MS Schippers

One-stop-shop for livestock farmers

MS Disinfection gate 3.0

NL Ontsmettingspoort

Inhoud

1. Ontsmettingspoort RVS

De ontsmettingspoort van Schippers biedt u een permanente oplossing voor een gedegen preventie van insleep van ziekten. Zodra een wagen uw terrein oprijdt, wordt door een signaleringsslang een pomp geactiveerd welke een ontsmettingsmiddel opzuigt. Het ontsmettingsmiddel wordt over de r.v.s poort verdeeld en via nozzles verneveld over de wagen. De geleverde poorten zijn standaard uitgevoerd met een speciale r.v.s. waterpomp met een 200 liter voorraadvat en ontsmettingsmiddelinjector inclusief aanvoerslang en signaleringsslang.

Als basis geldt een combinatie van de ontsmettingspoort (zie onderdelenlijst, art nr: 2509978/2509970) met besturingsunit met pomp en signaleringsslang (zie onderdelenlijst, art nr: 2509440), voorraadvat en aanvoerslang (zie onderdelenlijst, art nr: 2509475).

Daarnaast zijn de volgende accessoires leverbaar:

- Onderkantontsmetting (zie onderdelenlijst, art nr: 2509979)
- Drempel (noodzakelijk als bescherming voor de onderkantontsmetting) + bevestigingsset (zie onderdelenlijst, art nr: 4x 2509477en 4x 2509478)

2. Monteren van de ontsmettingspoort

De ontsmettingspoort, bestaande uit verschillende r.v.s. buizen, kan als volgt opgezet worden (zie omderdelenlijst).

LET OP!! ONTSMETTINGPOORT VAN BOVEN NAAR BENEDEN MONTEREN.

GEBRUIK TEFLON TAPE (MEEGELEVERD) OP ELKE KOPPELING MET SCHROEFDRAAD!

2.1 Monteren van frame hoge desinfectiepoort

1. De bovenbuizen kunnen met de lange kanten aan elkaar gemonteerd worden, d.m.v. van een sok 1". De nozzles in de bovenbuizen moeten naar achter bevestigd worden, zodat ook de achterzijde van het voertuig ontsmet wordt.
2. De staande buis moeten onder de gebogen r.v.s. buizen geplaatst worden, zodat de twee nozzles die erop zitten zo hoog mogelijk geplaatst worden (zie onderdelenlijst). Dit moet gemonteerd worden met een sok 1".
3. Aan de staande onderbuis moet een T-stuk 1” bevestigd worden (zie onderdelenlijst). Als alles aan elkaar gemonteerd is, kan hiermee alles goed vastgedraaid worden. De nozzles moeten naar de binnenkant gericht worden.
4. De liggende onderbuizen (dikke buizen met een nozzle) moeten in het T-stuk gemonteerd worden, zodat de nozzle het verst van de poort af ligt (zie bijlage 3). Aan de zijde van de ontsmettingspoort, waar de pomp zich bevindt, moet een verloopsok 1”x¾” gemonteerd worden met GK-koppeling en aan de andere kant een eindkap 1”. Aan de andere zijde van de ontsmettingspoort moet aan beide kanten onderaan een eindkap 1” gemonteerd worden. Bij een

onderkantontsmetting moet i.p.v. einddop een verloop met slangaansluiting geplaatst worden.

De ontsmettingspoort kan nu recht gezet worden met twee personen waarbij de liggende buizen een kwartslag gedraaid worden, zodat deze loodrecht staan op de ontsmettingspoort. De ontsmettingspoort kan zo blijven staan.
De kapbeugels kunnen nu aan de staande onderbuis gemonteerd worden, net onder de laatste nozzle en aan de schoorbuis, zodat deze twee aan elkaar vast gemaakt kunnen worden.
De schoorbuis kan op het erf gemonteerd worden.
De ontsmettingspoort kan vastgezet worden met de klembeugels over de liggende onderbuis, die op het erf gemonteerd kunnen worden.
De aanvoerslang vanaf de pomp kan aan de GK-koppeling gemonteerd worden.
De 220 Volt voedingskabel die uit de besturingsunit komt aansluiten. Gelieve hiervoor een geschikte stekker te monteren en deze stekker aan te sluiten op een waterdicht buitenstopcontact.
De signaleringsslang welke gemonteerd is aan de besturingsunit dient 5 meter voor de ontsmettingspoort te liggen. Als er over deze slang gereden wordt, schakelt deze de intervalschakelaar in, die op zijn beurt de nozzles in werking stelt.

2.2 Monteren frame half hoge desinfectiepoort

1. De staande buis moet aan het T-stuk1” bevestigd worden, zodat de twee nozzles die erop zitten zo hoog mogelijk geplaatst worden (zie onderdelenlijst). De nozzles moeten naar de binnenkant gericht worden.
2. De liggende onderbuizen (dikke buizen met een nozzle) moeten in het T-stuk gemonteerd worden, zodat de nozzle het verst van de poort af ligt (zie bijlage 3). Aan de zijde van de ontsmettingspoort, waar de pomp zich bevindt, moet aan beide uiteinden een verloopsok 1”x¾” gemonteerd worden met GK-koppeling. Aan de zijde het verste van de pomp moet aanéén uiteinde ook een verloopsok 1”x¾” gemonteerd worden met GK-koppeling. Aan het andere uiteinde wordt een eindkap 1” gemonteerd.

De 2 delen van het frame dienen +/- 4,25 m uit elkaar geplaatst te worden, zodat de drempelelementen er tussen in geplaatst kunnen worden.
De schoorbuis kan op het erf gemonteerd worden.
De ontsmettingspoort kan nu recht gezet worden met twee personen waarbij de liggende buizen een kwartslag gedraaid worden, zodat deze loodrecht staan op de ontsmettingspoort. De ontsmettingspoort kan zo blijven staan.
De kapbeugels kunnen nu aan de staande onderbuis gemonteerd worden, net onder de laatste nozzle en aan de schoorbuis, zodat deze twee aan elkaar vast gemaakt kunnen worden.
De ontsmettingspoort kan vastgezet worden met de klembeugels over de liggende onderbuis, die op het erf gemonteerd kunnen worden.

De aanvoerslang vanaf de pomp kan aan de GK-koppeling gemonteerd worden.
De aanvoerslang aan de onderkant kan via een GK-koppeling aangesloten worden.
De 220 Volt voedingskabel die uit de besturingsunit komt aansluiten. Gelieve hiervoor een geschikte stekker te monteren en deze stekker aan te sluiten op een waterdicht buitenstopcontact.
De signaleringsslang welke gemonteerd is aan de besturingsunit dient 5 meter voor de ontsmettingspoort te liggen. Als er over deze slang gereden wordt, schakelt deze de intervalschakelaar in, die op zijn beurt de nozzles in werking stelt.

Alvorens de ontsmettingspoort in gebruik te nemen dient naast het voorraadvat, ook de pomp volledig gevuld te worden met water. Het doseerkraantje behoort in dit geval gesloten te zijn. Wanneer het voorraadvat en de pomp volledig met water gevuld is, kan het doseerkraantje geopend worden en kan de ontsmettingspoort in gebruik genomen worden. (ongeveer een halve slag)

U kunt controleren of alles geleverd is d.m.v. de bijgevoegde lijst van onderdelen van de ontsmettingspoort.

LET OP!

De pomp moet zo dicht mogelijk bij de ontsmettingspoort geplaatst worden om het systeem snel op druk te laten komen. Dit mag maximaal 10 meter zijn, maar hoe korter hoe beter.
Het uiteinde van de signaleringsslang moet afgesloten worden, zodat er geen vocht in kan komen.
De drempels moeten goed vast staan, verankerd op het erf, anders schuift deze balk weg bij het passeren van de wagens.
De afstand van de signaleringsslang tot de ontsmettingspoort moet minimaal 5 meter zijn, om het systeem op tijd in werking te stellen.
Er moet zeer langzaam gereden worden bij het passeren van de ontsmettingspoort. Max. 5km/h.

3. Waterverbruik en dosering

De ontsmettingspoort bevat standaard 15 nozzles. Wanneer er een onderkantontsmetting op aangesloten wordt zijn er totaal 18 nozzles aanwezig. De halfhoge ontsmettingspoort heeft 11 nozzles.

Het waterverbruik in de ontsmettingspoort is:

- Standaard ± 55 liter/minuut
- Standaard + onderkantontsmetting ± 65 liter/minuut
- Halfhoog ± 40 liter/minuut

De hoeveelheid ontsmettingsmiddel kan ingesteld worden d.m.v. het doseerkraantje aan de binnenzijde van de besturingsunit.
Het doseerkraantje is manueel instelbaar tot een dosering van max. 1% ontsmettingsmiddel (ongeveer een halve slag open). Het ontsmettingsmiddel wat hiervoor gebruikt dient te worden is MS Megades. Andere ontsmettingsmiddelen zijn niet geschikt voor gebruik in combinatie met de MS Ontsmettingspoort.

Volgens proeven met een concentratie ontsmettingsmiddel van 1% en een doorrijtijd van de veewagen van 30 seconden, blijkt dat er voldoende actieve stof van het ontsmettingsmiddel gebruikt wordt, om een goede ontsmetting van de wagen te krijgen. De inwerktijd van het ontsmettingsmiddel is 10 minuten.
Meetpunten: banden, buitenzijde veewagen en buitenzijde cabine. Er zijn voldoende monsters genomen om een betrouwbaar beeld van het ontsmettingsresultaat te verkrijgen.

Metingen

Metingen van de hygiënescore van een veewagen die door de ontsmettingspoort van Schippers Europe BV is gereden	
Datum meting	24/11/1997
Hygiënescore van de gehele veewagen incl. banden	9.5 (zeer goed)
Hygiënescore buitenzijde laadbak en cabine	9.5 (zeer goed)
Hygiënescore van de banden	9.5 (zeer goed)

Bron: DLV Team Ketenprojecten, 1997

4. Timer instellen

De timer staat standaard ingesteld op 30 seconden werkingstijd. Desgewenst kan deze werkingstijd verlengd worden.

2. Gedeelte van de ingestelde seconden/minuten/uren
1. Seconden/minuten/uren instelbaar

Bijvoorbeeld:
1 = 1 minuut
2 = 0.5
Dat wil zeggen 0.5 van 1 minuut = 30 seconden werkingstijd
De timer stelt de installatie gedurende een bepaalde tijd in werking, vanaf het moment dat over de signaleringsslang wordt gereden.

5. Onderhoud

Ontsmettingspoort:

- Wanneer de ontsmettingspoort ’s winters niet gebruikt wordt, is het verstandig de ontsmettingspoort leeg te blazen met luchtdruk om al het water uit de leidingen te laten lopen en deze vervolgens droog op te bergen.
- Wanneer ’s winters de ontsmettingspoort wel gebruikt dient te worden, kan antivries (art nr 2509845) toegevoegd worden om bevriezen te voorkomen.

Pomp:
Altijd controleren of de spanning afgesloten is van de pomp en of er geen toevallige spanningsverbindingen mogelijk zijn.
De pomp heeft geen onderhoud nodig, mits de volgende voorzorgsmaatregelen getroffen zijn. Bij (nacht) vorst de pomp ledigen m.b.v. de speciale afloopdop die zich aan de onderkant van het pomphuis bevindt, denk erom de pomp voor het volgende gebruik eerst weer te vullen. Regelmatig nagaan of de terugslagklep schoon is. Als de pomp langere tijd (winter) niet gebruikt zal worden, is het beter de pomp helemaal leeg te maken, om te spoelen met schoon water en op te bergen op een droge plaats.

6. Gebruiksvoorwaarden pomp

PEDROLLO®
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2+4CP, 2+4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.
The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.
Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.

The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION
Unpack and check that it is in perfect condition.
CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.
CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE
The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2≥ 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION
Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.
CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.
Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position. The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.
The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS
They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.
Make sure that there is no voltage at the line wire terminals before connecting.
Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING
CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in. At the end of the operation, screw the plug back on and start the pump.
CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET,BETTY) is still not primed, switch it off and repeat the operation.
Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.
Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.
CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.
The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place
CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.
CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY
We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

San Bonifacio, 11/01/2010

Pedrollo S.p.A.
Amministratore Unico
Dileme Pedrollo

Veiligheid van de pomp

De r.v.s. pomp is een elektrische pomp, die voldoet aan de EEG normen. Voor de pomp geïnstalleerd wordt, moet eerst gecontroleerd worden of het spanningsnet voorzien is van een aardleiding en die aan de normen voldoet. Voor elke controle of onderhoudsbeurt dient de spanning van de installatie afgehaald te worden en de stekker uit het contact getrokken te worden.

De pomp is bedoeld voor het pompen van schoon water en kan niet gebruikt worden voor het pompen van ontvlambare vloeistoffen of in ruimten waar explosiegevaar bestaat. Daar de pomp elektrisch gevoed wordt, moet elk contact tussen voeding en de te pompen vloeistof vermeden worden.

De pomp is voorzien van een terugslagklep, waardoor er geen water samen met ontsmettingsmiddel, van uit de poort terug kan lopen naar het voorraadvat.

Vullen en ontluchten van de pomp

Attentie: het in werking stellen van een lege pomp veroorzaakt beschadigingen aan de mechanische afdichting!!!
De pompkop moet eerst gevuld worden met water, voordat deze in werking gesteld mag worden. Door de vulslang aan te sluiten op de besturingsunit, kan water aan de pompkop worden toegevoegd. Zet de hendel open en laat de pomp vollopen met water. Daarna de vulslang weer op het voorraadvat aansluiten en de pomp kan in werking gesteld worden. Indien het voorraadvat volledig gevuld is, zal de pomp na enkele seconden zichzelf vullen als deze gestart wordt. Sluit eerst het doseerkraantje, zodat de pomp zeker geen lucht aanzuigd.

7. Troubleshooting

Storingen bij de pomp

Probleem:	**Oorzaak:**	**Oplossing:**
1. Motor start niet	a) Geen spanning	• Kabelspanning controleren
		• Elektrische verbindingen controleren
	b) Waaier blokkeert	• Waaier demonteren en schoon maken
	c) Defect aan het elektrische circuit	• Contact opnemen met Schippers
2. Terugslagklep verstopt	a) Terugslagklep verstopt	• Klep schoonmaken
	b) Luchtaanzuiging	• Zuigleiding op lekken controleren

		• Nagaan of Terugslagklep onder water staat
	c) Verkeerde draairichting	• Pomp ontluchten
		• Bij de 3e fase motor twee fasen omwisselen
3. Niet voldoende water aanzuigen	a) Voetklep gedeeltelijk	• Terugslagklep en, zo nodig, de hele zuigleiding, wateropbrengst geblokkeerd schoon-maken
	b) Waaier blokkeert	• Pomp demonteren en pomphuis en waaier zorgvuldig schoonmaken
	c) Motor raakt oververhit	• Voltage en ventilatie controleren. Mogelijk slechte verlengkabel

Storingen bij Besturingsunit:

Probleem:	Oorzaak:	Oplossingen:
1. Lampje van de timer brandt niet.	a) Zekering kapot	• Vervangen

8. Garantiebepalingen

Bij normaal gebruik garandeert MS Schippers een garantie voor een periode van een (1) jaar vanaf de factuurdatum op de complete MS Ontsmettingspoort op fabricage- en/of materiaalfouten.

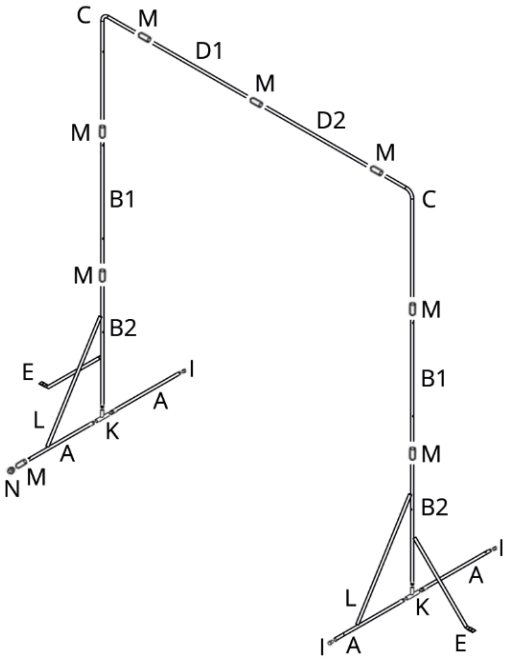
Geen garantie wordt gegeven zodra gebreken het gevolg zijn van:

- normale slijtage
- onoordeelkundig gebruik
- modificaties door onbevoegden
- reparaties door onbevoegden
- externe invloeden zoals vuur, water en abnormale milieuomstandigheden en mechanische schade door schok of val
- andere ontsmetting-/desinfectiemiddelen als MS Megades met een dosering van 1%

Indien zich tijdens de garantietermijn een defect aan het apparaat mocht voordoen zal MS Schippers de defecte onderdelen kosteloos vervangen. Bij herstel van het apparaat of de defecte delen moeten deze franco aan MS Schippers worden toegezonden.

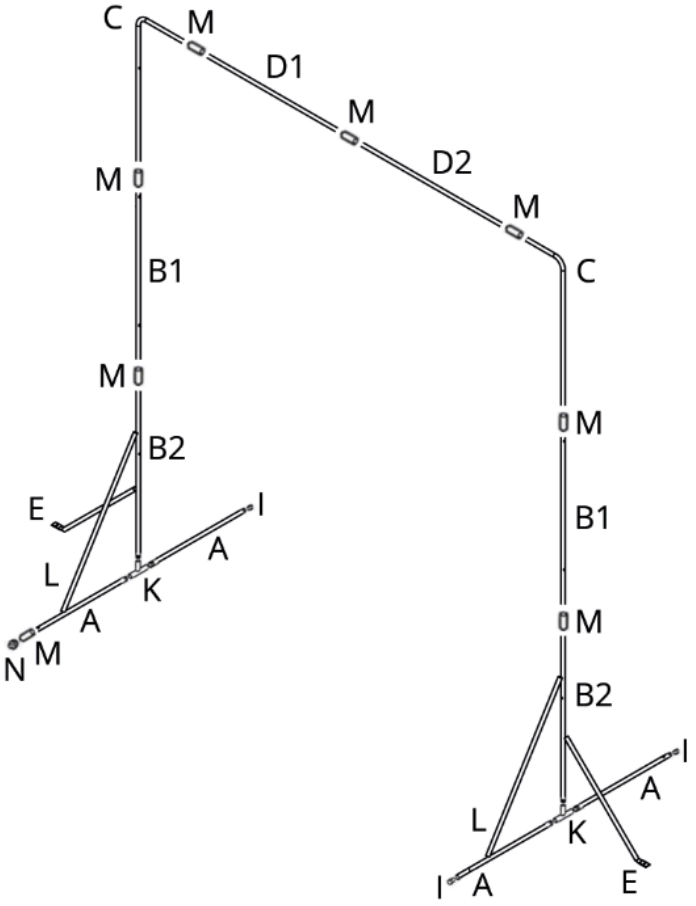
9. Onderdelenlijst

2508978 Frame RVS tbv MS Ontsmettingspoort



#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
A	4	2508978	Buis	3/4”	RVS	Onderste horizontale buis
B1	2		Buis	3/4”	RVS	Verticale buizen
B2	2		Buis	3/4”	RVS	Verticale buizen
C	2		Buis	3/4”	RVS	Bovenste verticale buis
D1	1		Buis	3/4”	RVS	Bovenste horizontale buis
D2	1		Buis	3/4”	RVS	Bovenste horizontale buis
E	2		Buis	3/4”	RVS	Schoorbuis
L	2		Buis	3/4”	RVS	Schoorbuis
F	4	8805161	Nozzle	¼		Onderste horizontale buis
G	8		Nozzle	¼		Verticale buizen
H	3		Nozzle	¼		Bovenste horizontale buis
L	3	8805324	Eindkap	3/4”	RVS	Onderste horizontale buis
K	2	8805325	T-stuk	3/4”	RVS	Onderste horizontale buis
M	7	8805326	Sok	3/4”	RVS	Onderste horizontale buis
N	4	0809762	GK-koppeling	3/4” mann.	Messing	Verloopsok 1” x ¾”
O	4	8805322	Kapbeugel	3/4”	Gegalvaniseerd	Verankeren van de poort
P	10	8805200	Bouten	M10 x 60	Gegalvaniseerd	Verankeren van de poort
Q	10	8805204	Rawl Plug	M12		Verankeren van de poort
R	12	8805323	Klembeugel	3/4”	Gegalvaniseerd	Bevestiging schoorbuis op poort

S	6	8805201	Bouten	M8 x 35	Gegalvaniseerd	Bevestiging schoorbuis op poort
T	6	Diverse	Moeren	M8	Gegalvaniseerd	Bevestiging schoorbuis op poort
U	12	Diverse	Revetten	M8	Gegalvaniseerd	Bevestiging schoorbuis op poort
V	2	1009978	Teflon Tape			Algemeen



b + m + c

c + m + d

a + b + k

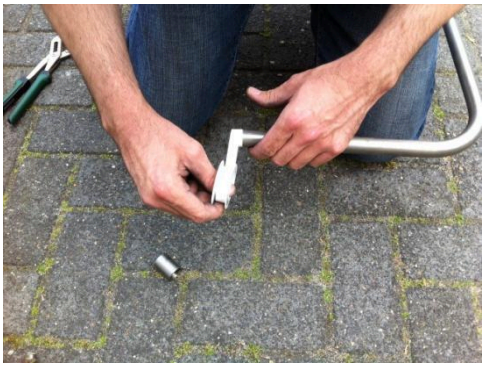
a + i

a + n + m

b + l / a + l / b + e (+ r + s + t + u)

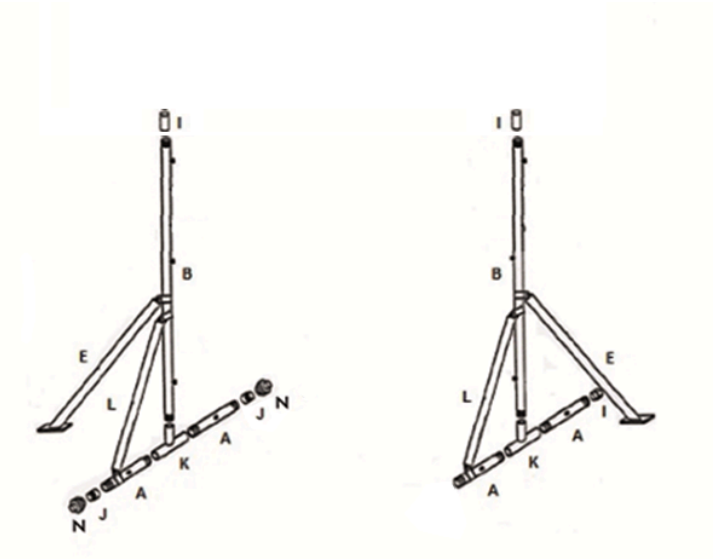
a + o + p + q

e + p + q



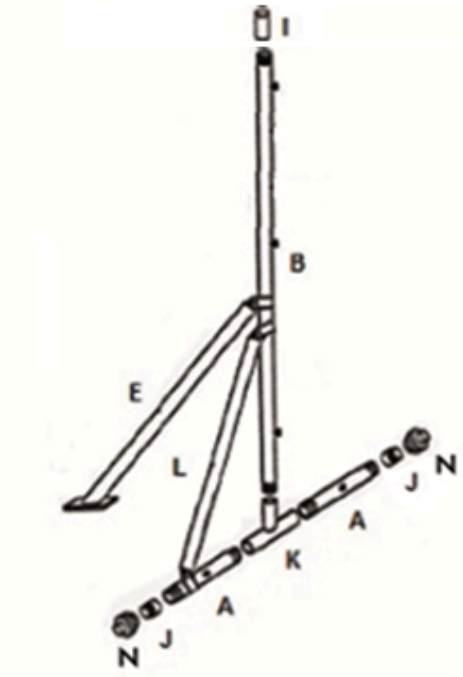
Elke verbinding + V

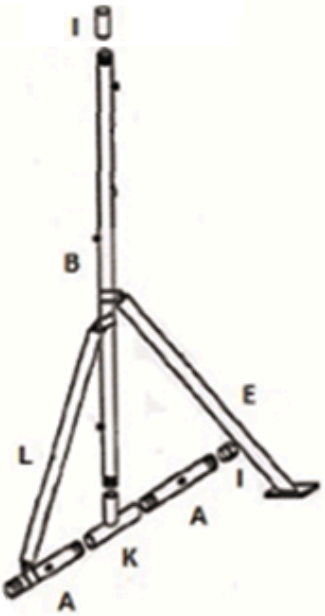
2509970 Frame RVS tbv MS Ontsmettingspoort



#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
a	4	2509970	Buis	1”	RVS	Onderste horizontale buis
b	2		Buis	1”	RVS	Onderste verticale buis
e	2		Buis	1”	RVS	Schoorbuis
l	2		Buis	1”	RVS	Schoorbuis
f	4	8805161	Nozzle	¼		Onderste horizontale buis
g	4		Nozzle	¼		Verticale buizen
i	3	8805208	Eindkap	1”	RVS	Onderste horizontale buis
j	3	8805209	Verloopsok	1” x ¾”	RVS	Onderste horizontale buis
k	2	8805210	T-stuk	1”	RVS	Onderste horizontale buis
n	3	8805213	GK-koppeling	¾” mann.	Messing	Verloopsok 1” x ¾”
o	4	8805239	Kapbeugel	1”	Gegalvaniseerd	Verankeren van de poort
p	10	8805200	Bouten	M10 x 60	Gegalvaniseerd	Verankeren van de poort
q	10	8805204	Rawl Plug	M12		Verankeren van de poort
r	12	8805240	Klembeugel	1”	Gegalvaniseerd	Bevestiging schoorbuis op poort
s	6	8805201	Bouten	M8 x 35	Gegalvaniseerd	Bevestiging schoorbuis op poort
t	6	Diverse	Moeren	M8	Gegalvaniseerd	Bevestiging schoorbuis op poort
u	12	Diverse	Revetten	M8	Gegalvaniseerd	Bevestiging schoorbuis op poort
v	2	1009978	Teflon Tape			Algemeen
w	1	0809969	Slang	2,5 m		
x	1	0809751	GK-koppeling	½ “		Vrouwelijke deel

y	2	8805234	GK-koppeling	1”		
z	2	8805215	Slang klem			





a + b + k

a + i & b + i

a + n + j

b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

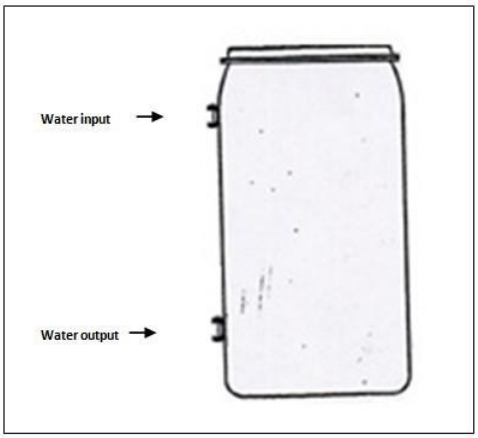
e + p + q

Elke verbinding + V

2509440 Besturingsunit

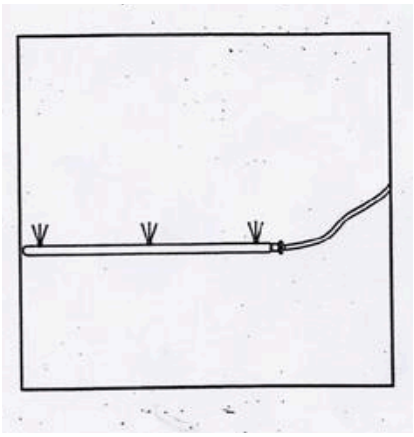
#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
a	1	8805282	Pomp		RVS	Pomp
b	1	8801813	Vloeistofklep 1	¾” x ¾” vrouw.	RVS	Pomp
c	1	8801812	Vloeistofklep 2	1/8” x 1/8” vrouw.	RVS	Pomp
g	2x10	2509815	Signaleringslang	p/m	Rubber	Besturingsunit
h	3	8805237	Slang p/m	1” (25 mm)	Helifex	Helifex slang
i	2	0807101	Slang p/m	7 x 10 mm		Vloeistofklep 2
j	1	8804943	Aanzuigfilter		RVS	Vloeistofklep 2

