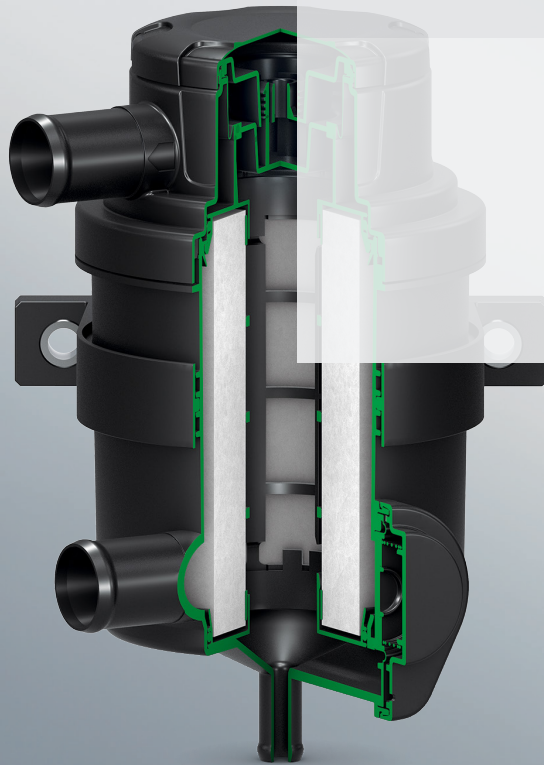


ProVent² Series Innovative Crankcase Ventilation Systems

- ✓ Highest efficiency
- ✓ Easy service
- ✓ Modular design








MANN+HUMMEL ProVent² Series

Innovative Crankcase Ventilation Systems

Product features and advantages

- Best in class performing separator
- Long service interval
- Very compact design
- High interface flexibility
- Easy service concept
- Lower total cost of ownership level compared to active separator systems
- Modular combination possible
- Optimal protection of engine components
- Open and closed crankcase ventilation possible

Technical features

Size	ProVent ² 100	ProVent ² 200	ProVent ² 300	ProVent ² 500	ProVent ² 700
					
Applications	Turbocharged Diesel Engines				Turbocharged Natural Gas Engines
Engine Power Range	75-200 kW	200-400 kW	40-1200 kW	> 1200 kW	> 800 kW
Blow-By Flowrate	< 100 l/min	< 200 l/min	< 300 l/min	< 500 l/min	< 700 l/min
Service Life	> 2.000 h*				> 8.000 h*
Separation Efficiency d50: 0.6 µm (mass weighted)	> 90%				> 99.9%
Separation Efficiency d50: 1.5 µm (mass weighted)	> 99%				> 99.99%
Operating Temperature	-40 °C to 120 °C, peak 150 °C				

* Depends on dirt and soot concentration in oil

MANN+HUMMEL ProVent² 100 / 200 / 300

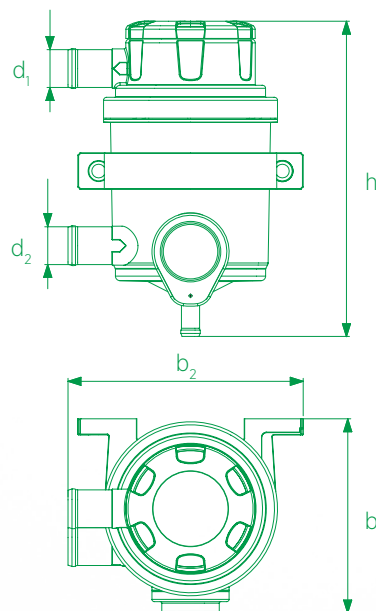
Innovative Crankcase Ventilation Systems

Product features and advantages

ProVent² 100-300 are MANN+HUMMEL's comprehensive solutions for crankcase ventilation on medium size diesel engines: The compact system includes an oil separator offering best in class separation efficiency at low pressure loss as well as pressure regulation and bypass valves.

- Compact design and simple installation
- Best in class droplet separation
- Long service interval
- Excellent price-performance ratio

Dim. [mm]	ProVent ² 100	ProVent ² 200	ProVent ² 300
h_1	156.0	207.7	241.0
b_1	94.2	128.0	128.0
b_2	129.3	155.5	155.5
$\varnothing d_1$	20.0	25.0	25.0
$\varnothing d_2$	20.0	25.0	25.0



