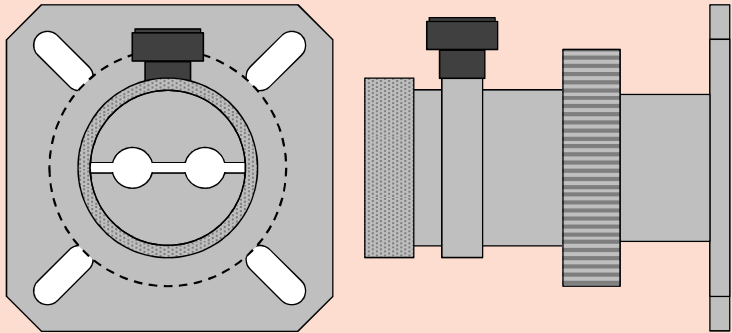
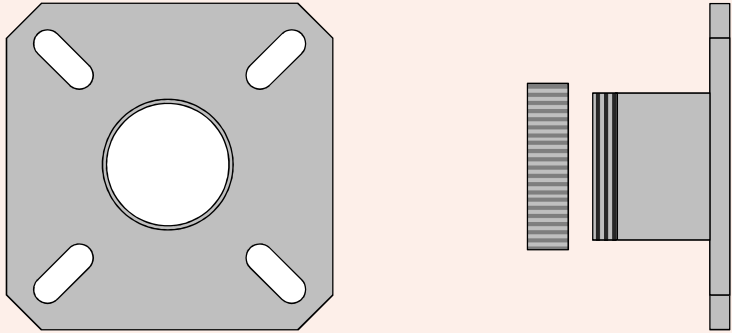
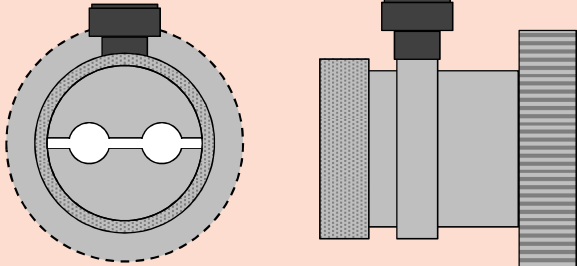
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Flange

Flange is designed to install dividable probes on all kind of stacks.

It is constituted of 2 parts:

- Stack part that is fixed on stack
- Probe part that is designed to install a dividable probe and an integrated Pitot (see data sheet EL 1.301.02) in parallel to preform isokinetic sampling according to international standards.

		Ref.
Complete flange		ES203-0004
Stack part		ES203-0002
Probe part		ES203-0003

Isokinetic Instack Sampling Probe

Pitot tubes

« S » type Pitot tubes

Tube for « S » type Pitot

- Compliant with international testing methods
- Built-in AISI 316 stainless steel.
- Removable "S" type Pitot terminations for easier calibration (not included).
- K type thermocouple included.
- Compatible with slide and lock device ES203-0004 (data sheet 1.301.01)

Length (m)	Reference
0.5	ES107-0300
1	ES107-0301
1,5	ES107-0302
2	ES107-0303
2,5	ES107-0304
3	ES107-0305



« S » type Pitot tubes terminations

The final part of "S" Pitot tube is detachable to allow a replacement in case of damage or for determination of the calibration factor.

The final part of "S" Pitot tube is realized in three lengths:

Designation	Code	Use	
"S" Type Pitot Tube - Short	ES107-0000	sampling with out-stack filter assembly	
"S" Type Pitot Tube - Long	ES107-0001	sampling with in-stack filter assembly	
"S" Type Pitot Tube - XL	ES107-0002	sampling with impactors	

ISO17025 calibration on 5 points, as requested in ISO16911-1:2013, can be supplied on demand. **Ref.** CE103-0000

« L » type Pitot tubes

- Compliant with international testing methods
- Built-in AISI 316 stainless steel.



Length (m)	Reference
0.2	ES107-1000
0.3	ES107-1001
0.45	ES107-1002
0.6	ES107-1003
0.9	ES107-1004
1.2	ES107-1005
1.5	ES107-1006

ISO17025 calibration on 5 points, as requested in ISO16911-1:2013, can be supplied on demand. **Ref.** CE103-0011

Technical specifications may change without previous warning

Isokinetic Instack Sampling Probe

Instack Integrated Probe



Main Characteristics :

- Compliant with international testing methods: EN13284-1, US EPA M17, ISO9096...
- Built-in AISI 316 stainless steel.
- Gaskets free for a maximum temperature of 800 °C
- Compatible with all instack accessories (filterholders, impactors,).

The integrated probe includes a suction tube, a K type thermocouple, A serialized "S" Pitot tube that is removable from the probe body which allows an easy replacement and calibration.

Design is made for easy of use, transport, robustness, long lasting and compatibility with isokinetic sampling scale accessories.

Integrated probe exists in several standard lengths as set in following table:
Other lengths can be supplied on demand.

