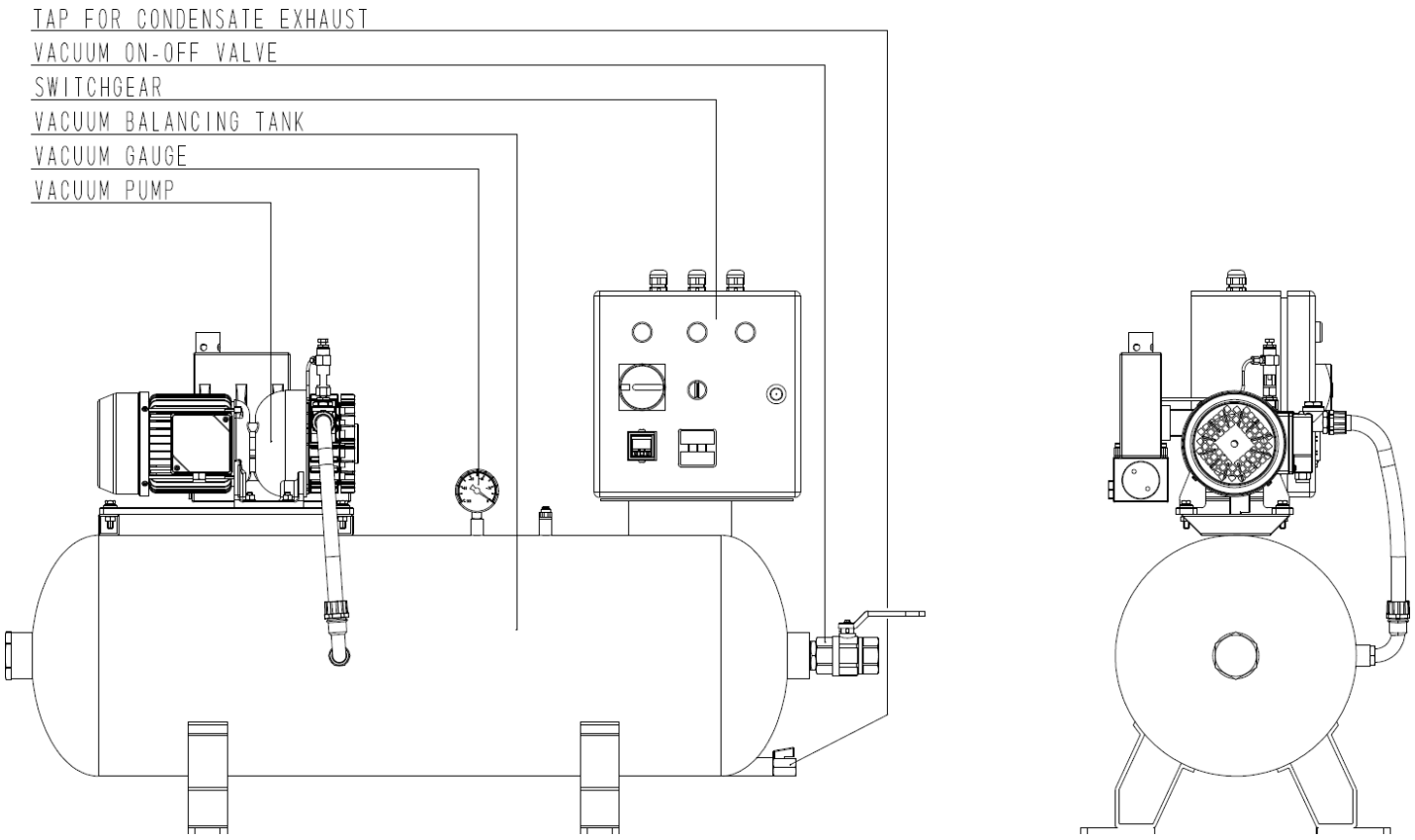
DEPRESSOR

OPERATING INSTRUCTIONS

DEPRESSOR - GENERAL INFORMATION

The assembly of a vacuum pump and a vacuum balancing tank is generally called “depressor”. Therefore, a depressor is made up by:

- a vacuum pump;
- a vacuum balancing tank equipped with accessories;
- a switchgear.



