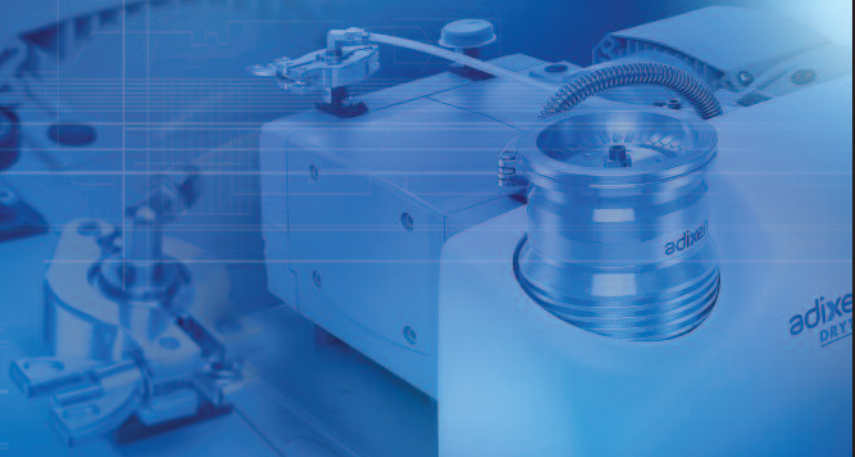




**COMPACT DRY PUMPING SYSTEMS**  
DRYTEL SERIES



## Dry pumping units

The Drytel series of products are dry pumping systems that include an Adixen molecular drag pump (MDP) or a hybrid turbo pump (AMH) and an oil-free forepump. Designed to be used on a bench top or easily integrated into a system, these units provide a dry, clean vacuum from atmosphere to  $10^{-8}$  mbar (Torr).

## "Open Concept": a new generation of Adixen's turbo pumping group...

### Benefits

- Flexible: many versions provide the most suitable configuration
- Easy to maintain: direct access to the system component
- Compact
- Cost effective

#### NO CONTAMINATION FROM INTERNAL LUBRICANTS

The two pumping stages working in series (MDP or AMH 020/AMD diaphragm pump) don't require any lubricant to operate, permitting use on ultra-clean processes.

#### HIGH RELIABILITY

The Drytel series incorporate well-proven vacuum pumps:

- Adixen molecular drag pump,
- Adixen compact hybrid turbo pump,
- Rugged diaphragm pumps.

#### COST-EFFECTIVE SOLUTION

The Drytel series is the least expensive solution to achieve a clean vacuum down to  $10^{-8}$  mbar (Torr).

### Applications

The Drytel series is recommended for all applications where a dry, clean vacuum is required, such as in industry (semiconductor, analytical instrumentation, pharmaceutical, chemicals...) and research and development laboratories.

They can be used in various types of applications:

- Backing of turbomolecular pumps
- Loadlock pumping
- Mass spectrometry
- Surface analysis
- Ion pump evacuation
- Cryopump regeneration
- Calibration
- Gas industry
- Gas lines



Application on a calibration bench

## Standard configurations: Drytel 1025

Based on the "Open Concept", this unique compact and flexible pumping system is available in several versions which can perfectly suit your needs.

According to your requirements, it may include :

- an Adixen MDP 5011 molecular drag pumps (7.5 l/s) or a compact AMH 020 hybrid turbo molecular pump (30 l/s).
- a 4 m<sup>3</sup>/h AMD4 NT dry roughing pump, with a 10,000 hour maintenance interval.



Drytel 1025

## Chemical configurations: Drytel 1025 C

With the same "Open Concept", several versions are dedicated to the corrosives applications, with protection devices.

According to your requirements, it may include :

- an Adixen MDP 5011 CP molecular drag pumps (7.5 l/s) or a compact AMH 020 C hybrid turbo molecular pump (30 l/s).
- a 4 m<sup>3</sup>/h AMD4C NT dry roughing pump, with a 10,000 hour maintenance interval.
- a purge device protect the ball bearing of the turbo molecular pump.
- an additional purge on the high pressure stage of the AMD4C NT is an option for the pumping of corrosive gases and to avoid gas condensation.



Drytel 1025 C

## Standard configurations: Drytel 1025

The Drytel 1025 is a small, robust pumping system which provides a solution for backing turbomolecular pumps or pumping a system down to  $10^{-8}$  mbar (Torr). This flexible system is available in several versions which can perfectly suit your needs.



