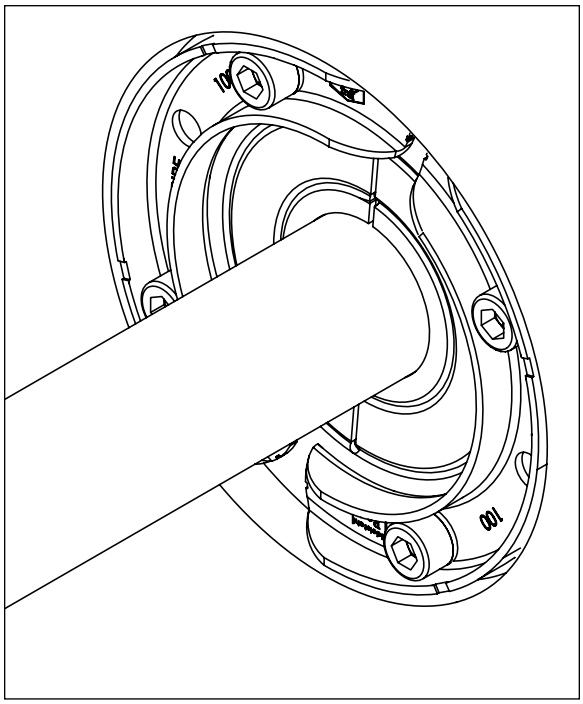
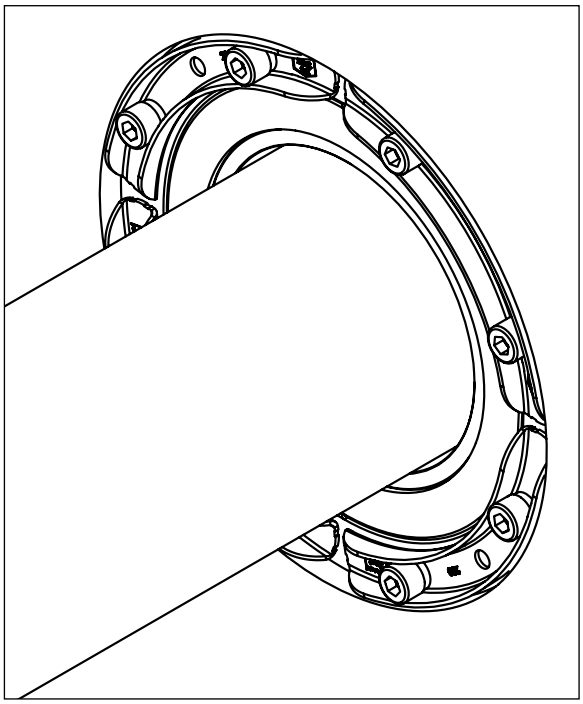
Always. Reliable. Tight.

Assembly instructions **-PHSD-SSG-SL standard mechanical seal**

for pipes/cables which are existing or newly laid



PHSD4-SSG-SL



PHSD6-SSG-SL, PHSD8-SSG-SL,
PHSD10-SSG-SL, PHSD12-SSG-SL

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Read the Instructions prior to installation and keep them in a safe place!

Contents

1 Publishing notes

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Subject to technical alterations at any time and without prior announcement.

2 Explanation of symbols

1 Work stages

▶ Effect/result of a work step

(1) Reference numerals in drawing

3 Required tool and auxiliaries

For correctly assembly of the the standard press seal you will need the following tools andaids in addition to the usual tools:.

