



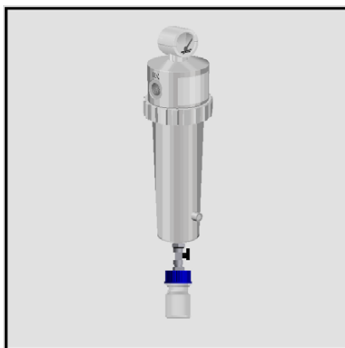
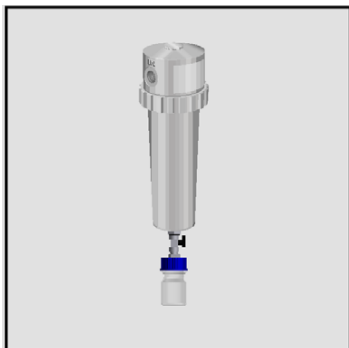
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A



B



C



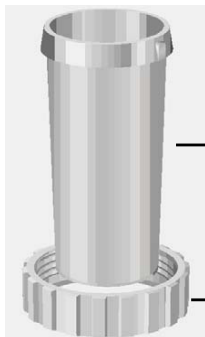
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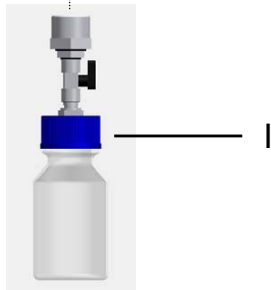
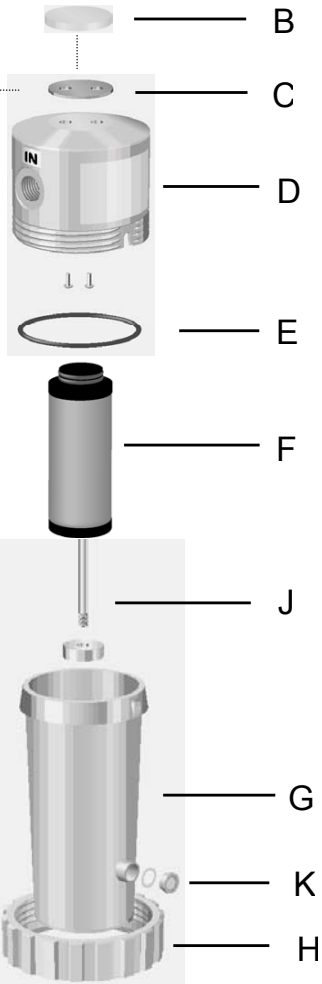
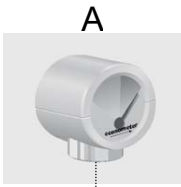


