	BUTANE	PATIO GAS	PROPANE	
USE	DOMESTIC	LEISURE	DOMESTIC/COMMERCIAL/ INDUSTRIAL	FORKLIFT
Size as Content in Litres	11.34kg (20 Litres)	10.9kg (21 Litres)	10.9kg 34kg 47kg (21 Litres) (67 Litres) (92 Litres)	1 5kg (29 litres)
Care Weight (Typical)	1 3kg	13kg	13kg 29kg 37kg	16kg
Height (mm)	560	560	560 960 1290	690
iameter (mm)	305	305	305 380 380	310
Gas offtake rate Btu/Hr kw/Hr	30,000 8.8	35,000 10.3	35,000 90,000 113,000 10.3 26.4 33	N/A

Note: Dimensions, tare weights and volume equivalents are approximate

## PROPANE CYLINDER MANIFOLDS WITH AUTOMATIC CHANGEOVER REGULATOR

MAXIMUM OFFTAKE RATES					
NUMBER OF CYLINDERS (34kg)	KW/HR	BTU/HR	KG/HR		
2 cylinders	26.4	90,000	1.9		
4 cylinders	52.8	180,000	3.7		
6 cylinders	79	270,000	5.6		
8 cylinders	105.5	360,000	7.4		
10 cylinders	132	450,000	9.3		

Note:2 cylinder manifold will have one cylinder operating and one cylinder on reserve. The situation is similar for the larger manifolds, i.e. half the cylinders working and the others in reserve.





# DOMESTIC CYLINDER INSTALLATION



Minimum horizontal separation distance required between various features or hazards and a cylinder installation

Minimum Separation–Metres	Feature or Hazard
1,0m	Window Door Air vent Balanced-flue Trapped drain
1,5m	Parked motor vehicle Fixed sources of ignition Unprotected electrical equipment Flammable/combustible materials
3,0m	Untrapped drain or unsealed gully Bond wall for bulk flammable liquid storage Opening to cellar / basement Corrosive, toxic or oxidising materials
6,0m	Mechanical air intake



### NON-DOMESTIC CYLINDER INSTALLATION

# Use of Propane in Cylinders at Commercial and Industrial Premises

#### **Cylinder Location**

Recommended cylinder locations for cylinders located outside are given in figure 1.

Cylinders should be installed in the upright position with the valves uppermost so that only vapour will be withdrawn in use.

#### Cylinders should be located

- where they remain readily accessible at all times;
- where they do not obstruct any means of access to or from the premises;
- where they are reasonably protected from accidental damage;
- where necessary suitable protection should be provided against possible damage or interference by persons, animals or vehicles.

#### Cylinders should not be located:

- in any cellars, basements (which have no natural floor level ventilation) nor in sunken areas;
- less than 1 metre measured in the horizontal plane from the nearest cylinder valve from fixed sources of ignition, unprotected electrical equipment, excessive heat sources, and readily ignitable materials etc. or, apertures in the property etc. such as doors, openable windows, ventilation ducts, air bricks or flue terminals etc;

- less than 0.3 metres measured vertically above the cylinder valve(s) from the items listed in the point above unless a non-combustible weather protection hood which does not impair access to valves is provided;
- closer than 2 metres measured in the horizontal plane from untrapped drains or unsealed gullies or openings to cellars unless an intervening diversion wall not less than the height of the cylinders is provided such that the distance measures round the wall to the opening is at least 2 metres;
- within 3 metres of any corrosive, toxic or oxidising materials unless a fire resistant barrier is interposed.

#### General

The area around the cylinders should be kept free of litter, vegetation or other flammable material. Associated equipment e.g. automatic change-over devices, pressure regulators etc. should be located as close as practicable to the cylinder(s). Flexible connections should be as short as practicable.



