



Industrial Gas Generation Sizing guide

ENGINEERING YOUR SUCCESS.

Nitrogen Gas Generator Sizing and Selection Guide

Important information

NITROSource PSA Generator Models

- 1) Sizing is based on ambient, (surrounding) air temperature
- 2) Inlet air quality required: * pressure dewpoint, 0.01 micron particulate and 0.01mg/m³ oil
- 3) When selecting a generator complete with a pre-treatment package, allow 1 bar(g) pressure differential.
e.g. if air pressure available is 7 bar(g), allow 7 bar(g) into pre-treatment package and 6 bar(g) into generator inlet port

Pre-treatment packages

- 1) Sizing is based on inlet air temperature ranges
- 2) To size a pre-treatment package, size the generator, then select pre-treatment package allowing 1 bar(g) pressure differential as described above. Do not forget to include purge flow within the total air inlet requirements.

Flow Data

- All flow rates are based on a reference m³ at 20 °C, 1013 millibar absolute and 0 % relative water vapour pressure
- For sizing based on given flow rates specified in Nm³ (normal metres cubed) at 0 °C, multiply by 1.08 to achieve correct generator selection flow.
e.g. Flow rate from customers flow meter calibrated in Nm³/hr reads 100Nm³/hr. Size the generator based upon
 $100 \times 1.08 = 108 \text{ m}^3/\text{hr}$

* Suggested pre-treatment dryer pressure dew point (pdp) selection where model availability permits

-20 °C Use for PSA technology generators in general industrial applications

-40 °C Use for PSA technology generators in food, beverage and pharmaceutical applications

+3 °C / -70 °C Please Consult Parker.

NITROSource PSA Sizing example

The following example illustrates how to size a PSA generator:

- 1) Understand the flow, purity and air inlet pressure available
- 2) To allow for pressure drop across pre-treatment package, select the generator inlet pressure 1 bar(g) below air pressure available. For example, if air pressure is 8 bar(g), select the generator based upon 7 bar(g) inlet
- 3) If ambient air temperature is above or below 20°C - 25°C, multiply generator output by the temperature correction factor to obtain revised output
- 4) To calculate air consumption of the generator, multiply output of generator at 20°C - 25°C by air to nitrogen ratio. If calculating flows at other temperatures do not use the revised nitrogen output, only use the nitrogen output at 20°C - 25°C
- 5) To select the correct pre-treatment dryer, choose the unit from dryer selection table based on air inlet temperature and pressure
- 6) To calculate total air consumption, add the dryer purge flow to the nitrogen generator air consumption

Example 1

Nitrogen flow rate required	30m ³ /hr
Food grade application	0.1%
Ambient air temperature	20°C
Factory air pressure available	7 bar(g)

Select the generator based on air available minus 1 bar(g) = 6 bar(g)

At 6 bar(g) air inlet a NITROSource N2-55P will produce 30.9m³/h. Air: N₂ ratio is 3.4:1. Therefore 30.9 x 3.4 = 105m³/h air inlet flow requirement to generator.

Selected from dryer table a OFAS HL 70 @ -40°C pdp at 7 bar(g) inlet pressure will flow up to 120m³/h outlet with 26.8m³/h purge flow.

To calculate total air inlet requirement to pre-treatment package add the generator air inlet flow to the dryer purge flow.

$$105\text{m}^3/\text{h} + 30\text{m}^3/\text{h} = 135\text{m}^3/\text{h}$$

Example 2

Nitrogen flow rate required	17m ³ /hr
Soldering application	100ppm
Ambient air temperature	35°C
Factory air pressure available	8 bar(g)

A NITROSource N2-45P will have a reduced flow of 20m³/h x 0.88 (temperature correction factor for 35°C) = 17.6m³/h

To obtain air inlet requirement ignore the temperature correction factor so 20m³/hr x air:N₂ ratio for a NITROSource N2-45P is 4.6:1 = 92.2m³/hr

As ambient temperature is 35°C the air inlet temperature to the pre-treatment package is likely to be slightly higher, so use the dryer performance at up to 45°C

At up to 45°C CDAS HL 65 @ -20°C with a 8 bar(g) air inlet will have an output flow capability of up to 97.2m³/hr with a purge requirement of 26.84m³/hr

To calculate the total air inlet requirement to the pre-treatment package add the generator inlet flow to the dryer purge air requirement. 92.2m³/hr + 22m³/h = 114.2m³/h

Energy Saving Technology – EST

NITROSource PSA energy saving

Flow Demand (%)	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Predicted Average Energy Savings (%)	71.0	65.9	61.3	57.0	53.1	49.6	46.5	43.6	41.0	38.6	36.2	33.9	31.5	29.0	26.2	23.0	19.4	15.1	10.0

*Energy Saving Calculation

Dependant upon exact compressor type and control

To calculate energy savings achievable - calculate NITROSource electrical energy running cost without EST. Then determine average flow demand and multiply energy running cost without EST by % predicted energy saving.

I.E. – NITROSource electrical energy running cost per annum without EST = €8000

Average flow demand = 75%

$$€8000 \times 29\% = €2320 \text{ saving per annum}$$

Even at full flow demand, EST can offer electrical running cost savings because the controller calculates exactly how much air is required to produce the correct output flow taking into account all variable internal and external operating parameters.

NITROSource PSA performance tables

Temperature correction factor

Ambient Temp °C	5	10	15	20	25	30	35	40	45	50
5-10ppm	0.8	0.9	0.94	1.0	0.98	0.95	0.86	0.76	0.66	0.56
50-500ppm	0.8	0.9	0.94	1.0	0.98	0.96	0.88	0.81	0.73	0.65
0.1%-5.0%	0.8	0.9	0.94	1.0	0.98	0.96	0.91	0.85	0.80	0.74

5 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	2.1	2.7	4.4	5.2	6.3	7.2	8.1	11.2	11.9	14.3	16.9	21.5	22.2	24.3
N2-25P	3.1	4.0	6.5	7.8	9.5	10.8	12.1	16.8	17.8	21.4	25.4	32.2	33.4	36.4
N2-35P	4.1	5.3	8.7	10.4	12.6	14.4	16.1	22.4	23.7	28.5	33.9	42.9	44.5	48.5
N2-45P	5.2	6.6	10.9	13.0	15.8	18.0	20.1	28.0	29.6	35.7	42.4	53.6	55.6	60.7
N2-55P	6.2	8.0	13.1	15.6	18.9	21.6	24.2	33.6	35.6	42.8	50.8	64.4	66.7	72.8
N2-60P	6.9	9.0	14.5	17.3	21.0	24.0	26.8	37.2	39.4	47.4	56.4	71.3	73.8	80.7
N2-65P	7.8	10.1	16.5	19.8	24.0	27.4	30.6	42.5	45.1	54.2	64.4	81.5	84.5	92.2
N2-75P	8.5	11.0	18.0	21.5	26.1	29.9	33.4	46.3	49.1	59.1	70.2	88.8	92.1	100.4
N2-80P	9.5	12.2	20.0	23.9	29.0	33.2	37.9	51.5	54.5	65.6	78.0	98.7	102.3	111.6
Air : N2 (20P-55P)	9.1	7.2	5.1	4.6	4.1	3.7	3.4	2.9	2.8	2.6	2.3	2.2	2.2	2.1
Air : N2 (60P-65P)	9.8	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	4.2	4.2	4.2	4.2	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.7	3.7

6 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	2.8	3.6	5.6	6.6	8.0	9.2	10.3	13.9	14.7	17.7	21.0	25.6	26.6	29.0
N2-25P	4.1	5.3	8.3	10.0	12.1	13.9	15.4	20.8	22.1	26.5	31.5	38.4	39.9	43.5
N2-35P	5.5	7.1	11.1	13.3	16.1	18.4	20.6	27.7	29.4	35.4	42.0	51.3	53.1	58.0
N2-45P	6.9	8.9	13.9	16.6	20.1	23.1	25.7	34.6	36.7	44.2	52.5	64.1	66.4	72.5
N2-55P	8.3	10.7	16.7	19.9	24.1	27.7	30.9	41.6	44.1	53.0	63.0	76.9	79.7	86.9
N2-60P	9.2	11.8	18.5	22.1	26.8	30.7	34.2	46.1	48.8	58.8	69.8	85.2	88.4	96.4
N2-65P	10.5	13.5	21.1	25.3	30.6	35.0	39.1	52.7	55.8	67.2	79.8	97.4	101.0	110.1
N2-75P	11.4	14.7	23.0	27.5	33.3	38.1	42.6	57.4	60.8	73.2	87.0	106.1	110.0	120.0
N2-80P	12.7	16.3	25.6	30.5	37.0	42.4	47.3	63.8	67.6	81.3	96.6	117.9	122.2	133.3
Air : N2 (20P-55P)	9.3	7.2	5.0	4.6	4.1	3.7	3.4	2.9	2.8	2.6	2.3	2.2	2.2	2.1
Air : N2 (60P-65P)	9.8	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	5.1	5.1	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.8	4.8	4.7	4.6	4.6

