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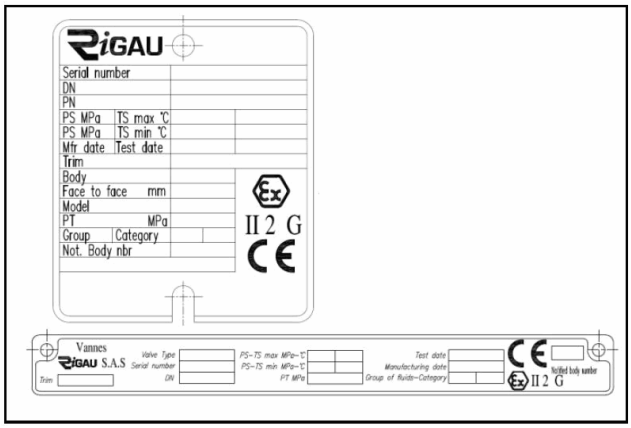
STARTING UP INSTRUCTIONS
WARNING – THIS DOCUMENT MUST BE GIVEN TO THE FINAL USER

This equipment is CE Ex in conformity with either the European Directive 2014/68/EU (pressure equipment) or the European Directive 2014/34/EU (explosive atmospheres) or the both ones. Declarations of conformity and CE marking attest to the related applicable directives.

This conformity is valid only for manufactured equipment, assembled and tested by Vannes Rigau, and equipped with original components in conformity with the drawings and manufacturing specifications approved by Vannes Rigau.

Limitations and requirements related to the groups, categories, fluids and zones of the risk category must be in conformity with the various related articles indicated by those Directives.

Sample of PED identification plate
(Non-exhaustive)



Sample of ATEX marking
(Non-contractual model)

CE Ex **II 2 G | Ex h IIC TX Gb**

THIS EQUIPMENT IS A PIPELINE ACCESSORY IN THE MEANING OF DIRECTIVE 2014/68/EU AND SHALL ONLY BE USED IN THE FOLLOWING CONDITIONS

1- Installation, start-up, adjustment, and use of this equipment shall be in conformance with the instructions in the relevant manual. The fluid group and category are stated on the plate. If not, the fluid group by default is group 1 case of gas.

2- Combination of pressure and temperature values permitted for the materials used in the equipment shall be in conformance with values stated on the identification plate affixed to the equipement, or with pressure/temperature relation sheet supplied in the relevant documentation. The information used to define these values are consultable at Vannes RIGAU. The use of thermal gradients higher than 50°C/hour must not be applied to the equipment, unless it has been specifically designed and purchased for such service.

3- This equipment must not be used as an obturator or blind accessory with one end not connected. It shall be fully integrated in a piping or in a system with each of its extremities hermetically sealed, unless the equipment has been expressely bought for this usage.

4- Screwed plugs and other pressure retaining devices installed on the pressure. Retaining parts of the equipment must not be removed or handled if the residual interior pressure exceeds 0.5 bar.

5- This equipment includes components exclusively and specifically adapted to the nature of the fluid and to the conditions of use described in the purchase order of the end user or its representative. Any modification by the user of the type, the form, or the quality of the equipment parts or any modification or of the conditions of use, is prohibited. Contact Vannes RIGAU.

6- Equipment design does not take into account fatigue stress. If the client considers that the use of the equipment implies a fatigue calculation, a special study will have to be realized. Contact Vannes RIGAU.

7- The equipment has been designed to support loads relevant to specified service conditions and also for other reasonably foreseeable conditions of use. Particularly, reactions and loads caused by supports, anchoring, and piping interacting simultaneously with the internal pressure must be taken into account by the user or the installer, and limited in conformances with requirements of current codes. For example, by an evaluation of the equivalent pressure and a comparison with the pressure limit of the class of equipment in question.

8- If this option is stated in the purchase order, this equipment is designed to satisfy accidental fire conditions (fire safe tested). It is certified in accordance with following particular specifications:

BS 6755 Part 2	☐	**TOTAL SGM S2040 TUY SC01**	☐	**API 607**	☐	**API 6F A**	☐	**API 6F D**	☐	**ISO 10497**	☐

9- In case of pressure tests, the operator shall check: the compatibility of test fluid with all the equipment materials, the inhibition of corrosion effects that may occur subsequent to this test, and that the equipment is completely drained of the test fluid after test completion.

