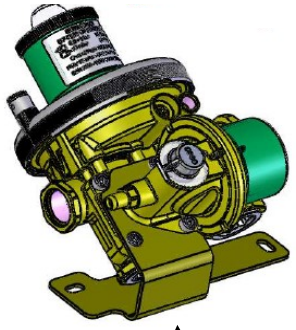
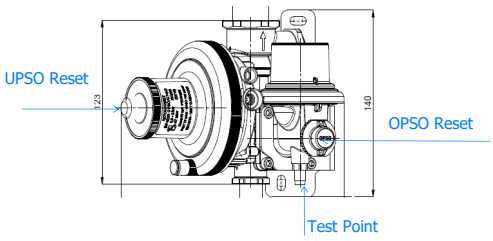
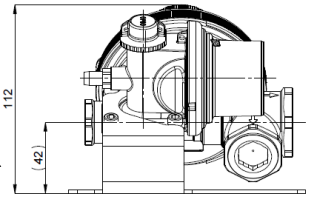
CLESSE PART No. 006850FM	2ND STAGE BP4203 UPSO OPSO 37mb 30kg/h 415kW	SUPPLIED BY CLESSE (UK) LIMITED

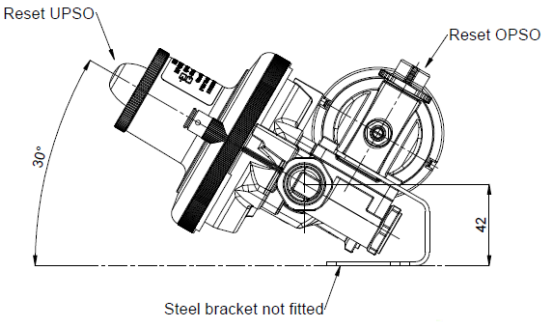




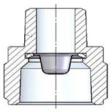
Shows optional wall mounting bracket



Technical Information	
Regulator	BP4203 U/OPSO
Capacity kg/h (kW) Qmax	30 (415)
Set Pressure	37 mbar (33-45)
Inlet Pressure(2nd Stage)	0.75 - 2 bar
Limited relief Valve	75 mbar
OPSO Set Pressure	110 mbar
UPSO Pressure	27-30 mbar
Design Standard	EN16129
Inlet connection	Rc1/2" ISO/7 (BSP)
Outlet connection	Rc1" ISO/7 (BSP



The wall bracket is set for 32mm riser, but is adjustable to accept 25mm and some variability. It can be shaped to meet contour of the wall.



It is recommended that the screen filter and ball valve is fitted to the regulator using only Clessetite, to avoid over tightening and possibility of PTFE shreds entering the regulator.

Assembly Instruction

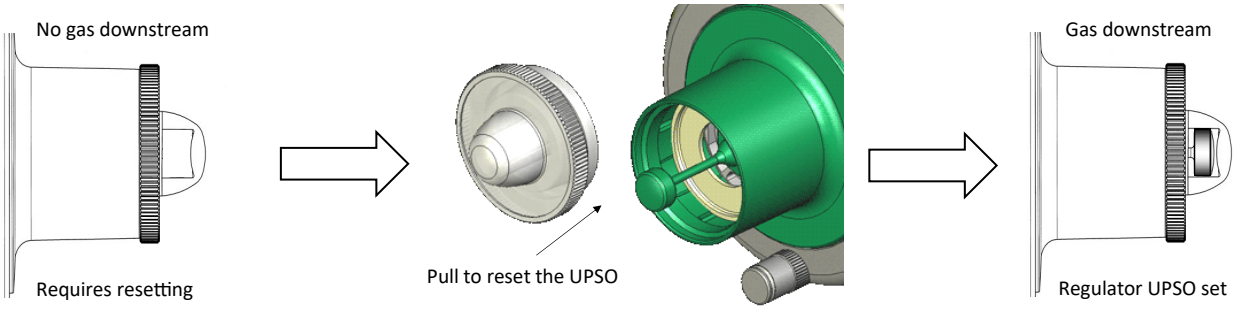
1. Check the contents of the box, ensuring that the regulator meets the pressure and capacity of the installation and all items are present and not damaged
2. Assemble the components as above using Clessetite or PTFE tape to BS EN 751:3 Type G on the male pipe threads. Tighten onto the regulator without applying undue strain. Assemble to achieve a gas tight seal using a flat jawed spanner on the appropriate points on the regulator.
3. Fit the wall mounting bracket (where required) to the regulator. Remove only two screws only from the opposing sides of OPSO body as shown using a Allen key 4mm. Fit the bracket as shown to the regulator (note the bracket is specially angled to allow close fitting to wall set for 32mm PE riser, but is adjustable), replace and retighten screws.
4. Ensure that the second stage regulator diaphragm is in the vertical position. Rotate the movable GIRO® vent to the Bottom Dead Centre position as in the assembly picture above. For convenience whilst assembling, this can be removed and refitted at the end of installation
5. Before fitting regulator to the wall end PE kit, ensure that the pipe is clear of any debris. Use a 3/4" 1/2" M/F screen filter (Clesse part 040910AB) if there is any possibility of debris in the pipe, as debris or PTFE will contribute pressure supply failure.
6. Connect the regulator and drill the wall using a 7.5 – 8 mm drill bit. Secure the regulator at the bracket.
7. Perform a gas tightness test to the requirements of UKLPG COP22 or BS 5482:1 – 2005 from the vessel to the wall end kit. Using the test point on the regulator, test and commission. Only use a small 4mm flat bladed screw driver and avoid over tightening when finished.
8. Fully commission assembly, checking operating pressures only when the appliances are available and connected. Otherwise, check for soundness and lockup before leaving.
9. 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.
10. Fit the blanking disc on outlet if not connecting to installation pipework, removing the copper olive compression ring. Secure this to the ball valve using zip tie for future use.
11. Adjustment of UPSO and Limited Relief Valve is not possible. OPSO setting is pre-set, and should not require adjustment.
12. Fit the OPSO seal, passing the wire through the regulator hole in the OPSO body and clear plastic OPSO cap.

