Martin® Inspection Door

Installation manual
M3127UK

1 Contents

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2 Introduction

2.1 About this Installation Manual

Non-compliance with this installation manual can lead to the loss of any liability claim and/or guarantee.

2.1.1 Scope

This installation manual applies exclusively to the product described herein and is aimed at those individuals who install this product, put it into operation and monitor its use.

2.1.2 Copyright

The technical standard at the time of delivery of the product and technical documentation is decisive, as long as no other information is given. We reserve the right to make technical changes without any announcement. Earlier documents will no longer be valid. Martin Engineering General Conditions of Sale and Delivery apply.

2.1.3 Disclaimer

Martin Engineering guarantees the faultless operation of the product according to the advertising, edited product information, and technical documentation. Martin Engineering does not accept any liability for the efficiency and proper operation, if this product is used for any other purpose, other than as described in the section "Appropriate Use"; or for any damage caused by the use of accessories and/or spare parts, that were not delivered and/or certified by Martin Engineering.

The products from Martin Engineering are designed for a long service life. They conform to the respective current state-of-the-art science and technology and they have been thoroughly tested prior to delivery. In addition to continuous advanced development of products, Martin Engineering also conducts constant product and market analyses.

In the event of faults and/or technical problems Martin Engineering offers professional support. Appropriate steps will be taken immediately. Martin Engineering's warranty conditions apply, which can be sent if required.

2.1.4 Reference to additional documentation

The following standards and directives were applied when composing this installation manual:

- EU Machinery Directive (2006/42/EC)
- ISO/IEC Guide 37 "Installation instructions for end-consumer used products“, edition 1995
- DIN 1421 "Structure and numbering in texts", edition 1983-01
- DIN/EN 12100 "Safety of machinery - Basic concepts, general principles of design", edition 2013-08
- DIN / ISO 16016 "Technical product documentation - Protection notices for restricting the use of documents and products", edition 2007-12
- DIN/EN 60204-1 "Safety of machinery - Electrical equipment of machines, Part 1, General requirements", edition 2007-06
- DIN EN 82079-1 Preparation of instructions for use - Structuring, content and presentation - Part 1: General principles and detailed requirements.

2.1.5 Classification of hazards

DANGER!

This indicates an imminent danger that leads to serious physical injuries or death, if not avoided.

WARNING!

This indicates a potentially dangerous situation that could lead to serious physical injuries or death, if not avoided.

CAUTION!

This indicates a potentially dangerous situation that could lead to minor physical injuries and/or damage to property, if not avoided.

NOTE

Contains information to the installation or use of the product and points to situations that cause neither injuries nor property damage but is nevertheless important information.

2.2 Appropriate Use

Martin® inspection doors predominantly serve maintenance and inspection service when using Martin Engineering cleaners and their accessories.

Martin® inspection doors can be used in temperature ranges from -30°C to +205°C, depending on the chosen option.

Martin® inspection doors are not suitable for a horizontal arrangement to enable access to walkable areas.

Any other use of this product is deemed to be inappropriate. If you wish to use the product for any other purpose, please contact Martin Engineering Customer Service. We will be happy to assist you with product configuration.

2.2.1 Use in EX-protection areas

Under certain circumstances, this product can also be used in potentially explosive areas. Contact Martin Engineering for more information on use in potentially explosive areas.

The use of the scraper in a device protection category that is higher than that specified or under operating conditions other than those specified by Martin Engineering is not permissible or may be done only if Martin Engineering has granted its approval.

2.2.2 Operating limits of this product

The use of the product mentioned here is allowed only within the specified specifications. Using it in a higher than specified equipment category or under operating conditions other than those named and previously specified by Martin Engineering is considered to be inappropriate use and can only be carried out if approved by Martin Engineering.

If the product mentioned here is to be used for a different purpose, then Martin Engineering or a representative can help with the product configuration.

2.3 Safety in the Workplace

2.3.1 Safety instructions, safety in the workplace

This installation manual must be read through in full prior to commencing work on the product or the customer's conveyor belt system.

The operator must ensure that all installation, inspections, and maintenance tasks are carried out exclusively by authorised experts.

All work on conveyor belt systems and their accessories must always be carried out only when the system is at a standstill. It is essential that the procedures described in the relevant installation manual which explain how to shut-down the conveyor belt system are followed.

Upon completion of work, all safety equipment and protective guards must be reinstalled and put back into operation.

Prior to commissioning, installation must be completed. Before the conveyor belt can be put back into operation, the flawless execution of all steps should be checked and verified. All notes on installation and commissioning of the product should be observed.

2.3.2 Obligations of the operator

The operator of this product must ensure that the personnel entrusted with the installation, maintenance and use of this product are only those personnel who

- are fully aware of regulations governing safety at work and accident prevention,
- are instructed in the use of the product and have read and understood this installation manual in full.

2.3.3 Authorised personnel

Personnel are considered to be authorised when they have completed the necessary training, hold the technical experience, knowledge of the relevant standards and directives and are also in a position to assess any task in order to recognise a critical situation in a timely fashion and at an early stage.

Operational, Maintenance and Installation Personnel

Personnel are considered to be authorised if they have been instructed in the use of the product and have read and understood this installation manual in full.

3 Product Description

3.1 Design and Function

Available in rubber, steel or stainless steel, Martin® inspection doors offer quick and easy access to conveyor belt cleaners and other components within chutes and enclosures for inspection and maintenance works.

3.2 Models

The Martin® inspection doors are available in different models which can be used in different application conditions:

Inspection doors with rubber door (CYAR-XXXX):

- Preferably only used when the main axis of the conveyor belt cleaner is guided through the door. Appropriate for the tightest installation conditions due to the small required opening clearance
- Adaptable for different application conditions by simple exchange of rubber door (temperatures up to 121°C, food area, etc...)
- The rubber doors are available in nitrile or silicone. These doors are oil-resistant and appropriate for high temperatures (Standard up to 120°C - maximum 205°C). The silicone doors also have FDA approval for the use in the food industry.

Inspection doors with steel door (Angular) (CYA(H)-XXXXX):

- Can be used in high temperature area (up to 177°C)
- Hardest application conditions
- The steel doors are available in mild steel (1.0037) or stainless steel (1.4301, 1.4571).

Inspection doors with steel door (round) (CYARD-XXXXX):

- Small need for space
- The steel doors are available in mild steel (1.0037) or stainless steel (1.4301, 1.4571).

4 Installation Preparation

4.1 Prior to Installation

4.1.1 Materials and tools required

Only standard tools are required for the installation and maintenance of the inspection door.

4.1.2 Preparatory measures

NOTE

Pay attention to the following checks and carry them out completely.
The freight forwarder is responsible for any transport damage!
For any damage claims, please contact the freight forwarder.

1. Check the delivery with respect to the following:
   - Is the delivery complete? Is the number of pallets/cases/ containers the same as the number on the delivery note?
   - Does all the transport packaging appear to be undamaged? Is there damage which may indicate that the contained products may be damaged?
2. If the delivery is incomplete or there is any transit damage, make sure that this is documented and have the freight forwarder confirm the same. All damaged products should be saved for inspection.
3. Depending on the scope of the order, the delivery should contain the following parts:
   - Martin® Inspection Door.
   - One Warning label (access), P/N: 30382.
   - One Warning label (Excess pressure), P/N: 30266
4. Missing or damaged parts must be reported to Martin Engineering or the authorised dealer.

5 Installation

5.1 Safety Instructions

NOTE

Read this chapter thoroughly prior to commencing any work!

WARNING! DANGER OF INJURY!

Body parts and/or clothing may get caught and pulled in by rotating parts or by the moving conveyor belt.
Before any installation or maintenance work is carried out, ensure that all power sources to the conveyor belt system and its accessories are switched off and secured against inadvertent switching-on.
Use warning signs!

WARNING! EXPLOSION HAZARD!

In enclosed areas there is an increased risk of explosion when using a cutting torch or welding equipment!
Before use, check the level of gas and dust in the air.

NOTE

The chute wall on which the spring tensioner shall be installed is referred to as ‘operator side’. The other chute wall is called the ‘opposite side’.
When installing dual spring tensioners, the most accessible side is the "operator side".

5.2 Installation procedure

5.2.1 Determining the installation position

Martin® inspection doors are usually installed in connection with a conveyor belt cleaner or a tensioner. These products are installed at the same time.

