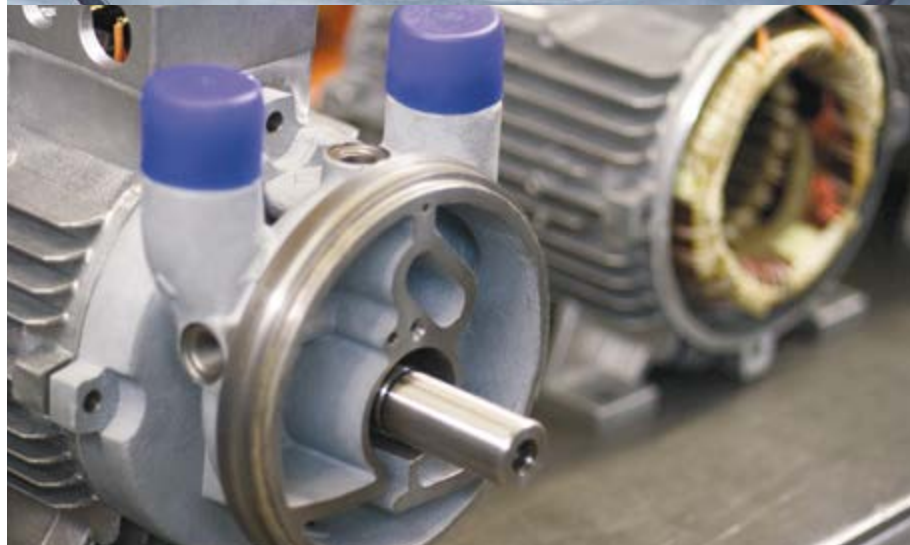


**The innovation leader**

## Products for Vacuum and Pressure





# Applications

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Chemical & Pharmaceutical Industry

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Plastics Industry

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Printing and Paper Industry

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Non-Food Packaging

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Food Packaging

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Environmental Engineering

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Industrial Parts Cleaning










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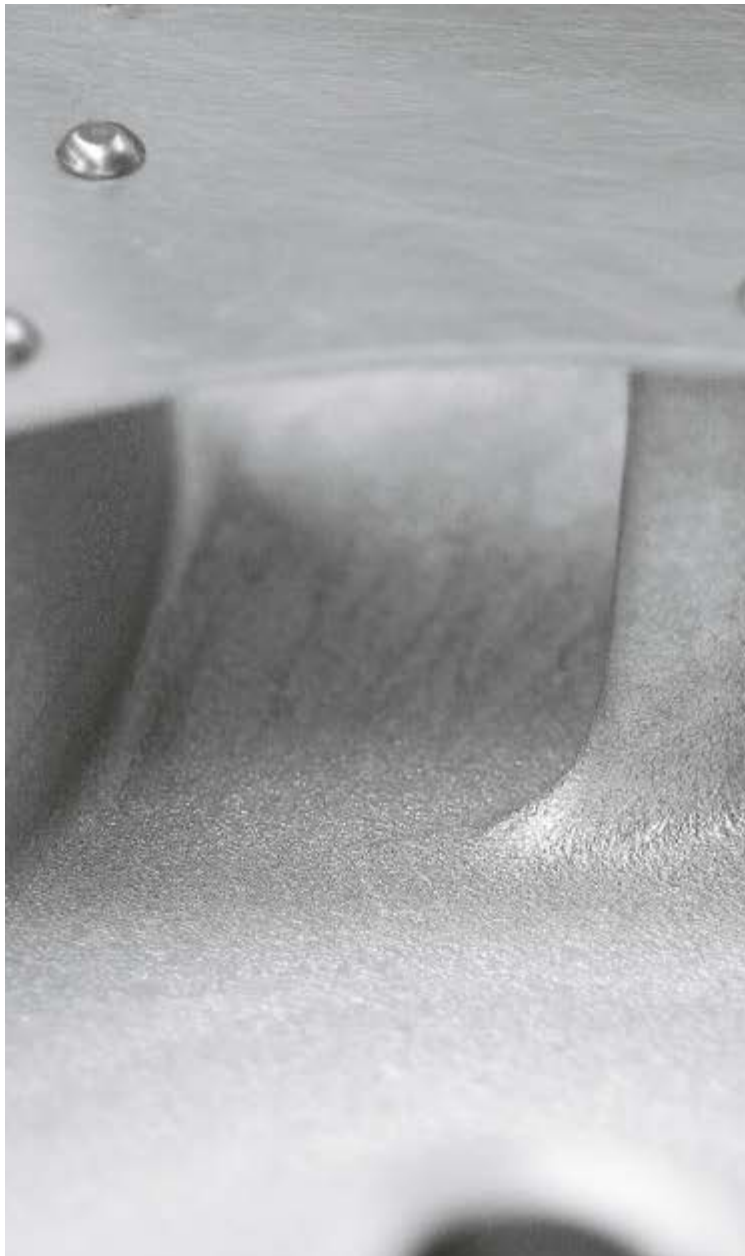


## Elmo Rietschle Products



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F-CEVF S



F-CEVF (29)



F-CEVF (31)



## F-Series Radial



F-RER / F-REL

Elmo Rietschle offers a wide range of single and multi-stage radial blowers for vacuum and pressure operation.

F-CEV multi-stage radial blowers

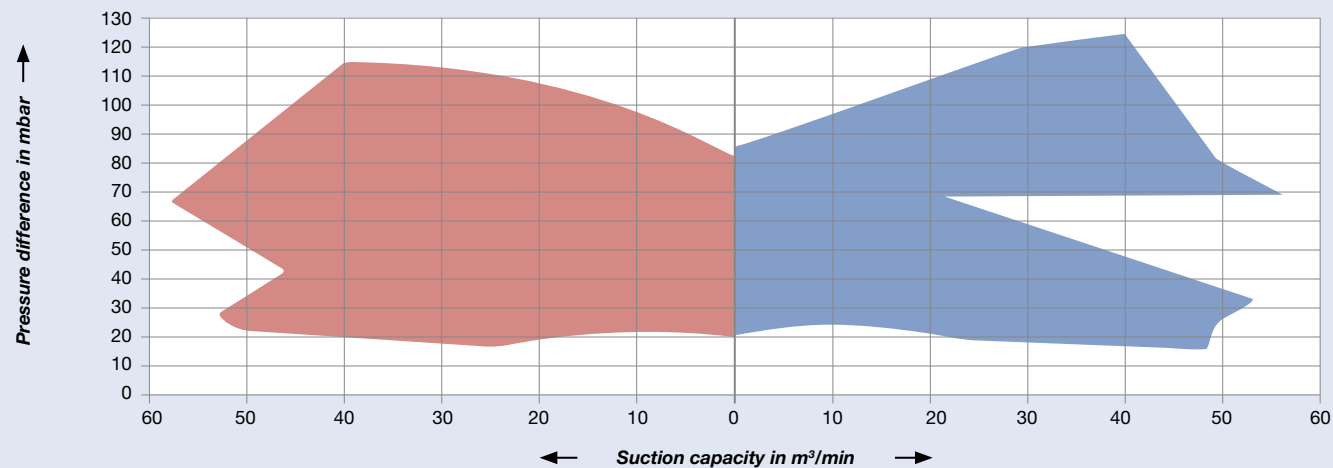
These blowers are available for suction (F-CEV-S) and pressure (F-CEV-D) mode and cover a wide range of industrial applications. F-CEVF versions include either a small dust collection canister or a large canister for the collection of plastic or paper trimmings.

