

ESR Series Dry Pumps

Energy Savings & Reliability



Technology • Reliability • Service

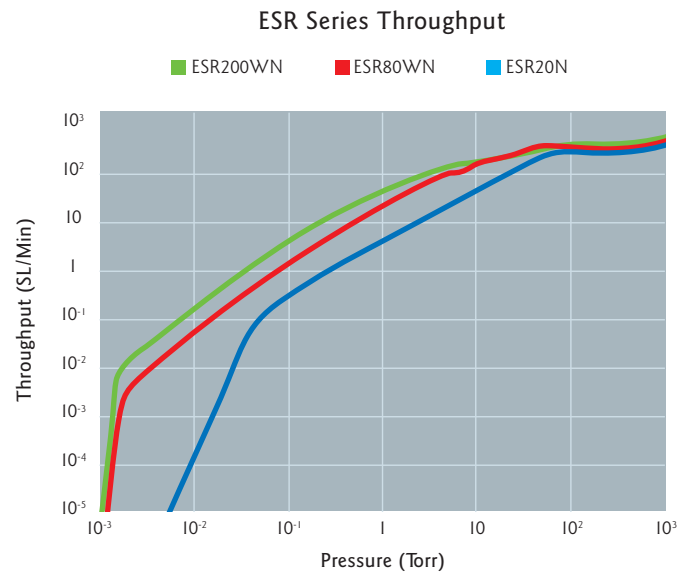
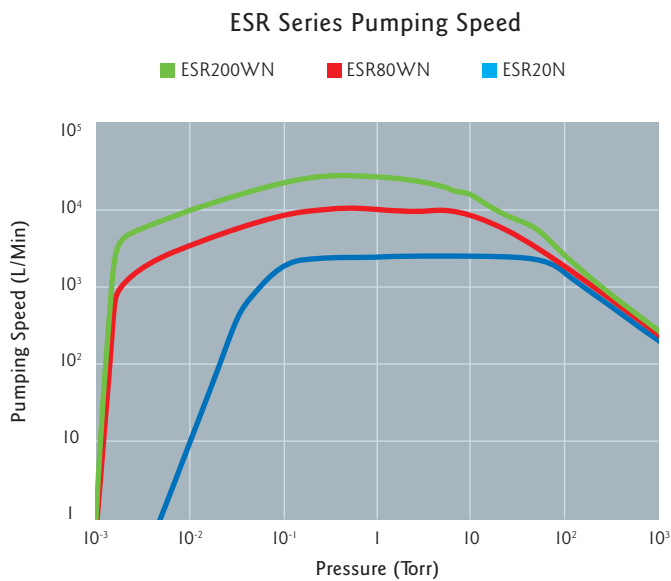
ESR Series Dry Pumps

The ESR Series (Energy Savings & Reliability) is a multistage lobe design engineered for application in clean and medium duty processes such as Load Lock, SEM, PVD, Ashing, Ion Implantation and Etch. The ESR Series covers a wide pumping speed range from 46 to 706 CFM. ESR pumps are designed and manufactured to be the lowest cost of ownership pumps on the market today. The main pump is constructed of NiResist, a solid cast material known for its superior corrosion resistance.

Features

- Low cost of ownership (power, N₂, water, footprint, volume, weight)
- No nitrogen purge required in clean applications
- Variable pumping speed to match application requirements
- High performance brushless DC motors
- State-of-the-art control and monitoring devices
- Idle mode can be employed for increased utility savings
- SEMI S2 assessed, NRTL listed, CE marked

