

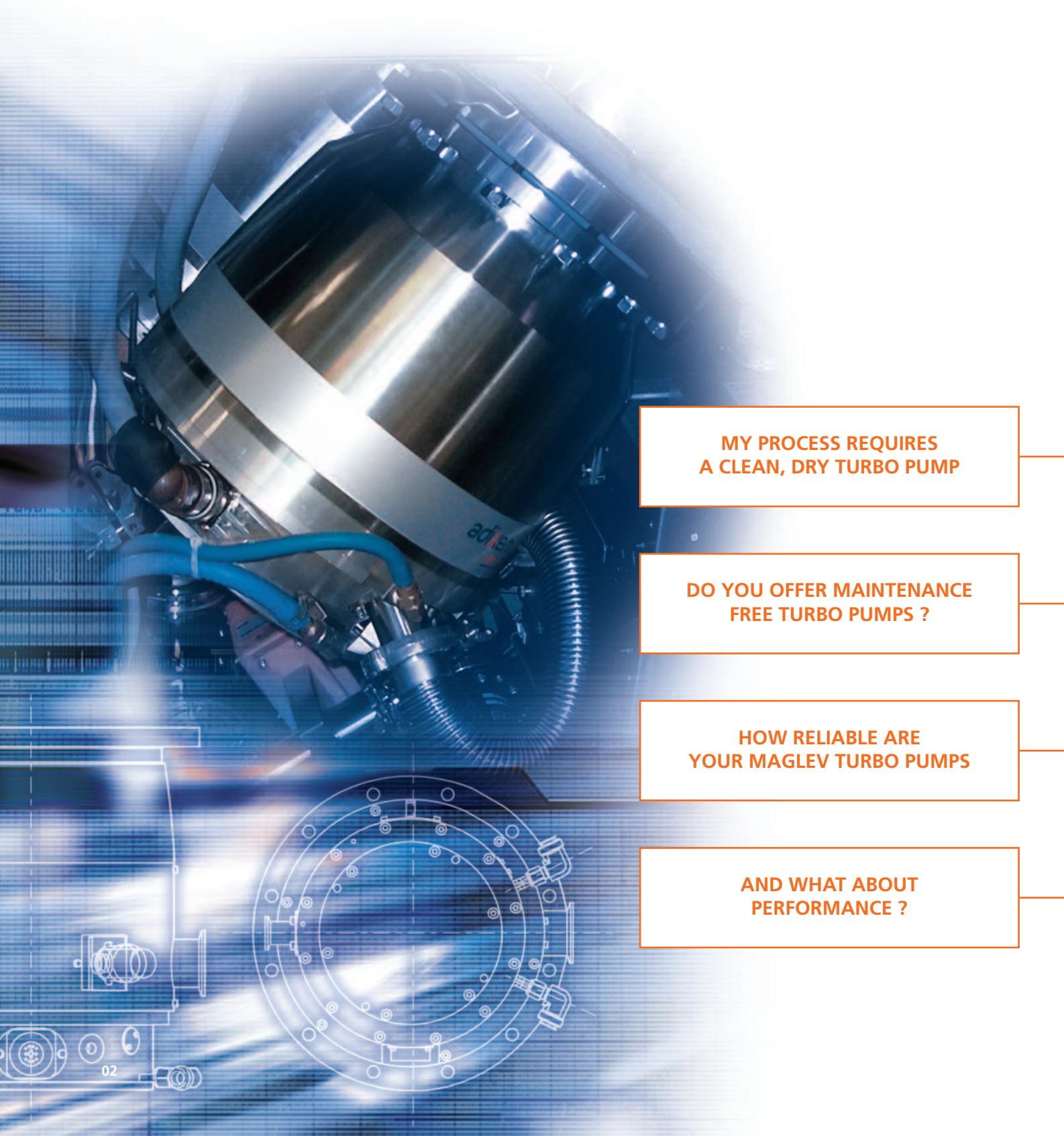
# adixen



**MAGLEV  
TURBOMOLECULAR PUMPS  
ATH M and ATP M SERIES**



## A new and comprehensive range from 500 to 3200 l/s Magnetically levitated Adixen Turbomolecular pumps



MY PROCESS REQUIRES  
A CLEAN, DRY TURBO PUMP

DO YOU OFFER MAINTENANCE  
FREE TURBO PUMPS ?

HOW RELIABLE ARE  
YOUR MAGLEV TURBO PUMPS

AND WHAT ABOUT  
PERFORMANCE ?

# Maintenance-free bearings, high-performance turbo pumps

Leading Adixen maglev applications include:

## Semiconductor Industry processes

- Harsh processes : Metal / Poly / Oxide Etch
- DRIE (Si deep etch)
- CVD / PVD / HDPCVD
- Ion implantation
- Lithography
- Load lock pumping

## Si industry

- Photovoltaic industry
- Flat Panel Display
- Micro Machining System

## Coating and other industries

- Glass Coating
- Thin film deposition
- Sputtering
- Hard Disk manufacturing
- Load lock pumping

## Instrumentation

- Electron microscopy
- Ion milling
- Medical imaging

## Research and development

- Particle accelerators



ATH 2303 M with OBC

### THE ADIXEN MAGLEVS ARE CLEAN, DRY HIGH VACUUM PUMPS

The magnetic bearing is frictionless and does not require any grease.

### THE ADIXEN MAGLEV BEARINGS ARE MAINTENANCE FREE

Because the magnetic bearing of the ATH M series is maintenance free, the pumps can run for years without any interruption on a clean process. This gives the ATH M series a significant cost of ownership advantage over ball bearing turbo pumps.

### THE ATH M ARE THE MOST RELIABLE TURBOS ON THE MARKET

The pumping cells of the ATH M pumps are designed for minimal stress on difficult applications. Furthermore, the pump can accept multiple landings at full speed on the emergency dry, back-up bearings.

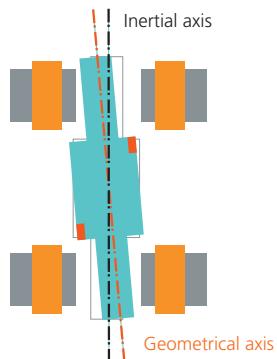
### THE ATH M OFFERS THE BEST PERFORMANCE/SIZE RATIOS ON THE MARKET

Sophisticated software tools helps us to develop the highest performing pumps for a given size. The pumps offer either high flow at high pressure as well as very low ultimate pressure.

## Rotor control

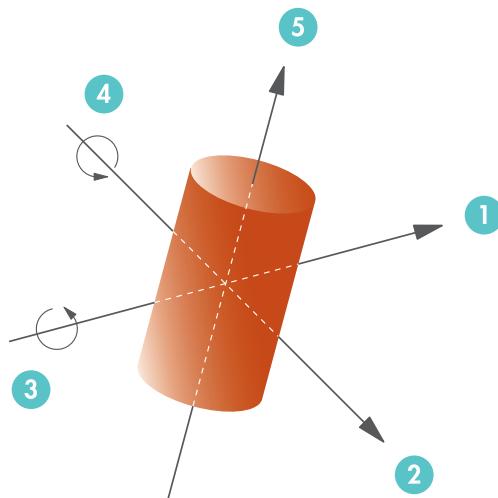
### Automatic balancing system

This device compensates in real time for any imbalance of the rotor due to accumulation of deposits.



### 5-axis control

A 5-axis magnetic bearing provides control of the rotor at high speed.



## Pump protection

### Purge

An inert gas purge is built into the pump. It may be used to prevent corrosive attack or deposition build-up inside the pumps.

