

Preliminary Technical Data Sheet

Model : MN2-15100

1. Product : Hollow fiber membrane type module

2. Use : Nitrogen generation

3. Dimensions and Weight

Length	Diameter	Weight
1080 mm	280 mm	47 kg

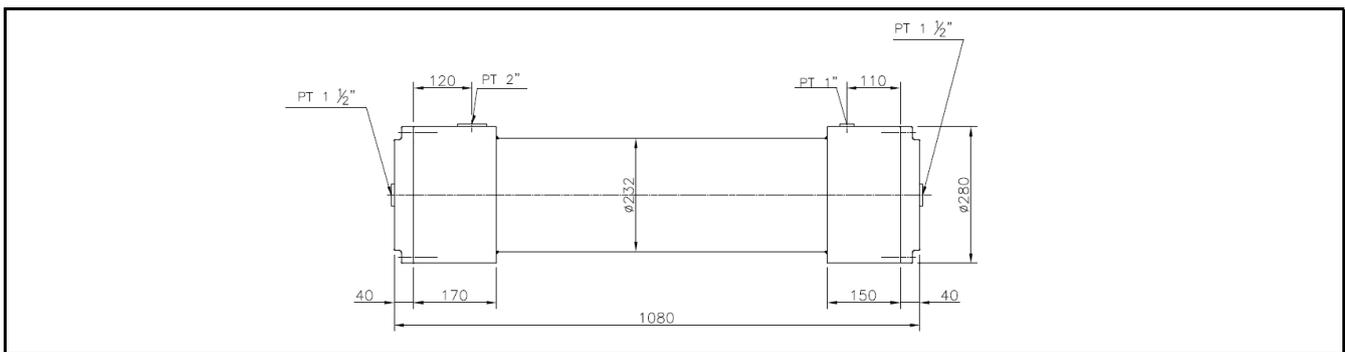
4. Fittings

Air inlet	N2 product outlet	O2 enriched air outlet
Rc1.5" (PT)	Rc1.5" (PT)	Rc2.0" (PT)

5. Components

Cap / Casing	Hollow fiber	Potting materials	Sealing O-Ring
Aluminium	Polysulfone	Epoxy	NBR

6. Module Configuration



7. Operating Conditions

Item	Unit	Condition
Operation Pressure	barg	Max. 20
Temperature(Min/Max)	°C	5 / 55
Relative humidity	%	Less than 60 (at Operating pressure and temperature, Remove moisture with air drier)
Particles		Less than 0.1 (Remove particles with 3 μ m gas filter and 0.01 μ m mist separator)
Residual oil	mg/m ³ (0 °C, 101.3 kPa)	Less than 0.01 (Remove oil with 3 μ m gas filter and 0.01 μ m mist separator)
Hydrocarbons		Less than 0.01 (Remove hydrocarbons with activated carbon if necessary)

8. Performance

Operating Temperature : 25 °C

Pressure	MN2-15100	Nitrogen product flow rate and Air feed required (Nm3/hr)					
	Oxygen density (%)	0.5	1	2	3	4	5
7 barg	Nitrogen	10.9	15.1	22.0	29.0	36.2	43.5
	Air	54.5	59.1	67.8	76.5	83.7	90.9
9 barg	Nitrogen	15.1	21.5	31.2	41.1	51.3	61.5
	Air	67.8	76.5	92.7	101.3	112.3	123.3
11 barg	Nitrogen	19.9	27.8	40.6	53.4	66.3	79.3
	Air	89.2	97.4	115.9	129.1	142.5	158.1
13 barg	Nitrogen	24.6	34.2	49.8	65.5	81.4	97.4
	Air	108.9	118.1	139.0	156.3	174.1	192.0
15 barg	Nitrogen	29.2	40.6	59.1	77.6	96.4	115.2
	Air	127.5	139.6	163.4	184.3	203.9	225.9
17 barg	Nitrogen	33.7	46.9	68.3	89.8	111.5	133.2
	Air	146.0	161.0	187.7	212.6	234.6	260.7
19 barg	Nitrogen	38.2	53.4	77.6	101.9	126.5	151.1
	Air	164.5	182.5	212.6	240.9	266.5	296.0
20 barg	Nitrogen	40.6	56.5	82.2	108.1	134.1	163.9
	Air	174.4	193.5	225.4	255.5	281.5	320.4

