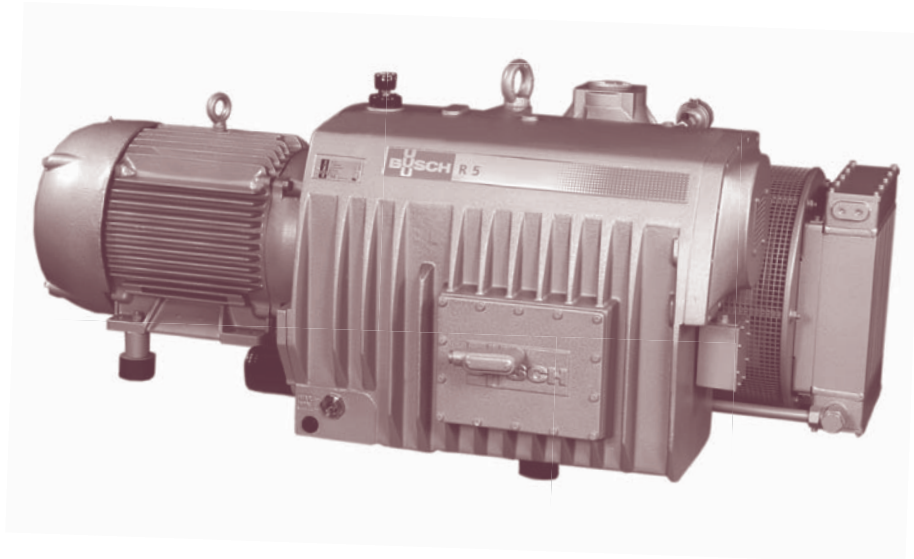


## R 5

### 0025 - 0630



RA 0630

#### Description

Modular designed Bosch R 5 oil-sealed rotary vane vacuum pumps are single stage, air-cooled, and direct-driven. This oil-recirculating design is one of the simplest and most reliable vacuum pumps available on the world market. These rugged pumps are used in a variety of industries such as packaging and food processing, rubber molding, thermoforming, printed circuit board testing, hospitals, laboratories, robotics, vacuum lamination, printing, and many others.

#### Features

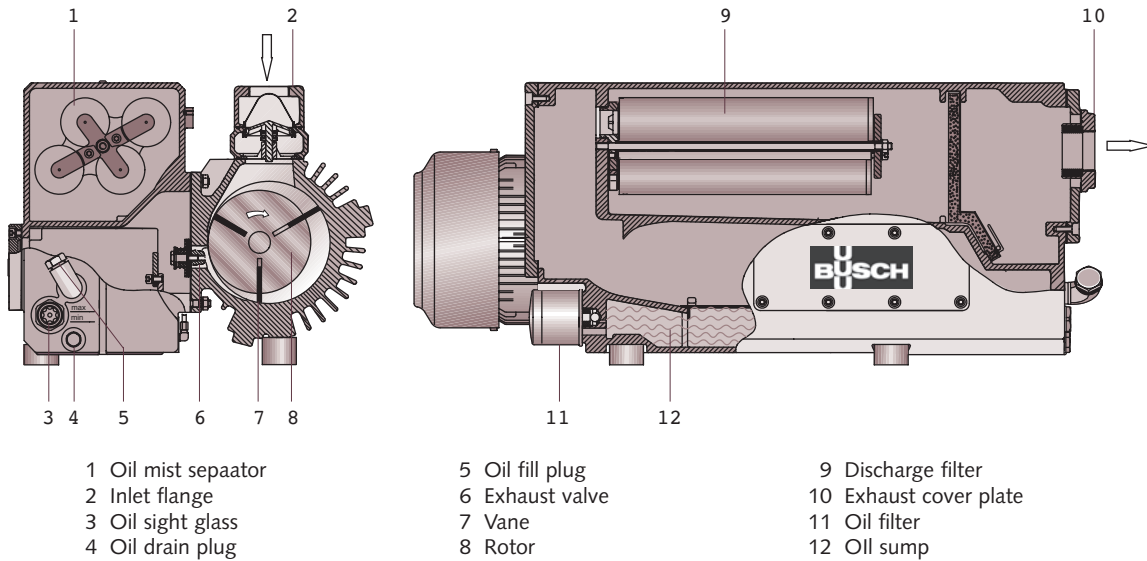
- Compact, simple design for easy installation and low maintenance
- Air-cooled, requiring no water
- Direct driven, eliminating belts and gears to loosen or wear
- Quiet operation
- Continuous duty
- Easy exhaust filter change
- High quality US made motors

