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**Dry Scroll Vacuum Pump**

**ISP Series**

Welcome to the Anest Iwata product line of Synergy Systems Corporation. SynSysCo's Principals and Anest Iwata have a long standing relationship that began in 1998. Together we established the original commercial relationship that introduced the Anest Iwata brand to North America and established its service and support centers.

Since this introduction, the Anest Iwata brand has become the Market Standard for Scroll pump performance. Their products have been widely received by all aspects of Industry, Academia, and Federal research institutions.

Anest Iwata is the original manufacturer to bring scroll vacuum pumps to the vacuum market. With nearly 20 years of field experience and more performance hours than all its competitors combined, the ISP series scroll vacuum pumps are the premium choice for clean pumping technology.

SynSysCo is pleased to distribute Anest Iwata products in North America, and we are able to service and support all your scroll pump application needs. Please feel free to contact us for any service, new product selection, or system configuration inquiries you may have. We look forward to hearing from you.



**Synergy Systems Corporation**

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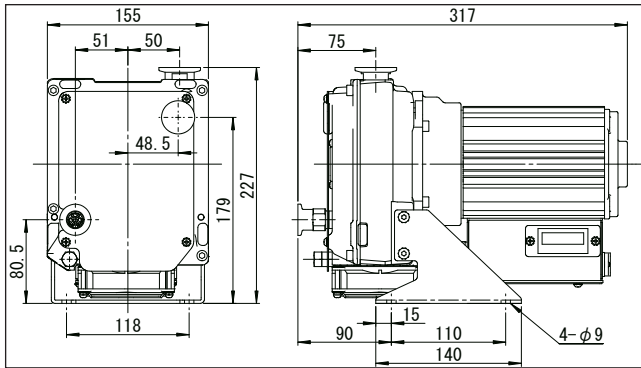
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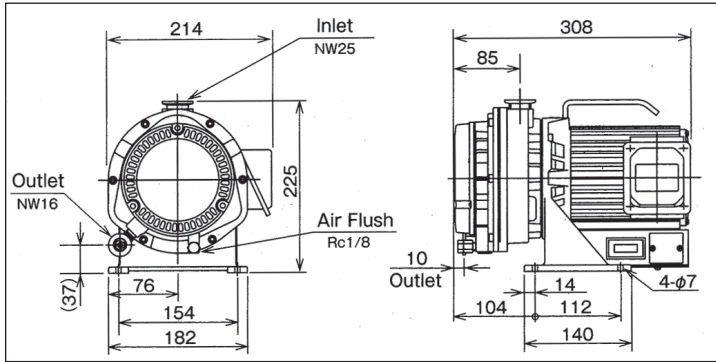
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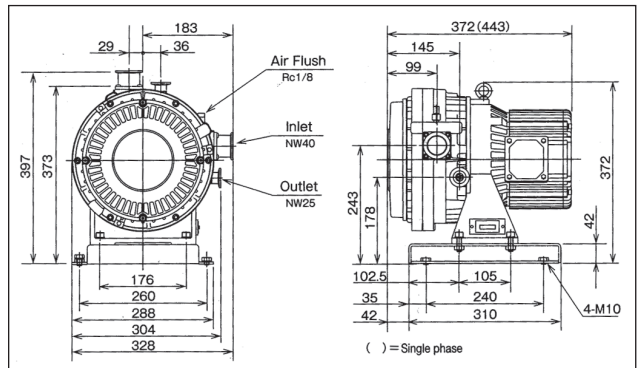
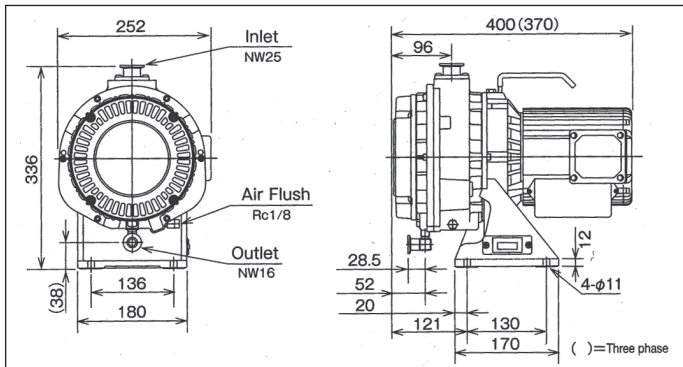
ISP-50



