



Portable sample probes type Smartline

In addition to stationary analysers, gas analysis for monitoring emissions also uses portable methods. The actual measuring task determines the complexity of the sampling/analysis units. Since not all control points are easy to access, operators are interested in suitable and light equipment with a compact size. Even under this premise, extracting the sample gas must meet high standards to ensure the measurements are reliable.

The Smartline series of portable gas sampling probes features a lightweight, self-regulating or temperature controlled heated sample gas line with built-in particle filter.

Portable probe and heated line as all-in-one solution for mobile applications

Designed for sample measurements

Also suitable for control measurements or continuous sampling

Self-regulating or temperature-controlled heated

Also ideal for service companies

Built-in, heated filter element

Low weight

Reduced maintenance

Stack mounting possible

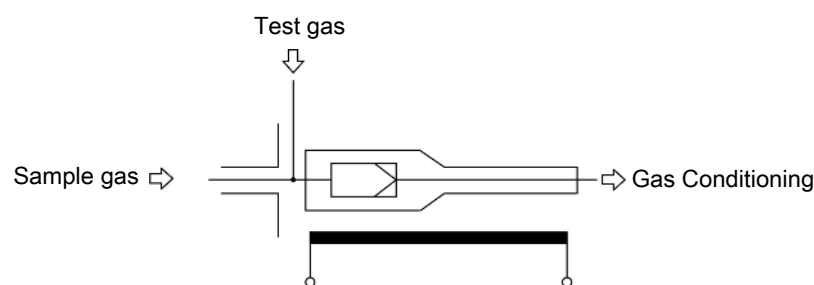
Tool-less filter element change

Space-saving version for sampling with high moisture content

Option: Test gas function option on input end

Option: Transport case



Flow chart

Technical Data
Smartline Technical Data

Warm up time at 25 °C	approx. 30 minutes
Ambient temperature	-20 °C to +40 °C
Max. operating temperature	Varies by heating tube type, see type plate
Heater	controllable with Pt100, 100 W/m, max. 180 °C self-regulating, 60 W/m, 120 °C
Dust load	max. 2 g/m ³
Temperature inside stack	max. 400 °C – 1050 °C, varies by sampling tube, see spare parts and accessories
Pressure	max. 6 bar
Protection class	IP 54

Electrical specifications
Electric supply

Voltage (optional supply via portable conditioning PCS.smart)	230 V AC - 60 W/m or 100 W/m +/- 10% 115 V AC - 60 W/m or 100 W/m +/- 10%
Length	1 m

Mechanical specifications

Heating tube diameter	approx. 32 mm
Heating tube length	3 or 5 m
Weight	approx. 2.3 kg at 3 m length approx. 3.7 kg at 5 m length

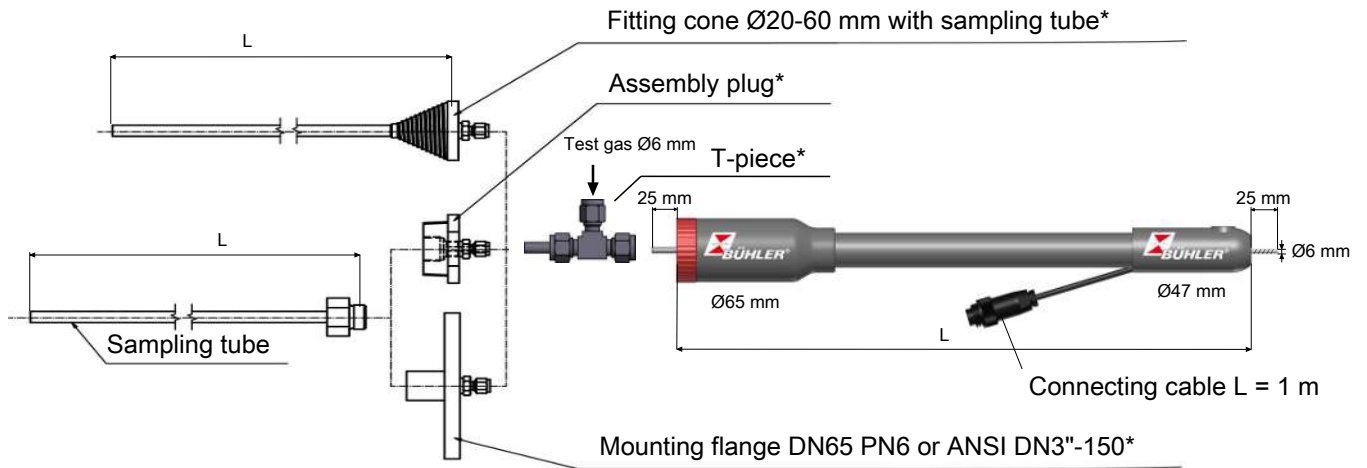
Materials

Material	Silicone, PTFE, stainless steel, polyamide
Parts in contact with mediums	Stainless steel 1.4571, 1.4404, 1.4305, PTFE
Bend radius	min. 140 mm
PTFE core	DN 4/6
End termination	Stainless steel, Ø6 mm

Transport case (accessory)

Outside dimensions	approx. 575 mm x 470 mm x 205 mm
with space for the following parts	Smartline 3 m/5 m, 3 x filter element, 2 x sampling tube, 2 x assembly plug, 2 x mounting flange, mounting bracket with chain, T-piece with insulation, 2 x compartment for small parts, operating instructions

Drawing



Mounting bracket with 2 m chain*

Insulating sleeve for T-piece 6 mm*



*optional

Ordering instructions

The item number is a code for the configuration of your unit. Please use the following model key.

Item no.	Smartline						
4677	X	X	X	X	0	0	Product Characteristics
							Voltage
	1						115 V AC
	2						230 V AC
							Length
	3						3 m
	5						5 m
							Temperature control
		1					self-regulating (120 °C)
		2					regulated (max. 180 °C) ¹⁾
							End termination
			1				Ø6 mm tube
			2				Quick-Lock female (ideal for PCS.smart)

¹⁾ Temperature controller required.

Other lengths and styles available upon request!

Filter element required for operation (see notes under "Spare Parts and Accessories").

Spare parts and accessories

Item no.	Description
46770070	Transport case
	Filter elements
46770020	Sintered metal filter element incl. seals; Material: 1.4404/Viton
46770030	Ceramic filter element incl. seals; Material: Ceramic/Viton
	Sampling tubes
467700030500	Tapered assembly plug \varnothing 20-60 with sampling tube; Material: 1.4571/1.4401; length 500 mm
467700060500	Tapered assembly plug \varnothing 20-60 with sampling tube; length 500 mm Material: Hastelloy/1.4571/1.4401
462220010500	Sampling tube length 500 mm, material: 1.4571, T_{\max} 600 °C
462220060500	Sampling tube length 500 mm, material: Hastelloy, T_{\max} 400 °C
462220040500	Sampling tube length 500 mm, material: Inconel, T_{\max} 1050 °C
	For more sampling tubes see accessory data sheet for sample gas probes DB461099
	Mounting accessories
46770004	Assembly plug R2; Material: 1.4571/1.4401
46770001	Mounting flange DN65 PN6; Material: 1.4571/1.4401
46770002	Mounting flange ANSI DN3"-150; Material: 1.4571/1.4401
46770005	Mounting bracket with 2 m chain; EPDM/galvanised steel
46770060	T-piece, 6 mm, stainless steel material for test gas
46770050	Insulating sleeve for T-piece
467700202	Seal kit, Viton material for FE sintered metal
467700302	Seal kit, Viton material for FE ceramic
9146100267	Flange socket 6-pin + PE
467707	Screw cap O-ring