7 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	3.5	4.5	6.7	8.0	9.7	11.1	12.4	16.7	17.7	21.3	25.3	29.8	30.9	33.7
N2-25P	5.3	6.8	10.1	12.0	14.6	16.7	18.6	25.1	26.6	32.0	38.0	44.7	46.4	50.6
N2-35P	7.0	9.0	13.4	16.0	19.4	22.2	24.8	33.4	35.4	42.6	50.6	59.6	61.8	67.4
N2-45P	8.8	11.3	16.8	20.0	24.3	27.8	31.0	41.8	44.3	53.3	63.3	74.5	77.3	84.3
N2-55P	10.5	13.5	20.1	24.0	29.1	33.3	37.2	50.1	53.1	63.9	75.9	89.4	92.7	101.1
N2-60P	11.6	15.0	22.3	26.6	32.3	36.9	41.2	55.5	58.9	70.8	84.1	99.1	102.7	112.1
N2-65P	13.3	17.1	25.5	30.4	36.9	42.2	47.1	63.5	67.3	80.9	96.1	113.2	117.4	128.1
N2-75P	14.5	18.6	27.7	33.1	40.2	46.0	51.3	69.1	73.3	88.2	104.7	123.4	127.9	139.5
N2-80P	16.1	20.7	30.8	36.8	44.6	51.1	57.0	76.8	81.4	98.0	116.4	137.1	142.1	155.0
Air : N2 (20P-55P)	9.3	7.2	5.1	4.6	4.1	3.8	3.4	2.9	2.8	2.6	2.3	2.2	2.2	2.1
Air : N2 (60P-65P)	9.8	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	6.0	6.0	6.0	6.0	6.0	6.0	5.8	5.8	5.7	5.7	5.6	5.5	5.4	5.4

8 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	4.0	5.2	7.5	9.0	10.9	12.4	13.9	18.5	19.6	23.2	27.6	32.5	33.7	36.7
N2-25P	6.0	7.8	11.3	13.4	16.3	18.6	20.8	27.8	29.5	34.8	41.4	48.7	50.5	55.1
N2-35P	8.0	10.3	15.0	17.9	21.7	24.9	27.8	37.1	39.3	46.4	55.1	65.0	67.4	73.5
N2-45P	10.1	12.9	18.8	22.4	27.2	31.1	34.7	46.3	49.1	58.0	68.9	81.2	84.2	91.8
N2-55P	12.1	15.5	22.5	26.9	32.6	37.3	41.7	55.6	58.9	69.6	82.7	97.4	101.0	110.2
N2-60P	13.4	17.2	24.9	29.8	36.1	41.3	46.2	61.6	65.3	77.2	91.7	108.0	112.0	122.1
N2-65P	15.3	19.7	28.5	34.0	41.3	47.2	52.8	70.4	74.7	88.2	104.8	123.4	128.0	139.6
N2-75P	16.7	21.4	31.1	37.1	45.0	51.5	57.5	76.7	81.3	96.1	114.2	134.5	139.4	152.1
N2-80P	18.5	23.8	34.5	41.2	50.0	57.2	63.9	85.3	90.4	106.8	126.8	149.4	154.9	169.0
Air : N2 (20P-55P)	9.3	7.2	5.1	4.6	4.1	3.7	3.4	2.9	2.8	2.6	2.3	2.2	2.2	2.2
Air : N2 (60P-65P)	9.8	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	6.9	6.9	6.9	6.8	6.8	6.7	6.7	6.6	6.6	6.5	6.4	6.3	6.2	6.2

9 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	4.5	5.8	8.3	9.9	12.0	13.8	15.4	20.4	21.6	25.3	30.1	35.5	36.8	40.10
N2-25P	6.8	8.8	12.5	14.9	18.0	20.6	23.1	30.6	32.4	38.0	45.2	53.2	55.2	60.15
N2-35P	9.1	11.7	16.6	19.8	24.1	27.5	30.7	40.7	43.2	50.7	60.2	70.9	73.5	80.21
N2-45P	11.4	14.6	20.8	24.8	30.1	34.4	38.4	50.9	54.0	63.4	75.3	88.7	91.9	100.3
N2-55P	13.6	17.5	24.9	29.8	36.1	41.3	46.1	61.1	64.8	76.0	90.3	106.4	110.3	120.3
N2-60P	15.1	19.4	27.6	33.0	40.0	45.8	51.1	67.7	71.8	84.3	100.1	117.9	122.3	133.4
N2-65P	17.3	22.2	31.6	37.7	45.7	52.3	58.4	77.4	82.1	96.3	114.4	134.8	139.7	152.4
N2-75P	18.8	24.2	34.4	41.1	49.8	57.0	63.7	84.3	89.4	104.9	124.6	146.8	152.2	166.0
N2-80P	20.9	26.9	38.2	45.6	55.3	63.3	70.7	93.7	99.3	116.6	138.5	163.1	169.1	184.5
Air : N2 (20P-55P)	9.3	7.2	5.1	4.6	4.1	3.7	3.4	2.9	2.8	2.6	2.3	2.2	2.2	2.1
Air : N2 (60P-65P)	9.8	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	7.8	7.8	7.8	7.7	7.7	7.6	7.5	7.4	7.4	7.2	7.1	7.0	6.9	6.9

10 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	5.1	6.5	9.2	11.0	13.3	15.2	17.0	22.0	23.4	27.3	32.4	38.1	39.5	43.1
N2-25P	7.6	9.8	13.8	16.4	19.9	22.8	25.5	33.1	35.0	40.9	48.6	57.2	59.3	64.7
N2-35P	10.1	13.0	18.4	21.9	26.6	30.4	34.0	44.1	46.7	54.5	64.8	76.3	79.1	86.3
N2-45P	12.7	16.3	22.9	27.4	33.2	38.0	42.5	55.1	58.4	68.2	81.0	95.4	98.9	107.8
N2-55P	15.2	19.6	27.5	32.9	39.9	45.6	51.0	66.1	70.1	81.8	97.1	114.4	118.7	129.4
N2-60P	16.9	21.7	30.5	36.4	44.2	50.6	56.5	73.3	77.7	90.6	107.7	126.8	131.5	143.4
N2-65P	19.3	24.8	34.9	41.6	50.5	57.8	64.5	83.8	88.8	103.6	123.1	144.9	150.3	163.9
N2-75P	21.0	27.0	38.0	45.4	55.0	63.0	70.3	91.3	96.7	112.9	134.1	157.9	163.7	178.6
N2-80P	23.3	30.0	42.2	50.4	61.1	69.9	78.1	101.4	107.5	125.4	149.0	175.5	181.9	198.4
Air : N2 (20P-55P)	9.3	7.2	5.1	4.6	4.1	3.7	3.4	2.9	2.8	2.6	2.3	2.2	2.19	2.1
Air : N2 (60P-65P)	10.0	7.6	5.3	4.9	4.3	3.9	3.5	3.0	2.9	2.7	2.5	2.3	2.3	2.2
Air : N2 (75P-80P)	10.1	7.8	5.5	5.0	4.4	4.0	3.7	3.1	3.0	2.8	2.5	2.4	2.4	2.3
Outlet (bar(g))	8.7	8.7	8.7	8.6	8.5	8.4	8.3	8.3	8.2	8.0	7.9	7.7	7.66	7.6

11 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	5.4	6.9	9.5	11.4	13.8	15.8	17.6	23.0	24.4	28.3	33.6	39.6	41.1	44.8
N2-25P	8.1	10.4	14.3	17.0	20.7	23.7	26.4	34.6	36.6	42.5	50.5	59.4	61.6	67.2
N2-35P	10.8	13.9	19.0	22.7	27.5	31.5	35.2	46.1	48.8	56.7	67.3	79.3	82.2	89.6
N2-45P	13.5	17.3	23.8	28.4	34.4	39.4	44.0	57.6	61.1	70.8	84.1	99.1	102.7	112.1
N2-55P	16.2	20.8	28.5	34.1	41.3	47.3	52.9	69.1	73.3	85.0	100.9	118.9	123.3	134.5
N2-60P	17.9	23.0	31.6	37.8	45.8	52.4	58.5	76.7	81.2	94.2	111.9	131.8	136.6	149.0
N2-65P	20.5	26.3	36.1	43.2	52.3	59.9	66.9	87.6	92.8	107.6	127.9	150.6	156.2	170.3
N2-75P	22.3	28.7	39.4	47.0	57.0	65.2	72.9	95.4	101.1	117.3	139.3	164.1	170.1	185.6
N2-80P	24.8	31.9	43.8	52.3	63.4	72.5	81.0	106.0	112.4	130.3	154.8	182.3	189.0	206.2
Air : N2 (20P-55P)	10.2	7.9	5.6	5.1	4.5	4.1	3.7	3.2	3.08	2.8	2.6	2.4	2.4	2.33
Air : N2 (60P-65P)	10.7	8.3	5.9	5.3	4.7	4.3	3.9	3.3	3.2	3.0	2.7	2.6	2.5	2.5
Air : N2 (75P-80P)	11.1	8.6	6.1	5.5	4.9	4.4	4.0	3.4	3.3	3.1	2.8	2.6	2.6	2.5
Outlet (bar(g))	9.6	9.6	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.8	8.6	8.4	8.3	8.3

12 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	5.7	7.3	9.9	11.8	14.4	16.4	18.3	23.9	25.3	29.4	34.9	41.1	42.6	46.5
N2-25P	8.6	11.0	14.9	17.8	21.5	24.6	27.5	35.8	38.0	44.1	52.4	61.7	64.0	69.8
N2-35P	11.4	14.7	19.8	23.7	28.7	32.9	36.7	47.7	50.6	58.8	69.8	82.2	85.3	93.0
N2-45P	14.3	18.3	24.8	29.6	35.9	41.1	45.9	59.7	63.3	73.5	87.3	102.8	106.6	116.3
N2-55P	17.1	22.0	29.7	35.5	43.1	49.3	55.1	71.6	75.9	88.2	104.7	123.4	127.9	139.5
N2-60P	19.0	24.4	33.0	39.4	47.7	54.6	61.0	79.4	84.2	97.7	116.1	136.7	141.8	154.6
N2-65P	21.7	27.9	37.7	45.0	54.5	62.4	69.7	90.7	96.2	111.7	132.7	156.3	162.0	176.7
N2-75P	23.6	30.4	41.0	49.0	59.4	68.0	76.0	98.9	104.8	121.7	144.5	170.2	176.5	192.5
N2-80P	26.2	33.7	45.6	54.5	66.0	75.6	84.4	109.8	116.4	135.2	160.6	189.2	196.1	213.9
Air : N2 (20P-55P)	10.2	7.9	5.6	5.1	4.5	4.1	3.7	3.2	3.1	2.8	2.6	2.4	2.4	2.3
Air : N2 (60P-65P)	10.7	8.3	5.9	5.3	4.7	4.3	3.9	3.3	3.2	3.0	2.7	2.6	2.5	2.5
Air : N2 (75P-80P)	11.1	8.6	6.1	5.5	4.9	4.4	4.0	3.4	3.3	3.1	2.8	2.6	2.6	2.5
Outlet (bar(g))	10.5	10.5	10.5	10.4	10.3	10.2	10.0	9.9	9.8	9.5	9.3	9.0	9.0	8.9

