

**DOCUMENTATION**

**ISO BUBBLE II**

**Manual : 582.212.110-UK - 2112**

*Date : 20/12/21*

*Supersede :*

*Modif.:*


**TRANSLATION FROM THE ORIGINAL MANUAL**

***IMPORTANT : Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).***

THE PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

**SAMES KREMLIN SAS**

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38 240 - MEYLAN - France

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**[www.sames-kremlin.com](http://www.sames-kremlin.com)**



<p style="text-align: center;"><b>FR</b></p> <p><b><u>Pour une utilisation sûre, Il est de votre responsabilité de :</u></b></p> <ul style="list-style-type: none"> <li>• Lire attentivement tous les documents contenus dans le CD joint avant la mise en service de l'équipement,</li> <li>• D'installer, d'utiliser, d'entretenir et de réparer l'équipement conformément aux préconisations de SAMES KREMLIN ainsi qu'aux réglementations nationales et/ou locales,</li> <li>• Vous assurez que les utilisateurs de cet équipement ont été formés, ont parfaitement compris les règles de sécurité et qu'ils les appliquent.</li> </ul>	<p style="text-align: center;"><b>UK</b></p> <p><b><u>To ensure safe use of the machinery, it is your responsibility to:</u></b></p> <ul style="list-style-type: none"> <li>• Carefully read all documents contained on the enclosed CD before putting the machinery into service,</li> <li>• Install, use, maintain and repair the machinery in accordance with SAMES KREMLIN's recommendations and national and/or local regulations,</li> <li>• Make sure that the users of the machinery have received proper training and that they have perfectly understood the safety rules and apply them.</li> </ul>	<p style="text-align: center;"><b>DE</b></p> <p><b><u>Eine sichere Nutzung setzt voraus, dass Sie: :</u></b></p> <ul style="list-style-type: none"> <li>• alle in der CD enthaltenen Dokumente vor der Inbetriebnahme der Anlage aufmerksam lesen,</li> <li>• die Anlage im Einklang mit den Empfehlungen von SAMES KREMLIN sowie mit den nationalen und/oder lokalen Bestimmungen installieren, verwenden, warten und reparieren,</li> <li>• sich vergewissern, dass die Nutzer dieser Anlage angemessen geschult wurden, die Sicherheitsbestimmungen verstanden haben und sie anwenden.</li> </ul>
<p style="text-align: center;"><b>ES</b></p> <p><b><u>Para una utilización segura, será de su responsabilidad:</u></b></p> <ul style="list-style-type: none"> <li>• leer atentamente todos los documentos que se incluyen en el CD adjunto antes de la puesta en servicio del equipo,</li> <li>• instalar, utilizar, efectuar el mantenimiento y reparar el equipo con arreglo a las recomendaciones de SAMES KREMLIN y a la normativa nacional y/o local,</li> <li>• cerciorarse de que los usuarios de este equipo han recibido la formación necesaria, han entendido perfectamente las normas de seguridad y las aplican.</li> </ul>	<p style="text-align: center;"><b>IT</b></p> <p><b><u>Per un uso sicuro, vi invitiamo a:</u></b></p> <ul style="list-style-type: none"> <li>• leggere attentamente tutta la documentazione contenuta nel CD allegato prima della messa in funzione dell'apparecchio,</li> <li>• installare, utilizzare, mantenere e riparare l'apparecchio rispettando le raccomandazioni di SAMES KREMLIN, nonché le normative nazionali e/o locali,</li> <li>• accertarvi che gli utilizzatori dell'apparecchio abbiano ricevuto adeguata formazione, abbiano perfettamente compreso le regole di sicurezza e le applichino.</li> </ul>	<p style="text-align: center;"><b>PT</b></p> <p><b><u>Para uma utilização segura, é da sua responsabilidade:</u></b></p> <ul style="list-style-type: none"> <li>• Ler atentamente todos os documentos incluídos no CD em anexo antes de pôr o equipamento em funcionamento,</li> <li>• Proceder à instalação, utilização, manutenção e reparação do equipamento de acordo com as preconizações de SAMES KREMLIN, bem como com outros regulamentos nacionais e/ou locais aplicáveis,</li> <li>• Assegurar-se que os utilizadores do equipamento foram devidamente capacitados, compreenderam perfeitamente e aplicam as devidas regras de segurança.</li> </ul>
<p style="text-align: center;"><b>NL</b></p> <p><b><u>Voor een veilig gebruik dient u:</u></b></p> <ul style="list-style-type: none"> <li>• alle document op de bijgevoegde cd aandachtig te lezen alvorens het apparaat in werking te stellen,</li> <li>• het apparaat te installeren, gebruiken, onderhouden en repareren volgens de door SAMES KREMLIN gegeven aanbevelingen en overeenkomstig de nationale en/of plaatselijke reglementeringen,</li> <li>• zeker te stellen dat de gebruikers van dit apparaat zijn opgeleid, de veiligheidsregels perfect hebben begrepen en dat zij die ook toepassen.</li> </ul>	<p style="text-align: center;"><b>SE</b></p> <p><b><u>För en säker användning av utrustningen ansvarar ni för följande:</u></b></p> <ul style="list-style-type: none"> <li>• Läs noga samtliga dokument som finns på den medföljande cd-skivan innan utrustningen tas i drift.</li> <li>• Installera, använd, underhåll och reparera utrustningen enligt anvisningarna från SAMES KREMLIN och enligt nationella och/eller lokala bestämmelser.</li> <li>• Försäkra er om att användare av denna utrustning erhållit utbildning, till fullo förstått säkerhetsföreskrifterna och tillämpar dem.</li> </ul>	<p style="text-align: center;"><b>FI</b></p> <p><b><u>Käytön turvallisuuden varmistamiseksi velvollisuutesi on:</u></b></p> <ul style="list-style-type: none"> <li>• Lukea huolella kaikki CD:llä olevat asiakirjat ennen laitteiston käyttöönottoa,</li> <li>• Noudataa laitteiston asennuksessa, käytössä, kunnossapidossa ja huollossa SAMES KREMLIN in suosituksia sekä kansallisia ja/tai paikallisia määräyksiä,</li> <li>• Varmistaa, että laitteiston käyttäjät ovat koulutettuja ja ymmärtävät täysin turvallisuusmääräykset ja miten niitä sovelletaan.</li> </ul>
<p style="text-align: center;"><b>PL</b></p> <p><b><u>Dla zapewnienia bezpiecznego użytkowania na użytkownika spoczywa obowiązek:</u></b></p> <ul style="list-style-type: none"> <li>• Uważnego zapoznania się ze wszystkimi dokumentami znajdującymi się na załączonej płycie CD przed pierwszym uruchomieniem urządzenia,</li> <li>• Instalowania, użytkowania, konserwacji i naprawy urządzenia zgodnie z zaleceniami firmy SAMES KREMLIN oraz z przepisami miejscowymi,</li> <li>• Upewnienia, że wszyscy przeszkoleni użytkownicy urządzenia zrozumieli zasady bezpieczeństwa i stosują się do nich.</li> </ul>	<p style="text-align: center;"><b>CS</b></p> <p><b><u>Pro bezpečné používání jste povinni:</u></b></p> <ul style="list-style-type: none"> <li>• Před uvedením zařízení do provozu si pozorně přečt' veškeré dokumenty obsažené na přiloženém CD,</li> <li>• Nainstalovat, používat, udržívat a opravovat zařízení v souladu s pokyny firmy SAMES KREMLIN a s národními a/nebo místními legislativními předpisy,</li> <li>• Ujistit se, že uživatelé tohoto zařízení byli vyškoleni, že dokonale pochopili bezpečnostní pravidla a že je dodrží.</li> </ul>	<p style="text-align: center;"><b>SL</b></p> <p><b><u>Za varno uporabo ste dolžni:</u></b></p> <ul style="list-style-type: none"> <li>• natančno prebrati vse dokumente na CD pred zagonom stroja,</li> <li>• instalirati, uporabljati, vzdrževati in popravljati opremo po določilih SAMES KREMLIN in v skladu z veljavnimi nacionalnimi in/ali lokalnimi predpisi,</li> <li>• poskrbeti, da so uporabniki te opreme ustrezno usposobljeni, poznajo varnostne predpise in da jih upoštevajo.</li> </ul>
<p style="text-align: center;"><b>SK</b></p> <p><b><u>V záujme bezpečného je vašou povinnosťou:</u></b></p> <ul style="list-style-type: none"> <li>• pozorne si prečítať všetky dokumenty obsiahnuté na priloženom CD predtým, ako zariadenie uvediete do prevádzky,</li> <li>• nainštalovať, používať, udržiavať a opravovať zariadenie v súlade s odporúčaniami spoločnosti SAMES KREMLIN a národnými a/alebo miestnymi predpismi,</li> <li>• uistiť sa, že používatelia tohto zariadenia boli zaškolení, riadne porozumeli pravidlám bezpečnosti a používajú ich.</li> </ul>	<p style="text-align: center;"><b>HU</b></p> <p><b><u>A biztonságos használat érdekében az Ön felelőssége, hogy:</u></b></p> <ul style="list-style-type: none"> <li>• a berendezés üzembe helyezése előtt figyelmesen elolvassa a mellékelt CD által tartalmazott összes dokumentumot,</li> <li>• a berendezést a SAMES KREMLIN ajánlásainak valamint a nemzeti és/vagy helyi szabályozásoknak megfelelően helyezze üzembe, használja, tartsa karban és javítsa,</li> <li>• megbizonyosodjon róla, hogy a berendezés felhasználói képzettek, tökéletesen megértették és alkalmazzák a biztonsági előírásokat.</li> </ul>	<p style="text-align: center;"><b>RO</b></p> <p><b><u>Penru o utilizare sigură, este responsabilitatea dvs. să:</u></b></p> <ul style="list-style-type: none"> <li>• Citiți cu atenție toate documentele de pe CD-ul anexat, înainte de punerea în funcțiune a echipamentului,</li> <li>• Instalați, utilizați, întrețineți și reparați echipamentul conform instrucțiunilor SAMES KREMLIN precum și reglementărilor naționale și/sau locale,</li> <li>• Vă asigurați că utilizatorii acestui echipament au fost instruiți, au înțeles perfect regulile de securitate și le aplică integral.</li> </ul>