Variable outlet orientation

90° rotatable depending on inlet position



Pressure regulation valve

Keeps the pressure in the specified range

Compact element

Patented sealing design



High air oil separation

High efficient patented MICROGRADE D-G media

Easy mounting

Bracket allowing variety of mounting configurations



Bypass-valve

Integrated for safety

Variable inlet orientation

left / right versions 30° rotatable

MANN+HUMMEL ProVent² 500

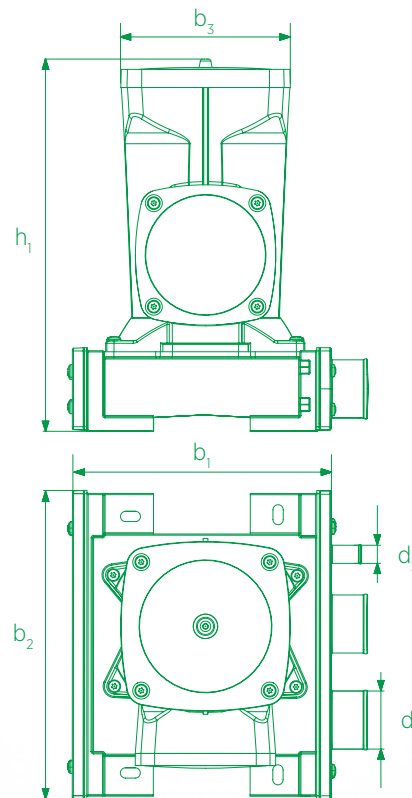
Innovative Crankcase Ventilation Systems

Product features and advantages

With the ProVent² 500, MANN+HUMMEL has developed a crankcase ventilation system with integrated oil separation for high blow-by volume flows. ProVent² 500 is particularly suitable for the special requirements of large, high-speed diesel engines in order to reduce engine emissions. The modular design of the series and the available flexibility in the configuration of the system make it easy to use in many different engines and applications.

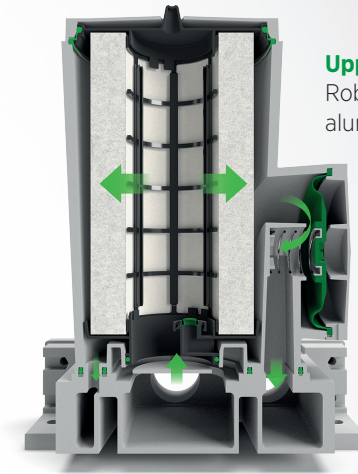
- Modular design - multiple units can be easily used in one application
- Significantly longer service life than comparable solutions
- Filter media MICROGRADE D-G offers a separation efficiency over 90% even with smallest droplet size distribution

Dim. [mm]	ProVent ² 500
h_1	308
b_1	255
b_2	214
b_2	140
$\varnothing d_1$	48
$\varnothing d_2$	15



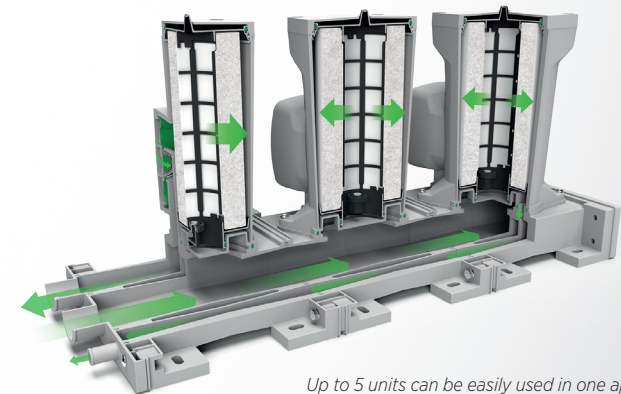
High air oil separation
Patented high efficient with MICROGRADE D-G media

Upper housing
Robust and strong aluminum die cast



Gas outlet
On front or back side

Gas inlet
On front or back side



Up to 5 units can be easily used in one application

MANN+HUMMEL ProVent² 700 for Gas Applications

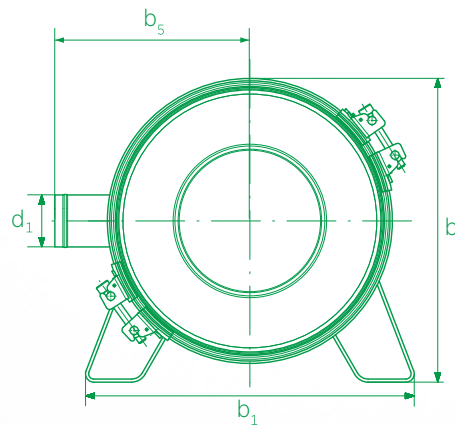
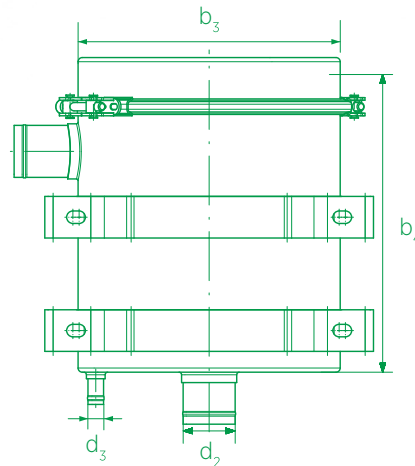
Innovative Crankcase Ventilation Systems

