

The GasGuard 'GG11' Back-Check Valve is used in conjunction with the GG10 bulk refueling nozzle for LPGas (Propane, Butane) bulk dispensing. It serves to contain leaks at storage tank fill points, allowing the driver to move to the next fill point without delay.

### Background:

Field experience shows that check valves on mobile or stationary LPGas tanks sometimes fail, e.g. due to poor quality, weathering or dirt. If a tank truck operator encounters a failing fill point check valve at the end of a LPGas bulk filling operation, under normal circumstances the nozzle/tank connection must be retightened as emergency action to contain the leak. If there is no secondary valve on the tank side, the operator is forced to remain on site until corrective action can be taken by appropriate service personnel, which can take hours.

The GG11 Back-Check Valve – superseding the previous LG11 type – solves this problem. It is screwed onto the nozzle before coupling with a 1¾" ACME fill point. The GG11 is specifically designed for use with the GG10 High Flow nozzle to maintain all of its safety features. This means that the nozzle valve cannot be opened when uncoupled and the Lever is actuated, unless the GG11/GG10 unit is connected to a specified ACME fill point.

### GG11 Specifications:

Thread connection (nozzle side):	1¾" ACME male according to AS/NZS 1596, AS/NZS 1425, EN 12806
Thread connection (tank side):	1¾" ACME female according to AS/NZS 1596, AS/NZS 1425, EN 12806
Materials:	Gunmetal casting, brass and anodized internal aluminium components
Weight:	Approx. 0.45 kg (1 lbs)
Length:	65 mm
Max. operating pressure:	2500 KPa or 25 bar (362 psi)
Operating temperature:	-40 °C to +110 °C
Release Volume:	23 cm <sup>3</sup>
UL listed:	According to UL 125

### GG11 Safety Features:

- Used in conjunction with the GG10 nozzle to contain potential leaks at the storage tank fill point.
- When mounted to the GG10 nozzle but not coupled to a fill point, no discharge of LPGas to the atmosphere is possible when the lever is actuated.
- Safe function also without fill point gasket.
- Safe connection even when the nozzle is not tightly screwed onto the fill point (up to 1.5 turns).

### Available Types:

**GG11:** After each filling completion, the combined GG10/GG11 unit is unscrewed to release the remaining gas between nozzle valve and tank valve. Gas disperses through the female ACME thread of the GG11. If the tank fill point is found to be leaking, the combined GG10/GG11 unit is screwed back onto the fill point to contain the leak. The GG10 nozzle is then removed from the GG11 Back-Check Valve, the GG11 is left on the tank for corrective action while the driver is able to move on.

