



Company

For 60 years PVR has been a leader providing high quality and reliable vacuum pumps. PVR means primarily trusted and advanced technologies, but also sustainable development for the stakeholders, environmental protection and focus on energy saving. The experience acquired during these years of activities, allows PVR to offer products and services that are always reliable and innovative.



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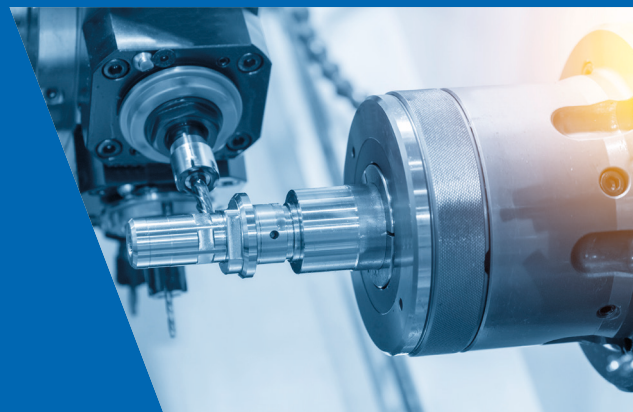
Provide trusted & advanced technologies



Machining Division

With a view to verticalization of its processes and increased capacity to provide more services to customers, PVR has had a specialized Machining Division for brass, steel, cast iron, stainless steel, and aluminum components since 2023.

Professionalism, experience, and quality characterise PVR Machining Division in the machining of numerous parts for vacuum pumps and components in the industrial, automotive, petrochemical, hydraulic, and electrical sectors.



Service

PVR guarantees a qualified advice for every inquiry thanks to its skilled technical/sales office that supports every project. The Service Department assists and advises our customers with scheduled maintenance, qualified overhauls and spare parts ready for delivery.



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042401-EN

Oil Lubricated Rotary Vane Vacuum Pumps **Ex-ATEX** and **Ox** Series



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Ex-ATEX Series

Oil lubricated vane vacuum pumps for ATEX environment

PVR has developed a range of vacuum pumps meeting the 2014/34 EU standards, certified for category 2 suitable for zone 1 inside/outside and temperature class T3 (200 °C), in answer to the frequent requests for pumps capable of operating in hazardous environments.

Applications

- Oil decontamination

Chemical processes

Degassing materials

Varnish mixers

Drying medicinal products
- Pneumatic conveying plants

Solvent recovery systems

Distillation systems

Drying transformer systems

Motor/transformer impregnation process
- Autoclaves

Leak detectors

Laboratories

Water and soil remediation

Central vacuum systems

			EU 45 Ex	EU 65 Ex	EU 105 Ex	EU 160 Ex	EU 300 Ex	EU 650 Ex
Nominal pumping speed	m³/h	50 Hz	48	69	105	152	300	660
		60 Hz	58	83	126	182	360	790
Ultimate pressure (abs.)	mbar	EU	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5
		EU/B	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	
Water vapour tolerance	mbar	50 Hz	30	30	30	30	30	30
Water vapour pumping capacity	kg/h	50 Hz	1	1,4	2,2	3	5	15
		60 Hz	1,3	2	3	4	7	22,5
Noise level	dB(A)	50 Hz	68	69	67	71	71	73
		60 Hz	69	70	69	72	73	76
Motor power	kW	50 Hz ~ 3	1,1	1,5	3	4	7,5	15
		60 Hz ~ 3	1,7	2,5	3,5	4,6	7,9	18,5
Motor speed	rpm	50 Hz	1500	1500	1500	1500	1500	1000
		60 Hz	1800	1800	1800	1800	1800	1200
Dimensions	L x B x H mm	50 Hz	556x340x284	601x340x284	735x405x334	805x436x348	979x551x436	1436x823x653
		60 Hz	581x340x284	641x340x284	735x405x334	814x436x348	1019x551x436	1481x823x653
Total weight	kg	50 Hz ~ 3	52	60	82	104	188	582
		60 Hz ~ 3	54	65	86	110	192	612



