

SOGEVAC SV FP



SOGEVAC FP range

SOGEVAC FP are proven oil sealed rotary vane pumps. This technology has been used by the food industry since decades and is today recognized as a standard.

SOGEVAC FP are delivered in serial with food grade oil.

Our Solution

- High pumping speed / footprint ratio by compact design
- Maximum tightness and low complexity thanks to integrated functions and no external pipes
- Lowest noise level on the market
- Wide range of motors available for all pump sizes
- Complete pump range from 10 m³/h to 320 m³/h
- Based on proven SOGEVAC design with manual gas ballast and oil filter
- Delivery with food grade oil NSF H1 (LEYBONOL LVO 140 or LVO 150)

Typical Applications

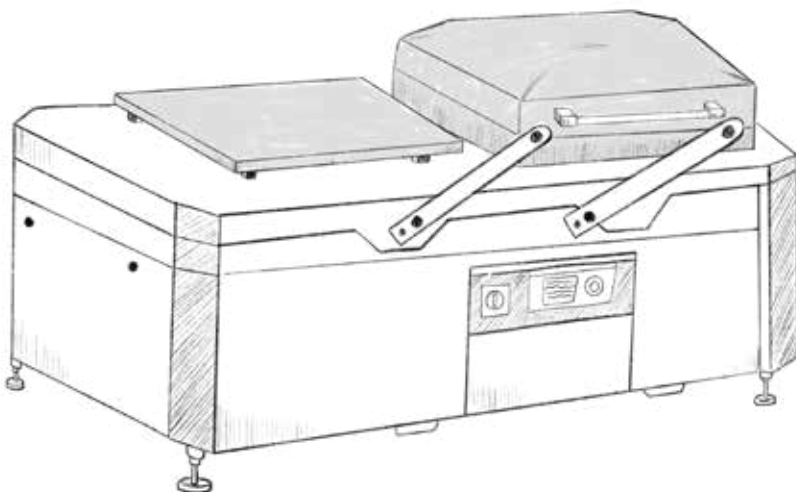
- Thermoformers / Rollstock machines
- Chamber packaging machines
- Modified Atmosphere Packaging (except with O₂)
- Rotary chamber packaging
- Blenders
- Stuffers
- Vacuum cutters
- Freeze drying
- Vacuum cooling

Customer Benefits

- Lowest cost of ownership by easy maintenance and minimized after sales costs

Options

- Stainless steel hygienic enclosures for full wash-down capability



| Technical Data | | SOGEVAC SV 10 FP | | SOGEVAC SV 16 FP | |
|---|--|------------------|---------------|------------------|---------------|
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz |
| Nominal speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 11 (6.5) | 13.0 (7.7) | 16.0 (9.4) | 19.0 (11.2) |
| Pumping speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 9.5 (5.6) | 11.5 (6.8) | 15.0 (8.8) | 17.0 (10.0) |
| Ultimate partial pressure without gas ballast ¹⁾ | mbar (Torr) | ≤ 1.5 (≤ 1.1) | ≤ 1.5 (≤ 1.1) | ≤ 1.0 (≤ 0.8) | ≤ 1.0 (≤ 0.8) |
| Ultimate total pressure with gas ballast ¹⁾ | mbar (Torr) | ≤ 2.5 (≤ 1.9) | ≤ 2.5 (≤ 1.9) | ≤ 2.0 (≤ 1.5) | ≤ 2.0 (≤ 1.5) |
| Maximum permissible Water vapor capacity | kg x h ⁻¹ (qt/hr) | 0.02 (0.02) | 0.03 (0.03) | 0.03 (0.03) | 0.05 (0.05) |
| Motor power | kW (hp) | 0.55 (0.75) | 0.75 (1.02) | 0.55 (0.75) | 0.75 (1.02) |
| Noise level ²⁾ | dB(A) | 60 | 64 | 60 | 64 |
| Oil capacity | l (qt) | 0.5 (0.53) | 0.5 (0.53) | 0.5 (0.53) | 0.5 (0.53) |
| Connections ³⁾ | | | | | |
| Intake side ⁴⁾ | G or NPT | 3/4" + 1/2" | 3/4" + 1/2" | 3/4" + 1/2" | 3/4" + 1/2" |
| Pressure side | G or NPT | - | - | - | - |

