

ASM 182 TD+ Technical characteristics

	Measurement range (Helium)		Crossover pressure (at inlet)	
	mbar.l/s	Pa.m ³ /s	mbar	Pa
Gross leak test mode	1x10 ⁻⁸ to 1x10 ⁻¹	1x10 ⁻⁷ to 1	6	600
High sensitivity test mode	1x10 ⁻¹¹ to 3x10 ⁻⁴	1x10 ⁻¹² to 3x.10 ⁻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	4.4 l/s
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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:

90 dB modulated and adjustable audio signal

Hard vacuum Audio signal set point	1.0E-19 to 9.9E+19
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Sniffing Audio set point	1.0E-19 to 9.9E+19
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Start-up time (at 20 °C)

Without auto-calibration	< 4'0 +/- 10 %
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With auto-calibration	< 5'30 +/- 10 %
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Time to reach test mode

(Hard vacuum test):	inlet port blanked-off	connected to 1.6 liters volume	connected to 60 liters volume
Gross leak test mode	2 sec	< 6 sec	< 1 min 20 sec
High sensitivity test mode	4 sec	< 20 sec	< 3 min 20 sec

Helium pumping speed:

At inlet port	4.4 l/s
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Roughing (primary) pump characteristics:

Hybrid (primary) pump pumping speed (in air)	25 m ³ /h (15 cfm) + 10 l/s
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Hybrid turbomolecular pump characteristics:

Hybrid turbomolecular pump pumping speed (in air)	110 l/s
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Hybrid turbomolecular pump exhaust pressure safety limit	6 mbar
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Analyzer cell (Spectro):

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

Power voltage	low voltage: 100 - 130 V +/- 10 % high voltage: 200 - 240 V +/- 10 %
Power frequency	50/60 Hz single phase
Power consumption (maximum)	1.5 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)	65 dBA
House protection level	20 IP
Weight	88 kg
Inlet	DN 40
Hygrometry max. (at 40 °C)	95 %
Part to be tested weight max.	30 kg

**Dimensions (mm/*inch*)
ASM 182 TD+**