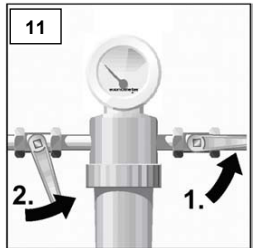
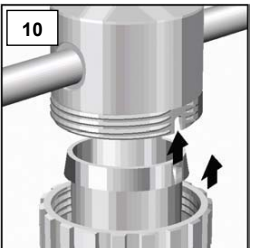
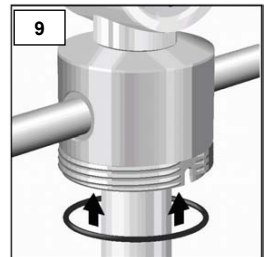
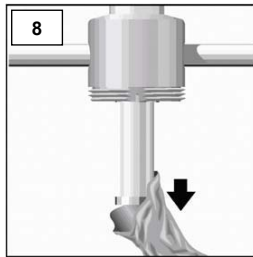
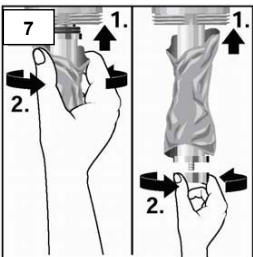
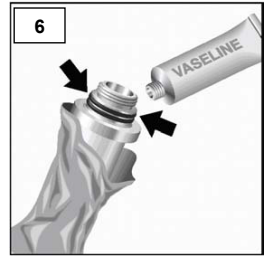
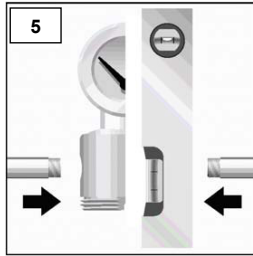
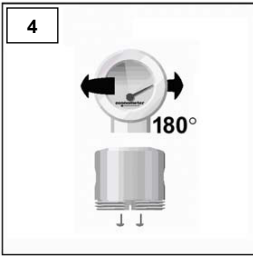
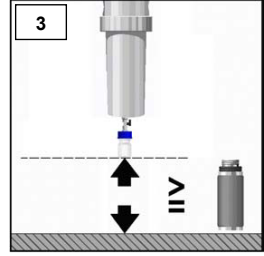
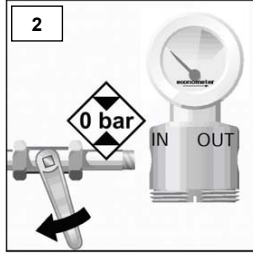
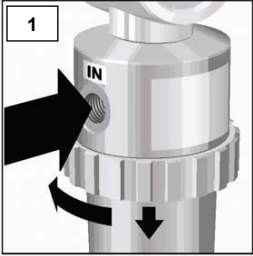
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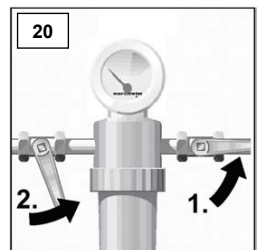
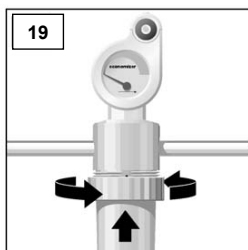
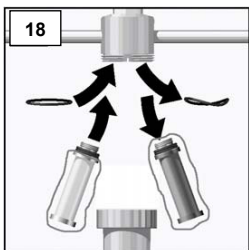
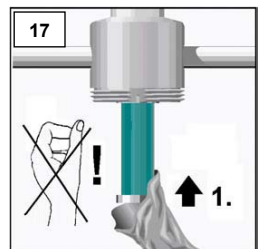
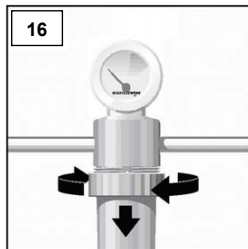
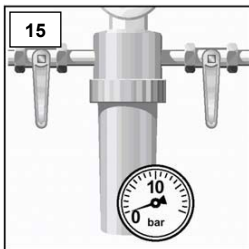
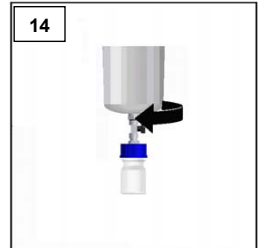
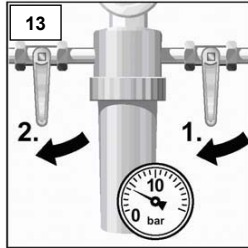
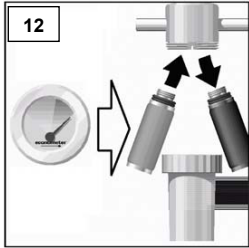
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I







Funktionselemente

- A Econometer ¹⁾
Differenzdruck-Manometer (Option)
- B Verschlussplatte
- C Flachdichtung
- D Gehäuseoberteil
- E Gehäuse O-Ring
- F Filterelement
- G Gehäuseunterteil
- H Überwurfmutter
- I Kugelhahn und Auffangflasche ²⁾
- J Zuganker und Rändelmutter
- K Sichtglas und Dichtung

^{1), 2)} je nach Ausführung, siehe separate Dokumentationen



Achtung!
Biogefährdung

Zu Ihrer Sicherheit



Für den Betrieb des Druckbehälters gelten die einschlägigen Arbeitsschutzvorschriften, sowie die Unfallverhütungsvorschriften und die Betriebsanleitungen. Das Druckgerät ist nach den allgemein anerkannten Regeln der Technik gebaut. Es entspricht den Anforderungen der Richtlinie 97/23/EG über Druckgeräte.

Am Aufstellungsort sind die jeweils zutreffenden nationalen Rechtsvorschriften über den Betrieb und die wiederkehrenden Prüfungen von Druckgeräten zu befolgen.

Die vorliegende Betriebsanleitung soll Sie als Betreiber/Benutzer mit der Funktion, der Installation und Inbetriebnahme des Gerätes vertraut machen.

Um den einwandfreien Betrieb des Gerätes zu gewährleisten, beachten Sie unbedingt die Sicherheitshinweise und Informationen.

Alle Sicherheitshinweise dienen stets auch Ihrer persönlichen Sicherheit!

- Der max. Betriebsüberdruck und die zulässige Betriebstemperatur des Druckgerätes sind auf dem Typenschild eingetragen.
- Die zulässigen Betriebstemperaturen für Anbauteile und Filterelemente finden Sie unter Technische Daten in dieser Anleitung.
- Es ist sicherzustellen, dass durch die am Aufstellungsort herrschenden Umgebungstemperaturen die zulässigen Betriebsdaten eingehalten werden.
- Es muss sichergestellt sein, dass die Anlage mit entsprechenden Sicherheits- und Prüfeinrichtungen ausgestattet ist, die ein Überschreiten der zulässigen Betriebsdaten verhindert.
- Für das Druckgerät ist ein Schutzabstand gegen Erwärmung infolge von Brandbelastung von min. 5 m einzuhalten.

