



Leybold Phoenix Quadro, Phoenix Magno, Phoenix Vario

Technical Specifications

	PHOENIX Quadro	PHOENIX Quadro dry
Smallest detectable helium leak rate		
Vacuum operation	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$\leq 5 \cdot 10^{-12}$
Sniffer mode	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$< 1 \cdot 10^{-9.1}$
Smallest detectable hydrogen leak rate		
Vacuum operation	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$\leq 1 \cdot 10^{-8}$
Sniffer mode	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$< 1 \cdot 10^{-7}$
Units of measurement (selectable)		
Pressure		mbar, Pa, atm, Torr
Leak rate		$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{Pa} \cdot \text{m}^3 \cdot \text{s}^{-1}$, $\text{Torr} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{atm} \cdot \text{cc} \cdot \text{sec}^{-1}$, sft^3/yr
Sniffer mode		ppm, g/a eq, oz/yr eq
Leak rate display area	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$1 \cdot 10^{-12}$ to $1 \cdot 10^{-1}$
Max. inlet pressure	mbar	15
with partial flow pump set	mbar	1000
Pumping speed during evacuation process		
50 Hz	$\text{m}^3 \cdot \text{h}^{-1}$	2.5
60 Hz	$\text{m}^3 \cdot \text{h}^{-1}$	3.0
Helium pumping speed in vacuum mode		
GROSS Modus	l/s	0.4
FINE Modus	l/s	1.2
ULTRA Modus	l/s	> 3.1
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

	PHOENIX Magno	PHOENIX Magno dry	PHOENIX Vario
Smallest detectable helium leak rate			
Vacuum operation	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$\leq 5 \cdot 10^{-12}$	$\leq 5 \cdot 10^{-12}$
Sniffer mode	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$< 1 \cdot 10^{-9.1}$	$< 1 \cdot 10^{-9.1}$
Smallest detectable hydrogen leak rate			
Vacuum operation	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$\leq 1 \cdot 10^{-8}$	$\leq 1 \cdot 10^{-8}$
Sniffer mode	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$< 1 \cdot 10^{-7}$	$< 1 \cdot 10^{-7}$
Units of measurement (selectable)			
Pressure		mbar, Pa, atm, Torr	mbar, Pa, atm, Torr
Leak rate		$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{Pa} \cdot \text{m}^3 \cdot \text{s}^{-1}$, $\text{Torr} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{atm} \cdot \text{cc} \cdot \text{sec}^{-1}$, sft^3/yr	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{Pa} \cdot \text{m}^3 \cdot \text{s}^{-1}$, $\text{Torr} \cdot \text{l} \cdot \text{s}^{-1}$, $\text{atm} \cdot \text{cc} \cdot \text{sec}^{-1}$, sft^3/yr
Sniffer mode		ppm, g/a eq, oz/yr eq	ppm, g/a eq, oz/yr eq
Leak rate display area	$\text{mbar} \cdot \text{l} \cdot \text{s}^{-1}$	$1 \cdot 10^{-12}$ to $1 \cdot 10^{-1}$	$1 \cdot 10^{-12}$ to $1 \cdot 10^{-1}$
Max. inlet pressure	mbar	15	15
with partial flow pump set	mbar	1000	1000
Pumping speed during evacuation process			Depending on chosen backing pump
50 Hz	$\text{m}^3 \cdot \text{h}^{-1}$	15	5
60 Hz	$\text{m}^3 \cdot \text{h}^{-1}$	17	6
Helium pumping speed in vacuum mode			
GROSS Modus	l/s	< 8	< 3.5
FINE Modus	l/s	< 7	< 2
ULTRA Modus	l/s	> 3.1	> 3.1
Time constant of the leak signal (blank flanged, 63% of the final value)	s	< 1	< 1
Run-up time (after switching on)	s	≤ 110	≤ 110
Mass spectrometer		180° magnetic sector field	180° magnetic sector field
Ion source		2 yttrium/iridium long-term cathodes	2 yttrium/iridium long-term cathodes
Detectable masses	amu	2, 3 and 4	2, 3 and 4
Test port			2 x DN 25 ISO-KF
Inlet flange	DN	25 ISO-KF	25 ISO-KF
Dimensions	(W x H x D) mm	521 x 653 x 366	486 x 380 x 345
Weight	kg	67	30



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SALES

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Features & Benefits

- highest accuracy & reliability
- fastest helium pumping speed allows most efficient measurements
- consistent & convenient
- innovative touch screen with intuitive menu structure
- handy & portable, compact & low weight
- log in using wi-fi on smart phone or tablet
- easy internal & external data logging
- HDMI interface allows checking leaks from anywhere

Applications

- research & development • UHV • particle accelerators • space simulation
- industrial • metallurgy • electrical • analytical instruments • medical devices • food & packaging • automotive & aviation • semiconductor
- flat panel display

