SAFETY OPSO (Over pressure shut off)
TYPE 404
FOR HIGH PRESSURE APPLICATION
IN CONFORMITY WITH STANDARD EN16129

34-1-110-1336 rev.2

This product is covered by the manufacturer's general warranty conditions, available in the General Warranty Conditions section of the www.cavagnagroup.com website.

DANGER

- Gas leaks may cause fatal fires or explosions
- Only skilled persons must work on gas circuits
- Inspect the gas circuit regularly
- Replace adapters, valves and regulators as recommended by the relevant technical regulations
- Failure to follow these instructions with care could lead to serious health risks

The manufacturer reserves the right to modify this instruction sheet without notice.

THE MANUFACTURER GUARANTEES THAT THIS REGULATOR COMPLIES WITH THE REGULATIONS AND STANDARDS REFERRED TO ABOVE. IT IS THEREFORE THE INSTALLER'S RESPONSIBILITY TO COMPLY WITH THE REGULATIONS IN FORCE IN THE REGULATOR'S COUNTRY OF USE AND CHECK ANY SPECIFIC DIRECTIVES COVERING ITS APPLICATION.
FAILURE TO COMPLY WITH THE INSTRUCTIONS PROVIDED HERE LEADS TO AUTOMATIC FORFEITURE OF THE MANUFACTURER'S WARRANTY ON THE PRODUCT, AND THE MANUFACTURER SHALL NOT BE HELD RESPONSIBLE FOR ANY CONSEQUENT DAMAGE.

1 TECHNICAL DATA:

- Inlet pressure (*p*):	max 2,5 bar (for internal impulse - written on the label) max 16 bar (for external impulse - written on the label)
- Operating pressure OPSO:	2,7 bar (written on the label)
- Inlet connection (1):	G.14-G.18-G.23 of EN16129 (written on the label)
- Outlet connection (2):	H.7-H.11-H.19 of EN 16129 (written on the label)
- Type of gas:	LPG, Butane and Propane (written on the label)

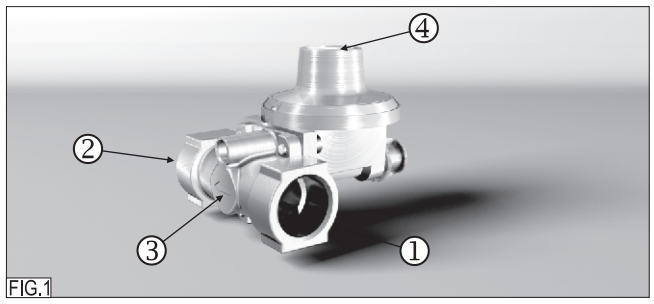

FIG.1

2 GENERAL:
- Make sure the safety OPSO inlet and outlet are compatible with the fitting and the appliance being used.
- The direction of the gas flow is given by the arrow (3) printed on the body of the regulator
- This safety is not for use in caravans and motor caravans.
- Do not attempt to adjust the outlet pressure. Should you require service, contact your dealer.

WARNING: INSTALLATION AND RESETTING TO BE CARRIED OUT BY A COMPETENT PERSON
DO NOT RUN THE INSTALLATION WITH ANY HOSE DISCONNECTED.

This safety is for use on BUTANE, PROPANE and LPG cylinder installations. It should be sited on an outside wall in an upright position, as shown overleaf, away from any openings such as windows, air vents, etc.
If possible it should be located in a position which remains shaded as this will prolong the useful life of the hoses.

Protection should be provided if necessary to keep ice or snow from covering the safety when it is located in an exposed position. Once installed the regulator must not be painted and care should be taken to avoid any contamination by building or other decorative materials. Failure to observe these recommendations may lead to impairment of performance of the regulator.

3- INSTALLATION AND APPLICATION
NOTE: INSTALLATION AND RESETTING TO BE CARRIED OUT BY A COMPETENT PERSON
Type 404, high pressure OPSO safety device, is mainly used in gas pressure installations. This «Over Pressure Shut Off» device stops the gas flow in event the regulated pressure is greater than a definitive value. such overpressures are mainly due to malfunctioning of the regulator (debris on the seat, ice blocking,...) or re-liquefaction of LPG in the pipes.
This safety defice has been designed to operate in two types of application/ installation:
1) Downstream of the supplying regulator (**Int. impulse** is written on the label):

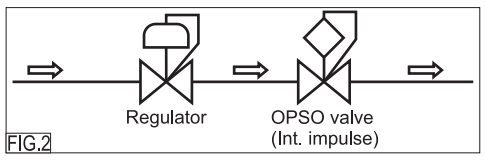

FIG.2

2) Upstream of the supplying regualator (**Ext. impulse** is written on the label):

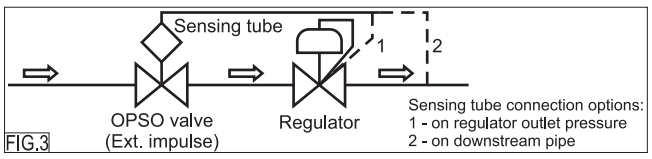

FIG.3

3.1 It is VERY IMPORTANT that the installer observes the correct orientation of the unit when installed in the horizontal plane. The vent must point downwards to prevent the ingress of rain water within the device and equally as important, to maximise the drainage of any water from within the regulator caused by condensation in adverse conditions eg, high humidity and freezing.
Furthermore, to guarantee the OPSO correct operation, the vent should never be plugged. Failure to observe these installation guide lines may result in the malfunction of the safety

Important: Before using the equipment it is recommended that you read the SAFETY INSTRUCTIONS enclosed. Please observe the correct procedure for resetting this OPSO safety device.

