



C-Series¹ CO₂ adsorption dryers

Flow Capacity: 1.5-120 L/min

The SR C-Series1 range of CO_2 adsorption dryers purify regular compressed air to deliver a continuous supply of clean, dry (-70 °C pdp) and CO_2 free (<1 ppm) purge gas. CO_2 adsorption dryers replace high pressure oxygen or nitrogen gas cylinders and are ideal for numerous applications including FT-IR (Fourier transform infrared) purge, TOC purge, NMR, GC flame gas and laser purging.

laboratory environment in mind – the unit can easily be wall mounted to save valuable bench space. The novel exhaust silencing system ensures that the unit is incredibly quiet in operation.

Using proven pressure swing adsorption (PSA) technology, the units feature automatic regeneration and integral pre and post filtration providing totally clean, dry air with a CO₂ level of <1ppm.

All SR porous system products are designed and manufactured within an ISO9001 quality system and are CE marked.

Features

- Outlet CO2 content to less than 1 PPM
- Outlet flow capacities up to 120 L/min
- Air dried to less than -70°C (-100°F) dew point
- Compact and lightweight design requires less space
- PLC control with clear display provides feedback
- Full repressurisation means no pressure fluctuations
- Novel exhaust silencing system ensures quiet operation



Benefits

Guaranteed Performance

- SR CO₂ adsorption dryers provide the highest standard of performance, backed up with a 5 year warranty.
- 100% function and performance tested.

Increased Efficiency

 A constant supply of high air purity eliminates interruption of analyses (to change cylinders) and reduces the amount of instrument re-calibration required.

Lower Running Costs

• Producing CO₂-free air from an existing compressed air supply is significantly cheaper than using cylinder supplies.

Simple Installation

 CO₂ adsorption dryers can be installed in the laboratory, eliminating the need for long gas lines from cylinders.

Quiet Operation

 Novel exhaust air silencer significantly reduces noise levels (<60dB(a)).

Easy to Maintain

- Unique factory built filtration and adsorption cartridge makes servicing simple.
- Less than 15 minutes required for maintenance.



Model	Outlet flow rate (L/min)	Total air inlet flow required (L/min)	Air loss for regeneration (L/min)	Connections	Dimensions mm (inches)				Weight (approx)
					A	В	С	D	Kg (Lbs)
NDC-015	1.5	2.5	1.0		447 (17)	241 (9)	160 (6)	252 (10)	8.3 (18.2)
NDC-140	15	25	10	1/4"	447 (17)	241 (9)	160 (6)	252 (10)	8.3 (18.2)
NDC-300	30	50	20	Swagelok	647 (25)	241 (9)	160 (6)	252 (10)	12.8 (28.2)
NDC-600	60	100	40		1097 (43)	241 (9)	333 (13)	252 (10)	19.3 (42.5)
NDC-900	90	150	60	0.0101	734 (29)	440 (17)	295 (12)	335 (13)	40 (88.2)
NDC-1200	120	200	80	G 3/8"	734 (29)	440 (17)	295 (12)	335 (13)	40 (88.2)

	Service Kit (12,000 hrs or 2 years)
ĺ	NDK-011
	NDK-021
Ì	NDK-031
ı	NDK-051
Ī	NDK-061
ĺ	NDK-061

Notes:

- Above flow rates are based on an air inlet pressure of 7 barg (100psig) and temperature of 21°C (70°F)
- Where the air source is from an oil lubricated compressor, we recommend that a 0.01 micron coalescing filter and also an activated carbon filter be installed, to reduce the (non-methane) hydrocarbons to <0.0003ppm. To achieve a particulate level of <0.01 micron, it would also be necessary to fit a fine dust filter to the outlet of the CO₂ adsorption dryer.

Specification				
CO ₂ / Content Pressure Dewpoint / Particles	<1ppm -70°C / pdp (-100°F pdp) / <1 micron			
Minimum working pressure	4 barg (58 psig)			
Maximum working pressure	12 barg (174 psig)			
Power supply	100 – 240VAC / 50 – 60Hz / 18W			
Minimum inlet temperature	1.5°C (34.7°F)			
Rated inlet condition	21°C (70°F), 375ppm CO ₂			









