Nilfisk FOOD

MultiFoamer Inox

Directions for use

For this unit the following manuals are available:

110006171 Direction for use - Inox MultiFoamer
110005692 User guide MultiFoamer
Direction for use and User guide will be enclosed as physical paper manuals.

Declaration of Conformity

Inox MultiFoamer

EN Declaration of Conformity

DE Konformitätserklärung

FR Déclaration de Conformité

IT Dichiarazione di Conformità

ES Declaración de Conformidad

PT Declaração de Conformidade

EL Δήλωση Συμμόρφωσης

NL Overeenkomstigheidsverklaring

SV Försäkran om överensstämmelse

FI Vaatimustenmukaisuusvakuutus

DA Overensstemmelseserklæring

PL Deklaracja zgodności

RU Декларация о соответствии

HU Megfelelőségi nyilatkozat

SL Izjava o skladnosti

HR Izjava o usklađenosti

SR Deklaracija o konformitetu

RO Declaraţie de Conformitate

BG Декларация за съответствие

CS Prohlášení o shodě

SK Prehlásenie o konformite

TR Uygunluk Bildirgesi

ET Vastavusdeklaratsioon

LT Atitikties deklaracija

LV Paziņojums par atbilstību prasībām

UK Свідчення про відповідність вимогам

Nilfisk FOOD
Blytækkervej 2
9000 Aalborg
Danmark

EN Declaration of Conformity

We Nilfisk FOOD, declare under our sole responsibility that the products Inox MultiFoamer. To which this declaration relates, are in conformity with these Council directives on the approximation of the laws of the EC menber states:
Machinery Directive (2006/42/EC).
- EN 60335-2-79 : 2012

EMC Directive (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

DE Konformitätserklärung

Nilfisk FOOD, als alleinverantwortlich, erklären hiermit, dass:
Inox MultiFoamer
in Übereinstimmung mit den Rechtlinien zur Angleichung der Rechtsvorschriften der Mitgliedstaaten ist:

Maschinendirektive (2006/42/EG).
- EN 60335-2-79 : 2012

EMC Direktive (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

FR Déclaration de conformité

Nous, Nilfisk FOOD, déclarons sous notre seule responsabilité, que les produits Inox MultiFoamer, auxquels se réfère cette déclaration, sont conformes aux Directives du Conseil concernant le rapprochement des législations des Etats membres CE relatives aux normes énoncées ci¬dessous :
Directive Machines (2006/42/CE).
- EN 60335-2-79 : 2012

Directive Compatibilité Electromagnétique CEM (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014

EN 61000-3-3 : 2013.

IT Dichiarazione di conformità

Nilfisk FOOD dichiara sotto la sua esclusiva responsabilità che i prodotti Inox MultiFoamer, ai quali si riferisce questa dichiarazione, sono conformi alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri CE:
Direttiva Macchine (2006/42/CE).
- EN 60335-2-79 : 2012

Direttiva EMC (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

ES Declaración de conformidad

Nosotros, Nilfisk FOOD, declaramos bajo nuestra entera responsabilidad que los productos Inox MultiFoamer, a los cuales se refiere esta declaración, están conformes con las Directivas del Consejo en la aproximación de las leyes de las Estados Miembros del EM:
Directiva de Maquinaria (2006/42/CE).
- EN 60335-2-79 : 2012

Directiva EMC (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

PT Declaração de Conformidade

A Nilfisk FOOD declara sob sua única responsabilidade que os produtos Inox MultiFoamer ,aos quais diz respeito esta declaração, estão em conformidade com as seguintes Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da CE:
Directiva Máquinas (2006/42/CE).
- EN 60335-2-79 : 2012

Directiva EMC (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013

EL Δήλωση συμμόρφωσης

Εμείς, η Nilfisk FOOD, δηλώνουμε με αποκλειστικά δική μας ευθύνη ότι τα προϊόντα Inox MultiFoamer στα οποία αναφέρεται η παρούσα δήλωση, συμμορφώνονται με τις εξής Οδηγίες του Συμβουλίου περί προσέγγισης των νομοθεσιών των κρατών μελών της ΕΕ:
Οδηγία για μηχανήματα (2006/42/ΕΚ).
- EN 60335-2-79 : 2012

Οδηγία Ηλεκτρομαγνητικής Συμβατότητας (EMC) (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

NL Verklaring van overeenstemming

Wij, Nilfisk FOOD, verklaren geheel onder eigen verantwoordelijkheid dat de producten Inox MultiFoamer waarop deze verklaring betrekking heeft, in overeenstemming zijn met de Richtlijnen van de Raad in zake de onderlinge aanpassing van de wetgeving van de EG Lidstaten betreffende:
Machine Richtlijn (2006/42/EG).
- EN 60335-2-79 : 2012

EMC Richtlijn (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(SV) Försäkran om överensstämmelse

Vi, Nilfisk FOOD, försäkrar under ansvar att produkterna Inox MultiFoamer, som omfattas av denna försäkran, är i överensstämmelse med rådets direktiv om inbördes närmande till EU-medlemsstaternas lagstiftning, avseende:
Maskindirektivet (2006/42/EG).
- EN 60335-2-79 : 2012

EMC-direktivet (2014/30/EG).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(DA) Overensstemmelseserklæring

Vi, Nilfisk FOOD, erklærer under ansvar at produkterne Inox MultiFoamer som denne erklæring omhandler, er i overensstemmelse med disse af Rådets direktiver om indbyrdes tilnærmelse til EF-medlemsstaternes lovgivning:
Maskindirektivet (2006/42/EF).
- EN 60335-2-79 : 2012

EMC-direktivet (2014/30/EF).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(RU) Декларация соответствия

Мы, компания Nilfisk FOOD, со всей ответственностью заявляем, что изделия Inox MultiFoamer, к которым относится настоящая декларация, соответствуют следующим Директивам Совета Евросоюза об унификации законодательных предписаний стран-членов ЕС:
Механические устройства (2006/42/EC).
- EN 60335-2-79 : 2012

Электромагнитная совместимость (2014/30/EC)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(SL) Izjava o skladnosti

V Nilfisk FOODu s polno odgovornostjo izjavljamo, da so naši izdelki Inox MultiFoamer na katere se ta izjava nanaša, v skladu z naslednjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic ES:
Direktiva o strojih (2006/42/ES).
- EN 60335-2-79 : 2012

Direktiva o elektromagnetni združljivosti (EMC) (2014/30/ES).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(FI) Vaatimustenmukaisuusvakuutus

Me, Nilfisk FOOD, vakuutamme omalla vastuullamme, että tuotteet Inox MultiFoamer, joita tämä vakuutus koskee, ovat EY:n jäsenvaltioiden lainsäädännön yhdenmukaistamiseen tähtäävien Euroopan neuvoston direktiivien vaatimusten mukaisia seuraavasti:
Konedirektiivi (2006/42/EY).
- EN 60335-2-79 : 2012

EMC-direktiivi (2014/30/EY).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(PL) Deklaracja zgodności

My, Nilfisk FOOD, oświadczamy z pełną odpowiedzialnością, że nasze wyroby Inox MultiFoamer, których deklaracja niniejsza dotyczy, są zgodne z następującymi wytycznymi Rady d/s ujednolicenia przepisów prawnych krajów członkowskich WE:
Dyrektywa Maszynowa (2006/42/WE).
- EN 60335-2-79 : 2012

Dyrektywa EMC (2014/30/WE).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(HU) Megfelelőségi nyilatkozat

Mi, Nilfisk FOOD, izjavljujemo pod vlastitom odgovornošću da je proizvod Inox MultiFoamer, na koji se ova izjava odnosi, u skladu s direktivama ovog Vijeća o usklađivanju zakona država članica EU:
Direktiva za strojeve (2006/42/EK).
- EN 60335-2-79 : 2012

Direktiva za elektromagnetsku kompatibilnost (2014/30/EZ).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(HR) Izjava o usklađenosti

Mi, Nilfisk FOOD, izjavljujemo pod vlastitom odgovornošću da je proizvod Inox MultiFoamer, na koji se ova izjava odnosi, u skladu s direktivama ovog Vijeća o usklađivanju zakona država članica EU:
Direktiva za strojeve (2006/42/EZ).
- EN 60335-2-79 : 2012

Direktiva za elektromagnetsku kompatibilnost (2014/30/EZ).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(SR) Deklaracija o konformitetu

Mi, Nilfisk FOOD, izjavljujemo pod vlastitom odgovornošću da je proizvod Inox MultiFoamerna koji se ova izjava odnosi, u skladu sa direktivama, Saveta za usklađivanje zakona država članica EU:
Direktiva za mašine (2006/42/EC).
- EN 60335-2-79 : 2012

EMC direktiva (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(BG) Декларация за съответствие

Ние, фирма Nilfisk FOOD, заявяваме с пълна отговорност, че продуктите Inox MultiFoamer, за които се отнася настоящата декларация, отговарят на следните указания на Съвета за уеднаквяване на правните разпоредби на държавите членки на ЕС:
Директива за машините (2006/42/ЕО).
- EN 60335-2-79 : 2012

Директива за електромагнитна съвместимост (2014/30/ЕС).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(SK) Prehlásenie o zhode

My firma Nilfisk FOOD prehlasujeme na svoju plnú zodpovednost', že výrobky Inox MultiFoamer, na ktoré sa toto prehlásenie vzt'ahuje, sú v súlade s ustanovením smernice Rady pre zblíženie právnych predpisov členských štátov Európskeho spoločenstva v oblastiach:
Smernica pre strojové zariadenie (2006/42/ES).
- EN 60335-2-79 : 2012

Smernica pre elektromagnetickú kompatibilitu (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(ET) Vastavusdeklaratsioon

Meie, Nilfisk FOOD, deklareerime enda ainuvastutusel, et tooted Inox MultiFoamer, mille kohta käesolev juhend käib, on vastavuses EÜ Nõukogu direktiividega EMÜ liikmesriikide seaduste ühitamise kohta, mis käsitlevad:
Masinate ohutus (2006/42/EÜ).
- EN 60335-2-79 : 2012

Elektromagnetiline ühilduvus (EMC direktiiv) (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(RO) Declaraţie de conformitate

Noi, Nilfisk FOOD, declarăm pe propria răspundere că produsele Inox MultiFoamer la care se referă această declaraţie, sunt în conformitate cu aceste Directive de Consiliu asupra armonizării legilor Statelor Membre CE:
Directiva Utilaje (2006/42/CE).
- EN 60335-2-79 : 2012

Directiva EMC (2014/30/CE)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(CS) Prohlášení o shodě

My firma Nilfisk FOOD prohlašujeme na svou plnou odpovědnost, že výrobky Inox MultiFoamer, na něž se toto prohlášení vztahuje, jsou v souladu s ustanoveními směrnice Rady pro sblížení právních předpisůčlenských států Evropského společenství v oblastech:
Směrnice pro strojní zařízení (2006/42/ES).
- EN 60335-2-79 : 2012

Směrnice pro elektromagnetickou kompatibilitu (EMC) (2014/30/ES)
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(TR) Uygunluk Beyanı

Nilfisk FOOD olarak bu beyannameye konu olan Inox MultiFoamer, ürünlerinin,AB Üyesi Ülkelerin kanunlarını birbirine yaklaştırma üzerine Konsey Direktifleriyle uyumlu olduğunun yalnızca bizim sorumluluğumuz altında olduğunu beyan ederiz:
Makineler Yönetmeliği (2006/42/EC).
- EN 60335-2-79 : 2012

EMC Diretifi (2014/30/EC).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(LT) Atitikties deklaracija

Компанія Nilfisk FOOD заявляє про свою виключну відповідальність за те, що продукти Inox MultiFoamer, на які поширюється дана декларація, відповідають таким рекомендаціям Ради з уніфікації правових норм країн -членів ЕС:
Механічні прилади (2006/42/EC).
- EN 60335-2-79 : 2012

Електромагнітна сумісність (2014/30/ЕВ).
- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(LV) Atbilstības deklarācija

Sabiedrība NILFISK FOOD ar pilnu atbildību dara zināmu, ka produkti Inox MultiFoamer, uz kuriem attiecas šis paziņojums, atbilst šādām Padomes direktīvām par tuvināšanos EK dalībvalstu likumdošanas normām:

Mašīnbūves direktīva (2006/42/EK).

- EN 60335-2-79 : 2012

Elektromagnētiskās saderības direktīva (2014/30/EK).

- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

(UA) Свідчення про відповідність вимогам

Компанія Nilfisk FOOD заявляє про свою виключну відповідальність за те, що продукти Inox MultiFoamer, на які поширюється дана декларація, відповідають таким рекомендаціям Ради з уніфікації правових норм країн -членів ЕС:

Механічні прилади (2006/42/EC).

- EN 60335-2-79 : 2012

Електромагнітна сумісність (2014/30/EC).

- EN 55014-1 : 2007
- EN 55014-2 : 2015
- EN 61000-3-2 : 2014
- EN 61000-3-3 : 2013.

Technical file responsible:

Flemming Asp
Nilfisk FOOD
Blytaekkervej 2
9000 Aalborg, Denmark

Signature:

Flemming Asp
R & D Manager
Aalborg d. 01-07-2018

1. Contents

2. Symbols used in this document

	Read before use
	Wear glasses when using the unit.
	Wear gloves and suitable clothing when using the unit.
	**Note:** A potentially damaging situation. Possible consequences: The product or something in its vicinity could be damaged. Prevention.
	**Caution:** A dangerous situation.'Possible consequences: light or minor injuries. Can also be used to warn against damage to property or other goods prevention.
	**Warning:** A Potentially dangerous situation. Possible consequences: Death or severe injury.
	**Danger:** A dangerous situation. Possible consequences: Death or severe injury.
	**Danger:** Risc of electric shock! Possible consequences: Death or severe injury.
	**Danger:** Warning! Sharp edges – watch your fingers.
	**Hot Surfaces** Risc of burns! Possible consequences: Severe injuries.

3. General information

Nilfisk FOOD congratulates you on your new low-pressure foam and sanitising cleaning equipment.

The equipment provides the latest standard of technology in low pressure cleaning equipment in your factory.

The equipment can be used for rinsing, foaming and application of disinfectants.

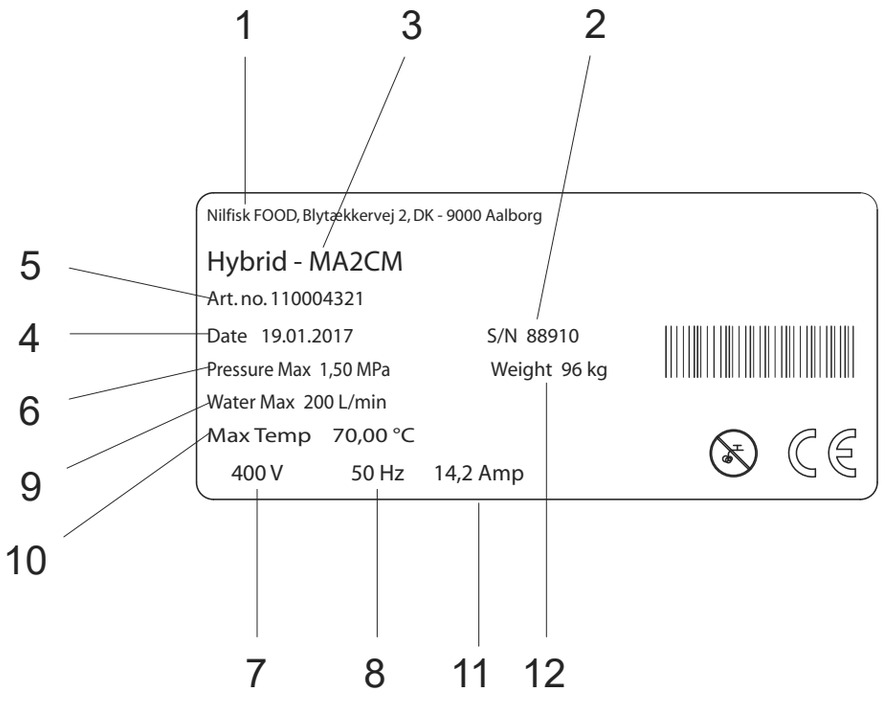
It is important that your operational staff read these directions for use prior to installation, start up and use of the equipment.

