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Vacuum Pumps and Compressors

Catalogue 2001

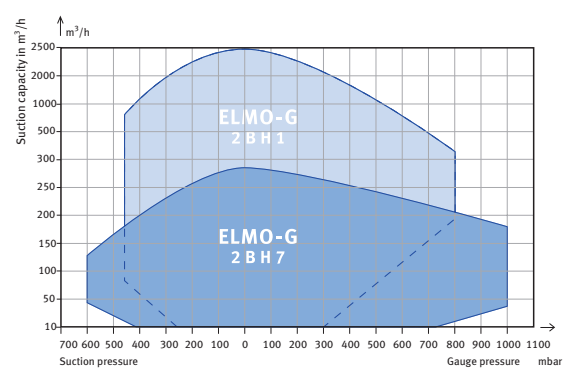


elmo vacuum technology GmbH

A Siemens Company

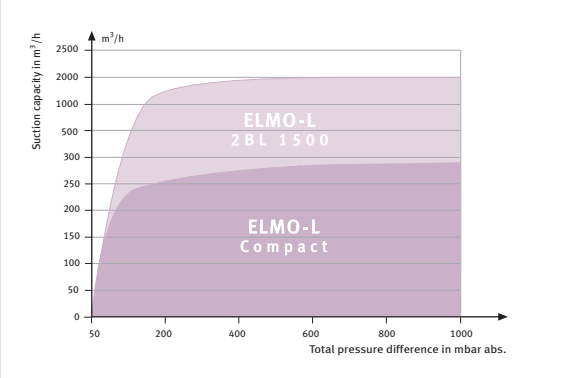
elmo
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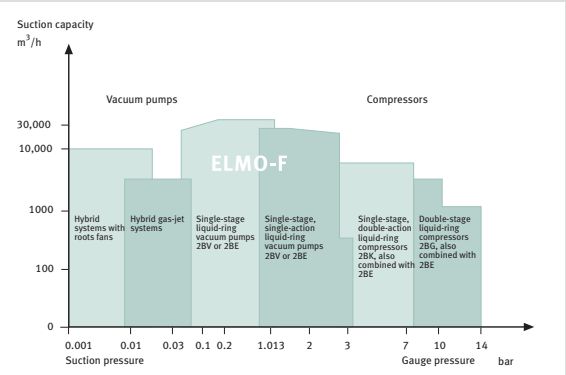
ELMO-G vacuum pumps and compressors convey non-explosive gases and gas-air mixtures absolutely oil-free and low-noise – at 50 Hz and 60 Hz. They are space-saving, maintenance-free – and highly economical:

- air-cooled
- ready to connect
- with Siemens 3-phase motors and IP 54 degree of protection
- with EEx e II T3 explosion protection
- motors in accordance with DIN VDE 0530
- max. gas and ambient temperature 40 °C
- standard paint finish in RAL 7030 colour
- can be installed in any axial orientation



Because of their unique operating principle, ELMO-L vacuum pumps are ideally suited for damp areas. They evacuate air, moist gases or vapours absolutely oil-free – at 50 or 60 Hz.

- insensitive to condensate
- particularly quiet
- ready to mount and connect
- with internal cooling and waste gas temperature based on ambient temperature
- max. ambient temperature 45 °C
- no risk of thermal overloading
- with Siemens three- or single-phase motors with IP 54/55 degree of protection



Because of their extremely tough design, ELMO-F liquid-ring vacuum pumps and compressors are particularly suitable for conveying moist, explosive and aggressive gases.
And yet – like the complete ELMO range – they are extremely economical:

- maintenance-free in continuous duty
- low-noise
- space-saving
- extremely tough



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Side-channel blowers ELMO-G

ELMO-G overview 2 - 3

ELMO-G vacuum pumps/compressors 4 - 9

ELMO-GS vacuum pumps/compressors, range 2BH1 with integrated frequency converter 10 - 11

ELMO-G vacuum pumps/compressors, range 2BH7, three-phase current 50/60 Hz 12 - 13

ELMO-GS vacuum pumps/compressors, range 2BH7 with integrated frequency converter, range 2BH100 “Little Star” 14 - 15

Accessories for ELMO-G/GS vacuum pumps/compressors 16 - 19

Dimensions for ELMO-G vacuum pumps/compressors 20 - 29

Accessories for ELMO-G vacuum pumps/compressors 30 - 33

G



Air-cooled vacuum pumps ELMO-L

ELMO-L overview 34 - 35

ELMO-L vacuum pumps in the range 2BL Compact, 50/60 Hz 36 - 37

ELMO-L vacuum pumps in the range 2BL1 500, 50/60 Hz 38

Accessories and dimensions for ELMO-L vacuum pumps 39

L



Liquid-ring vacuum pumps and compressors ELMO-F, Systems

ELMO-F overview 40 - 41

ELMO-F liquid-ring vacuum pumps/compressors, range 2BV, 50 and 50/60 Hz 42 - 47

Accessories for ELMO-F vacuum pumps, range 2BV2/5/6/7 48 - 50

Dimensions for ELMO-F vacuum pumps/compressors, range 2BV2/3, 5, 6, 7 51 - 57

ELMO-F vacuum units with vacuum pumps, range 2BE 58

ELMO-F selection overviews, range 2BE1, 3 59 - 60

Dimensions and accessories for ELMO-F units 2BE 61

ELMO-F systems 62 - 63

F



Radial blowers

Radial fans in range 2CF1 and 2CF2 and accessories 64 - 65

Dimensions for radial fans range 2CF1 and 2CF2 and accessories 66 - 67

Radial blowers in range 1BA 68

Appendix

Conversion tables 69

General safety information 70

Terms of sale and delivery Export regulations 71

DIN EN ISO 9001 certification 72

Contacts U3

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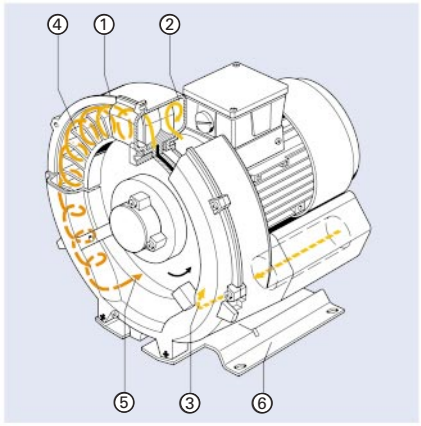
ELMO-G Side-Channel Blowers

A versatile solution for flexible use

Whether vacuum pump or compressor, whether handling air, non-explosive gases or gas-air mixtures – ELMO-G side-channel blowers are oil-free, maintenance-free and ever reliable in operation.

The reason: the impellers are mounted directly on the motor shaft and compress entirely without friction. Maximum operational reliability, including at high differential pressures, is ensured by the arrangement of the bearings outside the compression chamber.

All of this makes ELMO-G uniquely robust – and maintenance-free even in continuous duty.



Flexible and powerful

The ELMO-G range 2BH1 and 2BH7 vacuum pumps and compressors are available in a huge product range with over 80 sizes. They therefore cover the most varied requirements – flexibly and powerfully, even in applications which are otherwise the preserve of more sensitive dry-running rotary-vane compressors or noisy rotary-piston blowers. ELMO-G vacuum pumps and compressors are also available with integrated busable frequency converters for speed variation between 2200 and 5000 rpm. This allows any operating point to be precisely selected and controlled – without complex commissioning or additional wiring.

Short delivery time, easy installation

ELMO-G vacuum pumps and compressors are available immediately in all common voltages. Especially for resellers there are 50/60-Hz-wide-range voltages: consequently, 95% of all world voltages are covered. ELMO-G vacuum pumps and compressors come ready for connection. For the customer this means: just mount in any position, connect the suction/discharge lines to the system, wire up the electrical connections – and the ELMO-G is ready for operation. Motor (degree of protection IP 55) as well as suction- and discharge-side silencers are integrated in the compact design.

ELMO-G 2BH7, single-stage – for high pressure ranges.



ELMO-G side-channel blower 2BH1 – single-stage version.



ELMO-G side-channel blower 2BH1 – two-stage, for tougher requirements.



ELMO-GS 2BH1 – with integrated frequency converter for high volume flows and/or automatic modification to changing loads.



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2BH – operating principle

① *Casing*
② *Side channel*
③ *Inlet slot*
④ *Impeller*
⑤ *Discharge slot*
⑥ *Foot plate*

ELMO-G vacuum pumps and compressors work according to the side-channel principle. The gas flows through the compressor along a helical trajectory and is repeatedly accelerated and thereby repeatedly compressed according to the required operating point. Consequently, much higher pressures are obtained than it is possible with radial blowers of identical impeller diameter and speed.

Applications

- Pneumatic conveying systems
- Lifting and holding of parts by vacuum
- Packaging machines
- Aeration of sewage-treatment plants
- Filling of bags/bottles/hoppers
- Soil remediation
- Thermoforming
- Sorting/enveloping of letters
- Food-processing
- Laser printers
- Dental suction equipment
- Paper processing
- Printers/copiers
- Textile machines
- Aeration of fish ponds
- Gas analysis
- Swimming-pool equipment/whirlpools

ELMO-G 2BH7, two-stage – the reliable system for high differential pressures



Also available with 3 or 4 impellers (on request).



ELMO-G side-channel blower 2BH7 with integrated frequency converter.



ELMO-G with ECOFAST motor starter – for continuous starting via energy bus and AS interface.

2BH100 – “Little Star” drive via an electronically commutated, permanent-field d.c. motor. Infinitely variable over the entire power range.



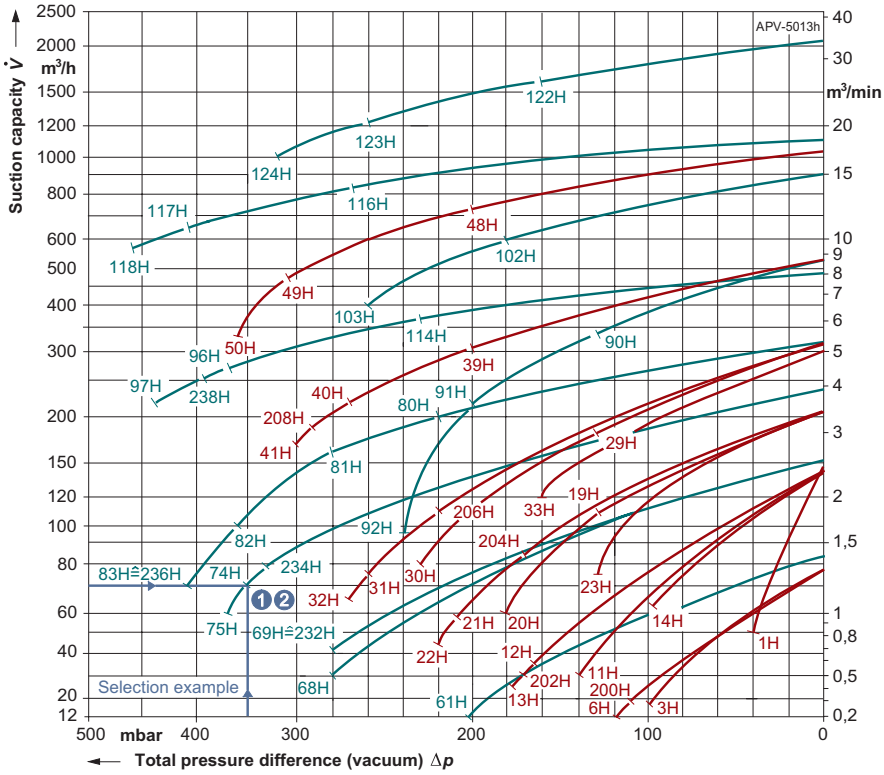
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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Three-Phase 50 Hz

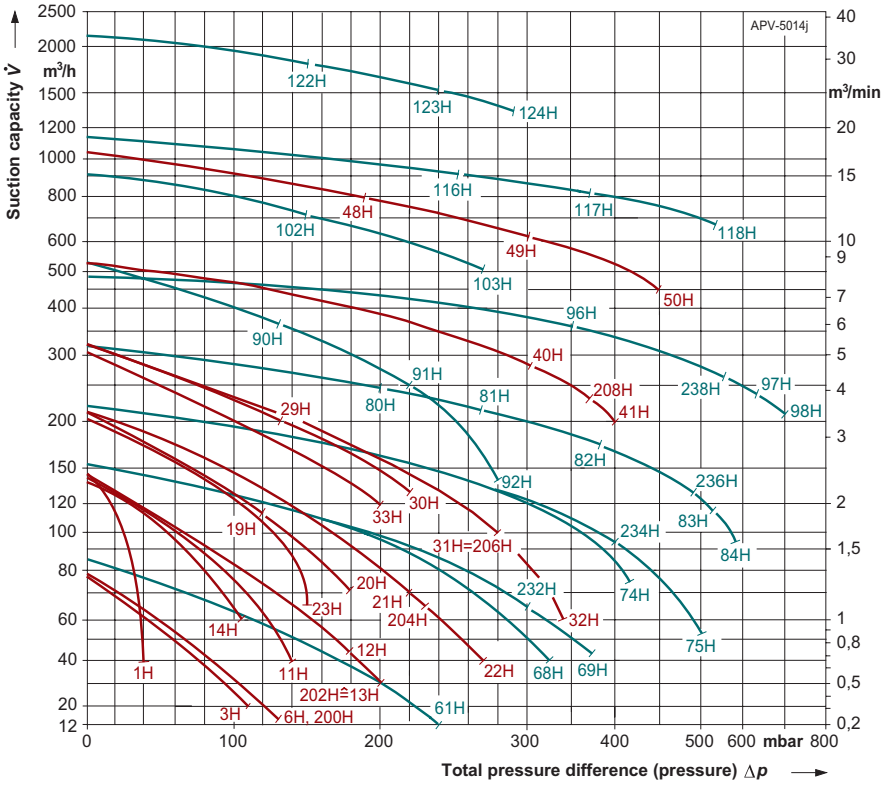
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Selection diagram vacuum operation



Selection diagram compressor operation



The performance curves are valid for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Three-Phase 50 Hz

Selection and ordering information for 50 Hz

Curve No.	Motor 9) Rated output kW	Rated current A	Degree of protection	Sound-pressure level 1) dB(A)	Order No. • AVAILABLE EX STOCK	Weight approx. kg	Vacuum-relief valve 2) Items x Type 2BX2...	Pressure-relief valve 2) Items x Type 2BX2...
1H	0.25	1.38 Δ / 0.8 Y	IP 55	57	•2BH1 200-7A H 0 6	8	—	—
3H	0.25	1.38 Δ / 0.8 Y	IP 55	58	•2BH1 300-7A H 0 6	8	1 x 110/141	1 x 111/143
6H	0.4	2.6 Δ / 1.5 Y	IP 55	58	•2BH1 300-7A H 1 6	10	1 x 110	1 x 111/143
11H	0.7	4.25 Δ / 2.45 Y	IP 55	63	•2BH1 400-7A H 0 6	13	1 x 110/141	1 x 111/143
12H	0.85	4.4 Δ / 2.55 Y	IP 55	63	•2BH1 400-7A H 1 6	15	1 x 110/141	1 x 111/143
13H	1.3	6.6 Δ / 3.8 Y	IP 55	63	•2BH1 400-7A H 2 6	16	1 x 110/141	1 x 111/143
14H	0.6	2.8 Δ / 1.6 Y	IP 55	63	•2BH1 490-7A H 1 6	14	—	—
19H	0.85	4.4 Δ / 2.55 Y	IP 55	66	•2BH1 500-7A H 0 6	18	1 x 110/145	1 x 111/147
20H	1.3	6.6 Δ / 3.8 Y	IP 55	66	•2BH1 500-7A H 1 6	20	1 x 110/145	1 x 111/147
21H	1.6	7.5 Δ / 4.3 Y	IP 55	66	•2BH1 500-7A H 2 6	21	1 x 110/145	1 x 111/147
22H	2.2	9.7 Δ / 5.6 Y	IP 55	66	•2BH1 500-7A H 3 6	25	1 x 110/145	1 x 111/147
23H	1.1	6.4 Δ / 3.7 Y	IP 55	66	•2BH1 590-7A E 1 1 7)	20	—	—
23H	1.1	7.5 Δ / 4.3 Y	IP 55	66	•2BH1 590-7A H 2 6	21	—	—
29H	1.5	6.3 Δ / 3.65 Y	IP 55	70	•2BH1 600-7A C 0 1 7)	26	1 x 110/145	2 x 111/147
30H	2.2	10.0 Δ / 5.8 Y	IP 55	70	•2BH1 600-7A H 1 6	29	1 x 110/145	1 x 111/147
31H	3	12.5 Δ / 7.2 Y	IP 55	70	2BH1 600-7A H 2 6	34	1 x 110/145	1 x 111/147
32H	4	9.3 Δ / 5.4 Y	IP 55	70	•2BH1 600-7A C 3 6	42	1 x 110/145	1 x 111/147
33H	2.2	10.5 Δ / 6.1 Y	IP 55	70	•2BH1 690-7A E 1 1 7)	29	—	—
33H	2.2	12.5 Δ / 7.2 Y	IP 55	70	•2BH1 690-7A H 2 6	31	—	—
39H	4	8.6 Δ / 5.0 Y	IP 54	71	2BH1 800-1A C 0 6 V)	112	2 x 110	—
40H	5.5	11.8 Δ / 6.8 Y	IP 54	71	•2BH1 800-1A C 1 6	126	1 x 110	1 x 111 8)
41H	7.5	15.1 Δ / 8.7 Y	IP 54	71	2BH1 800-1A C 2 6	128	1 x 110	1 x 111 8)
48H	9	17 Δ / 9.9 Y	IP 54	75	•2BH1 900-1A C 0 6	172	1 x 150	1 x 151 8)
49H	13	25 Δ/14.4 Y	IP 54	75	•2BH1 900-1A C 1 6	191	2 x 110	3 x 111 8)
50H	19	35.5 Δ / 20.5 Y	IP 54	75	•2BH1 900-1A C 2 6	204	2 x 110	2 x 111 8)
61H	0.76	3.55 Δ / 2.05 Y	IP 55	60	2BH1 310-7H C 2 1	14	1 x 110/141	1 x 111/143
68H	1.75	6.3 Δ / 3.65 Y	IP 55	66	2BH1 410-7H C 3 1	24	1 x 110/141	1 x 111/143
69H	2.2	9.7 Δ / 5.6 Y	IP 55	66	•2BH1 410-7H H 4 6	27	1 x 110/141	1 x 111/143
3 74H	3	12.5 Δ / 7.2 Y	IP 55	74	•2BH1 510-7H H 4 6	39	1 x 110/145	1 x 111/147
75H	4	17.4 Δ / 10.0 Y	IP 55	74	2BH1 510-7H H 5 6	43	1 x 110/145	1 x 111/147
80H	2.2	9.7 Δ / 5.6 Y	IP 55	75	•2BH1 610-7H H 1 6	42	1 x 110/145	1 x 111/147
81H	3	12.5 Δ / 7.2 Y	IP 55	75	•2BH1 610-7H H 2 1	47	1 x 110/145	1 x 111/147
82H	4	9.3 Δ / 5.4 Y	IP 55	75	•2BH1 610-7H C 3 6	53	1 x 110/145	1 x 111/147
83H	5.5	13.5 Δ / 7.8 Y	IP 54	75	•2BH1 610-1H C 4 6	70	1 x 110/145	1 x 111/147
84H	7.5	14.7 Δ / 8.5 Y	IP 54	75	•2BH1 610-1H C 5 6 K)	77	—	1 x 111/147
90H	4	9.3 Δ / 5.4 Y	IP 55	76	2BH1 640-7G C 3 6 7)	53	1 x 110/145	3 x 111/147
91H	5.5	11.6 Δ / 6.7 Y	IP 54	76	•2BH1 640-1G C 4 6	73	1 x 110/145	2 x 111/147
92H	7.5	14.7 Δ / 8.5 Y	IP 54	76	2BH1 640-1G C 5 6	86	1 x 110/145	1 x 111/147
96H	7.5	15.1 Δ / 8.7 Y	IP 54	75	•2BH1 810-1H C 2 6	169	1 x 110	2 x 111 8)
97H	11	25 Δ / 14.4 Y	IP 54	75	•2BH1 810-1H C 3 6	205	1 x 110	1 x 111 8)
98H	15	30 Δ / 17.4 Y	IP 54	75	2BH1 810-1H C 4 6 K)	221	—	1 x 111 8)
102H	7.5	15.1 Δ / 8.7 Y	IP 54	75	•2BH1 840-1 J C 2 6	160	3 x 110	1 x 151 8)
103H	11	25 Δ / 14.4 Y	IP 54	75	•2BH1 840-1 J C 3 6	200	2 x 110	2 x 111 8)
114H	5.5	11.8 Δ / 6.8 Y	IP 54	75	2BH1 810-1H E 1 6 7) V)	163	2 x 110	—
116H	13.7	26 Δ / 15 Y	IP 54	75	2BH1 910-1H C 1 6	265	1 x 150	1 x 151 8)
117H	17.8	34 Δ / 19.5 Y	IP 54	75	•2BH1 910-1H C 2 6	278	3 x 110	1 x 151 8)
118H	22.6	42 Δ / 24 Y	IP 54	75	•2BH1 910-1H C 3 6	295	3 x 110	3 x 111 8)
122H	15	30 Δ / 17.5 Y	IP 54	76	2BH1 943-1G C 2 6 3)	270	1 x 152	1 x 153 8)
123H	21	39.5 Δ / 23 Y	IP 54	76	•2BH1 943-1G C 3 6 3)	300	1 x 152	1 x 153 8)
124H	25	46.5 Δ / 27 Y	IP 54	76	2BH1 943-1G C 4 6 3)	330	3 x 110	1 x 153 8)

Selection and ordering information for 50 Hz, EEx e II T3 5)

200H	0.33	1.98 Δ / 1.14 Y	IP 54	58	2BH1 300-7A D 2 4 7)	10	1 x 110/141	1 x 111/143
202H	1	3.95 Δ / 2.3 Y	IP 54	63	2BH1 400-7A D 2 4 7)	16	1 x 110/141	1 x 111/143
204H	1.39	5.9 Δ / 3.4 Y	IP 54	70	2BH1 500-7A D 3 4 7)	24	1 x 110/145	1 x 111/147
	1.65	6.6 Δ / 3.8 Y						
206H	2.65	9.1 Δ / 5.2 Y	IP 54	72	2BH1 600-7A D 3 4 7)	49	1 x 110/145	1 x 111/147
	3.25	11.1 Δ / 6.4 Y						
208H	4.5	8.7 Δ / 5.1 Y	IP 54	71	2BH1 800-7A D 2 8 7)	132	1 x 110	1 x 111 8)
	6.5	12.5 Δ / 7.3 Y						
232H	1.6	5.7 Δ / 3.3 Y	IP 54	66	2BH1 410-7H D 4 4 7)	27	1 x 110/141	1 x 111/143
234H	2.45	8.4 Δ / 4.85 Y	IP 54	74	2BH1 510-7H D 5 4 7)	55	1 x 110/145	1 x 111/147
	3.1	10.3 Δ / 5.9 Y						
236H	4.65	8.9 Δ / 5.2 Y	IP 54	75	2BH1 610-1H D 5 8 7)	86	1 x 110/145	1 x 111/147
	5.6	10.7 Δ / 6.2 Y						
238H	7.1	13 Δ / 7.5 Y	IP 54	75	2BH1 810-1H D 4 8 7)	221	1 x 110	1 x 111 8)
	10	18.4 Δ / 10.7 Y						

Performances and currents for compressor operation

Voltages at 50 Hz

2BH1 . . . - . .	□	□
230 V Δ / 400 V Y 4)	C	1 6)
400 V Δ / 690 V Y 4)	C	6 6)
185 - 225 V Δ / 320 - 390 V Y	H	1
200 - 240 V Δ / 345 - 415 V Y	H	6
200 - 260 V Δ / 345 - 450 V Y	E	1
400 V Δ / 690 V Y	E	6
required voltage: ■	E	9
EEx e:		
230 V Δ / 400 V Y	D	4
400 V Δ / 690 V Y	D	8
required voltage: ■	D	9

■ Please give required voltage in plain text plus M1 Y.
e.g. 2BH1 800-1AE09
M1 Y
500 V Δ, 50 Hz

Selection example

Application:

e.g. pneumatic conveying

1. Required duty point:
   $\dot{V}$ = 70 m³/h
   Δp = 350 mbar
2. Choose the performance curve which lies closest to the duty point ①.
   In this example, No. 74H
3. Selection and order code:
   No. 74H ≙ Type 2BH1 510-7HH46

1) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at a distance of 1 m. The pump is throttled to a medium inlet pressure, a hose is connected to the discharge side, and a vacuum-relief valve is not fitted.

2) For selecting valves see accessories on pages 16 to 19. The pressure limits of the valves are based on a cooling-agent and ambient temperature of 25 °C, except for the curves 48H to 50H, 116H to 118H, 122H to 124H, (40 °C).

3) For 2BH1 943, only mounting on the end-casing is possible.

4) Permissible voltage range.

Rated voltage acc. to DIN IEC 38*	Permissible voltage range acc. to DIN VDE 0530 or DIN IEC 34-1**
230 V Δ / 400 V Y 400 V Δ / 690 V Y	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y

* Voltage tolerance here ±10 %.

** This voltage range is also indicated on the rating plate, together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is ±5%.

5) With Δ connection, an overload protection with phase failure protection is obligatory.

6) Delivery times on request.

7) Not possible in voltage versions H.1 and C.1 and H.6 and C.6.

8) Pressure-relief valve can only be supplied loose for these types, see accessories.

9) Motors designed for heat class F.

V) Only for vacuum operation.

K) Compressor operation.

This table offers a selection of standard types.
Further versions and electrical connection variants on request.

Accessories see pages 16 to 19.

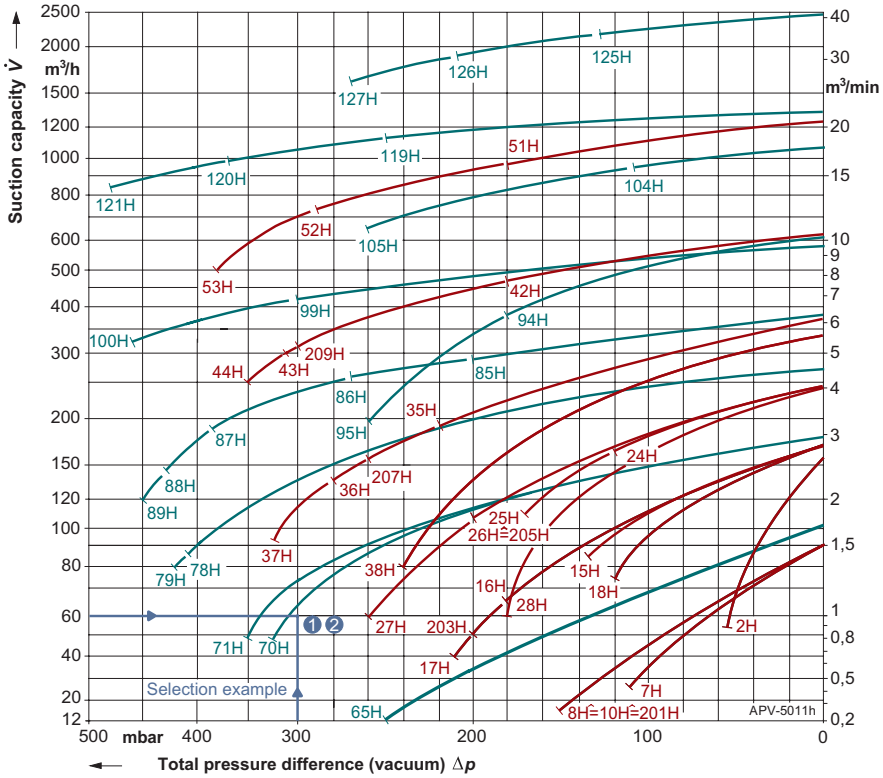
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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Three-Phase 60 Hz

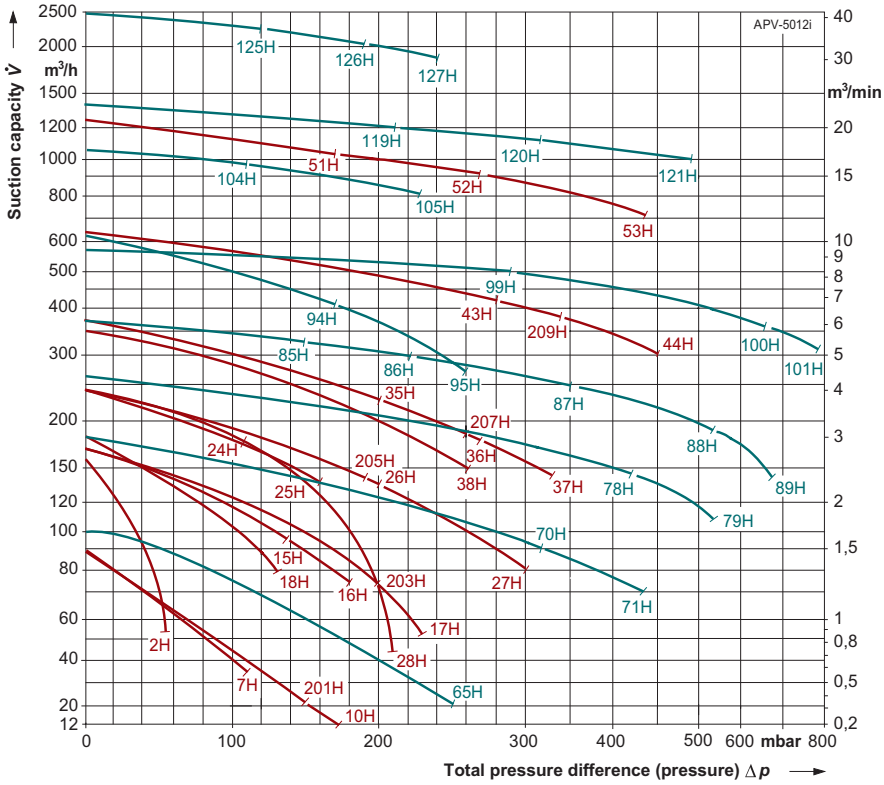
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Selection diagram, vacuum operation



Selection diagram, compressor operation



The performance curves apply for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences apply up to an intake and ambient temperature of 25 °C.