The operating instructions supplied are those concerning the depressor components mentioned in the delivery note.

HORIZONTAL VACUUM BALANCING TANK

ART. DO 100 02 V

CAPACITY 100 LITRES

OPERATING INSTRUCTIONS

CONTENTS

It is essential to read this handbook for a correct use of the vacuum balancing tank, anyway, for preventing dangerous situations; the non-compliance with the provisions therein contained may cause failures or operating problems, which involve the warranty cancellation.

1. OPERATING INSTRUCTIONS

1.1 DESCRIPTION AND GENERAL INFORMATION

The horizontal vacuum balancing tank art. DO 100 02 V is manufactured in welded steel sheet, having a perfect vacuum seal.
It is currently equipped with:
- a vacuum gauge art. 09 05 10 for visualizing the vacuum degree;
- a gas 1" check valve art. 10 03 11, to be applied to the suction inlet of the vacuum pump;
- a tap for the drainage of the condensate and of the sucked liquids;
- a ball on-off hand valve art. 13 05 10 for intercepting vacuum;
- a flexible pipe ½" gas art. TPR ½, for the connection of the vacuum pump to the tank;
- necessary screws and fittings.

REMARK: The components of the vacuum balancing tank are shown and described in the enclosed drawing nr. 6789i.
NOTE: To prevent foreign bodies from getting into the tank, we recommend installing a suitable filter on the vacuum on-off valve.

1.2 FIELD OF APPLICATION

The vacuum balancing tank art. DO 100 02 V has been planned in order to allow the suction of inert gases with the aid of vacuum pumps, within values between the atmospheric pressure and the final vacuum degree of the pump.
WARNING: The tank DO 100 02 V is not suitable for sucking war, inflammable and explosive gases, as well as for accumulating compressed air or gases.

1.3 PRELIMINARY INFORMATION

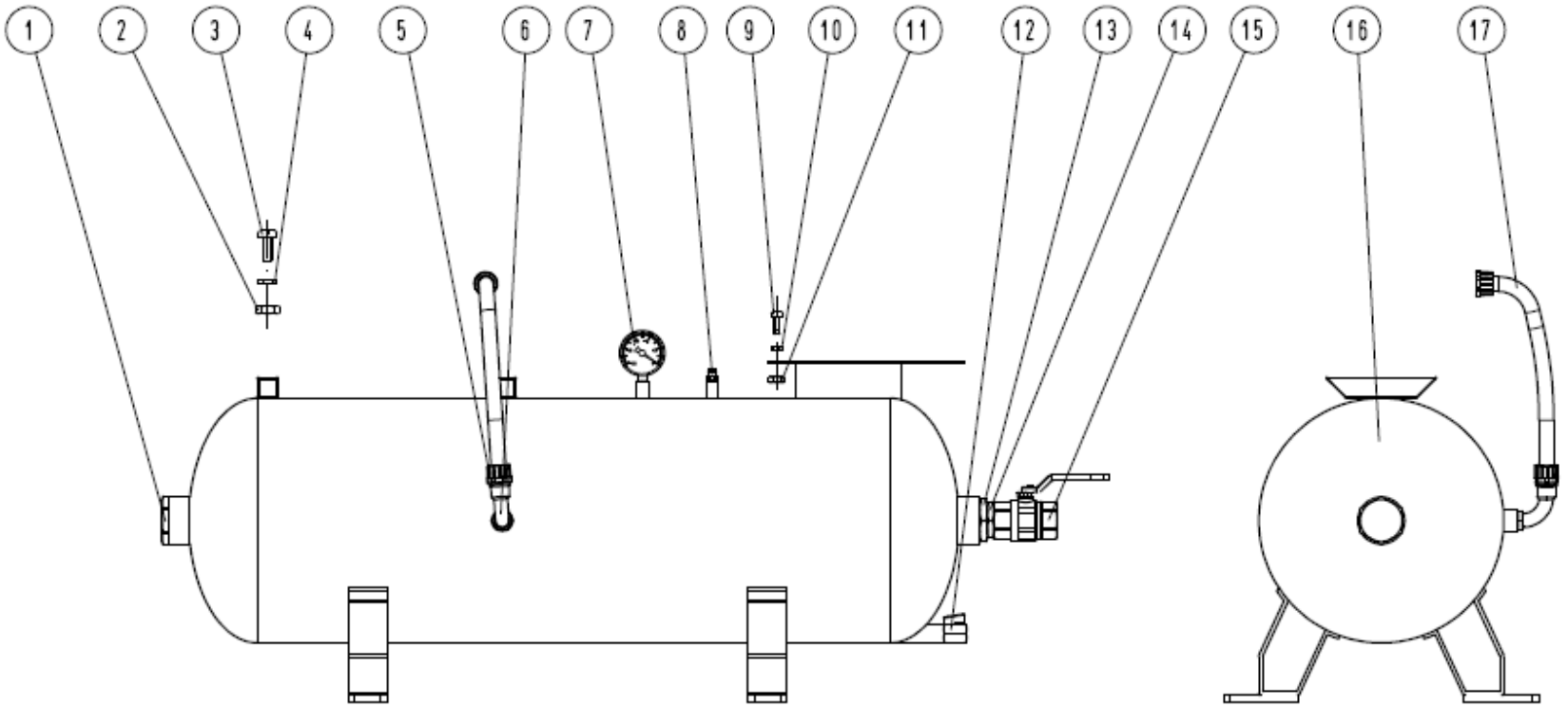
The horizontal vacuum balancing tank DO 100 02 V is only equipped with the accessories listed at point 1.1 and shown in drawing nr. 6789i, all what is requested in addition is to be considered as an extra.

