



Portable Heated Sample Tube <Smart-Sample-Tube>

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 Smart Sample Tube series portable heated sample tube is ideally operated with the Smartline. Since it is heated, the Smart Sample Tube can be used for sample gases in challenging measurements and when thermal bridges occur at the sample point. The temperature can be set up to 365 °F to even safely sample gas with high acid dew points.

Combining the Smart Sample Tube with the Smartline allows particle filtration near the sampling point. However, other heated lines can also be connected with universal insulation.

Designed to connect to Smartline

Compact size and light weight

Temperature-controlled - setting range 140 °F - 365 °F

Heat-up phase indicated by status LED

3 m connection cable with CEE-7/7 Euro Schuko plug

Calibrating gas connection sold separately

Threaded G3/8" connection for inlet filters or unheated sample tubes

Universal insulation for connecting other heating line sold separately

Mounting bracket with chain sold separately



Flow chart

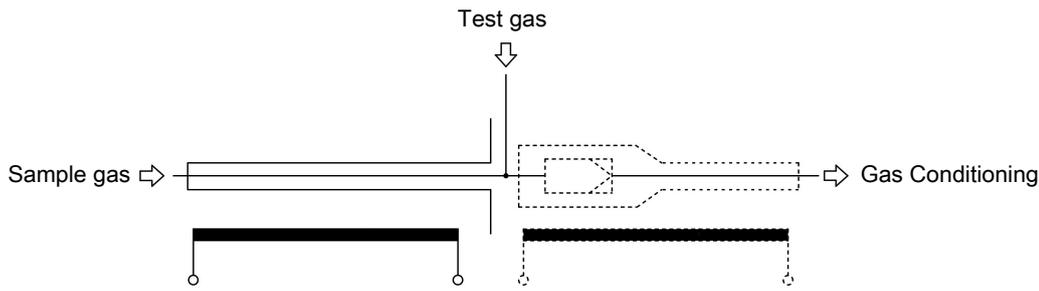


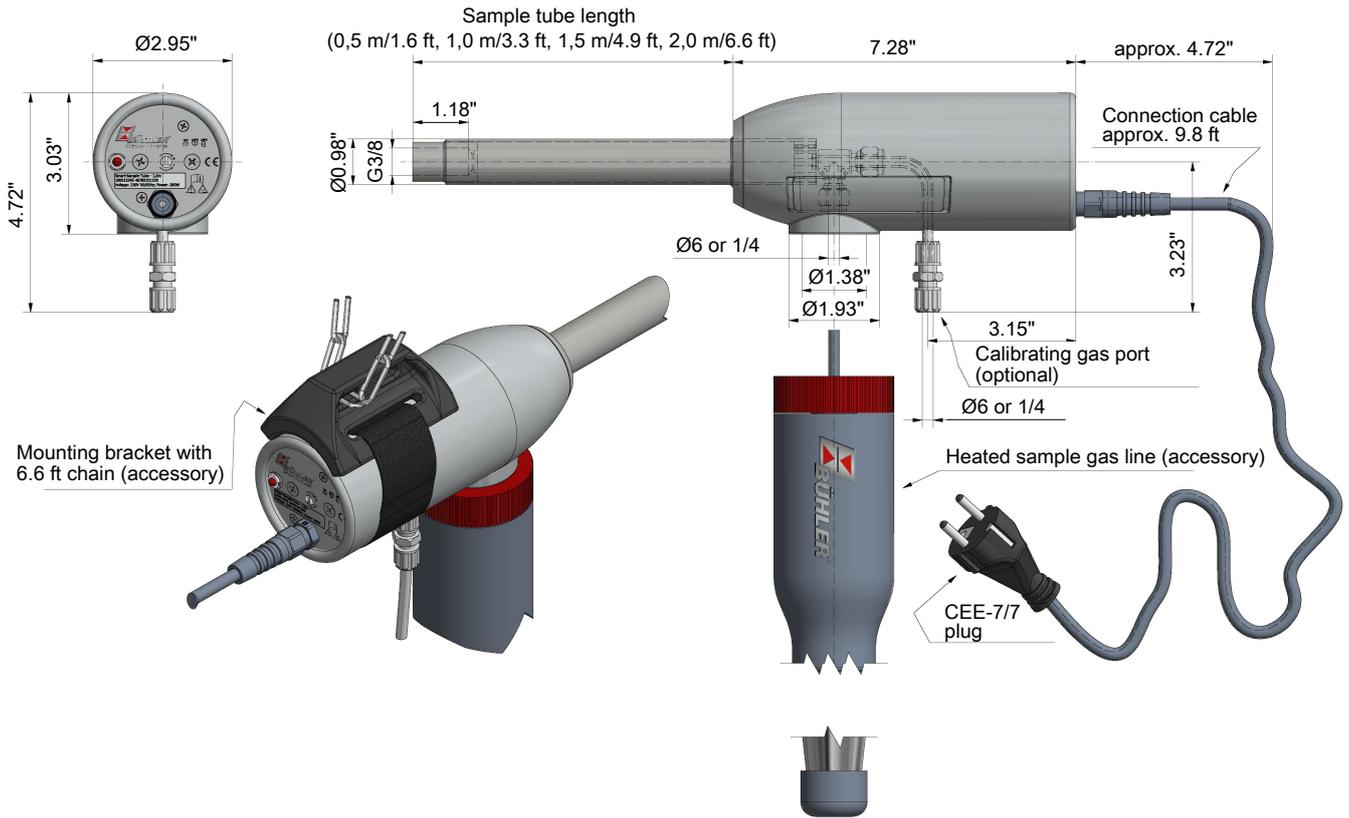
Fig. 1: Example with Smartline connection (dashed line drawing)