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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Three-Phase 60 Hz

Selection and ordering information for 60 Hz

Curve No.	Motor [9] Rated output kW	Rated current A	Degree of protection	Sound-pressure level [1] dB(A)	Order No. •AVAILABLE EX STOCK	Weight approx. kg	Vacuum-relief valve [2] Items x Type 2BX2...	Pressure-relief valve [2] Items x Type 2BX2...
2H	0.25	1.74 Δ / 1.0 Y	IP 55	61	•2BH1 200-7A H 0 6	8	—	—
7H	0.29	2.0 Δ / 1.15 Y	IP 55	61	•2BH1 300-7A H 0 6	8	1 x 114/142	1 x 115/144
10H	0.5	2.6 Δ / 1.5 Y	IP 55	61	•2BH1 300-7A H 1 6	10	1 x 114	1 x 115
15H	0.83	3.75 Δ / 2.15 Y	IP 55	64	•2BH1 400-7A H 0 6	13	1 x 114/142	1 x 115/144
16H	1.05	4.35 Δ / 2.5 Y	IP 55	64	•2BH1 400-7A H 1 6	15	1 x 114/142	1 x 115/144
17H	1.5	6.9 Δ / 4.0 Y	IP 55	64	•2BH1 400-7A H 2 6	16	1 x 114/142	1 x 115/144
18H	0.85	3.6 Δ / 2.1 Y	IP 55	64	•2BH1 490-7A H 1 6	14	—	—
24H	0.93	4.0 Δ / 2.3 Y	IP 55	73	•2BH1 500-7A H 0 6	18	1 x 114/146	2 x 115/148
25H	1.5	6.9 Δ / 4.0 Y	IP 55	73	•2BH1 500-7A H 1 6	20	1 x 114/146	1 x 115/148
26H	2.05	7.6 Δ / 4.4 Y	IP 55	73	•2BH1 500-7A H 2 6	21	1 x 114/146	1 x 115/148
27H	2.55	10.3 Δ / 6.0 Y	IP 55	73	•2BH1 500-7A H 3 6	25	1 x 114/146	1 x 115/148
28H	1.7	7.6 Δ / 4.4 Y	IP 55	73	•2BH1 590-7A H 2 6	21	—	—
35H	2.55	11.2 Δ / 6.5 Y	IP 55	73	•2BH1 600-7A H 1 6	29	1 x 114/146	2 x 115
36H	3.45	14.2 Δ / 8.2 Y	IP 55	73	2BH1 600-7A H 2 6	34	1 x 114/146	1 x 115
37H	4.6	9.6 Δ	IP 55	73	•2BH1 600-7A C 3 6	42	1 x 114/146	1 x 115
38H	3.5	14.2 Δ / 8.2 Y	IP 55	73	•2BH1 690-7A H 2 6	31	—	—
42H	4.6	8.3 Δ	IP 54	75	2BH1 800-1A C 0 6V)	112	2 x 114	—
43H	6.3	12.6 Δ	IP 54	75	•2BH1 800-1A C 1 6	126	1 x 114	2 x 115[8]
44H	8.6	15.3 Δ	IP 54	75	2BH1 800-1A C 2 6	128	1 x 114	1 x 115[8]
51H	11	17.5 Δ	IP 54	80	•2BH1 900-1A C 0 6	172	1 x 152	1 x 153[8]
52H	15.3	25 Δ	IP 54	80	•2BH1 900-1A C 1 6	191	3 x 114	1 x 151[8]
53H	22.7	39 Δ	IP 54	80	•2BH1 900-1A C 2 6	204	2 x 114	3 x 115[8]
65H	0.89	2.1 Y	IP 55	66	2BH1 310-7H C 2 1	14	1 x 114/142	1 x 115/144
③ 70H	2.15	3.7 Y	IP 55	69	2BH1 410-7H C 3 1	24	1 x 114/142	1 x 115/144
71H	2.55	10.3 Δ / 6.0 Y	IP 55	69	•2BH1 410-7H H 4 6	27	1 x 114/142	1 x 115/144
78H	3.45	14.2 Δ / 8.2 Y	IP 55	76	•2BH1 510-7H H 4 6	39	1 x 114/146	1 x 115/148
79H	4.6	8.7 Δ	IP 55	76	2BH1 510-7H H 5 6	43	1 x 114/146	1 x 115/148
85H	2.55	10.3 Δ / 6.0 Y	IP 55	77	•2BH1 610-7H H 1 6	42	2 x 114/146	2 x 115/148
86H	3.45	14.2 Δ / 8.2 Y	IP 55	77	•2BH1 610-7H H 2 1	47	2 x 114/146	2 x 115/148
87H	4.6	9.6 Δ	IP 55	77	•2BH1 610-7H C 3 6	53	1 x 114/146	2 x 115/148
88H	6.3	14.5 Δ	IP 54	77	•2BH1 610-1H C 4 6	70	1 x 114/146	1 x 115/148
89H	8.6	13.5 Δ	IP 54	77	•2BH1 610-1H C 5 6	77	1 x 114/146	1 x 115
94H	6.3	11.4 Δ	IP 54	80	•2BH1 640-1G C 4 6	73	2 x 114/146	3 x 115/148
95H	8.6	14.5 Δ	IP 54	80	2BH1 640-1G C 5 6	86	1 x 114/146	2 x 115/148
99H	8.6	15.3 Δ	IP 54	79	•2BH1 810-1H C 2 6	169	2 x 114	3 x 115[8]
100H	12.6	23 Δ	IP 54	79	•2BH1 810-1H C 3 6	205	1 x 114	2 x 115[8]
101H	17.3	29.5 Δ	IP 54	79	2BH1 810-1H C 4 6K)	221	—	2 x 115[8]
104H	8.6	15.3 Δ	IP 54	79	•2BH1 840-1 J C 2 6	160	1 x 152	1 x 153[8]
105H	12.6	23 Δ	IP 54	80	•2BH1 840-1 J C 3 6	200	3 x 114	1 x 151[8]
119H	15.5	25.5 Δ	IP 54	80	2BH1 910-1H C 1 6	265	1 x 152	1 x 153[8]
120H	20	34.5 Δ	IP 54	80	•2BH1 910-1H C 2 6	278	1 x 150	1 x 153[8]
121H	26.8	43.5 Δ	IP 54	85	•2BH1 910-1H C 3 6	295	3 x 114	1 x 151[8]
125H	17.5	29.5 Δ	IP 54	85	2BH1 943-1G C 2 6[3]	270	1 x 154	1 x 155[8]
126H	24.2	39 Δ	IP 54	85	•2BH1 943-1G C 3 6[3]	300	1 x 152	1 x 155[8]
127H	29	46 Δ	IP 54	85	2BH1 943-1G C 4 6[3]	330	1 x 152	1 x 153[8]

Selection and ordering information for 60 Hz, EEx e II T3

201H	0.53	1.25 Y	IP 54	61	2BH1 300-1A G 2 4[7]	10	1 x 114/142	1 x 115/144
203H	1.25	2.4 Y	IP 54	64	2BH1 400-1A G 2 4[7]	16	1 x 114/142	1 x 115/144
205H	1.95	3.7 Y	IP 54	73	2BH1 500-1A G 3 4[7]	24	1 x 114/146	1 x 115/148
207H	3.8	6.5 Y	IP 54	76	2BH1 600-1A G 3 4[7]	49	1 x 114/146	1 x 115
209H	6.5 7.8	10.9 Δ 13 Δ	IP 54	75	2BH1 800-1A G 2 8[7]	132	1 x 114	1 x 115

Performances and currents for compressor operation

Voltages at 60 Hz

2BH1 . . . - . .	□	. □
460 V Y[4]	C	1[6]
460 V Δ[4]	C	6[6]
200 - 240 V Δ / 345 - 415 V Y	H	1
220 - 275 V Δ / 380 - 480 V Y	H	6
required voltage: ■	F	9
EEx e:		
460 V Y	G	4
460 V Δ	G	8
required voltage: ■	G	9

■ Please give required voltage in plain text and also give M1 Y.
e.g. 2BH1 800-1AF09
M1 Y
500 V, 60 Hz

Selection example

Application:

e.g. suction lifter

① Required duty point:
$\dot{V}$ = 60 m³/h at 60 Hz
Δp = 300 mbar

② Choose the performance curve which lies closest to the duty point ①.
In this example, No. 70H

③ Selection and order code:
No. 70H ≙ Type 2BH1 410-7HC31

1) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at a distance of 1 m. The pump is throttled to a medium inlet pressure, a hose is connected to the discharge side, and a vacuum-relief valve is not fitted.

2) For selecting valves see accessories on pages 16 to 19. The pressure limits of the valves are based on a cooling-agent and ambient temperature of 25 °C, except for the curves 48H to 50H, 116H to 118H, 122H to 124H, (40 °C).

3) For 2BH1 943, only mounting on the end-casing is possible.

4) Permissible voltage range.

Rated voltage acc. to DIN IEC 38*	Permissible voltage range acc. to DIN VDE 0530 or DIN IEC 34-1**
230 V Δ / 400 V Y 400 V Δ / 690 V Y	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y

* Voltage tolerance here ±10%.

** This voltage range is also indicated on the rating plate, together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is ±5%

5) With Δ connection, an overload protection with phase failure protection is obligatory.

6) Delivery times on request.

7) Not possible in voltage versions H.1 and C.1 and H.6 and C.6.

8) Pressure-relief valve can only be delivered loose for these types, see accessories.

9) Motors designed for heat class F.

V) Only for vacuum operation.

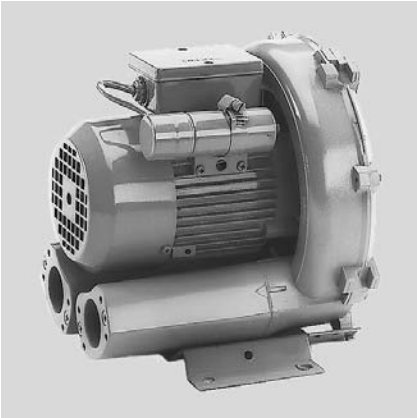
K) Compressor operation.

This table offers a selection of standard types.
Further versions and electric connection variants on request.

Accessories see pages 16 to 19.

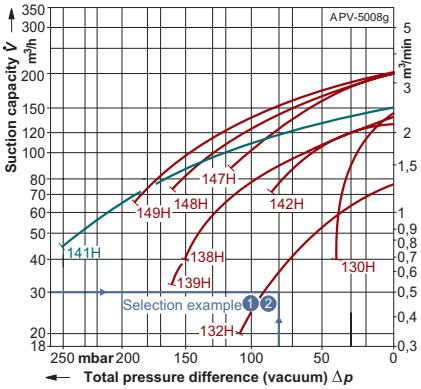
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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Single-Phase AC, 50/60 Hz

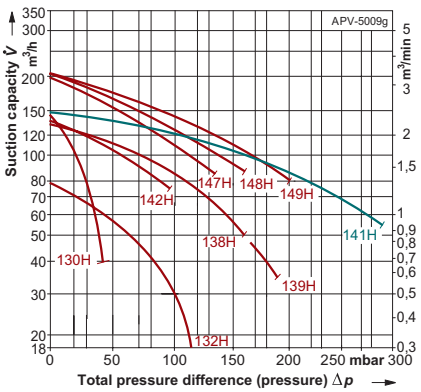


Selection diagram

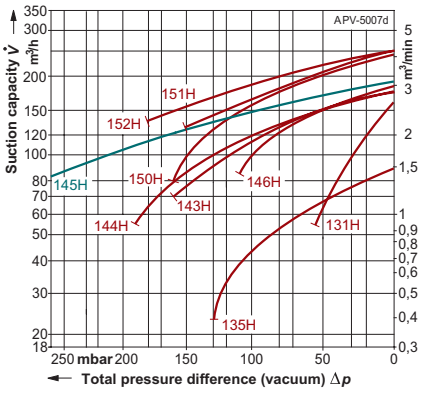
Vacuum operation 50 Hz



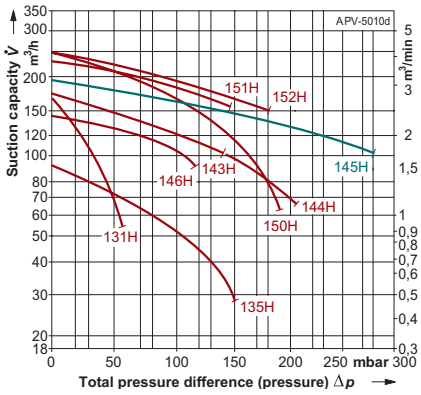
Compressor operation 50 Hz



Vacuum operation 60 Hz



Compressor operation 60 Hz



The performance curves apply for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

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ELMO-G Vacuum Pumps/Compressors, Range 2BH1, Single-Phase AC, 50/60 Hz

with single-phase AC motor and integral continuous duty capacitor

Selection and ordering information for 50 Hz

Curve No.	Motor: Rated output kW	Motor: Rated current A	Degree of protection	Capacitor: Capacity µF	Sound-pressure level [1] dB(A)	Order No. • AVAILABLE EX STOCK	Weight approx. kg	Vacuum-relief valve [2] Items x Type 2BX2...	Pressure-relief valve [2] Items x Type 2BX2...
130H	0.25	1.95	IP 55	8	57	•2BH1 200-7A A 0 1	8	—	—
3 132H	0.37	2.6	IP 55	10	58	•2BH1 300-7A A 1 1	10	1 x 110/141	1 x 111/143
138H	0.8	5.2	IP 55	20	63	•2BH1 400-7A A 1 1	15	1 x 110/141	1 x 111/143
139H	1.1	6.2	IP 55	25	63	2BH1 400-7A A 2 1	17	1 x 110/141	1 x 111/143
141H	1.5	9.1	IP 55	40	66	2BH1 410-7H A 3 1	19	1 x 110/141	1 x 111/143
142H	0.5	4.1	IP 55	20	63	2BH1 490-7A A 1 1	15	—	—
147H	1.2	7.9	IP 55	40	66	2BH1 590-7A A 2 1	21	—	—
148H	1.1	6.9	IP 55	25	66	2BH1 500-7A A 1 1	20	1 x 110/145	1 x 111/147
149H	1.5	9	IP 55	40	66	2BH1 500-7A A 2 1	21	1 x 110/145	1 x 111/147

Motor-rated voltage [3]: 230 V

Capacitor, continuous duty voltage: 450 V

Selection and ordering information for (50) 60 Hz

Curve No.	Motor: Rated output kW	Motor: Rated current A	Degree of protection	Capacitor: Capacity µF	Sound-pressure level [1] dB(A)	Order No.	Weight approx. kg	Vacuum-relief valve [2] Items x Type 2BX2...	Pressure-relief valve [2] Items x Type 2BX2...
131H	0.32	4.8	IP 54	20	61	2BH1 200-2A B 0 6	8	—	—
135H	0.45	6.3	IP 55	40	61	2BH1 300-7A B 1 6	10	1 x 114	1 x 115
143H	0.9	11.6	IP 55	80	64	2BH1 400-7A B 1 6	14	1 x 114/142	1 x 115/144
144H	1.3	16.4	IP 55	100	64	2BH1 400-7A B 2 6	16	1 x 114/142	1 x 115/144
145H	1.75	21.5	IP 54	150	69	2BH1 410-1H B 3 6	24	1 x 114/142	1 x 115/144
146H	0.62	10	IP 55	60	64	2BH1 490-7A B 1 6	14	—	—
150H	1.75	21.5	IP 55	150	73	2BH1 590-7A B 2 6	21	—	—
151H	1.3	16	IP 54	100	73	2BH1 500-1A B 1 6	20	1 x 114/146	1 x 115/148
152H	1.75	21.5	IP 54	150	73	2BH1 500-1A B 2 6	21	1 x 114/146	1 x 115/148

Motor-rated voltage [3]: 115 V

Capacitor, continuous duty voltage: 240 V

Other voltages

2BH1 . . . -. .	□	□
Required voltage:	↑	↑
- 50 Hz ■	A	9
- 60 Hz ■	B	9

■ Please give required voltage in plain text and also give M1 Y.
e.g. 2BH1 800-1AA09
M1 Y
200 V, 50 Hz

Selection example

Application:

e.g. sewing machines

1. Required duty operating point:
   $\dot{V}$ = 30 m³/h
   Δp = 80 mbar at 50 Hz
2. Choose the performance curve which lies closest to the duty point ①.
   In this example, No. **132H**
3. Selection and order code:
   No. **132H** ≙ Type 2BH1 300-7AA11

1) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at 1 m distance at medium throttle and with a connected hose line on the pressure-side; without vacuum-relief valve.

2) For selection and ordering information, see accessories. The pressure-relief values of the valves are based on a coolant and ambient temperature of 25 °C.

3) Tolerance ±5%.
If during continuous duty only up to 90% of the maximum permissible end pressure are used, the permissible voltage tolerance is increased to ±10%.

Accessories see pages 16 to 19.

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ELMO-GS Vacuum Pumps/Compressors, Range 2BH1 with Integrated Frequency Converter

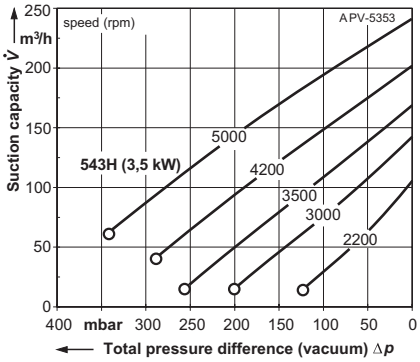


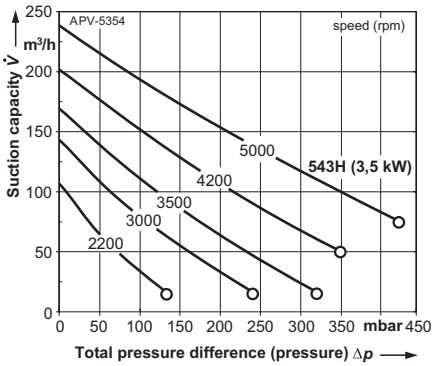
Selection diagram

Vacuum operation

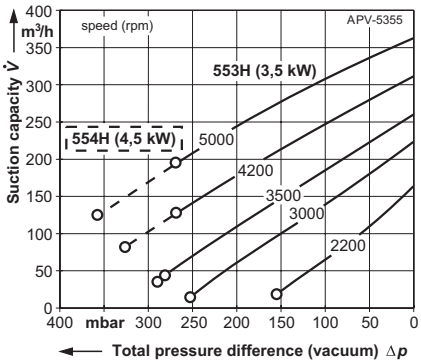
Compressor operation

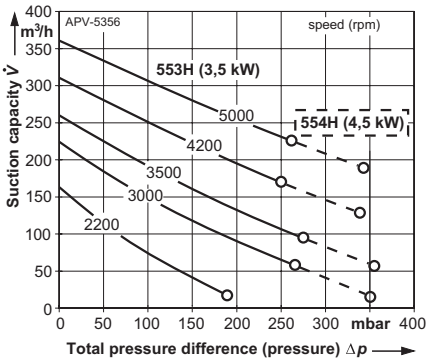
ELMO-GS types 2BH1 400-7AS..



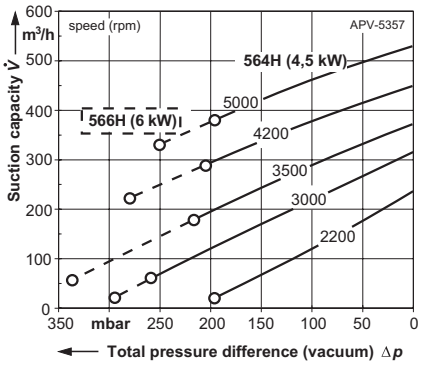


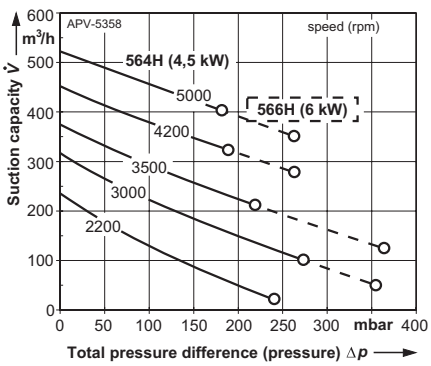
ELMO-GS types 2BH1 500-7AS..





ELMO-GS types 2BH1 600-7AS..





The performance curves are valid for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

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ELMO-GS Vacuum Pumps/Compressors, Range 2BH1, with Integrated Frequency Converter

Selection and ordering information — 3 ~ 50 … 60 Hz, IP 54 (Converter IP 55)

Curve No. Speed	Order No.	Input frequency	Rated output	Input voltage [1]	Input current	Max. differential pressure [2]		Sound-pressure level [3]	Weight approx.
						Vacuum p.p.	Compressor		
rpm		Hz	kW	V	A	mbar	mbar	dB(A)	kg
ELMO-GS types 2BH1 400-7AS..									
543H	**2BH1 400-7AS42**	47 … 63	3.5	380 … 480	6.4	—	—	—	27
5000						340	425	on request	
4200						290	350	on request	
3500						260	325	on request	
3000						200	245	63	
2200						125	135	on request	
ELMO-GS types 2BH1 500-7AS..									
553H	**2BH1 500-7AS32**	47 … 63	3.5	380 … 480	6.4	—	—	—	29
5000						270	260	on request	
4200						270	250	on request	
3500						280	275	on request	
3000						250	265	66	
2200						155	190	on request	
554H	**2BH1 500-7AS62**	47 … 63	4.5	380 … 480	10	—	—	—	32
5000						355	340	on request	
4200						325	340	on request	
3500						290	355	on request	
3000						250	350	66	
2200						155	190	on request	
ELMO-GS types 2BH1 600-7AS..									
564H	**2BH1 600-7AS62**	47 … 63	4.5	380 … 480	10	—	—	—	36
5000						195	180	on request	
4200						205	190	on request	
3500						215	220	on request	
3000						260	275	72	
2200						195	240	on request	
566H	**2BH1 600-7AS72**	47 … 63	6	380 … 480	12.1	—	—	—	43
5000						250	265	on request	
4200						280	265	on request	
3500						335	365	on request	
3000						295	355	72	
2200						195	240	on request	

1) Permissible voltage range: 3 ~ voltage at converter: 380 ... 480 V: Voltage tolerance: ±10%
Input frequency: 47... 63 Hz
Other voltages on request.
Version with separately located converter on request.

2) For the differential pressure limitation, vacuum-/pressure-relief valves are available as accessories.

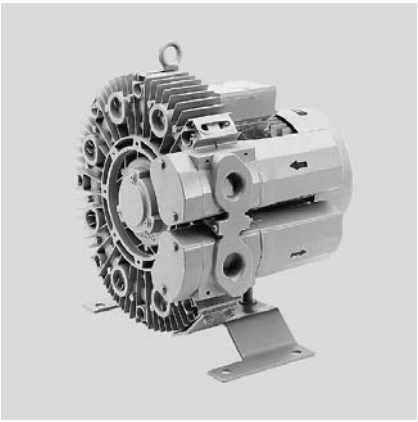
3) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at 1 m distance at medium throttle and with a connected hose line on the pressure-side (vacuum pump)/suction-side (compressor); without vacuum-relief valve/pressure-relief valve.

Accessories on request.

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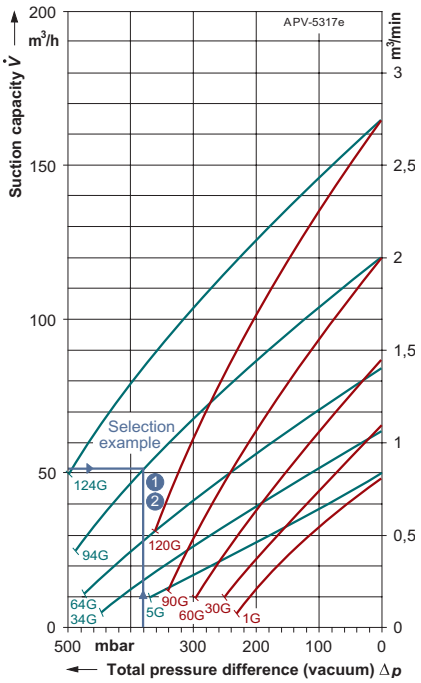
ELMO-G Vacuum Pumps/Compressors, Range 2BH7, Three-Phase 50/60 Hz

G

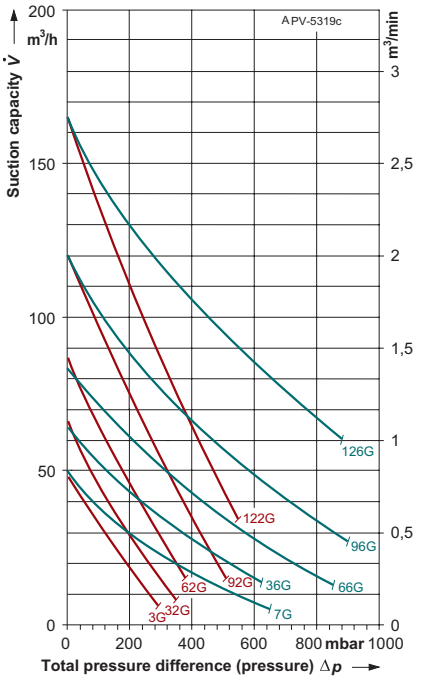


Selection diagram

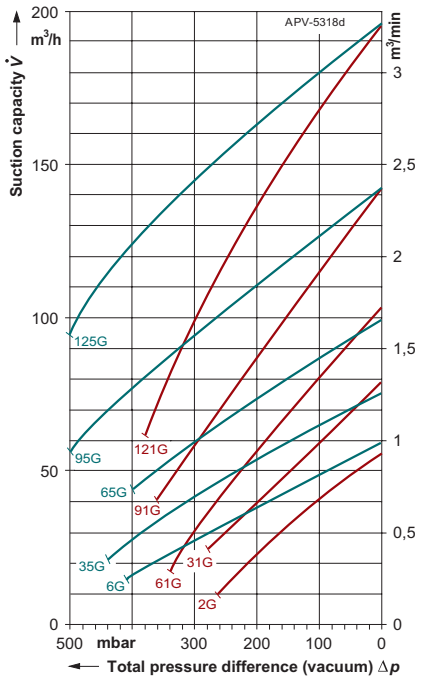
Vacuum operation 50 Hz



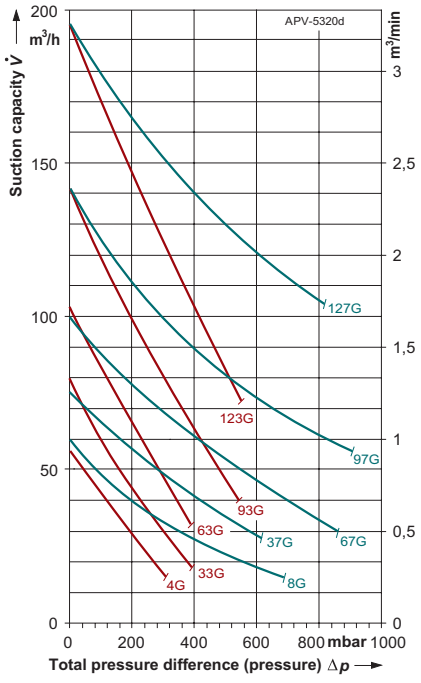
Compressor operation 50 Hz



Vacuum operation 60 Hz



Compressor operation 60 Hz



The performance curves are valid for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

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ELMO-G Vacuum Pumps/Compressors, Range 2BH7, Three-Phase 50/60 Hz

Selection and ordering information for 50 Hz 3AC, IP 55

Curve No.	Motor Rated output kW	Motor Rated current A	Sound-pressure level [1] dB(A)	Order No. • AVAILABLE EX STOCK	Weight approx. kg	Vacuum-relief valve [2] Items x Type 2BX2...	Pressure-relief valve [2] Items x Type 2BX2...
Vacuum pumps							
1G	0.55	3.55 Δ / 2.05 Y	57	•2BH7 210-0A C 1 1 -7	16	1 x 110/141	—
30G	0.55	3.55 Δ / 2.05 Y	57	2BH7 310-0A C 1 1 -7	16	1 x 110/141	—
60G	1.1	5.7 Δ / 3.3 Y	58	•2BH7 410-0A C 1 1 -7	23	1 x 110/141	—
90G	1.5	6.3 Δ / 3.65 Y	64	•2BH7 510-0A C 1 1 -8	26	1 x 110/141	—
120G	2.2	9.7 Δ / 5.6 Y	65	•2BH7 610-0A C 1 1 -8	32	1 x 110/141	—
5G	1.3	3.1 Δ / 1.8 Y	58	•2BH7 220-0A C 2 1 -7	24	1 x 110/141	—
34G	1.5	6.3 Δ / 3.65 Y	59	2BH7 320-0A C 5 1 -7	28	1 x 110/141	—
64G	1.5	6.3 Δ / 3.65 Y	61	•2BH7 420-0A C 2 1 -7	33	1 x 110/141	—
③ 94G	2.2	9.7 Δ / 5.6 Y	64	•2BH7 520-0A C 2 1 -8	40	1 x 110/141	—
124G	3.3	11.8 Δ / 6.8 Y	67	•2BH7 620-0A C 3 1 -8	48	1 x 110/141	—
Compressors							
3G	0.55	3.55 Δ / 2.05 Y	57	•2BH7 210-0A C 1 1 -7	16	—	1 x 111/143
32G	0.81	3.1 Δ / 1.8 Y	57	•2BH7 310-0A C 2 1 -7	17	—	1 x 111/143
62G	1.1	5.7 Δ / 3.3 Y	58	•2BH7 410-0A C 1 1 -7	23	—	1 x 111/143
92G	2.2	9.7 Δ / 5.6 Y	64	•2BH7 510-0A C 2 1 -8	29	—	1 x 111/143
122G	3.3	11.8 Δ / 6.8 Y	65	•2BH7 610-0A C 3 1 -8	35	—	1 x 111/143
7G	1.5	6.3 Δ / 3.65 Y	58	•2BH7 220-0A C 5 1 -7	28	—	1 x 111/143
36G	1.5	6.3 Δ / 3.65 Y	59	•2BH7 320-0A C 5 1 -7	30	—	1 x 111/143
66G	3	11.8 Δ / 6.8 Y	61	•2BH7 420-0A C 5 1 -7	39	—	1 x 111/143
96G	4	7.8 Δ / 4.5 Y [4]	65	•2BH7 520-0A C 7 6 -8	51	—	1 x 111/143
126G	5.7	9.4 Δ / 5.4 Y [4]	68	•2BH7 620-0A C 5 6 -8	65	—	1 x 111/143

Rated voltage [3]: 230 Δ / 400 Y (400 Δ / 690 Y [4]), 50 Hz

Selection and ordering information for 60 Hz 3AC, IP 55

Curve No.	Motor Rated output kW	Motor Rated current A	Sound-pressure level [1] dB(A)	Order No. • AVAILABLE EX STOCK	Weight approx. kg	Vacuum-relief valve [2] Items x Type 2BX2...	Pressure-relief valve [2] Items x Type 2BX2...
Vacuum pumps							
2G	0.63	2.1 Y	62	•2BH7 210-0A C 1 1 -7	16	1 x 114/142	—
31G	0.63	2.1 Y	62	2BH7 310-0A C 1 1 -7	16	1 x 114/142	—
61G	1.3	3.25 Y	62	•2BH7 410-0A C 1 1 -7	23	1 x 114/142	—
91G	1.75	3.7 Y	68	•2BH7 510-0A C 1 1 -8	26	1 x 114/142	—
121G	2.6	5.8 Y	71	•2BH7 610-0A C 1 1 -8	32	1 x 114/142	—
6G	0.94	1.9 Y	62	•2BH7 220-0A C 2 1 -7	24	1 x 114/142	—
35G	1.75	3.7 Y	63	2BH7 320-0A C 5 1 -7	28	1 x 114/142	—
65G	1.75	3.7 Y	66	•2BH7 420-0A C 2 1 -7	33	1 x 114/142	—
95G	2.6	5.7 Y	70	•2BH7 520-0A C 2 1 -8	40	1 x 114/142	—
125G	3.8	6.8 Y	71	•2BH7 620-0A C 3 1 -8	48	1 x 114/142	—
Compressors							
4G	0.63	2.1 Y	62	•2BH7 210-0A C 1 1 -7	16	—	1 x 115/144
33G	0.94	1.9 Y	62	•2BH7 310-0A C 2 1 -7	17	—	1 x 115/144
63G	1.3	3.25 Y	62	•2BH7 410-0A C 1 1 -7	23	—	1 x 115/144
93G	2.6	5.7 Y	68	•2BH7 510-0A C 2 1 -8	29	—	1 x 115/144
123G	3.8	6.8 Y	71	•2BH7 610-0A C 3 1 -8	35	—	1 x 115/144
8G	1.75	3.7 Y	62	•2BH7 220-0A C 5 1 -7	28	—	1 x 115/144
37G	1.75	3.7 Y	63	•2BH7 320-0A C 5 1 -7	30	—	1 x 115/144
67G	3.5	6.8 Y	66	•2BH7 420-0A C 5 1 -7	39	—	1 x 115/144
97G	4.6	8.0 Δ [5]	71	•2BH7 520-0A C 7 6 -8	51	—	1 x 115/144
127G	6.6	9.5 Δ [5]	72	•2BH7 620-0A C 5 6 -8	65	—	1 x 115/144

Rated voltage [3]: 460 Y (460 Δ[5]), 60 Hz

Other voltages

2BH7 . . . - . .	□	□
50 Hz:		
400 V Δ / 690 V Y [3]	C	6
required voltage: ■	E	9
60 Hz:		
460 V Δ [3]	C	6
required voltage: ■	F	9

■ Please give required voltage in plain text and add M1 Y.
Single-phase AC on request.
e.g. 2BH7 210-0AF19-7
M1 Y
380 V Δ, 60 Hz

Selection example

Application:

e.g. holding and lifting

① Required duty point:
$\dot{V}$ = 52 m³/h
Δp = 380 mbar
at 50 Hz

② Choose the performance curve which lies closest to the duty point ①.
In this example, No. 94G

③ Selection and order code:
No. 94G ≙ Type 2BH7 520-0AC21-8

1) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at a distance of 1 m. The pump is throttled to a medium inlet pressure, a hose is connected to the discharge side, and a vacuum-relief valve is not fitted.

