

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 built-in 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 M12	1000/24 M12	1000/37 M12	1500/24 M12	1500/37 M12	2000/24 M12	2000/37 M12
Capacity										
Liquid (gross)*	(liters)	240	240	601	997	997	1539	1539	2021	2021
Liquid (net)	(liters)	228	228	571	947	947	1462	1462	1920	1920
Gas**	(N ₂) (Nm ³)	147	147	369	612	612	945	945	1241	1241
	(O ₂) (Nm ³)	182	182	456	756	756	1167	1167	1533	1533
	(Ar) (Nm ³)	178	178	446	740	740	1142	1142	1500	1500
Capacity										
NER***	(N ₂) (% day)	1,2	1,2	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
Gas Flow	(CO ₂ & N ₂ O) (Nm ³ /hr)	N/A	N/A	7	9	9	10	10	10	10
Max. Relief Valve Setting	(bar)	22	22	24	24	37	24	37	24	37
Code		PED (EN 13458)								
Dimensions										
Tank Diameter	(mm)	660	660	900	1100		1400			
Base Dimens. (LxW)	(mm)	N/A	740 x 710	1000 x 1000	1200 x 1200		1500 x 1500			
Type of Base		Foot Ring	Square Caster Base	Pallet Base						
Height	(mm)	1543	1667	2050	2150			2550		
Tare Weight (approx.)	(kg)	170	189	528	721	783	987	1145	1129	1322

* Volume tolerance is ±4%

** At 0 barg pressure for N₂, O₂, Ar and 10 bar for CO₂, N₂O

*** NER: Nominal Evaporation Rate

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