F-RER and F-REL single stage radial blowers

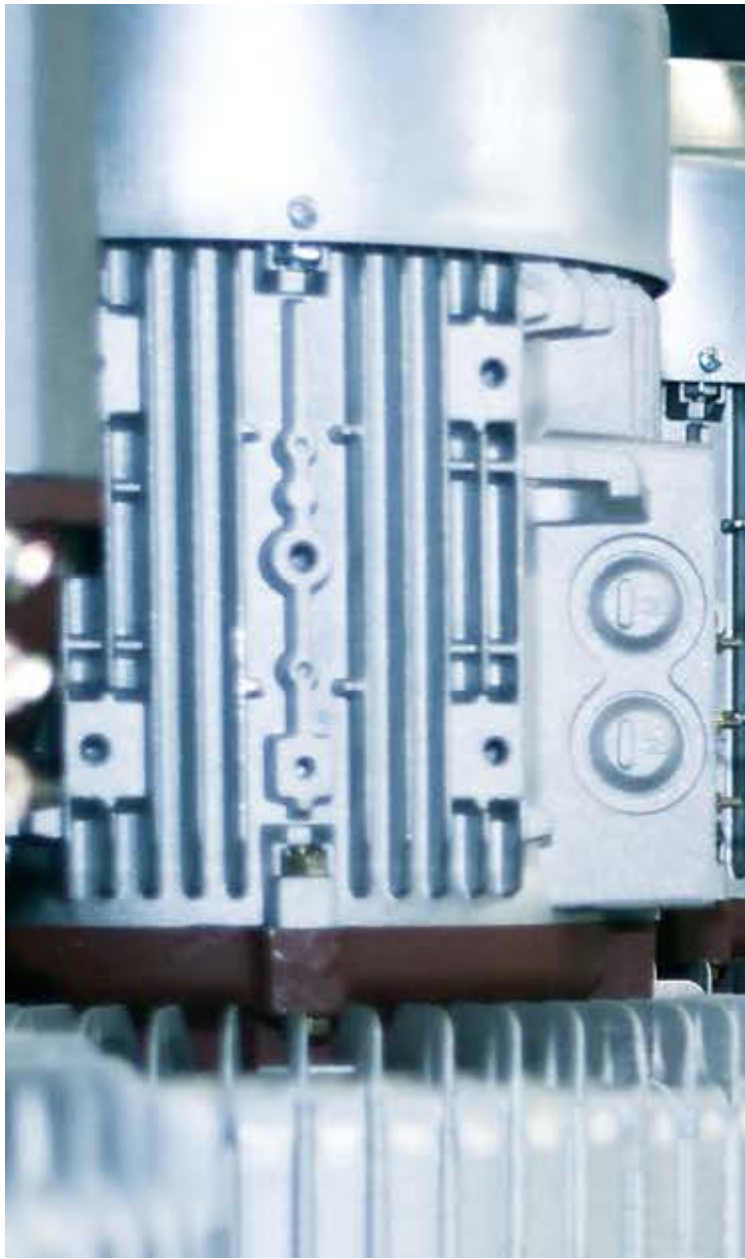
These blowers come in a wide variety of sizes and can be used for both suction and pressure mode in many industrial processes where high volume flow at small differential pressures are needed. Variable frequency drives are available.

When it comes to installing these blowers, you will find that any position (left/right/vertical/horizontal) is possible. F-RER blowers are right turning, F-REL left turning for maximum flexibility in cases where space is essential (such as in central air cabinets).

Performance data



Order No.		CEV 3709-S	CEV F 3718-3(29)	3718-3(31)	RER / REL 260 20	260 50	320 40	350 20	350 30
Motor output	kW	0,9	1,3	2,6	0,2	0,37	0,75	0,55	0,75
Rated voltage	V	220 / 380	220 / 380	220 / 380	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400
Weight approx	kg	38	40	52	15	20	30	30	30
Sound-pressure level	dB(A)	74	73	75	70	76	77	76	78



**G-BH1**  
single stage



**G-BH1**  
double stage



**G-BH2 VELOCIS**  
single, double and triple stage



**G-BH7**  
single stage



**G-BH7**  
multi stage



## G-Series Side Channel



**G-BH1 HT**  
single stage



**G-BH8**



**Elmo Rietschle Side Channel Blowers have proven their reliability in service for many decades, performing flawlessly day in and day out with virtually no down time.**

Available in a wide selection of performance ranges up to 3,000 m³/h and differential pressures of up to 1,000 mbar. They cover most requirements flexibly and powerfully. The G-Series side channel blowers feature voltage range motors for 50 /60 /87 and 100 Hz in protection class IP 55 or higher ( IP56 or IP65) (insulation class F) and are UL 507 and CSA 22.2 No. 113 approved and are also available with ATEX certification.

## Product Features

Reliable and built-to-last, virtually maintenance free

Robust yet light weight

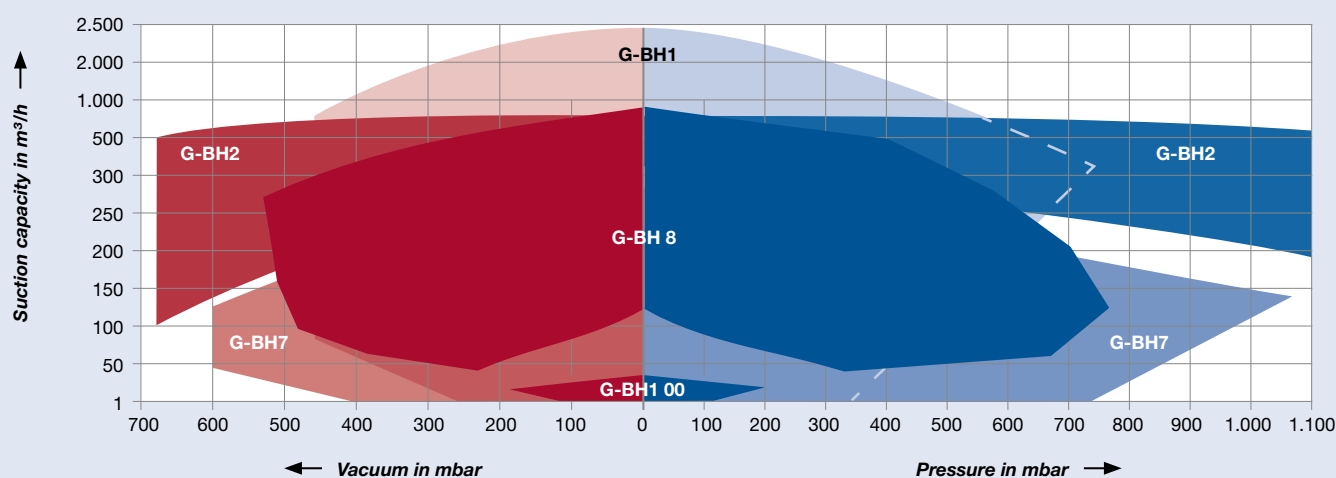
For use worldwide (UL/CSA/IEC/EN approval)

50/ 60/ 87/ 100 Hz motors

ATEX 94/9 EG

Adjustable speed control for all G-BH models

Variable performance control for all G-BH models



Range		G-BH1		G-BH2 VELOCIS		
		single stage	double stage	single stage	double stage	three stage
Order No.		2BH1 100 - 2BH1 943	2BH1 310 - 2BH1 910	2BH2 03601 - 2BH2 07801	2BH2 03602 - 2BH2 07802	2BH2 03603 - 2BH2 07803
Diff. pressure vacuum	mbar	max. 370	max. 490	max. 410	max. 580	max. 680
Diff. pressure compressor	mbar	max. 430	max. 750	max. 590	max. 930	max. 1050
Capacity	m³/h	50 - 2500	90 - 1350	310 - 900	310 - 850	310 - 800
Sound-pressure level	dB(A)	50 - 84	55 - 84	64 - 75	68 - 77	69 - 78
Range		G-BH7		G-BH8	G-BH1 HT	
		single stage	multi stage	single stage	double stage	
Order No.		2BH7 210 - 2BH7 610	2BH7 220 - 2BH7 630	2BH8	2BH18- 2BH19	
Diff. pressure vacuum	mbar	max. 380	max. 720	max. 550	max. 360	
Diff. pressure compressor	mbar	max. 530	max. 1050	max. 710	max. 460	
Capacity	m³/h	50 - 190	50 - 200	300-950	500-1600	
Sound-pressure level	dB(A)	57 - 71	58 - 76	77-79	70-80	





## Product Features

Monoblock design

- Excellent resistance to corrosion
- No deposits in pump
- No metal-to-metal contact
- Increased water carryover available
- Robust yet light weight
- For use worldwide (UL /CSA / IEC/ EN approval)
- 50/60 Hz motors
- ATEX 94/9 EG

L-BV3



L-BV7



L-BV5



L-BL2 Compact



L-BV54



**L-Series** Liquid Ring





Extreme conditions, which prevail in humid and wet processes, lead to lime scale or abrasion, and hence to a considerable reduction in the performance of the pump. Our liquid ring pumps, however, meet these challenges. The use of high quality materials such as stainless steel and ceramics ensure utmost reliability and constant operating characteristics – for years to come.

