

Environmentally friendly

due to working by the use of nature's own materials : expands + retracts by heating + cooling of wax, which consists of plant oils
(= harmless to humans even if licked, as opposed to electricity failures)

16

CYLINDER LIFETIME

We manufacture several hundred thousands of hydraulic cylinders each year, and the lifetime of such cylinders varies. **The average lifetime is 5-10 years.** A few last even 20 years and approx. 5 in 1000 cease to function within the first year or two.

Our warranty is officially 1 year
but in reality we cover 3 years.

The reason for this unofficial extension is to cover both storage time at our premises as well as at our dealers. The year of manufacturing is stamped into the black metal tube at its bottom, and this must be controlled before claiming our warranty.

Each cylinder has a rubber sealing ring between the piston rod and the inside the black tube. This rubber sealing ring gets worn over time by small dust particles brought down into the tube by the movement of the piston rod. **Greasing the piston rod once or twice a year reduces this wear.**

Smaller variations between the inside diameter of the tube and the outside diameter of the piston rod can cause an early leaking of the wax, which make it stop working within a year or two. That is - as mentioned above - the case for some 5 in a 1000. But 995 out of 1000 (= 99%) however work satisfactorily for years and years.

The wax consists of a mixture of natural seed oils,

so it is no health risk if a cylinder is leaking. Even if someone try to lick the wax, the worst that might happen is a bad stomach with some visits to the toilet for a while.

Overloading

the lifting capacity of a hydraulic cylinder may also shorten its lifetime. Used in a automatic vent opener the cylinder can push the weight of a top-hinged window or door of up to 15 Kg (=33 lbs). The weight on the cylinder itself is only half of this total weight, as the other half is resting on the hinges. Used entirely on its own the cylinder however may push up to 80 Kg (=175 lbs) but that is a different story.

Before installation

remember to leave the cylinder in your fridge to cool for 20-30 minutes. When you take it out, hold the piston rod against a wall or a tabletop – and push the piston rod into the cylinder. Now you are 100% sure, that the rod is at the correct starting point, when you fit it onto the vent opener.

The reason for doing so is, that the cylinder during transportation or/and storage may have been exposed to warm temperatures, that has started the wax pushing the rod a bit outwards already. The cylinder has NO return function itself. It must always be an external force to bring the rod back into the cylinder, and while in storage or under transportation no such force is available. Therefore – when you receive it - the cylinder may already have moved 10 or 30%, which will cause trouble with closing your vent, if not corrected before installation.

