

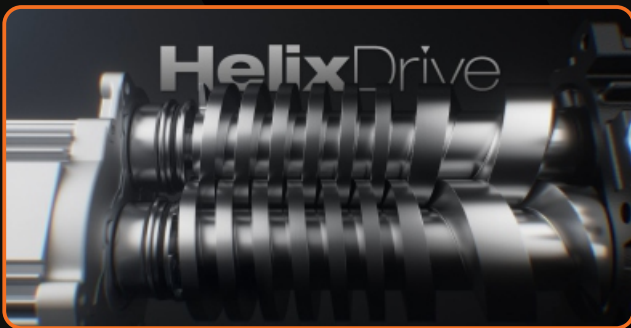
# HelixDrive

## 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.

### ▶ 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.

### ▶ Energy Efficiency

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

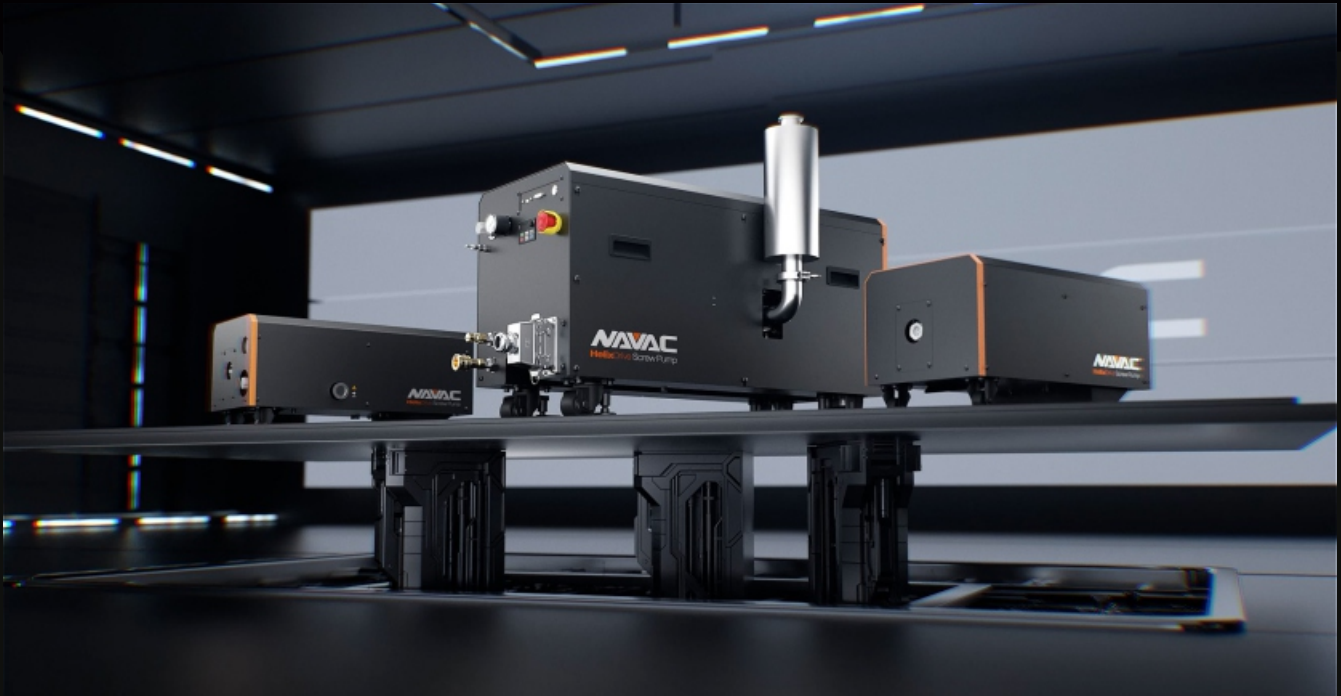
## Air-Cooled



### ▲ Air Cooling System

(HD8, HD20, HD40, HD60) Onboard cooling for high efficiency operation and cost savings.

## Redefining Performance and Precision



**HelixDrive** redefines vacuum technology with advanced engineering, delivering an exceptional experience through low noise operation, superior temperature management, deep vacuum levels, and zero-vibration stability. Designed for professionals who demand reliability, Helixdrive combines power and performance in a quiet, stable, and highly efficient solution.