Déclaration(s) de conformité au verso de ce document / Declaration(s) of conformity at the back of this document / Konformitätserklärung(en) auf der Rückseite dieser Unterlage / Declaración (es) de conformidad en el reverso de este documento / Dichiarazione/i di conformità sul retro del presente documento / Declaração(ões) de conformidade no verso do documento / Conformiteitsverklaring(en) op de keerzijde van dit document / Försäkran om överensstämmelse på omstående sida av detta dokument / Vaatimustenmukaisuusvakuutukset tämän asiakirjan kääntöpuolella / Deklaracja(e) zgodności na odwrocie dokumentu / Prohlášení o shodě se nachází/nacházejí na zadní straně tohoto dokumentu / Deklaracja(e) o skladnosti na hrtni strani tega dokumenta / Vyhlášení/-a o zhode sa nachádzajú na zadnej strane dokumentu / A dokumentum hátlapján szereplő megfeleléségi nyilatkoz(ok) / Declarații de conformitate pe versoul acestui document



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**ENCEINTE HYDRODILUABLE / WATER-BASED BUBBLE**  
**WASSERLACK-ISOLIERBLASE II / RECINTO HIDROSOLUBLE**

**BULLE II / ISO BUBBLE II**  
**/ ISOLIERBLASE II / BURBUJA II**

Est conforme à la législation d'harmonisation de l'Union applicable suivante / Is in conformity with the relevant Union harmonisation legislation / Erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union / es conforme con la legislación de armonización pertinente de la Unión / è conforme alla pertinente normativa di armonizzazione dell'Unione / in overeenstemming met de desbetreffende harmonisatiewetgeving van de Unie / med den relevanta harmoniserade unionslagstiftningen / on asiaa koskevan unionin yhdenmukaistamislainsäädännön vaatimusten mukainen / jest zgodny z odpowiednimi wymaganiami unijnego prawodawstwa harmonizacyjnego / Shoduje se s následující příslušnou evropskou harmonizační legislativou / V skladu s harmonizirano zakonodajo Unije / Je v súlade s uplatniteľnými harmonizačnými právnymi predpismi EÚ / Megfelelő ségi nyilatkozatot a gyártó kizárólagos felelőssége mellett adják ti / Prezenta declarație de conformitate este emisă pe răspunderea exclusivă a producătorului.

Installation de projection électrostatique de peinture hydrodiluable ininflammable / Electrostatic spraying installation for non-flammable material for painting and finishing

EN 50059:1993

La présente déclaration de conformité est établie sous la seule responsabilité du fabricant / This declaration of conformity is issued under the sole responsibility of the manufacturer / Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller / La presente declaración de conformidad se expide bajo la exclusiva responsabilidad del fabricante / La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante / A presente declaração de conformidade é emitida sob a exclusiva responsabilidade do fabricante / Deze conformiteitsverklaring wordt verstrekt onder volledige verantwoordelijkheid van de fabrikant / Denna försäkran om överensstämmelse utfärdas på tillverkarens eget ansvar / Tämä vaatimustenmukaisuusvakuutus on annettu valmistajan yksinomaista vastuulla / Niniejsza deklaracja zgodności wydana zostaje na wyłączną odpowiedzialność producenta / Toto prohlášení o shodě se vydává na výhradní odpovědnost výrobce / Za izdajo te izjave o skladnosti je odgovoren izključno proizvajalec / Toto vyhlásenie o zhode sa vydáva / na vlastnú zodpovednosť výrobcu / Ezt a megfelelő ségi nyilatkozatot a gyártó kizárólagos felelőssége mellett adják ti / Prezenta declarație de conformitate este emisă pe răspunderea exclusivă a producătorului.

Philippe PROVENAZ

Directeur Innovation & Développement / Innovation & Development Director / Direktor für Innovation & Entwicklung / Director de Inovación y Desarrollo / Direttore Innovazione e sviluppo / Diretor de Inovação / Manager Innovatie en Ontwikkeling / Direktör för Forskning och Utveckling / Innovaatio- ja kehitysohjtaja / Dyrektor ds. Innowacji I Rozwoju / Ředitel pro inovace a vývoj / Direktor za inovacije in razvoj / Riaditel' pre inováciu a rozvoj / Innovációs és fejlesztési igazgató / Director Inovație și Dezvoltare

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## **INSTRUCTION MANUAL**

### **ISO BUBBLE II**

*Manual : 2112 573.173.112*

*Date : 30/12/21 - Supersede : 19/05/08*

*Modif : Update*

### **TRANSLATION FROM THE ORIGINAL MANUAL**

***IMPORTANT : Before assembly and start-up, please read and clearly understand all the documents relating to the equipment (professional use only).***

THE PICTURES AND DRAWINGS ARE NOT CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE.

**SAMES KREMLIN SAS**

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**INSTRUCTION MANUAL**

**ISO BUBBLE II**

**SUMMARY**

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**ADDITIONAL DOCUMENTATIONS :**

Declaration of conformity	578.042.130
	<b>Spare parts</b>
Equipments for water-based material applications	573.304.050
Iso bubble II	573.305.050

Dear Customer,

We thank you very much for purchasing your new water-based bubble designed for water-based product electrostatic applications.

Special care has been taken during all designing and manufacturing process to make sure your investment will provide full satisfaction.

However, to get the best result, safe and efficient operation of your equipment, we advice you to read and make yourself familiar with this instruction and service manual.

## 1. GENERAL SAFETY INSTRUCTIONS



**WARNING : Any misuse of the equipment or accessories can damage them, result in serious body injury, fire or explosion hazard and reduce the equipment working life. Read, understand and comply with the safety instructions hereafter.**

The personnel involved in operating and servicing this equipment must be aware of all safety requirements stated in this manual. The workshop supervisor must be certain that the personnel has perfectly understood the safety instructions and complies with them.

Read all instruction manuals as well as the tags of the equipments before operating the equipment.

Refer to local safety instructions and comply with them.

### ■ INSTALLATION REQUIREMENTS

**A typical installation designed to spray non-flammable conductive material (water-based paints) must not be used to handle flammable material (solvent-based paints).**

**Never use flammable cleaning solvents.**

**Using the water-based bubble for flammable materials (solvent-based paints) may create unsafe conditions such as : explosion, fire, electric shock hazard and serious body injury for the personnel.**

Use the equipment only in a properly ventilated area to maximize health care.

Never stock paints and solvents in the spray area. Always close the pots and the tins.

Always keep the spray area clean and free from debris (solvent, rags,...).

Read paint and solvent manufacturer's technical instructions.

Spraying of some materials may result in hazardous working conditions. To protect the operator, respirator mask and hand cream and glasses are required (Refer to chapter "Safety equipment" of **SAMES KREMLIN** selection guide).

### ■ EQUIPMENT REQUIREMENTS

The operating pressures of these equipments are particularly high. Consequently, some precautions must be taken in order to prevent from accidents and from unsafe working conditions.

➔ **Never exceed the components maximum working pressure of the equipment.**

#### BUBBLE

➔ **Ground the bubble.**

#### HOSES

Do not use hoses with a maximum burst-proof pressure less than four times the maximum service pressure of the pump (see data sheet).

Be certain the hoses are not crimped, leaking and not unrolled.

Be certain hoses are in good conditions and showing no evidence of damage.

➔ **Use only insulating air hoses to connect the equipments located inside the bubble.**

- ➔ Use only a specific fluid hose to connect the pump to the gun.
- ➔ Use only a SAMES KREMLIN specific air hose to connect the STD9B box to the gun.

All fittings must be tight and in good condition.

### **PUMP**



➔ Remove the earth-cable from the pump.

Do not use any product or solvent incompatible with the pump components.

Use the appropriate solvent for the material being sprayed to increase the equipment working life.

### **GUN**

Never wipe the end of the tip with the fingers.

Always depressurize air and hoses before carrying out any servicing on the gun.

Never point the spray gun at anyone or at any part of the body.

### ▪ **MAINTENANCE REQUIREMENTS**

➔ Never modify these equipments.

Check them daily, keep them in a good condition and replace the worn parts **only with SAMES KREMLIN parts.**

**Before cleaning or removing components of the equipment, it is compulsory :**

- 1 - to switch off the equipment,**
- 2 - to shut off the compressed air supply,**
- 3 - to open the pump drain valve,**
- 4 - to point the gun into an appropriate waste receptacle and press the gun trigger to depressurize the system.**

## **2. DESCRIPTION**

The bubble is designed to receive the coating material equipment for non-flammable **water-based materials.**

This equipment may be composed of :

- either an airspray pneumatic pump,
- either an AIRMIX® pump,
- either a pressure tank (30 liters / 8 US gal maxi).

The gun may be :

- a manual gun, model K3H2O,
- or a standard automatic gun mounted on an insulating support.

The voltage from 0 to 8 V given by the STD9B box is sent to the HV generator located inside the bubble.

All parts located inside the bubble are negatively charged as is the voltage of the HV generator. The paint is then charged and sent to the gun.

### 3. OPERATING PRINCIPLE


The water-based paints are highly conductive materials with very low resistivity.

When operating the gun, all parts located inside the bubble are negatively charged.

When the gun trigger is released or the bubble door opened, the electrical charge accumulated by the pump or the tank is automatically evacuated through the ground by means of the ground connection single acting cylinder.