Manual series
For this unit the following manuals are available :

110006171 Direction for use – MultiFoamer Inox
110005692 User guide - MultiFoamer Inox

Direction for use and User guide will be enclosed as physical paper manuals.

3.1. Identification plate



1. Producer
2. Serial no
3. Type
4. Date of production
5. Article no
6. Maximum pressure
7. Supply voltage
8. Frequency
9. Maximum water consumption
10. Maximum temperature
11. Current
12. Weight

3.2. Supplier

Nilfisk FOOD
Blytækkervej 2
DK-9000 Aalborg, Denmark
Tel.: +45 7218 2000
CVR no. 6257 2213
www.nilfiskfood.com

3.3. Specifications

Water	**Unit**	**MultiFoamer Inox**
Max.outlet pressure.	bar/psi	3-20 / 43.5 - 290*
Comsumption during rinsing (manual)	lpm - gpm	30 / 7.9
Consumption during foaming (manual)	lpm - gpm	8.7 / 2.3
Max Water consumption during rinsing (automatic)	lpm - gpm	200 / 52.8
Water consumption during foaming (automatic)	lpm - gpm	11 / 2.9
Min. supply pressure	bar/psi	2 / 29
Max. supply pressure	bar/psi	8 / 116
Min. water supply	lpm - gpm	263 / 58
Max water temperature	C°/F°	70 / 158
Pipe dimension inlet Ø	mm	38
Pipe dimension outlet Ø	mm	38
Clamp connection type/size	Type/mm	DS-SMS / ø50.4
Compressed air		
Min/max. air pressure	bar/psi	5.9 - 9.9 / 87 - 145
Compressed air consumption	lpm - gpm	540 / 118.8
Pipe dimension inlet Ø	inch	1/4"
Electricity		
Supply voltage	V	380 - 500
Frequency	Hz	50 / 60Hz
Motor load (kW)	kW	7.5
Nominal current	A	14.1
Fuse	A	20
Internal fuse 5x20mm - 400V	A	1A slow
L1, L2, L3, PE	mm^2	2.5
General		
Sound level ISO 11202	dB	Below 70
Dimensions HxWxD	mm/inch	1310x560x470 / 51.57x22.04x18.5
Weight	kg/pounds	115 / 253
IP class		55

* By inlet pressure of minimum 43,5 bar/psi.

4. Overview and use

MultiFoamer is a complete hygiene and pumping station that supplies pressurised water to both its integrated hygiene points (optional) and to several connected cleaning areas. Therefore the mainstation must be supplied with:
water in sufficient quantity, power, compressed air, detergent(s), disinfectant.
The station is then ready for hygiene duties.

The mainstation is fittted with a frequency controlled pump, which ensures a constant working pressure independent of usage pattern.

Warning: Do not use the water from the system for applications other than cleaning.

Consumptions:
The unit is approved for the use of detergents and disinfectants.

Warning: Do not change the settings made or recommended by the supplier of the detergents!

Detergents are supplied via a User Pack system or from separate standard cans.

Before installation and set up of the unit always read this instruction thoroughly. Always make sure to follow personal safety procedures for chemicals in connection with refilling procedures (product change), maintenance and repair. See also product label and Material Safety Data Sheet (MSDS).

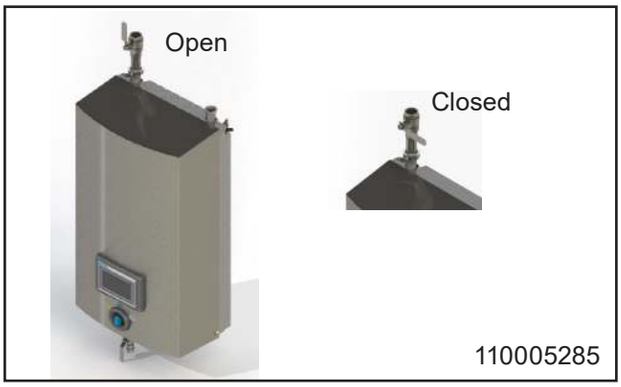
Safety instructions
Only professional service personel are allowed to carry out service and repairs on the unit.

Only instructed personel are allowed to operate the unit.

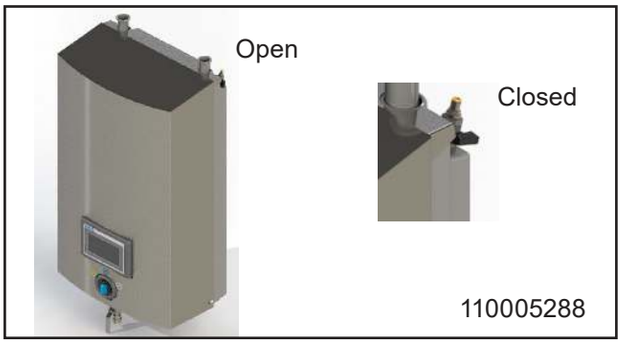
5. System safety

In case of error/defect or service on equipment:
1. Close the water supply
2. Close the air supply
3. Turn of power supply

5.1. Closing valve for water supply.
We recommend installing a closing valve for the water supply. With this valve the unit can be isolated from the water supply. Further, a non-return valve is built in the unit to prevent backflow of water.



5.2. Closing valve for air supply
With this valve the unit can be isolated from the air supply. Two non-return valves for air are built in the unit to prevent backflow of air.



The air pressure regulation/gauge only works when the supply valve is open.

Wear glasses when using the unit.

Wear gloves and suitable clothing when using the unit.

Warning:
The spray jets can be dangerous if subjected to misuse. The jets must not be directed at persons, live electrical equipment or the unit itself.

Warning:
Do not use the unit within range of persons unless they wear protective clothing.

5.3. Noise
Sound level according to ISO 11202: Below 70dB.

5.4. Vibrations
Hand-arm vibrations according to ISO 5349-1

5.5. Anticipated failures
Bursted air tube in unit:

- The unit must never be used without the front cover being mounted.
- The air closing valve on /in connection with the unit must always be closed when not in use.
- Air tube and fitting should be examined regularly and exchanged in case of visible damages.

Breakdown of non-return valves for air and water:

- The unit must never be used without the cover beeing mounted.
- Air and water closing valve on/in connection with the unit must always be closed when the unit is not in use.
- After use of the unit all chemical non-return valves must be thorougly rinsed with clean water. Follow instructions in paragraph 9.4.
- Non-return valves for air and water should be examined minimum once a year by authorised personel for defects.

Repair of unit:

- Do not attempt to repair a defect unit by yourself. Always contact an authorised service company.
- Block and mark any defect unit in order to avoid unintended use - see paragraph below regarding "Rest risk - Use of the unit"
- For safety reasons only use approved and original spare parts.

5.6. Rest Risk
Use of unit:

- Never use the unit without prior instructions in use of the unit and its safety instructions. The instruction must be prepared by an educated/ instructed personel.
- Never use the unit without having read the enclosed guide and safety instructions.
- Always close water and air supply after use.

Damaged unit:

- Never use the unit if leakages (air, water or chemical) are observed.
- Never use the unit if it is not possible to operate the closing valves and/or if it is not possible to select required operation.
- Never use the unit if it has been dislodged for its original place of mounting.

6. Installation

For safety reasons it is important to read all of the enclosed information before installation of this equipment. In addition, the legislation in force at the time of purchase must always be considered in connection with the installation and mounting of this equipment, no matter the contents of this manual. If there are matters of dispute please contact your dealer.

The pipeline must be rinsed thoroughly before the system is connected.

Remove cover before the unit is mounted on the wall.

6.1. Directions for mounting

- The unit should be mounted in frost-free rooms only.
- The unit can be mounted on a wall or on a separate frame which may be installed in production areas and anchored to the floor.
- For mounting on walls, please note the following:

The wall for mounting should be either a stable brick wall or a wall made of concrete.

- If the wall the unit is to be mounted on is made of bricks or concrete, the enclosed screws and rawl plugs are usable to mount the delivered bracket, otherwise you have to make sure that the carrying capacity of the wall is sufficient.
- The wall bracket should be mounted on the wall according to the above description and the station is hung on to the bracket.
- When mounted on the bracket secure the unit in the top by two screws through the designated holes. The hose and User Pack holders should be mounted afterwards. (See installation drawing)

6.2. Transportation
For secure transportation of the unit, we recommend always to ensure, that the unit can not slide or tip. The unit might have to be secured with straps. Transportation of the unit only in horisontal position: The unit must not be placed on the front where you find the operation panel. Neither can it be placed on top or bottom where connections and outlets are mounted.

In case the unit is moved at a temperature of approx or below 0°C (32°F), you must always make sure that the the unit has been fully emptied for water. If this is not the case, you may damage the unit.

6.3. Electrical installation

6.3.1.Power supply

Connection instruction is mounted on the cables.
The phase order is subordinated.

6.3.2.Earth leakage circuit breaker (ELCB).

When using an earth leakage circuit breaker (ELCB) also known as a residual current device (RCD) or a residual current circuit breaker (RCCB) in a system that incorporates a variable speed drive connected to 3 phase 400 V. The trip level of the ELCB has to be 300 mA.
(30 mA used in house hold will malfunction due to earth leakage).

6.3.3.Service switch

The unit must always be connected to the main supply through a separate service switch.

NB! Installation must always be in accordence with local legistration.

	MultiFoamer
Voltage:	3/PE 380-500V
Frequenz:	50/60 Hz
Motor load:	7.5 kW
Nominal current:	14.1 A
Fuse:	20 A
L1, L2, L3, PE	2.5 mm^2

6.4. Water connection

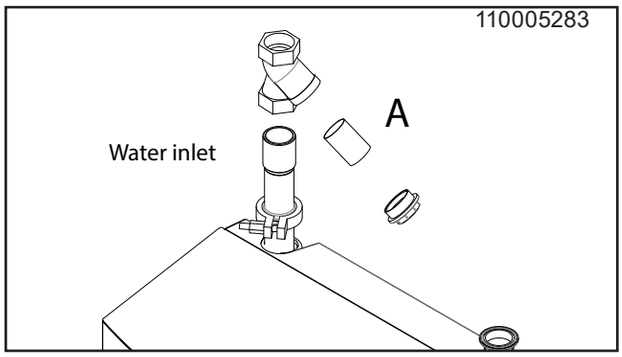
- Before the unit is connected to the water supply pipe, the supply line should be rinsed thoroughly in order to remove coarse impurities and metal shavings.
- The connection for water must be made at the top of the unit. (see layout drawing).
- Minimum diameter of the supply pipe must be at least Ø38 external (ø35mm internal).

- The unit must be fitted with a closing valve for water on the inlet (see drawing 110005285 on page 14).

- The pressure loss in the supply line must be held as low as possible by
  - avoiding long supply pipes
  - mounting low pressure resistance ball valves and
  - avoiding fittings with high pressure loss.
- When installing the piping, take care to avoid air traps.
- All pipe connections to the unit must be clamp connections ensuring simple maintenance and dismantling of the station.

Max. allowed temperature of supply water: 158°F
Max. allowed pressure of supply water: 29-116 psi

For an optimum functioning of the injector system, we recommend installing a filter on the inlet to avoid impurities.



6.5. Air connection

Before the unit is connected to the air supply, the pipe system must be thoroughly rinsed in order to remove coarse impurities.

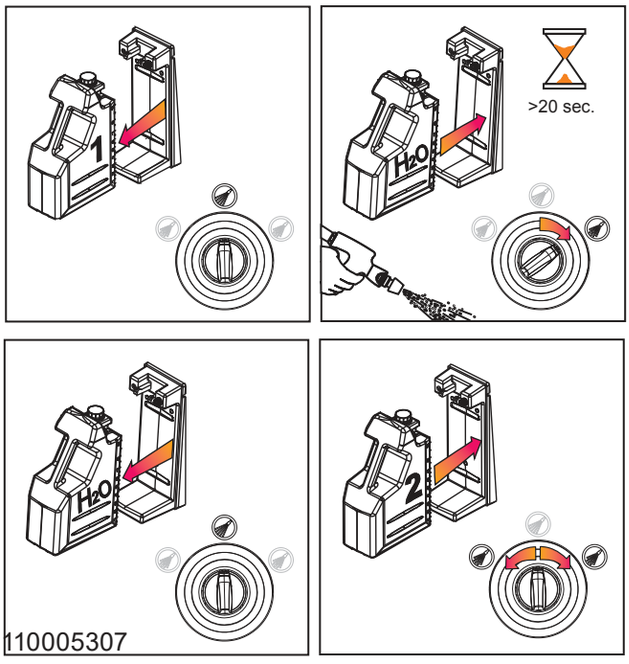
- The unit requires an air supply boosting
- an inlet pressure of minimum 87 psi
- a minimum capacity of 118 gpm.
- The air supply pipe is connected directly with a quick fitting for easy dismantling. In all units an inlet valve with 1/4” thread is fitted (layout drawings).

6.6. Supply of detergent

Mainstation <u>with</u> user pack system
See drawing no 110005307.

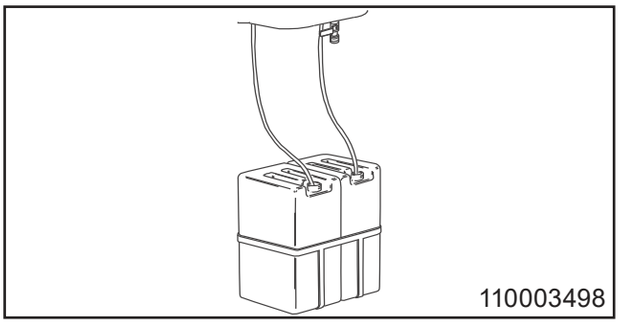
- Place the specially designed user pack in the automatic holder.
- If changing to a different product when ending the cleaning process, rinse the product inlet line with clean water as follows:

Replace the User Pack containing product by one with clean water; place the foam nozzle and open the spray gun/outlet valve. The product inlet line is now rinsed with clean water before use of another product.



Mainstation <u>without</u> user pack system.
See drawing no 110003498

- Place the can with detergent in the can holder
- Check the suction filter for impurities.
- Put the suction hose into the can below product level and avoid suction of air.
- After pre-rinsing, check again that the hose is sufficiently below product level and avoid suction of air during foam or spray operation.
- After use of and when changing product as well as after use of the unit, remove the hose from the can and rinse the product inlet line and injector with clean water.



6.7. Hose connection

- The special hose fitted with spray gun/outlet valve is connected to the outlet quick coupling of the unit (layout drawing).
- Maximum hose length: 30 m.
- It is recommended only to use Nilfisk FOOD hoses, which have been tested for resistance.

7. System preparation

7.1. Start up of new system

In order to ensure a problem-free start up of a new system the pipe system and pump must be flushed and bled.

