Suction tubes available with fixed or exchangeable inner tube.

Entrance: Internal thread G ½, Exit: external thread G ½.
Operating range: A: Material Stainless Steel up to 500°C, T: Material Titanium up to 400°C.

**Simple suction tube:**
with fixed inner tube 10 x 1 mm, Outer diameter protection tube: 25 mm

**Electrical heated suction tube:**
with integrated power heater cartridge (~ 500 W/m) and thermocouple NiCr-Ni for temperature regulation, with quick hose connectors.

**Water cooled suction tube:**
Outer diameter protection tube: 33 mm, without fixed inner tube, for exchangeable inner tube 10 x 1 mm.

The cooling water goes at first through a tube along the internal tube and then at the outside-wall. By glass-break of the internal tube, the individual parts can be removed over the rear internal thread G ¾.

With sufficient water-cooling can use this suction tube at temperatures up to 1000°C. If a hot-fan used instead of cooling water (adapters not in the delivery capacity) can the suction tube be heated.

**Combination probe:**
With the combination probe can measure the gas velocity and temperature at the sampling point.
Heated and non heated or water cooled versions available. Details see above-mentioned information.

**Matching inner tubes for all suction tubes:**
Exit with KS 19 spherical joint (ball)
Material: Duran, Quartz, Inox, Titanium

Exit with G ½ external thread
Material: Inox, Titanium

Exit: smooth
Material: Duran, Quartz, Inox, Titanium

**Available Pitot tubes for combination probe:**
(length between tip Pitot tube and front suction tube)

- **Version A**
  Prandtl tube (175 mm)

- **Version B**
  S-Pitot tube (175 mm)

- **Version C**
  S-Pitot tube (300 mm)

- **Version D**
  Prandtl-Pitot tube (300 mm)
Accessoires Suction Tubes

**Holders**

for fixing the suction pipe at the measuring point. The holder needs at least the length of half a sleeve / socket (approx. 30 mm).

**Gas-tight holders**

made of stainless steel for suction pipes with external Ø 25, 33, 50 or 60 mm. The gas-tight closure is achieved by a packing cord which is pressed against a flange on the suction pipe by means of screws. For shifting the suction pipe the flange is loosened;

- with external thread G 2: Art.-No.: 47.11
- with external thread G 2½: Art.-No.: 47.12
- with external thread G 3: Art.-No.: 47.13

**Quick fastener holder**

material: stainless steel pipe with two aluminium half-pans on the inside. The lower half-pan is firmly screwed on while the upper pan is moved by a toggle. The holder is not gas-tight. Shifting the suction pipe works fast and easily through the toggle. The suction pipe is not damaged by the half-pans even under strong loading. The half-pans are adapted to the required external Ø of the suction pipe. For suction tubes with external Ø: 25, 33, 50 or 60 mm.

- Small holder (for suction tubes with Ø: 25-33 mm)
  - with External thread G 2: Art.-No.: 47.31
  - with External thread G 2½: Art.-No.: 47.32
  - with External thread G 3: Art.-No.: 47.33

- Big holder (for suction tubes with Ø: 33-60 mm)
  - with External thread G 2: Art.-No.: 47.21
  - with External thread G 2½: Art.-No.: 47.22
  - with External thread G 3: Art.-No.: 47.23

**Sleeve reduction**

The holder can be adapted to the different coupling sleeves / sockets at the measuring points through sleeve reductions (bushing (M/F). The sleeve reduction is composed of stainless steel and an internal thread.

- Reduction of G 3 to G 2: Art.-No.: 47.41
- Reduction of G 2½ to G 2: Art.-No.: 47.42

**Adapter for suction tube:**

Entry adapter to adjust the gooseneck curve or bent in flow direction:

- for fixed inner tube: Art.-No.: 3.03 (Stainless Steel or Titanium)
- for exchangeable inner tube: Art.-No.: 3.01 (Stainless Steel or Titanium)