



JPES Portable Gas Sampling Kit



JCT
Analysentechnik

Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

Gas Conditioning Systems

Sample Gas Converters

APPLICATION

- Mobile extractive gas analysis
- Emission and process monitoring
- Mobile representative gas sampling in dust and humidity containing processes
- Removal of dust from the sample gas stream
- Condensate free transport from the sampling point to the conditioning system or the analyzer
- Especially designed for:
 - Stack testers
 - Authorities (QAL 2)
 - Mobile back-up CEMS

BENEFITS

- Lightweight and compact
- Quick and very easy start up
- Very easy operation
- Very easy and quick change of the filter element without tools
- Complete ready for use set, no additional equipment necessary
- No separate temperature controller necessary
- Only one power connection necessary (also with heated sampling tube JBER)
- No loose cables

FEATURES

- Robust, compact transport case with all necessary parts for mobile gas sampling: gas sampling probe, heated sample line, sampling tubes, filter elements, calibration gas connection, mounting chains, ...
- Compact gas sampling probe with operation and temperature status LEDs
- Homogeneous heating to 180 °C without cold spots
- Gas sampling probe with self limiting PTC heating element
- Calibration gas connection at the gas sampling probe
- Heated sample line JHSo with integrated temperature controller and operation status LED
- All electric connection cables are integrated in the heated sample line
- Exclusively quick-on connectors for all gas connections
- Flexible, lightweight and robust heated sample line
- Comprehensive list of options for various applications

TECHNICAL DATA

Model

JPES

Description	portable gas sampling probe
-------------	-----------------------------

Operation

Operating temperature	180 °C at 20 °C ambient temperature, max. 200 °C at 55 °C ambient temperature
Flow / Pressure Drop	max. 200 NI/hr / < 10 mbara
Ambient temperature	-20 °C to +55 °C
Operating pressure	max. 1,5 bara
Heat-up time	< 15 min

Construction

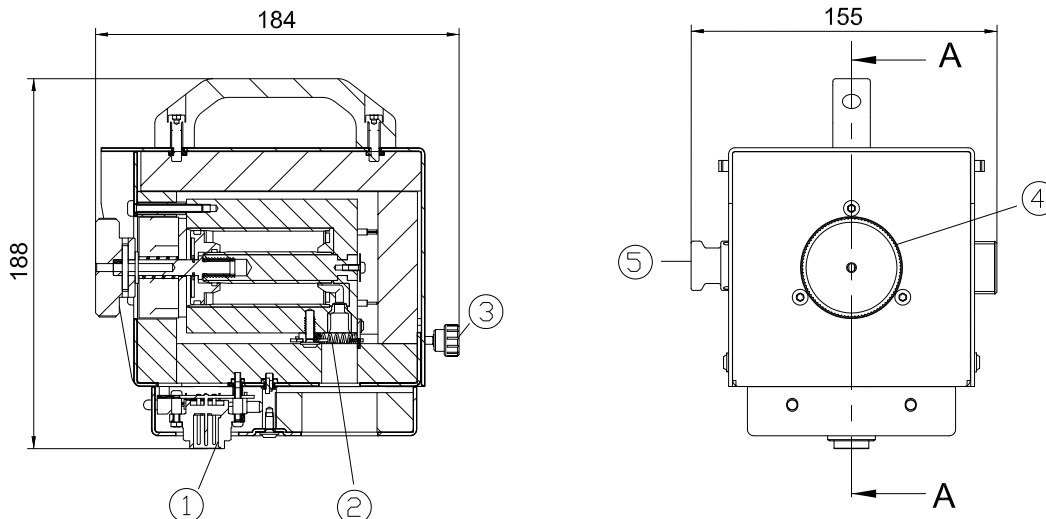
Dimensions over all (W x H x D)	155 x 188 x 184 mm
Filter elements	PTFE 2 µm, micro glass fibre 0,1 µm, stainless steel mesh 1 µm
Weight	approx. 3,1 kg
Housing, Colour	sheet steel, powder coated RAL 1026 / 9017
Gas wetted materials (without filter element)	SS316Ti, Viton®
Heating element	PTC self limiting
Mounting sampling point	Cone shaped universal sampling adapter 20 to 60 mm (No. 16) and mounting chains (No. 15)
Mounting position	5° to 15° incline (recommended)
Connection sampling tube / calibration gas / heated sample line	Quick-on
Protection class	IP22 (EN 60529)
Approvals / signs	CE

