

Type 4M-S with connection type C/Y-S

Electrically Heated Sample Lines Type 3/4M-S for Permanent Installation

Type 3 with PTFE tube, non-replaceable

Type 4 with PTFE tube, replaceable

Special Features

- Regulation via external temperature controller
- Completely assembled
- Type 3: PTFE tube, non-replaceable
- Type 4: PTFE tube, replaceable
- Tube DN 4/6 or 6/8
- Temperature: M=200 °C [392 °F]

Application

The electrically heated M&C sample lines series 3/4M-S are used in gas analysis systems to prevent measuring faults and also as frost protection during the transport of the sample gas from the sampling point to the gas conditioning system or directly to a heated analyzer (above the dew point).

Description

The electrically heated M&C sample lines 3/4M-S are supplied completely assembled in fixed length according to customer requirements.

Several options that can be combined are available:

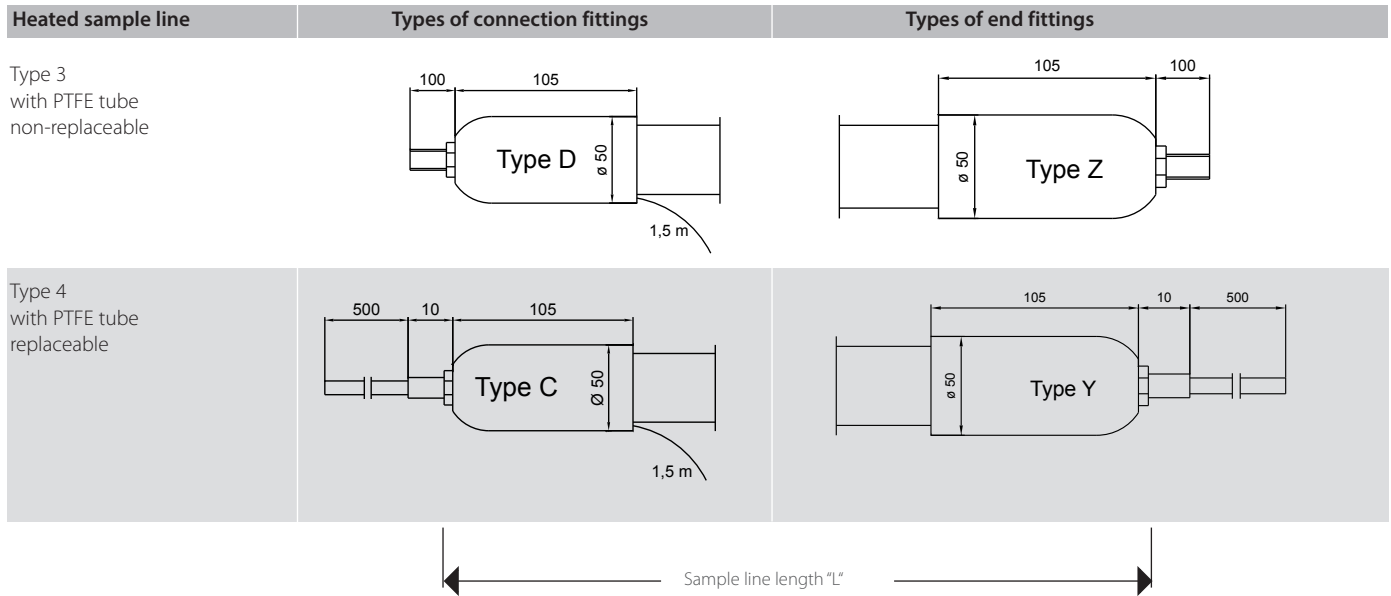
- Temperature: M=200 °C [392 °F],
- two tube versions (3/4) with either DN 4/6 or DN 6/8 each,
- as well as connection fittings and end fittings.

The robust design of the sample lines consists of the inner medium tube, a thermally conducting body, an axially coiled high-performance heating conductor and a two-layer thermal insulation. The outer jacket is an insulating tube made of silicone encased in nylon braiding.

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

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

Types of the Heated Sample Lines and Possible Connections



Dimensions in mm

Technical Data

Heated sample lines	Type 3/4M-S
Operating temperature, max.	+200 °C [392 °F]
Power consumption using DN 4/6	100 W/m
Power consumption using DN 6/8	100 W/m
Pressure, max.	Type 3 = 5 bar g, Type 4 = 3 bar g
Ambient temperature, max.	-20 up to + 60 °C [-4 up to 140 °F]
Tube DN	Optional DN 4/6 or 6/8
Sample line connection and end fittings	See connections and end fittings
Electrical connections	1.5 m [≈ 4.9 ft] cable for power and PT100 sensor connection
Power supply	230 V AC standard, supplied via a temperature controller
PT100 sensor position	0.25 m [≈ 0.82 ft] from the power inlet connection - standard
Weight	First meter = 2 kg [≈ 4.4 lbs]/each additional meter = 0.9 kg [≈ 2 lbs] standard version
Sample line max. length	30 m [≈ 98.4 ft]
Sample line inlet and outlet seal connections	Type 3 = PTFE tube \varnothing 6 or 8 mm, on request, 100 mm [≈ 0.3 ft] on both sides Type 4 = PTFE tube \varnothing 6 or 8 mm, on request, 0.5 m [≈ 1.6 ft] on both sides
Thermal insulation	Silicone tube
Outer shell	Nylon plaiting
Application fields/smallest bending radius	Stationary, indoor and outdoor mounting/400 mm [≈ 1.3 ft]

Description Sample Lines per Meter	Type	DN in mm	Part No
Electrically heated sample line type 3 with non-replaceable PTFE tube, max. 200 °C [392 °F]	3M-S	4/6	04B3010
Electrically heated sample line type 3 with non-replaceable PTFE tube, max. 200 °C [392 °F]	3M-S	6/8	04B3040
Electrically heated sample line type 4 with replaceable PTFE tube, max. 200 °C [392 °F]	4M-S	4/6	04B4010
Electrically heated sample line type 4 with replaceable PTFE tube, max. 200 °C [392 °F]	4M-S	6/8	04B4040
Connection fittings and end fittings for DN 4/6 or 6/8 incl. PT100 and 1.5 m [≈ 4.9 ft] cable:			
Connection fitting type D and end fitting type Z for electrically heated sample line type 3M-S	D/Z-S	4/6	04B1000
Connection fitting type D and end fitting type Z for electrically heated sample line type 3M-S	D/Z-S	6/8	04B1010
Connection fitting type C and end fitting type Y for electrically heated sample line type 4M-S	C/Y-S	4/6	04B1100
Connection fitting type C and end fitting type Y for electrically heated sample line type 4M-S	C/Y-S	6/8	04B1110
Option			
Electrically heated sample line with 115 V AC power supply instead of 230 V AC			03B9999

Other versions on request

Please specify with order:

- Line type (3, 4)
- Line length in meter
- Connection fitting and end fitting D/Z-S or C/Y-S
- Temperature range (N, M)
- Tube dimension DN (4/6, 6/8)
- 1x temperature controller

For example:

6 x 04B4010: 6 m electrically heated sample line, 4M-S 4/6, max. 200 °C [392 °F] with replaceable PTFE tube DN 4/6, 1 x 04B110 connection fitting and end fitting C/Y-S

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