

Oil filtration solutions for transmissions and electric drive units



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Long-term experience

MANN+HUMMEL is a technology leader for decades in the field of highly functional integrated oil filter systems for internal combustion engines.

This know-how is transferred to new applications such as eAxles and hybrid transmissions.

Function integration enables compact design with means of simulation, pressure-loss optimization and plastic processing. Furthermore, an acoustically optimized design and additional function integration such as defoaming and oil drying is possible.

Concept advantages

Oil supply management

Oil supply for transmission, e-motor and / or battery cooling.

Oil lifetime

Modular system of perfectly matching suction- and pressure-side filter.

Conductivity

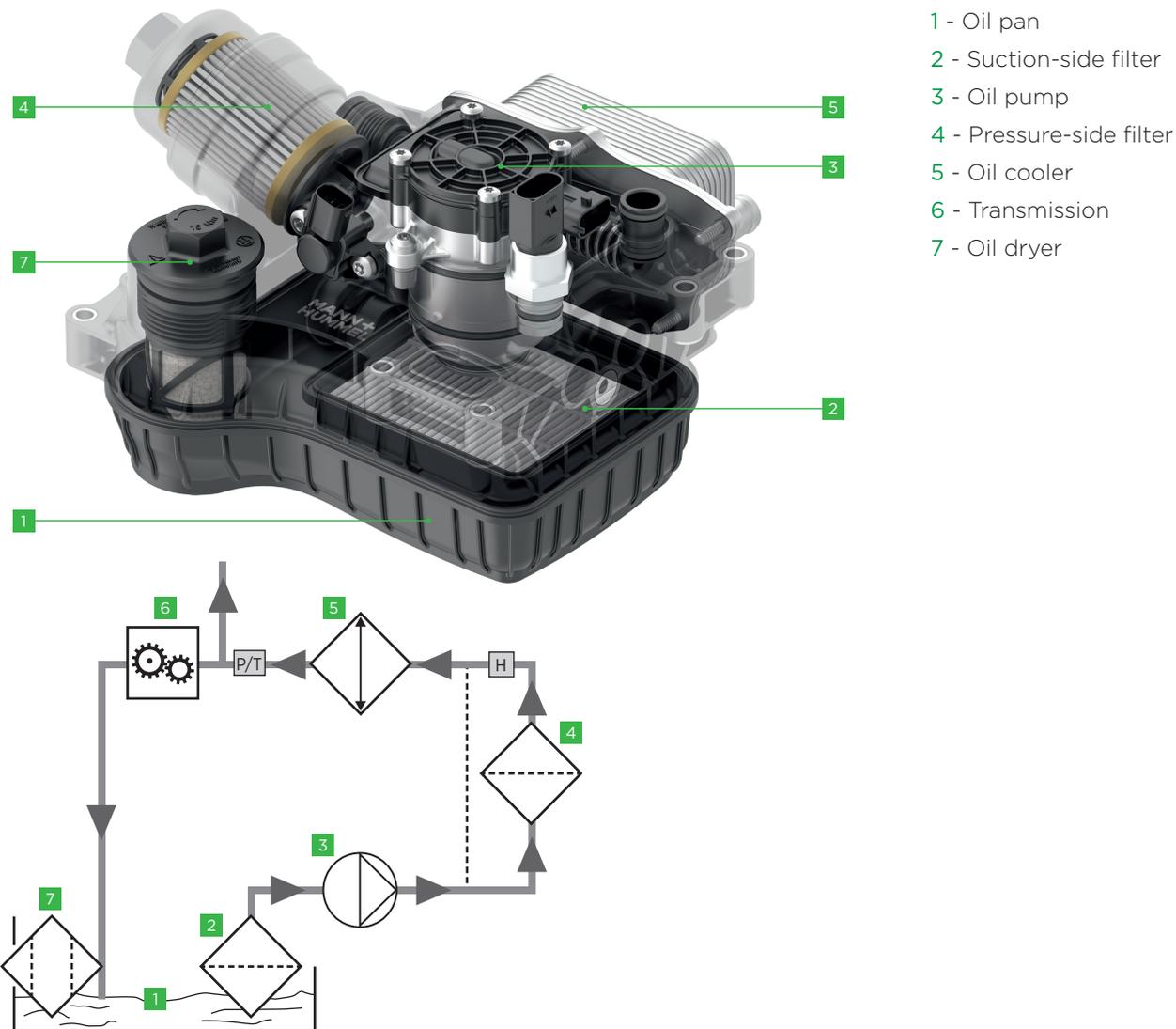
Oil drying by reduction of water in oil.

Service

Easy and clean change of oil dryer and pressure-side filter element.

Thermal management

Control of oil flow through cooler and bypass of cooler depending on oil temperature.



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MULTIGRADE filter media for innovative drivetrains

MULTIGRADE O-eM

- **System reliability**
Synthetic filter media with high chemical resistance.
- **System security**
No bypass in filter media for best particle separation starting from the first second.
- **Energy efficiency**
Ideal spacing of the pleats by drainage grid provides low differential pressure under all conditions.



MULTIGRADE O-G

- **Filtration efficiency**
Glass fiber filter media with highest filtration efficiencies for best oil cleanliness.
- **Installation space**
Perfectly matching multilayer set-up for high dust holding capacity.
- **Media stability**
Grid support offers highest pleat stability on the pressure-side.



Suction- and pressure-side filters for efficient system protection

Suction-side transmission oil filter

An installation space of only 20 millimeters is enough to enable the use of proven pleating technology. The pleated filter with MULTIGRADE O-eM multiplies the freedom of design for the customer:

- **Smaller installation space**
with the same filter area or,
- **Maximum service life**
by larger filter area in the same installation space or,
- **Lower differential pressure**
for reduction of pump drive power in the same installation space.



Pressure-side transmission oil filter

- **Filtration efficiency**
MULTIGRADE O-G to protect complex and sensitive transmission systems.
- **Flexible design**
Standalone solutions or matching combination with suction-side filter.



Decades of mass production experience with transmission oil filters and plastic oil filter systems.



MULTIGRADE filter media

Synthetic or glass fiber filter media for optimum protection of transmissions and eAxles



Suction-side transmission oil filter

Pleated filter media for efficient filtration and system protection



Pressure-side transmission oil filter

Highest oil cleanliness for complex and sensitive systems



Dryer cartridge (concept)

Protection against water and ice in direct-cooled systems

Oil filter system for eAxles and hybrid transmissions

High level of functional integration for compact packaging, best oil cleanliness and optimal oil control



MANN+HUMMEL Contact

Sales

Julian Eisele
Global Brand Manager E-Mobility / New Products
julian.eisele@mann-hummel.com
Phone: +49 7141 98-3628

Engineering

Claudia Wagner
Principal Expert Oil Filter Elements
claudia.wagner@mann-hummel.com
Phone: +49 7141 98-3596



Open the website for more information about transmission oil filters.



Watch the video of the transmission oil filter.