- Das Druckgerät ist für eine vorwiegend ruhende Druckbelastung mit höchstens 1000 Vollastwechseln ausgelegt. Häufige schwelende Lastwechsel mit mehr als 10 % des max. Zulässigen Betriebsdrucks sind nicht zulässig.
- Es ist auszuschließen, dass das Druckgerät Vibrationen ausgesetzt wird, die Dauerbrüche verursachen können.
- Das Druckgerät ist nicht auf Belastungen durch Verkehr, Wind und Erdbeben ausgelegt.
- Das eingesetzte Medium darf keine korrosiven Bestandteile aufweisen, die das Material des Druckgerätes in unzulässiger Weise angreifen.
- Alle Installations- und Wartungsarbeiten an dem Druckgerät dürfen nur von fach- und sachkundigem Personal ausgeführt werden.
- Sämtliche Arbeiten an den Druckbehältern und den Rohrleitungen wie z.B. Schweißarbeiten, bauliche Veränderungen usw. sind grundsätzlich verboten. Die Missachtung bedeutet höchste Gefahr für Sie und Ihre Kollegen.
- Achtung! Wenn das Druckgerät mit einer höheren Temperatur als 60°C betrieben wird, ist ein Berührungsschutz vorzusehen.
- In der Anlage muss ein Druckmanometer installiert sein, das den Betriebsdruck anzeigt.
- Vor allen Arbeiten an dem Druckgerät ist das System drucklos zu machen!
- Reinigen Sie vor der Montage die Rohrleitungen.
- Das Gerät muss senkrecht in die Rohrleitung montiert werden.
- Auf spannungsfreie Montage des Druckgerätes ist zu achten.
- Bei elektrischen Arbeiten, Spannungsversorgung unterbrechen.

Bestimmungsgemäßer Gebrauch

Das Gerät darf nur seiner Bestimmung gemäß verwendet werden. Das Geräte ist ausschließlich gebaut:

- für Betriebsmedien der **Gruppe 2** nach Druckgeräte richtlinie 97/23/EG.
- zur vollständigen Entfernung von Bakterien, zum Schutz gegen Kontamination gegenüber Vakuumpumpe und Atmosphäre.

Eine andere oder darüber hinausgehende Benutzung des Gerätes gilt als nicht bestimmungsgemäß! Für hieraus entstehende Schäden wird keine Haftung übernommen!

Hinweise für die Inbetriebnahme



Vor der Inbetriebnahme:

Durchflußrichtung beachten!

Die Durchflußrichtung des Filterelementes verläuft von außen nach innen.

Sämtliche Schraubverbindungen des Druckgerätes sind mit den erforderlichen und max. zulässigen Schrauben- Anzugsmomenten zu montieren.

Sichtprüfung vornehmen! Es dürfen keine äußerlichen Beschädigungen erkennbar sein.

Ihr Gerät kann mit unterschiedlichen Komponenten bestückt sein. Beachten Sie die zulässigen Betriebsüberdrücke sowie die zulässigen Temperaturen der Komponenten. Hinweise hierzu finden Sie in den technischen Daten der jeweiligen Betriebsanleitung bzw. auf dem Typenschild ihres Gerätes bzw. ihrer Komponenten.

Führen Sie eine Dichtigkeitsprüfung durch!

Inbetriebnahme:

System **langsam** mit Druck beaufschlagen, indem Sie hierbei das nachgeschaltete Ventil zuerst öffnen (**Bild 11**).

Hinweise zur Wartung



Hinweis!

Um die Wartung des eingebauten Filters zu erleichtern und um eine Unterbrechung der Vakuumversorgung zu vermeiden, empfiehlt es sich, zwei medizinische Vakuumfilter parallel zu installieren.

Tragen Sie bei Wartungsarbeiten vorschriftsmäßige Schutzkleidung, um eine biologische Kontamination zu vermeiden!

Vor Beginn der Wartungsarbeiten ist sicherzustellen, dass das Druckgerät drucklos und abgekühlt ist und während der Wartungsarbeiten nicht in Betrieb genommen werden kann.

Filterelemente müssen in regelmäßigen Abständen gewechselt werden. Spätestens wenn der zulässige Differenzdruck erreicht ist!

Ein blockiertes Filterelement kann zur Beschädigung der Vakuumpumpe führen!

Sollte Ihr Gehäuse mit einem Econometer ausgestattet sein, wird das Überschreiten des Differenzdruckes optisch angezeigt (**Bild 12**). Ansonsten gelten folgende Empfehlungen:

FFMV: Je nach Verschmutzung nach spätestens einem Jahr wechseln.

Die Auffangflasche ist täglich zu kontrollieren und in regelmäßigen Abständen zu entleeren. Sie muss vor der erneuten Montage gereinigt und autoklaviert werden.

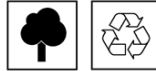
Bei einem Filterwechsel sollte auch der Gehäuse-O-Ring gewechselt werden (**Bild 18**).

Beschädigte Bauteile sind durch neue zu ersetzen. Bei erkennbaren starken Beschädigungen ist das Druckgerät komplett auszutauschen.

Das Druckgerät ist auf eine Lebensdauer von 10 Jahren ausgelegt.

Nach Abschluss der Wartungsarbeiten ist eine Dichtigkeitsprüfung durchzuführen!

