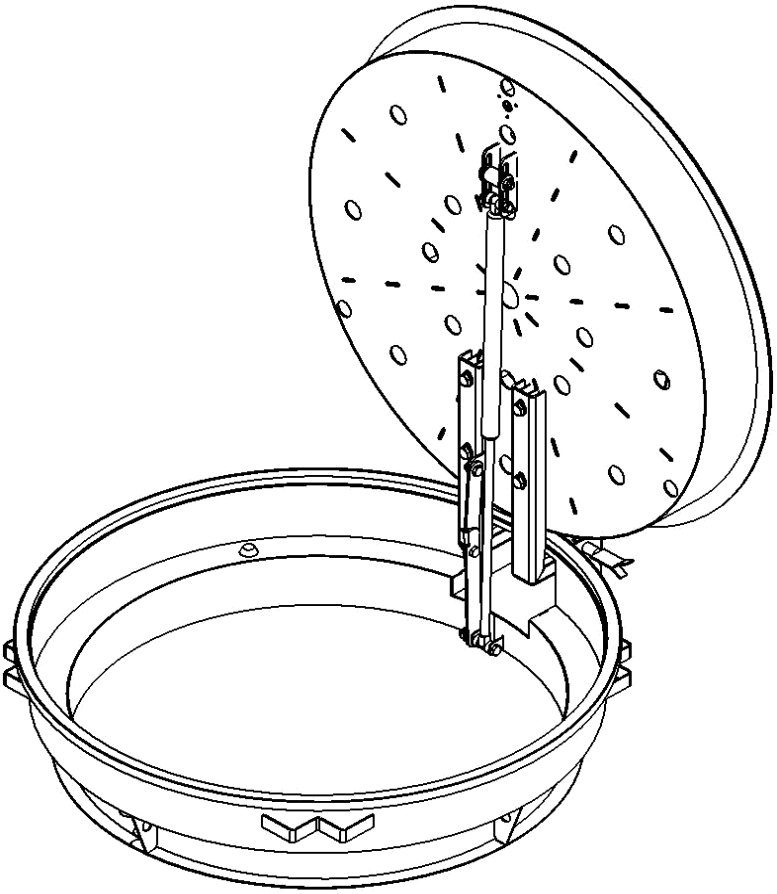
Assembly and User Instructions
Hailo Type HS8-R Shaft Cover

Shaft cover, flush, loads as per EN124 (Class B+D)



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Chapter 01: Mounting dimensions