2509475 Voorraadvat + koppelingen tbv MS Ontsmettingspoort

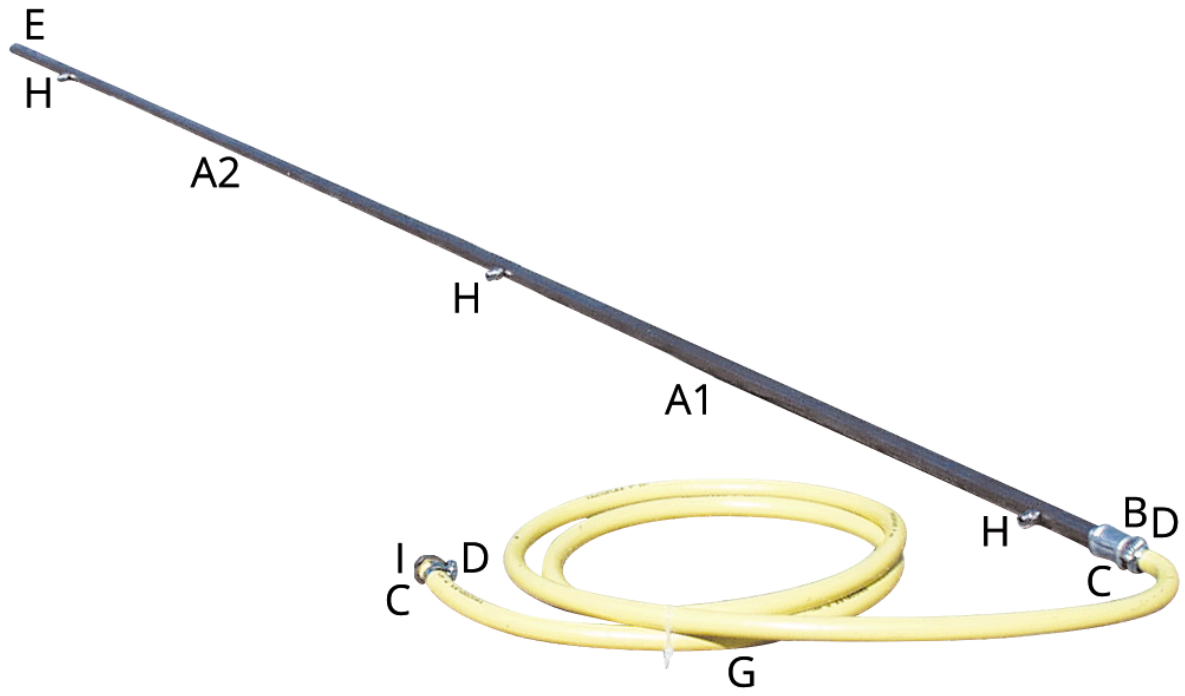


#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
a	1	8805264	Vat	225 ltr	PE	Vat
b	1	8805213	GK-koppeling	¾" mann.	Messing	Vat
c	2	8805215	Slangklem	30-20 mm	Gegalvaniseerd	Helifex slang
d	2	8805234	GK-koppeling	Tule 25 mm	Messing	Helifex slang
e	1	8805235	GK-koppeling	½" vrouw.	Messing	Vat
f	6	8805237	Slang p/m	1" (25 mm)	Helifex	Helifex slang
g	1	8805209	Verloopsok	1" x ¾"	RVS	Vat
h	1	0809982	Vlotter	½"	Messing	Vat

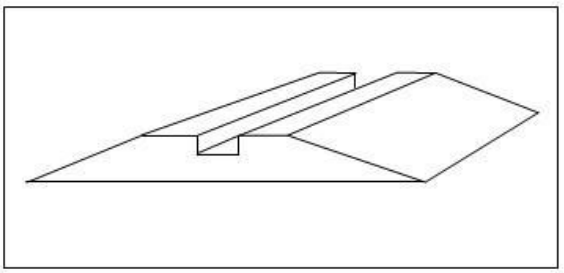
2509979 Onderkantontsmetting tbv MS Ontsmettingspoort



#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
a1	1		Buis 160cm	½"	RVS	Onderkant ontsmetting
a2	1		Buis 140cm	½"	RVS	Onderkant ontsmetting
b	1	8805226	GK-koppeling	½" mann.	Messing	Onderste horizontale buis
c	2	8805234	GK-koppeling	Tule 25 mm	Messing	Tricoflex slang
d	2	8805215	Slangklem	30 – 20 mm	Gegalvaniseerd	Tricoflex slang
e	1	8805219	Eindkap	½"	RVS	Onderste horizontale buis
g	2	0809925	Slang p/m	1" (25 mm)	Tricoflex	Onderkant ontsmetting
h	3	8805161	Nozzle	¼"	RVS	Onderste horizontale buis
i	1	0809752	GK-koppeling	¾" vrouw.	Messing	Tricoflex slang



2509477 Drempel element (gefreesd) 50 x 40 x 5cm



#	Aantal:	Art.nr.	Onderdeel:	Maat:	Materiaal:	Onderdeel van:
a	8	2509477	Drempel	50 x 40 cm	Kunststof	Drempel
b	8	2509478	Bevestigingsset			Drempel

Schematische plaatsing van onderkant ontsmetting in de drempelelementen

EN Disinfection gate

1. Stainless Steel Disinfection Gate

The Schippers Disinfection Gate gives you a permanent solution for maintaining bio-security on your livestock unit.
As soon as a vehicle enters your site, and drives over the indicator hose, the pump is activated. The pump will draw the disinfectant from the container and sprays it via special nozzles mounted in the stainless steel gate over the vehicle.
The disinfection gate is supplied as standard with a special stainless pump, with a 200 Litre tank, a disinfectant injector, a supply hose and an indicator hose.

The base is a combination of the disinfection port (see parts list Item No: 2509978) with control unit with pump and indicator hose (see parts list Item No: 2509440), storage barrel and supply hose (see parts list Item No: 2509475).

In addition, the following accessories are available:
o Bottom disinfection (see parts list Item No: 2509979)
o Threshold (necessary to protect the bottom disinfection) + mounting kit (see parts list Item No: 4x 4x 2509477en 2509478)

2. Installation

The disinfection gate comprises many different stainless steel pipes, which should be assembled as follows (see parts list).

NOTE! ASSEMBLE FROM THE TOP DOWNWARDS!! USE PTFE JOINT SEAL TAPE (PROVIDED) ON ALL THREADED CONNECTIONS!!

2.1 Mounting of frame high disinfection gate

1. Join the long straight parts of the two curved pipes together using a 1” connector. The nozzles should be placed faced backwards so the back of the vehicle will be disinfected as well.
2. The vertical tubes should be fitted under the curved stainless steel tubes, so the two nozzles on it will be placed as high as possible (see parts list). Connect the tubes using a 1” connector.
3. A 1” T-piece should be screwed onto the bottom end of the two lower vertical tubes. (see parts list). When all connections have been made, tighten everything, ensuring that all nozzles point inwards.
4. The horizontal bottom tubes (thick tubes with a nozzle) should be fitted into the T-pieces, so that the nozzle is as far from the gate as possible (see parts list). On the side of the disinfection gate where the pump will be fit the GK coupling with ¾” – 1” adaptor to one end of the horizontal pipe, and an end-stop to the opposite end. If using a bottom disinfector, connect this to one end of the pipe opposite the pump, and an end-stop to the other end, or if no bottom disinfector is being fitted, put end-stops on all three open ends of the horizontal pipes.

The disinfection gate can now be put in an upright position by two people. Turn the horizontal pipes a quarter-turn so that they run parallel to the intended direction of the vehicles, and they will support the gate in the vertical position for the moment.
Next fit the two buttresses, one each side, with the clips provided. Place one clip beneath the upper nozzle in the lower thicker pipe on each side, and one around the top part of the buttress pipe. Attach the two clips using the bolts so that the buttress will support the lower vertical pipe on each side.
The foot of each buttress can be fixed to the ground once the gate has been moved to its final position.
Secure the lower horizontal pipes to the ground using the 4 “U” clamps.
The inlet hose from the pump can be connected to the GK-coupling.
Link up the 220 Volt cable out of the control unit. Please use a suitable plug and socket, and connect it to a weatherproof box.
The indicator hose, which is connected to the bottom of the control unit, should be placed approx 5 metres in front of the disinfection gate. When a vehicle passes the hose, this will activate the pump which will spray for the required period.

2.2 Mounting frame half height disinfection gate

5. The vertical tubes should be fitted under the curved stainless steel tubes, so the two nozzles on it will be placed as high as possible (see parts list). A 1” T-piece should be screwed onto the bottom end of the two lower vertical tubes. (see parts list). When all connections have been made, tighten everything, ensuring that all nozzles point inwards.
6. The horizontal bottom tubes (thick tubes with a nozzle) should be fitted into the T-pieces, so that the nozzle is as far from the gate as possible (see parts list). On the side of the disinfection gate where the pump will be fit the GK coupling with ¾” – 1” adaptor to one end of the horizontal pipe, and an end-stop to the opposite end. If using a bottom disinfector, connect this to one end of the pipe opposite the pump, and an end-stop to the other end, or if no bottom disinfector is being fitted, put end-stops on all three open ends of the horizontal pipes.

The 2 parts of the frame should be placed +/- 4.25 m apart, so that the threshold elements can be placed in between.
The support tubes can be mounted on the yard.
The disinfection gate can then be put straight up with two people, turning the tubes that are laying down a quarter turn so that they are perpendicular to the disinfection gate. The disinfection gate can stay the way it is.
The cap brackets can now be mounted onto the bottom tube, just below the last nozzle and to the support tube, so that they can be attached to each other.
The disinfection gate can be secured with clamping brackets onto the tube that is lying on the ground, which can be mounted on the yard.

The supply hose from the pump can be mounted to the GK coupling.
The supply hose at the bottom can be connected with a a GK coupling.
Link up the 220 Volt cable out of the control unit. Please use a suitable plug and socket, and connect it to a weatherproof box.
The indicator hose, which is connected to the bottom of the control unit, should be placed approx 5 metres in front of the disinfection gate. When a vehicle passes the hose, this will activate the pump which will spray for the required period.

Before putting the disinfection gate into use, the pump must be filled with water with a water hose. In this case, the dosage tap has to be closed. Otherwise the pump cannot suck. When the barrel and the pump are completely filled with water, the dosage tap can be opened and the disinfection gate is ready for use. (approximately half a turn)

You can check if all parts are delivered by checking the parts list further in this manual.

ATTENTION!!!

The pump has to placed as near as possible to the disinfection gate, so the system can quickly come to pressure. Maximum 10 metres are allowed.
The end of the indication hose has to be closed, so no moisture can enter the hose.
The threshold has to be fixed well, eventually by woodthread bolts, otherwise it will move when cars are passing.
The distance from the indication hose to the disinfection gate has to be minimum 5 metres, to put the system into action in time.
When passing the disinfection gate, one has to drive slowly. Max. 5km/h

3. Water comsumption and dosage

The disinfection gate contains 15 nozzles as standard. When a bottom disinfector is connected 18 nozzles are present. The half-height disinfection port has 11 nozzles.

The water consumption in the disinfection gate is:

- Standard : 55 litres/minute.
- Standaard + bottom disinfection: 65 litres/minute
- Half 40 litres/minute

The quantity of disinfectant can be adjusted by means of a dosage tap, which can be found on the inside of the control unit.
The dosage tap is manually adjustable to a dose of up to 1% disinfectant (open approximately half a turn). The disinfectant to be used is MS Megades. Other disinfectants are not suitable for use in combination with the MS Disinfection Gate.

According to experiments with a disinfectant concentration of 1% and a passing of the vehicle of 30 seconds, it appears that there is sufficient active ingredient of the disinfectant to get a proper disinfection of the vehicle. The contact time of the disinfectant is 10 minutes.
Measuring points: tires and outside of the vehicle. There are enough samples to obtain a reliable picture.

Measurements

Measurements of the hygiene score of a vehicle that was driven by the disinfection gate of Schippers Europe BV	
Date of measurement	24/11/1997
Hygiene score of whole vehicle including tires	9.5 (very good)
Hygiene score outer body and cabin	9.5 (very good)
Hygiene score of tires	9.5 (very good)

Source: DLV Team Ketenprojecten, 1997

4. Set timer

The timer is set at 30 seconds operating time. If desired, the operating time can be extended.

2. Portion of the set seconds/minutes/hours

1. Seconds/minuts/hours adjustable

Example:
1 = 1 minute
2 = 0.5
That is to say, 0.5 of 1 minute = 30 seconds operating time
The timer sets the installation for a certain time in operation, from the time the vehicle drives over the indicator hose.

5. Maintenance

Disinfection gate:
When the disinfection gate is not used in winter, it is recommended to empty it by using air pressure, so all water will get out of the pipes and these can be stored dry.
When the disinfection will be used in winter, anti-frost (Item number 2509845) can be added to prevent freezing.

Pump:
Always check if the electricity is disconnected from the pump and if there are no possible electric connections. The pump does not need maintenance, provided that the following precautions are taken:
At (night) frost, empty the pump by the special drainage cap, which is at the bottom of the pump-body. Do not forget to fill the pump again before the next use. Check regularly if the check valve is clean. When the pump will not be used for longer time (winter), it is better to completely empty the pump, rinse with clean water and store at a dry place.

6. Terms of use pump

PEDROLLO
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2+4CP, 2+4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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Fax +39 045 7614663
e-mail: sales@pedrollo.com - www.pedrollo.com

CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.

The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.

Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.
The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION

Unpack and check that it is in perfect condition.

CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.

CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE

The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2= 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION

Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.

CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.

Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position. The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.

CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.

The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS

They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.
Make sure that there is no voltage at the line wire terminals before connecting.

Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING

CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in. At the end of the operation, screw the plug back on and start the pump.

CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET, BETTY) is still not primed, switch it off and repeat the operation.

Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.
Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.

CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.

The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place

CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.

CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY

We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

Pedrollo S.p.A.
Amministratore Unico
Dr. Ing. Pedrollo

San Bonifacio, 11/01/2010

Pump safety instructions

The stainless steel pump is an electric pump, which meets the EC standards. Before the pump is installed, you have to check if the network is supplied with an earth connection and meets the standards. Before every check or maintenance, the power has to be taken of the installation and the plug has to be taken out of the socket.

The pump is meant to use for pumping clean water and cannot be used for pumping inflammable fluids or in rooms where explosive danger exists. Because the pump is powered by electricity, any contact between the power supply and the fluids to be pumped has to be avoided.

The pump is equipped with a non return valve, preventing water with disinfectant, can run back into the barrel.

Filling and venting the pump

Attention: Putting an empty pump into operation will cause damages to the mechanical covering!!!

The head of the pump has to be filled with water first, before this can be put into operation. Water can be supplied to the head of the pump by connecting the filling hose to the lower pipe of the repercussion valve-set on top of the pump. Open the handle and let it fill with water. Then connect the filling tube to the storage container again and the pump can be put into operation. If the storage tank is fully filled, the pump will fill itself after a few seconds when started. First close the dosing valve to ensure that the pump does not suck in any air.

7. Troubleshooting

Malfunctions of the pump

Problem:	**Cause:**	**Solution:**
1. Motor does not start	a) No tension	• Check cable tension
		• Check electric connections
	b) Fan blocks	• Dismantle the fan and clean it
	c) Defect to the electric circuit	• Contact Schippers
2. Motor is running, but no water	a) Check valve blocked	• Clean valve
	b) Air suction	• Check air pipe for leakages

		• Look if check valve is under water
3. Does no suck sufficient water	a) Foot valve partly stopped up	• Clean the check valve, and if needed the whole suction pipe, water proceeds
	b) Fan blocks	• Dismantle the pump and clean the pump-body and the fan carefully
	c) Motor is overheated	• Check voltage and ventilation. Possibly bad extension cable

Malfunctions of the control unit:

Problem:	Cause:	Solution:
1. Lamp of the timer does not burn.	a) Fuse broken	• Replace it

8. Warranty conditions

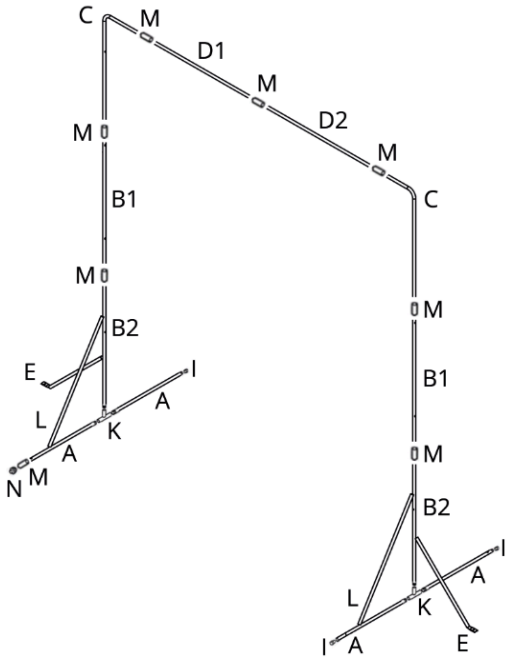
In normal use MS Schippers guarantees a warranty for a period of one (1) year from the date of invoice to the complete MS Disinfection Gate on manufacturing and / or material defects.

No guarantee is given when defects are the result of:
• normal wear and tear
• improper use
• unauthorized modifications
• Unauthorized repairs
• External influences such as fire, water and abnormal environmental conditions and mechanical damage by shock or fall
• other disinfectant as MS Megades with a dosage of 1%

If a defect should occur during the warranty period, MS Schippers will replace the defective parts free of charge. Upon recovery of the device or the defective parts that must be sent postage paid to MS Schippers

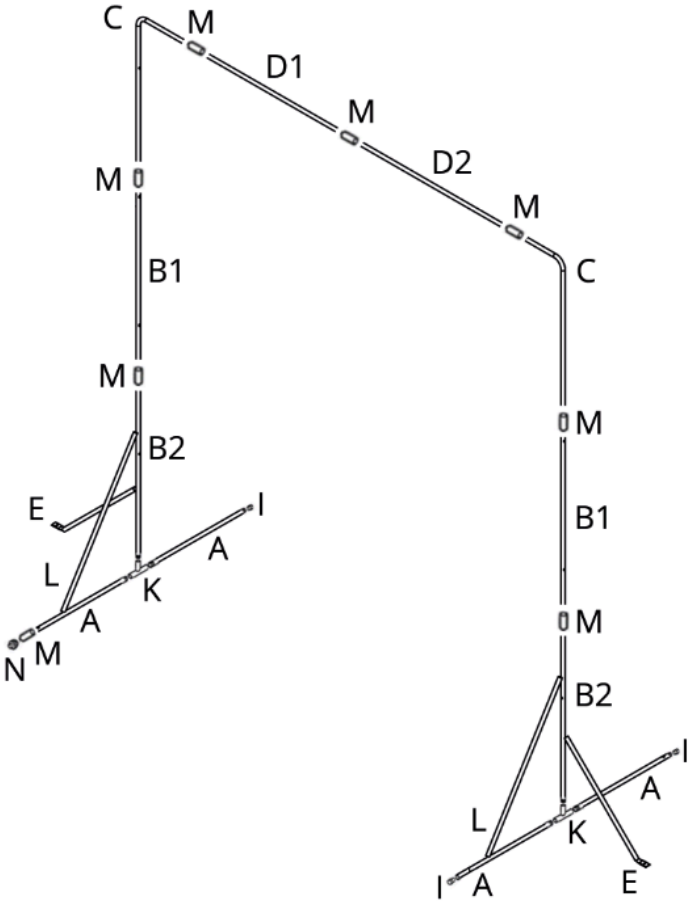
9. Parts list

2508978 Frame disinfection gate, stainless steel



#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
A	4	2508978	Pipe	3/4”	Stainless steel	Lower horizontal pipe
B1	2		Pipe	3/4”	Stainless steel	Lower vertical pipe
B2	2		Pipe	3/4”	Stainless steel	Lower vertical pipe
C	2		Pipe	3/4”	Stainless steel	Upper vertical pipe
D1	1		Pipe	3/4”	Stainless steel	Upper horizontal pipe
D2	1		Pipe	3/4”	Stainless steel	Upper horizontal pipe
E	2		Pipe	3/4”	Stainless steel	Support pipe
L	2		Pipe	3/4”	Stainless steel	Support pipe
F	4	8805161	Nozzle	¼		Lower horizontal pipe
G	8		Nozzle	¼		Vertical pipes
H	3		Nozzle	¼		Upper horizontal pipe
I	3	8805324	Endcap	3/4”	Stainless steel	Lower horizontal pipe
K	2	8805325	T-piece	3/4”	Stainless steel	Lower horizontal pipe
M	7	8805326	Socket	3/4”	Stainless steel	Lower horizontal pipe
N	4	0809762	GK-coupling	3/4” mann.	Brass	Connector piece 1” x ¾”
O	4	8805322	Captoggle	3/4”	Galvanized	Anchoring of the gate
P	10	8805200	Bolts	M10 x 60	Galvanized	Anchoring of the gate
Q	10	8805204	Plug	M12		Anchoring of the gate
R	12	8805323	Cliptoggle	3/4”	Galvanized	Mounting support pipe on gate
S	6	8805201	Bolts	M8 x 35	Galvanized	Mounting support pipe on gate

T	6	Various	Nuts	M8	Galvanized	Mounting support pipe on gate
U	12	Various	Washers	M8	Galvanized	Mounting support pipe on gate
V	2	1009978	Teflon Tape			General



b + m + c

c + m + d

a + b + k

a + i

a + n + m

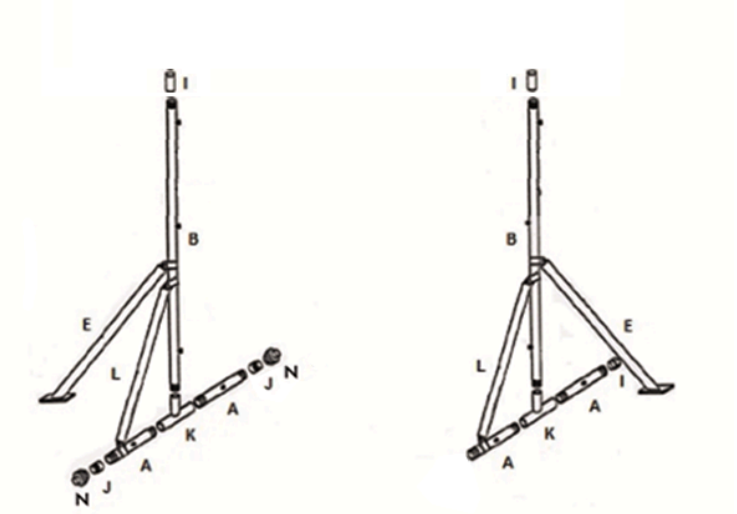
b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