Part of this installation is described in this installation manual. The remaining steps can be found in the installation manual for the conveyor belt cleaner or the tensioner.

There follows an overview of the installation steps:

No.	Installation step	Instruction
1	Determining the installation position	Scraper
2	Installing the Martin® inspection door	M3127
3	Installing the scraper	Scraper
4	Installing the tensioner	Tensioner
5	Tensioning the scraper	Tensioner

Tab. 1: Installation steps

NOTE

Martin® inspection doors can only be used for encased transfer systems. Please consult the corresponding instruction in the relevant section of the inspection door to be installed.

5.2.2 Installing the Martin® inspection door with rubber door

NOTE

The Martin® rubber door should preferably only be used when the main axis of the conveyor belt cleaner protrudes from the inspection door.

1. The rubber door (A, Fig.1) should be removed from the door frame (D, Fig.1).
2. The door frame can be used as a template to mark installation boreholes and the opening on the chute wall. For precise installation dimensions, see Fig. 9 on page 38.

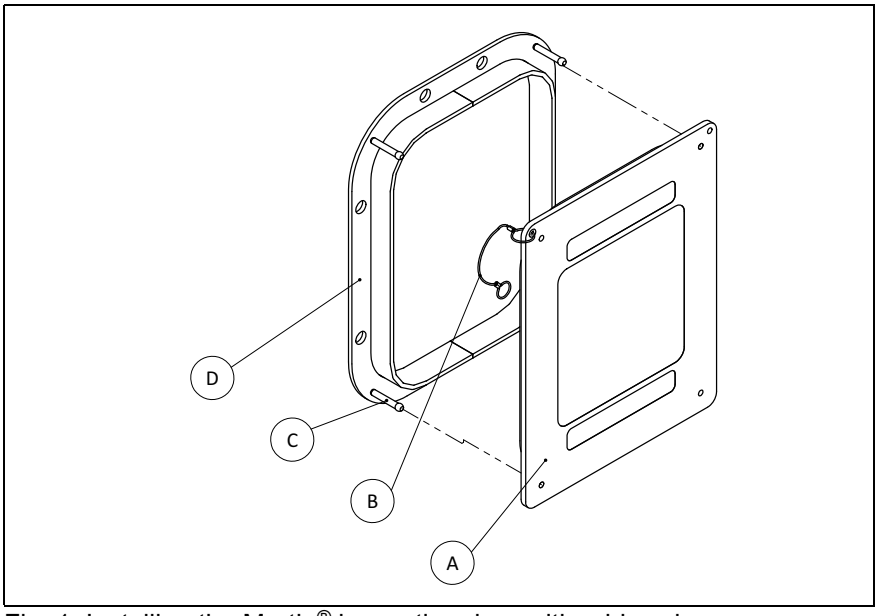

Fig. 1: Installing the Martin® inspection door with rubber door

Item	Description
A	Inspection rubber door
B	Wire rope
C	Bolt
D	Inspection door frame

Tab. 2: Installing the Martin® inspection door with rubber door

NOTE

Martin Engineering recommends to screw the door frame into the wall rather than welding it.

3. Create the opening for the access opening. This should be 3 mm larger than the labels for the opening. If the door frame is screwed, also create the boreholes for the screws. Remove burrs and sharp edges.
4. Grind down the chute wall areas where the door frame is touched.
5. Screw or weld the door frame and the wire rope (B, Fig.1) into the wall as follows.
   - To screw in, proceed as follows:
     a) Place the eyelet of the rope wire of the rubber door onto one of the screws.
     b) Place the door frame onto the chute wall and screw in.
   - To weld, proceed as follows:
     a) Attach the door frame to the chute wall using a welded seam which is interrupted for 12 mm every 51 mm.
     b) Weld the rope wire to the chute wall or the door frame.
6. Seal the door frame against the chute wall using suitable sealing compounds (not in the delivery scope).
7. Put the holes in the rubber door onto the bolts (C, Fig.1) on the door frame, until it sits properly on the door frame.

5.2.3 Installing the Martin® inspection door with steel door

NOTE

Martin Engineering recommends that the hinges of the steel door are installed positioned to the side or pointing downward.

1. The two spring cotters (B, Fig.2) and the two bolts (A, Fig.2) should be taken off the hinges and the steel door (C, Fig.2) taken off the door frame (D, Fig.2).
2. The door frame can be used as a template to mark installation boreholes and the opening on the chute wall. For precise installation dimensions, see Fig. 6 on page 30.

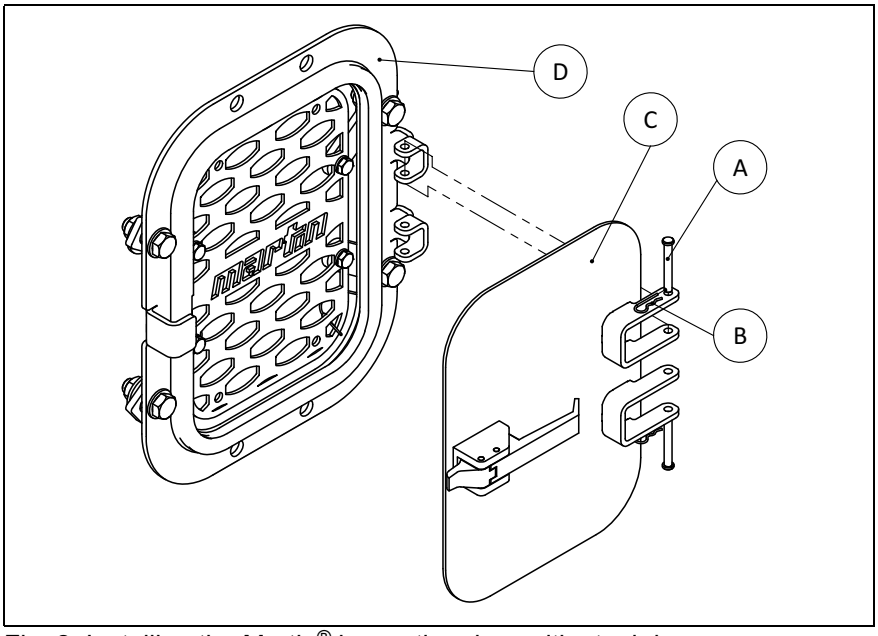

Fig. 2: Installing the Martin® inspection door with steel door

Item	Description
A	Bolt
B	Spring cotter
C	Inspection steel door
D	Inspection door frame

Tab. 3: Installing the Martin® inspection door with steel door

NOTE

Martin Engineering recommends to screw the door frame into the chute wall rather than weld it.

3. Create the opening for the access opening. This should be 3 mm larger than the labels for the opening. If the door frame is screwed, also create the boreholes for the screws. Remove burrs and sharp edges.
4. Grind down the chute wall areas where the door frame is touched.
5. Screw the door frame into the chute wall as follows or weld it:
   - To screw in, proceed as follows:
     a) Place the door frame onto the chute wall and screw in.
   - To weld, proceed as follows:
     a) Attach the door frame to the chute wall using a welded seam which is interrupted for 12 mm every 51 mm.
6. Seal the door frame against the chute wall using suitable sealing compounds (not in the delivery scope).

NOTE

Insert the bolts so that the split pin holes point downwards.

7. Insert the steel door into the door frame again and attach with the bolts and spring cotters.

5.2.4 Installing the Martin® inspection door with grating

WARNING!

The grating is supposed to limit access to potentially dangerous areas. The grating is not intended to cushion bumps or keep material inside the chute.

