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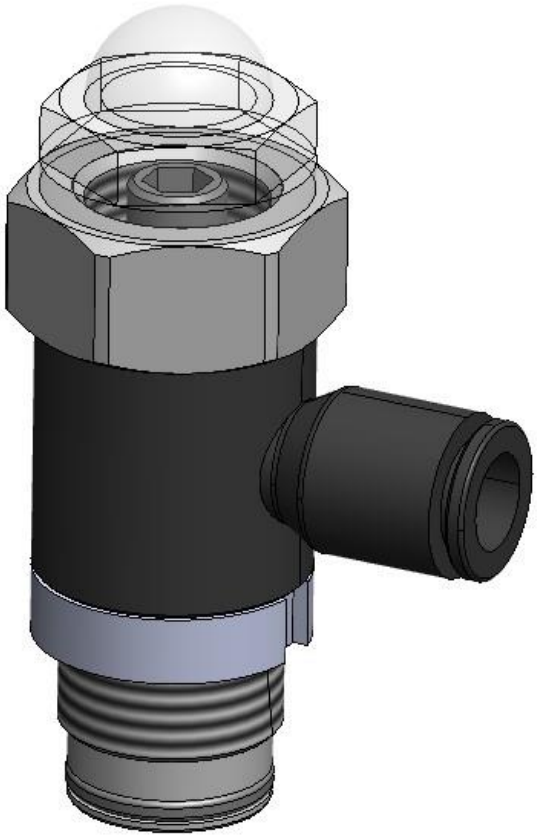

Illustration for reference only

Burst cartridge

Operation and assembly instructions

Table of Contents

1 Notes on the documentation

1.1 Manufacture

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1.2 Aim and purpose

The documentation provides the descriptions relevant for installation, maintenance, replacement, verification of functionality and dismantling, including all relevant information, especially regarding safety. If deviating or supplementary points arise during the installation of the burst cartridges, these must be documented and observed in addition.
All illustrations in this manual are similar to the objects described but may differ in certain details.

1.3 Copyright

NOTICE	
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	To improve readability, this manual omits the ® symbol when referencing registered trademarks.

2 Security

This chapter contains

- general safety instructions and
- components-specific safety instructions.

Definitions (as used in this manual – see also EN 16985:2018)**:**

- Coating system: A complete setup comprising a coating machine, spray booth, a fire detection system (if applicable), fire extinguishing equipment, and a technical ventilation system.
- Coating machine: A machine developed for the application of paints for quality assurance
- Spray booth: Spray booths are used for manual and automatic application of coatings. Spray booths also serve to guide the airflow.
- Fire protection system: A system for detecting fires.
- Technical ventilation system: A technical ventilation system is used to extract overpaint and solvent fumes that form during the application and handling of coating and solvent materials in the spray booth.

Improper installation of the burst cartridge may pose serious hazards. All personnel responsible for its use must carefully read, understand, and fully comply with the instructions in this chapter. Particular attention must be paid to the safety instructions, which are clearly highlighted in the operating manual. These instructions must be strictly always adhered to

The burst cartridge has been specifically tested and developed for use in coating machines operated in designated areas. Within the coating machine, the cartridge must only be installed in a media circuit where the medium is conveyed by a gear pump. It must be positioned immediately downstream of the gear pump and electrically bonded to the machine's potential equalization system.
Prior to installation, the operator of the coating system must verify that the burst cartridge is suitable for use in the intended coating machine. The cartridge is not designed to provide personal protection.

Installation, removal, maintenance, and replacement may only be performed by trained and qualified personnel who are familiar with the hazards associated with the coating machine. The following chapters do not provide detailed information on the hazards of the coating machine. Therefore, the machine's operating manual must also be strictly observed regarding all safety requirements.

2.1.1 Safety labelling

2.1.2 Structure of the safety information

⚠ SIGNAL WORD	
Safety symbol	Type and source of the danger Possible consequence(s) of non-compliance • Measure(s) to avert the danger

In the operating manual, the safety instructions are classified according to the severity of the hazard and the likelihood of its occurrence. The described measures to avoid hazards must be strictly followed. The operating manual uses warning, prohibition, and mandatory symbols with different meanings

2.1.3 Signal words

⚠ DANGER
DANGER warns of an imminent threatening situation which, if ignored, may result in serious injury, including death.