Primary pump: AMD 1/AMD4 NT and Turbo: MDP 5011/AMH 020



Primary pump: AMD4C NT and MDP 5011 CP/AHM 020 C

## Standard versions



Drytel 1025 with MDP 5011 and AMD1



Drytel 1025 with MDP 5011 and AMD4 NT



Drytel 1025 with AMH 020 and AMD1



Drytel 1025 with AMH 020 and AMD4 NT

## Chemical versions



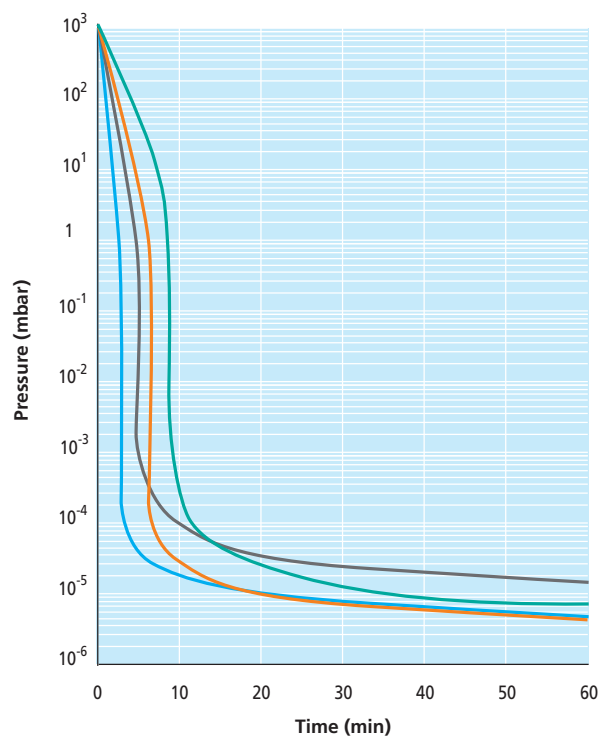
Drytel 1025C with MDP 5011 CP and AMD4C



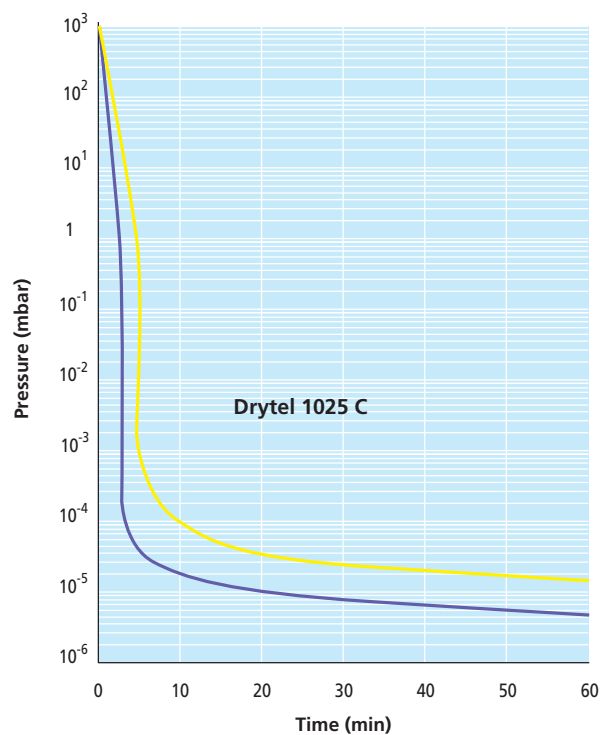
Drytel 1025C with AMH 020C and AMD4C

## Technical data

### Pump down curves on a 30 l volume of N<sub>2</sub>

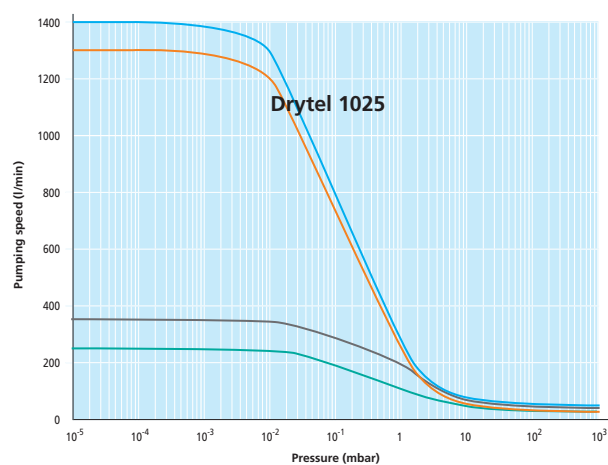


Drytel 1025

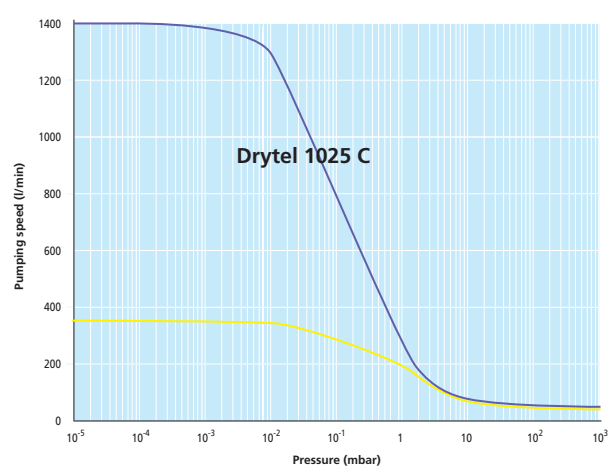


Drytel 1025 C

### Pumping speed / Inlet pressure (N<sub>2</sub>)



Drytel 1025



Drytel 1025 C

— AMH 020 and AMD1 on 30 L  
— MDP 5011 and AMD1 on 30 L

— AMH 020 and AMD4 NT on 30 L  
— MDP 5011 and AMD4 NT on 30 L

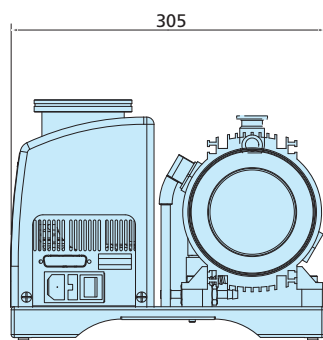
— AMH 020 C and AMD4C NT  
— MDP 5011 CP and AMD4C NT

## Drytel 1025 - Drytel 1025 C : technical data

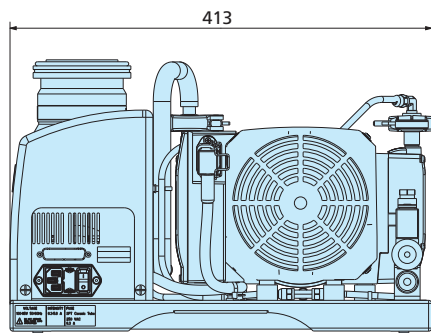
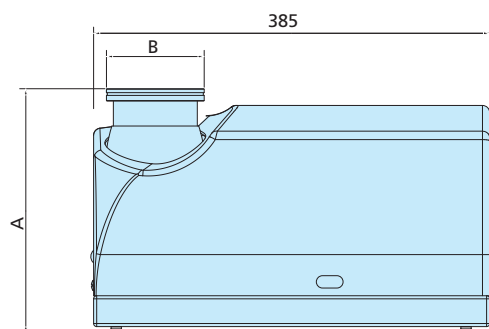
Drytel			Unités		1025 standard		1025 C	
High vacuum pump					MDP 5011		AMH 020	
Primary pum					AMD1		AMD4 NT	
H.P. pump. speed (60 Hz)			m³/hr		1.4		4	
L.P. pump. speed			N2 l/s		7.5		30	
			He l/s		4		20	
			H2 l/s		3		14	
Ult. pressure			mbar		10 <sup>-6</sup>		<10 <sup>-8</sup> (*)	
Start-up time			min		2		2	
Cooling system					Air		Air	
