# **STOKES MICROVANE** 14-52 SERIES

Rotary vane vacuum pumps



stokesvacuum.com

For over 100 years, the Stokes Vacuum have offered time-tested, proven performance with experienced service and technical support you can rely on. Stokes vacuum pumps are designed to meet the toughest demands with minimal maintenance and maximum uptime.

We now launch the Stokes Microvane Series rotary vane vacuum pumps. With low noise, virtually zero emissions, and up to three years of maintenance-free operation, Microvane pumps deliver reliable vacuum performance with less hassle. Thanks to an integrated exhaust filter operating at optimal temperature eliminates corrosion risks and performance loss associated with external filters.

The Stokes Microvane 14–52 Series rotary vane vacuum pumps deliver a modern, compact solution for clean, guiet, and reliable vacuum generation. Engineered for continuous duty from rough to fine vacuum, the Microvane series of pumps are built to minimize environmental impact, reduce operational costs, and extend service intervals. Designed for ease of use and durability, they offer a truly effortless vacuum solution across a wide range of industrial applications.





# Ultra-quiet performance

Operates as low as 52 dB(A) for a quieter, more comfortable working environment.



#### Up to 1 year / 8000hr maintenance-free

Long service intervals mean less downtime and lower total cost of ownership.

# **Compact and rugged design**

Built for demanding industrial environments small in size, big on durability.



# No external exhaust filter required

Simplifies installation and reduces total system footprint.

Integrated exhaust filtration

Reduces oil loss and keeps your work

environment cleaner.





## **Energy-efficient operation**

Delivers up to 20% energy savings, helping you lower operational costs.



#### Fully adaptable to your application

Offers flexibility through a range of accessories designed to optimize performance and simplify integration.

- Compatible with external frequency converters for single-phase power supply, monitoring, and control
- Optional adapters available for system integration with primary or booster pumps
- Service indicators monitor key parameters such as oil level, temperature, and filter status



#### **Cleaner technology built-in**

Engineered for cleaner, more efficient operation with minimal maintenance.

- Integrated exhaust filtration is built directly into the oil casing, reducing system complexity and installation time
- Sealed internal design virtually eliminates oil loss and prevents smoke emissions - no external exhaust filter required
- Optimized pump temperature enables condensation-free vapor pumping, protecting internal components and maintaining process reliability

# **Applications**

- Coating
- Pharma freeze-drying
- Vacuum drying
- **RAC** (Refrigeration and Air Conditioning)
- **Oil degassing**
- Industrial freeze drying
- **Chemical processes**





### Quiet performance by design

Enhances workplace comfort without sacrificing performance.

- Low acoustic impact, the pump operates as quietly as  $52 \, dB(A)$
- Ideal for noise-sensitive environments such as laboratories, cleanrooms, and production floors
- Reduces noise pollution and supports compliance with workplace sound level standards
- Quiet operation without sacrificing vacuum power or efficiency



#### Up to 1 year maintenance-free

Designed for long life and minimal maintenance, the Stokes Microvane Series keeps operations running smoothly.

- Up to 1 year of maintenance-free operation in clean applications
- Advanced sealing and lubrication technology reduces internal wear and tear
- Low oil consumption helps cut operating costs and environmental impact
- Optimized thermal management maintains stable performance and extends component life
- Fewer service interventions mean more uptime and lower total cost of ownership

### **Technical Specifications**

	Units	Microvane14	Microvane20	Microvane33	Microvane52	
Rated pumping speed	cfm	13	19	31	50	
Eff pumping speed	cfm	10	16	27	43	
Ult pressure w/o gas ballastopening	mbar	< 8 × 10 <sup>-3</sup>				
Ult pressure with gas ballast	mbar	< 1 × 10 <sup>-1</sup>				
Water vapor tolerance	mbar	10				
Motor power						
3-phase motor at 60 Hz	kW	0.7	1.1	1.5	2.6	
Noise level	dB(A)	54		57		
Oil volume (Approx.)	I	1.5		3		
Flanges		25 KF		40 KF		
Weight (Net approx.)	kg	42	48	80	88	
Dimensions approx. (L x W x H)	mm	516 × 288 × 294	518 × 288 × 294	632 × 356 × 320	669 × 359 × 320	

### **Ordering Information**

	Microvane14	Microvane20	Microvane33	Microvane52	
3-phase world motor 80264 / 342506 V, 60 Hz	A35137791	A35137792	A35137793	A35137794	
Oil level switch	9700LS				
Exhaust filter over-pressure switch	971471210				
Exhaust filter pressure manometer	95193				
Thermal switch to protect the pump from overheating	9700TS			9700TS65	
PT100 for pump temperature monitoring	N/A		9714	971444320	
1-phase driven F/C 180 - 264V, 60 Hz with overload protection	970FC01				
Roots adapter for close-coupled Roots mounting up to 500 m³/h	N/A		970RA02	970RA01	
Pump Service Indicator & cables Pump sensors (oil level, oil temperature and exhaust filter condition) not included	N/A	9700F1 & 9700F1C1	9700F1 & 9700F1C2		

# **Service solutions**

We offer a full complement of vacuum pump services, including commissioning, genuine spare parts and oil, remanufacturing, service exchange, field services, and managed maintenance.



