Extreme pressure seal ESD66H

triple-acting

**Function**
- Triple-acting, liquid lubricated mechanical seal for extreme pressure applications
- Third pair of seal rings forms a second seal liquid chamber
- A pressure splitting device can be fitted to significantly relieve the load on the seal rings
- Design for demanding processes with a high degree of reliability
- Suitable for extremely toxic and explosive products

**Advantages**
- Function in emergency situations: if one pair of seal rings fails, the seal operates as a double-acting mechanical seal
- Extended life time and less wear
- Lower leakage rates

**Working limits**
- Operating pressure: Vacuum ... 200 bar (abs.)
- Vessel temperature: -50...+400°C
- Shaft size: 40...220 mm
- Sliding speed: 0...3 m/s
- Certification: Acc. to ATEX 2014/34/EU

**Materials**
- Housing: Stainless steel
- Product-wetted parts: Stainless steel, Alloy, Titanium, special materials
- Seal rings: Carbon, Silicon Carbide
- O-rings: FKM (Viton), EPDM, FFKM (Kalrez, Chemraz etc.), special materials
- FDA approval: Available for all product-wetted parts

**Applications**
- Specialty chemicals
- Hydrometallurgy
- Demanding processes with high operational safety
### Design Details ESD66H

A triple acting mechanical seal with two seal chambers and pressure splitters, consisting of VD120 and VD120PS

<table>
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<th>Seal type / size</th>
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<th>d3</th>
<th>d4</th>
<th>d9</th>
<th>LK</th>
<th>n x d2</th>
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All dimensions in mm. Other sizes available on request. Technical data are subject to changes.

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Pressure splitting device VD120PS

Pressure splitter VD120PS

A triple acting mechanical seal with two seal chambers and pressure splitters, consisting of VD120 and VD120PS

Pressure compensator

Pressure chamber 2

Seal chamber 2

Seal chamber 1

Pressure chamber 1

D1

D3

D4

D9

Lk

N x D2

H