Maximum ambient temperature			°C		0 to 40		0 to 40	
Maximum power consumption			VA		< 160		< 310	
Weight			kg (lb)		16 (34)		26 (56)	
Standard flange					63 ISO-K		63 ISO-K or 63 CF-F	
Size			L mm		385		385	
			W mm		305		410	
			H mm		265		240	

\* : with CF-F 63 housing after 48 hours of baking according to Pneurop standard.

\*\* : with purge.



AMD1 version



AMD4 NT or AMD4C NT versions

Inlet flange	A	B
MDP 5011 : DN 63 ISO K-F	265	95
MDP 5011 CP : DN 63 ISO-KF	265	95
AMH 020 : DN 63 ISO-KF	240	95
AMH 020 C : DN 63 ISO-KF	240	95
AMH 020 : DN 63 CF-F	240	113

## Drytel 1025 and 1025 C : options and accessories

It is possible to order the Drytel 1025 with several types of options. They must be incorporated at time of original order.

### Options Drytel 1025



- Automatic gas ballast: improves the pumping of light gases and reduces condensation inside the Drytel.

- Exhaust connection: allows the collection of pumped gases to prevent release into the atmosphere.



- Interface board: allows the remote operation of the Drytel (start/stop and monitoring of the pumping system status), also available on Drytel 1025 C.

### Options Drytel 1025 C

Several options are possible:

- Purge connection: it can be equipped with a quick and anti such back connector or a DN16 electrical valve (24 V DC supplied by customer) normally closed.

- An additional purge (100 sccm) on the high pressure stage of the AMD4C NT for pumping of corrosive gases and avoid condensation.



