

Gas cooler

GO-PK-SERIES

Cooling- Processing- Analysis

GO-PK SERIES

Device for cooling the gas to separate the water vapor contained. The cooling process with the GO-PK Series gives you accurate measurement results and prevents washout losses.

To analyse the gas, it is also generally necessary to let the gas sample cool down among other things in order to condense the water vapour contained in the sample.

To obtain precise measurements, it is absolutely necessary to prevent the substances to be analysed from being washed out during the cooling process. In practice, it is desirable to keep the absorptions of the substances to be analysed in the condensate negligibly small. Ideally, the absorptions are either not detectable, or they are within the tolerances of the analysers.

This can be achieved by condensing the water vapour contained in the gas as quickly and as completely as possible and by immediately removing it from the gas passage.

For this purpose, the geometry of the condenser/ heat exchanger in the cooling block of a cooler is of particular importance. In a particle separator operating on a modified cyclone principle, the geometry of the contact precipitator and the resulting gas flow in the gas cooler GO-PK and GO-EPK force the gas to immediately contact the coldest place on the wall of the heat exchanger. The sudden cooling to approx. 5 °C causes the major part of the

condensate to precipitate in the lower quarter of the heat exchanger. The condensate drains off towards the bottom and the gas to be measured is conducted towards the top.

Further loss of substance is avoided due to the small inner surface and the small volume of the patented heat exchanger.

The gas coolers GO-PK and GO-EPK can be equipped with one or two heat exchangers. The convenient dimensions allow easy assembly in analyser cabinets; the model GO-EPK can be integrated in 19" racks.

The gas coolers GO-PK and GO-EPK constitute an integral part of the cooling systems GO-PP, GO-PKK, GO-PKF and the gas processing systems GOT, GOE and GOM.

ADVANTAGES

- ☑ Compact design
- ☑ With cyclone heat exchanger pat. DPB 38 33 192
- ☑ Fast operational readiness of approx. five minutes
- ☑ Helps to accurate readings
- ☑ Leaching losses are prevented
- ☑ The model GO-EPK can be integrated in 19" racks.

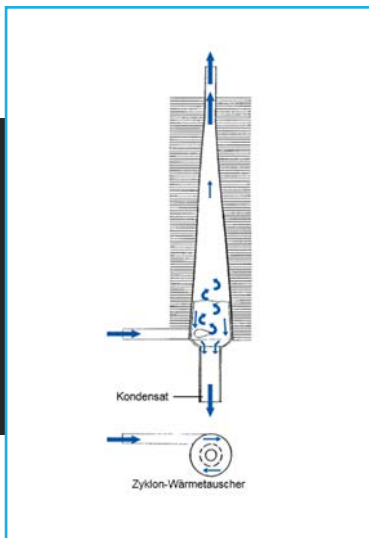


PERFORMANCE PROFILE GO-PK SERIES

Heat exchanger	GO-PK1 and GO-EPK1 / 1 cyclone separator DURAN GO-PK2 and GO-EPK2 / 2 cyclone separator DURAN
Volume of heat exchangers	GO-PK1 and GO-EPK1 / 25 ml GO-PK2 and GO-EPK2 / 50 ml
Outlet dew point	set at factory to + 5 °C, visual alarm with deviations of + 3 °C
Alarm output	Floating temperature alarm contact/ changeover, max. 250 V/30 W
Inlet dew point	GO-PK1 max. 65 °C GO-PK2 max. 70 °C GO-EPK1 max. 55 °C GO-EPK2 max. 60 °C
Cooling rate	approx. 110 kJ/h
Flow rate	GO-PK1 and GO-EPK1 / 50 - 150 l/h GO-PK2 and GO-EPK2 / 50 - 250 l/h
Ambient temperature	+5 to +30 °C
Operative	within approx. 10 minutes (depending on ambient temperature)
Peltier element	function-monitored with visual alarm
Power consumption	max. 100 VA
Operating pressure	max. 4 bar
Gas connections	Tube 4 x 6 mm, glass
Condensate drain	Tube 10 x 12 mm, glass
Dimensions (approx.)	GO-PK1 and GO-PK 2 / L 250 x W 120 x H 210 mm GO-EPK1 L 205 x W 155 x H 125 mm GO-EPK2 L 225 x W 155 x H 125 mm
Weight (approx.)	GO-PK1 approx. 6,0 kg GO-EPK1 approx. 4,5 kg GO-PK2 approx. 7 kg GO-EPK2 approx. 5 kg
Power supply	230 V, 50 Hz (other options on request)

GO-PK SERIES

TECHNICALLY RENOVATED AND EXPANDABLE



MODEL VARIANTS

- ☐ Brackets for wall mounting
- ☐ Transport protection
- ☐ Portable version with handle (not by GO-EPK 1)

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