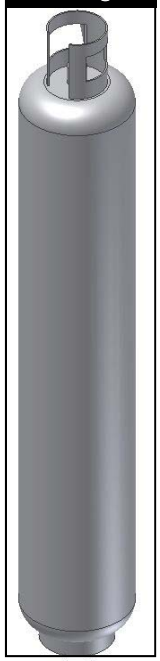
6 October 2011

Gas Bottle Consumption Calculation

LPG Gas Bottle Energy Calculation

45 kg



- 1 kg of LPG gas contains 50.4 MJ of Energy
- 1 kW = 3.6 MJ

9 kg

This Means that a 45kg LPG Gas Bottle has:

- 45 kg x 50.4 MJ = 2268 MJ

This works for the different Bottle Sizes

- 9 kg Gas Bottle = 453.6 MJ
- 45 kg Gas Bottle = 2268 MJ
- 2 x 45 kg Gas Bottles (Twin Pack) = 4536 MJ

Calculating how Long an LPG Bottle Will Last

To work out how many hours an LPG gas bottle will last, you need to divide the energy (MJ) By the total MJ input of your appliance (MJ /h)

Warmington Gas Fire (on High):

SG/EG 700 = 29 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{29MJ/h}$ = 15.6 h

for a 45 kg bottle = $\frac{2268MJ}{29MJ/h}$ = 78.2 h

SG/EG 780 = 38 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{38MJ/h}$ = 11.9 h

for a 45 kg bottle = $\frac{2268MJ}{38MJ/h}$ = 56.7 h

SG/EG 900 = 42 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{42MJ/h}$ = 10.8 h

for a 45 kg bottle = $\frac{2268MJ}{42MJ/h}$ = 54.0 h

SG/EG 1100 = 50 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{50MJ/h}$ = 9.1 h

for a 45 kg bottle = $\frac{2268MJ}{50MJ/h}$ = 45.4 h

SG/EG 780 Twin = 59 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{59MJ/h}$ = 7.7 h

for a 45 kg bottle = $\frac{2268MJ}{59MJ/h}$ = 38.4 h

SG/EG 900 Twin = 72 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{72MJ/h}$ = 6.3 h

for a 45 kg bottle = $\frac{2268MJ}{72MJ/h}$ = 31.5 h

SG/EG 1100 Twin = 76 MJ/h

for a 9 kg bottle = $\frac{453.6MJ}{76MJ/h}$ = 6.0 h

for a 45 kg bottle = $\frac{2268MJ}{76MJ/h}$ = 29.8 h