

Rotary heat exchanger for heat and humidity transmission consisting of wheel and casing; suitable for optimum dimensioning in accordance with VDI Directive 3803 Page 5.

### Rotor

The storage mass consists of corrugated and smooth corrosion-resistant aluminium foil with highly effective sorption coating for humidity transmission. As sorption agents for ideal moisture transfer, there is a special coating that consists of a 3 Å molecular sieve. The result is small, axially arranged, smooth ducts for laminar flow of air. The outside of the storage mass is supported by the wheel mantle; the hub is inside with the permanently lubricated, maintenance-free roller bearings and the axle. The wheel is permanently stabilised by internal spokes between the wheel mantle and hub.

### Casing

- Sheet-metal casing (for one-piece wheels)  
Self-supporting construction of aluzinc sheet steel, suitable for installation in ventilation units. Adjustable brush sealing is installed around the rotor periphery and along the centre beam. Standard casings are intended for vertical installation, smaller models can be ordered for horizontal installation.
- Profile casing (for multi-component wheels)  
Construction of aluminium extruded sections with aluzinc sheet steel panels, suitable for installation in ventilation units. Adjustable brush sealing is installed around the rotor periphery and along the centre beam.

### Drive

- Drive motor  
The drive motor is mounted inside the casing and drives the rotor via a belt pulley and a V-belt around the rotor; the transmission ratio is dimensioned to achieve optimum rotor rpm.
- Constant drive  
Rotary heat exchangers with constant drive operate in 'on/off' mode, the speed of the rotor is not controlled.
- Variable drive  
The variable drive system consists of a motor with associated controller; the controllers and motors used are perfectly matched to one another.

## Optionen

- Casing width in 1 mm steps; max.  $\varnothing + 1000$  mm
- Casing height in 1 mm steps; max.  $\varnothing + 1000$  mm / height max.:  $\leq 2550$  mm
- Triangular inspection hatch: The triangular inspection hatch enables inspection from the supply and exhaust air sides inside the air handling unit. ( $\varnothing \geq 1000$  mm)
- Casing powder-coated in RAL9006, corrosion class C4 acc. to ISO 12944
- Controller loose without cabling
- Controller loose incl. cabling
- Controller position on side wall in mm (reference point: upper housing edge)
- Coated face area: The face area of the storage mass is treated with an anti-corrosion coating (edge reinforcement).
- Intermediate sheets: Casing is provided with intermediate sheets on all 4 sides
- Extra seal: included as a spare part
- Spare belt: included as a spare part
- Cable gland: Cable glands (2x) are installed in defined positions in the area of the motor on both sides (in relation to the airflow)
- Double brush seal to increase the tightness: An additional brush seal is mounted on the periphery.
- Segmented version of rotor half-installed (lower half)
- Segmented version: Rotor completely installed
- Cable length 3 or 6 metres: incl. motor cabling
- Impeller sensor installed
- Rotor shaft at off-centre height position
- Rotor shaft at off-centre width position