1.4 HANDLING AND STORAGE

For handling and transporting the tank, take it by the supporting feet or on the cylindrical side; in any case, do not pick up the tank catching it by the components. Avoid knocks and, if possible, do not overturn it.
In case of storage, we recommend a dry and well aerated room.

1.5 TECHNICAL DATA

Minimum operating pressure	bar	0
Maximum operating pressure	bar	1
Volumetric capacity	lt	100
Maximum capacity of the vacuum pump	cum/h	20
Allowed working temperature	°C	- 20 ÷ + 80
Weight (not including pump and electric equipment)	kg	33,7



POS.	DENOMINAZIONE	N°PEZ.	RIF. DIS.	CODICE
1	PLUG G2'	1	COMMERCE	
2	ANTIVIBRATION WASHER	4	COMMERCE	
3	SCREW M6x25	4	COMMERCE	
4	NUT M6x25	4	COMMERCE	
5	FITTING RTPR G1/2'	1		RTPR 1/2'
6	ELBOW G1/2'	1	COMMERCE	
7	VACUUM GAUGE	1		09 05 10
8	FITTING 1 / 8 '	1		PM010611E
9	SCREW M10x35	4	COMMERCE	
10	STEEL WASHER	4	COMMERCE	
11	NUT M10	4	COMMERCE	
12	CONDENSATE DRAINAGE	1		13 03 11

POS.	DENOMINAZIONE	N°PEZ.	RIF. DIS.	CODICE
13	REDUCTION G2 - G1'	1		00RIDM08M05
14	NIPPLE G1'	1	COMMERCE	
15	VACUUM INTERCEPTION VALVE	1		13 05 10
16	VACUUM BALACING TANK LT.100	1		00 DO 06
17	PIPE TPR G1/2' L500 mm.	1		TPR 1/2'

TOLLERANZE GENERALI UNI 7097/97	DIMENSIONI (mm) PER GRUPPI	0 ÷ 6 ±0,05	>6 ÷ 30 ±0,1	>30 ÷ 120 ±0,15	>120 ÷ 315 ±0,2	DISEGNO N.: 67891
LAVORAZIONE:	SPIGOLI NON QUOTATI: X			RACCORDI NON QUOTATI: R.		SCALA: 1:5
MATERIALE:		TRATTAMENTO:				DATA: 23/05/17
		CODICE: DO 100 02 V				DISEGNATO: BARACHETTI

