

THERMAFIN SUPERGAP™

AMBIENT VAPORIZERS

PERFORMANCE

Supergap™ natural draft Ambient Vaporizers provide zero cost heating and vaporization for liquid gases and cryogenics including nitrogen (LIN), oxygen (LOX), argon (LAR), natural gas (LNG), hydrogen (LH₂) and helium (LHe). They are designed to meet the most demanding specifications established by the industrial gas industry. From high pressure applications to high flow, modules are available in a wide range of capacities in all-aluminium, stainless steel lined (high pressure) or monel lined (oxygen high pressure service) models.

Supergap modules are fully engineered and tested to withstand the demanding thermal cycling and ice loads generated in long term use.



SPECIFICATIONS

Supergap modules meet the most demanding set of specifications established by industrial gas industry:

- all models PED certified and CE marked
- severe thermal cycling per ANSI 831.3
- wind load 160 km/hr per 1997 UBC seismic requirements per UBC Zone 4
- uneven frost build-up loads

TYPE	PRESSURE RATING		
SGxxHF	all-aluminium, general service	40 barg	incl. LHe vaporizers
SGxxSS 4.0	stainless steel lined	275 barg	
SGxxSS 6.0	stainless steel lined, high pressure	414 barg	
SGxxM 4.0	monel lined, oxygen HP service	275 barg	
SGxxSSH-0.6	stainless steel lined	40 barg	for LHy vaporizers



THERMAFIN SUPERGAP™

AMBIENT VAPORIZERS

Dimensions & Nominal Parameters

Model	Connection	Std. Conn.	External	Weight	Length	Width	Height	Nominal Capacity in Nm/hr						Nominal Capacity in CO ₂
	kg/hr size	type (AI)	surface (m ²)	(kg)	(mm)	(mm)	(mm)	LIN	LOX	LAR	LNG	LHy	LHe	
SG25HF	DN25	M40x2	18	70	570	570	3860	70	60	80	60	75	95	50
SG35HF	DN25	M40x2	27	98	830	570	3860	100	90	110	80	110	145	80
SG50HF	DN25	M40x2	36	125	1130	570	3860	140	130	160	110	145	190	110
SG70HF	DN25	M40x2	54	184	1210	900	3860	210	190	240	170	220	285	160
SG95HF	DN25	M40x2	72	234	1210	1210	3860	273	250	310	220	290	380	200
SG110HF	DN25	M40x2	81	263	1210	900	5410	310	290	350	250	330	430	230
SG140HF	DN25	M40x2	108	345	1210	1210	5410	410	380	470	330	435	575	310
SG180HF	DN25	BSPRcl	135	424	1210	1510	5410	500	460	570	400	545	715	380
SG216HF	DN50	DIN2635	162	526	1840	1440	5690	610	560	700	490	655	860	460
SG270HF	DN50	DIN2635	202	646	1840	1740	5690	770	710	880	620	820	1075	580
SG320HF	DN50	DIN2635	243	767	1840	2050	5700	900	830	1030	720	980	1290	680
SG360HF	DN50	DIN2635	270	857	1890	1740	7200	1000	920	1140	800	1090	1430	750
SG430HF	DN50	DIN2635	324	1018	1890	2050	7200	1200	1100	1370	960	1310	1720	900
SG500HF	DN50	DIN2635	378	1175	1890	2350	7200	1400	1290	1600	1120	1525	2005	1050
SG580HF	DN50	DIN2635	431	1338	1890	2580	7200	1600	1470	1820	1280	1740	2290	1200
SG670HF	DN50	DIN2635	503	1547	2500	2280	7200	1900	1750	2170	1520	2030	2675	1430
SG770HF	DN50	DIN2635	575	1758	2500	2580	7200	2200	2020	2510	1760	2320	3055	1650
SG860HF	DN50	DIN2635	647	1969	2500	2890	7200	2500	2300	2850	2000	2615	3440	1880
SG1150HF	DN80	DIN2635	863	2792	2550	2580	10520	3300	3040	3760	2640	3485	4585	2480
SG1300HF	DN80	DIN2635	971	3116	2550	2880	10520	3700	3400	4220	2960	3920	5155	2780
SG1500HF	DN100	DIN2635	1150	3672	2550	2590	13570	4400	4050	5020	3520	4645	6110	3300
SG1700HF	DN100	DIN2635	1294	4114	2550	2890	13570	4900	4510	5590	3920	5225	6875	3680

Note:

- Nominal capacities at 20°C, 75% RH, 15 bar pressure, 10°C temperature approach and 8 hours service.
- For HP (lined) vaporizers multiply nominal capacity by 80 % (applicable for LIN, LOX, LAR only).
- Preseted values for hydrogen vaporizers SGxxSSH-0.6 type. The coefficient of 80 % from nominal capacity already applied. For hydrogen vaporizers SS flange or tube (for welding) connection used.
- For vaporizers SG25-SG180 connection types: Screwed - M40x2-Flange - EN 1092 DN25PN40, B16.5 NPS 1"300LB SO; Screwed - BSPRC 1"; NPS 1" Sch 10S.
- For vaporizers SG216-SG860 connection types: Flange - EN 1092 DN50PN40, B16.5 NPS 2"300LB SO
- For vaporizers SG1150-SG1300 connection types: Flange - EN 1092 DN80PN40, B16.5 NPS 3"300LB SO
- For vaporizers SG1500-SG1700 connection types: Flange - EN 1092 DN100PN40, B16.5 NPS 4"300LB SO