### 4. TECHNICAL FEATURES

#### Stickers on the Iso bubble II

 CE	<b>ENCEINTE ISOSTATIC</b> DE PROTECTION POUR PEINTURES HYDROSOLUBLES WATER-BASED ISOSTATIC BUBBLE RECINTO ISOSTATICO DE PROTECCION PARA PINTURAS HIDROSOLUBLES
MODELE MODEL : ENCEINTE HYDRODILUABLE II	<b>NE PAS UTILISER DE PEINTURES SOLVANTEES</b> DO NOT USE SOLVENT BASED MATERIALS NO UTILIZAR PINTURAS CON DISOLVENTES
REFERENCE : 148 260 100	<b>NE PAS UTILISER DE SOLVANTS INFLAMMABLES POUR LE NETTOYAGE</b> DO NOT USE FLAMMABLE SOLVENTS TO CLEAN THE ISO-BUBBLE NO EMPEAR DISOLVENTES INFLAMABLES PARA LA LIMPIEZA
TENSION D'ENTREE INPUT VOLTAGE : 8 V DC	
PUISSANCE POWER SUPPLY : 5.2 W	
INTENSITE DE SORTIE OUPUT INTENSITY : 100 µA	
TENSION DE SORTIE MAXIMUM MAXIMUM OUPUT VOLTAGE : 50 KV	
PRESSION AIR AIR PRESSURE : 6 BARS 87 PSI	
CONFORME CONFOMITY : EN 50059 INERIS 90691/07	

Material	White polyethylene
Total height (mm)	1453
External diameter (upper part/lower part) (mm)	721 / 700
Internal height (mm)	1000
Internal diameter (mm)	680
Weight (kg)	30

The ISO BUBBLE II commercialized consists of :

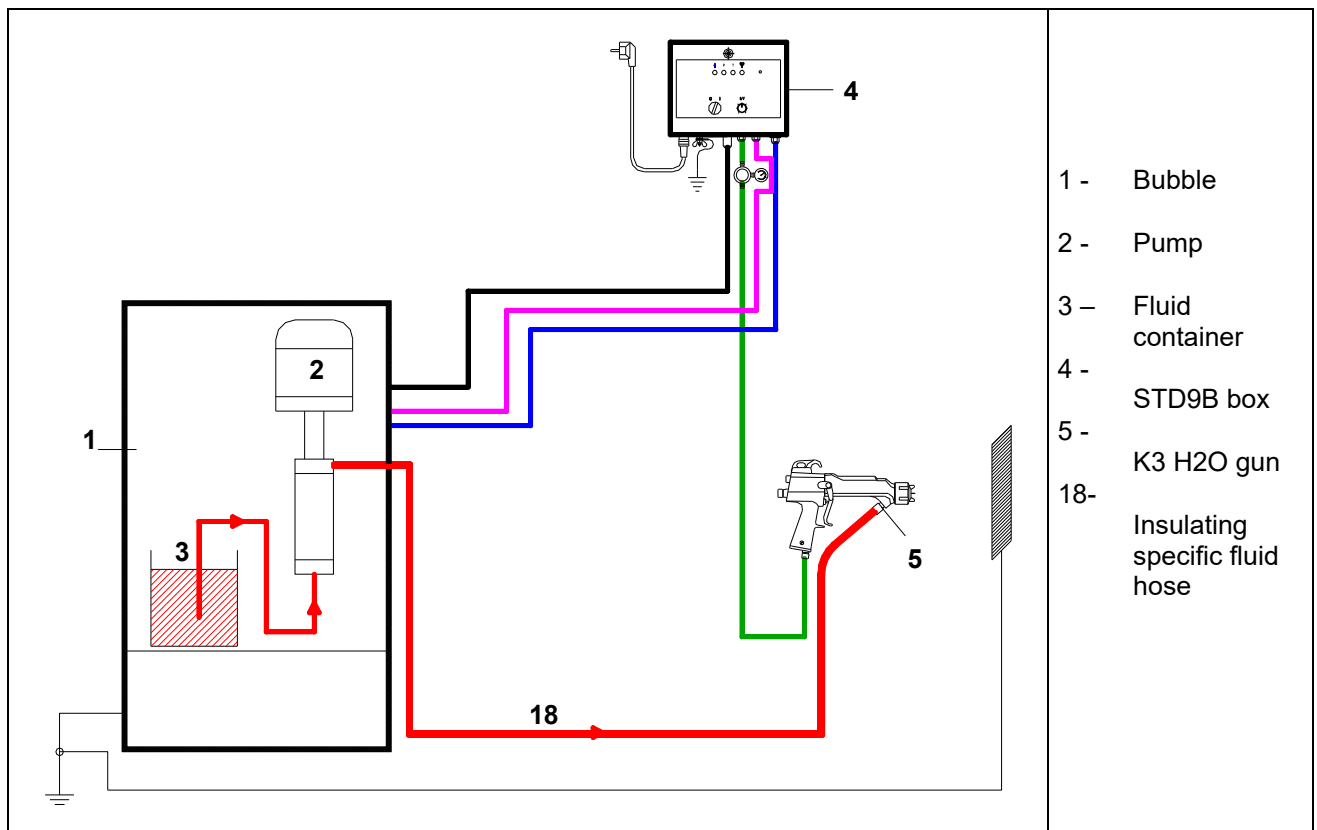
- the bubble with or without the generator barrel,
- some fittings and hoses to supply air to the bubble and the STD9 B box.

**⚠ CAUTION : The pumping system, the STD9 B box, the gun and the insulating fluid hose are not included in the water-based bubble.**



## 5. INSTALLATION

### ■ TYPICAL INSTALLATION (EXAMPLE WITH MANUAL GUN)



A safe electrostatic system installation requires compliance with all applicable safety standards and requirements outlined in this manual. It must not be placed near an installation for water-based materials.

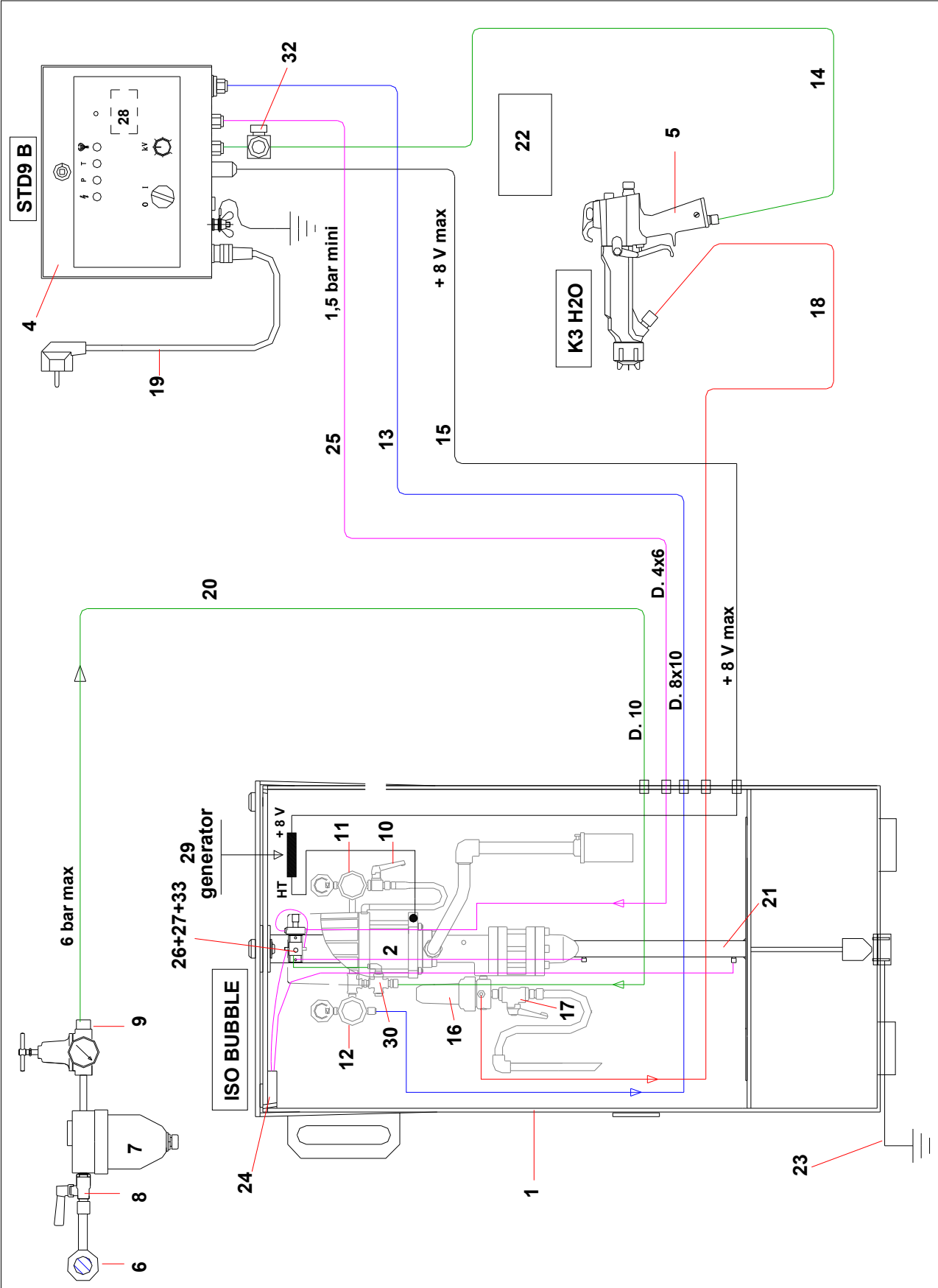


Any improper installation or misuse of the electrostatic coating system can cause serious body injury, fire or explosion or electric shock hazard.

