EnOxy 6010

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:

Avilo Stikstof en Persluchtsystemen B.V.

Watertoren 41e 3247 CL Dirksland The Netherlands

Tel: +31 (0)187 48 13 66 Email: info@avilo.nl Website: www.avilo.nl

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 CO₂ 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, pre- delivery

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





Performance data

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

Oxygen	Minimum enriched oxygen flow rate in I/min						
purity %	28	30	32	34	36	38	40
4 bar g	250	256	262	268	274	280	-
5 bar g	318	325	333	341	348	356	364
6 bar g	387	396	406	415	425	434	443
7 bar g	458	470	481	492	503	514	525
8 bar g	532	545	558	571	584	596	609
9 bar g	607	622	637	652	666	681	696
10 bar g	685	701	718	735	751	768	784
11 bar g	764	783	801	820	838	857	875
12 bar g	846	866	887	907	928	948	969

Oxygen	Feed-air consumption at minimum enriched oxygen flow rate in I/min '						
purity %	28	30	32	34	36	38	40
4 bar g	345	401	472	585	768	1093	-
5 bar g	438	500	579	698	871	1139	1964
6 bar g	534	608	706	818	1027	1302	1950
7 bar g	633	718	836	969	1172	1465	2101
8 bar g	734	833	970	1124	1360	1700	2346
9 bar g	838	952	1108	1284	1559	1941	2644
10 bar g	945	1076	1249	1455	1765	2227	3097
11 bar g	1062	1204	1402	1632	2012	2571	3691
12 bar g	1176	1336	1552	1814	2254	2939	4385

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% ^{1.} 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 ²
Min. / Max. operating temperature	+2°C / +50°C ²
Maximum oil vapour content	<0.01 mg/m ³
Particles	filtered at 0.01 µm cut off
Relative humidity	<100% (non condensing)

 $^{^{2}}$ combination of high operating pressure and high operating temperature can reduce the life time expectancy of the membrane module.

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*

^{*} version number may vary, make sure to use the most recent version

Material

Services on Request

3D model CAD STEP file

Weight, Dimensions and Connections

Dimensions H x Ø D	736 x 139 mm
Weight	8.1 kg
Connection feed-air	G 1" female to ISO 228
Connection nitrogen enriched air	G 1" female to ISO 228
Connection oxygen enriched air at atmospheric pressure	G 1" female to ISO 228
Dimensional drawing	Refer to K3.1.347

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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