



Cooler By Design.™



Packaged Gas

TECHNICAL SPECIFICATION

PERMA-CYL® 5000 MAXX Standard



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1. General

Type of tank:	Stationary liquid cylinder
Gas service:	LIN, LOX, LAR, CO ₂ , N ₂ O
Gross capacity:	4855 l
Net capacity @ 95% filling:	4612 l
Volume tolerance:	± 4%
Empty weight 18 bar:	up to 2200 kg (weight depends on selected options)
Empty weight 22 bar:	up to 2400 kg (weight depends on selected options)
Empty weight 37 bar:	up to 2950 kg (weight depends on selected options)
Gas flow (N ₂ , O ₂ , Ar):	up to 20 Nm ³ /h*, optionally 65 Nm ³ /h* and or 130 Nm ³ /h*
Gas flow (CO ₂ , N ₂ O):	up to 7 Nm ³ /h*, optionally 20 Nm ³ /h* and or 42 Nm ³ /h*
MIN./MAX. ambient temperature:	-30 °C / +50 °C
Overall dimensions (LxWxH):	2490 x 2150 x 2930 mm (Height with pallet frame is 3100 mm)
Max. allowable working pressure:	18 bar, 22bar, 37 bar
Design regulation:	PED (EN 13458; ISO 21009)
Notified body:	TÜV NORD

*

Continues flow 8 h per day @ 20°C; peak flow is approximately +40% of above listed continues flow rates

2. Pressure vessel

Design code:	PED (EN 13458; ISO 21009)
Material:	Stainless steel 1.4301
MIN./MAX. allowable temperature:	-196 °C / +50 °C
Piping material:	Stainless steel

3. Outer jacket

Design code:	EN 13458; ISO 21009
Material:	Stainless steel 1.4301
MIN./MAX. allowable temperature:	-196 °C / +50 °C
Outer diameter:	1900 mm

4. Insulation

Type of insulation:	Super insulation
Net evaporation rate:	0,26% per day (LOX); 0,42% (LIN)

5. Plumbing

Safety relief valves:	2 off, each safety relief valve designed for 100 % capacity
Piping material:	Stainless steel, copper
Pressure build-up vaporizer:	External aluminum star fins
Product vaporizer:	External aluminum star fins (modular system)



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DP Gauge:

Digital DP gauge Cyl-Tel (4-20 mA included)
For Russia: Wika 712.15.100 (4-20 mA as an option)
Other options available – see option list

6. Connection

Fill line (Top and Bottom):

Flange EN 1092-1/11/B1/DN40/PN40

Extra Bottom Liquid Withdrawal:

1/2" NPT Female

Trycock:

1/4 " NPT Female

Gas Use:

1/2" NPT Female

7. Documentation

Data Dossier:

Tank dossier in English electronically

Operation Manual:

Operating manual electronically either in English or on request in language of final destination (may be subject of additional charges)

Paper Dossier & Operation Manual:

Optional

8. Miscellaneous

Final surface:

Buffed stainless-steel surface or optional white paint

Legs:

1x adjustable + 3x fixed or up to 4 adjustable legs

Pallet Frame:

Only optional accessory – see option C07