# **EnOxy 608** Oxygen Membrane Module

Parker hollow-fibre membrane modules produce oxygen enriched air from compressed air to offer a cost effective, reliable and safe alternative to traditional oxygen gas supplies.

Parker modules can be built into a custom-made oxygen generator or can be integrated with your process to provide an on-demand, continuous source of oxygen gas.

Oxygen enriched air is used in many health and wellness related applications such as nitrox diving, oxygen bars and oxygen training rooms.



## **Contact Information:**

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### **Official Parker Distributor**

Avilo is a worldwide supplier of parker membranes. Always in stock. Fast delivery

## **Benefits:**

- Less membrane modules needed per enrichment system More enriched air per fibre is produced from Parker hollow-fibre membranes than any other in the world
- Use of low pressure standard industrial compressor No high pressure compressor needed to obtain required enriched-oxygen flow
- Energy savings Operation at a low pressure requires less energy
- Reduced CO<sub>2</sub> emissions No heater required to open polymer membrane structure, thus reducing the energy consumption
- Robust fibre
  Most tolerant fibre to particle
  contamination
- Large membrane diameter Lowest membrane module pressure drop

- Strong engineering plastic Life-expectancy of more than 10 years
- Factory membrane ageing, predelivery No performance decrease over time due to fibre ageing
- Quick start-up time Required enriched-oxygen purity is produced instantly, no time needed to heat-up
- Flexible mounting arrangements Can be mounted horizontal or vertical
- Low noise operation Radiated noise generated by membrane technology is extremely low
- No maintenance required No user serviceable parts
- Small system footprint Less modules needed to produce oxygen enriched air requirements



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#### Performance data

Standard test criteria are at 7 bar g, other specification points are an indication

Oxygen	Minimum enriched oxygen flow rate in l/min <sup>1</sup>						
purity %	28	30	32	34	36	38	40
4 bar g	128	131	134	137	140	143	-
5 bar g	163	167	170	174	178	181	185
6 bar g	199	203	207	212	216	221	225
7 bar g	235	240	246	251	256	261	267
8 bar g	273	279	285	291	297	303	309
9 bar g	311	318	325	332	339	346	353
10 bar g	351	358	366	374	382	390	397
11 bar g	391	400	408	417	426	435	443
12 bar g	432	442	452	461	471	481	490

Enriched oxygen flow exits at atmospheric pressure

Maximum pressure drop over nitrogen enriched flow <0.3 bar. Maximum enriched oxygen flow rate = minimum flow rate + 30%

<sup>1.</sup> I/min refers to conditions at 1013mbar(a) and 20°C

#### **Ambient Conditions**

Ambient temperature	+2°C to +50°C
Ambient pressure	atmospheric
Air quality	clean air without contaminants

#### **Feed-air Conditions**

Maximum operating pressure	13.0 bar g
Min. / Max. operating temperature	+2°C / +50°C
Maximum oil vapour content	<0.01 mg/m <sup>3</sup>
Particles	filtered at 0.01 µm cut off
Relative humidity	<100% (non condensing)

#### **Flow Rate Corrections**

Nitrogen flow rate at feed temperatures other than 20°C	Use bulletin S3.1.085*
Feed-air consumption at feed-air temperatures other than 20°C	Use bulletin S3.1.085*

 $^{\ast}$  version number may vary, make sure to use the most recent version

Oxygen purity %	Feed-air consumption at minimum enriched oxygen flow rate in I/min <sup>1</sup>						
	28	30	32	34	36	38	40
4 bar g	177	206	242	299	392	557	-
5 bar g	225	256	296	357	444	580	998
6 bar g	274	311	361	417	523	662	991
7 bar g	324	368	427	494	597	745	1066
8 bar g	376	426	495	573	692	864	1190
9 bar g	429	487	565	654	793	985	1340
10 bar g	484	550	637	741	897	1130	1569
11 bar g	543	615	715	830	1022	1304	1869
12 bar g	601	682	791	923	1145	1490	2219

#### Material

Housing	Aluminum
Housing	Aiuminum

#### Services on Request

3D model CAD STEP file

#### Weight, Dimensions and Connections

Dimensions H x ø D	736 x 114 mm
Weight	5.3 kg
Connection feed-air	G <sup>3</sup> /4" female to ISO 228
Connection nitrogen enriched air	G <sup>3</sup> /4" female to ISO 228
Connection oxygen enriched air at atmospheric pressure	G1" female to ISO 228
Dimensional drawing	Refer to K3.1.346

#### Note

Parker membrane systems produce both nitrogen and oxygen enriched air. Nitrogen enriched air can cause suffocation and oxygen enriched air causes increased fire hazards. The oxygen enriched air is available at ambient pressure and pressure build-up of enriched oxygen at the outlet must be prevented, otherwise a serious (reversible) decrease in performance will result. The nitrogen enriched air produced should be treated as pressurised air.

#### For more information please visit www.avilo.nl

Parker has a continuous policy of product development and although the company reserves the right to changes specifications, it attempts to keep customers informed of any alterations.

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