

nitroguard technical data sheet

Sure Purity, a company well known for providing CO₂ polishing solutions for beverage manufacturing, have now extended their well proven carbo**guard** range, to include a solution for polishing Nitrogen. The new nitro**guard** range, is a 5 stage-multibarrier filtration system for Nitrogen.

Model	Rated N ₂ Flow 7 barg / 100 psig		Approx. Overall Dimensions (L x W x H)		Port Size	Approx. Weight	
	m ³ /h	l/s	mm	inch		kg	lb
NG-01	10.00	2.78	300 x 220 x 1390	12 x 9 x 55	1	33	73
NG-02	20.00	5.55	500 x 220 x 1390	20 x 9 x 55	1	63	139
NG-03	30.00	8.33	700 x 220 x 1390	28 x 9 x 55	1	93	205
NG-04	40.00	11.11	900 x 220 x 1390	36 x 9 x 55	1	113	249
NG-05	50.00	13.88	1100 x 220 x 1390	44 x 9 x 55	1	156	344
NG-06	60.00	16.66	860 x 540 x 1430	34 x 23 x 57	1 1/2	160	353
NG-08	80.00	22.21	1070 x 540 x 1430	43 x 23 x 57	1 1/2	212	468
NG-10	100.00	27.77	1280 x 540 x 1430	51 x 23 x 57	1 1/2	260	574

If minimum operating pressure is below 7 barg (101 psig) you must first correct your flow using the table below.

For example 30 m³/h @ 7 barg select model NG-03. But 30 m³/h @ 5 barg requires a polisher rated for 40 m³/h (30 divided by 0.75, 40) select model NG-04.

barg	2	3	4	5	6	7	8	9	10	11	12
psig	29	44	58	72	87	100	115	130	145	160	174
Cop	0.38	0.50	0.62	0.75	0.87	1.00	1.13	1.25	1.38	1.50	1.62

Operating Pressure (Nominal)	7 barg	101 psig
Operating Pressure (Maximum) *	12 barg	174 psig
Operating Temperature (Minimum)	(-) 20°C	(-) 4°F
Operating Temperature (Maximum)	40°C	104°F

* For pressures up to 24.1 barg (350 psig) contact Sure Purity for assistance.

surepurity Limited

nitroguard systems are specifically engineered to operate in an environment that is a least 99.9% Nitrogen and are designed to protect against contaminants detailed in the ISBT guidelines for Nitrogen.

The incident protection offered by the nitroguard includes contamination up to a level of ten times the levels specified by ISBT.

Contamination Type	Guideline Limit
Total Volatile Hydrocarbons as Methane	5 ppmv
Nitrogen monoxide (NO)	2.5 ppmv
Nitrogen Dioxide (NO ₂)	2.5 ppmv

Replace nitroguard cartridges every 12 months.

Replace Pre and Post filter elements every 12 months.

Nitroguard annual maintenance kits		
Replace every 12 months		
Model number	Maintenance kit comprises of	Kit part number
NG-01	1x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-01
NG-02	2x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-02
NG-03	3x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-03
NG-04	4x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-04
NG-05	5x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-05
NG-06	6x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-06
NG-08	8x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-08
NG-10	10x Nitroguard cartridge, 1x pre filter, 1x post filter	NK-10