Length (m)	Reference
1	ES200-0001
1,5	ES200-0002
2	ES200-0003
2,5	ES200-0004
3	ES200-0005
3,5	ES200-0001

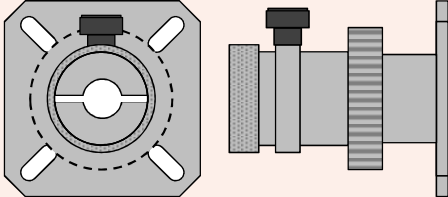
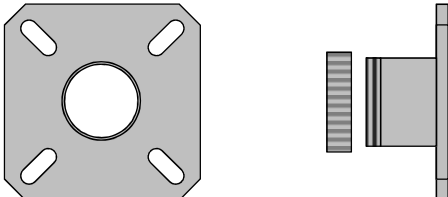
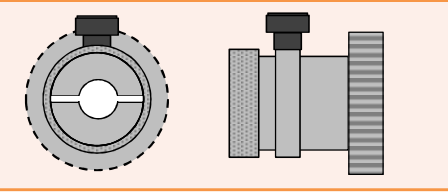
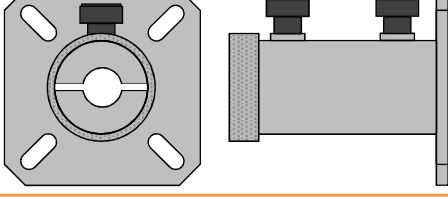
Flange

Flange is designed to install instack integrated sampling probes on all kind of stacks.

It is constituted of 2 parts:

- Stack part that is fixed on stack
- Probe part that is designed to install directly on the probe.

For probes of 2,5m and above a special flange is needed.

		Reference
Complete flange		ES200-9001
Stack part		ES200-9000
Probe part		ES203-0002
Complete flange Probes ≥2.5m		ES200-9002

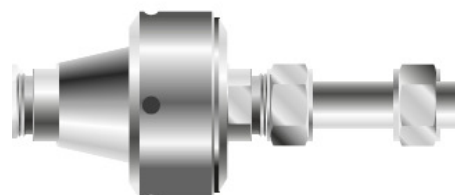
Technical specifications may change without previous warning

Isokinetic Instack Sampling Probe

Instack Filterholders

47 mm membrane in stack filterholder

- Compliant with international testing methods: EN13284-1, US EPA M17, ISO9096...
- Built-in AISI 316 stainless steel or titaniums.
- Gaskets free for a maximum temperature of 850 °C



Filterholder is designed to guaranty an homogeneous repartition for dust on filter and to maintain filter on its support during filterholder manipulation.

In stack Thimbleholder

- Compliant with international testing methods: EN13284-1, US EPA M17, ISO9096...
- Built-in AISI 316 stainless steel or titaniums.
- Gaskets free for a maximum temperature of 850 °C



The body of the thimbleholder can accept different types of filtering media thanks to its several accessories.

Easy to connect with probe and gooseneck. Can be prepared in lab to limit fields operations.

Glass/quartz whool basket



Ref. ES299-2002

Ø 30mm glass/quartz fiber filter thimble support



Ref. ES299-2003

Ø 35mm x 100mm ceramic thimble support



Ref. ES299-2004

		Stainless steel	titanium
Complete 47mm filterholder isokinetic kit (Filterholder + curve + nozzles set + transport case + mounting tools)		ES299-1001	ES299-1101
Complete thimbleholder isokinetic kit (Filterholder + curve + nozzles set + transport case + mounting tools)		ES299-2001	ES299-2101
47mm filterholder		ES299-1000	ES299-1100
Thimbleholder		ES299-2000	ES299-2100
Gooseneck		ES103-0101	ES103-0201
Nozzle kit Ø 4,5,6,7,8,10,12,14mm		ES104-9100	ES104-9200

Technical specifications may change without previous warning

Isokinetic Instack Sampling Probe

PM10 / PM2.5 Cyclones

Main Characteristics

- Compliant with international testing methods: US EPA 201A
- Built-in AISI 316 stainless steel
- Compatible with instack accessories (filterholders, sampling probes).

The PM10 cyclone allows to measure the fine particulate course in stack emission with aerodynamic diameter lower than 10 micron. The cyclone has been designed to meet the specifications reported by USEPA Method 201A.

This method concerns the sampling at constant flowrate at actual emission conditions using an in-stack filterholder (see datasheet EL.301.04).

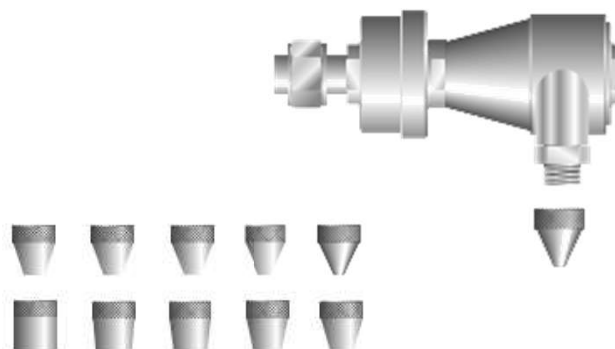
The PM10 cyclone can also be installed on the heated Probe (see datasheet EL.302.01), equipped with either AISI 316 or Titanium suction tube.

PM10 cyclone and nozzle kit

The PM10 cyclone, positioned instead of the curve gooseneck, allows to use the Isokinetic kit for determining the already existing total particulate matter.

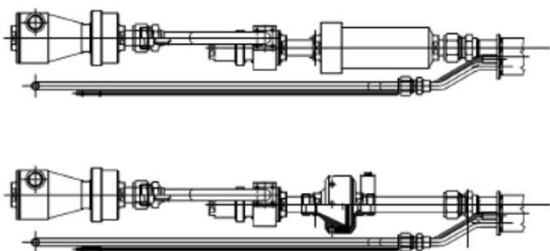
The PM10 cyclone inlet nozzles are available as kit or as single unit.,

The length of those nozzles is different from the one suggested by EPA, in order to allow the probe to enter the 4" stack ports.



PM2.5 cyclone

The PM2.5 cyclone is positioned between PM10 cyclone and filterholder.



	Stainless steel
PM10 cyclone	ES299-3002
PM2.5 cyclone	ES299-3003
Cyclone's nozzle kit	ES299-3001
Filterholder	see datasheet EL.301.04
Pitot tube	ES107-0002