TOOLS:

Assembly set for Polywater Toolset consisting of:

1 Torque spanner 1/4 inch (4-20 Nm)

1 Extension 1/4 inch (100 mm)

2 Extensions 1/4 inch (150 mm)

1 Adapter for cordless screwdriver, square, 1/4 inch

1 M6 socket, wrench size 5, 1/4 inch with spherical

AUXILARIES:

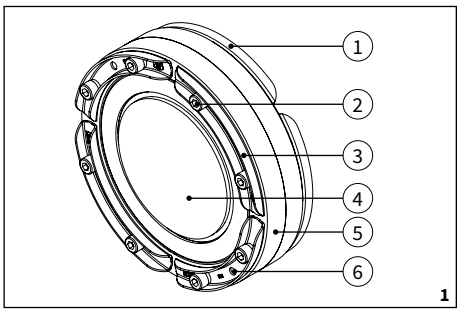
1 Lubricant

1 Cutter knife

1 Cleaning cloth

4 Description

Description: (see fig.: 1).



1

Legend for Fig. 1

1	Rear press segments
2	Allen screw
3	Front press segments
4	Blind plug
5	Elastomer segment/Rubber press ring (Grade: EPDM or NBR)
6	Built-in inspection opening

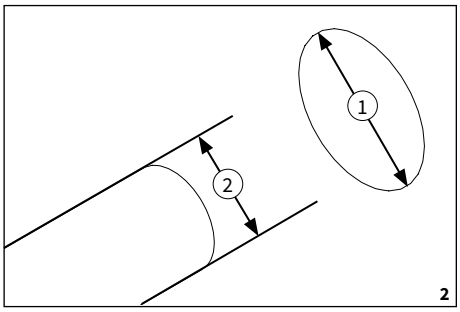
5 Preparing for assembly

1 Clean the core drilling/liner and media line.

Level out any chips and/or voids which may be present.

Check the diameter tolerance of the core drilling/ liner **(D -1, -0.039 inch + 0.079 inch (+2 mm))** and media line **(d) (see table 1),** as well as outer or drilling dimension of the press seal (see fi g.: 2).

The wall sleeve must be dimensionally accurate, smooth and inherently stable.



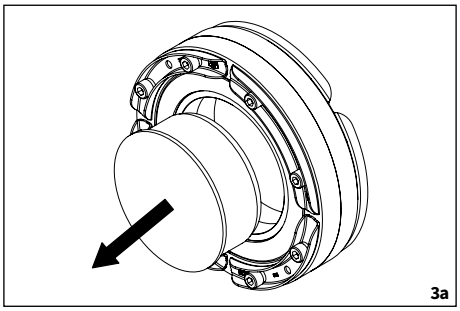
2

Legend for Fig. 2

1	Diameter **(D)** of the core drilling/wall sleeve
2	Diameter **(d)** of the cable/pipe

5.1 Mount the standard press seal from the outside of building

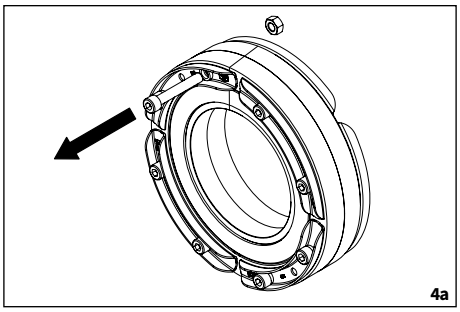
2a Remove the blind system cover from the standard press seal PHSD6-SSG-SL and PHSD8-SSG-SL (see fig.: 3a).


3a

2b Fold out and pull out the blind plug on the PPHSD4-SSG-SL (see fig.: 3b).


3b

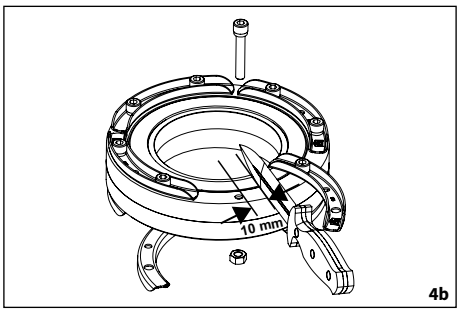
3a To open the standard press seal, loosen and remove a screw at the partition cut (see fig.: 4a).