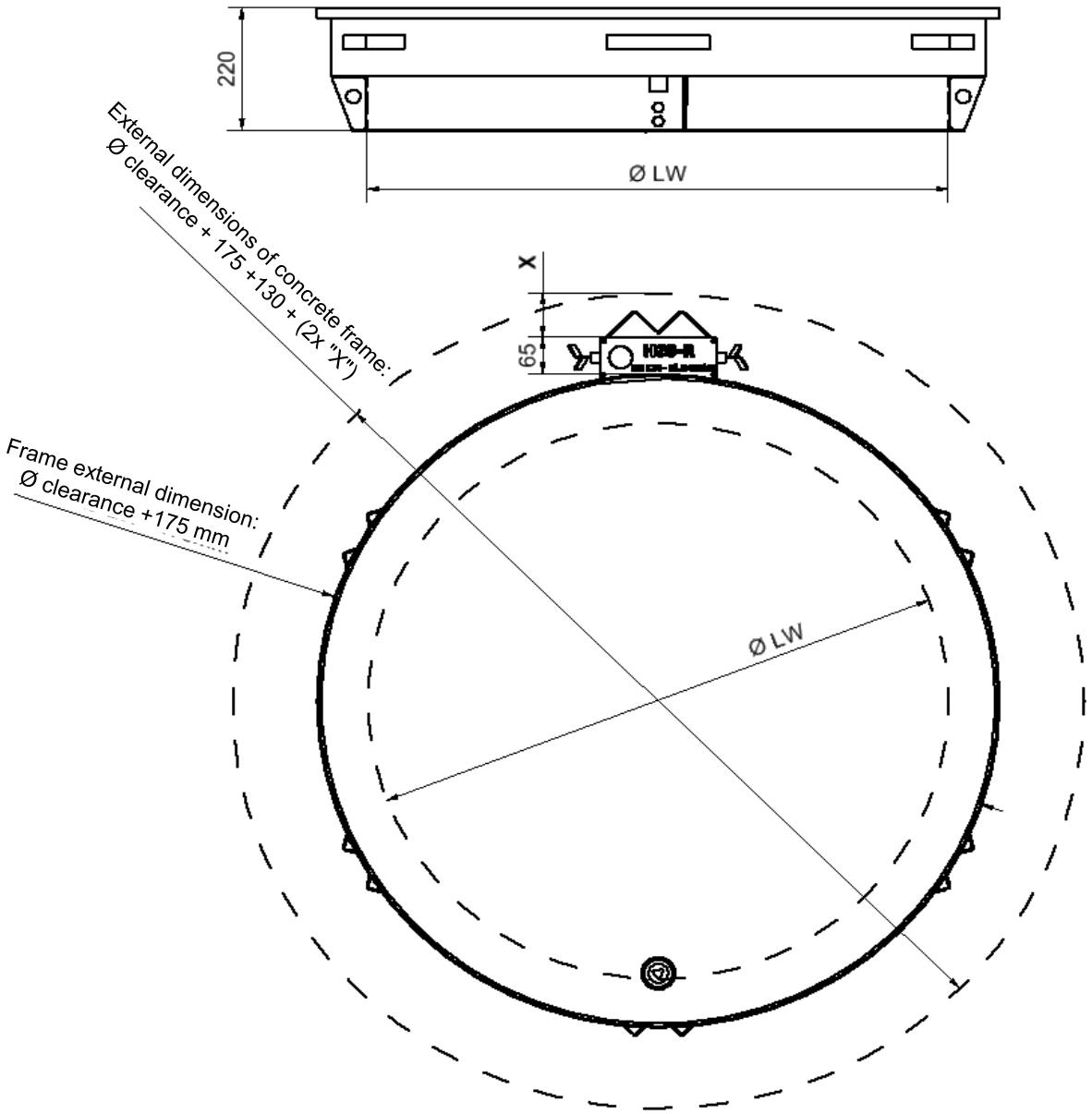
The surrounding concrete edge required is derived from the customer's structural calculations and formwork and reinforcement plans. This is not a constituent part of these assembly instructions.

As a guideline, we recommend the following minimum thicknesses **on all sides** in addition to the external dimensions of the shaft cover indicated below:

For stationary traffic (e.g. car park): 80mm
For flowing traffic (carriageway): 120mm

These dimensions must be respected at the rear, including behind the hinge boxes!

Minimum quality of concrete: C35/45, respecting the customer's specifications!



Chapter 02: Mounting / setting the cover in concrete

Round stainless steel chequer safety plate cover,
flush, load-bearing, load class according to EN124 B 150kN / D 400kN,
for setting in concrete, surface water tight, opening assisted by gas springs,
inc. mechanism for keeping the lid open

IMPORTANT!!!

To avoid damage to the cover, it is absolutely essential to comply with the following instructions. Hailo accepts no liability or warranty for damage caused by improper handling. The lid must sit correctly in and be firmly screwed to the frame while the outer concrete surround is being created! Otherwise there is a risk that the frame will move when the reinforcement is installed or when it is set into the concrete. The correct and secure positioning of the lid may then no longer be guaranteed. The lid must remain closed until the concrete has hardened! Only then is the cover opened and the gas spring fitted.

1. The recess required in your structure is calculated as follows: External dimensions of the cover + min. 80 / 120mm all round for the concrete.

2. Remove the parts supplied from the cover, e.g. the gas spring, and any keys and closure parts. Lift the shaft cover with suitable lifting tackle or equipment, such as a forklift, crane or digger, and insert it into the recess provided.

3. Level the cover using a spirit level and place it at the required height. Any difference in height can be compensated by putting shims under the frame. Make sure that the frame is lying straight. Make sure the installation height takes account of additional road or footpath surfaces.