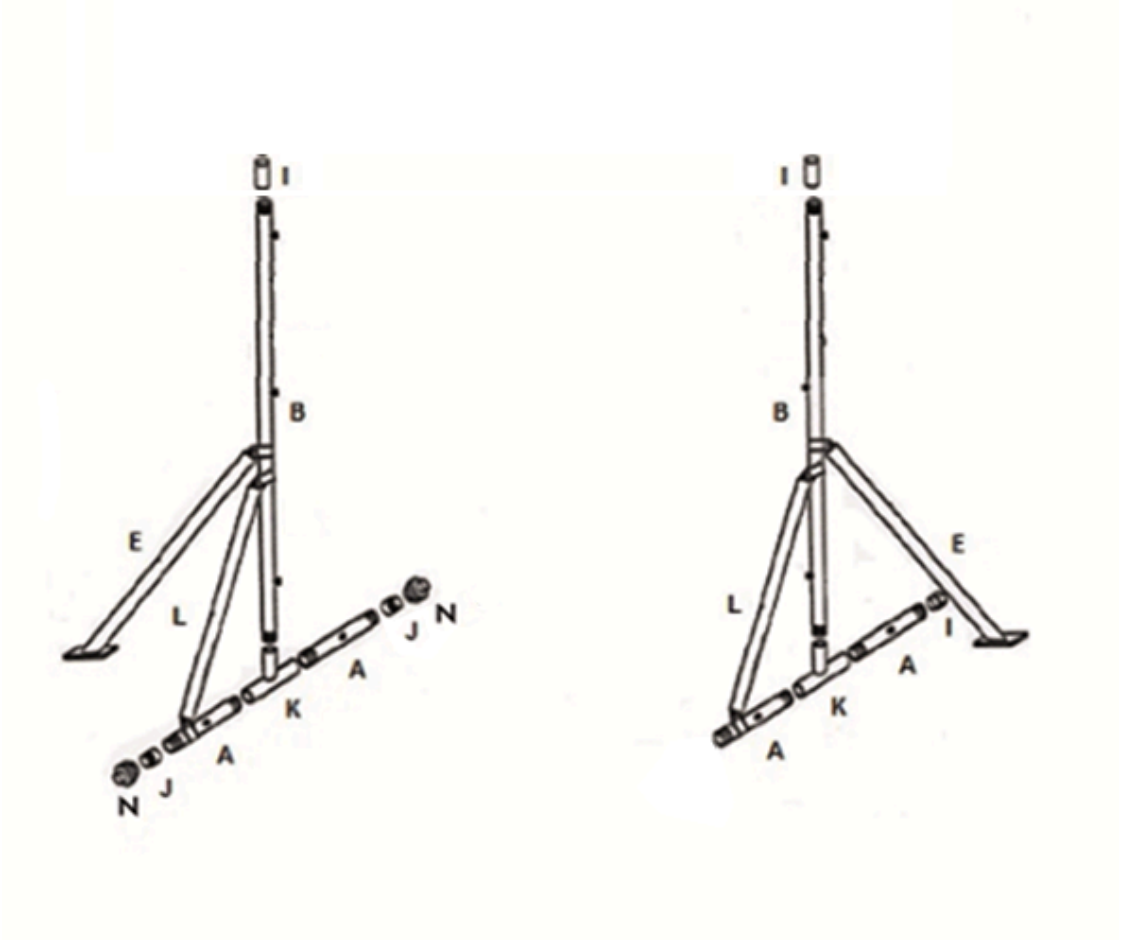
e + p + q

Every connection + V

2509970 Frame disinfection gate, stainless steel



#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
a	4	2509970	Pipe	1”	Stainless steel	Lower horizontal pipe
b	2		Pipe	1”	Stainless steel	Lower vertical pipe
e	2		Pipe	1”	Stainless steel	Support pipe
l	2		Pipe	1”	Stainless steel	Support pipe
f	4	8805161	Nozzle	¼		Lower horizontal pipe
g	4		Nozzle	¼		Vertical pipes
i	3	8805208	Endcap	1”	Stainless steel	Lower horizontal pipe
j	3	8805209	Connector piece	1” x ¾”	Stainless steel	Lower horizontal pipe
k	2	8805210	T-piece	1”	Stainless steel	Lower horizontal pipe
n	3	8805213	GK-coupling	¾” mann.	Brass	Connector piece1” x ¾”
o	4	8805239	Captoggle	1”	Galvanized	Anchoring of the gate
p	10	8805200	Bolts	M10 x 60	Galvanized	Anchoring of the gate
q	10	8805204	Plug	M12		Anchoring of the gate
r	12	8805240	Cliptoggle	1”	Galvanized	Mounting support pipe on gate
s	6	8805201	Bolts	M8 x 35	Galvanized	Mounting support pipe on gate
t	6	Various	Nuts	M8	Galvanized	Mounting support pipe on gate
u	12	Various	Washers	M8	Galvanized	Mounting support pipe on gate
v	2	1009978	Teflon Tape			General
w	1	0809969	Hose	2,5 m		
x	1	0809751	GK-coupling	½ “		Female part
y	2	8805234	GK-coupling	1”		
z	2	8805215	Hose clamp			



a + b + k

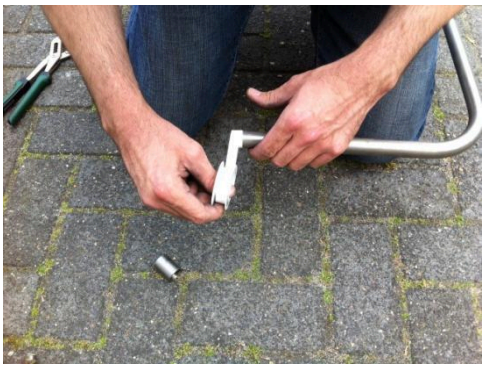
a + i & b + i

a + n+ j

b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

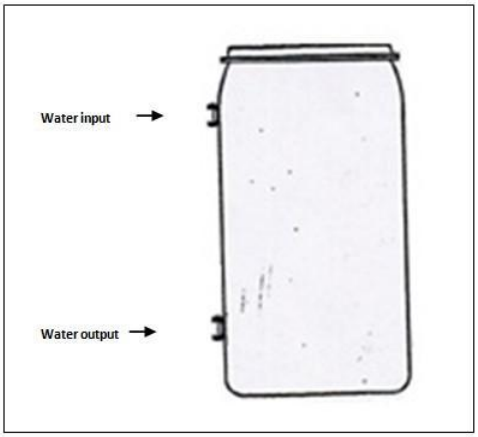


Every connection + V

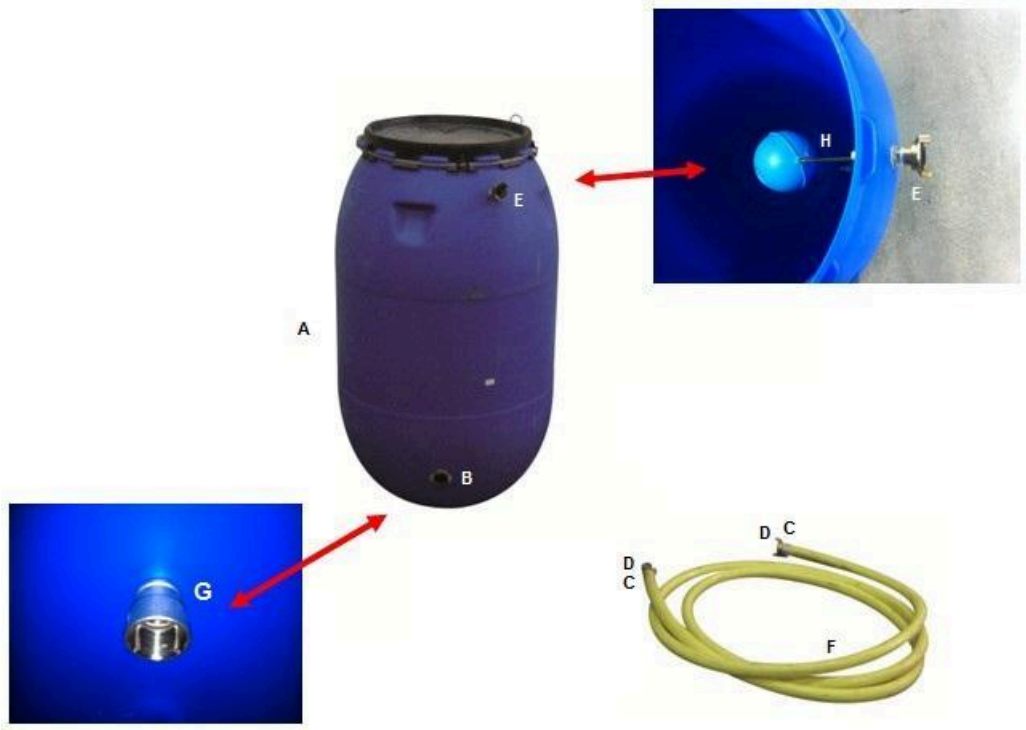
2509440 Control unit

#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
a	1	8805282	Pump		Stainless steel	Pump
b	1	8801813	Valve 1	¾" x ¾" female	Stainless steel	Pump
c	1	8801812	Valve 2	1/8" x 1/8" female	Stainless steel	Pump
g	2x10	2509815	Indicator hose	p/m	Rubber	Besturingsunit
h	3	8805237	hose p/m	1" (25 mm)	Helifex	Helifex slang
i	2	0807101	hose p/m	7 x 10 mm		Valve 2
j	1	8804943	Bottom valve		Stainless steel	Valve 2

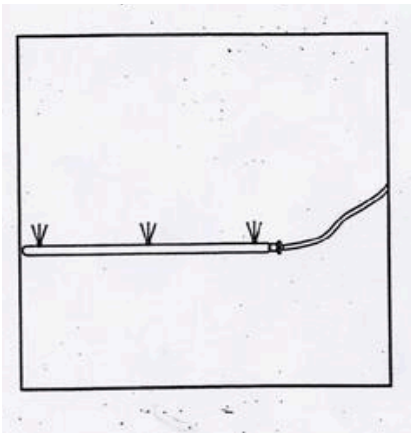
2509475 Storage barrel + coupling for disinfection gate



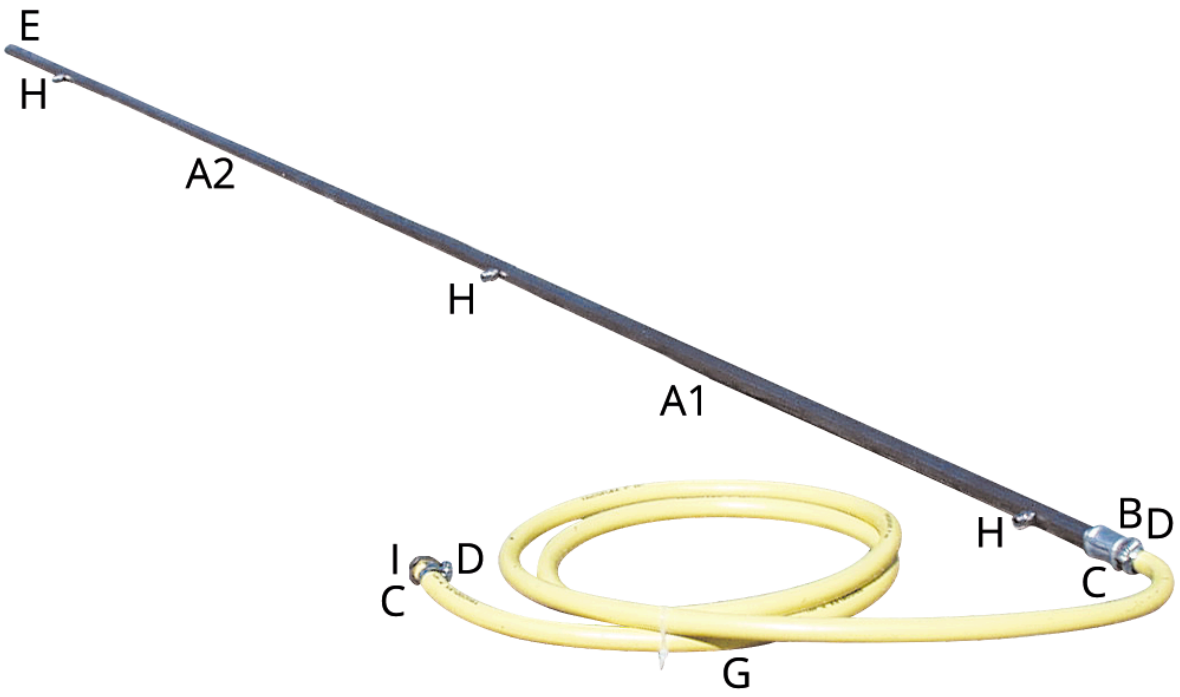
#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
a	1	8805264	Barrel	225 ltr	PE	Barrel
b	1	8805213	GK-coupling	¾" male	Brass	Barrel
c	2	8805215	Hose clamp	30-20 mm	Galvanized	Helifex hose
d	2	8805234	GK-coupling	Tule 25 mm	Brass	Helifex hose
e	1	8805235	GK-coupling	½" female	Brass	Barrel
f	6	8805237	Hose p/m	1" (25 mm)	Helifex	Helifex hose
g	1	8805209	Connector piece	1" x ¾"	Stainless steel	Barrel
h	1	0809982	Float	½"	Brass	Barrel



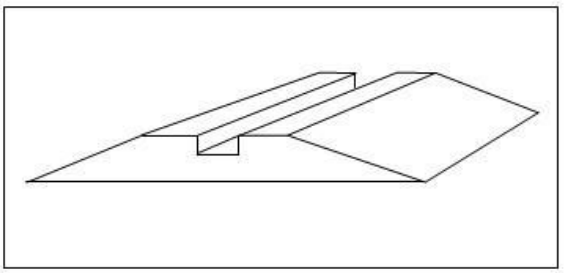
2509979 Bottom disinfector for disinfection gate



#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
A1	1		Pipe 160cm	½"	Stainless steel	Bottom disinfection
A2	1		Pipe 140cm	½"	Stainless steel	Bottom disinfection
B	1	8805226	GK-coupling	½" male	Brass	Lower horizontal pipe
C	2	8805234	GK-coupling	Tule 25 mm	Brass	Tricoflex hose
D	2	8805215	Hose clamp	30 – 20 mm	Galvanized	Tricoflex hose
E	1	8805219	Endcap	½"	Stainless steel	Lower horizontal pipe
G	2	0809925	Hose p/m	1" (25 mm)	Tricoflex	Bottom disinfection
H	3	8805161	Nozzle	¼"	Stainless steel	Lower horizontal pipe
I	1	0809752	GK-coupling	¾" female	Brass	Tricoflex hose

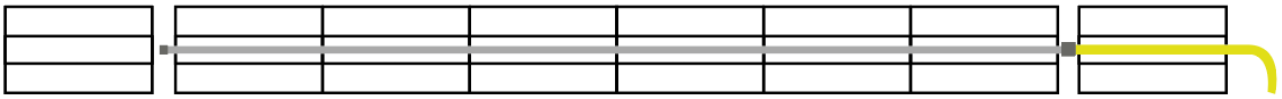


2509477 Threshold element (milled) 50 x 40 x 5 cm



#	Qty:	Art.nr.	Part:	Size:	Material:	Part of:
a	8	2509477	Treshold	50 x 40 cm	Plastic	Threshold
b	8	2509478	Mounting kit			Threshold

Schematic placement of bottom disinfector in the threshold elements



DE Desinfektionstor

Inhaltsverzeichnis

1. Edelstahl-Desinfektionstor

Mit dem Schippers Desinfektionstor erhalten Sie eine dauerhafte Lösung für die Aufrechterhaltung der Biosicherheit in Ihrem Tierhaltungsbetrieb. Sobald ein Fahrzeug auf Ihre Anlage kommt und über den Anzeigeschlauch fährt, wird die Pumpe aktiviert. Die Pumpe zieht das Desinfektionsmittel aus dem Behälter und sprüht es mit Spezialdüsen, die im Edelstahltor montiert sind, auf das Fahrzeug. Das Desinfektionstor wird in der Standardausstattung mit einer speziellen Edelstahlpumpe, einem 200-Liter-Tank, einer Desinfektionsmittel-Spritzdüse, einem Zuführschlauch und einem Anzeigeschlauch geliefert.

Die Basis ist eine Kombination aus Desinfektions-Anschluss (siehe Teileliste, Artikelnr. 2509978) mit Regeleinheit mit Pumpe und Anzeigeschlauch (siehe Teileliste, Artikelnr. 2509440), Lagerbehälter und Zuführschlauch (siehe Teileliste, Artikelnr. 2509475).

Zusätzlich ist folgendes Zubehör erhältlich:

- Unterseitendesinfektion (siehe Teileliste, Artikelnr. 2509979)
- Schwelle (notwendig für den Schutz der Unterseitendesinfektion) + Montagesatz (siehe Teileliste, Artikelnr. 4x 4x 2509477en 2509478)

2. Installation

Das Desinfektionstor umfasst viele verschiedene Edelstahlrohre, die folgendermaßen montiert werden müssen (siehe Teileliste).

HINWEIS! MONTIEREN SIE VON OBEN NACH UNTEN!!

VERWENDEN SIE PTFE-FUGENDICHTUNGSBAND (MITGELIEFERT) AN ALLEN GEWINDEVERBINDUNGEN!!

2.1 Montage der rahmenhohen Desinfektionstor

7. Verbinden Sie die langen, geraden Teile der zwei gebogenen Rohre mit einem 1”-Anschluss. Die Düsen müssen so angebracht werden, dass sie nach hinten zeigen, damit auch die Rückseite des Fahrzeugs desinfiziert wird.
8. Die senkrechten Rohre müssen unter den gebogenen Edelstahlrohren angebracht werden, so dass sich die zwei Düsen so hoch wie möglich befinden (siehe Teileliste). Verbinden Sie die Rohre mit einem 1”-Anschluss.
9. Ein 1”-T-Stück muss auf das untere Ende der zwei unteren senkrechten Rohre geschraubt werden. (Siehe Teileliste.) Wenn alle Verbindungen hergestellt wurden, ziehen Sie alles an, und stellen Sie dabei sicher, dass alle Düsen nach innen zeigen.
10. Die horizontalen unteren Rohre (dicke Rohre mit einer Düse) müssen in den T-Stücken befestigt werden, so dass die Düse so weit wie möglich vom Tor entfernt ist (siehe Teileliste). Befestigen Sie auf der Seite des Desinfektionstors, auf der sich die Pumpe befinden wird, die GK-Kupplung mit einem ¾” – 1”-Adapter an einem Ende des horizontalen Rohrs und einen Endanschlag am gegenüberliegenden Ende. Bei Verwendung eines Unterseitendesinfizierers verbinden Sie diesen mit einem

Ende des Rohrs gegenüber der Pumpe, und bringen Sie einen Endanschlag am anderen Ende an. Wenn kein Unterseitendesinfizierer montiert wird, bringen Sie an allen drei offenen Enden der horizontalen Rohre Endanschläge an.

Das Desinfektionstor kann jetzt von zwei Personen aufgestellt werden. Drehen Sie die horizontalen Rohre um eine Vierteldrehung, so dass sie parallel zur beabsichtigten Fahrtrichtung der Fahrzeuge verlaufen. Dadurch wird das Tor für den Moment in der vertikalen Position gestützt.
Als nächstes befestigen Sie die beiden Pfeiler, einen auf jeder Seite, mit den mitgelieferten Klemmen. Bringen Sie auf jeder Seite eine Klemme unter der oberen Düse im unteren, dickeren Rohr an sowie eine Klemme rund um den oberen Teil des Pfeilerrohrs. Befestigen Sie die zwei Klemmen mit den Schrauben, so dass der Pfeiler auf jeder Seite das untere, vertikale Rohr stützt.
Der Fuß jedes Pfeilers kann am Boden befestigt werden, sobald das Tor an seine endgültige Position gebracht wurde.
Befestigen Sie die unteren horizontalen Rohre mit den 4 U-Klemmen am Boden.
Der Einlassschlauch von der Pumpe kann an die GK-Kupplung angeschlossen werden.
Verbinden Sie das 220-Volt-Kabel aus der Regeleinheit. Verwenden Sie bitte eine geeignete Steckverbindung, und schließen Sie es an einen wetterfesten Elektrokasten an.
Der Anzeigeschlauch, der mit der Unterseite der Regeleinheit verbunden wird, muss sich etwa 5 Meter vor dem Desinfektionstor befinden. Wenn ein Fahrzeug über den Schlauch fährt, aktiviert dies die Pumpe, die dann während des erforderlichen Zeitraums sprüht.

2.2 Einbaurahmen halbe Höhe Desinfektionstor

1. Die senkrechten Rohre müssen unter den gebogenen Edelstahlrohren angebracht werden, so dass sich die zwei Düsen so hoch wie möglich befinden (siehe Teileliste). Ein 1”-T-Stück muss auf das untere Ende der zwei unteren senkrechten Rohre geschraubt werden. (Siehe Teileliste.) Wenn alle Verbindungen hergestellt wurden, ziehen Sie alles an, und stellen Sie dabei sicher, dass alle Düsen nach innen zeigen.
2. Die horizontalen unteren Rohre (dicke Rohre mit einer Düse) müssen in den T-Stücken befestigt werden, so dass die Düse so weit wie möglich vom Tor entfernt ist (siehe Teileliste). Befestigen Sie auf der Seite des Desinfektionstors, auf der sich die Pumpe befinden wird, die GK-Kupplung mit einem ¾” – 1”-Adapter an einem Ende des horizontalen Rohrs und einen Endanschlag am gegenüberliegenden Ende. Bei Verwendung eines Unterseitendesinfizierers verbinden Sie diesen mit einem Ende des Rohrs gegenüber der Pumpe, und bringen Sie einen Endanschlag am anderen Ende an. Wenn kein Unterseitendesinfizierer montiert wird, bringen Sie an allen drei offenen Enden der horizontalen Rohre Endanschläge an.

   Die 2 Teile des Rahmens sollten im Abstand von +/- 4,25 m platziert werden, so dass die Schwellenelemente dazwischen platziert werden können.
   Das Stützrohr kann auf dem Hof montiert werden.

Das Desinfektionstor kann nun mit zwei Personen aufgerichtet werden, indem die horizontalen Rohre eine Vierteldrehung gedreht werden, so dass sie senkrecht auf dem Desinfektionstor stehen. Das Desinfektionstor kann so stehen bleiben.
Die Rohrschellen können nun am stehenden Unterrohr, direkt unter der letzten Düse und am Stützrohr montiert werden, so dass die beiden aneinander befestigt werden können.
Das Desinfektionstor kann mit den Klemmschellen über dem Unterrohr befestigt werden, das auf dem Hof montiert werden kann.
Der Versorgungsschlauch von der Pumpe kann an der GK-Kupplung montiert werden.
Der Versorgungsschlauch an der Unterseite kann an der GK-Kupplung montiert werden.
Verbinden Sie das 220-Volt-Kabel aus der Regeleinheit. Verwenden Sie bitte eine geeignete Steckverbindung, und schließen Sie es an einen wetterfesten Elektrokasten an.
Der Anzeigeschlauch, der mit der Unterseite der Regeleinheit verbunden wird, muss sich etwa 5 Meter vor dem Desinfektionstor befinden. Wenn ein Fahrzeug über den Schlauch fährt, aktiviert dies die Pumpe, die dann während des erforderlichen Zeitraums sprüht.

Bevor das Desinfektionstor in Betrieb genommen wird, muss die Pumpe mit einem Wasserschlauch mit Wasser befüllt werden. In diesem Fall muss der Dosierhahn geschlossen sein. Ansonsten kann die Pumpe nicht saugen. Wenn der Behälter und die Pumpe komplett mit Wasser gefüllt sind, kann der Dosierhahn geöffnet werden, und das Desinfektionstor ist betriebsbereit. (etwa eine halbe Umdrehung)

Sie können anhand der Teileliste weiter hinten in diesem Handbuch überprüfen, ob alle Teile geliefert wurden.

ACHTUNG!!!

Die Pumpe muss so nahe wie möglich am Desinfektionstor platziert werden, damit das System schnell Druck aufbauen kann. Es sind maximal 10 Meter zulässig.
Das Ende des Anzeigeschlauchs muss geschlossen sein, damit keine Feuchtigkeit in den Schlauch eindringen kann.
Die Schwelle muss gut befestigt werden, eventuell mit Holzschrauben, ansonsten bewegt sie sich, wenn Fahrzeuge darüberfahren.
Der Abstand zwischen Anzeigeschlauch und Desinfektionstor muss mindestens 5 Meter betragen, damit das System rechtzeitig anläuft.
Das Desinfektionstor muss langsam durchfahren werden. Max. 5 km/h.

3. Wasserverbrauch und Dosierung

Das Desinfektionstor hat standardmäßig 15 Düsen. Wenn ein Unterseitendesinfizierer angeschlossen ist, sind es 18 Düsen. Der halbhohe Desinfektionsanschluss verfügt über 11 Düsen.

Der Wasserverbrauch des Desinfektionstors beträgt:

- Standard : 55 Liter/Minute.
- Standard + Unterseitendesinfektion: 65 Liter/Minute
- Halb 40 Liter/Minute

Die Menge des Desinfektionsmittels kann mit einem Dosierhahn justiert werden, der sich innerhalb der Regeleinheit befindet.
Der Dosierhahn lässt sich manuell auf eine Dosis von bis zu 1 % Desinfektionsmittel einstellen (etwa eine halbe Umdrehung öffnen). Das zu verwendende Desinfektionsmittel ist MS Megades. Andere Desinfektionsmittel sind nicht für die Verwendung in Kombination mit dem MS Desinfektionstor geeignet.

Experimente mit einer Desinfektionsmittelkonzentration von 1 % und einer Durchfahrtszeit des Fahrzeugs von 30 Sekunden haben gezeigt, dass ausreichend aktive Bestandteile des Desinfektionsmittels vorhanden sind, um das Fahrzeug korrekt zu desinfizieren. Die Kontaktzeit des Desinfektionsmittels beträgt 10 Minuten. Messpunkte: Reifen und Außenseite des Fahrzeugs. Es gibt genug Proben, um ein zuverlässiges Bild zu erhalten.

Messungen

Messungen der Hygienepunktzahl eines Fahrzeugs, das durch das Desinfektionstor von Schippers Europe BV gefahren wurde	
Datum der Messung	24.11.1997
Hygienepunktzahl des gesamten Fahrzeugs inklusive Reifen	9,5 (sehr gut)
Hygienepunktzahl von Karosserieaußenseite und Führerhaus	9,5 (sehr gut)
Hygienepunktzahl der Reifen	9,5 (sehr gut)

Quelle: DLV Team Ketenprojecten, 1997

4. Timer einstellen

Der Timer ist auf eine Betriebszeit von 30 Sekunden eingestellt. Falls gewünscht, kann die Betriebszeit verlängert werden.

2. Anteil der eingestellten Sekunden/Minuten/Stunden
1. Sekunden/Minuten/Stunden einstellbar

Beispiel:
1 = 1 Minute
2 = 0,5
Das heißt: 0,5 von 1 Minute = 30 Sekunden Betriebszeit
Der Timer stellt die Installation auf eine bestimmte Betriebszeit ab dem Zeitpunkt ein, wenn das Fahrzeug über den Anzeigeschlauch fährt.

5. Wartung

Desinfektionstor:

- Wenn das Desinfektionstor im Winter nicht verwendet wird, wird empfohlen, es mit Luftdruck zu entleeren, damit alles Wasser aus den Rohren gelangt und diese trocken gelagert werden können.
- Wenn die Desinfektion im Winter verwendet wird, kann Frostschutzmittel (Artikelnummer 2509845) zugesetzt werden, um ein Einfrieren zu verhindern.

Pumpe:
Überprüfen Sie immer, ob die Stromversorgung zur Pumpe unterbrochen ist und ob es keine möglichen elektrischen Verbindungen gibt.

Die Pumpe benötigt keine Wartung, vorausgesetzt, die folgenden Vorsichtsmaßnahmen werden ergriffen: Entleeren Sie die Pumpe bei (Nacht-)Frost mit der speziellen Entwässerungskappe, die sich an der Unterseite des Pumpengehäuses befindet. Vergessen Sie nicht, die Pumpe vor dem nächsten Gebrauch wieder zu befüllen. Überprüfen Sie regelmäßig, ob das Rückschlagventil sauber ist. Wenn die Pumpe für einen längeren Zeitraum (Winter) nicht verwendet wird, ist es besser, die Pumpe komplett zu entleeren, mit sauberem Wasser zu spülen und an einem trockenen Platz zu lagern.

6. Nutzungsbedingungen für die Pumpe

PEDROLLO
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2+4CP, 2+4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.

The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.

Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.

The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION

Unpack and check that it is in perfect condition.

CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.

CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE

The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2= 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION

Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.

CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.

Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position. The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.

CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.

The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS

They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.
Make sure that there is no voltage at the line wire terminals before connecting.

Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING

CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in. At the end of the operation, screw the plug back on and start the pump.

CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET,BETTY) is still not primed, switch it off and repeat the operation.

Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.

Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.

CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.

The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place

CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.

CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY

We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

San Bonifacio, 11/01/2010

Pedrollo S.p.A.
Amministratore Unico
Dr.ssa Pedrollo

Sicherheitshinweise für die Pumpe

Die Edelstahlpumpe ist eine Elektropumpe, die die EG-Richtlinien erfüllt. Bevor die Pumpe installiert wird, müssen Sie überprüfen, ob das Stromnetz geerdet ist und die Richtlinien erfüllt. Vor jeder Kontrolle oder Wartung muss die Stromzufuhr zur Installation unterbrochen und der Stecker aus der Steckdose gezogen werden.

Die Pumpe ist zum Pumpen von sauberem Wasser vorgesehen und darf nicht zum Pumpen von entflammbaren Flüssigkeiten oder in Räumen verwendet werden, in denen Explosionsgefahr besteht. Da die Pumpe mit Strom betrieben wird, muss jeder Kontakt zwischen der Stromversorgung und den zu pumpenden Flüssigkeiten vermieden werden.

Die Pumpe ist mit einem Rückschlagventil ausgestattet, das verhindert, dass Wasser mit Desinfektionsmittel zurück in den Behälter läuft.

Pumpe befüllen und entlüften

Achtung: Die Inbetriebnahme einer leeren Pumpe verursacht Schäden an der mechanischen Abdeckung!!!

