



INERT GAS PURIFICATION

INERT GAS TECHNOLOGY



Type	MB 10G	MB 20G	MB 200G	MB 300G
General Data	Size: 430 x 400 x 710 mm (LxWxH) Weight: 80 kg	Size: 820 x 590 x 840 mm (LxWxH) Weight: 260 kg	Size: 820 x 590 x 840 mm (LxWxH) Weight: 290 kg	Size: 700 x 950 x 2040 (WxDxH) Weight: 600 kg
Process	Closed loop gas recirculation			
Gas Purif. System	Removal of H ₂ O and O ₂			
Working Gas	Inert gas: Nitrogen, Argon or Helium			
Attainable Purity	H ₂ O < 1 ppm, O ₂ < 1 ppm			
Purifier	Type: 1 purifier column H ₂ O / O ₂ Capacity: Oxygen removal: 20 l (standard conditions), Moisture removal: 950 g Material: Stainless Steel type 1.4301 (US type 304) Heater: Integrated, 300 W		Type: 2 purifier columns H ₂ O / O ₂ Capacity: Oxygen removal: 30 l (standard conditions), Moisture removal: 1300 g Capacity: Oxygen removal: 90 l (standard conditions), Moisture removal: 2000g	
Regeneration	The purifier unit is regenerable Procedure: Autom. regen. program (PLC controlled) Regeneration gas: N ₂ /H ₂ mix. (H ₂ 3-5 %) or Ar/H ₂ mix. (H ₂ 3-5 %)			
Circulation Unit	Integrated blower MB BL-8 vacuum-tight, oil-free Flow rate: 20 m ³ /h (60 Hz)	Integrated blower MB BL-1 vacuum-tight, oil-free Flow rate: 84 m ³ /h (50 cfm) at ΔP = 60 mbar (60 Hz)	Integrated blower MB BL-1 vacuum-tight, oil-free Flow rate: 84 m ³ /h (50 cfm) at ΔP = 60 mbar (60 Hz)	Integrated blower MB BL-4 vacuum-tight, oil-free Flow rate: 155 m ³ /h (92 cfm) at ΔP = 80 mbar (50 Hz)
Cooling	Type: Ambient air	Type: Water cooling 2-3 l/min (optional)		Type: Water cooling 5 l/m option: recirculating chiller
	(allows convenient temperature of box atmosphere at elevated ambient temperature)			
Vacuum Pump	Type: Rotary vane pump, oil mist filter, oil recirculation, automatic gas ballast control (dry pump on request) Operation: 17 m ³ /h (10.9 cfm), dual stage, ultim. vacuum < 3 · 10 ⁻² mbar			Operation: 25 m ³ /h (15 cfm) dual stage, ultim. vacuum < 3 · 10 ⁻² mbar (dry pump on request)
Valves	Main valves: Electropneum.valves MB EPV-40 DN 40 Control valves: MB LogicSVB magn. valve system, DN 6/10 (Stainless Steel)			Main valves: Electropneum. gate valve DN 63
Piping	Main piping: Stainless Steel pipe 1.431 (US type 304) DN 40 KF-flange system Control pipework: Stainless Steel pipe 1.4301 (US type 304) on request			
Integral Leak Rate	Less than 10 ⁻⁵ mbar l/s			