



## **Function**

Symmetrical piston/rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

### **Features**

- ⇒ Symmetrical, single acting piston/rod seal, no interference on the ID or OD.
- ⇒ Stabilisation of the sealing ring by an additional retainer ring.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Excellent performance in low pressure conditions.
- ⇒ Useable for long stroke lengths.
- ⇒ Negligible tendency to "stick-slip" effect above a speed of 0.15 m/s.

# **Application**

Reciprocating pistons/rods in hydraulic cylinders, plungers etc.

Replacement for rubber fabric seals of older machineries.

Max. pressure 400 bar, max. speed 0.5 m/s.

### **Installation**

Installation in open housings

#### Seal housing recommendation

| Tolerances            | [mm]      |            |
|-----------------------|-----------|------------|
| L < 10mm              | + 0.2     |            |
| L ≥10mm               | + 0.3     |            |
| Ø NA (rod groove)     | H10       |            |
| Ø NI (rod diam.)      | f8        |            |
| Ø NA (cylinder diam.) | H9        |            |
| Ø NI (piston groove)  | h10       |            |
|                       |           |            |
| Surface roughness     | Rtmax [µ] | Ra [μ]     |
| Bottom of groove      | ≤ 6.3     | ≤ 1.6      |
| Face of groove        | ≤ 15      | ≤ 3        |
|                       |           |            |
| Sliding surface       | Rtmax [µ] | Ra [μ]     |
| PU, elastomeres       | ≤ 2.5     | ≤ 0.1-0.5  |
| PTFE                  | ≤ 2       | ≤ 0.05-0.3 |

**DS22**