The BP4203 regulator is double staged. There is further inter-stage pressure reduction before the main regulator. Therefore, increasing inlet pressure to achieve higher capacity has little effect. Always ensure that there is 0.75 bar at the inlet for reliable service.

Operating Conditions	Settings
Lock-up Pressure	50mb or less
Operating pressure	37mb +/- 5mb
Operating temperature	-20°C to 45°C
Max Operating Inlet Pressure	4bar

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

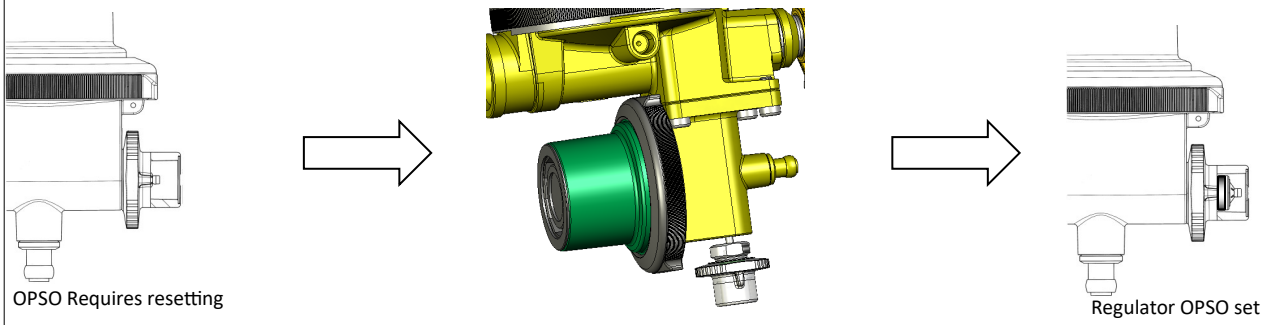
Under Pressure Shut Off Valve Reset on a 2nd Stage Regulator



Before resetting the Under Pressure Shut Off

1. Ensure any valves downstream of the regulator are closed before introducing gas into the pipework.
2. Check gas is available, turned on upstream of the regulator and that the OPSO is also set.
3. Unscrew the large clear plastic cap on the main body of the regulator as shown.
4. Under this cap is the green UPSO reset (spindle), gently pull the green re-set, and hold in this position whilst downstream pipework fills with gas. **Do not push the reset spindle.**
5. Replace the cap, finger-tighten, and commission the installation if required.
6. When reset, the green spindle is clearly visible under the clear cap as shown, with the best viewing angle from the side.

Over Pressure Shut Off Valve Reset on a 2nd Stage Regulator



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. The gas supply is not required 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, reseal with new wire seal, and if required, proceed to reset UPSO.

Nominal Pressure Adjustment

Regulator adjustment is not normally required. In the event that this is needed:

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