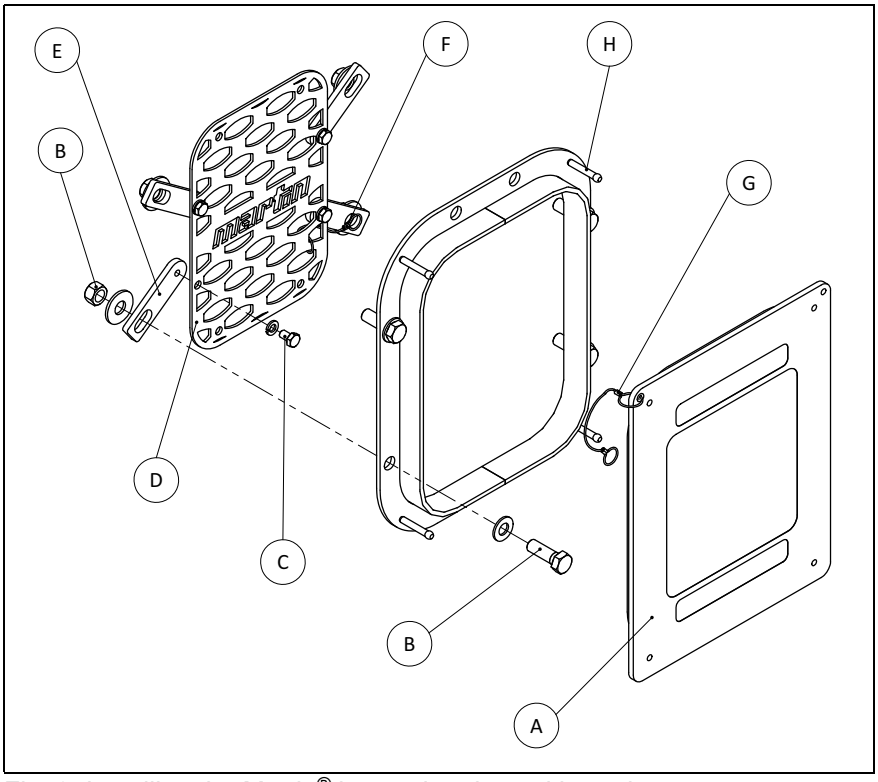

Fig. 3: Installing the Martin® inspection door with grating

Item	Description
A	Inspection rubber door
B	Screw
C	Screw
D	Grating
E	Fastening clip
F	Wire rope (grating)
G	Wire rope (door)
H	Bolt
I	Installation door frame

Tab. 4: Installing the Martin® inspection door with grating

NOTE

Martin Engineering recommends that the Martin® inspection door with grating should be screwed into the wall rather than welding it. The grating is attached to the door frame fastening boreholes with the attached grating clips. When welding the door frame, the positioning of the grating clips on the wall is very difficult.

NOTE

When using an angle bracket or another installation bracket of a conveyor belt cleaner, shear a 64 mm large opening into the grating (Fig. 4). Install the installation device there (see installation instruction for the used conveyor belt cleaner for further instructions).

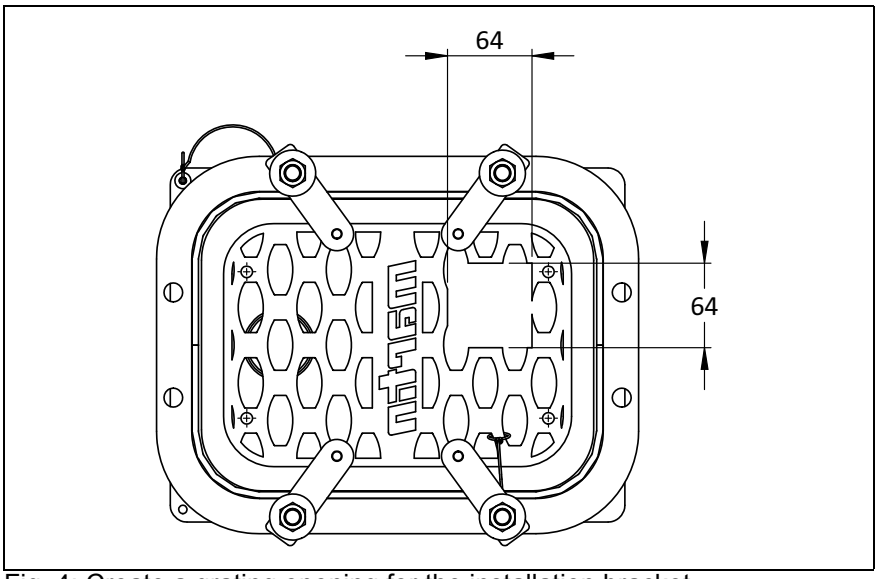

Fig. 4: Create a grating opening for the installation bracket

Fixing with screws

1. Perform steps 1 to 4 of the installation for the Martin® inspection door with rubber or steel door.
2. Push the screws (B, Fig.3) through the boreholes in the door frame (I, Fig.3) and the chute wall.

NOTE

The grating can be screwed to the bottom or the top of the door frame. Transfer the fastening clips according to the desired position.

3. Guide the grating (D, Fig.3) using the fastening clips (E, Fig.3) and the rope wire (F, Fig.3) from within the chute wall onto the previously inserted screws.
4. Screw the door frame with the grating to the chute wall.
5. Place the eyelet of the rope wire (G, Fig.3) of the rubber door (A, Fig.3) onto one of the four screws not already installed.
6. Install the remaining screws.
7. Seal off the door frame against the chute wall on all side.
8. Place the rubber door back onto the door frame or close the steel door.

Welding

1. Perform steps 1 to 4 of the installation for the Martin® inspection door with rubber or steel door.
2. Guide the grating (D, Fig.3) using the fastening clips (E, Fig.3) and the rope wire (F, Fig.3) from within the chute wall.
3. Position the grating with the clips so that the opening completely covers the door and that the clips are attached to the chute wall. After correcting the position, completely weld the clips.
4. Place the rubber door back onto the door frame or close the steel door.

5.2.5 Retrofit Martin® inspection door with grating

NOTE

Martin Engineering recommends that the Martin® inspection door with grating should be screwed into the wall rather than welding it. The grating is attached to the door frame fastening boreholes with the attached grating clips. When welding a grating to the door frame, the positioning of the grating clips on the wall is very difficult.

NOTE

When using an angle bracket or another installation bracket of a conveyor belt cleaner, shear a 64 mm large opening into the grating (Fig. 4). Install the installation device there (see installation instruction for the used conveyor belt cleaner for further instructions).

Fixing with screws

1. Remove the rubber door or open the steel door.
2. Remove the four screws (B, Fig.3).
3. Attach the rope wire of the grating (G, Fig.3) with one of the screws (C, Fig.3) onto the fastening clips (E, Fig.3).

NOTE

The grating can be screwed to the bottom or the top of the door frame. Transfer the fastening clips according to the desired position.

4. Insert the grating from within the chute wall.
5. Push the screws (B, Fig.3) through the boreholes in the door frame (I, Fig.3), the fastening clips and the chute wall.
6. Screw in the grating - if necessary, re-install the rope wire of the rubber door.
7. Tighten the screws (B, Fig.3).
8. If necessary, seal off the door frame against the chute wall on all side.
9. Reposition the rubber door or close the steel door.

Welding

1. Remove the rubber door or open the steel door.
2. Attach the rope wire of the grating (G, Fig.3) with one of the screws (C, Fig.3) onto the fastening clips (E, Fig.3).
3. Insert the grating from within the chute wall.
4. Position the grating with the clips so that the opening completely covers the door and that the clips are attached to the chute wall. After correcting the position, completely weld the clips.
5. Reposition the rubber door or close the steel door.

5.3 After the installation

NOTE

After all tasks have been completed, check whether all screws have been tightened, if necessary.

CAUTION! FLYING PARTS!

Tools or installation parts which are left behind can fall from a moving conveyor belt and may cause minor injuries and damage to property.
After all tasks have been completed, first remove the tools from the place of work and from the conveyor belt before switching on the power supply.

5.4 Attaching the warning label or the warning tag

Place the warning labels either onto the inspection door or directly next to the chute wall.

NOTE

Martin Engineering recommends that the label should be stuck onto the door if necessary.

Fig. 5: Warning label for inspection doors

6 Maintenance

6.1 Safety Instructions

NOTE

Maintenance inspections should take place at least once a week. Depending on operational conditions, shorter maintenance intervals may be necessary.

NOTE

Read this chapter thoroughly prior to commencing any work.

WARNING! DANGER OF INJURY!

Body parts and/or clothing may get caught and pulled in by rotating parts or by the moving conveyor belt.
Before maintenance work is carried out, ensure that all power sources to the conveyor belt system and its accessories are switched off and secured against inadvertent switching-on.
Use warning signs!

6.2 Weekly maintenance

1. Check that all securing parts are tightened. Tighten any loose connections as required.
2. Clean all warning labels. Replace any warning labels which are illegible. Warning labels may be purchased from Martin Engineering or an authorised dealer.
3. Check the rubber door for wear, holes or tears. If required, replace it.
4. Check the seal of the door frame for damages. If required, repair it.

CAUTION! FLYING PARTS!

Tools or installation parts which are left behind can fall from a moving conveyor belt and may cause minor injuries and damage to property.
After all tasks have been completed, first remove the tools from the place of work and from the conveyor belt before switching on the power supply.

