

ASM 192 T2D+ Technical characteristics

	Measurement range (Helium)		Crossover pressure (at inlet)	
	mbar.l/s	Pa.m ³ /s	mbar	Pa
Gross leak test mode	1x10 ⁻⁵ to 1x10 ⁰	1x10 ⁻⁶ to 1x10 ⁻¹	30	3000
Normal test mode	1x10 ⁻⁹ to 1x10 ⁻¹	1x10 ⁻¹⁰ to 1x10 ⁻²	3	300
High sensitivity test mode	1x10 ⁻¹¹ to 3x10 ⁻⁴	1x10 ⁻¹² to 3x10 ⁻⁵	2x10 ⁻²	2
Sniffing test mode	1x10 ⁻⁷ to 1x10 ⁻¹	1x10 ⁻⁸ to 1x10 ⁻²	sniffer probe at atm. pressure	
Response time (Inlet port blanked off)				< 0.1 s

Helium pumping speed:

At inlet port	20 l/s
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Roughing (primary) pump characteristics:

Hybrid (primary) pump pumping speed (in air) (1 ACP 28 version)	27 m ³ /h (16 cfm) + 10 l/s
Hybrid (primary) pump pumping speed (in air) (2 ACP 28 version)	54 m ³ /h (32 cfm) + 10 l/s

Analyzer cell (Spectro):

Analyzer cell design	self protected 180° magnetic deviation mass spectrometer
Analyzer cell filament	2 tungsten filaments
Analyzer cell sensitivity	3x10 ⁻⁴ A/mbar
Emission current range	0.2 to 2 mA
Air pumping speed	110 l/s
He pumping speed	30 l/s

Displays and setpoints adjustments:

Inlet port pressure display range	10 ³ to 10 ⁻³ mbar / 10 ⁵ to 10 ⁻¹ Pa
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Audio alarm:

	100 dB modulated and adjustable audio signal
Hard vacuum Audio signal set point	1.0E-19 to 9.9E+19
Sniffing Audio set point	1.0E-19 to 9.9E+19

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Start-up time (at 20 °C)

Without auto-calibration	3'30 +/- 10 %
With auto-calibration	5'00 +/- 10 %

Time to reach test mode (hard vacuum test):

Volume	46 liters		200 liters		1 m ³	
Configuration	Standard	2 ACP 28 option	Standard	2 ACP 28 option	Standard	2 ACP 28 option
Gross leak	43 s	23 s	2 mn 59 s	1 mn 32 s	9 mn 27 s	6 mn 21 s
Normal	1 mn 2 s	33 s	4 mn 25 s	2 mn 18 s	16 mn	9 mn 41 s
High sensitivity	1 mn 31 s	54 s	6 mn 30 s	3 mn 48 s	25 mn 35 s	16 mn 44 s
Residuel at 1x10 ⁻⁸	1 mn 51 s	1 mn 16 s	8 mn 20 s	5 mn 42 s	31 mn 7 s	22 mn 7 s
Residuel at 2x10 ⁻⁹	2 mn	1 mn 24 s	8 mn 56 s	6 mn 24 s	31 mn 1 s	24 mn 4 s

Miscellaneous:

Power voltage	low voltage: 100 - 130 V +/- 10 % high voltage: 200 - 240 V +/- 10 %	
Power frequency	50/60 Hz single phase	
Power consumption*	1 ACP 28 version	2 ACP 28 version
- maximum at roughing (delay 1 sec.)	1.5 KVA	2.3 KVA
- stabilized at roughing (max.)	1 KVA	1.9 KVA
- stabilized in test mode or in standby mode	0.8 KVA	1.3 KVA
Start-up temperature	10 to 40 °C	
Ambient operating temperature	10 to 40 °C	
Storage temperature	- 40 to 70 °C	
Noise level (at 1 meter; audio alarm not operational, stand by mode)	66 dBA	
House protection level	20 IP	
Weight (1 ACP 28 version)	157 kg	
Weight (2 ACP 28 version)	190 kg	
Inlet	DN 50	
Hygrometry max. (at 40°C)	95 %	
Part to be tested weight max.	30 kg	

*Average power consumption for a cycle on a 200 liters volume to obtain 1.10⁻⁸ mbar.l/s.