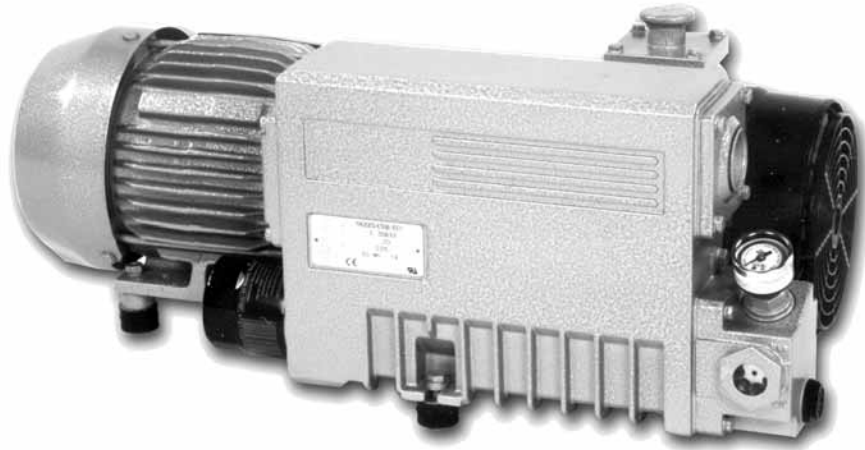


## 7005 Series 0025-0100



RA 0025

### Description

7005 Series vacuum pumps are based on our proven rotary vane vacuum pump R 5 series. Compared with the standard series, they are designed to achieve an ultimate pressure of 250 microns.

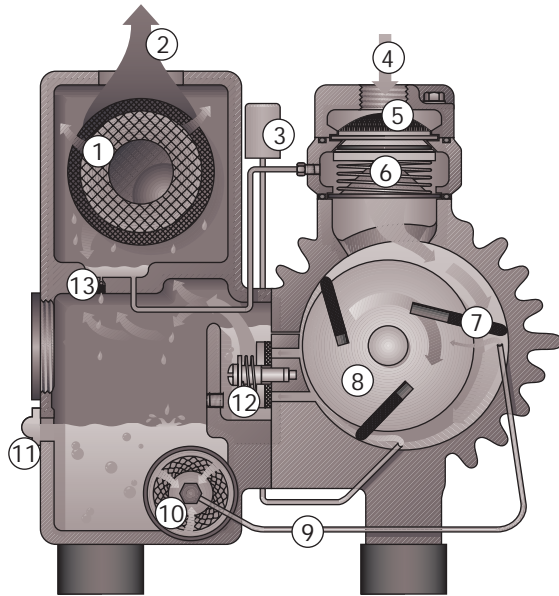
7005 Series vacuum pumps are single stage, air cooled, and direct driven. They are also one of the simplest and most reliable oil recirculating vacuum pumps available on the world market.

### Features

- Air cooled, requiring no water
- Direct drive, eliminating belts and gears to loosen or wear
- Oil mist eliminator for 99.9% oil-free exhaust
- Quiet operation
- Low vibration
- Built-in anti suck-back valve
- Optional gas ballast valve
- C-Faced, TEFC motor

# Rotary Vane Vacuum Pumps

## Operating Principle



- |                        |                        |
|------------------------|------------------------|
| 1. Oil Mist Eliminator | 8. Rotor               |
| 2. Exhaust             | 9. Main Oil Feed Line  |
| 3. Gas Ballast         | 10. Spin-On Oil Filter |
| 4. Inlet               | 11. Oil Sight Glass    |
| 5. Inlet Screen        | 12. Exhaust Valve      |
| 6. Anti-Suckback Valve | 13. Oil Return Valve   |
| 7. Vane                |                        |

## Operating Principle

Rotation of the pump rotor, which is mounted eccentrically in the pump cylinder, traps entering vapor between rotor vane segments. As rotation continues, vapor is compressed and discharged into the exhaust box.

Vapors then pass through several stages of internal oil and mist eliminators to remove 99.9% of lubricating oil from

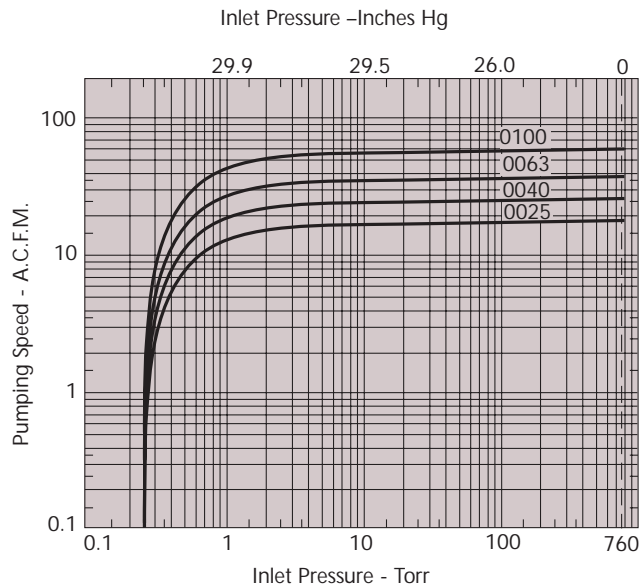
the exhaust. Oil is then returned to the oil reservoir. Additional features include an automotive type spin-on oil filter, and a built-in inlet anti-suckback valve that prevents the pump from rotating backwards.

