

VAP



***AMBIENT AIR VAPORISERS
CUSTOM-MADE FLOWRATE***



CRYOLOR

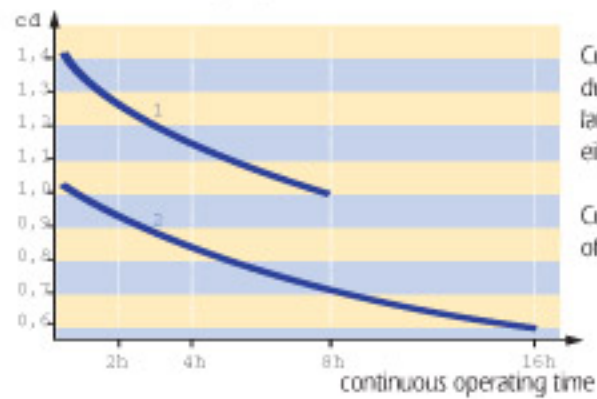
Connected to cold converters, VAP vaporise the liquid and heat the gas produced before being fed into the utilisation circuit. Their flowrate is variable depending on the atmospheric conditions and continuous use (up to 22 hours a day).

The «reference flowrate» D in nitrogen is obtained under the following conditions (curve 1):

- ▶ Ambient temperature + 20° C
- ▶ Relative humidity 70 %
- ▶ Difference between ambient and outlet temperature 15°
- ▶ Continuous operating time 8 hours

This flowrate is to be adjusted according to the actual operating conditions.

CONTINUOUS OPERATING TIME CORRECTION FACTOR (cd)



Curve 1 stands for operation during day time, in a well ventilated area, exposed to the sun either under cloudy or clear sky.

Curve 2 stands for operation out of the wind and in the shade.

FLUID CORRECTION FACTOR (cf) CLIMATE CORRECTION FACTOR (ct)

Fluid	cf	Ambient temperature	CO ₂ (20 bar)	Other fluids
He	1,87	-10		0,70
H ₂	1,29	-5		0,75
Ar	1,11	0	0,28	0,80
N ₂	1	+5	0,46	0,85
O ₂	0,88	+10	0,64	0,90
CH ₄	0,75	+15	0,82	0,95
CO ₂ (20 bar)	0,80	+20	1	1
		+25	1,18	1,05

Actual flowrate is (equal to) = D x cd x cf x ct

Type		VAP 70	VAP 140	VAP 280	VAP 420	VAP 560	VAP 630	VAP 1260
Reference flowrate [D]	Nm ³ /h	70	140	280	420	560	630	1260
Weight	kg	50	92	190	280	360	940	1680
Required floor space	mm	510x460	510x980	510x2000	510x3100	510x4050	1200x1950	2250x1950
Height	mm	3070	3070	3070	3070	3070	5710	5710
Pressure drop at flowrate D under 7 bar	bar	0,04	0,28	0,35	0,35	0,35	0,20	1,20
Maximum operating pressure	bar	maxi 40 bar according to regulations						
Wind resistance*	km/h	130	130	130	130	130	150	150

