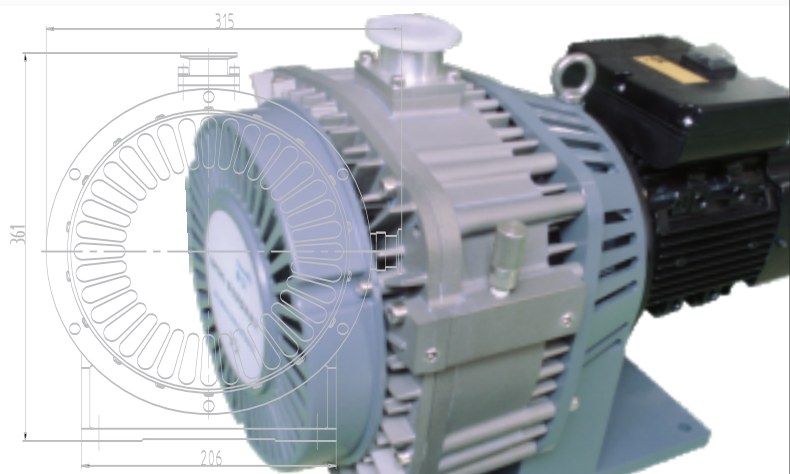
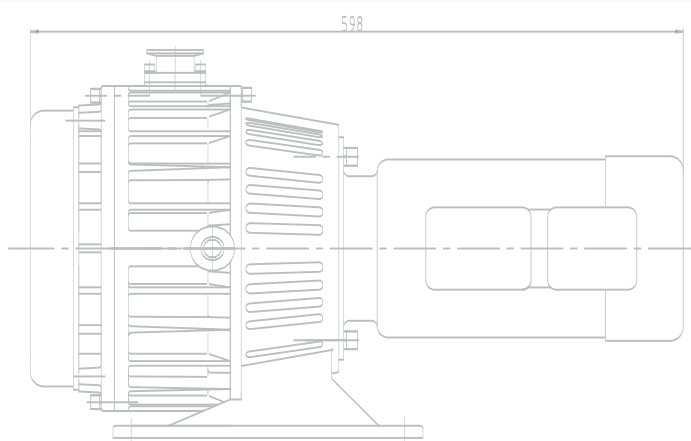


OILFREE SCROLL VACUUM PUMP



GWSP



Construction and Operating Principle

GWSP series oil free scroll vacuum pump is constructed with fixed scrolls, orbiting scroll, main shaft, cooling fans, crank shaft kits, and bracket.

Its' operating principle is based on two spiral cylinders, one offset and orbiting against the other with an offset of 180°. Thus several crescent-shaped pockets of differing sizes are created. By means of an eccentric drive, the orbiting scroll is made to orbit about the fixed scroll, reducing the volume of the pockets and compressing gases from the outside towards the inside thereby pumping the gases from vacuum chamber.



