

## Quadro Technical Information

Technical data	PHOENIX Quadro	PHOENIX Quadro dry	
Smallest detectable helium leak rate			
Vacuum operation	mbar · l · s <sup>-1</sup>	≤ 5 · 10 <sup>-12</sup>	
Sniffer mode	mbar · l · s <sup>-1</sup>	< 1 · 10 <sup>-9(1)</sup>	
Smallest detectable hydrogen leak rate			
Vacuum operation	mbar · l · s <sup>-1</sup>	≤ 1 · 10 <sup>-8</sup>	
Sniffer mode	mbar · l · s <sup>-1</sup>	< 1 · 10 <sup>-7</sup>	
Units of measurement (selectable)			
Pressure		mbar, Pa, atm, Torr	
Leak rate		mbar · l · s <sup>-1</sup> , Pa · m <sup>3</sup> · s <sup>-1</sup> , Torr · l · s <sup>-1</sup> , atm · cc · sec <sup>-1</sup> , sft <sup>3</sup> /yr	
Sniffer mode		ppm, g/a eq, oz/yr eq	
Leak rate display area	mbar · l · s <sup>-1</sup>	1 · 10 <sup>-12</sup> to 1 · 10 <sup>-1</sup>	
Max. inlet pressure	mbar	15	
with partial flow pump set	mbar	1000	
Pumping speed during evacuation process			
50 Hz	m <sup>3</sup> · h <sup>-1</sup>	2.5	3.0
60 Hz	m <sup>3</sup> · h <sup>-1</sup>	3.0	3.0
Helium pumping speed in vacuum mode			
GROSS Modus	l/s	0.4	0.04
FINE Modus	l/s	1.2	1.2
ULTRA Modus	l/s	> 3.	> 3.
Time constant of the leak signal (blank flanged, 63% of the final value)	s	< 1	
Run-up time (after switching on)	s	≤ 110	
Mass spectrometer		180° magnetic sector field	
Ion source		2 yttrium/iridium long-term cathodes	
Detectable masses	amu	2, 3 and 4	
Test port			
Inlet flange	DN	25 ISO-KF	
Dimensions	(W x H x D) mm	495 x 475 x 319	
Weight	kg	45	35
Available languages		English, German, Chinese, Japanese (Katakana), Korean, Russian, French, Italian, Spanish and Polish	