



METAN, KOLDIOXID, LUFTFUKTIGHET
MULTIGAS PROBE MGP261

Vaisala CARBOCAP MGP261 Multigas givare för metan, koldioxid och luftfuktighet är designad för inlinemätning i krävande biogas processer där repeterbara, stabila och noggranna mätningar är viktiga.

MGP261 är Ex-Certifierad för att användas i Ex Zon 0 för processdelen och Ex Zon 1 för delar utanför processen.

	 Vaisala MGP261 Methane, carbon dioxide and humidity multigas probe	 Vaisala MGP262 Methane and carbon dioxide multigas probe
Primary use	Raw biogas monitoring	Biomethane offgas monitoring
Installation type	In situ	
Sensor	CARBOCAP®	
Methane CH ₄ measurement range	0 ... 100 vol-%	0 ... 5 vol-%
Carbon dioxide CO ₂ measurement range	0 ... 100 vol-%	0 ... 100 vol-%
Water vapor H ₂ O measurement range	0 ... 25 vol-%, -10 ... +60 dew point °C (14 ... +140 dew point °F)	n/a
CH ₄ accuracy at +25 °C (+77 °F) and 1013 mbar ¹⁾	0 ... 40 vol-%: ±2 vol-% 40 ... 70 vol-%: ±1 vol-% 70 ... 100 vol-%: ±2 vol-%	0 ... 2 vol-%: ±0.1 vol-% CH ₄ 2 ... 5 vol-%: ±5% of reading
CO ₂ accuracy at +25 °C (+77 °F) and 1013 mbar ¹⁾	0 ... 30 vol-%: ±2 vol-% 30 ... 50 vol-%: ±1 vol-% 50 ... 100 vol-%: ±2 vol-%	90 ... 100 vol-%: ±1 vol-% 0 ... 90 vol-%: ±2 vol-%
H ₂ O accuracy at +25 °C (+77 °F) and 1013 mbar ¹⁾	0 ... 25 vol-%: ±0.5 vol-%	n/a
Repeatability CH ₄	±0.5 vol-% at 60 vol-%	< ±0.1 vol-% at 1% CH ₄
Repeatability CO ₂	±0.3 vol-% at 40 vol-%	±0.4 vol-% at 95 vol-%
Repeatability H ₂ O	±0.1 vol-% at 10 vol-%	n/a

¹⁾ Including non-linearity, calibration uncertainty, and repeatability; temperature and pressure compensated, excluding cross-interferences to other gases.

Installation direkt i rör alternativt flödescell för mindre rördimensioner

An external pressure measurement instrument (item 5) is shown as an example of pressure compensation input options: for a description of alternative options, see [Pressure compensation input options](#) (page 25).

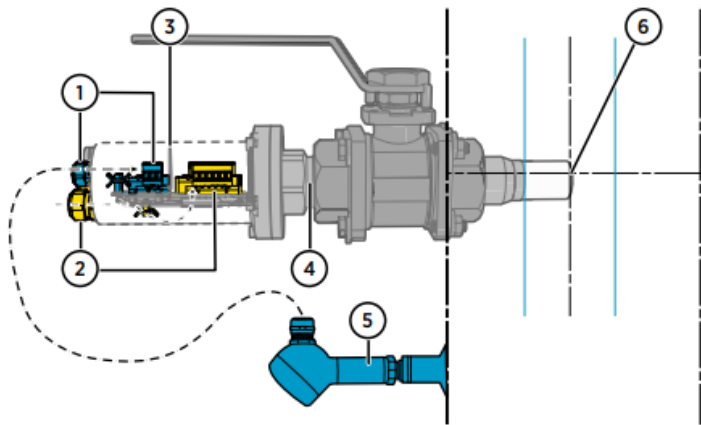


Figure 8 MGP260 installation example with wiring routes and recommended orientation and depth

- 1 External pressure or temperature sensor input wiring (Ex ia): use the M16x1.5 lead-through and route the cable directly to the terminal.
- 2 Standard analog output, power supply input, and RS-485 communication wiring: use the M20x1.5 lead-throughs and route the cables to the terminals through the openings below the component board.
- 3 Metal barrier separating the intrinsically safe external sensor input terminals (optional, for environmental compensation input) from the analog output, power supply input, and RS-485 terminals on the component board.
- 4 1.5" male NPT thread on MGP260: **never install to any other thread type than 1.5" female NPT.**
- 5 Example pressure compensation input option: an external measurement instrument connected to the MGP260 Ex ia input terminals (item 1).
- 6 For best results, install MGP260 horizontally and position the tip of the filter within 1/3 of the pipe's diameter from the pipe centerline. In smaller pipes, the installation depth can be adjusted by using an adapter (for example, a ball valve).



CAUTION! Always use a separate cable for the external pressure or temperature sensor input (Ex ia) wiring (1), and make sure the wiring remains separated from the terminals and wiring (2) on the other side of the metal barrier (3) on the component board.

3.1.4 Installation option: flow-through adapter installation

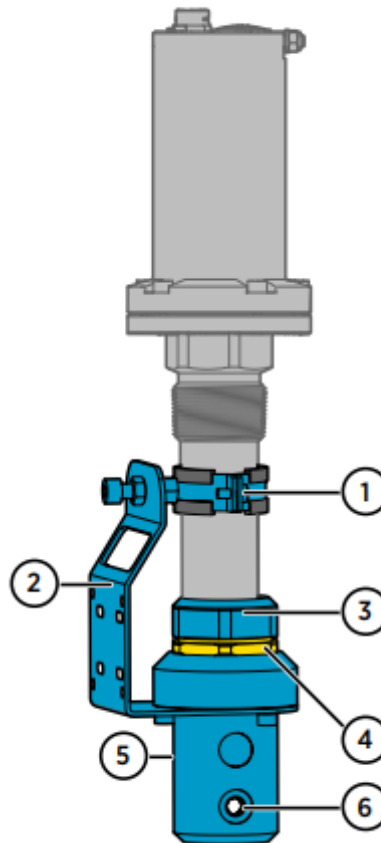


Figure 9 (page 23) shows MGP260 attached into the MGP260 flow-through adapter accessory (Vaisala order code: 258877). For instructions on attaching MGP260 to the flow-through adapter, see [Attaching flow-through adapter to MGP260](#) (page 31).

For an example of connecting a pressure input instrument, see [Figure 8](#) (page 22).

Figure 9 MGP260 in flow-through adapter 258877

- 1 Clamp with 2 screws
- 2 Mounting plate (attach to mounting surface with screws or ties)
- 3 Probe gland tightening nut
- 4 Probe gland locknut: **do not turn**
- 5 Gas tube inlet port, G 1/8 (on the other side of the adapter)
- 6 Gas tube outlet port, G 1/8