

# PSG Plus

## Flex

### Application

The controlled heated flexible sample lines series **PSG Plus Flex** are used for for continuous extractive gas analysis. They serve primarily for the transport of the humid sample gas stream from the sample point to the analyzer house. The holding temperature of the line thereby has to be above water vapour resp. acid dew point of the sample gas. In this way uncontrolled condensation of water vapour on the way to the analyzer and therefore washing out of gas components in condensate is prevented. Also, failure of the measurement by a freezing line at ambient temperatures below 0°C is avoided.

### Technology

The flexible lines are equipped with outer jacket corrugated tube made of metal. For heating a fixed resistor heating cable is used. Insulation is done with glass fibre and thermos fleece. Internal lines made of PTFE or PFA are possible. Pressure resistance is achieved by a metal braid jacket of the internal tube.

### Functions

The lines are delivered completely assembled and ready for operation ex works. The control of the lines is done with an external temperature controller (e.g. Controller ST 49 or Controller DC-10) via integrated PT100 to max. 200°C.



- ✓ Robust design with flexible corrugated tube outer jacket made of metal with extruded PVC protection coating
- ✓ Pressure resistant internal tube with metal braid jacket
- ✓ Operation with external temperature controller
- ✓ Fixed resistor heating cable
- ✓ Max. 200°C control temperature
- ✓ Ready for operation assembled ex works
- ✓ Internal lines made of PTFE or PFA

## Technical data

Construction data		
Max. operating temperature	°C	200
Heat insulation / weight	kg/m	glass fibre and thermo fleece / 1
Insulation thickness	mm	10
Heating cable type		fixed resistor heating cable
Outer jacket		metal corrugated tube with extruded PVC protection coating
Outer diameter	mm	42 with one internal line
Min. bending radius	mm	8 - 10 x outer diameter
Ambient temperature	°C	-20 to +65
Max. operating pressure abs. PTFE line	bar	20
Protection class		IP64 (EN60529)
Max. heating circuit length	m	60
Elektrical data		
Power	W/m	90
Electrical connection		3m silicone connection cable*, open ends (included in assembly)
Power supply		230V 50/60Hz or optional 120V 50/60Hz
Order numbers for line with metal corrugated tube with extruded PVC protection coating, 230V 50/60Hz		
1 x PTFE internal line 6mm	1m	54003239
1 x PTFE internal line 8mm	1m	54003126
Order numbers for assembly ex works		
Silicone cap with stainless steel tube socket		50085049
Silicone cap with stainless steel tube socket		50085057
PT100 placed 350mm from ending, 3m cable		50061200

Assembly	Temperature controller	
		
Silicone cap with stainless steel tube socket	PSG Controller ST 49 mit 25A SSR 230V 50/60Hz Art. Nr. 50078850	PSG Controller DC-10 Art. Nr. 50078820
Options		
<ul style="list-style-type: none"> <li>✓ Internal lines made of PTFE or PFA with dimensions</li> <li>✓ DN4/6 or DN6/8</li> <li>✓ Power supply 115V 50/60Hz</li> <li>✓ Cable gland M63 x 1,5 (clamping range 36-48mm), PA, for cabinet wall mounting, IP68, mounted or separately</li> </ul>		