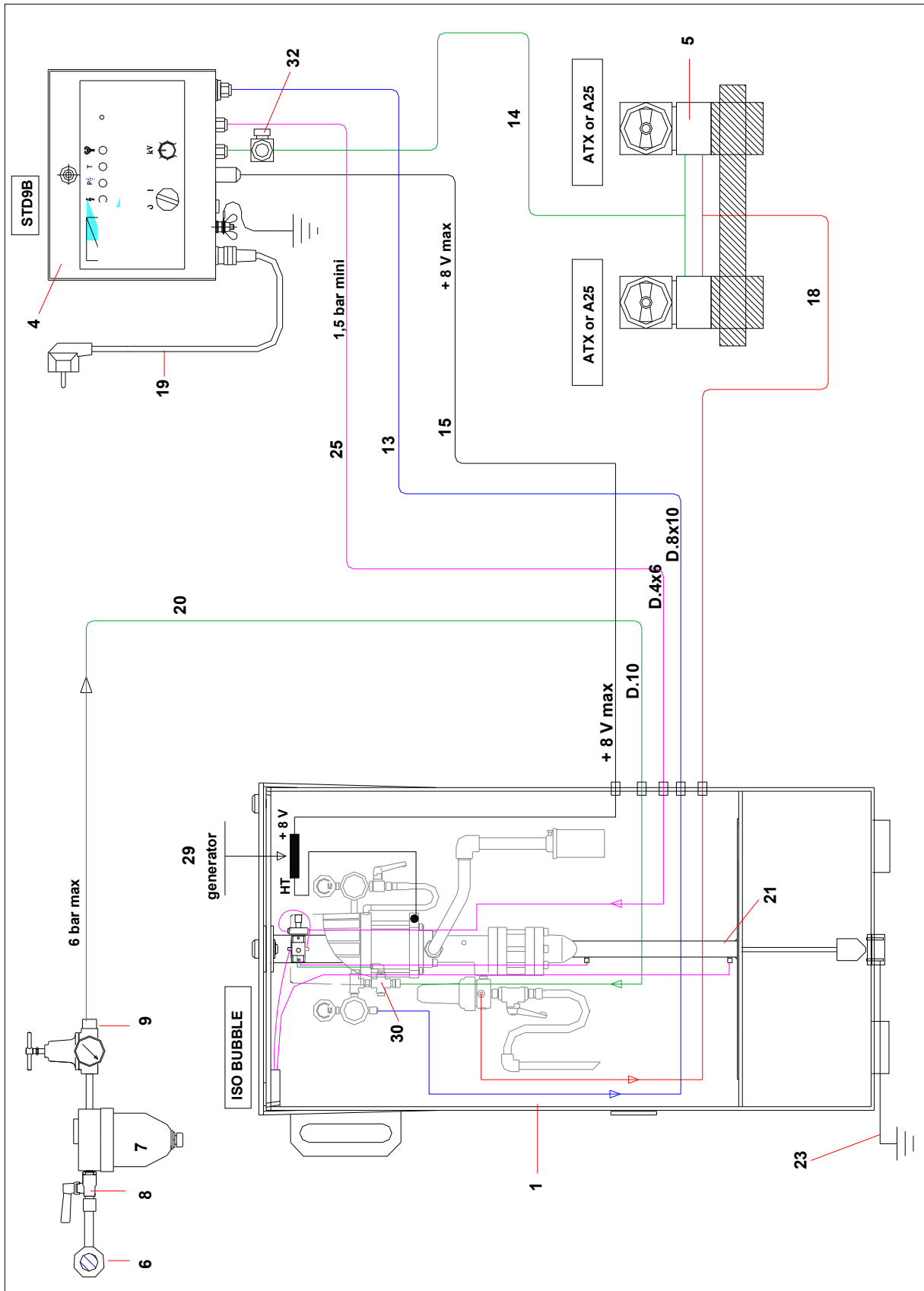
The bubble must be inspected frequently and cleaned (inside and outside) to keep it free of coating material deposits.

Install the coating material supply equipment (pump or pressure tank) inside bubble. Use only metallic container for supplying pump with material. Connect all the hoses.

**BUBBLE WITH MANUAL GUN, MODEL K3H2O**



## BUBBLE WITH STANDARD AUTOMATIC GUN, MODEL ATX or A25



NOTA : The ATX guns must be mounted on an insulating support.

**Captions :**

Ind.	Description
1	Bubble
2	Pump
4	STD9B box
5	Gun
6	Main air supply
7	Air and water separator
8	Main air valve
9	Main air regulator
10	Air supply shut off valve
11	Air regulator (fluid pressure)
12	Spraying air regulator
13	Flow switch air supply hose (8x10 / 5/16 x 3/8))
14	Gun air supply hose ( <b>conductor</b> ) Ø 8 / 5/16 dia , hoses 1/4 NPS
15	Low voltage cable of the BG Ex (+ 8 V max)
16	Fluid filter
17	Drain valve

Ind.	Description
18	Gun fluid supply hose (insulating specific hose)
19	Wire cable (230 V + earth) or (115V + earth)
20	<b>Insulating</b> air hose (pump), Ø 10 / 3/8 dia , 3/8 NPS
21	Ground connection single acting cylinder
22	Safety warning sign
23	Earth cable
24	Door switch
25	Connecting air pilot line (4x6)
26	Cell
27	Air flow rate adjuster
28	Flow switch
29	Ex generator (with cable ind. 15)
30	Air intake assembly
32	Air regulator with gauge (STD9B box air outlet)
33	Air regulator (presetting carried out in the factory)

▪ **ASSEMBLY**

Install the coating material supply equipment (pump or pressure tank) inside the bubble.

**Connect the "air intake" assembly (30) and all the hoses supplied with the bubble.**

2 : pump air inlet connection

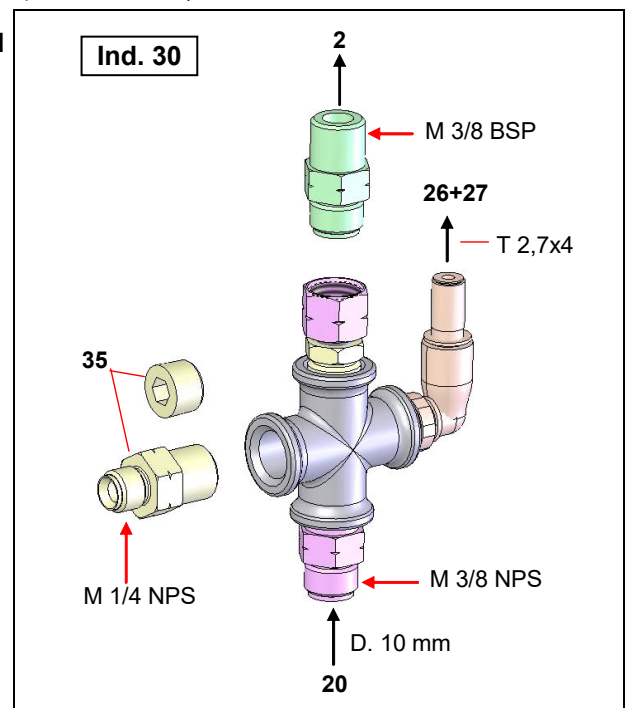
20 : Bubble air supply hose (insulating hose Ø 10 / 3/8 dia)

26+27 : air hose (2,7x4) → yellow fitting of the assembly (flow adjuster and cell)

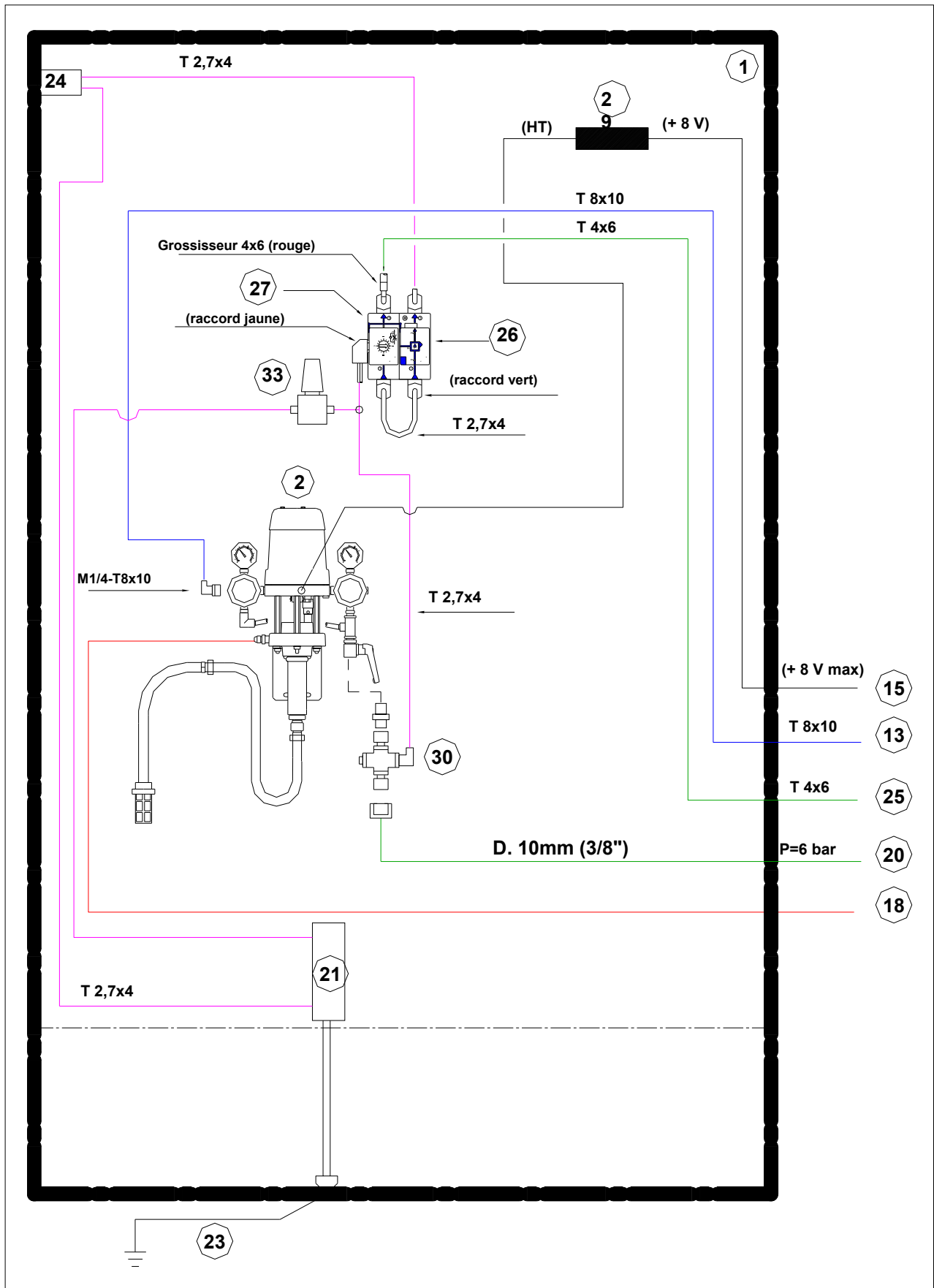
35 : plug or fitting to be mounted

Fix the 'air intake' assembly (30) to the pump air equipment. Screw the fitting (M 3/8 BSP) in the pump air supply valve (refer to diagram with pump, model 10-14 - following page)

(\*) : A plug and a fitting are supplied with the 'air intake' assembly. Screw the plug in the cross or install instead of it the fitting to get an additional air supply, if necessary (eg : supply a pneumatic agitator).