Vor der Inbetriebnahme muss der Pumpenkopf mit Wasser gefüllt werden. Der Pumpenkopf kann mit Wasser versorgt werden, indem der Füllschlauch an das untere Rohr des Rückschlagventilsatzes auf der Oberseite der Pumpe angeschlossen wird. Öffnen Sie den Griff und lassen Sie Wasser einlaufen. Schließen Sie dann den Füllschlauch wieder am Lagerbehälter an, und die Pumpe kann in Betrieb genommen werden. Wenn der Vorratstank vollständig gefüllt ist, füllt sich die Pumpe beim Start nach einigen Sekunden selbst. Schließen Sie zunächst das Dosierventil, um sicherzustellen, dass die Pumpe keine Luft ansaugt.

7. Fehlersuche

Störungen der Pumpe

Problem:	**Ursache:**	**Lösung:**
1. Motor startet nicht	a) Keine Spannung	• Kabelspannung überprüfen
		• Elektrische Verbindungen überprüfen
	b) Ventilator blockiert	• Ventilator zerlegen und reinigen
	c) Fehler im Stromkreis	• Schippers kontaktieren
2. Motor läuft, aber kein Wasser	a) Rückschlagventil blockiert	• Ventil reinigen

	b) Luftansaugung	• Luftrohr auf Leckagen überprüfen
		• Nachsehen, ob Rückschlagventil unter Wasser steht
3. Saugt nicht ausreichend Wasser an	a) Fußventil teilweise verstopft	• Rückschlagventil reinigen, bei Bedarf ganzes Saugrohr reinigen, bis Wasser läuft
	b) Ventilator blockiert	• Pumpe zerlegen und Pumpengehäuse und Ventilator sorgfältig reinigen
	c) Motor ist überhitzt	• Spannung und Belüftung überprüfen. Möglicherweise schlechtes Verlängerungskabel

Störungen der Regeleinheit:

Problem:	Ursache:	Lösung:
1. Lampe des Timers leuchtet nicht.	a) Sicherung defekt	• Ersetzen

8. Garantiebedingungen

Bei normalem Gebrauch gibt MS Schippers eine Garantie für einen Zeitraum von einem (1) Jahr ab Rechnungsdatum auf das komplette MS Desinfektionstor bei Herstellungs- und/oder Materialfehlern.

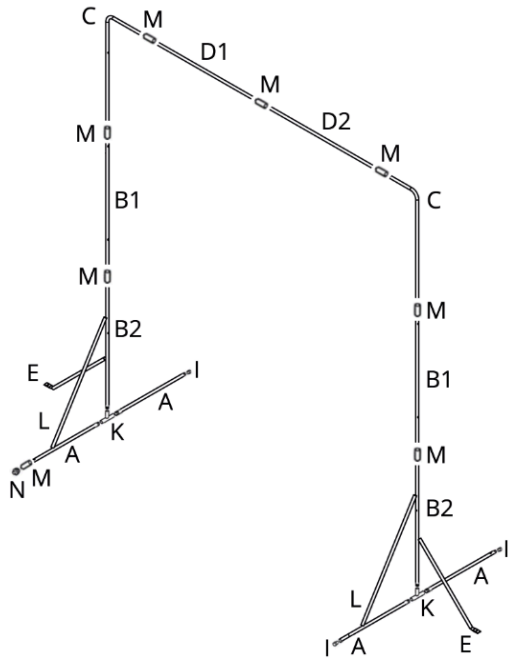
Keine Garantie wird gegeben, wenn folgende Gründe für die Fehler vorliegen:

- normaler Verschleiß
- unsachgemäßer Gebrauch
- nicht autorisierte Veränderungen
- nicht autorisierte Reparaturen
- äußere Einflüsse wie Feuer, Wasser und abnormale Umweltbedingungen sowie mechanische Schäden durch Stoß oder Fall
- anderes Desinfektionsmittel als MS Megades mit einer Dosierung von 1 %

Falls während der Garantiezeit ein Fehler auftritt, ersetzt MS Schippers die fehlerhaften Teile kostenfrei bei Erhalt des Geräts oder der fehlerhaften Teile, die ausreichend frankiert an MS Schippers gesendet werden müssen.

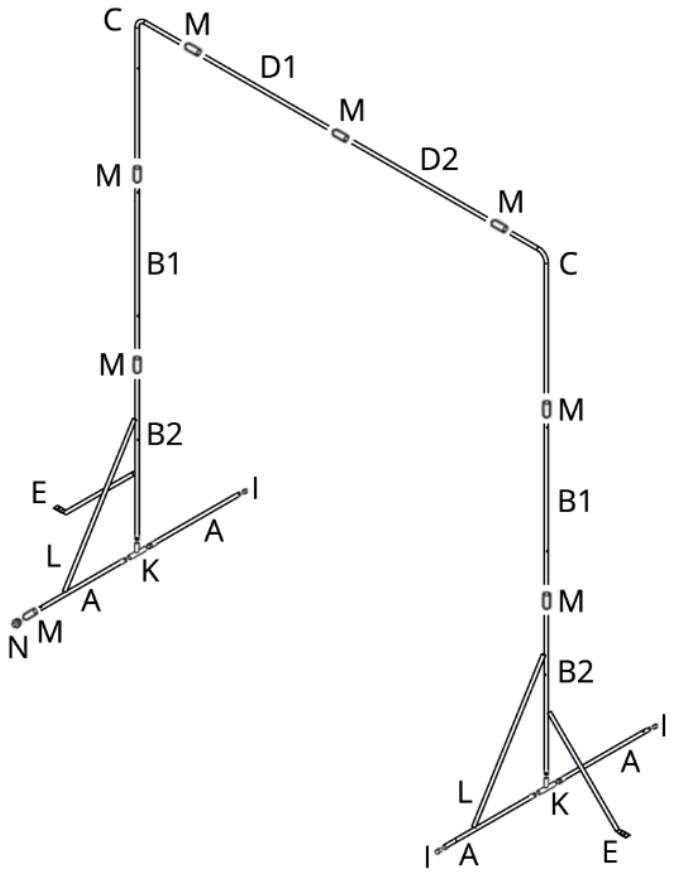
9. Teileliste

2508978 Rahmen Desinfektionstor, Edelstahl



#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
A	4	2508978	Rohr	3/4”	Edelstahl	Unteres horizontales Rohr
B1	2		Rohr	3/4”	Edelstahl	Unteres vertikales Rohr
B2	2		Rohr	3/4”	Edelstahl	Unteres vertikales Rohr
C	2		Rohr	3/4”	Edelstahl	Oberes vertikales Rohr
D1	1		Rohr	3/4”	Edelstahl	Oberes horizontales Rohr
D2	1		Rohr	3/4”	Edelstahl	Oberes horizontales Rohr
E	2		Rohr	3/4”	Edelstahl	Stützrohr
L	2		Rohr	3/4”	Edelstahl	Stützrohr
F	4	8805161	Düse	¼		Unteres horizontales Rohr
G	8		Düse	¼		Vertikale Rohre
H	3		Düse	¼		Oberes horizontales Rohr
I	3	8805324	Endkappe	3/4”	Edelstahl	Unteres horizontales Rohr
K	2	8805325	T-Stück	3/4”	Edelstahl	Unteres horizontales Rohr
M	7	8805326	Muffe	3/4”	Edelstahl	Unteres horizontales Rohr
N	4	0809762	GK-Kupplung	¾” man.	Messing	Anschlussstück 1” x ¾”
O	4	8805322	Wechseldeckel	3/4”	Verzinkt	Torverankerung
P	10	8805200	Schrauben	M10 x 60	Verzinkt	Torverankerung
Q	10	8805204	Stopfen	M12		Torverankerung
R	12	8805323	Wechselklemme	3/4”	Verzinkt	Montage des Stützrohrs am Tor
S	6	8805201	Schrauben	M8 x 35	Verzinkt	Montage des Stützrohrs am Tor

T	6	Diverse	Muttern	M8	Verzinkt	Montage des Stützrohrs am Tor
U	12	Diverse	Unterlegscheiben	M8	Verzinkt	Montage des Stützrohrs am Tor
V	2	1009978	Teflonband			Allgemein



b + m + c

c + m + d

a + b + k

a + i

a + n + m

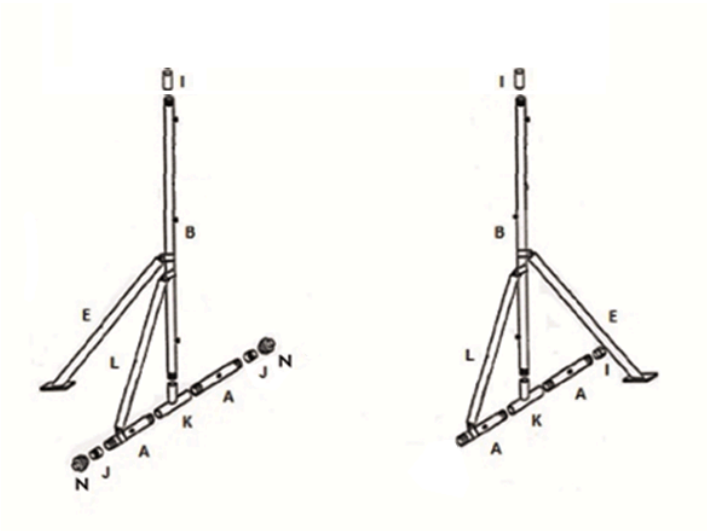
b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

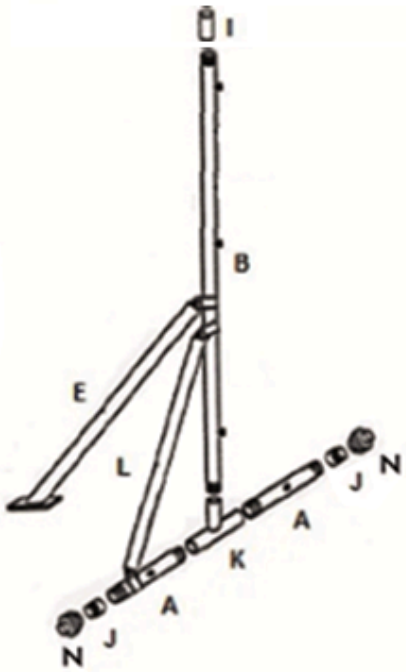
e + p + q

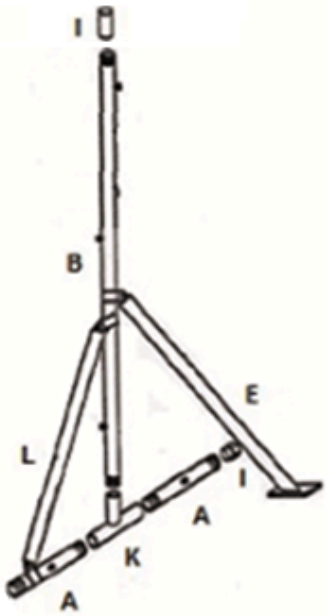
Jede Verbindung + V

2509970 Rahmen Desinfektionstor, Edelstahl



#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
a	4	2509970	Rohr	1”	Edelstahl	Unteres horizontales Rohr
b	2		Rohr	1”	Edelstahl	Unteres vertikales Rohr
e	2		Rohr	1”	Edelstahl	Stützrohr
l	2		Rohr	1”	Edelstahl	Stützrohr
f	4	8805161	Düse	¼		Unteres horizontales Rohr
g	8		Düse	¼		Vertikale Rohre
i	3	8805208	Endkappe	1”	Edelstahl	Unteres horizontales Rohr
j	1	8805209	Anschlussstück	1” x ¾”	Edelstahl	Unteres horizontales Rohr
k	2	8805210	T-Stück	1”	Edelstahl	Unteres horizontales Rohr
n	1	8805213	GK-Kupplung	¾” man.	Messing	Anschlussstück 1” x ¾”
o	4	8805239	Wechseldeckel	1”	Verzinkt	Torverankerung
p	10	8805200	Schrauben	M10 x 60	Verzinkt	Torverankerung
q	10	8805204	Stopfen	M12		Torverankerung
r	12	8805240	Wechselklemme	1”	Verzinkt	Montage des Stützrohrs am Tor
s	6	8805201	Schrauben	M8 x 35	Verzinkt	Montage des Stützrohrs am Tor
t	6	Diverse	Muttern	M8	Verzinkt	Montage des Stützrohrs am Tor
u	12	Diverse	Unterlegscheiben	M8	Verzinkt	Montage des Stützrohrs am Tor
v	2	1009978	Teflonband			Allgemein
w	1	0809969	Schlauch	2,5 m		
x	1	0809751	GK-Kupplung	½ “		Weiblicher Teil
y	2	8805234	GK-Kupplung	1”		
z	2	8805215	Schlauch Schelle			





a + b + k

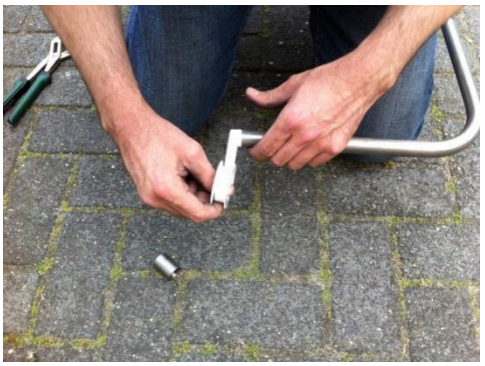
a + i & b + i

a + n + j

b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

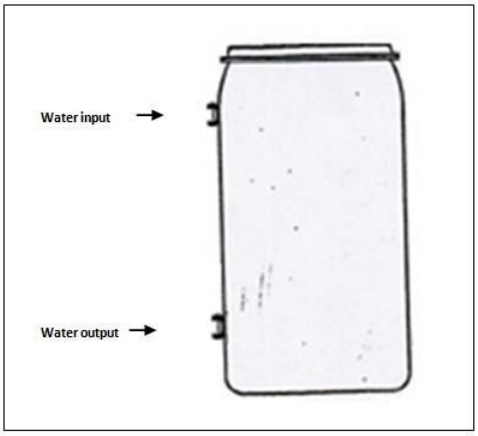


Jede Verbindung + V

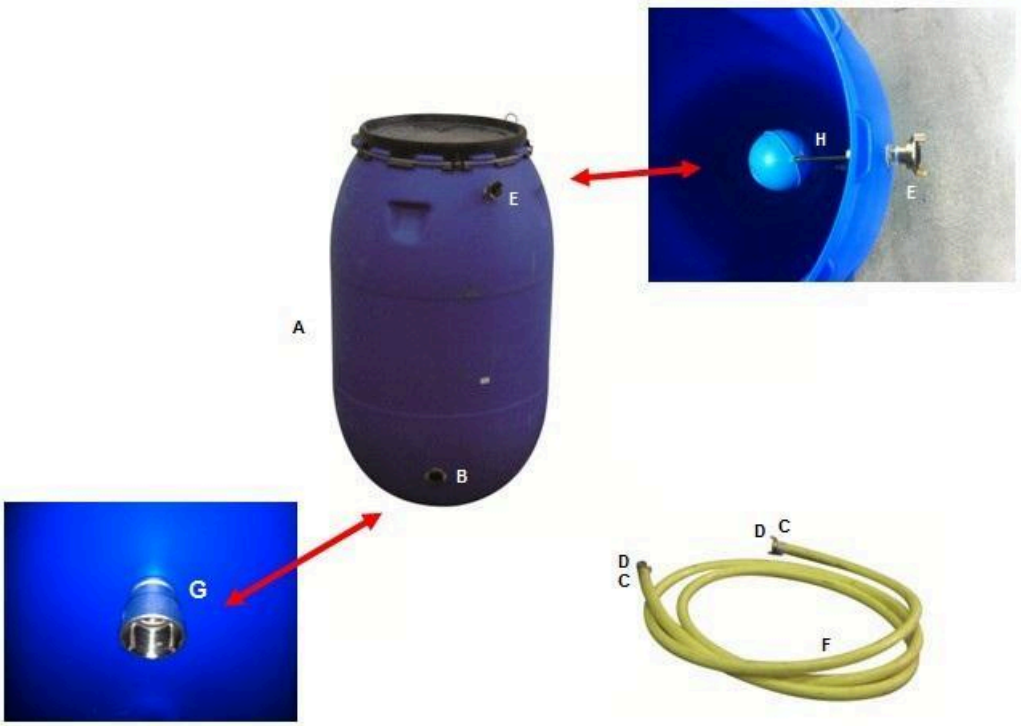
2509440 Steuergerät

#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
a	1	8805282	Pumpe		Edelstahl	Pumpe
b	1	8801813	Ventil 1	¾” x ¾” Innengewinde	Edelstahl	Pumpe
c	1	8801812	Ventil 2	1/8” x 1/8” Innengewinde	Edelstahl	Pumpe
g	2x10	2509815	Anzeigeschlauch	p/m	Gummi	Regeleinheit
h	3	8805237	Schlauch p/m	1” (25 mm)	Helifex	Helifex-Schlauch
i	2	0807101	Schlauch p/m	7 x 10 mm		Ventil 2
j	1	8804943	Bodenventil		Edelstahl	Ventil 2

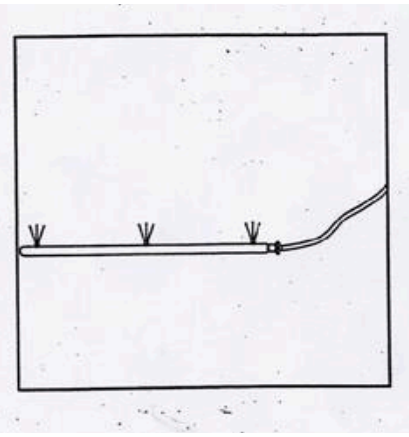
2509475 Lagerbehälter + Kupplung für Desinfektionstor



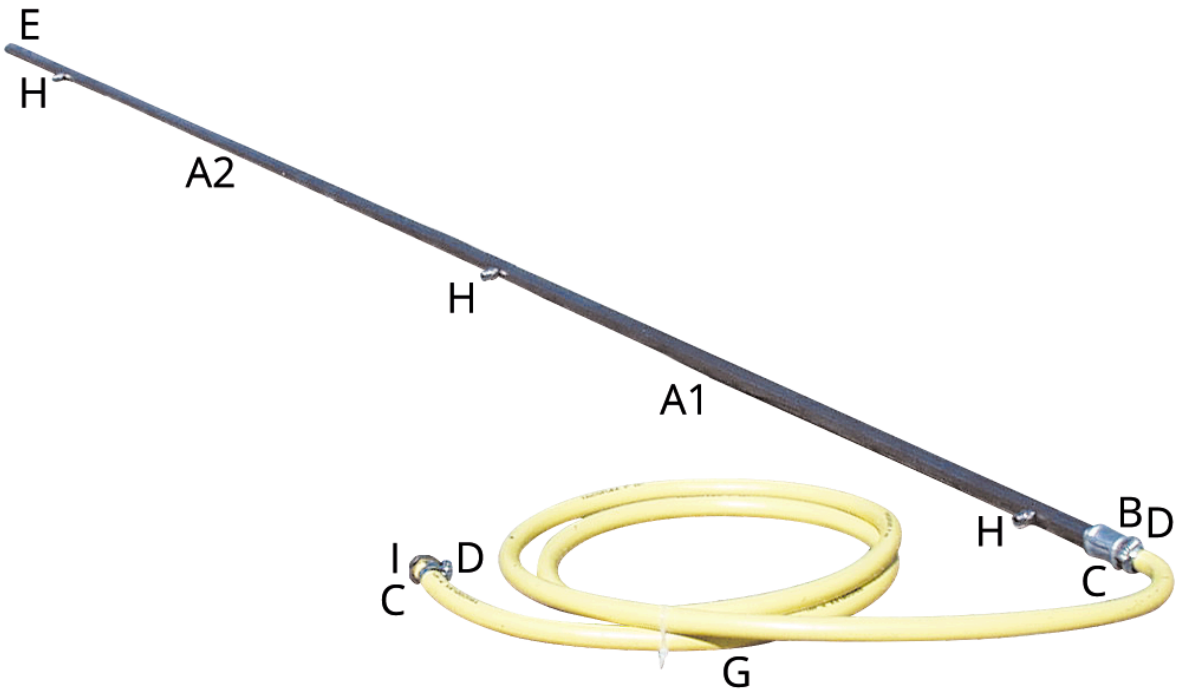
#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
a	1	8805264	Behälter	225 Liter	PE	Behälter
b	1	8805213	GK-Kupplung	¾" Außengewinde	Messing	Behälter
c	2	8805215	Schlauchklemme	30-20 mm	Verzinkt	Helifex-Schlauch
d	2	8805234	GK-Kupplung	Tule 25 mm	Messing	Helifex-Schlauch
e	1	8805235	GK-Kupplung	½" Innengewinde	Messing	Behälter
f	6	8805237	Schlauch p/m	1" (25 mm)	Helifex	Helifex-Schlauch
g	1	8805209	Anschlussstück	1" x ¾"	Edelstahl	Behälter
h	1	0809982	Schwimmer	½"	Messing	Behälter



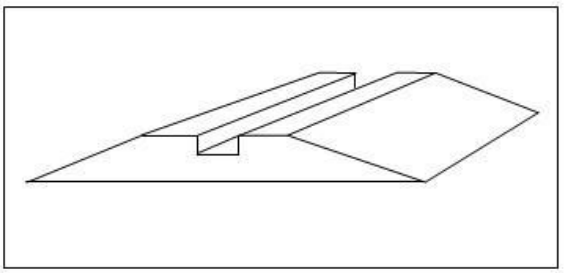
2509979 Unterseitendesinfizierer für Desinfektionstor



#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
a1	1		Rohr 160cm	½"	Edelstahl	Unterseitendesinfektion
a2	1		Rohr 140cm	½"	Edelstahl	Unterseitendesinfektion
b	1	8805226	GK-Kupplung	½" Außengewinde	Messing	Unteres horizontales Rohr
c	2	8805234	GK-Kupplung	Tule 25 mm	Messing	Tricoflex-Schlauch
d	2	8805215	Schlauchklemme	30 – 20 mm	Verzinkt	Tricoflex-Schlauch
e	1	8805219	Endkappe	½"	Edelstahl	Unteres horizontales Rohr
g	2	0809925	Schlauch p/m	1" (25 mm)	Tricoflex	Unterseitendesinfektion
h	3	8805161	Düse	¼"	Edelstahl	Unteres horizontales Rohr
i	1	8805213	GK-Kupplung	¾" weiblich	Messing	Tricoflex-Schlauch

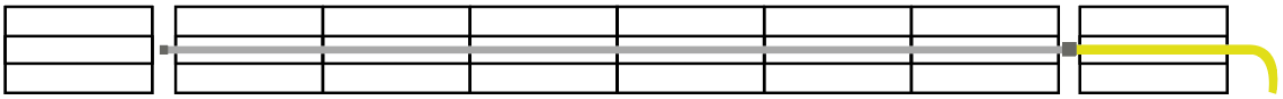


2509477 Schwellenelement (gefräst) 50 x 40 x 5 cm



#	Menge:	Art.-Nr.	Teil:	Größe:	Material:	Teil von:
a	8	2509477	Schwelle	50 x 40 cm	Kunststoff	Schwelle
b	8	2509478	Montagesatz			Schwelle

Schematische Platzierung der Unterseitendesinfizierer in den Schwellenelementen



FR Portique de désinfection

Sommaire

1. Portique de désinfection acier inox

Le portique de désinfection Schippers vous apporte une solution permanente pour une excellente prévention des contaminations extérieures. Chaque fois qu'un véhicule se présente sur votre exploitation, un tuyau détecteur démarre une pompe qui aspire un désinfectant. Le désinfectant se répartit sur le périmètre du portique en acier inox et est nébulisé sur le véhicule. Nous livrons ces portiques équipés en standard d'une pompe à eau en inox munie d'un réservoir de 200 litres et d'un dispositif d'injection de produit désinfectant, avec tuyau de raccordement et tuyau détecteur.

La configuration de base consiste en la combinaison du portique de désinfection (voir liste des composants, n° référence 2509978), dispositif de commande compris, et du tuyau détecteur (voir liste des composants, n° référence 2509440) ainsi que du réservoir et du tuyau de raccordement (voir liste des composants, n° référence 2509475).

En outre, sont disponibles les accessoires suivants:

- Dispositif de désinfection du dessous du véhicule (voir liste des composants, n° référence 2509979)
- Dos d'âne (nécessaire pour protection du dispositif de désinfection du dessous du véhicule) avec kit de fixation (voir liste des composants, n° référence 4x 2509477 et 4x 2509478)

2. Montage du portique de désinfection

Le portique de désinfection est composé de divers éléments tubulaires en inox et s'assemble comme suit (voir liste des composants).

ATTENTION ! LE PORTIQUE DE DÉSINFECTION S'ASSEMBLE DE HAUT EN BAS.

POSER DU RUBAN TEFLON (FOURNI) SUR CHAQUE RACCORD FILETÉ!

2.1 Montage du cadre de l'orifice de haute désinfection

3. Les tubes du dessus sont assembles en joignant leurs parties longues au moyen d'une douille de 1". Les buses de ces tubes doivent être fixées en direction arrière, de façon que la partie arrière des véhicules soit elle aussi désinfectée.
4. Les tubes verticaux doivent être disposés sous les tubes coudés inox, de telle façon que les deux buses qui s'y trouvent soient en position haute (voir liste des composants). Assemblage au moyen de douilles 1".
5. Les tubes du piètement (tubes épais avec une buse) doivent être montés sur la pièce en T de telle sorte que leur buse soit en position éloignée du portique (voir annexe 3). Le tube de piètement qui se trouve du côté de la pompe sera muni d'une douille réductrice 1" x ¾", montée avec un raccord GK, et d'un bouchon de 1" à l'autre extrémité. De l'autre côté du portique de désinfection, le tube de piétement sera muni à chaque extrémité d'un bouchon de 1". Pour un dispositif de désinfection du dessous du véhicule, mettre en place son alimentation au moyen d'un bouchon muni d'un raccord de tuyau.

On peut alors redresser le portique de désinfection, à deux personnes, les tubes de piètement subissant une rotation d'un quart de tour pour se retrouver à angle droit avec le plan du portique. Le portique de désinfection est ainsi stabilisé.
Monter les colliers de fixation sur les tubes verticaux inférieurs, juste sous la dernière buse, et sur les tubes obliques de soutien, de façon à pouvoir solidariser ces tubes les uns avec les autres.
Les tubes de soutien seront montés sur site.
Le portique de désinfection sera assuré avec des étriers de serrage sur les tubes de piètement, qui peuvent être assemblés sur site.
On peut alors raccorder le tuyau d'alimentation relié à la pompe au raccordement GK.
Connecter le câble d'alimentation électrique 220 volts relié au dispositif de commande. Veuillez utiliser pour cela une fiche adaptée, qui sera connectée à une prise d'alimentation extérieure étanche à l'eau.
Le tuyau détecteur, relié au dispositif de commande, doit être disposé à 5 mètres de distance avant le portique de désinfection. Quand un véhicule roule sur ce tuyau, il met en route le minuteur qui va, à son tour, actionner les buses de nébulisation.