7 Troubleshooting

7.1 Safety Instructions

NOTE

During normal operation, no problems are to be expected, but the product is exposed to different bulk materials and is often used under extreme working and environmental conditions.
In the case of problems, Martin Engineering or a representative can help with the positioning or with customised solutions. Only use the conveyor system after the fault has been found and repaired.

8 Storage, De-installation, Disposal

8.1 Packing and transportation

The products described here are packed and shipped by Martin Engineering.

The products may be transported solely in the Martin Engineering packaging.

The logistics company in charge of the shipment shall be responsible for any damage and/or loss.

8.2 Storage

For your product to work optimally, Martin Engineering recommends that you store the components made of rubber in dry condition at room temperature and protect them from exposure to direct sunlight.

The optimum conditions for storage are at a temperature of +0°C to +30°C and 60% relative humidity.

8.3 De-installation

The de-installation is done in reverse sequence of the steps involved in installation (refer to Chapter 5.2, page 13).

8.4 Disposal

Assemblies and/or single components or parts of the products of Martin Engineering must be disposed of properly and professionally after use.

- Complete assemblies should be de-installed and separated according to material type and disposed of.

When disposing of components and materials, all national and international waste disposal regulations must be observed.

9 Part Numbers

In this chapter, the product terms along with the accompanying part numbers for the Martin® inspection doors and accessories are listed.

When ordering, always state the P/N.

9.1 Part number description

Martin® Inspection door (Round)

CYAaa-bbbbcdef

a		**Design**
	RD:	Round steel door
b		**Door dimensions in inch**
	4:	4" (Ø114 mm)
	6:	6" (Ø152 mm)
	8:	8" (Ø203 mm)
c		**Door material**
	C:	Stainless steel (1.4403)
	S:	Stainless steel (1.4571)
	Ø:	Mild steel (1.0037)
d		**Lockable door handle**
	L:	Yes
	Ø:	No
e		**Installation accessories option**
	M:	With
	Ø:	Without
f		**Inspection screen option**
	G:	With
	Ø:	Wihtout

Martin® Inspection Door

CYA-abbbbccdefgh

a		**Door design**
	R:	Steel frame with rubber door
	H:	Steel door with locking rod
	Ø:	Steel door with locking handle
	E:	Steel door with extended frame depth
b		**Door dimensions in inch**
	0912:	290 x 370 mm
	1212:	360 x 370 mm
	1214:	360 x 410 mm
	1218:	360 x 510 mm
	1818:	510 x 510 mm
	1824:	510 x 670 mm
	2020:	570 x 570 mm
	2030:	600 x 850 mm
	2424:	670 x 670 mm
	2436:	670 x 1000 mm
	3018:	850 x 520 mm
	3030:	850 x 850 mm
	3636:	1000 x 1000 mm
c		**Frame depth in inch (only option "E")**
	03:	76 mm
	04:	102 mm
	05:	127 mm
	06:	152 mm
	07:	178 mm
	08:	203 mm
	09:	229 mm (>1824)
	10:	254 mm (>1824)
	11:	280 mm (>1824)
	12:	305 mm (>1824)
d		**Operating temperature rubber door (only option "R")**
	H:	max. 200°C
	Ø:	max. 120°C

e		**Door material**
	C:	Stainless steel (1.4301)
	Ø:	Mild steel (1.0037)
f		**Installation accessories option**
	M:	with
	Ø:	without
g		**Lockable door handle option (not for Option "R")**
	L:	Yes
	Ø:	No
h		**Inspection screen option**
	G:	with
	Ø:	without

9.2 Accessories

- Inspection screen set for Martin® Inspection door with rubber door: P/N: 38414-XXXXX*
- Inspection screen set for Martin® Inspection door with steel door: P/N: 38409-XXXXX*
  * XXXXX = Possible sizes - see P/N
- Inspection screen set for Martin® Inspection door with steel door (round): P/N: 38409R-X*
  *X = Possible sizes - see P/N.
- Inspection doors installation set:
  P/N: 38228-XX+E
  Comprises:
  - 8 x Sct. Screw M12x40
  - 8x flat washer A12
  - 8x spring washer A12
  - 8 x Sct. Nut M12
- Inspection doors Installation set (round):
  P/N. 38228-04-XX+E
  Comprises:
  - 4x Sct. Screw M12x40
  - 4x flat washer A12
  - 4x spring washer A12
  - 4x Sct. Nut M12

9.3 Warning label / Warning pendant

- Warning label (access),
  P/N: 30382
- Warning label (Excess pressure),
  P/N: 30266

9.4 Martin® Inspection door with steel door (Handle lock)

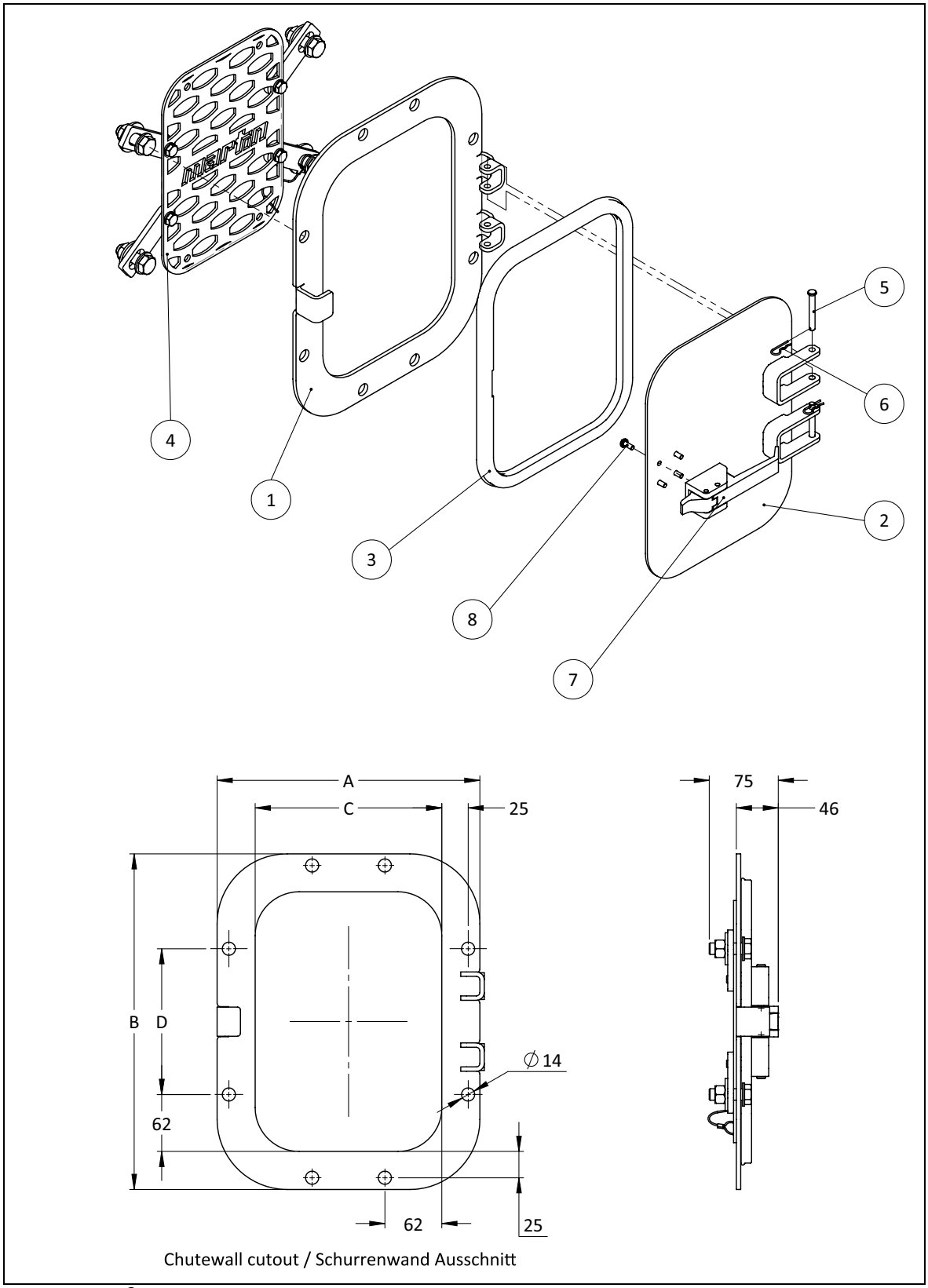

Fig. 6: Martin® Inspection door with steel door (Handle lock)

ND	Item / Pos.	Qty. / Anz.	Description / Beschreibung	P/N / Teile-Nr.
	1	1	Inspection Door frame / Inspektionstür Rahmen	s.C. / s.T.
	2	1	Inspection steel door / Inspektions Stahltür	s.C. / s.T.
	3	1	Gasket rubber door seal / Türgummidichtung	s.C. / s.T.
	4	1	Inspection door safety screen / Inspektionstür Sicherheitsgitter	s.C. / s.T.
	5	2	Pin clevis 1/4 X 1-7/8 / Bolzen mit Kopf	38641
	6	2	Cotter hairpin .06 DIA X 1.13 / Federstecker	34951
	7	1	Over center lever / Türgriff	s.C. / s.T.
	8	4	Screw PHPM #10-32NF X 1/2 w/washer / Linsenschraube mit Scheibe	s.C. /s.T.
	9	1	Inspection door installation set / Inspektionstüren Installationssatz	s.C. / s.T.