Remark: The SV 10 FP and SV 16 FP cannot work continuously above 150 mbar. Please consult Leybold for this application

| Technical Data | | SOGEVAC SV 25 FP | | SOGEVAC SV 45 FP | |
|---|--|------------------|---------------|------------------|---------------|
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz |
| Nominal speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 26.0 (15.3) | 31.0 (18.3) | 44.0 (25.9) | 53.0 (31.2) |
| Pumping speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 22.5 (13.3) | 25.0 (14.7) | 38.5 (22.7) | 47.0 (27.7) |
| Ultimate partial pressure without gas ballast ¹⁾ | mbar (Torr) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) |
| Ultimate total pressure with gas ballast ¹⁾ | mbar (Torr) | ≤ 0.8 (≤ 0.6) | ≤ 0.8 (≤ 0.6) | ≤ 1.5 (≤ 1.1) | ≤ 1.5 (≤ 1.1) |
| Maximum permissible water vapor capacity | kg x h ⁻¹ (qt/hr) | 0.085 (0.09) | 0.1 (0.11) | 0.76 (0.81) | 0.9 (0.95) |
| Motor power | kW (hp) | 0.9 (1.2) | 1.1 (1.5) | 1.1 (1.5) | 1.5 (2.0) |
| Noise level ²⁾ | dB(A) | 64 | 67 | 58 | 60 |
| Oil capacity | l (qt) | 0.5 (0.53) | 0.5 (0.53) | 1.0 (1.05) | 1.0 (1.05) |
| Connections ³⁾ | | | | | |
| Intake side ⁴⁾ | G or NPT | 3/4" + 1/2" | 3/4" + 1/2" | 1 1/4" | 1 1/4" |
| Pressure side | G or NPT | 3/4" | 3/4" | 1 1/4" | 1 1/4" |

¹⁾ To DIN 28 400 and following numbers

²⁾ Operated at the ultimate pressure without gas ballast, free-field measurement at a distance of 1 m (3.5 ft)

³⁾ 1/2" adapter supplied. Basic port is 3/4"

⁴⁾ Single-phase motors do not have plugs, cords or ON/OFF switches

SOGEVAC SV FP

| Technical Data | | SOGEVAC SV 70 FP | | SOGEVAC SV 105 FP | |
|---|--|------------------|---------------|-------------------|---------------|
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz |
| Nominal speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 59.0 (34.8) | 71.0 (41.8) | 97.5 (57.4) | 117.0 (68.9) |
| Pumping speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 54.0 (31.8) | 64.0 (37.7) | 87.5 (51.5) | 105.0 (61.8) |
| Ultimate partial pressure without gas ballast ¹⁾ | mbar (Torr) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) | ≤ 0.5 (≤ 0.4) |
| Ultimate total pressure with gas ballast ¹⁾ | mbar (Torr) | ≤ 1.5 (≤ 1.1) | ≤ 1.5 (≤ 1.1) | ≤ 1.5 (≤ 1.1) | ≤ 1.5 (≤ 1.1) |
| Maximum permissible Water vapor capacity | kg x h ⁻¹ (qt/hr) | 1.0 (1.1) | 1.25 (1.33) | 1.6 (1.7) | 1.7 (1.8) |
| Motor power | kW (hp) | 1.5 (2.0) | 1.8 (2.4) | 2.2 (3.0) | 3.5 (4.7) |
| Noise level ²⁾ | dB(A) | 60 | 64 | 61 | 64 |
| Oil capacity | l (qt) | 2.0 (2.1) | 2.0 (2.1) | 2.0 (2.1) | 2.0 (2.1) |
| Connections | | | | | |
| Intake side | G or NPT | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |
| Pressure side | G or NPT | 1 1/4" | 1 1/4" | 1 1/4" | 1 1/4" |