13 bar(g) inlet pressure

Model	Nitrogen flow rate m³/hr vs Purity (Oxygen Content)													
	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.10%	0.40%	0.50%	1%	2%	3%	4%	5%
N2-20P	6.0	7.7	10.2	12.2	14.8	17.0	19.0	24.9	26.4	30.2	35.9	42.3	43.9	47.8
N2-25P	9.0	11.6	15.4	18.4	22.3	25.5	28.5	37.3	39.6	45.4	53.9	63.5	65.8	71.8
N2-35P	12.0	15.5	20.5	24.5	29.7	34.0	37.9	49.8	52.7	60.5	71.8	84.6	87.8	95.7
N2-45P	15.0	19.3	25.6	30.6	37.1	42.5	47.4	62.2	65.9	75.6	89.8	105.8	109.7	119.6
N2-55P	18.1	23.2	30.7	36.7	44.5	50.9	56.9	74.6	79.1	90.7	107.8	126.9	131.6	143.6
N2-60P	20.0	25.7	34.1	40.7	49.3	56.5	63.1	82.7	87.7	100.6	119.4	140.7	146.0	159.1
N2-65P	22.9	29.4	38.9	46.5	56.4	64.5	72.1	94.6	100.2	114.9	136.5	160.8	166.7	181.8
N2-75P	24.9	32.0	42.4	50.7	61.4	70.3	78.5	103.0	109.2	125.2	148.7	175.2	181.6	198.1
N2-80P	27.7	35.6	47.1	56.3	68.3	78.1	87.3	114.5	121.3	139.1	165.3	194.6	201.8	220.1
Air : N2 (20P-55P)	10.2	7.9	5.6	5.1	4.5	4.1	3.7	3.2	3.1	2.8	2.6	2.4	2.4	2.3
Air : N2 (60P-65P)	10.7	8.3	5.9	5.3	4.7	4.3	3.9	3.3	3.2	3.0	2.7	2.6	2.5	2.5
Air : N2 (75P-80P)	11.1	8.6	6.1	5.5	4.9	4.4	4.0	3.4	3.3	3.1	2.8	2.6	2.6	2.5
Outlet (bar(g))	11.4	11.4	11.3	11.2	11.2	11.0	10.9	10.7	10.6	10.3	10.0	9.6	9.5	9.5

Buffer vessel sizes

NITROSource Model	Buffer vessel size (litres)	NITROSource Model	Buffer vessel size (litres)
N2-20P	250	N2-60P	750
N2-25P	500	N2-65P	1000
N2-35P	500	N2-75P	1000
N2-45P	750	N2-80P	1000
N2-55P	750		

Mass Flow Controller Variants

Product selection nomenclature

Model	
20	4 Chambers
25	6 Chambers
35	8 Chambers
45	10 Chambers
55	12 Chambers
60	14 Chambers
65	16 Chambers
75	18 Chambers
80	20 Chambers

Flow m³/h	Nitrogen Outlet Pressure Regulator Setting (bar(g)) vs Mass Flow Controller Maximum Flow Rate								
	5 bar(g)	6 bar(g)	7 bar(g)	8 bar(g)	9 bar(g)	10 bar(g)	11 bar(g)	12 bar(g)	13 bar(g)
LF 0-60	61	66	70	74	78	82	86	89	93
MF 60-120	122	132	140	148	156	164	172	178	186
HF 120-300	190	205	219	232	245	257	268	279	290

O2 Purity	
X	Ultra High Purity (≤10ppm)
A	High Purity (ppm)
B	Low Purity (%)

Energy Saving Technology (EST)	
N	No - Does not include this feature
Y	Yes - Includes this feature

Technology	
P	Pressure Swing Adsorption (PSA)

Flow @ 5 bar(g)	
L	Low Flow - (0-60 M³/Hr)
M	Medium Flow - (60-120 M³/Hr)
H	High Flow - (120-300 M³/Hr)

N	2	-	8	0	P	A	L	N
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NITROSource Compact

Temperature correction factor

Ambient Temp	5	10	15	20	25	30	35	40	45	50
10ppm	0.8	0.9	0.94	1.0	0.98	0.95	0.86	0.76	0.66	0.56
100ppm	0.8	0.9	0.94	1.0	0.98	0.96	0.88	0.81	0.73	0.65
%	0.8	0.9	0.94	1.0	0.98	0.96	0.88	0.85	0.80	0.74

Performance m³/h @ 20 to 25 °C Ambient Air Temperature & 6 bar(g) Air Inlet Pressure

Model	10ppm	100ppm	0.10%	0.50%	1.00%	2.00%	3.00%	4.00%	5.00%
Compact 2	0.7	1.4	2.1	3.1	3.7	5.5	7.0	8.2	9.3
Compact 4	1.6	2.6	4.2	6.4	7.8	11.5	14.1	16.4	18.3
Compact 6	2.2	4.0	6.5	9.4	11.3	16.6	20.2	23.2	25.8
Compact 8	3.0	5.3	8.7	12.6	15.3	21.4	26.1	30.2	33.7
Air to Nitrogen Ratio	7.0	5.3	3.9	3.2	3.0	2.5	2.3	2.1	2.0
Outlet Bar(g)	4.8	4.8	4.9	4.9	5.0	5.1	5.0	4.9	4.6

Performance m³/h @ 20 to 25 °C Ambient Air Temperature & 7 bar(g) Air Inlet Pressure

Model	10ppm	100ppm	0.10%	0.50%	1.00%	2.00%	3.00%	4.00%	5.00%
Compact 2	0.8	1.5	2.5	3.7	4.4	6.1	7.7	9.1	10.3
Compact 4	1.7	2.9	5.0	7.6	9.1	13.0	15.9	18.4	20.6
Compact 6	2.4	4.5	7.6	11.1	13.3	18.6	22.7	26.1	29.0
Compact 8	3.4	5.9	10.2	14.9	18.0	24.0	29.3	33.9	37.8
Air to Nitrogen Ratio	7.0	5.3	3.9	3.2	3.0	2.5	2.3	2.1	2.0
Outlet Bar(g)	5.4	5.5	5.6	5.6	6.0	5.9	5.8	5.5	5.3

Performance m³/h @ 20 to 25 °C Ambient Air Temperature & 8 bar(g) Air Inlet Pressure

Model	10ppm	100ppm	0.10%	0.50%	1.00%	2.00%	3.00%	4.00%	5.00%
Compact 2	0.8	1.5	2.7	4.0	5.4	7.0	8.8	10.4	11.7
Compact 4	1.7	2.9	5.4	8.3	10.9	14.5	17.8	20.6	23.0
Compact 6	2.4	4.5	8.3	12.1	15.9	20.9	25.4	29.2	32.5
Compact 8	3.4	5.9	11.2	16.2	21.4	26.9	32.8	38.0	42.3
Air to Nitrogen Ratio	7.4	5.7	3.9	3.2	3.0	2.5	2.3	2.1	2.0
Outlet Bar(g)	6.1	6.2	6.2	6.2	6.9	6.7	6.6	6.2	6.0

Performance m³/h @ 20 to 25 °C Ambient Air Temperature & 9 bar(g) Air Inlet Pressure

Model	10ppm	100ppm	0.10%	0.50%	1.00%	2.00%	3.00%	4.00%	5.00%
Compact 2	0.8	1.5	2.9	4.2	6.2	7.5	9.4	11.1	12.6
Compact 4	1.7	2.9	5.7	8.7	12.2	15.5	19.1	22.1	24.7
Compact 6	2.4	4.5	8.7	12.7	17.8	22.4	27.2	31.3	34.8
Compact 8	3.4	5.9	11.8	17.1	24.1	28.8	35.2	40.7	45.4
Air to Nitrogen Ratio	7.7	5.9	3.9	3.3	3.0	2.6	2.3	2.1	2.0
Outlet Bar(g)	7.1	6.8	6.7	6.7	7.8	7.4	7.3	6.9	6.7

Performance m³/h @ 20 to 25 °C Ambient Air Temperature & 10 bar(g) Air Inlet Pressure

Model	10ppm	100ppm	0.10%	0.50%	1.00%	2.00%	3.00%	4.00%	5.00%
Compact 2	0.8	1.5	3.0	4.4	6.9	7.9	10.0	11.8	13.3
Compact 4	1.7	2.9	5.9	9.0	13.3	16.3	20.0	23.2	25.9
Compact 6	2.4	4.5	9.0	13.2	19.4	23.5	28.6	32.8	36.6
Compact 8	3.4	5.9	12.2	17.7	26.3	30.3	37.0	42.8	47.6
Air to Nitrogen Ratio	8.0	6.1	3.9	3.3	3.0	2.6	2.3	2.2	2.0
Outlet Bar(g)	7.4	7.3	7.1	7.0	8.5	7.9	7.7	7.4	7.1

Buffer vessels

Flow rate m³/h	Buffer vessel size - litres
0 - 3	50
3.1 - 7.5	150
7.6 - 12.3	250
12.3 - 24	500
24.1 - 45	750

NITROSource Compact model numbers

Model	Number of Columns	Constant Flow	PPM / %	Standard Pressure	O2 Analyser
N2C-2 NCALA	2	✓	PPM	✓	✓
N2C-2 NCBLA	2	✓	%	✓	✓
N2C-2 NCBLN	2	✓	%	✓	✗
N2C-4 NCALA	4	✓	PPM	✓	✓
N2C-4 NCBLA	4	✓	%	✓	✓
N2C-4 NCBLN	4	✓	%	✓	✗
N2C-6 NCALA	6	✓	PPM	✓	✓
N2C-6 NCBLA	6	✓	%	✓	✓
N2C-6 NCBLN	6	✓	%	✓	✗
N2C-8 NCALA	8	✓	PPM	✓	✓
N2C-8 NCBLA	8	✓	%	✓	✓
N2C-8 NCBLN	8	✓	%	✓	✗

Pre Treatment

K-MT low flow -40°C pdp desiccant dryers

KA-MT versions include activated carbon filter.

