

Analyser for measurement of Toxic Gases and Hydrogen Traces AMS 6420



available options:

- gas pump
- pressure reducer
- automatic bypass- and purge valve
- analog output galvanically separated
- particle filter 2-7 μ m
- electronic flow monitoring / -alarm
- 2 free adjustable measuring values
- manual 5 way valve
- different housings

The Application:

The Analyser AMS 6420 has been developed for the measurement of toxic impurities and Hydrogen in process gases. The measurement of toxic impurities is usually required in combination to a trace oxygen analysis in process gases. In these applications the Analyser AMS 6420 can be integrated in the gas pathway after the trace oxygen analysis. The advantage for the customer is, that both analysers can be supplied with process gas by only one gas path way.

The Measuring principle:

The electrochemical sensors that are used in the Toxic gas Analyser AMS 6420 are selected specifically for an application. The many years of experience of AMS in manufacturing gas analysers for process applications guarantee the supply of a highly precise and long-life solution. The universal sensor electronics of the Toxic gas Analyser AMS 6420 allows adopting a specific sensor for an application. An important factor is the selection of an electrochemical sensor with focus on the electrolyte and the material of the electrodes. This requires knowledge of the physical and chemical parameters of the gas such as gas temperature, pressure / draft of the process gas at the measuring point, humidity content and the specification of the gas with focus on by-gases. AMS provides specific questionnaires containing the relevant data.

The Measuring system:

The Toxic gas Analyser AMS 6420 is available in various housings for General Applications. A number of options allow adopting the AMS 6420 even to extreme applications. On customer request, AMS designs and fabricates analyser cabinets with measuring signal distribution around the AMS analysis systems, always focusing on a specific customer application.

Technical Data

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| Analyser | AMS 6420 |
| Measuring principle | Electrochemical sensor |
| Application | Gases Industries, Chemical Industries |
| Gas components | Carbon monoxide, Hydrogen |
| Measuring ranges | 4 |
| | 0 ... 10, 0 ... 100, 0 ... 1000, 0 ... 10000 ppmv |
| Analogue signal port | 0 ... 10 V, 0 (4) ... 20mA |
| Reproducibility | +/- 2 % of the measuring value |
| Resolution | 0,01 ppm – C(gas) – 0,01 % |
| | depending on gas concentration |
| T90-Time | ca. 40 Seconds |
| Display | 3 ½ digit LCD display |
| Messages | 2 free adjustable messages based on the gas concentration |
| Gas connection | inlet / outlet 3 / 6 mm ferrule pack |
| Gas sampling | built-in inlet / outlet valve, flowmeter |
| Sample flow | min. 20 NI/h, max. 40 NI/h |
| Sample pressure (inlet) | min. 1,01 bar abs., max. 10 bar abs. |
| Ambient operating temp. | - 5 °C up to + 45 °C |
| Relative humidity of the gas | 0 ... 99 % not condensing |
| Power supply | 110 or 230 VAC / 60 - 50 Hz |
| Protection / Housing / | IP 65 / wall mounting housing 300 x 250 x 320 mm |
| Dimensions | IP 54 / 63 TE, 3 HU portable housing |
| | IP 20 / 19" rack, 3 HU |
| | IP 20 / ½ 19" electronics housing, 3 HU |
| | IP 20 / ½ 19" cassette |
| Weight | 8-10 kg |
| Options | electrical/pneumatical gas pump |
| | pressure reducer (max 10 bar in, 50 mbar out) |
| | automatic bypass- and purge valve |
| | analog output galvanically separated |
| | particle filter 2-7µm |
| | electronic flow monitoring / -alarm |
| Version: AMS 6420 E V-2013-07 | |

Technical data are subject to change.