4a

5.2 Retrofi tted splitting of standard press seal (PHSD 150/200/250 and 300-SSG) on already laid pipes

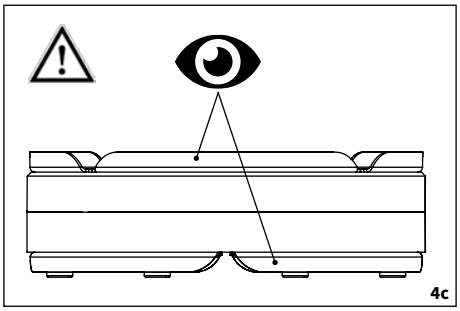
3b To split the standard press seal **PHSD6-SSG-SL and PHSD8-SSG-SL,** loosen and remove a screw (see fig.: 4b).

Fold out the front and rear press segment and at a distance of approx. 0.394 (10 mm) inch from the screw drilling, separate the rubber press ring with a sharp knife (see fig.: 4b).



4b

The front and rear press segments must be arranged offset (see fig.: 4c).


4c

3c Then fold out and pull off the segment rings one by one until the necessary diameter area is visible on the segment (see fig.: 4d).

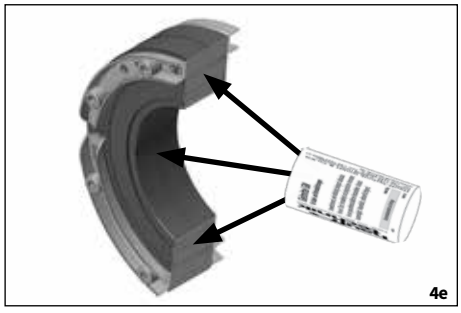
For split seals, this step must be repeated for the other half of the press seal in exactly the same way (the same number of segments must be removed on each half of the press seal).

If necessary, cut the segment rings with a sharp knife at the sectioning point and then pull off.


4d

3d Though not required, lubricant may be applied to the cut surfaces and cable sealing surface of the seal. (see fig.: 4e).

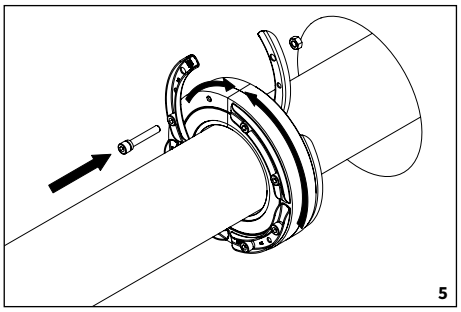
Do not coat the outer sealing surface of the cable and pipe seal. This must be clean, dry and free of grease.


4e

4 Insert the pipe/cable into standard press seal or fold the seal over the pipe/cable and close both press segments (see fig.: 5).

The pipe/cable must be free of longitudinal grooves and damage in the sealing area. (Possibly push media lines back or forwards a little until grooves are no longer visible).

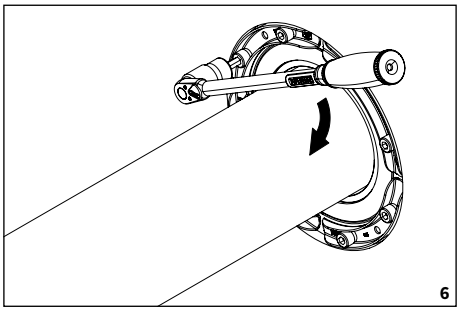
Re-mount screw and nut (see fig.: 5).

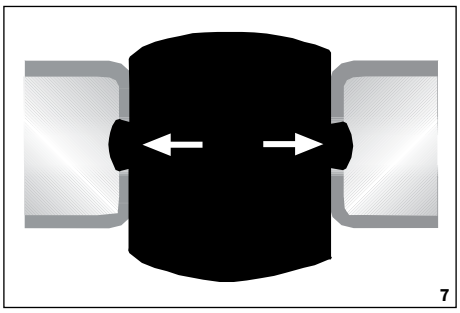

5

5 Insert the standard press seal into core drilling/ conduit from outside of building until flush with the wall (see fig.: 6).

