



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 185 °C 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 60 °C - 185 °C

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

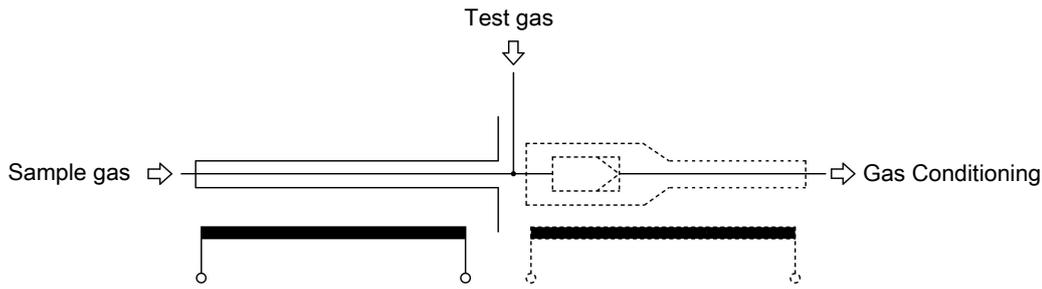


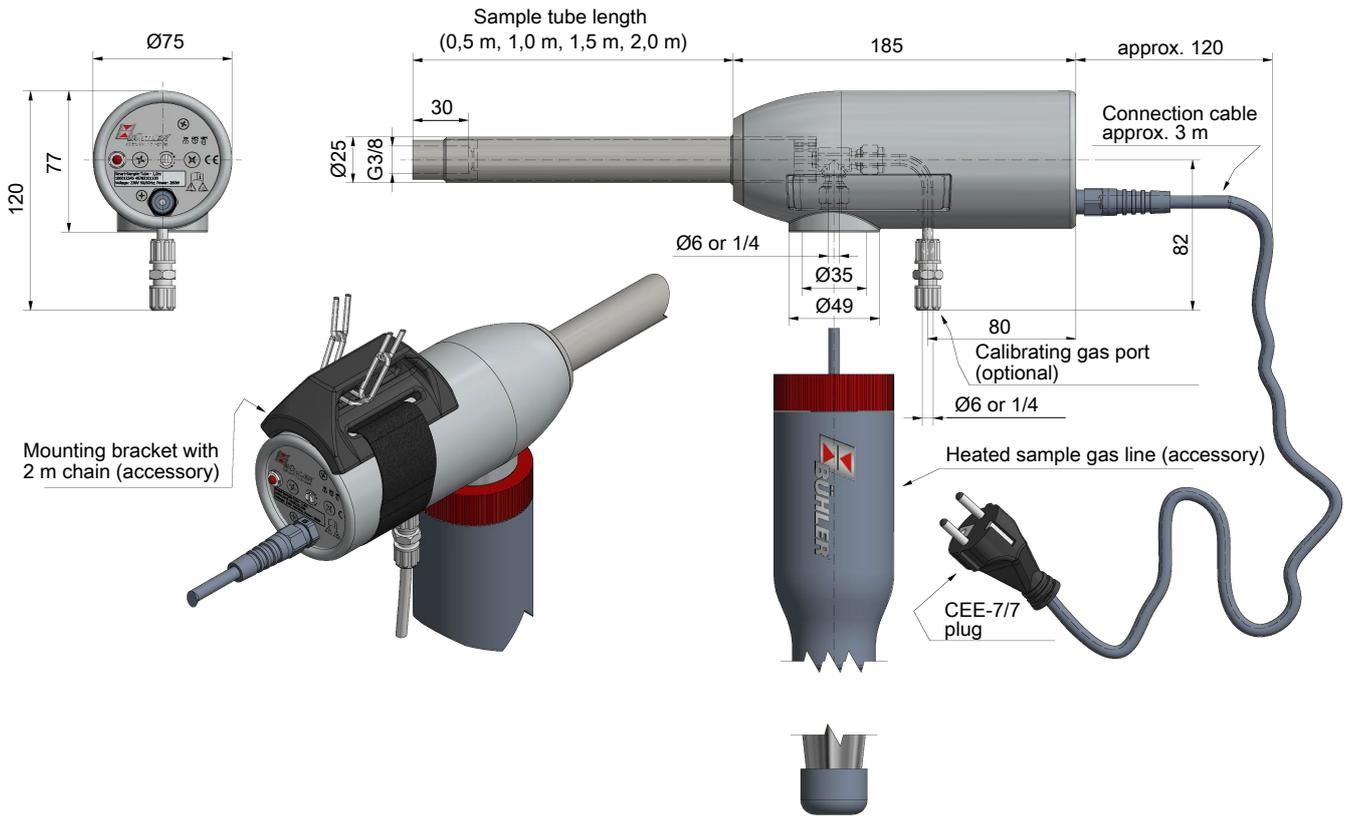
Fig. 1: Example with Smartline connection (dashed line drawing)

Technical Data

Technical Data

| | | |
|--------------------------------------|--|---------------|
| Heat-up time for 25 °C: | approx. 10 minutes (regulating point thermostat) | |
| Ambient temperature: | -20 °C to +50 °C | |
| Max. Process temperature: | 200 °C | |
| Heater: | Temperature-controlled from 60 °C to 185 °C | |
| Pressure: | max. 6 bar | |
| 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 |
| | 0.5 m = 115 W | 0.5 m = 103 W |
| | 1.0 m = 280 W | 1.0 m = 200 W |
| | 1.5 m = 500 W | 1.5 m = 450 W |
| | 2.0 m = 450 W | 2.0 m = 400 W |
| | | |
| Lengths: | 0.5 m; 1 m; 1.5 m; 2 m | |
| Weight: | approx. 1.9 kg at 0.5 m length approx. 2.6 kg at 1 m length approx. 3.3 kg at 1.5 m length approx. 4.0 kg at 2 m 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 | | | | | 0.5 m |
| | | 1 | 0 | | | | | 1.0 m |
| | | 1 | 5 | | | | | 1.5 m |
| | | 2 | 0 | | | | | 2.0 m |
| | | | | | | | | Temperature control |
| | | | | 1 | | | | Regulated (control range 60 °C - 185 °C) |
| | | | | | | | | 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 2 m chain; EPDM/galvanised steel |
| 4678010 | Transition insulation – hose: Outside Ø40 mm; inside Ø20 mm; length 100 mm; customisable; silicone material (max. 200 °C) 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

