

EnOxy 606

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
Persluchtssystemen 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 purity %	Minimum enriched oxygen flow rate in l/min ¹						
	28	30	32	34	36	38	40
4 bar g	69.2	70.8	72.3	74.0	75.5	77.2	-
5 bar g	88.2	90.2	92.2	94.2	96.2	98.2	100
6 bar g	108	110	113	115	118	120	122
7 bar g	128	131	133	136	139	142	145
8 bar g	148	151	155	158	162	165	168
9 bar g	168	173	177	180	185	188	192
10 bar g	190	195	198	203	208	212	217
11 bar g	212	217	222	227	232	237	242
12 bar g	235	240	245	252	257	262	267

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 l/min refers to conditions at 1013mbar(a) and 20°C

Oxygen purity %	Feed-air consumption at minimum enriched oxygen flow rate in l/min ¹						
	28	30	32	34	36	38	40
4 bar g	95.6	111	130	161	212	301	-
5 bar g	122	139	160	193	241	314	541
6 bar g	149	169	196	227	284	360	538
7 bar g	176	200	232	269	324	405	580
8 bar g	204	232	269	312	376	470	648
9 bar g	233	264	307	356	431	536	730
10 bar g	263	299	347	403	488	615	855
11 bar g	295	334	389	452	556	710	1018
12 bar g	327	371	430	502	623	811	1208

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 ³
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*

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

Material

Housing	Steel
Tube	PVC
Coating (housing)	ESPC to RAL 7035 (Light Grey)
Coating Tube	None

Services on Request

3D model CAD STEP file

Weight, Dimensions and Connections

Dimensions H x W x D	751 x 110 x 84 mm
Weight	6.4 kg
Connection feed-air	G ^{1/2} " female to ISO 228
Connection nitrogen enriched air	G ^{1/2} " female to ISO 228
Connection oxygen enriched air at atmospheric pressure	G ^{1/2} " female to ISO 228
Dimensional drawing	Refer to K3.1.345

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.