⚠ WARNING
WARNING warns of an imminent threatening situation which, if not avoided, may result in serious injury, including death.

⚠ CAUTION
CAUTION warns of an imminent threatening situation which, if not avoided, may result in minor injury.

NOTICE	
	Important notes on explosion protection. Failure to observe the notes can lead to fires, explosions, and deflagrations.
	Notes on the avoidance of personal injury and property damage. Failure to observe these instructions can result in serious personal injury, damage to machinery, or even a system standstill.
	User tips and useful information.

NOTICE	
	User tips and useful information.

NOTICE	
	Notes on the prevention of environmental damage.

2.1.4 Safety symbols

2.1.4.1 Warning symbols

Examples of warning symbols for marking hazardous points according to DIN 4844-2.

	**Warning of a hazardous point** • Life-threatening situation.
	**Warning of dangerous electrical voltage** • Life-threatening voltage.
	**Warning of explosive atmosphere** • Explosive gas concentrations, in connection with hot, live and moving parts, can cause fires, explosions and deflagrations. • Risk of serious or fatal injuries.
	**Warning of automatic startup** • Life-threatening situation.
	**Warning of hand injuries** • Danger of crushing.

2.1.4.2 Prohibition symbols

Examples of prohibition symbols for marking hazardous points according to DIN 4844-2.

	**Authorized personnel only** • Life-threatening situation.
	**Fire, open light, and smoking prohibited** • Fire and explosion hazard.

2.1.4.3 Instruction symbols

The instruction symbols indicate the personal protective equipment which must be worn.
To prevent injuries, the required personal protective equipment should be worn for the activity indicated by these symbols.

	**Wear eye protection** • The safety glases prevent eye injuries caused by flying media or parts.
	**Wear protective gloves** • Protective gloves prevent crushing and cutting injuries to hands and fingers. • Conductive protective gloves also prevent ignition hazards due to electrostatic charging. • The gloves must meet the requirements of EN ISO 1149-5. The measured insulation resistance must not exceed 100 MOhm.
	**Wear protective shoes** • Safety shoes prevent crushing of feet and toes. • Conductive shoes also prevent ignition hazards due to electrostatic charge. • The shoes must meet the requirements of EN ISO 20344. The measured insulation resistance must not exceed 100 MOhm.
	**Wear work clothes** • Work clothing avoids exposure to harmful or hazardous materials. • Work clothing should be selected to fit tightly to the body and thus avoid hazards from being pulled in on moving machine components. • Conductive work clothing prevents ignition hazards due to electrostatic charging.
	**Wear hearing protection** • The hearing protection avoids hearing damage.

	**Wear respiratory protection** • The respiratory protection avoids damage to the respiratory tract.

	**Disconnect before working** • Disconnect the system from its mains before starting any work.

	**Lock** • Secure the system against unintentional restart by locking it.

	**Observe the operation manual** • Observing the operation manual prevents injuries due to incorrect usage.

2.2 Safety Concepts

2.2.1 Organizational measures

Organizational measures serve to reduce accidents risks and protect personnel from hazards. These measures include procedures to raise employee awareness of potential dangers.

The operating manual must therefore be kept readily accessible at the coating system in which the burst cartridge is installed for all responsible personnel (operators, maintenance, service staff, etc.). In addition to the operating manual, applicable statutory and other binding regulations for accident prevention and environmental protection must be observed and enforced. Such obligations may, for example, include handling of hazardous substances or provision and use of personal protective equipment.

Personnel assigned to installation, removal, maintenance and replacement of the burst cartridge must read and understand the operation manual, with particular attention to the chapter "Safety", before commencing and work related to the cartridge.