### Heated version pumps for corrosive applications



The MT model features a temperature management system which controls an integrated heater band. The heater band and water cooling maintain the

pump internal surface at a constant temperature (up to 75° C) in order to minimize the condensation of by-products inside the pump.

## Pump safety

### Power failure

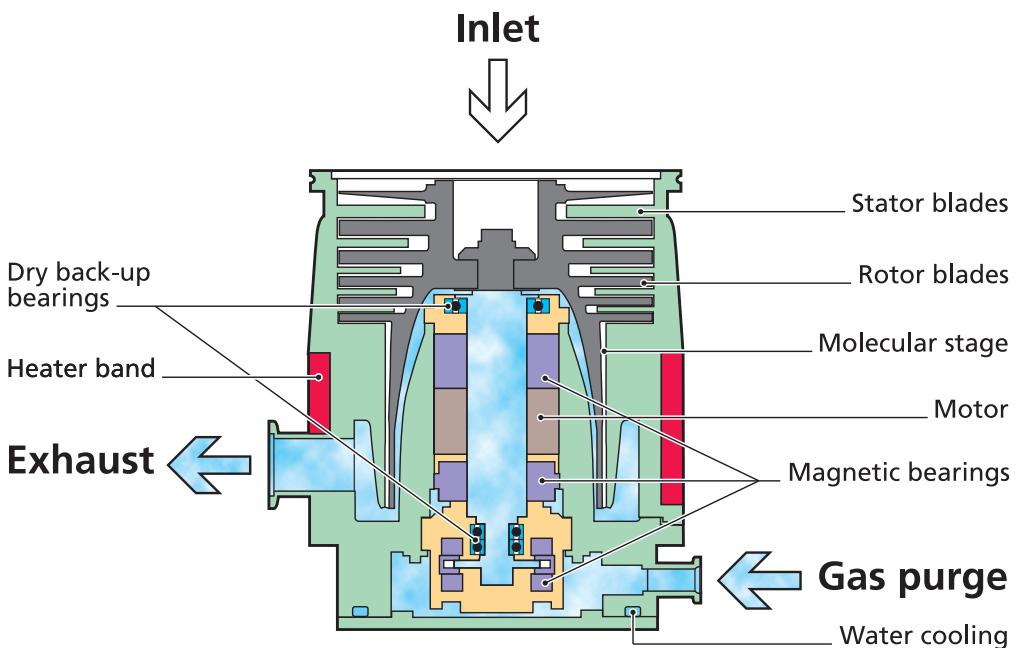
In the event of a power failure, the maglev rotor acts as a generator to convert the rotor energy into electrical power to supply the controller. Thus, the rotor remains levitated and slows down, until gently landing on the back-up bearings. No battery is required.

### Landing

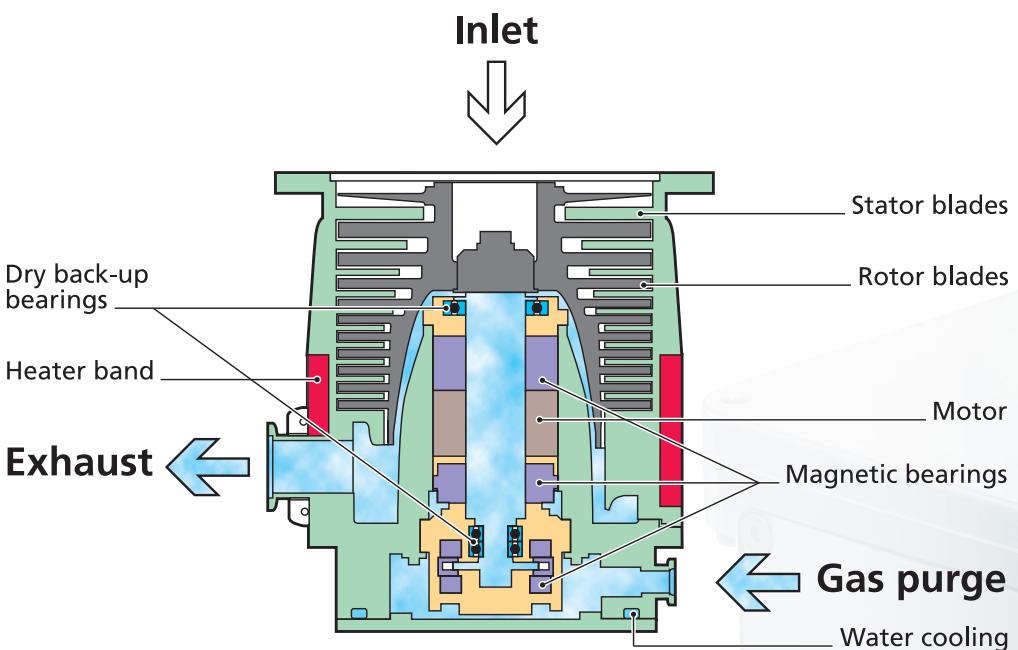
The pump emergency back-up bearings can withstand multiple landings at full speed in the exceptional event of an accidental cable disconnection, or a massive air inrush. The controller monitors the status of the backup bearing life.

