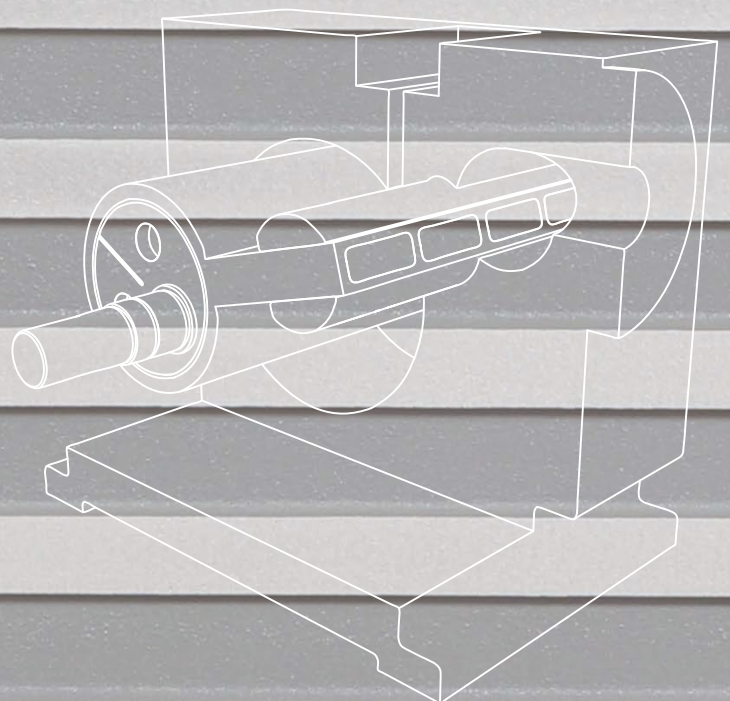
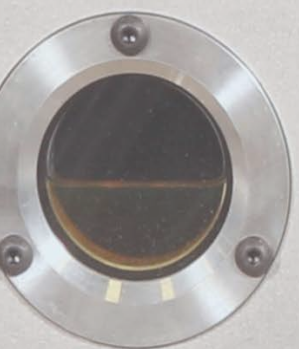


# STOKES MICROVAC ROTARY PISTON PUMPS



# STOKES VACUUM





## EDWARDS THE PARTNER OF CHOICE

**Edwards is a world leader in the design, technology and manufacture of vacuum pumps with nearly 100 years' history supplying reliable vacuum solutions.**

Edwards believes in delivering results that bring value to our customers by using our breadth of industry experience to identify and apply solutions to your problems. Using the most innovative and up-to-date modelling techniques, we can optimize the pumping configuration for customers to provide a system design giving the maximum performance in the most reliable and cost-effective way.

# PROVEN PERFORMANCE

With over 80 years of experience, the Stokes Microvac has set the standard for performance, efficiency and reliability. The Stokes line has been improved, upgraded and fine-tuned and delivers even better dependability and productivity combined with minimal maintenance and process downtime.

## Proven reliability

Over 80 years of time-tested, proven performance

## Value for investment

Low rotational speed enables longest pump life cycle

## Easy on-site maintenance

Robust, simple mechanism for high reliability and ease of rebuild

## Configured for your application

Choice of pumping combinations available to provide a wide range of vacuum pumping solutions



## Features and benefits

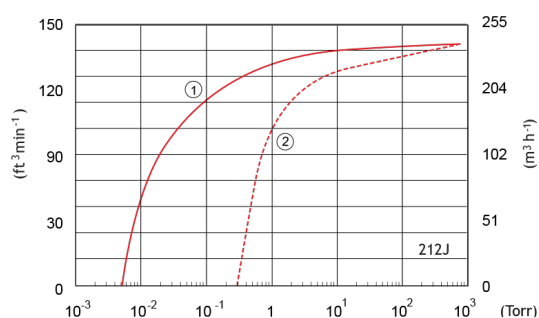
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- Robust cast and ductile iron construction provides rugged, reliable operation
- Efficient design provides maximum uptime with minimal moving parts and large clearance
- Low ultimate blank-off with maximum speed down to 1 Torr and continuous high pressure pumping up to 600 Torr
- Latest valve design virtually eliminates valve maintenance and reduces noise, while requiring lower power
- Space-saving design which saves up to 50% of valuable floor space
- Complete and self-contained unit delivered ready to install
- Controlled balancing reduces vibration to a practical minimum
- Automatic lubrication system provides proper flow of oil to bearings and sealing surfaces and prevents back-flow into system
- Gas ballast as standard
- Total capability includes the manufacturing and service capabilities to keep your equipment in top operation with a broad range of vacuum system accessories

