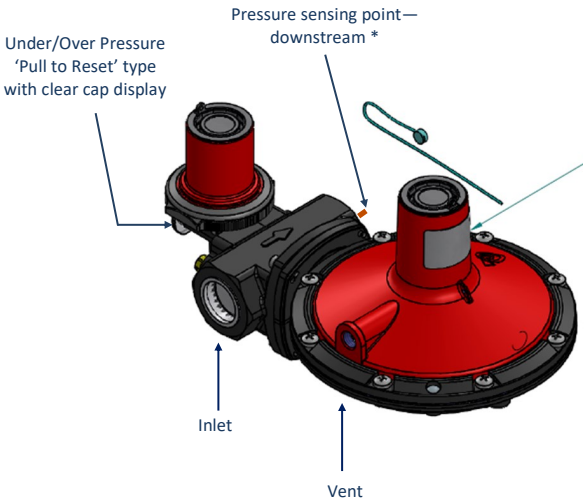
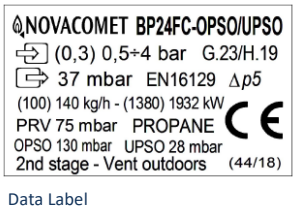
CLESSE No. 006896CC	2nd Stage UPSO OPSO 37mbar 140kg/h 1932kW	SUPPLIED BY CLESSE (UK) LIMITED

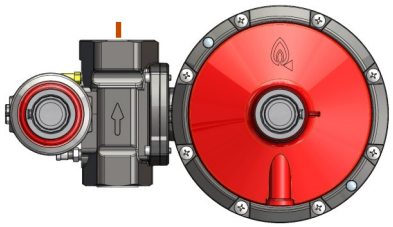




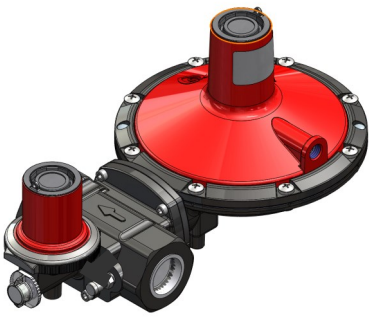
Data Label

Technical Information	
Regulator	BP24FC UPSO OPSO
Capacity kg/h (kW) @ min inlet pressure*	140kg/h (1932 kW)
Set Pressure	37 mbar (31 - 50)
Inlet Pressure(1st Stage)	0.5 bar (0.3—4 bar)
Limited relief Valve	75 mbar
OPSO Set Pressure	130 mbar
UPSO Pressure	28 (27-30) mbar
Design Standard	BS EN16129
Inlet connection	Rc1F ISO/7 (BSP) (1")
Outlet connection	Rc1 1/4 F ISO/7 (BSP) (1 1/4")

Item	Qty	Description
	1	BP24FC 37mbar 2nd Stage Regulator 140kg/h 1932kW



Install the regulator with vent pointing down or horizontal



Assembly Instruction

1. Check the contents of the box, ensuring that the regulator meets the pressure and capacity of the installation. A visual inspection for damage and missing parts should also be completed.
2. This is a 2nd stage regulator and requires 1st Stage pressure reduction, according to the inlet pressure specification 0.5—4.0 Bar. We recommend fitting a Clesse 1st stage to guarantee performance.
3. If the regulator is to be fitted as a wall mounted assembly, the pipework immediately before and after the regulator should be supported.
4. Ensure that the regulator vent faces downwards so that it does not collect rain water. See page 2 for instructions on how to rotate the vent.
5. Before fitting regulator to wall end PE kit, ensure that the pipe is clear of any debris. It is recommended to fit an inlet filter.
6. Perform a gas tightness test to the requirements of UKLPG COP22 or BS 5482:1 – 2005, to suit the installation. Outlet pressure should be checked downstream of the regulator at high flow rates. The regulator test point should only be used for checking the lock up pressure or downstream pipework integrity.
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.
8. Use Leak Detection Fluid on the test points and joints, checking for any leakage and wiping off any remaining residues. If not using LPG for test media, purge the assembly fully before leaving site.

Useful Information

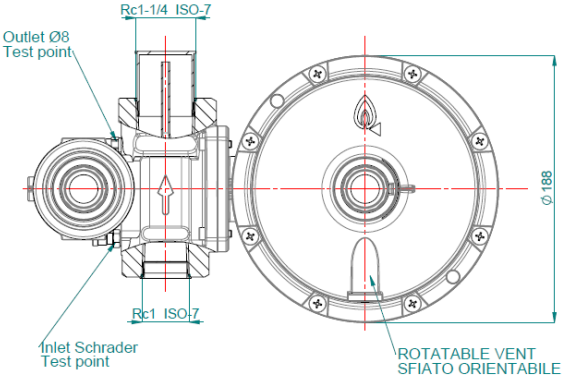
- This regulator is fitted with a limited relief valve and should be fitted outdoors.
- This regulator can achieve a maximum flow rate of 140kg/h (1,932kW) at low inlet pressure of 0.5 bar.
- See overleaf for information on rotatable vent and diaphragm.

