



Sorbent Traps

for mercury measurements

Sorbent Traps

Special Features

- Short-term measurements up to 12 hours
- Long-term measurements up to 2 weeks
- Length of the short-term traps: approx. 180 mm [≈ 7.1"]
- Length of the long-term traps: approx.
 400 mm [≈ 15.7"]
- Speciation Traps for separate quantification of elemental and ionic mercury

Application

The Sorbent Traps are used for mercury measurement according to DIN CEN/TS 17286:2019-07. In this mercury measurement, a defined volume flow is passed through two traps. The use of two Sorbent Traps in independent parallel gas paths ensures a high reliability of the measurement results. The traps are divided into up to six sections. The criteria which these sections must meet are defined in the relevant regulations. The analysis of the Sorbent Traps is carried out in the laboratory.

Typical applications are sampling of flue gases from combustion plants. Mercury measurement with Sorbent Traps is a very efficient tool for tests to separate mercury from flue gas.

Description

The M&C Sorbent Traps are part of M&C's PSS-STS portable sampling system which is used to determine the total mercury concentration in flue gases. Mercury detection limits as low as 10 ng/m³ can be achieved depending on sampling conditions, parameter settings and analytical method. The Sorbent Traps are inserted into the heated probe and removed according to a defined and programmed collection cycle.



Short-Term Traps for Measurements up to 12 Hours

Туре	Description	Part No.
Trap Hg, short-term	and the second sec	97A1010
	 Trap for adsorption of Hg up to 12 hours in clean gas For a loading level of approx. 500 ng Hg at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 180 x 10 mm [≈ 7.1" x 0.4"] 	
Trap Hg, short-term, spiked inspection section	 Trap with spiked inspection section for adsorption of Hg up to 12 hours in clean gas Spiked inspection section with defined amount of Hg for recovery check in the laboratory (for regulatory authority measurements) For a loading level of approx. 500 ng Hg at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 180 x 10 mm [≈ 7.1" x 0.4"] 	97A1030

Long-Term Traps for Measurements up to 336 Hours

Туре	Description	Part No.
Trap Hg, long-term		97A1110
	 Trap for adsorption of Hg up to 336 hours in clean gas For a loading level of approx. 2000 ng Hg at a flow rate of 30 NI/h sample gas* Dimensions (L x Ø): approx. 400 x 10 mm [≈ 15.7" x 0.4"] 	
Trap Hg, long-term, spiked inspection section	 Trap with spiked inspection section for adsorption of Hg up to 336 hours in clean gas Spiked inspection section with defined amount of Hg for recovery check in the laboratory (for regulatory authority measurements) For a loading level of approx. 2000 ng Hg at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 400 x 10 mm [≈ 15.7" x 0.4"] 	97A1130

* under ideal conditions

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Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F], 1013 mbar.

Speciation Traps



Туре	Description	Part No.
Trap Hg, speciation	 Trap with acid section for adsorption of Hg up to 336 hours in clean gas Separate quantification of elemental and ionic mercury For a loading level of approx. 2000 ng Hg⁰ and 2000 Hg²⁺ at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 400 x 10 mm [≈ 15.7" x 0.4"] 	97A1210
Trap Hg, speciation, spiked inspection section	 Trap with acid and spiked inspection section for adsorption of Hg up to 336 hours in clean gas Separate quantification of elemental and ionic mercury Spiked inspection section with defined amount of Hg for recovery check in the laboratory (for regulatory authority measurements) For a loading level of approx. 2000 ng Hg⁰ and 2000 ng Hg²⁺ at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 400 x 10 mm [≈ 15.7" x 0.4"] 	97A1220

Orientation Trap

Туре	Description	Part No.
Trap Hg, orientation, spiked inspection section	 Trap with acid and spiked inspection section for adsorption of Hg up to 4 hours Spiked inspection section with defined amount of Hg for recovery check in the laboratory (for regulatory authority measurements) For a loading level of approx. 2000 ng Hg_{total} at a flow rate of 30 Nl/h sample gas* Dimensions (L x Ø): approx. 180 x 10 mm [~ 7.1" x 0.4"] 	97A1240

* Under ideal conditions Special traps on request Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F], 1013 mbar.