Electrics

Power supply	115 VAC or 230 VAC 50/60 Hz
Inrush current	3 A
Power consumption	approx. 160 W
Status contact temperature	volt free contact, min. 24 VDAC / 50 mA, max. 230 VAC / 5 A cosφ 0,95 threshold level 150 °C
Operating-LED / status-LED	operation: yellow / temperature < 150 °C: red, temperature > 150 °C: green
On time	100 %
Electrical connection	7-pole plug, power supply via heated sample line

DIMENSIONS

Dimensions in mm



1	7-pole socket for JHSo or JBER
2	Quick-on connection for JHSo
3	Release quick-on connection

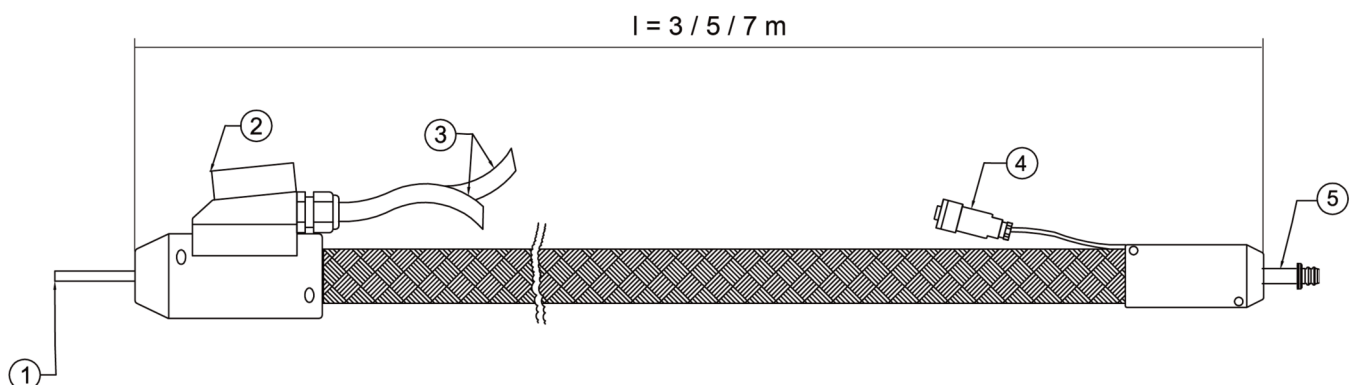
4	Rotary knob filter lock
5	Blind plug calibration gas connection

TECHNICAL DATA

Model	JHSo
Description	heated sample line
Operation	
Operating temperature	180 °C
Ambient temperature	-40 °C to +60 °C
Operating pressure	max. 1,5 bara
Heat-up time	< 15 min
Construction	
Outer diameter	35 mm
Minimal bending radius	50 mm
Inner core	PTFE, DN 4/6 mm
External protection jacket	PA-braid, black
Temperature control	integrated temperature controller with operation status LED, directly on hard cap end
Thermal insulation	close pore, waterproof silicone hose, thermally stabilised
End configuration	hard caps
Connection	to sampling probe side: quick-on, to controller side: stainless steel stub 6 mm
Sample line length	3 / 5 / 7 m
Approvals / signs	CE
Electrics	
Power supply	115 VAC or 230 VAC 50/60 Hz
Fusing	external, on site
Power consumption	approx. 100 W/m
Power cord	CEE7/7 or country specific plug, length 2 m
Signal cord sampling probe temperature	2 x 0,75 mm ² , open ends
On time	100 %
Electrical connection at JPES	7-pole connector

