

Chart's Microbulk Solution for Stationary Applications

Introducing the Perma-Cyl

- **Low Cost Packaged Gas**
- **Fast No-Loss Fill Capability**
- **Extended Holding Time**
- **Easy To Adjust Pressure Control**

The Microbulk solution features...

For most users of 8 or more high pressure cylinders per month, Perma-Cyls offer a lower cost alternative than individual cylinders or bundles. Delivering liquefied gas at site costs less than transporting a lot of steel and some compressed gas.

Perma-Cyls can be filled in 3 minutes (Perma-Cyl 230) with no losses using the Orca delivery system under normal conditions. And the unique Chart auto shut-off allows the option of remote filling without entering the user's building.

Improved thermo-technology has lowered normal evaporation, extended holding times without venting (up to 6 days at normal gas-use pressure) and reduced pressure rise...all to improve customer satisfaction.

Chart's combination regulators allow easy pressure adjustment using a builtin pressure scale.



5-year
vacuum
warranty

The Perma-Cyl 230 is available with casters or round base.

5 Convenient Sizes

- **230 Liters - 22 bar**
- **600 Liters - 24 bar**
- **1000 Liters - 24 / 37 bar**
- **1500 Liters - 24 / 37 bar**
- **2000 Liters - 24 / 37 bar**

Popular Options

- **Remote filling**
- **Top and bottom fill**
- **Safety device options**

PERMA-CYL 230 to 2000 Liters

Specifications

Model		230/22 FR	230/22 SB	600/24	1000/24	1000/37	1500/24	1500/37	2000/24	2000/37	
Capacity											
Liquid (gross)	(liters)	240	240	659	996	989	1522	1504	2030	2007	
Liquid (net)	(liters)	228	228	620	945	940	1446	1428	1928	1906	
Gas*	(N ₂)	(Nm ³)	147	147	404	611	608	935	923	1246	1232
	(O ₂)	(Nm ³)	182	182	500	756	751	1156	1142	1541	1524
	(Ar)	(Nm ³)	179	179	493	745	741	1140	1126	1520	1503
Performance											
NER**	(N ₂)	(% day)	1,8	1,8	1,0	0,9	0,9	0,8	0,8	0,8	0,8
Gas Flow	(N ₂ , O ₂ , Ar)	(Nm ³ /hr)	11	11	21	27	27	32	32	32	32
Max. Relief Valve Setting	(bar)		22	22	24	24	37	24	37	24	37
Code			PED	PED	PED	PED	PED	PED	PED	PED	PED
Dimensions											
Tank Diameter	(mm)	660	660	965	1067	1067	1300	1300	1300	1300	
Base Dimens. (LxW)	(mm)	N/A	740 x 710	1030 x 1030	1140 x 1140		1365 x 1365				
Type of Base		Foot Ring	Square Caster Base	Pallet Base							
Height	(mm)	1510	1610	1900	2150	2150	2150	2150	2590	2590	
Tare Weight (approx.)	(kg)	154	154	650	900	960	1095	1280	1270	1510	

* At 0 bar pressure saturated

** NER: Nominal Evaporation Rate

Note: all models and specifications are conditional and subject to change without prior notice.

