





## NAVAC<sup>®</sup> Inc.

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# **About NAVAC**

NAVAC is the global leader in rotary vane vacuum pump manufacturing. With an impressive legacy of over 30 years at the forefront of vacuum pump technological advancements, NAVAC has consistently set the industry standard for innovation and quality. As the world's largest rotary vane pump manufacturer, we take pride in empowering our customers by providing them with cutting-edge solutions.

At NAVAC, we understand the evolving landscape of advanced vacuum technology and the challenges it presents. Our mission is to guide our customers through these challenges, helping them navigate the complexities and make informed choices. We believe in providing not just products but solutions that enable our customers to work with confidence.

**PERFORMANCE, RELIABILITY & SERVICE** are at the core of our values. We are committed to delivering unparalleled excellence in every aspect of our offerings. Whether you are in research and development, manufacturing, or any other industry that relies on advanced vacuum solutions, NAVAC is here to exceed your expectations.

# **Our Mission**

We empower our customers to drive innovation for the future while helping them NAVIGATE advanced vacuum technology challenges and choices. Our focus on service, reliability, and performance will lead us beyond what we ever thought was possible.

HAIC R

Performance

TABLE CONTENT





# EcoDrive

Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump

**EcoDrive** is a dual-stage, oil-sealed rotary vane vacuum pump equipped with a high-efficiency Permanent Magnet motor. With a new advanced feature, "Eco Mode", the pump runs at peak efficiency, optimizing both energy consumption and noise. This technology is ideal for industrial applications due to its performance and reliability, ensuring long-term productivity.

ED 8



NAVAC

#### Gas Ballast

Adjustable gas ballast allows for the different requirements of condensable gas to be exhausted.

#### lio

Proprietary mineral oil included with the pump. All models can also be prepped with high performance PFPE.

#### Anti-Suck Back Design

Protects vacuum system from backstreaming oil contamination in the event of an unexpected shut down.



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#### Eco Mode

The pump is equipped with variable-frequency motor, and the Eco Mode allows the pump to run at peak efficiency, optimizing both energy consumption and noise.



3



### Permanent Magnet Motor

Advanced motor design allows for low energy consumption in the quietest environments.

#### Fast Pumping Speed

ED30 provides the fastest pumping speed with the lowest energy consumption.

#### Proprietary Coating

ED**16** 

Special coating helps protect against corrosive environment.

## ED30 Corrosion Resistant

EcoDrive Series ED16, ED24, ED30 are designed with a proprietary coating to perform in corrosive applications.



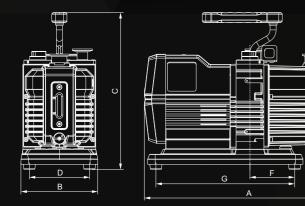
# EcoDrive

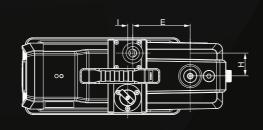
V Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump

		ED4	ED8	<b>ED12</b>
SPEC				
Pumping Speed (60Hz)	m³/h (CFM)	4 (2.4)	8 (4.7)	10 (5.9)
Ultimate Total Pressure without Gas Ballast	mbar (Torr)	5x10 <sup>-3</sup> (3.7x10 <sup>-3</sup> )	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )
Ultimate Total Pressure with Gas Ballast	mbar (Torr)	2 (1.5)	2 (1.5)	2 (1.5)
Power Supply		Single Phase	Single Phase	Single Phase
Power Rating	kW	0.37	0.37	0.37
Motor Speed	rpm	1500	1500	1850
Inlet/Outlet		KF25	KF25	KF25
Oil Capacity	L	1	1	1
Noise Level	dB	≤53	≤53	≤53
Weight	lbs	29.7	32	32
Dimensions (L*W*H)	in	16.3x6x12.2	16.3x6x12.2	16.3x6x12.2

		<b>ED16</b>	ED24	<b>ED30</b>
SPEC				
Pumping Speed (60Hz)	m³/h (CFM)	16 (9.4)	24 (14)	30 (18)
Ultimate Total Pressure without Gas Ballast	mbar (Torr)	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )
Ultimate Total Pressure with Gas Ballast	mbar (Torr)	8x10 <sup>-2</sup> (6x10 <sup>-2</sup> )	8x10 <sup>-2</sup> (6x10 <sup>-2</sup> )	8x10 <sup>-2</sup> (6x10 <sup>-2</sup> )
Power Supply		Single Phase	Single Phase	Single Phase
Power Rating	kW	1.1	1.1	1.1
Motor Speed	rpm	1500	1500	1500
Inlet/Outlet		KF25	KF25	KF25
Oil Capacity	L	2.2	2.2	2.2
Noise Level	dB	≤58	≤58	≤58
Weight	lbs	62	64	66
Dimensions (L*W*H)	in	23.9x7.4x11.8	23.9x7.4x11.8	23.9x7.4x11.8