Ox vacuum pumps

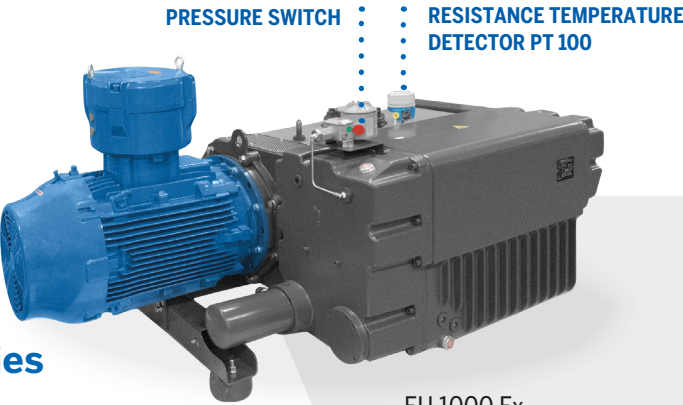
The pump version for Oxygen has been designed for pumping gas with high content of oxygen in a percentage higher than 21%. A special PFPE-based lubricant must be used, which does not degrade and ensures optimal pump operation.

			PVL 15 Ox	EU 45 Ox	EU 65 Ox	EU 105 Ox	EU 160 Ox	EU 205 Ox	EU 300 Ox
Nominal pumping speed	m³/h	50 Hz	18	48	69	105	152	207	300
		60 Hz	21	58	83	126	182	248	360
Ultimate pressure (abs)	mbar		≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5
Motor power	kW	50 Hz	0,75	1,5	2,2	3	4	5,5	7,5
		60 Hz							

Accessories

- Pressure switch
- Inlet filters
- Oil level switch
- Resistance Temperature Detector PT 100

EU 1000 Ex	EU 160 Ex HWT	EU 300 F Ex HWT	EU 650 Ex HWT
1033	152	300	660
1239	182	360	790
≤ 0,5	≤ 0,8	≤ 0,8	≤ 0,8
≤ 10			
30	80	80	40
20	9	13,5	19
20	12,3	19	28,5
80	71	71	73
81	72	73	76
22	4	7,5	15
30	4,6	7,9	18,5
1000	1500	1500	1000
1200	1800	1800	1200
1747x946x840	805x436x316	979x551x436	1436x823x653
1877x946x840	814x436x316	1019x551x436	1481x823x653
960	104	188	582
1180	110	192	612



EU 1000 Ex

Ex-Atex vacuum pumps

We are focused on customers' requirements and for this reason our R&D analyses every single project. Atex pumps are available with special seals and lubricants. Pumps can be supplied with safety devices such as resistance temperature detector PT 100, pressure switch, inlet filters.



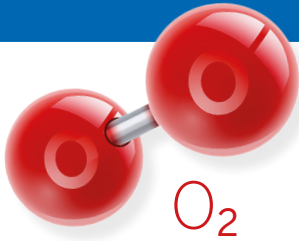
Ex-ATEX pumps are provided in compliance with ISO EN 80076 standard:

- (I) II 2G Ex h IIB T3 Gb X
- (I) II 3D Ex h IIIC T80°C Dc X
- (O) II 2G Ex h IIB T3 Gb X
- (O) II 2D Ex h IIIC T150°C Db X

Serie Ox

Oil lubricated vane pumps for oxygen

Ox pumps are used in food packaging installations where Oxygen gas is used during the packaging process. The use of materials that are compatible with the pumped gas as well as the use of dedicated PFPE lubricants allow these pumps the handling of gases with high concentration of Oxygen assuring efficient performance and good safety level.



Applications

- Packaging machines with modified atmosphere
- Vacuum chambers
- De-aeration tunnels
- Thermoforming packaging machines
- Gas bottle filling equipment

PVL 401 Ox	PVL 541 Ox	EU 650 Ox	EU 1000 Ox
417	553	660	1033
500	663	792	1239
≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5
11	15	18,5	30