2.2 Montage de l'orifice de désinfection à mi-hauteur du châssis

1. Les tubes verticaux doivent être disposés sous les tubes coudés inox, de telle façon que les deux buses qui s'y trouvent soient en position haute (voir liste des composants).
2. Les tubes du piètement (tubes épais avec une buse) doivent être montés sur la pièce en T de telle sorte que leur buse soit en position éloignée du portique (voir annexe 3). Le tube de piètement qui se trouve du côté de la pompe sera muni d'une douille réductrice 1" x ¾", montée avec un raccord GK, et d'un bouchon de 1" à l'autre extrémité. De l'autre côté du portique de désinfection, le tube de piétement sera muni à chaque extrémité d'un bouchon de 1". Pour un dispositif de désinfection du dessous du véhicule, mettre en place son alimentation au moyen d'un bouchon muni d'un raccord de tuyau.

Les 2 parties du cadre doivent être placées à +/-4,25 m l’une de l’autre, afin de pouvoir placer entre elles les ralentisseurs.
Le tube oblique de soutien peut être monté sur l’exploitation.
Le portique de désinfection peut à présent être redressé, à deux personnes, en tournant d'un quart de tour les tubes de piètement, de sorte qu’ils soient positionnés perpendiculairement au portique de désinfection. Le portique de désinfection est ainsi stabilisé.
Les colliers de fixation peuvent à présent être montés sur le tube inférieur vertical, juste sous la dernière buse et sur le tube oblique de soutien, afin que ces deux tubes soient fixés de manière solidaire l’un avec l’autre.
Le portique de désinfection peut être fixé avec les étriers de serrage sur le tube de piètement, qui peut être monté sur l’exploitation.

Le tuyau d'alimentation peut être raccordé à la pompe grâce au raccord GK.
Le tuyau d'alimentation peut être connecté au côté inférieur via un raccord GK.
Connecter le câble d'alimentation électrique 220 volts relié au dispositif de commande. Veuillez utiliser pour cela une fiche adaptée, qui sera connectée à une prise d'alimentation extérieure étanche à l'eau.
Le tuyau détecteur, relié au dispositif de commande, doit être disposé à 5 mètres de distance avant le portique de désinfection. Quand un véhicule roule sur ce tuyau, il met en route le minuteur qui va, à son tour, actionner les buses de nébulisation.

En préalable à l'utilisation du portique, tant le réservoir que la pompe doivent être entièrement remplis d'eau. Durant le remplissage, le robinet doseur doit être fermé. Une fois le réservoir et la pompe remplis d'eau, on peut ouvrir le robinet doseur et mettre en service le portique de désinfection. (environ un demi-tour)

Vous pourrez vérifier si la livraison est complète au moyen de la liste des composants du portique de désinfection, fournie avec celui-ci.

ATTENTION !

La pompe doit être aussi proche que possible du portique de désinfection, de façon à assurer une montée en pression rapide du système. La distance maximale est de 10 mètres, mais le plus court sera le mieux.
L'extrémité du tuyau détecteur doit être obturée de façon à empêcher l'humidité d'y pénétrer.
Les dos d'âne doivent être solidement fixés au sol, sans quoi ils seront déplacés par le passage des véhicules.
La distance du tuyau détecteur au portique de désinfection doit être au minimum de 5 mètres, afin de laisser au système le temps de se déclencher.
Un véhicule qui passe sous le portique de désinfection doit rouler très lentement. Au maximum 5 km/h.

3. Consommation d'eau et dosage de produit

Le portique de désinfection comporte en standard 15 buses de nébulisation. Avec l'adjonction d'un dispositif de désinfection du dessous du véhicule, le nombre total de buses s'élève à 18. Le port de désinfection mi-hauteur comporte 11 buses.

La consommation d'eau du portique est de:

- Installation standard ± 55 litres/minute
- Installation standard + dispositif désinfection dessous véhicule ± 65 litres/minute
- Demi ± 40 litres/minute

La quantité de produit désinfectant peut être réglée à l'aide du robinet doseur situé sur la à l'intérieur de dispositif de commande.
Le robinet doseur se règle manuellement jusqu'à un dosage de 1% maximum de désinfectant (ouvrir d'un demi-tour environ). Le désinfectant à utiliser à cet effet est le MS Megades. Tout autre désinfectant n'est pas adapté pour une utilisation en combinaison avec le portique de désinfection MS.

Les essais ont montré qu'avec une concentration de 1% de désinfectant, et un temps de passage du véhicule de 30 secondes, la quantité de désinfectant utilisée est suffisante pour assurer une bonne désinfection du véhicule. Le temps nécessaire pour que le produit agisse est de 10 minutes.
Points de mesure: pneus, extérieur des bétaillères, extérieur des habitacles. Les échantillons recueillis ont été assez nombreux pour fournir une image fiable du résultat de la désinfection.

Mesures

Mesures de la note d'hygiène d'une bétaillère passée par le portique de désinfection de Schippers Europe BV	
Date de la mesure	24/11/1997
Note d'hygiène de l'ensemble du véhicule, pneus compris	9,5 (très bonne)
Note d'hygiène extérieur benne et habitacle	9,5 (très bonne)
Note d'hygiène des pneus	9,5 (très bonne)

Source: DLV Team Ketenprojecten, 1997

4. Réglage du minuteur

Le minuteur est réglé en standard sur 30 secondes de fonctionnement. Si nécessaire, cette durée peut être augmentée.

2. Division correspondant aux secondes/minutes/heures du réglage actuel
1. Réglable en secondes/minutes/heures

Exemple:
1 = 1 minute
2 = 0,5
Cela signifie 0,5 de 1 minute, soit un temps de fonctionnement de 30 secondes

Le minuteur fixe la durée de fonctionnement à une valeur donnée, à partir du moment où le tuyau détecteur est activé par un passage.

5. Entretien

Portique de désinfection

- Quand le portique de désinfection n'est pas utilisé en période hivernale, il est conseillé d'insuffler de l'air comprimé pour expulser toute l'eau des tuyauteries, puis de les maintenir au sec.
- Si le portique reste néanmoins en service au cours de l'hiver, on peut ajouter de l'antigel (n° de référence 2509845) afin de prévenir le gel des canalisations.

Pompe:
Toujours vérifier que la pompe est isolée du courant électrique et que des contacts accidentels ne peuvent pas se produire.
La pompe n'a pas besoin d'entretien, à condition de respecter les précautions suivantes. En cas de gelées (nocturnes), vider la pompe au moyen du bouchon de vidange spécial situé sur la face inférieure du carter de la pompe, ne pas oublier de la remplir à nouveau avant de la mettre en service. Vérifier régulièrement la propreté du clapet anti-retour. Si la pompe doit rester hors service durant un certain temps (hiver), il est préférable de la vider complètement, de la rincer à l'eau claire et de l'entreposer au sec.

6. Modalités d'utilisation de la pompe

PEDROLLO®
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2÷4CP, 2÷4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.
The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.
Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.

The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION

Unpack and check that it is in perfect condition.
CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.
CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE

The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2= 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION

Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.
CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.
Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position.The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.
The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS

They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.
Make sure that there is no voltage at the line wire terminals before connecting.
Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING

CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in.At the end of the operation, screw the plug back on and start the pump.
CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET,BETTY) is still not primed, switch it off and repeat the operation.
Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.
Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.
CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.
The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place
CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.
CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY

We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

Pedrollo S.p.A.
Amministratore Unico
Dott.ssa Pedrollo

San Bonifacio, 11/01/2010

Sécurité de la pompe

La pompe en acier inox est une pompe électrique qui satisfait aux normes de l'UE. Avant son installation, il est nécessaire de vérifier que le réseau d'alimentation électrique est relié à la terre et que cette liaison répond aux normes en vigueur. Avant toute opération de contrôle ou d'entretien, l'installation doit être mise hors tension et la fiche d'alimentation retirée de la prise murale.

La pompe est destinée au pompage d'eau claire et ne doit pas servir à pomper des produits inflammables, ou fonctionner dans des enceintes présentant des risques d'explosion. Du fait que la pompe est alimentée par électricité, tout contact entre cette alimentation et le liquide pompé doit être évité.

La pompe est équipée d'un clapet anti-retour qui empêche toute remontée d'eau et de désinfectant à partir du portique vers le réservoir d'eau.

Remplissage et purge de la pompe

Attention: Mettre en marche la pompe quand elle est vide provoque des dommages à son étanchéité physique!
La tête de pompe doit avoir été remplie d'eau avant de mettre la pompe en marche. Brancher le tuyau de remplissage sur le dispositif de commande permet d'apporter l'eau à la tête de pompe. Mettre la poignée en position "ouvert" et remplir la pompe à ras bord. Après quoi le tuyau de remplissage est à nouveau raccordé au réservoir et la pompe est prête à fonctionner. Si le réservoir de stockage est complètement rempli, la pompe se remplit toute seule après quelques secondes au démarrage. Fermez d'abord la vanne de dosage pour vous assurer que la pompe n'aspire pas d'air.

7. Résolution des problèmes

Problèmes concernant la pompe

Problème:	**Cause:**	**Solution:**
1. Le moteur ne démarre pas	a) Pas de courant	• Vérifier courant au câble d'alimentation
		• Vérifier les connexions électriques
	b) Le rotor se bloque	• Démonter et nettoyer le rotor
	c) Panne du circuit électrique	• Contacter Schippers
2. Clapet anti-retour bouché	a) Clapet anti-retour bouché	• Nettoyer le clapet
	b) Aspiration d'air	• Rechercher des fuites sur le conduit d'aspiration

		• Vérifier que le clapet anti-retour est sous eau
	c) Rotation dans le mauvais sens	• Purger la pompe
		• Intervertir 2 phases du moteur triphasé
3. Aspiration d'eau insuffisante	a) Fonctionnement partiel du clapet anti-retour	• Nettoyer le clapet anti-retour et, au besoin, l'ensemble du conduit d'aspiration, débit à zéro
	b) Le rotor se bloque	• Démonter la pompe et nettoyer avec soin le carter et le rotor
	c) Le moteur chauffe	• Vérifier voltage et ventilation. Câble d'extension probablement défectueux

Problèmes concernant le dispositif de commande:

Problème:	Cause:	Solution:
1. Le voyant du minuteur ne s'allume pas	a) Fusible mort	• Remplacer fusible

8. Dispositions de garantie

Pour une utilisation normale du produit, MS Schippers assure une garantie d'un an, à compter de la date de facturation, couvrant l'ensemble du portique de désinfection contre tout défaut de fabrication et/ou de matériau.

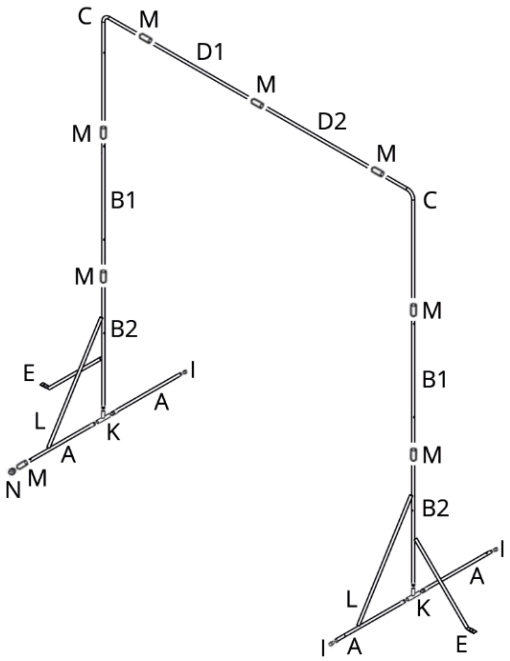
La garantie ne joue pas pour une panne due aux causes suivantes:

- usure normale
- utilisation non conforme
- modifications par personnes non agréées
- réparations par personnes non agréées
- facteurs extérieurs tels que feu, eau et conditiona ambiantes anormales, ainsi que dégâts mécaniques suite à un choc ou une chute
- utilisation de désinfectants autres que MS Megades à 1%

Au cas où l'appareil manifesterait un défaut au cours de la période de garantie, MS Schippers remplacerait gratuitement les composants défectueux. L'expédition de l'appareil ou des pièces défectueuses vers MS Schippers est aux frais de l'expéditeur.

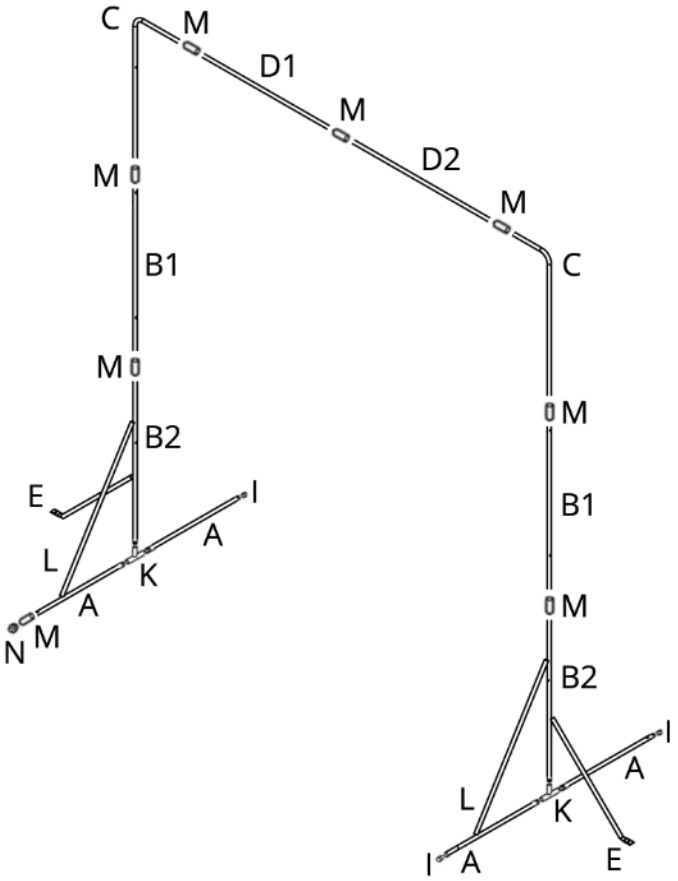
9. Liste des composants:

2508978 Cadre en inox pour portique de désinfection MS



#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
A	4	2508978	Tube	3/4”	Inox	Tubes horizontaux du bas
B1	2		Tube	3/4”	Inox	Tubes verticaux du bas
B2	2		Tube	3/4”	Inox	Tubes verticaux du bas
C	2		Tube	3/4”	Inox	Tubes verticaux du haut
D1	1		Tube	3/4”	Inox	Tubes horizontaux du haut
D2	1		Tube	3/4”	Inox	Tubes horizontaux du haut
E	2		Tube	3/4”	Inox	Tubes de soutien
L	2		Tube	3/4”	Inox	Tubes de soutien
F	4	8805161	Buse	¼		Tubes horizontaux du bas
G	8		Buse	¼		Tubes verticaux
H	3		Buse	¼		Tubes horizontaux du haut
I	3	8805324	Bouchon	3/4”	Inox	Tubes horizontaux du bas
K	2	8805325	Pièce en T	3/4”	Inox	Tubes horizontaux du bas
M	7	8805326	Connecteur	3/4”	Inox	Tubes verticaux du haut Tubes horizontaux du haut
N	4	0809762	Raccord GK	3/4” mâle	Laiton	Douille réductrice 1” x ¾”
O	4	8805322	Collier de serrage	3/4”	Acier galvanisé	Ancrage du portique
P	10	8805200	Boulons	M10 x 60	Acier galvanisé	Ancrage du portique
Q	10	8805204	Chevilles	M12		Ancrage du portique
R	12	8805323	Étrier de serrage	3/4”	Acier galvanisé	Fixation tube de soutien au portique

S	6	8805201	Boulons	M8 x 35	Acier galvanisé	Fixation tube de soutien au portique
T	6	Divers	Écrous	M8	Acier galvanisé	Fixation tube de soutien au portique
U	12	Divers	Rondelles	M8	Acier galvanisé	Fixation tube de soutien au portique
V	2	1009978	Ruban Teflon			Général



b + m + c

c + m + d

a + b + k

a + i

a + n + m

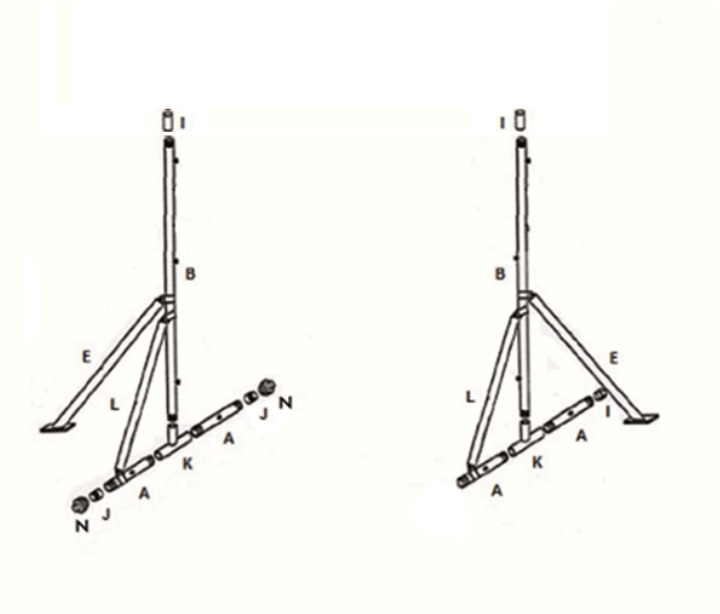
b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

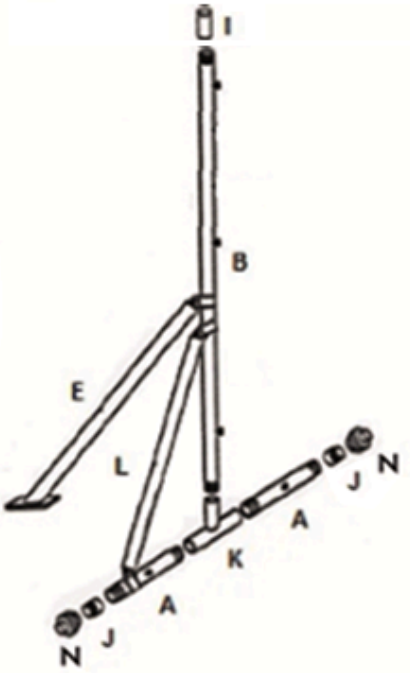
Pour chaque raccord +V

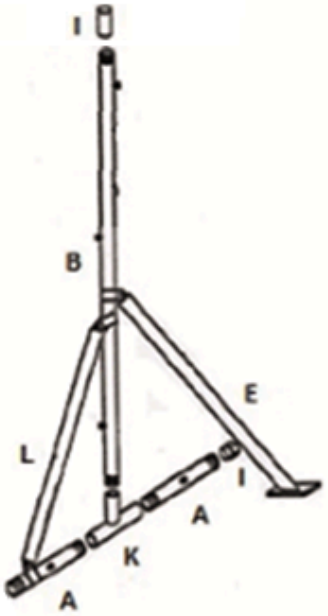
2509970 Cadre en inox pour portique de désinfection MS



#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
a	4	2509970	Tube	1″	Inox	Tubes horizontaux du bas
b	2		Tube	1″	Inox	Tubes verticaux du bas
e	2		Tube	1″	Inox	Tubes de soutien
l	2		Tube	1″	Inox	Tubes de soutien
f	4	8805161	Buse	¼		Tubes horizontaux du bas
g	4		Buse	¼		Tubes verticaux
i	3	8805208	Bouchon	1″	Inox	Tubes horizontaux du bas
j	3	8805209	Douille réductrice	1″ x ¾″	Inox	Tubes horizontaux du bas
k	2	8805210	Pièce en T	1″	Inox	Tubes horizontaux du bas
n	3	8805213	Raccord GK	¾″ mâle	Laiton	Douille réductrice 1″ x ¾″
o	4	8805239	Collier de serrage	1″	Acier galvanisé	Ancrage du portique
p	10	8805200	Boulons	M10 x 60	Acier galvanisé	Ancrage du portique
q	10	8805204	Chevilles	M12		Ancrage du portique
r	12	8805240	Étrier de serrage	1″	Acier galvanisé	Fixation tube de soutien au portique
s	6	8805201	Boulons	M8 x 35	Acier galvanisé	Fixation tube de soutien au portique
t	6	Divers	Écrous	M8	Acier galvanisé	Fixation tube de soutien au portique
u	12	Divers	Rondelles	M8	Acier galvanisé	Fixation tube de soutien au portique

v	2	1009978	Ruban Teflon			Général
w	1	0809969	Collier	2,5 m		
x	1	0809751	Raccord GK	½ “		Partie femelle
y	2	8805234	Raccord GK	1”		
z	2	8805215	Collier de serrage			





a + b + k

a + i & b + i

a + n + j

b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

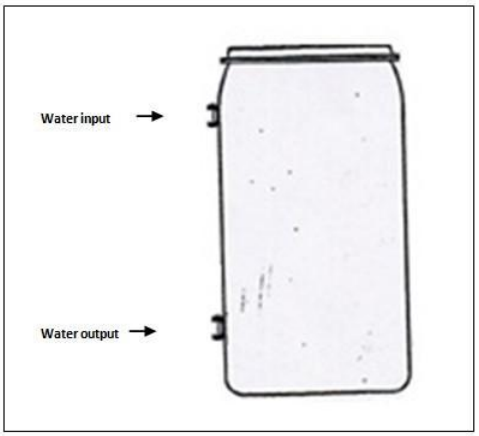
e + p + q

Pour chaque raccord +V

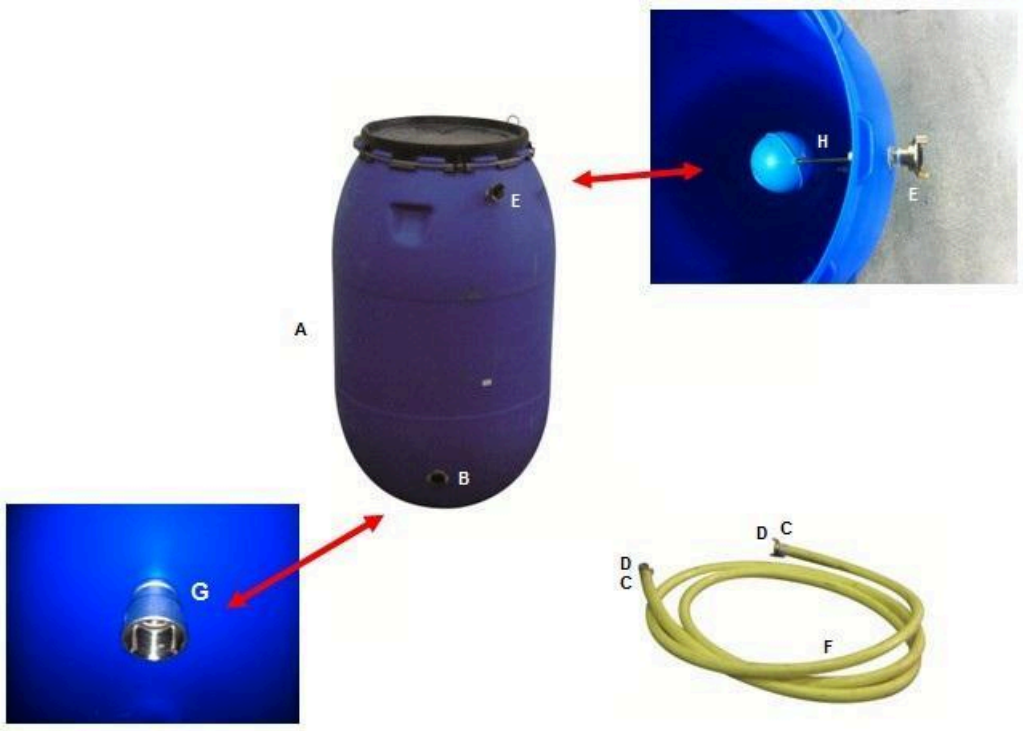
2509440 Unité de contrôle

#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
a	1	8805282	Pompe		Inox	Pompe
b	1	8801813	Vanne pour liquide 1	¾" x ¾" fem.	Inox	Pompe
c	1	8801812	Vanne pour liquide 2	1/8" x 1/8" fem.	Inox	Pompe
g	2x10	2509815	Tuyau détecteur	Au mètre	Caoutchouc	Dispositif de commande
h	3	8805237	Tuyau au mètre	1" (25 mm)	Helifex	Tuyau Helifex
i	2	0807101	Tuyau au mètre	7 x 10 mm		Vanne pour liquide 2
j	1	8804943	Filtre d'aspiration		Inox	Vanne pour liquide 2

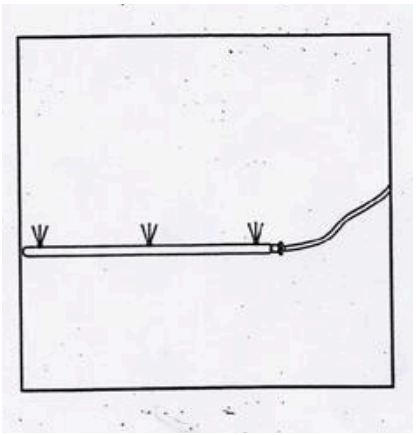
2509475 Réservoir + raccords pour portique de désinfection MS



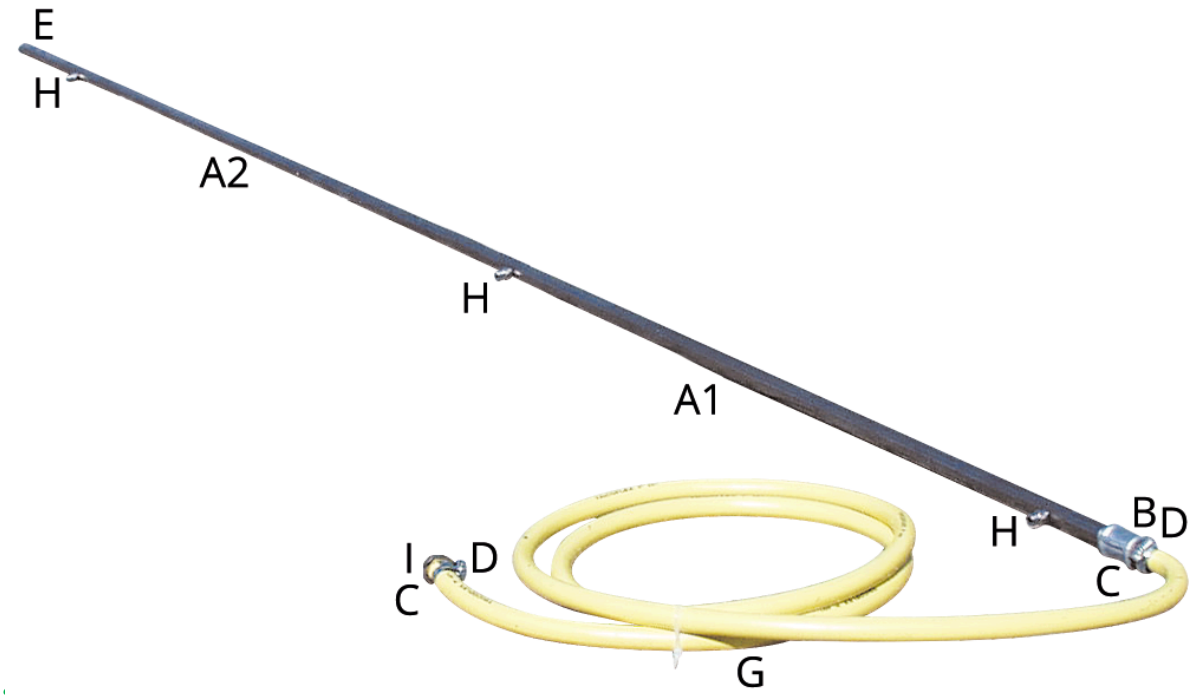
#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
a	1	8805264	Bidon	225 ltr	PE	Bidon
b	1	8805213	Raccord GK	¾" mâle	Laiton	Bidon
c	2	8805215	Collier de serrage	30 -20 mm	Acier galvanisé	Tuyau Helifex
d	2	8805234	Raccord GK	Tulle 25 mm	Laiton	Tuyau Helifex
e	1	8805235	Raccord GK	½" fem.	Laiton	Bidon
f	6	8805237	Tuyau au mètre	1" (25 mm)	Helifex	Tuyau Helifex
g	1	8805209	Douille réductrice	1" x ¾"	Inox	Bidon
h	1	0809982	Flotteur	½"	Laiton	Bidon



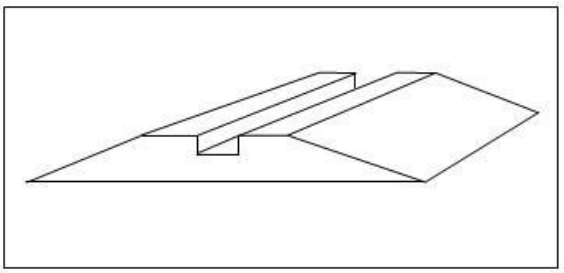
2509979 Dispositif désinfection dessous des véhicules pour portique MS



#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
a1	1		Tube 160cm	½"	Inox	Disp. désinfection dessous véhicule
a2	1		Tube 160cm	½"	Inox	Disp. désinfection dessous véhicule
b	1	8805226	Raccord GK	½" mâle	Laiton	Tubes horizontaux du bas
c	2	8805234	Raccord GK	Tulle 25 mm	Laiton	Tuyau Tricoflex
d	2	8805215	Collier de serrage	30 – 20 mm	Acier galvanisé	Tuyau Tricoflex
e	1	8805219	Bouchon	½"	Inox	Tubes horizontaux du bas
g	2	0809925	Tuyau au mètre	1" (25 mm)	Tricoflex	Disp. désinfection dessous véhicule
h	3	8805161	Buse	¼"	Inox	Tubes horizontaux du bas
i	1	8805213	Raccord GK	¾" femelle	Laiton	Tuyau Tricoflex



2509477 Dos d'âne (fraisé) 50 x 40 x 5cm



#	Nombre:	N° Référ.	Type de composant:	Taille:	Matériau:	Fait partie de:
a	8	2509477	Dos d'âne	50 x 40 cm	Plastique	Dos d'âne
b	8	2509478	Kit de fixation			Dos d'âne

Schéma de placement de la Dispositif désinfection dans les Dos d'ânes

ES Arco de desinfección

Índice

1. Arco de desinfección de acero inoxidable

El arco de desinfección de Schippers le ofrece una solución permanente para la prevención eficaz de la entrada de enfermedades. En cuanto un vehículo entra en la finca, un tubo flexible de señalización activa una bomba que absorbe el producto desinfectante. El producto desinfectante se distribuye por el arco de acero inoxidable y se nebuliza sobre el vehículo a través de boquillas. Los arcos suministrados se realizan de manera estándar con una bomba de agua especial de acero inoxidable con un depósito de 200 litros, inyector de desinfectante, tubo flexible de alimentación y tubo flexible de señalización.

