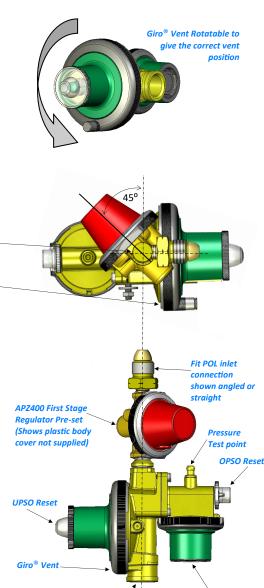
2nd Stage Regulator 37mb outlet APZ400/BP2203 1ST 2ND STAGE COMBINED REGULATOR

1st Stage Regulator

fixed pressure

Technical Information	
Regulator	BP2203 + APZ400
	GIRO [®] VENT
Capacity kg/h (kW)	10.5 (146)
Set Pressure	37 mbar
Inlet Pressure (2nd Stage)	1.5-16 bar (0.45-2 bar)
Limited relief Valve	75 mbar
OPSO Set Pressure	100 mbar
UPSO Pressure	27-30 mbar
Design Standard	BS EN16129
Inlet connection	1/4"F ISO7 (BSP)
Outlet connection	Rc3/4F ISO7 (BSP)



 Operating Conditions
 Settings

 Lock-up Pressure
 50mb or less

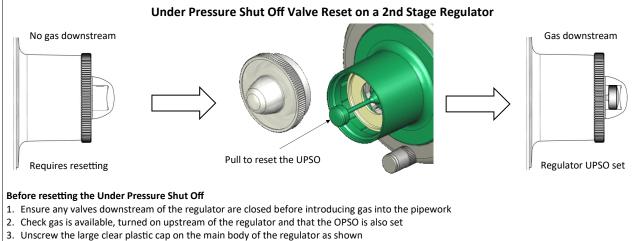
 Operating pressure
 37mb +/- 5mb

Operating temperature

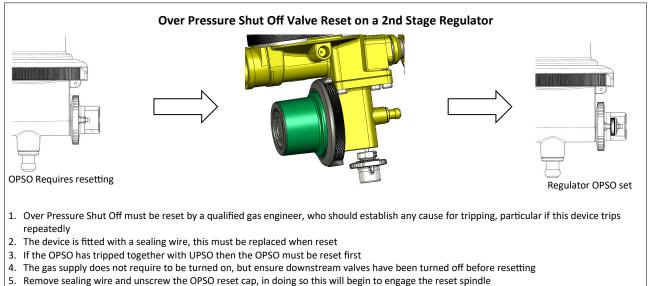
-20°C to 45°C

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.
- Assemble the components as above using PTFE tape to BS EN 751:3 Type G or Clessetite on the male pipe threads. Tighten the regulator or POL without applying undue strain on pre-assembled joints, particularly between regulators. Assemble to achieve a gas tight seal using a flat jawed spanner on the appropriate points on the regulator.
- 3. When using the angled POL, it should be fitted to the first stage regulator and set at an angle of 45° left of TDC. This joint should be tightened to approximately 30 Nm.
- 4. Ensure that the second stage regulator diaphragm is in the vertical position. Rotate the movable GIRO® vent to the Bottom Dead Centre position. For convenience whilst assembling, this can be removed and refitted at the end of installation.
- 5. Steel pipe to be cut to length, threaded, de-burred, and thoroughly cleaned of any loose material before assembly onto the First and Second Stage regulator assembly. Use flat jawed spanner at the outlet end of the 2nd stage regulator when screwing the pipe.
- 6. Install the completed assembly onto the vessel using an appropriate mounting bracket, ensuring the regulator assembly is fully supported. Tighten any pipe support after the regulator POL connection has been made, ensuring no undue strain on the assembly occurs when doing so, particularly the POL fitting.
- Perform a gas tightness test to the requirements of UKLPG COP22 or BS 5482:1 2005 using the test point on the second stage regulator. Only use a small 3.5mm flat bladed screw driver and avoid over tightening when finished.
- 8. Use Leak Detection Fluid on the test point and POL connection, wiping off any remaining residues. If not using LPG for test media, purge the assembly fully before leaving site, ensuring all pipework is plugged or capped.
- 9. 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 when used. If operating pressure adjustment is required, see overleaf.
- 10. Adjustment of UPSO and Limited Relief Valve is not possible, OPSO setting is pre-set and should not require adjustment.
- 11. Fit the OPSO seal, passing the wire through the regulator hole in the OPSO body and clear plastic OPSO cap.



- 4. Under this cap is the green UPSO reset (spindle), gently pull the green re-set, hold in this position whilst downstream pipework fills with gas. Do not push the reset spindle
- 5. Replace the cap, finger-tight 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.



- 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, if required proceed to reset UPSO.

Nominal Pressure Adjustment

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

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

2. Replace the UPSO cap

Adjust the disc to alter outlet pressure