## SPECIFICATIONS

Pump Type	Maximum pumping speed		Ultimate vacuum		Motor power				Overall dimensions			Noise level 50/60 Hz
	m <sup>3</sup> /hr (50 Hz)	cfm (60 Hz)	mbar	Torr	50 Hz		60 Hz		L	W	H	
					kW	Hp	kW	Hp	in	in	in	dB(A)
212 J	234	138	<3.3x10 <sup>-2</sup>	<2.5x10 <sup>-2</sup>	5.5	7.5	5.5	7.5	26.25	24	43.5	<77
412 J	442	260	<3.3x10 <sup>-2</sup>	<2.5x10 <sup>-2</sup>	11	15	7.7	10	40.25	25.63	131.4	<85
612 J	884	520	<3.3x10 <sup>-2</sup>	<2.5x10 <sup>-2</sup>	11	15	7.7	10	43.75	70	56.63	<85

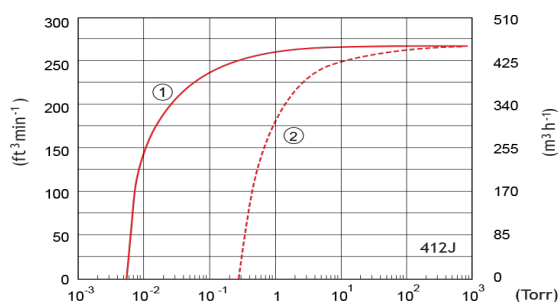
### Stokes Microvac Model 212J Performance Curve



- 1 - Without gas ballast
- 2 - With gas ballast



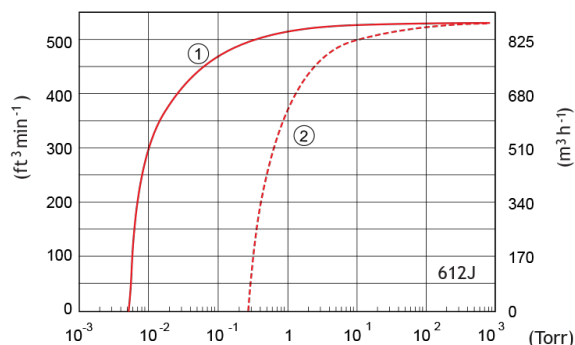
### Stokes Microvac Model 412J Performance Curve



- 1 - Without gas ballast
- 2 - With gas ballast



### Stokes Microvac Model 612J Performance Curve



- 1 - Without gas ballast
- 2 - With gas ballast



## Applications

Automotive	Leak Detection
General Applications	PET Processing
Metallurgy	Pharmaceuticals
Vacuum Coating	Transformer drying
Vacuum Melting	
Chemical Processing	
Heat Treatment	

## STOKES BOOSTER COMBINATIONS

Higher capacities and deeper vacuum levels are available by combining mechanical boosters with Stokes pumps.

## STOKES 6" MECHANICAL BOOSTER PUMPS

Stokes 6" series mechanical boosters are designed to be used in conjunction with Stokes rotary pumps and a wide range of other roughing or backing vacuum pumps to create a compact, integrated package.

When coupled with one of these pumps, the Stokes 6" mechanical boosters increase pumping speed at working pressures and significantly reduce pumpdown time.

Stokes booster pump options include:

- direct drive (1800 RPM, or 3600 RPM) Variable Frequency (VFD) compatible
- bare shaft
- vertical or horizontal gas flow
- by-pass (designed to pumpdown from atmospheric pressure)
- process isolation variant (five seal design for tough, high particulate applications)

### Industry Staple

Over 80 years of time-tested, proven performance with experienced service and technical support

### Easy to maintain

Single mechanical seal can be replaced easily without need to access pump internal mechanism

### Increased productivity

Five seal design for optimal process protection



## 6" BOOSTER DIMENSIONS

	Length		Width		Height		Inlet connection size	Outlet connection size
	mm	in	mm	in	mm	in		
607	1087	42.8	502	19.76	543	21.38	6" ASA/ANSI	6" ASA/ANSI
615	1369	53.9	502	19.76	543	21.38	8" ASA/ANSI	8" ASA/ANSI
622	1613	63.5	501	19.72	543	21.38	8" ASA/ANSI	8" ASA/ANSI

## EH BOOSTERS

Edwards EH mechanical booster pumps feature a unique hydrokinetic drive which provides efficient power transmission with benefits in economy, performance and compactness. These booster pumps are suitable for use with high differential pressures, allowing the booster pump to be started at the same time as the backing pump, reducing total pumpdown times.

### Increased productivity

Faster pumpdown time

### Simple installation

No need for pressure switches, bypass lines or variable frequency drives

### Reliable operation even for harsh duties

Proven shaft seal design



## EH BOOSTER DIMENSIONS

	Length		Width		Height		Inlet connection size	Outlet connection size
	mm	in	mm	in	mm	in		
EH250	705	27.8	305	12	272	10.7	ISO63	ISO40
EH500	791	31.1	305	12	265	10.4	ISO100	ISO63
EH1200	953	37.5	380	15	334	13.1	ISO160	ISO100
EH2600	1156	45.5	522	20.6	479	18.9	ISO160	ISO100
EH4200	1336	52.6	522	20.6	479	18.9	ISO250	ISO100

## APPLICATION ENGINEERING, DESIGN AND SYSTEMIZATION

Our application expertise will ensure we can offer a comprehensive package of design and integrated system solutions.

