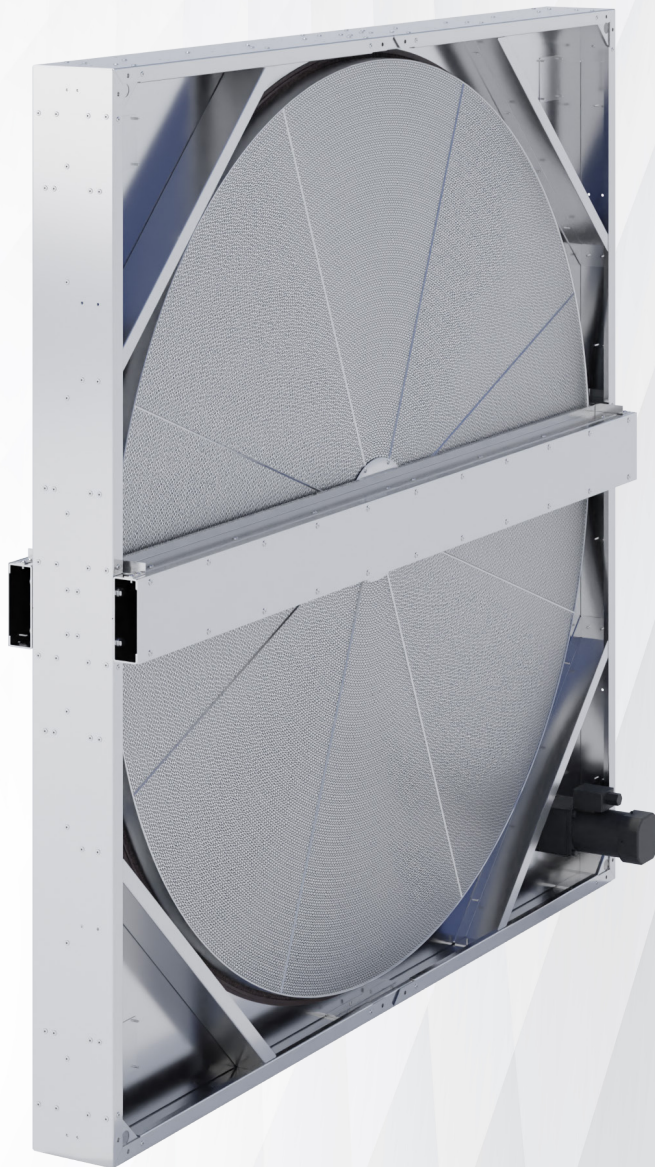




SFC



4" Energy Recovery Wheels

4" Energy Recovery Wheels

Design

A range of dimensions that is **equivalent** to most energy recovery wheels available on the market

Monolithic construction of the heat accumulation structure based on a patented foil forming technology that interlocks subsequent foil layers

Single diaphragm casing design:

Facilitates transport and installation of the wheel

Easy and quick adaptation of the design and drive position to real installation conditions.

Heat Transfer Media

Humidity transfer coating based on 3Å molecular sieve for odor-free operations:

"**Sorption**" coating – for highest rate of latent heat transfer (humidity) between supply and return air.

Wave height: 1,2 mm

Energy Recovery Performance*

Sensible effectiveness	75,7%
Latent effectiveness	87,9%
Total effectiveness	74,7%



Compliance with standards

AHRI Standard 1060 – „Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment“, Accordance certified by **AHRI Certification**

Drive unit

3-phase asynchronous motor fitted for **VFD operations**

Wide range of power supply options:

