

HDR-2C: Bi-Component Polyurethane Rod Seal

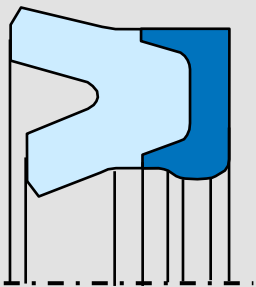
Outstanding flexibility at cold temperatures and excellent resistance to extrusion characterize the bi-component polyurethane rod seal HDR-2C. The investment costs for the user are moderate in spite of its innovative material characteristics.

With the HDR-2C rod seal, Simrit has developed a component that combines outstanding low temperature flexibility – down to -50 °C (-58 °F) – with exceptional extrusion resistance at high pressures. The component consists of static and dynamic sealing edges made of low-temperature polyurethane 92 AU 21100, and an extremely extrusion resistant back side made from our 98 AU 928 polyurethane.

This combination provides a significantly extended application temperature range with added high pressure extrusion resistance. Design engineers are able to benefit from larger extrusion gap widths which provides greater protection against housing / bore contact. Installation is also made easier due to the integration of the back-up ring into the seal.



Flexible at cold temperatures and resistant to extrusion – the HDR-2C rod seal



Significantly increased service life

The HDR-2C bi-component rod seal can increase service life up to 50% in applications characterized by high pressure impact. This also allows for use of inexpensive plastic guides rather than elaborate metallic guides. Last but not least, the bi-component rod seal fits in standard housings. Despite the innovative character of the rod seal, the technology is based on the Simrit design philosophy used for standard products which makes this an affordable way to greatly improve cylinder performance.

Bi-Component Technology Benefits

- **Only one piece**
 - Simple assembly
 - Interchangeable in standard ISO housings
- **Increased resistance against extrusion**
 - Larger gaps allowed with typical pressure
 - Higher pressure allowed with traditional gap widths
- **Superior sealing function even at critical conditions**
 - Extreme low operating temperatures
 - Outstanding extrusion resistance at high pressures

+ In brief

- Bi-component rod seal made of low-temperature PU 92 AU 21100 and extrusion resistant PU 98 AU 928
- Usage under low temperatures and high pressures
- Larger gap widths possible – greater protection against metallic contact
- Compatible with standard housings