

PSG Plus

Extruded ATEX 150

Application

The controlled heated sample lines series **PSG Plus Extruded ATEX 150** 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 robust lines with thick-walled extruded flame resistant and extremely weather resistant TPU or PVC outer jacket are equipped with high quality Raychem® heating cable. Insulation is done with a thermal or glass fiber fleece. Holding temperatures of up to 150°C at -20°C ambient temperature can be reached. Solutions down to -52°C are also possible. Up to 12 PTFE, PFA, stainless steel or special alloy tubes as internal line and also interchangeable internal tubes are available.




Functions

Delivery lengths of up to 300m at a stretch are possible on cable drum and then can be adapted on-site and shortened every 1.5m. Furthermore, they are available ready for operation ex works. Control of the lines to max. 150°C is done by an external temperature controller and limiter via the integrated PT100.


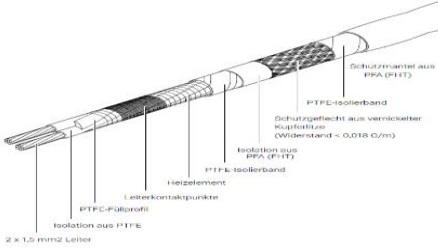


- ✓ For use in Ex-zone 1 and 2
- ✓ Temperature controller necessary
- ✓ Raychem® heating cables
- ✓ Max. 150°C holding temp. at -20°C ambient temperature
- ✓ Up to 300m at a stretch
- ✓ Every 1.5m shortenable for assembly on-site (video tutorial on [YouTube](#)) or ready-made ex works
- ✓ Robust design with thick-walled extruded, flame resistant, extremely weather resistant PVC or TPU outer jacket
- ✓ Internal tube made of PTFE, PFA, stainless steel or special alloy
- ✓ Up to 12 internal lines as option
- ✓ Interchangeable internal lines as option

Technical data

Construction data		
Max. operating temp. (heating cable)	°C	260
Max. holding temperature	°C	150
Heat insulation / weight	kg/m	thermal- or glass fibre fleece / 1,1
Insulation thickness	mm	10
Heating cable type		Raychem® 40FHT2-CT
Outer jacket		2mm PVC or TPU extruded
Outer diameter	mm	42 with one internal line, 43 with 2x6mm, 45 with 2x8mm
Min. bending radius	mm	8 - 10 x outer diameter
Ambient temperature	°C	-20 to +65
Max. operating pressure abs. PTFE line	bar	DN4/6: 5,8 / DN6/8: 4,6 at 150°C
Max. operating pressure abs. SS316L line	bar	400
Protection class		IP64 (EN60529)
Ex-protection heating cable		Ex II 2GD Ex e II T* (See Schedule) Ex tD A21 IP66 Ex e II T* (See Schedule) Ex tD A21 IP66
Temperature class*		T3...T1
Max. length heating circuit	m	85
Electrical data		
Max. Power (ta = +10°C)	W/m	40
Electrical connection		Heating cable overhang with M25 for ATEX terminal box
Power supply		230 Vac
Order numbers for line 230V 50/60Hz		
1 x PTFE internal tube 6mm	1m	54004455
2 x PTFE internal tube 6mm	1m	54003306
Temperature controller and limiter		
with SSR FRBL1 		50071110
NGC-20-CL-E 		80001102
Order number for assembly ex works		
PTFE-Ex-cap ending		50085503
PTFE-Ex-cap with electr. connection		50085502
Order number for assembly on-site		
PTFE-Ex- cap ending		50084503
PTFE-Ex- cap with electr. connection		50084502

* By design. Temperature classification (T-rating) has to be established by using the principles of stabilised design or the use of a temperature limiting device.

Assembly	FHT Heating cable construction
	
PTFE-Ex-Cap	
Options	
<ul style="list-style-type: none"> ✓ Up to 12 internal PTFE and/or PFA and/or stainless steel and/or special alloy tubes with dimensions DN4/6, DN6/8, DN8/10, DN10/12 or inch ✓ Interchangeable internal lines ✓ Cable gland M63 x 1,5 (clamping range 36-48mm), PA, for cabinet wall mounting, IP68, mounted or separately 	