## Cross section

### ATH M cross section

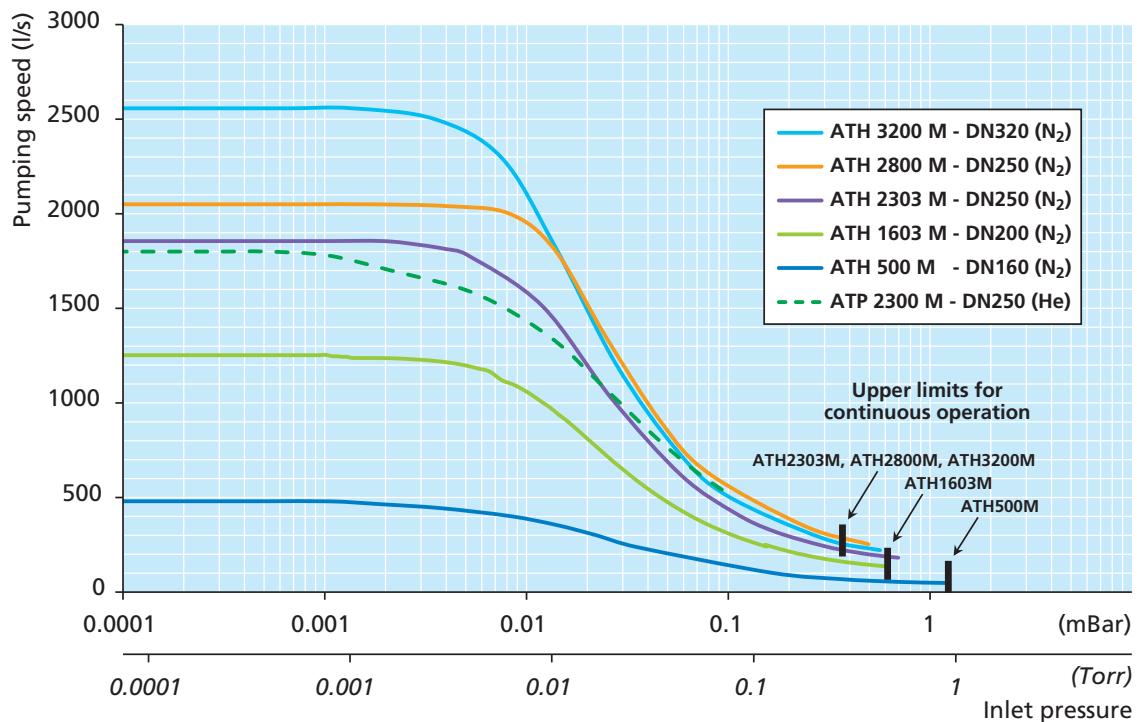


### ATP M cross section

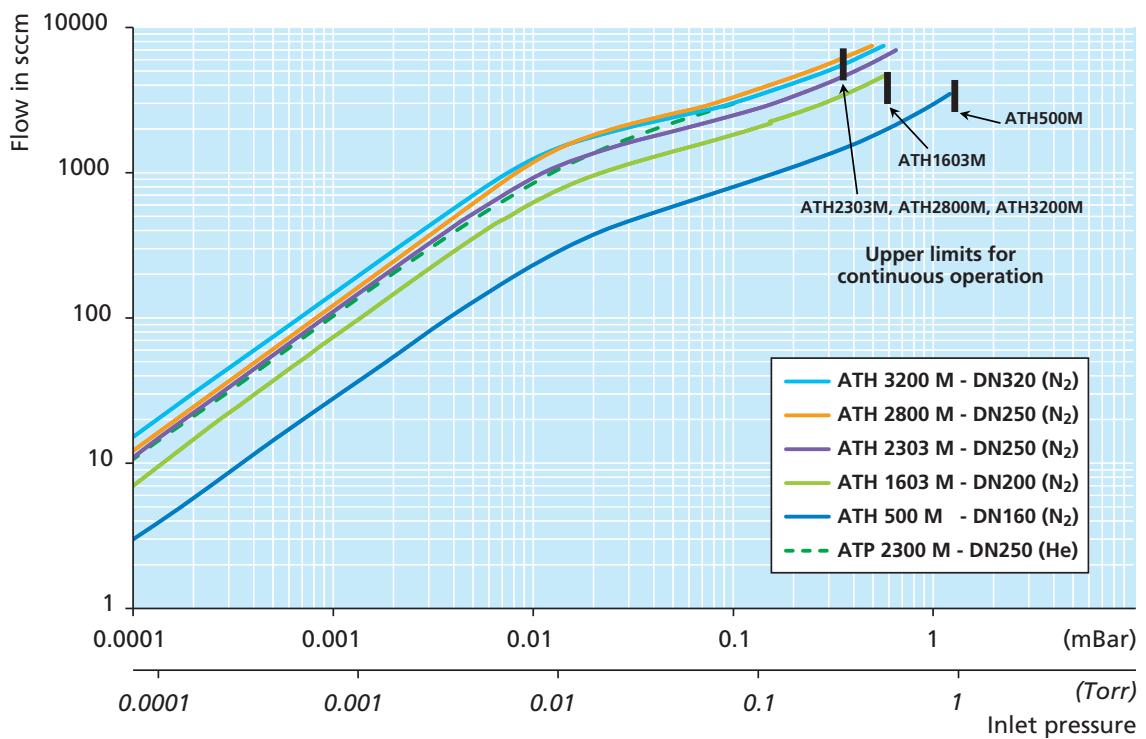


ATH M and ATP M

## Pumping speed\* versus inlet pressure



## Flow rate\* versus inlet pressure



## High throughput at high inlet pressure or high pumping speed for light gases

The ATH M pump series are designed for high pressure and high throughput, but also provide low ultimate pressure.

### Adjustable rotational speed

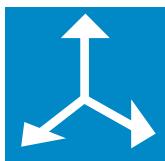
The ATH M series features adjustable rotational speed control, optimizing the pumping parameters. For instance, at high pressure, the throughput can be increased if the rotational speed is decreased.

### Flange and orientation

Industry standard flanges are available. All maglevs can be installed in any orientation for easy integration.



ISO-K/CF-F/ISO-F/VG



Any orientation

## Adixen's Magnetically levitated series

### ATH 3200 M

Adixen **T**urbomolecular **H**ybrid pump - **M**agnetically levitated (ATH M series)  
→ **From 500 to 3200 l/s**

### ATP 2300 M

Adixen **T**urbomolecular **P**ump - **M**agnetically levitated (ATP M)  
→ **For light gas applications**

### ATH 3200 MT

**T** is for **T**hermal-controlled version

## Technical data (measured specifications per PNEUROP standards)

		ATH 500 M	ATH 500 MT
Rotational Speed	rpm		50000
Inlet Flange		DN100 DN160	DN160
	N <sub>2</sub> l/s	300 500	500
Pumping Speed with inlet screen	Ar l/s	270 500	500
	He l/s	270 340	340
	H <sub>2</sub> l/s	170 190	190
	N <sub>2</sub>		2 x 10 <sup>7</sup>
Compression ratio	Ar		8 x 10 <sup>6</sup>
	He		1 x 10 <sup>4</sup>
	H <sub>2</sub>		2 x 10 <sup>2</sup>
Ultimate Pressure	mbar		< 1 x 10 <sup>-8</sup>
Recommended Purge Flow Rate	sccm		50
Maximum continuous inlet pressure N <sub>2</sub> *	mbar	1 1.2	0.02
Maximum continuous exhaust pressure N <sub>2</sub> **	mbar	1.7 1.8	1.7
Maximum throughput N <sub>2</sub> (M: cold, MT: 65°C)*	sccm	3000	500
Maximum heating temperature	°C	N/A	65
Maximum baking temperature	°C		120
Vibration level (displacement)	µm		< 0.01
Recommended backing pump			ACP40
Recommended cooling water flow rate	l/hour		60
Cooling water temperature	°C		15-25
Mounting orientation			Any
Exhaust flange		DN25 ISOKF	DN40 ISO KF
N <sub>2</sub> purge flange		1/8G (ISO228)	1/4VCR
Start up time (maximum)	mn		< 2.5
Pump weight	kg (lb)	17 (37)	18 (39)
Remote Controller type			N/A
Controller weight	kg (lbs)		N/A
Start up Power	Watt		560
Nominal Power	Watt		100
Controller power supply			48 VDC
Stainless steel inlet screen (factory setting)			yes
OBC (on-board-control) control option	Profibus	yes	no
	Remote	yes	
	Device net	no	

\*Depends on external conditions of water temperature, water flow, environment temperature

\*\* Exhaust pressure limit without flow speed loss. Depends on certain external condition

		ATH 1603 M	ATH 1600 MT			
Rotational Speed	rpm	39000				
Inlet Flange		DN200	DN250	DN200 DN250		
	N <sub>2</sub> l/s	1200	1220	1200 1220		
Pumping Speed with inlet screen	Ar l/s	1100	1150	1100 1150		
	He l/s	1050	1050	1050 1050		
	H <sub>2</sub> l/s	550	550	550 550		
	N <sub>2</sub>	$6 \times 10^7$				
Compression ratio	Ar	$6 \times 10^7$				
	He	$8 \times 10^3$				
	H <sub>2</sub>	$3 \times 10^2$				
Ultimate Pressure	mbar	$< 6 \times 10^{-9}$				
Recommended Purge Flow Rate	sccm	50				
Maximum continuous inlet pressure N <sub>2</sub> * Maximum continuous exhaust pressure N <sub>2</sub> **	mbar	0.6		0.01 1.8		
Maximum throughput N <sub>2</sub> (M: cold, MT: 65°C)*	sccm	4000		1000		
Maximum heating temperature	°C	N/A	75			
Maximum baking temperature	°C	120				
Vibration level (displacement)	µm	$< 0.01$				
Recommended backing pump		ADS602				
Recommended cooling water flow rate	l/hour	60				
Cooling water temperature	°C	15-40				
Mounting orientation		Any				
Exhaust flange		DN40 ISO KF				
N <sub>2</sub> purge flange		DN16 ISO KF				
Start up time (maximum)	mn	6				
Pump weight	kg (lb)	34 (75.5)				
Remote Controller type		Magpower	ACT1300M			
Controller weight	kg (lbs)	8.7 ( 19 )	8 (18)			
Start up Power	Watt	650				
Nominal Power	Watt	300				
Controller power supply		200-240V - 50/60 Hz Single phase				
Stainless steel inlet screen (factory setting)		yes				
OBC (on-board-control) control option	Profibus	yes				
	Remote	yes				
	Device net	yes				