DIMENSIONS

Dimensions in mm



1	Stainless steel stub 6 mm
2	Integrated temperature controller
3	Power cord and signal cord for sampling probe temperature

4	0,3 m cord with 7-pole connector to sampling probe JPES resp. to heated sampling tube JBER
5	Quick-on sampling probe connection

TECHNICAL DATA

Model

JBER

Description	heated sampling pipe
-------------	----------------------

Operation

Operating temperature	180 °C
Sample gas temperature	max. 250 °C
Ambient temperature	-40 °C to +60 °C
Operating pressure	max. 1,5 bara
Heat-up time	< 15 min

Construction

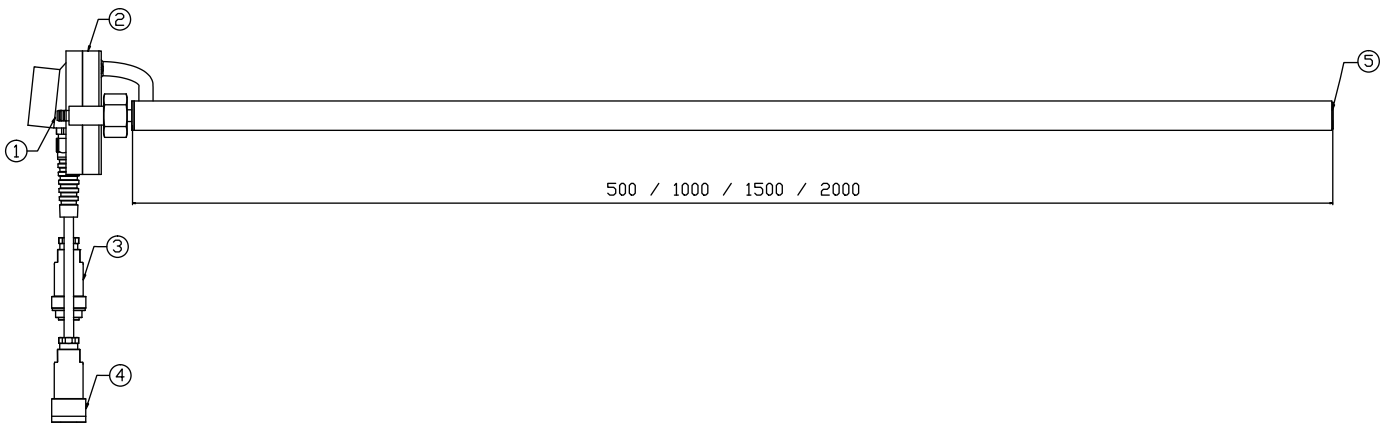
Outer diameter	25 mm
Nominal width inner pipe	4 mm
Temperature control	integrated temperature controller
Gas wetted materials	SS316
Protection class	IP 54
Connection pre-filter	R 3/8" i
Tube length	500 / 1000 / 1500 / 2000 mm
Total length	610 / 1110 / 1610 / 2110 mm
Weight	1,2 / 1,8 / 3,0 / 3,6 kg
Approvals / signs	CE

Electrics

Power supply	115 VAC or 230 VAC 50/60 Hz
Fusing	external, on site
Power consumption	approx. 530 W
On time	100 %
Electrical connection at JHSo	Power supply via 7-pole connector

DIMENSIONS

Dimensions in mm



1	Quick-on probe connection
2	Integrated temperature controller
3	0,3 m cord with 7-pole connector to heated sample line JHSo

4	0,5 m cord with 7-pole connector to probe JPES
5	Thread connector R 3/8" i for pre-filter or unheated tube extension