*in accordance with the mounting specification

AMBIENT AIR VAPORISERS

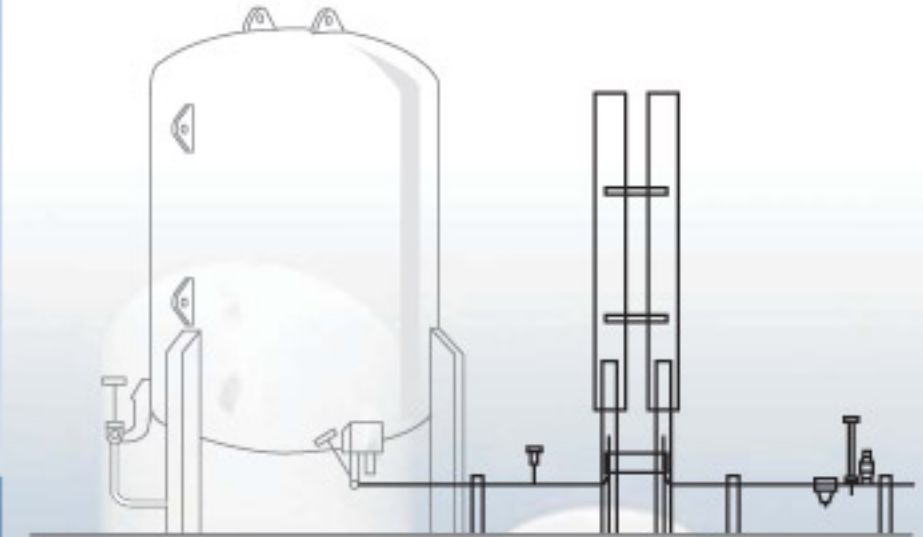
The efficient patented fin design of the CRYOLOR VAP aluminium ambient air vaporiser ensures the highest performance and quality. VAP are a perfect compliment to your CRYOLOR cryogenic tank installation with benefits such as:

- ▶ Maximum vaporising efficiency
- ▶ Easy to install, reduced footprint
- ▶ Highly adaptable through modular design
- ▶ Suitable to all medical and industrial gases (oxygen clean)
- ▶ High capacity, quick response to peak requirements
- ▶ Single or double phase (liquid + gaseous) vaporisation
- ▶ Conform with the European Directive
- ▶ Extensive testing ensures the highest welding quality and safety, as with all CRYOLOR products



COMPLETE TURN-KEY INSTALLATION

CRYOLOR proposes all the components required for a quick, complete set-up.



CONNECTIONS

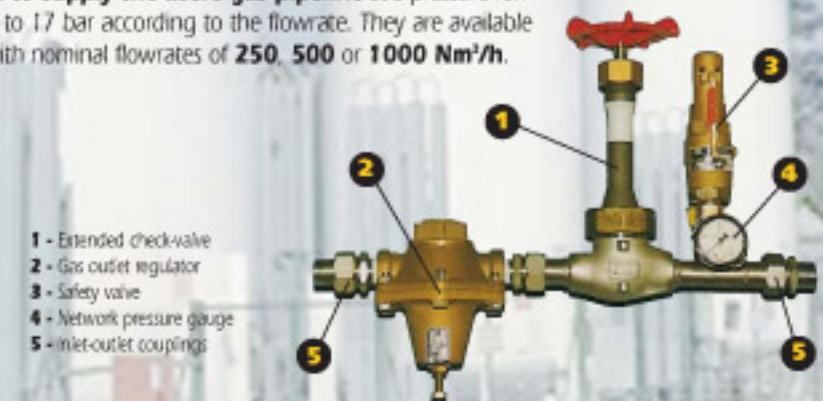
CRYOLOR VAP provided with 3-pieces stainless steel coupling, VAP 70 to VAP 420: ND 25 for butt-welding on 33,7 x 1,6 pipe VAP 560 to VAP 1260: ND 32 for butt-welding on 42,4 x 1,6 pipe

INTERCONNECTING PIPEWORK

Installed without welding! The CRYOLOR interconnecting pipework allows a quick, easy, and reliable connection **without welding** between the tank, the VAP and the regulation block. The interconnection pipework is supplied, complete with 3-pieces stainless steel couplings, thermal relief valve and supports.

REGULATION BLOCKS

The regulation sets which are necessary complements to vaporisers are designed to supply the user's gas pipeline at a pressure ranging from 1,4 to 17 bar according to the flowrate. They are available in 3 models with nominal flowrates of 250, 500 or 1000 Nm³/h.



ON SPECIAL REQUEST

Manual or automatic reversing device for alternate operation of various vaporisers, atmospheric vaporisers for bigger flowrates or using other sources of energy (water, vapour, electricity), for electronic applications...



OUR PRODUCT RANGE



Vertical storage vessels



CO₂ storage vessels



Thermosiphon tanks



Cryogenic containers, semi-trailers and road tankers



Ambient air vaporisers



Related services



CRYOLOR

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