### Reliable and economical

The L-Series liquid ring vacuum pumps and compressors last longer and are more reliable than modular pumps and will considerably reduce your operating costs.

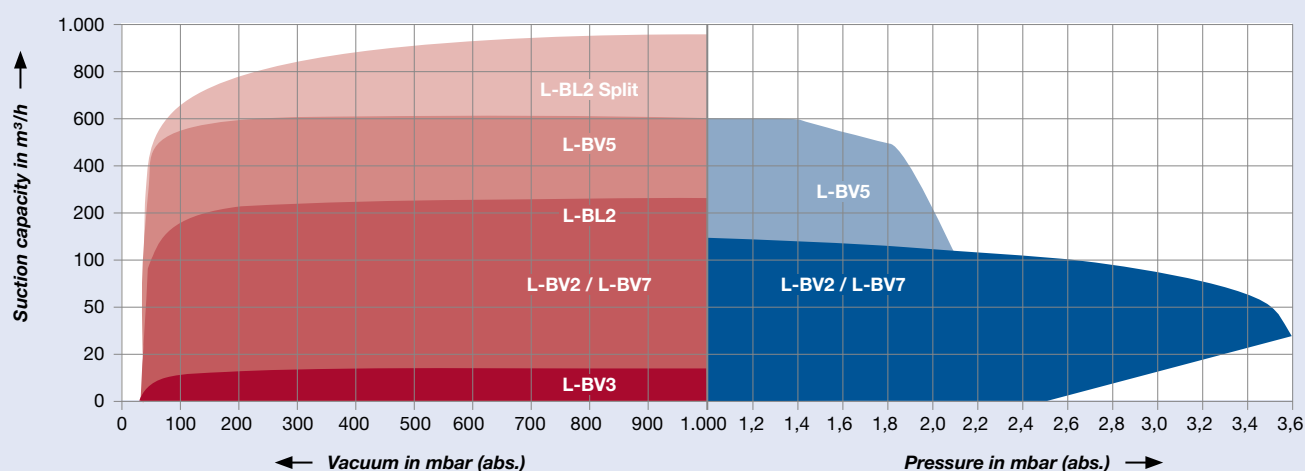
### Safe and resilient

Our pumps have stainless steel shafts which makes them corrosion resistant. They work safely and reliably even extreme conditions, like those in humid processes.

### No more limescale

The unique ceramic internal coating of the L-Series pump housings means that the pumps will not calcify due to fluid deposits. The special coating has been developed by us in cooperation with our expert partners. The benefit: years of optimal performance at low maintenance cost.

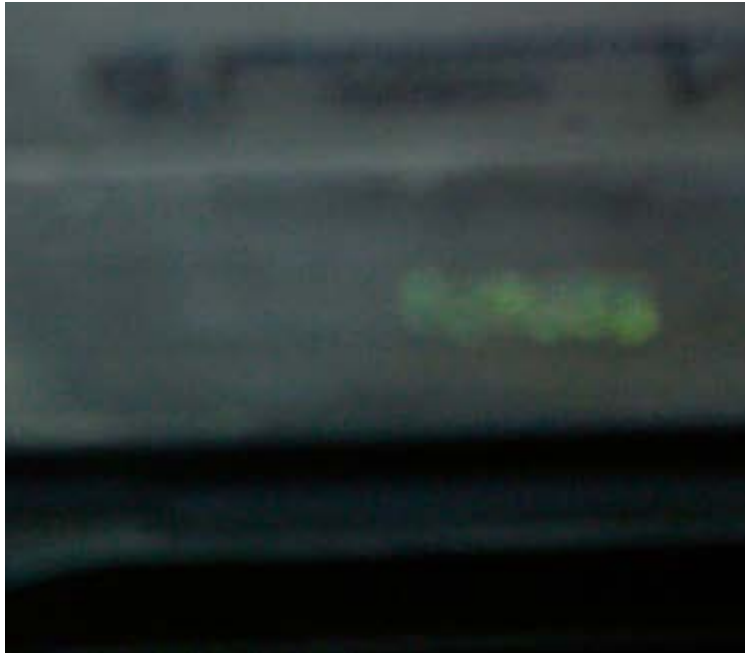
## Performance data



Range		L-BV3	L-BV2	L-BV7	L-BV5
Order No.		2BV3 151	2BV2 061 - 2BV2 071	2BV7 060 - 2BV7 071	2BV5 110 - 2BV5 161
Ultimate vacuum (abs.)	mbar	max. 33	max. 33	max. 33	max. 33
Discharge pressure p2	bar	–	3,5	3,5	2,1
Capacity	m³/h	10	30 - 150	30 - 140	160 - 500
Sound-pressure level	dB(A)	55 - 62	65 - 77	62 - 86	63 - 78
Range		L-BL2 Compact		L-BL2 Split	L-BV54
Order No.		2BL2041-2341		2BL2501-2901	2BV5470-2BV5421
Ultimate vacuum (abs.)	mbar	appr. 50		appr. 50	appr. 100
Discharge pressure p2	bar	-		-	2,6
Capacity	m³/h	25-280		400-900	75-340
Sound-pressure level	dB(A)	63-77		75-80	65-75



**V-Series**  
Dry Running Rotary Vane



V-VTN



V-VTA



V-VTR



V-DTN



V-DTA



V-DTR



V-KTN

## Dry running rotary vane vacuum pumps

The range of eco-friendly dry running rotary vane pumps from Elmo Rietschle have a wide performance range, making them suited to a broad range of applications. Design features include maximized cooling air pathways, heat resistant materials, sound reduction covers and relief valves.