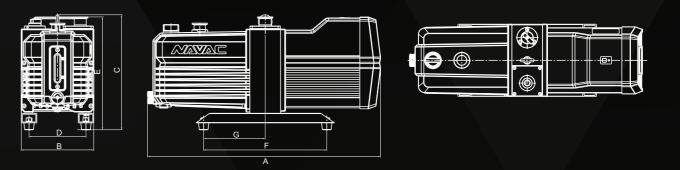
### Dimensions





Model	А	В	С	D	Е	F	G	Н	I	Inlet	Outlet
ED4	16.3	6	12.2	4.7	4.5	3.4	10.7	1.8	0.4	KF25	KF25
ED8	16.3	6	12.2	4.7	4.5	3.4	10.7	1.8	0.4	KF25	KF25
ED12	16.3	6	12.2	4.7	4.5	3.4	10.7	1.8	0.4	KF25	KF25

## Dimensions



Model	А	В	С	D	E	F	G	Inlet	Outlet
ED16	23.9	7.4	11.8	5.8	11.5	12.6	6.3	KF25	KF25
ED24	23.9	7.4	11.8	5.8	11.5	12.6	6.3	KF25	KF25
ED30	23.9	7.4	11.8	5.8	11.5	12.6	6.3	KF25	KF25



EcoDrive

Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump 🔻



# DuoDrive

Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump

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**DuoDrive** is a dual-stage, oil-sealed rotary vane vacuum pump equipped with a traditional AC motor. True to its legacy, the DuoDrive has been coined as the "workhorse" in the industrial vacuum market. Its proprietary coating protects the pump from the most demanding industrial applications.



#### Gas Ballast

Adjustable gas ballast allows for the different requirements of condensable gas to be exhausted.

#### Oil

Proprietary mineral oil included with the pump. All models can also be prepped with high performance PFPE.

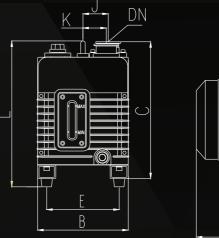
#### Anti-Suck Back Design

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Protects vacuum system from backstreaming oil contamination in the event of an unexpected shut down.

		DD/9	<b>DD65</b>
SPEC		<b>DD48</b>	
Pumping Speed (50/60Hz)	m³/h (CFM)	48 (28) / 56 (33)	65 (38) / 78 (46)
Ultimate Total Pressure Gas Ballast Close	mbar (Torr)	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )	8x10 <sup>-3</sup> (6x10 <sup>-3</sup> )
Ultimate Total Pressure Gas Ballast Open	mbar (Torr)	8x10 <sup>-2</sup> (6x10 <sup>-2</sup> )	8x10 <sup>-2</sup> (6x10 <sup>-2</sup> )
Power Supply		Three Phase	Three Phase
Power Rating	kW	1.5	2.2
IP Level		IP44	IP44
Motor Speed (50/60Hz)	rpm	1440/1720	1440/1720
Inlet/Outlet		KF40	KF40
Oil Capacity	L	4	4
Noise Level (50/60Hz)	dB	≤65/71	≤65/73
Weight	lbs	136.7	143.3
Dimensions (L*W*H)	in	28.7x9.2x14	28.7x9.2x14

### Dimensions



Unit: inch				
Unit: Inch		14.		- 1-
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		16.	III II	

Model	A	В	С	D	Е	G	Н	Ι	J	K	L	Inlet	Outlet
DD48	28.7	9.2	14.1	15.6	7.5	7.9	8.8	6.2	2.7	2.2	15.4	KF40	KF40
DD65	28.7	9.2	14.1	15.6	7.5	7.9	8.8	6.2	2.7	2.2	15.4	KF40	KF40

# **DD65**

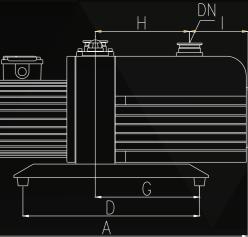
Corrosion Resistant

DuoDrive Series pumps are designed with a proprietary coating to perform in corrosive applications.