\*Depends on external conditions of water temperature, water flow, environment temperature

\*\* Exhaust pressure limit without flow speed loss. Depends on certain external condition

## Technical data (measured specifications per PNEUROP standards)

		ATH 2303 M	ATH 2300 MT	ATP 2300 M
Rotational Speed	rpm		31000	
Inlet Flange		DN200 DN250	DN200 DN250	DN200 DN250
	N <sub>2</sub> l/s	1250 1850	1250 1850	1250 1750
Pumping Speed with inlet screen	Ar l/s	1200 1750	1200 1750	1200 1650
	He l/s	1500 1600	1500 1600	1700 1800
	H <sub>2</sub> l/s	1200 1200	1200 1200	1700 1700
	N <sub>2</sub>		> 1 x 10 <sup>8</sup>	> 1 x 10 <sup>8</sup>
Compression ratio	Ar		> 1 x 10 <sup>8</sup>	> 1 x 10 <sup>8</sup>
	He		> 3 x 10 <sup>4</sup>	> 1 x 10 <sup>5</sup>
	H <sub>2</sub>	> 1 x 10 <sup>3</sup>	> 2 x 10 <sup>3</sup>	> 7 x 10 <sup>3</sup>
Ultimate Pressure	mbar		< 6 x 10 <sup>-9</sup>	< 4 x 10 <sup>-9</sup>
Recommended Purge Flow Rate	sccm		50	
Maximum continuous inlet pressure N <sub>2</sub> *	mbar	0.3	0.01	0.33
Maximum continuous exhaust pressure N <sub>2</sub> **	mbar	2.5	2.8	2.1
Maximum throughput N <sub>2</sub> (M: cold, MT: 65°C)*	sccm	4000	1000	2200
Maximum heating temperature	°C	N/A	75	N/A
Maximum baking temperature	°C		120	
Vibration level (displacement)	µm		< 0.01	
Recommended backing pump			ADS602	
Recommended cooling water flow rate	l/hour		60	
Cooling water temperature	°C		15-40	
Mounting orientation			Any	
Exhaust flange			DN40 ISO KF	
N <sub>2</sub> purge flange			DN16 ISO KF	
Start up time (maximum)	mn	8		8
Pump weight	kg (lb)	60 (132.3)		52 (112)
Remote Controller type			Magpower	
Controller weight	kg (lbs)		8.7 (19)	
Start up Power	Watt	1000		1000
Nominal Power	Watt	350		350
Controller power supply		200-240V - 50/60 Hz Single phase		
Stainless steel inlet screen (factory setting)			yes	
OBC (on-board-control) control option	Profibus		yes	
	Remote		yes	
	Device net		yes	

\*Depends on external conditions of water temperature, water flow, environment temperature

\*\* Exhaust pressure limit without flow speed loss. Depends on certain external condition

		ATH 2800 M	ATH 2800 MT	ATH 3200 M	ATH 3200 MT
Rotational Speed	rpm		25000		
Inlet Flange		DN250		DN320	
	N <sub>2</sub> l/s	2050		2600	
Pumping Speed with inlet screen	Ar l/s	2000		2400	
	He l/s	2150		2400	
	H <sub>2</sub> l/s	1750		1800	
	N <sub>2</sub>		> 1 x 10 <sup>8</sup>		
Compression ratio	Ar		> 1 x 10 <sup>8</sup>		
	He		> 3 x 10 <sup>4</sup>		
	H <sub>2</sub>		> 2 x 10 <sup>3</sup>		
Ultimate Pressure	mbar		< 6 x 10 <sup>-9</sup>		
Recommended Purge Flow Rate	sccm		50		
Maximum continuous inlet pressure N <sub>2</sub> *	mbar	0.26	0.01	0.26	0.01
Maximum continuous exhaust pressure N <sub>2</sub> **	mbar	1.8	1.8	1.8	1.8
Maximum throughput N <sub>2</sub> (M: cold, MT: 65°C)*	sccm	5000	1000	5000	1000
Maximum heating temperature	°C	N/A	75	N/A	75
Maximum baking temperature	°C		120		
Vibration level (displacement)	µm		< 0.01		
Recommended backing pump			ADS602		
Recommended cooling water flow rate	l/hour		60		
Cooling water temperature	°C		15-40		
Mounting orientation			Any		
Exhaust flange			DN40/50 ISO KF		
N <sub>2</sub> purge flange			DN16 ISO KF		
Start up time (maximum)	mn		10		
Pump weight	kg (lb)		85 (187.4)		
Remote Controller type			Magpower		
Controller weight	kg (lbs)		8.7 (19)		
Start up Power	Watt		1000		
Nominal Power	Watt		400		
Controller power supply			200-240V - 50/60 Hz Single phase		
Stainless steel inlet screen (factory setting)			yes		
OBC (on-board-control) control option	Profibus		No		
	Remote		No		
	Device net		No		

\*Depends on external conditions of water temperature, water flow, environment temperature

\*\* Exhaust pressure limit without flow speed loss. Depends on certain external condition

## Ordering information

### ATH 500 M

#### Note

- The ATH 500 M is supplied with a stainless steel inlet screen and standard 50 sccm purge flow reducer (at 1 bar relative pressure)
- ATH 500 M controller requires 48 VDC power supply

### ATH 500 M / ATH 500 MT

Inlet Flange DN	ATH 500 M Water cooling Remote P/N	ATH 500 M Water cooling Profibus P/N	ATH 500 M Air cooling Remote P/N	ATH 500 M Air cooling Profibus P/N	ATH 500 MT Heated Remote P/N
100 ISO-K	V2312100	VY312100	V2311100	VY311100	VR312103
100 CF-F	V2322100	VY322100	V2321100	VY321100	VR322103
160 ISO-F	V2462100	VY462100	V2461100	VY461100	VR462103
160 ISO-K	V2412100	VY412100	V2411100	VY411100	VR412103
160 CF-F	V2422100	VY422100	V2421100	VY421100	VR422103



ATH 500 M with integrated controller and optional HHR

# Ordering information

## Accessories for ATH 500 M

### Accessories

Item	Part Number
Hand Held Remote (HHR)	114461
3.5 meter Power cord (Power supply to pump)	A331328-035
230VAC to 48VDC Power supply	114866
Power Cord 2.5m Europe standard 200V-240V	Consult us
Power Cord 3.5m US standard 250V	A332106-035

### Purge control

By default, 50 sccm air purge is included with ATH 500 M

Purge accessories	Part Number
Purge plug with O-ring	115298S
Purge valve kit (24 VDC)*	115303S

\* User driven

### Mounting bolts

Pump type	Inlet size	Housing type							
		ISO F		ISO K		CF-F		VG (2)	
		P/N	Description	P/N	Description	P/N	Description	P/N	Description
ATH 500 M	DN 100		(1)		(1)		(1)		(1)
	DN 160	110676S	12 CHC M10*35	117996	12 CHC M10*50		(1)		n/a

n/a: not applicable, not possible - (1) Please consult us - (2) Without centering ring

### Inlet screen (stainless steel)

Inlet Flange DN	Part Number
DN100	118001
DN160	118002

Mesh size = 5 mm

By default, ATH 500 M is delivered with a stainless screen

### Copper gasket

Inlet Flange DN	Part Number
100 CF-F	303291
160 CF-F	303292

See Adixen catalog page C26.20 for more detail

### Rotatable flange

Inlet Flange DN	Part Number
100 ISO-K	303127
160 ISO-K	303129

See Adixen catalog page C26.18 for more detail

### Centering ring with oring

Inlet Flange DN	Part Number
100 ISO-K / ISO-F	068349
160 ISO-K / ISO-F	068186

See Adixen catalog page C26.14 for a more detail

### Valves

Item description	Part Number
Air venting valve DN25 24V	108348

## Ordering information

### ATH M and ATP M series

#### Note

Applicable for all of ATH M and ATP M series, except ATH 500 M.