Our highly focused applications team, central applications group and regional networks of application specialists are on hand to offer expert support throughout your selection and installation process.

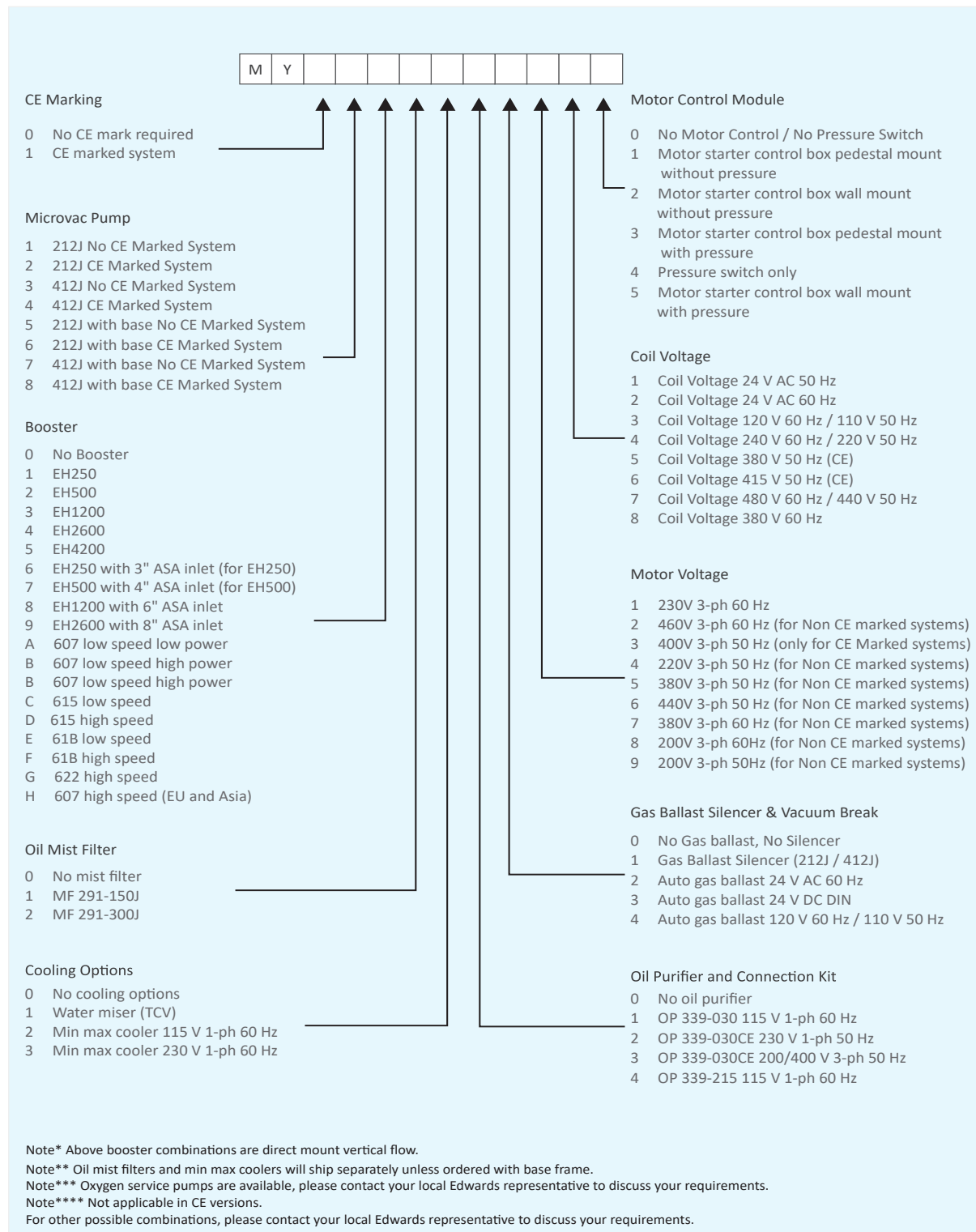
Accessories include -

- water miser
- oil mist separators
- gas ballast silencers
- auto gas ballast
- external oil purifiers
- inlet filters
- closed loop external cooling system (min/max)

Stokes 1700 Series Mechanical Booster Combinations maximize your productivity and performance. Models range from 1721 to 1754HC.



# OIL SEALED PISTON PUMPS & MECHANICAL BOOSTER COMBINATIONS





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