DuoDrive

### Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump 🔻





# ShieldDrive

Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump

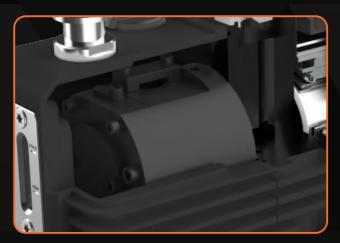
**ShieldDrive** is a dual-stage, oil-sealed rotary vane vacuum pump with a Permanent Magnet motor optimized for efficiency and leak-free operation. It employs static sealing with a mechanical shield and magnetic coupling designs, offering complete protection against oil migration. Ideal for laboratory use, its robust design guarantees leak-free performance in critical applications.

#### Leak Free Operation

Magnetic shield design enhances connection between motor and pump to ensure leak-free operation.

#### **Corrosion-Resistant**

Designed with a proprietary coating to perform in corrosive applications.



#### Gas Ballast

Adjustable gas ballast allows for the different requirements of condensable gas to be exhausted.

#### li Oil

Proprietary mineral oil included with the pump. All models can also be prepped with high performance PFPE.

#### Anti-Suck Back Design

Protects vacuum system from backstreaming oil contamination in the event of an unexpected shut down.

#### Eco Mode

The pump is equipped with variable-frequency motor, and the Eco Mode allows the pump to run at peak efficiency, optimizing both energy consumption and noise.





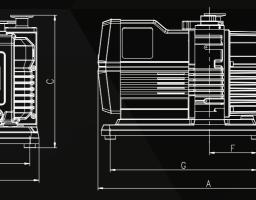
**SD12** 

SD2

ShieldDrive

		SD2	SD8	<b>SD12</b>
SPEC		JUZ		JUIZ
Pumping Speed (60Hz)	m³/h (CFM)	2.5 (1.5)	8 (4.7)	10 (5.9)
Ultimate Total Pressure without Gas Ballast	mbar (Torr)	5x10 <sup>-3</sup> (3.7x10 <sup>-3</sup> )	5x10 <sup>-3</sup> (3.7x10 <sup>-3</sup> )	5x10 <sup>-3</sup> (3.7x10 <sup>-3</sup> )
Ultimate Total Pressure with Gas Ballast	mbar (Torr)	3x10 <sup>-2</sup> (2.2x10 <sup>-2</sup> )	3x10 <sup>-2</sup> (2.2x10 <sup>-2</sup> )	3x10 <sup>-2</sup> (2.2x10 <sup>-2</sup> )
Power Supply		Single Phase	Single Phase	Single Phase
Power Rating	kW	0.25	0.37	0.37
Motor Speed		1800	1500	1850
Inlet/Outlet	rpm	KF16	KF25	KF25
Oil Capacity	L	0.33	1	1
Noise Level	dB	≤50	≤52	≤53
Weight	lbs	22	33	33
Dimensions (L*W*H)	in	12.2x4.5x6.6	16.3x6x9.3	16.3x6x9.3

### Dimensions



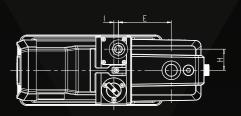
Unit: inch											
Model	А	В	С	D	E	F	G	Н	I	Inlet	Outlet
SD2	12.2	4.5	6.6	3.6	3.7	2.9	7.5	0.95	/	KF16	KF16
SD8	16.3	6	9.3	4.7	4.5	3.4	10.7	1.8	0.4	KF25	KF25
SD12	16.3	6	9.3	4.7	4.5	3.4	10.7	1.8	0.4	KF25	KF25

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Dual-Stage, Oil-Sealed Rotary Vane Vacuum Pump 🔻





# UniDrive

Single-Stage, Oil Sealed Rotary Vane Vacuum Pump

**UniDrive** is a single-stage, oil-sealed rotary vane vacuum pump optimized for applications with high moisture content. Engineered with performance in mind, UniDrive offers unmatched reliability for industries such as food processing and packaging.



#### Integrated Oil Mist Filter

High efficiency oil mist filters prevent oil vapor exhausting into the equipment space and smoking while also prolonging the service life.