## Advantages at a glance

Dry running

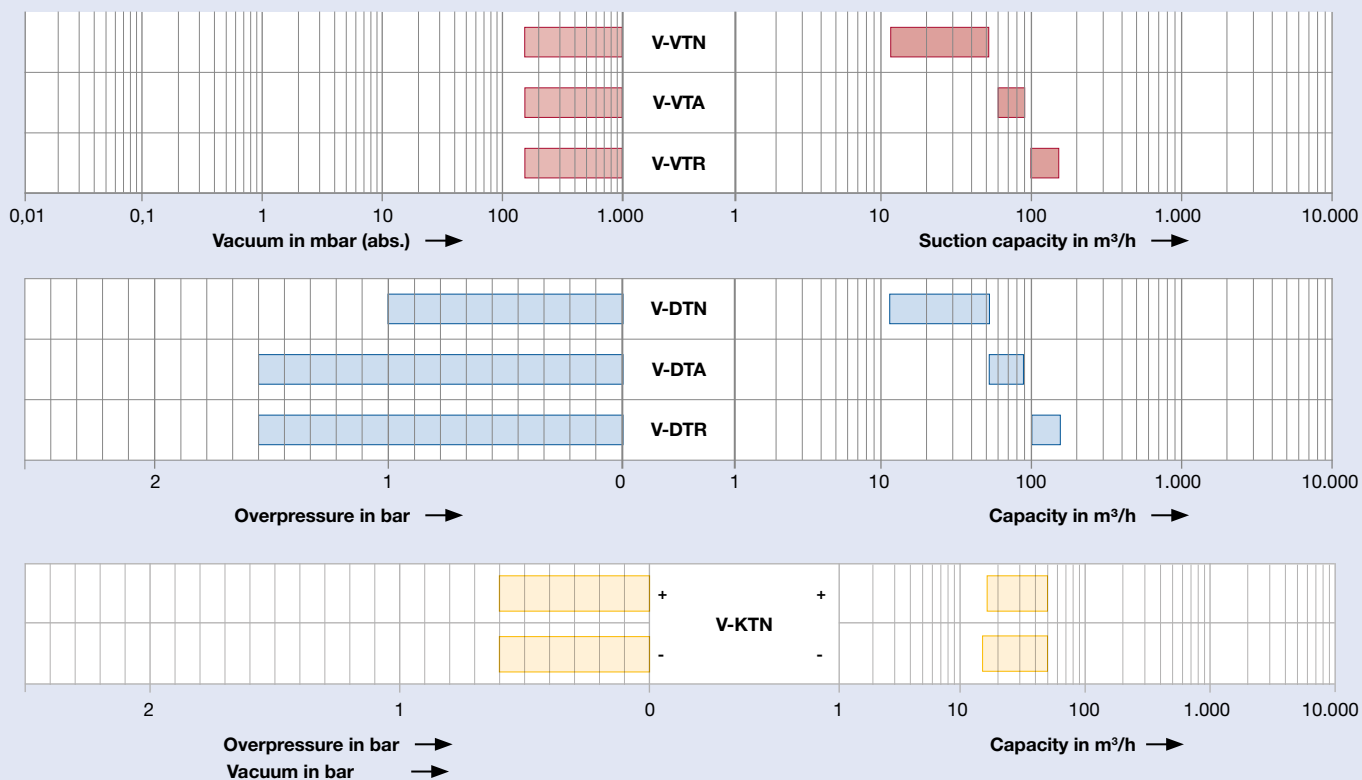
Low noise level

Robust and economical

Long up times

Easy to operate

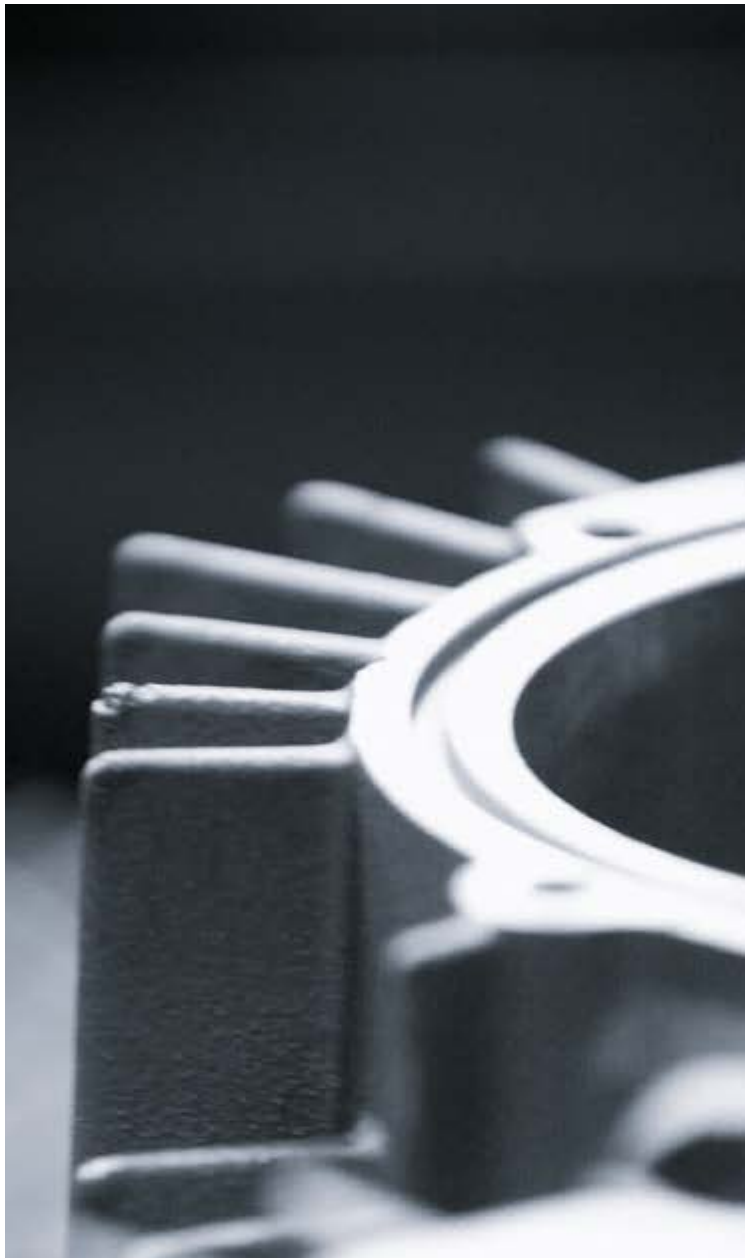
## Performance data



Order No.		VTN			VTA		VTR		DTN			DTA		DTR	
		16	26	41	60	80	100	140	16	26	41	60	80	100	140
Ultimate vacuum	mbar (abs.)	150			150		150		-	-	-	-	-	-	-
Capacity	m³/h	17	27	42	60	80	100	140	-	-	-	-	-	-	-
Overpressure max.	bar (abs.)	-	-	-	-	-	-	-	1,0	1,0	1,0	1,5	1,5	1,4	1,5
Capacity	m³/h	-	-	-	-	-	-	-	17,0	26,0	43,5	60,0	80,0	100,0	140,0
Speed	min⁻¹	1.450			1.740		1.740		1.450			1.450		1.450	
Weight approx	kg	3~	26,8	30,5	46,7	74	80	122	127	28,0	30,7	47,0	86	97	127
			27,2	31,8	47										
Average noise level	dB(A)	60	61	66	74	75	77	78	61	62	67	74	76	77	78

Order No.		16				KTN 26				41			
Vacuum max.	bar	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6	-0,6
Capacity max.	m³/h	17	15,5	15	14,6	26	24	23,5	23	42,5	41	39,5	38,3
Overpressure max.	bar (abs.)	1,0				1,0				1,0			
Capacity max.	m³/h	16,3	14	13,2	12,5	16,3	14	13,2	12,5	16,3	14	13,2	12,5
Speed	min <sup>-1</sup>	1450											
Weight approx	kg	28,4				35,1				49,9			
	3~ 1~	28,6				35,2				52,2			
Average noise level	dB(A)	63				65				68			



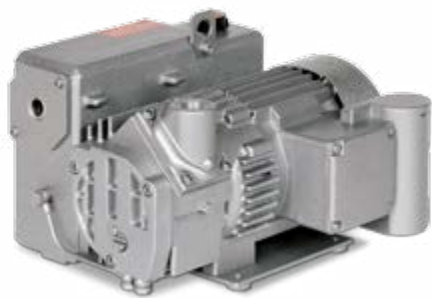


## V-Series

Oil Lubricated Rotary Vane



V-VGD



V-VCB



V-VGC



V-VC



## Lubricated rotary vane vacuum pumps

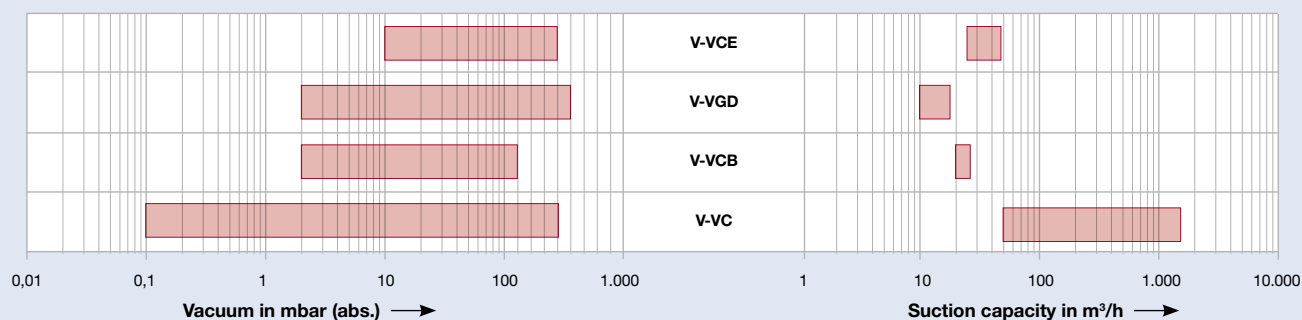
Elmo Rietschle Oil-lubricated rotary vane vacuum pumps are used in a wide variety of industrial applications. Offering the largest range of oilflooded vacuum pumps for industrial coarse and fine vacuum operation.