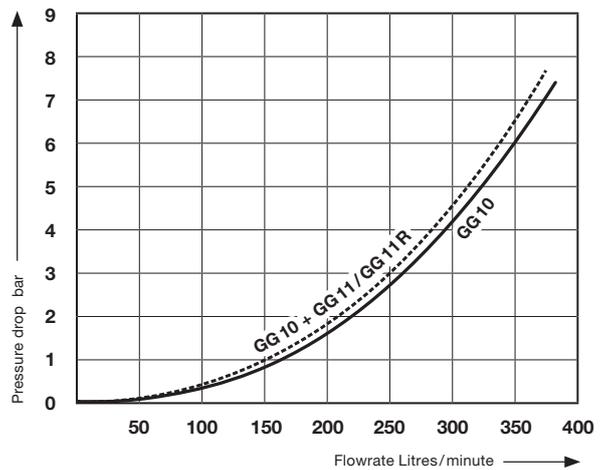
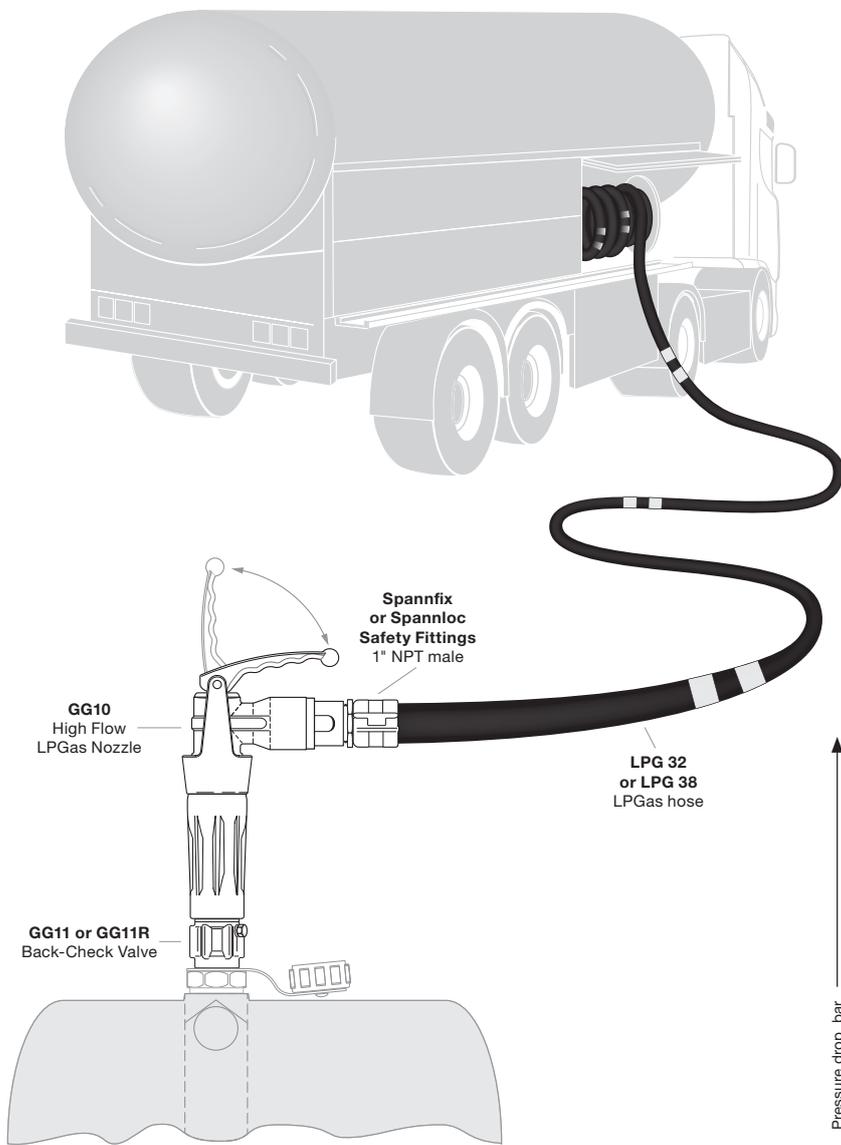
**GG11R:** The function and performance is the same as the GG11, however the GG11R uses an external screw to discharge the release volume between the nozzle valve and Back-Check Valve. This is done by the operator with a gloved hand after each fill.



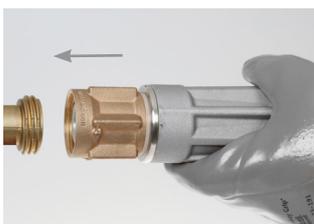
## Bulk LPGas Dispensing, Reel to Tank.

For the applications of filling of stationary storage tanks from 90 up to 4000 litres with a bobtail truck, we recommend our ELAFLEX LPGas 'Orange Band' hose DN 32 mm (or alternatively DN 25 mm) with Spannfix/Spannloc couplings.

For a safe connection between the bobtail tank truck and the storage tank, we offer the high flow GG10 nozzle and GG11 / GG11R Back-Check Valve, capable of a flowrate up to 380 l/min with a negligible pressure drop (see flow chart below).



## GG11 / GG11R: Operation with the GG 10 Nozzle



Use gloves. Screw **combined unit** (Nozzle/Back-Check Valve) ...



... to fill point.



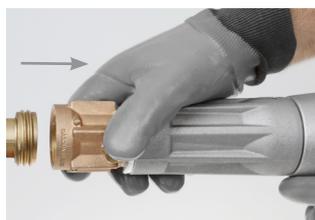
Actuate lever until held in cam open position. Start refueling.



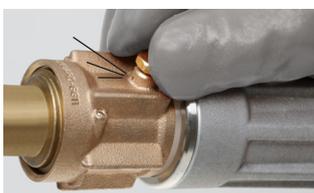
After refueling disengage lever. Prepare for disconnection.



**GG11:** begin to unscrew combined unit - gas is released at screw connection.



Once all gas is released, remove the **combined unit** from the tank fill point.



**GG11R:** actuate gas release screw, gas is released at opening (hole).

### If a fill point leak is detected:



If a leak of the LPGas tank fill point back-check valve is evident and gas continues to be released at the screw connection (GG11) or the gas release valve (GG11R), only unscrew the GG10 nozzle and leave the GG11 / GG11R Back-Check Valve on the tank for corrective action.