#### Gas Ballast

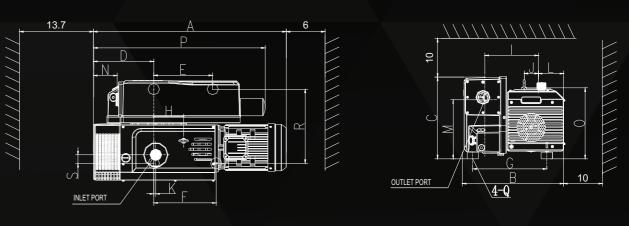
Adjustable gas ballast allows for the different requirements of condensable gas to be exhausted.

### Proprietary Motor

In-house designed and manufactured AC motor provides longevity and robust operation.

			<b>UD20</b>	LID65	<b>UD100</b>	110300
SPEC						
Pumping Sp	eed (50/60Hz)	m³/h (CFM)	22 (13), 60Hz	55 (32) / 65 (38)	100 (59) /120 (71)	300 (177), 60Hz
L Illine at a	w. Gas Ballast	mbar (Torr)		0.3 (0.22)	0.3 (0.22)80	0.1 (0.075)
Ultimate Pressure	w. Gas Ballast I	mbar (Torr)	1.6 (1.2)	0.5 (0.37)	0.8 (0.6)	0.2 (0.15)
	w. Gas Ballast II	mbar (Torr)		2 (1.5)	3 (2.3)	1 (0.75)
Water	w. Gas Ballast I	mbar (Torr)	15 (11)	15 (11.3)	30 (22.5)	30 (22.5)
Vapor Tolerance	w. Gas Ballast II	mbar (Torr)		30 (22.5)		50 (37.5)
Power Supp	ly		Single Phase	Three Phase	Three Phase	Three Phase
Power Ratin	ıg	kW	0.75	1.5	3	7.5
IP Level			IP54	IP54	IP54	IP54
Motor Spee	d (50/60Hz)	rpm	3440 (60Hz)	1440/1720	1440/1720	1440/1720
Inlet/Outlet			G1/2" G3/4"/-	G1-1/4"/G1-1/4"	G1-1/4"/G1-1/4"	G2"/G2"
Oil Capacity	,	L	0.45	2.5	2.5	8
Noise Level	(50/60Hz)	dB	≤70.5 (60Hz)	≤65/67	≤65/67	≤79(60Hz)
Weight		lbs	43	93.7	158.7	474
Dimensions	(L*W*H)	in	12.5x9.8x8.6	21.8x12.2x10.6	27.7x16x11.3	40.7x21.2x17.1

### Dimensions



I Init'	Inch
Unit.	

Model	Α	В	С	D	Е	F	G	Н	1	J	K	L	М	Ν	0	Ρ	Q	R	S	Inlet	Outlet
UD20	12.5	9.8	8.6	3	5.5	4.3	5.2	/	5	/	0.6	2.8	6.2	0.8	7.2	11.8	M8	4.8	0.2	G1/2" G3/4"	/
UD65	21.8	12.2	10.6	5.9	8.5	7.8	10	2.3	7.4	2	0.2	2.8	8	1.3	9.9	18.3	M8	9.5	1.3	G1-1/4"	G1-1/4"
UD100	27.7	16	11.3	6.5	8.9	8.9	12.6	5.2	8.9	1.7	1.1	3.6	8.7	2.4	11	22.8	M10	10.2	1.6	G1-1/4"	G1-1/4"
UD300	40.7	21.3	17.1	12.8	12.3	13	15.5	16.3	11.2	3	0.4	5.3	12.4	5.2	14.8	38	M10	15.5	1.8	G2"	G2"



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UniDrive

Single-Stage, Oil-Sealed Rotary Vane Vacuum Pump 🔻

# UniDrive LC-MS

# Single-Phase, Single-Stage Oil Sealed Rotary Vane Vacuum Pump Designed for mass spectrometers

UniDrive LC-MS is a single-phase, single-stage, oil-sealed rotary vane vacuum pump optimized for Liquid chromatography-mass spectrometry. Designed to complement your LC-MS system, UniDrive LC-MS offers a compact design as well as noise reduction; Optimal for laboratory environments.



#### Optimal for Laboratory

Designed with quiet operation in mind, these pumps are ideal for low noise environments, perfect for laboratory use.

#### Integrated Oil Mist Filter

High efficiency oil mist filters prevent oil vapor exhausting into the equipment space while also prolonging the service life.