Bleeding the pipe system

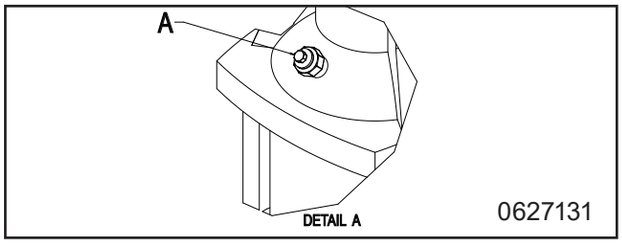
1. Turn on the water supply to rinse and bleed the entire system. If satellites are installed open the tap furthest away until no air or dirt comes out. Then rinse and bleed the next tap and continue until the tap closest to you has been rinsed and bled.

Bleeding the pump

1. Loosen the relief plug (A) (drawing 0627131) 1-2 revolutions until water and air begin to flow out.

Never loosen the relief plug while the pump is running as this may damage the packing. Tighten the relief plug again.

2. Start the pump so that all remaining air pockets are forced up to the top of the pump.
3. Stop the pump
4. Loosen the relief plug 1-2 revolutions again and bleed the system until only water flows out.
5. Tighten the relief plug once more.



The mainstation is now ready for operation.

7.1.1. Start

1. Make sure that the water and air supply to the unit is open. For air see layout drawing. In case of central chemical supply this must be activated too.

7.1.2. Stop

1. Stop program if running.
2. Close the water supply (see drawing 110005285-page 14).
3. Close the air supply (see drawing 110005288-page 14).
4. Deactivate chemical supply by pulling up the suction hose or removing the User Pack.

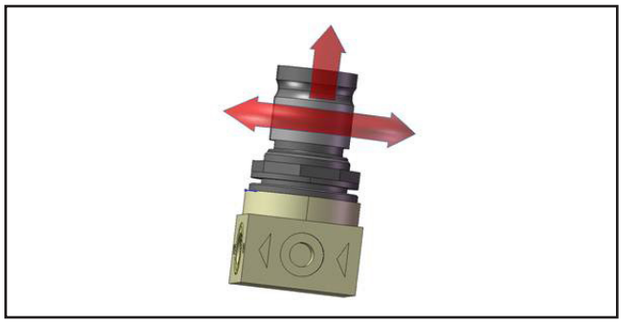
Due to the following it is very important to close water, air and chemical supply when the unit is not in use.

- If the air supply is open when the unit is not in use - air might seep into the water pipe - which means that the system has to be bled again.

7.1.3. Adjustment of air

Remove the cover from the unit.
Adjust the air pressure on the reduction valve until an appropriate foam quality is reached.

When setting the regulator, carefully pull up the knob and turn it clockwise for pressure increase and counter clock wise for pressure decrease.



8. Operation

Wear glasses when using the unit.

Wear gloves and suitable clothing when using the unit.

WARNING
This machine has been designed for use with the cleaning agents supplied or recommended by the supplier

8.1. Start/Stop (change, rinse, foam, des)

Start mainstation

1. Check that water- and air supplies for the system are open.
2. Make sure that the water and air supply to the unit is open. For air see drawing 110005288-page 14. In case of central chemical supply this must be activated too.

Stop mainstation

3. Turn off the water supply
4. Close the air supply
5. Deactivate chemical supply by pulling up the suction hose or removing the User Pack.

It is important to shut off the water and air when the unit is left after use .

If the air supply is open when the unit is not in use, air may seep into the water pipe. If this is the case the system may have to be bled again.

It may be necessary to bleed the pipes and the unit again after it has been closed for a longer period of time (holidays, and the like)

CAUTION
The chemical supply must always be rinsed thoroughly after use.

The following procedure will clean the chemical supply for detergents and/or remains of disinfectants:

1. Remove User Pack or standard can.
2. Hold the rinsing bottle with clean water tightly against the suction opening (with User Pack). Alternatively, you can place a User Pack with clean water in the holder or – without User Pack – place the hose in a bucket of clean water.
3. Activate the hose handle until clean water comes out of the nozzle (approx. 30 seconds).

8.2. Long stops

If long productions stops are planned (more than 6 months) and the pump is emptied of water, it is recommended that the pump be secured as follows:
1. Remove the coupling safety guard.
2. Spray a couple of drops of silicone oil onto the axle between the top section and the coupling.

Carefully follow the instructions given in the manual provided by the pump supplier. Never store or install the equipment where the ambient temperature gets at or below the freezing point.

8.3. Regular maintenance

Quick coupling; it is recommended to lubricate all coupling parts regularly, approx. once a month) by waterproof grease to prevent leaks and damage of o-rings.

1. If the quick couplings leak, o-rings should be replaced.
2. Depending on usage, maintenance should be undertaken by an authorised service engineer at least once a year in order to prevent defects and failure of operation. Authorised engineers are persons who due to their skills and experience have sufficient knowledge of Hygiene Systems and are confident with the state work safety regulations, accident preventing regulations, lines and generally acknowledged technical regulations such as DIN-norms and VDE-provisions. For your safety, this cleaning unit has been manufactured according to all relevant regulations valid in the EU and therefore it has been supplied with the CE-marking. For further information, please refer to the service department.
3. When the cleaning process has been completed or chemicals have been changed, it is important to rinse the suction and injector system in the following way:
   - Replace the can with a can containing clean water.
   - Put the suction hose into the water can.
   - Connect the foam nozzle.
   - Open the spray gun/outlet valve and keep it open until the injector has been rinsed through (approx. 30 seconds).
     Remove the suction hose from the water can.
4. It is recommended to delime the unit according to pharagraph 9.6

9. Maintenance, trouble shooting, service

Service may only be carried out by authorized and qualified personnel.

CAUTION
The system must only be serviced when there is no voltage or pressure on the system.

1. Turn off the main switch.
2. Open a water outlet to depressurise the system.

CAUTION
The system might be hot.
Ensure sufficient cooling time.

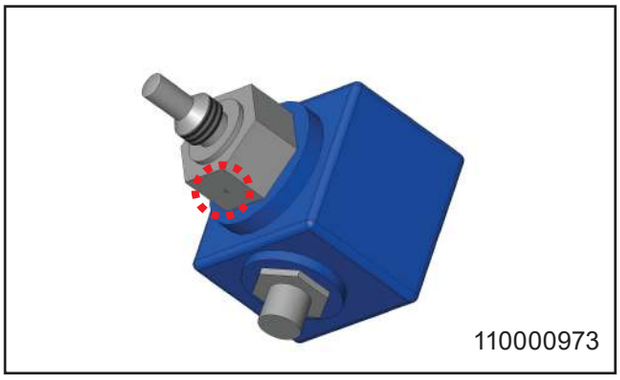
Wear glasses.

Wear gloves and be aware of chemicals.

WARNING
To ensure machine safety, use only original and apporved spare parts.

9.1. Installation instruction for flow switch

There is a dot on one of the nut surfaces on the sensor. This is used to position the contact point of the sensor in relation to the direction of flow of the medium.



This marking must be located within an angle of +/- 30° parallel to the direction of flow, as shown in the example.

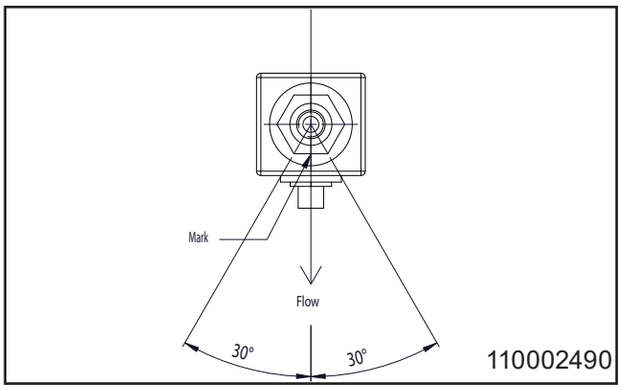
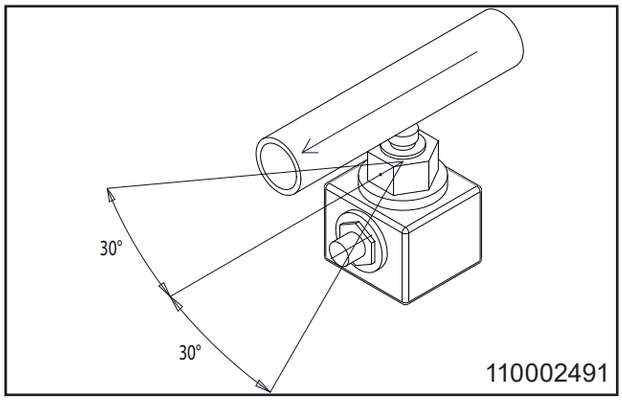


Diagram of sensor fitted in a pipe.



Loctite 577 is used at the factory to seal the thread, but packing yarn/packing tape can also be used.

9.2. Components

9.2.1. Pump/motor

Pump/motor are maintenance free.

9.2.2. Flow switch

Maintenance-free.
If defective, replace the flow switch.

1. Stop the system.
2. Remove the cover.
3. Turn the “rinse/foam” handle to foam position.
4. Activate the spray handle on the outlet hose so water runs out.
5. Check that the flow switch is turned the correct way (the wire must follow the follow direction).
6. Turn the brass screw at the bottom of the hole until a green diode lights up.
7. Close the spray handle again and check that the red diode lights up.
8. Mount the cover.

9.2.3. Product solenoid valve

Maintenance-free.
If defective, replace the product solenoid valve and/or replace chemical supply hoses.

Warning: Risk of chemical residue. Wear protective gear.

1. Turn off power supply.
2. Remove valve with a slot-head screwdriver.
3. Change valve and/or hoses. Be ware of flow direction marked on bracket.
4. Mount the valve in the bracket.

The flow direction is marked on the bracket. The flow of chemical supply is in the direction of the arrow with the tip pointing towards the automatic block. Do NOT use the marking printed on the solinoid valve.

9.3. Preventive maintenance

Depending on usage, maintenance should be undertaken by an authorised service engineer at least once a year in order to prevent defects and failure of operation. Authorised engineers are persons who due to their skills and experience have sufficient knowledge of the Hygiene Systems and are confident with the state work safety regulations, accident preventing regulations, lines and generally acknowledged technical regulations such as DIN-norms and VDE-provisions. For your safety, this cleaning unit has been manufactured according to all relevant regulations valid in the EU and therefore it has been supplied with the CE-marking. For further information, please refer to the service department.

9.4. Rinsing the chemical supply/injector system

The chemical supply must always be rinsed thoroughly after use.

Remains of detergents or disinfectants can clog the injector so it needs to be rinsed or replaced.
The following procedure will clean the chemical supply for detergents and/or remains of disinfectants.

1. Remove User Pack, if any.
2. Hold the rinsing bottle with clean water tightly against the suction opening (with User Pack) or against the hose (without User Pack). Alternatively, you can place a User Pack with clean water in the holder or – without User Pack – place the hose in a bucket of clean water.
3. Activate the hose handle until clean water comes out of the nozzle (approx. 30 seconds).

This procedure should be followed both on the detergent and the disinfectant side (if this is installed).

9.5. Change of injector

1. Turn off power supply.
2. Turn off water and air supply.
3. Depressurise the system.

4. Unscrew and change injector. Beware of chemical residue.
5. Reconnect water, air supply and power supply.

WARNING
Risk of chemical residue.
Wear protective clothing.

CAUTION
The unit might be hot.
Ensure sufficient cooling time.

9.6. Deliming

The interval of the deliming procedure depends on the water hardness. Please see table in the end of this section.

9.6.1. Manual block

1. Make sure the water and the power to the unit is disconnected.
2. Remove the cover from the unit.
3. Depressurise the system.
4. Dismount the injector block, product non-return valve, air valve and air non-return valve including the air fittings.
5. Rinse the injector block in the clean water.
6. Place the injector block and product non-return valves in a deliming bath - make sure the selector knob is over the surface.
7. Wait for 60 minutes.
8. Rinse the injector block in clean water.
9. Mount the air valve, air non-return valve and product non-return valve on the injector block and mount the injector block in the unit.
10. Reconnect water to the unit.
11. Test the unit in foam position make sure the vacuum is sufficient, it is recommended to be between 14,8-20,7 inHg/-0,05-0,07MPa.
12. Test that the unit can start and stop in both foam and rinse position.
13. Reinstall the cover on the unit.

9.6.2. Automatic block

A dedicated deliming program is needed for the following process:

1. Remove the cover from the unit.
2. Place the chemical supply hoses in clean water and activate the foaming function on all chemical valves for 1 minute.
3. Place the chemical hoses in deliming fluid and activate the foaming function for all chemical valves for 1 minute.
4. Wait 60 minutes.
5. Place the chemical hoses in clean water and activate the foaming function on all chemical valves for 5 minutes.
6. Activated the rinsing function for 1 minute.
7. Test foaming function and make sure the vacuum is sufficient, it is recommended to be between 14,8-20,7 inHg/-0,05-0,07MPa.
8. Reinstall the cover on the unit.

°dH	ppm	Time between deliming
0-5	18-90	12 months
5-10	90-180	6 to 12 months
10-15	180-270	3 to 6 months
15-20	270-360	3 to 6 months
>20	>360	1 to 3 months

Table 9.1

9.7. Coupling

It is recommended to lubricate all coupling parts regularly (approx. once a week) with waterproof grease to prevent leaks and damage of o-ring. If the unit is equipped with a spray gun the -o-ring of the gun should also be lubricated.
In leaking quick couplings the o-rings should be replaced.

9.8. Internal cleaning of the unit

Depending on the environment where the unit is installed, internal cleaning of the unit might be required. We recommend opening and cleaning the unit inside once a year. Do not spray inside the unit.

Chemical hoses; it is recommended to check all chemical hoses regularly, approx. once every 3rd month.

9.9. Trouble shooting and remedy

In case of errors/troubles not mentioned above, please contact your local service technician for further assistance.

Fault	Cause	Remedy
The unit does not start	• Is there supply voltage to the unit • Flow switch out of adjustment	• Reconnect voltage and ensure right supply • Try to readjust flow switch
No pressure / too low pressure	• Insufficient water supply at unit • Is the filter clogged • Is the pump leaking or making jarring sounds • Rinsing nozzle not installed • Defect in mainstation unit • No water supply	• Open water supply valve • Clean the filter • Call technician • Place rinsing nozzle • Consult direction for use of mainstation • Ensure water supply
Insufficient foam creation	• No supply of diluted products • Product not suitable • Insufficient air supply at unit • Air pressure in mixing chamber too high • Defect non-return valve for air • Incorrect nozzle • Leaking or blocked chemical non-return valve • System needs deliming	• Consult directions for use of dosing unit • Choose suitable product • Provide sufficient air supply • Adjust air pressure setting • Replace non-return valve for air • Place foam nozzle 50/200 • Clean or replace chemical non-return valve • Delime the unit according to paragraph 9.5
No foam creation	• No supply of diluted products • Product not suitable • Air pressure in mixing chamber too high • Defect non-return valve for air • No air supply at unit • Non-return valve blocked • Nozzle of mixing chamber blocked • Leaking or blocked chemical non-return valve • System needs deliming	• Consult directions for use of dosing unit • Choose suitable product • Adjust air pressure setting • Replace non-return valve for air • Ensure air supply • Clean or replace non-return valve • Clean nozzle • Clean or replace chemical non-return valve • Delime the unit according to paragraph 9.5
No spray sanitising	• No supply of diluted products • Non-return valve blocked • Nozzle of mixing chamber blocked • Leaking or blocked chemical non-return valve • System needs deliming	• Consult directions for use of dosing unit • Clean or replace non-return valve • Clean nozzle • Clean or replace chemical non-return valve • Delime the unit according to paragraph 9.5

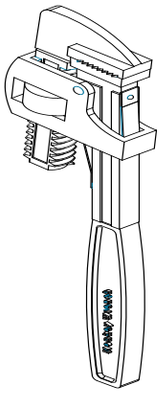
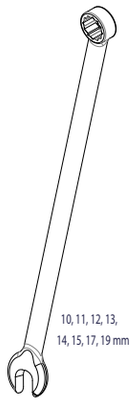
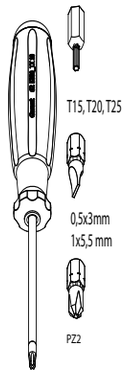
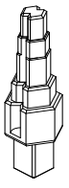
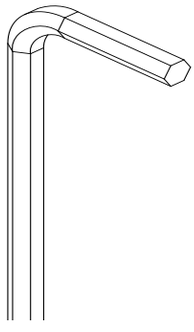
Error	Cause	Remedy
Limit exceed 1 – Temperature sensor	1) Water pump top temperature above 80 degrees C / 175 degrees F	1) Lower the inlet water temperature to below 70 degrees C / 158 degrees F
Limit exceed 2 – Dry run sensor	1) Inlet water pressure is too low Water consumption too high – pump in suction mode	1) Secure sufficient water supply pressure min. 1 bar / 14 psi Secure that water consumption does not exceed pump capacity 2) Check inlet filter for impurities/clean filter
Signal outside range analogue input 1 (165)	1) Output signal from pressure sensor on automatic block is outside range	1) Reset unit via reset contact terminals 4A and 4B 2) If error remains after reset either sensor or sensor cable is broken
Signal outside range analogue input 2 (166)	1) Output signal from dry run sensor on inlet pipe is outside range	1) Reset unit via reset contact terminals 4A and 4B 2) If error remains after reset either sensor or sensor cable is broken

9.10.Service address

Please see the back cover of this manual.