2.2.2 Personnel selection and qualification

The operator of the coating system in which the burst cartridge is installed is responsible for preventing injury, property damage and environmental harm. Accordingly:

- Only trained or instructed personnel are permitted to perform work on the burst cartridge. Responsibilities for installation, removal and maintenance must be clearly defined.
- Personnel in training or under instructions may only perform work on the burst cartridge under the direct supervision of qualified personnel.
- Auxiliary staff may only carry out tasks under continuous supervision of qualified personnel and must be instructed in all applicable safety procedures.
- Connection of the burst cartridge to the coating machine's potential equalization may only be performed by a qualified electrician, in accordance with relevant electrical regulations.
- Only personnel with specialized knowledge and experience in hydraulics and pneumatics is allowed to work on hydraulic and pneumatic systems.

2.2.3 Life cycle of the burst cartridge

The burst cartridge passes through several safety-relevant life cycle stages. Each stage involves specific conditions, operating procedures and potential hazards that must be considered. The following life cycle stages are defined:

Assembly, transport and installation

- Assembly at the manufacturer
- Transport
- Installation at the coating system

Operation and use

- Operation of the coating machine with the installed burst cartridge
- Fault detection and troubleshooting
- Maintenance
- Cleaning
- Service and replacement

Decommssioning

- Removal
- Disposal

2.3 General hazards and protective measures

This section outlines general hazards associated with the burst protections cartridge. It is essential to note that the cartridge is installed in a coating machine, which is part of a complete coating system. A typical coating system consists of: a coating machine, if applicable, a fire detection system and fire extinguishing equipment, a technical ventilation system, a spray booth. The coating machine is located in an EX-protection area.

The possible hazards associated with the coating system are described below. For detailed information regarding safety and safety regulations of the coating system, the operating manuals and other relevant documentation of the respective coating system or coating machine must always be observed.

2.3.1 Fires, explosions and deflagrations

A fire can occur whenever a substance is heated above its flash point. The risk of explosions and deflagrations may occur if the concentration of a flammable substance exceeds the lower explosive limit and an ignition source is present.

⚠ HAZARD

Hazards include:

- Combustible paint residues causing flashovers and promoting fire.
- Solvent vapors during evaporation.
- Equipment not approved for EX-protection areas
- Vapors from cleaning fluids in high concentrations
- Grinding, welding and cutting operations
- Defective hoses and pipelines
- Spontaneous ignition of solvent-soaked cloths
- Spontaneous ignition from chemical reactions when different substances are mixed
- Electrostatic charges (accumulation of static electricity that may cause dangerous discharges)
- Ignition of explosive mixtures (gases, dusts, etc.) caused by short circuits. Electrical charges may accumulate on poorly grounded objects, including coated surfaces (capacitor effect). Upon reaching breakdown voltage or when a person or object approaches, discharge may occur in the form of a spark, potentially causing fire or explosion.

Protective measures

Regular visual inspections of the burst cartridge is a prerequisite for uninterrupted operation of the coating machine and is critical for fire and explosion protection. The burst cartridge itself does not pose an ignition hazard.

NOTICE	
	The explosion protection of the burst cartridge installed in a coating machine is ensured by the following points: • The burst cartridge may only be installed in coating machines operated within designated areas. • The burst cartridge must be properly grounded to the coating machine's potential equalization. A floating potential is not permitted • The return container connected to the cartridge's media outlet must be connected to the coating machine's potential equalization. • Regular inspection of the respective potential equalization. • The media circuit connected to the media outlet must be rated for the burst differential pressure. • Use only equipment approved for the corresponding EX zone during cleaning operations. • Do not use sparking tools during maintenance, installation, or removal of the burst cartridge. • Maintenance and cleaning may only be performed with the technical ventilation system switched on and fully operational. • Maintenance, installation, removal, and cleaning tasks may only be carried out by trained personnel. • Connection of the burst cartridge to the coating machine's potential equalization may only be carried out by a qualified electrician or by trained personnel under the supervision of a qualified electrician. • Wear antistatic clothing and footwear. • Welding, flame-cutting, and grinding work may only be performed with authorization. • Regularly check media connections and outlets for leaks. • Observe general safety regulations.