- **Required accessories:** pumps require the following accessories for operation: Interconnecting cable, ACT, OBC, or Magpower controller, and heater cable for MT models.
- **OBC controller:** can be driven in I/O Remote, RS232/RS485 devicenet or Profibus mode (Factory setting). Pumps equipped with OBC include a permanent 50 sccm purge valve (under a 1 bar relative pressure). OBC devicenet is available on request. See note (\*) for OBC pumps for glass coating application.
- **Inlet screen:** all ATH M and ATP M include a stainless inlet screen.

### ATH 1603 M / ATH 1600 MT

Inlet Flange DN	ATH 1603 M P/N	ATH 1600 MT P/N	ATH 1603 M with OBC Profibus controller P/N (*)	ATH 1603 M with OBC Devicenet controller P/N (*)	ATH 1600 MT with OBC Profibus controller P/N (*)
200 ISO-F	Y256210A	P6562100	YY56210A	YV56210A	PX56210A
200 ISO-K	Y251210A	P6512100	YY51210A	YV51210A	PX51210A
200 CF-F	Y252210A	P6522100	YY52210A	YV52210A	PX52210A
250 ISO-F	Y266210A	P6662100	YY66210A	YV66210A	PX66210A
250 ISO-K	Y261210A	P6612100	YY61210A	YV61210A	PX61210A
250 CF-F	Y262210A	P6622100	YY62210A	YV62210A	PX62210A

### ATH 2303 M / ATH 2300 MT

Inlet Flange DN	ATH 2303 M P/N	ATH 2300 MT P/N	ATH 2303 M with OBC Profibus controller P/N (*)	ATH 2303 M with OBC Devicenet controller P/N (*)	ATH 2300 MT with OBC Profibus controller P/N (*)
200 ISO-F	X2562100	Q6562100	XY56210A	XV56210A	QX56210A
250 ISO-F	X2662100	Q6662100	XY66210A	XV66210A	QX66210A
250 CF-F	X2622100	Q6622100	XY62210A	XV62210A	QX62210A

(\*) For glass coating applications, replace the last two digits of P/N (0A) with (5A). Pumps for glass coating applications come with the following extra accessories: Clamp (DN32/40KF), stainless steel non rotatable (ISO-K only), inlet centering ring (ISO-F only), high strength screw kit, centering ring DN40KF, and purge valve. Contact us for more information.

## Ordering information

### ATH M and ATP M series

#### ATP 2300 M

Inlet Flange DN	ATP 2300 M P/N	ATP 2300 M with OBC Profibus controller P/N (*)	ATP 2300 M with OBC DeviceNet controller P/N (*)
200 ISO-F	T2562100	TY56210A	TV56210A
250 ISO-F	T2662100	TY66210A	TV66210A
250 ISO-K	T2612100	TY61210A	TV61210A
250 CF-F	T2622100	TY62210A	TV62210A

#### ATH 2800 M / MT

Inlet Flange DN	ATH 2800 M P/N	ATH 2800 MT P/N
250 ISO-F	U2662100	U6662100
VG250	U26A2100	U66A2100

For other inlet housing configurations, please consult us.

#### ATH 3200 M / MT

Inlet Flange DN	ATH 3200 M P/N	ATH 3200 MT P/N
320 ISO-F	U2C62100	U6C62100
VG350	U2DA2100	U6DA2100

For other inlet housing configurations, please consult us.

(\*) For glass coating applications, replace the last two digits of P/N (0A) with (5A). Pumps for glass coating applications come with the following extra accessories: Clamp (DN32/40KF), stainless steel non rotatable (ISO-K only), inlet centering ring (ISO-F only), high strength screw kit, centering ring DN40KF, and purge valve. Contact us for more information.

## Multiple controller options for compact and effective electronic monitoring – ACT 1300 M, Magpower and OBC (pump mounted)

Adixen maglev pump controller offering:

		ACT 1300 M	Magpower	OBC
Controller type	1/2 rack	●	●	
	Pump mounted			●
Associated pump	ATH 1603 M		●	●
	ATH 1600 MT	●		●
	ATH 2303 M		●	●
	ATH 2300 MT		●	●
	ATP 2300 M		●	●
	ATH 2800 M / MT		●	
	ATH 3200 M / MT		●	
	200-240 VAC		●	●
Power supply	Universal	●		

### Rack controllers:

#### ACT 1300 M and Magpower

- Light weight: 8 kg / 19 lbs
- Compact ½ rack

### Pump mounted controller: OBC

- Compact , up to 40% volume reduction
- No cables required
- Devicenet and Profibus network
- LEDs for pump status / HHR (Hand Held Remote) option for maintenance

### All controllers feature:

- Inputs
  - Remote control of START/ STOP/ STANBY/ INHIBIT functions
- Outputs
  - Pump starting
  - Pump at speed
  - Stand-by on
  - Venting valve on/off (OBC only)
  - Selectable 0 – 10 volts output for speed, pump current or temperature (not for OBC)

### Convenient Interface

- User friendly menu (For OBC, with HHR option)
- Digital display of:
  - Rotational speed
  - Pump current
  - Pump and controller temperatures
  - Fault codes

### Full interchangeability

No pump to controller matching: any controller may be used with any Adixen Maglev pump, without the need for tuning or adjustment (not for ACT 1300 M)



ATP 2300 M with  
Magpower controller



ATH 1603 M with OBC and HHR



ACT 1300 M controller

## Ordering information

### Accessories for ATH M and ATP M series (except ATH 500 M)

#### Remote ACT controller or Magpower controller

Item description	Part Number	Applicable pump
ACT 1300 M controller (universal Voltage) <sup>(1)</sup>	114462	ATH 1600 MT
ACT 1300 M Lon controller (universal Voltage) <sup>(1)</sup>	114463	ATH 1600 MT
Magpower controller (200-240 VAC) <sup>(1)</sup>	114679	ATH 1603 M, ATH 2303 M, ATP 2300 M, ATH 2300 MT, ATH 2800 M / MT, ATH 3200 M / MT

<sup>(1)</sup> ROHS

#### Interconnecting cable: pump to rack controllers

Length	ACT 1300 M	Magpower
	Part Number	Part Number
1 m	104624	A215300-010-C6-D
3.5 m	103719	A215300-035-C6-D
5 m	103720	A215300-050-C6-D
10 m	103721	A215300-100-C6-D
20 m	A214574	A215300-200-C6-D

Note : Interconnecting cable is not required on pumps equipped with OBC controllers

#### Valve cable (controller to vent valve)

Length	ACT 1300 M	Magpower
	Part Number	Part Number
1 m	106052	A462403-010
3.5 m	105172	A462403-035
5 m	105173	A462403-050
10 m	105174	A462403-100
20 m	A459362	A462403-200

Note : Valve cable is not required on pumps equipped with OBC controllers

#### Heater band cables (MT pumps and ACT 1300 M only)

Interconnecting cable between heater band and controller. This cable includes water valve cable.