10. Tools

Standard tools that are useful/necessary for service and maintenance on the full range of equipment.

	BF/BW & MB Booster Mainstation Foamatic mainstation		Satellites BF/BW & MB Booster Mainstation Foamatic satellites Foamatic mainstation
	Satellites BF/BW & MB Booster Mainstation Foamatic satellites Foamatic mainstation		Satellites BF/BW & MB Booster Mainstation Foamatic satellites Foamatic mainstation
	BF/BW & MB Booster		Foamatic satellites Foamatic mainstation
	Satellites BF/BW & MB Booster Mainstation Foamatic satellites Foamatic mainstation		Satellites Mainstation Foamatic satellites Foamatic mainstation

11. End of use

11.1. Dismounting

Close all supply valves and remove the unit from wall.

11.2. Disposal

In case the unit should be disposed, it must be separated and sorted in recyclable and non-recyclable parts. The steel construction is easily separated and disposed and constitutes no environmental risk - nor for the user.

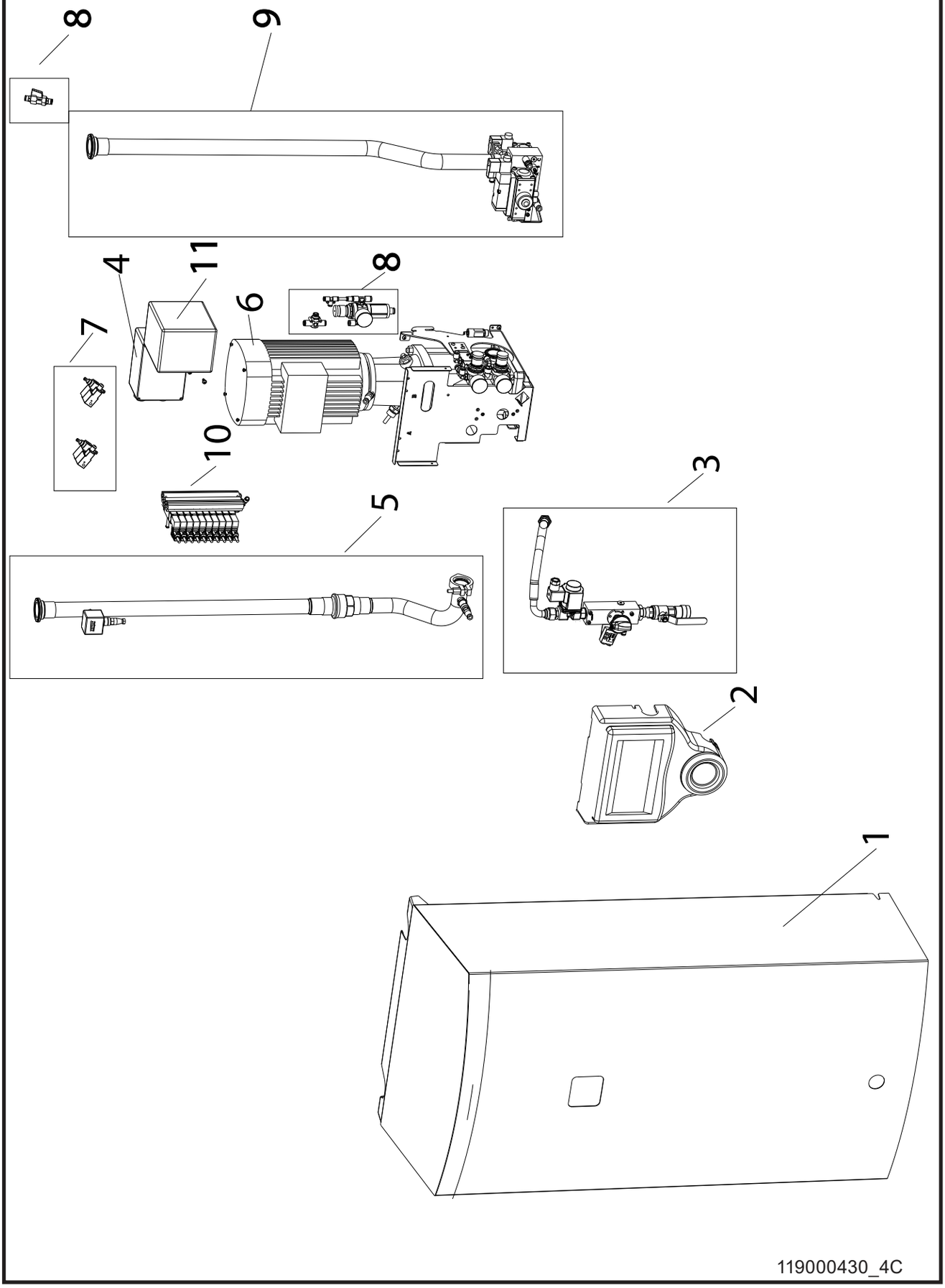
Disposal must be made according to rules and regulations in force for disposal of machines as well as all standards in connection with environmental protection.

CAUTION

Disposal of electronic components and other remedies must be handled as special disposal when disposed. Alternatively, it can be disposed by a specialised disposal company.

Spare Parts

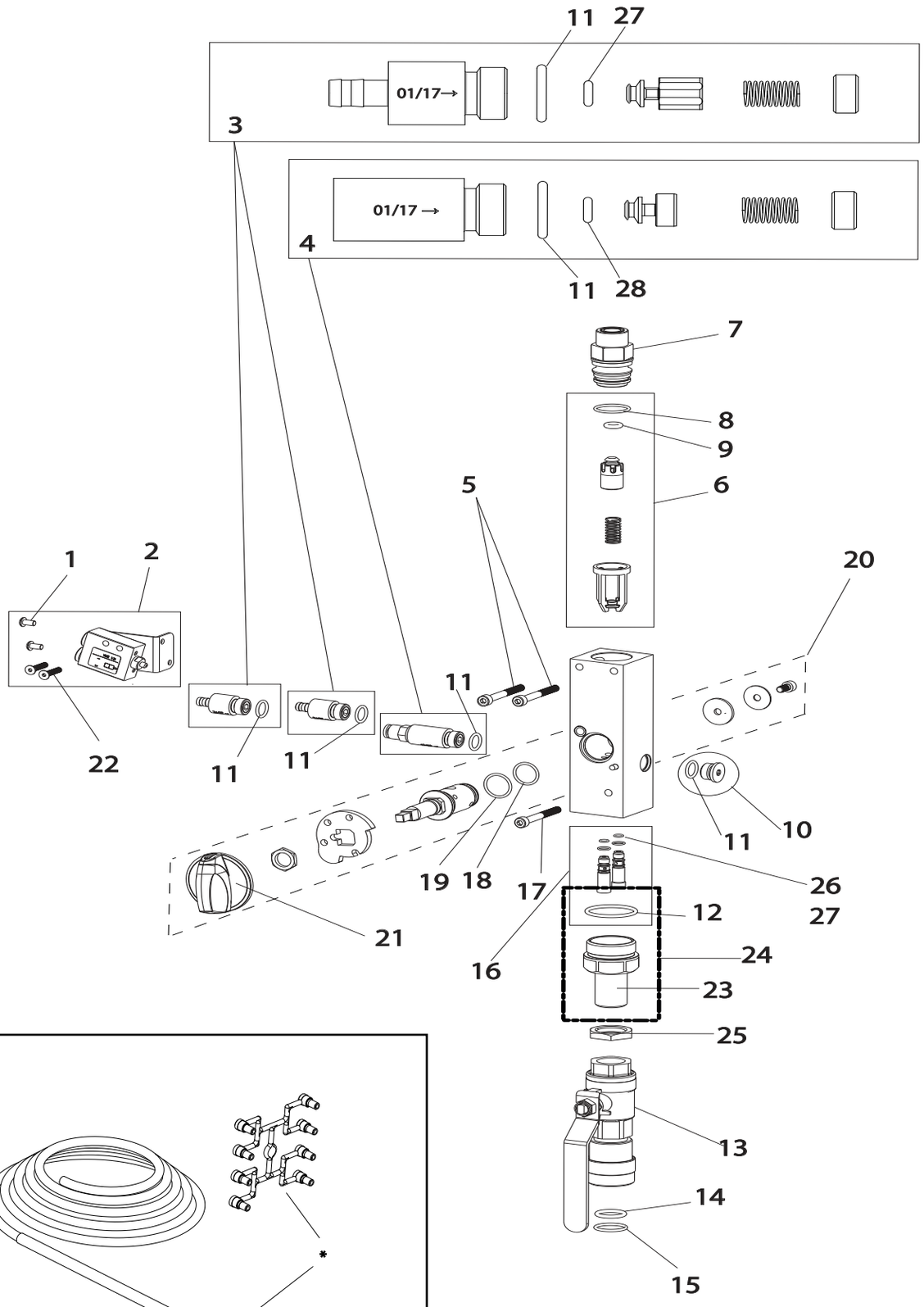
MultiFoamer

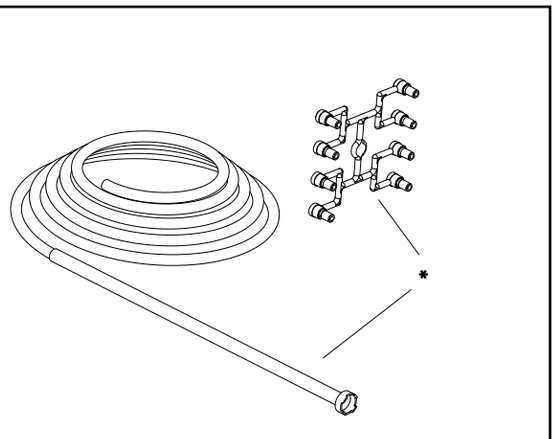


Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3
1	110005898	Cover Hybrid MS +70	1	1	1	1
2	110003965	Vacuum cover	1	1	1	1
3		See page 28 drawing 110004572	-	1	-	1
4		Screw terminals	1	1	1	1
5		See page 30 drawing 110001888	1	1	1	1
6	110005904	CRNE 5-9	1	1	1	1
7	110005281	Solenoid valve complete valid **until** 22/1-2021	2	2	3	3
7	110006599	Solenoid valve complete valid **from** 22/1-2021	2	2	3	3
7	110006677	Chemical valve, Bürkert (cURus approved)	2	2	3	3
8		See page 36, drawing 119000430_3	1	1	1	1
9		See page 32 drawing 110004580	1	1	1	1
10	10002433	Pilot manifold f. 10 valves (Optional)	1	1	1	1
11	110008156	Power supply for flow switch	*	*	*	*

* Optional

Manuel Block



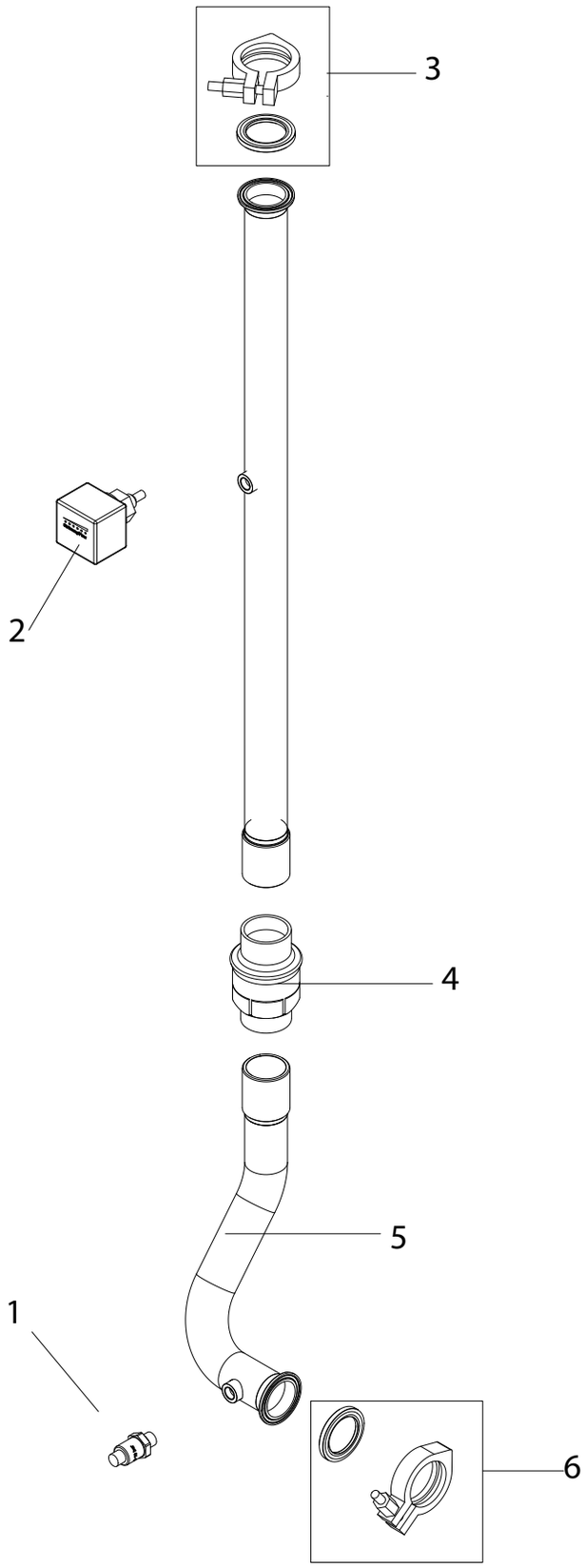


110001405

110004572MA-1

Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3M
1	110003512 (0602021)	Screw kit	-	1	-	1
2	110003282	Air regulation valve complete	-	1	-	1
3	110001102	Chemical non return valve	-	2	-	2
4	110001979	Air non return valve	-	1	-	1
5	110003512 (110000526)	Screw kit	-	1	-	1
6	110004384	Water non return valve complete	-	1	-	1
7	110004246	Fitting	-	1	-	1
8	110005355 (0600078)	O-ring kit	-	1	-	1
9	110005355 (110002785)	O-ring kit	-	1	-	1
10	110002306	Plug	-	1	-	1
11	110005355 (110002952)	O-ring kit	-	4	-	4
12	110005355 (110000038)	O-ring kit	-	1	-	1
13	110003682	Outlet coupling complete	-	1	-	1
14	110005355 (641101)	O-ring kit	-	1	-	1
15	110005355 (641102)	O-ringkit	-	1	-	1
16	110003283	Injector kit	-	1	-	1
17	110003512 (110000526)	Screw kit	-	1	-	1
18	110005355 (110002508)	O-ring kit	-	1	-	1
19	110005355 (350108)	O-ring kit	-	1	-	1
20	110003401	Axle for block complete	-	1	-	1
21	909100214	Operation button	-	1	-	1
22	110003512 (110000525)	Screw kit	-	1	-	1
23	110003092	Hexagon nipple	-	1	-	1
24	350705	Lock nut	-	1	-	1
25	110005355 (110004888)	O-ring kit	-	1	-	1
26	110005355 (110004887)	O-ring kit	-	1	-	1
27	110003355 (0635021)	O-ring kit	-	1	-	1
*	**110001214**	**Chemical hose (blue)**				
	110001197	**Chemical hose (yellow)**				
	110001198	**Chemical hose (red)**				
	110001199	**Chemical hose (green)**				
	0646105	**Chemical limiting nozzle**				