0°(360°) gas suction



90° gas pressing



180° further compressing



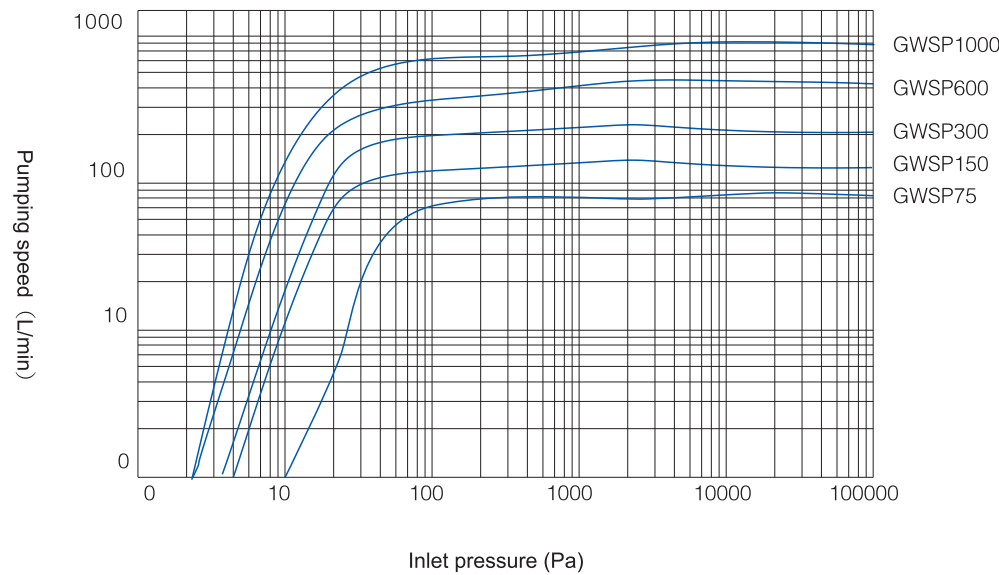
270° discharging

Applications

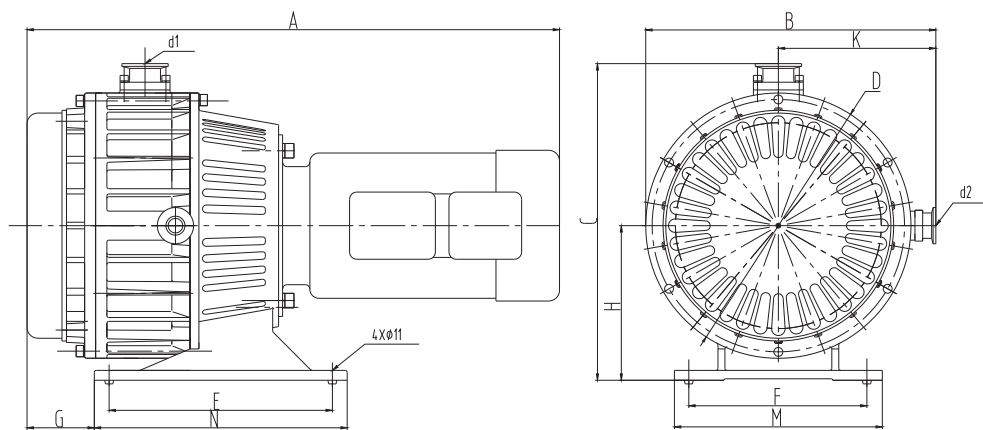
	Industry	Semiconductor	Power/Chemical	Food/Pharmaceutical	R&D	Analyzer
Vacuum packaging storage	✓	✓		✓	✓	
Vacuum oven	✓	✓			✓	
Vacuum exhauster	✓	✓			✓	✓
Oven/freeze drying	✓	✓	✓	✓	✓	
Gas recirculation	✓	✓	✓	✓	✓	✓
Air condition gas line pumping	✓					
Breaker gas line pumping	✓	✓	✓	✓	✓	
Laser tube vacuum pumping	✓				✓	
Rough pump for molecular pump	✓	✓		✓	✓	✓
Vacuum processing	✓	✓	✓	✓		
Vacuum plating	✓	✓			✓	✓
Leak detecting	✓	✓	✓		✓	✓
Glove box	✓	✓		✓	✓	
Mass spectrometer					✓	✓
Electron microscopy					✓	✓
High-energy beam lines accelerator					✓	✓
Oilfree vacuum testing station					✓	
Sample preparation					✓	✓

GWSP

Performance Curve



Connection



Size	A	B	C	D	E	F	G	H	M	N	K	d1	d2
Model													
GWSP75	350	210	245	187	179	140	42	125	160	204	116	25	16
GWSP150	430	250	280	220	214	109	86	130	155	250	135	25	16
GWSP300	490	290	340	267	252	145	101	201	192	288	156	25	16
GWSP600	520	316	360	291	252	160	93	175	206	288	175	40	16
GWSP1000	580	360	400	336	267	184	121	195	224	303	191	40	16×2