MOD.	DATA	DISEGNATO	APPROVATO

VUOTOTECNICA s.r.l.
23883 BEVERATE DI BRIVIO (LC) - Italia
Tel. (039) 5320561 - 5320147

DESCRIZIONE:
HORIZONTAL VACUUM BALANCING TANK
FROM LT.100 FOR PUMP RVP21

1.6 ACCESSORIES

On request, the following accessories can be supplied:
- Oil bath suction filter art. FO 30;
- Suction filter with stainless steel net cartridge 44µ art. FB 30;
- Suction filter with treated paper cartridge 5÷7µ art. FC 30;
- Vacuum reducer complete with a vacuum gauge art. 11 05 10;

2.INSTALLATION

2.1 MECHANICAL FIXING

The tank can be fixed to the floor with four screws, by using the holes set for the purpose made in the supporting feet; in case it is fixed to a metal structure, we recommend using vibration-damping supports.
REMARK: The fixing of the tank to the floor is optional; the depressor can work correctly even if it is only leaned. In order to allow a suitable cooling of the vacuum pump installed on board, and to allow access to instrumentation and a suitable maintenance, do not install the depressor in too narrow rooms, difficult to reach.

2.2 CONNECTION TO THE SYSTEM

2.2.1 SUCTION

Connect to the system the vacuum on-off valve or the filter if installed, by means of suitable rigid or flexible pipelines. Assure the tightness of the connections by means of a teflon tape or commercial dope.
REMARK: Make sure of the perfect tightness of the suction line in order to avoid leaks, with a consequent reduction of the vacuum degree.
WARNING: The pressure coming into the tank should never be higher than the atmospheric pressure. The diameter of the suction pipeline should be equal or higher than the diameter of the vacuum on-off valve or the filter, if installed. The tubes and the connections used should be suitable to withstand the maximum vacuum degree of the installed pump.
Also the opposite connection of the tank, normally closed by a 1" gas threaded plug (1), can be connected to the system, provided that a two-way vacuum on-off valve is installed, and also a filter, if necessary.

2.2.2 CONDENSATE EXHAUST

To exhaust the condensate or any sucked liquids, open the relevant tap which is at the base of the tank, only after having re-established the atmospheric pressure inside. The frequency of the operation will be subject to the contents of vapours or condensate of the inert gas or of the sucked air.
REMARK: On vacuum installations characterized by a considerable presence of liquids or non-corrosive vapours, it is possible to apply an automatic exhaust system to the tank; for further information contact our technical department.

3.MAINTENANCE

The only maintenance to be carried out concerning the vacuum balancing tank is the drainage of the possible condensate accumulated and of the liquids sucked inside, by means of the relevant tap 13 (drawing nr. 6789i,) and the periodical cleaning of the suction filter, if installed on the vacuum on-off valve 15.
Regularly check that the vacuum switch and the vacuum gauge are properly working.
No other maintenance is required by the vacuum balancing tank or by its components.

4. WARRANTY LIMITATIONS

Vuototecnica guarantee that the vacuum balancing tank basically works according to the handbook and does not show any material and manufacturing faults in its normal use and service, for a period of one year from delivery date. In case of their responsibility, it will be at Vuototecnica's discretion to repair or replace the vacuum balancing tank. This warranty is no more valid in case the fault is due to incidents, incorrect use or wrong application.

4.1 EXCLUSION OF RESPONSIBILITY FOR INDIRECT DAMAGES

Under no circumstances will Vuototecnica be responsible for damages caused by the use of the Vuototecnica product (loss or failed profit, business interruption or other economic losses), even if Vuototecnica have been informed of the possibility of such damages. Replacement of defective parts can be carried out exclusively at the factory of origin. Goods should be shipped carriage paid, provisions other than the listed ones will be valid only if accepted in writing. Warranty does not cover all materials deteriorated by wear or because of the incorrect use of the vacuum balancing tank made by the user. Replaced materials will remain property of Vuototecnica.

VACUUM BALANCING TANK ART. DO 100 02 V

DELIVERY DATE:

1/12/2020