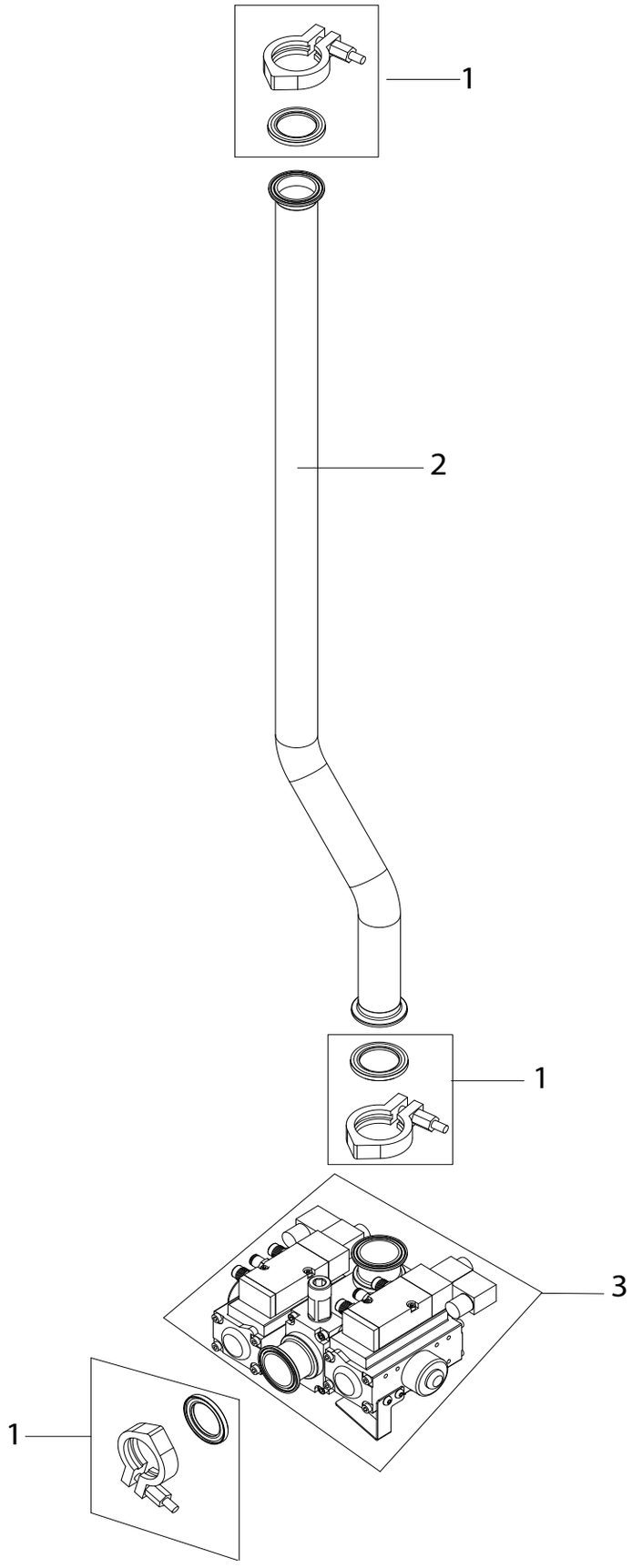
Inlet pipe



110001888-A-119000411

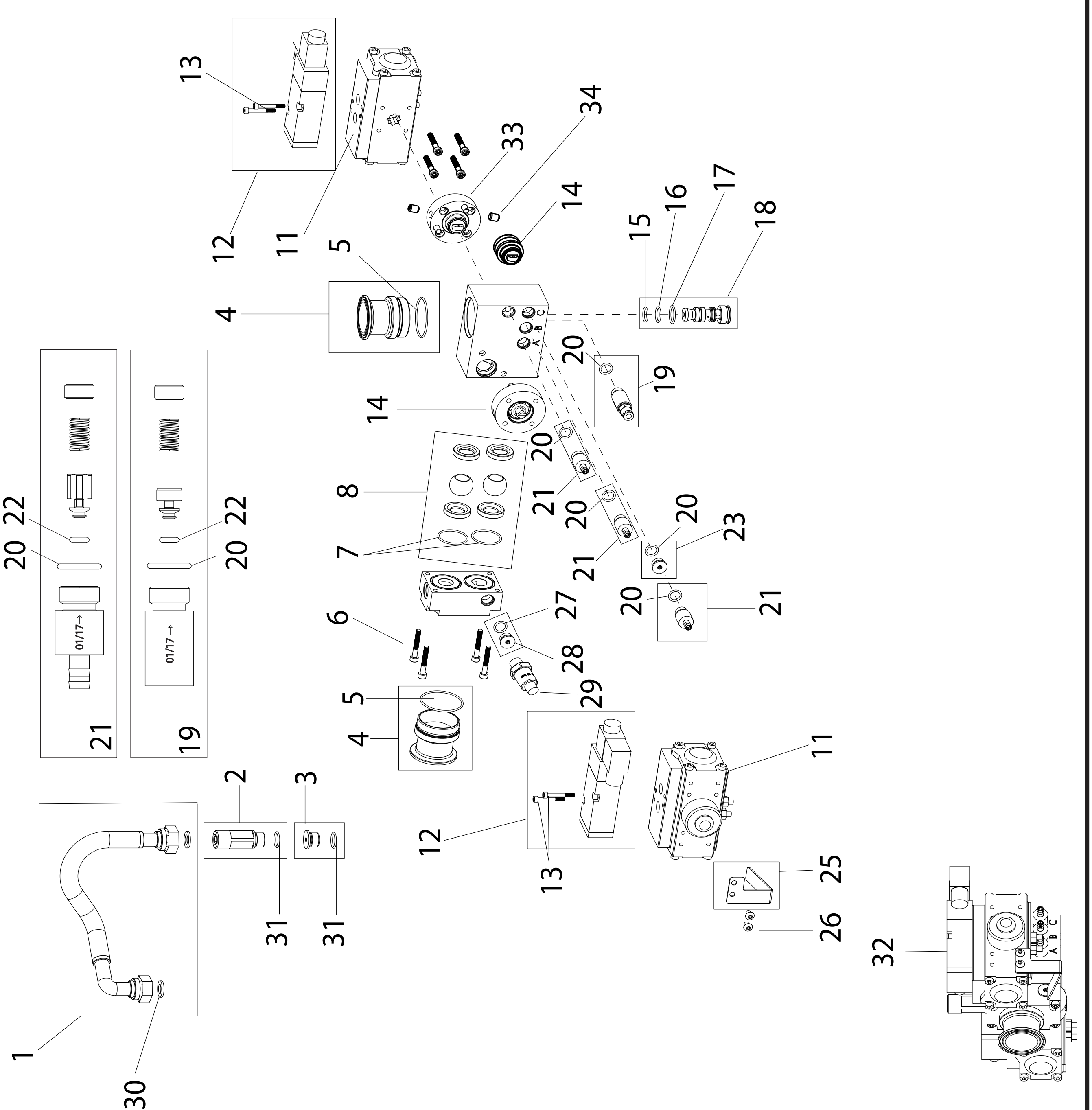
Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3M
1	0631030	Pressure sensitive switch (dry run) **until 20/8-2020**	1	1	1	1
1	110006663	Pressure transmitter 0-40 bar **from 21/8-2020**	1	1	1	1
2	110000973	Flow switch	1	1	1	1
2	110007807	Flow switch (cURus approved)	1	1	1	1
3	110005273	Clamp kit Foamatic	1	1	1	1
4	630900	Non return valve 1 1/4"	1	1	1	1
5	110004913	Piping support inlet	1	1	1	1
6	110005273	Clamp kit Foamatic	1	1	1	1

Outlet pipe



110004580-119000411

Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3
1	110005273	Clamp kit Foamatic	3	3	3	3
2	110005106	Outlet pipe complete	1	1	1	1
3		See page 34 drawing 119000430-5	1	1	1	1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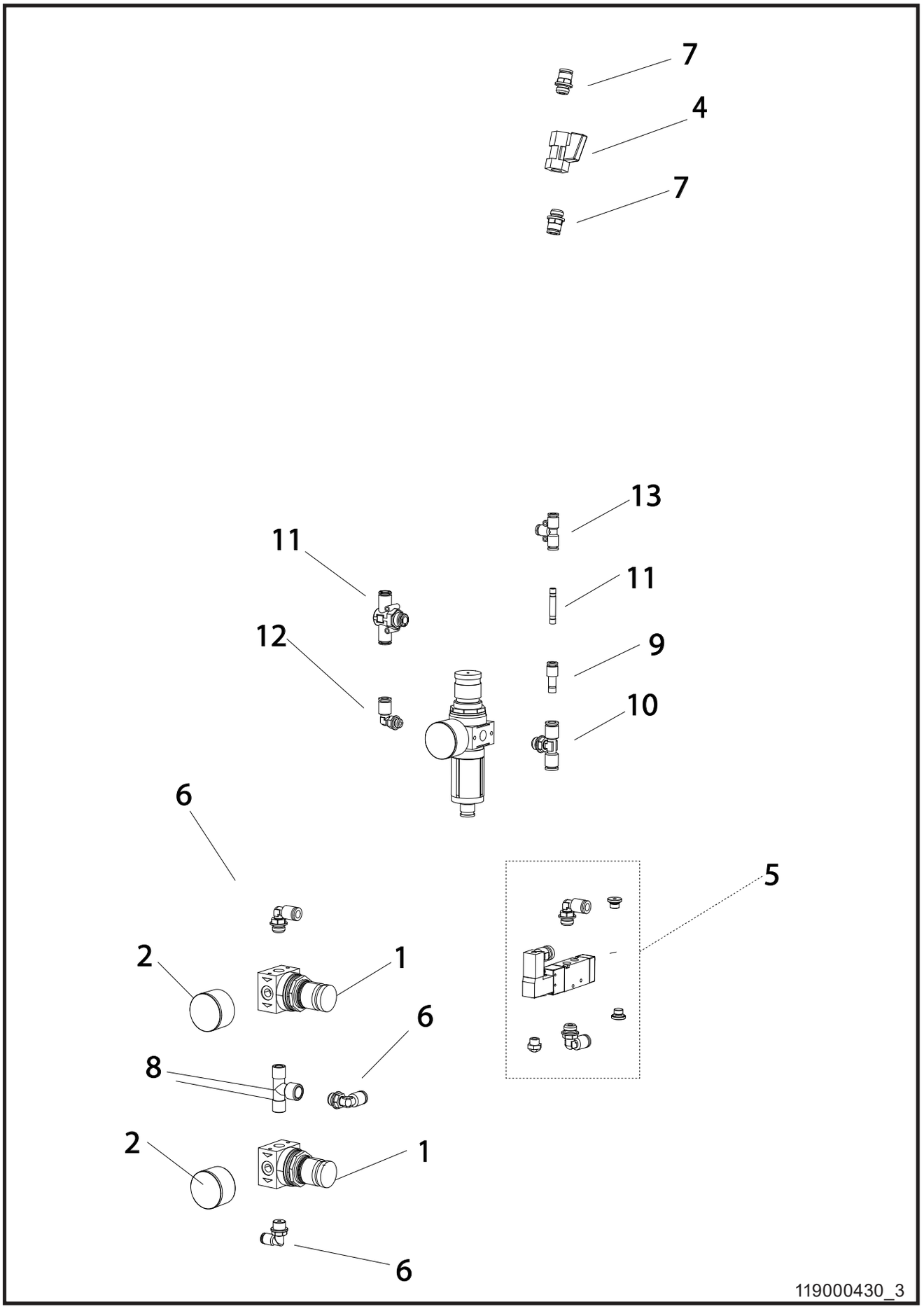
01/17→