# ASSEMBLY WITH AN AIRMIX PUMP, MODEL 10-14



### Connecting the hoses :

- the air hose (20) between the wall mounting air regulator (9) and the air intake assembly (30).
- the air hose ( $\varnothing$  2,7x4) between the air intake assembly (30) and the yellow fitting of the assembly (26+27).
- the specific fluid hose (18) between the pump fluid outlet and the gun (5) fluid inlet.
- the air hose (13) ( $\varnothing$  8x10) between the pump air regulator (12) and the STD9 B box inlet.
- the air hose (25) ( $\varnothing$  4x6) between the red fitting of the flow adjuster (27) and the piloting air outlet on the STD9B box.

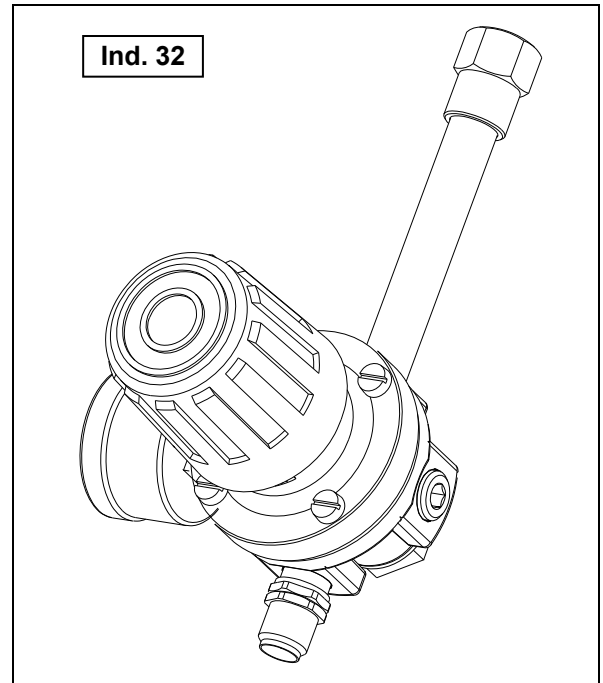
### Air regulator assembly (32) :

An air regulator fitted with a gauge is supplied with the bubble.

The regulator enables to adjust the gun air supply pressure.

The whole is mounted at the air outlet of the STD 9 B power supply (upstream of the hose, ind. 14). The hose (10 cm / 0.33 ft long) makes the assembly of the regulator easier at the bottom of the power supply.

Connect the air hose (14) between the air regulator (32) and the gun air inlet.



### Assembly of the Ex generator barrel (29) and connection of the cables

If the bubble is not equipped of origin with an Ex generator barrel, you must assemble it inside the bubble and connect it.

**Nota : The EX generator barrel is fitted with a 6 m / 19.7 ft low voltage cable which cannot be taken apart.**

Place the generator barrel (29) on the support designed for that purpose (upper cross-link).

Fix it by means of the 2 flanges, the screws and the nuts.

Connect the HV cable between the generator barrel (29) and the pump earth terminal.

Connect the low voltage cable (15), length 6 m / 19.7 ft , to the STD9B power supply (4) inserting the end of that cable through one of the cups of the bubble.



**Ground the bubble earth cable to a real earth connection.  
The parts located inside the bubble must not be grounded.**

## 6. OPERATING

Compressed air supply to the electrostatic coating system must be **absolutely** dry and clean.

To ensure a proper operating of the equipment, an air supply pressure of **6 bar / 87 psi is required**.

It is **compulsory** to connect the manual or automatic electrostatic spray gun to a power supply model **STD 9 B**.

**Minimum** piloting air pressure : **from 1,5 to 2 bar / from 21.76 to 29 psi**.

If an automatic spray gun is used, locate an air repartition box between the STD 9 B power supply and the gun. The box manages the separated adjustment of the fan air and atomizing air.

Adjust the fluid supply pressure (regulator 11) and the air supply pressure (regulator 32) of the gun to obtain the required fan.

Close bubble door. The gun operating depends on the door-switch position.

- Switch off → Installation in operation.
- Switch on → Installation not in operation.



**Do not open the door of the bubble during the operating of the gun.  
Wait for 3 seconds between the stopping of the gun and the opening of the bubble door to evacuate the electrical charge of the parts located inside the bubble.**

An air regulator (33), located in the bubble, sends air to increase the single acting cylinder coming down and the evacuation of the charge during the stop of the installation.

A preset of the regulator is carried out in the factory. If the regulator should happen to go wrong, unscrew completely the adjustment knob, screw by 3 or 4 turns and lock it. The pressure delivered by the regulator **must be lower** to the pressure applied during the ascent of the single acting cylinder.

## 7. BREAKDOWNS AND SOLUTIONS

Diagnosis during the lack of electrostatic effect on a water-based paint application installation.

### No electrostatic effect :

You can observe the loss of electrostatic effect when using the gun :

- The red led of the power supply is switched off or slightly switched on,
- The parts painted do not have by-pass effect,
- No electric field near the gun electrode.

If you notice these troubles, the components of the installation (power supply, HV generator, bubble, hose, gun) installation constitutive components can be involved.

If only the lack of by-pass is noticed, you must check the following elements :

- Grounding of the parts to be painted.
- Gun spraying air pressure.

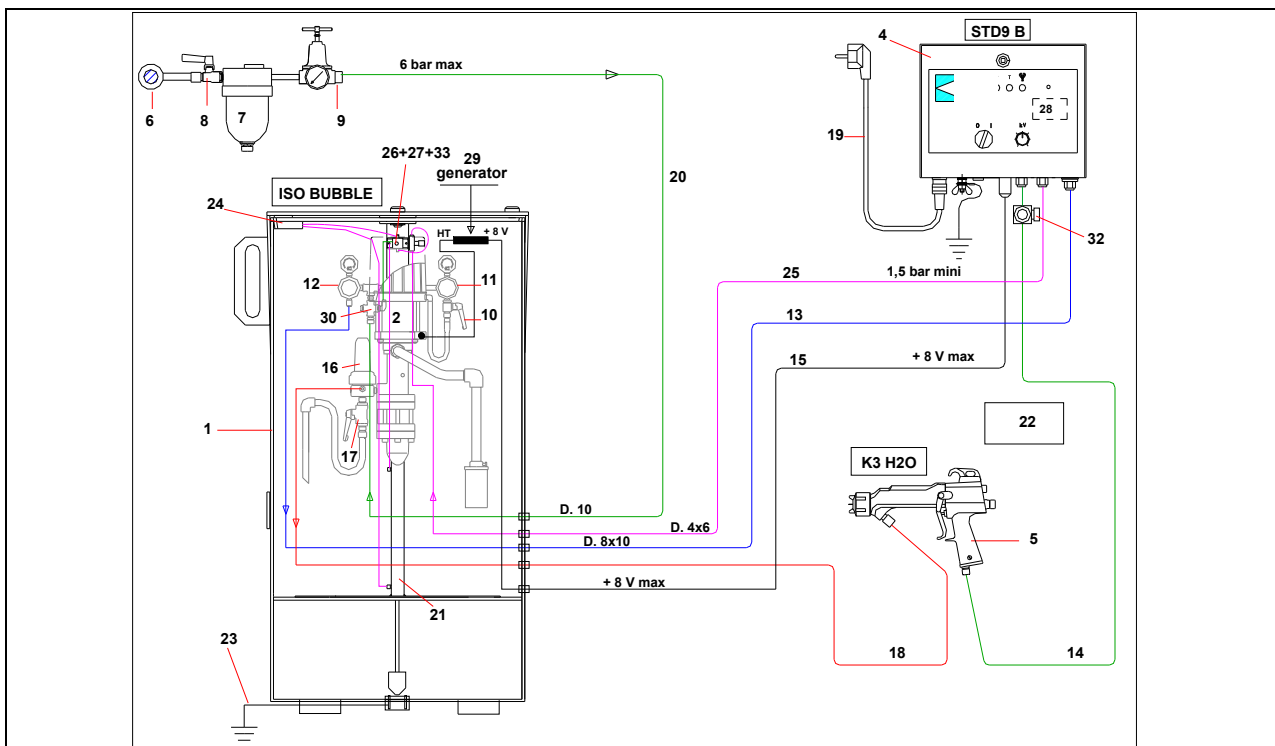
### Previous checkings :

Before checking if there is a breakdown :

- Check the fuse of the power supply
- Check the condition and the connection of the HV generator cables,
- Check there is no dirt and trace of damp outside and inside the bubble,
- Check there is no leak coming from the fluid hose,
- Make sure there is no leak coming from the gun cartridge and the inside of the aircap is perfectly clean.