2.3.2 Electrical voltage

⚠ DANGER
Hazards due to electrical shock: • Contact with live components of the coating machine with damaged insulation. • Contact with conductive parts that are only live in case of a fault. • Contact with live parts during installation, removal, or maintenance. Secondary hazards: • Falling • Collisions • Fire

Protective measures

Connection of the burst cartridge to the coating machine's potential equalization may only be carried out by a qualified electrician or by trained personnel under the supervision of a qualified electrician and in accordance with electrical regulations.

NOTICE	
!	Observe the five safety rules according to DIN VDE 0105 • Disconnect from power. • Secure against reconnection. • Verify absence of voltage on all poles. • Ground and short-circuit. • Cover or isolate adjacent live parts. Additional: • The burst cartridge must be connected to the coating machine's potential equalization (it must not have a floating potential). • The return container connected to the cartridge's media outlet must be connected to the coating machine's potential equalization. • Regular inspection of the potential equalization. • Use only original components. • Components being worked on may only be live if expressly required. • For all installation, removal, maintenance, repair, and cleaning work, the coating machine with the burst cartridge must be switched off and secured against reconnection. If necessary, place a warning sign on the main switch. • Use only suitable measuring instruments and insulated tools. • If work on live components is necessary, a second person must be present to operate the emergency stop or main switch in case of emergency.

2.3.3 Mechanical hazards

⚠ DANGER
Hazards due to: • Pinching, crushing, cuts, and impact injuries during installation, removal, replacement or maintenance of the burst cartridge.

Protective measures

Installation, removal, maintenance, replacement and cleaning of the burst cartridge installed in a coating machine may only be performed by trained and qualified personnel.

NOTICE	
	Protection against mechanical hazards of the burst cartridge installed in a coating machine is ensured by the following points: • Parts weighing less than 25 kg may be lifted manually by one person, considering ergonomics and accessibility. • Wear protective clothing (gloves, close-fitting clothing, hairnet if necessary). • Wear safety shoes.

2.3.4 Process medium under pressure and stored pneumatic energy

⚠ WARNING
Hazards due to: • Sudden release of high-pressure air • Ejection of liquids under high pressure • Burst hoses, pipes, or connectors • Flying parts due to loose components and lines • Pressure-loaded lines after an emergency stop of the coating machine Secondary hazards: • Noise • Vapors • Falling • Collisions

Protective measures

Work on pressurized systems may only be performed by personnel with specialized knowledge and experience in pneumatics or hydraulics.

NOTICE	
!	Protection against pressurized fluid and stored pneumatic or hydraulic energy in connection with the burst cartridge is ensured by: • In case of leakage, immediately relieve pressure from the affected lines or the entire machine (close main valve). Press the emergency stop. • Depressurize system sections and pressure lines to be opened before maintenance and secure against reconnection. • The burst cartridge may only be installed in a media circuit with a gear pump. • The media circuit connected to the outlet must be rated for the burst differential pressure. • Before performing work on the cartridge, ensure that the coating machine's energy supply is disconnected. This includes switching off and securing main switches as well as isolating compressed air lines. • Any opening of lines after an emergency stop must be performed cautiously. • Wear protective clothing, eye protection and gloves.

2.3.5 Organic coating materials, solvents and cleaning chemicals

⚠ WARNING
Hazard due to: • Skin or eye contact • Inhalation of aerosols • Triggering allergic reactions • Environmental damage from improper disposal Secondary hazards: • Explosion • Fire • Deflagration

Protective measures

NOTICE	
	Protection against organic coatings, solvents and cleaning agents in connection with the burst cartridge is ensured by: • Observe the safety data sheets of the respective substances. • Wear protective clothing, eye protection and gloves. • Use respiratory protection if aerosols may form. • Work may only be performed with the technical ventilation system switched on and fully operational. • Observe protective measures to prevent explosions and fires.

Prolonged contact with solvents or cleaning agents can strip the skin of its natural oils, causing dryness and cracks, increasing susceptibility to skin diseases. Coatings and cleaning agents may contain flammable solvents, even in diluted form (e.g., water-thinned paints with ~10% solvent), posing a fire and explosion risk.