<u>This regulator includes down stream sensing pipe</u>. This allows higher capacity of the regulator without the need to fit a separate pipe. However please note:

- DO NOT OBSCURE, REMOVE, OR BLOCK THE COPPER SENSING PIPE.
- DO NOT USE THE OUTLET TEST POINT TO DETERMINE CORRECT PRESSURE SETTING WHEN GAS IS BEING USED. ALWAYS USE A DOWNSTREAM TEST POINT.

IMPORTANT

<u>This test point is only to be used for soundness pressure test and lockup.</u>
When checking regulated pressure settings (gas is being passed through the regulator) ALWAYS use a pressure test point at least 300mm downstream of the regulator and within a straight length of pipe, or at the appliance. This avoids inaccurate readings.

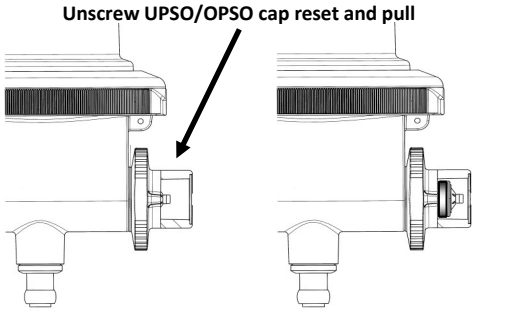


Operating Conditions	Settings
Lock-up Pressure	50 mb or less
Operating pressure	37 mb +/- 5 mb
Operating temperature	-20°C to 45°C
Max Operating Inlet Pressure	4 bar
Optional pressure by replacement spring or ordering direct from Clesse (UK) Ltd	None
Special Builds & Assemblies with Meters Available	

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

Under/Over (UPSO/OPSO) Pressure Shut Off Reset

1. This regulator has the Under & Over Pressure Shut Off Reset combined.
2. If an over pressure situation is suspected, this should be investigated and reset by a qualified gas engineer.
3. If an under pressure situation has occurred i.e. gas storage run out, then the reset device can be reset by the consumer.
4. Before resetting the UPSO/OPSO, ensure all downstream appliances and pipework have been checked, isolated, & turned off. Generally, under pressure cut off is caused by a gas run out. If this not the case, please thoroughly investigate downstream appliances and pipework.
5. **Only when point 4 has been completed satisfactorily should an UPSO/OPSO be reset.**
6. When resetting, the upstream gas supply should be turned on and remain on.
7. The UPSO/OPSO reset is located under the clear cap, remove the sealing wire (if fitted) and unscrew the cap.
8. Gently pull the UPSO/OPSO reset, allowing sufficient gas to pass through to the downstream pipework before releasing.
9. Once reset, the green indicator should be clearly visible in the indicator window.
10. Screw the cap back in finger tight only.
11. If the device repeatedly trips, consult your gas supplier or qualified engineer as soon as possible.



Vent orientation

Breather vent orientation is made easier by the Rotatable Vent cover, to prevent 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.

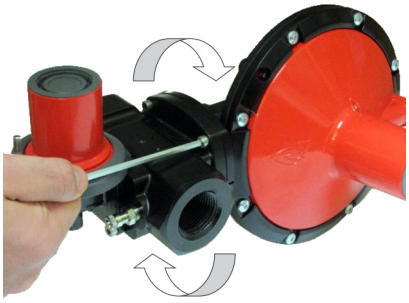
1. Loosen the 8 screws, one by one.
2. Rotate and orientate the regulator cover with vent downward oriented.
3. Redo the 8 screws alternately.
4. Perform a leak test to ensure the installation is sound and the Rotatable Vent cover is sealed.



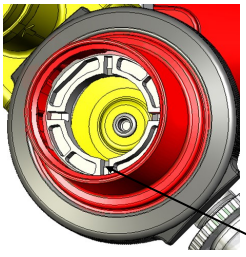
Rotatable Diaphragm Case

After installation into the pipework, it's easy to rotate the diaphragm casing to fit into confined spaces, or to position the vent downward as advised previously. Please proceed as follows:

1. Slack off (with a hexagon wrench), one by one, the 4 screws around the flange.
2. Rotate and orientate the diaphragm casing as necessary.
3. Redo the 4 screws alternately.
4. Perform a leak test to ensure the installation is sound and the Rotatable Vent cover is sealed.



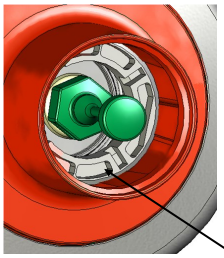
OPSO Adjustment



1. OPSO adjustment is not normally required—however in the event that this is required
2. Remove the black OPSO cap using special key, 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