



# Controlled Heated Flexible Sample Lines

## PSG Flex Basic

### Application

The controlled heated flexible sample lines series **PSG Flex Basic** are used for continuous extractive gas analysis. They serve primarily for the transport of the humid sample gas stream from the sample point to the analyser 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 analyser 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 PA12. The ultraflexible versions get an outer jacket made of PA12 braid. For heating a fixed resistor heating cable is used. Insulation is done with silicone foam hose. Up to 6 internal lines made of PTFE or PFA are possible. Interchangeable PTFE or PFA are also available.

### 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. PSG ST49 or PSG DC10) via integrated PT100 to max. 200°C.

- ✓ Robust design with flexible corrugated hose outer jacket made of PA12
- ✓ Ultraflexible versions with PA12 braid outer 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
- ✓ Up to 6 internal lines as option
- ✓ Interchangeable internal lines as option







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## Technical data and order numbers

Construction data		
Max. operating temperature	°C	200
Heat insulation / weight	kg/m	silicone foam hose / 0,8
Insulation thickness	mm	10
Heating cable type		Fixed resistor heating cable
Outer jacket		PA12 corrugated hose or braid
Outer diameter	mm	43 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	DN4/6: 5,6 / DN6/8: 4,5
Protection class		IP64 (EN60529)
Max. heating circuit length	m	60
Electrical 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 1m line with PA12 corrugated hose, 230V 50/60Hz		
1 x PTFE internal tube 6mm	1m	54002566
1 x PTFE internal tube 8mm	1m	54000323
1 x PTFE internal tube 10mm	1m	54000462
1 x PTFE internal tube 12mm	1m	54000013
Order numbers for assembly ex works		
Silicone cap ending		50084005
Silicone cap with electr. connection		50084004
PTFE cap ending		50085003
PTFE cap with electr. connection		50085002

\* to lead frontal or backwards through the cap

### Assembly



PTFE cap



Silicone cap

### Temperature controller



PSG ST49 with 25A SSR 230V 50/60Hz  
Part No. 50078850



PSG DC10  
Part No. 50078820

### Options

- Flexible lines with PA12 corrugated hose outer jacket
- Ultraflexible lines with outer jacket made of PA12 braid
- Up to 6 internal lines made of PTFE or PFA  
DN4/6, DN6/8, DN8/10, DN10/12 or inch
- Interchangeable internal lines
- Power supply 115V 50/60Hz
- Cable gland M63 x 1,5 (clamping range 36-48mm), PA, for cabinet wall mounting, IP68, mounted or separately

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