K-MT dryer sizing

Model	Inlet air temperature °C	Purge m³/h	Outlet flow m³/h @ inlet pressure bar(g)										
			5	6	7	8	9	10	11	12	13	14	15
K-MT 1 / KA-MT 1	25	1.6	4.8	5.8	6.6	7.7	8.8	9.5	10.6	11.3	12.4	13.5	14.4
	30	1.6	4.7	5.7	6.6	7.6	8.6	9.4	10.3	11.3	12.4	13.5	14.4
	35	1.6	4.4	5.5	6.4	7.4	8.5	8.9	9.3	10.3	11.4	12.1	12.7
	40	1.6	3.5	4.6	5.7	6.4	7.0	7.7	8.3	9.3	10.2	11.0	11.8
	45	1.6	3.3	4.2	5.0	5.9	6.6	7.0	7.2	8.2	9.2	10.1	11.0
	50	1.6	3.1	3.8	4.7	5.3	6.3	6.6	7.0	7.8	8.7	9.4	10.1
K-MT 2 / KA-MT 2	25	3	9.0	10.8	12.5	14.4	16.5	17.9	19.8	21.2	23.3	25.4	27.0
	30	3	8.9	10.7	12.3	14.3	16.2	17.6	19.4	21.2	23.3	25.4	27.0
	35	3	8.3	10.4	12.0	17.0	15.9	16.7	17.4	19.4	21.3	22.7	23.9
	40	3	6.6	8.7	10.7	12.0	13.2	14.4	15.6	17.4	19.1	20.6	22.1
	45	3	6.2	8.0	9.3	11.1	12.5	13.1	13.5	15.5	17.3	18.9	20.6
	50	3	5.9	7.1	8.9	9.9	11.9	12.5	13.1	14.7	16.4	17.7	18.9
K-MT 3 / KA-MT 3	25	5	15.0	18.0	20.8	24.0	27.5	29.8	33.0	35.3	38.8	42.3	45.0
	30	5	14.8	17.8	20.5	23.8	27.0	29.3	32.3	35.3	38.8	42.3	45.0
	35	5	13.8	17.3	20.0	23.3	26.5	27.8	29.0	32.3	35.5	37.8	39.8
	40	5	11.0	14.5	17.8	20.0	22.0	24.0	26.0	29.0	31.8	34.3	36.8
	45	5	10.3	13.3	15.5	18.5	20.8	21.8	22.5	25.8	28.8	31.5	34.3
	50	5	9.8	11.8	14.8	16.5	19.8	20.8	21.8	24.5	27.3	29.5	31.5
K-MT 4 / KA-MT 4	25	7	21.0	25.2	29.1	33.6	38.5	41.7	46.2	49.4	54.3	59.2	63.0
	30	7	20.7	24.9	28.7	33.3	37.8	41.0	45.2	49.4	54.3	59.2	63.0
	35	7	19.3	24.2	28.0	32.6	37.1	38.9	40.6	45.2	49.7	52.9	55.7
	40	7	15.4	20.3	24.9	28.0	30.8	33.6	36.4	40.6	44.5	48.0	51.5
	45	7	14.4	18.6	21.7	25.9	29.1	30.5	31.5	36.1	40.3	44.1	48.0
	50	7	13.7	16.5	20.7	23.1	27.7	29.1	30.5	34.3	38.2	41.3	44.1

CDAS/OFAS/FBP

Dessicant Dryers

CDAS/OFAS Dryers -20°C

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -20°C pdp								
			6	7	8	9	10	11	12	13	14
CDAS/OFAS/FBP HL 50	Up to 35	11	42,0	49,4	56,9	64,5	71,7	79,1	86,4	95,0	103,0
	40	11	39,9	47,1	54,3	61,6	68,6	75,7	82,7	90,9	98,6
	45	11	35,5	42,0	48,5	55,2	61,6	68,1	74,5	82,0	89,0
	50	11	27,7	33,1	38,5	44,1	49,4	54,8	60,1	66,3	72,2
CDAS/OFAS/FBP HL 55	Up to 35	14	53,5	62,9	72,4	82,1	91,3	100,8	110,0	120,9	131,1
	40	14	50,9	59,9	69,1	78,4	87,3	96,4	105,3	115,7	125,5
	45	14	45,2	53,5	61,8	70,3	78,4	86,7	94,8	104,3	113,3
	50	14	35,2	42,1	49,1	56,2	62,9	69,8	76,5	84,5	91,9
CDAS/OFAS/FBP HL 60	Up to 35	18	68,8	80,9	93,1	105,6	117,5	129,6	141,5	155,5	168,6
	40	18	65,4	77,1	88,8	100,9	112,3	123,9	135,4	148,8	161,4
	45	18	58,1	68,8	79,5	90,4	100,8	111,5	121,9	134,2	145,7
	50	18	45,3	54,2	63,1	72,2	80,9	89,7	98,4	108,6	136,2
CDAS/OFAS/FBP HL 65	Up to 35	22	84,1	98,9	113,8	129,1	143,6	158,4	173,0	190,1	206,1
	40	22	80,0	94,3	108,6	123,3	137,2	151,5	165,5	181,9	197,3
	45	22	71,0	84,1	97,2	110,6	123,3	136,3	149,1	164,1	178,1
	50	22	55,4	66,2	77,2	88,3	98,9	109,7	120,3	132,8	144,5
CDAS/OFAS/FBP HL 70	Up to 35	30	114,6	134,8	155,2	176,0	195,8	216,0	235,8	259,1	280,9
	40	30	109,0	128,5	148,0	168,1	187,1	206,5	225,6	248,0	269,0
	45	30	96,8	114,6	132,4	150,7	168,0	185,8	203,2	223,6	242,8
	50	30	75,5	90,3	105,2	120,4	134,8	149,5	164,0	181,0	197,0
CDAS/OFAS/FBP HL 75	Up to 35	37	141,3	166,3	191,4	217,1	241,5	266,4	290,9	319,7	346,6
	40	37	134,5	158,5	182,6	207,4	230,8	254,8	278,3	305,9	331,8
	45	37	119,4	141,3	163,4	185,9	207,3	229,2	250,6	275,9	299,5
	50	37	93,2	111,4	129,7	148,5	166,3	184,5	202,3	223,3	243,0
CDAS/OFAS/FBP HL 80	Up to 35	44	168,1	197,8	227,7	258,3	287,2	316,9	346,0	380,2	412,2
	40	44	159,9	188,5	217,2	246,6	274,5	303,0	331,0	363,9	394,7
	45	44	142,1	168,1	194,3	221,1	246,6	272,6	298,1	328,1	356,2
	50	44	110,8	132,5	154,3	176,6	197,8	219,4	240,7	265,6	289,0
CDAS/OFAS/FBP HL 85	Up to 35	60	229,2	269,7	310,4	352,1	391,6	432,1	471,8	518,4	562,1
	40	60	218,1	257,0	296,2	336,3	374,3	413,2	451,3	496,2	538,1
	45	60	193,7	229,2	265,0	301,5	336,2	371,7	406,5	447,4	485,7
	50	60	151,1	180,7	210,4	240,8	269,7	299,2	328,2	362,2	394,1

CDAS/OFAS/FBP

Dessicant Dryers

CDAS/OFAS Dryers -40°C

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -40°C pdp								
			6	7	8	9	10	11	12	13	14
CDAS/OFAS/FBP HL 50	Up to 35	11	37,2	44,0	50,8	57,8	64,3	71,1	77,7	85,5	92,8
	40	11	35,4	41,9	48,4	55,1	61,4	67,9	74,3	81,8	88,8
	45	11	31,3	37,2	43,2	49,3	55,1	61,0	66,8	73,6	80,0
	50	11	24,2	29,1	34,1	39,2	44,0	48,9	53,8	59,4	64,7
CDAS/OFAS/FBP HL 55	Up to 35	14	47,4	56,0	64,7	73,5	81,9	90,5	98,9	108,8	118,1
	40	14	45,0	53,3	61,6	70,1	78,2	86,5	94,6	104,1	113,0
	45	14	39,9	47,4	55,0	62,8	70,1	77,6	85,0	93,7	101,9
	50	14	30,8	37,1	43,4	49,9	56,0	62,3	68,4	75,6	82,4
CDAS/OFAS/FBP HL 60	Up to 35	18	60,9	72,0	83,1	94,5	105,3	116,3	127,2	139,9	151,8
	40	18	57,9	68,5	79,2	90,2	100,5	111,2	121,6	133,8	145,3
	45	18	51,3	60,9	70,7	80,7	90,1	99,8	109,3	120,5	131,0
	50	18	39,6	47,7	55,8	64,1	72,0	80,0	88,0	97,3	123,9
CDAS/OFAS/FBP HL 65	Up to 35	22	74,5	88,0	101,6	115,5	128,7	142,2	155,4	171,0	185,5
	40	22	70,8	83,8	96,8	110,2	122,9	135,9	148,6	163,6	177,6
	45	22	62,6	74,5	86,4	98,6	110,2	122,0	133,6	147,3	160,1
	50	22	48,4	58,3	68,2	78,4	88,0	97,8	107,5	118,9	129,5
CDAS/OFAS/FBP HL 70	Up to 35	30	101,6	120,0	138,5	157,5	175,5	193,9	211,9	233,2	253,0
	40	30	96,5	114,2	132,1	150,3	167,6	185,3	202,6	223,0	242,1
	45	30	85,4	101,6	117,8	134,5	150,2	166,4	182,2	200,8	218,3
	50	30	66,0	79,5	93,0	106,9	120,0	133,4	146,6	162,1	176,6
CDAS/OFAS/FBP HL 75	Up to 35	37	125,3	148,0	170,9	194,3	216,4	239,1	261,4	287,6	312,1
	40	37	119,0	140,9	162,9	185,4	206,7	228,5	249,9	275,1	298,6
	45	37	105,4	125,3	145,3	165,9	185,3	205,2	224,7	247,7	269,2
	50	37	81,5	98,0	114,7	131,8	148,0	164,5	180,8	199,9	217,8
CDAS/OFAS/FBP HL 80	Up to 35	44	149,0	176,0	203,2	231,0	257,4	284,4	310,8	342,0	371,1
	40	44	141,6	167,5	193,7	220,4	245,8	271,7	297,2	327,1	355,1
	45	44	125,3	149,0	172,8	197,2	220,4	244,0	267,3	294,6	320,1
	50	44	96,9	116,6	136,4	156,7	176,0	195,7	215,0	237,7	259,0
CDAS/OFAS/FBP HL 85	Up to 35	60	203,2	240,0	277,1	315,0	351,0	387,8	423,9	466,3	506,0
	40	60	193,0	228,5	264,1	300,6	335,2	370,5	405,3	446,1	484,3
	45	60	170,8	203,2	235,7	268,9	300,5	332,8	364,4	401,7	436,5
	50	60	132,1	159,0	186,0	213,7	240,0	266,8	293,2	324,2	353,2