10- In case of risk of equipment clogging or blocking, the user must take all necessary precautions to avoid operating the equipment until he is sure that there is no longer a risk that the equipment is blocked or clogged. In the case of a permanent deformation or breakage of the stem, the use of the equipment must be stopped and the equipment removed from service.

11- If it is necessary to fit or remove the vent or drain plug (for equipment equipped with vent or drain plug only), the control of plug tightening (plug layout inside the body) and of the tightness (pressure test) must be supervised on operator responsibility.

12- In case of external heating systems installed by user or other part (heating jackets, electric heating tape), the maximum temperature supported by the equipment must be limited to the values stated on the identification plate or to the values stated on the pressure/temperature relation sheet supplied in the relevant documentation. The density of the thermal flow must not exceed 10 watts per cm2 of the surface of contact.

13- The equipment is designed for standard climatic conditions or those stated in the purchase order requisition. Particularly, impact of overload involved by earthquakes, sea waves, underwater submersion, or others environments, application of an external pressure exceeding 1 bar as well as risk involved by thunderbolt must be evaluated and communicated to Vannes Rigau before placement of purchase order.

14- The valves with several seats are designed with an internal volume which can be isolated from the piping when the obturator is in the closed position. In case of removal of the valve from installation, the operators must take all precautions necessary to empty all residual fluids such as contaminants, inflammable fluids, or toxic fluids left in the valve, by operating a complete stroke of the valve in safe conditions.

15- The sealant injection systems to the seats and/or to stems of the valves must be filled previously before putting the valve into service with a sealant adapted to the conditions of use, including winter temperatures.

IF THE CE MARKING OR THE CE DECLARATION OF CONFORMITY ATTESTS SO, THIS EQUIPEMENT IS ALSO DESIGNED TO SUPPORT THE EVALUATED RISKS FOR GROUP II, CATEGORY 2, ZONE G (GAS) OF THE 2014/34/EU DIRECTIVE AND SHOULD BE USED ONLY UNDER THE FOLLOWING CONDITIONS.

1- The temperature of external exposed hot surfaces must be restricted to the compatible values with an external explosive atmosphere indicated on the identification plate of the equipment or those fixed by the class T of ATEX marking.

2- The temperature of the fluid must be restricted to values that cannot create an explosive atmosphere when mixed with air. If it is impossible, it is imperative to prevent this risk by modifying the device to have a sufficient dilution to avoid the creation of an explosive atmosphere which could ignite itself at the considered temperature.

3- The loss of the shell's containment is conditioned to the integrity of the sealing systems. It is necessary to ensure these systems remain efficient carrying regular checks of fugitive emissions.

4- The dynamic impermeability system guarantees a « safety working » for a number of cycles (one opening and one closing) lower or equal to 500. If the number of cycles exceeds 500 then limited releases of fluid may occur during the rotation of the equipment stem. Proceed to a checking on the equipment and carry out an operation of maintenance if necessary.

5- Except particular specifications, the speed between rubbing surfaces should not exceed 1 meter per second in any condition of working. In case of modification of the operating speed, imperatively consult Vannes Rigau.

6- To prevent the creation of sparks which are ignition sources, watch over the jamming risks by checking regularly the evolution of the impacted parameters (torque, path). Furthermore, avoid any collision in the presence of explosive atmosphere.

7- The equipment ensures a total electric continuity between the internal components and the pressurized shell. The user has to avoid any contact between the equipment and an unexpected electrical source. The checking of the electric continuity between the equipment and the rest of the installation is under responsibility of the user.

8- If specific solvents, which have not been indicated in the inquiry, encounter sensitive components (elastomer seals, plastic materials), a swelling may occur involving local high temperature on surfaces to be generated. Consult Vannes Rigau.

9- In the event of additional ignition risks (waves, ultrasounds, compressions/decompressions…) which have not been indicated in the inquiry, these risks have to be assessed by the user and their elimination or reduction done.

10- Some troubles in working may occur after having demounted and remounted operating systems such as actuators or gearboxes, when the driving components (sleeves, trainers) are badly or not aligned and/or if the panned electrical continuities are impeded. Strictly apply the recommendations indicated in the handbooks or consult Vannes Rigau.

11- The following effects, assumed as rare events and not related to own ignition source, are not taken in account: lightening, electromagnetic source, optical source, ionizing radiation, ultrasound, adiabatic compression, exothermic reaction. When necessary, consult Vannes Rigau.