



A3P series

Advanced, energy-efficient technology for medium duty processes



A3P series

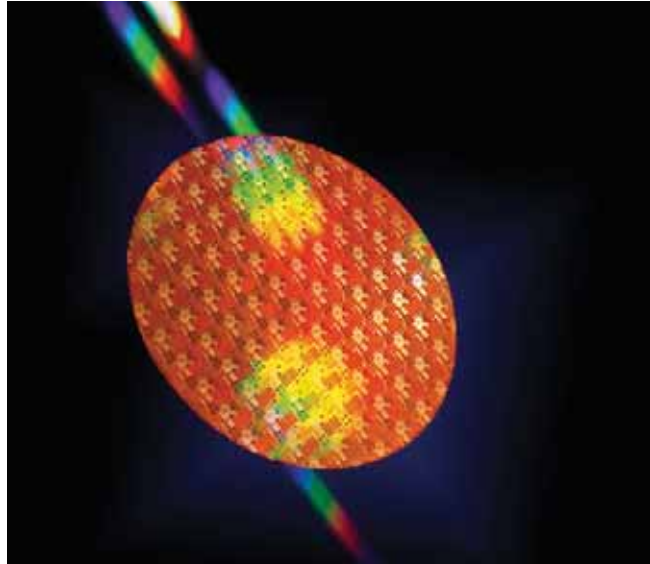
The A3P series of vacuum pumps, offer high reliability and the necessary equipment to withstand traces of aggressive and corrosive media. The three models available in the series cover a wide spectrum of pumping speeds. Compared to conventional pumps, energy savings of up to 50% can be achieved with the A3P range. These pumps are designed for quiet and low-vibration operation and are CE and SEMI S2 compliant. Due to their compact dimensions, they can easily be integrated into existing systems and save up to 50% space compared to conventional pumps.

Customer benefits

- Low power consumption
- Easy integration into existing systems due to their compact and lightweight design
- Longer service life through high resistance to corrosive media
- No need for an external silencer
- Reduced operating costs
- Compatible with semiconductor fab requirements

Recommended applications

- Oxide etching
- Poly etching
- Stripping
- Ashing
- Implant source



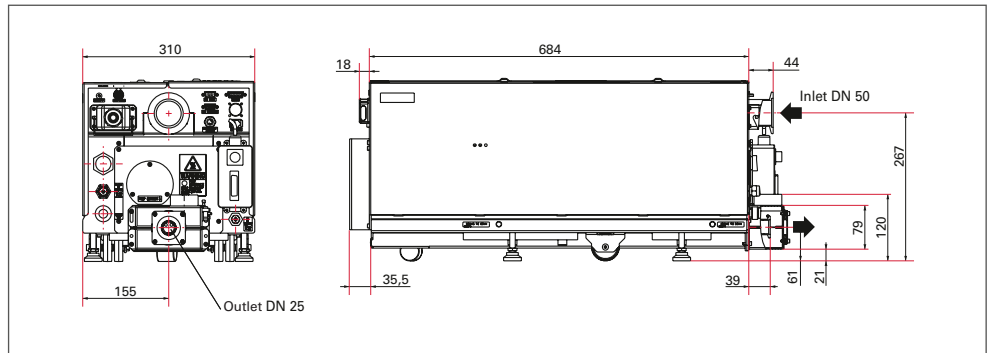
Semiconductors

A3P series

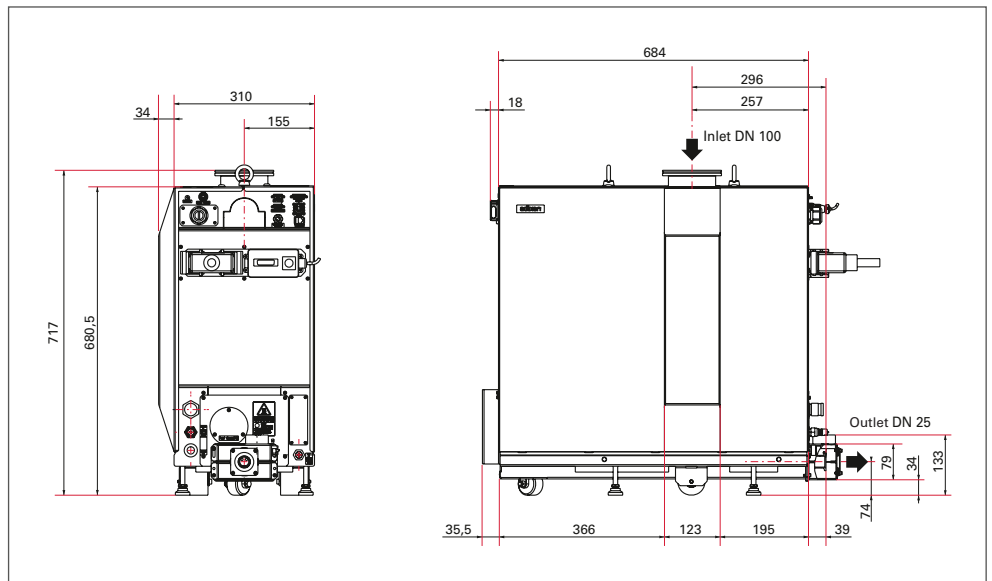


- Low operating costs
- Small footprint
- Light weight for simpler assembly
- High reliability in medium duty applications
- Compatible with semiconductor fab requirements