Umweltschutz



Achtung! Eine sorgfältige und vorschriftsmäßige Entsorgung der verbrauchten Filterelemente ist aufgrund der biologischen Kontaminationsgefahr unerlässlich!

Verpackungsmaterialien sowie Gerät und Zubehör sind aus recycelfähigen Materialien hergestellt.

Die getrennte, umweltgerechte Entsorgung von Materialresten fördert die Wiederverwertung von Wertstoffen.

Ersatzteile

Gehäuse O-Ring



Schauglas



Filterelemente



Bitte geben Sie bei Ihrer Ersatzteilbestellung immer die Typenbezeichnung ihres Filtergehäuses mit an.

Zubehör

Differenzdruck-Manometer
"Econometer"



Bitte geben Sie bei Ihrer Bestellung der Zubehörteile immer die Typenbezeichnung ihres Filtergehäuses mit an.

Technische Daten

zul. Betriebsdruck: 2 bar a

Auslegungs-Temperatur
Gehäuse: - 25°C/+120°C

zul. Betriebstemperatur
mit Filtertyp:

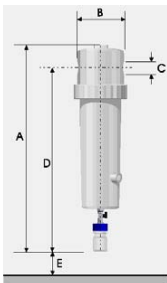
FFMV - 10°C/+
65°C

zul. Betriebstemperatur



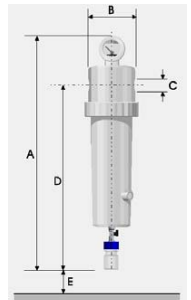
- 10°C/+ 65°C

Abmessungen



Typ	A mm		B Ø mm	C*	D mm		E mm	Element
	I	II			I	II		
0002	360	435	70	R 1/4"	320	395	90	03/10
0006	410	485	80	R 3/8"	350	425	120	04/10
0012	430	505	95	R 1/2"	375	450	150	05/20
0018	430	505	95	R 3/4"	375	450	150	05/20
0027	505	580	110	R 1"	440	515	200	07/25
0036	505	580	110	R 1 1/4"	440	515	200	07/25
0048	620	735	150	R 1 1/2"	545	660	250	10/30
0108	800	915	160	R 2"	725	840	450	15/30
0144	940	1055	180	R 2 1/2"	855	970	580	20/30
0192	1190	1305	180	R 3"	1105	1220	850	30/30

* alternativ auch in NPT lieferbar



Functional elements

- A Econometer ¹⁾
Differential pressure manometer
- B Sealing plate
- C Flat seal
- D Upper housing bowl
- E Housing O-ring
- F Filter element(s)
- G Lower housing bowl
- H Coupling nut
- I Ball valve and drain flask ²⁾
- J Tie rod and knurled nut
- K Sight glass and seal
- ^{1), 2)} according to configuration, see separate documentation



Attention!
Biological risk

For your safety



The relevant safety at work and accident prevention regulations, plus the operating instructions, shall apply for operation of the pressure vessel. The pressure vessel has been constructed in accordance with the generally recognized rules of engineering. It complies with the requirements of directive 97/23/EC concerning pressure vessels.

The relevant applicable national regulations in force at the place of installation concerning the operation and routine testing of pressure vessels must be complied with.

You as operator / user of the unit should make yourself familiar with the function, installation and start-up of the unit through these operating instructions.

It is essential that you follow these safety notes and this information in order to ensure trouble-free operation of the unit.

All the safety information is always intended to ensure your personal safety!

- The max. working pressure and the max. permissible working temperature of the pressure vessel are detailed on the type plate.
- The permissible working temperatures for add-on parts and filter elements are given under Technical data in these instructions.
- Ensure that the permitted operational temperatures are complied with, regardless of the ambient temperatures prevailing at the place of installation.
- It is necessary to ensure that the unit is equipped with the corresponding safety and test devices to prevent the permissible operating parameters from being exceeded.
- The pressure vessel must be at a safe distance of min. 5 m to prevent heating up in the event of a fire.

- The pressure vessel has been designed for a primarily static pressure loading with a maximum of 1000 cycles to and from the full load. Rapid changes of load with more than 10 % of the max. working pressure are not allowed.
- Ensure that the pressure vessel is not subjected to vibrations that could cause fatigue fractures.
- The pressure vessel is not to be subjected to stresses arising from traffic, wind and earthquakes.
- The medium used may not have any corrosive components that could attack the materials of the pressure vessel in a way that is not permitted.
- All Installation and maintenance work on the pressure vessel may only be carried out by trained and experienced specialists.
- It is forbidden to carry out any kind of work on the pressure vessel and piping, this covering welding and constructional changes, etc. Breaking this rule means extreme danger for you and your colleagues.
- Attention! If the pressure vessel is operated at temperatures over 60°C, suitable protection to prevent contact must be provided.
- A pressure gauge that shows the operational pressure must be installed in the unit.
- Depressurize the system before carrying out any work on the pressure vessel.
- Clean the piping before carrying out the installation work.
- The unit must be installed vertically in the piping.
- Ensure that the pressure vessel is installed without any stresses.
- Disconnect the power supply when carrying out electrical work.