| Technical Data | | SOGEVAC | | | | | |
|---|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | SV 200 FP | | SV 300 FP | | SV 320 FP | |
| | | 50 Hz | 60 Hz | 50 Hz | 60 Hz | 50 Hz | 60 Hz |
| Nominal speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 180 (106) | 220 (130) | 280 (165) | 340 (200) | 330 (194) | 385 (227) |
| Pumping speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 170 (100) | 200 (118) | 240 (141) | 290 (171) | 284 (168) | 330 (194) |
| Ultimate partial pressure without gas ballast ¹⁾ | mbar (Torr) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) |
| Ultimate total pressure with gas ballast ¹⁾ | mbar (Torr) | ≤ 0.7 (≤ 0.5) | ≤ 0.7 (≤ 0.5) | ≤ 0.7 (≤ 0.5) | ≤ 0.7 (≤ 0.5) | ≤ 0.7 (≤ 0.5) | ≤ 0.7 (≤ 0.5) |
| Maximum permissible Water vapor capacity | kg x h ⁻¹ (qt/hr) | 3.4 (3.6) | 5.4 (5.7) | 1.3 (1.4) | 1.8 (1.9) | 1.3 (1.4) | 1.8 (1.9) |
| Motor power | kW (hp) | 4.0 (5.4) | 4.6 (6.2) | 5.5 (7.4) | 6.3 (8.4) | 7.5 (10) | 7.5 (10) |
| Noise level ²⁾ | dB(A) | 69 | 73 | 72 | 76 | 70 | 73 |
| Oil capacity | l (qt) | 9.0 (9.5) | 9.0 (9.5) | 11.5 (12.2) | 11.5 (12.2) | 11.5 (12.2) | 11.5 (12.2) |
| Connections | | | | | | | |
| Intake side | G or NPT | 2" | 2" | 2" | 2" | 2" | 2" |
| Pressure side | G or NPT | 2" | 2" | 2" | 2" | 2" | 2" |

¹⁾ To DIN 28 400 and following numbers

²⁾ Operated at the ultimate pressure without gas ballast, free-field measurement at a distance of 1 m (3.5 ft)

³⁾ 1/2" adapter supplied. Basic port is 3/4"

⁴⁾ Single-phase motors do not have plugs, cords or ON/OFF switches

Ordering Information

SOGEVAC

| | SV 10 FP | SV 16 FP | SV 25 FP | SV 45 FP | SV 70 FP |
|---|------------|------------|------------|------------|------------|
| | Part No. | Part No. | Part No. | Part No. | Part No. |
| SOGEVAC SV 10 - 70 FP Three-phase world motor | 960 100 FP | 960 160 FP | 960 251 FP | 960 324 FP | 960 424 FP |
| Three-phase world motor 230 V / 400 V, 50 + 60 Hz / 460 V, 60 Hz | - | - | - | 960 307 FP | 960 407 FP |
| Single-phase world motor 230 V, 50/60 Hz; G | 960 105 FP | 960 165 FP | 960 256 FP | - | - |
| 230 V, 50/60 Hz; NPT | - | - | 960 257 FP | - | - |
| 110 - 120 V, 60 Hz | 960 110 FP | 960 170 FP | 960 261 FP | - | - |
| Hygienic enclosures SOGEVAC | - | - | - | - | HygEn002 |

For accessories, see pumps SOGEVAC SV 10 B, SV 16 B, SV 25 B, SV 40 B and SV 65 B

Ordering Information

SOGEVAC

| | SV 105 FP | SV 200 FP | SV 300 FP | SV 320 FP |
|--|------------|--------------|------------|------------|
| | Part No. | Part No. | Part No. | Part No. |
| SOGEVAC SV 105 - 300 FP Three-phase Europe motor 230 V / 400 V, 50 Hz and 460 V, 60 Hz | 960 507 FP | 109 27 FP | 960 702 FP | 960 722 FP |
| Three-phase USA motor ¹⁾ 230 V / 460 V, 60 Hz and 400 V, 50 Hz UL/CSA with terminal board | 960 514 FP | 950 27 FP | 960 707 FP | 960722FP01 |
| Three-phase world motor 230 V / 400 V, 50 + 60 Hz / 460 V, 60 Hz | 960 524 FP | 109 2 791 FP | 960 717 FP | 960732FP |
| Hygienic enclosures SOGEVAC | HygEn002 | HygEn003 | HygEn004 | HygEn004 |

For accessories, see pumps SOGEVAC SV 40 B, SV 65 B, SV 100 B, SV 200 and SV 300 B

¹⁾ Pumps with USA motors have NPT inlet and outlet flanges