GAS FLOW DIAGRAM



ORDER CODE

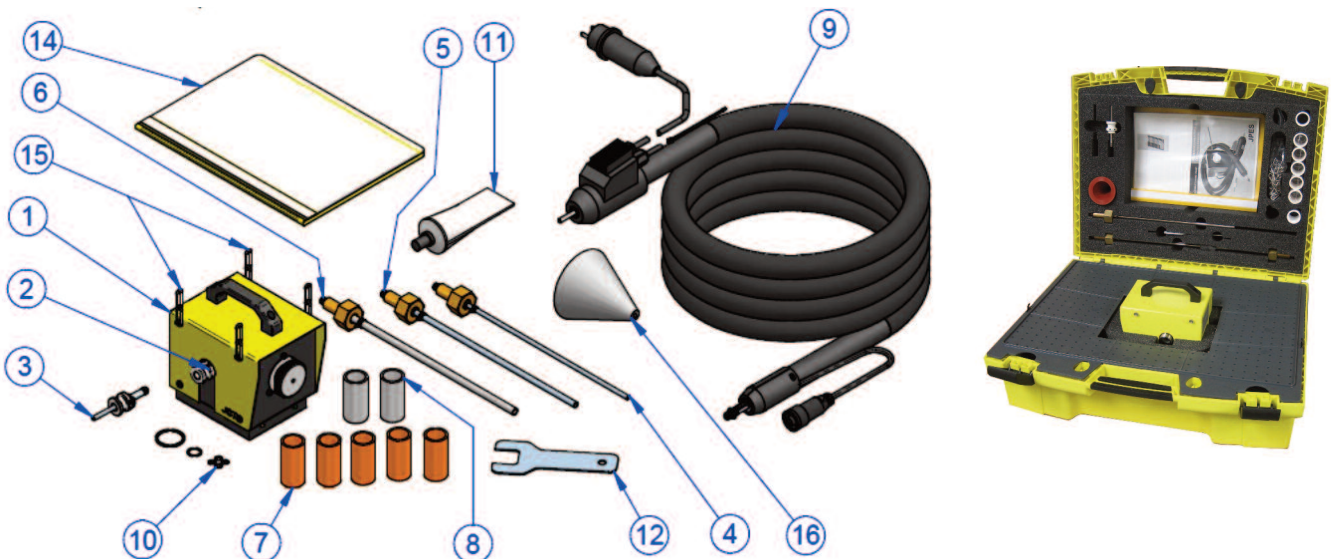
Order code	Description
34.00100	JPES portable gas sampling probe, 115 VAC 50/60 Hz
34.00200	JPES portable gas sampling probe, 230 VAC 50/60 Hz
34.00150	JPES starter kit with portable gas sampling probe and 3 m heated sample line, 115 VAC 50/60 Hz
34.00250	JPES starter kit with portable gas sampling probe and 3 m heated sample line, 230 VAC 50/60 Hz
34.00180	JPES premium kit with portable gas sampling probe and 5 m heated sample line, 115 VAC 50/60 Hz
34.00280	JPES premium kit with portable gas sampling probe and 5 m heated sample line, 230 VAC 50/60 Hz

JPES starter kit - scope of delivery

1 x portable gas sampling probe JPES	1
1 x calibration gas blind plug	2
	3
	4
1 x sampling pipe Ø 10 mm, length 300 mm	5
1 x filter element micro glass fibre	7
	8
1 x heated sample line, length 3 m	9
	10
1 x disassembling aid	12
1 x carrying case	13
1 x operating manual	14
1 x mounting chains (2 pcs. 1 m each)	15
1 x universal-sampling adapter 20 to 60 mm	16

