



## 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

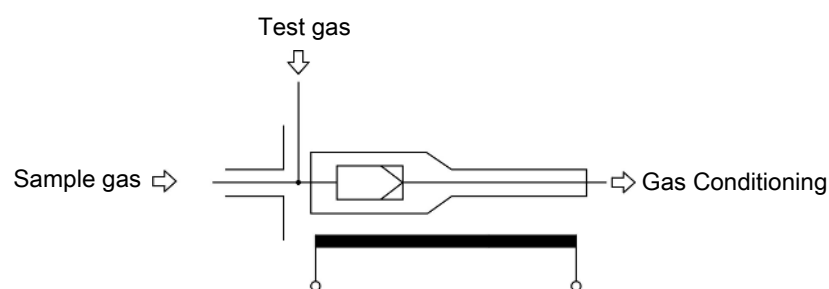
Tool-less filter element change

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 77 °F	approx. 30 minutes
Ambient temperature	-4 °F to 104 °F
Max. operating temperature	Varies by heating tube type, see type plate
Heater	controllable with Pt100, 100 W/m, max. 356 °F self-regulating, 60 W/m, 248 °F
Dust load	max. 2 g/m <sup>3</sup>
Temperature inside stack	max. 752 °F – 1922 °F, varies by sampling tube, see spare parts and accessories
Pressure	max. 87 psi
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 (3.2 ft)

**Mechanical specifications**

Heating tube diameter	approx. 1.26 in
Heating tube length	3 (9.8 ft) or 5 m (16.4 ft)
Weight	approx. 5.1 lb at 3 m (9.8 ft) length approx. 8.2 lb at 5 m (16.4 ft) length

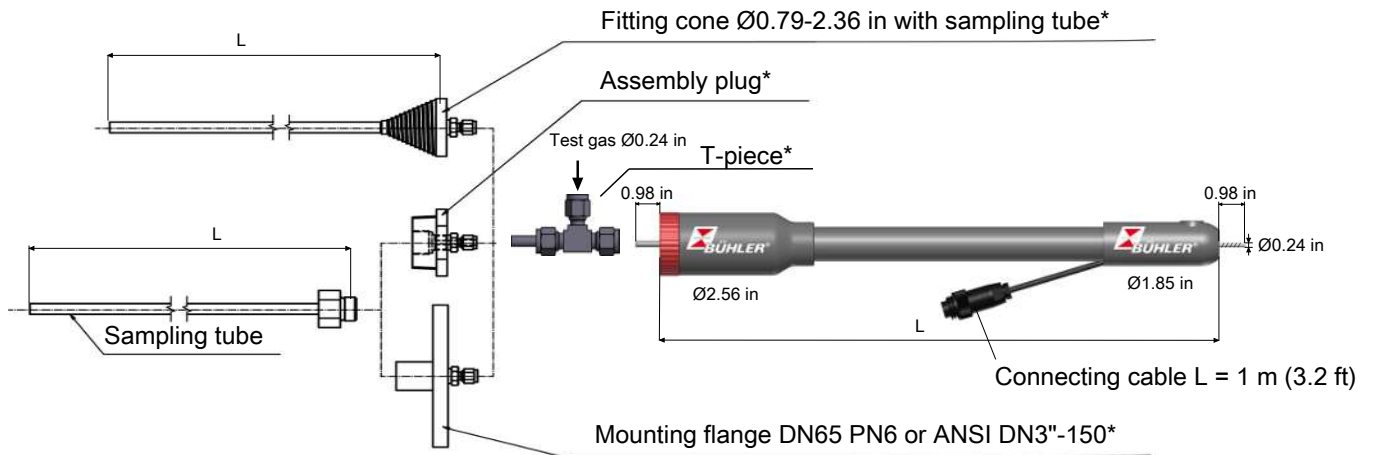
**Materials**

Material	Silicone, PTFE, stainless steel, polyamide
Parts in contact with mediums	Stainless steel 1.4571, 1.4404, 1.4305, PTFE
Bend radius	min. 5.51 in
PTFE core	DN 4/6
End termination	Stainless steel, Ø0.24 in

**Transport case (accessory)**

Outside dimensions	approx. 22.64 in x 18.5 in x 8.07 in
with space for the following parts	Smartline 3 m (9.8 ft)/5 m (16.4 ft), 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 (6.6 ft) chain\*

Insulating sleeve for T-piece 0.24 in\*



\*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	<b>Product Characteristics</b>
							<b>Voltage</b>
	1						115 V AC
	2						230 V AC
							<b>Length</b>
	3						3 m (9.8 ft)
	5						5 m (16.4 ft)
							<b>Temperature control</b>
	1						self-regulating (120 °C/248 °F)
	2						regulated (max. 180 °C/356 °F) <sup>1)</sup>
							<b>End termination</b>
	1						Ø6 mm tube
	2						Quick-Lock female (ideal for PCS.smart)

<sup>1)</sup> 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
	<b>Filter elements</b>
46770020	Sintered metal filter element incl. seals; Material: 1.4404/Viton
46770030	Ceramic filter element incl. seals; Material: Ceramic/Viton
	<b>Sampling tubes</b>
467700030500	Tapered assembly plug $\varnothing$ 20-60 (0.79-2.36 in) with sampling tube; Material: 1.4571/1.4401; length 500 mm (19.69 in)
467700060500	Tapered assembly plug $\varnothing$ 20-60 (0.79-2.36 in) with sampling tube; length 500 mm (19.69 in) Material: Hastelloy/1.4571/1.4401
462220010500	Sampling tube length 500 mm (19.69 in), material: 1.4571, T <sub>max</sub> 600 °C
462220060500	Sampling tube length 500 mm (19.69 in), material: Hastelloy, T <sub>max</sub> 400 °C
462220040500	Sampling tube length 500 mm (19.69 in), material: Inconel, T <sub>max</sub> 1050 °C
	For more sampling tubes see accessory data sheet for sample gas probes DB461099
	<b>Mounting accessories</b>
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 (6.6 ft) chain; EPDM/galvanised steel
46770060	T-piece, 6 mm (0.24 in), 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