

Pressure expansion vessel with fixed air cushion

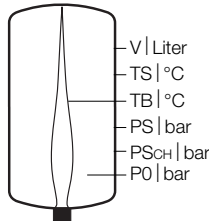
Safety, Assembly and Storage Information



These instructions are intended for qualified personnel. They must be read before commencing installation work and stored in a safe place by the operator. Personnel must possess the appropriate skills and training.

Store with original packing in dry rooms locations. Only install in secure well ventilated rooms free of frost. Prior to the assembly a visual inspection of the vessels is to be performed. In case of serious damage the vessel must not be used. Welding to the vessel is not allowed and will invalidate the warranty.

Please refer to the label for details regarding the manufacturer, year of construction, production number and the technical specifications. It is important that admissible temperatures and pressures are not exceeded. In case of deviations from the admissible bag temperature TB an intermediate vessel is to be installed in the expansion line.



Prior to maintenance work, inspections and dismantling the vessel must be unpressurized and cooled down.

- Shut off and evacuate on the water side.
- Depressurize at the gas filling valve GV on the gas side. (test, disassembly)



Caution! Expansion vessel and connecting pipework may be hot.

Application | Installation

- Heating, solar and cooling water systems
- Steel, welded
- airproof butyl bag, 5-year-warranty
- Inspection opening for internal inspections above 1000 bar·litres
- Addition of antifreeze agent up to 50%
- CE design-tested acc. to PED/DEP 97/23/EC

Other applications than the ones described require the agreement of Pneumatex.

Assembly (» page 5)

Statico SD are ideally fixed to a wall by its wall bracket with the connection facing downwards. Other

orientations require an alternative fixing. (» page 5) Statico SE, SU, SG are assembled in a standing position. The connection of the expansion line is preferably made in the system return on the suction side of the circulation pump ❶ – observe DNe dimension. It is recommended to install a drain valve and a secured shut-off at the vessel connection (KAH cap shut-off tap).

Setting the pre set pressure P0 (» page 5)

The factory set pre set pressure is to be adjusted according to the system specification: vessel empty on the water side. Remove the valve cover, set the pressure at the gas filling valve GV, tightly close the valve cover. Parallel connected vessels must have the same pre set pressure.

Setting the initial pressure pa (» page 5)

Statico must add a head of water. To this purpose, the system must be filled at least until the initial pressure p_a . An exact pressure calculation – initial pressure p_a (tmin) | final pressure p_e (tmax) also in dependence on the temperature t is possible with our online calculation program *SelectP!*

Enter P0, pa, pe

The set pre set pressure should be entered in the appropriate space on the type plate. Initial pressure p_a and end pressure p_e can be recorded on the EXPLic label.

Operation | Maintenance

Statico are virtually maintenance-free. In general, it is sufficient to control the initial pressure p_a once a year and the pre set pressure P0 every 5 years.



Bag exchange

Please contact the Pneumatex customer service. For SD and SU the entire vessel is exchanged, for SG only the bag.

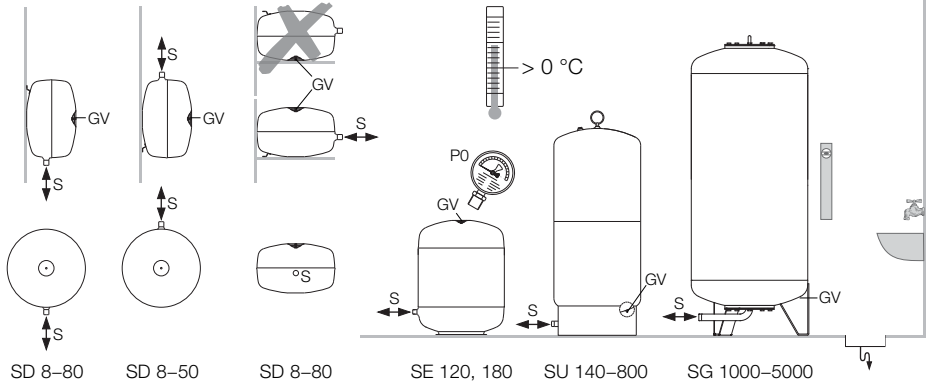


Test

The regulations with respect to the installation and regular inspection of the Statico depend on the country of destination. In general, the operator is responsible for the notification.