2) For selecting valves see accessories on pages 16 to 19. The pressure limits of the valves are based on a cooling-agent and ambient temperature of 25 °C,

Rated voltage acc. to DIN IEC 38*	Permissible voltage range acc. to DIN VDE 0530 or DIN IEC 34-1**	Frequency Hz
230 V Δ / 400 V Y 400 V Δ / 690 V Y	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y	50
460 V Y 460 V Δ	440...480 V Y 440...480 V Δ	60

3) Permissible voltage range.

* Voltage tolerance here ±10%.

** This voltage range is also indicated on the rating plate, together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is ±5%.

Accessories see pages 16 to 19.

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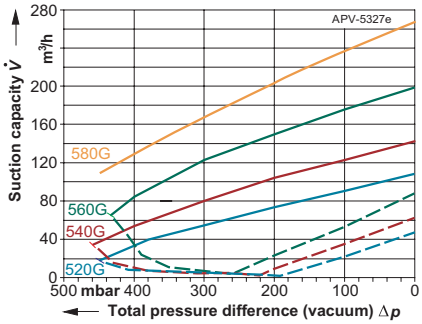
ELMO-GS Vacuum Pumps/Compressors, Range 2BH7, with Integrated Frequency Converter

G

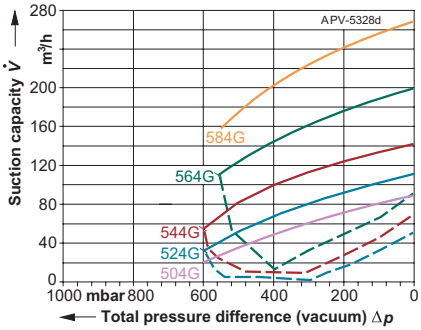


Selection diagram, vacuum operation

2BH7 .10-0AS (single-stage)

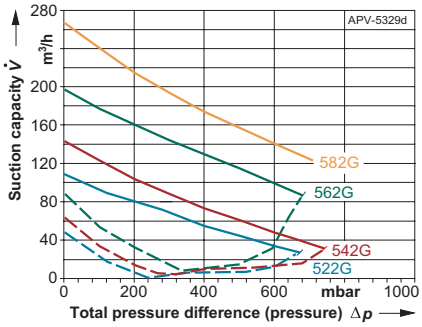


2BH7 .20-0AS (two-stage)

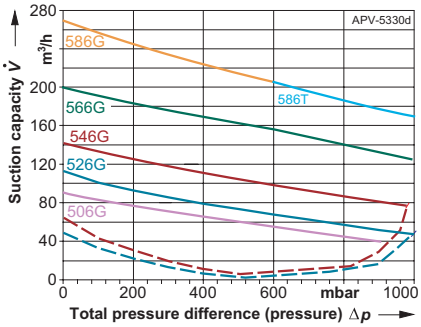


Selection diagram, compressor operation

2BH7 .10-0AS (single-stage)



2BH7 .20-0AS (two-stage)



The performance curves are valid for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

Selection and ordering information

Curve No.	Motor			Sound-pressure level [1]	Order No.	Weight approx.	Vacuum-relief valve [2] Items x Type	Pressure-relief valve [2] Items x Type
	Rated output	Rated voltage [3]	Rated current					
	kW	V	A	dB(A)		kg	2BX2...	2BX2...
Vacuum pumps								
520G	2.3	380...480 V	4.7	76	2BH7 310-0AS52-7	19	1 x 110	—
540G	3.3	380...480V	6.4	76	2BH7 410-0AS32-7	29	1 x 110	—
560G	4.5	380...480 V	10	78	2BH7 510-0AS42-8	36	1 x 110	—
580G	4.5	380...480 V	10	77	2BH7 610-0AS32-8	36	1 x 110	—
504G	2.3	380...480 V	4.7	74	2BH7 220-0AS52-7	29	1 x 110	—
524G	2.3	380...480 V	4.7	76	2BH7 320-0AS52-7	34	1 x 110	—
544G	3.3	380...480 V	6.4	76	2BH7 420-0AS32-7	37	1 x 110	—
564G	4.5	380...480 V	10	78	2BH7 520-0AS42-8	48	1 x 110	—
584G	6	380...480 V	12.2	80	2BH7 620-0AS42-8	59	1 x 110	—
Compressors								
522G	3.3	380...480 V	6.4	76	2BH7 310-0AS62-7	22	—	on request
542G	4.5	380...480 V	10	76	2BH7 410-0AS52-7	33	—	on request
562G	6	380...480 V	12.2	79	2BH7 510-0AS62-8	42	—	on request
582G	8.3	380...480 V	16	77	2BH7 610-0AS52-8	54	—	on request
506G	3.3	380...480 V	6.4	74	2BH7 220-0AS62-7	32	—	on request
526G	4.5	380...480 V	10	76	2BH7 320-0AS82-7	41	—	on request
546G	6	380...480 V	12.2	76	2BH7 420-0AS72-7	47	—	on request
566G	8.3	380...480 V	16	78	2BH7 520-0AS82-8	66	—	on request
586G	8.3	380...480 V	16	80	2BH7 620-0AS52-8	66	—	on request
586T	11.3	380...480 V	25	80	2BH7 620-0AT61-8 [4]	74	—	on request

Dimensions see page 28.

1) Measuring-surface sound-pressure level, given for 5,000 rpm, acc. to EN 21680-1, measured at 1 m distance at medium throttle and a connected hose line on the suction-side (compressor)/pressure-side (vacuum pump); without pressure-/vacuum-relief valve.

2) For selection and ordering information, see accessories. The pressure-relief values of the valves are based on a coolant and ambient temperature of 25 °C.

3) Tolerance ±10%. Input frequency 47 to 63 Hz. Other voltages on request.

Version with separate converter on request.

4) Without converter: suitable for operation with separate converter 6SE3222-4DG40.

Accessories see page 16 to 19.

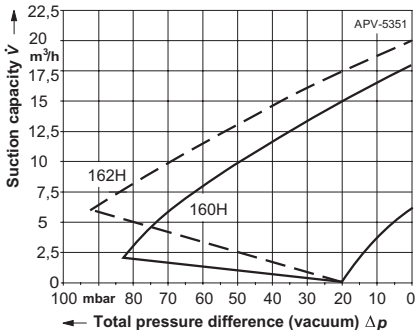
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ELMO-G Vacuum Pumps/Compressors, Range 2BH100
"Little Star"

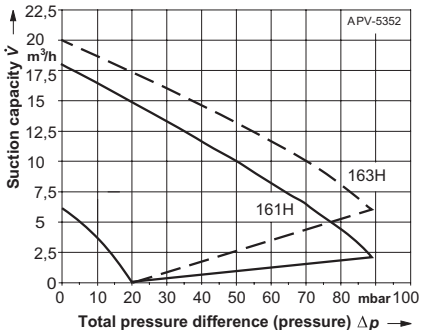


Selection diagram

Vacuum operation



Compressor operation



Selection and ordering information

ELMO-G types 2BH100

Curve No. / Speed n	Control voltage (0...10 V DC)	Order No. • AVAILABLE EX STOCK	Rated output	Rated voltage	Rated current	Max. differential pressure: Vacuum p.p.	Max. differential pressure: Compressor	Sound-pressure level [1]	Weight approx.
rpm	V		W	V	A	mbar	mbar	dB(A)	kg
IP 66, with cover (electronics as accessories [2])									
160H / 161H		• **2BH1 000-0AA42** [2]	70	24 DC	4.25	—	—	48	1.0
$n_{max.}$	10					83	89		
7000	7 ± 0.2					78	87		
6000	6.1 ± 0.2					69	68		
5000	5.2 ± 0.2					51	54		
4000	4.35 ± 0.2					34	35		
3000	3.5 ± 0.2					20	20		
IP 66, with cover and integrated electronics									
162H / 163H		• **2BH1 000-0AB32**	80	24 DC	4.5	—	—	48	1.0
$n_{max.}$	10					92	89		
7000	7.15 ± 0.1					81	88		
6000	6.1 ± 0.1					68	72		
5000	5.1 ± 0.1					52	55		
4000	4.05 ± 0.1					34	36		
3000	3.05 ± 0.1					20	21		

Version without cover available on request.

1) Measuring-surface sound-pressure level acc. to EN 21680, T1, measured at 1 m distance with closed suction and pressure-side, at 7400 rpm. Tolerance: ±3 dB(A).

2) Characteristic data determined with external electronics, type 2BX4 130, or abbreviation "B30" (see accessories).

Accessories see page 19.

The performance curves are valid for pumping air at 15 °C at the inlet flanges with an air pressure of 1013 mbar with a tolerance of ±10%. The total pressure differences are valid up to an intake and ambient temperature of 25 °C.

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Accessories for ELMO-G/GS Vacuum Pumps and Compressors

Selection and ordering information

		For ELMO-G/GS Type	Order No.	∅ thread mm / inches	Weight approx. kg
	**Suction-side through-filter for vacuum pumps** [1] incl. mounting kit for fixed installation: Gasket, threaded flange, double pipe nipple, pipe elbow, through-filter	**2BH1** 3	**2BX2 060**		2.7
		2BH7 2..-...1. /-...2. /-...4. / 2BH7 3 / 74 / 75 / 76	**2BX2 060**		2.7
		2BH7 2..-...5.	**2BX4 060**		2.7
	Suction-side through-filter for vacuum pumps [1] incl. gasket, hose flange [2], double nipple, through-filter, hose clips, without hose line between filter and vacuum pump	**2BH1** 2 / 2BH1 40.-...0. /-...1. /-...2. / 2BH1 49 / 2BH15 /16	**2BX2 061**		5
		2BH1 40.-...3. /-...4. / 2BH1 41	**2BX2 064**		5
	Suction-side through-filter for vacuum pumps [1] incl. double nipple, through-filter, hose clips, without hose line between filter and vacuum pump	**2BH1** 8	**2BX2 063**		5.5
	including connecting flange, gasket, reducing nipple, through-filter, hose clips with hose line between filter and vacuum pump	2BH1 90 / 91	**2BX2 065**		20
		2BH1 94	**2BX2 066**		22
	Replacement filter cartridge for 2BX2 060		**2BY7 101**		0.4
	for 2BX2 061/063/064		**2BY7 103**		0.6
	for 2BX2 065/066		**2BY7 104**		0.8
	**Suction filter for compressors** [1] including mounting kit: Gasket, threaded flange [3], pipe elbow and, dep. on ELMO-G type, spigot, adapter flange, nipple, reducing coupling	**2BH1** 2 ./ 2BH1 40.-...0. / -...1. / -...2. / 2BH1 49	**2BX2 101**		3
		2BH1 3 .	**2BX2 100**		1.4
		2BH1 40.-...3. / -...4. / 2BH1 41	**2BX2 107**		3
		2BH1 5. / 60 / 61 / 69	**2BX2 102**		2.7
		2BH1 64	**2BX2 103**		5.1
		2BH1 8.	**2BX2 104**		5.1
		2BH7 2..-..C1. / -..C2. / -..C4. / 2BH7 3..-..C.. / 2BH7 4..-..C..	**2BX2 100**		1.4
		2BH7 2..-..C5..	**2BX4 080**		1.4
		2BH7 3..-..S.. / 2BH7 4..-..S.. / 2BH7 5 / 76	**2BX2 108**		3
	Through filter, suction-side	2BH1 90 / 91	**2BX2 065**		20
		2BH1 94	**2BX2 066**		22
	Replacement filter cartridge for 2BX2 100		**2BY7 100**		0.4
	for 2BX2 101 / 102 / 107 / 108		**2BY7 101**		0.5
	for 2BX2 103 / 104		**2BY7 102**		0.6
	**Additional silencer** incl. gasket and screws — Silencing dB				
		3 **2BH1** 2	**2BX1 030**	50	0.5
		4 2BH1 3	**2BX1 031**	40	0.45
		3 2BH1 40.-...0. / -...1. / -...2. / 2BH1 49	**2BX1 030**	50	0.5
	Silencing was measured at a distance	3 2BH1 40.-...3. / -...4. / 2BH1 41.	**2BX1 045**	50	0.5
	of 1 m at medium throttle with a	4 2BH1 5	**2BX1 030**	50	0.5
	connected hose line on the suction-side	5 2BH1 6	**2BX1 030**	50	0.5
	(vacuum operation) or pressure-side	4 2BH1 8	**2BX1 055**	80	1.2
	(compressor operation).	4 2BH1 90 / 91	**2BX1 056**	115	1.5
		4 2BH1 94	**2BX1 057**	150	1.7
		4 **2BH7** 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX1 031**	40	0.45
		on request 2BH7 2..-...5.	**2BX4 000**	40	0.45
	**Threaded flange** incl. gasket and screws	**2BH1** 2 / 2BH1 40.-...0. / -...1. / -...2. / 2BH1 49	**2BX1 038**	G1 1/2	0.46
		2BH1 3	**2BX1 037**	G1 1/4	0.22
		2BH1 40.-...3. / -...4. / 2BH1 41	**2BX1 040**	G1 1/2	0.46
		2BH1 5 / 16	**2BX1 041**	G2	0.46
		2BH1 90 / 91	**2BX1 042**	G4	1.6
		2BH1 94	**2BX1 043**	G5	5.9
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX1 037**	G1 1/4	0.22
		2BH7 2..-...5.	**2BX4 040**	G1 1/2	0.22

1) All filters are suitable only for separation with dry air and cannot be used for liquids. Installation must be made to ensure that no water can enter the filter.

2) Through-filter 2BX2 064 with hose flange 2BX1 034.

3) Suction filter 2BX2 107 with threaded flange 2BX1 040.

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Accessories for ELMO-G/GS Vacuum Pumps and Compressors

Selection and ordering information

		For ELMO-G/GS Type	Order No.	∅ (thread) mm / inches	Weight approx. kg
	**Hose flange** incl. gasket and screws	**2BH1** 2 / 2BH1 40.-...0. / -...1. / -...2. / 2BH1 49 / 2BH1 5	**2BX1 033**	50	0.11
		2BH1 3	**2BX1 032**	40	0.1
		2BH1 40.-...3. / -...4. / 2BH1 41	**2BX1 034**	50	0.13
		2BH1 6	**2BX1 036**	60	0.17
		2BH1 8	**2BX1 047**	G1 1/2	0.4
		2BH1 90 / 91	**2BX1 048**	114	2.6
		2BH1 94	**2BX1 046**	150	7.5
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX1 032**	40	0.1
		2BH7 2..-...5.	**2BX4 020**	40	0.1
	**1 set of feet** for vertical mounting on the end cover (1 set = 3 pieces)	**2BH1** 2	—		
		2BH1 3 / 14	**2BX2 120**		0.15
		2BH1 5	**2BX2 121**		0.15
		2BH1 6	**2BX2 122**		0.45
		2BH1 8	**2BX2 123**		1.4
		2BH1 90 / 91	**2BX2 123**		1.4
		2BH7 2	**2BX2 135**		0.15
		2BH7 3 / 74	**2BX2 127**		0.15
		2BH7 5 / 76	**2BX2 128**		0.2
	Fixing clamps for floor mounting (1 set = 4 retaining washers, 4 fixing screws M 12 x 20 and 5 clamping devices)	2BH1 943	**2BX2 124**		3.5
	**Vacuum-relief valve, suction-side** [1] with built-on adapter, one gasket and screws				
	for 50-Hz operation:	**2BH1** 3 [2] / 14	**2BX2 141** ■		0.5
		2BH1 5 / 16	**2BX2 145** ■		0.5
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX2 141** ■		0.5
		2BH7 2...-...5.	**2BX2 171** ■		0.5
	for 60-Hz operation:	**2BH1** 3 [2] / 14	**2BX2 142** ■		0.5
		2BH1 5 / 16	**2BX2 146** ■		0.5
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX2 142** ■		0.5
		2BH7 2...-...5.	**2BX2 172** ■		0.5
	**Pressure-relief valve, suction-side** [2] with built-on adapter, one gasket and screws				
	for 50-Hz operation:	**2BH1** 3 [2] / 14	**2BX2 143** ■		0.5
		2BH1 5 / 16	**2BX2 147** ■		0.5
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX2 143** ■		0.5
		2BH7 2...-...5.	**2BX2 173** ■		0.5
	for 60-Hz operation:	**2BH1** 3 [2] / 14	**2BX2 144** ■		0.5
		2BH1 5 / 16	**2BX2 148** ■		0.5
		2BH7 2..-...1. / -...2. / -...4. / 2BH7 3 / 74 / 75 / 76	**2BX2 144** ■		0.5
		2BH7 2...-...5.	**2BX2 174** ■		0.5

1) For the required quantity, see pages 5, 7, 9, 13.

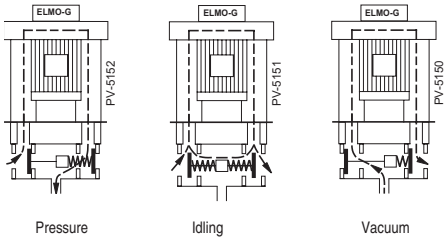
2) Except for 2BH1 30.-.AB1. / -.AH1., on request.

■ Add a "**-Z**" to the order number and the order no. of the ELMO-G should be given as follows: Example 2BX2 142-**Z**
MLFB=2BH1 400-7AH16

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Accessories for ELMO-G/GS Vacuum Pumps and Compressors

Selection and ordering information

	Solenoid valves	Rated voltage	Rated current	For ELMO-G/GS Type	Order No.	Weight approx. kg
	**Changeover valve** Single spool for changeover from vacuum to pressure operation Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	1.5 A	2BH1 30 2BH1 40 2BH1 59 2-phase	**2BX9 328 - 0MA0** **2BX9 328 - 0MC0** **2BX9 328 - 0ME0** on request	2.5
		230 V AC 50 / 60 voltage	0.16 A	2BH1 30 2BH1 40 2BH1 59 2-phase	**2BX9 328 - 0MA1** **2BX9 328 - 0MC1** **2BX9 328 - 0ME1** on request	2.5
	**Changeover valve** Double spool for changeover from/to vacuum, pressure or idling operation Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	0.8 A	2BH1 30 2BH1 40 2BH1 59 2-phase	**2BX9 328 - 0MB0** **2BX9 328 - 0MD0** **2BX9 328 - 0MF0** on request	2.5
		230 V AC 50 / 60 Hz voltage	0.14 A	2BH1 30 2BH1 40 2BH1 59 2-phase	**2BX9 328 - 0MB1** **2BX9 328 - 0MD1** **2BX9 328 - 0MF1** on request	2.5
	**Changeover valve** for changeover from vacuum to pressure operation Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	1.0 A	2BH1 50 2BH1 60 2BH1 69 2-phase	**2BX9 328 - 0ML0** on request	9.6
		230 V AC 50 / 60 Hz voltage	0.13 A	2BH1 50 2BH1 60 2BH1 69 2-phase	**2BX9 328 - 0ML1** on request	9.6
	**Changeover valve** for changeover from vacuum to pressure operation Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	1.0 A	2BH7 .1.	**2BX9 328 - 1MC0**	on request
		230 V AC 50 / 60 Hz voltage	0.13 A	2BH7 .1.	**2BX9 328 - 1MC1**	on request
	Changeover valve for changeover from vacuum to pressure operation Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	on request	2BH1 80 / 81 2BH1 90 / 91	**2BX9 328 - 1MA0** **2BX9 328 - 1MB0**	9.5 10.5
		230 V AC 50 / 60 Hz voltage	on request	2BH1 80 / 81 2BH1 90 / 91	**2BX9 328 - 1MA1** **2BX9 328 - 1MB1**	9.5 10.5
	**Switch-over valve** to switch between two different pressure/vacuum conducts with the same flow direction or flow interruption with one conveyor conduct. Load factor: 100 % Operate time: ≤ 0.35 s Release time: ≤ 0.4 s	24 V DC voltage	2.4 A	2BH1 5 / 16	**2BX9 328 - 0MJ0**	4.8
		230 V AC 50 / 60 Hz voltage	0.5 A	2BH1 5 / 16	**2BX9 328 - 0MJ1**	4.8

for 2BH7: on request.

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Accessories for ELMO-G/GS Vacuum Pumps and Compressors

Selection and ordering information

		For ELMO-G/GS Type	Order No.	Weight approx. kg
 2BX2 11.	**Vacuum-relief valve, suction-side** [1] for pipeline mounting			
	for 50-Hz operation:	**2BH1** 3. to 2BH1 8. 2BH1 900-...1. / -...2. 2BH1 910-...2. / -...3. / -...4. 2BH1 943-...4.	**2BX2 110** ■	0.3
		2BH1 900-...0. / 2BH1 910-...1. 2BH1 943-...2. / -...3.	**2BX2 150** ■ **2BX2 152** ■	14 27
		2BH7	**2BX2 110** ■	0.3
 2BX2 15.	for 60-Hz operation:	**2BH1** 3. to 2BH1 6 2BH1 80 / 81 2BH1 840-...3. 2BH1 900-...1. / -...2. 2BH1 910-...3.	**2BX2 114** ■	0.3
		2BH1 910-...2. 2BH1 840-...2. 2BH1 900-...0. 2BH1 910-...1. 2BH1 943-...3. / -...4.	**2BX2 150** ■ **2BX2 152** ■	14 27
		2BH1 943-...2.	**2BX2 154** ■	54
		2BH7	**2BX2 114** ■	0.3
 2BX2 11.	**Pressure-relief valve, discharge-side** [1] for pipeline mounting up to max. Δp = 600 mbar			
	for 50-Hz operation:	**2BH1** 3. to 2BH1 6 2BH1 80 / 81 2BH1 840-...3. 2BH1 900-...1. / -...2. 2BH1 910-...3. / -...4.	**2BX2 111** ■	0.3
		2BH1 840-...2. 2BH1 900-...0. 2BH1 910-...1. / -...2. / -...4. 2BH1 943-...2. / -...3. / -...4.	**2BX2 151** ■ **2BX2 153** ■	8 18
		2BH7	**2BX2 111** ■	0.3
 2BX2 15.	for 60-Hz operation:	**2BH1** 3. to 2BH1 6 2BH1 80 / 81 2BH1 900-...2. 2BH1 840-...3. 2BH1 900-...1. 2BH1 910-...3.	**2BX2 115** ■	0.3
		2BH1 840-...2. 2BH1 900-...0. 2BH1 910-...1. / -...2. 2BH1 943-...4. 2BH1 943-...2. / -...3.	**2BX2 151** ■ **2BX2 153** ■ **2BX2 155** ■	8 18 33
		2BH7	**2BX2 115** ■	0.3

1) For the required quantity, see pages 5, 7, 9, 13.

■ Please add a "**-Z**" to the order number and give the order number for the ELMO-G as follows: Example 2BX2 142-**Z**
MLFB=2BH1 400-7AH16

Accessories for 2BH100

	Delivery loose **Order No.** • **AVAILABLE EX STOCK**	Delivery with the pump **Abbreviation** [1]	Weight approx. kg
External electronics (Variotronic) [2], **Loose**	• **2BX4 130**	—	0.2
Set of plugs [3], **loose**, eight-pole, for connecting motor Variotronic, comprising: 1 x socket casing, 3 x socket contact AWG 20 5 x socket contact AWG 26, 2 x 1 each spare contact	• **2BX4 131**	—	—
External electronics (Variotronic) [2], **complete**, comprising: Electronics type 2BX4 130, socket set type 2BX4 131	—	**B30**	0.2
Rubber buffer (1 set = 4 pieces) (rubber metal bearing)	• **2BX4 132**	**B31**	—

1) Please add a "**-Z**" to the order number and add the abbreviation as follows: Example 2BH1 000-0AA42-**Z**
B30 + B31

2) With ambient temperatures over 25 °C the operating speed may be less depending on the cooling of the electronics system.

3) Note: Pliers for the socket contacts are not included with delivery; obtainable from Molex Deutschland / Heilbronn; Germany
Fax ++49 (0) 70 66 / 95 55 29; Type 69008-0274.

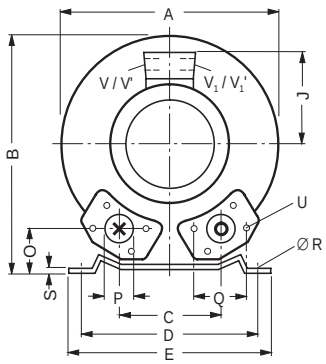
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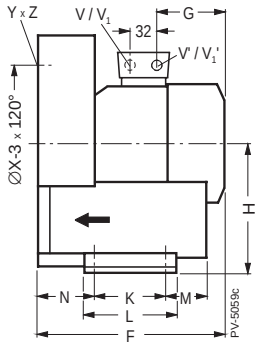
Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

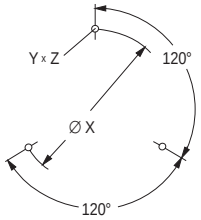
G

Dimensions for 2BH1 20., 2BH1 30., 2BH1 40., 2BH1 49. (mm)

2BH1 30./2BH1 40./2BH1 49.

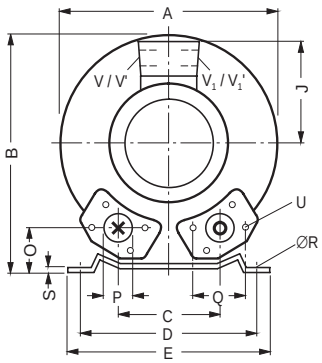


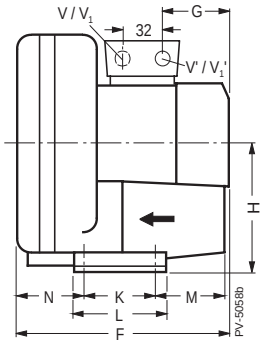




Hole pattern, cover

2BH1 200





Type	Phases	Curve No.	A	B	C	D	E	F	G	H	J	K	L	M	N	O
2BH1 200 - 7AA0.	1 ~	130H	233	250	110	205	230	244	96	136	101	83	108	100	75	52
- 2AB0.		131H							90							
- 7AH0.	3 ~	1H/2H							92							
2BH1 30. - 7A.1.	1 ~	132H/135H	246	247	90	205	230	256	133	128	111	83	108	75	71	39
- 7AD..	3 ~ EEx	200H							108		145					
- 7A.0.	3 ~	3H/7H						219	92		101					
- 7A.1.		6H/10H						256	129		111					
2BH1 40. - 7A.1.	1 ~	138H/143H	285	302	115	225	255	292	156	154	120	95	130	70	75	46
- 7A.2.		139H/144H														
- 7AD..	3 ~ EEx	202H							131		154					
2BH1 40. - 7A.0.	3 ~	11H/15H	285	302	115	225	255	269	129	154	111	95	130	70	75	46
- 7A.1.		12H/16H						292	153		120					
- 7A.2.		13H/17H														
2BH1 49. - 7AA1.	1 ~	142H	285	302	115	225	255	292	156	154	120	95	130	70	75	46
- 7AB1.		146H														
- 7AH1.	3 ~	14H/18H							153							

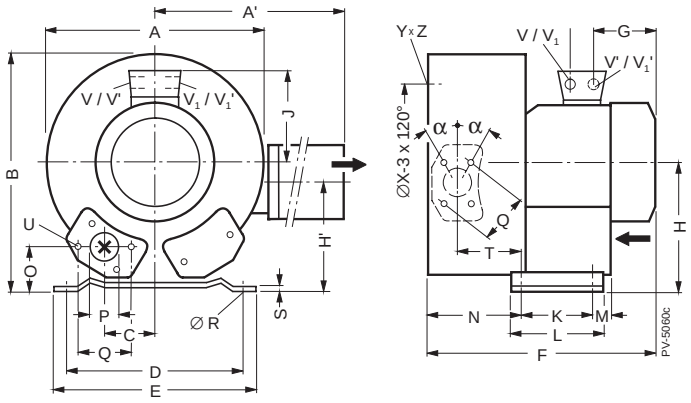
Type	Phases	Curve No.	P	Q	∅ R	S	U	V (1 ~)	V' (1 ~)	V_1 (3 ~)	V'_1 (3 ~)	Y x Z	X holes	∅ X
2BH1 200 - 7AA0.	1 ~	130H	G 1½	72	10	2.5	M 6 x 19	M 16 x 1.5	M 25 x 1.5	—	—	—	—	
- 2AB0.		131H	(15 deep)					—	Pg 11	—	—			
- 7AH0.	3 ~	1H/2H						—	—	M 25 x 1.5	M 16 x 1.5			
2BH1 30. - 7A.1.	1 ~	132H/135H	G 1¼	64	10	2.5	M 6 x 17	M 16 x 1.5	M 25 x 1.5	—	—	M 6 x 15	0°/120°/240°	∅ 140
- 7AD..	3 ~ EEx	200H	(15 deep)					—	—	M 25 x 1.5	M 16 x 1.5			
- 7A.0.	3 ~	3H/7H						—	—					
- 7A.1.		6H/10H						—	—					
2BH1 40. - 7A.1.	1 ~	138H/143H	G 1½	72	12	3	M 6 x 19	M 16 x 1.5	M 25 x 1.5	—	—	M 6 x 15	0°/120°/240°	∅ 174
- 7A.2.		139H/144H	(15 deep)							—	—			
- 7AD..	3 ~ EEx	202H						—	—	M 25 x 1.5	M 16 x 1.5			
2BH1 40. - 7A.0.	3 ~	11H/15H						—	—					
- 7A.1.		12H/16H						—	—					
- 7A.2.		13H/17H						—	—					
2BH1 49. - 7AA1.	1 ~	142H	G 1½	72	12	3	M 6 x 19	M 16 x 1.5	M 25 x 1.5	—	—	M 6 x 15	0°/120°/240°	∅ 174
- 7AB1.		146H	(15 deep)							—	—			
- 7AH1.	3 ~	14H/18H						—	—	M 25 x 1.5	M 16 x 1.5			

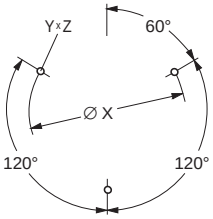
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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

Dimensions for 2BH1 31., 2BH1 41. (mm)

2BH1 31. / 2BH1 41.





