

KW-CN-03
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Screw Technology in the Semicon World

Vacuum Technology The Clear Solution

Screw Type Dry Vacuum Pumps
NEOVAC Series



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Represented by

KOWEL

Best

Quality, Technology, Reliability

Neovac S Series

Maximizing Productivity and Optimizing Process

APPLICATIONS

- CVD, Sputtering, Load lock, Implanting, Etching, Ashing & etc.
- PCB laser drilling, LiPB battery, battery for electric cars
- Furnace, Coating, Degassing, Evaporation & etc.
- Solar cell, Ingot growing

FEATURES

- Compact Design
- Low Noise Level & Vibration
- High Pumping Speed in a Compact Package
- Smaller Effective Footprint

BENEFITS

- Easy to Integrate
- Highest Reliability for the Process
- Reduced Installation Costs
- Lower Investment
- Low power Consumption
- Oil Free Operating
- Corrosion Resistant Design

NEW TECHNOLOGY

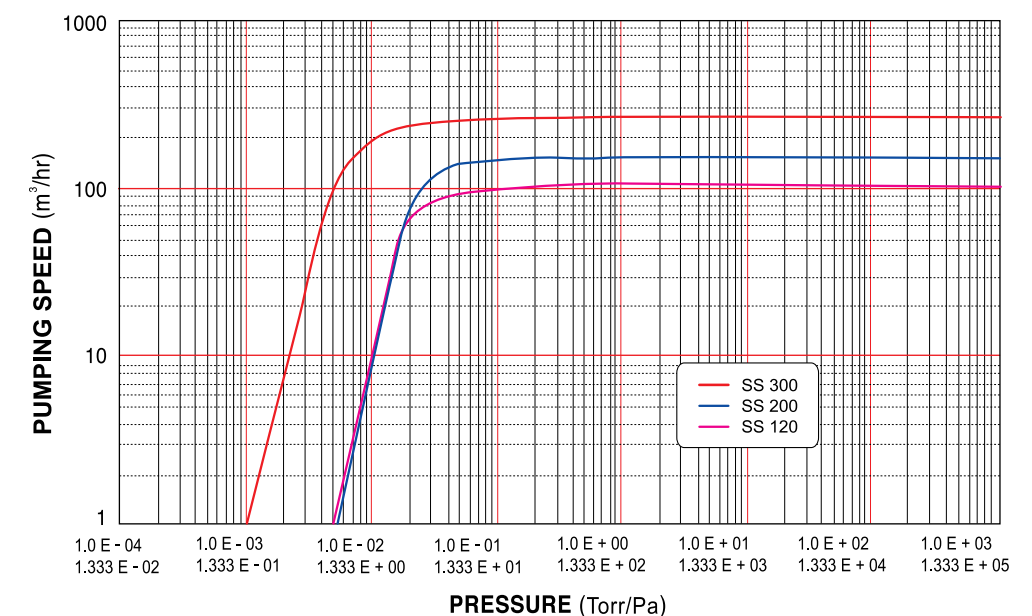
Neovac S Series

Technical Specification

Description \ Type		SS 120	SS 200	SS 300
Nominal Displacement(50/60)	m ³ /hr	100 / 120	155 / 187	267 / 320
	ℓ/min	1666 / 2000	2583 / 3117	4450 / 5333
Ultimate Pressure(50/60)	mbar	$2.6 \times 10^{-2} / 6 \times 10^{-3}$	$1 \times 10^{-2} / 6 \times 10^{-3}$	$9 \times 10^{-3} / 1.3 \times 10^{-3}$
	Torr	$2 \times 10^{-2} / 5 \times 10^{-3}$	$8 \times 10^{-3} / 5 \times 10^{-3}$	$7 \times 10^{-3} / 1 \times 10^{-3}$
	Pa	2.66 / 0.66	1.06 / 0.66	0.93 / 0.13
Power	Kw	3.7	5.5	7.5
Power Consumption(Actual)	Kw	2.2	3.8	4.1
Port Size	Suction	NW50	NW50	NW50
	Discharge	NW40	NW40	NW50
Noise	dB	<65	<65	<65
Gear Oil	Liter	0.45	0.45	1.6
Cooling Water	ℓ/min	3	3	7
Weight	Kg	210	350	470

※ Specifications are subject to change without notice to improve product quality.