Length	Heater band cables	
	110-120V – 50-60hz	200-240V – 50-60hz
	Part Number	Part Number
1 m	A328698A	A328697A
3.5 m	A328698B	A328697B
5 m	A328698C	A328697C
10 m	A328698D	A328697D
20 m	A328698F	A328697F

## Ordering information

Accessories for ATH M and ATP M series (except ATH 500 M)

### Heater band and water valve cables (MT pumps and Magpower only)

Length	Heater cable		Water valve cable	
	200-240V – 50/60hz		24VDC	
	Part Number	Part Number	Part Number	Part Number
1 m	A460082-010		A462401-010	
3.5 m	A460082-035		A462401-035	
5 m	A460082-050		A462401-050	
10 m	A460082-100		A462401-100	
20 m	A460082-200		A462401-200	

### Mounting bolts

For safety reasons, we recommend installing the high strength bolts and washers specified below

Pump type	Inlet size	Housing type							
		ISO F		ISO K		CF-F		VG (2)	
		P/N	Description	P/N	Description	P/N	Description	P/N	Description
ATH 1600 M	200	110675	12 CHC M10*30 <sup>(2)</sup>	117996	12 CHC M10*50	111664	24 CHC M8*65	(1)	
		110676S	12 CHC M10*35 <sup>(3)</sup>						
	250	110675	12 CHC M10*30 <sup>(2)</sup>	117996	12 CHC M10*50	111665	32 CHC M8*65	113189	12 CHC M12*45
		110676S	12 CHC M10*35 <sup>(3)</sup>						
ATH 1603 M	200	110675	12 CHC M10*30 <sup>(2)</sup>	(1)		(1)		(1)	
		110676S	12 CHC M10*35 <sup>(3)</sup>						
	250	110675	12 CHC M10*30 <sup>(2)</sup>	(1)		(1)		(1)	
		110676S	12 CHC M10*35 <sup>(3)</sup>						
ATH 2300 M	200	114510	12 stub M10*35	114510	12 stub M10*35	(1)		(1)	
		110034	12 CHC M10*30 <sup>(2)</sup>	117996	12 CHC M10*50	118690	32 stub M8*35	(1)	
	250	110676S	12 CHC M10*35 <sup>(3)</sup>						
ATP 2300 M	200	114510	12 stub M10*35 <sup>(3)</sup>	(1)		(1)		(1)	
		110034	12 CHC M10*30 <sup>(2)</sup>						
	250	110676S	12 CHC M10*35 <sup>(3)</sup>	117996	12 CHC M10*50	118690	32 stub M8*35	(1)	
ATH 2303 M	200	114510	12 stub M10*35	(1)		(1)		(1)	
		110034	12 CHC M10*30 <sup>(2)</sup>						
	250	110676S	12 CHC M10*35 <sup>(3)</sup>	(1)		118690		32 stub M8*35	
ATH 2800 M	250	110034	12 CHC M10*30 <sup>(2)</sup>	(1)		(1)		113189	12 CHC M12*45
		110676S	12 CHC M10*35 <sup>(3)</sup>						
ATH 3200 M	320	113189	12 CHC M12*45 <sup>(3)</sup>	(1)		n/a		113189	12 CHC M12*45
		n/a							

n/a: not applicable - (1) Please consult us - (2) Without centering ring - (3) With centering ring

## Power cord

Item description	ACT 1300 M (universal voltage) and Magpower (220 VAC)
	Part Number
Power Cord 2.5m Europe standard 200-240V AC	A328405
Power Cord 2.5m US standard 100-120V AC	A328406
Power Cord 2.5m US standard 200-240V AC	A331729

## Valves

Item description	Part Number	Applicable controller
Air Venting DN 40 24 VDC normally = closed, 11 SLM	114280	Magpower and OBC

For other specific requests, please consult us.

## Inlet Screen

By default, all pumps are delivered with a stainless steel inlet screen

Inlet Flange DN	Part Number		Applicable pump
	Stainless steel	Aluminium	
200 ISO-K / ISO-F / CF-F	108872	109200	ATH 1603 M, ATH 1600 MT, ATP 2300 M, ATH 2303 M, ATH 2300 MT
250 ISO-K / ISO-F / VG	108762	111640	ATH 1603 M, ATH 1600 MT, ATP 2300 M, ATH 2303 M, ATH 2300 MT
250 ISO-F / CF-F / VG	112128		ATH 2800 M
320 ISO-K / ISO-F / CF-F	112132		ATH 3200 M
350 VG	114683		ATH 3200 M

## Hand Held Display Module

Item description	Part Number
Hand Held Remote (HHR) Display Module (OBC controller only)	114461

## Rotatable flange

Inlet Flange DN	Part Number
200 ISO-K / ISO-F / CF-F	303131
250 ISO-K / ISO-F / CF-F	303133

See Adixen catalog page C26.18 for more detail

## Centering ring with oring

Inlet Flange DN	Part Number
200 ISO-K / ISO-F	112007
250 ISO-K / ISO-F	114583
320 ISO-K / ISO-F	113130

See Adixen catalog page C26.14 for more detail

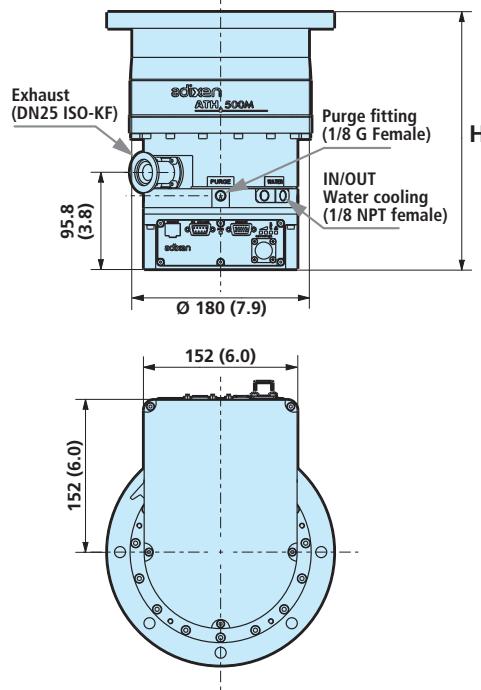
## Copper Gasket

Inlet Flange DN	Part Number
200 CF-F	(set of 10)
250 CF-F	(set of 1)

See Adixen catalog page C26.20 for more detail

## Dimensions mm (inches)

### ATH 500 M/MT

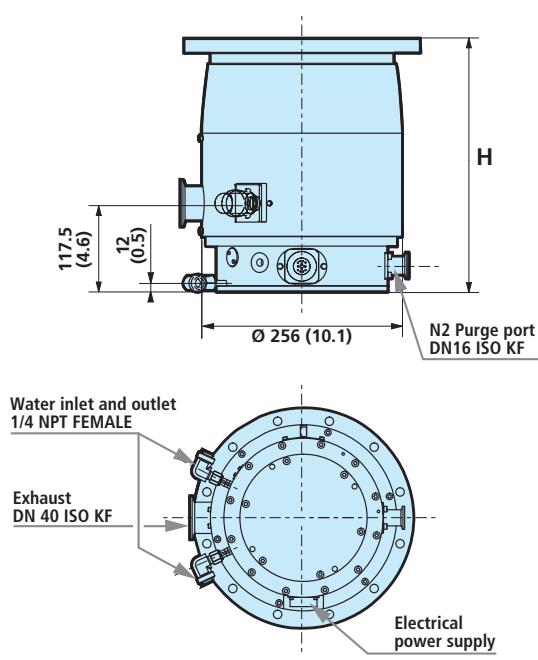


Inlet Flange	H*	
	mm	inches
DN 160 ISO-F	256	10.1
DN 160 ISO-K	256	10.1
DN 160 CF-F	277	10.9
DN 100 ISO-K	296	11.7
DN 100 CF-F	306	12.1