CDAS/OFAS/FBP

Dessicant Dryers

CDAS/OFAS/FBP desiccant dryer -70°C versions.

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -70°C pdp								
			6	7	8	9	10	11	12	13	14
CDAS/OFAS/FBP HL 50	Up to 35	11	22.7	27.5	32.2	37.1	41.7	46.4	51.0	56.5	61.6
	40	11	21.4	26.0	30.6	35.2	39.7	44.2	48.6	53.9	58.8
	45	11	18.6	22.7	26.9	31.2	35.2	39.4	43.4	48.2	52.7
	50	11	13.6	17.1	20.5	24.1	27.5	30.9	34.3	38.3	42.0
CDAS/OFAS/FBP HL 55	Up to 35	14	28.9	35.0	41.0	47.2	53.1	59.1	65.0	71.9	78.4
	40	14	27.3	33.1	38.9	44.8	50.5	56.3	61.9	68.6	74.8
	45	14	23.7	28.9	34.2	39.7	44.8	50.1	55.3	61.3	67.0
	50	14	17.3	21.7	26.1	30.7	34.9	39.3	43.6	48.7	53.4
CDAS/OFAS/FBP HL 60	Up to 35	18	37.2	44.9	52.7	60.7	68.2	75.9	83.5	92.4	100.7
	40	18	35.1	42.5	50.0	57.6	64.9	72.3	79.6	88.2	96.2
	45	18	30.4	37.2	44.0	51.0	57.6	64.4	71.0	78.9	86.2
	50	18	22.3	27.9	33.6	39.4	44.9	50.6	56.1	62.6	68.7
CDAS/OFAS/FBP HL 65	Up to 35	22	45.5	54.9	64.4	74.2	83.4	92.8	102.1	113.0	123.1
	40	22	42.9	52.0	61.1	70.5	79.3	88.4	97.3	107.8	117.6
	45	22	37.2	45.5	53.8	62.3	70.4	78.7	86.8	96.4	105.3
	50	22	27.3	34.1	41.1	48.2	54.9	61.8	68.6	76.5	83.9
CDAS/OFAS/FBP HL 70	Up to 35	30	62.0	74.9	87.9	101.1	113.7	126.6	139.2	154.0	167.9
	40	30	58.5	70.9	83.3	96.1	108.2	120.5	132.7	146.9	160.3
	45	30	50.7	62.0	73.4	85.0	96.0	107.3	118.4	131.4	143.6
	50	30	37.2	46.6	56.0	65.7	74.9	84.3	93.5	104.3	114.5
CDAS/OFAS/FBP HL 75	Up to 35	37	76.5	92.4	108.4	124.7	140.2	156.1	171.7	190.0	207.1
	40	37	72.1	87.4	102.8	118.5	133.4	148.7	163.6	181.2	197.7
	45	37	62.5	76.5	90.5	104.9	118.5	132.4	146.0	162.1	177.1
	50	37	45.8	57.4	69.1	81.0	92.4	103.9	115.3	128.7	141.2
CDAS/OFAS/FBP HL 80	Up to 35	44	91.0	109.8	128.9	148.3	166.7	185.6	204.1	225.9	246.3
	40	44	85.8	103.9	122.2	140.9	158.6	176.8	194.6	215.5	235.1
	45	44	74.4	91.0	107.6	124.7	140.9	157.4	173.7	192.8	210.6
	50	44	54.5	68.3	82.2	96.4	109.8	123.6	137.1	153.0	167.9
CDAS/OFAS/FBP HL 85	Up to 35	60	124.0	149.8	175.7	202.2	227.4	253.1	278.4	308.1	335.8
	40	60	116.9	141.7	166.7	192.2	216.3	241.1	265.4	293.9	320.6
	45	60	101.4	124.0	146.8	170.0	192.1	214.7	236.8	262.9	287.2
	50	60	74.3	93.1	112.1	131.4	149.8	168.6	187.0	208.7	228.9

MXS

Pre-treatment

MXS Dryers -20°C

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -20°C pdp							
			6	7	8	9	10	11	12	13
MXS102C	25 to 35	82	311	366	422	478	532	587	641	705
	40	82	296	349	402	457	509	561	613	674
	45	82	263	311	360	410	457	505	552	608
	50	82	205	245	286	327	366	406	446	492
MXS103C	25 to 35	122	468	551	634	719	799	882	963	1058
	40	122	445	524	604	686	763	843	921	1012
	45	122	395	468	540	615	686	758	829	913
	50	122	308	368	429	491	550	610	669	739
MXS103	25 to 35	153	584	688	792	898	999	1102	1203	1322
	40	153	556	655	755	857	954	1053	1151	1265
	45	153	494	584	676	769	857	948	1036	1141
	50	153	385	461	536	614	688	763	837	924
MXS105	25 to 35	204	691	816	942	1071	1193	1318	1441	1585
	40	204	656	777	898	1022	1140	1260	1378	1517
	45	204	581	691	801	914	1022	1131	1239	1366
	50	204	449	541	633	727	816	907	997	1102
MXS104	25 to 35	255	974	1146	1319	1496	1664	1836	2005	2203
	40	255	927	1092	1259	1429	1590	1756	1918	2109
	45	255	823	974	1126	1281	1429	1579	1727	1901
	50	255	642	768	894	1023	1146	1271	1395	1539
MXS106	25 to 35	306	1169	1375	1583	1796	1997	2203	2406	2644
	40	306	1112	1311	1510	1715	1909	2107	2302	2530
	45	306	988	1169	1351	1538	1714	1895	2073	2281
	50	306	771	921	1073	1228	1375	1526	1673	1847
MXS107	25 to 35	357	1364	1605	1847	2095	2330	2571	2807	3084
	40	357	1297	1529	1762	2001	2227	2458	2685	2952
	45	357	1152	1364	1576	1794	2000	2211	2418	2662
	50	357	899	1075	1252	1433	1604	1780	1952	2155
MXS108	25 to 35	408	1558	1834	2111	2394	2663	2938	3208	3525
	40	408	1483	1748	2014	2286	2545	2809	3069	3374
	45	408	1317	1558	1801	2050	2286	2527	2764	3042
	50	408	1027	1228	1431	1637	1834	2034	2231	2463

MXS

Pre-treatment

MXS Dryers -40°C

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -40°C pdp							
			6	7	8	9	10	11	12	13
MXS102C	25 to 35	82	276	326	376	428	477	527	576	634
	40	82	262	310	359	408	455	504	551	606
	45	82	232	276	320	365	408	452	495	546
	50	82	179	216	253	290	326	362	398	440
MXS103C	25 to 35	122	414	490	565	643	716	791	865	951
	40	122	394	466	539	613	684	756	827	910
	45	122	349	414	481	549	613	679	743	819
	50	122	269	324	380	436	490	544	598	661
MXS103	25 to 35	153	518	612	707	803	895	989	1081	1189
	40	153	492	583	673	766	855	945	1033	1137
	45	153	436	518	601	686	766	849	929	1024
	50	153	337	405	474	545	612	680	748	827
MXS105	25 to 35	204	691	816	942	1071	1193	1318	1441	1585
	40	204	656	777	898	1022	1140	1260	1378	1517
	45	204	581	691	801	914	1022	1131	1239	1366
	50	204	449	541	633	727	816	907	997	1102
MXS104	25 to 35	255	863	1020	1178	1339	1492	1648	1801	1982
	40	255	820	971	1122	1277	1424	1575	1722	1896
	45	255	726	863	1002	1143	1277	1414	1549	1707
	50	255	561	676	791	908	1020	1134	1246	1378
MXS106	25 to 35	306	1036	1224	1413	1607	1790	1978	2162	2378
	40	306	984	1165	1347	1533	1709	1890	2067	2275
	45	306	871	1036	1202	1372	1533	1697	1859	2049
	50	306	674	811	949	1090	1224	1361	1495	1653
MXS107	25 to 35	357	1209	1428	1649	1874	2088	2307	2522	2775
	40	357	1149	1359	1571	1788	1994	2205	2411	2654
	45	357	1016	1209	1402	1600	1788	1980	2168	2390
	50	357	786	946	1107	1272	1428	1588	1744	1929
MXS108	25 to 35	408	1381	1632	1884	2142	2387	2637	2882	3171
	40	408	1313	1554	1796	2044	2279	2520	2756	3033
	45	408	1162	1381	1603	1829	2043	2263	2478	2731
	50	408	898	1081	1265	1453	1632	1814	1994	2204