208-230/380/460V/3

575V/3

230/400V/3

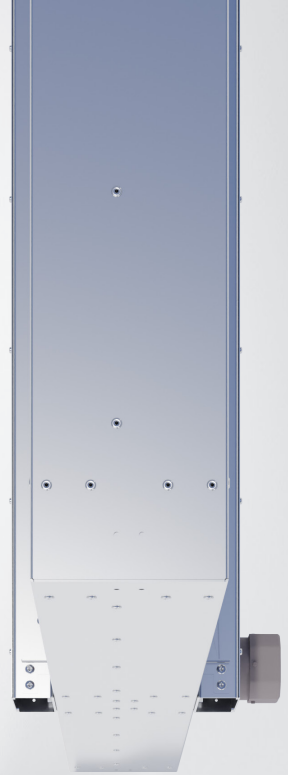
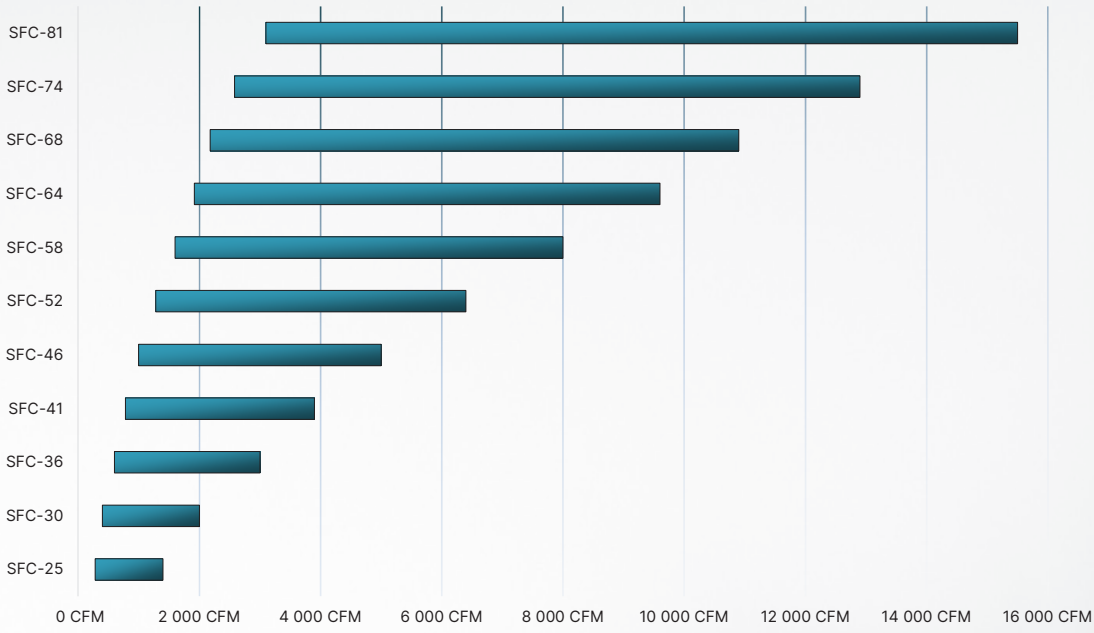
VFD speed controller (optional)

Compact design planetary gear, fitted for secure best wheel revolutions.