NOTICE	
	• Ensure safe and environmentally responsible disposal of operational and auxiliary substances. Collected materials (e.g., oils, solvents) and replaced parts must be retained, recycled, or disposed of properly. • Improper disposal may cause environmental damage. • Observe drinking water and water body protection regulations.

2.3.6 Oils, greases and other chemical substances

⚠ WARNING
Hazard due to: • Skin or eye contact • Triggering of allergic reactions • Environmental damage due to improper disposal Secondary hazard: • Slip hazard in the event of spillage

Protective measures

NOTICE	
	Protection against oils, greases and other chemical substances in connection with the burst cartridge installed in a coating spray machine is ensured by the following measures: • Observe the safety data sheets (SDS) of the respective substances. • Wear protective clothing, eye protection and protective gloves. • When handling oils, greases and other chemical substances, comply with the applicable national and regional safety regulations for the product. • Risk of slipping due to spilled oils and greases: immediately absorb any spilled quantities and clean the affected area.

NOTICE	
	• Ensure safe and environmentally sound disposal of operating and auxiliary materials. Any accumulated substances (e.g. oil) as well as replaced components must be collected, recycled or disposed of properly. • Environmental damage may occur if disposal is improper. • Observe drinking water and water protection regulations.

2.3.7 Gases and solvent vapors

⚠ WARNING
Hazards due to: • Inhalation of solvent vapors. • Inhalation of spray aerosols. • Inhalation of gases from automatic fire extinguishing systems (e.g. CO_2).

Protective measures

NOTICE	
!	Protection against gases and solvent vapors in connection with the burst cartridge installed in a coating spray machine is ensured by the following measures: • Assembly, disassembly, maintenance, replacement and cleaning work related to the burst cartridge may only be carried out when the technical ventilation system of the coating spray installation is switched on and fully effective. • When entering rooms where hazardous gases may be present, wear respiratory protection or wait for sufficient air exchange. • Rooms equipped with automatic fire extinguishing systems must be fitted with visual and acoustic warning devices. All personnel must be instructed and informed about the associated hazards.

2.3.8 Noise

⚠ WARNING
Hazards due to: • Tinnitus, hearing damage, stress and discomfort due to excessive noise generated by spray guns. • System venting operations.

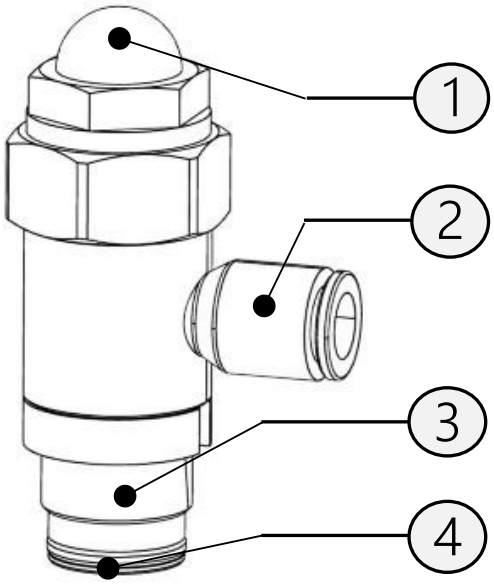
Protective measures

NOTICE	
!	Protection against noise in connection with the burst cartridge installed in a coating spray machine is ensured by the following measures: • In designated areas, always wear the prescribed personal hearing protection.

3 Description of the burst cartridge

The burst cartridge contains a rupture disc that protects the connected piping system against overpressure. Liquid and gaseous media can be discharged in a controlled manner via a media outlet connection. Activation of the rupture disc can be visually detected through the sight glass. The burst cartridge is screwed into a connection block that provides a low dead-volume connection between the cartridge and the fluid line.