MXS

Pre-treatment

MXS Dryers -70°C

Model	Inlet air temp °C	Purge m³/h	Outlet flow rate m³/h @ inlet pressure (bar(g)) for -70°C pdp							
			6	7	8	9	10	11	12	13
MXS102C	25 to 35	82	168	203	239	275	309	344	378	419
	40	82	159	192	226	261	294	327	360	399
	45	82	138	168	199	231	261	292	322	357
	50	82	101	126	152	178	203	229	254	283
MXS103C	25 to 35	122.4	253	306	358	413	464	516	568	628
	40	122.4	239	289	340	392	441	492	541	600
	45	122.4	207	253	299	347	392	438	483	536
	50	122.4	152	190	229	268	306	344	381	426
MXS103	25 to 35	153	316	382	448	516	580	645	710	786
	40	153	298	361	425	490	552	615	677	749
	45	153	259	316	374	434	490	547	604	670
	50	153	190	237	286	335	382	430	477	532
MXS105	25 to 35	204	422	509	597	688	773	861	946	1047
	40	204	398	482	567	653	736	820	902	999
	45	204	345	422	499	578	653	730	805	894
	50	204	253	317	381	447	509	573	636	709
MXS104	25 to 35	255	527	637	747	860	966	1076	1183	1309
	40	255	497	602	708	817	919	1025	1128	1249
	45	255	431	527	624	723	816	912	1006	1117
	50	255	316	396	476	559	637	716	795	887
MXS106	25 to 35	306	633	764	896	1031	1160	1291	1420	1571
	40	306	596	723	850	980	1103	1229	1353	1499
	45	306	517	633	749	867	980	1095	1208	1341
	50	306	379	475	571	670	764	860	954	1064
MXS107	25 to 35	357	738	891	1046	1203	1353	1506	1656	1833
	40	357	696	843	992	1143	1287	1434	1579	1749
	45	357	603	738	873	1012	1143	1277	1409	1564
	50	357	442	554	667	782	891	1003	1113	1241
MXS108	25 to 35	408	843	1019	1195	1375	1546	1721	1893	2095
	40	408	795	964	1133	1307	1471	1639	1804	1999
	45	408	690	843	998	1156	1306	1460	1610	1787
	50	408	505	633	762	894	1018	1146	1272	1419

SPE

Refrigeration Dryers

Ambient Temperature Correction Factors							
Ambient temperature °C	20	25	30	35	40	45	50
Multiply dryer output by correction factor	1,07	1	0,98	0,92	0,87	0,82	0,78

Model	Inlet air temp °C	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp, 50Hz Models									
		5	6	7	8	9	10	11	12	13	14
SPE 004	30	26,1	27,5	28,9	31,4	34,0	34,8	35,7	36,6	37,6	38,6
	35	21,6	22,9	24,0	26,1	28,2	28,9	29,6	30,4	31,2	32,0
	40	16,6	17,6	18,5	20,1	21,7	22,2	22,8	23,4	24,0	24,6
	45	13,4	14,2	14,9	16,2	17,5	18,0	18,4	18,9	19,4	19,9
	50	10,8	11,4	12,0	13,0	14,1	14,5	14,8	15,2	15,6	16,0
	55	9,3	9,8	10,3	11,2	12,1	12,4	12,7	13,0	13,4	13,7
	60	9,1	9,6	10,1	11,0	11,9	12,1	12,4	12,8	13,1	13,4
	65	8,6	9,1	9,6	10,4	11,3	11,6	11,9	12,2	12,5	12,8
SPE 007	30	45,6	48,2	50,6	55,0	59,5	61,0	62,5	64,1	65,7	67,5
	35	37,8	40,0	42,0	45,7	49,4	50,6	51,9	53,2	54,5	56,0
	40	29,1	30,8	32,3	35,1	38,0	38,9	39,9	40,9	42,0	43,1
	45	23,5	24,8	26,1	28,4	30,7	31,4	32,2	33,0	33,9	34,8
	50	18,9	20,0	21,0	22,8	24,7	25,3	25,9	26,6	27,3	28,0
	55	16,2	17,2	18,0	19,6	21,2	21,7	22,3	22,8	23,4	24,0
	60	15,9	16,8	17,6	19,2	20,8	21,3	21,8	22,3	22,9	23,5
	65	15,1	16,0	16,8	18,3	19,8	20,2	20,7	21,3	21,8	22,4
SPE 009	30	58,6	62,0	65,1	70,7	76,5	78,4	80,3	82,4	84,5	86,7
	35	48,6	51,4	54,0	58,7	63,5	65,1	66,7	68,4	70,1	72,0
	40	37,4	39,6	41,5	45,2	48,9	50,0	51,3	52,6	53,9	55,4
	45	30,2	31,9	33,5	36,5	39,5	40,4	41,4	42,5	43,6	44,7
	50	24,3	25,7	27,0	29,3	31,8	32,5	33,3	34,2	35,1	36,0
	55	20,9	22,1	23,2	25,2	27,3	27,9	28,6	29,3	30,1	30,9
	60	20,4	21,6	22,7	24,7	26,7	27,3	28,0	28,7	29,5	30,3
	65	19,5	20,6	21,6	23,5	25,4	26,0	26,7	27,3	28,1	28,8
SPE 014	30	91,2	96,4	101,2	110,0	119,1	121,9	124,9	128,1	131,4	134,9
	35	75,7	80,0	84,0	91,3	98,8	101,2	103,7	106,3	109,1	112,0
	40	58,2	61,5	64,6	70,2	76,0	77,8	79,8	81,8	83,9	86,2
	45	47,0	49,7	52,2	56,7	61,4	62,9	64,4	66,0	67,8	69,6
	50	37,8	40,0	42,0	45,7	49,4	50,6	51,9	53,2	54,5	56,0
	55	32,5	34,3	36,1	39,2	42,4	43,4	44,5	45,6	46,8	48,1
	60	31,8	33,6	35,3	38,4	41,5	42,5	43,6	44,7	45,8	47,1
	65	30,3	32,0	33,6	36,5	39,5	40,5	41,5	42,5	43,6	44,8

SPE

Refrigeration Dryers

Model	Inlet air temp °C	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp, 50Hz Models									
		5	6	7	8	9	10	11	12	13	14
SPE 018	30	117,2	123,9	130,1	141,4	153,1	156,8	160,6	164,7	169,0	173,5
	35	97,3	102,9	108,0	117,4	127,1	130,1	133,3	136,7	140,3	144,0
	40	74,8	79,1	83,1	90,3	97,7	100,1	102,6	105,2	107,9	110,8
	45	60,4	63,9	67,1	72,9	78,9	80,8	82,8	84,9	87,1	89,4
	50	48,6	51,4	54,0	58,7	63,5	65,1	66,7	68,4	70,1	72,0
	55	41,8	44,1	46,4	50,4	54,5	55,8	57,2	58,7	60,2	61,8
	60	40,9	43,2	45,4	49,3	53,4	54,7	56,0	57,4	58,9	60,5
	65	38,9	41,1	43,2	47,0	50,8	52,0	53,3	54,7	56,1	57,6
SPE 026	30	169,3	179,0	188,0	204,3	221,1	226,4	232,0	237,9	244,1	250,6
	35	140,5	148,6	156,0	169,6	183,5	188,0	192,6	197,5	202,6	208,0
	40	108,1	114,3	120,0	130,4	141,2	144,6	148,1	151,9	155,8	160,0
	45	87,3	92,3	96,9	105,3	114,0	116,7	119,6	122,7	125,8	129,2
	50	70,3	74,3	78,0	84,8	91,8	94,0	96,3	98,7	101,3	104,0
	55	60,3	63,8	67,0	72,8	78,8	80,7	82,7	84,8	87,0	89,3
	60	59,1	62,4	65,5	71,2	77,1	79,0	80,9	83,0	85,1	87,4
	65	56,2	59,4	62,4	67,8	73,4	75,2	77,0	79,0	81,0	83,2
SPE 032	30	208,4	220,3	231,3	251,4	272,1	278,7	285,6	292,8	300,4	308,4
	35	173,0	182,9	192,0	208,7	225,9	231,3	237,0	243,0	249,4	256,0
	40	133,1	140,7	147,7	160,5	173,8	177,9	182,3	187,0	191,8	196,9
	45	107,4	113,6	119,3	129,6	140,3	143,7	147,2	151,0	154,9	159,0
	50	86,5	91,4	96,0	104,3	112,9	115,7	118,5	121,5	124,7	128,0
	55	74,2	78,5	82,4	89,6	96,9	99,3	101,7	104,3	107,0	109,9
	60	72,7	76,8	80,7	87,7	94,9	97,2	99,6	102,1	104,8	107,6
	65	69,2	73,1	76,8	83,5	90,4	92,5	94,8	97,2	99,7	102,4
SPE 040	30	260,5	275,4	289,2	314,3	340,2	348,4	357,0	366,0	375,5	385,5
	35	216,2	228,6	240,0	260,9	282,4	289,2	296,3	303,8	311,7	320,0
	40	166,3	175,8	184,6	200,7	217,2	222,4	227,9	233,7	239,8	246,2
	45	134,3	142,0	149,1	162,0	175,4	179,6	184,0	188,7	193,6	198,8
	50	108,1	114,3	120,0	130,4	141,2	144,6	148,1	151,9	155,8	160,0
	55	92,8	98,1	103,0	112,0	121,2	124,1	127,2	130,4	133,8	137,3
	60	90,8	96,0	100,8	109,6	118,6	121,5	124,5	127,6	131,0	134,5
	65	86,5	91,4	96,0	104,3	112,9	115,7	118,5	121,5	124,7	128,0