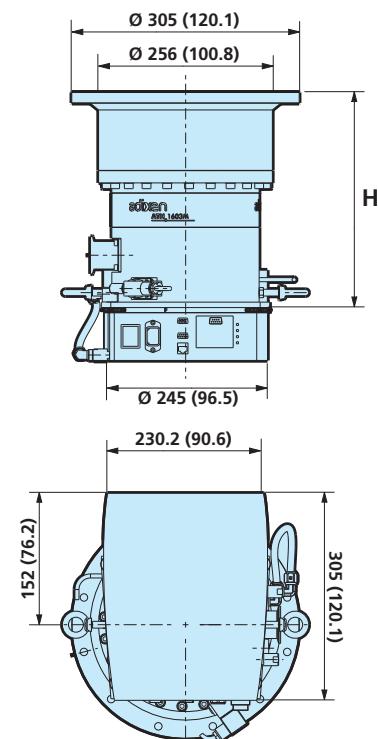
All dimensions in mm (inches)

\* Height without mesh

## ATH 1600 MT



## ATH 1603 M



Inlet Flange	H*	
	mm	inches
DN 250 ISO-F	317.4	12.5
DN 250 ISO-K	317.4	12.5
DN 250 CF-F	328.9	13.0
DN 200 ISO-F	317.4	12.5
DN 200 ISO-K	317.4	12.5
DN 200 CF-F	343.9	13.5

Contact us for dimension with OBC

Inlet Flange	H*	
	mm	inches
DN 200 ISO-F	320.15	12.6
DN 250 ISO-F	317.15	12.5

Contact us for dimension with OBC

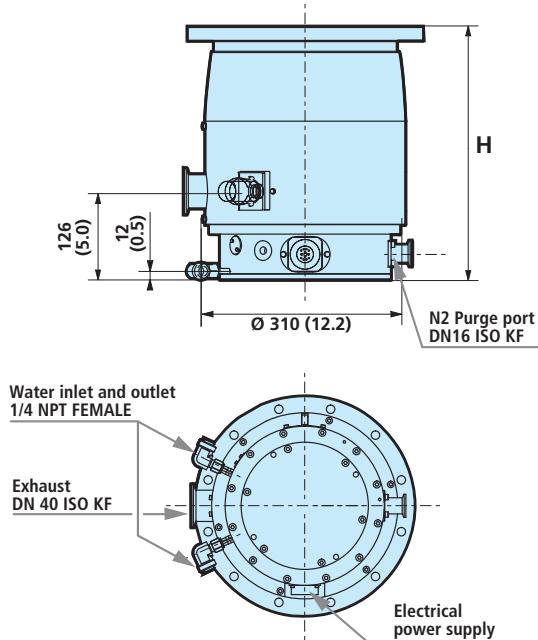
All dimensions in mm (inches)

\* Height without mesh

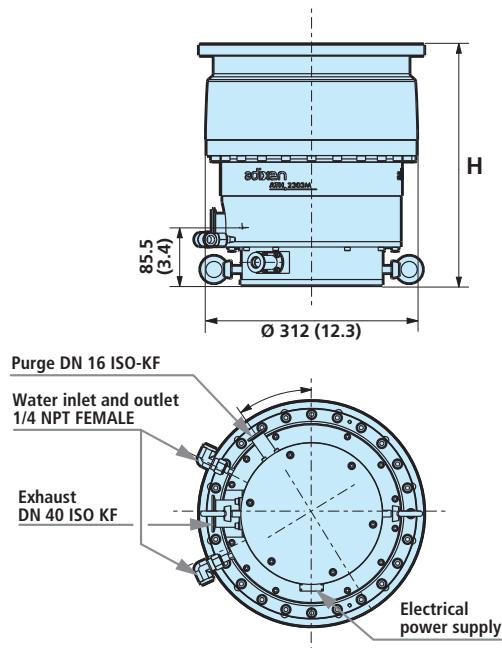
## ATH M and ATP M

## Dimensions mm (inches)

ATH 2300 MT



ATH 2303 M



Inlet Flange	H*	
	mm	inches
DN 250 ISO-F	358.5	14.1
DN 250 ISO-K	358.5	14.1
DN 250 CF-F	402.5	15.9
DN 200 ISO-F	402.5	15.9
DN 200 CF-F	402.5	15.9

Contact us for dimension with OBC

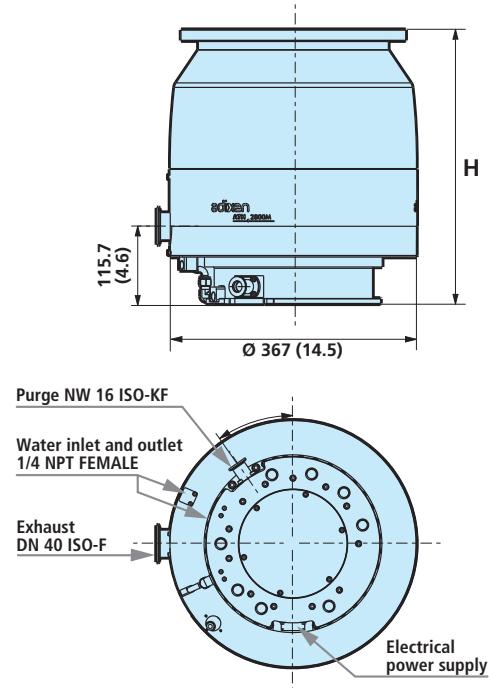
Inlet Flange	H*	
	mm	inches
DN 250 ISO-F	358.1	14.1
DN 250 CF-F	403.0	15.9
DN 200 ISO-F	416.0	16.4

Contact us for dimension with OBC

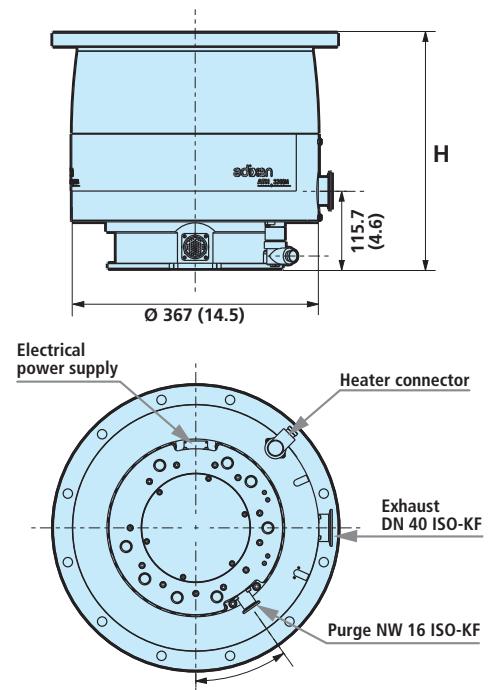
All dimensions in mm (inches)