Product features and advantages

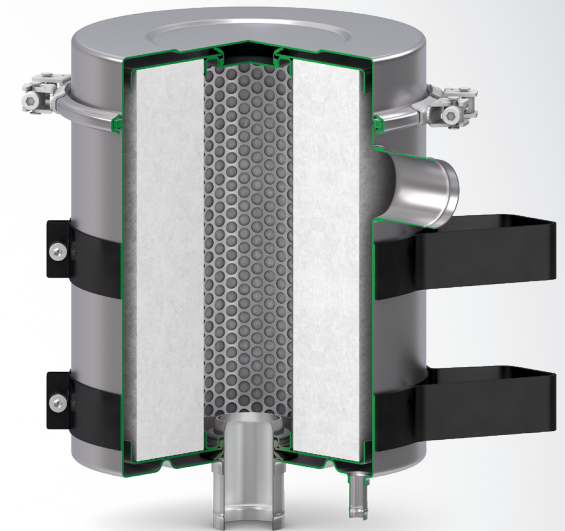
The ProVent² 700 developed from MANN+HUMMEL is a crankcase ventilation system with integrated oil separator for gas engines. The system is characterized by its ultra-high filtration efficiency and a long service interval. With the stainless-steel housing, the system is suitable for universal use in several kinds of applications with gas engines.

- Ultra-high filtration efficiency
- Residual oil content <1 mg/m³
- Long service interval (> 8.000 h)
- Robust stainless-steel housing

Dim. [mm]	ProVent ² 700
b ₁	316
b ₂	307
b ₃	252
b ₄	302
b ₅	187,5
ø d ₁	48
ø d ₂	48
ø d ₃	15



Ultra high efficient oil separation at low pressure loss
Patented MICROGRADE D-G media



Central inlet orientation

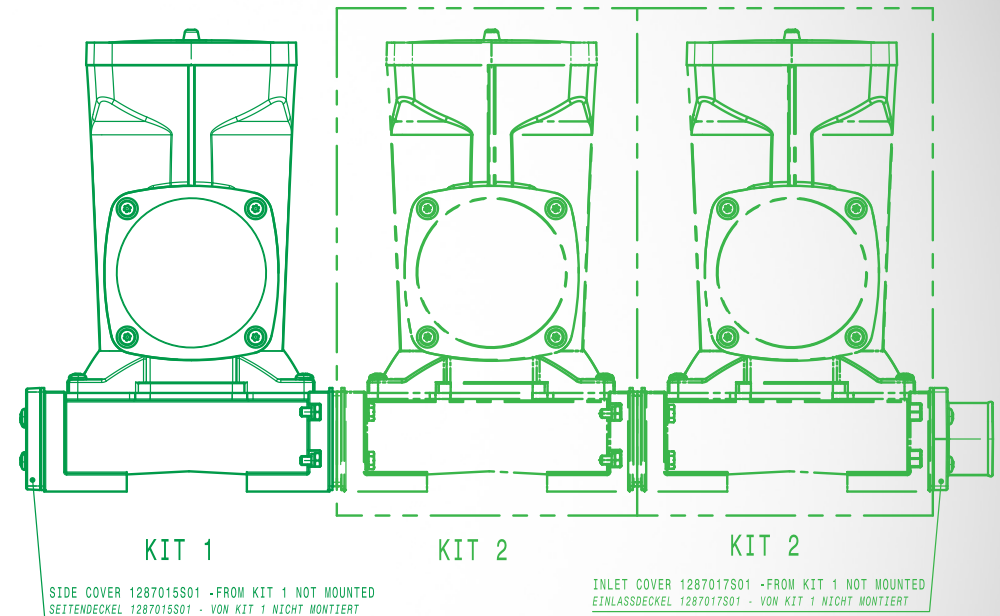
MANN+HUMMEL ProVent² Series Innovative Crankcase Ventilation Systems

Part Numbers

Model	Part Number	Oil Separator
ProVent ² 100*	13 439 08 S02*	LC 8005
ProVent ² 200	12 395 37 S02	LC 11 002
ProVent ² 300*	14 337 15 S01*	LC 11 003
ProVent ² 500 (Kit 1)**	12 867 93 S01	LC 14 002
ProVent ² 500 (Kit 2)**	12 973 99 S01	LC 14 002
ProVent ² 700	14 228 80 S01	LC 24 001

* In preparation (availability 2022)

** See Example 1



LEGEND :
 KIT 1 ———
 KIT 2 - - - -

Example:
 3 ProVent² 500 in parallel:
 1 x Kit 1 and 2 x Kit 2
 Side cover from Kit 1 is to mount after second Kit 2.
 Max. 5 No.'s of ProVent² 500 in parallel.

Example 1



MANN+HUMMEL Contact

Product Management

Carsten Kus

Global Product Management OE

carsten.kus@mann-hummel.com

Phone: +49 6232 53-8691