GWSP

Technical Specification

Model			GWSP75	GWSP150	GWSP300	GWSP600	GWSP1000	
Displacement	50Hz	l/s	1.0	2.0	4.3	8.7	16.6	
		l/min	60.0	120.0	258.0	522.0	996.0	
		m³/h	3.6	7.2	15.5	31.3	59.8	
		cfm	2.2	4.3	9.3	18.7	35.8	
	60Hz	l/s	1.2	2.4	5.1	10.4	19.9	
		l/min	72.0	144.0	306.0	624.0	1194.0	
		m³/h	4.3	8.6	18.3	37.4	71.6	
		cfm	2.5	5.1	10.9	22.3	42.8	
Ultimate Pressure		Pa	≦ 10	≦ 8.0	≦ 2.6	≦ 1.0	≦ 1.0	
		Torr	≦ 7.5 × 10 ⁻²	≦ 6.0 × 10 ⁻²	≦ 1.9 × 10 ⁻²	≦ 7.5 × 10 ⁻³	≦ 7.5 × 10 ⁻³	
		mbar	≦ 1.0 × 10 ⁻¹	≦ 8.0 × 10 ⁻²	≦ 2.6 × 10 ⁻²	≦ 1.0 × 10 ⁻²	≦ 1.0 × 10 ⁻²	
		psi	≦ 1.4 × 10 ⁻³	≦ 1.2 × 10 ⁻³	≦ 3.8 × 10 ⁻⁴	≦ 1.4 × 10 ⁻⁴	≦ 1.4 × 10 ⁻⁴	
Noise Level		dB(A)	≦ 52	≦ 57	≦ 61	≦ 63	≦ 67	
Leakage			1 × 10 ⁻² Pa•l/s (1 × 10 ⁻⁴ mbar• l/s)					
Max. Inlet/Exhaust Pressure		MPa	0.1 / 0.13					
Ambient Operation Temp.		°C/°F	5 ~ 40/41 ~ 104					
Max. Water Treatment		G/h	50		60			
Motor 3 phase	Output		kW/hp	0.15/0.20	0.25/0.30	0.55/0.74	0.75/1.00	1.50/2.00
	Voltage		VAC	380/220				
	Speed	50Hz	rpm	1410				
		60Hz		1680				
Motor 1 phase	Output		kW/hp	0.15/0.20	0.25/0.30	0.55/0.74	0.75/1.00	--
	Voltage		VAC	220/110				
	Speed	50Hz	rpm	1410				
		60Hz		1680				
Inlet/Exhaust Flange		mm	KF25/16	KF25/16	KF25/16	KF40/16	KF40/16 × 2	
Dimensions		mm	350 × 210 × 245	430 × 250 × 280	490 × 290 × 267	520 × 316 × 360	580 × 360 × 400	
Packing Dimension		mm	400 × 300 × 340	550 × 400 × 420	650 × 450 × 480	650 × 450 × 480	750 × 500 × 520	
Net Weight		kg	13	18	32	38	52	
Gross Weight		kg	21	27	42	50	65	
Cooling Type		Air cooled						
Others		With air flush						

FORELINE FILTER

Professional oilfree scroll machinery manufacturer

GWT

Construction and Operating Principle

GWT series fore line filters are designed to stop dust particles made in the vacuum process from reaching GWSP series scroll pump. It is constructed with case, filter elements, seals, and quick release flange. Filter case is made of aluminum alloy, through hard anodized corrosion-resistant surface treatment. Filter element is reusable and removed. Filtration efficiency can be up to 98% for dust particles, chemical fumes and spray of diameter greater than 10 micron for pharmaceuticals, food processing, ceramics and glass processing, vacuum furnaces and vacuum packing machines and other air filtration process.



Features

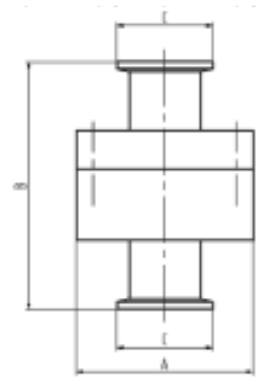
Reliable and high efficient performance, simple structure.

The filter element can be easily remove, clean and replaced.

With GWT series gas particulate filter, the scroll pump maintenance cycle can be extended by 200%.

Technical Specification

Model	GWT25	GWT40
Operating Pressure	1 ~ 10 ⁵ Pa	
Efficiency	≥98%	
Flitting Particle Size	≥10 μm	
Operating Temperature	-20 ~ 140℃	
In/Outlet Size	KF25/KF25	KF40/KF40
Dimensions	Ø74(A) × 104(B) × KF25(C)	Ø94(A) × 124(B) × KF40(C)



Applications

	GWT25	GWT40
Coating	*	*
Pharmaceutical	*	*
Food	*	*
Ceramics and Glass	*	*
Vacuum Furnaces	*	*
Vacuum Packing	*	*

GWSPS

Construction and Operating Principle

GWSPS series oil free scroll vacuum pump is constructed with fixed scrolls, orbiting scroll, main shaft, cooling fans, crank shaft kits, and bracket.