JPES premium kit - scope of delivery

1 x portable gas sampling probe JPES	1
1 x calibration gas blind plug	2
1 x calibration gas connection (with fitting on request)	3
1 x sampling pipe Ø 6 mm, length 300 mm	4
1 x sampling pipe Ø 8 mm, length 300 mm	5
1 x sampling pipe Ø 10 mm, length 300 mm	6
5 x filter element micro glass fibre	7
2 x filter element PTFE	8
1 x heated sample line, length 5 m	9
1 x spare o-ring set	10
1 x tube PTFE-Paste 113,4 g	11
1 x disassembling aid	12
1 x carrying case	13
1 x operating manual	14
1 x mounting chains (2 pcs. 1 m each)	15
1 x universal-sampling adapter 20 to 60 mm	16



ORDER CODE

JHSo heated sample line with integrated temperature controller

Order code	Description
34.00401	JHSo heated sample line 230 VAC 50/60 Hz, length 3 m, inner core PTFE DN4/6 mm
34.00402	JHSo heated sample line 230 VAC 50/60 Hz, length 5 m, inner core PTFE DN4/6 mm
34.00403	JHSo heated sample line 230 VAC 50/60 Hz, length 7 m, inner core PTFE DN4/6 mm
34.00411	JHSo heated sample line 115 VAC 50/60 Hz, length 3 m, inner core PTFE DN4/6 mm
34.00412	JHSo heated sample line 230 VAC 50/60 Hz, length 5 m, inner core PTFE DN4/6 mm
34.00550	Adapter for third party heated sample line to Quick-On connection



JBER heated sampling pipe with integrated temperature controller

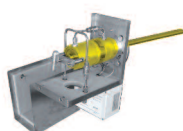
Order code	Description
34.00605	JBER heated sampling pipe with Quick-On connection, 230 VAC 50/60 Hz, length 500 mm
34.00610	JBER heated sampling pipe with Quick-On connection, 230 VAC 50/60 Hz, length 1000 mm
34.00615	JBER heated sampling pipe with Quick-On connection, 230 VAC 50/60 Hz, length 1500 mm
34.00620	JBER heated sampling pipe with Quick-On connection, 230 VAC 50/60 Hz, length 2000 mm
34.00705	JBER heated sampling pipe with Quick-On connection, 115 VAC 50/60 Hz, length 500 mm
34.00710	JBER heated sampling pipe with Quick-On connection, 115 VAC 50/60 Hz, length 1000 mm
34.00715	JBER heated sampling pipe with Quick-On connection, 115 VAC 50/60 Hz, length 1500 mm
34.00720	JBER heated sampling pipe with Quick-On connection, 115 VAC 50/60 Hz, length 2000 mm
34.00910	Positioning flange for grid measurements with JBER, SS316, DN65 PN6 DIN 2573
34.00905	Positioning flange for grid measurements with JBER, SS316, 2"
34.00900	Positioning flange for grid measurements with JBER, SS316, 3"



Stainless steel sampling pipes up to max. 600 °C

Order code	Description
34.00307	Stainless steel sampling pipe DN8/10 with Quick-On connection, SS316, length 300 mm
34.00308	Stainless steel sampling pipe DN8/10 with Quick-On connection, SS316, length 500 mm
34.00309	Stainless steel sampling pipe DN8/10 with Quick-On connection, SS316, length 1000 mm
34.00304	Stainless steel sampling pipe DN6/8 with Quick-On connection, SS316, length 300 mm
34.00305	Stainless steel sampling pipe DN6/8 with Quick-On connection, SS316, length 500 mm
34.00306	Stainless steel sampling pipe DN6/8 with Quick-On connection, SS316, length 1000 mm
34.00301	Stainless steel sampling pipe DN4/6 with Quick-On connection, SS316, length 300 mm
34.00302	Stainless steel sampling pipe DN4/6 with Quick-On connection, SS316, length 500 mm
34.00303	Stainless steel sampling pipe DN4/6 with Quick-On connection, SS316, length 1000 mm

Gas Sampling Probes



Heated Sample Lines



Sample Gas Coolers



Gas Conditioning Systems



NOx Converter



and solutions for