#### Standard Equipment

- TEFC motor
- Motor starter (optional)
- NPT inlet on most models
- Exhaust pressure gauge
- Anti-suckback valve
- Built-in exhaust filter
- Wire mesh inlet screen
- Non-metallic, non-asbestos vanes
- Vibration isolators
- Automotive type spin-on oil filter
- Oil level sight glass

# Rotary vane vacuum pumps

## Operating Principle



### 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 lubricating oil from the exhaust. The oil that is separated 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 and provides oil drying for maximum performance.

### Accessories

- Motor starters and controls
- Inlet air filters
- Liquid separators
- Exhaust Silencers
- Control valves
- Vacuum gauges
- Vacuum switches and transmitters
- Lubricants
- Vacuum receivers

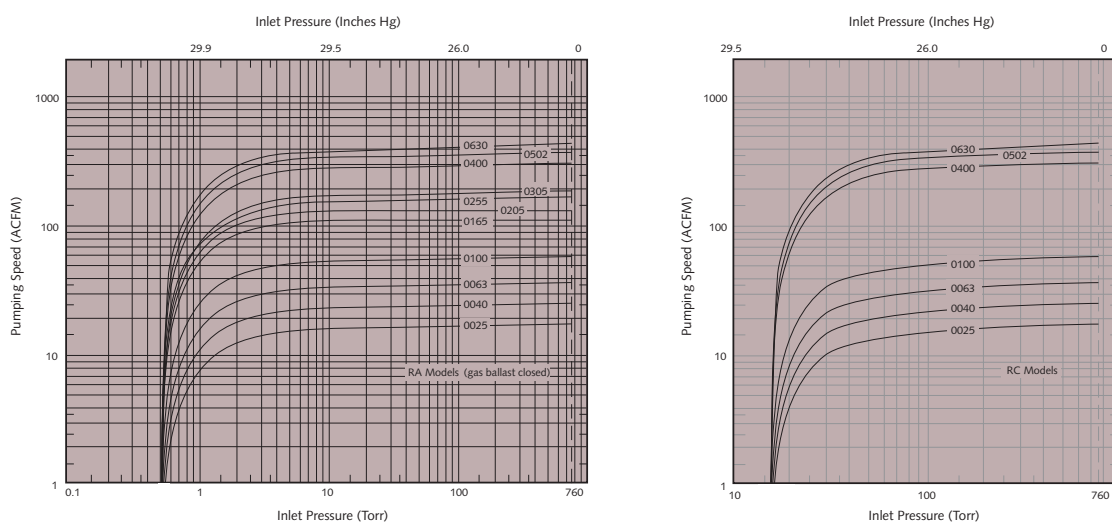
### Applications

- Packaging industry
- Food industry
- Pneumatic conveying
- Transport and lifting systems
- Medical technology
- Central vacuum systems
- Environmental technology
- Woodworking
- Plastic industry
- Ceramics and brick industry
- Sewage transfer
- Textile industry
- Beverage industry
- Paper industry
- Printing industry