Tighten screws cross-wise and step-by-step with a maximum of five rotations in each case until the torque is reached **(see table 1***)* and the rubber emerges evenly from all inspection openings (see fig.: 6 and 7).

If installation is carried out correctly, it will not be necessary to retighten the screws.


6


7

5.3 Mount the standard press seal from the inside of building

Assembly is carried out as in work stages 3a till 4, only from the inside of the building.

6 Insert the pipe/cable line into standard press seal or fold the seal over the media line and close both press segments (see fig.: 5).

Re-mount screw, slide ring and nut (see fig.: 5). Insert the standard press seal from inside of building as far as the outer edge of the core drilling/conduit (see fig.: 8).

Tighten screws with extension cross-wise and step-by-step with a maximum of fi ve rotations in each case until the torque is reached **(see table 1)** and the rubber emerges evenly from all inspection openings (see fig.: 8 und 7).

If installation is carried out correctly, it will not be necessary to retighten the screws.

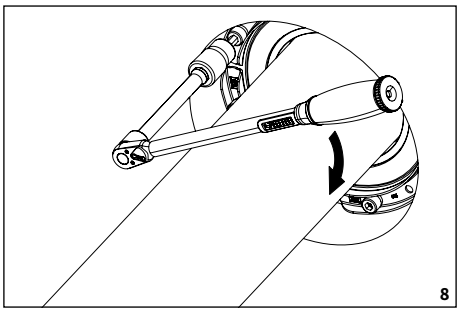

8

Table 1

Designation	Core drilling/conduit +0.079/-0.039 inch (+2/-1 mm)	Number of drill holes	Pipe/Cable OD inches (mm)	Max. ightening torque
PHSD4-SSG-SL	100	1	0.709-2.559 inch (18-65 mm)	70.81 in lb (8 Nm)
PHSD6-SSG-SL	150	1	2.756-4.409 inch (70-112 mm)	70.81 in lb (8 Nm)
PHSD8-SSG-SL	200	1	4.331-6.378 inch (110-162 mm)	70.81 in lb (8 Nm)
PHSD10-SSG-SL	250	1	6.260-8.307 inch (159-211 mm)	106.21 in lb (12 Nm)
PHRD12-SSG-SL	300	1	7.874-9.921 inch (200-252 mm)	123.91 in lb (14 Nm)

Safety instructions and information

The installation may only be carried out by technical experts.
Qualified and trained individuals carrying out installation must experts.
- knowledge of general safety and accident prevention regulations as amended,
- knowledge of how to use safety equipment,
- knowledge of how to use hand tools and electric tools,
- knowledge of the relevant standards and guidelines for laying pipes cables and for backfilling utility trenches, as amended,
- knowledge of the regulations and installation guidelines of the supply company as amended,
- knowledge of the impermeable concrete directive and building waterproofing standards as amended.

General information and intended use

According to their intended use, our products have been designed exclusively for installation in buildings made from state-of-the-art construction materials. We do not accept liability for use deviating from or beyond this unless our express written confirmation has been obtained in advance.

For warranty conditions, please see our current General Terms and Delivery Conditions.

Standard press seals are not fi xed settlement points or bearings and therefore cannot absorb any mechanical forces. Any anticipated reductions must be compensated for by the installation of centering guides in the conduits or core drillings and/or by spacers.

Safety

This section provides an overview of the main safety aspects for optimum protection of personnel and a safe installation process. If there is a failure to observe the instructions and safety information set out here, this may result in significant hazards.
PHRD modular seal installation must comply with the relevant professional associations regulations, federal, state and local safety and accident prevention regulations as well as company regulations (work and procedural instructions).
The fitter must wear the relevant protective clothing.
Only intact components may be installed.

