Installation and maintenance guide

PRESSURIZED TANKS **PT**

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1 DECLARATION OF CONFORMITY

CE

Brand: DAV Tech Srl
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DECLARE THAT

TANKS: **PT2.0 - PT2.0LLS - PT 2.0LLS-AN - PT5.0 - PT5.0LLS - PT 10.0 PT 10.0LLS - PT 16.0 - PT 16.0LLS**
MEET THE REQUIREMENTS FOR CE MARKING According to the PED

Any modification or tampering of the same DAV Tech download from any liability.

Montecchio Maggiore March 8, 2010

The legal representative
Giancarlo Grazioli

2 TECHNICAL DATA

Name	**PT 2.0 - PT 5.0 - PT 10.0 - PT 16.0**
Purpose of use material	Pressurized Tank
Materials used for the tank	Stainless Steel and Aluminum

Operating Data		
Design pressure (mod. PT2.0 - PT2.0LLS - PT 2.0LLS-AN - PT5.0 - PT5.0LLS - PT 10.0 - PT 10.0LLS)	(bar)	5.0
Permissible operating pressure: (1) (mod. PT2.0 - PT2.0LLS - PT 2.0LLS-AN - PT5.0 - PT5.0LLS - PT 10.0 - PT 10.0LLS)	(bar)	5.0
Design pressure (mod. PT 16.0 - PT 16.0LLS)	(bar)	3.0
Permissible operating pressure: (1) (mod. PT 16.0 - PT 16.0LLS)	(bar)	3.0
Pressure control:	(bar)	10
Set pressure of the safety valve	(bar)	5.0
Max inlet pressure (pressure regulator)	(bar)	10.0
Operating Temperature (min.)	(C°)	+10
Operating Temperature (max.)	(C°)	+50
Volume	(Ltr)	2-5-10-16 liters

(1) The tank is designed to < = 1000 stress cycles between the depressurized state and the operating pressure and / or fluctuations in pressure of < 10% of the permissible operating pressure.

(2) The useful volume refers to the use stationary plant. No account has been taken of the interior fittings that reduce the volume and / or the use of internal tanks (eg. barrels or buckets). The useful volume may have to be reduced depending on the usage conditions, in order to avoid damage of accessories and components due of infiltration.

3 GENERAL RULES

3.1 Special controls

Due to changes in the pressure tank can be put into operation only after the supplier has checking the condition and compliance with safety regulations if the operation has been changed as a result of modification. Upon reaching the predetermined number of stress cycles, contact your supplier to arrange the the next procedure. In the event that the operating parameters allowed (permissible operating pressure, temperature maximum permissible operating) have been overtake by excess or defect in the face of the type of employment or external factors, the pressure tank can be put into operation only after the manufacturer has verified the perfect state of tank. This also applies in the case in which the tank is exposed to a fire.

4 FUNCTIONING

4.1 General rules

The standard model of the pressure tank is constituted by a tank with a removable lid, on this is mounted to a group of input air comprising: a pressure regulator with pressure gauge and a valve sphere; always on the lid are present the output of the product and a safety valve. Under the action of static pressure exerted by a cushion of air- liquid or pasty products are pushed from the reservoir towards a dispenser such as a valve DAV Tech. The performance of a regulator is improved when combined with a tank under pressure, in fact in this way there is a constant and optimal dispensing of the product. The pressure tanks are suitable to meet a variety of applications such as mixing and dosing industry mechanical and plant engineering, etc. The pressure adjustment is via a pressure regulator mounted on the lid of the tank. Once you set the operating pressure of the tank ensures a constant flow of product. At the request of the tanks can also be equipped with agitators, these provide consistency homogeneous material and avoid that this is at the bottom of the tank. Depending on the size of the tank you can choose between agitators manual, pneumatic and electrical systems. The tanks can be equipped with various accessories such as the indicator of a minimum level electrical heating bands etc.

5 INSTRUCTIONS

5.1 Conditions of use

Before you proceed with filling the tank with the product to be used to make sure that it is not a substance dangerous. See the information about the product and possibly the safety data sheet provided by the manufacturer, in the absence of such information require these data to the manufacturer. Comply with the rules relating to the treatment of product and safety information provided by the product manufacturer. Aggressive and corrosive materials can cause damage to health. The operator must verify the compatibility between the product and the materials of the tank and gaskets. In this regard in particular take into account aspects such as corrosion and abrasion. The tank can be placed in function only in the presence of the necessary safety devices (safety valves, pressure gauges, etc.) which must be in order and ready to be used. With the intervention of the safety valve may be hazardous substances released into the environment . For this reason, certain conditions of use may necessitate the use of safety devices other than the standard. The power supply system and reduction in air pressure of the client must ensure a flow rate lower than the discharge flow rate of the valve safety. In the case in which the operating parameters are exceeded allowed the manufacturer via devices safety must ensure the impossibility of too high a pressure or vacuum forming is not tolerated. Do not exceed the usable volume and weight filler shown on the rating plate of the tank. The ambient temperature must not exceed the absolutely permissible operating temperature. During operation, protect from dirt and damage especially the safety devices. Personal injury or property damage may be the result of a poorly executed installation, an employment not appropriate to use non-compliant, non-compliance of safety, removal of unauthorized components of security, maintenance is not performed or structural changes of the tank.