4. Once the cover is finally fixed, seal the gap all the way round between frame and structure (with a wooden frame, sealing cord ...).

5. Make sure that the lid of the shaft cover is tightly closed while it is being concreted in. This prevents the frame from getting out of shape. To safeguard against lifting and movement when concreting, the cover can be secured using ballast.

6. The cover can now be finished off with a seal. We recommend compressing the concrete with internal compactors. Allow for the setting times specified for the concrete.

7. Once the concrete has hardened, the gas spring can be installed. The piston rod is always screwed to the frame and the cylinder to the lid. The necessary means of attachment are pre-fitted.

8. Once all work has been completed, it is important to remove any concrete residue and dirt from the frame and the lid. This ensures that your Hailo shaft cover will have a long and trouble-free service life.

Chapter 03: Assembling the opening aids - gas springs

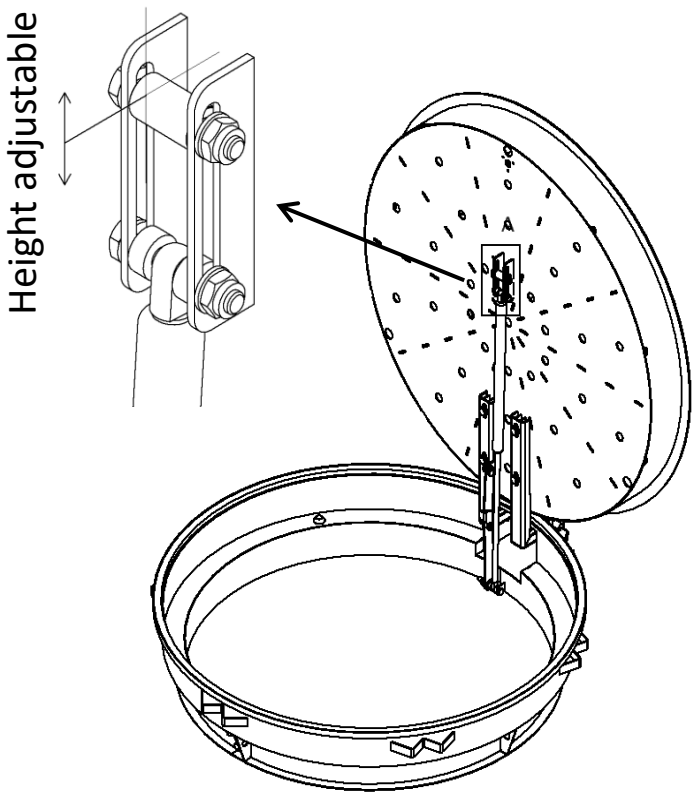
The gas springs can be adjusted for force by fitting an adjustable stop (see illustration below).

1. First, screw the piston rod head to the frame at the bottom using the pre-fitted screw. **Only tighten the nut to a point where the screw can still be rotated!**

2. Next, fit the head of the cylinder as illustrated. As the lid moves, the screw slides in the slot, **so do not tighten this nut firmly either.**

3. By fixing the stop / sleeve at a variable height, it is possible to adjust the point to which the gas spring also slides up when opening the lid.
If the shaft cover has only one gas spring, the point is to be chosen such that the lid stops when opened at around 80°. It is then easy to move the lid manually into the latch locking position. The stop is not required for lids with a depth of 600 mm. If multiple gas springs are used, it makes sense to fit the stops in such a way that the gas springs are used in succession. The advantage of this is that, when opening, the lid does not open too quickly and, when closing, there is no need to push immediately against the force of all the gas springs. The further the stop is moved downwards, the greater the force of the gas springs when opening starts.

Please note: Do not move the stop so far downwards that the piston of the gas spring comes into contact with the base of the cylinder!



Chapter 04: Using the shaft cover

Opening and closing the shaft cover

To use the shaft cover, you need an operator key (#9515031) and the key to the profile cylinder in the locking insert (optional), if any.

1. Use the operator key to release the upper brass triangular locking screw(s) of the locking mechanism(s) and store it (them) somewhere clean (figure 1).

