Embracing Challenge





Type 4-N(M) 4/6 C/Y

### **Special Features**

- Regulation with external temperature controller
- Completely assembled
- PTFE-tube non interchangeable, Type 3/
- PTFE-tube interchangeable, Type 4/
- Tube 4/6 or 6/8 mm, DN..
- 2 temperature ranges, N=100°C, M=200°C

# Electrically Heated Sample Lines Type 3/4-N/M-S for permanent installation

Type 3 with PTFE tube non interchangeable Type 4 with PTFE tube interchangeable

#### Application

The electrically heated M&C-sample lines series 3/4/-N/M-S may be used with advantage in gas analysis systems. Their application helps avoid errors and acts as frost protection during transport of the sample gas from the sample point to the gas conditioning system or directly to a heated analyser (above dew point).

## Description

The electrically heated M&C-sample lines 3/4-N/M-S are supplied according to clients requirements completely fabricated in the factory with connections and ends to a fixed length.

Several options can be supplied:

Two different temperature versions (N-100 °C/ M-200 °C),

two tube versions (3/4) with either DN 4/6 or DN 6/8 mm each

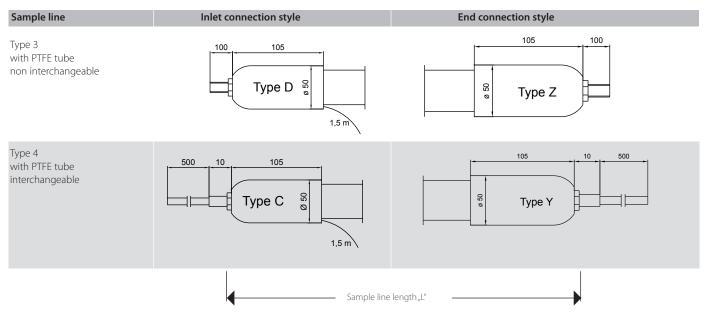
as well as inlet and end connections.

The construction of the sample line consists of a medium tube, a heat conductor and the axial taped high performance heating followed by a further two layers of thermal insulation. The outer cover is a nylon plaiting.

The ends of the sample line are finished with heat resistant Silicone materials, and the entire construction ensures that the complete sample line is properly heated, including the ends.

The sample line is equipped with a PT100 for temperature detection.

# Possible Connections and Styles of the Heated Sample Lines



Dimensions in mm

## **Technical Data**

Sample lines Type 3/4-N/M	Ν	Μ	
Operating temperature, max.	+100 °C	+200 °C	
Power consumption at DN 4/6	100 W/m		
Power consumption at DN 6/8	100 W/m		
Pressure, max.	Type 3 = 5 bar g, Type 4 = 3 bar g		
Ambient temperature, max.	-20 °C up to + 60 °C		
Tube DN	optional 4/6 or 6/8 mm		
Sample line inlet and end connections	see inlet and end connections		
Electrical connections	1,5 m cable for power and PT100-sensor connection		
Power supply	230V AC standard, supplied via a temperature controller		
PT100-Sensor position	0,25 m from the power inlet connection - standard		
Weight	first meter = $2 \text{ kg}$ / each meter more = 0,9 kg standard execution		
Sample line max. length	30 m		
Sample line inlet and outlet seal connections	Type 3 = PTFE tube ø 6 or 8 mm, on request, 100 mm on both sides Type 4 = PTFE tube ø 6 or 8 mm, on request, 0,5 m on both sides		
Thermal insulation	Silicone tube		
Outer cover	Nylon plaiting		
Application fields / smallest bending radius	stationary, inside and outside mounting / 400 mm		

**M**&



Description Sample lines per meter	Туре	DN in mm	Part number
Electrically heated sample line type 3 with non interchangeable PTFE tube, max. 100 $^\circ \! C$		4/6	04B3000
Electrically heated sample line type 3 with non interchangeable PTFE tube, max. 200 $^\circ \! C$	3M-S	4/6	04B3010
Electrically heated sample line type 3 with non interchangeable PTFE tube, max. 100 $^\circ\mathrm{C}$	3N-S	6/8	04B3030
Electrically heated sample line type 3 with non interchangeable PTFE tube, max. 200 $^\circ \! C$	3M-S	6/8	04B3040
Electrically heated sample line type 4 with interchangeable PTFE tube, max. 100 °C	4N-S	4/6	04B4000
Electrically heated sample line type 4 with interchangeable PTFE tube, max. 200 °C	4M-S	4/6	04B4010
Electrically heated sample line type 4 with interchangeable PTFE tube, max. 100 $^\circ \! C$	4N-S	6/8	04B4030
Electrically heated sample line type 4 with interchangeable PTFE tube, max. 200 $^\circ \! C$	4M-S	6/8	04B4040
Inlet and end connections for DN 4/6 or DN 6/8 incl. PT100 and 1,5 m cable:			
Inlet and end connections type D and Z for electrically heated sample line type 3N/M-S	D/Z-S	4/6	04B1000
Inlet and end connections type D and Z for electrically heated sample line type 3N/M-S	D/Z-S	6/8	04B1010
Inlet and end connections type C and Y for electrically heated sample line type 4N/M-S	C/Y-S	4/6	04B1100
Inlet and end connections type C and Y for electrically heated sample line type 4N/M-S	C/Y-S	6/8	04B1110
Option			
Electrically heated sample line with power 115VAC instead of 230VAC			03B9999

Other executions on request

# Please specify with order:

- line type (3, 4)
- line length in meter
- inlet and end connection D/Z or C/Y

- temperature range (N, M)
- tube dimension DN (4/6, 6/8)
- 1x temperature controller

#### For example:

6x 04B4010 6 m electrically heated sample line, 4M-S 4/6, max. 200 °C with interchangeable PTFE tube DN 4/6, 1x 04B110 inlet and end connection C/Y

- Temperature controller see data sheet 4.1, 4.2 and 4.3 -