Hole pattern, cover

Type	Phases	Curve No.	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M
2BH1 31. - 7H.2.	3 ~	61H/65H	284	316	270	45	205	230	316	129	128	106	111	83	108	75
2BH1 41. - 7H.3.	1 ~	141H/145H	321	321	315	58	225	255	401	185	154	154	128	95	130	70
- 1HD..	3 ~ EEx	232H							401	163			162			
- 1H.3.	3 ~	68H/70H							401	185			128			
- 1H.4.		69H/71H							401	185			128			

Type	Phases	Curve No.	N	O	P	Q	∅ R	S	T	U	V (1 ~)	V' (1 ~)	V_1 (3 ~)	V'_1 (3 ~)	α	∅ X	Y x Z	X holes
2BH1 31. - 7H.2.	3 ~	61H/65H	130	39	G 1¼ (15 deep)	64	10	2.5	88	M 6 x 17	—	—	M 25 x 1.5	M 16 x 1.5	27°	140	M 6 x 15	51°/171°/291°
2BH1 41. - 7H.3.	1 ~	141H/145H	151	46	G 1½ (15 deep)	72	12	3	106	M 6 x 19	M 16 x 1.5	M 25 x 1.5	—	—	28°	174	M 6 x 15	51°/171°/291°
- 1HD..	3 ~ EEx	232H									—	—	M 25 x 1.5	M 16 x 1.5				
- 1H.3.	3 ~	68H/70H									—	—						
- 1H.4.		69H/71H									—	—						

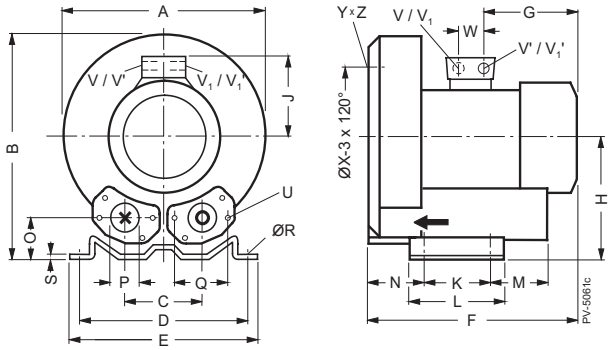
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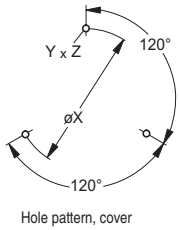
Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

G

Dimensions for 2BH1 50., 2BH1 59., 2BH1 60., 2BH1 69. (mm)

2BH1 50. / 2BH1 59.
2BH1 60. / 2BH1 69.





Hole pattern, cover

Type	Phases	Curve No.	A	B	C	D	E	F	G	H	J	K	L	M	N	O
2BH1 50. - 7A.1.	1. ~	148H/151H	334	337	120	260	295	313	156	175	120	115	155	96	87	48
- 7A.2.		149H/152H						345	188		128					
- 7AD..	3 ~ EEx	204H						345	163		162					
2BH1 50. - 7A.0.	3 ~	19H/24H	334	337	120	260	295	314	153	175	120	115	155	96	87	48
- 7A.1.		20H/25H						314	153							
- 7A.2.		21H/26H						346	185		128					
- 7A.3.		22H/27H/204H						346	185							
2BH1 59. - 7AA2.	1 ~	147H	334	337	120	260	295	345	188	174.5	128	115	155	96	87	48
- 7AB2.		150H														
- 7AE1.	3 ~	23H						314	153		120					
- 7AH2.		28H						345	185		128					
2BH1 60. - 7A.0.	3 ~	29H	382	384	125	290	325	377	185	198	128	140	180	84	109	54
- 7A.1.		30H/35H														
- 7A.2.		31H/36H						411	190		135					
- 7A.3.		32H/37H/206H						432	211		148					
2BH1 69. - 7A.1.			382	384	125	290	325	377	185	198	128	140	180	84	109	54
- 7A.2.											135					

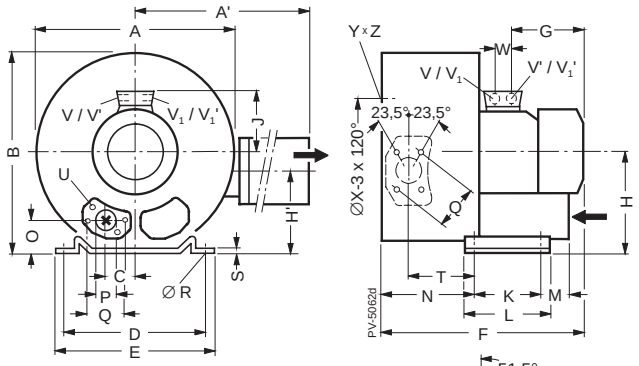
Type	Phases	Curve No.	∅ P	Q	∅ R	S	U	V (1 ~)	V' (1 ~)	V_1(3 ~)	V'_1(3 ~)	∅ X	Y x Z	X holes	W
2BH1 50. - 7A.1.	1 ~	148H/151H	55	83	14	4	M 8 x 17	M 16 x 1.5	M 25 x 1.5	—	—	200	M 8 x 20	0°/120°/240°	32
- 7A.2.		149H/152H								—	—				
- 7AD..	3 ~ EEx	204H						—	—	M 25 x 1.5	M 16 x 1.5				
2BH1 50. - 7A.0.	3 ~	19H/24H						—	—						
- 7A.1.		20H/25H						—	—						
- 7A.2.		21H/26H						—	—						
- 7A.3.		22H/27H/204H						—	—						
2BH1 59. - 7AA2.	1 ~	147H	55	83	14	4	M 8 x 17	M 16 x 1.5	M 25 x 1.5	—	—	200	M 8 x 20	0°/120°/240°	32
- 7AB2.		150H								—	—				
- 7AE1.	3 ~	23H						—	—	M 25 x 1.5	M 16 x 1.5				
- 7AH2.		28H						—	—						
2BH1 60. - 7A.0.	3 ~	29H	55	83	15	4.5	M 8 x 17	—	—	M 25 x 1.5	M 16 x 1.5	240	M 10 x 20	0°/120°/240°	32
- 7A.1.		30H/35H						—	—						
- 7A.2.		31H/36H						M 32 x 1.5	M 32 x 1.5	M 32 x 1.5	M 32 x 1.5				42
- 7A.3.		32H/37H/206H													
2BH1 69. - 7A.1.	3 ~	33H	55	83	15	4.5	M 8 x 17	—	—	M 25 x 1.5	M 16 x 1.5	240	M 10 x 20	0°/120°/240°	32
- 7A.2.		33H/38H						M 32 x 1.5	M 32 x 1.5	M 32 x 1.5	M 32 x 1.5				42

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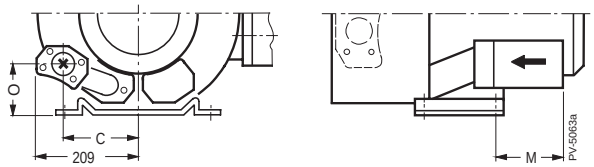
Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

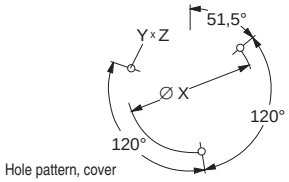
Dimensions for 2BH1 51., 2BH1 61., 2BH1 64. (mm)

2BH1 51.
2BH1 61.-...1.
-...2.
-...3.



2BH1 61.-...4.
-...5.



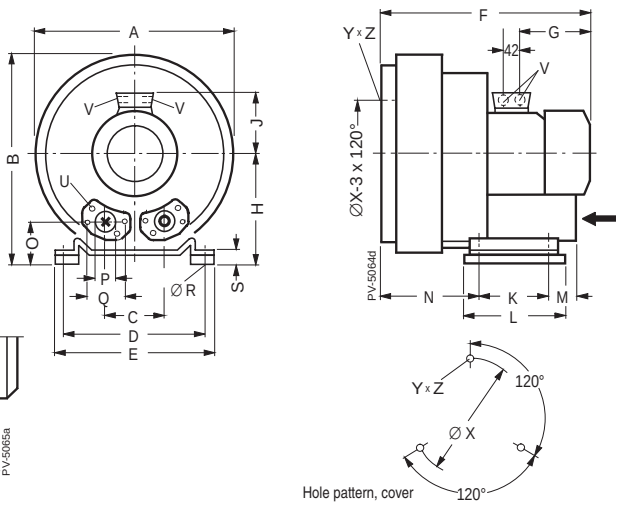


Hole pattern, cover

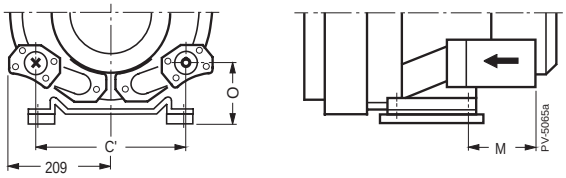
Type	Curve No.	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M
2BH1 51. - 7H.4. - 7H.5.	74H/78H 75H/79H/234H	372	411	371	60	260	295	465 499	190 224	175	144	135	115	155	98
2BH1 61. - 7H.1. - 7H.2. - 7H.3. - 1H.4. - 1H.5.	80H/85H 81H/86H 82H/87H 83H/88H 84H/89H/236H	426	424	420	63 155	290	325	473 507 528 569	185 190 211 256	198	164	128 135 148 196	140	180	84 225

Type	Curve No.	N	O	∅ P	Q	∅ R	S	T	U	V	V'	V_1	V'_1	∅ X	Y x Z	X holes	W
2BH1 51. - 7H.4. - 7H.5.	74H/78H 75H/79H/234H	171	48	55	83	14	4	116	M 8 x 17			4 x M 32 x 1.5		200	M 8 x 20	51.5°/171.5°/291.5°	42
2BH1 61. - 7H.1. - 7H.2. - 7H.3. - 1H.4. - 1H.5.	80H/85H 81H/86H 82H/87H 83H/88H 84H/89H/236H	205	54 94	55	83	15	4.5	129	M 8 x 17	M 25 x 1.5 — —	M 16 x 1.5 4 x M 32 x 1.5 — —	— — 2 x Pg 21	— —	240	M 10 x 20	51.5°/171.5°/291.5°	32 42

2BH1 64.-...3.



2BH1 64.-...4.
-...5.



Hole pattern, cover

Type	Curve No.	A	B	C	C'	D	E	F	G	H	J	K	L	M
2BH1 64. - 7G.3. - 1G.4. - 1G.5.	90H 91H/94H 92H/95H	424	430	125 —	— 309	290	325	528 596	211 256	218	148 196	140	188	84 225

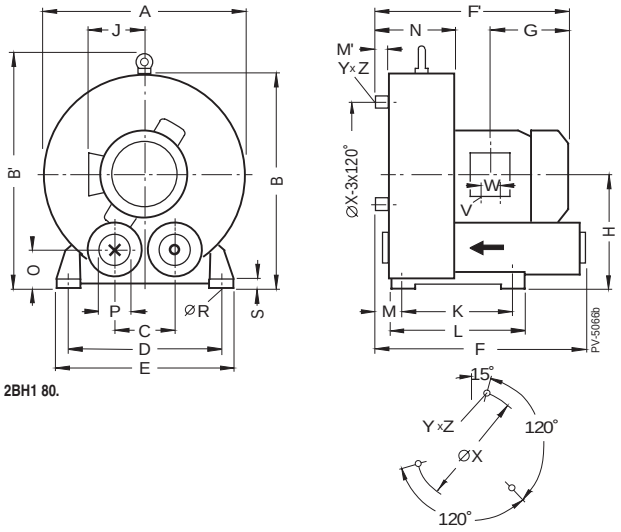
Type	Curve No.	N	O	∅ P	Q	∅ R	S	U	V	∅ X	Y x Z	X holes
2BH1 64. - 7G.3. - 1G.4. - 1G.5.	90H 91H/94H 92H/95H	205	74 114	55	83	15	24.5	M 8 x 17	4 x M 32 x 1.5 2 x Pg 21	240	M 10 x 20	0°/120°/240°

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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

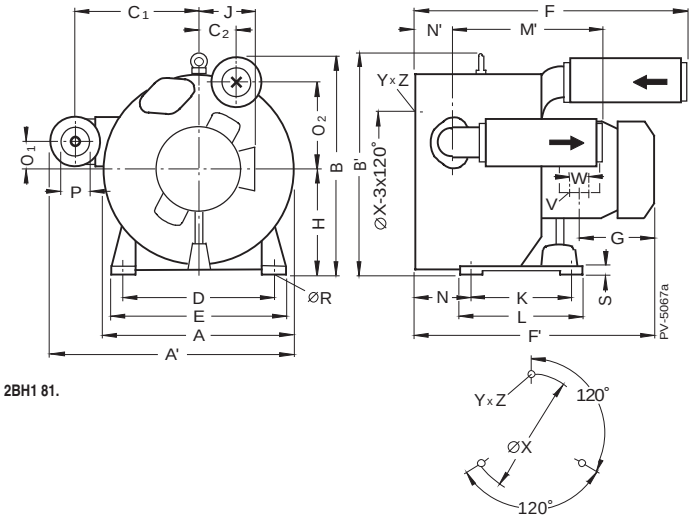
Dimensions for 2BH1 80., 2BH1 81., 2BH1 84. (mm)

2BH1 80.



Hole pattern, cover

2BH1 81.

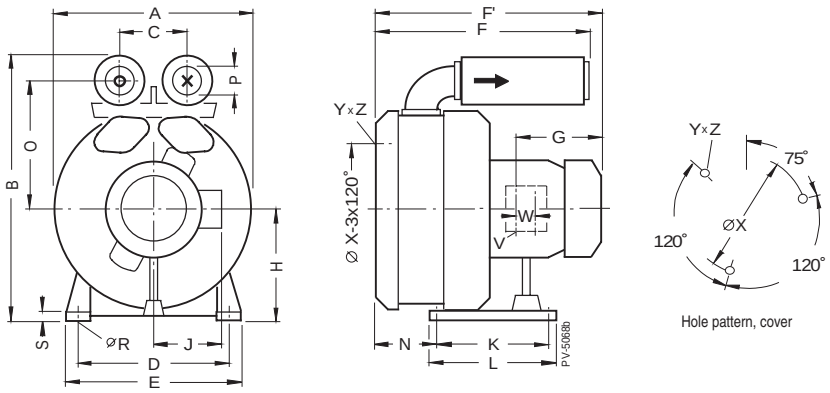


Hole pattern, cover

Type	Curve No.	A	A'	B	B'	C	C_1	C_2	D	E	F	F'	G	H	J	K	L
2BH1 80. - 1A.0. - 1A.1. - 1A.2.	39H/42H 40H/43H 41H/44H/208H	498	—	514	567	145	—	—	365	420	495	447.5 477	193 232.5	265	171 196	280	316
2BH1 81. - 1HE1. - 1H.2. - 1H.3. - 1H.4.	114H 96H/99H 97H/100H 98H/101H/238H	501	640.5	516 563	567	—	317.5	72.5 91	365	420	595.5 720.5	583 654	232.5 287	265	196 234	280	316

Type	Curve No.	M	M'	N	N'	O	O_1	O_2	∅ P	∅ R	S	V	W	∅ X	Y x Z	X holes
2BH1 80. - 1A.0. - 1A.1. - 1A.2.	39H/42H 40H/43H 41H/44H/208H	35	10	170	—	81	—	—	G 2½	15	22	2 x Pg 21	42	408	M 12 x 20	15°/135°/255°
2BH1 81. - 1HE1. - 1H.2. - 1H.3. - 1H.4.	114H 96H/99H 97H/100H 98H/101H/238H	—	402	140.5	104	—	66	184 231	G 2½	15	22	2 x Pg 21 2 x Pg 29	42 54	408	M 12 x 20	0°/120°/240°

2BH1 84.



Hole pattern, cover

Type	Curve No.	A	B	C	D	E	F	F'	G	H	J	K
2BH1 84. - 1J.2. - 1J.3.	102H/104H 103H/105H	498	654.5	160	365	420	521	583 654	232.5 287	265	196 234	280

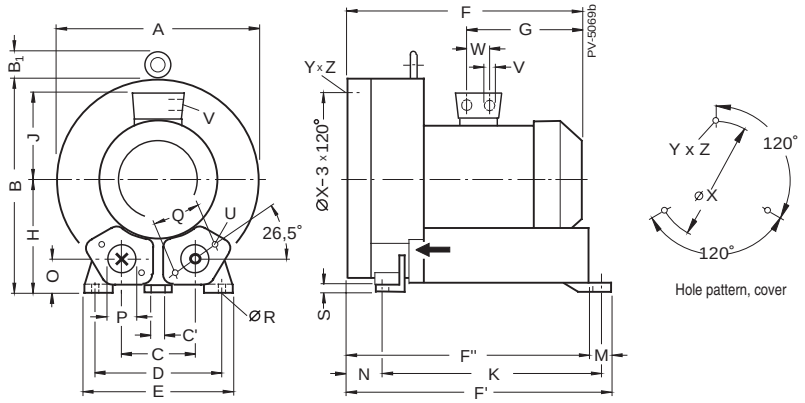
Type	Curve No.	L	N	O	∅ P	∅ R	S	V	W	∅ X	Y x Z	X holes
2BH1 84. - 1J.2. - 1J.3.	102H/104H 103H/105H	316	140.5	317.5	G 2½	15	22	2 x Pg 21 2 x Pg 29	42 54	408	M 12 x 20	75°/195°/315°

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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

Dimensions for 2BH1 90., 2BH1 91. (mm)

2BH1 90.

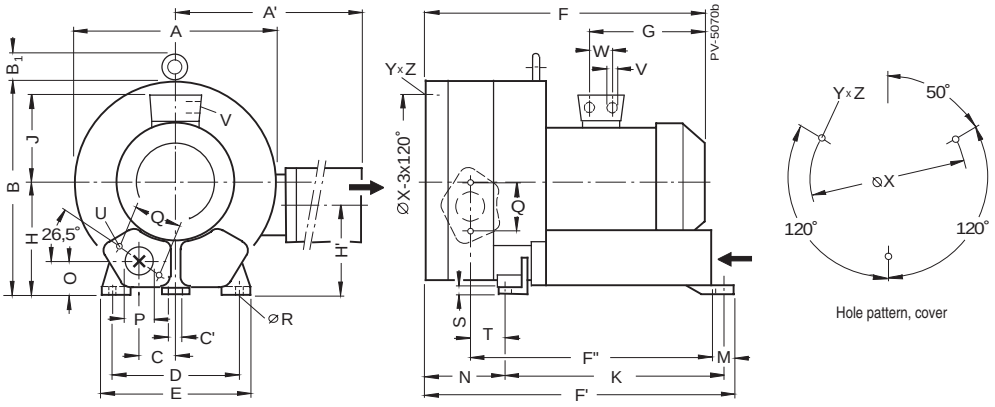


Hole pattern, cover

Type	Curve No.	A	B	B1	C	C'	D	E	F	F'	F''	G	H	J	K	M
2BH1 90. - 1A.0. - 1A.1. - 1A.2.	48H/51H 49H/52H 50H/53H 210H	550	570	62	207	15	360	415	516 605	726	674	256 317	300	196 234	600	52

Type	Curve No.	N	O	∅ P	Q	∅ R	S	U	V	W	∅ X	Y x Z	X holes
2BH1 90. - 1A.0. - 1A.1. - 1A.2.	48H/51H 49H/52H 50H/53H 210H	106	91	100	150	15	25	M 12 x 30	2 x Pg 21 2 x Pg 29	42 54	490	M 12 x 30	0°/120°/240°

2BH1 91.



Hole pattern, cover

Type	Curve No.	A	A'	B	B1	C	C'	D	E	F	F'	F''	G	H	H'	J
2BH1 91. - 1H.1. - 1H.2. - 1H.3. - 1H.4.	116H/119H 117H/120H 118H/121H 239H	550	796	570	62	104	15	360	415	740 785	860	661	317 345	300	245	234

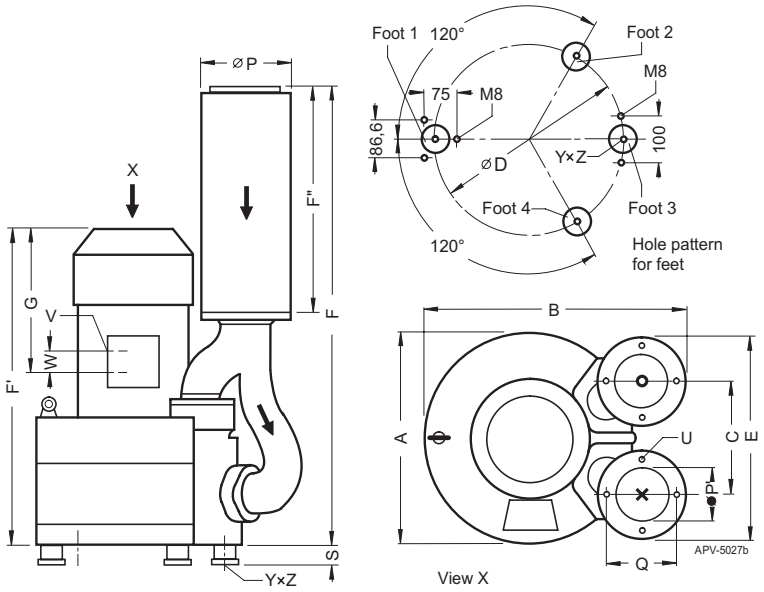
Type	Curve No.	K	M	N	O	∅ P	Q	∅ R	S	T	U	V	W	∅ X	Y x Z	X holes
2BH1 91. - 1H.1. - 1H.2. - 1H.3. - 1H.4.	116H/119H 117H120H 118H/121H 239H	600	52	240	91	100	150	15	25	93	M 12 x 30	2 x Pg 29	54	490	M 12 x 30	50°/170°/290°

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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

G

Dimensions for 2BH1 943 (mm)



2BH1 943 (only cover mounting possible)
Dimensions for fixing elements 2BX2 124, see page 31
(not included in the scope of delivery of the pump/compressor).

Type	Curve No.	A	B	C	D	E	F	F'	F''	G
2BH1 943 - 1G.2.	122H/125H	554	704	307	490	560	1203	740	600	317
- 1G.3.	123H/126H							740		317
- 1G.4.	124H/127H							785		365

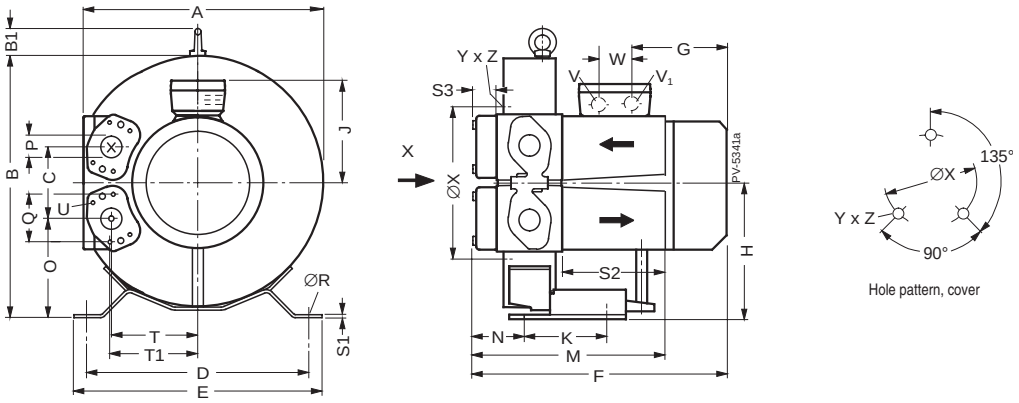
Type	Curve No.	P	P'	Q	S	U	V	W	Y x Z
2BH1 943 - 1G.2.	122H/125H	250	130	210	40	M 16 x 30	2 x Pg 29	54	M 12 x 30
- 1G.3.	123H/126H								
- 1G.4.	124H/127H								

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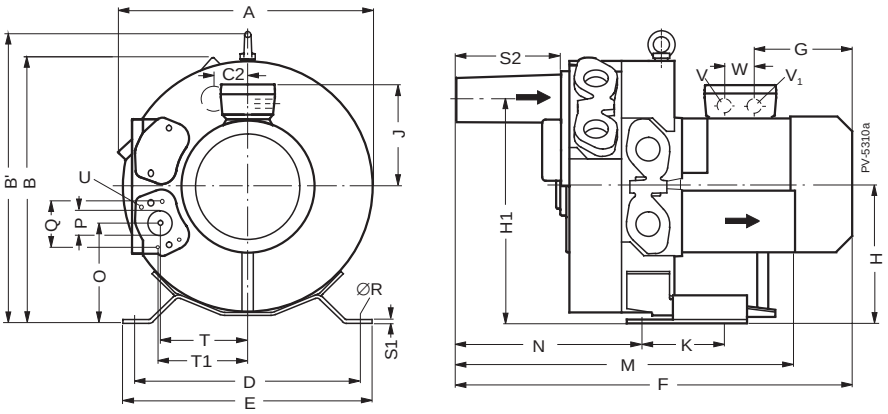
Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH7

Dimensions for 2BH7 2., 2BH7 3., 2BH7 4., 2BH7 5., 2BH7 6. (mm)

2BH7 21., 2BH7 31., 2BH7 41., 2BH7 51., 2BH7 61.



2BH7 22., 2BH7 32., 2BH7 42., 2BH7 52., 2BH7 62.



Type	Curve No.	A	B	B'	B1	C	C2	D	E	F	G	H	H1	J	K	M	N
2BH7 210 - 0AC1.	1G/2G/3G/4G	294	319	—	39	87	—	260	298	293	129	167	—	111	105	252	65
2BH7 310 - 0AC1.	30G/31G	313	339	—	39	94	—	290	325	295	129	177	—	120	105	256	67
- 0AC2.	32G/33G																
2BH7 410 - 0AC1.	60G/61G/62G/63G	346	375	—	38	103	—	315	350	321	153	195	—	120	130	260	66
2BH7 510 - 0AC1.	90G/91G	368	395	—	39	114	—	328	363	361	185	205	—	128	152	265	68
- 0AC2.	92G/93G																
2BH7 610 - 0AC1.	120G/121G	418	455	—	39	127	—	371	406	364	185	235	—	128	152	271	72
- 0AC3.	122G/123G									390	211					271	
2BH7 220 - 0AC2.	5G/6G	313	326	359	—	—	43	260	298	469	130	167	272	111	105	426	241
- 0AC5.	7G/8G									525	185			128			
2BH7 320 - 0AC4.	34G/35G	331	345	380	—	—	47	290	325	495	153	177	291	120	105	431	243
- 0AC5.	36G/37G									527	185			128			
2BH7 420 - 0AC2.	64G/65G	363	377	414	—	—	52	315	350	529	180	195	319	128	130	436	243
- 0AC5.	66G/67G									554	211						
2BH7 520 - 0AC2.	94G/95G	387	402	435	—	—	57	328	363	549	185	206	343	128	152	453	256
- 0AC7.	96G/97G									603	211			148			
2BH7 620 - 0AC3.	124G/125G	442	457	495	—	—	63	372	406	578	211	236	389	128	152	458	259
- 0AC5.	126G/127G									643	248			148			

Type	Curve No.	O	P	Q	R	S1	S2	S3	T	T1	U	V	V_1	W	X	Y x Z
2BH7 210 - 0AC1.	1G/2G/3G/4G	124	G $1^1/_4$	64	14	4	140	31	105	107	M 6 x 17	M 25 x 1.5	M 16 x 1.5	32	153	M 6 x 15
2BH7 310 - 0AC1.	30G/31G	130	(18 deep)						114	116						
- 0AC2.	32G/33G															
2BH7 410 - 0AC1.	60G/61G/62G/63G	143							125	127					167	
2BH7 510 - 0AC1.	90G/91G	148				5			137	138					192	M 8 x 15
- 0AC2.	92G/93G															
2BH7 610 - 0AC1.	120G/121G	172							153	155					228	
- 0AC3.	122G/123G															
2BH7 220 - 0AC2.	5G/6G	123	G $1^1/_4$	63.8	14	4	140		105	107	M 6 x 17	M 25 x 1.5	M 16 x 1.5	32	—	—
- 0AC5.	7G/8G		(18 deep)												—	—
2BH7 320 - 0AC4.	34G/35G	130							114	116					—	—
- 0AC5.	36G/37G														—	—
2BH7 420 - 0AC2.	64G/65G	143							125	127					—	—
- 0AC5.	66G/67G														—	—
2BH7 520 - 0AC2.	94G/95G	148				5			137	138					—	—
- 0AC7.	96G/97G											2 x M 32 x 1.5		42	—	—
2BH7 620 - 0AC3.	124G/125G	173							153	155		M 25 x 1.5	M 16 x 1.5	32	—	—
- 0AC5.	126G/127G											2 x M 32 x 1.5		42	—	—

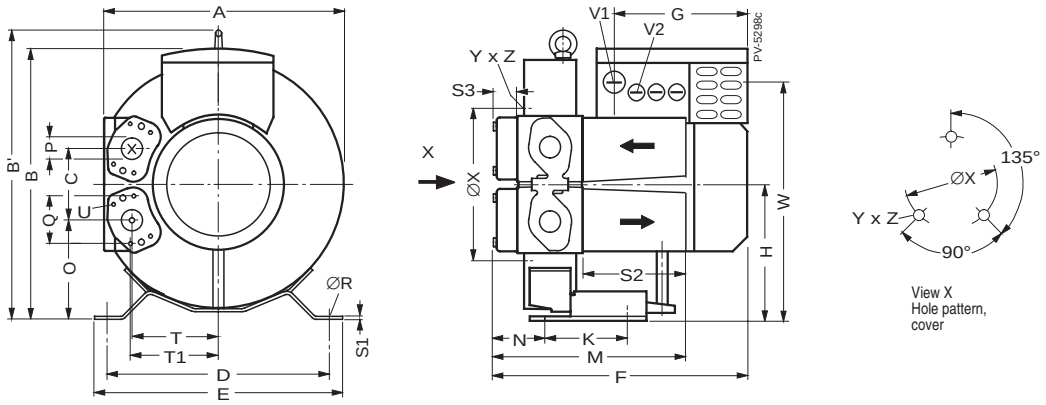
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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH7 with Integrated Frequency Converter

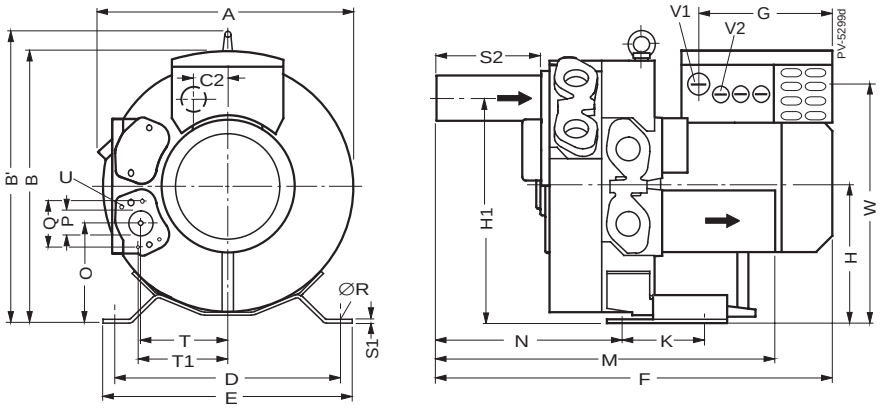
G

Dimensions for 2BH7 2., 2BH7 3., 2BH7 4., 2BH7 5., 2BH7 6. (mm)

2BH7 31., 2BH7 41., 2BH7 51., 2BH7 61.



2BH7 22., 2BH7 32., 2BH7 42., 2BH7 52., 2BH7 62.