The following instructions are to be observed prior to installation of the standard press seal:

⚠ **WARNING!**
Risk of injury in the event of improper installation!
Improper installation can result in signifi cant bodily harm and property damage.
- The nationally applicable laying and fi lling regulations for pipes and cables are to be observed at all times.
- Seal the underground and cable substructure well prior to laying pipes/cables so that the latter cannot subside.

! Note!
No sealing due to incorrect assembly!
Improper installation can result in damage.
For one-sided installation of the standard press seal into core drillings, seal from outside of building.
- Prior to installing the standard press seal, any existing breaks or blowholes in the cored hole have to be repaired.
- Ensure that the medium pipe is centred and horizontal in the core drilling/wall sleeve.
- Please make sure that the inside of the liner is clean, dry and free of grease.
- The respective application range is specifi ed on the inside of the standard press seal.
- If the press seal is installed in an exposed duct, then the duct wall must be stabilised with a clamping strap at the location of the press seal.
- The front and rear press segments must be arranged offset.
- Do not lubricate the outer sealing surface of the press seal with lubrication.
- The pipe seal is evenly pressed in as soon as the rubber can be seen and feltin all
- inspection openings.
- If sealing is to be carried out on the outside of the building, a check must be carried out before the trench is fi lled and all laying and connection is completed to see whether the rubber in all inspection openings can be seen and felt. If this is not the case or it is no longer possible to access the inspection openings, the torque must be checked and if necessary tightened.
- No cleaning agents containing solvent may be used to clean the standard press seal. We recommend using using Polywater HP cable cleaner .
- For details of other accessories and further information, see wwwpolywater–haufftechnik.com and the technical specifi cation sheets.

Personnel requirements

Qualifications

⚠ **WARNING!**
Risk of injury in the event of improper installation!
Improper installation can result in significant bodily harm and property damage.
- Installation may only be carried out by qualified and trained individuals who have read and understood these instructions.

Skilled experts
Based on their specialist training, skills, experience and familiarity with the relevant provisions, standards and regulations, skilled experts are able to carry out the work assigned, independently identifying and avoiding potential hazards.

Transport, packaging, scope of delivery and storage
Safety instruction in connection with transport

! Note!
Damage in the event of improper transport
Significant damage can occur in the event of improper transport.
- When unloading packaging items on delivery and in the course of in-house transport, proceed with care and observe the symbols on the packaging.

Transport inspection
Inspect the delivery immediately on receipt for completeness and transport damage.
In the event of transport damage being visible from the outside, proceed as follows:
- Do not accept the delivery or only do so subject to reservations.
- Make a note of the extent of damage in the transport documentation or delivery note provided by the transporter.

• Submit a claim for every defect as soon as it has been identified
• Make a note of the extent of damage in the transport documentation or delivery note provided by the transporter.

Scope of delivery
The scope of delivery of the PHSD 100-SSG,PHSD 150-SSG,PHSD 200-SSG, P HSD250-SSG and PHSD 300-SSG includes:

Designation	Blind plug included	Blind plug is available as an optional accessory
PHSD4-SSG-SL	X	
PHSD6-SSG-SL	X	
PHSD8-SSG-SL	X	
PHSD10-SSG-SL		X
PHRD12-SSG-SL		X

Storage

NOTE!
Damage due to improper storage!
Significant damage can occur in the event of improper storage.
- Protect the PHRK modular seal from damage, damp and soiling prior to installation. Only intact components may be installed.
- The PHRK modular seal must be stored in such a way that it is not exposed to low temperatures 40°F (<5° C), high temperatures 85°F (>30° C) or direct sunlight.

Disposal
If no return or disposal agreement has been concluded, recycle dismantled components after they have been properly dismantled:
- Metal remains are to be scrapped according to existing environmental regulations
- Dispose of elastomer segments according to existing environmental regulations.
- Dispose of plastics according to existing environmental regulations.
- Dispose of packaging material according to existing environmental regulations.

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