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.				
	1		2		3
	Standard	Option C	Standard	Option C	
CYA-0912XXXX+E	38399-0912	38399-0912WC	38398-0912	38398-0912WC	38400-0912
CYA-1212XXXX+E	38399-1212	38399-1212WC	38398-1212	38398-1212WC	38400-1212
CYA-1214XXXX+E	38399-1214	38399-1214WC	38398-1214	38398-1214WC	38400-1214
CYA-1218XXXX+E	38399-1218	38399-1218WC	38398-1218	38398-1218WC	38400-1218
CYA-1812XXXX+E	38399-1812	38399-1812WC	38398-1812	38398-1812WC	38400-1812
CYA-1814XXXX+E	38399-1814	38399-1814WC	38398-1814	38398-1814WC	38400-1814
CYA-1818XXXX+E	38399-1818	38399-1818WC	38398-1818	38398-1818WC	38400-1818

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.							
	4		7		8		9	
	Option G	Option CG	Standard	Option L	Standard	Option C	Option M	Option CM
CYA-0912XXXX+E	38409-0912	38409-0912C	37051	37051-L	38182	M453-SS	38228+E	38228-A4+E
CYA-1212XXXX+E	38409-1212	38409-1212C						
CYA-1214XXXX+E	38409-1214	38409-1214C						
CYA-1218XXXX+E	38409-1218	38409-1218C						
CYA-1812XXXX+E	38409-1812	38409-1812C						
CYA-1814XXXX+E	38409-1814	38409-1814C						
CYA-1818XXXX+E	38409-1818	38409-1818C						

Assy P/N Baugr.-Nr.	DIM			
	A	B	C	D
CYA-0912XXXX+E	286	365	210	289
CYA-1212XXXX+E	360	365	284	289
CYA-1214XXXX+E	360	413	284	337
CYA-1218XXXX+E	360	514	284	438
CYA-1812XXXX+E	541	360	438	284
CYA-1814XXXX+E	514	413	438	337
CYA-1818XXXX+E	514	514	438	438

9.5 Martin® Inspection door with steel door and increased frame depth

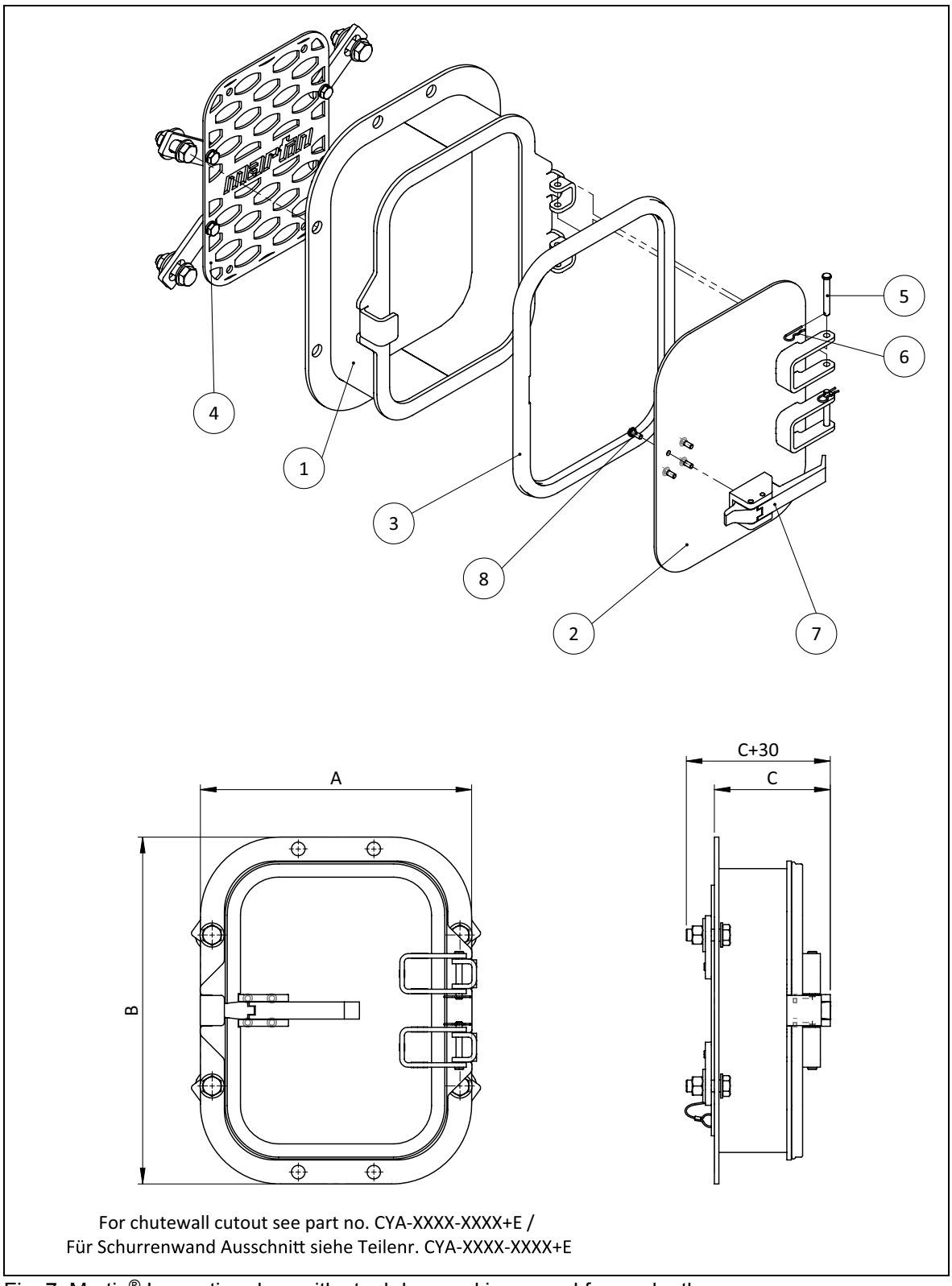

Fig. 7: Martin® Inspection door with steel door and increased frame depth

ND	Item / Pos.	Qty. / Anz.	Description / Beschreibung	P/N / Teile-Nr.
	1	1	Inspection door frame (Extended height) / Inspektionstür Rahmen (Erweiterte Rahmentiefe)	s.C. / s.T.
	2	1	Inspection steel door / Inspektions Stahltür	s.C. / s.T.
	3	1	Gasket rubber door seal / Türgummidichtung	s.C. / s.T.
	4	1	Inspection door safety screen / Inspektionstür Sicherheitsgitter	s.C. / s.T.
	5	2	Pin clevis 1/4 X 1-7/8 / Bolzen mit Kopf	38641
	6	2	Cotter hairpin .06 DIA X 1.13 / Federstecker	34951
	7	s.C. / s.T.	Over center lever / Türgriff	s.C. / s.T.
	8	s.C. / s.T.	Screw PHPM #10-32NF X 1/2 w/washer / Linsenschraube mit Scheibe	s.C. / s.T.
	9	1	Inspection door installation set / Inspektionstüren Installationssatz	s.C. / s.T.