Appropriate use

The equipment may only be used for its intended purpose. The equipment has been built exclusively:

- for operating media of group 2 as per Pressure Equipment Directive 97/23/EC.
- for the complete removal of bacteria, for the protection against contamination for vacuum-pumps and atmosphere.

Any other form of use or one going beyond this shall be considered as inappropriate. We shall have no liability whatsoever for any damage incurred as a result!

Notes on starting up



Before initial commissioning:

Take note of the flow direction!

The flow direction of the filter element is from outside to inside.

All the screwed connections of the pressure vessel must be done up to the required and max. permissible tightening torques for the screws and bolts.

Make a visual check! There must be no external damage visible.

Your unit can be equipped with various components. Note the permissible working pressures and permissible temperatures for the components. You can find information in the relevant operating instructions and also from the type plate of your unit or its components.

Make a check for leaks!

Initial commissioning:

Slowly apply pressure to the system by first opening the downstream valve (**Picture 11**).

Information concerning maintenance



Note!

In order to make the maintenance of the built-in filter easier and to avoid an interruption of the vacuum-supply, it is recommended to install two medical vacuum filters parallel.

In accordance with instructions wear protective clothes when maintenance work is being done, in order to avoid a biological contamination!

Before starting any maintenance work, ensure that the pressure vessel has been depressurized and has cooled down, and cannot be put back into operation during the maintenance work.

The filter elements must be changed at regular intervals. At the latest, once the permissible differential pressure has been reached!

A blocked filter element can lead to damage the vacuum-pump!

If the housing of your unit has been equipped with an Econometer, this will show optically (**Picture 12**) if the differential pressure has been exceeded. Otherwise, the following recommendation apply:

FFMV: Depending on the degree of dirtiness, change after one year at the latest.

The drain flask is to be controlled on a daily basis and emptied in regular intervals. Before renewed installation it must be cleaned and autoclaved.

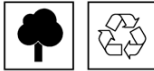
The housing O-ring should also be changed at the same that the filter is changed (**Picture 18**).

Damaged components are to be replaced by new ones. If a marked degree of damage is found, the entire vessel is to be replaced.

The pressure vessel has been designed for a life of 10 years.

Carry out a check for leaks once the maintenance work has been finished!

Protection of the environment

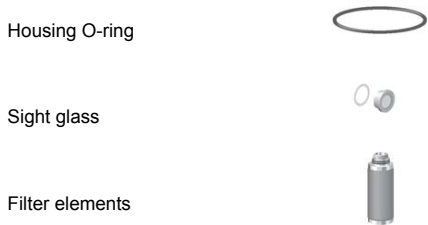


Attention! In accordance with instructions a careful waste disposal of the used filter elements is imperative due to the basis of the biological contamination danger.

The packing material and the unit itself and its accessories are produced from recyclable materials.

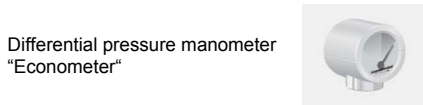
Separating the remaining materials in an appropriate way helps in the recycling of materials.

Spare parts



Please always quote the type designation on your filter housing when making orders for spare parts.

Accessories



Please always quote the type designation on your filter housing when making orders for accessory parts.

Technical data

Max. working pressure PS: 2 bar a

Design temperature of the housing: - 25°C/+120°C

Permissible working temperature with filter type:

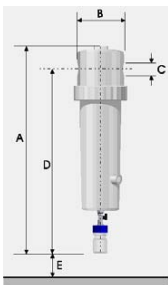
FFMV - 10°C/+ 65°C

Permissible working temperature:



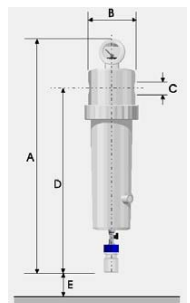
- 10°C/+ 65°C

Dimensions



Type	A mm		B Ø mm	C*	D mm		E mm	Element
	I	II			I	II		
0002	360	435	70	R 1/4"	320	395	90	03/10
0006	410	485	80	R 3/8"	350	425	120	04/10
0012	430	505	95	R 1/2"	375	450	150	05/20
0018	430	505	95	R 3/4"	375	450	150	05/20
0027	505	580	110	R 1"	440	515	200	07/25
0036	505	580	110	R 1 1/4"	440	515	200	07/25
0048	620	735	150	R 1 1/2"	545	660	250	10/30
0108	800	915	160	R 2"	725	840	450	15/30
0144	940	1055	180	R 2 1/2"	855	970	580	20/30
0192	1190	1305	180	R 3"	1105	1220	850	30/30