Performance Curve



NEW TECHNOLOGY

Neovac S Series

Technical Specification

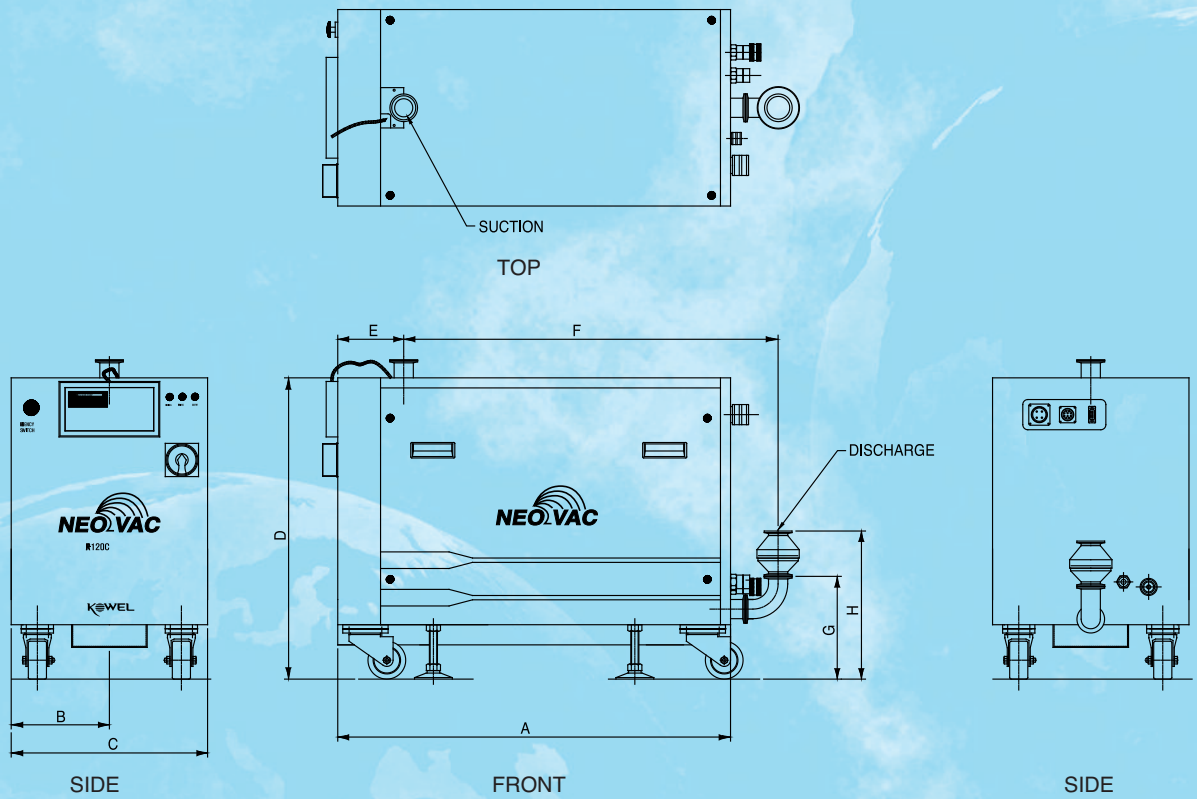
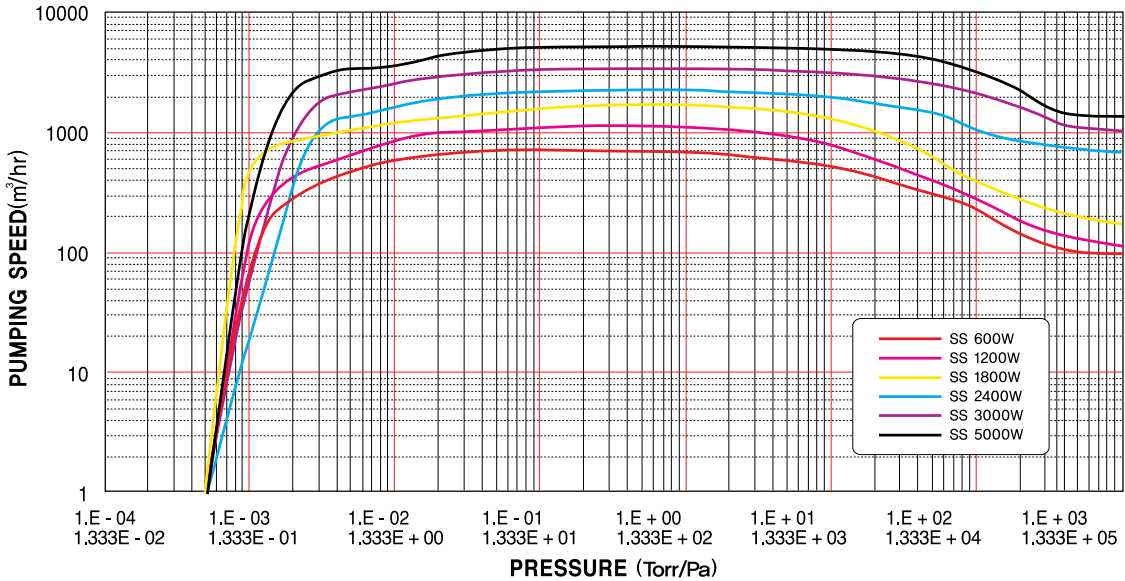