Its' operating principle is based on two spiral cylinders, one offset and orbiting against the other with an offset of 180° . Thus several crescent-shaped pockets of differing sizes are created. By means of an eccentric drive, the orbiting scroll is made to orbit about the fixed scroll, reducing the volume of the pockets and compressing gases from the outside towards the inside thereby pumping the gases from vacuum chamber.

In the pumping course bearings and airflow channel is completely isolated, thus GWSPS oil-free scroll vacuum pump can be expanded its usage to a wider area of the oil and gas recovery, chemical and pharmaceutical industry.



0° gas suction



90° gas pressing



180° further compressing



270° discharging

Applications

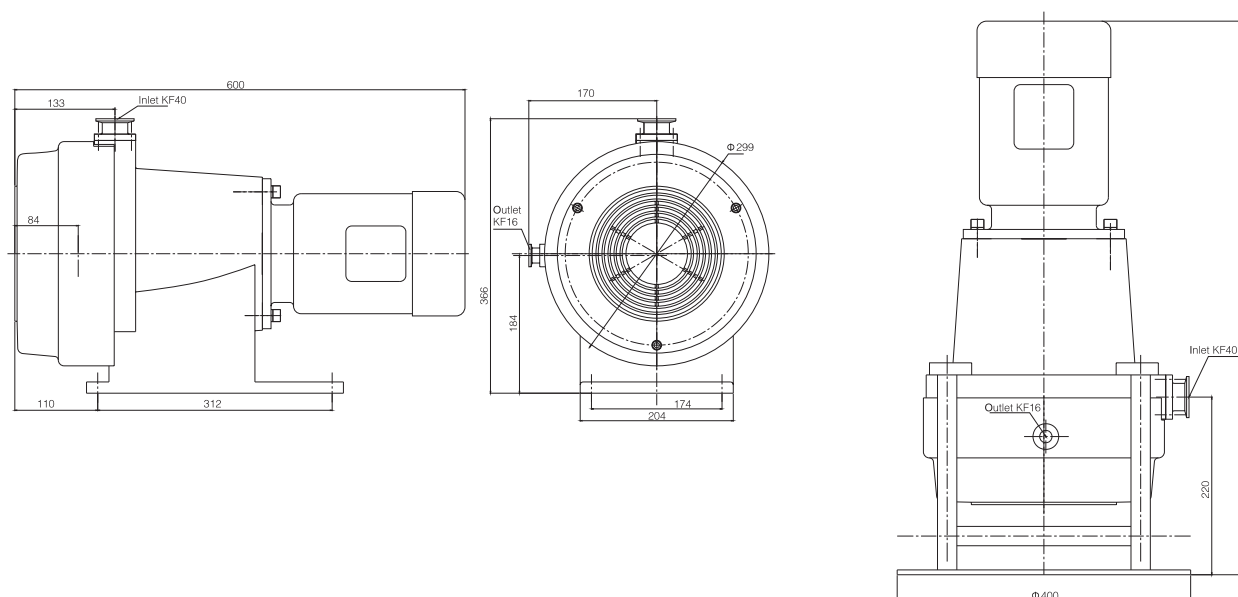
	Industry	Car/Light	Energy/Steel	Petrochemical	Electronics	Food/ Pharmaceutical	R&D
Vacuum extraction				✓		✓	✓
Vacuum heat treatment	✓	✓	✓				
Gas recovery and recirculation				✓	✓		✓
Glove box	✓		✓	✓	✓	✓	✓
Oven/freeze drying	✓		✓	✓	✓	✓	✓
Air condition gas line pumping	✓				✓		✓
Breaker gas line pumping		✓			✓		✓
Sample Preparation						✓	✓
Vacuum packaging storage	✓		✓		✓	✓	✓
Gel drying	✓			✓			✓
Rough pump for molecular pump	✓				✓	✓	✓
Vacuum exhauster	✓		✓	✓	✓	✓	✓
Pharmaceutical	✓				✓	✓	✓

