



# Automatic Motor Valve AMV-03



- Allows automatic isokinetic sampling
- Easy to set-up and configure
- Fast and accurate
- Easy exchangeable orifice plates
- Works also with non-zero pressure nozzles
- Standard flow ranges: 1-6 m<sup>3</sup>/h (dust sampling) and 5-20 l/min (dioxin sampling)

## Motor Valve for automatic isokinetic control

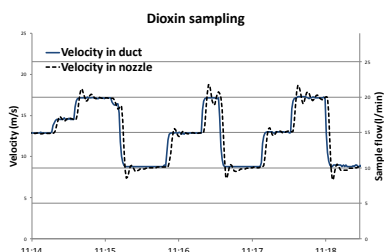
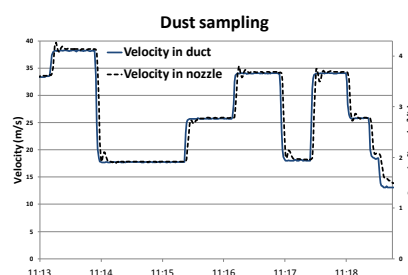
The motor valve, AMV-03, measures and calculates gas velocity in the duct by help of a S-pitot head and temperatures sensor and calculates the corresponding flow through the nozzle for isokinetic sampling. The nozzle flow is measured and controlled to match the calculated flow. The sample flow is determined by measuring the pressure difference over an orifice plate. The orifice plates come in two different sizes depending on desired range of sample flow and are easily exchangeable. Small orifice plates are used for flows of 5-20 liters per minute and bigger plates for 1-6 m<sup>3</sup>/h. Isokinetic sampling is reached within 5-15 seconds even with big velocity fluctuations.

METLAB offer measurement equipment for dust, dioxin and wet chemical sampling. This motor valve is compatible with all of these systems. Recording of differential pressures of both S-pitot head and sample flow orifice, valve position, and temperatures is possible on an external logger.



### Dust sampling

AMV-03 allows for accurate isokinetic dust sampling. Gas velocity can range from 5-50 m/s with sample flow from 1-6 m<sup>3</sup>/h, depending on nozzle-size and gas velocity.



### Dioxin sampling

With a smaller orifice plate the AMV-03 allows for accurate isokinetic dioxin sampling with sample flows from 5-20 l/min.



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### Control unit

Dimension: 420 x 210 x 200 mm

Weight: 6.75 kg

### Connections

Vacuum hose of EPDM och silicon gum

Twin hose for pressure measuring (0-1000Pa)

Standard connectors thermocouple type K

Out-put signals: Diff pressures (0-10V), valve position (0-10V) and temperature recording



### Accessories

Twin hoses EPDM for orifice differential pressure and pitot head differential pressure

Vacuum hoses EPDM or Silone gum for inlet and outlet sample flow

Thermocouple wires for gas meter temperature and flue gas temperature

Out-put signal cables for data logging (option)

A set of orifice plates for different flow ranges.

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