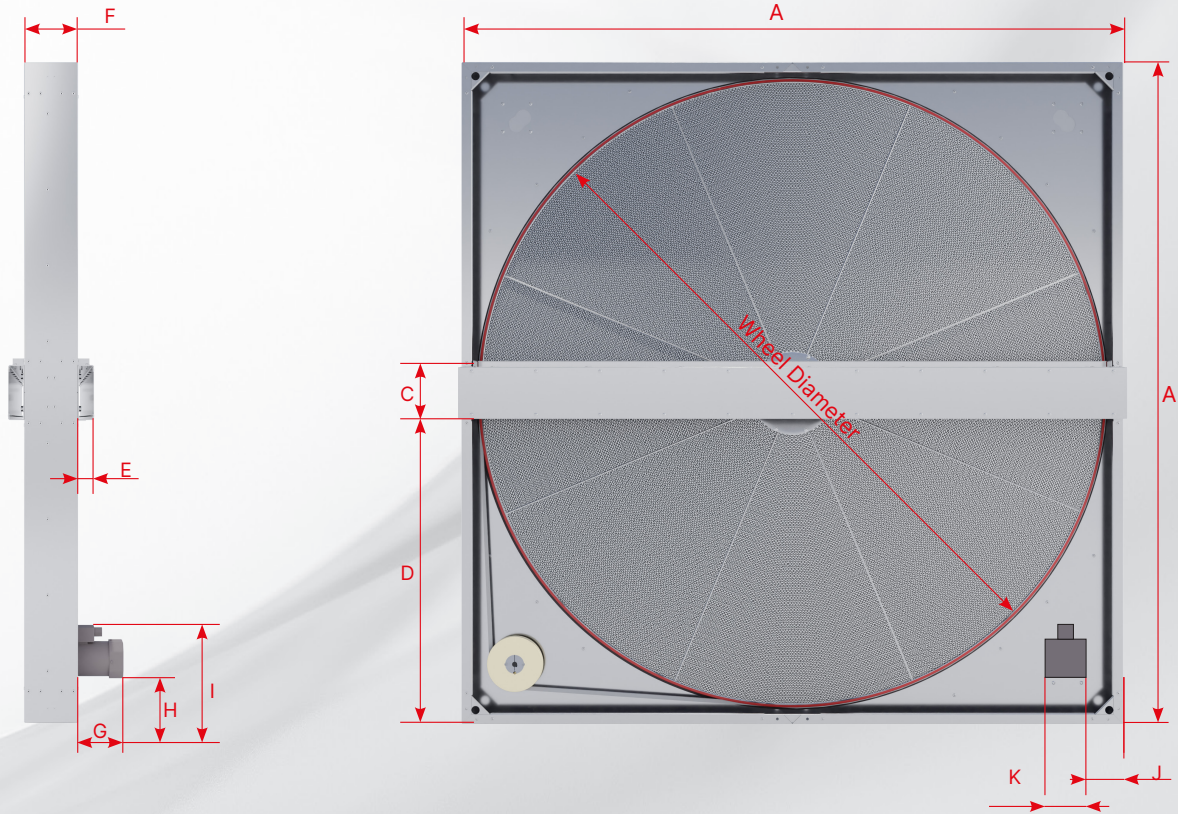
Power transmission: Segmented belt

*Performance information given for 316 FPM (1,6 m/s) air face velocity Sorption wheel

Supported airflow ranges



Dimensions



Model	Wheel Diameter	A	C	D	E	F	G	H	I	J	K	Weight
												Lbs
SFC-25	25	29.00	2.04	13.44	1.32	4.36	5.39	1.66	6.74	1.62	3.54	81
SFC-30	30	34.00	2.04	15.98	1.32	4.36	5.39	1.77	6.80	1.68	3.54	101
SFC-36	36	39.80	2.82	18.47	1.32	4.36	5.39	2.32	7.40	2.28	3.54	128
SFC-41	41	44.00	4.27	19.85	1.57	4.36	5.99	2.14	7.30	2.14	3.54	165
SFC-46	46	50.00	4.27	22.86	1.57	4.36	5.99	2.20	7.36	2.20	3.54	194
SFC-52	52	56.00	4.27	25.96	1.57	4.36	5.99	2.73	7.89	2.73	3.54	231
SFC-58	58	62.40	4.27	29.06	2.05	4.36	5.14	3.81	8.97	3.81	3.54	308
SFC-64	64	68.00	5.00	31.50	2.05	6.07	6.77	3.93	9.64	3.93	4.09	363
SFC-68	68	72.00	6.00	33.00	2.05	7.07	6.26	3.93	9.64	3.93	4.09	422
SFC-74	74	78.00	6.00	36.00	2.05	7.07	6.26	3.93	9.64	3.93	4.09	495
SFC-81	81	85.00	6.00	39.50	2.14	7.07	6.26	3.93	9.64	3.93	4.09	561



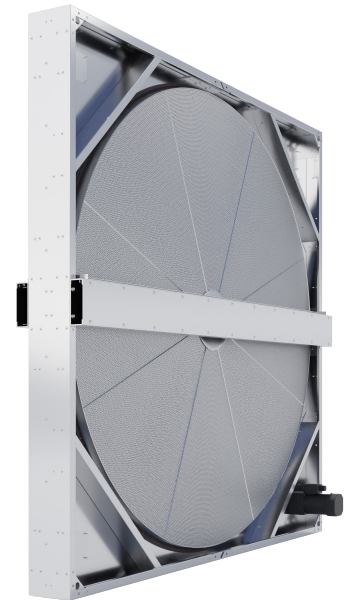
SFC

Energy Recovery Wheel

Molecular physics for **pure moisture recovery**

Avoiding the transfer of contaminants, bacteria and odors is a significant challenge for modern energy recovery wheels design. The essence of this challenge is to limit the ingress of these pollutants while maintaining high moisture recovery performance in winter and effective air dehumidification in summer.

To solve this problem, we engaged advanced knowledge in the field of molecular physics and turned it into a specific technological solution, creating the...



3Å molecular sieve

What **principles of physics** did we use?

- We assumed that the only substance we want to transfer between air streams is **water**, whose kinetic diameter is 2.65 angstroms ($1\text{\AA} = 1.0 \times 10^{-10}$ meters)
- We took advantage of the fact that virtually all other particles, which are undesirable odors, pollutants or bacteria, have a diameter much larger than water.

We have thus created the most technologically advanced Energy Recovery Wheel, with superb energy recovery performance, at the same time guaranteeing the best protection of ventilation systems hygiene.

