

COOLED ELECTRIC MOTOR HOUSING: >10% LIGHTER; 60 % THINNER CROSS SECTION

Greater cooling capacity of electric motors in a smaller space

Application

Witzenmann's patented electric motor housing (EMH) yields high efficiency performance for liquid cooled motors. Its light weight, compact design, makes it superior to existing solutions on the market.

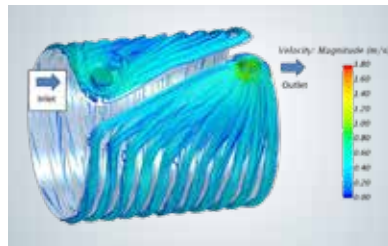
Technical data

(Example: 250 mm active diameter and length)

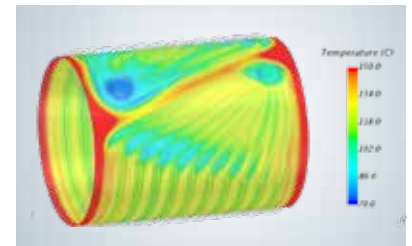
- Weight approx. 6.0 kg
- Radial approx. 4.0 mm layer on stator
- < 8 kW heat dissipation
- Pressure drop \leq 80 mbar
- Customized size to fit the application

Advantages over conventional cast aluminum housings

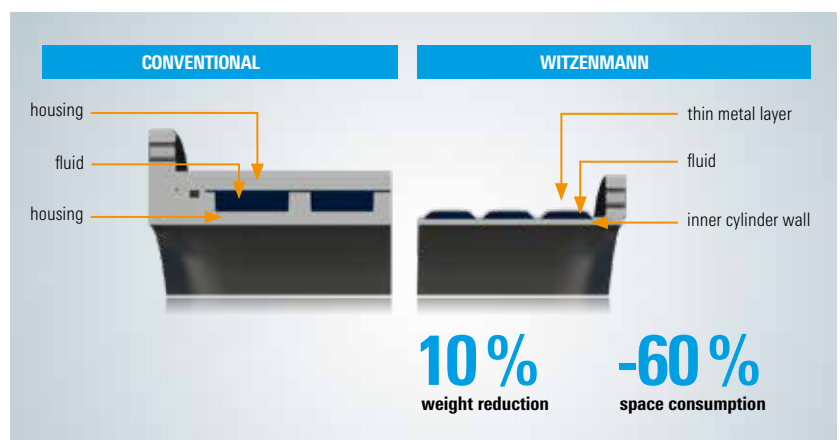
- Higher cooling efficiency, compact design
- Higher potential torque in same packaging space due to thinner wall cross section.
- Homogeneous, high cooling capacity due to patented liquid through-flow design
- Lighter weight
- Leak tight without use of additional seals
- Improved efficiency of electric motors



Homogeneous flow distribution, no turbulences, pressure loss $\Delta p < 80$ mbar possible



Homogeneous temperature distribution and high cooling capacity e.g. Tmax 102 °C at the water jacket with 8 kW heat dissipation and active diameter of 246 mm



Thin walled construction for better packing envelope