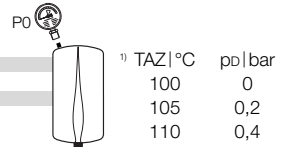
In Switzerland, Statico do not required an approval by the SVTI if the system is protected in such a manner that PSch is not exceeded.

Aufstellung | Installation | Installation | Opstelling



P0 Vordruck | Pression de gonflage | Pre set pressure | Voordruk

- ❶ $P_0 = H_{st}/10 + 0,3 \text{ bar} + p_{b1}$
- ❷ $P_0 = H_{st}/10 + 0,3 \text{ bar} + p_{b1} + \Delta p$

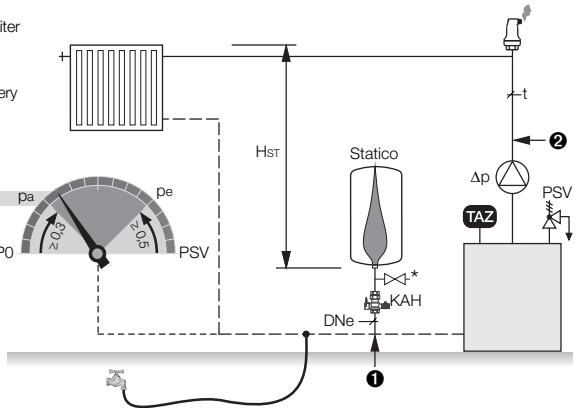


EXPLIC P0 bar

pa Anfangsdruck | Pression de remplissage à froid | Initial pressure | Begindruk

* Zusätzlicher Entleerungshahn bauseits für VN > 80 Liter
 Vanne de vidange additionnelle d'au non inclus dans la livraison pour VN > 80 litres
 Additional drain cock not included in standard delivery for VN > 80 litres
 Additioneel aftapkraan voor VN > 80 liter (niet in de levering inbegrepen).

- $$p_a \geq P_0 + 0,3 \text{ bar}$$
- $$t = t_{min}$$
- $$p_e \leq PSV - 0,5 \text{ bar}$$
- $$t = t_{max}$$



EXPLIC pa bar
 pe bar

DNe Ausdehnungsleitung | Conduite d'expansion | Expansion line | Expansieleidingen

	DNe **	20	25	32	40	50	65	80	100
EN 12828	Q kW	1000	1700	3000	3900	6000	11000	15000	23000
SWKI 93-1	Q kW	300	600	900	1400	3000	6000	9000	-

** Länge bis ca. 30 m | Longueur jusqu'à env. 30 m | Length up to appr. 30 m | Lengte tot ca. 30 m



PED/DEP 97/23/EC - 29.05.1997

A Ausdehnungs-, Zwischen- und Entgasungsgefäße für Heizungs- Kühl- und Trinkwasseranlagen:
Vases d'expansion, vases intermédiaires et vases de dégazage pour installations de chauffage, de réfrigération et d'eau potable:
Expansion vessels, intermediate vessels and degassing vessels for heating, cooling and drinking water installations:
Expansievaten, tussenvaten en ontgassingsvaten voor verwarmings-, zonne- en koelwatersystemen:

Compresso, Transfero, Vento, Aquapresso, Statico, Zwischengefäße | Vases intermédiaires | Intermediate vessels | Tussenvaten

B Baugruppe Gefäß + TecBox:

Module Vase + TecBox:

Assembly Vessel + TecBox:

Bouwgroep Vat + TecBox:

Compresso, Transfero, Vento

Konformitätsbewertungsverfahren Procédure d'évaluation de la conformité Conformity assessment Conformiteitsevaluatie	nach Modul B + D (Kategorie I-IV) selon module B + D (catégorie I-IV) according to module B + D (category I-IV) conform module B + D (categorië I-IV)
Gewählte technische Spezifikation Spécifications techniques utilisées Chosen technical specification Gekozen technische specificatie	PED/DEP 97/23/EC AD 2000-Regelwerk, TRD Code AD-2000, règles techniques pour chaudières à vapeur Code AD-2000, technical rules for steam boilers Code AD-2000, technische regelgeving voor stoomketels
Druckgerät Equipment sous pression Pressure equipment Drukapparaat	A: Artikel Article Article Artikel 3 1.1a B: Artikel Article Article Artikel 3 2.2
Fluidgruppe Fluid Group Fluide du groupe Vloeistofcategorie	2
Benannte Stelle für Entwurf/Baumusterprüfung; Herstellung/Prüfung: Zertifizierung des Qualitätssystems Organisme notifié pour conception/homologation; fabrication/contrôle; certification du Système Qualité Notified body for design/type examination; manufacture/check-out; certification of Quality System Verwittigde instantie voor ontwerp/typekeur; fabricage/ eindcontrole; certificering van kwaliteitsborgingsysteem	Swiss TS und TÜV SÜD Industrie Service GmbH Technical Services AG et Westendstrasse 199 Richtstrasse 15 and D-80686 München CH-8304 Wallisellen en
Kennzeichnung gem. Identification selon la Label according to Identificatie conform	PED/DEP 97/23/EC CE 0036
Zertifikat-Nr. der EG-Baumusterprüfung (Modul B) N° du certificat d'examen «CE de type» (module B) Certificate no. of EC Type Approval (module B) Certificaat nummer van EC typekeur (module B)	IS-CH-SWISSSTS-06-06-36267-015 - TecBox Compresso IS-CH-SWISSSTS-06-06-36267-016 - TecBox Transfero FDB-MAN/00/12/6449123/03 - Ausdehnungsgefäße Vases d'expansion Expansion vessels Expansievaten FDB-MAN/00/07/6449123/01 - Längsnahtgeschweisste Gefäße Vases à souder longitudinale Longitudinal weld vessels Längsnaadgelaste vaten FDB-MAN/00/07/6449123/02 - Tiefgezogene Gefäße Vases emboutis profond Deep-drawn vessels Diepgetrokken vaten
Sicherheitsventil Soupape de sécurité Safety valve Veiligheidsventiel	Transfero Pos. 2.3 Compresso Pos. SV
Zertifikat des Qualitätssicherungssystems (Modul D) Certificat du Système Assurance Qualité (module D) Certificate of Quality Assurance System (module D) Certificaat van kwaliteitsborgingsysteem (module D)	PED/DEP 97/23/EC DGR-0036-QS-105-00

Der unterzeichnete Hersteller bescheinigt hiermit, dass Konstruktion, Herstellung und Prüfung dieses Behälters den Anforderungen der Druckgeräterichtlinie PED/DEP 97/23/EC in Verbindung mit der gewählten technischen Spezifikation entsprechen. Nicht genannte Ausrüstungsteile fallen unter Artikel 3, Absatz 3.

Le constructeur soussigné déclare que la conception, la production et le contrôle de ce vase correspondent aux exigences de la Directive PED/DEP 97/23/EC pour Equipements sous Pression en liaison avec les spécifications techniques utilisées. Les composants non décrits sont soumis à l'Article 3, Paragraphe 3.

The undersigned manufacturer declares herewith that design, production and check-out of this vessel are in conformity with the Pressure Equipment Directive PED/DEP 97/23/EC in connection with the chosen technical specification sheets. Parts of equipment not mentioned are subject to Article 3, Paragraph 3.

De ondertekenend fabrikant verklaart hiermee dat de constructie, fabricage en controle van dit vat conform zijn aan de drukapparaatrichtlijn PED/DEP 97/23/EC in combinatie met de gekozen technische specificatie. Niet genoemde uitrustingsdelen vallen onder Artikel 3 Paragraaf 3.

Hersteller | Constructeur | Manufacturer | Fabrikant:

Pneumatex AG
Mühlerainstrasse 26
CH-4414 Füllinsdorf


Christian Müller
Quality Manager

06

de

fr

en

nl

WSMOIND0010805