SPE

Refrigeration Dryers

Model	Inlet air temp °C	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp, 50Hz Models									
		5	6	7	8	9	10	11	12	13	14
SPE 052	30	338,7	358,0	375,9	408,6	442,2	452,9	464,1	475,8	488,2	501,2
	35	281,1	297,1	312,0	339,1	367,1	375,9	385,2	394,9	405,2	416,0
	40	216,2	228,6	240,0	260,9	282,4	289,2	296,3	303,8	311,7	320,0
	45	174,6	184,6	193,8	210,6	228,0	233,5	239,2	245,3	251,7	258,4
	50	140,5	148,6	156,0	169,6	183,5	188,0	192,6	197,5	202,6	208,0
	55	120,6	127,5	133,9	145,5	157,5	161,3	165,3	169,5	173,9	178,5
	60	118,1	124,8	131,1	142,5	154,2	157,9	161,8	165,9	170,2	174,8
	65	112,4	118,9	124,8	135,7	146,8	150,4	154,1	158,0	162,1	166,4
SPE 062	30	403,8	426,9	448,2	487,2	527,3	540,0	553,3	567,3	582,1	597,6
	35	335,1	354,3	372,0	404,3	437,6	448,2	459,3	470,9	483,1	496,0
	40	257,8	272,5	286,2	311,0	336,7	344,8	353,3	362,2	371,6	381,5
	45	208,2	220,1	231,1	251,1	271,8	278,4	285,3	292,5	300,1	308,1
	50	167,6	177,1	186,0	202,2	218,8	224,1	229,6	235,4	241,6	248,0
	55	143,8	152,1	159,7	173,5	187,8	192,4	197,1	202,1	207,3	212,9
	60	140,8	148,9	156,3	169,9	183,9	188,3	193,0	197,9	203,0	208,4
	65	134,1	141,7	148,8	161,7	175,1	179,3	183,7	188,4	193,2	198,4
SPE 080	30	521,0	550,8	578,3	628,6	680,4	696,8	714,0	732,0	751,1	771,1
	35	432,4	457,1	480,0	521,7	564,7	578,3	592,6	607,6	623,4	640,0
	40	332,6	351,6	369,2	401,3	434,4	444,9	455,8	467,4	479,5	492,3
	45	268,6	283,9	298,1	324,1	350,7	359,2	368,1	377,4	387,2	397,5
	50	216,2	228,6	240,0	260,9	282,4	289,2	296,3	303,8	311,7	320,0
	55	185,6	196,2	206,0	223,9	242,4	248,2	254,3	260,8	267,5	274,7
	60	181,7	192,1	201,7	219,2	237,3	243,0	249,0	255,3	261,9	268,9
	65	173,0	182,9	192,0	208,7	225,9	231,3	237,0	243,0	249,4	256,0
SPE 100	30	651,3	688,5	722,9	785,8	850,5	871,0	892,5	915,1	938,8	963,9
	35	540,5	571,4	600,0	652,2	705,9	722,9	740,7	759,5	779,2	800,0
	40	415,8	439,6	461,5	501,7	543,0	556,1	569,8	584,2	599,4	615,4
	45	335,7	354,9	372,7	405,1	438,4	449,0	460,1	471,7	484,0	496,9
	50	270,3	285,7	300,0	326,1	352,9	361,4	370,4	379,7	389,6	400,0
	55	232,0	245,2	257,5	279,9	303,0	310,3	317,9	326,0	334,4	343,3
	60	227,1	240,1	252,1	274,0	296,6	303,7	311,2	319,1	327,4	336,1
	65	216,2	228,6	240,0	260,9	282,4	289,2	296,3	303,8	311,7	320,0

PST

Refrigeration Dryers

Ambient Temperature Correction Factors							
Ambient temperature °C	20	25	30	35	40	45	50
Multiply dryer output by correction factor	1,06	1	0,95	0,9	0,83	0,77	0,72

Model	Inlet air temp	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp									
		5	6	7	8	9	10	11	12	13	14
PST 075	30	498	531	554	576	592	598	614	620	631	637
	35	405	432	450	468	482	486	500	504	513	518
	40	340	363	378	393	404	408	420	423	431	435
	45	284	302	315	328	337	340	350	353	359	362
	50	239	255	266	276	284	287	295	297	303	305
	55	203	216	225	234	241	243	250	252	257	259
	60	182	194	203	211	217	219	225	227	231	233
	65	162	173	180	187	193	194	200	202	205	207
PST 095	30	631	673	701	729	750	757	778	785	799	806
	35	513	547	570	593	610	616	633	638	650	656
	40	431	460	479	498	512	517	531	536	546	551
	45	359	383	399	415	427	431	443	447	455	459
	50	303	323	336	350	360	363	373	377	383	387
	55	257	274	285	296	305	308	316	319	325	328
	60	231	246	257	267	274	277	285	287	292	295
	65	205	219	228	237	244	246	253	255	260	262
PST 120	30	797	850	886	921	948	956	983	992	1010	1018
	35	648	691	720	749	770	778	799	806	821	828
	40	544	581	605	629	647	653	671	677	689	696
	45	454	484	504	524	539	544	559	564	575	580
	50	382	408	425	442	455	459	472	476	484	489
	55	324	346	360	374	385	389	400	403	410	414
	60	292	311	324	337	347	350	360	363	369	373
	65	259	276	288	300	308	311	320	323	328	331
PST 140	30	930	992	1033	1075	1106	1116	1147	1157	1178	1188
	35	756	806	840	874	899	907	932	941	958	966
	40	635	677	706	734	755	762	783	790	804	811
	45	529	564	588	612	629	635	653	659	670	676
	50	446	476	496	515	530	535	550	555	565	570
	55	378	403	420	437	449	454	466	470	479	483
	60	340	363	378	393	404	408	420	423	431	435
	65	302	323	336	349	360	363	373	376	383	386
PST 180	30	1196	1275	1328	1382	1421	1435	1475	1488	1514	1528
	35	972	1037	1080	1123	1156	1166	1199	1210	1231	1242
	40	816	871	907	943	971	980	1007	1016	1034	1043
	45	680	726	756	786	809	816	839	847	862	869
	50	573	612	637	663	682	688	707	714	726	733
	55	486	518	540	562	578	583	599	605	616	621
	60	437	467	486	505	520	525	539	544	554	559
	65	389	415	432	449	462	467	480	484	492	497

PST

Refrigeration Dryers

Model	Inlet air temp °C	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp									
		5	6	7	8	9	10	11	12	13	14
PST 220	30	1461	1559	1624	1689	1737	1753	1802	1818	1851	1867
	35	1188	1267	1320	1373	1412	1426	1465	1478	1505	1518
	40	998	1064	1109	1153	1186	1198	1231	1242	1264	1275
	45	832	887	924	961	989	998	1026	1035	1053	1063
	50	701	748	779	810	833	841	864	872	888	896
	55	594	634	660	686	706	713	733	739	752	759
	60	535	570	594	618	636	642	659	665	677	683
	65	475	507	528	549	565	570	586	591	602	607
PST 260	30	1727	1842	1919	1996	2053	2072	2130	2149	2187	2207
	35	1404	1498	1560	1622	1669	1685	1732	1747	1778	1794
	40	1179	1258	1310	1363	1402	1415	1455	1468	1494	1507
	45	983	1048	1092	1136	1168	1179	1212	1223	1245	1256
	50	828	884	920	957	985	994	1022	1031	1049	1058
	55	702	749	780	811	835	842	866	874	889	897
	60	632	674	702	730	751	758	779	786	800	807
	65	562	599	624	649	668	674	693	699	711	718
PST 300	30	1993	2125	2214	2303	2369	2391	2458	2480	2524	2546
	35	1620	1728	1800	1872	1926	1944	1998	2016	2052	2070
	40	1361	1452	1512	1572	1618	1633	1678	1693	1724	1739
	45	1134	1210	1260	1310	1348	1361	1399	1411	1436	1449
	50	956	1020	1062	1104	1136	1147	1179	1189	1211	1221
	55	810	864	900	936	963	972	999	1008	1026	1035
	60	729	778	810	842	867	875	899	907	923	932
	65	648	691	720	749	770	778	799	806	821	828
PST 350	30	2325	2480	2583	2686	2764	2790	2867	2893	2945	2970
	35	1890	2016	2100	2184	2247	2268	2331	2352	2394	2415
	40	1588	1693	1764	1835	1887	1905	1958	1976	2011	2029
	45	1323	1411	1470	1529	1573	1588	1632	1646	1676	1691
	50	1115	1189	1239	1289	1326	1338	1375	1388	1412	1425
	55	945	1008	1050	1092	1124	1134	1166	1176	1197	1208
	60	851	907	945	983	1011	1021	1049	1058	1077	1087
	65	756	806	840	874	899	907	932	941	958	966
PST 460	30	3055	3259	3395	3531	3632	3666	3768	3802	3870	3904
	35	2484	2650	2760	2870	2953	2981	3064	3091	3146	3174
	40	2087	2226	2318	2411	2481	2504	2573	2597	2643	2666
	45	1739	1855	1932	2009	2067	2087	2145	2164	2202	2222
	50	1466	1563	1628	1694	1742	1759	1808	1824	1856	1873
	55	1242	1325	1380	1435	1477	1490	1532	1546	1573	1587
	60	1118	1192	1242	1292	1329	1341	1379	1391	1416	1428
	65	994	1060	1104	1148	1181	1192	1225	1236	1259	1270