Dimension

Description		Type	SS 600W	SS 1200W	SS 1800W	SS 2400W	* SS 3000W	* SS 5000W
Nominal Displacement(50/60)		m³/hr	568 / 660	930 / 1220	1552 / 1862	2026 / 2432	3000	5000
		ℓ/min	11000	20333	31033	40533	50000	83333
Ultimate Pressure(50/60)		mbar	6×10 ⁻⁴	6×10 ⁻⁴	6×10 ⁻⁴	6×10 ⁻⁴	6×10 ⁻⁴	6×10 ⁻⁴
		Torr	5×10 ⁻⁴	5×10 ⁻⁴	5×10 ⁻⁴	5×10 ⁻⁴	5×10 ⁻⁴	5×10 ⁻⁴
		Pa	0.06	0.06	0.06	0.06	0.06	0.06
Power		Kw	7.4	7.4	11	15	18.5	30
Port Size	Suction		ISO100	ISO100	ISO160	ISO160	ISO200	ISO320
	Discharge		NW40	NW40	NW40	NW50	ISO63	ISO80
Noise		dB	<65	<65	<65	<65	<65	<65
Gear Oil		Liter	1.8	1.8	4.2	5.6	5.6	14.2
Cooling Water		ℓ/min	4~5	4~5	5~7	11	15	28
Weight		Kg	340	460	740	970	1070	1600

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※ Please contact us for more details over the model of SS3000W & SS5000W.

Performance Curve

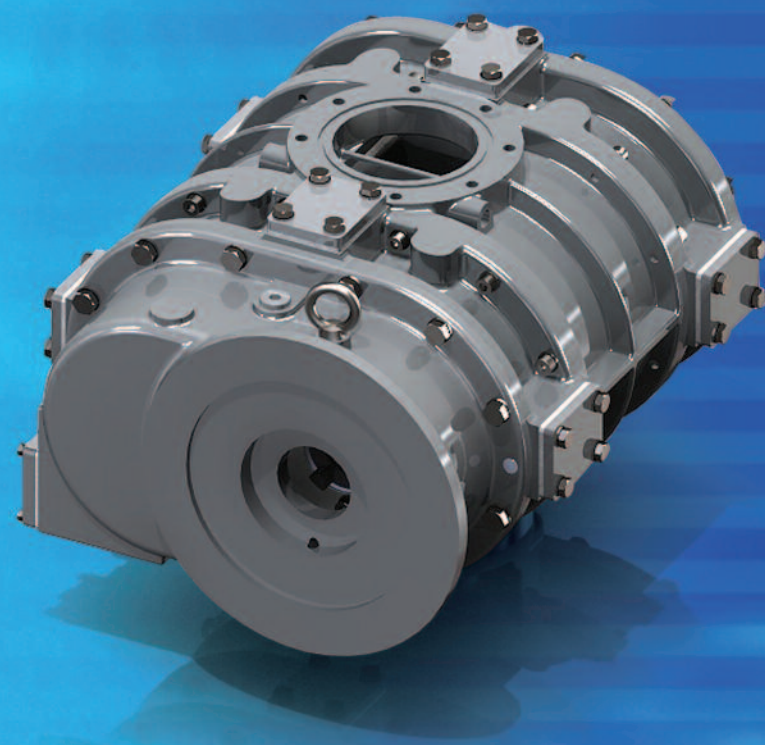


[Unit : mm]