119000430_5

Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3M
1	110004875	Hose	-	1	-	1
2	110005274	Fitting	-	1	-	1
3	110005275	Plug	1	-	1	-
4	110005279	Clamp fitting	2	2	2	2
5	110005355 (110004837)	O-ring kit	2	2	2	2
6	110003512 (110005104)	Screw kit	4	4	4	4
7	110005355 (110004835)	O-ring kit	2	2	2	2
8	110005276	Service kit actuator	1	1	1	1
11	0605792	Actuator	2	2	2	2
12	110004622	Solenoid valve	2	2	2	2
12	110006681	Solenoid valve (cURus approved)	2	2	2	2
13	110003512 (110004573)	Screw kit	4	4	4	4
14	110005277	Service kit automatic block	2	2	2	2
15	110005355 (110004870)	O-ring kit	1	1	1	1
16	110005355 (110004871)	O-ring kit	1	1	1	1
17	110005355 (110002955)	O-ring kit	1	1	1	1
18	110005363	Injector kit	1	1	1	1
19	110001979	Air non return valve	1	1	1	1
20	110005355 (110002952)	O-ring kit	3	3	4	4
21	110001102	Chemical non return valve	2	2	3	3
22	110005355 (0635021)	O-ring kit	3	3	4	4
23	110002306	Plug	1	1	-	-
25	110005207	Bracket	1	1	1	1
26	110003512 (110003900)	Screw kit	2	2	2	2
27	110005355 (110002952)	O-ring kit	-	-	-	-
28	110002306	Plug	-	-	-	-
29	110006663	Sensor	1	1	1	1
30	110005355 (0635042)	O-ring kit	-	2	-	2
31	110005355 (110004140)	O-ring kit	1	1	1	1
32	110005227	Block automatic complete, 3 detergents w. sat	-	-	-	1
32	110005226	Block automatic complete, 2 detergents w. sat	-	1	-	-
32	110005229	Block automatic complete, 3 detergents	-	-	1	-
32	110005228	Block automatic complete, 2 detergents	1	-	-	-
33	110005351	Fixation for actuator	2	2	2	2
34	110003512 (156519)	Pinol screw	4	4	4	4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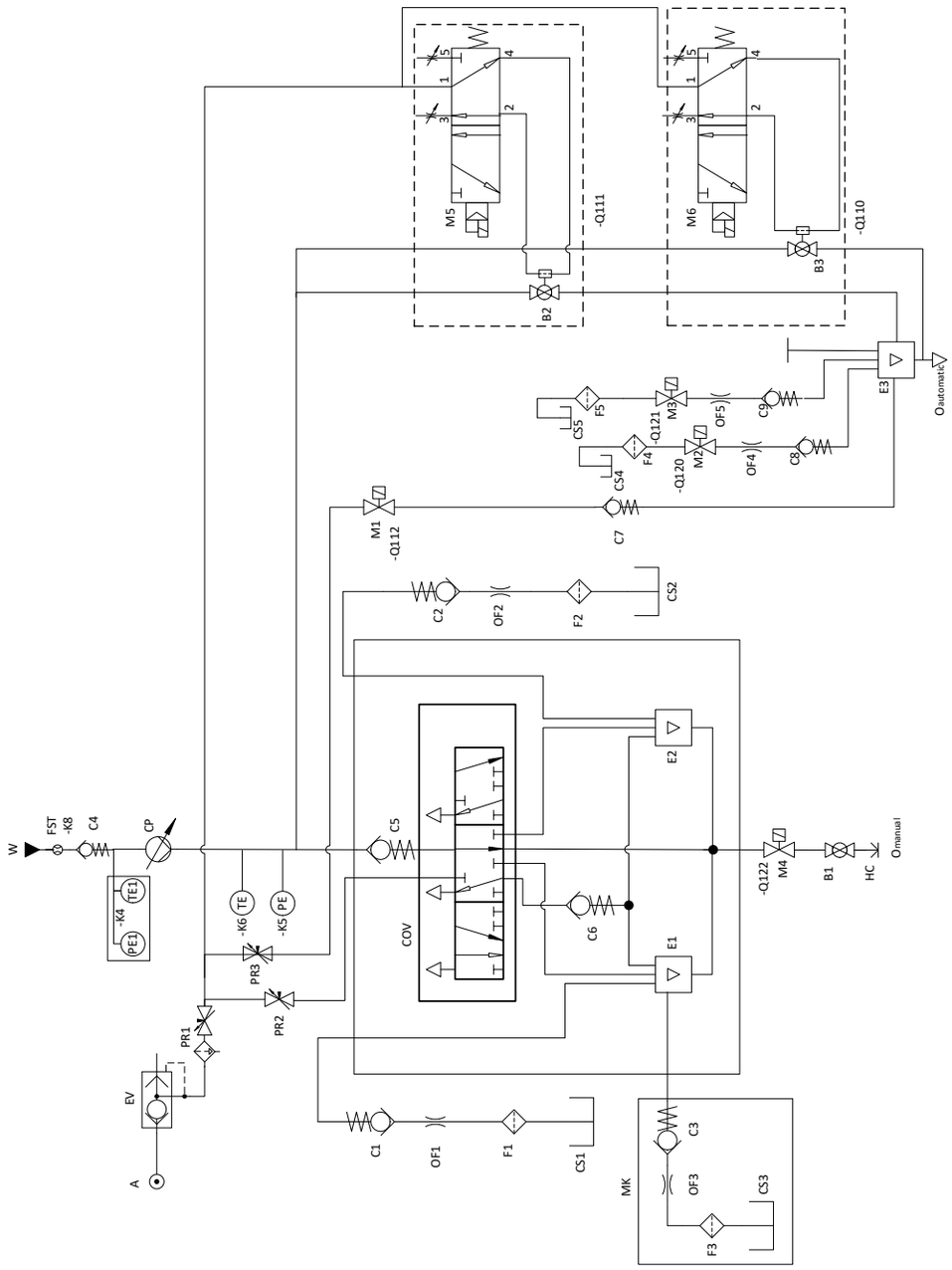
6
119000430_3

Pos./Ref.	Nr. No.	Description Beschreibung Désignation Designación	Multifoamer Inox 200-2	Multifoamer Inox 200-2M	Multifoamer Inox 200-3	Multifoamer Inox 200-3M
1	110000655	Regulator	1	2	1	2
2	635660	Manometer	1	2	1	2
3	635650	Air filter, regulator	1	1	1	1
4	634000	Ball valve air	1	1	1	1
5	110002787	Solenoid valve 5/2" complete	1	1	1	1
5	110006653	Solenoid valve (cURus approved)	1	1	1	1
6	59000	Air fittings, elbow 6 mm	2	3	2	3
7	639500	Air fittings 8 mm	2	2	2	2
8	0600084	Tee-piece 1/4"	-	1	-	1
9	110005431	Reduction ø8-ø6	1	1	1	1
10	638601	Air fittings 8 x 1/4" x 8	1	1	1	1
11	0663009	Air fittings 6 mm	1	1	1	1
12	638500	Air fittings, elbow 8 mm	1	1	1	1
13	0663011	Air fittings 6 mm tee-piece	1	1	1	1

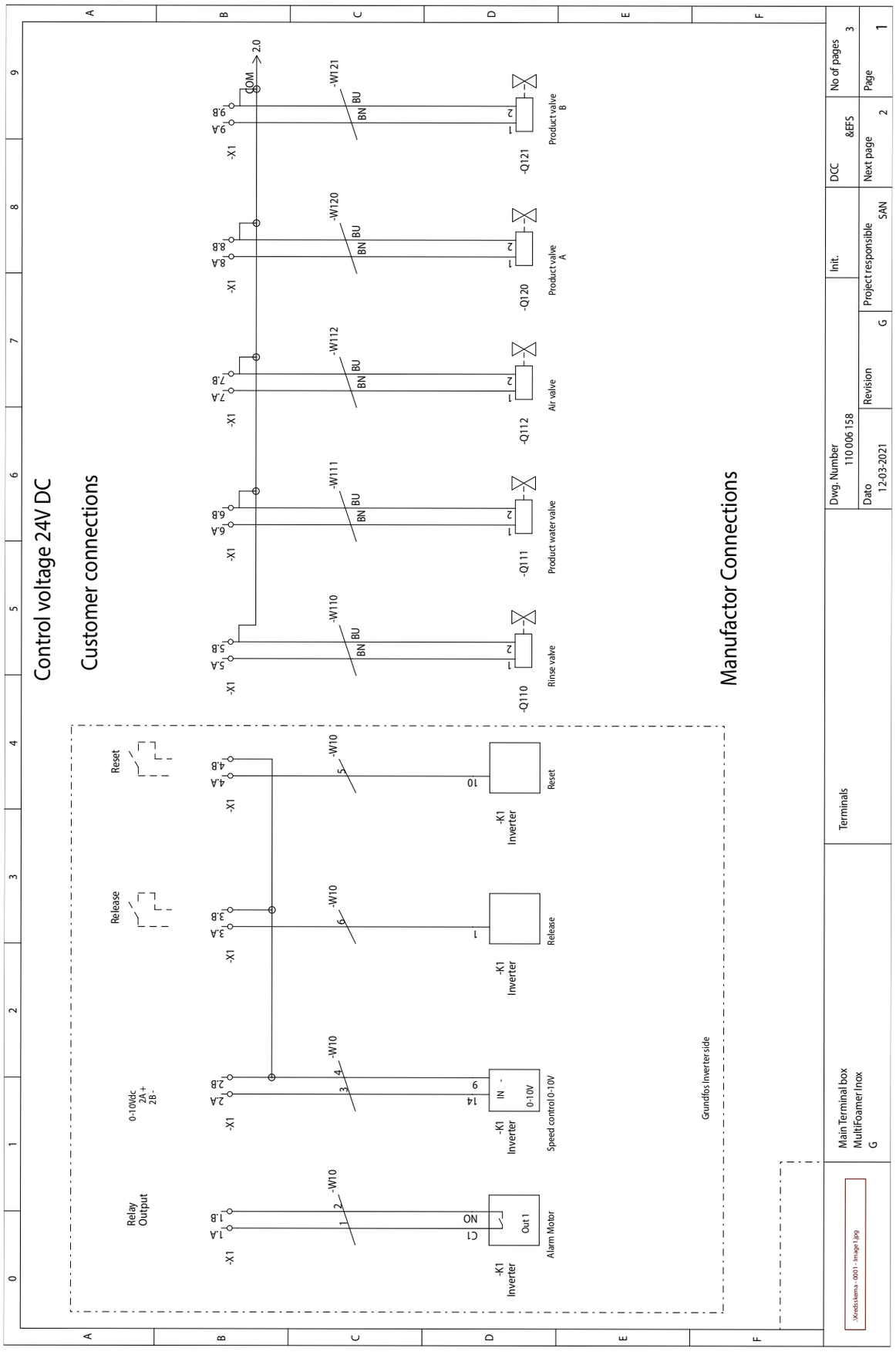
Operating Diagram

Number/Mark	Description
A	Air supply
B	Ball valve
C	Check valve
COV	Change over valve
CP	Centrifugal pump
CS	Chemical supply
E	Ejector
EV	Exhaust valve
F	Filter
FST	Flowsensor and -trigger
HC	Hose coupling
K	Component reference
M	Magnetic valve
MK	Mix kit (optional)
O	Outlet
OF	Orifice
PE	Pressure sensor
PR	Pressure regulator
Q	Component reference
TE	Temperature sensor
W	Water inlet



110005751

EI Diagram/Sensor Diagram



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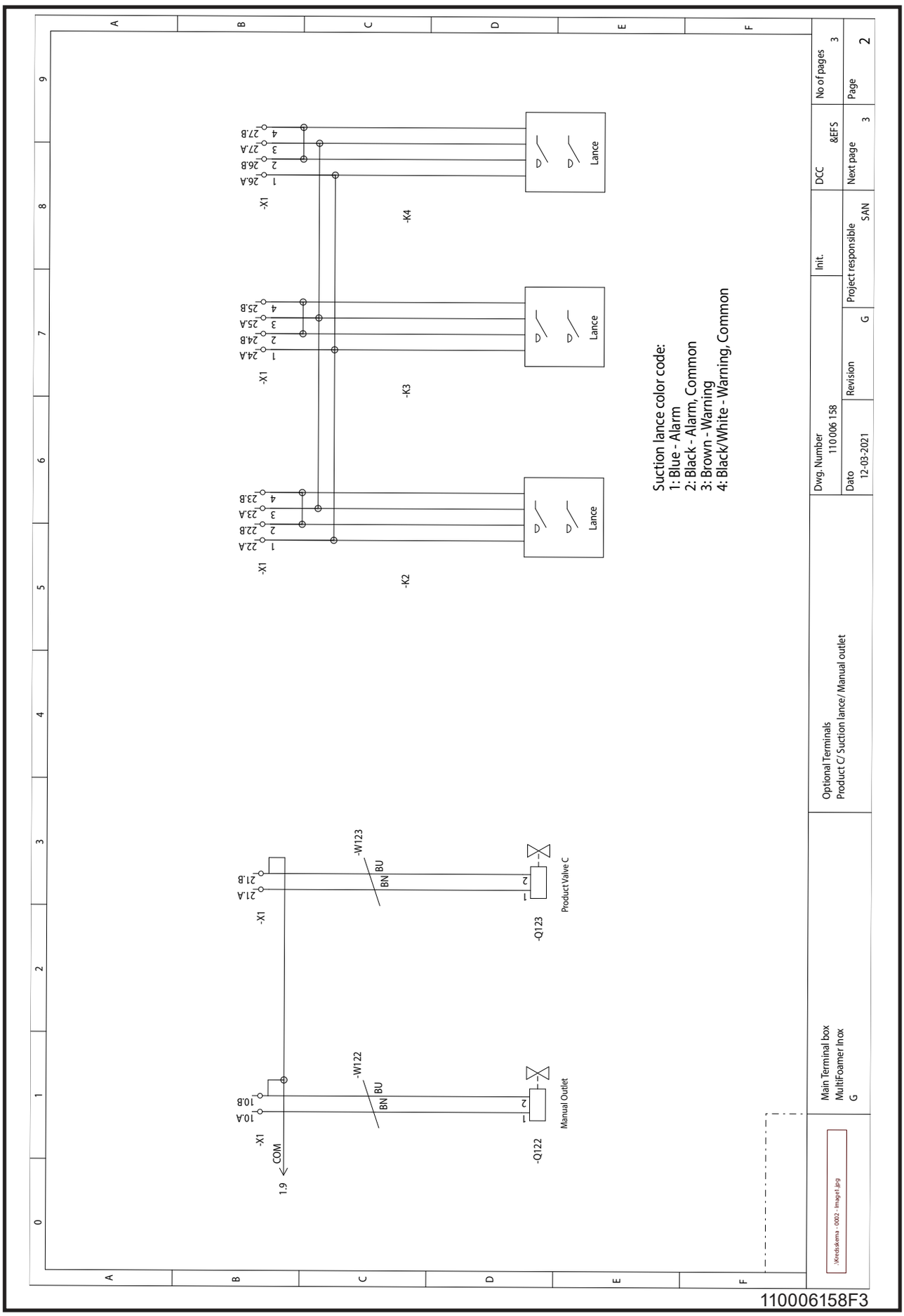
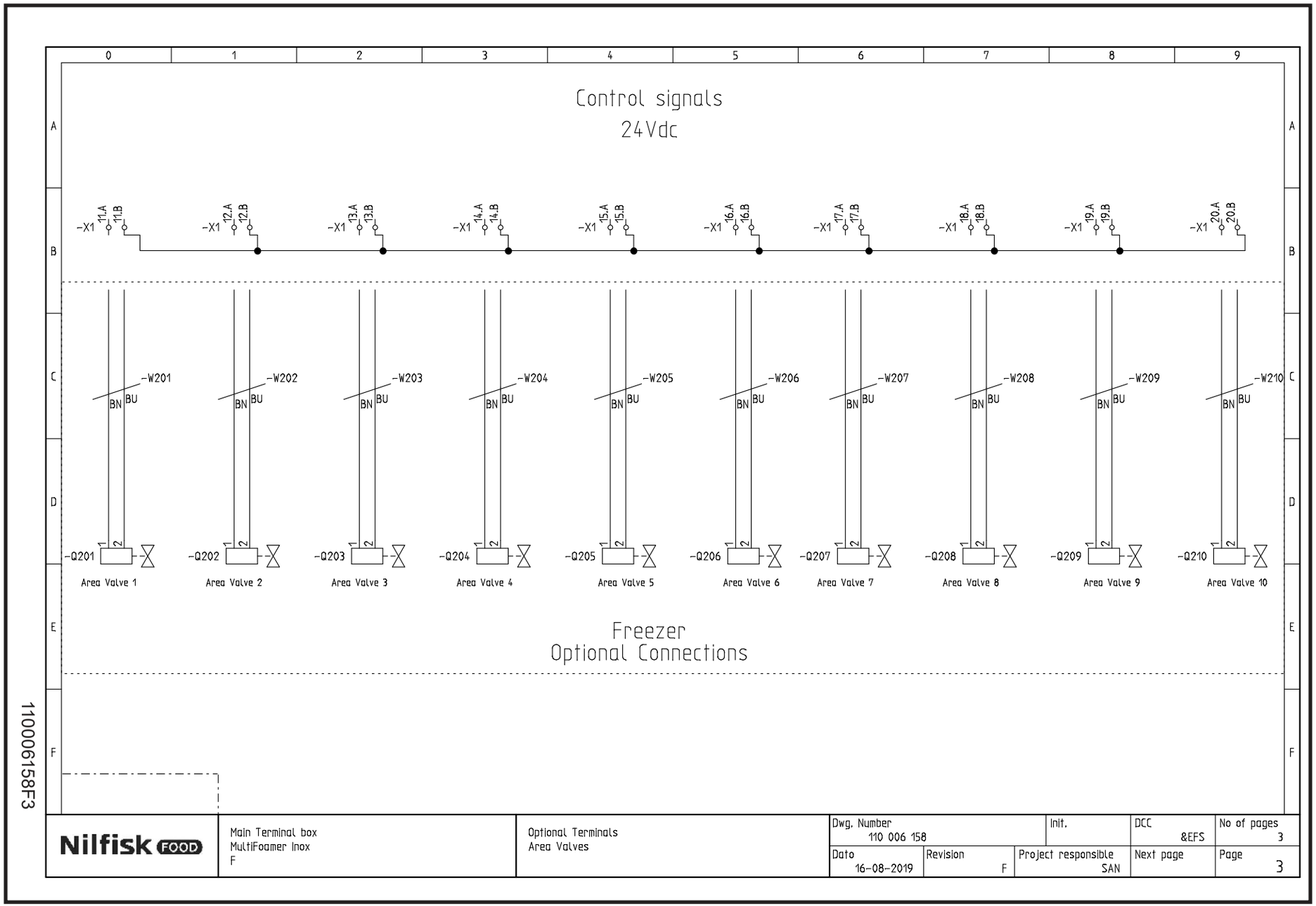
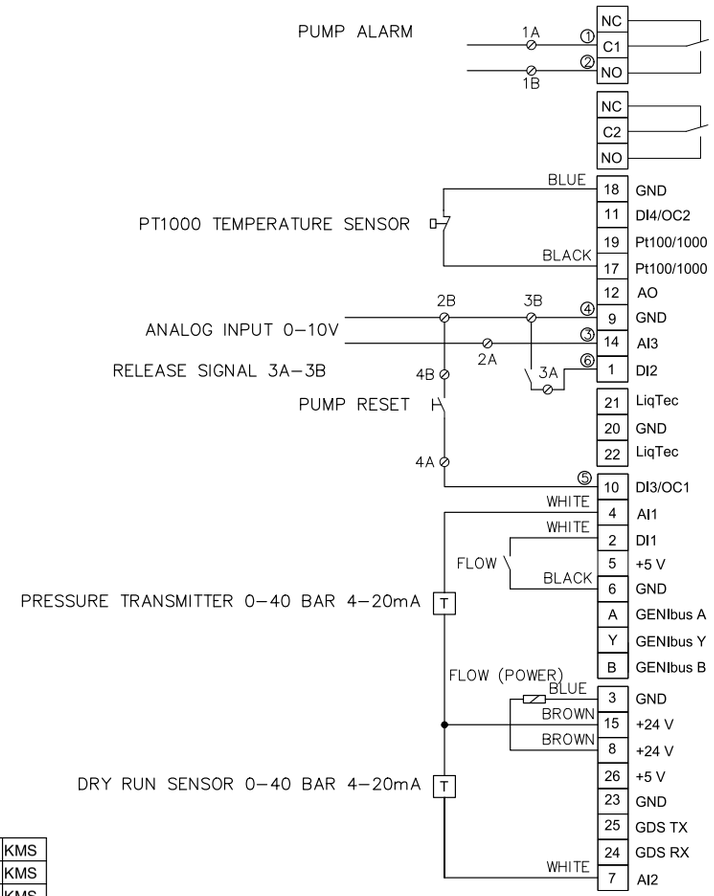

