

## PSG Plus Extruded Duo

### Application

The controlled heated sample lines series **PSG Plus Extruded Duo** are used for continuous extractive gas analysis. Heated division in highly flexible sections is possible in lengths of 60 cm, 120 cm or 180 cm. All combinations are possible: Split on the sample and / or analyser side. In this way, continuous heating, e.g. of calibration gas lines or the operation of two analysers with one probe, can be easily implemented. This type of line is mainly used for mercury analysers or for systems that operate both cold-extractive and hot-extractive. The **PSG Plus Extruded Duo** lines are primarily used to transport the moist sample gas flow from the sampling point to the analyser house. The holding temperature of the line must be above the water vapor or acid dew point of the sample gas to prevent uncontrolled condensation of water vapor on the way to the analyser and thus the washing out of gas components in the condensate. In the standard version with 2 6x1mm PTFE inner cores and PVC jacket, this line is in stock and can usually be delivered at short notice.

### Technology

The robust cables with thick-walled extruded, flame-retardant and weather-resistant TPU, PE or PVC outer jacket are equipped with high-quality

PSG-Plus parallel heating tape. Insulation is provided by a thermal fleece. Due to the matching insulation in the two outgoing sample gas lines, only one temperature sensor in a variable point of the line is sufficient.

### Functions

The cables are available up to 73m in one piece and can be easily adapted on site and shortened every 0.6m. In addition, they are also available completely assembled and ready for operation ex works. The control of the lines is done with an external temperature controller (e.g. controller ST49 or controller DC-10) via the integrated PT100 to max. 200°C.



- ✓ Division in 2x 60/120/180 cm long heated sample lines at the end of line
- ✓ PSG-Plus parallel heating cable
- ✓ Max. 200°C control temperature
- ✓ Up to 73m at a stretch
- ✓ Every 0,6 m 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, PE or TPU outer jacket
- ✓ 2 internal tube made of PTFE, PFA,
- ✓ Additional internal lines possible (e.g. for instrument air for backflushing)
- ✓ Also available as hybrid line with additional power and sensor cable

## Technical Data and order number

| Construction data  |      |   |
|--|------|---|
| Max. operating temperature   | °C   | 200   |
| Heat insulation / weight   | kg/m | Thermal fleece/ 1   |
| Insulation thickness   | mm   | 10  |
| Heating cable type   |      | Parallel heating cable CPD Plus                                 |
| Length of the 2 extraction strands   | cm   | 60, 120 or 180 (according to customer requirements)             |
| Outer jacket   |      | 2mm PVC, PE or TPU extruded                                     |
| Outer diameter   | mm   | 43  |
| Min. bending radius  | mm   | 8 - 10 x outer diameter   |
| Ambient temperature  | °C   | -20 bis +65   |
| Max. operating pressure abs. PTFE line   | bar  | DN4/6: 5,6 / DN6/8: 4,5   |
| Protection class   |      | IP64 (EN60529)  |
| Max. length heating circuit  | m    | 73  |
| Electrical data  |      |   |
| Power  | W/m  | 60  |
| Electrical connection  |      | 3 m silicone connection cable, open ends (included in assembly) |
| Power supply   |      | 230V 50/60Hz  |
| Order number and options   |      |   |
| 2x6x1mm PTFE with PVC jacket   |      | 50030500  |
| Y-division with 2x 0,6m long sample line with silicon caps PSG assembly ex works |      | 50087042  |
| Silicone cap ending with electr. connection<br>PSG assembly ex works             |      | 50085532  |
| Silicone cap ending with electr. connection<br>Shrink cap for assembly on site   |      | 50085632  |
| PT100 for assembly ex works  |      | 50061200  |
| PT100 set for assembly on site   |      | 50050153  |
| M63 cable gland<br>Mounted on the heated line                                    |      | 80040358  |

| Assembly  |   |  |
|---|---|--|
|  |  |  |
| Silicone cap  | Controller ST49 with 25A SSR 230V<br>50/60Hz<br>Art. Nr. 50078850                   | Controller DC-10<br>Art. Nr 50078820   |