Quick connector



DN16 Electrical valve



Purge on high pressure stage

### Accessories for Drytel 1025 and 1025 C

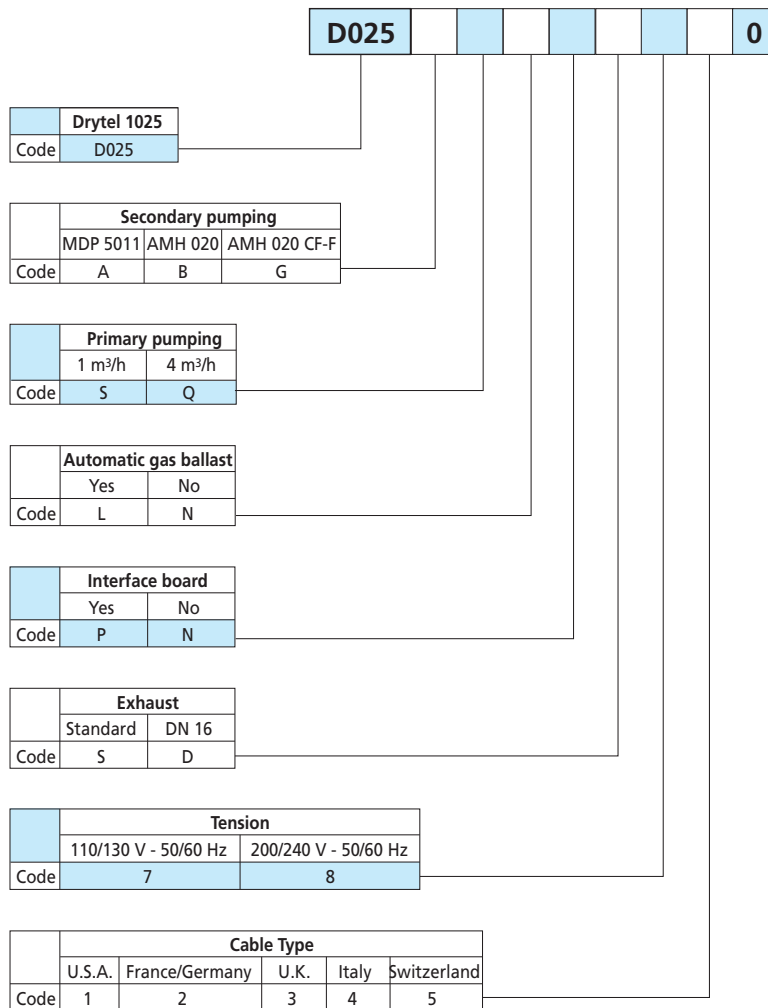
The following accessories are available for the Drytel 1025 and 1025 C. In particular, an inlet screen should be used to prevent foreign material from entering the pump.

Description	P/N
Inlet screen (DN 63 ISO-K) - 2.5 mm mesh size	102565
Dense mesh filter (DN 63 ISO-K) - 20 µm mesh size	102668
Aluminium centering ring (DN 63) special for MDP 5011 (without o-Ring)	063212



Standard and dense mesh inlet screen

## Drytel 1025 : ordering information



**For example**  
You need ...

Drytel	D025	
Secondary pumping	<b>A</b>	
Primary pumping	<b>S</b>	
Gas ballast	<b>L</b>	
Interface board	<b>P</b>	
Exhaust DN 16	<b>D</b>	
110/130 V - 50/60 Hz	<b>7</b>	
U.S.A.	<b>1</b>	

=

D025	A	S	L	P	D	7	1	0
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## Drytel 1025 C : ordering information

DC25		R						0
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	<b>Drytel 1025 C</b>		
	1025C		
Code	DC25		

	<b>High vacuum pump</b>		
	MDP 5011 CP	AMH 020 C	AMH 020 C-CF-F
Code	D	E	H

	<b>Primary pump</b>	
	AMD4C	
Code	R	

	<b>Purge connection</b>	
	DN16	Quick connect
Code	M	A

	<b>Primary pumps purge</b>	
	No	Yes
Code	S	P

	<b>Remote control board</b>	
	Yes	No
Code	P	N

	<b>Voltage</b>	
	110/130 V - 50/60 Hz	200/240 V - 50/60 Hz
Code	7	8

	<b>Power connector</b>				
	USA/Japan	France/Germany	U.K.	Italy	Switzerland
Code	1	2	3	4	5

**For example**  
You need ...

Drytel	DC25	=	DC25	D	R	A	P	P	7	1	0
High vacuum pump	D										
Primary pump	R										
Purge connection	A										
Primary pumps purge	P										
Remote control board	P										
Voltage	7										
U.K.	1										

## Customization

If you do not see the configuration that you need, we can customize the pumping system. We offer product customization and integration of accessories, such as:

- Valves
- Gauges

Please consult us.



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