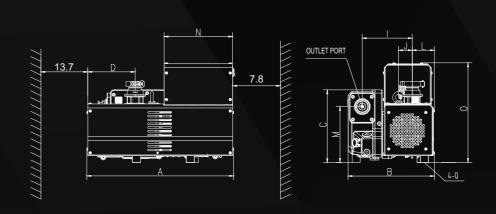
#### Gas Ballast

Adjustable gas ballast allows for the different requirements of condensable gas to be exhausted.



		UDS55	UDS75
SPEC			00375
Pumping Speed (60Hz)	m³/h (CFM)	50 (30)	70 (41)
Ultimate Pressure	mbar (Torr)	≤0.15 (0.11)	≤0.15 (0.11)
Power Supply		Single Phase, 220V/50-60Hz	Single Phase, 220V/50-60Hz
Power Rating	kW	1.5	1.5
Motor Speed	rpm	1400	1800
Inlet/Outlet		KF40/KF25	KF40/KF25
Oil Capacity	L	2.5	2.5
IP Rating		IP20	IP20
Noise Level	dB	≤63	≤65
Weight	lbs	121.2	121.2
Dimensions (L*W*H)	in	21.5x12.7x14.6	21.5x12.7x14.6

**Dimensions** 



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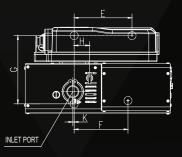
Model	А	В	С	D	E	F	G	Н	1	J	К	L	М	N	0	Q	Inlet	Outlet
UDS55	21.5	12.7	10.6	6.9	8.5	7.9	9.3	2.3	7.3	2	0.2	3.3	8.2	10	14.6	M8	KF40	KF25
UDS75	21.5	12.7	10.6	6.9	8.5	7.9	9.3	2.3	7.3	2	0.2	3.3	8.2	10	14.6	M8	KF40	KF25





UniDrive LC-MS

Single-Phase, Single-Stage Oil Sealed Rotary Vane Vacuum Pump Designed for Mass Spectrometers



# HelixDrive

Ultra-Compact, Oil-Free Dry Screw Vacuum Pump

HelixDrive is an ultra-compact, oil-free dry screw vacuum pump. Its unique coaxial design, with an integrated motor, enhances both efficiency and reliability. Its proprietary coating protects the pump from the most demanding industrial applications. Ideal for harsh applications where oil is not tolerated.



**Oil Free Operation** Ideal for harsh applications where oil is not tolerated.

#### Temperature Management

Our temperature management system is optimized for the most effective cooling. Our larger pumps are water-cooled to enhance the performance of the pump while our smaller pumps are air cooled for easy operation.

#### Energy Efficiency

Equipped with Permanent Magnet motor, HD20 and HD40 are the most efficient dry pumps in their class.

#### Water Vapor Handling

HelixDrive pumps are robust and durable. They have excellent moisture handling capacities.

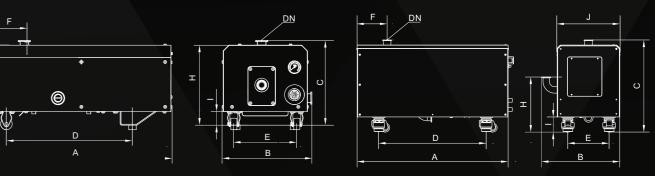
#### Compact Design

As one of the most innovative designs, this dry screw pump delivers fast pumping speed in an ultra compact package.



			HD8	HD20	HD40	HD80	HD100		
SPEC									
Pumpin	ng Speed(60Hz)	m³/h	8	20	32	80	100		
Ultimate	e Pressure	Ра	1	1	1	3	3		
0.00	Dry Nitrogen/Dry Compressed Air	slm	1	0~100	0~100	0~180	0~60		
Gas purge	Pressure	Мра		0.04~0.07	0.04~0.07	0.015~0.02	0.015~0.02		
1. 3.	Joint		1	Quick joint for air pipe Φ6mm					
Rated power		kW	1.8	1.8	1.8	3	3		
Current	Current at Ultimate Pressure		6	7	8	3	4		
Peak C	Peak Current		13	13	13	6	7		
PID Functions					Yes				
Analog	Input		Yes						
Commu	unication Function								
Inlet/Ou	utlet		KF25/KF16	KF25	KF25	KF40	KF40		
Water \	/apor Treatment Capacity	g/h	135	200	200	800	800		
Cooling	Mode		Air Cooling			Water Cooling			
Ambien	Ambient Temperature				5°C-40°C				
Noise		dB	≤58	≤60	≤60	≤65	≤65		
Weight		lbs	83.7	105.8	105.8	452	452		
Dimens	sions (L*W*H)	in	20.5x11.8x12.6	23.6x11.8x12.6	23.6x11.8x12.6	35.4x18.3x21.6	35.4x18.3x21.6		

### Dimensions



	nit	Inch
0	IIII.	