* alternativ auch in NPT lieferbar



Elementi funzionali

- A** Econometro ¹⁾
Manometro pressione differenziale
(scelta)
- B** Piastra di chirusa
- C** Guarnizione piatta
- D** Parte superiore del contenitore
- E** Anello torico del contenitore
- F** Elemento filtrante
- G** Parte inferiore dell'involucro
- H** Dado a risvolto
- I** Válvula esférica
e Bottiglia di raccolta ²⁾
- J** Tirante + Dado zigrinato
- K** Vetro di controllo e guarnizione
- ^{1), 2)} a seconda della realizzazione,
vedi documentazione separata



Attenzione!
Rischio biologico

Per la Vostra sicurezza



Per il funzionamento del recipiente pressurizzato sono da osservare e rispettare le attuali prescrizioni per la protezione sul lavoro nonché le norme antinfortunistiche e le presenti istruzioni per l'uso. L'apparecchio pressurizzato è stato costruito secondo le regolamentazioni tecniche generalmente approvate.

Esso corrisponde alle rivendicazioni della direttiva 97/23/CE per apparecchi pressurizzati.

Sul luogo d'installazione sono da osservare e rispettare rigorosamente le rispettive prescrizioni di legge vigenti a livello nazionale per il servizio ed i periodici controlli di apparecchi pressurizzati.

Le presenti istruzioni per l'uso servono per familiarizzare l'esercente/utente con le funzioni, l'installazione e la messa in servizio dell'apparecchio.

Al fine di poter garantire un servizio irreprensibile dell'apparecchio, è assolutamente necessario osservare le avvertenze ed informazioni di sicurezza.

Tutte le avvertenze di sicurezza servono costantemente anche per la Vostra sicurezza!

- La massima pressione e la massima temperatura di servizio dell'apparecchio pressurizzato sono indicati sulla targhetta d'identificazione.
- Le temperature di servizio ammesse per i componenti d'applicazione e gli elementi filtranti sono da apprendere nei Dati tecnici riportati nelle presenti istruzioni per l'uso.
- Occorre garantire che le temperature ambiente del luogo di installazione rispettino i dati di esercizio consentiti.
- È necessario accertare che l'impianto sia equipaggiato dei necessari dispositivi di sicurezza e controllo, che servono per prevenire un superamento dei dati di servizio ammessi.
- Per l'installazione dell'apparecchio pressurizzato è necessario rispettare una distanza di sicurezza di almeno 5 metri per prevenirne un surriscaldamento in seguito ad eventuali incendi.

- L'apparecchio pressurizzato è concepito per essere sollecitato con pressione prevalentemente di riposo con massimo 1000 cambi a carico pieno. Non sono ammessi frequenti cambi di carico con oltre il 10% della massima pressione di servizio consentita.
- Evitare assolutamente di esporre l'apparecchio pressurizzato a vibrazioni, che potrebbero causare delle rotture definitive.
- L'apparecchio pressurizzato non è previsto per resistere a sollecitazioni dovute a traffico, vento e scosse sismiche.
- Il mezzo impiegato non deve mostrare alcuni componenti corrosivi, che possano in un certo qual modo aggredire il materiale dell'apparecchio pressurizzato.
- Tutti i lavori d'installazione e manutenzione all'apparecchio pressurizzato devono essere eseguiti esclusivamente da parte di personale specializzato e qualificato.
- Sono in linea di massima vietati tutti i lavori al serbatoio di pressione e alle tubazioni, quali ad esempio modifiche di costruzione, saldature, ecc. La mancata osservanza costituisce un elevato pericolo per l'operatore e i suoi colleghi.
- **Attenzione !** Se l'apparecchio pressurizzato viene impiegato a temperature maggiori di 60°C, sarà necessario prevedere una protezione contro il diretto contatto.
- Nell'impianto deve essere installato un manometro di pressione, per indicare la pressione di servizio.
- Prima di eseguire un qualsiasi lavoro all'apparecchio pressurizzato, è assolutamente necessario depressurizzare l'intero sistema!
- Prima del montaggio delle tubazioni, eseguirne un'accurata pulizia.
- L'apparecchio deve essere montato nella tubazione in posizione verticale.
- Accertarsi che l'apparecchio pressurizzato venga montato senza torsioni meccaniche.
- Interrompere sempre l'alimentazione di tensione per eseguire dei lavori agli equipaggiamenti elettrici!

Impiego conforme allo scopo previsto

È consentito utilizzare l'apparecchio esclusivamente in conformità allo scopo previsto.

Gli apparecchi sono costruiti esclusivamente per:

per **gruppo 2** deve avvenire conformemente alla direttiva per apparecchi pressurizzati 97/23/CE.

- Per rimuovere in modo completo i batteri e per preservare dalla contaminazione della pompa a vuoto e atmosfera.

Un impiego diverso o inoltrato degli apparecchi non è più da considerare quale impiego conforme allo scopo previsto. Per i danni che risulteranno di conseguenza, il costruttore non potrà assumersi alcuna responsabilità.

Informazioni per la messa in servizio



Prima della messa in servizio:

Fare attenzione alla direzione del flusso!

La direzione del flusso dell'elemento filtrante va dall'esterno verso l'interno.

