



Storage, installation, and maintenance guide for:

Hydraflex Hydraulic cylinder

type: H2C-series



Storage:

Cylinders must be stored in full retracted position with connection ports blocked with correct plug.

Recommended storage condition: 15-25°C, RF 30-60%.

Storage shelf life at recommended storage condition is approx. 2 years. Longer storage periods can cause deformation of seals resulting in initial seal leakage and reduced seal lifetime.

To avoid corrosion during storage, it is recommended to corrosion protect non-painted parts and bearings with grease. (With the exception of maintenance-free steel bearings, lifetime of maintenance-free steel bearings can be greatly reduced if greased or oiled)

Note: If cylinders are stored in cold storage for longer periods, condensation can appear internal in the cylinder and cause corrosion. To avoid this, it is recommended to fill cylinders with oil before storage in cold storage.

Note: In case of storage of longer periods, contact Hydraflex A/S for more information.

Installation and system requirements:

Hydraulic Media:

Series H2C Hydraulic cylinders is as standard equipped with seals for use with Hydraulic fluids based on mineral oil. Mainly HL, HM/HLP or HV, ISO VG 15 to VG 46 depending on operating temperature.

Note: If cylinders are ordered with special seals or for use with special hydraulic media, Contact Hydraflex A/S for more information.

Oil Cleanliness:

Oil contamination can severely reduce the lifetime of the hydraulic cylinders. For normal operation condition it is recommended to secure oil cleanliness of min. 20/18/15 according to ISO 4406 or NAS 9 according to NAS 1638.

It is recommended to regularly check the oil cleanliness and state of filters on the system.



Installation of hydraulic cylinders:

Before installation, hydraulic cylinders must be visually inspected for damage caused during transport and storage.

Hydraulic cylinders of H2C-series must not be used as end stop of mechanical motion.

Then installed, cylinders must be stroked at full stroke length several times with reduced pressure and load to remove air from the cylinders. If there are still signs of trapped air in the system, the system must be bled for air manually. Contact system supplier for guidance.

During the first strokes small leaks of assembly oil/grease can be observed at the Rodseal. This is ok and will continue for the first 10-20 strokes and then be less and less. Only if it continues for a longer period of the time the Cylinder Rod Seal is defect.

Warning: Trapped air in the cylinder can damage seals and cause unpredicted movements and resulting dangerous situations.

Maintenance:

Visual inspection for leakage:

To avoid breakdown, it is recommended to regular inspect the cylinders for the following:

Leakage from piston rod seals and connections ports:

Leakage from piston rod seal is an indication of wear or damage to the seal, and the seal must be replaced. Replacements seals can be ordered from Hydraflex A/S.

Leakage from connection ports is an indication of the connection is loose and must be tighten or a damage to the seal on the connection hose/fitting.

Damage to hard chrome plating on rod.

Damage to plating on the rod, will result in increased seal wear and leakage. Contact Hydraflex for replacements piston rod or complete cylinder.



Wear and damage do bearings and mounting points.

Wear and damage to bearings and mounting points can result in critical failure of the cylinder.

Damage to surface treatment on cylinder body.

Damage to surface treatment on cylinder body can cause corrosion over time. Repair of the surface treatment or a repaint of the cylinder are recommended.

lubrication of bearings:

All non-maintenance-free bearings and other mounting points must be regularly lubricated with a suitable grease or oil.

Replacements of seals:

Replacements seals can be ordered from Hydraflex A/S, to identify the correct seals the Hydraflex Cylinder Item No. must be stated. Hydraflex Cylinder item No. is 7 digit and starting with 97.xxx.xx

The replacing of the seals must be performed by an experienced technician.

Note: for guide to replacing special seals, contact Hydraflex A/S