2. Use the key to unlock and remove the locking insert, if any.

3. Release the lower brass triangular locking screw(s) (figures 2 and 3).

4. Use the key hook to reach into the opening in the neck of the lock and lift the lid (figure 4).

5. The gas springs assist opening up to approx. 80°; beyond that you must open the lid further by hand until the latch engages.

6. To close, release the latch and perform steps 5 to1 in the reverse order.

Figure 1

Figure 2

Figure 3

Figure 4

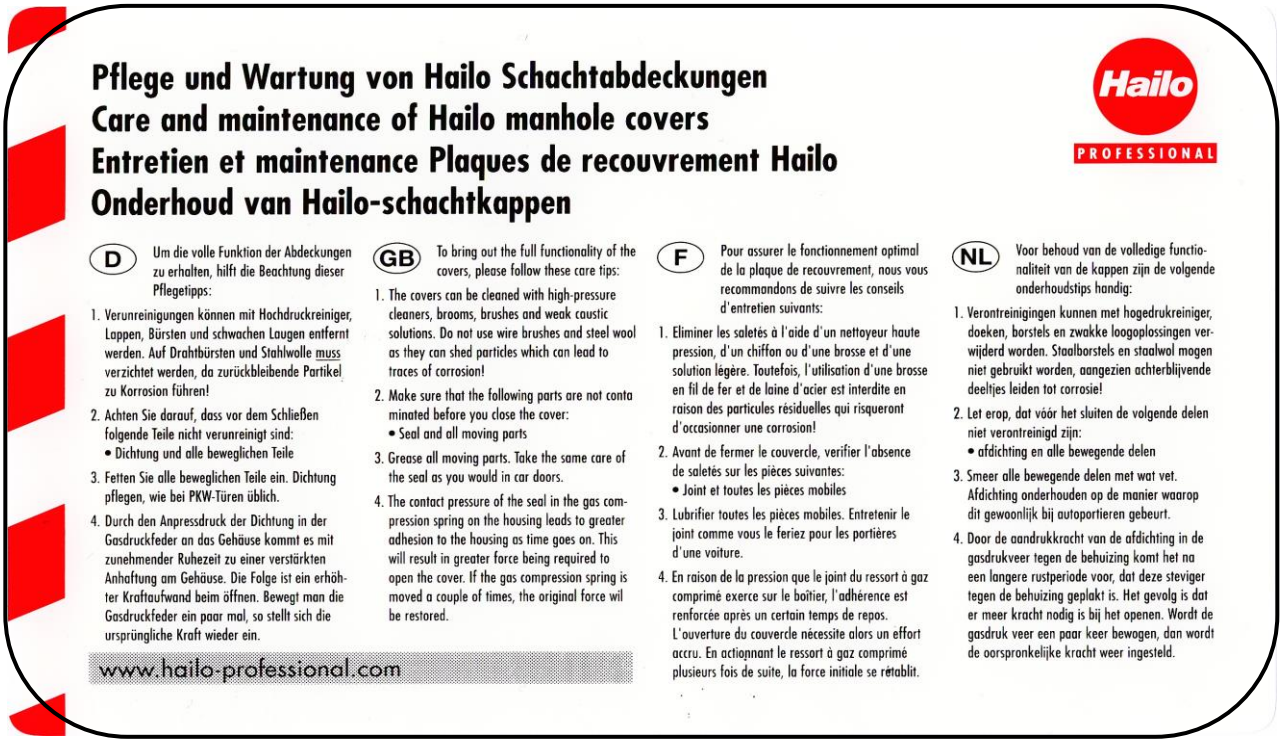
1. The triangular locking screws are made of brass in order to prevent or exclude "seizing" or cold welding of the screwed connection between the lid and frame.

2. The locking screws can be greased on the thread so that they can be freed more easily if the shaft cover has not been opened for a prolonged period.

3. The seal must always be kept clean in order to avoid damage and the resulting loss of sealing.

4. For that reason, always clean the seal around the frame and the stainless steel contact surfaces between the lid and the frame with a hand-brush or cloth before using the lid. The use of stainless steel removes the need to apply oil or grease.