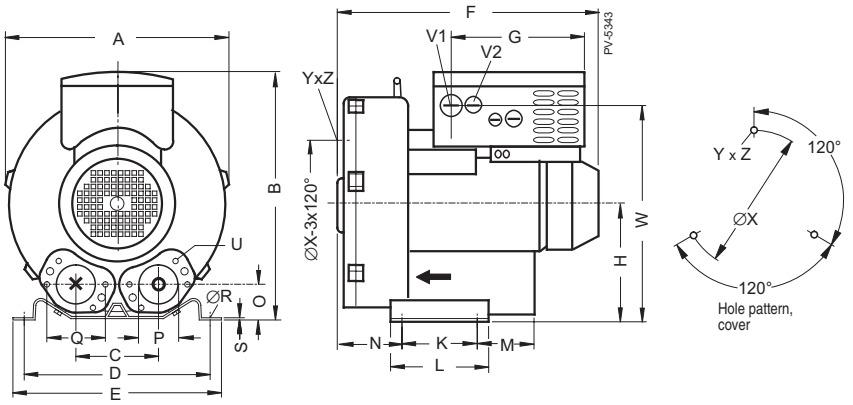
Type	Curve No.	A	B	B'	C	C2	D	E	F	G	H	H1	K	M	N	O	P
2BH7 310 - 0AS52-. 2BH7 310 - 0AS62-.	520G 522G	313	412	379	94	—	290	325	376	213	177	—	105	256	67	130	G 1¼ (18 deep)
2BH7 410 - 0AS32-. 2BH7 410 - 0AS52-.	540G 542G	346	429	414	103	—	315	350	378 378	213	195	—	130	260	66	143	
2BH7 510 - 0AS42-. 2BH7 510 - 0AS62-.	560G 562G	368	440	434	115	—	328	363	387 428	213	205	—	152	265	68	148	
2BH7 610 - 0AS32-. 2BH7 610 - 0AS52-.	580G 582G	418	470 484	494	127	—	372	406	390 455	213	235	—	152	271	72	172	
2BH7 220 - 0AS52-. 2BH7 220 - 0AS62-.	504G 506G	313	400	359	—	43	260	298	550	213	167	272	105	426	241	123	G 1¼ (18 deep)
2BH7 320 - 0AS52-. 2BH7 320 - 0AS82-.	524G 526G	331	412	379	—	47	290	325	552 552	213	177	291	105	431	243	130	
2BH7 420 - 0AS32-. 2BH7 420 - 0AS72-.	544G 546G	363	430 430	414 414	—	52	315	350	554 596	213	195	319	130	436	243	143	
2BH7 520 - 0AS42-. 2BH7 520 - 0AS82-.	564G 566G	387	440 454	435 435	—	57	328	363	575 640	213	206	343	152	453	256	148	
2BH7 620 - 0AS42-. 2BH7 620 - 0AS52-.	584G 586G	442	484	495	—	63	372	406	605 643	213	236	389	152	459	259	173	

Type	Curve No.	Q	R	S1	S2	S3	T	T1	U	V1	V2	W	X	Y x Z
2BH7 310 - 0AS52-. 2BH7 310 - 0AS62-.	520G 522G	63.8	14	4	140	31	114	116	M 6 x 17	Pg 21	Pg 16	362	153	M 6 x 15
2BH7 410 - 0AS32-. 2BH7 410 - 0AS52-.	540G 542G	63.8	14	4	140	31	125	127	M 6 x 17	Pg 21	Pg 16	379	167	M 6 x 15
2BH7 510 - 0AS42-. 2BH7 510 - 0AS62-.	560G 562G	63.8	14	5	140	31	137	138	M 6 x 17	Pg 21	Pg 16	390 390	192	M 8 x 15
2BH7 610 - 0AS32-. 2BH7 610 - 0AS52-.	580G 582G	63.8	14	5	140	31	153	155	M 6 x 17	Pg 21	Pg 16	420 434	228	M 8 x 15
2BH7 220 - 0AS52-. 2BH7 220 - 0AS62-.	504G 506G	63.8	14	4	140	—	105	107	M 6 x 17	Pg 21	Pg 16	350	—	—
2BH7 320 - 0AS52-. 2BH7 320 - 0AS82-.	524G 526G	63.8	14	4	140	—	114	116	M 6 x 17	Pg 21	Pg 16	362	—	—
2BH7 420 - 0AS32-. 2BH7 420 - 0AS72-.	544G 546G	63.8	14	4	140	—	125	127	M 6 x 17	Pg 21	Pg 16	380 380	—	—
2BH7 520 - 0AS42-. 2BH7 520 - 0AS82-.	564G 566G	63.8	14	5	140	—	137	138	M 6 x 17	Pg 21	Pg 16	390 404	—	—
2BH7 620 - 0AS42-. 2BH7 620 - 0AS52-.	584G 586G	63.8	14	5	140	—	153	155	M 6 x 17	Pg 21	Pg 16	434	—	—

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Dimensions for ELMO-G Vacuum Pumps and Compressors, Range 2BH1 with Integrated Frequency Converter and for 2BH100

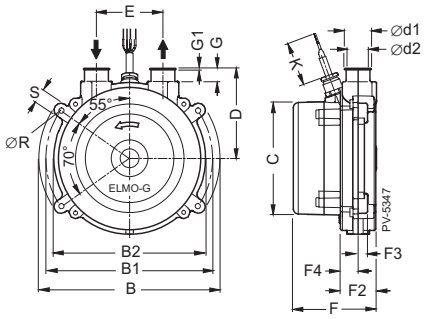
Dimensions for 2BH14/15/16. .-. .S. . (mm)



Type	A	B	C	D	E	F	G	H	K	L	M	N	O	P	Q	Ø R	S
2BH1 400-7AS42	285	386	115	225	255	368	213	154	95	130	70	75	46	G $1^{1}/_{4}$ (14 deep)	72	12	3
2BH1 500-7AS32 2BH1 500-7AS62	334	408	120	260	295	389	213	176	115	155	98	88	48	55	83	14	4
2BH1 600-7AS62 2BH1 600-7AS72	381	430	125	290	325	420 444	213	198	140	180	80	112	54	55	83	15	4.5

Type	U	V 1	V 2	W	Ø X	Y x Z
2BH1 400-7AS42	M 6 x 17 deep	PG21	PG16	336	174	M 6 x 15 deep (3 x)
2BH1 500-7AS32 2BH1 500-7AS62	M 8 x 17 deep			358	200	M 8 x 20 deep (3 x)
2BH1 600-7AS62 2BH1 600-7AS72				380 383	240	M 10 x 20 deep (3 x)

Dimensions for 2BH100. - . . . (mm)



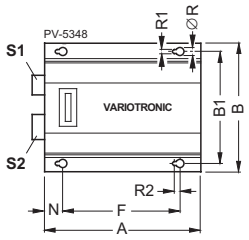
Type	B	B 1	B 2	C	D	Ø d1	Ø d2	E	F	F 2	F 3	F 4	G	G 1	K	Ø R	S
2BH1 000-0AA42 2BH1 000-0AB32	145	133	121	90	72	20	19	53	66	28.3	7.5	14.2	11	1	450	4.2	11

Dimensional drawings are also available on request as .dxf files.

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Accessories for ELMO-G Vacuum Pumps and Compressors, Range 2BH1

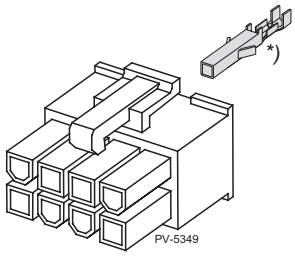
Dimensions Accessories for 2BH100 (mm)



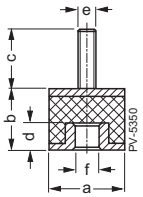
S1 Control signal

S2 Motor connection

External electronics (Variotronic)
2BX4 130 / B30



Set of plugs
2BX4 131 / B30



Rubber buffer
2BX4 132 / B31

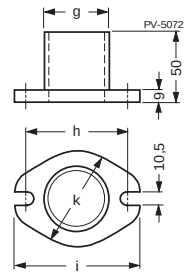
Order No. / Abbreviation								
2BX4 130 / B30	A	B	B 1	F	N	∅ R	R 1	R 2
	112	92	80	84	13	6.5	3	5.5
2BX4 132 / B31	a	b	c	d	e	f		
	∅ 10	10	10	4	M 4	M 4		

*) 2BX4 131: Pliers not included in delivery.

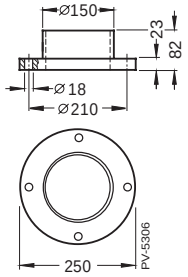
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Accessories for ELMO-G Vacuum Pumps and Compressors, Range 2BH1 and 2BH7

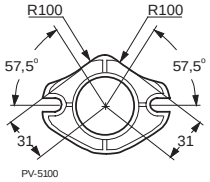
Dimensions (mm)



Hose flange
2BX1 03.



Hose flange
2BX1 046

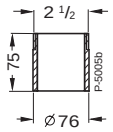


Hose flange
2BX1 034
all other dimensions as for 2BX1 033

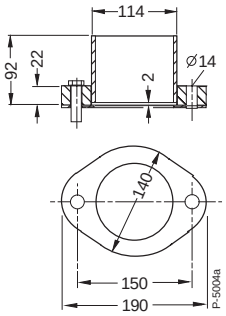


2BX1 03./056

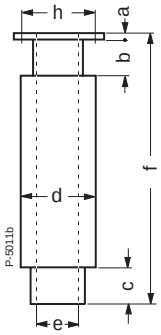
To be screwed directly into the inner thread of the silencer



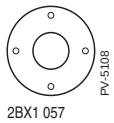
Hose flange
2BX1 047



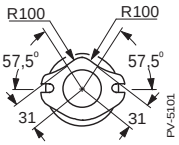
Hose flange
2BX1 048



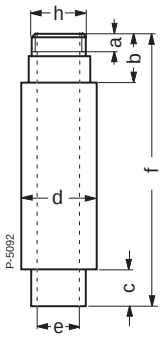
Additional silencer
2BX1 03./045/056/057



2BX1 057



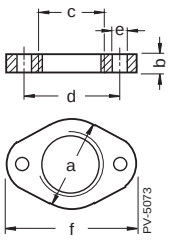
2BX1 045
all other dimensions as for 2BX1 030



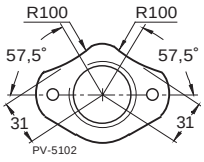
Additional silencer
2BX1 055

Type	g	h	i	k
2BX1 032	40	64.5	85	60
2BX1 033	50	75.5	100	72
2BX1 034	50	75.5	100	72
2BX1 036	60	83	100	74

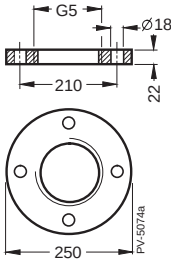
Type	a	b	c	d	e	f	h
2BX1 030	9	45	40	80	50	293	75.5
2BX1 031	9	45	40	75	40	293	64.5
2BX1 045	9	45	40	80	50	293	75.5
2BX1 055	30	95	56	127	80	651	G 2½
2BX1 056	22	70	60	167	115	652	150
2BX1 057	22	65	60	209	150	647	210



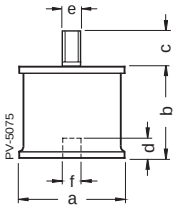
Threaded flange
2BX1 037 to 2BX1 042



Threaded flange
2BX1 040
all other dimensions as for 2BX1 038



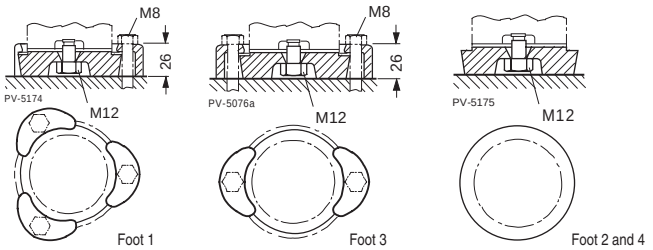
Threaded flange
2BX1 043



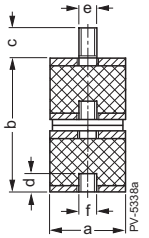
Feet for end-casing mounting
2BX2 12.

Type	a	b	c	d	e	f
2BX1 037	56	14	G 1¼	64	9.5	80
2BX1 038	72	14	G 1½	75	9.5	100
2BX1 040	72	14	G 1½	75	9.5	100
2BX1 041	80	16	G 2	83	12	112
2BX1 042	140	22	G 4	150	14	190

Type	a	b	c	d	e	f
2BX2 120	25	20	10	6	M 6	M 6
2BX2 121	30	20	13	8	M 8	M 8
2BX2 122	50	30	15	10	M 10	M 10
2BX2 123	75	40	18	10.5	M 12	M 12
2BX2 127	35	45	11	8	M 6	M 6
2BX2 128	35	45	11	8	M 8	M 8
2BX2 135	25	44	10	6	M 6	M 6



Fixing clamps for 2BH1 943 (1 set = 4 feet)
2BX2 124

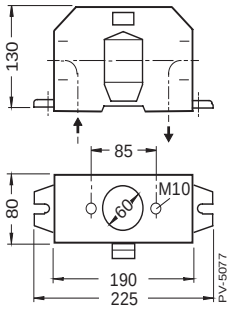


Rubber buffer
2BX2 135

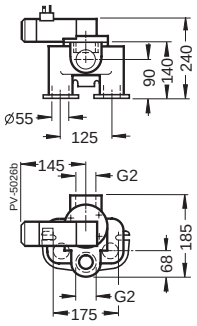
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Accessories for ELMO-G Vacuum Pumps and Compressors, Range 2BH1 and 2BH7

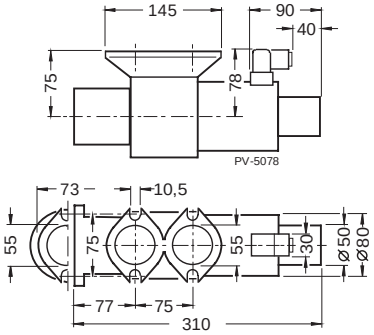
Dimensions (mm)



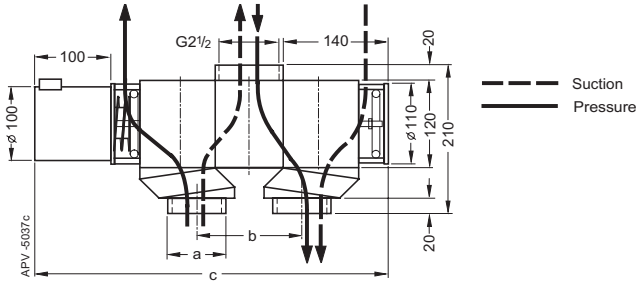
Changeover valve
2BX9 328 - 0M.



Changeover valve
2BX9 328 - 0ML0, 2BX9 328 - 0ML1

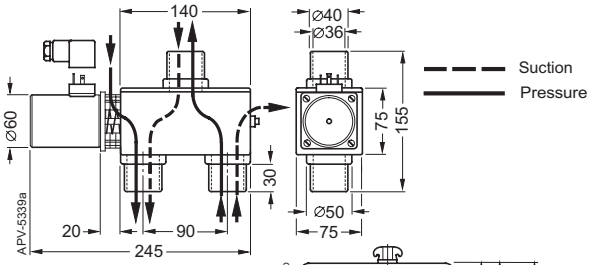


Switch-over valve
2BX9 328 - 0MJ.

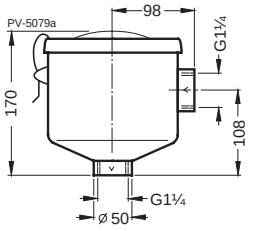


Type	a	b	c
2BX9 328 - 1MA. 2BX9 328 - 1MB.	G 2½ G 3	145 208	470 533

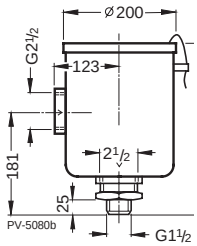
Changeover valve
2BX9 328 - 1MA., 2BX9 328 - 1MB.



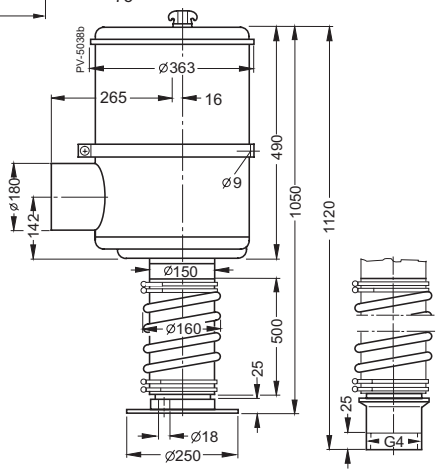
Changeover valve
2BX9 328 - 1MC



Through filter, suction-side
2BX2 060



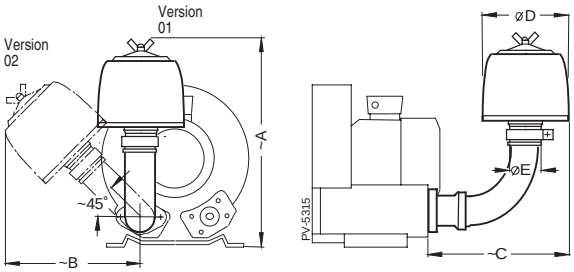
Through filter, suction-side
2BX2 06.
(for 2BH18. remove nipple)



Through filter, suction-side
2BX2 066

2BX2 065

Type	for ELMO-G	Version	A	B	C	D	E
2BX2 100	2BH1 3. . - 1. .0/ - 1. .1/ - 1. .2, 2BH7 2. . - 0. .1/ - 0. .2, 2BH7 3. . - 0. .1/ - 0. .2 2BH1 3. . - 1. .4, 2BH7 2. . - 0. .5, 2BH7 3. . - 0. .4/ - 0. .5, 2BH7 4. . - 0. .1/ - 0. .2/ - 0. .5	01 02	260 190	— 190	165	132	40
2BX2 101	2BH1 2. . - 2. .0, 2BH1 40. - 1. .0/ - 1. .1/ - 1. .2, 2BH1 49. - 1. .1	01	300	—	265	170	60
2BX2 102	2BH1 5. . - 1. .0/ - 1. .1/ - 1. .2, 2BH1 60. - 1. .0 2BH1 5. . - 1. .3/ - 1. .4/ - 1. .5, 2BH1 60. - 1. .1/ - 1. .2/ - 1. .3, 2BH1 61. - 1. .1/ - 1. .2/ - 1. .3/ - 1. .4/ - 1. .5, 2BH1 69. - 1. .1/ - 1. .2	01 02	300 240	— 240	220	170	60
2BX2 103	2BH1 64. - 1. .3/ - 1. .4/ - 1. .5	02	310	310	280	283	100
2BX2 104	2BH1 80. - 1. .0/ - 1. .1/ - 1. .2, 2BH1 81. - 1. .1/ - 1. .2/ - 1. .3/ - 1. .4, 2BH1 84. - 1. .2/ - 1. .3	01	380	—	280	283	100
2BX2 107	2BH1 41. - 1. .3/ - 1. .4	01	300	—	265	170	60
2BX2 108	2BH7 5. . - 0. .1/ - 0. .2/ - 0. .7, 2BH7 6. . - 0. .1/ - 0. .3/ - 0. .5	01	300	—	265	170	60

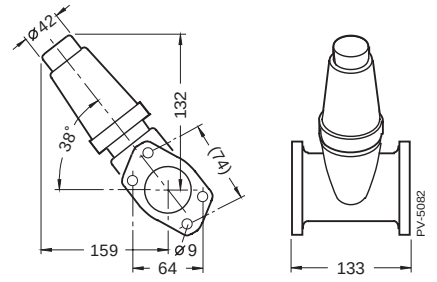


Suction filter
2BX2 10.

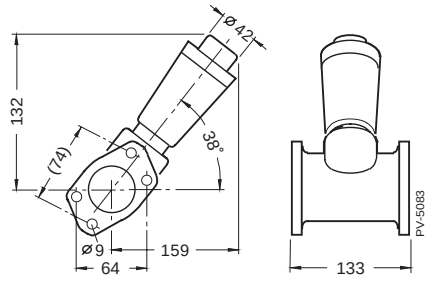
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Accessories for ELMO-G Vacuum Pumps and Compressors, Range 2BH1 and 2BH7

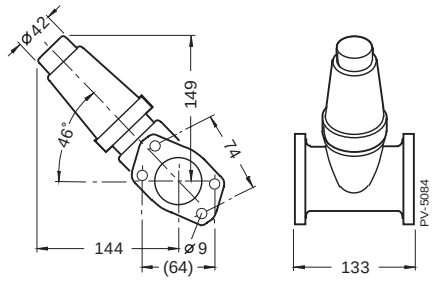
Dimensions (mm)



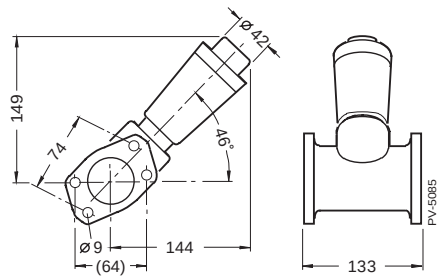
For 2BH1 3:
Vacuum-relief valve, suction-side
2BX2 141
2BX2 142



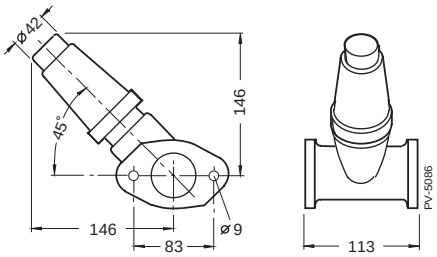
For 2BH1 3:
Pressure-relief valve, discharge-side
2BX2 143
2BX2 144



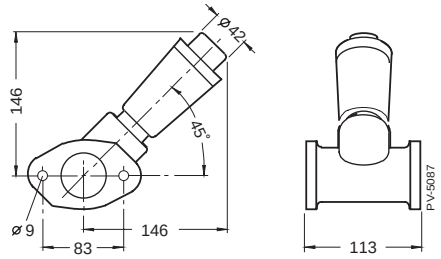
For 2BH1 4:
Vacuum-relief valve, suction-side
2BX2 141
2BX2 142



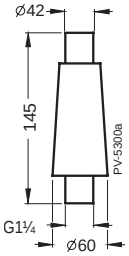
For 2BH1 4:
Pressure-relief valve, discharge-side
2BX2 143
2BX2 144



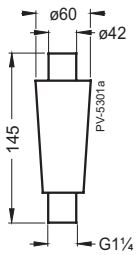
For 2BH1 5/2BH1 6:
Vacuum-relief valve, suction-side
2BX2 145
2BX2 146



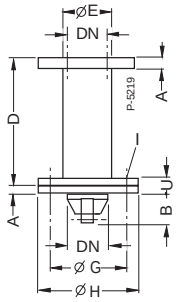
For 2BH1 5/2BH1 6:
Pressure-relief valve, discharge-side
2BX2 147
2BX2 148



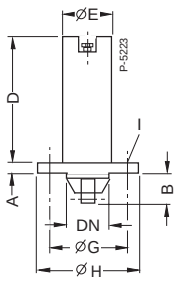
Loose vacuum-relief valve
2BX2 110
2BX2 114



Loose pressure-relief valve
2BX2 111
2BX2 115



Loose vacuum-relief valve
2BX2 150
2BX2 152
2BX2 154



Loose pressure-relief valve
2BX2 151
2BX2 153
2BX2 155

Type	DN	A	B	D	E	G	H	I	U
2BX2 150	80	19	41	220	89	160	200	8 x ∅ 18	41
2BX2 152	125	22	70	370	133	210	250		46
2BX2 154	200	22	124	570	206	295	340	8 x ∅ 23	48
2BX2 151	80	19	41	220	90	160	200	8 x ∅ 18	—
2BX2 153	125	22	70	370	137	210	250		—
2BX2 155	200	22	124	570	206	295	340	8 x ∅ 23	—

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ELMO-L
Vacuum Pumps

The complete system with patented discharge-air cooling

ELMO-L vacuum pumps are compact, ready-to-connect systems: connect the power supply, fill the water tank and install the suction line – finished. No need for a foundation. ELMO-L pumps are 100% oil-free. Throughout the entire working range the casing temperature is max. 15 °C above room temperature. The discharge air leaves the pump at room temperature or lower – clean and dust-free.

L

Reliable in continuous duty

Insensitive to condensate from the air being handled and unaffected by water vapour. Problem-free continuous duty at end vacuum (closed suction gate valve) is guaranteed: the pump remains cold, power consumption is reduced to a minimum.
At 50 Hz the sound-pressure level is between 63 and 72 dB (A), depending on size. Sound-absorbing covers and discharge-air silencers are therefore not needed.
The complete vacuum system is a low-maintenance system. Thanks to contact-free compression, it is wear-free in operation – i.e. no periodic maintenance, lubrication or replacement of wearing parts.

No need for additional energy: patented ELMO discharge-air cooling

Discharge-air cooling in ELMO-L vacuum pumps is by means of a special, patented process – with no need for additional outside energy. Unlike conventional closed-circuit systems with liquid-ring vacuum pumps (1), the ELMO-L system uses a special discharge-air cooler (3) to cool the water-vapour-saturated, hot discharge-air downstream of the water separator (2). The temperature falls below room temperature. Water vapour condenses out of the discharge air as a result of cooling. This condensate is returned to the operating liquid. This means that ELMO-L vacuum pumps can be operated without the continuous supply of make-up water. A further advantage over conventional systems is, that there are no problems with materials as a result of corrosive pollutants, because there is no build-up of dissolved constituents in the operating liquid as a consequence of the escape of water vapour on the discharge side.



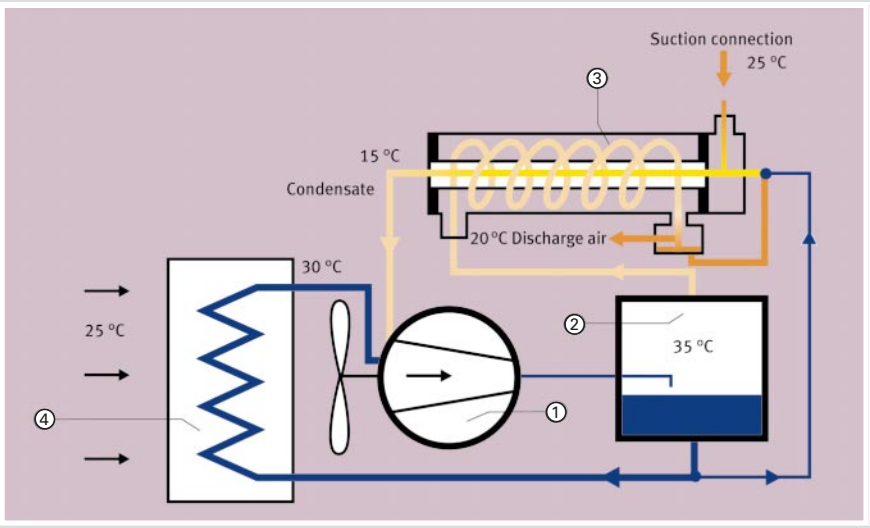
ELMO-L vacuum pump, compact version – ready to connect, easy fit, highly integrated.



ELMO-L vacuum pump 2BL1 500 – more power and flexibility, for decentralised mounting.

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Schematic of patented discharge-air cooling

① *Liquid-ring vacuum pump*
② *Separator*
③ *Discharge-air cooler*
④ *Air-water cooler for operating liquid*

Applications

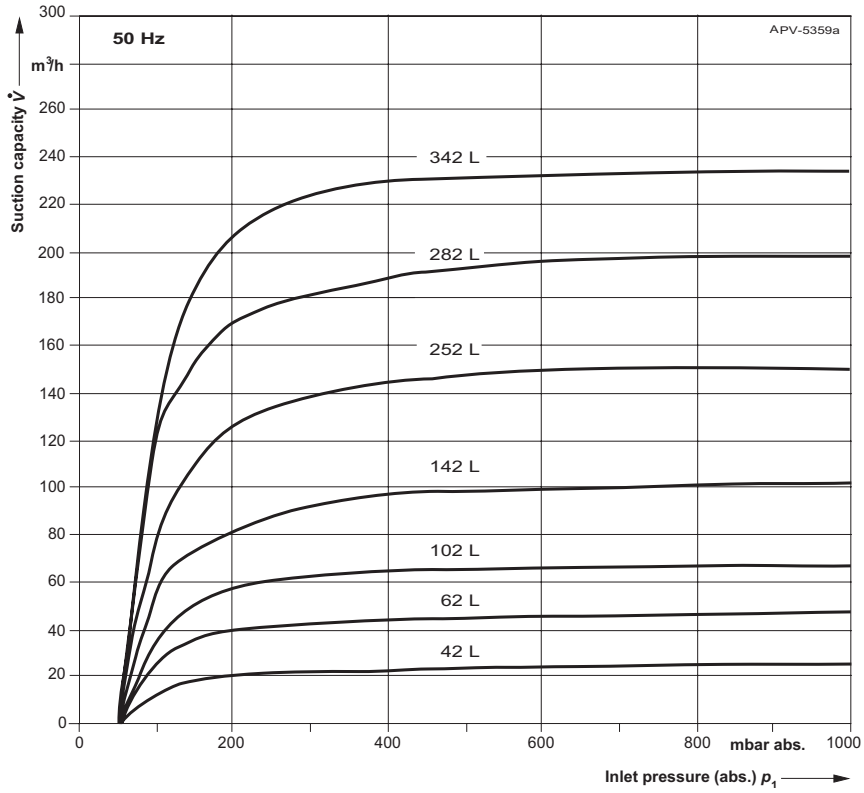
- Plastics industry: degassing, vacuum forming
- Beverage industry: bottles-filling machines, water degassing
- Hospitals: central vacuum installations, sterilisers
- Ceramics industry
- Packaging machines
- Printing presses
- Lifting and holding: e.g. wood, glass, laminex and veneer plywood

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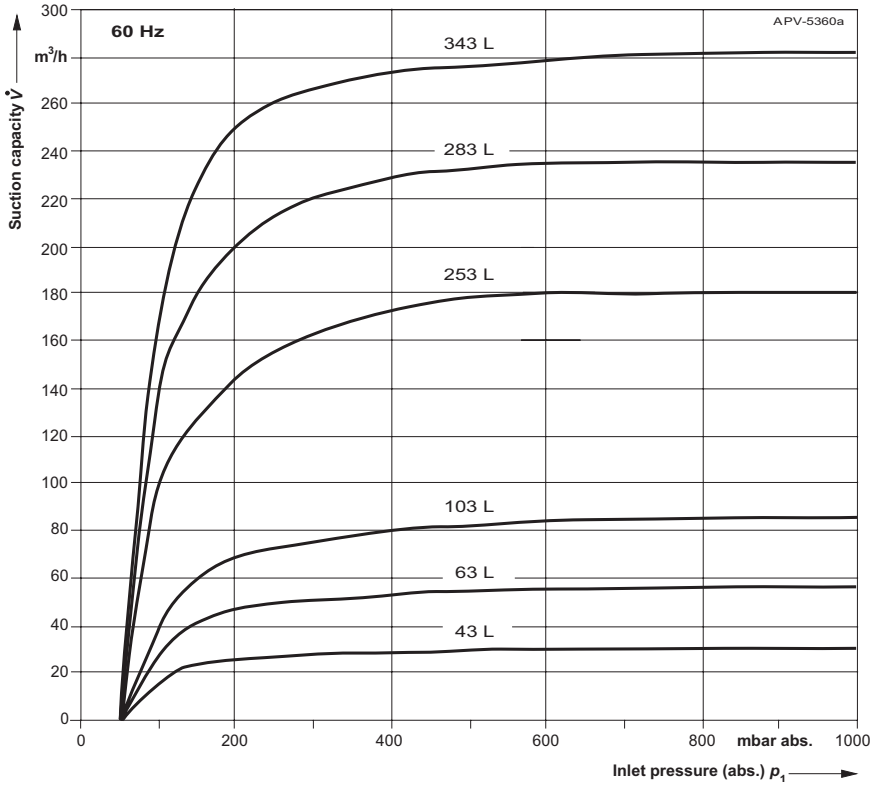
ELMO-L Compact Vacuum Pumps, Range 2BL, 50/60 Hz



Selection diagram 50 Hz



Selection diagram 60 Hz



The performance curves are valid for atmospheric air with 50% relative humidity, ambient temperature 20 °C and an ambient pressure of 1013 mbar with a tolerance of ±10%. The lowest achievable inlet pressure is 50 mbar.