Dimensions



A 103 P



A 603 P, A 1003 P

Multi-stage
Roots pumps

Technical data	A 103 P	A 603 P	A 1003 P
Flange (out)	DN 25 ISO-KF	DN 25 ISO-KF	DN 25 ISO-KF
Flange (in)	DN 50 ISO-K	DN 100 ISO-K	DN 100 ISO-K
Dimensions (L x W x H)	684 x 310 x 323 mm	684 x 342 x 662 mm	684 x 342 x 662 mm
Weight	125 kg	270 kg	270 kg
Cooling	Water	Water	Water
Power consumption at ultimate pressure	1 kW	1.3 kW	1.6 kW
Continuous inlet flow, max.	50 slm	25 slm	25 slm
Cooling water flow, min.	1.5 l/mn	1.5 l/mn	1.5 l/mn
Nominal motor rating	2.5 kW	4.7 kW	5 kW
N ₂ purge gas flow, max.	60 slm	60 slm	60 slm
N ₂ purge gas flow, min.	5 slm	5 slm	5 slm
Power supply voltage, 3 phase	200-230 V; 380-440 V	200-230 V; 380-440 V	200-230 V; 380-440 V
Pumping speed	120 m ³ /h		900 m ³ /h
Pumping speed at 50 Hz		480 m ³ /h	
Pumping speed at 60 Hz		570 m ³ /h	
Noise level	< 58 dB (A)	< 65 dB (A)	< 65 dB (A)
Typical ultimate pressure	6.5 · 10 ⁻³ hPa		3 · 10 ⁻⁴ hPa
Typical ultimate pressure, 50 Hz		5 · 10 ⁻⁴ hPa	
Typical ultimate pressure, 60 Hz		3 · 10 ⁻⁴ hPa	
Typical ultimate pressure with N ₂ purge	(with 20 slm purge) 2.6 · 10 ⁻² hPa		(with 20 slm purge) 1 · 10 ⁻³ hPa
Typical ultimate pressure with N ₂ purge, 50 Hz		(with 20 slm purge) 2 · 10 ⁻³ hPa	
Typical ultimate pressure with N ₂ purge, 60 Hz		(with 20 slm purge) 1 · 10 ⁻³ hPa	
Full load current	11.4 A (for 200-230 V); 6 A (380-440 V)	17.6 A (for 220-230 V); 9.4 A (for 380-440 V)	22.8 A (for 220-230 V); 12 A (for 380-440 V)
Volume size, max.	1 m ³	1 m ³	1 m ³
Water temperature	10 to 25 °C	10 to 25 °C	10 to 25 °C
Water connector	Brass, stainless steel	Brass, stainless steel	Brass, stainless steel

Accessories			
Isolation valve, manual	30501M	30503M	30503M
Isolation valve, 24 V DC	30501B	30503B	30503B
Cable for isolation valve, 24 V DC, 2.5 m	A330071	A330071	A330071
Seismic brackets kit	110914	110914	110914
Hand held remote display, 1.5 m cable	118952S	118952S	118952S

Order number guide A3P series

A3P	a	2	b	c	d	0	e	f	0	g	0
Product	Pump model	Pump type	Voltage	Inlet port	Water connector	Purge system	Cable type	Purge configuration	OEM	SEMI S2	Reserved
A 203 P	G	2	1, 2	5	0, 1	0	1, 2	0, 1, 2	0	0, 1	0
A 603 P	D	2	1, 2	6	0, 1	0	1, 2	0, 1, 2	0	0, 1	0
A 1003 P	C	2	1, 2	6	0, 1	0	1, 2	0, 1, 2	0	0, 1	0

Order number matrix
A3P series

Order number

A3P a 2 b c d 0 e f 0 g 0

Pump model	a
A 203 P	G
A 603 P	D
A 1003 P	C
Voltage	b
Low Voltage	1
High Voltage	2
Inlet port	c
DN 50	5
DN 100	6
Water connector	d
Brass	0
Stainless Steel	1
Cable type	e
Hard wire	1
Plug	2
Purge configuration	f
Without standby	0
With standby	1
Single purge	2
SEMI S2	g
Without	0
With	1