PST

Refrigeration Dryers

Model	Inlet air temp °C	Outlet flow rate m³/h @ inlet pressure (bar(g)) for +3°C pdp									
		5	6	7	8	9	10	11	12	13	14
PST 520	30	3454	3684	3838	3991	4106	4145	4260	4298	4375	4413
	35	2808	2995	3120	3245	3338	3370	3463	3494	3557	3588
	40	2359	2516	2621	2726	2804	2830	2909	2935	2988	3014
	45	1966	2097	2184	2271	2337	2359	2424	2446	2490	2512
	50	1657	1767	1841	1914	1970	1988	2043	2062	2099	2117
	55	1404	1498	1560	1622	1669	1685	1732	1747	1778	1794
	60	1264	1348	1404	1460	1502	1516	1558	1572	1601	1615
	65	1123	1198	1248	1298	1335	1348	1385	1398	1423	1435
PST 630	30	4184	4463	4649	4835	4975	5021	5161	5207	5300	5347
	35	3402	3629	3780	3931	4045	4082	4196	4234	4309	4347
	40	2858	3048	3175	3302	3397	3429	3524	3556	3620	3651
	45	2381	2540	2646	2752	2831	2858	2937	2964	3016	3043
	50	2007	2141	2230	2319	2386	2409	2476	2498	2542	2565
	55	1701	1814	1890	1966	2022	2041	2098	2117	2155	2174
	60	1531	1633	1701	1769	1820	1837	1888	1905	1939	1956
	65	1361	1452	1512	1572	1618	1633	1678	1693	1724	1739
PST 750	30	4981,5	5313,6	5535,0	5756,4	5922,5	5977,8	6143,9	6199,2	6309,9	6365,3
	35	4050,0	4320,0	4500,0	4680,0	4815,0	4860,0	4995,0	5040,0	5130,0	5175,0
	40	3402,0	3628,8	3780,0	3931,2	4044,6	4082,4	4195,8	4233,6	4309,2	4347,0
	45	2835,0	3024,0	3150,0	3276,0	3370,5	3402,0	3496,5	3528,0	3591,0	3622,5
	50	2389,5	2548,8	2655,0	2761,2	2840,9	2867,4	2947,1	2973,6	3026,7	3053,3
	55	2025,0	2160,0	2250,0	2340,0	2407,5	2430,0	2497,5	2520,0	2565,0	2587,5
	60	1822,5	1944,0	2025,0	2106,0	2166,8	2187,0	2247,8	2268,0	2308,5	2328,8
	65	1620,0	1728,0	1800,0	1872,0	1926,0	1944,0	1998,0	2016,0	2052,0	2070,0
PST 900	30	5978	6376	6642	6908	7107	7173	7373	7439	7572	7638
	35	4860	5184	5400	5616	5778	5832	5994	6048	6156	6210
	40	4082	4355	4536	4717	4854	4899	5035	5080	5171	5216
	45	3402	3629	3780	3931	4045	4082	4196	4234	4309	4347
	50	2867	3059	3186	3313	3409	3441	3536	3568	3632	3664
	55	2430	2592	2700	2808	2889	2916	2997	3024	3078	3105
	60	2187	2333	2430	2527	2600	2624	2697	2722	2770	2795
	65	1944	2074	2160	2246	2311	2333	2398	2419	2462	2484

Oil-X filters

Coalescing & Dry Particulate Filters

Product Selection

Grades	Element Type	Model Size / Port Connection		Thread Connection	Drain Type	Differential Pressure Indicator*
AA	P	030	G	G	F	I
WS	P	010 A (¼")		G (BSPP)	F (Float)	X (None)
AO		010 B (¾")		N (NPT)	M (Manual)	I (DPI)
AA		010 C (½")		N (NPT)		
ACS		015 C (½")				
		020 D (¾")				
		025 D (¾")				
		025 E (1")				
		030 G (1 ½")				
		035 G (1 ½")				
		040 H (2")				
		045 I (2 ½")				
		050 I (2 ½")				
		055 I (2 ½")				
		055 J (3")				
		060 K (4")				

* AO/AA only available with differential pressure indicator (I) WS/ACS only available without differential pressure indicator (X)

Flow Rates

Stated flows are for operation at 7 bar(g) (102 psi g) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure.

Model	Port Connection	Flow Rates				Replacement Elements
		L/s	m³/min	m³/hr	scfm	
GRADE P010A □ (*) □	¼"	10	0.6	36	21	P010 GRADE
GRADE P010B □ (*) □	¾"	10	0.6	36	21	P010 GRADE
GRADE P010C □ (*) □	½"	10	0.6	36	21	P010 GRADE
GRADE P015C □ (*) □	½"	20	1.2	72	42	P015 GRADE
GRADE P020C □ (*) □	½"	30	1.8	108	64	P020 GRADE
GRADE P020D □ (*) □	¾"	30	1.8	108	64	P020 GRADE
GRADE P025D □ (*) □	¾"	60	3.6	216	127	P025 GRADE
GRADE P025E □ (*) □	1"	60	3.6	216	127	P025 GRADE
GRADE P030G □ (*) □	1 ½"	110	6.6	396	233	P030 GRADE
GRADE P035G □ (*) □	1 ½"	160	9.6	576	339	P035 GRADE
GRADE P040H □ (*) □	2"	220	13.2	792	466	P040 GRADE
GRADE P045I □ (*) □	2 ½"	330	19.8	1188	699	P045 GRADE
GRADE P050I □ (*) □	2 ½"	430	25.9	1548	911	P050 GRADE
GRADE P055I □ (*) □	2 ½"	620	37.3	2232	1314	P055 GRADE
GRADE P055J □ (*) □	3"	620	37.3	2232	1314	P055 GRADE
GRADE P060K □ (*) □	4"	1000	60.0	3600	2119	P060 GRADE

(*) = Replace with (F) when ordering AO/AA coalescing filters, (M) when ordering AO/AA dry particulate filters or (M) when ordering ACS oil vapour removal filters

OVR

Oil Vapour Removal Filter

OIL-X EVOLUTION - Plant Scale / Point of Use Oil Vapour Removal Grade OVR Filtration Performance

Filtration Grade	Filter Type	Particle Removal (inc Water & Oil Aerosols)	Max Remaining Oil Content	Filtration Efficiency	Test Method Used	Inlet Challenge Concentration	Initial Dry Differential Pressure	Initial Saturated Differential Pressure	Adsorbent Life	Precede with Grade
OVR	Oil Vapour Removal	N/A	0.003 mg/m ³ 0.003 ppm (w)	N/A	ISO8573-5	0.05mg/m ³	<350 mbar <5 psi	N/A	*12 months	AO + AA

*When corrected to match systems conditions.

Product selection Grade OVR

Stated flows are for operation at 7 bar(g) (100 psi g), 35°C (95°F) for flows at other conditions use Correction Factors below.

Model	Pipe Size	L/s	m ³ /min	m ³ /hr	cfm	Replacement Cartridge	No. Required
OVR300H ☐ XX	2	87	5.2	314	185	300OVR	1
OVR350H ☐ XX	2	177	10.6	637	375	350OVR	1
OVR400H ☐ XX	2	354	21.2	1274	750	400OVR	1
OVR450I ☐ XX	2 1/2	531	31.9	1911	1125	450OVR	1
OVR500I ☐ XX	2 1/2	708	42.5	2549	1500	500OVR	1
OVR550I ☐ XX	2 1/2	885	53.1	3186	1875	550OVR	1
2 x OVR550I ☐ XX	2 1/2	1770	106.2	6371	3750	550OVR	2
3 x OVR550I ☐ XX	2 1/2	2655	159.3	9557	5625	550OVR	3
4 x OVR550I ☐ XX	2 1/2	3540	212.4	12743	7500	550OVR	4
5 x OVR550I ☐ XX	2 1/2	4424	265.5	15928	9375	550OVR	5

☐ G = BSPP / N=NPT

Correction Factors Temperature (CFT)

Oil lubricated compressors		
°C	°F	Correction Factor
25	77	1.00
30	86	1.00
35	95	1.00
40	104	1.25
45	113	1.55
50	122	1.90

Correction Factors Temperature (CFT)

Oil free compressors		
°C	°F	Correction Factor
25	77	1.00
30	86	1.00
35	95	1.00
40	104	1.02
45	113	1.04
50	122	1.05

Correction factors Pressure (CFP)

bar(g)	psi g	Correction Factor
3	44	2.00
4	58	1.60
5	73	1.33
6	87	1.14
7	100	1.00
8	116	1.00
9	131	1.00
10	145	1.00
11	160	1.00
12	174	1.00
13	189	1.00
14	203	1.00
15	218	1.00
16	232	1.00

Correction Factors - Inlet Dewpoint (CFD)

CDD Dewpoint	°C	°F	Correction Factor
Dry	-70 to +3	-100 to +38	1.00
Wet	+3 and above	+38 and above	4.00

It is assumed inlet oil vapour concentration does not exceed 0.05mg/m³ at 35°C (95°F).

For applications with higher oil vapour concentrations, please contact Parker domnick hunter for accurate sizing.

Filter Selection - Grade OVR

To correctly select an OVR oil vapour removal filter, the flow rate of the OVR must be adjusted for the minimum operating pressure, maximum operational temperature and pressure dewpoint of the system.

1. Obtain the minimum operating pressure, maximum inlet temperature, maximum compressed air flow rate and dewpoint of the compressed air at the inlet of the OVR.
2. Select correction factor for maximum inlet temperature from the CFT table to compressor type (always round up e.g. for 37°C use 40°C correction factor).
3. Select correction factor for minimum inlet pressure from the CFP table that corresponds type (always round down e.g. for 5.3 bar use 5 bar correction factor).
4. Select correction factor for pressure dewpoint from the CFD table.

5. Calculate minimum filtration capacity.

$$\text{Minimum filtration Capacity} = \text{Compressed Air Flow} \times \text{CFT} \times \text{CFP} \times \text{CFD}$$

6. Using the minimum filtration capacity, select an OVR model from the flow rate tables above (OVR selected must have a flow rate equal to or greater than the minimum filtration capacity).

If the minimum filtration capacity exceeds the maximum values of the models shown within the tables, please contact Parker domnick hunter for advice regarding larger multi-banked units.

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