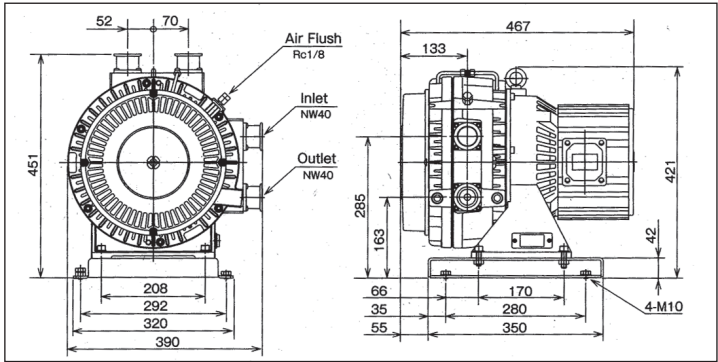
ISP-90



ISP-250C

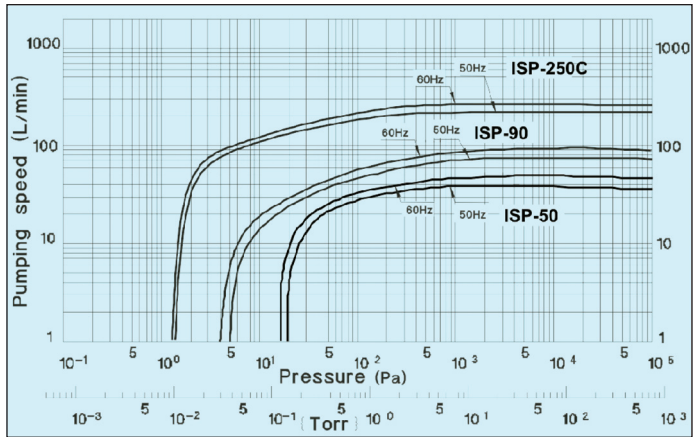


ISP-500

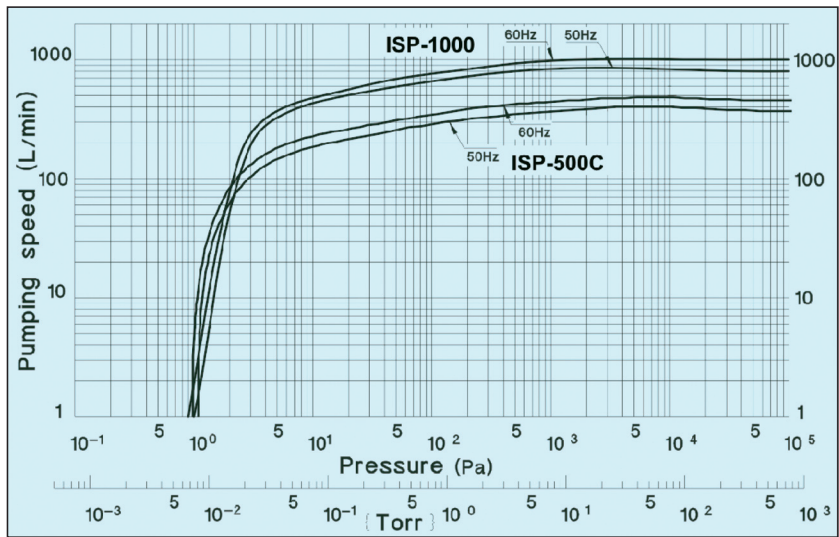


ISP-1000

Trade Name		Oil Free Scroll Vacuum Pump			
Model		ISP-50-SV1	ISP-50-SV2	ISP-90	ISP-250
Pumping Speed	L/min (CFM) 50/60 Hz	50/60 (1.8/2.1)	90/108 (3.2/3.8)	250/300 (8.8/10.6)	
Ultimate Pressure	Pa(Torr)	≤ 15 (1.1x10 <sup>-1</sup> )	≤ 5 (3.7x10 <sup>-2</sup> )	≤ 1.6 (1.2x10 <sup>-2</sup> )	
Motor Power	W	100	150	400	
Voltage	V	1Ph 100, 115	200, 230	100, 115, 200, 230	
	3Ph	-	-	200, 208, 230, 380, 415, 460	
Noise Level	dB (A)	48	52	58	
Noise Level (at air-flush)	dB (A)	57	57	66	
Weight	kg	12	14	25	
	3Ph	-	-	23	
Leak Tightness	Pa · m <sup>3</sup> /s	≤ 1.0x10 <sup>-7</sup>	≤ 1.0x10 <sup>-5</sup>	≤ 1.0x10 <sup>-5</sup>	
Water Vapor Capacity	g/day	3	5	25	
Air Flush	L/min	4	9	10	
Inlet Connection	NW	25			
Outlet Connection	NW	16			
Cooling System		Air-Cooled			
Ambient Temperature	°C / °F	5 ~ 40 / 41 ~ 104			



Trade Name		Model		ISP-500	ISP-1000
Pumping Speed	L/min (CFM) 50/60 Hz			500/600 (17.2/21.2)	1000/1200 (35.3/42.4)
Ultimate Pressure	Pa(Torr)			≤ 1 (7.5x10 <sup>-3</sup> )	≤ 1 (7.5x10 <sup>-3</sup> )
Motor Power	W			600	1400
Voltage	V	1Ph	100, 115, 200, 230	-	-
	3Ph		200, 208, 230, 380, 415, 460	-	-
Noise Level	dB (A)			60	67
Noise Level (at air-flush)	dB (A)			68	74
Weight	kg	1Ph	44	-	-
	3Ph		38	60	-
Leak Tightness	Pa · m <sup>3</sup> /s			≤ 1.0x10 <sup>-5</sup>	
Water Vapor Capacity	g/day			25	
Air Flush	L/min			10	
Inlet Connection	NW			40	
Outlet Connection	NW			25	40
Cooling System				Air-Cooled	
Ambient Temperature	°C / °F			5 ~ 40 / 41 ~ 104	10 ~ 40 / 50 ~ 104



## Applications

- Sputtering equipment, Vacuum deposition equipment, Ion plating equipment
- Gas recovery devices
- Leak Detectors
- Device Handling Systems
- Surface modification, Electron beam process
- Vacuum furnace, Heat treatment furnace
- Laboratory Use
- Vacuum packaging machine
- Others

## Air Flush

Purpose of Air Flush - Pumping humid gas with a vacuum pump can cause condensed moisture to remain in the pump. This remaining moisture can cause a failure to the pump or ultimate pressure. The Air Flush operation is necessary to remove remaining moisture. The Air Flush operation not only removes the remaining moisture but recovers ultimate pressure.

## Air Flush