La base es la combinación del arco de desinfección (ver la lista de componentes, núm. de ref.: 2509978) con la unidad de control con bomba y tubo flexible de señalización (ver la lista de componentes, núm. de ref.: 2509440), el depósito y el tubo flexible de alimentación (ver la lista de componentes, núm. de ref.: 2509475).

Además, se pueden suministrar los siguientes accesorios:

- Desinfección de la parte inferior (ver la lista de piezas, núm. de ref.: 2509979)
- Umbral (necesario como protección para la desinfección de la parte inferior) + juego de fijación (ver la lista de piezas, núm. de ref.: 4x 2509477 y 4x 2509478)

2. Montaje del arco de desinfección

El arco de desinfección, que está formado por diferentes tubos de acero inoxidable, puede instalarse del siguiente modo (ver la lista de componentes).

¡ATENCIÓN! MONTAR EL ARCO DE DESINFECCIÓN DESDE ARRIBA HACIA ABAJO.

¡UTILIZAR CINTA DE TEFLÓN (SUMINISTRADA) EN TODAS LA CONEXIONES DE ROSCA!

2.1 Montaje de la puerta de desinfección alta del marco

6. Los tubos pueden ser acoplados entre sí mediante los cantos largos, sirviéndose de un manguito de 1". Las boquillas de los tubos superiores deben ser fijados hacia atrás, de modo que la parte trasera del vehículo también quede desinfectada.
7. Los tubos superiores verticales deben ser colocados por debajo de los tubos curvos de acero inoxidable, de modo que las dos boquillas que tienen se sitúen en el punto más alto posible (ver la lista de componentes). Se debe montar mediante un manguito de 1".
8. Al tubo inferior vertical debe fijarse una pieza en T de 1” (ver la lista de piezas). Cuando estén todos los componentes colocados, se pueden empezar a apretar bien todas las roscas. Las boquillas deben orientarse hacia el lado interior.
9. Los tubos inferiores horizontales (tubos gruesos con una boquilla) deben montarse en la pieza en T, de modo que la boquilla quede lo más lejos posible del arco (ver el anexo 3). En el lado del arco de desinfección, donde se encuentra

la bomba, debe montarse un manguito reductor de 1”x¾” con un acoplamiento de garras y, al otro lado, una tapa de 1”. En el otro lado del arco de desinfección debe montarse una tapa de 1” a ambos lados. En caso de desinfección de la parte inferior, debe colocarse un acoplamiento con conexión para tubo flexible, en lugar de una tapa.

Ahora se puede enderezar el arco de desinfección entre dos personas, girando los tubos horizontales un cuarto de vuelta, de modo que quede totalmente recto en el arco de desinfección. El arco de desinfección puede permanecer de ese modo.
En este punto se pueden montar los estribos de la tapa en el tubo inferior vertical, justo debajo de la última boquilla y junto al tubo de soporte, de modo que los dos puedan quedar fijados uno con otro.
El tubo de soporte se puede montar en el patio de entrada.
El arco de desinfección puede fijarse con las abrazaderas por encima de los tubos inferiores horizontales que se pueden montar en el patio de entrada.
El tubo de alimentación desde la bomba puede montarse en el acoplamiento de garras.
Conectar el cable de alimentación de 220 V que sale de la unidad de control. Para ello, se recomienda montar un conector adecuado y conectarlo a un enchufe para exteriores impermeable.
El tubo flexible de señalización que se encuentra montado en la unidad de control debe estar 5 metros por delante del arco de desinfección. Cuando se circula por encima de dicho tubo flexible, este activa el interruptor de intervalo, que pone en funcionamiento las boquillas a su debido tiempo.

2.2 Montaje de la puerta de desinfección de media altura del marco

1. Los tubos superiores verticales deben ser colocados por debajo de los tubos curvos de acero inoxidable, de modo que las dos boquillas que tienen se sitúen en el punto más alto posible (ver la lista de componentes). Al tubo inferior vertical debe fijarse una pieza en T de 1” (ver la lista de piezas). Cuando estén todos los componentes colocados, se pueden empezar a apretar bien todas las roscas. Las boquillas deben orientarse hacia el lado interior.
2. Los tubos inferiores horizontales (tubos gruesos con una boquilla) deben montarse en la pieza en T, de modo que la boquilla quede lo más lejos posible del arco (ver el anexo 3). En el lado del arco de desinfección, donde se encuentra la bomba, debe montarse un manguito reductor de 1”x¾” con un acoplamiento de garras y, al otro lado, una tapa de 1”. En el otro lado del arco de desinfección debe montarse una tapa de 1” a ambos lados. En caso de desinfección de la parte inferior, debe colocarse un acoplamiento con conexión para tubo flexible, en lugar de una tapa.

Las dos partes de la estructura se deben colocar con una separación de +/-4,25 m, para poder colocar entre ellas los elementos del umbral.
El tirante de sujeción se puede montar en el terreno.

Se necesitan dos personas para poner de pie el arco de desinfección. Para ello, se deben girar los tubos tumbados noventa grados para que queden perpendiculares al arco de desinfección. El arco de desinfección ya está en su posición.
A continuación, monte las grapas de tubos en el tubo inferior de pie, justo debajo de la última boquilla y en el tirante de sujeción, para poder unir estos dos elementos.
Fije el arco de desinfección con las abrazaderas sobre el tubo inferior tumbado, que se puede montar en el terreno.
Acople la manguera de entrada desde la bomba con el acoplamiento GK.
Acople la manguera de entrada de la parte inferior mediante un acoplamiento GK.
Conectar el cable de alimentación de 220 V que sale de la unidad de control. Para ello, se recomienda montar un conector adecuado y conectarlo a un enchufe para exteriores impermeable.
El tubo flexible de señalización que se encuentra montado en la unidad de control debe estar 5 metros por delante del arco de desinfección. Cuando se circula por encima de dicho tubo flexible, este activa el interruptor de intervalo, que pone en funcionamiento las boquillas a su debido tiempo.

Antes de utilizar el arco de desinfección, es preciso llenar también la bomba próxima al depósito por completo con agua. En este caso, la llave de dosificación debe estar cerrada. Si el depósito y la bomba están completamente llenos de agua, puede abrirse la llave dosificadora y se podrá utilizar el arco de desinfección. (aproximadamente media vuelta)

Se puede controlar si se ha entregado todo mediante la lista de componentes adjunta perteneciente al arco de desinfección.

¡Atención!

La bomba debe montarse los más cerca posible del arco de desinfección para dar la presión necesaria al sistema con la mayor rapidez. Puede estar a un máximo de 10 m, pero cuanto más cerca, mejor.
Es preciso ocluir el extremo del tubo flexible de señalización, de modo que no pueda penetrar la humedad.
Los umbrales deben quedar bien fijos, anclados al suelo de la entrada, para que no sean desplazados por los vehículos al pasar.
La distancia del tubo flexible de señalización al arco de desinfección debe ser de 5 metros como mínimo, para que el sistema pueda ponerse en marcha a tiempo.
Es preciso circular muy lentamente al pasar el arco de desinfección. Máx. 5 km/h.

3. Consumo de agua y dosificación

El arco de desinfección incluye 15 boquillas de manera estándar. Si se conecta la desinfección de la parte interior, entonces hay un total de 18 boquillas. El puerto de desinfección de media altura tiene 11 boquillas.

El consumo de agua del arco de desinfección es:

- E Estándar ± 55 litros/minuto
- Estándar + desinfección de la parte inferior ± 65 litros/minuto
- Medio ± 40 litros/minuto

La cantidad de desinfectante puede ajustarse con la válvula dosificadora situada en el interior de la unidad de control.
La llave dosificadora se pueda ajustar manualmente hasta una dosificación máx. del 1% de desinfectante (abrir aproximadamente media vuelta). El desinfectante que debe utilizarse para ello es MS Megades. Los otros desinfectantes no son aptos para ser utilizados en combinación con el MS Arco de desinfección.

Según las pruebas realizadas con una con una concentración de desinfectante al 1% y un tiempo de paso del vehículo de transporte de ganado de 30 segundos, la sustancia activa empleada es suficiente para lograr una desinfección eficaz del vehículo. El tiempo de actuación del desinfectante es de 10 minutos.
Puntos de medición: neumáticos, lado exterior del camión de transporte de ganado y lado exterior de la cabina. Se han tomado las muestras suficientes para obtener una imagen fiable del resultado de desinfección.

Mediciones

Mediciones de la puntuación de higiene de un camión de transporte de ganado tras haber pasado por el arco de desinfección de Schippers Europe BV	
Fecha de medición	24/11/1997
Puntuación de la higiene de todo el vehículo de transporte de ganado, incluidos los neumáticos	9,5 (muy buena)
Puntuación de la higiene del exterior del área de carga y de la cabina	9,5 (muy buena)
Puntuación de la higiene de los neumáticos	9,5 (muy buena)

Fuente: DLV Equipo de proyectos del sector, 1997

4. Ajuste del temporizador

El temporizador dispone de un ajuste estándar con un tiempo de actuación de 30 segundos. Es posible prolongar el tiempo de actuación si se desea.

2. Parte de los segundos/minutos/horas ajustados
1. Segundos/minutos/horas ajustables

Por ejemplo:
1 = 1 minuto
2 = 0,5
Esto significa el 0,5 de 1 minuto = 30 segundos de tiempo de actuación

El temporizador pone la instalación en funcionamiento durante un tiempo determinado, desde el momento en que se circula por encima del tubo flexible de señalización.

5. Mantenimiento

Arco de desinfección:

- Si no se utiliza el arco de desinfección durante el invierno, conviene expulsar todo el agua de los tubos mediante aire comprimido y, a continuación, guardarlo una vez esté seco.
- Si se quiere seguir utilizando el arco de desinfección en invierno, se puede añadir anticongelante (núm. de ref. 2509845) para evitar la congelación.

Bomba:
Controlar que la tensión de la bomba esté siempre conectada y que no exista posibilidad de conexión accidental.
La bomba no requiere mantenimiento, siempre que se lleven a cabo las siguientes medidas de prevención. En caso de helada (nocturna), vaciar las tuberías de la bomba mediante el tapón especial de vaciado, situado en la parte inferior de la carcasa de la bomba. No olvidar volver a llenar la bomba antes de utilizarla de nuevo. Comprobar regularmente que la válvula antirretorno esté limpia Si no se va a utilizar la bomba durante un periodo de tiempo prolongado (invierno), es mejor vaciar la bomba por completo, aclararla con agua limpia y guardarla en un lugar seco.

6. Condiciones de uso de la bomba

PEDROLLO
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2+4CP, 2+4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.
The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.
Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.

The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION
Unpack and check that it is in perfect condition.
CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.
CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE
The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2= 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION
Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.
CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.
Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position. The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.
The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS
They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.
Make sure that there is no voltage at the line wire terminals before connecting.
Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING
CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in. At the end of the operation, screw the plug back on and start the pump.
CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET,BETTY) is still not primed, switch it off and repeat the operation.
Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.
Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.
CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.
The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place
CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.
CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY
We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

San Bonifacio, 11/01/2010

Pedrollo S.p.A.
Amministratore Unico
Dr. Ing. Pedrollo

Seguridad de la bomba

La bomba de acero inoxidable es una bomba eléctrica conforme a la normativa de la CEE. Antes de instalar la bomba, es preciso controlar primero si la red dispone de una línea a tierra conforme a las normas. Antes de cualquier control o revisión de mantenimiento es preciso desconectar la tensión de la instalación y extraer el conector de la toma.

La bomba ha sido diseñada para bombear agua limpia y no se puede utilizar para bombear líquidos inflamables o en lugares con peligro de explosión. Debido a que la bomba dispone de alimentación eléctrica, es preciso evitar el contacto entre la alimentación y el líquido a bombear.

La bomba dispone de una válvula de retención, gracias a la cual no puede haber fluido de retorno de agua con desinfectante del arco al depósito.

Llenado y purga de aire de la bomba

Atención: ¡La puesta en marcha de una bomba vacía provoca daños en la junta mecánica de estanqueidad!

En primer lugar, es preciso llenar de agua el cabezal de la bomba, previamente a su puesta en funcionamiento. Se puede añadir agua al cabezal de la bomba conectando el tubo flexible de llenado a la unidad de control. Abrir la palanca y dejar que la bomba se llene de agua. Después, conectar de nuevo el tubo flexible de llenado al depósito antes de poner la bomba en funcionamiento. Si el tanque de almacenamiento está completamente lleno, la bomba se llenará por sí sola después de unos segundos al arrancar. En primer lugar, cierre la válvula dosificadora para asegurarse de que la bomba no aspira aire.

7. Resolución de problemas

Averías en la bomba

Problema:	**Causa:**	**Solución:**
1. El motor no arranca	a) No hay tensión	• Controlar la tensión del cable
		• Controlar las conexiones eléctricas
	b) Ventilador bloqueado	• Desmontar el ventilador y limpiarlo
	c) Defecto en el circuito eléctrico	• Ponerse en contacto con Schippers

2. Válvula antirretorno obstruida	a) Válvula antirretorno obstruida	• Limpiar la válvula
	b) Aspiración de aire	• Comprobar si existen fugas en el conducto de aspiración
		• Verificar si la válvula antirretorno se encuentra bajo el agua
	c) Sentido de giro incorrecto	• Purgar el aire de la bomba
		• Con la 3ª fase del motor, intercambiar dos fases
3. No aspira suficiente agua	a) Válvula de retención parcialmente obstruida	• Limpiar la válvula antirretorno y, en caso necesario, todo el conducto de aspiración
	b) Ventilador bloqueado	• Desmontar la bomba y limpiar la carcasa de la bomba y el ventilador minuciosamente
	c) El motor se recalienta	• Comprobar el voltaje y la ventilación. Posiblemente un cable de extensión malo

Averías en la unidad de control:

Problema:	Causa:	Soluciones:
1. La luz del temporizador no se ilumina.	a) Fusible estropeado	• Sustituir

8. Condiciones de garantía

Siempre que se haga un uso normal, MS Schippers otorga una garantía por un periodo de un (1) año a partir de la fecha de factura, que cubre los defectos de fabricación y/o de material del MS Arco de desinfección.

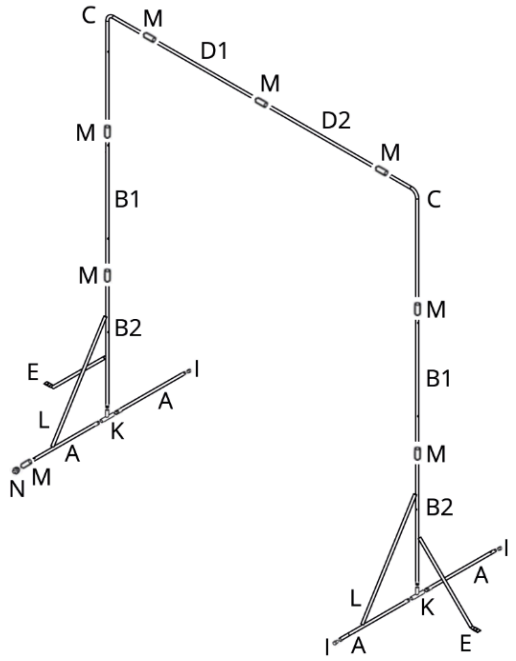
La garantía no cubre daños ocasionados por:

- desgaste normal
- uso indebido
- modificaciones realizadas por personal no autorizado
- reparaciones realizadas por personal no autorizado
- factores externos como fuego, agua y condiciones ambientales anómalas, así como daños mecánicos ocasionados por golpes o caídas
- otros productos desinfectantes diferentes de MS Megades con una dosificación al 1%

Si se produce un fallo en el aparato durante el periodo de garantía, MS Schippers reemplazará las piezas defectuosas sin coste alguno. En caso de reparación del aparato o de las piezas defectuosas, estas deben ser enviadas a MS Schippers libres de costes.

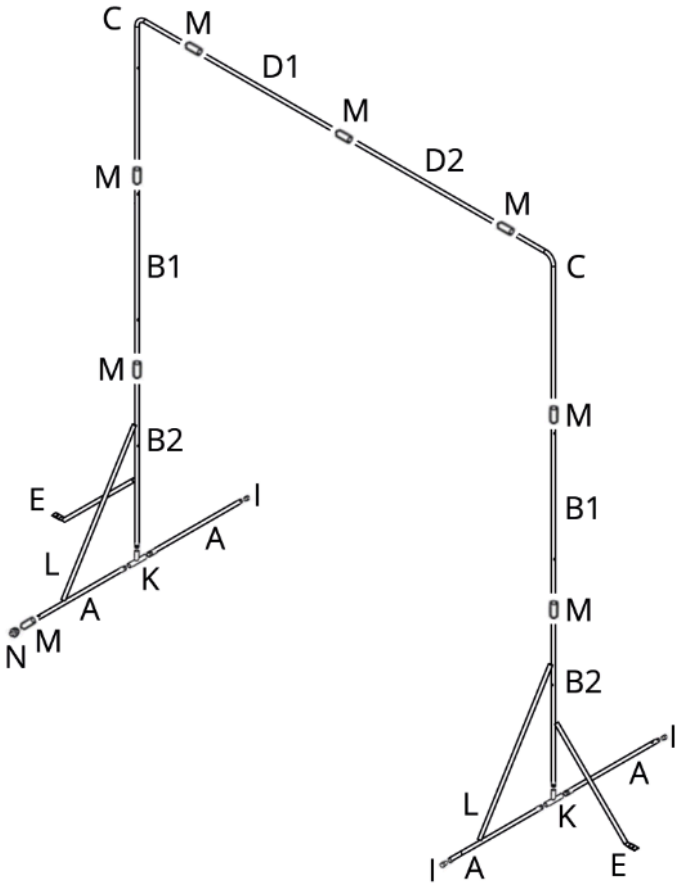
9. Lista de piezas

2508978 Marco de acero inoxidable para el MS Arco de desinfección



#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
A	4	2508978	Tubo	3/4”	Acero inoxidable	Tubo inferior horizontal
B1	2		Tubo	3/4”	Acero inoxidable	Tubo inferior vertical
B2	2		Tubo	3/4”	Acero inoxidable	Tubo inferior vertical
C	2		Tubo	3/4”	Acero inoxidable	Tubo superior vertical
D1	1		Tubo	3/4”	Acero inoxidable	Tubo superior horizontal
D2	1		Tubo	3/4”	Acero inoxidable	Tubo superior horizontal
E	2		Tubo	3/4”	Acero inoxidable	Tubo de soporte
L	2		Tubo	3/4”	Acero inoxidable	Tubo de soporte
F	4	8805161	Boquilla	¼		Tubo inferior horizontal
G	8		Boquilla	¼		Tubos verticales
H	3		Boquilla	¼		Tubo superior horizontal
I	3	8805324	Tapa	3/4”	Acero inoxidable	Tubo inferior horizontal
K	2	8805325	Pieza en T	3/4”	Acero inoxidable	Tubo inferior horizontal
M	7	8805326	Calcetín	3/4”	Acero inoxidable	Tubo superior vertical Tubo superior horizontal
N	4	0809762	Acoplamiento de garras	3/4” macho	Latón	Manguito reductor 1” x ¾”
O	4	8805322	Estribo de tapa	3/4”	Galvanizado	Anclaje del arco
P	10	8805200	Tornillos	M10 x 60	Galvanizado	Anclaje del arco
Q	10	8805204	Rawlplug	M16		Anclaje del arco
R	12	8805323	Brida de apriete	3/4”	Galvanizado	Fijación del tubo de soporte al arco

S	6	8805201	Tornillos	M8 x 35	Galvanizado	Fijación del tubo de soporte al arco
T	6	Diversos	Tuercas	M8	Galvanizado	Fijación del tubo de soporte al arco
U	12	Diversos	Arandelas	M8	Galvanizado	Fijación del tubo de soporte al arco
V	2	1009978	Cinta de teflón			Información general



b + m + c

c + m + d

a + b + k

a + i

a + n + m

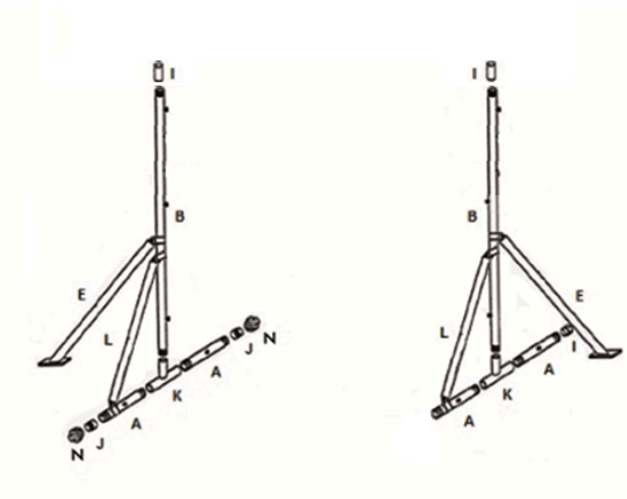
b +l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