Operating Temperature : 35 °C

Pressure	MN2-15100	Nitrogen product flow rate and Air feed required (Nm3/hr)					
	Oxygen density (%)	0.5	1	2	3	4	5
7 barg	Nitrogen	11.6	16.0	23.4	30.7	38.4	46.1
	Air	60.0	65.0	74.5	84.2	92.1	100.1
9 barg	Nitrogen	16.0	22.7	33.1	43.6	54.3	65.0
	Air	74.5	84.2	101.9	111.5	123.6	135.7
11 barg	Nitrogen	21.2	29.4	43.0	56.5	70.3	84.2
	Air	98.2	107.0	127.5	142.0	156.8	173.9
13 barg	Nitrogen	26.0	36.2	52.8	69.4	86.2	103.1
	Air	119.8	129.9	152.9	172.0	191.4	211.2
15 barg	Nitrogen	30.9	43.0	62.6	82.2	102.2	122.2
	Air	140.1	153.6	179.7	202.7	224.3	248.5
17 barg	Nitrogen	35.8	49.8	72.5	95.2	118.3	141.2
	Air	160.6	177.1	206.4	233.9	258.1	286.7
19 barg	Nitrogen	40.6	56.5	82.2	108.1	134.2	160.2
	Air	181.0	200.8	233.9	265.1	293.2	325.6
20 barg	Nitrogen	43.0	59.8	87.2	114.5	142.2	173.8
	Air	191.8	212.9	247.9	281.1	309.7	352.3

Operating Temperature : 45 °C

Pressure	MN2-15100	Nitrogen product flow rate and Air feed required (Nm3/hr)					
	Oxygen density (%)	0.5	1	2	3	4	5
7 barg	Nitrogen	13.1	18.0	26.4	34.8	43.5	52.1
	Air	69.7	75.6	86.8	97.9	107.1	116.5
9 barg	Nitrogen	18.0	25.7	37.5	49.4	61.5	73.7
	Air	86.8	97.9	118.7	129.8	143.8	158.0
11 barg	Nitrogen	23.9	33.4	48.7	63.9	79.6	95.3
	Air	114.1	124.6	148.2	165.3	182.3	202.4
13 barg	Nitrogen	29.4	41.0	59.8	78.5	97.6	116.7
	Air	139.4	151.3	177.9	200.2	222.8	245.7
15 barg	Nitrogen	34.9	48.7	71.0	93.1	115.8	138.3
	Air	163.1	178.6	209.1	235.8	261.0	289.2
17 barg	Nitrogen	40.4	56.2	82.0	107.8	133.8	159.9
	Air	186.9	206.1	240.2	272.1	300.3	333.6
19 barg	Nitrogen	45.9	63.9	93.1	122.4	151.9	181.4
	Air	210.5	233.5	272.1	308.4	341.0	378.8
20 barg	Nitrogen	48.7	67.8	98.7	129.7	160.9	196.8
	Air	223.2	247.6	288.5	327.0	360.4	410.0

Operating Temperature : 55 °C

Pressure	MN2-15100	Nitrogen product flow rate and Air feed required (Nm3/hr)					
	Oxygen density (%)	0.5	1	2	3	4	5
7 barg	Nitrogen	13.9	19.4	28.3	37.3	46.6	56.0
	Air	76.6	83.1	95.3	107.5	117.7	127.9
9 barg	Nitrogen	19.4	27.6	40.3	52.9	66.0	79.1
	Air	95.3	107.5	130.4	142.6	158.1	173.5
11 barg	Nitrogen	25.7	35.8	52.1	68.6	85.4	102.2
	Air	128.6	137.6	163.1	180.4	198.4	221.9
13 barg	Nitrogen	31.6	44.0	64.1	84.2	104.8	125.3
	Air	158.0	169.1	194.3	221.7	243.5	266.3
15 barg	Nitrogen	37.5	52.1	76.0	99.8	124.0	148.4
	Air	179.3	196.4	229.8	259.1	286.8	317.8
17 barg	Nitrogen	43.3	60.4	88.0	115.5	143.4	171.5
	Air	205.3	226.5	264.0	299.1	330.0	366.7
19 barg	Nitrogen	49.2	68.6	99.8	131.2	162.8	194.6
	Air	234.6	263.7	302.6	336.3	370.2	413.9
20 barg	Nitrogen	52.3	72.6	105.9	139.0	172.6	210.9
	Air	248.6	279.5	320.7	356.4	392.2	448.8