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ELMO-L Compact Vacuum Pumps, Range 2BL, 50/60 Hz

Selection and ordering information

Curve	Motor			Sound-pressure level [2]	Order No.	Empty weight approx.
	Rated output	Rated voltage [1]	Rated current			
No.	kW	V	A	dB(A)	**Cast iron**	kg
50 Hz, IP 55						
42L	0.81	1~, 230 V 230 Δ / 400 Y	6.9 3.6 Δ / 2.1 Y	63	**2BL1 040-2N A 00-1 S** [3] **2BL1 040-2N C 00-1 S** [3]	43
62L	1.45	1~, 230 V 230 Δ / 400 Y	10.2 6.4 Δ / 3.7 Y	66	**2BL1 060-2N A 02-1 S** [3] **2BL1 060-2N C 02-1 S** [3]	59
102L	2.35	230 Δ / 400 Y	10.4 Δ / 6.0 Y	68	**2BL1 100-2N C 00-1 S** [3]	70
142L	3.85	230 Δ / 400 Y	14.5 Δ / 8.4 Y	72	**2BL1 140-2N C 03-1 S**	94
252L	4.0	400 Δ / 690 Y	9.9 Δ / 5.7 Y	67	**2BL1 250-2K C 00-6 S**	180
282L	5.5	400 Δ / 690 Y	13.1 Δ / 7.6 Y	70	**2BL1 280-2K C 00-6 S**	185
342L	7.5	400 Δ / 690 Y	17.3 Δ / 10 Y	71	**2BL1 340-2K C 00-6 S**	270
60 Hz, IP 55						
43L	1.27	220 … 275 Δ / 380 … 480 Y	5.1 Δ / 2.35 Y	66	**2BL1 041-2N H 01-8 S** [3]	43
63L	2.0	220 … 275 Δ / 380 … 480 Y	7.8 Δ / 4.5 Y	67	**2BL1 061-2N H 03-8 S** [3]	59
103L	3.45	220 … 275 Δ / 380 … 480 Y	14.2 Δ / 8.2 Y	72	**2BL1 101-2N H 01-8 S** [3]	83
253L	6.2	460 Δ	11.3 Δ	71	**2BL1 251-2K H 01-6 S**	180
283L	8.2	460 Δ	14.3 Δ	73	**2BL1 281-2K H 01-6 S**	185
343L	11.4	460 Δ	21 Δ	76	**2BL1 341-2K H 01-6 S**	270
E Exe II T3, 50 Hz, IP 54						
24L	1	230 Δ / 400 Y	on request	63	**2BL1 040-2N D 01-4**	43
62L	1.75	230 Δ / 400 Y	6.3 Δ / 3.65 Y	66	**2BL1 060-2N D 03-4**	62
102L	2.8	230 Δ / 400 Y	9.5 Δ / 5.5 Y	68	**2BL1 100-2N D 01-4**	94

USA design pumps available on request

Accessories

	Brief information [4]	Weight approx. kg
Attached loose: - Intake filter - Vacuum control valve - Drainage tap	 **F50** **F51** **F55**	 0.5 … 4.2 0.5 a. A.
Built-in: - Mechanical inflow control - Mechanical outflow control - Electrical level switch	 **F52** **F53** **F54**	 0.5 0.5 0.7
With stainless steel cladding	**F56**	0.5

4) A "**Z**" and a brief indication should be added to the order no. as follows: Example 2BL1 040-2NC00-1S-**Z**
F50 + F52.

Other voltages

2BL1 . . . - . .	□	. . - □
50 Hz, 3~:	↑	↑
230 V Δ / 400 V Y	**C**	. . - **1**
400 V Δ / 690 V Y	**C**	. . - **6**
60 Hz, 3~:		
460 VΔ	**H**	. . - **6**
220...275 V Δ / 380...480 V Y	**H**	. . - **8**
200...245 V Δ / 345...440 V Y	**H**	. . - **0**
Other voltages	.	. . - **9**

■ Please give required voltage in plain text and then add N1 Y.
Ordering example:
2BL1 040-2NC00-9S
N1 Y
500 V Y, 50 Hz

Other materials

2BL1 . . . -. □ . . . -. .	↑
Standard version = cast iron	
Version containing no non-ferrous metal *)	**C**
Version containing no cast iron *)	**R**
Stainless steel version *)	**H**
Part-stainless steel version; IP 55	**B**

*) Not available for 2BL1 04.

1) Permissible voltage range:

Rated voltage acc. to DIN IEC 38, Voltage tolerance ±10 %	Permitted voltage range acc. to DIN EN 60034 or DIN IEC 34-1, Voltage tolerance ±5 %	Frequency Hz
230 V Δ / 400 V Y 400 V Δ / 690 V Y	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y	50
460 V Δ —	440...480 V Y 220...275 V Δ / 380...480 V Y	60

2) Measuring-surface sound-pressure level acc. to DIN EN 21 680 Part 1 / ISO 1680-1, measured at 1 m distance with a total pressure difference (vacuum) of 80 to 120 mbar and connected inlet pipe. Tolerance ±3 dB(A).

3) Also available as improved version for use with intake pressures less than 200 mbar.
The order no. then changes to: 2BL1 ...-**0**.
Can also be upgraded later to version 2BL1 …-**0**.

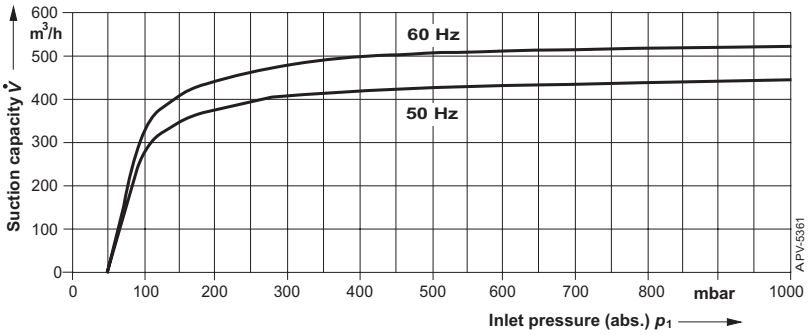
L

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ELMO-L Vacuum Pumps, Range 2BL1 500, 50/60 Hz



Selection diagram

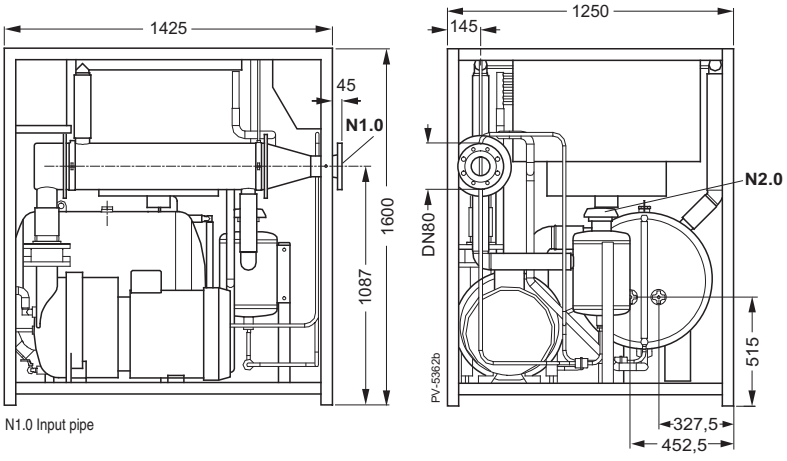


Order information *	2BL1 500-0KC00-6	2BL1 501-0KH02-6
Motor characteristic data:		
Frequency [Hz]	50	50 / 60
Rated output [kW]	12	15 / 18
Rated voltage [V]	400 Δ / 690 Y	400 Δ / 690 Y; 50 Hz 460 Δ; 60 Hz
Degree of protection	IP 55	IP 55
Materials **		
Monoblock pump Casing / port plate and cover / impeller	GG20 coated / GG20 / G-CuAl10Ni	GG20 coated / GG20 / G-CuAl10Ni
Condensation cooler	Stainless steel	Stainless steel
Separator	Galvanised steel	Galvanised steel
Pipework	PE, PVC	PE, PVC

* further types and voltages on request.

** other material versions on request.

Dimensions (mm)



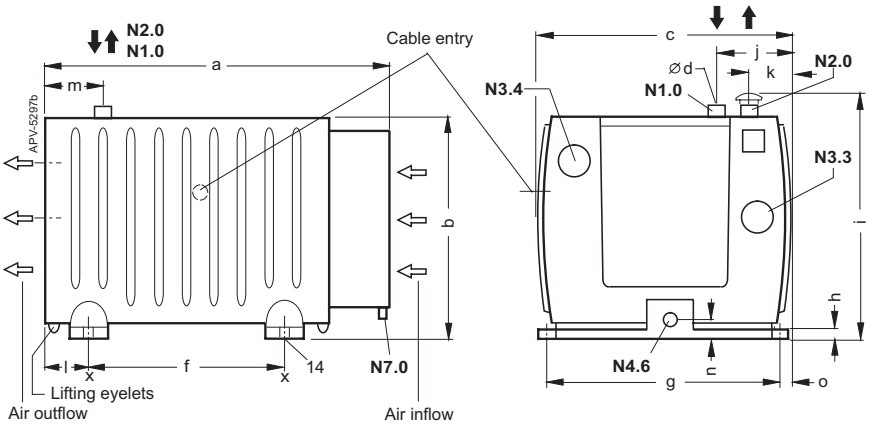
N1.0 Input pipe

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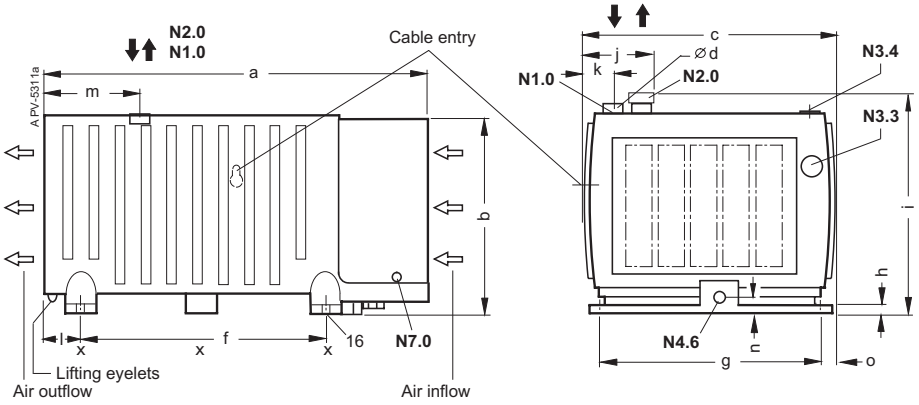
Accessories and Dimensions for ELMO-L Vacuum Pumps

Dimensions (mm)

2BL1 040 … 2BL1 100



2BL1 101 … 2BL1 341



N1.0 Suction connection
N2.0 Discharge connection
N3.3 Connection for in- and outflow controller
N3.4 Filling
N4.6 Total drain or sealant supply
N7.0 Drain of heat exchanger, piping side
x Bearing point

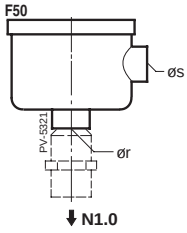
Type	a	b	c	d	g	h	i	j	k	l	m	n	o	N 1.0 ∅ d)	N 3.3	N 3.4	N 4.6	N 7.0
2BL1 040 / 041	600	390	420	345	370	25	440	115	65	80	116	35	25	32	S 56 x 4	S 56 x 4	G ¾ “	G 1/8 “
2BL1 060 / 061	740	430	520	450	460	25	485	150	80	85	120	35	30	50	S 56 x 4	S 56 x 4	G ¾ “	G 1/8 “
2BL1 100	760	430	520	450	460	25	485	150	80	85	120	35	30	50	S 56 x 4	S 56 x 4	G ¾ “	G 1/8 “
2BL1 101 / 140	920	470	620	590	535	25	525	142	72	90	225	35	42.5	50	S 56 x 4	Rd 30 x ¼	G 1 “	G 1/8 “
2BL1 2. / 3.	1100	630	845	755	725	30	710	240	120	90	310	35	60	63	S 56 x 4	Rd 30 x ¼	G 1 “	G 1/8 “

Accessories dimensions (mm)

For type	Brief information		
	F50	**F51**	**F52 / F53**
	∅ r / s	∅ t	min. x
2BL1 040 / 041	R ¾ “	G ¾ “	135
2BL1 060 / 061	R 1 ¼ “	G ¾ “	135
2BL1 100	R 1 ¼ “	G ¾ “	135
2BL1 101 / 140	R 1 ¼ “	G 1 “	135
2BL1 2.	R 1 ¼ “	G 1 “	135
2BL1 3.	R 2 “	G 1 “	135

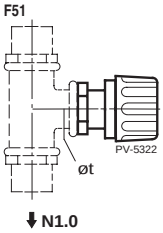
F55: Total drain valve on request

F50



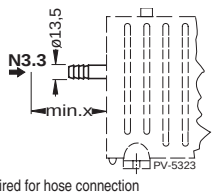
Suction filter

F51



Vacuum relief valve

F52/F53



Space required for hose connection

Inflow/outflow controller

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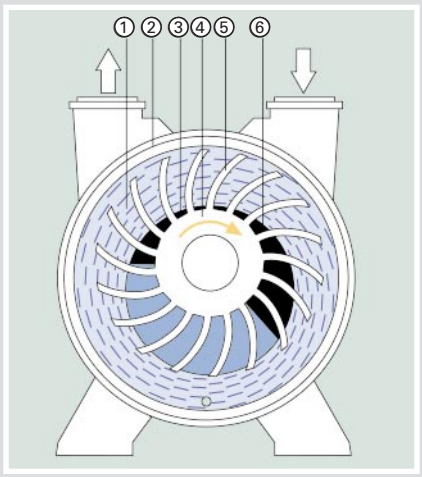


ELMO-F Liquid-Ring Vacuum Pumps/Compressors

Robust technology for every application

We have been building liquid-ring vacuum pumps and compressors for almost 100 years and have acquired a unique level of know-how which we systematically build upon – with great success throughout the world.

Whether from our 2BV, 2BE or 2BG/2BK range, ELMO-F liquid-ring vacuum pumps and compressors are ideally equipped for use in wet processes. They are insensitive to thermal loading, condensate, dust, dirt particles and water slugs. They extract or compress even explosive gas mixtures safely and reliably. ELMO-F vacuum pumps and compressors are 100% oil-free in operation. The suction capacity is maximised by internal condensation of the steam in the suction flow, which means maximum performance when extracting steam-air mixtures.



Operating principle of a 2BE pump

① *Operating liquid*
② *Casing*
③ *Discharge port*
④ *Impeller hub*
⑤ *Impeller*
⑥ *Suction port*

F

M o n o b l o c k p u m p s:



ELMO-F vacuum pumps 2BV2/2BV5 (IP 54 degree of protection) – motor and pump form one structural unit – amazingly space-saving.



ELMO-F vacuum pumps 2BV3 (IP 54) – reliable monoblock pumps for low suction flows.



ELMO-F vacuum pumps 2BV7 (IP 55) – ultra-compact with the lowest water consumption.



ELMO-F vacuum pumps 2BV6 (IP 55, explosion protected) – with single or double mechanical seals and in stainless steel.

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Simple and robust

The principle is simple and robust: the impeller is the only moving part and rotates without making contact – that means without contact with the casing or with the port plates, which limit the end faces of the impeller. Sealing is provided by an operating liquid ring (1) which rotates together with the impeller (5) in the casing (2). At the topmost point, the liquid completely fills the impeller chamber; and, as the impeller rotates around, the liquid falls away from the hub (4). As the space between the operating liquid and the impeller hub increases, it is filled with gas, which is drawn in through the suction port (6) of the port plate.
At the discharge-side, the liquid ring moves back towards the hub and compresses the gas just like a piston, which is then discharged through the flexible discharge port (3) of the port plate.

Applications

- Mining
- Chemical, pharmaceutical and refinery plants
- Evacuation of condensers in steam-electric power plants
- Plastic industry
- Medical technology
- Food industry
- Paper industry
- Textile industry
- Environmental engineering
- Vacuum filtration for processing of ore
- Process engineering
- Sugar factories

Modular design:



ELMO-F vacuum unit 2BE1 – successfully used worldwide in moist processes.



ELMO-F 2BE3 – high performance for extraction and compression of steam-air mixtures.



ELMO-F liquid-ring compressor 2BG, 10 sizes – up to 400 kW and 14 bar abs. pressure.

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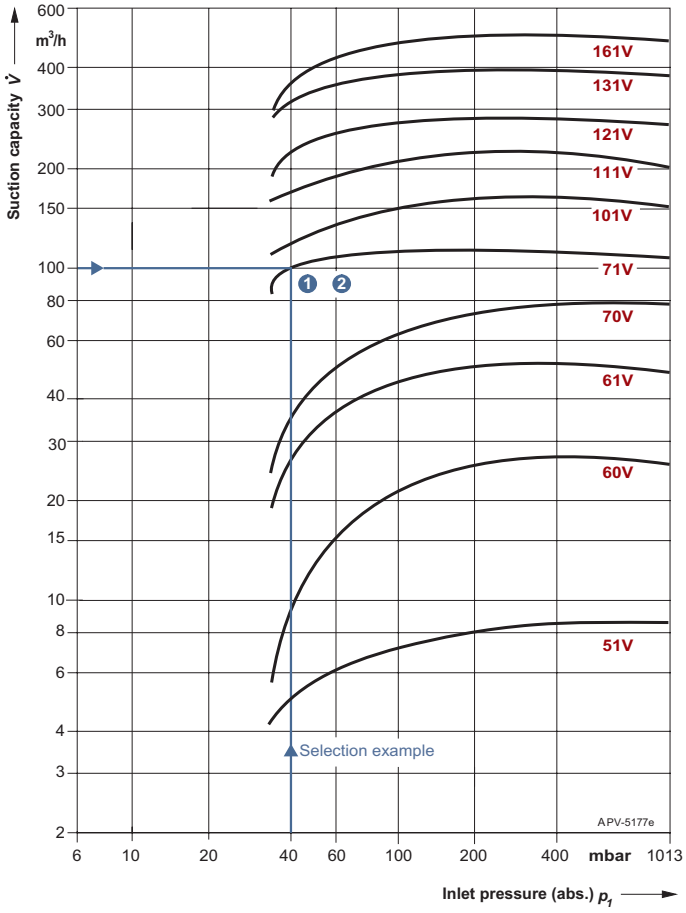
ELMO-F Liquid-Ring Vacuum Pumps, Range 2BV, 50 Hz





The performance curves are valid for pumping air with 100% relative humidity and 20 °C, compression to 1013 mbar, and water at 15 °C as the operating liquid.

Selection diagram 50 Hz



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ELMO-F Liquid-Ring Vacuum Pumps, Range 2BV, 50 Hz

Selection and ordering information

Curve No.	Materials [1] Casing/ port plate/ impeller	Motor: Rated output	Motor: Rated voltage [2]	Motor: Rated current	Operating fluid requirement [3]	Sound-pressure level [4]	Order No. • AVAILABLE EX STOCK	Weight approx.
		kW	V	A	m^3/h	dB(A)		kg
Monoblock design 50 Hz [5]								
51V	Bronze/CrNi steel/bronze	0.3	1 ~ 230	2.9	0.078	57	• 2BV3 051-0GA01-1E	8.5
60V	CrNi steel/bronze/cast iron	0.83	230 Δ / 400 Y	3.3 Δ / 1.9 Y	0.1	62	2BV7 060-1AE00-1S	16
61V	CrNi steel/bronze/cast iron [8]	1.2	1 ~ 230 230 Δ / 400 Y	10.3 8.8 Δ / 5.1 Y	0.12	65	2BV7 061-1AA00-1S 2BV7 061-1AC00-1S	22 22
70V	CrNi steel/bronze/cast iron	2.4	230 Δ / 400 Y	11.6 Δ / 6.7 Y	0.15	66	2BV7 070-1AE00-1S	31
71V	CrNi steel/bronze/cast iron	3.5	400 Δ / 690 Y	8.5 Δ / 4.9 Y	0.22	70	2BV7 071-1AE00-6S	38
101V	CrNi steel/bronze/cast iron	4	400 Δ / 690 Y	9.9 Δ / 5.7 Y	0.45 / 0.25	68	2BV5 110-0KC00-6S	78
111V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	5.5	400 Δ / 690 Y	13.1 Δ / 7.6 Y	0.5 / 0.3	68	• 2BV5 111-0KC00-6P 2BV5 111-0HC00-6P	100
121V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	7.5	400 Δ / 690 Y	17.3 Δ / 10 Y	0.6 / 0.3	69	• 2BV5 121-0KC00-6P 2BV5 121-0HC00-6P	145
131V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	11	400 Δ / 690 Y	23 Δ / 13.4 Y	0.9 / 0.4	73	• 2BV5 131-0KC00-6P 2BV5 131-0HC00-6P	165
161V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	12	400 Δ / 690 Y	29 Δ / 16.8 Y	1.2 / 0.6	74	• 2BV5 161-0KC00-6P 2BV5 161-0HC00-6P	252
Monoblock design 50 Hz, motor in EEx e II T3 [6]								
60V	Cast iron/ceramic/bronze	1.1	230 Δ / 400 Y	4.2 Δ / 2.4 Y	0.12	62	2BV2 060-0ND01-4S	20
61V	Cast iron/ceramic/bronze	1.85		6.3 Δ / 3.65 Y		65	2BV2 061-0ND03-4S	25
70V	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	2.5	230 Δ / 400 Y	8.6 Δ / 4.95 Y	0.15	66	2BV2 070-0ND01-4S 2BV2 070-0PD01-4S 2BV2 070-0HD01-4S	42
71V	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	4.6	230 Δ / 400 Y	15 Δ / 8.6 Y	0.25	72	2BV2 071-0ND04-4S 2BV2 071-0PD04-4S 2BV2 071-0HD04-4S	60
101V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	5	400 Δ / 690 Y	10.4 Δ / 6 Y	0.45 / 0.25	63	2BV5 110-0KD02-8S 2BV5 110-0HD02-8S	83
111V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	6.8	400 Δ / 690 Y	14 Δ / 8.1 Y	0.5 / 0.3	68	2BV5 111-0KD02-8P 2BV5 111-0HD02-8P	105
121V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	10	400 Δ / 690 Y	19.5 Δ / 11.4 Y	0.6 / 0.3	69	2BV5 121-0KD02-8P 2BV5 121-0HD02-8P	165
131V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	13.5	400 Δ / 690 Y	26 Δ / 15.1 Y	0.9 / 0.4	73	2BV5 131-0KD02-8P 2BV5 131-0HD02-8P	185
161V	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	13.2	400 Δ / 690 Y	28 Δ / 16 Y	1.2 / 0.6	74	2BV5 161-0KD02-8P 2BV5 161-0HD02-8P	260
Close-coupled design 50 Hz								
101V	CrNi steel/CrNi steel/CrNi steel	4	400 Δ / 690 Y	9.9 Δ / 5.7 Y	0.45 / 0.25	63	2BV6 110-0HC00-6S	107
111V		5.5		13.1 Δ / 7.6 Y	0.5 / 0.3	68	2BV6 111-0HC00-6S	142
121V		7.5		17.3 Δ / 10 Y	0.6 / 0.3	69	2BV6 121-0HC00-6S	165
131V		11		23 Δ / 13.4 Y	0.9 / 0.4	73	2BV6 131-0HC00-6S	246
161V		12		29 Δ / 16.8 Y	1.2 / 0.6	74	2BV6 161-0HC00-6S	342
Close-coupled design 50 Hz, motor in EEx e II T3 [6]								
101V	CrNi steel/CrNi steel/CrNi steel	5	400 Δ / 690 Y	10.3 Δ / 6 Y	0.45 / 0.25	63	2BV6 110-0HD02-8S	117
111V		6.8		13.8 Δ / 8 Y	0.5 / 0.3	68	2BV6 111-0HD02-8S	142
121V		10		18.6 Δ / 10.8 Y	0.6 / 0.3	69	2BV6 121-0HD02-8S	165
131V		13.5		25.7 Δ / 14.9 Y	0.9 / 0.4	73	2BV6 131-0HD02-8S	246
161V		13.2		27.6 Δ / 16 Y	1.2 / 0.6	74	2BV6 161-0HD02-8S	350
Close-coupled design 50 Hz, motor in EEx de II C								
101V	CrNi steel/CrNi steel/CrNi steel	5.5	400 Δ / 690 Y	11.1 Δ / 6.4 Y	0.45 / 0.25	63	2BV6 110-0HE02-6L	117
111V		7.5		14.8 Δ / 8.6 Y	0.5 / 0.3	68	2BV6 111-0HE02-6L	142
121V		11		20.9 Δ / 12.1 Y	0.6 / 0.3	69	2BV6 121-0HE02-6L	198
131V		15		28.5 Δ / 16.5 Y	0.9 / 0.4	73	2BV6 131-0HE02-6L	238
161V		15		29.5 Δ / 17.1 Y	1.2 / 0.6	74	2BV6 161-0HE02-6L	350

2BV vacuum pumps are made as standard with single mechanical seals with **internal** supply.

For the 2BV6 range, the following alternatives are also available:

Order No. **2BV6 . . . - . . . □ . - . .**

Single mechanical seals, **external** supply	3
Double mechanical seals, **external** supply	**5**

For footnotes, see page 45.

For dimensions, see pages 51 to 53.

Selection example

Application:
e.g. sterilisation

1. Required duty point at 50 Hz:
   $\dot{V}$ = 100 m^3/h
   p_1 = 40 mbar
2. Choose the performance curve which lies closest to the duty point ①.
   In this example, No. **71V**
3. Selection and order code (standard version):
   No. **71V** ≙ Type 2BV7 071-1AE00-6S

F

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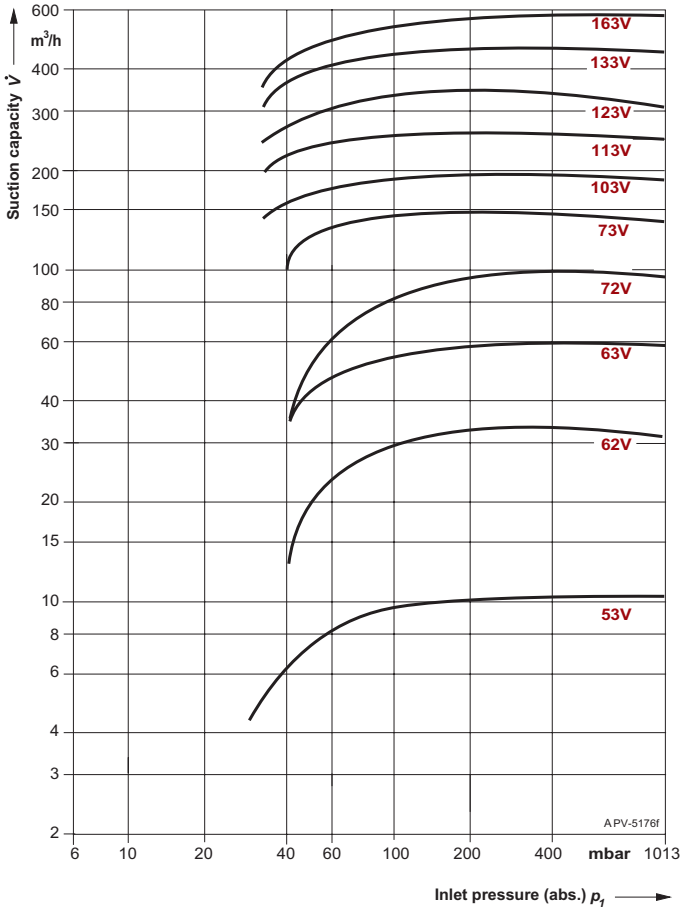
ELMO-F Liquid-Ring Vacuum Pumps, Range 2BV, 50/60 Hz





The performance curves are valid for pumping air with 100% relative humidity and 20 °C, compression to 1013 mbar, and water at 15 °C as the operating liquid.

Selection diagram 60 Hz



F

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ELMO-F Liquid-Ring Vacuum Pumps, Range 2BV, 50/60 Hz

Selection and ordering information

Curve No.	Frequency	Service-factor 7)	Motor			Operating fluid requirement 3)	Sound-pressure level 4)	Order No.	Weight approx.
			Rated output	Rated voltage 2)	Rated current			• AVAILABLE EX STOCK	
	Hz	SF	kW	V	A	m^3/h	dB(A)		kg
Monoblock design 50/60 Hz (at 50 Hz also for more difficult operating conditions)									
51V	50	1.33	0.3	185...220 Δ / 320...380 Y	3.6 Δ / 2.1 Y	0.078	57	**2BV3 051-0GH02-0E**	8.5
53V	60	1.3	0.4	200...254 Δ / 345...440 Y	3.6 Δ / 2.1 Y	0.085	61		9.2
51V	50	1.33	0.3	200...240 Δ / 345...415 Y	3.8 Δ / 2.2 Y	0.078	57	**2BV3 051-0GH02-8E**	8.5
53V	60	1.3	0.4	220...275 Δ / 380...480 Y	3.8 Δ / 2.2 Y	0.085	61		9.2
51V	50	1.65	0.3	1 ~ 100 / 200	9.0 Δ / 4.5 Y	0.078	57	**2BV3 051-0GV02-4E**	8.5
53V	60	1.45	0.4	1 ~ 100 / 200	10.0 Δ / 5.0 Y	0.085	61		9.2
51V	50		0.3	1 ~ 115 / 230	9.0 Δ / 4.5 Y	0.078	57	**2BV3 051-0GV02-5E**	8.5
53V	60		0.4	1 ~ 115 / 230	10.0 Δ / 5.0 Y	0.085	61		9.2
60V	50	1.33	0.83	200... 240 Δ / 345...415 Y	5.0 Δ / 2.9 Y	0.1 / 0.03	62	• **2BV7 060-2AH00-8S**	17
62V	60	1.04	1.04	220...275 Δ / 380...480 Y	5.0 Δ / 2.9 Y	0.1 / 0.03	67		
60V	50	1.33	0.83	185...220 Δ / 320...380 Y	6.0 Δ / 3.4 Y	0.1 / 0.03	62	**2BV7 060-2AH00-0S**	17
62V	60	1.25	1.04	200...254 Δ / 345...440 Y	5.7 Δ / 3.3 Y	0.1 / 0.03	67		
61V	50	1.83	1.2	200...240 Δ / 345...415 Y	9.5 Δ / 5.5 Y	0.12 / 0.06	65	• **2BV7 061-1AH00-8S**	22
63V	60	1.59	1.6	220...275 Δ / 380...480 Y	9.5 Δ / 5.5 Y	0.12 / 0.06	69		
61V	50	1.83	1.2	185...220 Δ / 320...380 Y	10.0 Δ / 5.8 Y	0.12 / 0.06	65	**2BV7 061-1AH00-0S**	22
63V	60	1.59	1.6	200...254 Δ / 345...440 Y	10.8 Δ / 6.2 Y	0.12 / 0.06	69		
70V	50	1.75	2.4	200...240 Δ / 345...415 Y	16.6 Δ / 9.6 Y	0.15 / 0.06	66	• **2BV7 070-2AH00-8S**	31
72V	60	1.34	3.5	220...275 Δ / 380...480 Y	16.6 Δ / 9.6 Y	0.15 / 0.07	72		
70V	50	1.75	2.4	185...220 Δ / 320...380 Y	18.4 Δ / 10.6 Y	0.15 / 0.06	66	**2BV7 070-2AH00-0S**	31
72V	60	1.34	3.5	200...254 Δ / 345...440 Y	18.4 Δ / 10.6 Y	0.15 / 0.07	72		
71V	50	1.57	3.5	200...240 Δ / 345...415 Y	22.1 Δ / 12.8 Y	0.15 / 0.06	66	• **2BV7 071-2AH00-8S**	31
73V	60	1.21	5.2	220...275 Δ / 380...480 Y	22.1 Δ / 12.8 Y	0.15 / 0.07	72		
71V	50	1.57	3.5	185...220 Δ / 320...380 Y	24.0 Δ / 14.0 Y	0.15 / 0.06	66	**2BV7 071-2AH00-0S**	31
73V	60	1.21	5.2	200...254 Δ / 345...440 Y	24.0 Δ / 14.0 Y	0.15 / 0.07	72		
101V	50	1.3	4	200...240 Δ / 345...415 Y	25.5 Δ / 14.7 Y	0.45 / 0.25	63	• **2BV5 110-0KH01-8S** **2BV5 110-0HH01-8S** 1)	83
103V	60	1	6.2	220...275 Δ / 380...480 Y	25.5 Δ / 14.7 Y	0.45 / 0.25	63	• **2BV5 110-0KH01-8S** **2BV5 110-0HH01-8S** 1)	83
111V	50	1.25	5.5	200...240 Δ / 345...415 Y	31 Δ / 17.8 Y	0.5 / 0.3	68	• **2BV5 111-0KH01-8P** **2BV5 111-0HH01-8P** 1)	105
113V	60	1	8.2	220...275 Δ / 380...480 Y	31 Δ / 17.8 Y	0.5 / 0.3	68	• **2BV5 111-0KH01-8P** **2BV5 111-0HH01-8P** 1)	105
121V	50	1.3	7.5	200...240 Δ / 345...415 Y	43 Δ / 25 Y	0.6 / 0.3	69	• **2BV5 121-0KH01-8P** **2BV5 121-0HH01-8P** 1)	165
123V	60	1	11.4	220...275 Δ / 380...480 Y	43 Δ / 25 Y	0.6 / 0.3	69	• **2BV5 121-0KH01-8P** **2BV5 121-0HH01-8P** 1)	165
131V	50	1.2	11	200...240 Δ / 345...415 Y	50 Δ / 29 Y	0.9 / 0.4	73	**2BV5 131-0KH01-8P** **2BV5 131-0HH01-8P** 1)	185
133V	60	1	16.2	220...275 Δ / 380...480 Y	56 Δ / 32.5 Y	0.9 / 0.4	73	**2BV5 131-0KH01-8P** **2BV5 131-0HH01-8P** 1)	185
161V	50	1.25	12	200...240 Δ / 345...415 Y	63.5 Δ / 36.5 Y	1.2 / 0.6	74	**2BV5 161-0KH02-8P** **2BV5 161-0HH02-8P** 1)	260
163V	60	1	18	220...275 Δ / 380...480 Y	72 Δ / 41.5 Y	1.2 / 0.6	74	**2BV5 161-0KH02-8P** **2BV5 161-0HH02-8P** 1)	260
Close-coupled design 50/60 Hz (at 50 Hz also for onerous operating conditions)									
101V	50		5.5	400 Δ / 690 Y 2)	11.4 Δ / 6.6 Y	0.45 / 0.25	63	**2BV6 110-0HH02-6S** 1)	117
103V	60		6.3	460 Δ 2)	11.2 Δ	0.45 / 0.25	67		
111V	50		7.5	400 Δ / 690 Y 2)	15.4 Δ / 8.9 Y	0.5 / 0.3	68	**2BV6 111-0HH02-6S** 1)	142
113V	60		8.6	460 Δ 2)	15 Δ	0.5 / 0.3	74		
121V	50		11	400 Δ / 690 Y 2)	21.1 Δ / 12.2 Y	0.6 / 0.3	69	**2BV6 121-8HH02-6S** 1)	165
123V	60		12.6	460 Δ 2)	21 Δ	0.6 / 0.3	75		
131V	50		15	400 Δ / 690 Y 2)	28.5 Δ / 16.5 Y	0.9 / 0.4	73	**2BV6 131-0HH02-6S** 1)	246
133V	60		17.3	460 Δ 2)	29 Δ	0.9 / 0.4	77		
161V	50		15	400 Δ / 690 Y 2)	30 Δ / 17.3 Y	1.2 / 0.6	74	**2BV6 161-0HH02-6S** 1)	342
163V	60		18	460 Δ 2)	31 Δ	1.2 / 0.6	75		
Close-coupled design 60 Hz, motor to EEx de II C									
103V			8.6	460 Δ 2)	15 Δ	0.45 / 0.25	67	**2BV6 110-0HR03-6L**	129
113V			8.6	460 Δ 2)	15 Δ	0.5 / 0.3	74	**2BV6 111-0HR02-6L**	142
123V			12.6	460 Δ 2)	21 Δ	0.6 / 0.3	75	**2BV6 121-0HR02-6L**	238
133V			17.3	460 Δ 2)	29 Δ	0.9 / 0.4	77	**2BV6 131-0HR02-6L**	232
163V			18	460 Δ 2)	31 Δ	1.2 / 0.6	75	**2BV6 161-0HR02-6L**	362

50 Hz curves, see page 42

Ordering example for special voltages:
2BV7 061-1AA00-9S
N1 Y
220 V Δ, 50 Hz

3) Operating liquid quantity: Based on operating duty "partial operating liquid flow" with use of a discharge-liquid separator. 2BV2: Values are valid for the complete inlet pressure range. 2BV5 and 2BV6: Valid for inlet pressure < 200/>= 200 mbar.

4) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at a distance of 1 m, with medium inlet pressure (100 mbar abs.) and with pipes connected.

5) For version for onerous operating conditions see page 45.

6) With Δconnection, an overload protection with phase failure protection is obligatory.

7) The pumps with a service factor > 1 have additional motor reserves for onerous operating conditions.
Example:
If the rated output is 0.81 kW and SF = 1.35, the maximum permissible motor output is 0.81 kW x 1.35 = 1.093 kW.

8) Casing, cover and impeller also available in chrome-nickel steel (G-X6CrNiMo 1810/1.4408). Please inquire.

Accessories, see pages 48 to 50.

Materials

for	for pump	Pump part		
Casing/port plate/impeller	Type	Pump casing	Port plate	Impeller
Cast iron/ceramic/bronze	**2BV2**	GG 20	KER 221	G-CuAl 10 Ni
Bronze/CrNi steel/bronze	**2BV3**	G-Cu Al 10 Ni	X6CrNiTi 1810	G-CuAl 10 Ni
Cast iron/cast iron/bronze	**2BV5**	GG 20	GG 20	G-CuAl 10 Ni
CrNi steel/ceramic/CrNi steel	**2BV2**	G-X6CrNiMo 1810	KER 221	G-X6CrNiMo 1810
CrNi steel/CrNi steel/CrNi steel 1)	**2BV2** **2BV5/6**	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810
CrNi steel/CrNi steel/bronze	**2BV7**	X5CrNi 1810 (Lantern: EN-GJL-200)	X6CrNiMoTi 17-12-2	G-CuAl 10 Ni

2) Permissible voltage range

Rated voltage acc. to DIN IEC 38 Voltage tolerance here ±10 %		Permissible voltage range acc. to DIN VDE 0530 or DIN IEC 34-1 Voltage tolerance here ±5 %	
50 Hz	60 Hz	50 Hz	60 Hz
230 V Δ / 400 V Y 400 V Δ / 690 V Y	460 V Y 460 V Δ	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y	440...480 V Y 440...480 V Δ

F

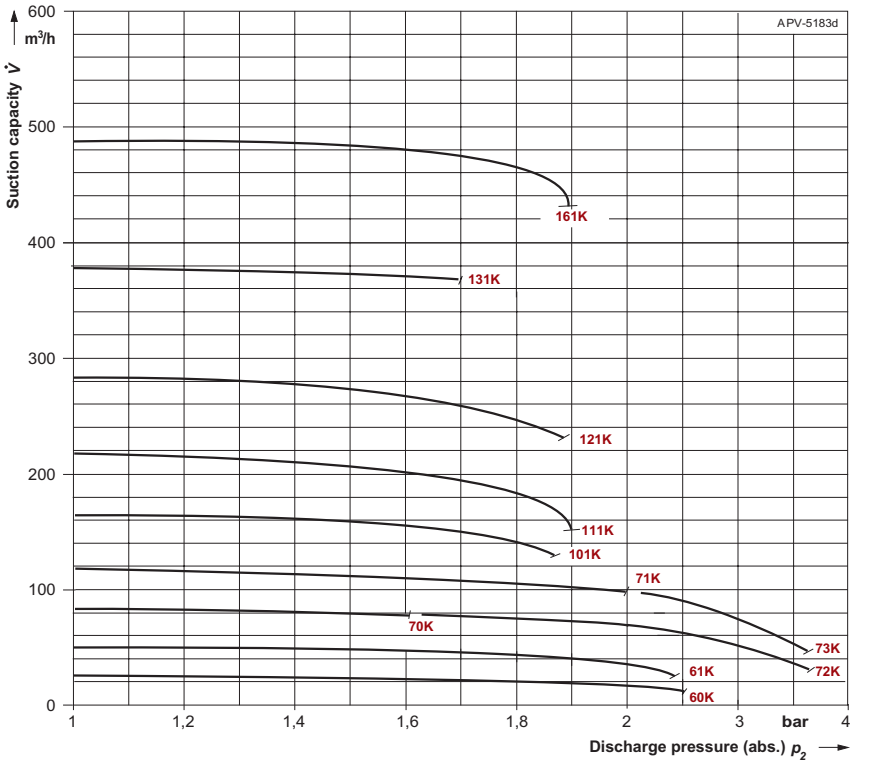
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ELMO-F Liquid-Ring Compressors, Range 2BV, 50/60 Hz

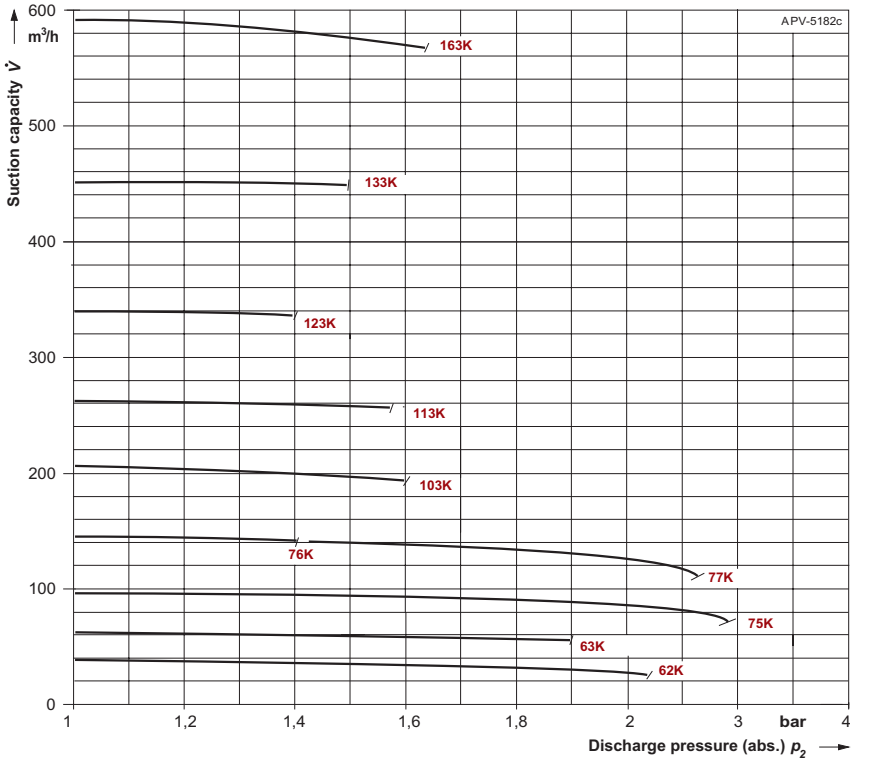


Selection diagram

50 Hz



60 Hz



The performance curves are valid for pumping air with 100% relative humidity and 20 °C, compression to 1013 mbar, and water at 15 °C as the operating liquid.

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ELMO-F Liquid-Ring Compressors, Range 2BV, 50/60 Hz

Selection and ordering information

Curve No.	Materials [1] Casing/ port plate/ impeller	Frequency	Motor				Operating fluid requirement [3]	Sound-pressure level [4]	Order No.	Weight approx.
			Rated output	Service-factor [5]	Rated voltage	Rated current			• AVAILABLE EX STOCK	
		Hz	kW	SF	V	A	m^3/h	dB(A)		kg
Compressors in monoblock design for 50/60 Hz										
60K	Cast iron/ceramic/bronze	50	1.5	1	230 Δ / 400 Y [2]	6.0 Δ / 3.4 Y	0.2	67	**2BV2 060-8NH02-1S**	23
62K		60	1.73		460 Y [2]	3.4 Y		69		
61K	Cast iron/ceramic/bronze	50	2.2	1	230 Δ / 400 Y [2]	8.1 Δ / 4.7 Y	0.25	70	**2BV2 061-8NH03-1S**	25
63K		60	2.53		460 Y [2]	4.7 Y		72		
70K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	50	2.35	1.25	200...240 Δ / 345...415 Y	12.8 Δ / 7.4Y	0.5	73	• **2BV2 070-0NH01-8S** **2BV2 070-0PH01-8S** **2BV2 070-0HH01-8S**	35
72K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	50	5.5	1	400 Δ / 690 Y [2]	11.3 Δ / 6.5 Y	0.5	73	**2BV2 070-8NH03-6S** **2BV2 070-8PH03-6S** **2BV2 070-8HH03-6S**	70
75K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	60	6.3	1	460 Δ [2]	11.3 Δ	0.5	75	**2BV2 070-8NH03-6S** **2BV2 070-8PH03-6S** **2BV2 070-8HH03-6S**	70
71K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	50	3.85	1.4	200...240 Δ / 345...415 Y	22.1 Δ / 12.8 Y	0.7	76	• **2BV2 071-0NH04-8S** **2BV2 071-0PH04-8S** **2BV2 071-0HH04-8S**	60
76K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	60	6.3	1	220...275 Δ / 380...480 Y	22.1 Δ / 12.8 Y	0.7	77	• **2BV2 071-0NH04-8S** **2BV2 071-0PH04-8S** **2BV2 071-0HH04-8S**	60
73K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	50	7.5	1	400 Δ / 690 Y [2]	14.7 Δ / 8.5 Y	0.7	76	**2BV2 071-8NH05-6S** **2BV2 071-8PH05-6S** **2BV2 071-8HH05-6S**	79
77K	Cast iron/ceramic/bronze CrNi steel/ceramic/CrNi steel CrNi steel/CrNi steel/CrNi steel	60	8.6	1	460 Δ [2]	14.7 Δ	0.7	77	**2BV2 071-8NH05-6S** **2BV2 071-8PH05-6S** **2BV2 071-8HH05-6S**	79
101K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	50	4	1.3	200...240 Δ / 345...415 Y	25.5 Δ / 14.7 Y	0.9	67	• **2BV5 110-0KH01-8S** **2BV5 110-0HH01-8S**	83
103K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	60	6.2	1	220...275 Δ / 380...480 Y	25.5 Δ / 14.7 Y	0.9	71	• **2BV5 110-0KH01-8S** **2BV5 110-0HH01-8S**	83
111K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	50	5.5	1.25	200...240 Δ / 345...415 Y	31 Δ / 17.8 Y	1.2	69	• **2BV5 111-0KH01-8P** **2BV5 111-0HH01-8P**	105
113K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	60	8.2	1	220...275 Δ / 380...480 Y	31 Δ / 17.8 Y	1.2	73	• **2BV5 111-0KH01-8P** **2BV5 111-0HH01-8P**	105
121K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	50	7.5	1.3	200...240 Δ / 345...415 Y	43 Δ / 25 Y	1.5	73	• **2BV5 121-0KH01-8P** **2BV5 121-0HH01-8P**	165
123K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	60	11.4	1	220...275 Δ / 380...480 Y	43 Δ / 25 Y	1.5	76	• **2BV5 121-0KH01-8P** **2BV5 121-0HH01-8P**	165
131K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	50	11	1.2	200...240 Δ / 345...415 Y	50 Δ / 29 Y	1.8	76	**2BV5 131-0KH01-8P** **2BV5 131-0HH01-8P**	185
133K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	60	16.2	1	220...275 Δ / 380...480 Y	56 Δ / 32.5 Y	1.8	78	**2BV5 131-0KH01-8P** **2BV5 131-0HH01-8P**	185
161K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	50	12	1.25	200...240 Δ / 345...415 Y	63.5 Δ / 36.5 Y	2.4	77	**2BV5 161-0KH02-8P** **2BV5 161-0HH02-8P**	260
163K	Cast iron/cast iron/bronze CrNi steel/CrNi steel/CrNi steel	60	18	1	220...275 Δ / 380...480 Y	72 Δ / 41.5 Y	2.4	78	**2BV5 161-0KH02-8P** **2BV5 161-0HH02-8P**	260
Other voltages at 50/60 Hz on request										

Ordering example for special voltages:
2BV2 060-0NC00-9S
N1 Y
220 V Δ, 50 Hz

For dimensions, see page 55.

1) Materials

for	for Compressor	Compressor part		
Casing/port plate/impeller	Type	Casing	Port plate	Impeller
Cast iron/cast iron/bronze	**2BV2 06./7.**	GG 20	KER 221	G-CuAl 10 Ni
Cast iron/ceramic/bronze	**2BV5 . . .**	GG 20	GG 20	G-CuAl 10 Ni
CrNi steel/ceramic/CrNi steel	**2BV2 07.**	G-X6CrNiMo 1810	KER 221	G-X6CrNiMo 1810
CrNi steel/CrNi steel/CrNi steel	**2BV2 07.** **2BV5 . . .**	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810	G-X6CrNiMo 1810 G-X5CrNiMoNb 1810

2) Permissible voltage range

Rated voltage acc. to DIN IEC 38*	Permissible voltage range acc. to DIN VDE 0530 or DIN IEC 34-1**
230 V Δ / 400 V Y 400 V Δ / 690 V Y	220...240 V Δ / 380...420 V Y 380...420 V Δ / 660...725 V Y

* Voltage tolerance here ±10 %.

** This voltage range is also indicated on the rating plate, together with the currents occurring in this range. For this range, the permissible voltage tolerance acc. to DIN VDE 0530 and IEC 34-1 is ±5%.

3) Operating liquid quantity: Based on operating duty "increased operating liquid flow". The values are valid for the complete pressure range.

4) Measuring-surface sound-pressure level acc. to EN 21680-1, measured at 1 m distance, at medium discharge-pressure and with pipes connected.

5) The permissible motor rating is derived from the rated power x SF (service factor).

F

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Accessories for ELMO-F Vacuum Pumps, Range 2BV2

Selection and ordering information

		Material	For ELMO-F Type	Order No. • AVAILABLE EX STOCK	Weight approx. kg
	**Discharge-liquid separator** including return pipework and cavitation protection pipework	Plastic/ Steel PPN 4060/ GTW/St 33, zinc-coated	2BV2 060 - 0N . . . 2BV2 061 - 0N . . . 2BV2 070 - 0N . . . 2BV2 071 - 0N . . .	• **2BX1 061** • **2BX1 061** • **2BX1 062** • **2BX1 062**	0.8 0.8 1.3 1.3
		Chrome-nickel steel/ chrome-nickel steel X6CrNiMoTi 17122/ 1.4571	2BV2 070 - 0H . . . 2BV2 070 - 0P . . . 2BV2 071 - 0H . . . 2BV2 071 - 0P . . .	**2BX1 063**	4.8
	**Non-return valve** directly screwed into the inlet flange of the pump	Brass	2BV2 060 - 0N . . . 2BV2 061 - 0N . . . 2BV2 070 - 0N . . . 2BV2 071 - 0N . . .	• **2BY6 930 - 0AX08** • **2BY6 930 - 0AX08** • **2BY6 932 - 0AX08** • **2BY6 932 - 0AX08**	0.7 0.7 1.4 1.4
	**Non-return valve** (between flanges) for vertical mounting	Chrome-nickel steel X6CrNiMoTi 17122/ 1.4571	2BV2 070 - 0H . . . 2BV2 070 - 0P . . . 2BV2 071 - 0H . . . 2BV2 071 - 0P . . .	**2BY6 904 - 0HX08**	0.7
	**Mounting kit** for direct mounting of the non-return valve 2BY6 904 - 0HX08 onto the pump comprising 1 set Flange, fixing screws and gaskets	Chrome-nickel steel G-X6CrNiMo 1810/ 1.4408 X5CrNiMo 17122/ 1.4401	2BV2 070 - 0H . . . 2BV2 070 - 0P . . . 2BV2 071 - 0H . . . 2BV2 071 - 0P . . .	**2BX1 080**	1.9
	**2 connections and 2 mating flanges** (threaded flanges) including fixing screws and gaskets	Cast iron GGG50/USt 37-1	2BV2 060 - 0N . . . 2BV2 061 - 0N . . . 2BV2 070 - 0N . . . 2BV2 071 - 0N . . .	• **2BX1 071** • **2BX1 071** • **2BX1 075** • **2BX1 077**	1.1 1.1 1.9 2.1
	2 connections and 2 mating flanges with weld-neck acc. to DIN 2642 G40 x 48.3 including fixing screws and gaskets	Chrome-nickel steel G-X6CrNiMo 1810/ 1.4408 X5CrNiMo 17122/ 1.4401	2BV2 070 - 0H . . . 2BV2 070 - 0P . . . 2BV2 071 - 0H . . . 2BV2 071 - 0P . . .	**2BX1 076** **2BX1 076** **2BX1 078** **2BX1 078**	1.9 1.9 2.1 2.1 (each piece)
	**Gas ejector** [1]				
	Mains frequency **50 Hz** and **60 Hz**				
		Head; diffusor; jet			
		Cast iron (GG 20); Brass (MS 58); Brass (MS 58)	2BV2 060 - 0N . . .	**2BP1 061 - 1N**	2
			2BV2 061 - 0N . . .	**2BP1 061 - 1N**	
			2BV2 070 - 0N . . .	**2BP1 070 - 1N**	3
			2BV2 071 - 0N . . .	**2BP1 071 - 1N**	4
		Chrome-nickel steel *; Chrome-nickel steel **; Chrome-nickel steel **	2BV2 070 - 0H . . . 2BV2 070 - 0P . . . 2BV2 071 - 0H . . . 2BV2 071 - 0P . . .	**2BP1 070 - 1H** **2BP1 070 - 1H** **2BP1 071 - 1H** **2BP1 071 - 1H**	3 4

1) With connection to the vacuum pump, inlet pressures down to 10 mbar can be reached (propelling gas: ambient air at 20 °C, 1013 mbar).

*) G-X7CrNiMoNb 1810/1.4581

**) X10CrNiMoTi 1810/1.4571

For dimensions, see pages 56, 57.

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Accessories for ELMO-F Vacuum Pumps, Range 2BV5/6

Selection and ordering information

		Material	For ELMO-F Type	Order No. • AVAILABLE EX STOCK	Weight approx. kg
	**Discharge-liquid separator** including return pipework, cavitation protection pipework, gaskets and screws	Plastic/ Steel PPN 4060/ GTW/St33, zinc-coated	2BV5 11 . - 0K. 2BV5 12 ./13. - 0K. 2BV5 16 . - 0K.	•**2BX1 100** •**2BX1 101** **2BX1 106**	7 9 12
		Chrome-nickel steel/ Chrome-nickel steel X6CrNiMoTi 17122/1.4571	2BV. 11 . - 0H. 2BV. 12 ./13. - 0H. 2BV. 16 . - 0H.	**2BX1 102** **2BX1 103** **2BX1 107**	17 19.5 38
	**Non-return valve** (between flanges) for vertical mounting	Steel housing Stainless steel cup Teflon gasket X10Cr 13/1.4006 X6CrNiMoTi 17122/1.4571 PTFE	2BV5 11 . - 0K. 2BV5 12 ./13. - 0K. 2BV5 16 . - 0K.	•**2BY6 905 - 5BX08** •**2BY6 906 - 5BX08** **2BY6 908 - 5BX08**	1.2 1.7 2.3
		Stainless steel housing Stainless steel cup X6CrNiMoTi 17122/1.4571 X6CrNiMoTi 17122/1.4571	2BV. 11 . - 0H. 2BV. 12 ./13. - 0H. 2BV. 16 . - 0H.	**2BY6 905 - 5HX08** **2BY6 906 - 5HX08** **2BY6 908 - 5HX08**	1.2 1.7 2.3
	**Mounting kit** For direct mounting of the non-return valve on the pump, comprising 1 mating flange with weld-neck acc. to DIN 2642, PN 10, gaskets and fixing screws	Flange: Cast steel Weld-neck: Chrome-nickel steel GGG 60 X5CrNiMo 17122/1.4401	2BV. 110 - 0. 2BV. 111 - 0. 2BV. 121 - 0. 2BV. 131 - 0. 2BV. 161 - 0.	**2BX1 081** **2BX1 081** **2BX1 082** **2BX1 082** **2BX1 083**	3 3 3.5 3.5 4
	comprising 1 mating flange (threaded flange) acc. to DIN 2566, PN 16, gaskets and fixing screws	Steel USt 37.1	2BV. 110 - 0K 2BV. 111 - 0K 2BV. 121 - 0K 2BV. 131 - 0K 2BV. 161 - 0K	**2BX1 090** **2BX1 090** **2BX1 091** **2BX1 091** **2BX1 092**	3 3 3.5 3.5 4
	Mating flange 1 loose flange with weld-neck, acc. to DIN 2642, PN 10, gasket and fixing screws	Flange: Cast steel Weld-neck: Chrome-nickel steel GGG 60 X5CrNiMo 17122/1.4401	2BV. 110 - 0. 2BV. 111 - 0. 2BV. 121 - 0. 2BV. 131 - 0. 2BV. 161 - 0.	**2BX1 093** **2BX1 093** **2BX1 094** **2BX1 094** **2BX1 095**	3 3 3.5 3.5 4
	Threaded mating flange 1 loose mating flange acc. to DIN 2566, PN 16 with gasket and fixing screws	Steel USt 37.1	2BV. 110 - 0K 2BV. 111 - 0K 2BV. 121 - 0K 2BV. 131 - 0K 2BV. 161 - 0K	**2BX1 096** **2BX1 096** **2BX1 097** **2BX1 097** **2BX1 098**	3 3 3.5 3.5 4
	**Gas ejector** [1]				
	Mains frequency **50 Hz**				
		Head; diffusor; jet			
		Cast iron (GGG 40); Cast iron (GGG 40); Chrome-nickel steel (CrNi-St)	2BV5 110 - 0K 2BV5 111 - 0K 2BV5 121 - 0K 2BV5 131 - 0K 2BV5 161 - 0K	**2BP5 110 - 1KC** **2BP5 111 - 1KC** **2BP5 121 - 1KC** **2BP5 131 - 1KC** **2BP5 161 - 1KC**	15 15 19 19 25
		Chrome-nickel steel *; Chrome-nickel steel **; Chrome-nickel steel **	2BV. 110 - 0H 2BV. 111 - 0H 2BV. 121 - 0H 2BV. 131 - 0H 2BV. 161 - 0H	**2BP5 110 - 1HC** **2BP5 111 - 1HC** **2BP5 121 - 1HC** **2BP5 131 - 1HC** **2BP5 161 - 1HC**	15 15 19 19 25
	Mains frequency **60 Hz**				
		Head; diffusor; jet			
		Cast iron (GGG 40); Cast iron (GGG 40); Chrome-nickel steel (CrNi-St)	2BV5 110 - 0K 2BV5 111 - 0K 2BV5 121 - 0K 2BV5 131 - 0K 2BV5 161 - 0K	**2BP5 110 - 1KF** **2BP5 111 - 1KF** **2BP5 121 - 1KF** **2BP5 131 - 1KF** **2BP5 161 - 1KF**	15 15 19 19 25
		Chrome-nickel steel *; Chrome-nickel steel **; Chrome-nickel steel **	2BV. 110 - 0H 2BV. 111 - 0H 2BV. 121 - 0H 2BV. 131 - 0H 2BV. 161 - 0H	**2BP5 110 - 1HF** **2BP5 111 - 1HF** **2BP5 121 - 1HF** **2BP5 131 - 1HF** **2BP5 161 - 1HF**	15 15 19 19 25
	Pressure gauge -1 to +0.6 bar including stopcock and gasket		2BV. 110 - . . . to 2BV. 161 - . . .	**2BX9 012 - 1HD20**	1

1) With connection to the vacuum pump, inlet pressures down to 10 mbar can be achieved (propelling gas: ambient air at 20 °C, 1013 mbar).

*) G-X7CrNiMoNb 1810/1.4581

**) X10CrNiMoTi 1810/1.4571

For dimensions, see pages 56, 57.

F

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Accessories for ELMO-F Vacuum Pumps, Range 2BV7

Selection and ordering information

		Material	For ELMO-F Type	Order No.	Weight approx. kg
 Example	**Discharge-liquid separator**	on request	2BV7 060 - . A 2BV7 061 - . A 2BV7 070 - . A 2BV7 071 - . A	**2BX3 000 - 1A** **2BX3 001 - 1A**	1.5 on request
 Example	**Non-return valve** screwed directly on the pump suction connection	Brass / NBR, 1.4301	2BV7 060 - . A 2BV7 061 - . A 2BV7 070 - . A 2BV7 071 - . A	**2BX3 130 - 1A** **2BX3 131 - 1A**	0.9 on request
 Example	**2 connections and 2 mating flanges** (threaded flanges) with gaskets and fixing screws	Metalleable iron zinc coated (EN 10 242)	2BV7 060 - . A 2BV7 061 - . A 2BV7 070 - . A 2BV7 071 - . A	**2BX3 020 - 1A** **2BX3 021 - 1A**	1.2 on request
	**Air ejector** [1]	Cast iron / brass / Metalleable iron zinc coated (EN 10 242)	2BV7 060 - . A 2BV7 061 - . A 2BV7 070 - . A 2BV7 071 - . A	**2BX3 160 - 1A** **2BX3 161 - 1A** **2BX3 162 - 1A**	2.0 on request on request
 Example	**Valve for cavitation protection**	on request	2BV7 060 - . A 2BV7 061 - . A 2BV7 070 - . A 2BV7 071 - . A	**2BX3 110 - 1A** **2BX3 111 - 1A**	0.1 on request

1) Air ejector with connection to the vacuum pump, inlet pressures down to 10 mbar abs. can be achieved (propelin gas: ambient air of 20 °C, 1013 mbar).

The illustrations are preliminary and not obligatory.

Dimensions on request.

Accessories (supplied with pump)

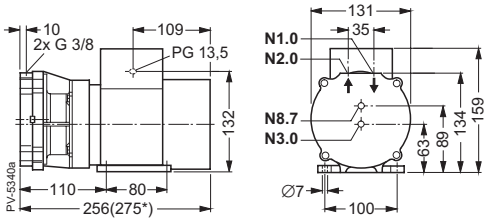
	Abbreviation [1]
Liquid separator	**B11**
Non-return valve can be screwed directly onto the inlet flange of the pump	**B12**
2 connections and 2 mating flanges (Threaded flanges) incl. screws and gaskets	**B13**
Gas ejector [1]	**B14**
Valve for cavitation protection	**B15**

1) A "**Z**" and the abbreviation should be added to the order no. as follows: Example 2BV7 061-2AC00-1S-**Z**
B11 + B14

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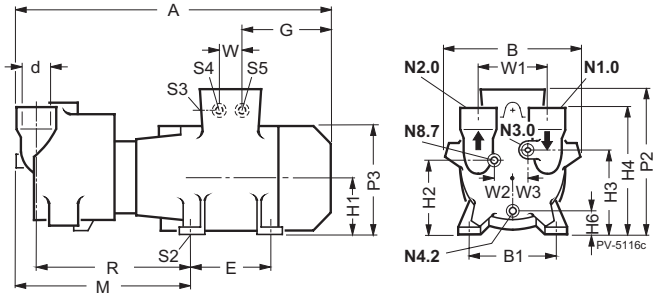
Dimensions for ELMO-F Vacuum Pumps, Range 2BV2/3

Dimensions for 2BV2 06., 2BV2 07., 2BV3 05. (mm)



2BV3 051

N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating water connection (G⅛)
N8.7 Cavitation protection (built-in) (G⅛)
* Dimensions of 2BV3 051-0GB02-1E
Capacitor integrated in terminal box.



2BV2 06./2BV2 07.

