Products

Oil-free Scroll Vacuum Pumps SCROLLVAC SC 5 D, SC 15 D, SC 30 D



Scroll vacuum pump SCROLLVAC SC 30 D

Advantage for the User

- Absolutely oil-free
- High effective pumping speed
- Low ultimate pressure
- Low noise level
- Low vibration operation
- Atmospheric inlet pressure allowable
- Low weight
- Air cooling
- Low power consumption
- Integrated operating hours counter

Typical Applications

- Electron beam welding
- Lasers
- Leak detection systems
- Accelerators / synchrontrons
- Surface analysis instruments
- Scanning electron microscopes
- Load lock
- Spectroscopy
- Lamp manufacturing
- As a backing pump for turbomolecular pump systems



Important to the quality of a scroll pump is that precise manufacturing tolerances are maintained and that suitable materials are selected.

Maintenance Intervals

In order to maintain the performance of the pump, a standard maintenance is required after a certain number of operating hours.

For this we are offering complete maintenance kits

- Small maintenance kit (Minor Kit) after 8,000 h or at latest after an operating time of 12 months
- Large maintenance kit (Major Kit) after 16,000 hours or at latest after an operating time of 24 months

Warranty

Upon signing a warranty contract, we will grant a two-year warranty for faulty material when complying with the required maintenance intervals.

Excluded are wearing parts as well as well wear due to the process.





Dimensional drawing for the scroll vacuum pump SCROLLVAC SC 5 D (above) and SC 15 D (below)



Dimensional drawing for the scroll vacuum pump SCROLLVAC SC 30 D





Technical Data		SCROLLVAC		
		SC 5 D	SC 15 D	SC 30 D
Nominal pumping speed ¹⁾ 50 Hz 60 Hz	m ³ /h (cfm) m ³ /h (cfm)	5.4 (3.2) 6.4 (3.8)	15.0 (8.8) 18.0 (10.6)	30.0 (17.7) 36.0 (21.2)
Pumping speed ¹⁾ 50 Hz 60 Hz	m ³ /h (cfm) m ³ /h (cfm)	4.8 (2.8) 6.0 (3.5)	13.0 (7.7) 15.5 (9.1)	26.0 (13.3) 31.0 (18.3)
Attainable ultimate pressure	mbar (Torr)	≤ 0.05 (≤ 0.038)	≤ 0.016 (≤ 0.012)	≤ 0.01 (≤ 0.008)
Leak rate	mbar I/s	1 x 10 ⁻⁶	1 x 10 ⁻⁶	1 x 10 ⁻⁶
Maximum inlet pressure		Atmosphere	Atmosphere	Atmosphere
Permissible ambient tempera	ature °C (°F)	5 to 40 (41 to 104)	5 to 40 (41 to 104)	5 to 40 (41 to 104)
Connections Inlet Exhaust	DN DN	25 16	25 16	40 25
Cooling		Air	Air	Air
Water vapor capacity with purge, min.	g/h I/min	0.2 9	1.04 10	1.04 10
Protection class	IP	20	20	20
Motor power	W (hp)	150 (0.20)	400 (0.54)	600 (0.82)
Motor speed 50 Hz 60 Hz	min ⁻¹ (rpm) min ⁻¹ (rpm)	1440 (1440) 1740 (1740)	1450 (1450) 1730 (1730)	1450 (1450) 1730 (1730)
Motor voltage	1 ph. ²⁾ 3 ph.	100 V / 50 Hz 100 - 115 V / 60 Hz 200 - 230 V / 50/60 Hz	100 V / 50 Hz 100 - 115 V / 60 Hz 200 - 230 V / 50/60 Hz 200 V, 380 - 415 V / 50 Hz 200 - 230 V, 460 V / 60 Hz	100 V / 50 Hz 100 - 115 V / 60 Hz 200 - 230 V / 50/60 Hz 200 V, 380 - 415 V / 50 Hz 200 - 230 V, 460 V / 60 Hz
Noise level at 1 m, free field measurement	dB(A)	≤ 52	≤ 58	≤ 62
Dimensions (W x H x D)	mm (in.)	308 x 214 x 225 (12.13 x 8.43 x 8.86)	400 x 252 x 336 (15.75 x 9.92 x 13.23)	443 x 328 x 372 (17.44 x 12.91 x 14.65)
Weight Single-phase motor Three-phase motor	kg (lbs) kg (lbs)	14 (30.9) -	25 (55.2) 23 (50.8)	44 (97.1) 38 (83.9)
Ordering Information		SCROLLVAC		
Oil-free scroll vacuum pump Single-phase motor, with cable and plug Europe (Schuko plug, 230 V) US / Japan (NEMA plug, 115 V) Three-phase motor, without cable Maintenance kits		Part No. 133 000 Part No. 133 100 -	Part No. 133 001 Part No. 133 101 Part No. 133 003	Part No. 133 002 Part No. 133 102 Part No. 133 004
Small maintenance kit (after 8,000 h)	Minor Kit	Part No. EK870000496	Part No. EK870000497	Part No. EK870000498

Part No. EK870000499

Part No. EK870000502

Part No. EK870000500

(after 16,000 h) Tool kit SC 5/15/30 D

Large maintenance kit

¹⁾ In accordance with 28 400 and subsequent numbers

 $^{2)}\,$ The Part No. for single-phase pumps will determine the voltage range at delivery

Major Kit

Part No. EK870000501

Part No. EK870000503 Part No. EK870000503