● Sampling Conditioning Systems ● Process Analytics
● System Integration ● Gas Generators ● FTIR-Analysers

Conditioning systems

Portable Sampling Probe JPES and Heated Hose

FEATURES

- ◆ All-in-one
- ◆ Compact and light weight
- ◆ Easy site set up
- ◆ Quick On connectors
- ◆ Quick heat up
- ◆ Zero cold spot technology
- ◆ Integrated temperature controller
- ◆ Versatile accessories

APPLICATION

The heated JPES sample probe is designed for use in extractive sampling systems with sample gases containing dust and aerosol, especially for measurement in not stationary applications.

The heated gas sample probe JPES and the also included heated sample hose ensure that water vapour and high dew point corrosive gases are kept above their dew point to prevent corrosion and sample degradation prior to the analysis or sample conditioning.

All necessary parts for a mobile gas sample probe are part of the package and placed in a handy case. Quick On connectors allow tool-less mounting and operation. Filter replacement as well can be done easily without any tools and without disconnecting the heated sample line.

Different pipes -heated and unheated-, materials and filters as well as heated hoses and a positioning flange make the JPES very flexible for different applications.

TECHNOLOGY

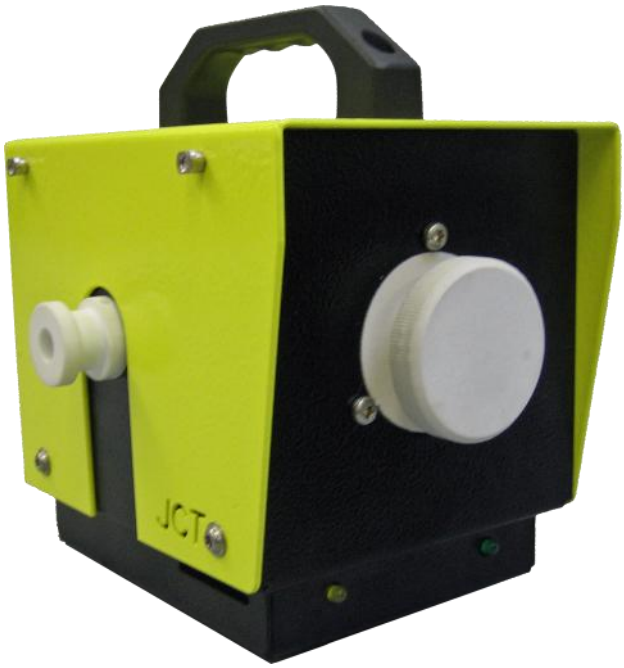
The JPES sample probe can be equipped with several different replaceable, heated and large surface filter elements. The filter element is mounted in a thermal isolated and electrically heated stainless steel housing covered by a protection enclosure. The temperature regulation is done by a maintenance free PTC heater.

OPERATION

The probe is mounted directly to a sampling hole or flange. If the assembly takes place horizontal, the JPES should be built in an angle at least between 5° and 15° from the horizontals falling, to allow condensate flow back into the process. The heated sample line JH-SO 9412 series is directly connected with the probes housing via a Quick On connection.
The sampling is ready for use within a few minutes.

TECHNICAL DATA

SPECIFICATIONS OF SAMPLING PROBE	
Filter element	GF, PTFE, SS
Operating pressure	50 kPa abs.
Flow rate	Up to 200 l/h depending on filter element
Mounting flange	Flange adapter universal 20-80mm
Mounting angle	5°-15° sloping down
Sample gas connector	Quick On
Heated hose connection	Quick On
Calibration gas connector	Quick On
Sample gas wetted parts	1.4571, Viton
Operating temperature nom. Operating temperature max.	180°C 200°C
Heat up time	<15 min
Permissible ambient temperature	-20°C ... +55°C
Power consumption	Approx. 160 W
Heater element	PTC self limiting
Supply voltage	115VAC or 230VAC/ 50/60Hz
Inrush current	3 A
Status signal	Volt free contact
Protection class	IP 22
Weight	3,1 kg



SPECIFICATIONS OF HEATED HOSE	
Supply voltage	115VAC or 230VAC/50/60Hz
Power consumption	approx. 100 W/m
Heating	Integrated temperature controller
Shell	PA-braided
Outer diameter	35mm
Minimal bending radius	50mm
Colour	black
Operating temperature	180°C
Heat up time	< 15 min
Fusing	External, on site
On-time	100%
Inner core	PTFE
Nominal width inner core	ID4/ OD6 mm
Signal cord	2 x 0,75², open endings
Power cord	IEC or country specific plug
Cable length	2m each

SPECIFICATIONS OF HEATED SAMPLE PIPE (OPTION)	
Supply voltage	115VAC or 230VAC/50/60Hz
Power consumption	approx. 150 W/m
Heater	Integrated temperature controller
Gas wetted parts	SS 1.4571
Outer diameter	25mm
Nominal width inner-pipe	ID4 mm
Connector pre filter	Thread connector R3/8”
Length	1000, 1500, 2000mm
Length over all	1110, 1610, 2110mm
Weight	1,8;3,0;3,6kg
Operating temperature	+180°C
Sample gas temperature	max. 250°C
Heat up time	< 15min
Connector 7-pin	Power supply via heated hose
On-time	100%
Protection class	IP54