3.1 Overview of the main components

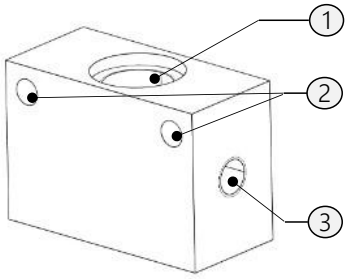
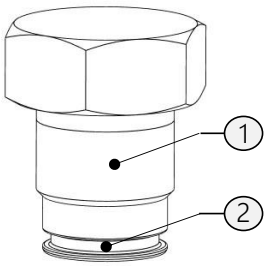


[1] Sight glass
[2] Discharge point (quick connector for hose OD 8mm)
[3] Connection point (M18 x 1 outer thread)
[4] Rupture disc (not visible)

Main components of the burst cartridge (Art. No. 501930)

3.2 Accessories

The following accessories are avaible for the burst cartridge and are recommended to ensure its proper and reliable operation.

ACCESSORIES	
	**Connection block (Art. No.: 501940):** The connection block provides a low-dead-volume interface for integrating the burst cartridge into the fluid line of the coating system. Features: • Internal thread M18 x 1 [1] for connecting the burst cartridge • Inlet [3] and outlet (not visible) for connection to the fluid line and gear pump of the coating system: 2x internal thread G1/8 with a 90° cone for industry-standard push-in fittings. • d_i = 6mm connection block • Mounting options [2] $d_{drill\ holes}$ = 6,5mm • Other sizes and custom designs available upon request Material: • Stainless steel
	**Sealing screw (Art. No.: 505668):** The sealing screw can be installed in the connection block if no replacement burst cartridges are available. This allows coating operations to continue without interrupting flushing or coating results. The screw is hand-tightened using a hex wrench (SW24) with a maximum torque of 6 Nm until it reaches the stop. Features: • External thread M18 x 1 [1] • O-ring seat [2] (Attention: O-ring must be ordered separately) Material: • Polyoxymethylen (POM) – black • Stainless steel available upon request **Attention:** After installing the sealing screw, the corresponding media circuit is no longer protected against overpressure. O-ring-Material options: 1. FFKM (Art. Nr.: 503849) 2. Viton (Art. Nr.: 505827)

3.3 Transport, packaging and storage

3.3.1 Transport and packaging

Each burst cartridge and, if applicable, its accessories are delivered in a plastic packaging. The packaging bears the following information (example shown for the burst cartridge):

Burst cartridge
Art. Nr.: 501930

PREBAS GmbH
Am Zwerggewann 1
D-63150 Heusenstamm
Germany
Phone: +49 6104 94739-0

E-Mail: info@prebas.com
https://www.prebas.com

3.3.2 Temporary storage

If the burst cartridges and, where applicable, accessories are not installed immediately after delivery, they must be stored carefully in a location protected from moisture, dust, cold and extreme heat.

3.3.3 Transport damages

Any missing parts or transport damage must be reported to PREBAS immediately in writing.

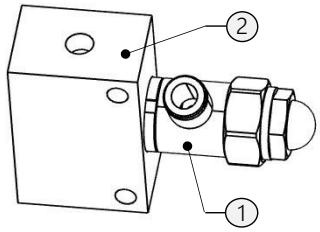
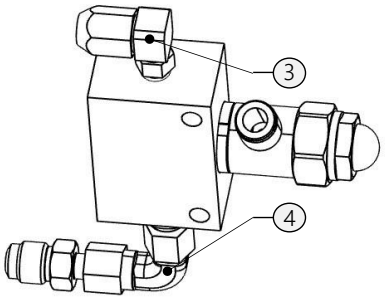
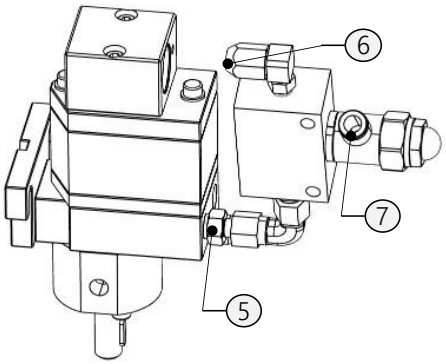
3.3.4 Disposal of the burst cartridge

The triggered burst cartridges can be disposed of as "mixed waste for recovery (commercial waste)".

