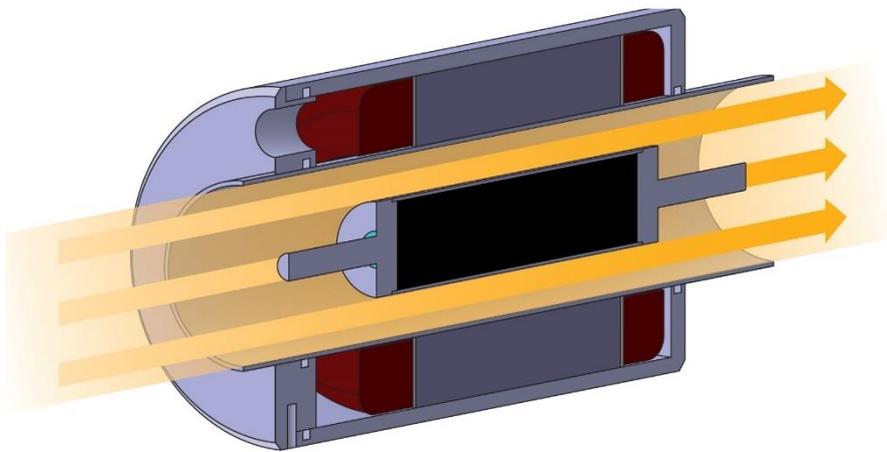
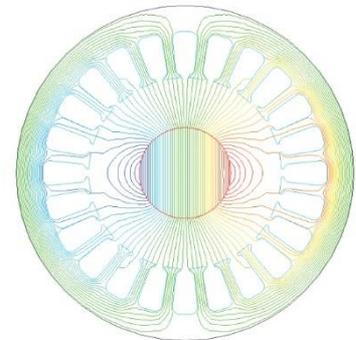


SycoFlow - Media Gap Motor



Design



Depiction of flux line

The media gap motor is a permanent magnet synchronous motor (PMSM) that is characterized by the fact that it is a hermetically sealed system with an internal stator diameter that is particularly large in proportion to the external diameter of the rotor/ permanent magnet.

The large air gap enables various media to be transported between the rotor and stator in the axial direction. The rotor magnet can be directly coupled to the feed unit or incorporated into the unit itself.

Possible applications

- Transporting explosive gases, dusts, vapors, adhesive materials, pastes, fluids such as water or oils, and perishable goods such as foodstuffs
- Ventilation systems
- Pumps such as can pumps (transport of media in axial direction), metering pumps, micro pumps, unidirectional pumps, and multi-staged pump systems
- For aggressive media such as salt water and chemical solutions (as a substitute for hose pumps in dental surgery instruments)
- Pump systems that can be disinfected or sterilized
- Turbines and generators
- Conveying screws for granular media, fluids, or pastes
- Gas, water, and steam turbines
- Media flow rate measurement using generator voltage

SycoFlow efficiency			
Output [P2]*	6,000 rpm	8,000 rpm	10,000 rpm
0	0.0	0.0	0.0
10	69.9	65.1	60.5
20	81.7	78.6	75.2
30	86.4	84.3	81.8
50	90.2	89.3	87.8
100	92.0	92.7	92.4
150	91.5	93.2	93.7
200	90.3	93.0	94.0
250	89.0	92.5	93.9
300	87.6	91.8	93.6
350	86.2	91.0	93.3
400	84.8	90.2	92.8
450	83.5	89.4	92.3
500	82.1	88.6	91.8
600	79.5	86.9	90.8
700	77.1	85.3	89.7
800	74.7	83.7	88.6
900	72.5	82.2	87.5
1000	70.4	80.7	86.5

*P2 [W]