OIL FREE SCROLL VACUUM PUMP

Professional oilfree scroll machinery manufacturer

GWSPS

Connection



Technical Specification

Model			GWSPS500	GWSPS900
Displacement	I/s		6.7	11.6
	I/min		402	693
	m ³ /h		24.1	41.6
	cfm		14.2	24.6
Ultimate Pressure	Pa		≤ 10	≤ 400
	Torr		≤ 7.5 × 10 ⁻²	≤ 3
	mbar		≤ 1.0 × 10 ⁻¹	≤ 4
	psi		≤ 1.45 × 10 ⁻³	≤ 5.80 × 10 ⁻²
Leakage			1 × 10 ⁻² Pa I/s (1 × 10 ⁻⁴ mbar I/s)	
Max. Inlet/Exhaust Pressure		MPa	0.1/0.13	
Ambient Operation Temp		°C/°F	5 ~ 40/41 ~ 104	
Motor	Output	kW/hp	0.75/1.00	
	Voltage	VAC	380	
	Speed	rpm	1410	
Noise Level		dB(A)	≤ 67	
Inlet/Exhaust Flange		mm	KF40/16	
Cooling Type			Air cooled	
Weight		kg	36	

GWSPL

Construction and Operating Principle

GWSPL series oil free scroll vacuum pump is constructed with fixed scrolls, orbiting scroll, main shaft, cooling fans, crank shaft kits, and bracket.

Its' operating principle is based on two spiral cylinders, one offset and orbiting against the other with an offset of 180°. Thus several crescent-shaped pockets of differing sizes are created. By means of an eccentric drive, the orbiting scroll is made to orbit about the fixed scroll, reducing the volume of the pockets and compressing gases from the outside towards the inside thereby pumping the gases from vacuum chamber.



0°(360°) gas suction



90° gas pressing

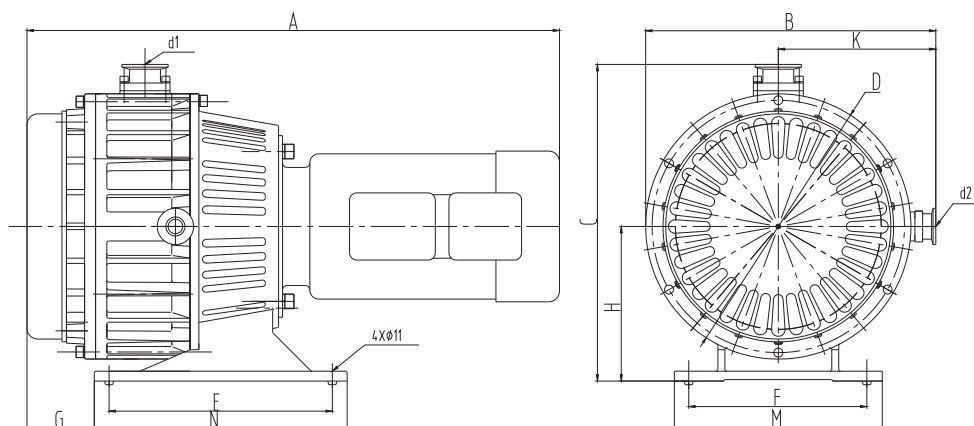


180° further compressing



270° discharging

Connection



Model	Size	A	B	C	D	E	F	G	H	H1	M	N	d1	d2
GWSLP75		350	210	245	187	179	140	42	125	160	204	116	25	16
GWSPL150		430	250	280	220	214	109	86	130	155	250	135	25	16
GWSPL300		490	290	340	267	252	145	101	201	192	288	156	25	16
GWSPL600		520	316	360	291	252	160	93	175	206	288	175	40	16
GWSPL1000		580	360	400	336	267	184	121	195	224	303	191	40	16 × 2

GWSPL

Applications

	Industry	Semiconductor	Power/Chemical	Food/ Pharmaceutical	R&D	Analyzer
Vacuum packing	✓	✓		✓	✓	
Vacuum dryer	✓	✓		✓	✓	
Gas exhauster	✓	✓		✓	✓	✓
Oven / freeze-drying	✓	✓	✓	✓	✓	
Vacuum processing	✓	✓	✓	✓	✓	✓
Vacuum plating	✓	✓		✓	✓	✓
Sample preparation				✓	✓	✓