This ensures that your Hailo shaft cover will have a long and trouble-free service life.



Pflege und Wartung von Hailo Schachtabdeckungen
Care and maintenance of Hailo manhole covers
Entretien et maintenance Plaques de recouvrement Hailo
Onderhoud van Hailo-schachtkappen

Hailo PROFESSIONAL

D Um die volle Funktion der Abdeckungen zu erhalten, hilft die Beachtung dieser Pflegetipps:

1. Verunreinigungen können mit Hochdruckreiniger, Lappen, Bürsten und schwachen Laugen entfernt werden. Auf Drahtbürsten und Stahlwolle muss verzichtet werden, da zurückbleibende Partikel zu Korrosion führen!
2. Achten Sie darauf, dass vor dem Schließen folgende Teile nicht verunreinigt sind:
   • Dichtung und alle beweglichen Teile
3. Fetten Sie alle beweglichen Teile ein. Dichtung pflegen, wie bei PKW-Türen üblich.
4. Durch den Anpressdruck der Dichtung in der Gasdruckfeder an das Gehäuse kommt es mit zunehmender Ruhezeit zu einer verstärkten Anhaftung am Gehäuse. Die Folge ist ein erhöhter Kraftaufwand beim öffnen. Bewegt man die Gasdruckfeder ein paar mal, so stellt sich die ursprüngliche Kraft wieder ein.

GB To bring out the full functionality of the covers, please follow these care tips:

1. The covers can be cleaned with high-pressure cleaners, brooms, brushes and weak caustic solutions. Do not use wire brushes and steel wool as they can shed particles which can lead to traces of corrosion!
2. Make sure that the following parts are not contaminated before you close the cover:
   • Seal and all moving parts
3. Grease all moving parts. Take the same care of the seal as you would in car doors.
4. The contact pressure of the seal in the gas compression spring on the housing leads to greater adhesion to the housing as time goes on. This will result in greater force being required to open the cover. If the gas compression spring is moved a couple of times, the original force wil be restored.

F Pour assurer le fonctionnement optimal de la plaque de recouvrement, nous vous recommandons de suivre les conseils d'entretien suivants:

1. Eliminer les saletés à l'aide d'un nettoyeur haute pression, d'un chiffon ou d'une brosse et d'une solution légère. Toutefois, l'utilisation d'une brosse en fil de fer et de laine d'acier est interdite en raison des particules résiduelles qui risqueront d'occasionner une corrosion!
2. Avant de fermer le couvercle, verifier l'absence de saletés sur les pièces suivantes:
   • Joint et toutes les pièces mobiles
3. Lubrifier toutes les pièces mobiles. Entretenir le joint comme vous le feriez pour les portières d'une voiture.
4. En raison de la pression que le joint du ressort à gaz comprimé exerce sur le boîtier, l'adhérence est renforcée après un certain temps de repos. L'ouverture du couvercle nécessite alors un effort accru. En actionnant le ressort à gaz comprimé plusieurs fois de suite, la force initiale se rétablit.

NL Voor behoud van de volledige functionaliteit van de kappen zijn de volgende onderhoudstips handig:

1. Verontreinigingen kunnen met hogedrukreiniger, doeken, borstels en zwakke loogoplossingen verwijderd worden. Staalborstels en staalwol mogen niet gebruikt worden, aangezien achterblijvende deeltjes leiden tot corrosie!
2. Let erop, dat vóór het sluiten de volgende delen niet verontreinigd zijn:
   • afdichting en alle bewegende delen
3. Smeer alle bewegende delen met wat vet. Afdichting onderhouden op de manier waarop dit gewoonlijk bij autoportieren gebeurt.
4. Door de aandrukkracht van de afdichting in de gasdrukveer tegen de behuizing komt het na een langere rustperiode voor, dat deze steviger tegen de behuizing geplakt is. Het gevolg is dat er meer kracht nodig is bij het openen. Wordt de gasdruk veer een paar keer bewogen, dan wordt de oorspronkelijke kracht weer ingesteld.

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