A built-in gas ballast permits pumping with high water vapor loads.

## Application

- Lasers
- Leak detectors
- Research and laboratory
- Applications requiring a lower ultimate pressure than provided by the standard R 5 vacuum pumps

Technical Data

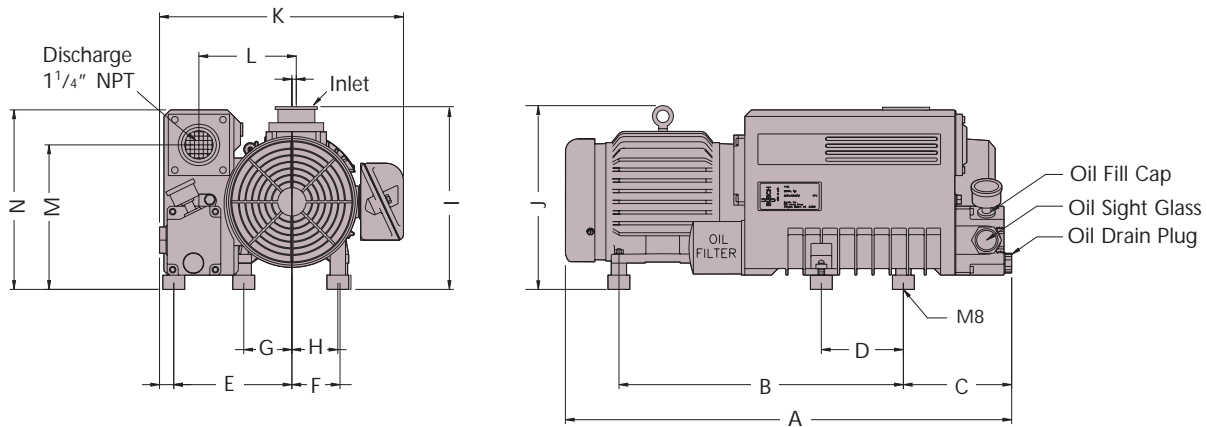


Technical Data 7005 Series		RA 0025	RA 0040	RA 0063	RA 0100
Nominal pumping speed	ACFM	18	26	36	56
Free air displacement	CFM	20	28	41	63
End vacuum	Torr	0.25	0.25	0.25	0.25
Sound level rating*	dB(A)	64	67	69	71
Motor size for 3 phase	HP	1.5	2	3	5
Motor rotational speed	RPM	1800	1800	1800	1800
Oil capacity (approx.)	Qts	1.4	1.4	2.5	2.7
Weight (approx.)	Lbs.	106	120	172	198

\*DIN45635

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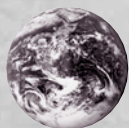
## Dimensions



Model RA 0025

Dimensions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Inlet
RA 0025	25 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>4</sub>	6 <sup>3</sup> / <sub>16</sub>	4 <sup>11</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	10 <sup>7</sup> / <sub>10</sub>	--	14	5 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	25 KF
RA 0040	26 <sup>1</sup> / <sub>8</sub>	17 <sup>1</sup> / <sub>8</sub>	6	4 <sup>13</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	2 <sup>5</sup> / <sub>8</sub>	10 <sup>7</sup> / <sub>10</sub>	--	14	5 <sup>9</sup> / <sub>16</sub>	8 <sup>1</sup> / <sub>4</sub>	10 <sup>1</sup> / <sub>4</sub>	25 KF
RA 0063	27 <sup>3</sup> / <sub>4</sub>	17 <sup>3</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>4</sub>	--	10 <sup>15</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	0	11 <sup>13</sup> / <sub>16</sub>	11 <sup>7</sup> / <sub>8</sub>	--	9 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>16</sub>	40 KF
RA 0100	29 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>2</sub>	6 <sup>11</sup> / <sub>16</sub>	--	10 <sup>15</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	0	11 <sup>13</sup> / <sub>16</sub>	11 <sup>7</sup> / <sub>8</sub>	--	9 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>8</sub>	11 <sup>3</sup> / <sub>16</sub>	40 KF

All dimensions in inches unless otherwise noted.



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