

R 5

Rotary Vane Vacuum Pumps RA 0165–0305 D



› **Reliable:**

robust construction, reliable operation, highly resilient carbon fibre vanes, proven performance, over 3 million pumps in operation

› **High Performance:**

high pumping speed and low ultimate pressure, designed for continuous operation, high separating performance in the rough vacuum sector

› **Flexible:**

application-oriented, various design options available, easy adaption to individual customer requirements and processes

› **Low Operating Costs:**

energy-efficient, optimum cost-benefit ratio

› **Easy Servicing:**

easy service routine

The R 5 RA 0165–0305 D belong to the Busch product family of proven R 5 rotary vane vacuum pumps. They have been specially designed for applications in the rough vacuum sector. Thanks to the optimized internal oil separation, these vacuum pumps guarantee clean exhaust under even the most difficult operating conditions.

Robustness and reliability of operation are the outstanding qualities of R 5 rotary vane vacuum pumps. These are just some of the reasons why proven Busch rotary vane technology has long established itself as the industry standard. Over 3 million R 5 rotary vane vacuum pumps are in operation worldwide in industry every day.

Rotary vane technology has been continuously developed and optimized by Busch in the course of over 50 years, always with a strong focus on economy and reliability

of operation. High efficiency is the benefit of this continual development.

R 5 rotary vane vacuum pumps are characterized by high pumping speeds even in low pressure ranges and therefore rapid evacuation times. They feature highly durable Busch carbon fibre composite vanes as standard, ensuring optimum performance together with long service life. The specially designed exhaust filters provide excellent oil separation.

Maintenance can easily be carried out by the operator. Apart from changing oil and filters at regular service intervals, no further maintenance is required.

R 5 rotary vane vacuum pumps stand for advanced and energy-efficient vacuum generation in a wide variety of applications in industry throughout the world. You can always rely on the R 5 – whether used intermittently or around the clock.

**R 5 – proven and reliable.
Over 3 million pumps
in operation worldwide.**



R 5

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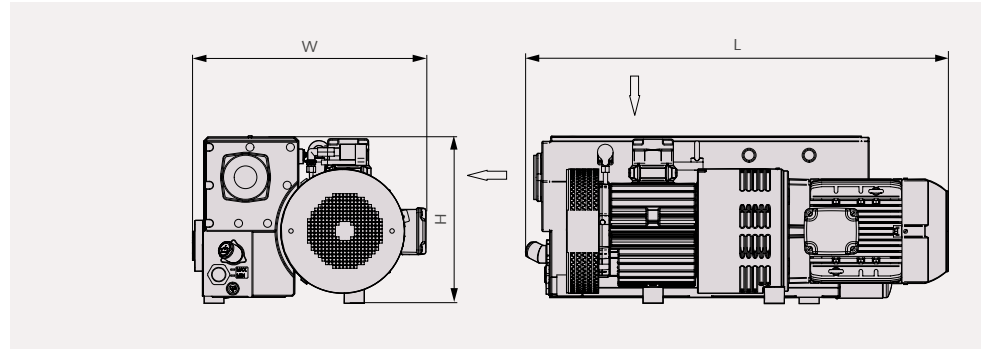
Technical specifications

Rotary vane technology is synonymous with a robust, functional construction. R 5 rotary vane vacuum pumps are characterized by an optimum design and perfectly synchronized components and materials. The constantly high vacuum level in continuous operation is ensured by recirculating oil lubrication and state-of-the-art precision manufacturing. A sophisticated oil separator ensures efficient use of oil. When fitted with a gas-ballast valve (optional), even large quantities of vapor can be extracted. A non-return valve in the inlet flange prevents the pumped medium from flowing back into the vacuum process after the vacuum pump is switched off. The R 5 RA 0165–0305 D are driven by a directly flange-mounted standard electric motor, with an efficiency class of IE3.

Accessories / Technical options

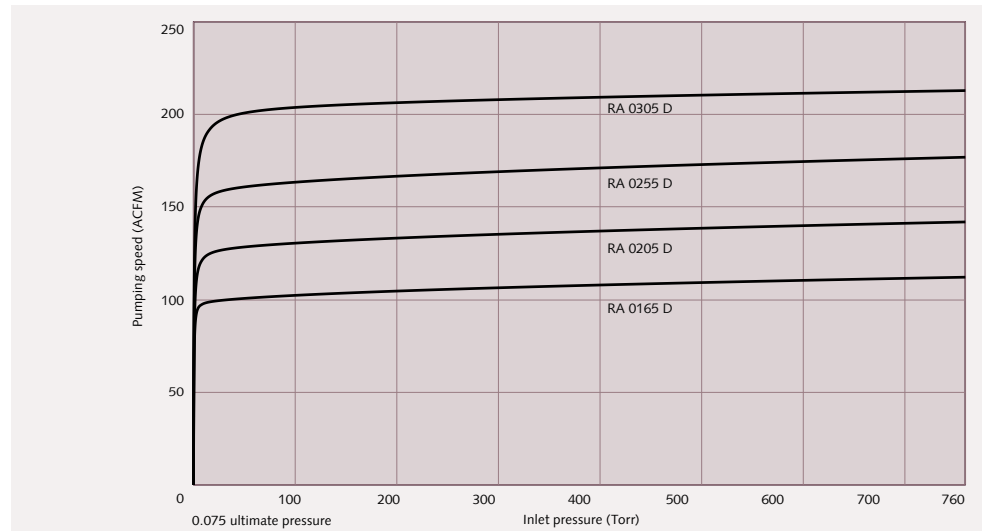
- Gas-ballast valve
- Various inlet filters
- Energy recuperation kit with heat exchanger
- Oil level switch
- Temperature sensors
- Filter pressure gauge
- Vacuum pump oils for all applications
- Vacuum regulating unit

R 5 RA 0165–0305 D



Pumping speed

Air at 70 °F. Tolerance: ± 10%



Technical Data		R 5 RA 0165 D	R 5 RA 0205 D	R 5 RA 0255 D	R 5 RA 0305 D
Max. pumping speed	ACFM	112	141	177	212
Ultimate pressure	Torr	0.075*	0.075*	0.075*	0.075*
Nominal motor rating	HP	7.5	7.5	10	12
Power consumption at 75 Torr	HP	6.3	7	8.8	9.6
Power consumption at ultimate pressure	HP	3.9	5.4	6	6.8
Nominal motor speed	RPM	1800	1800	1800	1800
Sound level (ISO 2151)	dB(A)	72	74	74	76
Oil capacity	Qts.	7	7	7	7
Approximate weight	Lbs.	435	435	520	520
Dimensions (L x W x H)	inches	40" x 23 1/4" x 16 1/8"	40" x 23 1/4" x 16 1/2"	43 1/8" x 23 1/4" x 16 1/2"	43 1/8" x 23 1/4" x 16 1/2"
Gas inlet / outlet	NPT	2" / 2"	2" / 2"	2" / 2"	2" / 2"

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

* 0.375 Torr with standard gas-ballast valve open

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Technical data is subject to change. Created in Germany. MG PL R5RA01650305D USenus 05/2018 8Aa