4- SAFETY CHECK BEFORE FITTING
This safety device should only be installed by an approved registered installer or suitably competent person. Ensure the gas equipment and appliances are in a sound condition and of an approved type. If you are in any doubt about the safety and efficiency of your gas system, consult your dealer or approved register installer. Never fit a cylinder on its side or leaning out of the vertical, always upright with the valve uppermost. Ensure that the hoses are routed so that any propane condensate returns back to cylinders as this will assist in the service life of hoses and regulator. Check the data badge of the appliances to ensure that the regulator is compatible with the application.
Check that there is adequate ventilation for the appliance(s) used.

5- OPSO
This OPSO (over pressure shut off) device, which may need resetting before cylinder valves are turned on.
IMPORTANT : IF THE OPSO SHOULD TRIP, RED PLASTIC INDICATOR (A) IS VISIBLE ON THE TRANSPARENT CUP (B)
RESETTING:

1 - CLOSE THE TANK VALVE
2 - UNSCREW THE PROTECTION CUP (B) UNTIL THAT THE SYSTEM IS RESET SUCCESSFULLY
3 - SCREW THE PROTECTION CUP (B) TO ITS INITIAL POSITION
4 - SLOWLY REOPEN TANK VALVE IN SAME WAY

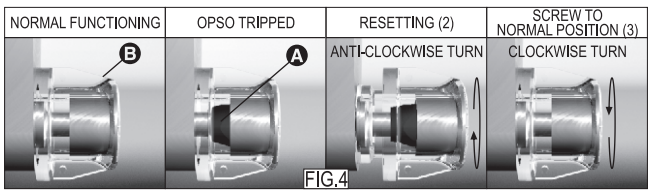

FIG.4

6- MAINTENANCE
It is recommended that all appliances have at least an annual inspection and at this time the regulator should be checked by the gas supplier.
Do not attempt to repair the regulator yourself, as there are no user serviceable parts in its construction. Hoses should be checked annually. If hoses show any signs of cracking or deterioration they should be changed. It is recommended that all hose are changed 5 years from installation.
In normal conditions of use, in order to ensure the correct operation of the installation, it is recommended that this regulator is changed within 10 years of the date of manufacture.

7- GENERAL SAFETY INSTRUCTION
All persons concerned with BUTANE, PROPANE and LPG should familiarise themselves with the following characteristics and hazards: BUTANE, PROPANE and LPG are stored normally as a liquid under pressure. Leakage, especially of liquid, may release a large volume of flammable gas.
A very small proportion (1.9% - 11%) of these gases in air can give rise to an explosive mixture.
BUTANE, PROPANE and LPG are heavier than air and therefore any leakage will accumulate at the lowest level of surroundings.
As a liquid, BUTANE, PROPANE and LPG are half the density of water and will therefore lie on top of water.
BUTANE, PROPANE and LPG liquid by its rapid vaporization and consequent lowering of the temperature can cause severe frost burns when in contact with the skin.

8- GAS LEAKS All gas leaks, however small, are dangerous and must be eliminated. Escaping gas can normally be traced by smell or sound but liquid detergent should be brushed over the area to confirm the location of the leak. Never look for a leak with a naked flame. If a leak is detected on bulk tank installations, turn off the service valve and call your dealer.

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NOTE
PRINT: Black&White

cavagna group / RECA	DENOMINATION: **INSTRUCTION FOR OPSO TYPE 404 EN16129 (EN)**						MODEL: 404	
	TOOL NO: N.A.	SHARED: N.A.	LOGO NR: N.A.	INSTRUCTION TYPE: N.A.	PACKAGING TYPE: N.A.	LABEL TYPE: N.A.	SCALE: 1:1	MATERIAL: Normal Paper 80g
FORMAT: 273X210	FOLDING TYPE: PARALLEL FOLD	LANGUAGE: ENGLISH	TREATMENT: N.A.	CATEGORY: STANDARD	MODIFY FILE: DM05883	PRODUCT NO: **34-1-110-1336**	REV: **2**	
PROD. EVOLUTION: **DEFINITIVE**	PROJECT NO: N.A.	RELEASE LEVEL: **APPROVED**	DRAWN BY: RUSSO R.	VERIFIED BY: TOMASELLI L.	APPROVED BY: SCHLICK B.	DATE: 13/07/17		