6 CORRECT USE

The pressure vessels are to be used exclusively with liquid or pasty through the pressure of a cushion of compressed air. The type of product that can be used must meet the criteria described on nameplate and the parameters described in the chapter Technical data. The tank must be used only with the operating parameters specified on the rating plate and in the chapter Technical data. The manufacturer assumes responsibility solely of the plant that is part of the supply, ie the pressure tank and accessories. The operator in accordance with the rules in force assumes responsibility for the use the tank correctly and precisely. The manufacturer is not responsible for any personal injury or damage materials due to incorrect use and / or installation or maintenance is not performed properly. Use pursuant requires careful reading, understanding and respect of all the data and information contained in this manual.

7 UNCORRECT USE

> Do not feed the plant with poisonous gases, fuels or aggressive. It' absolutely forbidden food the tank with pure oxygen , because the fittings are coated with a thin layer of fat: DANGER OF EXPLOSION. Do not use the system with nitrogen in the absence of suitable safety devices .

> The tank should not be used as a container for transport of material.

> Do not leave it for too long a period of time inside the tank.

> Do not use the tank with incompatible products with the material of the tank and gaskets, which can cause corrosion or abrasion.

> Do not remove or obscure the name plate of the tank.

> Do not alter in any way the parts of the construction of the tank and accessories.

> Accessories fitted to the tank with safety functions must not be modified or rendered inoperative. Do not remove or damage the safety valve. Protect the safety devices from impurities and by dirty.

8 USING THE TANK IN AREAS AT RISK OF EXPLOSION

8.1 Areas at risk of explosion

The operator must decide, comply with regulations, which are the areas at risk of explosion in the event of doubt on the definition of such areas should contact a competent authority .

8.2 Suitability of the system in areas at risk of explosion

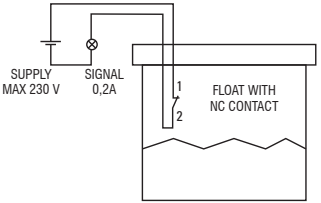
Suitability of the system in areas at risk of explosion. The pressure tank covered by this document is not a device within the meaning of Directive 94 /9 / EC (ATEX) 3. The reservoir, even if used according to the standards, depending on the product used may submit atmosphere internal explosion risk, then glia equipment in your tank should be considered as devices independent within the meaning of Directive above. In the case where the tank is used in an area at risk of explosion and / or flammable or explosive products, responsibility of the user to ensure that all technical data and any certifications correspond to ATEX standards.

9 INSTALLING THE TANK

a) Place or secure the tank in such a way as to prevent it from moving thus compromising its functionality. The place installation must be such as to allow adequate access for control operations, maintenance and control. The installation must be carried out in such a way that , in case of loss or abnormal operation , operators or third parties are to be in danger. Provide the necessary protection areas.
b) An area of at least 5 meters around the tank are absolutely prohibited: fire, smoke and direct sunlight. The processing of easily flammable materials increases the risk of fire or explosion within the work area.
c) The customer must provide the mesa's ground in order to protect against electrostatic charges.
d) The customer must provide the connections for mixers and units of measurement and adjustment (if any). All work must be carried out by technicians or qualified and authorized personnel.
e) Prior to commissioning, ensure that the air supply line is equipped with a suitable device for pressure reduction and that the necessary safety devices are properly installed and ready to use. Staff qualified personnel must provide for the proper assembly of the fittings of the tank.
f) The pipes and fittings and connections provided by the customer must comply with the regulations in force and bearing so secure the mechanical, chemical and thermal properties provided by the mode of operation.
g) Prior to the start-up with a suitable cleaning agent to clean the part of the tank that will be in contact with the product.

9.1 Model with low lovel sensor (LLS)

The float inside the tank by means of a report normally closed contact that the product is within below the minimum level. Applies a voltage to the contact up to 230V and a current of 0.2 A. Here's an example application of contact, the light will turn on with the level under to a minimum.



10 HOW TO MAKE WORK THE TANK

Recommendations for safety

For refilling , cleaning, maintenance and repair depressurize the tank completely .
The use of solvents or detergents based on halogenated hydrocarbons and methylene chloride can trigger reactions chemical in contact with the components of aluminum or galvanized. This can result in their oxidation, in cases extremes of the reaction can be explosive. Do not open the tank to full pressure relief.
DANGER INJURY. In systems equipped with agitators, before the opening of the agitator off and prevent a accidentally switched on. If there is a risk that hazardous substances are released into the air, wear overalls and respiratory protective equipment as required by law.