\* Height without mesh

## ATH 2800 M/MT



## ATH 3200 M/MT



Inlet Flange	H*	
	mm	inches
DN 250 ISO-F	409.0	16.1
VG250	409.0	16.1

Contact us for dimension with OBC

Inlet Flange	H*	
	mm	inches
DN 320 ISO-F	351.4	13.8
VG350	351.4	13.8

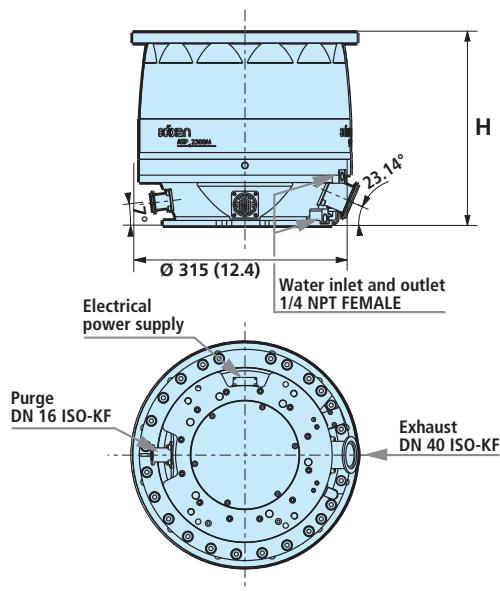
Contact us for dimension with OBC

All dimensions in mm (inches)

\* Height without mesh

## Dimensions mm (inches)

### ATP 2300 M



Inlet Flange	H*	
	mm	inches
DN 250 ISO-F	289.2	11.4
DN 250 ISO-K	289.2	11.4
DN 250 CF-F	333.2	13.1
DN 200 ISO-F	350.2	13.8
DN 200 ISO-K	350.2	13.8

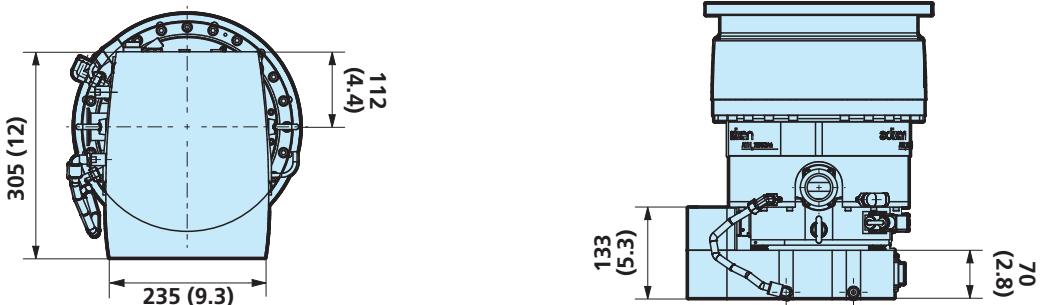
Contact us for dimension with OBC

All dimensions in mm (inches)

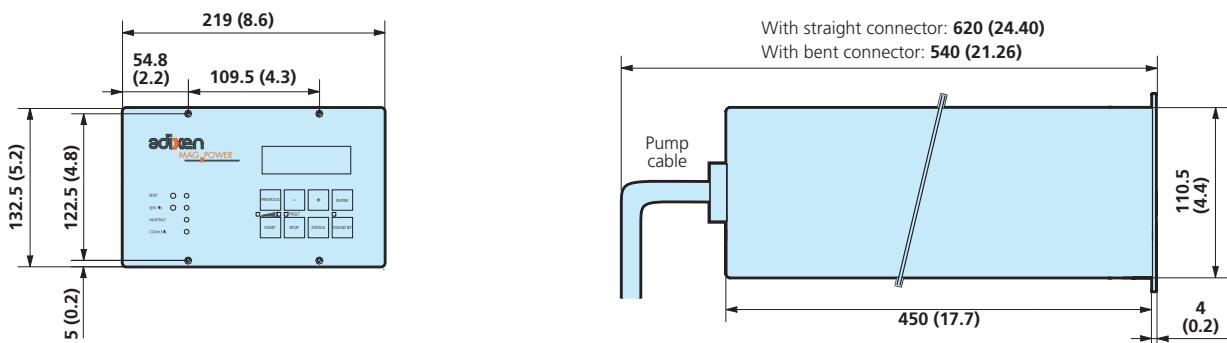
\* Height without mesh

## Controller dimensions mm (inches)

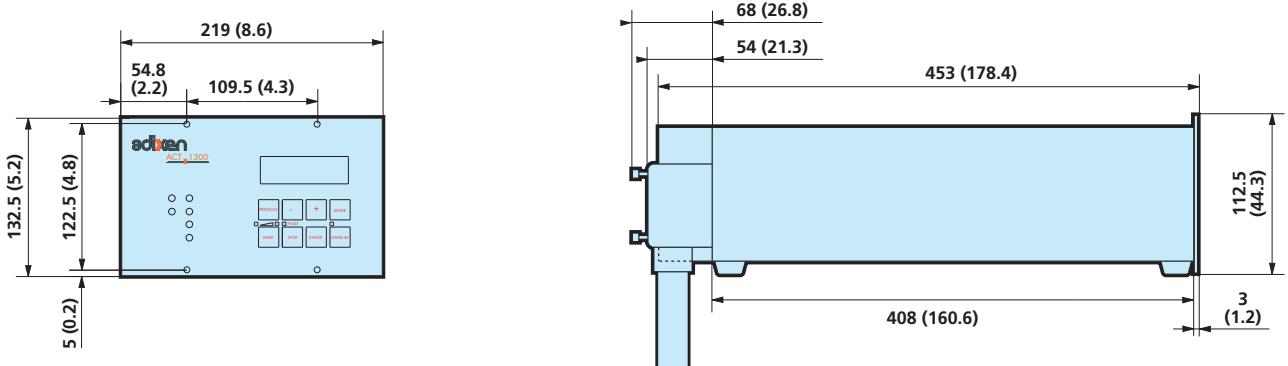
### OBC (pump mounted)



### Magpower Controller



### ACT 1300 M Controller



**China**

Alcatel Vacuum  
Technology Shanghai  
Tel: (8621) 5027 0628  
Fax: (8621) 3895 3815

**France (Headquarters)**

Alcatel Vacuum  
Technology France  
Tel: 33 (0)4 50 65 77 77  
Fax: 33 (0)4 50 65 77 89

**Germany**

Alcatel Hochvakuum  
Technik GmbH  
Tel: (49) 9342 96 10 0  
Fax: (49) 9342 96 10 30

**Italy**

Alcatel Vacuum  
Systems S.p.A.  
Tel: (39) 039 686 3855  
Fax: (39) 039 667 125

**India**

Alcatel Vacuum  
Technology India  
Tel: (91) 124 473 7777  
Fax: (91) 124 473 7799

**Japan**

Alcatel-Lucent Japan Ltd  
Tel: (81) 45 540 7220  
Fax: (81) 45 544 0049

**Korea**

Alcatel Vacuum  
Technology Korea  
Tel: (82) 31 206 6277  
Fax: (82) 31 204 6279

**Netherlands**

Alcatel Vacuum  
Technology Netherlands  
Tel: (31) 345 478 400  
Fax: (31) 345 531 076

**Singapore**

Alcatel-Lucent Singapore  
Tel: (65) 6254 0828  
Fax: (65) 6254 7018

**Sweden**

Adixen Scandinavia  
Tel: (46) 13 35 59 00  
Fax: (46) 13 35 59 01

**Taiwan**

Alcatel Vacuum  
Technology Taiwan  
Tel: (886) 3 5599 230  
Fax: (886) 3 5599 231

**United Kingdom**

Alcatel Vacuum  
Technology (U.K.) Ltd  
Tel: (44) 1 506 418 000  
Fax: (44) 1 506 418 002

**USA**

Alcatel Vacuum  
Products  
Tel: (1) 781 331 4200  
Fax: (1) 781 331 4230

Alcatel Vacuum Technology France

98, avenue de Brogny - BP 2069 - 74009 ANNECY CEDEX - FRANCE - Tel.: 33 (0)4 50 65 77 77 - Fax: 33 (0)4 50 65 77 89  
[www.adixen.com](http://www.adixen.com)