N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating water connection
N4.2 Drain or sealant supply
N8.7 Cavitation protection (built-in)

Type	Curve No.	A	B	B1	E	G	H1	H2	H3	H4	H6	M	P2	P3
2BV2 060 - 0	60V	403	186	125	100	153	80	108	116	185	27,5	219	200	158
- 1	60V/62V													
- 0ND01	60V					138							234	
2BV2 061 - 2	61V	476	186	140	100	185	90	118	126	195	37,5	251	218	177
- 3	61V/63V													
- 0ND03	61V					170							252	
2BV2 070 - 0	70V	494	223	140	100	185	90	117.5	136	212	23	265	218	177
- 1	70V/72V	552		160	140	190	100	127.5	146	222	33	300	235	197
- 0ND01	70V													
2BV2 071 - 3	71V	559	223	160	140	190	100	127.5	146	222	33	307	235	198
	71V/73V	564		216		254	132	159.5	178	254	65	276	327	262
	71V													

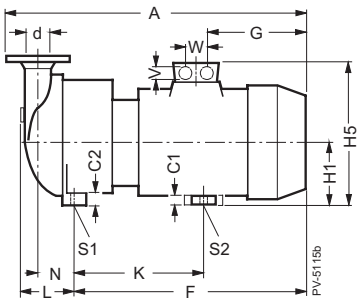
Type	Curve No.	R	S2	S3/S4	S5	W	W1	W2	W3	d	N3.0	N4.2	N8.7
2BV2 060 - 0	60V	193	9,5	M 25 x 1.5	M 16 x 1.5	32	110	25.5	21	G 1	G ⅜	G ¼	G ⅜
- 1	60V/62V									(18 deep)	(12 deep)	(12 deep)	(11 deep)
- 0ND01	60V												
2BV2 061 - 2	61V	224	10				110	25.5	21	G 1	G ⅜	G ¼	G ⅜
- 3	61V/63V									(18 deep)	(12 deep)	(12 deep)	(11 deep)
- 0ND03	61V												
2BV2 070 - 0	70V	234	10				110	33	27	G 1½	G ⅜	G ¼	G ⅜
- 1	70V/72V	269	12	4 x M 32 x 1.5		42				(22 deep)	(12 deep)	(12 deep)	(11 deep)
- 0ND01	70V												
2BV2 071 - 3	71V	276	12				110	33	27	G 1½	G ⅜	G ¼	G ⅜
	71V/73V	246								(22 deep)	(12 deep)	(12 deep)	(11 deep)
	71V												

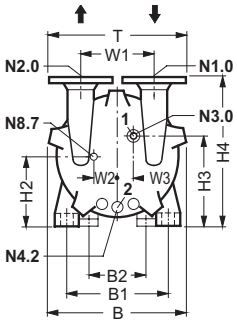
F

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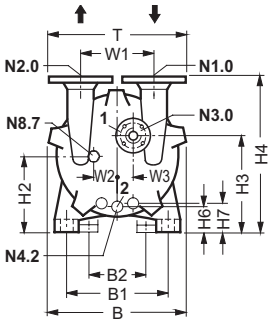
Dimensions for ELMO-F Vacuum Pumps, Range 2BV5

Dimensions for 2BV5 110, 2BV5 111, 2BV5 121, 2BV5 131, 2BV5 161 (mm)



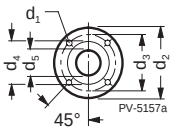


2BV5... - 0K
(cast iron version)

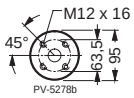


2BV5... - 0H
(CrNi steel version)

N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating water connection
N4.2 Drain or sealant supply
N8.7 Cavitation protection (built-in)



N1.0, N2.0 1)



N3.0 (only 2BV5 … - 0H.) 2)

Type	Curve No.	A	B	B1	B2	C1	C2	H1	H2	H3	H4	H5	H6	H7	K	L
2BV5 110 - 0K ... 2BV5 110 - 0H ...	101V/103V	639	326 326	255	190	20	26	140	156 153	202 203	361	288	38.5	58	295 295	128
2BV5 110 - 0KD.2 2BV5 110 - 0HD.2	101V	669	325 330	255	190	20	36	150	166 163	211 213	371	345	47.5	67	306	130
2BV5 111 - 0K ... 2BV5 111 - 0H ...	111V/113V	655	325 330	265	190	20	26	150	166 163	212 213	371	345	47.5	68 67	291	130
2BV5 111 - 0KD.2 2BV5 111 - 0HD.2	111V	693	325 330	265	190	20	26	150	166 163	212 213	371	345	47.5	68 67	291	130
2BV5 121 - 0K ... 2BV5 121 - 0H ...	121V/123V	715	347 352	265	190	20	26	150	167	217	385	345	38.5	60	336	141
2BV5 121 - 0KD.2 2BV5 121 - 0HD.2	121V	798	347 352	265	190	20	51	175	192	242	410	408	63.5	85	375	141
2BV5 131 - 0K ... 2BV5 131 - 0H ...	131V/133V	802	377 382	300	190	20	30	175	194	249	427	409	53	76	373	147 150
2BV5 131 - 0KD.2 2BV5 131 - 0HD.2	131V	842	377 382	300	190	20	30	175	194	249	427	409	53	76	373	147 150
2BV5 161 - 0KC.0 2BV5 161 - 0HC.0	161V	895	479 484	370	190	20	30	210	225	303 305	521	444	51	79.5	422.5	201
2BV5 161 - 0K ..2 2BV5 161 - 0H ..2	161V/163V	1011	479 484	370	370	30	30	210	225	303	521	485	51	79.5	617.5	201

Type	Curve No.	F	G	N	S1	S2	T	V	d_1	d_2	d_3	d_4	d_5
2BV5 110 - 0 .... 2BV5 110 - 0.D.2	101V/103V 101V	468 497	208 233	92	12 x 23	12	340	4 x M 32 x 1.5	19	160	123	97	52
2BV5 111 - 0 .... 2BV5 111 - 0.D.2	111V/113V 111V	483 521	233 271	92	12 x 23	12	340	2 x Pg 21	19	160	123	97	52
2BV5 121 - 0 .... 2BV5 121 - 0.D.2	121V/123V 121V	528 610	233 287	97	12 x 23	12 14	382	2 x Pg 21 2 x Pg 29	19	182	142	113	66.5
2BV5 131 - 0 .... 2BV5 131 - 0.D.2	131V/133V 131V	608 648	287 327	103	15 x 25	14	382	2 x Pg 29	19	182	142	113	66.5
2BV5 161 - 0.C.0 2BV5 161 - 0 ...2	161V 161V163V	658 773.5	243 450	137.5	15 x 27	14	450	2 x Pg 29	22	200	156	130	80

Type	Curve No.	W	W1	W2	W3	d (N1.0, N2.0)	N3.0	N4.2	N8.7
2BV5 110 - 0K ... 2BV5 110 - 0H ...	101V/103V	42	180	52.5	27 24.5	DN 50/PN 40	G ¾ (24 deep) DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV5 111 - 0K ... 2BV5 111 - 0H ...	111V/113V	42	180	52.5	27 24.5	DN 50/2''	G ¾ (24 deep) DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV5 121 - 0K ... 2BV5 121 - 0H ...	121V/123V	42 3)	200	57	29	DN 65/2 ½''	G ¾ (24 deep) DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV5 131 - 0K ... 2BV5 131 - 0H ...	131V/133V	54	200	62.5	32	DN 65/2 ½''	G ¾ (24 deep) DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV5 161 - 0K ..2 2BV5 161 - 0H ..2	161V/163V	75 4)	250	81	41	DN 80/3''	G ¾ (24 deep) DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)

1) Suitable for mating flange acc. to DIN 2501, ND 16 or ANSI B16.5-3-150.

2) Suitable for round flange acc. to DIN 2633, ND 16, nominal diameter 15, or ANSI B16.5-1/2-150.

3) 2BV5 121-0.D.: 54 mm

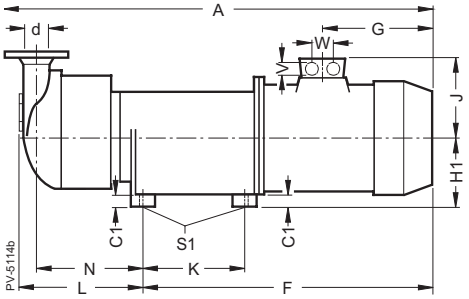
4) 2BV5 161-0.C.O.: 54 mm

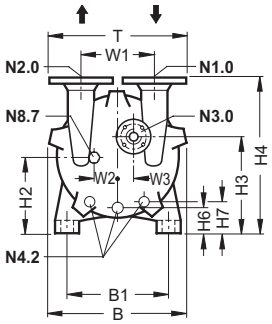
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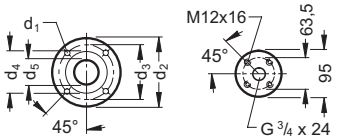
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Dimensions for ELMO-F Vacuum Pumps, Range 2BV6

Dimensions for 2BV6 110, 2BV6 111, 2BV6 121, 2BV6 131, 2BV6 161 (mm)







N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating liquid connection
N4.2 Drain and sealant supply
N8.7 Cavitation protection (built-in)

N1.0, N2.0 [1]

N3.0 [2]

Type	Curve No.	A	B	B1	C1	F	G	J	V	W
2BV6 110 - 0HC.0	101V	986	330	255	26	626	195	171	2 x Pg 21	42
2BV6 110 - 0HD.2	101V	1044				684	233	195		
2BV6 110 - 0HH.2	103V									
2BV6 110 - 0HE.2	101V	1118				758	305	253		54
2BV6 110 - 0HR.3	103V									
2BV6 111 - 0HC.0	111V	1124	330	279	26	733	233	195	2 x Pg 21	42
2BV6 111 - 0HD.2	111V	1162				771	271			
2BV6 111 - 0HH.2	113V	1124				733	233			
2BV6 111 - 0HE.2	111V	1198				807	305	253		54
2BV6 111 - 0HR.2	113V									
2BV6 121 - 0HC.0	121V	1152	351	279	26	733	233	195	2 x Pg 21	42
2BV6 121 - 0HD.2	121V	1287				868	287	233	2 x Pg 29	54
2BV6 121 - 0HH.2	123V									
2BV6 121 - 0HE.2	121V	1294				875	339	276		
2BV6 121 - 0HR.2	123V									
2BV6 131 - 0HC.0	131V	1383	382	320	26	939	287	233	2 x Pg 29	54
2BV6 131 - 0HD.2	131V	1423				979	327			
2BV6 131 - 0HH.2	133V	1383				939	287			
2BV6 131 - 0HE.2	131V	1456				1012	390	292		117
2BV6 131 - 0HR.2	133V									
2BV6 161 - 0HC.0	161V	1441	484	320	26	939	287	233	2 x Pg 29	54
2BV6 161 - 0HD.2	161V	1569				1067	450	275		75
2BV6 161 - 0HH.2	163V									
2BV6 161 - 0HE.2	161V	1573				1071	454	310		
2BV6 161 - 0HR.2	163V									

Type	Curve No.	H1	H2	H3	H4	H6	H7	K	L	N	S1	T	W1	W2	W3
2BV6 110 -	101V103V	160	173	223	381	58	77	250	319	281	Ø 13 x 23	340	180	52	27
2BV6 111 -	111V/113V	180	193	243	401	78	97	320	349	311	Ø 13 x 23	340	180	52	27
2BV6 121 -	121V/123V	180	197	247	415	69	90	320	372	328	Ø 13 x 23	381.5	200	57	29
2BV6 131 -	131V/133V	215	234	287	467	93	116	414	400	353	Ø 15 x 27	381.5	200	62.5	32
2BV6 161 -	161V/163V	215	230	310	526	56	85	414	466	402	Ø 15 x 27	450	250	81	41

Type	Curve No.	d_1	d_2	d_3	d_4	d_5	d (N1.0, N2.0)	N3.0	N4.2	N8.7
2BV6 110 -	101V/103V	19	160	123	97	52	DN 50/2''	DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV6 111 -	111V/113V	19	160	123	97	52	DN 50/2''	DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV6 121 -	121V/123V	19	181.5	142	113	66.5	DN 65/2½''	DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV6 131 -	131V/133V	19	181.5	142	113	66.5	DN 65/2½''	DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)
2BV6 161 -	161V/163V	22	200	156	130	80	DN 80/3''	DN 15 + G ¾ (24 deep)	G ⅜ (25 deep)	G ⅜ (11 deep)

1) Suitable for mating flange acc. to DIN 2501, ND 16 or ANSI B16.5-3-150.

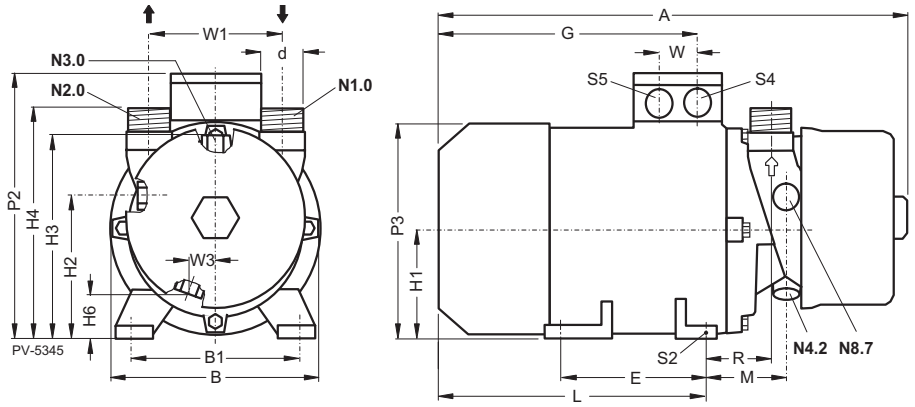
2) Suitable for round flange acc. to DIN 2633, ND 16, nominal diameter 15, or ANSI-B16.5-1/2-150.

F

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Dimensions for ELMO-F Vacuum Pumps, Range 2BV7

Dimensions for 2BV7 (mm)



2BV7

N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating water connection
N4.2 Drain or sealant supply
N8.7 Cavitation protection (built-in)

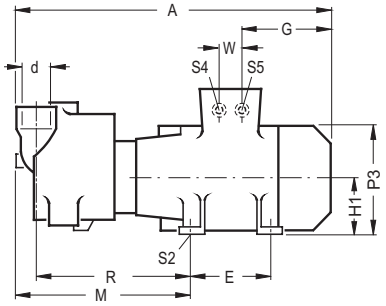
Type	Curve No.	A	B	B_1	E	G	H_1	H_2	H_3	H_4	H_6	M	P_2	P_3	R	S_2	S_4	S_5	W	W_1	W_3	d	N3.0	N4.0
2BV7 060 - 1 2BV7 060 - 2	60V	325 372	162 180	125 140	100	154 186	80 90	107 117	156 166	180 190	26 35	72 68	200 218	161 161	59 55	10	M 25 x 1.5	M 16 x 1.5	32	110	23	R1''	G ¼	G ¼
2BV7 061	61V	394	180	140	100	186	90	117	166	190	36	68	218	180	55	10	M 25 x 1.5	M 16 x 1.5	32	110	23	R1''	G ¼	G ¼
2BV7 070 - 1 2BV7 070 - 2	70V	438 473	202	160	140	241 266	100	127	194	222	34	89	235	201	71	12	M 32 x 1.5	M 32 x 1.5	42	120	28	R1 ½''	G ¼	G ¼
2BV7 071 - 1 2BV7 071 - 2	71V	488 511	227 266	190 216	140	252 266	112 132	139 159	208 226	234 254	46 66	96 99	260 288	225 265	78 81	12	M 32 x 1.5	M 32 x 1.5	42 42	120	28	R1 ½''	G ¼	G ¼

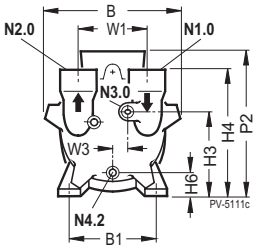
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Dimensions for ELMO-F Compressors, Range 2BV.

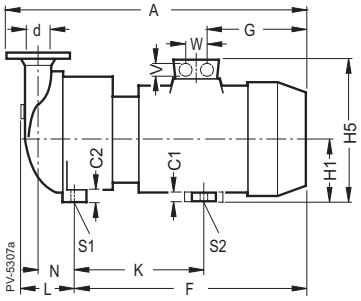
Dimensions for 2BV2 06., 2BV2 07., 2BV5 (mm)



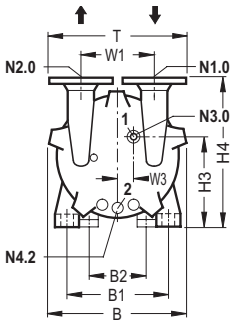


2BV2 06., 2BV2 07.

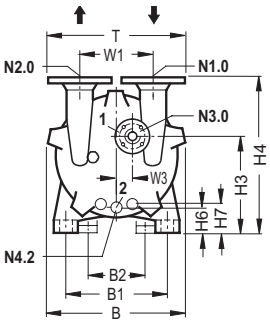
N1.0 Suction connection
N2.0 Discharge connection
N3.0 Operating water connection
N4.2 Drain or sealant supply



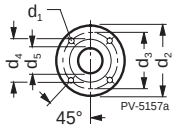
2BV5



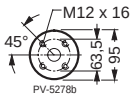
2BV5 ...-0K
(Cast iron version)



2BV5 ...-0H
(CrNi steel version)



N1.0, N2.0 [1]



N3.0 (only 2BV5. ...-0H.) [2]

Type	Curve No.	A	B	B1	E	G	H1	H3	H4	H6	M	P2	P3	R	S2	S4	S5	W	W1	W3	d	N3.0	N4.2
2BV2 060 - 2	60K/62K	457	186	140	100	185	90	126	195	37.5	276	218	177	205	10	M 25 x 1.5	M 16 x 1.5	32	110	21	G 1	G ¾	G ¼
2BV2 061 - 3	61K/63K	476				185					251	218	177	224				32				12 deep	12 deep
2BV2 070 - 1	70K	552	223	160	140	190	100	146	222	33	300	235	197	269	12	4 x M 32 x 1.5		42	110	27	G 1½	G ⅜	G ¼
- 3	72K/75K	557		216		225	132	178	254	65	302	299	261	239								12 deep	12 deep
2BV2 071 - 4	71K/76K	564	223	216	140	225	132	261	254	65	276	299	261	246	12	4 x M 32 x 1.5		42	110	27	G 1½	G ⅜	G ¼
- 5	73K/77K																					12 deep	12 deep

Type	Curve No.	A	B	B1	B2	C1	C2	H1	H3	H4	H5	H6	H7	K	L	F	G	N	S1	S2	T	V
2BV5 110 - 0K...	101K/103K	647	325	255	190	20	26	140	201	361	311	38	57	297.5	130	475	195	92	12 x 23	12	340	2 x Pg 21
2BV5 110 - 0H...			330						203													
2BV5 111 - 0K...	111K/113K	655	325	265	190	20	26	150	212	371	346	48	68	291	130	483	233	92	12 x 23	12	340	2 x Pg 21
2BV5 111 - 0H...			330						213				67									
2BV5 121 - 0K...	121K/123K	715	347	265	190	20	26	150	217	385	346	39	60	336	141	528	233	97	12 x 23	12	382	2 x Pg 21
2BV5 121 - 0H...			352																			
2BV5 131 - 0K...	131K/133K	802	377	300	190	20	30	175	249	427	409	53	76	373	147	608	287	103	15 x 25	14	382	2 x Pg 29
2BV5 131 - 0H...			382												150							
2BV5 161 - 0K...	161K/163K	1011	479	370	370	30	30	210	303	521	485	51	80	617.5	201	773.5	450	137.5	15 x 27	15	450	2 x Pg 29
2BV5 161 - 0H...			484						305													

Type	Curve No.	d_1	d_2	d_3	d_4	d_5	W	W1	W3	d (N1.0, N2.0)	N3.0	N4.2
2BV5 110 - 0K...	101K/103K	19	160	123	97	52	42	180	27	DN 50/2"	G ¾ (24 deep)	G ⅜ (25 deep)
2BV5 110 - 0H...									24		DN 15 + G ¾ (24 deep)	
2BV5 111 - 0K...	111K/113K	19	160	123	97	52	42	180	27	DN 50/2"	G ¾ (24 deep)	G ⅜ (25 deep)
2BV5 111 - 0H...									24		DN 15 + G ¾ (24 deep)	
2BV5 121 - 0K...	121K/123K	19	182	142	113	66.5	42	200	29	DN 65/2 ½'	G ¾ (24 deep)	G ⅜ (25 deep)
2BV5 121 - 0H...											DN 15 + G ¾ (24 deep)	
2BV5 131 - 0K...	131K/133K	19	182	142	113	66.5	54	200	32	DN 65/2 ½"	G ¾ (24 deep)	G ⅜ (25 deep)
2BV5 131 - 0H...											DN 15 + G ¾ (24 deep)	
2BV5 161 - 0K...	161K/163K	22	200	156	130	80	75	250	41	DN 80/3"	G ¾ (24 deep)	G ⅜ (25 deep)
2BV5 161 - 0H...											DN 15 + G ¾ (24 deep)	

1) Suitable for mating flange acc. to DIN 2501, ND 16 or ANSI B16.5-3-150.

2) Suitable for round flange acc. to DIN 2633, ND 16, nominal diameter 15, or ANSI B16.5-1/2-150.

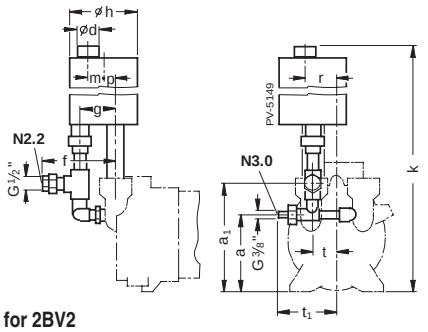
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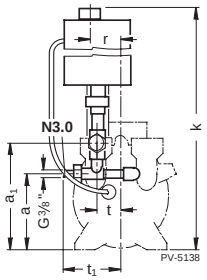
Accessories for ELMO-F Vacuum Pumps and Compressors, Range 2BV.

Dimensions (mm)

Discharge-liquid separator without pipe for cavitation protection



Discharge-liquid separator with pipe for cavitation protection

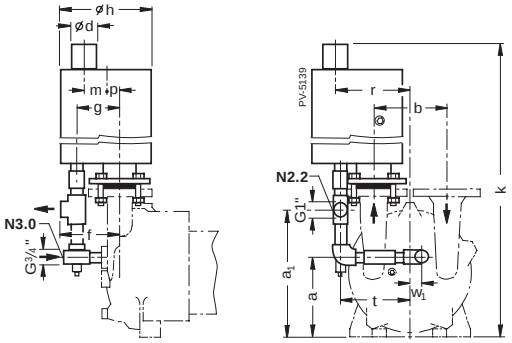


N2.2 Separator overflow
N3.0 Operating liquid connection

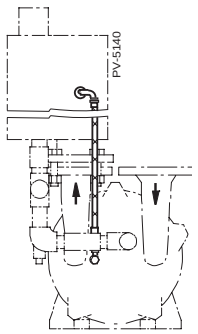
Discharge-liquid separator for 2BV2

Order No.	For type	a	a_1	Ø d	f	g	Ø h	k	m	p	r	t	t_1
2BX1 061	2BV2 060	116	191	40	153	72	125	521	27	30	71	75	185
2BX1 061	2BV2 061	126	201	40	153	72	125	531	27	30	71	75	185
2BX1 062/063	2BV2 070-0...0	136	211	50	167	86	161	620	19	31	86	69	179
2BX1 062/063	2BV2 070-0...1	146	221	50	167	86	161	630	19	31	86	69	179
2BX1 062/063	2BV2 071-0...3	146	221	50	167	86	161	630	19	31	86	69	179
2BX1 062/063	2BV2 071-0...4	178	253	50	167	86	161	662	19	31	86	69	179

Discharge-liquid separator without pipe for cavitation protection



Discharge-liquid separator with pipe for cavitation protection

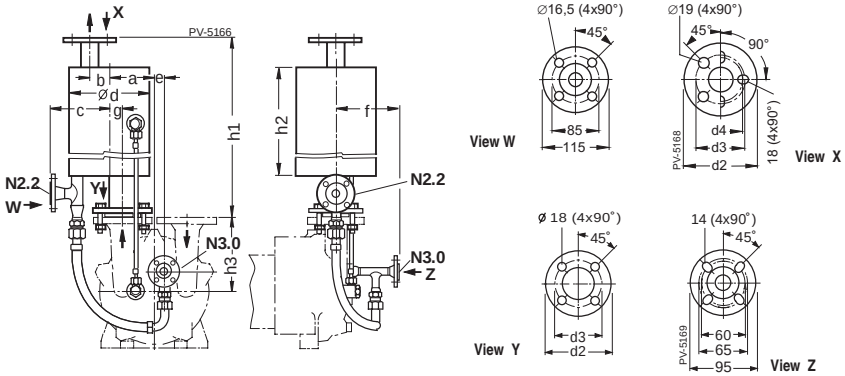


N2.2 Separator overflow
N3.0 Operating liquid connection

Discharge-liquid separator for 2BV5

Order No.	For type	a	a_1	b	Ø d	f_1	f_2	g	Ø h	k	m	p	r	t	w_1
2BX1 100	2BV5 110	202	322	180	63	125	120	87	200	904	54	22	144	151	27
	2BV5 111	212	332							914					27
2BX1 101	2BV5 121	217	337	200	75	131	126	93	250	915	18	12	200	200	29
	2BV5 131	249	369							955					32
2BX1 106	2BV5 161	305	425	250	90	151	146	113	315	1120	0	0	255	182	41

Discharge-liquid separator with pipe for cavitation protection



N2.2 Separator overflow [1]
N3.0 Operating liquid connection

1) 2BX1 10.: Flange DIN 2633, ND 16 suitable for ANSI-1¼-150

2) 2BX1 102: Flange B DIN 2576 suitable for ANSI-2-150
2BX1 103: Flange B DIN 2576 suitable for ANSI-2½-150
2BX1 107: Flange 100/108 DIN 2633 suitable for ANSI-4-150

3) 2BX1 102: Loose flange DIN 2642
2BX1 103: Loose flange DIN 2642
2BX1 107: Flange 80/88.9 DIN 2633

Discharge-liquid separator for 2BV5 ...-0H and 2BV6

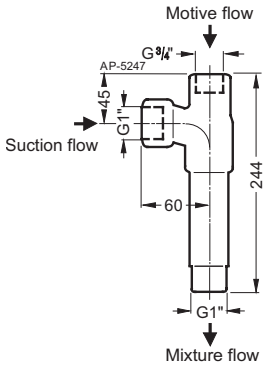
												Flange view X [2]			Flange view Y [3]	
Order No.	For type	a	b	c	d	e	f	g	h1	h2	h3	d2	d3	d4	d2	d3
2BX1 102	2BV. 110	123	45	157	204	25	164	33	598	380	221	165	125	120.6	165	125
	2BV. 111															
2BX1 103	2BV. 121	143	62	157	254	29	170	43	598	380	235	185	145	139.7	185	145
	2BV. 131					32	173				252					
2BX1 107	2BV. 161	203	100	77	355	41	188	78	717	505	311	220	190.5	180	200	160

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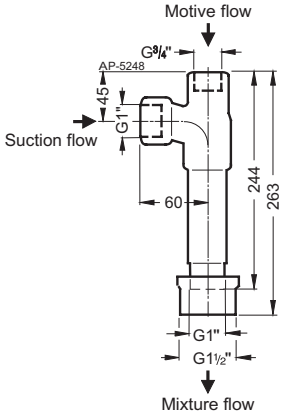
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Accessories for ELMO-F Vacuum Pumps and Compressors, Range 2BV.

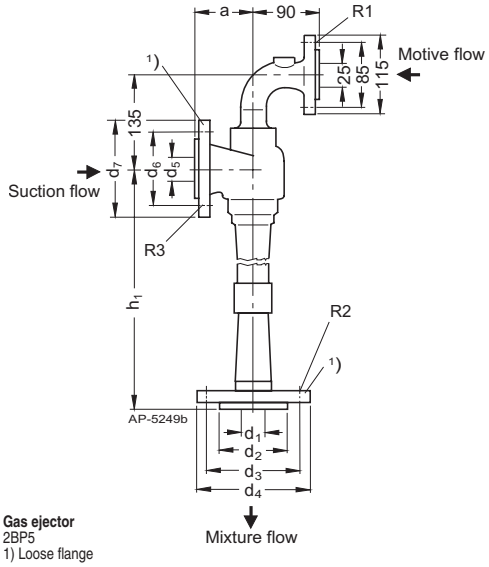
Dimensions for Accessories 2BV2 06., 2BV2 07., 2BV5 (mm)



Gas ejector
2BP1 061



Gas ejector
2BP1 07.



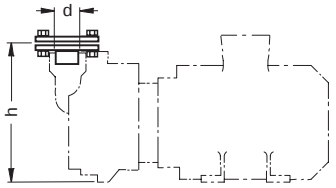
Gas ejector
2BP5
1) Loose flange

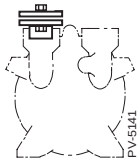
Gas ejector for 2BV5 and 2BV6

Order No.	For type	a	d_1	d_2	d_3	d_4	d_5	d_6	d_7	h_1	R1	R2	R3
50 Hz													
2BP5 110 - 1.C	2BV. 110	104	32	78	125	165	32	100	140	352	4 x 14	4 x 18	4 x 18
2BP5 111 - 1.C	2BV. 111	104	32	78	125	165	32	100	140	352	4 x 14	4 x 18	4 x 18
2BP5 121 - 1.C	2BV. 121	114	40	88	145	185	40	110	150	412	4 x 14	4 x 18	4 x 18
2BP5 131 - 1.C	2BV. 131	114	40	88	145	185	40	110	150	412	4 x 14	4 x 18	4 x 18
2BP5 161 - 1.C	2BV. 161	100	50	102	160	200	50	125	165	605	4 x 14	8 x 18	4 x 18
60 Hz													
2BP5 110 - 1.F	2BV. 110	104	32	78	125	165	32	100	140	352	4 x 14	4 x 18	4 x 18
2BP5 111 - 1.F	2BV. 111	114	40	78	125	165	40	100	140	412	4 x 14	4 x 18	4 x 18
2BP5 121 - 1.F	2BV. 121	114	40	88	145	185	40	110	150	412	4 x 14	4 x 18	4 x 18
2BP5 131 - 1.F	2BV. 131	100	50	88	145	185	50	110	150	605	4 x 14	4 x 18	4 x 18
2BP5 161 - 1.F	2BV. 161	100	50	102	160	200	50	125	165	605	4 x 14	8 x 18	4 x 18

Flange connection for 2BV2

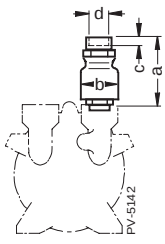
Order No.	For type	d	h
2BX1 071	2BV2 060 2BV2 061	G 1	211 221
2BX1 075/076	2BV2 070 - 0...0 2BV2 070 - 0...1	G 1½	240 250
2BX1 077/78	2BV2 070 - 0...3 2BV2 071 - 0...4	G 1½	250 282



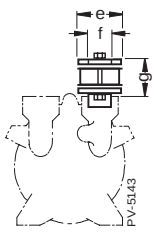


Non-return valve for 2BV2, 2BV5 and 2BV6

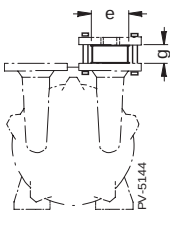
	2BY6 93.				2BY6 90. with 2BX1 080		
For type	a	b	c	d	e	f	g
2BV2 060/2BV2 061	79	57	17	G 1	—	—	—
2BV2 070/2BV1 071	85	75	20	G 1½	90	54	86
2BV. 110/2BV. 111	—	—	—	—	100	—	42
2BV. 121/2BV. 131	—	—	—	—	118	—	48
2BV. 161	—	—	—	—	138	—	55



2BY6 930 - 0AX08
2BY6 932 - 0AX08



2BY6 904 - 0HX08
with mounting kit
2BX1 080



2BY6 9.
with mounting kit
2BX1 08.

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