Performance Curves



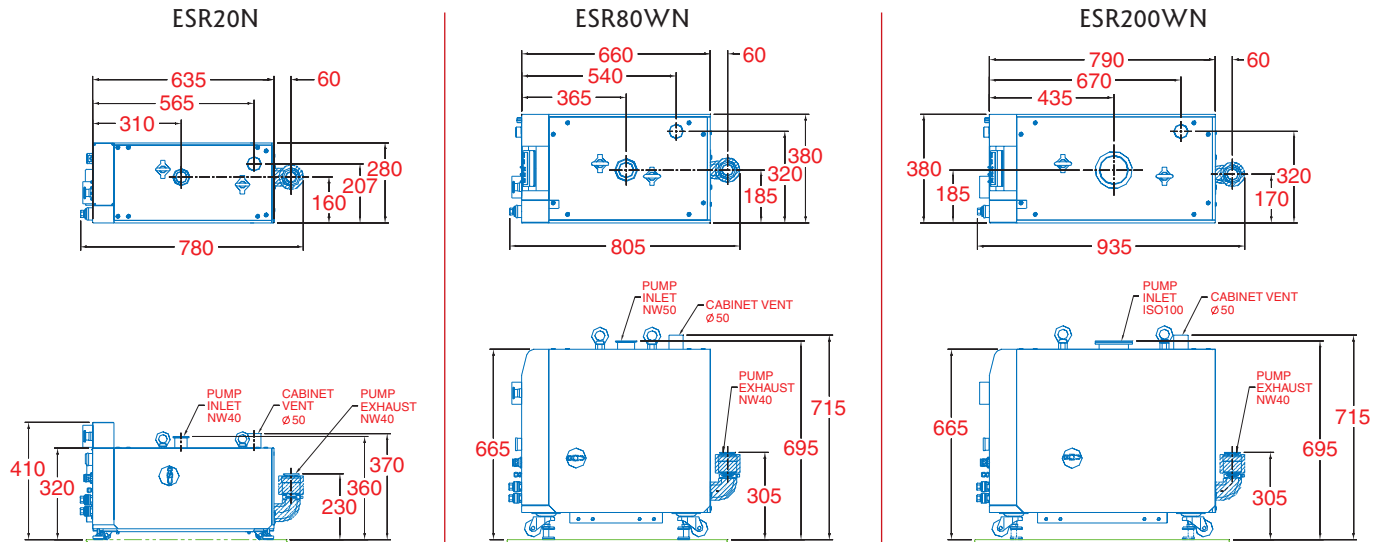
Dry Pump Applications

Process	SEM	Load Lock	PVD	Ashing	Ion Implanter	Etch
ESR SERIES	•	•	•	•	•	•

24/7 Direct Service and Support

If you require an immediate service response, please contact the nearest EBARA Service Center or you may call 1-800-535-5376. EBARA Service is available 24 hours a day 7 days a week to provide on-site support through our extensive network of Service and Quick Response Centers.

Dimensions (mm)



Specifications

		ESR20N	ESR80WN	ESR200WN
Pumping Speed (min. RPM - max. RPM)	CFM	46 - 71	141 - 300	353 - 706
	L/Min	1,300 - 2,000	4,000 - 8,500	10,000 - 20,000
	M ³ /Hr	78 - 120	240 - 510	600 - 1200
Ultimate Pressure	mTorr	5	1	1
Inlet Connection	ISO	40	50	100
Outlet Connections	ISO	40	40	40
Motor Rated Power	KW	2.8	5.2	5.6
(at ultimate pressure)	KW	0.7	1	1.1
Cooling H ₂ O	L/Min	2	2	2
Bearing & Dilution N ₂	L/Min	0 to 12	2 to 12	2 to 12
Cabinet Dimensions LxWxH	mm	635 x 280 x 320	660 x 380 x 655	790 x 380 x 655
	~ inch	25 x 11 x 12.6	26 x 15 x 25.8	31.1 x 15 x 25.8
Weight	lb (Kg)	200 (90)	400 (180)	550 (250)

Complete product line to meet the needs of your Fab

Dry Vacuum Pump



Turbomolecular Pump



Point-of-Use Abatement



Contamination Control



EBARA Technologies, Inc.

Family of Products

Dry Vacuum Pumps

Turbomolecular Pumps

Point-of-Use Abatement

Ammonia Monitor

Ozonized Water Generator

Ultra Clean Ozone

(AMC) Filters

E-Cube Wafer Carriers

Global Service Network

ASIA

Fujisawa, Japan (Headquarters)
Seoul, Korea
Taipei, Taiwan
Singapore, Singapore

EUROPE

Livingston, U.K.
Gloucester, U.K.
Paris, France
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