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Tutti i collegamenti a vite dell'attrezzatura a pressione vanno montati con le necessarie coppie di serraggio max. consentite.

- Eseguire un controllo visuale! Non devono essere visibili alcuni danneggiamenti esterni.
- Il Vostro apparecchio può essere equipaggiato con diversi componenti. Rispettare le pressioni di servizio e temperature consentite per i componenti.

Le rispettive informazioni sono da apprendere nei dati tecnici riportati nelle rispettive istruzioni per l'uso risp. sulle targhette di identificazione degli apparecchi ovvero componenti.

- Eseguire un controllo della tenuta ermetica!

Messa in servizio

- Alimentare **lentamente** il sistema con pressione, aprendo per prima la valvola successivamente collegata **(11)**.

Informazioni per la manutenzione



Avvertenza!

Per semplificare la manutenzione del filtro montato ed evitare un'interruzione dell'alimentazione del vuoto si consiglia di installare parallelamente due filtri sanitari del vuoto.

Durante le operazioni di manutenzione indossare gli indumenti di protezione prescritti per evitare una contaminazione biologica!

Prima di eseguire i lavori di manutenzione è necessario accertarsi che l'apparecchio sia stato completamente depressurizzato e raffreddato e che non possa essere messo in funzione durante l'esecuzione dei lavori di manutenzione.

Gli elementi filtranti devono essere cambiati periodicamente. AL più tardi dopo il raggiungimento della pressione differenziale ammessa!

Un elemento filtrante bloccato può avere come conseguenza il danneggiamento della pompa del vuoto!

Qualora l'involucro fosse dotato di econometro, viene indicato visivamente il superamento della pressione differenziale (**fig. 12**). Per il resto, si intendono valide le seguenti raccomandazioni:

FFMV: eseguire il cambio a seconda del grado di sporcizia al più tardi dopo un anno;

La bottiglia di raccolta va controllata ogni giorno e svuotata ad intervalli regolari. Prima di essere rimontata va pulita ed autoclavata.

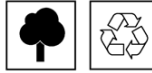
Nel cambio del filtro si dovrebbe anche sostituire l'anello torico del contenitore (**18**).

I componenti danneggiati devono essere sostituiti con dei nuovi. Nel caso di danneggiamenti visibili esternamente, sarà necessario sostituire completamente l'apparecchio pressurizzato.

L'apparecchio pressurizzato è stabilito per una durata utile di 10 anni.

Al termine dei lavori di manutenzione occorre effettuare un controllo a vista.

Protezione ambientale



Attenzione! A causa del pericolo di contaminazione biologica è indispensabile provvedere ad un accurato e regolamentare smaltimento degli elementi filtranti consumati!

Il materiale di imballaggio come pure l'apparecchio e gli accessori vengono prodotti con materiali riciclabili.

Per poter riutilizzare i materiali di produzione, occorre eseguire uno smaltimento separato dei residui.

Pezzi di ricambio

Anello torico del contenitore



Vetro di controllo



Elementi filtranti



Per le ordinazioni dei pezzi di ricambio si prega di indicare sempre la descrizione del tipo del contenitore filtrante.

Accessori

Manometro pressione Differenziale "Econometro"



Per le ordinazioni degli accessori si prega di indicare sempre la descrizione del tipo del contenitore filtrante.

Data tecnici

Pressione prevista per
il contenitore: 2 bar a

Temperatura consentita : - 25°C/+120°C

Temperatura consentita
con filtro tipo:

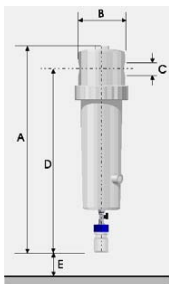
FFMV - 10°C/+ 65°C

Temperatura consentita



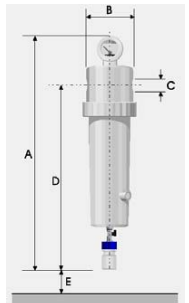
- 10°C/+ 65°C

Dimensioni



Tipo	A mm		B Ø mm	C*	D mm		E mm	Elementi
	I	II			I	II		
0002	360	435	70	R 1/4"	320	395	90	03/10
0006	410	485	80	R 3/8"	350	425	120	04/10
0012	430	505	95	R 1/2"	375	450	150	05/20
0018	430	505	95	R 3/4"	375	450	150	05/20
0027	505	580	110	R 1"	440	515	200	07/25
0036	505	580	110	R 1 1/4"	440	515	200	07/25
0048	620	735	150	R 1 1/2"	545	660	250	10/30
0108	800	915	160	R 2"	725	840	450	15/30
0144	940	1055	180	R 2 1/2"	855	970	580	20/30
0192	1190	1305	180	R 3"	1105	1220	850	30/30

* fornitura possibile alternativamente anche in NPT



WORLDWIDE WARRANTY STATEMENT

Under proper use, installation, application, and maintenance in accordance with the manufacturer's written recommendations and specifications for a specific time period outlined below each ultrafilter product is warranted to be free from defects in materials and workmanship. Before installing the ultrafilter products, the customer has to ensure that his application/usage of the ultrafilter product is in accordance with the manufacturer's recommendations and specifications.

