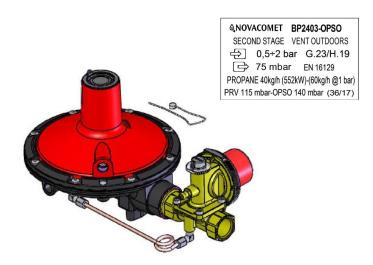


CLESSE PART No. 006842CB

2nd Stage regulator 75mbar 553 kW

SUPPLIED BY CLESSE (UK) LIMITED



Technical Information		
Regulator	BP2403 OPSO	
Capacity kg/h (kW) @ min inlet pressure	40kgh (553)*	
Set Pressure	75 mbar (60-90)	
Inlet Pressure(2nd Stage)	0.5-2 bar	
Limited relief Valve	115 mbar	
OPSO Set Pressure	140 mbar	
UPSO Pressure	N/A	
Design Standard	BS EN16129	
Inlet connection	Rc3/4F ISO/7 (BSP)	
Outlet connection	Rc1F ISO/7 (BSP)	

Assembly Instruction

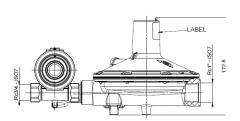
- 1. Check the contents of the box, ensuring that the regulator meets the pressure and capacity of the installation and all items are present and not damaged.
- 2. This regulator requires 1st Stage pressure reduction 4 bar or below. Due to liquefaction at low ambient temperatures, Clesse recommends the use of inlet pressure of 2 bar or below. The regulator has been marked to show this.
- 3. If the regulator is to be fitted as a wall mounted assembly, a wall mounting bracket can be fitted to the regulator (Part No.UUBRACKETSET1).
- 4. When installed, ensure that the second stage regulator vent position ensures that rain water does not enter, and allows drainage of any water condensate.
- 5. Before fitting regulator to wall end PE kit, ensure that the pipe is clear of any debris. Clesse recommends use of an inline filter on the regulator inlet, Clesse part code: 040910AC.
- 6. Perform a gas tightness test to the requirements of UKLPG COP22 or BS 5482:1 2005 to suit the installation. There is a test point on the second stage regulator, use a small 3.5mm flat bladed screw driver and avoid over tightening when finished.
- 7. Fully commission assembly, checking operating pressures only when the appliances are available and connected. Otherwise, check for soundness and lockup before leaving. The regulator is pre-set at the factory and does not normally need adjustment. If operating pressure adjustment is required, see overleaf.
- 8. Use Leak Detection Fluid on the test point and OPSO flange, checking for any leakage and wiping off any remaining residues. If not using LPG for test media, purge the assembly fully before leaving site.
- 9. Adjustment of the UPSO is not possible. The OPSO and Limited Relief Valve setting is pre-set and should not require adjustment.
- 10.Fit the OPSO seal, passing the wire through the regulator hole in the OPSO body and clear plastic OPSO cap.

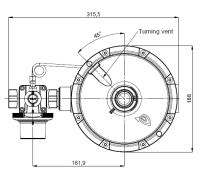
Engineer information on regulator design:

Regulators manufactured to EN16129 standards have OPSO setting typically between 140 mbar on a 75 mbar regulator, with the relief valve system operating at 115 mbar. This protects downstream pipework, to ensure that if the 3rd stage regulator fails, appliances do not see more than 150 mbar.

Range Rated Capacity:

The regulator is rated to the lowest inlet pressure; pressures above this will mean that higher capacities can be reached. Use the table opposite to determine the correct inlet pressure for the demands of the installation. Careful selection of 1st stage regulator, such as the AP40 or APS2000, together with correct LPG storage and pipe sizing must be considered. Inlet pressures of over 1.5 bar should be only considered with care.





Operating Conditions	Settings
Lock-up Pressure	98 mb or less
Operating pressure	75 mb +/- 5 mb
Operating temperature	-20°C to 45°C
Max Operating Inlet Pressure	2 bar (4 bar max)
Optional pressure by	50 mb (50-100)
replacement spring or ordering	Special order up
direct from Clesse (UK) Ltd	to 200 mb
Optional vent location and special builds available	

* Regulator Capacity kg/h (kW)	Inlet Pressure bar
40 (553)	0.5
60 (830)	1

ANY REGULATOR ADJUSTMENTS AND RESET PROCEDURES SHOULD BE CARRIED OUT BY A SUITABLY QUALIFIED GAS ENGINEER

Over Pressure Shut Off Valve Reset Unscrew OPSO cap reset and pull Regulator OPSO set

- 1. Over Pressure Shut Off must be reset by a qualified gas engineer, who should establish any cause for tripping, particularly if this device trips repeatedly.
- 2. The device is fitted with a sealing wire, this must be replaced when reset.
- 3. If the OPSO has tripped together with UPSO, the OPSO must be reset first.
- 4. Gas supply does not require to be turned on, but ensure downstream valves have been turned off before resetting.
- 5. Remove sealing wire and unscrew the OPSO reset cap, in doing so this will begin to engage the reset spindle.
- 6. The OPSO cap is attached to the green reset indicator inside and is used to pull the device to reset—pull the cap firmly.
- 7. When reset, replace cap, finger tighten, and reseal with new wire seal. If required, proceed to reset UPSO.

OPSO Adjustment

- 1. OPSO adjustment is not normally required, however, in the event that this is required:
- 2. Remove the black OPSO cap and adjust to give the desired pressure.
- 3. Reset OPSO and recheck settings.

Adjust here to alter OPSO pressure

Nominal Pressure Adjustment



Regulator adjustment is not normally required, however, in the event that this is required:

- 1. Remove the clear cap, remove and discard the white plastic tamperproof disc and adjust to give the desired pressure.
- 2. Replace the cap.

Adjust here to alter outlet pressure

Additional Features

Vent orientation—Breather vent orientation is made easier by the Rotatable Vent cover, which prevents water from entering and/or accumulating in the regulator, either by rain, humidity, or condensation. The operation can be carried out on site by a qualified engineer following below instruction:

- 1. Loosen the 8 screws, one by one.
- 2. Rotate and orientate the regulator cover with vent oriented downward.
- 3. Tighten the 8 screws alternately.
- Perform a leak test to ensure the installation is sound and the Rotatable Vent cover is sealed.