Compact pumps with overhung bearing design

Medium ranges with rotors supported on both sides and flexible coupling

Large pumps with rotors supported on both sides, flexible coupling and double wall cylinder

## Performance data



Order No.		VCE		VGD		VCB	
		25	40	10	15	20	25
Ultimate vacuum	mbar (abs.)	10		10		2	
Capacity	m³/h	25	40	10	15	20	25
Speed	min <sup>-1</sup>	1.450		2.850		2.850	
Weight approx	kg	3~	50	19		23	
	1~	25	53				
Sound-pressure level	dB(A)	59	63	59	60	64	66

Order No.		VC											
		50	75	100	150	202	303	400	500	700	900	1100	1300
Ultimate vacuum	mbar (abs.)	0,1				0,1		0,1					
Capacity	m³/h	50	75	100	150	200	300	400	500	700	900	1.100	1.300
Speed	min <sup>-1</sup>	1.450						950					
Weight approx	kg	3~	59	90	98	191	192	485	579	605	710	960	1050
	1~	57	59	90	98	191	192	485	579	605	710	1130	1130
Sound-pressure level	dB(A)	67	68	69	71	73	74	75	77	80	81	83	84
												85	85



### Advantages at a glance

Robust and economical

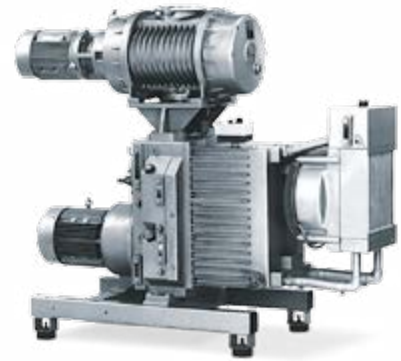
Dry running

Modular design

Available as single aggregates

Available as individually engineered pump sets

Frequency control available



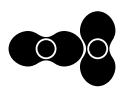
R-VPA



R-VPR



R-VWP



**R-Series Rotary Lobe**





## Rotary Lobe

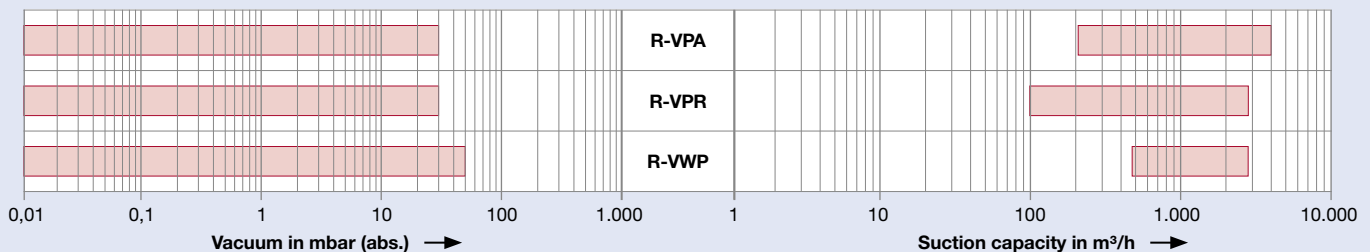
Rotary lobe vacuum pumps R-VWP can be used in many applications that need coarse or fine vacuum. Two symmetrically shaped rotors rotate against each other, synchronized by a pair of gear wheels. The pumps are dry running, and consequently the compression chamber is free of grease or oil. Gear box and bearings are oil lubricated.

The Elmo Rietschle R-VPR pump stand consists of oil lubricated rotary vanes and rotary lobe vacuum pumps; their main applications are to be found in industrial fine vacuum. The R-VPA standard pump sets use fresh oil lubricated rotary vanes as backup for the booster. Evacuation applications in industrial and chemical processes are their main field of use.

## Vacuum pump stands

Pump sets consisting of oil lubricated rotary vanes or screws as backing pump in combination with rotary lobe vacuum pumps as booster pump are used when both high end vacuum and suction capacity are required.

## Performance data



Order No.		62.10	100.05	102.05	162.05	252.10	VPA 252.20	300.10	402.10	402.20	402.40	700.25
Ultimate vacuum	mbar (abs.)	0,1										
Capacity	m³/h	1130	-	520	540	990	2230	-	1215	2360	3960	-
Weight approx	kg	675	225	580	595	695	1025	425	750	1080	1220	1080
Sound-pressure level	dB(A)	77	76	75	77	78	78	78	79	79	79	83

Order No.		VPR 1100.25	500	1000	VWP 1500	2500
Ultimate vacuum	mbar (abs.)	0,1	50	43	43	35
Capacity	m³/h	-	590	1295	1909	2752
Motor rating	kW	-	1,8	3,6	4,8	7,5
Speed	min <sup>-1</sup>	-	3450	3480	3470	3500
Weight approx	kg	1440	100	180	225	342
Sound-pressure level	dB(A)	86	71 / 72	70 / 71	75 / 76	76 / 77



### Advantages at a glance

- Dry, contact-free operation
- Process safe and reliable
- No oil in the compression chamber
- Frequency control available
- Low sound level
- No greasing of bearings



**C-VLR ZEPHYR**  
Vacuum pump



**C-DLR ZEPHYR**  
Compressor



## C-Series Claw



**C-KLR ZEPHYR**  
Pressure-vacuum pump

Our dry running C-Series generates contact free vacuum or compressed air efficiently and economically due to the principle of internal compression. This leads to considerable energy savings compared to the traditional rotary lobe design without internal compression.

## Wide spectrum of performance

With the C-VLR claw vacuum pumps and C-DLR claw compressors the following ultimate pressures are attainable during continuous operation: vacuum up to 50 mbar (abs.) and pressure up to 2.2 bar. Combination pressure-vacuum pumps provide underpressure up to -0.6 bar and overpressure up to + 1.0 bar.

## Innovative claw technology

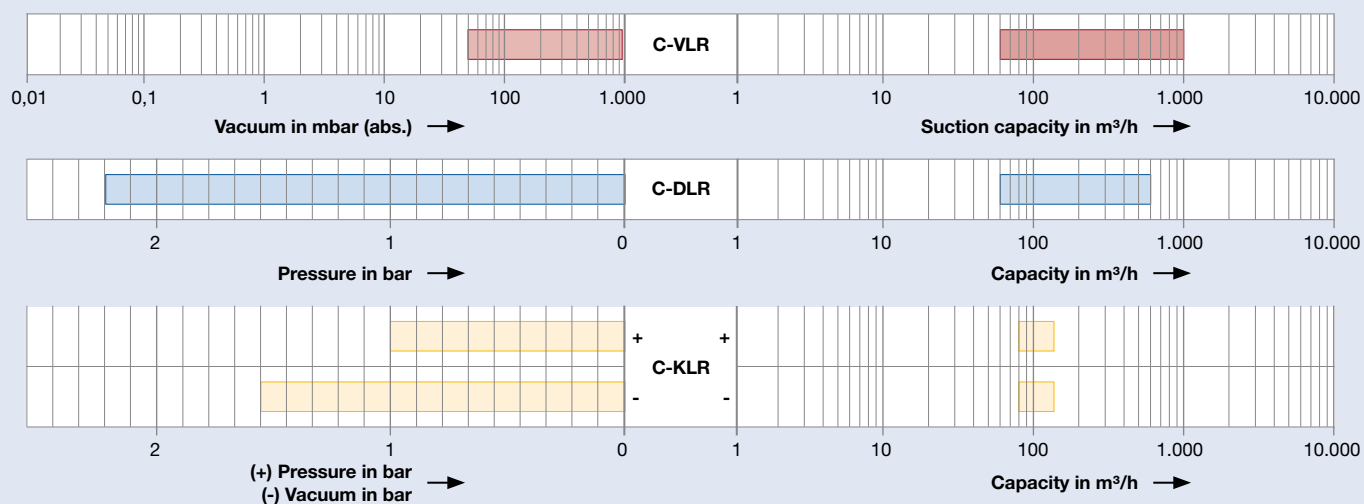
The claws of the C-Series feature an optimized, high precision shape and roll together without contact, synchronised by a precision gear set. The compression is achieved dry and wear free. Special seals separate the compression chamber and gearbox. The claw rotors control the transportation of the medium by opening and closing the inlet and outlet channels.