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.				
	1		2		3
	Standard	Option C	Standard	Option C	
CYAE-0912-XXXX	38499-0912-XX	38499-0912-XXWC	33898-0912	33898-0912WC	38400-0912
CYAE-1214-XXXX	38499-1214-XX	38499-1214-XXWC	33898-1214	33898-1214WC	38400-1214
CYAE-1218-XXXX	38499-1218-XX	38499-1218-XXWC	33898-1218	33898-1218WC	38400-1218
CYAE-1824-XXXX	38499-1824-XX	38499-1824-XXWC	33898-1824	33898-1824WC	38400-1824
CYAE-2424-XXXX	38499-2424-XX	38499-2424-XXWC	33898-2424	33898-2424WC	38400-2424

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.								Qty. Pos. / Anz. Pos.	
	4		7		8		9		7	8
	Option G	Option CG	Standard	Option L	Standard	Option C	Option M	Option CM		
CYAE-0912-XXXX	38409-0912	38409-0912C	37051	37051-L	38182	M453-SS	38228+E	38228-A4+E	1	4
CYAE-1214-XXXX	38409-1214	38409-0912C							1	4
CYAE-1218-XXXX	38409-1218	38409-1218C							1	4
CYAE-1824-XXXX	38409-1824	38409-1824C							2	8
CYAE-2424-XXXX	38409-2424	38409-2424C							3	12

Assy P/N Baugr.-Nr.	DIM	
	A	B
CYAE-0912-XXXX	285	365
CYAE-1214-XXXX	360	412
CYAE-1218-XXXX	360	514
CYAE-1824-XXXX	514	665
CYAE-2424-XXXX	658	658

Assy P/N Baugr.-Nr.	DIM	Assy P/N Baugr.-Nr.	DIM
	C		C
CYAE-XXXX-03XX	122	CYAE-XXXX-08XX	249
CYAE-XXXX-04XX	147	CYAE-XXXX-09XX	274
CYAE-XXXX-05XX	172	CYAE-XXXX-10XX	299
CYAE-XXXX-06XX	198	CYAE-XXXX-11XX	325
CYAE-XXXX-07XX	223	CYAE-XXXX-12XX	350
Options 09-12 only available from size -1824 and above / Optionen 09-12 erst ab Größe -1824 erhältlich			

9.6 Martin® Inspection door with steel door (bolt with handle)

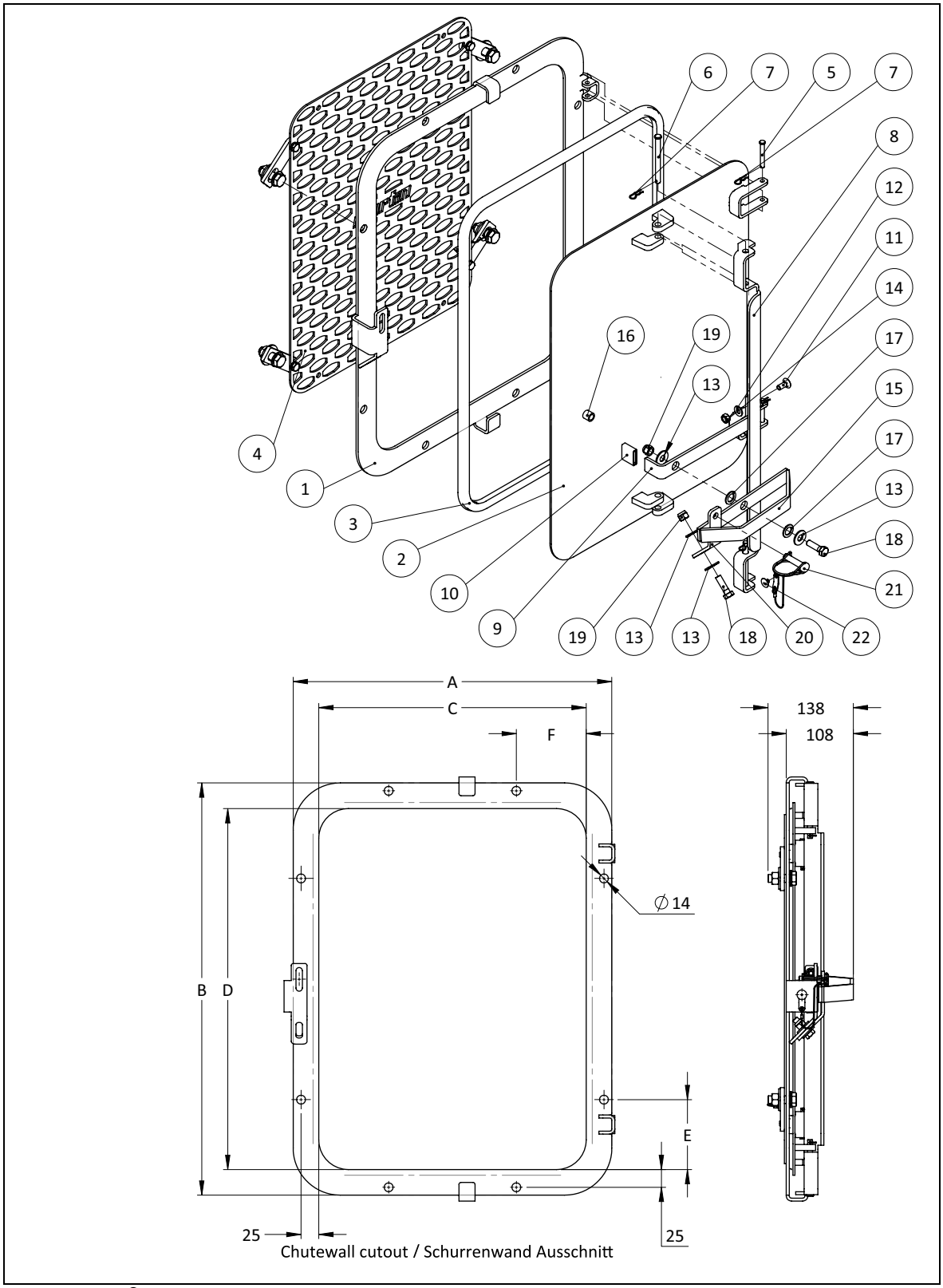

Fig. 8: Martin® Inspection door with steel door (bolt with handle)

ND	Item / Pos.	Qty. / Anz.	Description / Beschreibung	P/N / Teile-Nr.
	1	1	Inspection door frame / Inspektionstür Rahmen	s.C. / s.T.
	2	1	Inspection steel door / Inspektions Stahltür	s.C. / s.T.
	3	1	Gasket rubber door seal / Türgummidichtung	s.C. / s.T.
	4	1	Inspection door saftey screen / Inspektionstür Sicherheitsgitter	s.C. / s.T.
	5	2	Pin clevis 1/4 X 1-7/8 / Bolzen mit Kopf	38641
	6	2	Clevis pin 5/16 X 3-1/2 / Bolzen mit Kopf	38941
	7	4	Cotter hairpin .06 DIA X 1.13 / Federstecker	34951
	8	1	Locking bar / Sperrstange	s.C. / s.T.
	9	1	Locking handle / Sperrgriff	s.C. / s.T.
	10	1	Cap for locking bar / Kappe für Sperrgriff	38940
	11	2	Coach bolt 5/16 x 0.75 / Rundkopfschraube	38942
	12	2	Washer compression 5/16 / Unterlegscheibe	11452
	13	4	Washer flat 3/8 wide / Unterlegscheibe	18007
	14	2	Nut hex 5/16-18NC / Sechskantmutter	11963
	15	1	Door handle / Türgriff	s.C. / s.T.
	16	1	Spacer / Abstandshalter	s.C. / s.T.
	17	2	Nylon washer 9/16 / Nylon Unterlegscheibe	38710
	18	2	Screw HHC 3/8-16NC X 1-1/4 / Sechskantschraube	12215
	19	2	Nut hex elastic lock 3/8-16NC / Selbstsichernde Sechskantmutter	14201
	20	1	Latch bar / Riegel	s.C. / s.T.
	21	1	Lock pin with lanyard and mount / Sicherungsbolzen mit Seil und Befestigung	38877
	22	1	Rivet 3/16 dia X 1/4 / Niete	37905
	23	1	Inspection door installation set / Inspektionstüren Installationssatz	s.C. / s.T.