Suction lance color code:
1: Blue - Alarm
2: Black - Alarm, Common
3: Brown - Warning
4: Black/White - Warning, Common
-K2
-K3
-K4
-X1
Lance
-W123
-W122
-Q123
-Q122
Product Valve C
Manual Outlet
COM
Main Terminal box
MultiFoamer Inox
G
Optional Terminals
Product C/ Suction lance/ Manual outlet
Dwg.Number
110 006 158
Dato
12-03-2021
Revision
G
Project responsible
SAN
DCC
&EFS
Next page
3
No of pages
3
Page
2
110006158F3


0 1 2 3 4 5 6 7 8 9
A B C D E F
Control signals
24Vdc
-X1 11.A 11.B
-X1 12.A 12.B
-X1 13.A 13.B
-X1 14.A 14.B
-X1 15.A 15.B
-X1 16.A 16.B
-X1 17.A 17.B
-X1 18.A 18.B
-X1 19.A 19.B
-X1 20.A 20.B
-W201 BN BU
-W202 BN BU
-W203 BN BU
-W204 BN BU
-W205 BN BU
-W206 BN BU
-W207 BN BU
-W208 BN BU
-W209 BN BU
-W210 BN BU
-Q201 1 2
-Q202 1 2
-Q203 1 2
-Q204 1 2
-Q205 1 2
-Q206 1 2
-Q207 1 2
-Q208 1 2
-Q209 1 2
-Q210 1 2
Area Valve 1
Area Valve 2
Area Valve 3
Area Valve 4
Area Valve 5
Area Valve 6
Area Valve 7
Area Valve 8
Area Valve 9
Area Valve 10
Freezer
Optional Connections
110006158F3
Nilfisk FOOD
Main Terminal box
MultiFoamer Inox
F
Optional Terminals
Area Valves
Dwg. Number 110 006 158
Init.
DCC &EFS
No of pages 3
Dato 16-08-2019
Revision F
Project responsible SAN
Next page
Page 3

English (EN)



Mrk.	Dato	Rettelser	Init.
J	12/4-21	Kosmetiske ændringer	KMS
I	19/3-21	0-40 bars sensor	KMS
H	16/3-21	Release signal tilf.	KMS
G	14/9-20	Pumpealarm, fejl: flyttet fra NC til NO.	KMS
F	26/8-20	Tørløb, nye farver på ledning.	KMS
E	25/8-20	Tørløb atter tilbage som pressost.	KMS
D	6/7-20	Lampe fjernet, Input X5 box fjernet.	KMS
C	17/3-20	Output X5 rettet til Input X5.	KMS
B	27/1-20	Pressostat ind på dry-run.	KMS

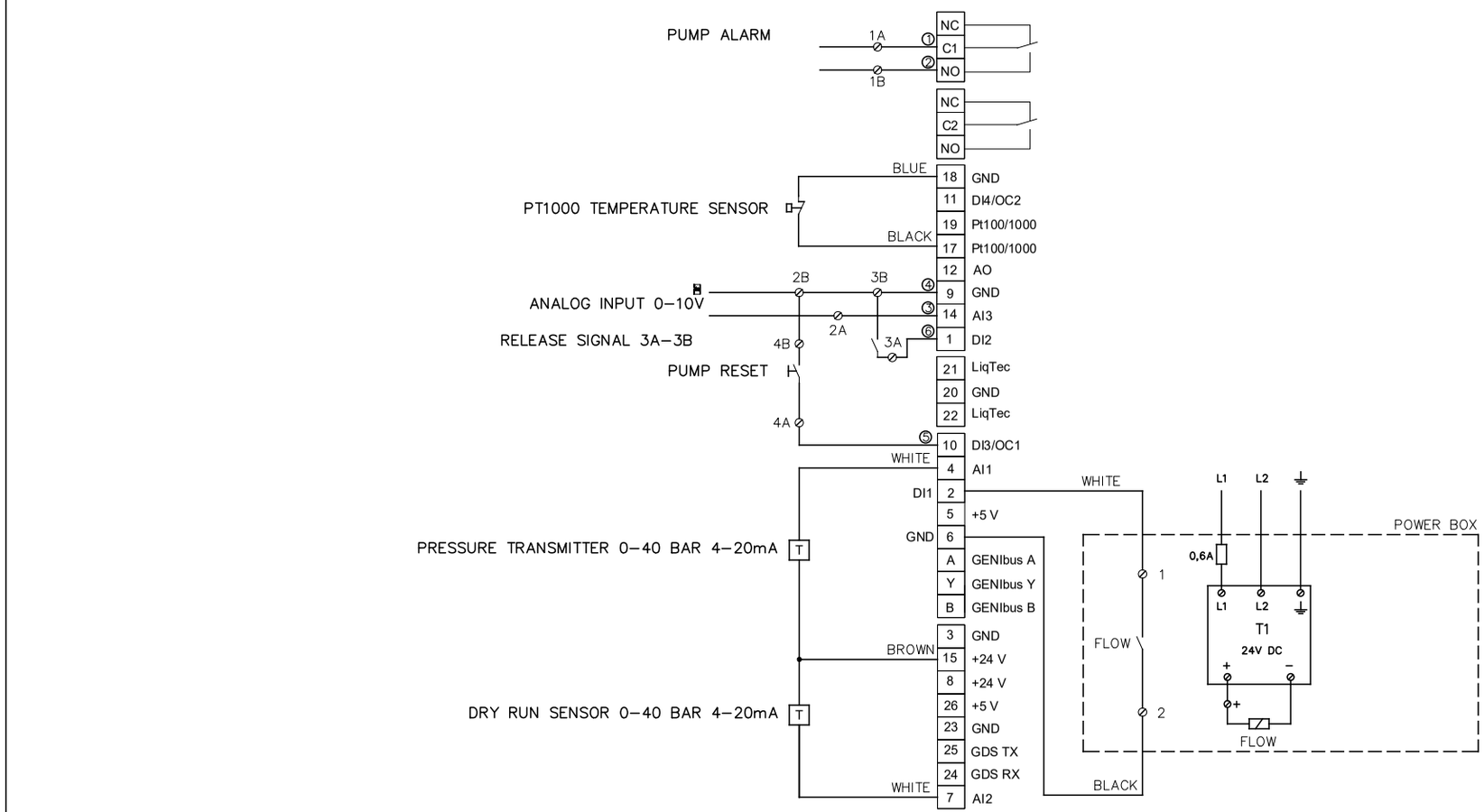
Nilfisk
Blytækkervej 2
DK-9000 Aalborg
Phone +45 72 18 21 00
Fax +45 72 18 20 99

Tegnet	18.12.19			
Godkendt	KMS		Ordre nr.	

ELDIAG.F.GRUNDFOS PUMP MULTIFOAMER INOX.

Tegnings nr.	Revision	Ark nr.
110007110J		1 of 1

Erstatning for

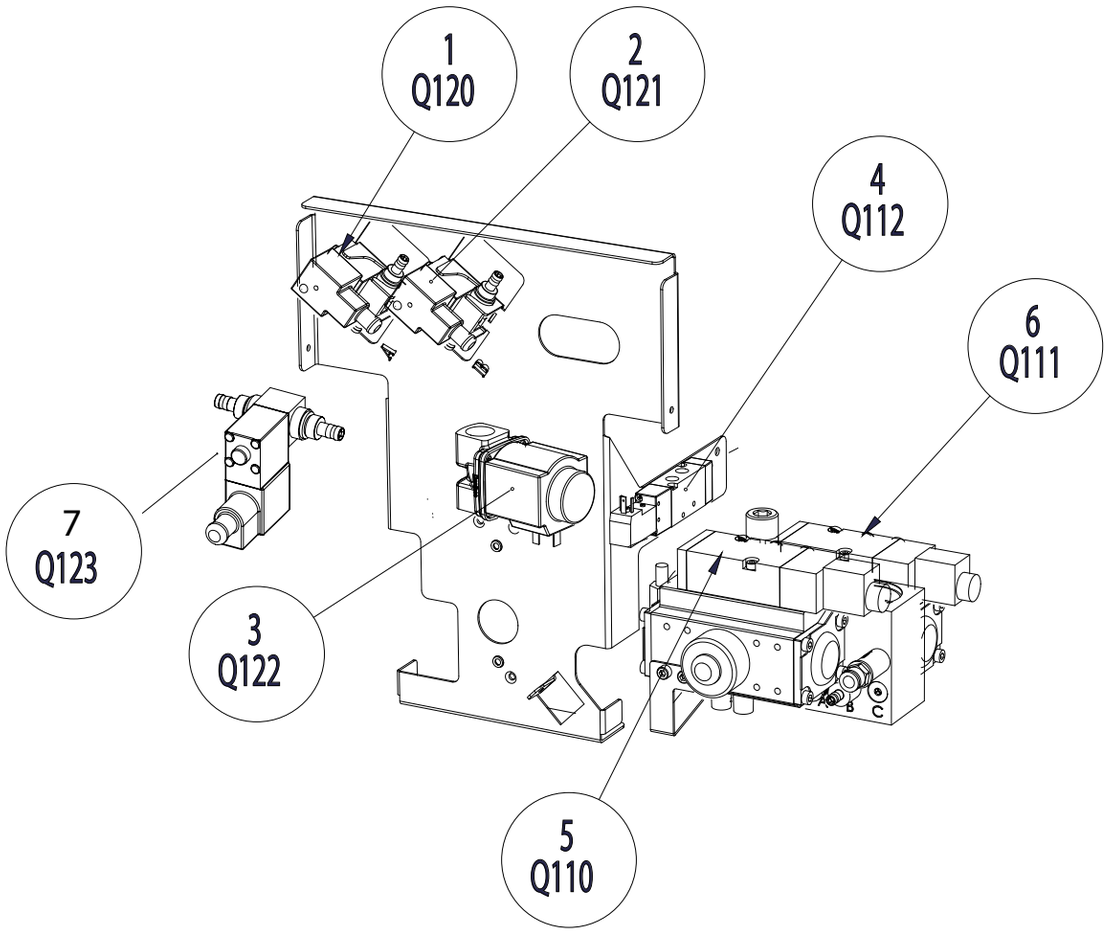


				Nilfisk FOOD	Blytækkervej 2 DK–9000 Aalborg Phone +45 72 18 21 00 Fax +45 72 18 20 99	Tegnet	11.06.21			Tegnings nr. 110008156 Revision Ark nr. 1 of 1
						Godkendt	KMS		Ordre nr.	
Mrk.	Dato	Rettelser	Init.			ELDIAG.F.GRUNDFOS MULTIFOAMER INOX UL.				Erstatning for

110008156

English (EN)

Chemical Product valves



Position	Description
Q123	Chemical Valve C
Q122	Solenoid valve for manual outlet
Q121	Chemical product valve B
Q120	Chemical product valve A
Q112	Air valve
Q110	Rinse valve

119000411-7

MultiFoamer Terminal box

Terminal description

Rinse valve (Q110)

Terminals 5.A and 5.B are used for opening for rinse water. This is water going through the block but not through the injector inside the block. Opening this valve is done by applying 24Vdc to terminal 5.A and 0V to terminal 5.B.

Product water valve (Q111)

Terminals 6.A and 6.B are opening for the valve in the block leading water through the injector to the outlet pipe. Opening the valve is done by applying 24Vdc to terminal 6.A and 0V to terminal 6.B.

Air Valve (Q112)

Terminals 7.A and 7.B are opening for compressed air to the block. This is done for instance to make foam or empty off the pipes. Activating this valve is done by applying 24Vdc to terminal 7A and 0V to terminal 7B.

Product valve A,B,C (Q120, Q121, Q123)

Terminals 8 and 9-A and B are opening for products to flow to the injector. Activating these valves are done by applying 24Vdc to the A terminal and 0V to the B terminal. NB! Be very careful not to open more than one product valve at a time, unless it is approved by the chemical supplier.

Manual outlet (Q122)

Terminals 10.A and 10.B are for opening the valve for manual cleaning. Activating this valve is done by applying 24Vdc to the A terminal and 0V to the B terminal.

Error

This signals is a relay signal indicating if an error is active at the pump. If an error is active terminal 1.A and 1.B will be short circuited otherwise they will be disconnected.

Speed Control/enable motor

Terminals 2.A and 2.B are used for controlling the pressure of the pump, with a signal of 0-10Vdc. 0V being pump stopped and 10Vdc is equal to maximum pressure. Signal to control the pressure must be applied for the motor to run.

Release signal

Terminals 3A and 3B are used for a release signal. From the factory we build in a wired bridge between 3A and 3B to simulate the release signal. When the unit is delivered it can therefore run as if the release signal was present. If you want to actively use the release signal, remove the wired bridge and make the release signal from your PLC.

