

# ShieldDrive

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

**ShieldDrive** represents the next generation of scientific vacuum technology, engineered for absolute reliability, zero leakage, and effortless maintenance. Designed with corrosion-resistant core components, the latest "SDi-Series" performs flawlessly even in harsh chemical environments, high humidity, and corrosive gas applications. Its advanced magnetic drive and mechanical shielding technology create a fully hermetic seal—eliminating oil leakage issues common in traditional dynamic seal pumps.

With its robust construction, convenience features, intelligent controls, and guaranteed leak-free performance, the "SDi-Series" ShieldDrive Vacuum Pump delivers a worry-free vacuum solution for critical applications where reliability truly matters. 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.

▶ **Anti-Suck Back Design**

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

▶ **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.

▶ **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.



▶ **Quick-Change Oil Mist Filter**

Built-in high-performance oil mist filter prevents oil vapor coming into working environments. Easy maintenance.



Detachable oil reservoir for fast replacement

▶ **Easy Oil Change**

**SD4i**

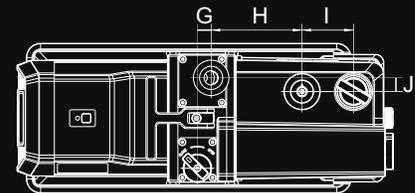
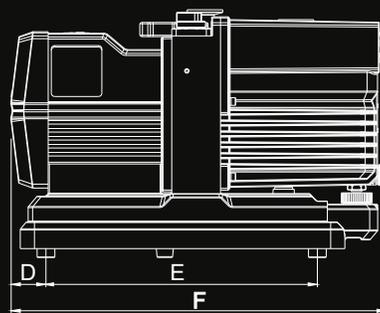
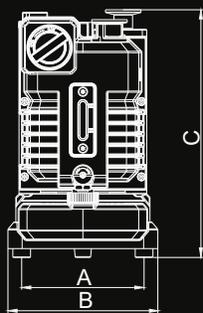
**SD12i**

# ShieldDrive

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

SPEC		SD4i	SD8i	SD12i	SD16i
Pumping Speed (60Hz)	m <sup>3</sup> /h (CFM)	4 (1.5)	8 (4.7)	12 (7.1)	16 (4.7)
Ultimate Pressure without Gas Ballast	mbar (Torr)	2x10 <sup>-3</sup> (1.5x10 <sup>-3</sup> )	2x10 <sup>-3</sup> (1.5x10 <sup>-3</sup> )	2x10 <sup>-3</sup> (1.5x10 <sup>-3</sup> )	2x10 <sup>-3</sup> (1.5x10 <sup>-3</sup> )
Ultimate 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> )	3x10 <sup>-2</sup> (2.2x10 <sup>-2</sup> )
Power Supply		SD4i, 8i, 12i, 16i: Single Phase, 60 Hz, 110V SD4i-2, 8i-2, 12i-2, and 16i-2: Single Phase, 50/60 Hz, 200-240V			
Power Rating	kW	0.25	0.25	0.37	0.37
Inlet/Outlet		KF25	KF25	KF25	KF25
Oil Capacity	L	0.8	0.8	0.8	0.8
Noise Level	dB	≤50	≤52	≤52	≤54
Weight	lbs	36.3	36.3	37.4	37.4
Dimensions (L*W*H)	in	16.7x6.6x11	16.7x6.6x11	16.7x6.6x11	16.7x6.6x11
Accessories		SDi-FOB SDi replaceable oil box			

## Dimensions



Unit: inch

Model	A	B	C	D	E	F	G	H	I	J	Inlet	Outlet
SD4i	5.4	6.6	11	1.5	12	16.7	0.6	4	2.3	0.6	KF25	KF25
SD8i	5.4	6.6	11	1.5	12	16.7	0.6	4	2.3	0.6	KF25	KF25
SD12i	5.4	6.6	11	1.5	12	16.7	0.6	4	2.3	0.6	KF25	KF25
SD16i	5.4	6.6	11	1.5	12	16.7	0.6	4	2.3	0.6	KF25	KF25