Thus no sealing fluid within the compression chamber is needed.

The overhung rotor design in all sizes up to model 300 is another outstanding feature of this technology. Gas tight versions with reduced leakage rates are available. We hold the patent on the newly designed triple lobe rotors with intermediate charging of air – for the first time vacuum and pressure are being created in one stage.

Explosion proof versions with reduced leakage are available as well as ATEX compliant vacuum pumps and compressors.

## Performance data



Order No.		VLR									DLR							KLR	
		60	100	150	250	251	301	400	500	1000	60	100	150	250	300	400	500	80	140
Ultimate vacuum	mbar (abs.)	50	50	50	50	50	50	50	50	50	-							-	-
Capacity	m³/h	72	120	180	282	255	345	462	600	950	-							-	-
Pressure	bar (abs.)	-									2	0,8	1,0	1,0	1,2	0,6	0,8	-	-
												2,2	1,8	0,8	2,2	2,0	2,0		
Capacity	m³/h	-									68	13	170	282	360	462	600	-	-
Capacity	mbar	-									-							-0,6	-0,6
	m³/h																	60-120	77,3-133,9
Pressure / Capacity	bar	-									-							+0,7	+0,7
	m³/h																	62-97	98-126,9
Motor output	kW	1,5	2,6	3,6	4,8	4,8	6,5	9	11	22	3,6	4,8	6,5	9,0	13	13	18	4,8	6,5
Rated current	A	5,9	11,8	13,8	20,0	19	12,7	19,0	24	35,0	#	#	#	#	#	#	#	#	14 / 18
		3,4	6,8	6,9	11,5	11,0	7,4	11	13,8	22,0			8,0						
Speed	min <sup>-1</sup>	3450									3450							3450	
Weight approx	kg	51	105	125	213	140	270	330	381	790	57	105	151	250	259	356	411	120	160
												130		293	301	442	510		
Sound-pressure level	dB(A)	80	82	82	82	82	77	84	84	84	79	83	81	85	85	85	85	83	#





## Advantages at a glance

Dry running

High vacuum in one stage

Application specific options

Short evacuation time due to high suction capacities

Flushing/CIP capable

Insensitive against water shocks



S-VSA TWISTER



S-VSB TWISTER



S-VSI TWISTER



**S-Series Screw**



The dry and contact free operation of the Elmo Rietschle S-Series screw vacuum pumps requires no lubrication in the pumping chamber. This translates into major advantages: no process contamination and no pollution caused by the pump operation.

### Wide performance range

Our S-VSA, S-VSB and S-VSI screw vacuum pumps achieve an ultimate vacuum of 0.05 mbar (abs.) and can operate at any pressure between end vacuum and atmospheric pressure.

### Rugged and durable design

In the pump housing, two parallel screw rotors, both timing gear synchronized, turn in opposite directions. Gas is compressed in the direction of the discharge port. Gearbox and mechanical seals are oil lubricated. Cooling is achieved through the continuous flow of coolant through the pump housing. Our S-Series screw pumps feature high vapor and liquid tolerance, are easy to service and have a long service life – the low rotational speed ensures low noise and low vibration operation.

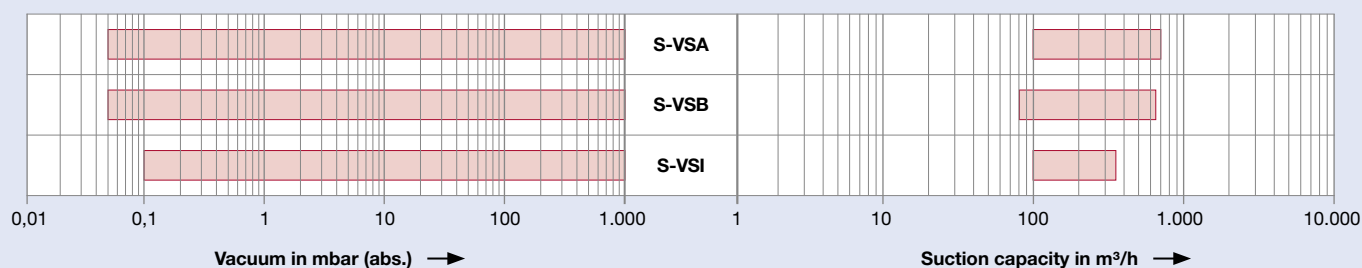
### Multiple applications

Elmo Rietschle screw vacuum pumps are primarily used in applications across many different industries where clean, oil free vacuum is needed. They can also be combined with a vacuum booster in customized vacuum systems for very high suction capacities.

The S-VSB range are to be found in many chemical and pharmaceutical processes. ATEX compliant versions are available.

General industrial applications such as packaging, drying and coating or vacuum furnaces are best served by our S-VSI range of pumps.

## Performance data

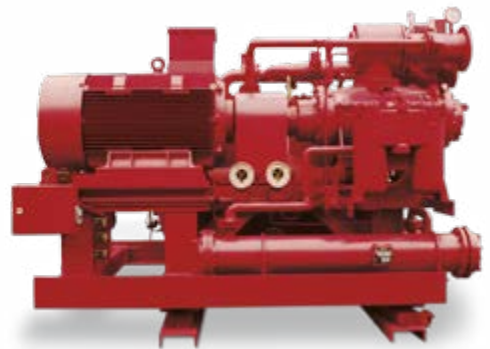


Order No.		VSA				VSB					VSI	
		150	330	400	800	120	200	320	430	800	100	300
Ultimate vacuum	mbar (abs.)	0,3	0,3	0,05	0,05	0,3	0,3	0,3	0,3	0,05	0,1	0,1
Capacity	m³/h	135	300	360	720	100	140	250	250	650	120	360
Motor output	kW	4,8	9,0	18,0	22,0	3,6	4,8	6,5	6,5	18,0	3,6	9,0
Speed	min <sup>-1</sup>	3450				3450					3550	
Weight approx	kg	320	520	610	810	230	280	380	450	750	190	#
Sound-pressure level	dB(A)	#	#	81	#	74	75	76	78	80	75	80



#### **X-RVA G WITTIG**

Once through oil lubricated rotary vane compressors



#### **X-RO G WITTIG**

Circular oil lubricated rotary vane compressors



## **X-Series** WITTIG Industrial Systems



#### **X-WPSO WITTIG**

Rotary vane vacuum pumps



#### **X-WKP-WPSO WITTIG**

Vacuum pump sets



## Rugged and durable

These high performing vacuum pumps and compressors cover a wide performance range. Their major applications include air and gas applications in sewage plants, coke ovens, mines and offshore petroleum extraction. Glass manufacturing also uses the stationary Wittig products. These rotary vanes are used either as stand-alone units or are packaged in pump stands (vacuum pumps only). Thanks to their high quality and reliability they can operate 24/24.

