

RPP Series Rotary Piston Pumps



RPP45

Since 1923 Pneumofore has designed and produced vacuum pumps and air compressors, featuring original solutions, the result of constant efforts in research and development.

Positive displacement rotary vacuum blowers used as boosters in series in a primary vacuum system, increase pumping speed and provide deeper vacuum level. The blowers are made of cast iron with rotors in carbon steel or in spheroidal cast iron depending on the size. These materials assure good performances in standard operating conditions with gases or vapours. With corrosives gases or vapours, the parts in contact with them can be coated with a stainless Nichel alloy.

Design Features	Main technical features
<p>The RPP series vacuum blowers are made of two conjugate rotors which rotate inside a special design casting with very tight clearances in all positions assuring gas sealing without contact between parts.</p> <p>The rotors are synchronized by high precision helical gears which allow high rotational speed.</p> <p>Compressor chamber sealing The sealing between compression chamber and bearing housings is made with labyrinth seals avoiding atomized oil to enter the compression chamber.</p> <p>The sealing between compression chamber and environment is ensured by O-rings seals in Viton set between ground surfaces.</p> <p>Shaft-end sealing The shaft-end sealing is made with two seal rings in Viton with opposite lips, lubricated by means of a fitted oiler. The oil ring housing can be cooled by water circulation. The shaft is protected by an hardened replaceable sleeve.</p>	<ul style="list-style-type: none"> • Operating absolute inlet pressure from 0,01 to 20 mbar • Inlet flow rate from 300 to 8000 m³/h • Absolute outlet pressure up to 50 mbar
	Performance and advantages
	<ul style="list-style-type: none"> • Possibility of sucking gases and vapours. • No sliding parts, no wear. • Minimum maintenance. • Maximum reliability. • Minimum noise level.
	Fields of application
	<p>These blowers are mainly used in processes that require medium or high vacuums, such as:</p> <ul style="list-style-type: none"> • Food industry: freeze-drying, drying, vacuum packaging. • Chemical industry: extraction of gases or vapours, ovens under vacuum. • Electronics industry: production of integrated circuits, circulation of gases in lasers.

Model	3000 rpm 50 Hz		3600 rpm 60 Hz		Sv max	Sv min	Conn. UNI PN10	Dimensions				Weight (without motor)
	S th m³/h	N kW	S th m³/h	N kW				at 50 Hz		length*	length**	
					m³/h	m³/h	DN	mm	mm	mm	mm	kg
RPP 35	360	1,5	430	2,2	250	70	80	561	809	331	319	85
RPP 45	470	2,2	565	3	300	100	80	621	894	331	319	97
RPP 65	970	4	1165	5	600	200	150	768	1111	385	369	160
RPP 85	2125	5,5	2550	7,5	1300	425	150	924	1286	420	449	250
RPP 105	3815	7,5	4575	11	2300	750	200	1060	1396	486	529	400
RPP 125	7380	7,5	8855	11	4400	1500	250	1205	1572	640	599	605

Sth Blowers teoretical capacity **Sv** Primary vacuum system capacity * with coupling and bell
N Motor power, nominal ** with motor

The RPP vacuum blowers can be started up when the system pressure is lower than 50 mbar(a).