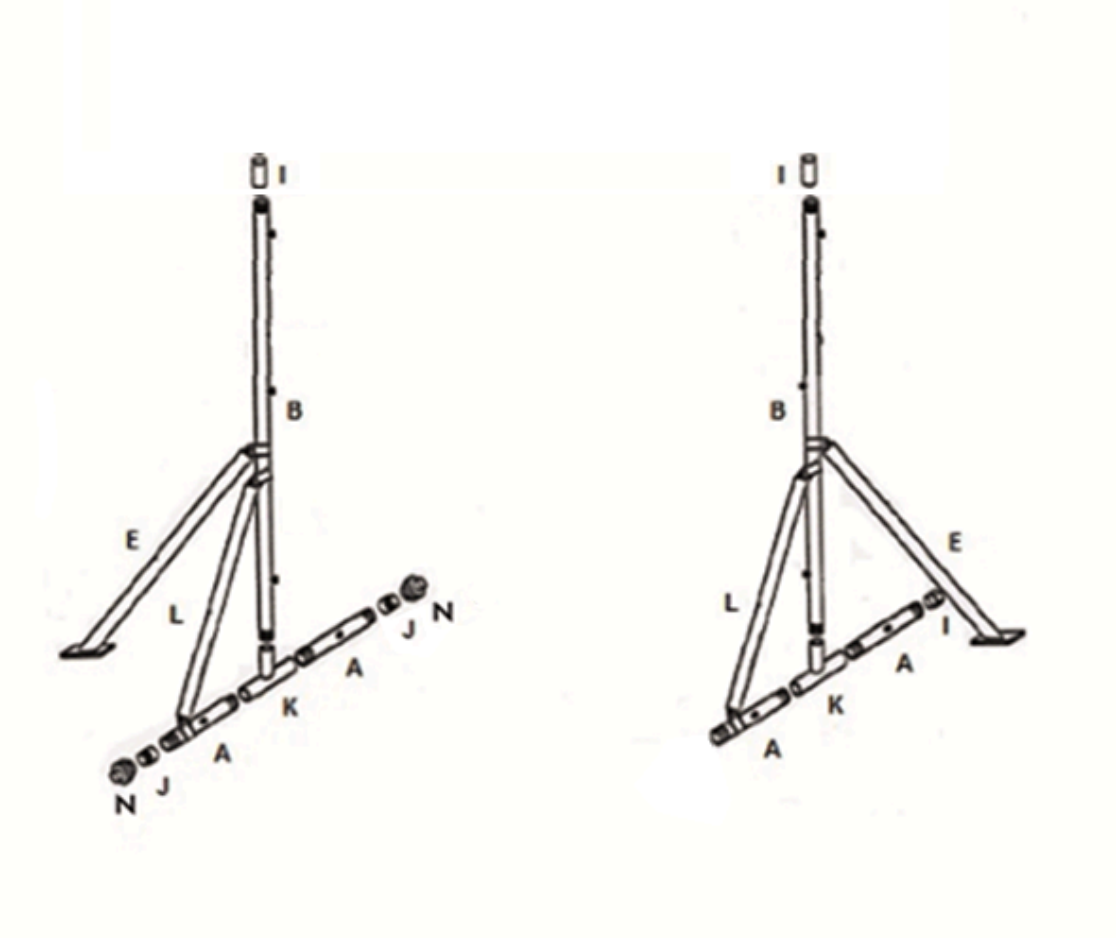
Cada conexión + V

2509970 Marco de acero inoxidable para el MS Arco de desinfección



#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
a	4	2509970	Tubo	1”	Acero inoxidable	Tubo inferior horizontal
b	2		Tubo	1”	Acero inoxidable	Tubo inferior vertical
e	2		Tubo	1”	Acero inoxidable	Tubo de soporte
l	2		Tubo	1”	Acero inoxidable	Tubo de soporte
f	4	8805161	Boquilla	¼		Tubo inferior horizontal
g	4		Boquilla	¼		Tubos verticales
i	3	8805208	Tapa	1”	Acero inoxidable	Tubo inferior horizontal
j	3	8805209	Manguito reductor	1” x ¾”	Acero inoxidable	Tubo inferior horizontal
k	2	8805210	Pieza en T	1”	Acero inoxidable	Tubo inferior horizontal
n	3	8805213	Acoplamiento de garras	¾” macho	Latón	Manguito reductor 1” x ¾”
o	4	8805239	Estribo de tapa	1”	Galvanizado	Anclaje del arco
p	10	8805200	Tornillos	M10 x 60	Galvanizado	Anclaje del arco
q	10	8805204	Rawlplug	M16		Anclaje del arco
r	12	8805240	Brida de apriete	1”	Galvanizado	Fijación del tubo de soporte al arco
s	6	8805201	Tornillos	M8 x 35	Galvanizado	Fijación del tubo de soporte al arco
t	6	Diversos	Tuercas	M8	Galvanizado	Fijación del tubo de soporte al arco

u	12	Diversos	Arandelas	M8	Galvanizado	Fijación del tubo de soporte al arco
v	2	1009978	Cinta de teflón			Información general
w	1	0809969	Abrazadera	2,5 m		
x	1	0809751	Acoplamiento de garras	½ “		Pieza hembra
y	2	8805234	Acoplamiento de garras	1”		
z	2	8805215	Abrazadera de manguera			



a + b + k

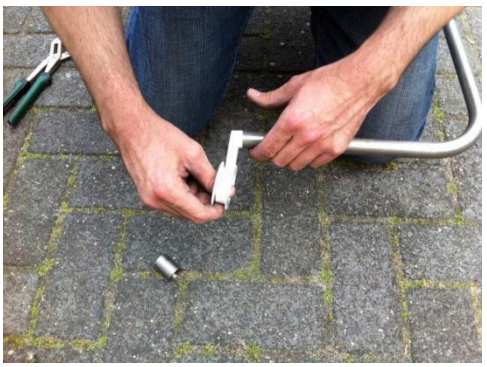
a + i & b + i

a + n + j

b +l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

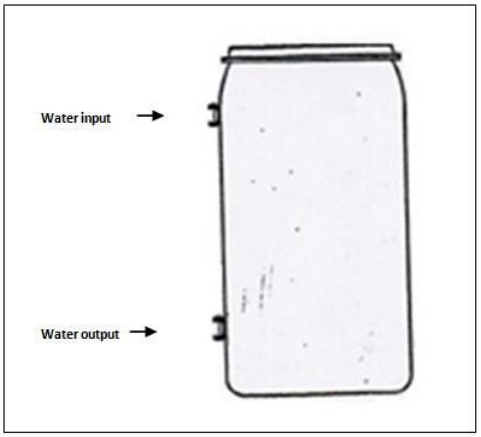


Cada conexión + V

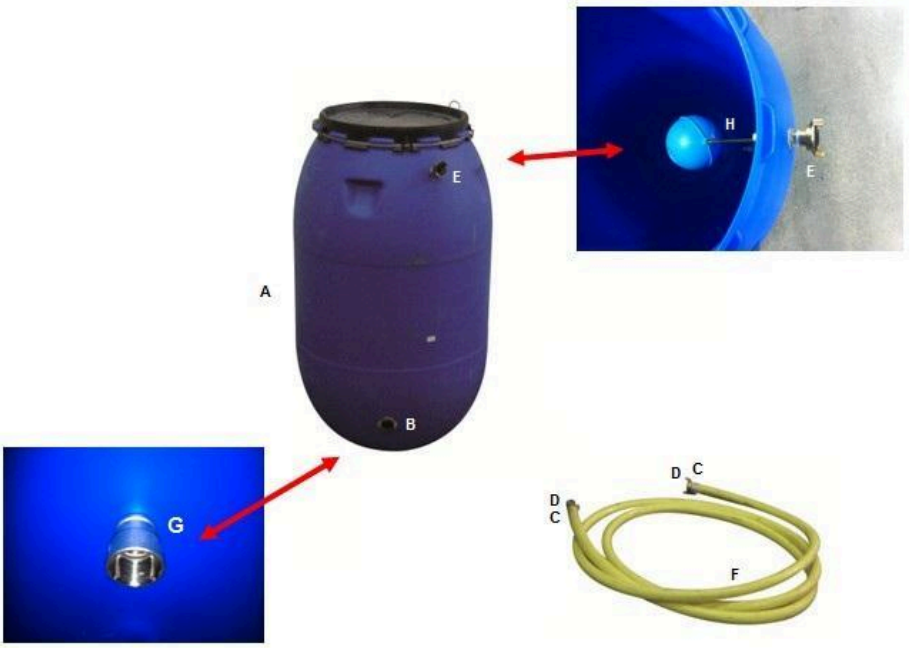
2509440 Unidad de control

#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
a	1	8805282	Bomba		Acero inoxidable	Bomba
b	1	8801813	Válvula de líquido 1	¾" x ¾" hembra	Acero inoxidable	Bomba
c	1	8801812	Válvula de líquido 2	1/8" x 1/8" hembra	Acero inoxidable	Bomba
g	2x10	2509815	Tubo flexible de señalización	p/m	Goma	Unidad de control
h	3	8805237	Tubo flexible p/m	1" (25 mm)	Helifex	Tubo flexible Helifex
i	2	0807101	Tubo flexible p/m	7 x 10 mm		Válvula de líquido 2
j	1	8804943	Filtro de aspiración		Acero inoxidable	Válvula de líquido 2

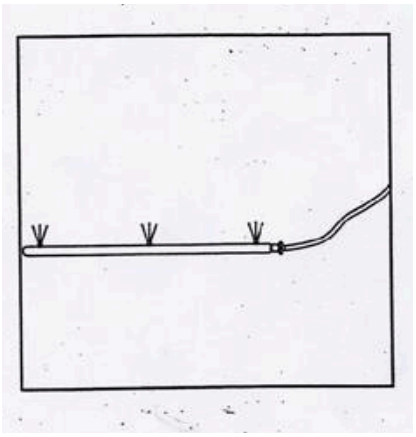
2509475 Depósito + acoplamientos para el MS Arco de desinfección



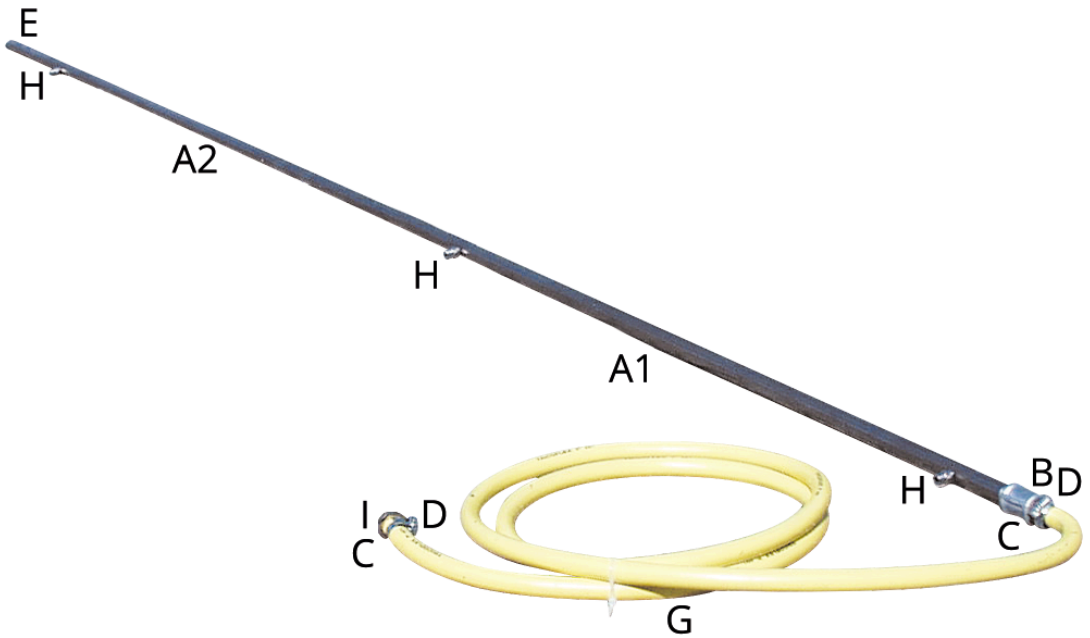
#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
a	1	8805264	Bidón	225 ltr	PE	Bidón
b	1	8805213	Acoplamiento de garras	¾" macho	Latón	Bidón
c	2	8805215	Abrazadera para tubos flexibles	30-20 mm	Galvanizado	Tubo flexible Helifex
d	2	8805234	Acoplamiento de garras	Manguito 25 mm	Latón	Tubo flexible Helifex
e	1	8805235	Acoplamiento de garras	½" hembra	Latón	Bidón
f	6	8805237	Tubo flexible p/m	1" (25 mm)	Helifex	Tubo flexible Helifex
g	1	8805209	Manguito reductor	1" x ¾"	Acero inoxidable	Bidón
h	1	0809982	Flotador	½"	Latón	Bidón



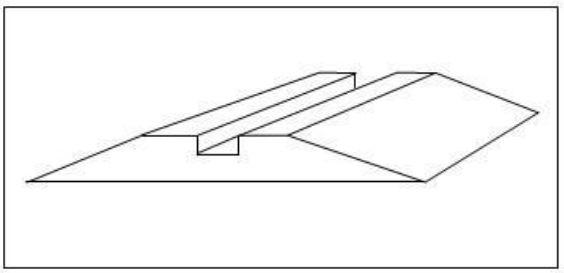
2509979 Desinfección de la parte inferior para MS Arco de desinfección



#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
a1	1		Tubo 160cm	½"	Acero inoxidable	Desinfección de la parte inferior
a2	1		Tubo 140cm	½"	Acero inoxidable	Desinfección de la parte inferior
b	1	8805226	Acoplamiento de garras	½" macho	Latón	Tubo inferior horizontal
c	2	8805234	Acoplamiento de garras	Manguito 25 mm	Latón	Tubo flexible Tricoflex
d	2	8805215	Abrazadera para tubos flexibles	30 – 20 mm	Galvanizado	Tubo flexible Tricoflex
e	1	8805219	Tapa	½"	Acero inoxidable	Tubo inferior horizontal
g	2	0809925	Tubo flexible p/m	1" (25 mm)	Tricoflex	Desinfección de la parte inferior
h	3	8805161	Boquilla	¼"	Acero inoxidable	Tubo inferior horizontal
i	1	8805213	Acoplamiento de garras	¾" macho	Latón	Tubo flexible Tricoflex

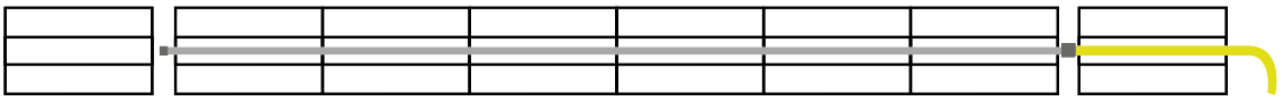


2509477 Elemento de umbral (fresado) 50 x 40 x 5 cm



#	Cantidad:	Núm. de ref.	Pieza:	Medida:	Material:	Componente de:
a	8	2509477	Umbral	50 x 40 cm	plástico	Umbral
b	8	2509478	Juego de fijación			Umbral

Colocación esquemática de la descontaminación del fondo en los elementos del umbral.



IT Porta di disinfezione

Indice

1. Porta di disinfezione in acciaio inox

La porta di disinfezione di Schippers è una soluzione permanente che previene in modo ottimale l'introduzione di malattie. Non appena un veicolo entra nella vostra azienda, un tubo di segnalazione attiva una pompa, che irrora una sostanza disinfettante. Il disinfettante viene immesso nella porta in acciaio inox e polverizzato sul veicolo tramite degli ugelli. Le porte sono fornite di serie con una speciale pompa ad acqua in acciaio inox con serbatoio di 200 litri e iniettore di sostanza disinfettante comprendente il condotto di alimentazione e il tubo di segnalazione.

Il dispositivo di base è costituito dalla combinazione della porta di disinfezione (cfr. l'elenco componenti, art. n. 2509978) e dell'unità di comando con pompa e tubo di segnalazione (cfr. elenco componenti, art. n. 2509440), serbatoio e condotto di alimentazione (cfr. elenco componenti, art. n. 2509475).

Sono inoltre disponibili i seguenti accessori:

- Disinfezione lato inferiore (cfr. elenco componenti, art. n. 2509979)
- Soglia (necessaria per la protezione della disinfezione del lato inferiore + kit di fissaggio (cfr. elenco componenti, art. n. 4x 2509477e 4x 2509478)

2. Montaggio della porta per disinfezione

La porta di disinfezione, costituita da vari condotti in acciaio inox, può essere montata come segue (cfr. elenco componenti).

ATTENZIONE! MONTARE LA PORTA DALL'ALTO VERSO IL BASSO.

UTILIZZARE IL NASTRO IN TEFLON (FORNITO) SU OGNI RACCORDO FILETTATO!

2.1 Montaggio del telaio porta di disinfezione alta

10. I condotti possono essere uniti tra di loro con i lati lunghi utilizzando una giunzione da 1". Gli ugelli sui condotti superiori devono essere fissati verso l'esterno, in modo che venga disinfettato anche il lato posteriore del veicolo.
11. Il condotto verticale deve essere posizionato sotto i condotti curvi in acciaio inox, in modo che i due ugelli si trovino il più in alto possibile (cfr. elenco componenti). Deve essere montato con una giunzione da 1".
12. Al condotto verticale deve essere fissato un pezzo a T (cfr. elenco componenti), Quando tutto è montato, è possibile passare alla fase di fissaggio. Gli ugelli devono essere rivolti verso l'interno.
13. I condotti orizzontali (tubi sottili con un ugello) devono essere inseriti nel pezzo a T, in modo che l'ugello sia il più lontano possibile dalla porta (cfr. allegato 3). Sul lato della porta di disinfezione, dove è situata la pompa, è necessario montare un adattatore da 1" x 3/4" con raccordo geka e sull'altro lato un tappo terminale da 1". Sull'altro lato della porta di disinfezione deve essere montato un tappo

terminale da 1" su entrambi i lati. Per la disinfezione del lato inferiore dei veicoli, invece del tappo terminale è necessario montare un condotto con collegamento per il tubo di segnalazione.

La porta di disinfezione ora può essere sollevata da due persone: gli ugelli orizzontali devono essere ruotati di un quarto di giro, in modo che siano perpendicolari alla porta di disinfezione. Ora la porta può rimanere in piedi.
Le staffe terminali possono essere montate sul condotto verticale inferiore, sotto l'ultimo ugello e sul palo di sostegno, in modo da poterne unire due.
Il palo di sostegno può essere fissato al suolo.
La porta di disinfezione può essere fissata con i ganci sul condotto inferiore orizzontale, che può essere montato al suolo.
Il condotto di alimentazione proveniente dalla pompa può essere montato sui raccordi geka.
Collegare il cavo di alimentazione da 220 V dell'unità di comando. È preferibile montare una spina adatta e collegarla a una presa esterna stagna.
Il tubo di segnalazione montato sull'unità di comando deve essere a 5 metri dalla porta di disinfezione. Quando il tubo viene calpestato con un veicolo, si attiva l'interruttore a intermittenza che a sua volta aziona gli ugelli.

2.2 Montaggio della porta di disinfezione a mezza altezza del telaio

1. Il condotto verticale deve essere posizionato sotto i condotti curvi in acciaio inox, in modo che i due ugelli si trovino il più in alto possibile (cfr. elenco componenti). Al condotto verticale deve essere fissato un pezzo a T (cfr. elenco componenti), Quando tutto è montato, è possibile passare alla fase di fissaggio. Gli ugelli devono essere rivolti verso l'interno.
2. I condotti orizzontali (tubi sottili con un ugello) devono essere inseriti nel pezzo a T, in modo che l'ugello sia il più lontano possibile dalla porta (cfr. allegato 3). Sul lato della porta di disinfezione, dove è situata la pompa, è necessario montare un adattatore da 1" x 3/4" con raccordo geka e sull'altro lato un tappo terminale da 1". Sull'altro lato della porta di disinfezione deve essere montato un tappo terminale da 1" su entrambi i lati. Per la disinfezione del lato inferiore dei veicoli, invece del tappo terminale è necessario montare un condotto con collegamento per il tubo di segnalazione.

   Le 2 parti del telaio devono essere posizionate a +/- 4,25 m di distanza l'una dall'altra in modo da poter montare le parti della soglia.
   Il tubo di sostegno può essere montato in loco.
   La porta di disinfezione può quindi essere raddrizzata con due persone, ruotando i tubi orizzontali di un quarto di giro in modo che siano perpendicolari alla porta di disinfezione. La porta di disinfezione può rimanere in questa posizione.
   Le staffe possono ora essere fissate al tubo verticale, appena sotto l'ultimo ugello, e al tubo di sostegno, in modo che i due tubi siano attaccati l'uno all'altro.

La porta di disinfezione può essere fissata con i morsetti sul tubo orizzontale, che può essere montato in loco.
Il tubo flessibile di alimentazione della pompa può essere montato sul raccordo GK.
Il tubo di alimentazione sul fondo può essere collegato tramite un raccordo GK.
Collegare il cavo di alimentazione da 220 V dell'unità di comando. È preferibile montare una spina adatta e collegarla a una presa esterna stagna.
Il tubo di segnalazione montato sull'unità di comando deve essere a 5 metri dalla porta di disinfezione. Quando il tubo viene calpestato con un veicolo, si attiva l'interruttore a intermittenza che a sua volta aziona gli ugelli.

Prima di azionare la porta di disinfezione, è necessario riempire d'acqua il serbatoio e la pompa. Il rubinetto di dosaggio in questo caso deve essere chiuso. Quando il serbatoio e la pompa sono pieni d'acqua, è possibile aprire il rubinetto di dosaggio e attivare la porta di disinfezione. (circa mezzo giro)

Per verificare che tutti i componenti siano stati consegnati, abbiamo allegato un elenco dei componenti della porta di disinfezione.

ATTENZIONE!

La pompa deve essere posizionata il più vicino possibile alla porta di disinfezione affinché il sistema vada rapidamente in pressione. La distanza massima non deve superare i 10 metri, ma più breve è, meglio è.
L'estremità del tubo di segnalazione deve essere chiusa, per evitare che entri umidità.
Le soglie devono essere fissate correttamente, cioè ancorate al suolo; in caso contrario, l'asta si sposta al passaggio dei veicoli.
La distanza tra il tubo di separazione e la porta di disinfezione deve essere almeno di 5 metri, in modo che il sistema si attivi in tempo.
È necessario procedere molto lentamente quando si entra nella porta di disinfezione. Max. 5 km/h.

3. Consumo d'acqua e dosaggio

La porta di disinfezione comprende 15 ugelli. Se viene collegata anche la disinfezione del lato inferiore, gli ugelli totali saranno 18. La porta di disinfezione a mezza altezza è dotata di 11 ugelli.

Il consumo di acqua della porta di disinfezione è:

- standard ± 55 litri/minuto
- standard + disinfezione lato inferiore ± 65 litri/minuto
- Altezza ± 40 litri/minuto

La quantità di disinfettante deve essere dosata con il rubinetto di dosaggio all'interno dell'unità di controllo.
Il rubinetto è impostabile manualmente fino a un dosaggio max. dell'1% di disinfettante (aprire circa mezzo giro). Il disinfettante che deve essere utilizzato è MS Megades. Altri disinfettanti non sono adatti per l'utilizzo con la Porta di disinfezione MS.
Da test effettuati con una concentrazione di disinfettante all'1% e un tempo di passaggio di circa 30 secondi è risultato che la quantità di sostanza attiva utilizzata è sufficiente per ottenere una buona disinfezione del veicolo. Il tempo di azione del disinfettante è di circa 10 minuti.
Punti di misurazione: pneumatici, lato esterno camion per bestiame e lato esterno cabina. È stato raccolto un numero di campioni sufficiente per avere una visione affidabile del risultato della disinfezione.

Misurazioni

Misurazioni dell'indice igienico dei camion adibiti al trasporto di animali che passano dalla porta di disinfezione di Schippers Europe BV	
Data misurazione:	24/11/1997
Indice igienico del veicolo completo compresi gli pneumatici:	9,5 (ottimo)
Indice igienico lato esterno cassone di carico e cabina:	9,5 (ottimo)
Indice igienico degli pneumatici:	9,5 (ottimo)

Fonte: DLV Team Ketenprojecten, 1997

4. Impostazione del timer

Il timer è impostato su un periodo di funzionamento di 30 secondi. Se necessario, è possibile prolungare tale periodo.

2. Parte con i secondi/minuti/ore impostati
1. Impostazione di secondi/minuti/ore

Per esempio:
1 = 1 minuto
2 = 0,5
Cioè 0,5 di un minuto = 30 secondi di intervallo di periodo di funzionamento
Il timer fa funzionare l'impianto per il tempo impostato a partire dal momento in cui il veicolo calpesta il tubo di segnalazione.

5. Manutenzione

Porta per disinfezione

- Se la porta di disinfezione in inverno non viene utilizzata, si consiglia di svuotarla utilizzando aria compressa per eliminare tutta l'acqua dai condotti e quindi farli asciugare.
- Se la porta di disinfezione invece viene utilizzata in inverno, è possibile aggiungere il liquido antigelo (art. n. 2509845) per evitare la formazione di ghiaccio.

Pompa

Controllare sempre che la pompa non sia collegata alla tensione e che non vi siano collegamenti accidentali. La pompa non ha bisogno di manutenzione a condizione che siano rispettate le seguenti misure precauzionali. In caso di gelo (notturno), svuotare la pompa con lo speciale tappo di svuotamento posizionato sul lato inferiore dell'alloggiamento; prima dell'uso successivo, la pompa dovrà essere di nuovo riempita d'acqua. Controllare con regolarità che la valvola di non ritorno sia pulita. Se la pompa non viene usata per lunghi periodi di tempo (per esempio in inverno), si consiglia di svuotarla completamente, di lavarla con acqua pulita e di riporla in un luogo asciutto.

6. Condizioni di utilizzo della pompa

PEDROLLO
... the spring of life

PK, PKS, PQ, PQA, PV, CP, AL-RED, 2CP, 2+4CP, 2+4CR, MK, VL, VLE, JSW, JCR, JDW, PLURIJET, CK, CKR, NGA, PRO-NGA, HF, NF, F, ..-I, ..-Bs, ..-Bz, BETTY, EASYPUMP, PR, HYDROFRESH, K.

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CE
MADE IN ITALY

EN OPERTING INSTRUCTIONS - ENGLISH

These pumps are recommended for pumping clean water, water with a moderate impurity load (NGA, PRO-NGA, HF, NF) and chemically non-aggressive fluids.
They must be used in compliance with local laws.

CAUTION! Before installation and use read the following instructions carefully. The manufacturer declines all responsibility in the event of accident or damage due to negligence or failure to observe the instructions described in this booklet or in conditions that differ from those indicated on the rating plate.
It also declines all responsibility for damage caused by improper use of the water pump.

SAFETY

Before carrying out checks or doing any maintenance, clear the system by disconnecting the voltage and unplug the pump from the socket.

The water pumps comply with the Directives 2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC including the latest amendments.
Before installing the water pump, make sure that the power supply mains is earthed and complies with regulations.
During operation the motor can get hot: be careful.

They are not suitable for pumping inflammable liquids or for operating in places where there is danger of explosion.

Avoid contact between the power supply and the liquid to be pumped.
The water pump must never be lifted or transported by its supply cable.

The norm EN 60335-2-41 sets out what follows:
1) the pump used for cleaning and other swimming pool maintenance purposes should not be used when there are people in the pool and
must be operated through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
2) the pump for outdoor fountains, garden ponds and similar places must be supplied through a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
3) for pumps meant to be used in swimming pools and pumps to be used for outdoor use the supply cord should not be any lighter than "H07 RN-F" (245 IEC 66 denomination).
The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction. Children should be supervised to ensure that they do not play with the appliance.

PRELIMINARY INSPECTION

Unpack and check that it is in perfect condition.

CAUTION! Also check that the data on the rating plate correspond to the required data. If there is any problem contact the supplier immediately, specifying the type of fault.

CAUTION! If there is any doubt about the safety of the machine, do not use it.

CONDITIONS OF USE

The following conditions must be observed when using the water pump:
Maximum operating pressure: 10 bar (6 bar up to P2= 0.75 kW) (18 bar x PQ3000).
Maximum liquid temperature allowed, as per norm EN 60335-2-41: +35 °C.
Maximum liquids temperature allowed for materials used: +90 °C (+60 °C for PK-PKS) (+40 °C for models with plastic impeller or other plastic components that comes into contact with liquids)
Voltage variation allowed: ±5% (if a field of nominal values is indicated, these are to be considered as minimum/maximum values allowed)
Uniform and continous level of acoustic pressure: [≤ 75 dB(A) for P2 up to 2.2 kW] - [≤ 85 dB(A) for any other P2]
Make sure that the pump works in its rated operation range

INSTALLATION

Installation can be a fairly complex operation.
It must therefore be carried out by competent and authorized installers.

CAUTION! During installation apply all safety regulations issued by the competent authorities and use common sense at all times.

Install the pump in a dry and well-aired place.
When an IP55 grade pump is installed in a humid environment, it is necessary to drain the condensate that forms in the motor on a regular basis, especially if the pump is subject to only intermittent use. Before starting the pump, remove the two condensate drainage plugs located in the lower part of the motor and allow the condensate to drain. Subsequently, put the condensate drainage plugs back in the holes. With the appropriate bolts secure the pump to flat solid surfaces to avoid vibrations. The pump VLE can be installed either vertically or horizontally. Horizontal installation is recommended.
The pump (PKS, JSW, JCR, CK, CKR, JDW, PLURIJET, BETTY) must be installed in a horizontal position. The suction diameter of the piping should be no less than the pump inlet diameter.
If the suction height is more than 4 metres, use a larger diameter.
The pipe must have a slight upward slope towards the suction inlet to avoid air getting trapped.
Make sure that the pipe is perfectly air-tight and that it is submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.

CAUTION! The pump can be damaged if it operates with leaks in the suction pipes. A foot valve must always be fitted to the end of the suction tube.