The manufacturer's warranty is a legal remedy and limited to the repair or replacement (at ultrafilter's option) of unaltered products returned to the manufacturer and proven to have such defect, provided the defects are reported within the time guideline listed below. Any replacement pads or dryers will extend to the remaining period of original warranty and not beyond.

Refrigerated Air Dryers and Chillers - 24 months from date of invoice.

Note: In addition to the above stated warranty, both air to air and air to refrigerant heat exchangers in ultrafilter dryers are warranted on a prorated basis from time of shipment for a period of five (5) years. This extended warranty is limited to these pads only and will be prorated in the following manner:

Year 1 - 100%, year 2 - 100 %, year 3 - 75% , year 4 - 50% , year 5 - 25% .

Regenerative Dryers - 24 months from date of invoice. Proof of installation must be received from claimant to verify installation date or commissioning by ultrafilter service.

All Other Commodity Products - filters, drains, economizers, ultraseps, and components, etc.: 12 months from date of final shipment to the end customer by factory or manufacturer's authorized distributor. 60 month material safety guarantee for housings from date of invoice.

ultrafilter original Spare parts- twelve (12) months ,pads only' warranty from date of purchase.

Products found to be damaged by exposure to acidic or otherwise corrosive environments will not be covered under normal or prorated warranty.

Maintenance and Adjustment - Adjustment to hot gas bypass valves, float drains, condenser cleaning, and other routine maintenance required to keep a dryer in good operating order are not considered a warranty item. This is the responsibility of the owner of the equipment, and labour or material for such will not be reimbursed under warranty. The usual maintenance and replacement type products are not covered by this warranty. Please consult the installation and operation manual for adjustment and maintenance requirements.

Before any warranty service work is started, it must first be authorized by ultrafilter. ultrafilter will not reimburse warranty work unless it has been preauthorized. Unauthorized service voids the warranty and any resulting charge or subsequent claim will not be paid.

What is And What Is Not Covered Under This Warranty?

NOT COVERED:

- All freight damage claims are not the responsibility of the manufacturer and are not covered under warranty, as all products are shipped F.O.B. shipper. Please direct freight claims to the shipper in question.
- More than one service technician on one warranty job, extra helpers deemed necessary (on-site personnel should assist as much as possible).
- Overtime hours, weekend labour rates.

- Airfreight of units or parts. If airfreight is required, the manufacturer will pay the cost for normal ground transportation and the customer will be liable for costs exceeding those charges.
- Removal or reinstallation of equipment or extra bypassing to accomplish repairs.
- Hot gas valve adjustments or other normal maintenance items.
- Damages due to misapplication, incorrect installation or use, poor maintenance, corrosive environments, or other items outside the scope of manufacturer defects. See operating and instruction books.
- Service work by unauthorized service.

COVERED:

- Repairs due to defects in materials.
- Repairs due to defects in workmanship.
- A maximum of 200 km round trip travel for one service technician at a maximum rate of 50 € / hour and 30 cent / per mile.
- Any accessories, pads and equipment supplied by ultrafilter, but not manufactured by ultrafilter shall carry whatever warranty the manufacturer has given to ultrafilter, provided it is possible for ultrafilter to pass on such warranty to the customer.
- Total value of claim not to exceed the value of the pad including labour and materials,

Specifications, limitations and recommended applications and uses for and of products may be established or amended by ultrafilter from time to time. Only those specifications, limitations and recommended applications and uses expressly identified as such shall be binding upon ultrafilter. Samples, descriptions, representations, and other information concerning products in ultrafilter catalogues, advertisements or other promotional materials

or statements of representations made by ultrafilter employees or sales representatives are for general information purpose only and are not binding upon ultrafilter with respect to such warranty provisions.

No employee or sales representative of ultrafilter shall have any authority whatsoever to establish, expand or otherwise modify ultrafilter product specifications, limitations, or recommended applications without ultrafilter giving it's prior express written consent to the customer.

To claim under warranty, the goods must have been installed and continuous maintenance must have taken place in the manner specified in the Operators Handbook. Our service engineers are highly qualified and equipped to assist you in this respect. They are also available to do repairs that may become necessary, in which event they will require an official order before carrying out the work. If such work is to be the subject of a warranty claim, the order should be endorsed 'for consideration under warranty'. Warranty claims must be submitted and shall be processed in accordance with ultrafilter's established warranty claim procedure.

This is the only authorized ultrafilter warranty and is in line with all other expressed or implied warranties or representation including any implied warranties or other obligations on the pad of the manufacturer. The forgoing is the exclusive remedy of any buyer of the manufacturer's product. The maximum damages liability of the manufacturer is the Original purchase price of the product or part. ultrafilter will not be held liable for business interruptions, loss of profits, personal injury, costs of delay or any other special indirect, incidental, special or consequential loss, costs, or damages.