NOTICE	
	If the triggered burst cartridges are replaced, they can be sent to PREBAS. The returned burst cartridges will be inspected to determine whether they can be repaired and cleaned. If this is the case, a quotation for the repair and cleaning will be provided upon customer request.

3.4 Installation and removal

The following installation instructions describe the essential steps for mounting the burst cartridge in a coating system. During installation, removal, replacement and operation, the safety regulations outlined in Section 2 – Safety must be strictly observed.

INSTALLATION MANUEL	
	**Step 1:** • Screw the burst cartridge [1] into the connection block [2] until it reaches the stop – hand-tighten with max. 6 Nm (example shown: PREBAS connection block). • Recommendation: Apply a thin layer of silicone-free special grease (Art. No.: 500043) to the O-rings and threads.
	**Step 2:** • Connect the burst cartridge to the fluid line [3] (example: angled fitting). • Connect the burst cartridge to the gear pump [4] (example: angled fitting).
	**Step 3:** • Connect the outlet of the gear pump [5] (example: angled fitting). • Connect the fluid line [6]. • Connect the return line to the reservoire [7]. • Ensure proper potential equalization with the coating system.

3.5 Intended use

The burst cartridge is intended solely for use in coating systems operated within a designated area. During installation, removal and operation, the following points must be observed:

- The burst cartridge may only be installed in a fluid circuit where the medium is pumped by a gear pump.
- The burst cartridge must be installed immediately downstream of the gear pump. Only the media circuit connected to the outlet of the connection block is protected against overpressure if a properly functioning burst cartridge is installed. Warning: The burst cartridge does not protect personnel.
- The burst cartridge must be included in the potential equalization of the coating system.
- The burst cartridge must be screwed fully into the connection block until it reaches stop.
- If a connection block other than the PREBAS model is used, the sealing effect between the burst cartridge and the connection block must be ensured. Otherwise, paint may accumulate in the gap, potentially affecting flushing results.
- If required, the sealing screw may be used to achieve the same sealing effect between the burst cartridge and the connection block. Otherwise, paint may accumulate in the gap, potentially affecting flushing results.
- The media circuit connected to the burst cartridge's outlet must be designed to handle the process medium at the burst differential pressure.
- A return container must be connected to the media drain, and it must be integrated into the coating machine's equipotential bonding system.
- Additional information can be found in the burst cartridge datasheet.

Important: The theoretical burst pressure of the hose and the burst differential pressure of the burst cartridge must be matched to ensure optimal overpressure protection and to avoid unnecessary cartridge use. Refer to the table below:

POSSIBLE PAIRINGS OF PAINT HOSE AND BURST CARTRIDGE	
Theoretical burst pressure hose *(see manufacturer datasheet)*	Burst differential pressure burst cartridge *(see datasheet)*
≥ 40,5 bar	35,0 bar ± 10%

3.6 Replacement of the burst protection cartidge

- Observe all safety instructions from Section 2 – Safety.
- Wear appropiate protective clothing.
- Use only approved tools.

Recommended steps for replacing the burst cartridge:

1) Flush the affected fluid line if necessary to remove any potential paint residues from the connection block.
2) Set the coating system to a depressurized state and secure it against reactivation.
3) Switch off the main machine switch and secure against reactivation.
4) Disconnect the hose from the return reservoir and inspect for damage or blockages.
5) Replace the hose to the return reservoir if required.
6) Unscrew the triggered burst cartridge from the connection block.
7) Inspect the connection block for any paint residues and remove them if present.
8) Screw the new burst cartridge into the connection block until it reaches the stop, hand-tightened with a maximum torque of 6 Nm.
9) Connect the hose to the return reservoir at the media outlet of the burst cartridge.
10) Flush the affected fluid line as required.