Technical Data

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Heat-up time for 77 °F:	approx. 10 minutes (regulating point thermostat)	
Ambient temperature:	-4 °F to 122 °F	
Max. Process temperature:	392 °F	
Heater:	Temperature-controlled from 140 °F to 365 °F	
Pressure:	max. 87 psi	
IP rating:	IP 44 (with properly installed heated line type Smartline)	
Protection class:	I	
Voltage:	230 V AC, 50/60 Hz	
	115 V AC, 50/60 Hz	
Output varies by sample tube length:	230 V	115 V
	1.6 ft (0.5 m) = 115 W	1.6 ft (0.5 m) = 103 W
	3.3 ft (1.0 m) = 280 W	3.3 ft (1.0 m) = 200 W
	4.9 ft (1.5 m) = 500 W	4.9 ft (1.5 m) = 450 W
	6.6 ft (2.0 m) = 450 W	6.6 ft (2.0 m) = 400 W
	Lengths:	1.6 ft (0.5 m); 3.3 ft (1 m); 4.9 ft (1.5 m); 6.6 ft (2 m)
Weight:	approx. 4.2 lb at 1.6 ft length	
	approx. 5.7 lb at 3.3 ft length	
	approx. 7.3 lb at 4.9 ft length	
	approx. 8.8 lb at 6.6 ft length	
Parts in contact with media:	Stainless steel 1.4571, 1.4401 (with calibrating gas port additionally PVDF, PTFE)	

Dimensions



Ordering instructions

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

4678	X	X	X	1	X	0	0	Product Characteristics
								Voltage
	1							115 V AC
	2							230 V AC
								Sample tube length
		0	5					1.6 ft (0.5 m)
		1	0					3.3 ft (1.0 m)
		1	5					4.9 ft (1.5 m)
		2	0					6.6 ft (2.0 m)
								Temperature control
				1				Regulated (control range 140 °F - 365 °F)
								Connection for heated line / calibrating gas port
					1			Pipe fitting Ø6 mm / none
					2			Pipe fitting Ø6 mm / hose coupling DN 4/6
					3			Pipe fitting Ø1/4" / none
					4			Pipe fitting Ø1/4" / hose coupling 1/4"-1/6"

Spare parts and accessories

Item no.	Description
46770005	Mounting bracket with 6.6 ft (2 m) chain; EPDM/galvanised steel
4678010	Transition insulation – hose: Outside Ø1.57" (Ø40 mm); inside Ø0.79" (Ø20 mm); length 3.94" (100 mm); customisable; silicone material (max. 200 °C/392 °F) Required when using universal heating line to prevent thermal bridges.
4300010	Check valve 5R400TA DN 4/6 hose connection both ends
4300011	Check valve 5R400TA DN 1/4"-1/6" hose connection both ends
see data sheet 461099	Gas sample tubes see probe accessories
see data sheet 464002	Smartline
see data sheet 464006	PCS.smart+

Drawing

