

OG SERIES

OXYGEN GENERATORS

operating pressure	7 to 7,5 barg
operating temp.range	5 to 35 °C
ambient air temp.	5 to 45 °C
dew points (atmosph.)	-60°C

APPLICATIONS

- Aquaculture
- Feed Gas for Ozone Generators
- Glass blowing
- Leaching
- NOx Reduction for Fuel Burners
- Oxygen Lancing
- Welding, Brazing
- Wellness

DESCRIPTION

The OG series oxygen generators extract the available oxygen in the ambient air from the other gases by applying the Pressure Swing Adsorption (PSA) technology. During the PSA process compressed, cleaned ambient air is led to a molecular sieve bed, which allows the oxygen to pass through as a product gas, but adsorbs other gases.

The sieve releases the adsorbed gases to the atmosphere, when the outlet valve is closed and the bed pressure returns to ambient pressure. Subsequently the bed will be purged with oxygen before fresh compressed air will enter for a new production cycle.

In order to guarantee a constant product flow, oxygen generators use modules of two molecular sieve beds, which alternatively switch between the adsorption and the regeneration phase. Under normal operating conditions and with correct maintenance the molecular sieve beds will have an almost indefinite lifetime.



STANDARD EQUIPMENT

- Feed Air Filters
- Adsorber Vessel Module(s)
- Pneumatic Valves with SS316L Bodies
- Internal Piping & Fittings in SS316
- Exhaust Mufflers
- Oxygen Pressure Regulation
- Local Instrumentation
- Control System with Allen-Bradley PLC
- Pressure Switch for Automated Idle-Mode

OPTIONAL EQUIPMENT

- Dual Bank Unit (max. 3)
- Oxygen Analyzer
- Electronic Product Flow Meter
- Touch screen or Semi-Graphical Operator Interface
- Telemetry, even through GSM or Ethernet
- Sterile Filters
- External O₂ Analyzing System incl. PDP, CO/CO₂
- MedOx External Control System for Duplex Units
- Oxygen Booster with Cylinder Filling System

TECHNICAL DATA						
Type	Connection		Dimensions [mm]			Mass
	In	Out	L	B	H(H)*	kg
OG 03	1"	1"	780	560	1672 (1510)	306
OG 05	1"	1"	1048	560	1672 (1510)	458
OG 08	1"	1"	1316	560	1672 (1510)	609
OG 10	1"	1"	1584	560	1672 (1510)	759
OG 13	1"	1"	1852	560	1672 (1510)	910
OG 15	1"	1"	2120	560	1672 (1510)	1061

* Dimensions for slave unit

PERFORMANCE					
Type	Inlet pressure	Discharge pressure	OXYGEN PURITY [%]		
	[barg]	[barg]	90	93 ⁽¹⁾	95
OG 03	7,5	6,1 (± 0,5 bar)	2,6	2,5	2,5
	Feed air consumption [Nm ³ /h]		28,2	28,2	28,2
OG 05	7,5	6,1 (± 0,5 bar)	5,3	5,1	5,0
	Feed air consumption [Nm ³ /h]		56,4	56,4	56,4
OG 08	7,5	6,1 (± 0,5 bar)	8,0	7,8	7,6
	Feed air consumption [Nm ³ /h]		84	84	84
OG 10	7,5	6,1 (± 0,5 bar)	10,5	10,2	10,0
	Feed air consumption [Nm ³ /h]		111,6	111,6	111,6
OG 13	7,5	6,1 (± 0,5 bar)	13,1	12,7	12,5
	Feed air consumption [Nm ³ /h]		139,2	139,2	139,2
OG 15	7,5	6,1 (± 0,5 bar)	15,5	15,1	14,8
	Feed air consumption [Nm ³ /h]		168	168	168

(1) Purity according to the Oxygen 93 Monograph of European Pharmacopoeia 7.1 and USP 23 and conform ISO 10083 standard. Flow rates at standard atmospheric conditions (20 °C / 70 °F, 1013 mbar / 14,7 psi and 60% RH).