### Find the defective component :

If the previous checkings can not explain the cause of the breakdown, follow the instruction described in the chart hereafter :

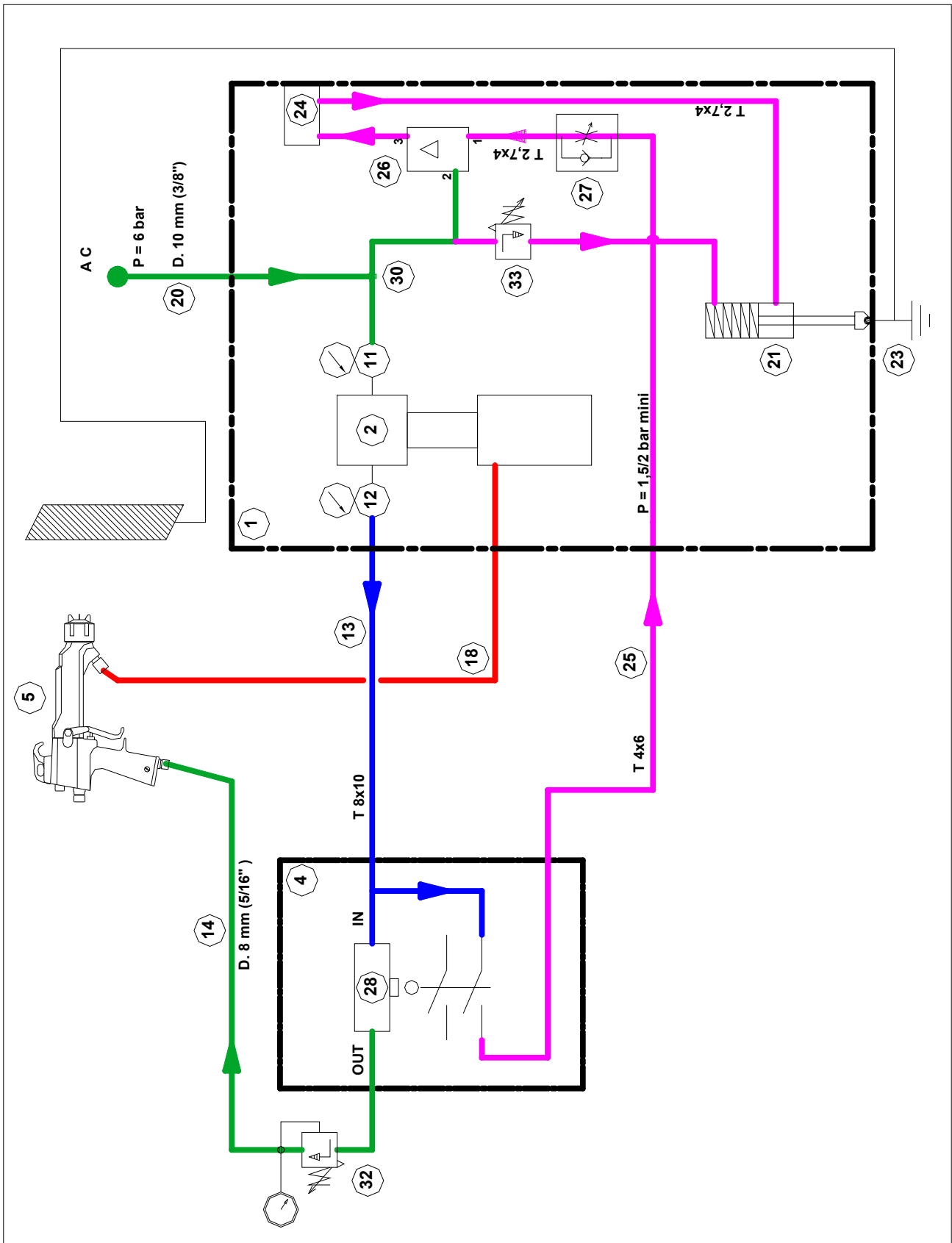




OPERATIONS	CHECKINGS	DIAGNOSIS / SOLUTIONS
Disconnect the HV generator supply cable (15) at STD power supply level (Plug DIN 3 connectors). Switch on the installation and trigger the gun to consume air.	The red led switches on.	The power supply operates. ↳ Connect the supply cable again.
	The red led does not switch on.	↳ Check the power supply (fuse, supply card,...).
Disconnect the HV generator outlet cable (mounted on the pump). Install temporarily the end of the cable inside the bubble over 15 cm from the metal parts. Switch on the installation and trigger the gun to consume air.	The red led switches on.	The power supply and the generator operate. ↳ Connect the cable of the generator again..
	The red led does not switch on.	↳ Check the generator (oscillator, cabling,...).
Disconnect the fluid hose (18) at pump level and fix it temporarily inside the bubble over 15 cm from the metal parts (be careful you do not make the bubble dirty). Switch on the installation and trigger the gun to consume air.	The red led switches on.	The power supply, the generator and the bubble operate. ↳ Connect again the hose on the pump.
	The red led does not switch on.	↳ Check the bubble (dampness, jack, grounding, timing,...).
Disconnect the fluid hose (18) at the gun level and fix it temporarily over 15 cm from the metal parts. Switch on the installation and trigger the gun to consume air.	The red led switches on.	The power supply, the generator, the bubble and the hose operate. ↳ Disassemble and check the gun (cartridge, material inside the barrel air-conduits,...).

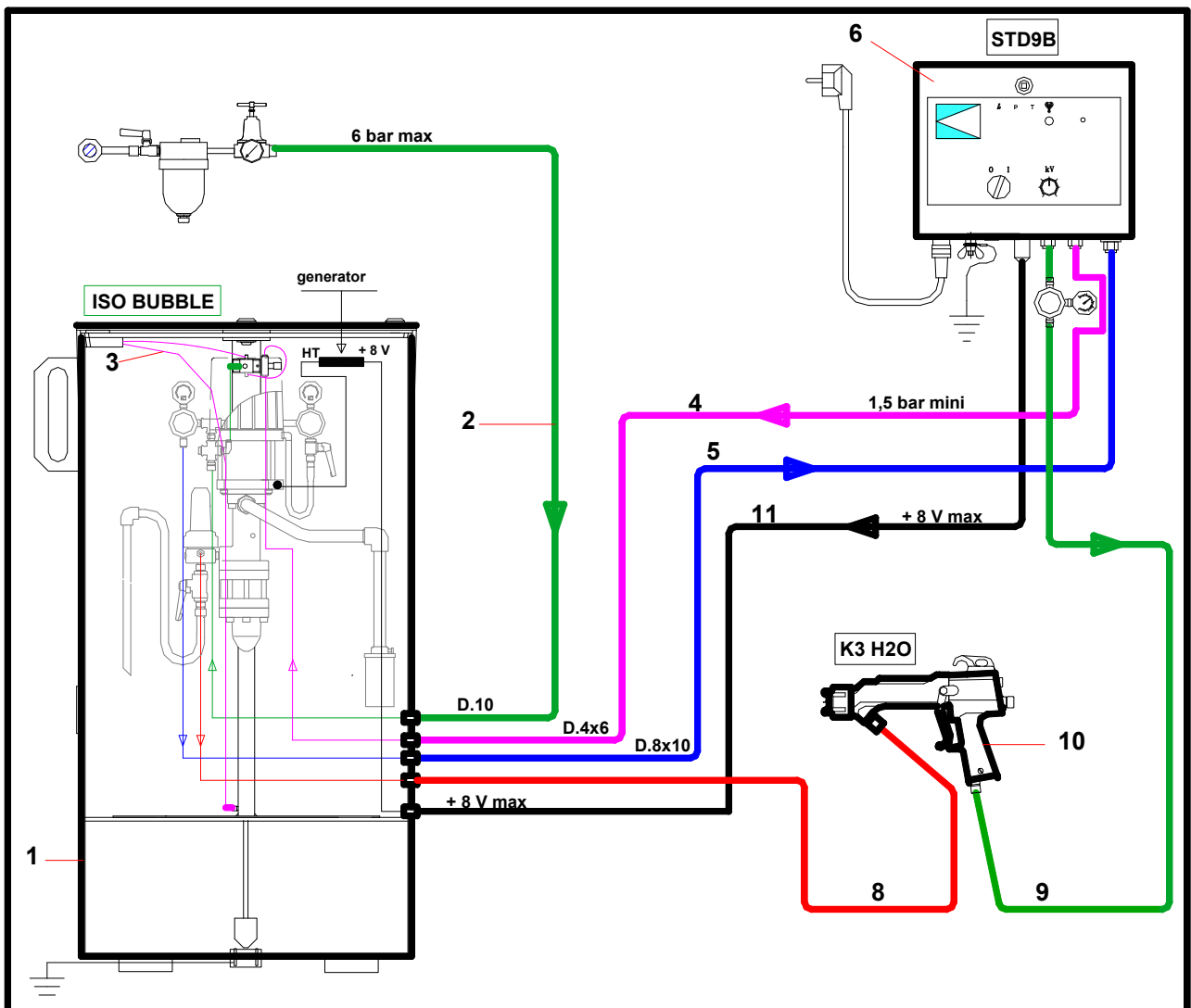
Nota : To repair the different components, please refer to the respective instruction manuals.

## 8. PNEUMATIC DIAGRAM



<p><b>Doc. 573.304.050</b>                  Date/Datum/Fecha : 30/12/21                  Annule/Cancel/                  Ersetzt/Anula : 14/02/14</p>	<p><b>Modif. / Änderung :</b>                  Mise à jour / Update / Aktualisierung                  / Actualización</p>	<p><b>Pièces de rechange</b>                  Spare parts list                  Ersatzteilliste                  Piezas de repuesto</p>
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<p><b>INSTALLATION POUR PEINTURE                  HYDRODILUABLE</b></p>	<p><b>EQUIPMENTS FOR WATER-BASED                  MATERIAL APPLICATIONS</b></p>
<p><b>ANLAGENELEMENTE FÜR WASSERLACK-                  APPLIKATION</b></p>	<p><b>INSTALACIÓN PARA PINTURA                  HIDROSOLUBLE</b></p>



Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
1	148 260 100	Bulle II avec barreau générateur (voir Doc. 573.305.050)	Water-based bubble II with generator barrel (see Doc. 573.305.050)	Wasserlack-Isolierblase II mit Generator (Siehe Dok. 573.305.050)	Burbuja II con barra generadora (Consultar Doc. 573.305.050)	1
2		Tuyau d'air (isolant) Ø 10 mm - 3/8 NPS	Air hose (isolating) Ø 10 mm - 3/8 NPS	Luftschlauch (isolier) Ø 10 mm - 3/8 NPS	Tubería de aire (aislante) Ø 10 mm - 3/8 NPS	1
	050 370 502	Longueur 5 m	Length 5 m / 16 ft	Länge 5 m	5 m de largo	1
	050 370 503	Longueur 10 m	Length 10 m / 33 ft	Länge 10 m	10 m de largo	1
3	050 372 102	Tuyau en polyamide Ø 2,7 x 4 (long. 25 m)	Hose, polyamide Ø 2,7 x 4 (length : 25 m / 82 ft)	Polyamidschlauch Ø 2,7 x 4 (Länge : 25 m)	Tubería de poliamida Ø 2,7 x 4 (25 m de largo)	1
4	050 372 103	Ø 4 x 6 (long. 25 m)	Ø 4 x 6 (length : 25 m / 82 ft)	Ø 4 x 6 (Länge : 25 m)	Ø 4 x 6 (25 m de largo)	1
5	050 372 125	Ø 8 x 10 (long. 25 m)	Ø 8 x 10 (length : 25 m / 82 ft)	Ø 8 x 10 (Länge : 25 m)	Ø 8 x 10 (25 m de largo)	1
6	148 200 200	Boîtier STD9B (voir Doc. 573.351.050)	STD9B power supply (see Doc. 573.351.050)	STD9B Elektrosteuereinheit (Siehe Dok. 573.351.050)	Armario STD9B (Consultar Doc. 573.351.050)	1
8		Tuyau produit spécifique (isolé)	Specific fluid hose (insulating)	Spezifischer Farbschlauch (isoliert)	Tubería producto específica (aislada)	
	129 292 310	Longueur 10 m	Length 10 m / 33 ft	Länge 10 m	10 m de largo	1
	129 292 315	Longueur 15 m	Length 15 m / 50 ft	Länge 15 m	15 m de largo	1
	129 292 320	Longueur 30 m	Length 30 m / 98.5 ft	Länge 30 m	30 m de largo	1
9		Tuyau air (conducteur) Ø 8 mm - 1/4 NPS ⇒ KMP H2O - KMV H2O	Air hose (conductor) Ø 8 mm - 1/4 NPS ⇒ KMPH2O - KMVH2O	Luftschlauch (leitfähig) Ø 8 mm - 1/4 NPS ⇒ KMP H2O - KMV H2O	Tubería aire (conductora) Ø 8 mm - 1/4 NPS ⇒ KMP H2O - KMV H2O	
	050 389 101	Longueur 5 m	Length 5 m / 16.5 ft	Länge 5 m	5 m de largo	1
	050 389 102	Longueur 10 m	Length 10 m / 33 ft	Länge 10 m	10 m de largo	1
	050 385 105	Longueur 15 m	Length 15 m / 50 ft	Länge 15 m	15 m de largo	1
	050 389 106	Longueur 30 m	Length 30 m / 98.5 ft	Länge 30 m	30 m de largo	1
		Tuyau air (conducteur) Ø 7 mm - 1/4 NPS ⇒ KMX H2O - KMC H2O	Air hose (conductor) Ø 7 mm - 1/4 NPS ⇒ KMXH2O - KMCH2O	Luftschlauch (leitfähig) Ø 7 mm - 1/4 NPS ⇒ KMX H2O - KMC H2O	Tubería aire (conductora) Ø 7 mm - 1/4 NPS ⇒ KMX H2O - KMC H2O	
	050 382 109	Longueur 5 m	Length 5 m / 16.5 ft	Länge 5 m	5 m de largo	1
	050 382 110	Longueur 10 m	Length 10 m / 33 ft	Länge 10 m	10 m de largo	1
	050 382 116	Longueur 15 m	Length 15 m / 50 ft	Länge 15 m	15 m de largo	1
10		Pistolet manuel	Manual gun	Handpistole	Pistola manual	
	135 296 000	KMP3 H2O	KMP3 H2O	KMP3 H2O	KMP3 H2O	1
	135 297 000	KMV3 H2O	KMV3 H2O	KMV3 H2O	KMV3 H2O	1
	135 294 000	KMX3 H2O	KMX3 H2O	KMX3 H2O	KMX3 H2O	1
	135 293 000	KMC3 H2O	KMC3 H2O	KMC3 H2O	KMC3 H2O	1

Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
11	129 397 909	Câble électrique Longueur 6 m	Electrical cable Length 6 m / 20 ft	Elektrisches Kabel Länge 6 m	Cable eléctrico 6 m de largo	1
	129 397 908	Longueur 12 m	Length 12 m / 40 ft	Länge 12 m	12 m de largo	1
	129 397 911	Longueur 30 m	Length 30 m / 98.5 ft	Länge 30 m	30 m de largo	1
-	129 270 095	Enveloppe de pistolet (pochette de 10)	Gun cover (pack of 10)	Spritzpistolen Schutzhaube (10er Pack)	Protector de pistola (bolsa de 10)	1
-	129 270 087	Enveloppe de protection des tuyaux (longueur 10 m)	Protective hose sleeving (10 m / 33 ft long)	Schlauch Schutzhülle (Länge 10 m)	Funda de protección de las tuberías (10 m de largo)	1
-	129 270 093	Pochette d'outils K3 (clés plates, tournevis spécial, démontage cartouche, goupillon)	Tool kit (wrenches, special screwdriver, cartridge dismantling, small brush)	Satz Werkzeugsatz für K3 (Flachlüssel, Spezieller Schraubenzieher, Ausbau der Packung, Rienigungsbürste)	Bolsa de utiles K3 (llaves planas, destornillador especial, desmontaje cartucho, cepillo de limpieza)	1

***Pour montage pistolet KA. Ex avec bulle hydrodiluable  
/ For assembly of KA. Ex gun with Isobubble  
/ Für Montage der Pistole KA. Ex mit der Wasserlack Isolierblase  
/ Para montaje de la pistola KA. Ex con burbuja hidrosoluble***

Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
-	129 397 910	Embase avec joints et vis	Base with O ring and screws	Sockel mit O-Ring und Schrauben	Base con juntas y tornillos	1

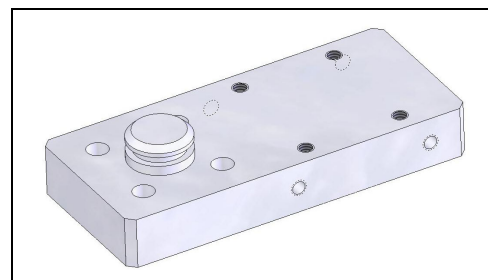
L'embase se monte sur le pistolet KA. Ex à la place du barreau générateur.

The base is mounted instead of the generator barrel on the KA. Ex gun.

Sockel für Montage der Pistole KA. Ex mit der Wasserlack Isolierblase.

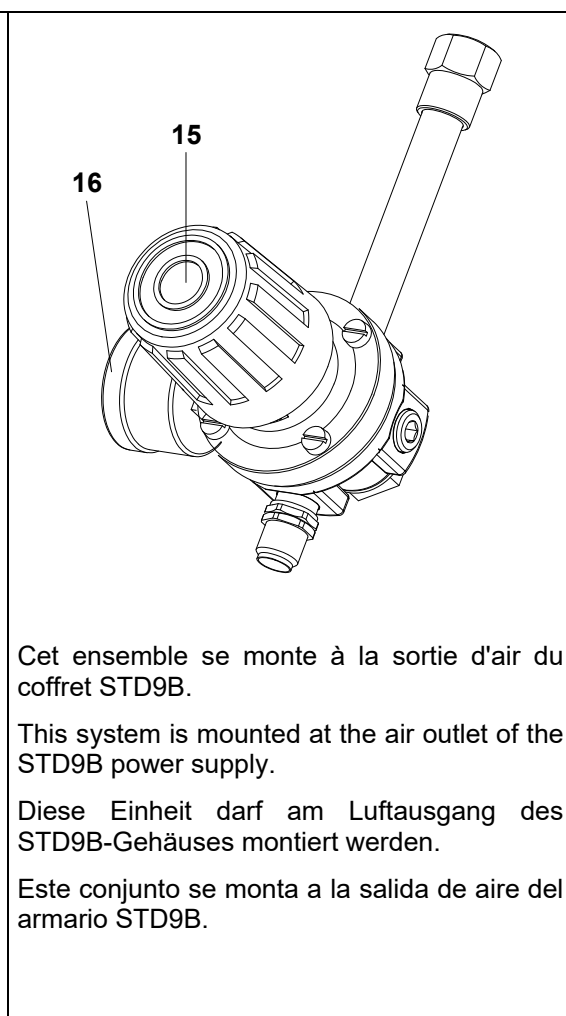
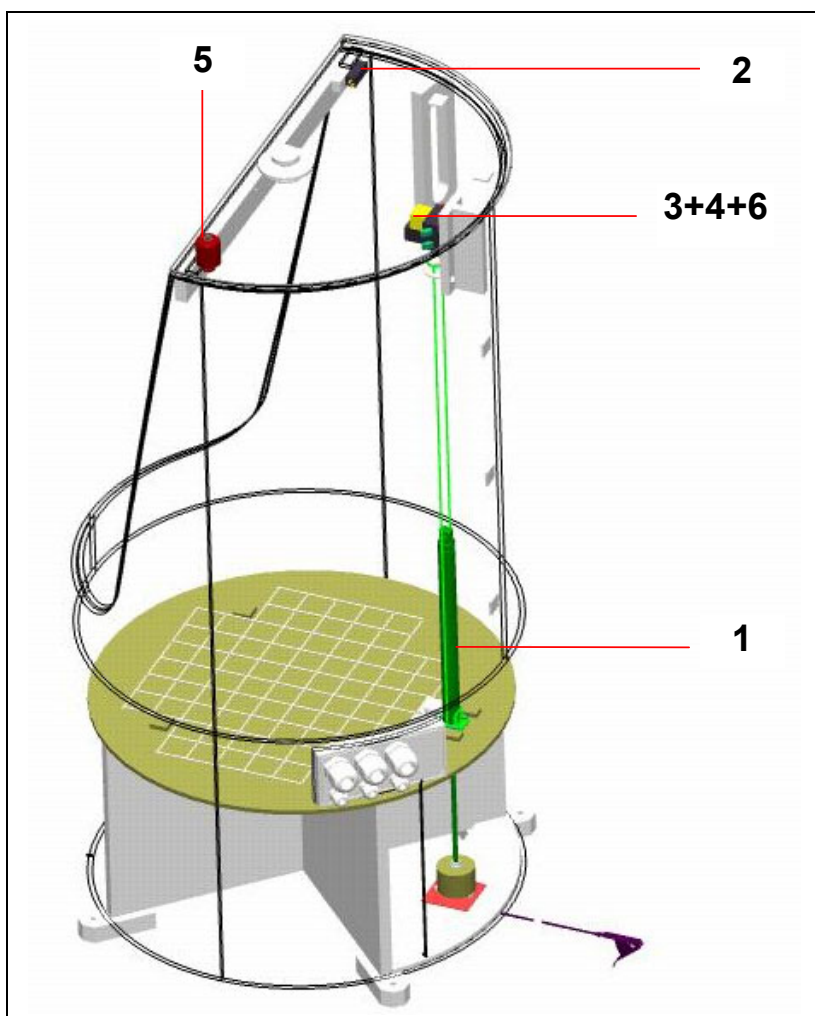
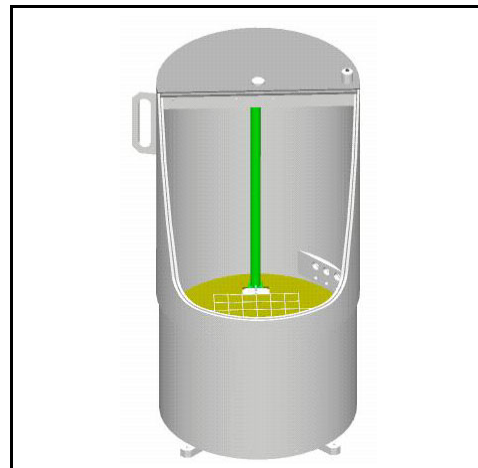
La base se monta en la pistola KA. Ex en vez de la barra generadora.