## Water-Cooled



▲ **Water Cooling System**  
(HD80, HD100) Excellent temperature control,  
pump surface temperature rise <math>< 50^{\circ}\text{F}</math>



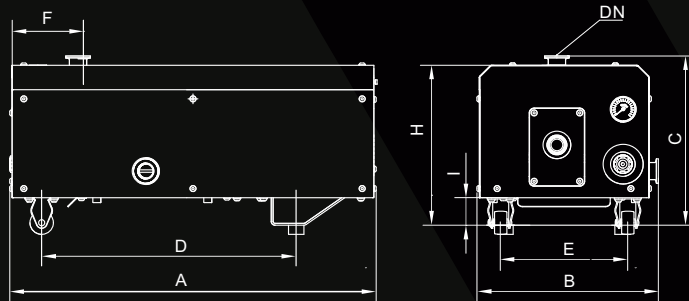
# HD80

# HelixDrive

Ultra-Compact, Oil-Free Dry Screw Vacuum Pump

SPEC			HD8	HD20	HD40	HD60
Pumping Speed (60Hz)	m <sup>3</sup> /h (CFM)		8 (5)	20 (12)	32 (18.8)	50 (30)
Ultimate Pressure	mbar (Torr)		1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )	1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )	1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )	1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )
Gas Purge	Dry Nitrogen/Dry Compressed Air	slm	/	0~100	0~100	0~100
	Pressure	Mpa	/	0.04~0.07	0.04~0.07	0.04~0.07
	Joint	/	Quick joint for air pipe Φ6mm			
Power Rating	kW	1.8	1.8	1.8	2.2	
Current at Ultimate Pressure	A	6	7	8	7	
Peak Current	A	13	13	13	18	
PID Functions		Yes (for 220V only)				
Analog Input		Yes (for 220V only)				
Communication Function		MODBUS-RTU (for 220V only)				
Inlet/Outlet		KF25/KF16	KF25	KF25	KF40/KF25	
Water Vapor Treatment Capacity	g/h	135	200	200	250	
Cooling Mode		Air Cooling				
Noise	dB	≤62	≤62	≤62	≤62	
Weight	lbs	84	106	106	165	
Dimensions (L*W*H)	in	20.5x11.8x12.6	23.6x11.8x12.6	23.6x11.8x12.6	26x13.7x15.7	
Power Supply		HD8, HD20, HD40: 1-ph, 110V, 60Hz HD8-2, HD20-2, HD40-2, HD60-2: 1-ph, 220V, 50/60Hz				

## Dimensions



Unit: inch

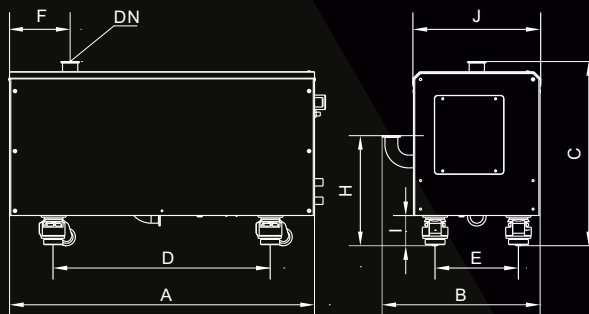
Model	A	B	C	D	E	F	H	I	Inlet/Outlet
HD8	20.5	11.8	12.6	13.5	8.2	4.2	11	2.3	KF25/16
HD20	23.6	11.8	12.6	16.3	8.2	4.2	11	2.3	KF25
HD40	23.6	11.8	12.6	16.3	8.2	4.2	11	2.3	KF25
HD60	25.7	12.2	12.7	19	9.5	5.2	12	2.7	KF40/KF25

# HelixDrive

Ultra-Compact, Oil-Free Dry Screw Vacuum Pump

SPEC			HD80	HD100
Pumping Speed (60Hz)		m <sup>3</sup> /h (CFM)	80 (47)	100 (60)
Ultimate Pressure		mbar (Torr)	1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )	1x10 <sup>-3</sup> (7.5x10 <sup>-4</sup> )
Gas Purge	Dry Nitrogen/Dry Compressed Air	slm	0~180	0~180
	Pressure	Mpa	0.15~0.2	0.15~0.2
	Joint		Quick joint for air pipe Φ6mm	Quick joint for air pipe Φ6mm
Power Rating		kW	3	3
Current at Ultimate Pressure		A	3	4
Peak Current		A	6	7
PID Functions			Yes	Yes
Analog Input			Yes	Yes
Communication Function			MODBUS-RTU	MODBUS-RTU
Inlet/Outlet			KF40	KF40
Water Vapor Treatment Capacity		g/h	700	800
Cooling Mode			Water Cooling	Water Cooling
Noise		dB	≤65	≤65
Weight		lbs	452	452
Dimensions (L*W*H)		in	38.9x18.4x21.7	38.9x18.4x21.7
Power Supply			3-ph, 380V/60Hz	3-ph, 380V/60Hz

## Dimensions



Unit: inch

Model	A	B	C	D	E	F	H	I	J	Inlet/Outlet
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