## Technical Data

### Pumping Speed vs. Inlet Pressure

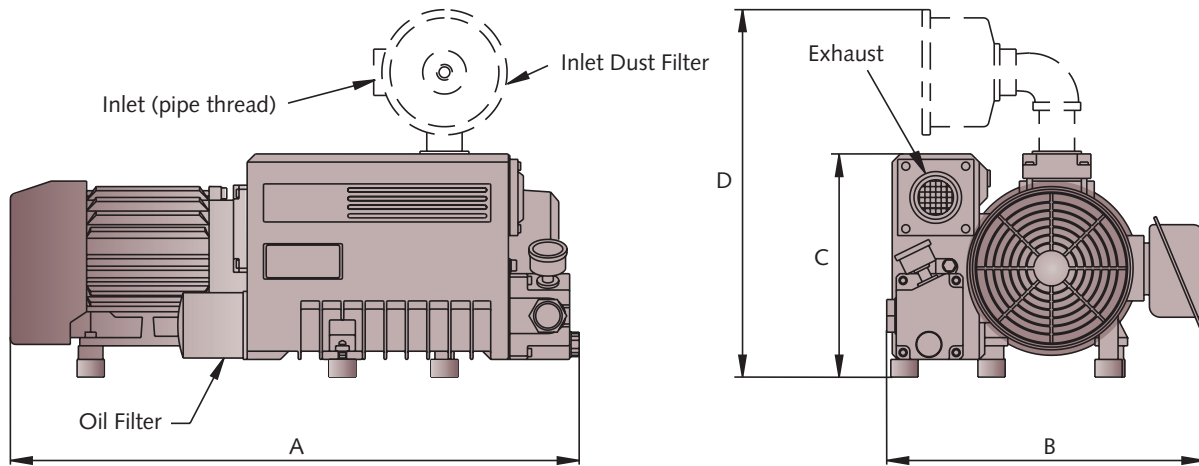


Technical Data		0025	0040	0063	0100	0165	0205	0255	0305	0400	0502	0630
Nominal pumping speed	ACFM	18	26	36	56	115	130	170	196	305	375	455
Free air displacement	CFM	20	28	41	63	117	141	180	212	330	413	490
Ultimate Pressure (RC)	Torr	15	15	15	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ultimate Pressure (RA)	Torr	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Motor size	HP	1.5	2	3	5	7.5	7.5	10	12	15	20	25
Motor rotational speed	RPM	1750	1750	1750	1750	1750	1750	1750	1750	1150	1150	1150
Sound rating*	dB(A)	70	70	70	71	72	74	74	76	79	79	79
Inlet connections	NPT	1.25	1.25	1.25	1.25	2	2	2	2	3	3	3
Approx. oil capacity	Qts.	1.4	1.4	2.5	2.7	7	7	7	7	14	16	16
Approximate weight	Lbs.	106	120	172	198	416	435	460	575	1152	1316	1525

All performance data is based on ambient conditions of 14.7 PSIA and 70° F, and has a tolerance of +/- 10%.

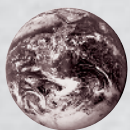
\*DIN EN ISO 2151

Dimensions



Dimensions	A	B	C	D
R 5 0025	26 <sup>1</sup> / <sub>8</sub>	14 <sup>9</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>8</sub>	17 <sup>1</sup> / <sub>8</sub>
R 5 0040	26 <sup>13</sup> / <sub>16</sub>	14 <sup>9</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>8</sub>	17 <sup>1</sup> / <sub>8</sub>
R 5 0063	28	19 <sup>5</sup> / <sub>16</sub>	11 <sup>7</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>4</sub>
R 5 0100	29 <sup>1</sup> / <sub>2</sub>	19 <sup>5</sup> / <sub>16</sub>	11 <sup>7</sup> / <sub>8</sub>	18 <sup>3</sup> / <sub>4</sub>
R 5 0165	40 <sup>1</sup> / <sub>2</sub>	23 <sup>9</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	25 <sup>3</sup> / <sub>8</sub>
R 5 0205	40 <sup>1</sup> / <sub>2</sub>	23 <sup>9</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	25 <sup>3</sup> / <sub>8</sub>
R 5 0255	40 <sup>1</sup> / <sub>2</sub>	23 <sup>9</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	25 <sup>3</sup> / <sub>8</sub>
R 5 0305	40 <sup>1</sup> / <sub>2</sub>	23 <sup>9</sup> / <sub>16</sub>	16 <sup>1</sup> / <sub>2</sub>	25 <sup>3</sup> / <sub>8</sub>
R 5 0400	54 <sup>3</sup> / <sub>8</sub>	36 <sup>3</sup> / <sub>8</sub>	26 <sup>1</sup> / <sub>2</sub>	38 <sup>1</sup> / <sub>4</sub>
R 5 0502	67 <sup>1</sup> / <sub>16</sub>	37 <sup>3</sup> / <sub>4</sub>	26 <sup>1</sup> / <sub>2</sub>	38 <sup>1</sup> / <sub>4</sub>
R 5 0630	70 <sup>1</sup> / <sub>8</sub>	37 <sup>3</sup> / <sub>4</sub>	26 <sup>1</sup> / <sub>2</sub>	38 <sup>1</sup> / <sub>4</sub>

All dimensions in inches unless otherwise noted.



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**Busch LLC 516 Viking Drive Virginia Beach, VA 23452**  
**Phone (757) 463-7800 Fax (757) 463-7407**

**www.buschusa.com**  
**1-800-USA-PUMP**