# 129.397.910



<p><b>Doc. 573.305.050</b>  Date/Datum/Fecha : 30/12/21  Annule/Cancela/  Ersetzt/Anula : 14/02/14</p>	<p><b>Modif. / Änderung :</b>  Mise à jour / Update / Aktualisierung  / Actualización</p>	<p><b>Pièces de rechange</b>  <b>Spare parts list</b>  <b>Ersatzteilliste</b>  <b>Piezas de repuesto</b></p>
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## BULLE HYDRODILUABLE II / ISO BUBBLE II WASSERLACK-ISOLIERBLASE II / BURBUJA II



**BULLE II / ISO BUBBLE II / ISOLIERBLASE II / BURBUJA II**

<b>avec barreau générateur / with generator barrel / mit Generator / con barra generadora</b>	<b>sans barreau générateur / without generator barrel / ohne Generator / sin barra generadora</b>
<b># 148.260.100</b>	<b># 148.260.000</b>

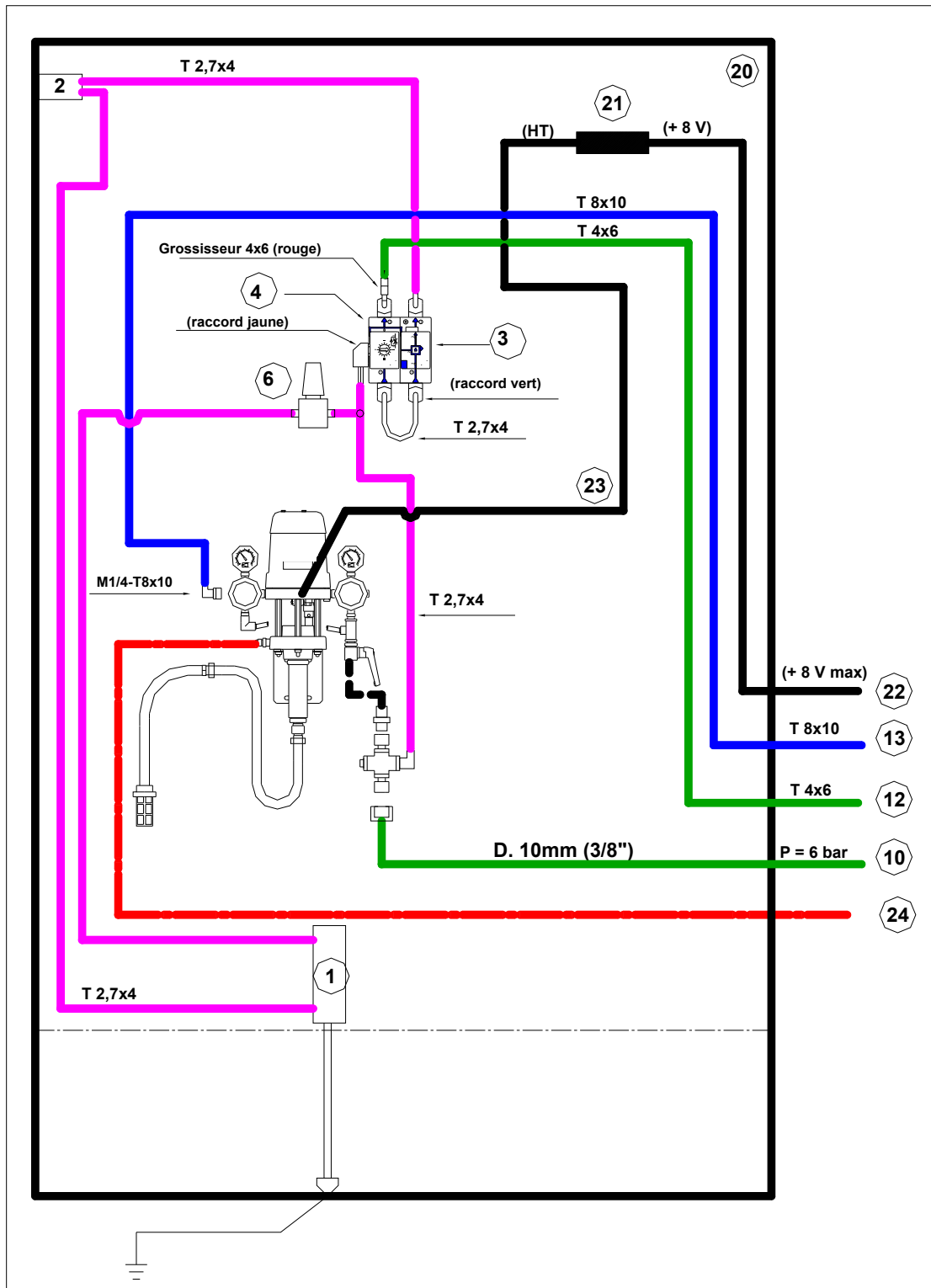
**Pièces communes - Common parts - Gleiche Teile - Partes comunes**

Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
1	903 020 521	Vérin pneumatique	Single acting cylinder	Pneumatischer Erdungszylinder	Pistón neumático	1
2	903 020 516	Interrupteur de porte	Door switch	Türendschalter	Interruptor de apertura de la puerta	1
3	903 050 506	Amplificateur (cellule OUI)	Amplifier	UND-Ventil	Amplificador	1
4	903 050 507	Réducteur de débit	Flow reducer	Drosselventil	Reductor de caudal	1
5	919 100 104	Aimant	Magnet	Magnet	Imán	1
6	903 130 603	Détendeur d'air (0,5-8,5 bar)	Air regulator (0.5-8.5 bar / 7.2-123.3 psi)	Luftdruckregler (0,5-8,5 bar)	Reductor de aire (0,5-8,5 bar)	1
10	050 370 502	Tuyau d'air isolant (Ø 10, long. 5 m)	Air hose (isolating) (Ø 3/8", length : 5 m / 16.5 ft)	Luftschlauch (isoliert) (Ø 10, Länge 5m)	Tubería de aire (aislante) (Ø 10, 5 m de largo)	1
		<i>Tuyau en polyamide</i>	<i>Hose, polyamide</i>	<i>Polyamidschläuche:</i>	<i>Tubería de poliamida</i>	
11	050 372 102	Ø 2,7 x 4 (long. 25 m)	Ø 2,7 x 4 (length : 25 m / 82 ft)	Ø 2,7 x 4 (Länge : 25 m)	Ø 2,7 x 4 (25 m de largo)	1
12	050 372 103	Ø 4 x 6 (long. 25 m)	Ø 4 x 6 (length : 25 m / 82 ft)	Ø 4 x 6 (Länge : 25 m)	Ø 4 x 6 (25 m de largo)	1
13	050 372 125	Ø 8 x 10 (long. 25 m)	Ø 8 x 10 (length : 25 m / 82 ft)	Ø 8 x 10 (Länge : 25 m)	Ø 8 x 10 (25 m de largo)	1
15	016 380 000	Détendeur d'air (0-3,5 bar)	Air regulator (0-3.5 bar / 0-51 psi)	Luftdruckregler (0-3,5 bar)	Reductor de aire (0-3,5 bar)	1
16	910 011 205	Manomètre (0-6 bar)	Gauge (0-6 bar / 0-87psi)	Manometer (0-6 bar)	Manómetro (0-6 bar)	1

**Pièces spécifiques - Specific parts - Spezifische Teile - Partes específicas**

Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
21 + 22	129 397 650	Barreau générateur Ex avec câble basse tension (long. 6 m) (voir Doc. 573.348.050)	Ex-Generator barrel with low voltage cable (length : 6 m / 19.7 ft ) (see Doc. 573.348.050)	ExGenerator stab mit Niederspannungskabel (Länge : 6 m) (Siehe Dok. 573.348.050)	Barra generadora Ex con cable baja tensión (6 m de largo) (consultar Doc. 573.348.050)	1
23	129 391 090	Câble HT (long. 1 m) (liaison sortie BG - pompe)	HV cable (length : 1 m / 3.28 ft) (GB outlet - pump connection)	Hochspannungskabel (Länge : 1 m) (zwischen Generator und Pumpe)	Cable HT (1 m de largo) (conexión salida BG -bomba)	1

**Exemple de montage avec une pompe 10-14 / Assembly example with a pump, model 10-14**  
**Montagebeispiel mit einer Pumpe 10-14 / Ejemplo de montaje con una bomba 10-14**



Ind. 24 : tuyau produit (non fourni avec la bulle) → voir Doc. 573.304.050

Ind. 24 : fluid hose (not supplied with the bubble) → refer to Doc. 573.304.050

Pos. 24 : Materialschlauch (nicht mit der Isolierblase geliefert) → siehe Dok. 573.304.050

Índ. 24 : tubería producto (no suministrada con la burbuja) → consultar Doc. 573.304.050