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.				
	1		2		3
	Standard	Option C	Standard	Option C	
CYAH-1824XXXX	38931H-1824	38931H-1824C	38932H-1824	38932H-1824C	38400-1824
CYAH-2020XXXX	38931H-2020	38931H-2020C	38932H-2020	38932H-2020C	38400-2020
CYAH-2030XXXX	38931H-2030	38931H-2030C	38932H-2030	38932H-2030C	38400-2030
CYAH-2418XXXX	38931H-2418	38931H-2418C	38932H-2418	38932H-2418C	38400-2418
CYAH-2424XXXX	38931H-2424	38931H-2424C	38932H-2424	38932H-2424C	38400-2424
CYAH-2436XXXX	38931H-2436	38931H-2436C	38932H-2436	38932H-2436C	38400-2436
CYAH-3018XXXX	38931H-3018	38931H-3018C	38932H-3018	38932H-3018C	38400-3018
CYAH-3030XXXX	38931H-3030	38931H-3030C	38932H-3030	38932H-3030C	38400-3030
CYAH-3636XXXX	38931H-3636	38931H-3636C	38932H-3636	38932H-3636C	38400-3636

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.							
	4		8		9		15	
	Option G	Option CG	Standard	Option C	Standard	Option C	Standard	Option C
CYAH-1824XXXX	38409-1824	38409-1824C	38935-24	38935-24C	38936	38936-C	38937	38937-C
CYAH-2020XXXX	38409-2020	38409-2020C	38935-20	38935-20C				
CYAH-2030XXXX	38409-2030	38409-2030C	38935-30	38935-30C				
CYAH-2418XXXX	38409-2418	38409-2418C	38935-18	38935-18C				
CYAH-2424XXXX	38409-2424	38409-2424C	38935-24	38935-24C				
CYAH-2436XXXX	38409-2436	38409-2436C	38935-36	38935-36C				
CYAH-3018XXXX	38409-3018	38409-3018C	38935-18	38935-18C				
CYAH-3030XXXX	38409-3030	38409-3030C	38935-30	38935-30C				
CYAH-3636XXXX	38409-3636	38409-3636C	38935-36	38935-36C				

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.					
	16		20		23	
	Standard	Option C	Standard	Option C	Option M	Option CM
CYAH-1824XXXX	38681	38681-SS	38571	38571-C	38228+E	38228-A4+E
CYAH-2020XXXX						
CYAH-2030XXXX						
CYAH-2418XXXX						
CYAH-2424XXXX						
CYAH-2436XXXX						
CYAH-3018XXXX						
CYAH-3030XXXX						
CYAH-3636XXXX						

Assy P/N Baugr.-Nr.	DIM					
	A	B	C	D	E	F
CYAH-1824XXXX	514	665	438	589	116	65
CYAH-2020XXXX	565	565	489	489	116	65
CYAH-2030XXXX	597	851	768	514	116	116
CYAH-2418XXXX	671	521	589	438	65	116
CYAH-2424XXXX	665	665	583	583	116	116
CYAH-2436XXXX	665	1003	583	921	116	116
CYAH-3018XXXX	851	521	438	768	65	116
CYAH-3030XXXX	851	851	768	768	116	116
CYAH-3636XXXX	1003	1003	921	921	116	116

9.7 Martin® inspection door with rubber door

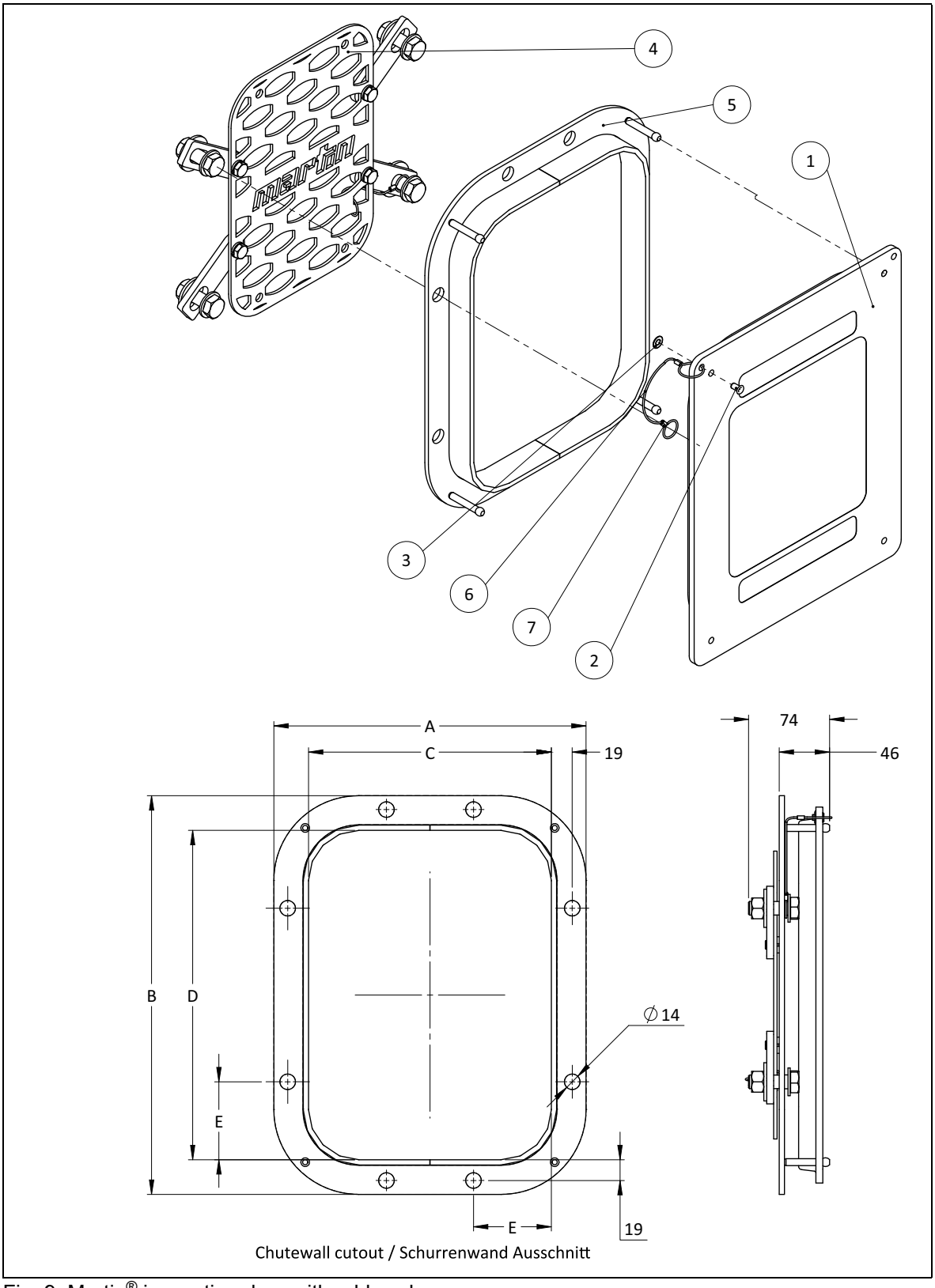

Fig. 9: Martin® inspection door with rubber door

ND	Item / Pos.	Qty. / Anz.	Description / Beschreibung	P/N / Teile-Nr.
	1	1	Inspection rubber door / Inspektionsgummitür	s.C. / s.T.
	2	1	Grommet eyelet / Befestigungsöse	32407-01
	3	1	Grommet washer / Befestigungsscheibe	32407-02
	4	1	Inspection door saftey screen / Inspektionstür Sicherheitsgitter	s.C. / s.T.
	5	1	Inspection door frame / Inspektionstür Rahmen	s.C. / s.T.
	6	0,5 m	Cable 1 mm / Drahtseil	s.C. / s.T.
	7	2	Clip for 1/16 wire / Seilklemme für Ø1 mm Seil	s.C. / s.T.
	8	1	Inspection door installation set / Inspektionstüren Installationssatz	s.C. / s.T.