Reset

Terminal 4.A and 4.B are used for resetting any errors detected. Reset will happen by making a short circuit between 4.A and 4.B for a short period of time. After this release the short circuit again.

Description of internal valves in MultiFoamer - Description of sequence for wash steps

Rinsing

Sequence	**Activity/function**	**Time/Valve no. to activate**
1	Activate area valve*	
2	Activate rinse valve	(Q110)
3	Step time – rinsing	XX sec.
4	Deactivate rinse valve	(Q110)
5	Action pause (closing of valve)	3 sec.
6	Deactivate area valve	
7	Action pause (close of valve)	3 sec.

Foaming

Sequence	**Activity/function**	**Time/Valve no. to activate**
1	Activate area valve*	
2	Activate product water valve	(Q111)
3	Activate chemical product valve**	(Q120/Q121/Q123)
4	Action pause (opening of valve)	3 sec.
5	Activate air valve	(Q112)
6	Step time – foaming	XX sex.
7	Deactivate air valve	(Q112)
8	Deactivate chemical product valve**	(Q120/Q121/Q123)
9	Deactivate product water valve	(Q111)
10	Action pause (closing of valve)	3 sec.
11	Deactivate area valve	
12	Action pause (closing of valve)	3 sec.

Sanitize

Sequence	**Activity/function**	**Time/Valve no. to activate**
1	Activate area valve*	
2	Activate product water valve	(Q111)
3	Activate chemical product valve**	(Q120/Q121/Q123)

4	Step time – sanitizing	XX sec.
5	Deactivate chemical product valve**	(Q120/Q121/Q123)
6	Deactivate product water valve	(Q111)
7	Action pause (closing of valve)	3 sec.
8	Deactivate area valve	
9	Action pause (closing of valve)	3 sec.

Pause

Sequence	Activity/function	Time/Valve no. to activate
1	Step time – pause	XX sec.

Injector pulse flush function

Sequence	Activity/function	Time/Valve no. to activate
1	Activate area valve*	
2	Activate product water valve	(Q111)
3	Action pause (opening of valve)	10 sec.
4	Deactivate product water valve	(Q111)
5	Action pause (closing of valve)	5 sec.
6	Activate product water valve	(Q111)
7	Action pause (opening of valve)	5 sec.
8	Deactivate product water valve	(Q111)
9	Action pause (closing of valve)	5 sec.
10	Activate product water valve	(Q111)
11	Action pause (opening of valve)	5 sec.
12	Deactivate product water valve	(Q111)
13	Action pause (closing of valve)	5 sec.
14	Activate product water valve	(Q111)
15	Action pause (opening of valve)	5 sec.
16	Deactivate product water valve	(Q111)
17	Action pause (closing of valve)	5 sec.
18	Activate product water valve	(Q111)
19	Action pause (opening of valve)	5 sec.
20	Deactivate product water valve	(Q111)
21	Action pause (closing of valve)	5 sec.
22	Deactivate area valve*	

Fill pipe

Sequence	Activity/function	Time/Valve no. to activate
1	Activate product water valve	(Q111)
2	Action pause (opening of valve)	5 sec.
3	Activate area valve*	
4	Step time – filling pipe	XX sec.
5	Deactivate product water valve	(Q111)
6	Action pause (closing of valve)	3 sec.
7	Deactivate area valve*	
8	Action pause (closing of valve)	3 sec.

Empty pipe

Sequence	Activity/function	Time/Valve no. to activate
1	Activate area valve*	
2	Activate air valve	(Q112)
3	Step time – emptying pipe	XX sec.
4	Deactivate air valve	(Q112)
5	Action pause (closing of valve)	5 sec.
6	Deactivate area valve*	
7	Action pause (closing of valve)	3 sec.

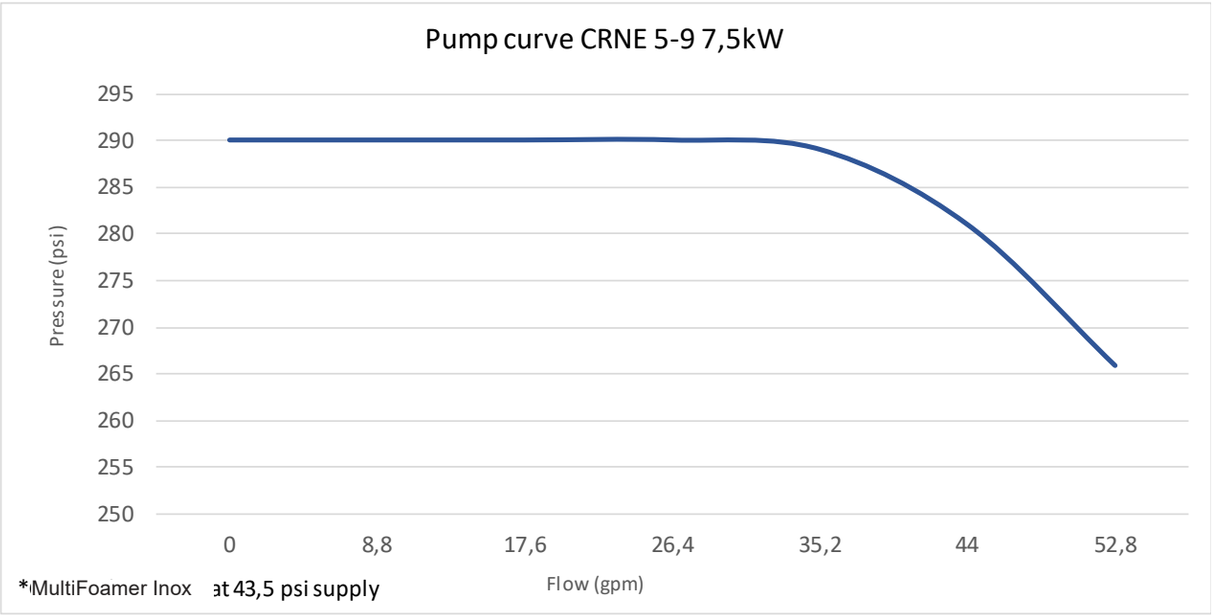
Manual cleaning

Sequence	Activity/function	Time/Valve no. to activate
1	Activate valve for manual cleaning	Q122

* Customer must decide which area valve

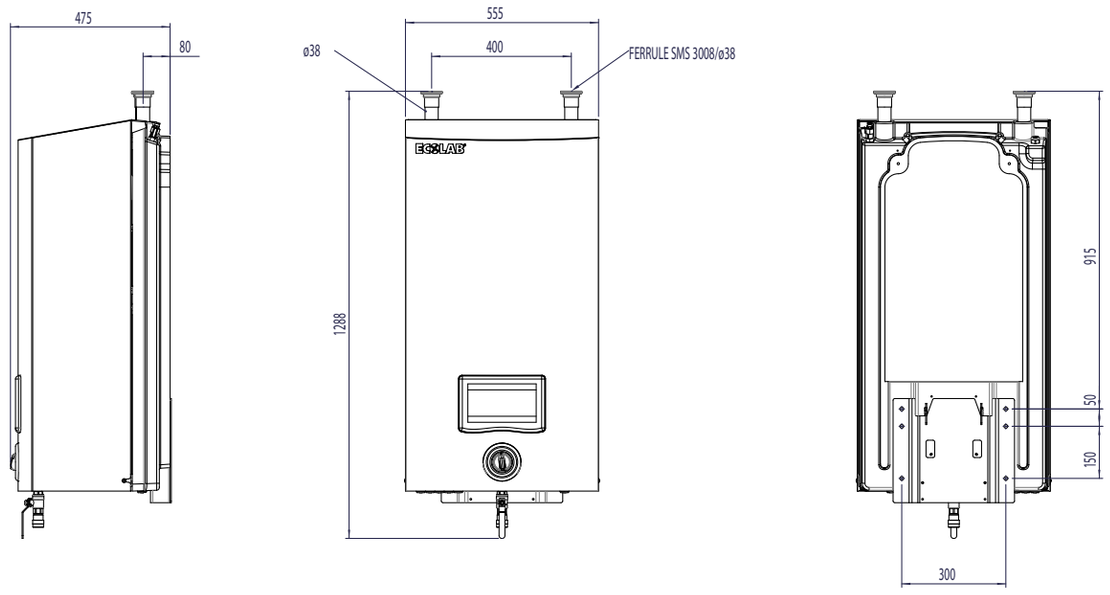
** WARNING! Be sure not to open two chemical product valves at the same time! Unless your chemical supplier advise to do so!

Pump curve MultiFoamer Inox



*MultiFoamer Inox at 43,5 psi supply

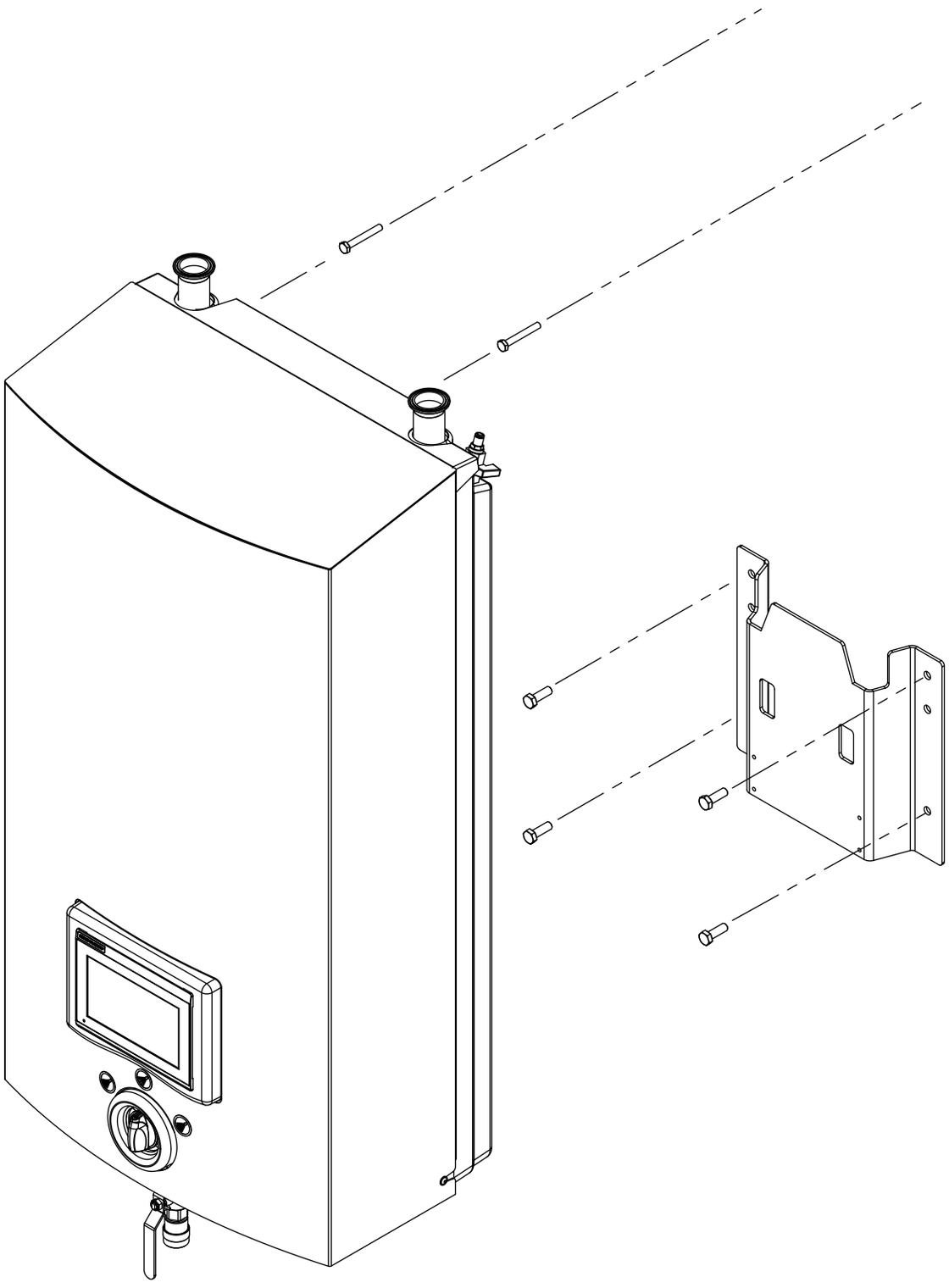
Installation Diagram



All measurements are stated in mm !

119000430_2

Mounting



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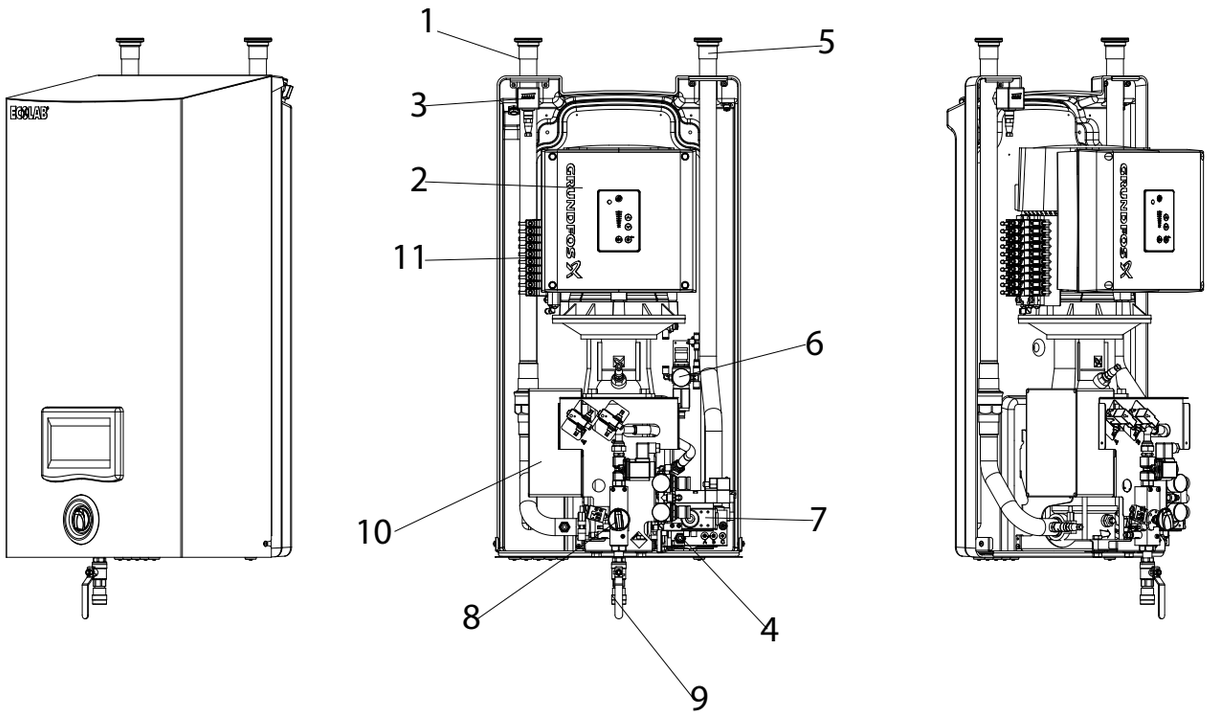
Layout MultiFoamer

Layout Hybrid Foamatic



119000430_1

	English
1	Water inlet
2	Pump
3	Flow switch
4	Pressure sensor
5	Water Outlet pipe
6	Air regulator with manometer
7	Multi block
8	Operation button, manual cleaning
9	Ball valve with quick coupling
10	Screw terminal
11	Manifold for air

Printed in Denmark

No.: 110006171J 12/2021
Serial no: 128.02.000xxx

Nilfisk FOOD