Important: If the burst cartridge has been triggered and replaced, the connected media circuit must be inspected for possible causes, such as a blocked or kinked hose or a malfunctioning valve

NOTICE	
!	If the triggered burst cartridges are replaced, they can be sent to PREBAS. The returned burst cartridges will be inspected to determine whether they can be repaired and cleaned. If this is the case, a quotation for the repair and cleaning will be provided upon customer request.

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3.6.1 Misuse

Potential misuses:

- Formation of a paint layer on the burst disc due to improper flushing of the coating system. This may cause the burst cartridge to lose its functionality.
- Formation of a paint layer on the burst disc due to improper handling or use of the burst cartridge. This may cause the burst cartridge to lose its functionality.
- Leakage caused by incompatible combinations of burst cartridge, connection block, and sealing screw. Paint may accumulate in the gap between the burst cartridge and connection block or between the sealing screw and connection block, potentially leading to poor flushing results. It is recommended to use original PREBAS accessories.
- Not suitable for operation in coating systems used in explosion-hazard zones 1 or 0.
- Any additional possible misuses identified by the operator of the coating system should be reported to PREBAS to update this list.

4 Cleaning

4.1 General information

NOTICE	
	**Operator responsibilities:** • The burst cartridge must be properly connected and integrated into the coating system's fluid circuit so that it is flushed according to the prescribed intervals of the coating system. Proper flushing is essential for uninterrupted production and is critical for fire and explosion protection. • Personnel performing flushing must be trained regarding potential hazards associated with flushing coating systems. Knowledge must be regularly refreshed and verified through operator-led training. • Cleaning personnel performing maintenance on the burst cartridge must be trained regarding potential hazards associated with cleaning in coating systems. Knowledge must be regularly refreshed and verified through operator-led training. • Safety instructions in Section 2 – Safety must be observed.
	**Paint compatibility („LABS-free")** • All materials used for the burst cartridge and its accessories are completely silicone-free and compatible with coatings according to the state of the art. • Use of materials that are incompatible with paints, cause cratering, or contain silicone is prohibited. • PREBAS is not liable for direct or indirect damages resulting from the use of such materials.
	• Any unsafe handling of the burst cartridge must be avoided. • During cleaning (other than flushing), the coating system must be secured against reactivation. Place a warning sign at the main switch. • If necessary, the cleaning must be secured. • Cleaning must only be performed with operational and effective ventilation.

4.2 Cleaning checklist

The following cleaning tasks are suggested for scheduled maintenance. If contamination is found on the burst cartridge that could affect the functionality or production safety of the coating system, cleaning should be performed as soon as possible, e.g., during the next coating break. The cleaning intervals provided are indicative and may vary depending on machine usage.

Components	Cleaning measures	D	W	M	Y
Pipes, hoses	Flushing	X			

5 Maintenance and inspections

NOTICE	
	The maintenance tasks and recommended intervals listed below are provided guidelines by PREBAS. **Operator responsibilities:** • Maintenance of the burst cartridge is essential for uninterrupted production and is critical for fire and explosion protection. • Personnel performing maintenance on the burst cartridge must be trained on potential hazards associated with the coating system in which the burst cartridge is installed. Knowledge must be regularly refreshed and verified through operator-led training. • Safety instructions in Section 2 – Safety must be observed.

5.1 Maintenance and inspection checklist

5.1.1 Burst protection cartidge

Components	Maintenance tasks	Remarks	Interval
All lines, hoses, and connections to the burst cartridge, and if applicable, the connection block into which the burst cartridge is installed	Check cleanliness, functionality, sealing, and condition. Inspect for breakage, kinks, or other damage.	Replace if necessary	Weekly
Sight glass and return hose of the burst cartridge	Visual inspection	Replace burst cartridge if necessary	Daily

5.1.2 Recurring inspections by a qualified electrician

NOTICE	
	**Qualified electrician:** • A qualified electrician is a person who, due to their professional training, knowledge, and experience, as well as familiarity with applicable regulations, can assess the assigned work and identify potential hazards.

Inspection	Notes	Interval
Connection of the burst cartridge to the potential equalization of the coating system	Check all connections for functionality. Inspect for tightness, damage, contamination and corrosion.	Monthly