Model	А	В	С	D	E	F	н	I	J	Inlet/Outlet
HD8	20.5	11.8	12.6	13.5	8.2	4.2	11	2.3	/	KF25
HD20	23.6	11.8	12.6	16.3	8.2	4.2	11	2.3	/	KF25
HD40	23.6	11.8	12.6	16.3	8.2	4.2	11	2.3	/	KF25
HD80	35.4	18.3	21.6	25.2	9.7	7	13	3.5	14.8	KF40
HD100	35.4	18.3	21.6	25.2	9.7	7	13	3.5	14.8	KF40



HelixDrive

Ultra-Compact, Oil-Free Dry Screw Vacuum Pump 🔻



# BoostDrive High-Speed Roots-Style Vacuum Blower

**BoostDrive** is a high-speed roots-style blower designed to enhance your backing pump in a compact design. With performance in mind, pump downtime is decreased while optimizing ultimate vacuum pressure. This unique design makes it an excellent choice for various industries including chemical processing, pharmaceutical manufacturing, and semi-conductor coating.



#### Performance

With pumping speed up to 600 m<sup>3</sup>/h, this roots-style blower will outperform pumps twice its size.

#### Compact Design

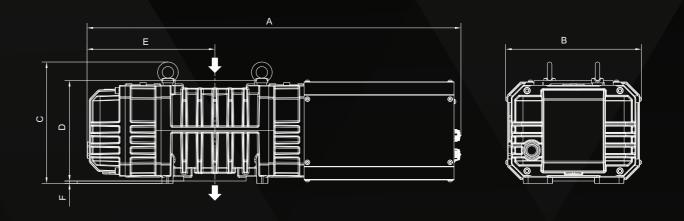
As one of the most innovative designs, this dry roots-style blower delivers fast pumping speed in an ultra compact package.

#### System Flexibility

Designed with flexibility in mind, this roots-style blower can be paired with a backing pump to optimize pumping efficiency.

		BD100	<b>BD600</b>
SPEC			
Pumping Speed (60Hz)	m³/h (CFM)	190 (112)	720 (424)
Ultimate Pressure	mbar (Torr)	3.0x10 <sup>-4</sup> (2.3x10 <sup>-4</sup> )	3.0x10 <sup>-4</sup> (2.3x10 <sup>-4</sup> )
Max. Permissible Pressure Difference (60Hz)	mbar (Torr)	40 (30)	80 (60)
Backing Pump (Recommended)		DD48	UD100
Power Supply	/	200-230V/60Hz	460V/60Hz
Power Rating	kW	0.37	1.5
Oil Viscosity	/	100	100
Inlet	mm	VG 50	DN 100
Outlet	mm	VF 50	DN 63
Noise	dB(A)	62	63
Weight	lbs	50.7	218
Dimensions (L*W*H)	in	19.4x8.3x6.3	30.7x11.2x10

### **Dimensions**



Unit: inch								
Model	А	В	С	D	E	F	Inlet	Outlet
BD100	19.4	8.3	6.3	/	6.5	/	VG 50	VF 50
BD600	30.7	11.2	10	8.3	10.5	0.2	DN 100	DN 63





BoostDrive

High-Speed Roots-Style Vacuum Blower



# Genuine **OEM Parts**

Vacuum Solutions for Every Industrial Challenge

# Unrivaled **Technical Support**

NAVAC's commitment to your success goes beyond delivering exceptional products. With our dedicated technical support team, we're ready to assist you with any inquiries or challenges you may encounter. We prioritize your success while helping you navigate all your vacuum needs.

## **Commitment to** Excellence

Excellence is not just a goal at NAVAC, it's a standard we live by. From quality of our products to the reliability of our solutions and the support we provide, we strive for nothing less than excellence. Our dedication to continuous improvements ensures that NAVAC remains synonymous with top-tier industrial vacuum pumps.











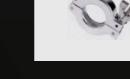
## **Contact Us**

For information on authorized service partners, please visit our website.

Performance -

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Centering Ring

Pump Oi











# **Spare Parts**

### Designed & Built to Withstand The Toughest Industrial Processe

















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