Technical Specification

Model			GWSPL75	GWSPL150	GWSPL300	GWSPL600	GWSPL1000	
Displacement	50Hz	l/s	1.0	2.0	4.3	8.7	16.6	
		l/min	60.0	120.0	258.0	522.0	996.0	
		m³/h	3.6	7.2	15.5	31.3	59.8	
		cfm	2.2	4.3	9.3	18.7	35.8	
	60Hz	l/s	1.2	2.4	5.1	10.4	19.9	
		l/min	72.0	144.0	306.0	624.0	1194.0	
		m³/h	4.3	8.6	18.3	37.4	71.6	
		cfm	2.5	5.1	10.9	22.3	42.8	
Ultimate Pressure		Pa	≤40					
		Torr	≤3.0 × 10 ⁻¹					
		mbar	≤4.0 × 10 ⁻¹					
		psi	≤5.6 × 10 ⁻³					
Noise		dB(A)	≤52	≤57	≤61	≤63	≤67	
Leakage			1 × 10 ⁻² Pa·l/s					
Max. Inlet/Outlet Pressure		°C/°F	0.1 /0.13					
Ambient Operation Temp.		MPa	5 ~ 40/41~104					
Max. Water Treatment		G/h	50		60			
Motor 3 phase	Output		kW/hp	0.15/0.20	0.25/0.30	0.55/0.74	0.75/1.00	1.50/2.00
	Voltage		VAC	380/220				
	Speed	50Hz	rpm	1410				
		60Hz		1680				
Motor 1 phase	Output		kW/hp	0.15/0.20	0.25/0.30	0.55/0.74	0.75/1.00	
	Voltage		VAC	220/110				
	Speed	50Hz	rpm	1440				
		60Hz		1680				
Inlet/Exhaust Flange		mm	KF25/16	KF25/16	KF25/16	KF40/16	KF40/16 × 2	
Dimensions		mm	350 × 210 × 245	430 × 250 × 280	490 × 290 × 267	520 × 316 × 360	580 × 360 × 400	
Packing Dimension		mm	400 × 300 × 340	550 × 400 × 420	650 × 450 × 480	650 × 450 × 480	750 × 500 × 520	
Net Weight		kg	13	18	32	38	52	
Gross Weight		kg	21	27	42	50	65	
Cooling Type		Air cooled						
Others		With air flush						

GWSPC

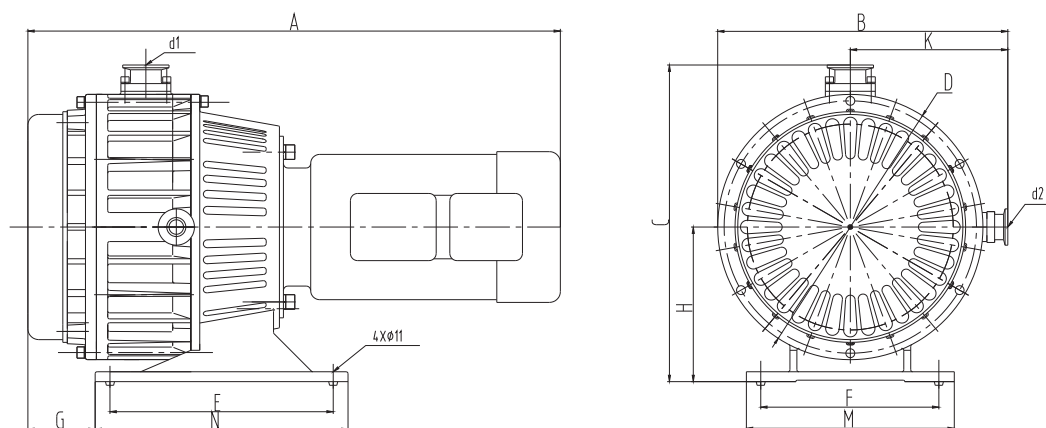


Construction and Operating Principle

GWSPC series oil free scroll vacuum compressor is mainly constructed with fixed scrolls, orbiting scroll, main shaft, cooling fans, crank shaft kits, and bracket.