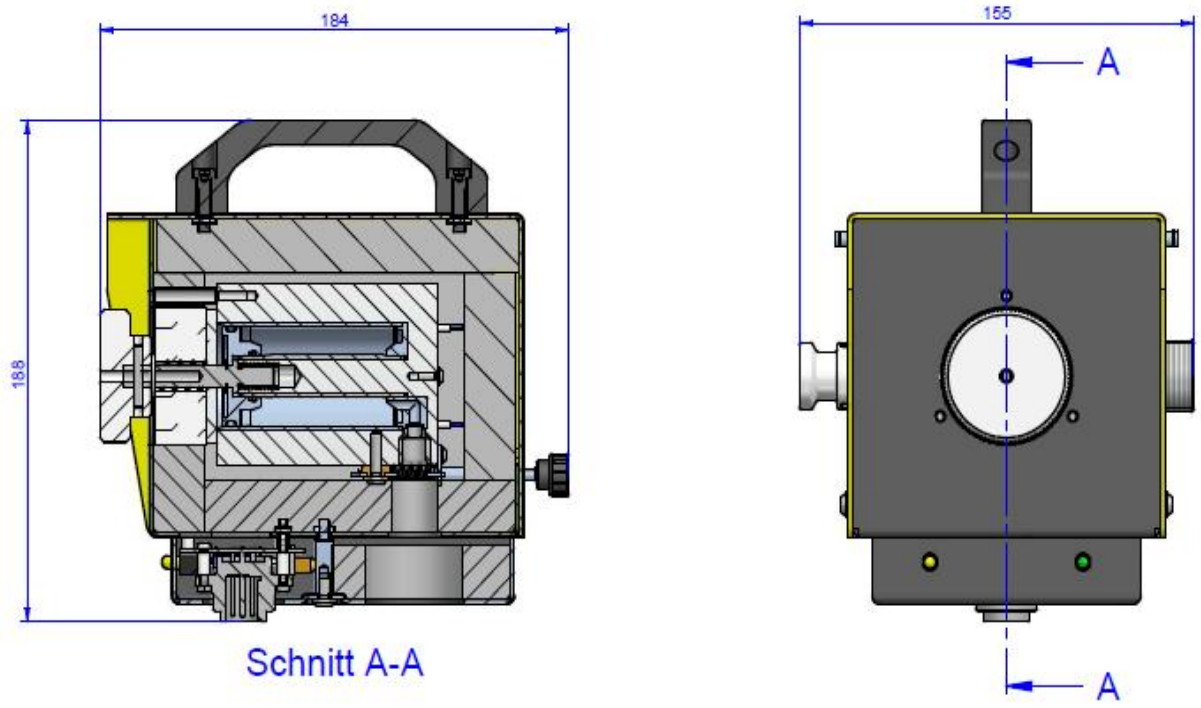
ORDER CODES

Part-No.	Components description	Content „Starter“	Content „Premium“
34.00401	Heated hose 230VAC l=3m inside 6x4mm	(√)	
34.00402	Heated hose 230VAC l=5m inside 6x4mm		(√)
34.00403	Heated hose 230VAC l=7m inside 6x4mm		
34.00411	Heated hose 115VAC l=3m inside 6x4mm	(√)	
34.00412	Heated hose 115VAC l=5m inside 6x4mm		(√)
34.90015	Filter element microfiber 2µm (PU 5 pcs)	1x	√
K3411305	Filter element PTFE 2µm		2x
K3411310	Filter element SS sieve fabric 2µm, incl. sealing		
34.00307 34.00308 34.00309	Sample pipe SS ID8/OD10mm, max. 600°C L= 300mm L= 500mm L=1000mm	√	√
34.00304 34.00305 34.00306	Sample pipe SS ID6/OD8mm, max. 600°C L= 300mm L= 500mm L=1000mm		√
34.00301 34.00302 34.00303	Sample pipe SS ID4/OD6mm, max. 600°C L= 300mm L= 500mm L=1000mm		√
34.00610	Heated sample pipe 230VAC l=1m		
34.00615	Heated sample pipe 230VAC l=1,5m		
34.00620	Heated sample pipe 230VAC l=2m		
34.00710	Heated sample pipe 115VAC l=1m		
34.00715	Heated sample pipe 115VAC l=1,5m		
34.00720	Heated sample pipe 115VAC l=2m		
34.00510	Calibration gas connector		√
34.90025	Calibration gas tamping	√	√
P3400100	Carrying case yellow with shell moulds	√	√
K1001041	O-ring A (Filter lock inside) Ø15mm		
K1001043	O-ring B (Filter lock outside) Ø33mm		
K1001042	O-ring C (Quick on connectors) Ø6mm		
34.90010	O-ring set: 1x O-ring A, 1x O-ring B, 4x O-ring C		√
K3419010	PTFE paste 113,4g collapsible tube		√
34.00501	Mounting chain (2x1m)	√	√
34.00520	Filter lock complete		
K3419020	Disassembling aid (flat spanner)	√	√
On request	Stationary sampling point: sample gas connector with ferrule for screw in mounting		
On request	Stationary sampling point: sample port with ferrule welded in mounting		
K3419030	Mobile sample point adapter universal (cone -shaped for pipe diameter20-60mm)	√	√
34.00910	Positioning flange for heated sample pipe DN 65, PN6; DIN 2573; SS316Ti		

Part-No.	Components description
34.00150	JPESX Starter Kit, 115V
34.00250	JPES Starter Kit, 230V
34.00180	JPESX Premium Kit, 115V
34.00280	JPES Premium Kit, 230V

TECHNICAL DRAWINGS

Heated sample probe



Heated hose

Heated sample pipe

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