The ejector unit should be installed in wells with diameter no less than 4", 3" or 2" according to the model.
It is connected to the pump body by means of two pipes with internal diameters no less than the internal diameters of the corresponding inlets and outlets.
A foot valve must always be fitted to the end of the ejector suction tube, submerged at least 50 cm in the liquid to be pumped in order to avoid the formation of eddies.
The flow rate and pressure available at the points of utilization depend on the diameter of the delivery pipe.
For installations with very long delivery pipes, leaks may be reduced by using a diameter greater than that of the pump outlet.
It is advisable to install a check valve after the pump delivery outlet so that maintenance can be carried out without having to empty the delivery pipe and also to avoid water hammering if the pump suddenly stops.
This is a necessary precaution when there is a water column of more than 20 metres on the delivery side.
Pipes should be anchored so that no stress of any type is transmitted to the pump.
When laying the pipes ensure that protruding seals and burrs inside do not reduce the cross-section required for passage of the flow.
Screw the pipes to the corresponding openings without forcing them in order not to cause damage.

ELECTRICAL CONNECTIONS

They are delivered ready to be connected.

CAUTION! It is the installer's responsibility to perform the connections in compliance with the regulations in force in the country of installation.

Make sure that there is no voltage at the line wire terminals before connecting.

Check that the data on the rating plate corresponds to the rated line values.
Connect up the pump (making sure that there is an efficient earth circuit) according to the diagram below the terminal box or on the identification plate.
The earth wire must be longer than the live wires, and must be the first wire to be connected when the pump is being set up and the last to be disconnected during disassembly.
If a pump is not equipped with a supply cord and a plug, the power supply network should include a cut-off device or system having a contact separation of at least 3 mm in all poles. If a pump is provided with a supply cord and a plug, the pump must be positioned so that the plug is accessible.
It is advisable to install a residual current device (RCD) with a rated residual operating current not exceeding 30 mA.
A thermal overload cutout in the winding protects against voltage overload in the single-phase pump motors up to 1.50 kW.
Three-phase motors must be protected by the user.
Three-phase motors should be installed with a thermal magnetic circuit breaker suitable for use with the current indicated on the pump data plate.
If the pump is not fitted with a power cable and plug, foresee the use of a device capable of ensuring the total disconnection of power in the event of category III over voltage.
For three-phase motors, check that the rotation direction is clockwise by looking at the pump from the fan side. If not, invert two of the phases.
For three-phase motors (VL, VLE) the rotation direction may be inverted; in this case performance is much lower than the rated values.
In order to check whether the connection is correct, proceed as follows:
a) pump to be installed: when started up, the pump tends to rotate in an anticlockwise direction seen from above;
b) pump installed and submerged in the fluid to be pumped: measure the current absorbed by the pump when working using a snap-on ammeter; if the direction of the rotation is incorrect, the values will be approximately double those indicated on the rating.
To invert the direction of rotation simply invert two of the phases.

PRIMING

CAUTION! Dry operation of the pump will damage the mechanical seal.
This operation is performed via the priming plug, by filling the pump casing (as well as the suction pipe for no self-priming pumps) with the liquid to be pumped in. At the end of the operation, screw the plug back on and start the pump.

CAUTION! If, after about ten minutes the pump (PKS, CK, CKR, JSW, JCR, JDW, PLURIJET, BETTY) is still not primed, switch it off and repeat the operation.

Priming must be repeated whenever the pump has not been used for a long time or, for no self-priming pumps, when air has entered in the system.

MAINTENANCE

Before doing anything, make sure that the pump is disconnected from the power source and that there is no possibility of accidental connections.

Repair of the pump by personnel not authorized by the manufacturer will render the guarantee null and void and will entail operating with potentially dangerous equipment.

CAUTION! Any tampering may lead to performance being reduced and danger to persons and/or things.

The pumps do not require any maintenance as long as the following precautions are taken:
Where there is the risk of freezing, empty the pump and remember to re-prime when used again
Frequently check that the foot valve (check valve for PKS) is clean
If the pump is not going to be used for a long time (for example, in winter), it is advisable to empty it completely, rinse it with clean water and store in a dry place

CAUTION! The loss of any lubricant contained within the pump will not result in the contamination of the pumped liquid.

CAUTION! The apparatus is not intended for use by people (children included) with reduced physical, sensorial or mental capabilities, or by those lacking the required experience or knowledge unless supervised or instructed in the use of the apparatus by a person responsible for their safety. Children should be supervised in order to ensure that they do not play with the apparatus.

DECLARATION OF CONFORMITY

We hereby declare, under our exclusive responsibility, that the product in question complies with the provisions of the following community directives, including the latest amendments, and with the related assimilated national legislation:
2006/42/EEC, 2006/95/EEC, 2004/108/EEC, 2002/95/EEC

Pedrollo S.p.A.
Amministratore Unico
Mauro Pedrollo

San Bonifacio, 11/01/2010

Sicurezza della pompa

La pompa in acciaio inox è un dispositivo elettrico, conforme alle norme UE. Prima di installare la pompa è necessario controllare se la rete elettrica è munita di messa a terra conforme alle normative vigenti. Prima di qualsiasi controllo e prima di effettuare interventi di manutenzione è necessario staccare la pompa dalla corrente togliendo la spina dalla presa.

La pompa deve essere utilizzata con acqua pulita e quindi non può essere usata per pompare liquidi infiammabili o in spazi in cui vi sia rischio di esplosioni. Poiché la pompa è elettrica, è necessario evitare qualsiasi contatto tra l'alimentazione e il liquido da pompare.

La pompa è munita di una valvola di non-ritorno, per cui è impossibile che l'acqua miscelata al disinfettante torni dalla porta al serbatoio.

Riempimento e spurgo della pompa

Attenzione: mettere in funzione la pompa vuota causa danni al giunto meccanico!
Prima di essere messa in funzione, la pompa deve essere riempita d'acqua. Collegando il tubo di riempimento all'unità di comando, si aggiunge acqua alla pompa. Aprire la leva e lasciare che la pompa si riempia d'acqua. Collegare il tubo di riempimento di nuovo al serbatoio: ora è possibile mettere in funzione la pompa. Se il serbatoio di stoccaggio è completamente riempito, la pompa si riempirà da sola dopo pochi secondi all'avvio. Per prima cosa chiudere la valvola di dosaggio per assicurarsi che la pompa non aspiri aria.

7. Soluzione dei problemi

Malfunzionamenti della pompa

Problema:	**Causa:**	**Soluzione:**
1. Il motore non si avvia	a) Non c'è tensione	• Controllare la tensione nei cavi
		• Controllare i collegamenti elettrici
	b) La turbina si blocca	• Smontare la turbina e pulirla
	c) Difetto al circuito elettrico	• Contattare Schippers
2. La valvola di non ritorno si blocca	a) Valvola di non ritorno otturata	• Pulire la valvola

	b) Aspirazione dell'aria	• Controllare eventuali perdite del condotto di aspirazione
		• Controllare che la valvola di non ritorno sia immersa nell'acqua
	c) Senso di rotazione inverso	• Sfiatare la pompa
		• Sostituire il motore a tre fasi con uno a due fasi
3. Aspirazione acqua insufficiente	a) Valvola di fondo parzialmente otturata	• Pulire la valvola di non ritorno e, se necessario, tutto il condotto di aspirazione, con l'alimentazione dell'acqua bloccata
	b) La turbina si blocca	• Smontare la pompa e pulire con cura l'alloggiamento e la turbina
	c) Il motore si surriscalda	• Controllare voltaggio e ventilazione. Possibile che il cavo di prolunga sia difettoso

Malfunzionamenti dell'unità di comando

Problema:	Causa:	Soluzioni:
1. La spia del timer non si accende	a) Fusibile rotto	• Sostituirlo

8. Garanzia

Se la Porta di disinfezione MS completa viene utilizzata nel modo corretto, MS Schippers riconosce un periodo di garanzia di un (1) anno a partire dalla data riportata sulla fattura per danni di fabbricazione o dei materiali.

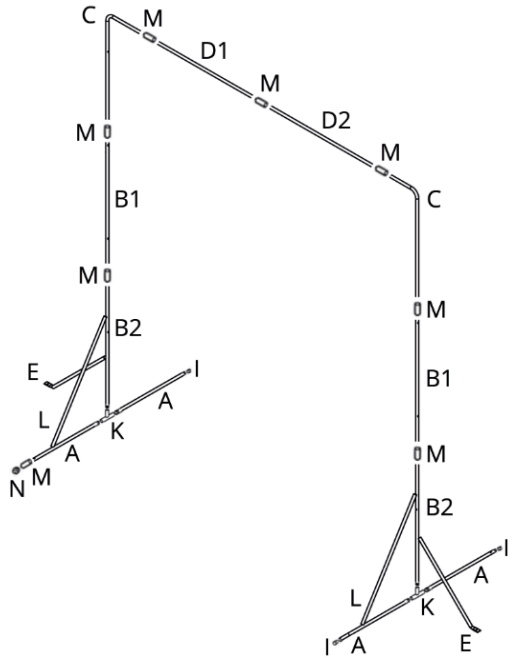
Non viene riconosciuta nessuna garanzia in caso di:

- normale usura
- utilizzo con corretto
- modifiche eseguite da personale non autorizzato
- riparazioni eseguite da personale non autorizzato
- cause esterne come incendio, acqua e condizioni meteorologiche anormali, danni meccanici causati da impatti o cadute
- disinfettanti diversi da MS Megades con un dosaggio dell'1%.

Se il dispositivo risulta essere difettoso nel periodo di validità della garanzia, MS Schippers sostituirà gratuitamente le parti difettose. In caso di riparazione del dispositivo o delle parti difettose, queste devono essere rese in porto franco a MS Schippers.

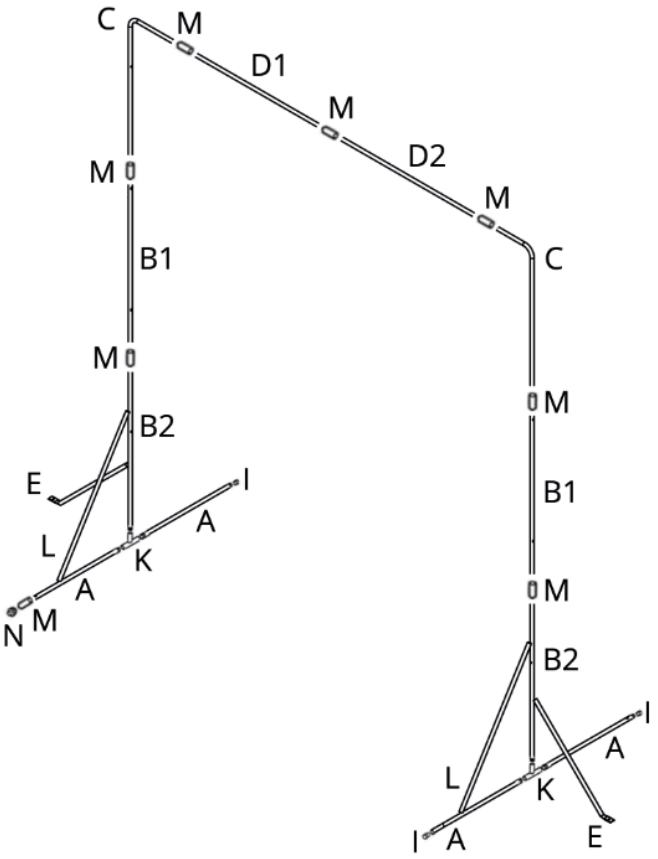
9. Elenco componenti

2508978 Telaio inox per Porta di disinfezione MS



#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
A	4	2508978	Condotto	3/4”	Inox	Condotto orizzontale inferiore
B1	2		Condotto	3/4”	Inox	Condotto verticale inferiore
B2	2		Condotto	3/4”	Inox	Condotto verticale inferiore
C	2		Condotto	3/4”	Inox	Condotto verticale superiore
D1	1		Condotto	3/4”	Inox	Condotto orizzontale superiore
D2	1		Condotto	3/4”	Inox	Condotto orizzontale superiore
E	2		Condotto	3/4”	Inox	Sostegno
L	2		Condotto	3/4”	Inox	Sostegno
F	4	8805161	Ugello	¼		Condotto orizzontale inferiore
G	8		Ugello	¼		Condotti verticali
H	3		Ugello	¼		Condotto orizzontale superiore
I	3	8805324	Tappo terminale	3/4”	Inox	Condotto orizzontale inferiore
K	2	8805325	Pezzo a T	3/4”	Inox	Condotto orizzontale inferiore
M	7	8805326	Giunzione	3/4”	Inox	Condotto orizzontale inferiore
N	4	0809762	Raccordo geka	3/4” maschio	Ottone	Adattatore 1” x ¾”
O	4	8805322	Staffa terminale	3/4”	Galvanizzato	Ancoraggio della porta
P	10	8805200	Bulloni	M10 x 60	Galvanizzato	Ancoraggio della porta
Q	10	8805204	Tassello	M12		Ancoraggio della porta
R	12	8805323	Gancio	3/4”	Galvanizzato	Fissaggio sostegno porta
S	6	8805201	Bulloni	M8 x 35	Galvanizzato	Fissaggio sostegno porta
T	6	Vari	Dadi	M8	Galvanizzato	Fissaggio sostegno porta
U	12	Vari	Rivetti	M8	Galvanizzato	Fissaggio sostegno porta

V	2	1009978	Nastro Teflon			Generale



b + m + c

c + m + d

a + b + k

a + i

a + n + m

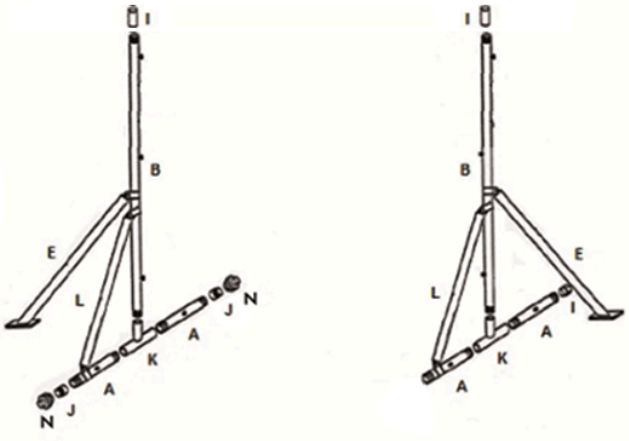
b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

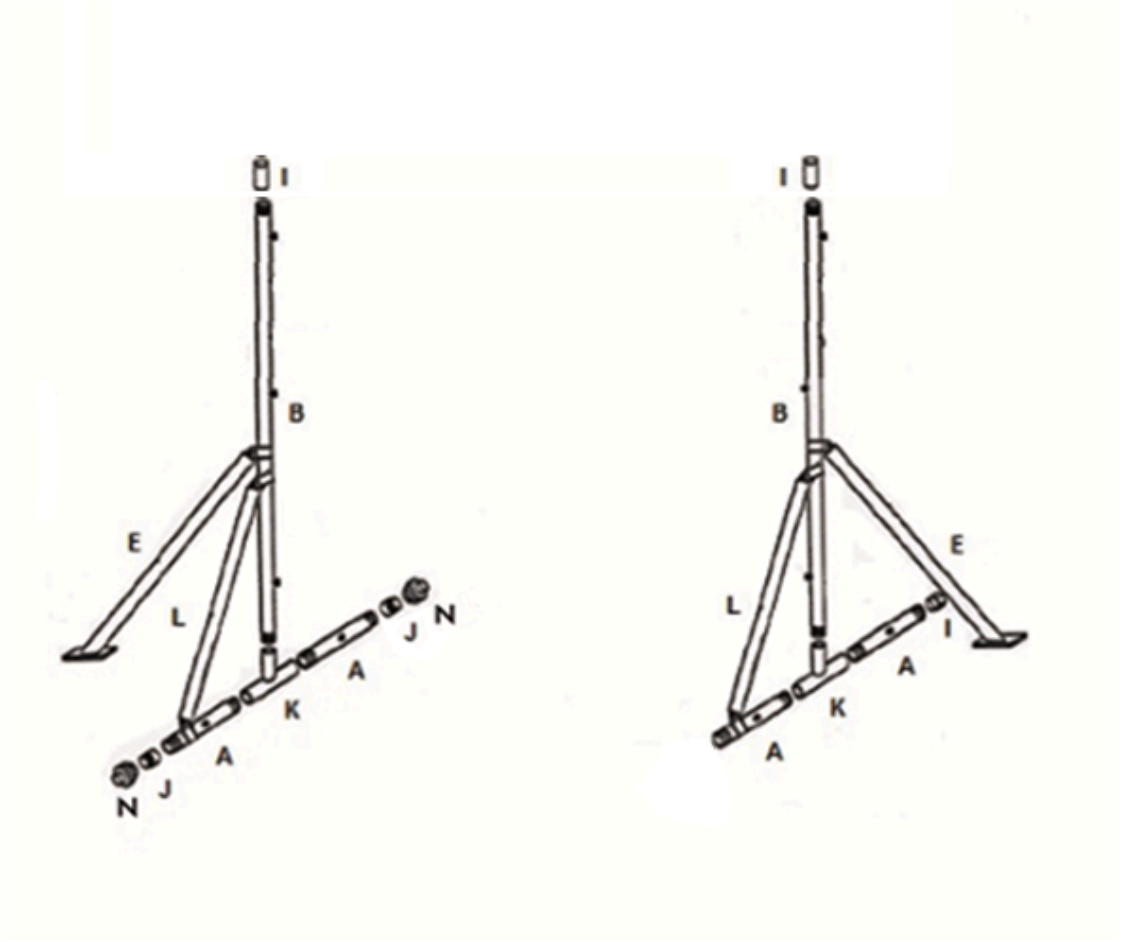
e + p + q

Tutti i collegamenti + V

2509970 Telaio inox per Porta di disinfezione MS



#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
a	4	2509970	Condotto	1"	Inox	Condotto orizzontale inferiore
b	2		Condotto	1"	Inox	Condotto verticale inferiore
e	2		Condotto	1"	Inox	Sostegno
l	2		Condotto	1"	Inox	Sostegno
f	4	8805161	Ugello	¼		Condotto orizzontale inferiore
g	4		Ugello	¼		Condotti verticali
i	3	8805208	Tappo terminale	1"	Inox	Condotto orizzontale inferiore
j	3	8805209	Adattatore	1" x ¾"	Inox	Condotto orizzontale inferiore
k	2	8805210	Pezzo a T	1"	Inox	Condotto orizzontale inferiore
n	3	8805213	Raccordo geka	¾" maschio	Ottone	Adattatore 1" x ¾"
o	4	8805239	Staffa terminale	1"	Galvanizzato	Ancoraggio della porta
p	10	8805200	Bulloni	M10 x 60	Galvanizzato	Ancoraggio della porta
q	10	8805204	Tassello	M12		Ancoraggio della porta
r	12	8805240	Gancio	1"	Galvanizzato	Fissaggio sostegno porta
s	6	8805201	Bulloni	M8 x 35	Galvanizzato	Fissaggio sostegno porta
t	6	Vari	Dadi	M8	Galvanizzato	Fissaggio sostegno porta
u	12	Vari	Rivetti	M8	Galvanizzato	Fissaggio sostegno porta
v	2	1009978	Nastro Teflon			Generale
w	1	0809969	Stringitubo	2,5 m		
x	1	0809751	Raccordo geka	½ "		Parte femmina
y	2	8805234	Raccordo geka	1"		
z	2	8805215	Fascetta stringitubo			



a + b + k

a + i & b + i

a + n + j

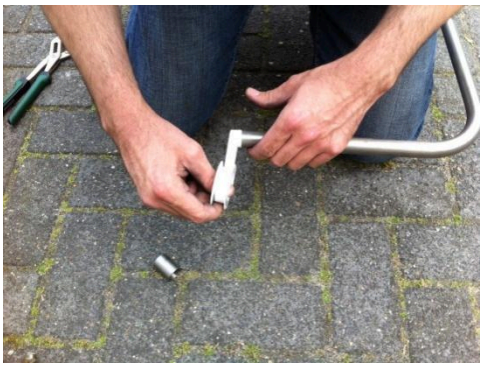
a + i & b + i

a + n + j

b + l / a + l / b + e (+ r + s + t + u)

a + o + p + q

e + p + q

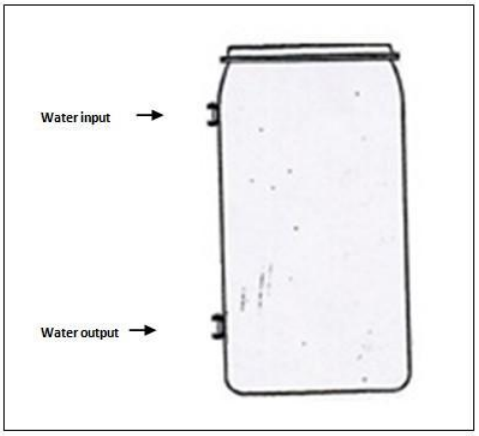


Tutti i collegamenti + V

2509440 Unità Besturings

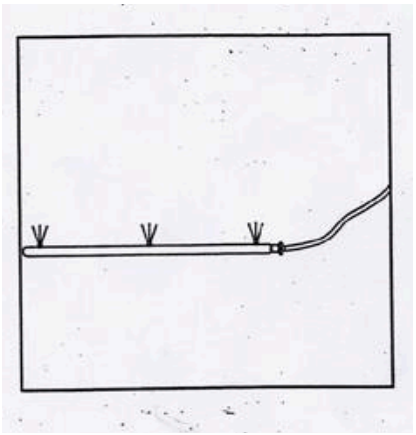
#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
a	1	8805282	Pompa		Inox	Pompa
b	1	8801813	Valvola del liquido 1	¾” x ¾” femmina	Inox	Pompa
c	1	8801812	Valvola del liquido 2	1/8” x 1/8” femmina	Inox	Pompa
g	2x10	2509815	Tubo di segnalazione	p/m	Gomma	Unità di comando
h	3	8805237	Tubo p/m	1” (25 mm)	Flessibile	Tubo flessibile
i	2	0807101	Tubo p/m	7 x 10 mm		Valvola del liquido 2
j	1	8804943	Filtro aspirazione		Inox	Valvola del liquido 2

2509475 Serbatoio + attacchi per Porta di disinfezione MS

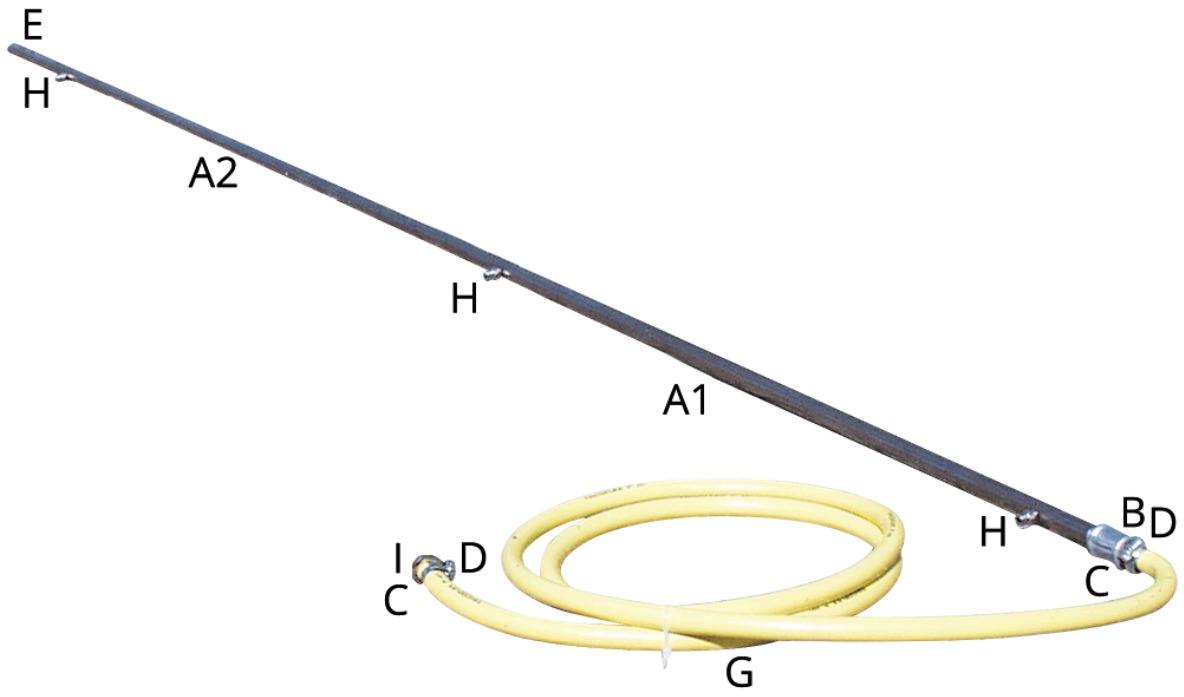


#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
a	1	8805264	Contenitore	225 litri	PE	Contenitore
b	1	8805213	Raccordo geka	¾" maschio	Ottone	Contenitore
c	2	8805215	Fascetta di serraggio	30-20 mm	Galvanizzato	Tubo flessibile
d	2	8805234	Raccordo geka	Raccordo 25 mm	Ottone	Tubo flessibile
e	1	8805235	Raccordo geka	½" femmina	Ottone	Contenitore
f	6	8805237	Tubo p/m	1" (25 mm)	Flessibile	Tubo flessibile
g	1	8805209	Adattatore	1" x ¾"	Inox	Contenitore
h	1	0809982	Galleggiante	½"	Ottone	Contenitore

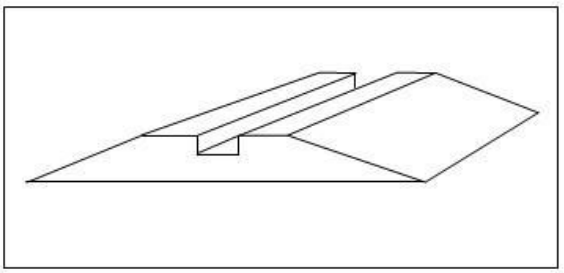
2509979: Disinfezione lato inferiore Porta di disinfezione MS



#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
a1	1		Condotto 160cm	½"	Inox	Disinfezione lato inferiore
a2	1		Condotto 140cm	½"	Inox	Disinfezione lato inferiore
b	1	8805226	Raccordo geka	½" maschio	Ottone	Condotto orizzontale inferiore
c	2	8805234	Raccordo geka	Raccordo 25 mm	Ottone	Tubo Tricoflex
d	2	8805215	Fascetta di serraggio	30 – 20 mm	Galvanizzato	Tubo Tricoflex
e	1	8805219	Tappo terminale	½"	Inox	Condotto orizzontale inferiore
g	2	0809925	Tubo p/m	1" (25 mm)	Tricoflex	Disinfezione lato inferiore
h	3	8805161	Ugello	¼"	Inox	Condotto orizzontale inferiore
i	1	8805213	Raccordo geka	¾" femmina	Ottone	Tubo Tricoflex



2509477 Elemento soglia (fresato) 50 x 40 x 5cm



#	Numero:	N. articolo:	Componente:	Misura:	Materiale:	Parte per:
a	8	2509477	Soglia	50 x 40 cm	Plastica	Soglia
b	8	2509478	Kit di fissaggio			Soglia

Posizionamento schematico della disinfezione lato inferiore negli elementi di soglia