Its' operating principle is based on two spiral cylinders, one offset and orbiting against the other with an offset of 180° . Thus several crescent-shaped pockets of differing sizes are created. By means of an eccentric drive, the orbiting scroll is made to orbit about the fixed scroll, reducing the volume of the pockets and compressing gases from the outside towards the inside thereby pumping and compressing the gases.

Connection



Model \ Size	A	B	C	D	E	F	G	H	M	N	K	d1	d2
GWSPC150	426	245	277	220	214	109	82	130	155	250	135	25	16
GWSPC300	540	285	344	262	252	145	81	174.5	192	288	156.5	25	16
GWSPC600	599	316	360	291	302	160	93	174.5	206	338	174.5	40	16
GWSPC1000	605	359	397	336	303	160	103	195	224	338	191	40	16 × 2

GWSPC

Technical Specification

Model			GWSPC150	GWSPC300	GWSPC600	GWSPC1000	
Displacement	50Hz	l/s	2.0	4.3	8.7	16.6	
		l/min	120.0	258.0	522.0	996.0	
		m³/h	7.2	15.5	31.3	59.8	
		cfm	4.3	9.3	18.7	35.8	
	60Hz	l/s	2.4	5.1	10.4	19.9	
		l/min	144.0	306.0	624.0	1194.0	
		m3/h	8.6	18.3	37.4	71.6	
		cfm	5.1	10.9	22.3	42.8	
Ultimate Pressure		Pa	≦30	≦20	≦10	≦10	
		Torr	≦2.2 × 10 ⁻¹	≦1.5 × 10 ⁻¹	≦7.5 × 10 ⁻²	≦7.5 × 10 ⁻²	
		mbar	≦3.0 × 10 ⁻¹	≦2.0 × 10 ⁻¹	≦1.0 × 10 ⁻¹	≦1.0 × 10 ⁻¹	
		psi	≦4.2 × 10 ⁻³	≦2.8 × 10 ⁻³	≦1.4 × 10 ⁻³	≦1.4 × 10 ⁻³	
Leakage			1 × 10 ⁻³ Pa • l/s (1 × 10 ⁻⁴ mbar • l/s)				
Max. Inlet/Exhaust Pressure		MPa	0.1 /0.3				
Ambient Operation Temp.		°C/°F	5 ~ 40/41 ~ 104				
Motor	Output		kW/hp	0.37/0.49	1.50/2.00	2.2/3.00	3.00/4.00
	Operating Voltage		VAC	3 phase, 380/220			
	Speed	rpm	50Hz	1410			
			60Hz	1600			
Noise Level			dB(A)	≦57	≦63	≦65	≦67
Inlet/Exhaust Connection			mm	KF25/16	KF25/16	KF40/16	KF40/16 × 2
Dimensions			mm	430 × 250 × 280	540 × 290 × 267	580 × 316 × 360	605 × 360 × 400
Packing Dimension			mm	550 × 400 × 420	650 × 450 × 480	650 × 450 × 480	750 × 500 × 520
Net Weight			kg	18	38	46	62
Gross Weight			kg	26	46	55	75
Cooling Type			Air cooled				

COMPANY PROFILE

From the setup of Geowell Vacuum Co., Ltd, we have been focusing on the development and supply of oil free scroll vacuum pump, oil free scroll vacuum compressor, oil free vacuum pumping system, oil free scroll vacuum pump tip seal, gas forefilter and OEM service to our customers.

In order to provide scroll vacuum pump with the advantage of clean vacuum, high performance, high reliability, and energy save, Geowell developed the whole series patent proved technology and special knowhow in design, manufacturing, assembly, inspection of oil free scroll machinery. We offer by far the GWSP, GWSPL and GWSPS series oil free scroll vacuum pumps, GWSPC series oil free scroll vacuum compressor, GWMS and GWRS series oilfree vacuum (high vacuum) pumping system, GWTS series tip seals, GWT series oil free vacuum system fore line filter and supply OEM serves.

We believe the integration of high performance and high reliability of oil free scroll vacuum pumps and compressor will bring the highest value to both our customer and ourselves. So, for this goal, we contribute our complete effort.

Add: No.11, Block 3, Wenhua Rd, Heping Distr, Shenyang, China

Tel: +86-24-83685362, 83680676

Fax: +86-24-23783066

URL: www.geowell.com.cn

Email: info@geowell.com.cn