Model	A	B	C	D	E	F	G	H	PORT	
									SUC.	DIS.
SS 120	780	195	390	598	131	743	204	294	NW50	NW40
SS 200	820	205	410	620	155	765	210	300	NW50	NW40
SS 300	1260	270	590	785	222	1160	1120	430	NW50	NW40
SS 600W	780	195	390	828	288	646	204	294	ISO100	NW40
SS 1200W	850	195	390	858	323	681	204	294	ISO100	NW40
SS 1800W	940	260	520	1000	404	603	215	305	ISO160	NW40
SS 2400W	1240	310	620	1148	379	1080	349	450	ISO160	NW50
SS 3000W	1270	320	590	1120	272	998	304	410	ISO200	ISO63
SS 5000W	2170	620	1190	1800	820	1550	500	760	ISO320	ISO80

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KB Series Mechanical Booster

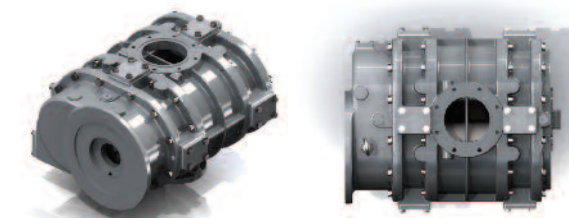


Feature & Benefits

- Low-cost, high-capacity
- Simple design - fewer parts, easier maintenance.
- Small footprint - for less space requirement.
- Non contacting parts - for longer booster life.

Applications

- CVD, Implanting, Etching, Ashing, PVD, Sputtering, Load lock, Electric & Electronics
- Solar cell, Battery, Ingot growing, PCB laser drilling, Furnace, Display & etc.



Technical Specification

Description		Type	KB 600	KB 1200	KB 1800	KB 2400	KB 3000	KB 5000
Nominal Displacement	m³/hr		765 / 917	1020 / 1220	1700 / 2039	2156 / 2587	2832 / 3398	5098 / 6117
	CFM		450 / 540	600 / 720	1000 / 1200	1320 / 1584	1666 / 2000	3000 / 3600
Effective pumping speed at 0.5 Torr(60hz) (Standard Backing Pump)	m³/hr		680	900	1350	1713	Contact Kowel	Contact Kowel
	CFM		400	530	795	1008		
Ultimate pressure with single stage backing pump			SS 120	SS 120	SS 200	S300	KDPS430	KDPS800
	mbar		6×10^{-4}	6×10^{-4}	6×10^{-4}	6×10^{-4}	6×10^{-4}	6×10^{-4}
	Torr		5×10^{-4}	5×10^{-4}	5×10^{-4}	5×10^{-4}	5×10^{-4}	5×10^{-4}
Motor power	Pa		6×10^{-2}	6×10^{-2}	6×10^{-2}	6×10^{-2}	6×10^{-2}	6×10^{-2}
	Kw		3.7	3.7	3.7	7.5	7.5	15
Suction/ Discharge flange	Hp		5	5	5	10	10	20
	ISO-DN		100	100	160	160	200	320
Cooling water consumption	l/min		2	2	3	3	3	7
	gal/min		0.53	0.53	0.79	0.79	0.8	1.85
Oil capacity	l		1	1	1.7	1.7	1.7	6.5
	gal		0.26	0.26	0.45	0.45	0.45	1.72
Dimension (L×W×H)			466×388×312	566×388×312	686×388×330	592×508×429	672×508×429	1414×540×650
Weight	Kg		125	145	165	190	250	657
	lb		276	320	364	419	551	1450

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