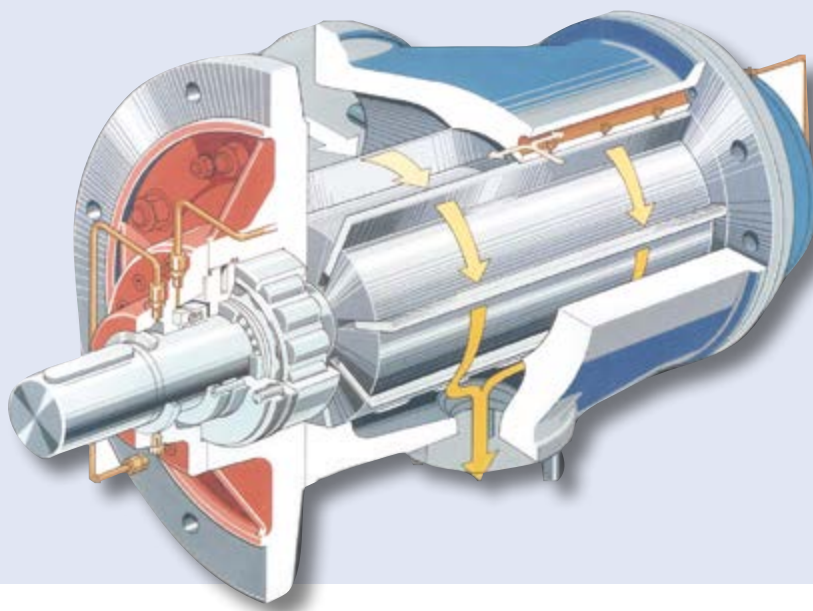
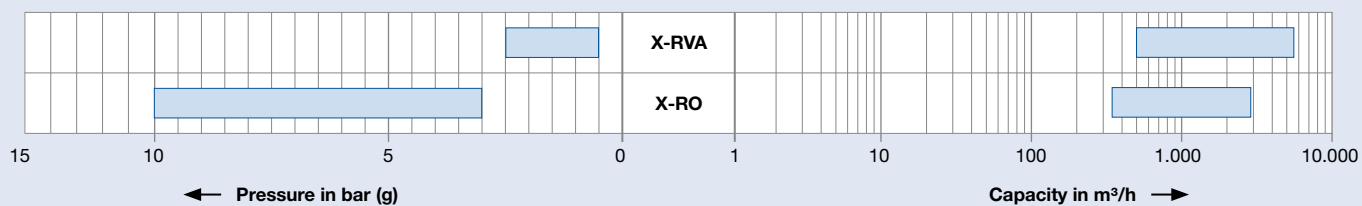
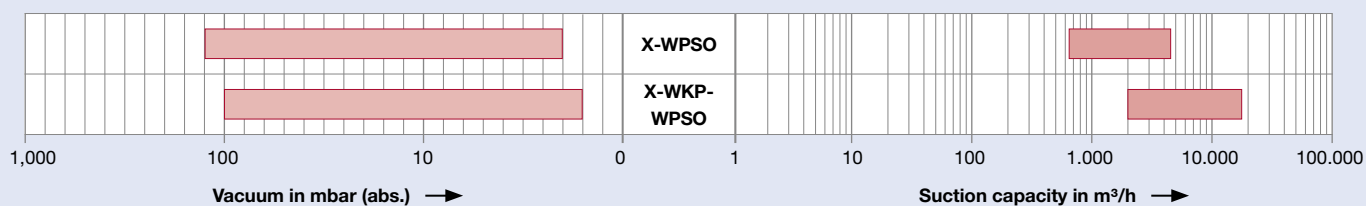
## Advantages at a glance