Filling

Before opening the tank to make sure it was depressurized and that all piping pressures are closed.

Never fill the tank beyond its useful volume. The easiest way is to fill the tank by removing the top cover.

1 Remove the pressure tank
2 Open the ball valve and drain all the air
3 Remove the 4 wing nuts
4 Remove the cover
5 Fill the tank
6 Close the wing nuts and tighten them crosswise
7 Close the ball valve
8 Reconnect the pressure gradually to the tank

The product to be used can also be supplied in drums or in special disposable dried, or it can be poured directly into the tank.

10.2 Commissioning

1 . Make sure the tank fittings are tight (especially the compressed air connection and material). Latter must be inserted into the fitting ogive to intercept the bottom of the tank (or jar inserted in the reservoir). Lift few mm and tighten the fitting so as to deform the spinner.

2 . Ensure that all the knobs that secure the cover to the tank are tight.

3 . Make sure that the safety devices are in optimum condition.

4 . The vent valve, the ball valve air inlet and the valve outlet ball material are closed.

5 . Turn the knob to the left of the pressure regulator to stop.

6 . Make sure that the regulator (eg spray gun) connected to the tank is ready for use.

7 . Food pneumatically pressure regulator

8 . Forcing the valve opening / dosing and so that the air present in the circuit can be evacuated.

9 . Slowly turn the knob to the right of the pressure regulator until the gauge does not mark the desired pressure when exceeding the maximum pressure set by this safety valve is opens, in this case, reduce the pressure by turning the knob to the left of the pressure regulator.

Note: To avoid difficulty setting pressure, adjust the pressure to the desired starting a lower value.

10.3 Decommissioning

Relieve the pressure remaining in the tank only through the vent valve. Never discharge pressure through the safety valve and enticing knobs or filler cap. Perform cleaning only after the tank is depressurized and disconnected lines.

1. Close the ball valve air inlet and outlet ball valve material (if any).
2. Open the bleed valve by turning it to the left.
3. Do not under any circumstances open the reservoir to the full discharge of the air inside.

11 CLEANING SYSTEM

Perform cleaning only after the tank is depressurized and disconnected lines.

> Follow the recommendations for the security provided by the manufacturer of the detergent used. Detergents or can cause corrosive damage to health.
> During all cleaning work overalls and use of respiratory protective devices as prescribed by the standards.
> When cleaning, be careful that any accumulation of material not catch fire in contact with utensils employees or heat sources.
> The use of highly flammable materials increases the risk of fire or explosion within the work area.
> For cleaning do not use hard or sharp objects that could scratch the surface.
> Use only detergents that contact with members of the tank does not cause chemical reactions or thermal.
> Never immerse the tank completely in a bath of solvent or detergent. Otherwise you will no longer guarantee the perfect functioning of the components of the reservoir, in particular the safety components.
> To clean the components of the tank is not allowed the use of products that can cause corrosion.

11.1 Cleaning for use in the food and pharmaceutical industries

In the case where the tank is used in the food or pharmaceutical industry, before proceeding to its filling, during use and during cleaning and care should be taken to ensure maximum hygiene.
Comply with the provisions of law regarding the treatment of food and pharmaceutical products. A breakthrough cleaning incorrectly or too little can result in the risk of infection, sickness or contagion through the product food or pharmaceutical worked . Use only detergents suitable and which do not pose a risk to health, suitable for use in food or pharmaceutical industries. While cleaning be careful to remove any residual detergent from the reservoir. Use only tanks are not subject to corrosion.

12 MAINTENANCE AND INSPECTION

Maintenance Operations

a) Check regularly at predetermined intervals and components with safety function, verifying the accuracy during maintenance. The frequency of controls and the degree of accuracy must be established by the operator on basis of their own experiences and depending on the type of application , however, the controls must be performed at least every 3 months. For any questions in assessing the timing of contact maintenance personnel. To check the proper operation of the safety valve : the pressure tank (at least 80-90% of maximum pressure) rotate a few turns to the left, depending on the model , or the ring or the bleed screw until the the blow valve. Return the nut or screw to stop turning it to the right. Check that the seal or ring safety valve is not damaged. Unscrew the pressure gauge and control it using a reference tool. Replaced immediately of any safety components damaged or not working with original components.
b) Submit the pressure regulator at regular intervals to control the operation.
c) Regularly check the operation of the ball valve inlet and outlet.
d) Check that the walls of the tank for signs of corrosion and / or abrasion. In case of wear of the walls put the tank out of service.

All components with safety function and the components subject to pressure have to be replaced
with original spare parts.

Inspection (recurring checks)

a) Comply with the time schedule for these checks contact time for staff monitoring authority.
b) Once you reach the number of stress cycles indicated in the technical data , notify the qualified body.

SCAN THIS CODE TO SEE TUTORIAL ONLINE

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