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.					
	1		4		5	
	Standard	Option H	Option G	Option CG	Standard	Option C
CYAR-0912XXXX+E	27708-0912	28557-0912	38414-0912	38414-0912C	38412-0912	38412-0912WC
CYAR-1214XXXX+E	27708-1214	28557-1214	38414-1214	38414-1214C	38412-1214	38412-1214WC
CYAR-1218XXXX+E	27708-1218	28557-1218	38414-1218	38414-1218C	38412-1218	38412-1218WC
CYAR-1824XXXX+E	27708-1824	28557-1824	38414-1824	38414-1824C	38412-1824	38412-1824WC
CYAR-2424XXXX+E	27708-2424	28557-2424	38414-2424	38414-2424C	38412-2424	38412-2424WC

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.					
	6		7		8	
	Standard	Option C	Standard	Option C	Standard	Option C
CYAR-0912XXXX+E	40181	40181-A4	40182	40182-A4	38228+E	38228-A4+E
CYAR-1214XXXX+E						
CYAR-1218XXXX+E						
CYAR-1824XXXX+E						
CYAR-2424XXXX+E						

Assy P/N Baugr.-Nr.	DIM				
	A	B	C	D	E
CYAR-0912XXXX+E	286	365	222	302	71
CYAR-1214XXXX+E	368	419	305	356	71
CYAR-1218XXXX+E	360	514	297	451	71
CYAR-1824XXXX+E	514	665	451	602	122
CYAR-2424XXXX+E	659	659	596	596	122

9.8 Martin® inspection door with steel door (Round/Handle lock)

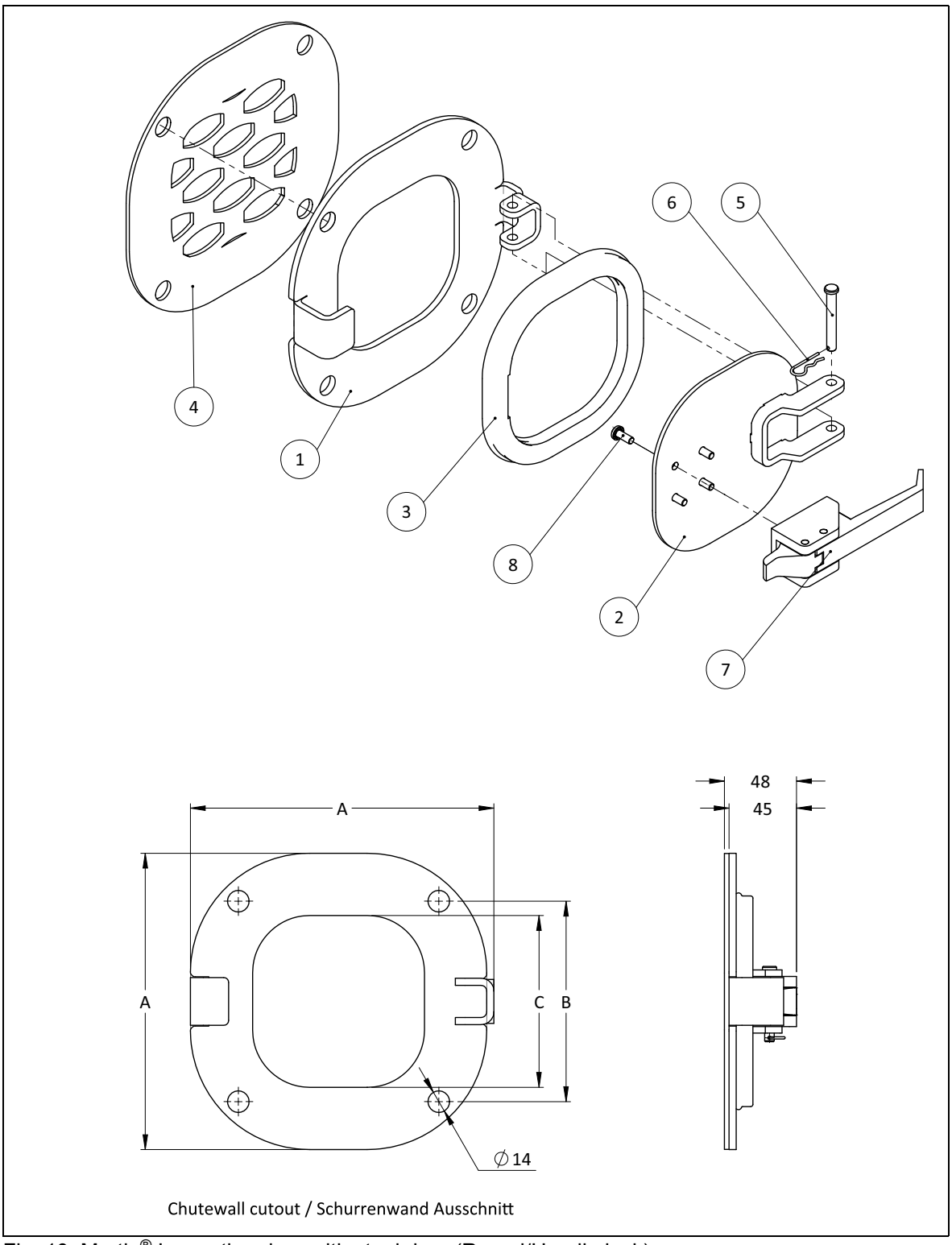

Fig. 10: Martin® Inspection door with steel door (Round/Handle lock)

ND	Item / Pos.	Qty. /Anz.	Description / Beschreibung	P/N / Teile-Nr.
	1	1	Inspection door frame / Inspektionstür Rahmen	s.C. / s.T.
	2	1	Inspection steel door / Inspektions Stahltür	s.C. / s.T.
	3	1	Inspection door rubber seal / Inspektionstür Gummidichtung	s.C. / s.T.
	4	1	Inspection door saftey screen / Inspektionstür Sicherheitsgitter	s.C. / s.T.
	5	1	Pin clevis 1/4 X 1-7/8 / Bolzen mit Kopf	38641
	6	1	Cotter hairpin .06 DIA X 1.13 / Federstecker	34951
	7	1	Over center lever / Türgriff	s.C. / s.T.
	8	4	Screw PHPM #10-32NF X 1/2 w/washer / Linsenschraube mit Scheibe	s.C. / s.T.
	9	1	Inspection door installation set / Inspektionstüren Installationssatz	s.C. / s.T.

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.						
	1			2			3
	Standard	Option C	Option S	Standard	Option C	Option S	Standard
CYARD-4XXX	38639-4	38639-4WC	38639-4WS	38638-4	38638-4WC	38638-4WS	38400-4
CYARD-6XXX	38639-6	38639-6WC	38639-6WS	38638-6	38638-6WC	38638-6WS	38400-6
CYARD-8XXX	38639-8	38639-8WC	38639-8WS	38638-8	38638-8WC	38638-8WS	38400-8

Assy P/N Baugr.-Nr.	P/N item / Teilenr. Pos.							
	4		7		8		9	
	Standard	Option C	Standard	Option L	Standard	Option C/S	Option M	Option CM/SM
CYARD-4XXX	38409R-4	38409R-4C	37051	37051-L	38182	M453-SS	38228-04+E	38228-04A4+E
CYARD-6XXX	38409R-6	38409R-6C						
CYARD-8XXX	38409R-8	38409R-8C						

Assy P/N Baugr.-Nr.	DIM		
	A	B	C
CYARD-4XXX	197	133	114
CYARD-6XXX	235	159	152
CYARD-8XXX	286	197	203

9.9 Ratings Martin® Inspection doors

Martin® Inspection Door Materials	Operation temperature max. [°C]	Overpressure max. [bar]
Nitrile rubber (65 Shore)	68	0.020
Silicone rubber (65 Shore)	200	0.020
Safety screen	68	---
Stainless steel (1.4301,1.4571)	74	0.138

Tab. 5: Ratings Martin® Inspection doors

10 Declaration of Incorporation

Declaration of Incorporation in accordance with the Machinery Directive (2006/42/EC) Annex II B for the installation of an incomplete machine

We hereby declare, the company Martin Engineering

In der Rehbach 14 Tel.: +49 (0)6123-97820

D-65396 Walluf Fax: +49 (0)6123-75533

that the product mentioned below

Product designation:

Inspection Door

of the make / type:

Martin® Inspection Door

with the serial number:

not required

comply with the following provisions:

EC Machinery Directive 2006/42/EC

DIN EN 618 - Equipment and Systems for the Handling of Bulk Materials

In particular, the following harmonised standards have been applied:

DIN EN ISO 12100 Safety of machinery

Notified body:

not required

The information provided in the installation manual and technical documentation are in the original version with the named product.

The operation of this product is prohibited until it has been established that, the system in which it is to be installed complies with the provisions of the EU Directive 98/37/EC and 2006/42/EC, in the amended form.

Date: 21/01/2015

Manufacturer's signature: Managing Director, Michael Hengl

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Subject to technical modifications
Quality management system certified by DNV - ISO 9001

Publication no. M3127UK-01/17