Low maintenance

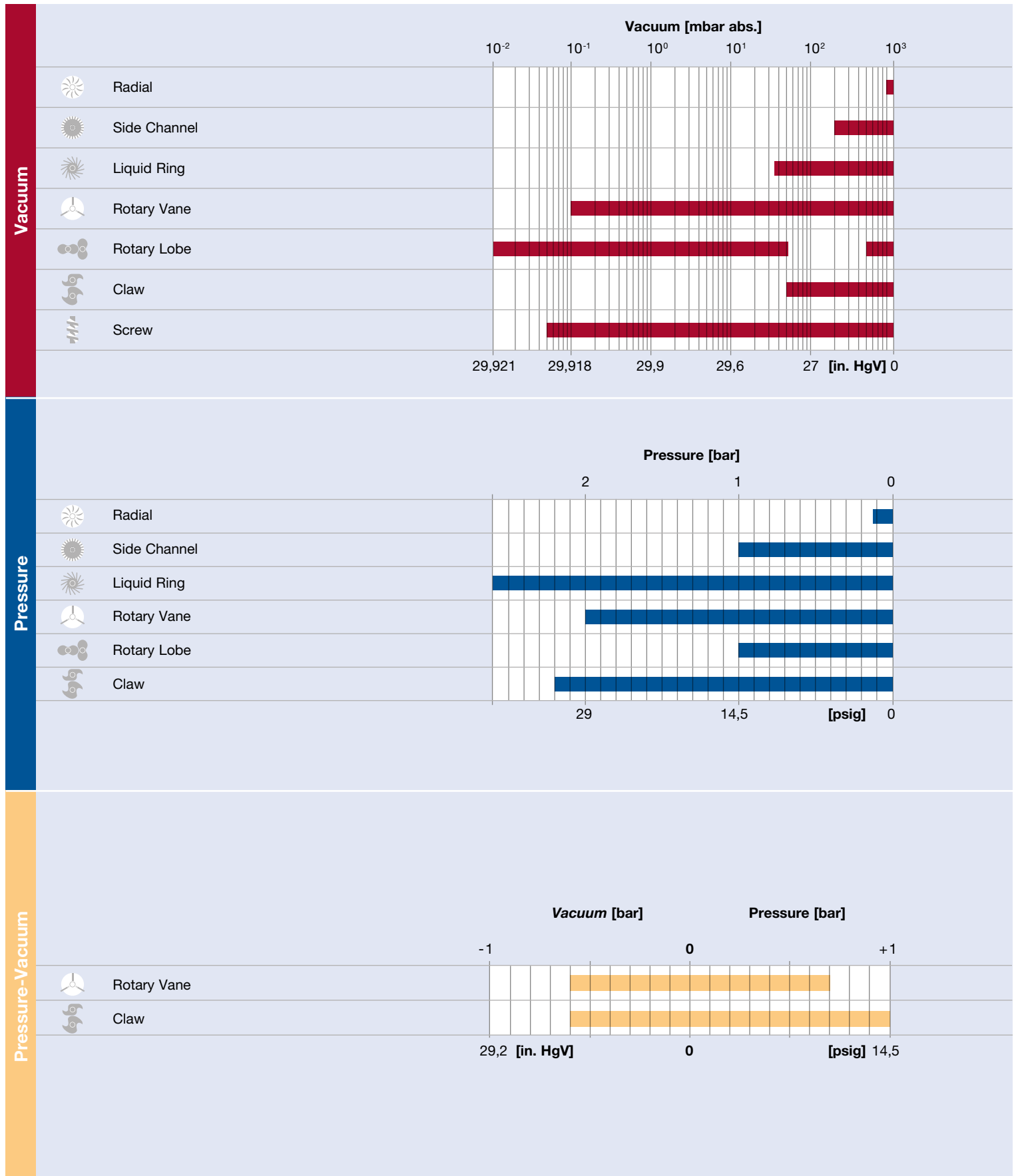
Long service life

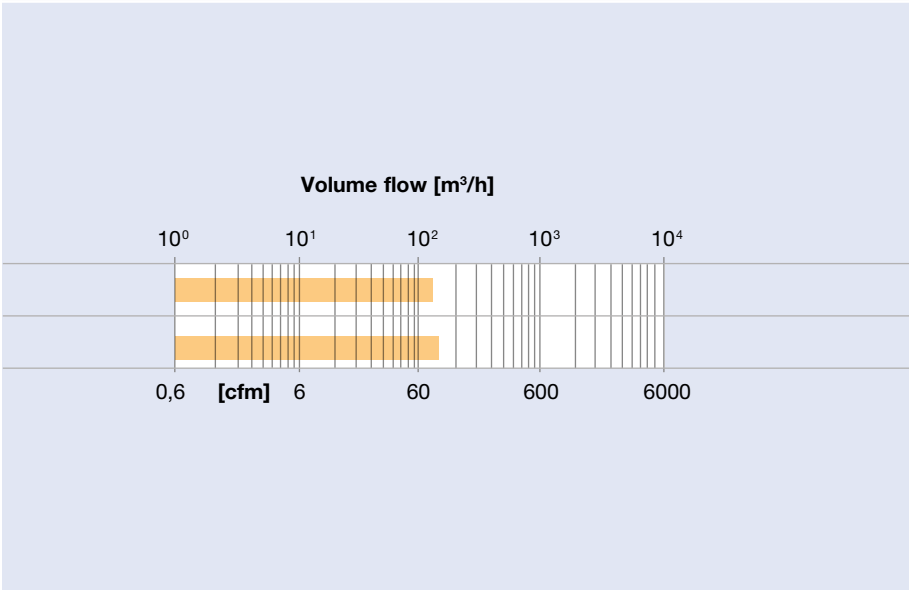
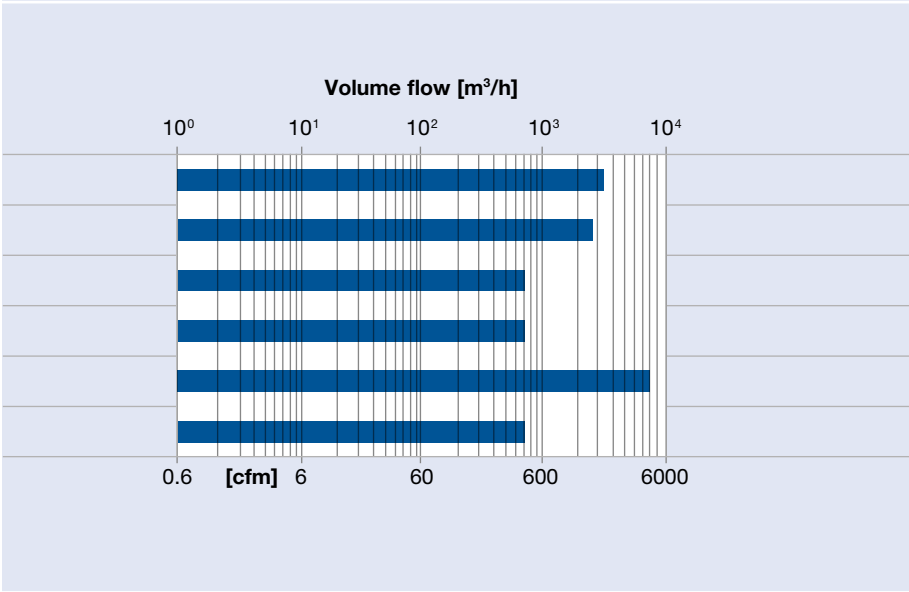
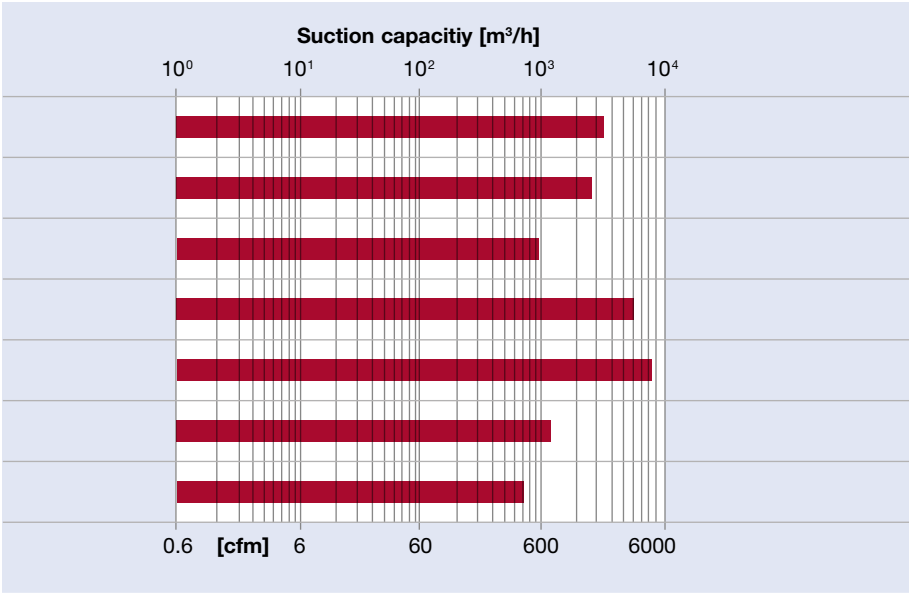
Robust construction

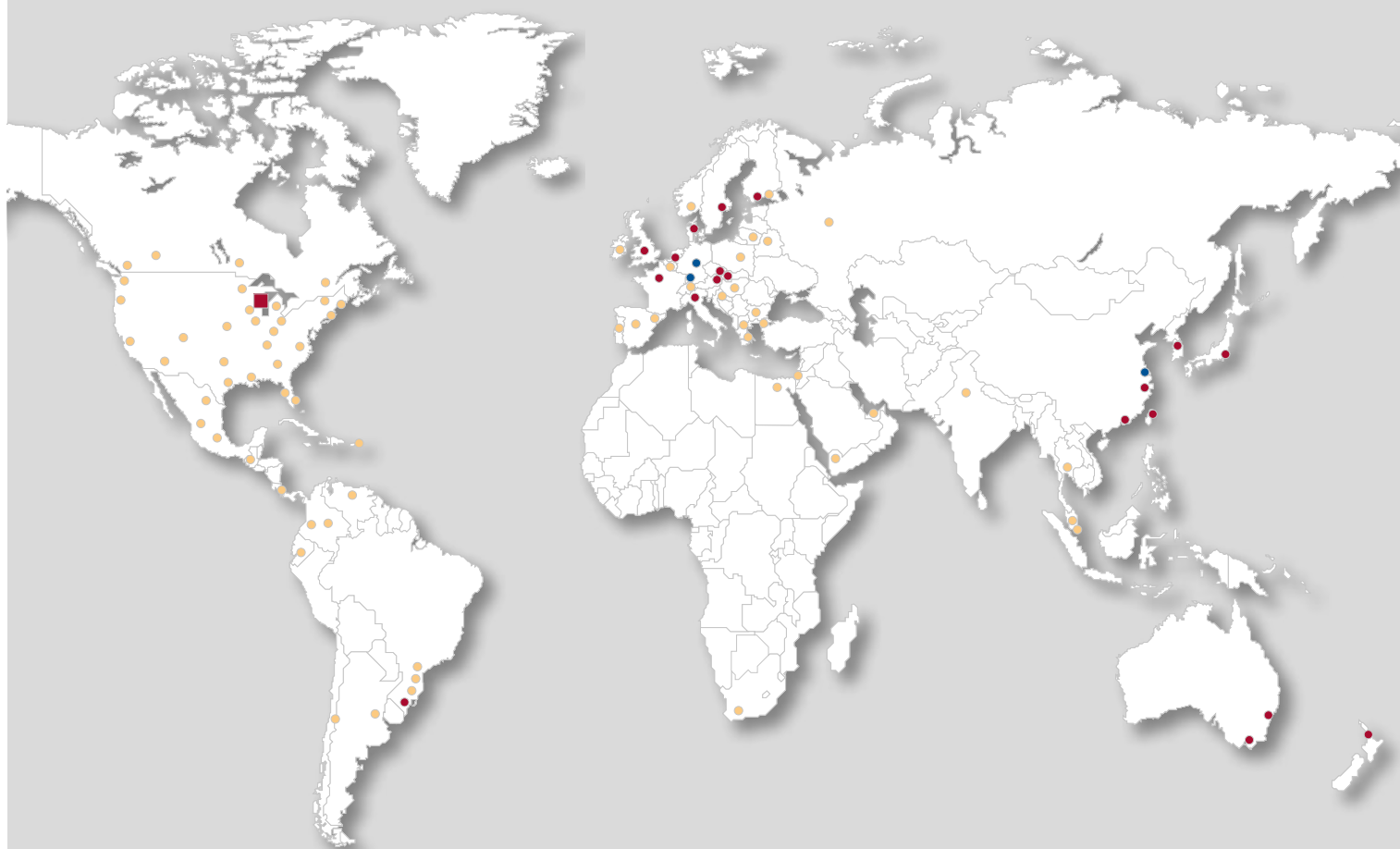
## Performance data



## Operating Range







- Corporate Headquarters
- Sales / Service Location
- Manufacturing Location
- Our Partners

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