



The profile HRI is ideal for sealing internally high-pressurized flanges, in particular cryogenic static and intermittently dynamic applications.

#### **Features**

- · Extended heel to resist extrusion effects.
- Wiper-type lips.
- Cantilever spring with high-load/high-compliance to resist permanent set and long-term flange separation.
- Rigid spring acts as a control band to resist low temperature shrinkage.
- Available in large cross-sections, ideal for large-diameter seals.
- NACE-approved energizers available for oil field use.

### Range of Application

For internal cryogenic static and intermittently dynamic flange sealing – high-pressure.

Operating pressure  $\leq$  55 MPa Operating temperature -260 to +315 °C Surface speed  $\leq$  0.005 m/s

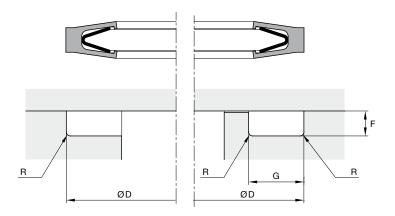
## Compounds

The HRI seal is available in a wide range of polymers. These include unfilled PTFE, filled PTFE, UHMW-PE, PEEK and many others. See the compound list for further information.









# **Housing dimensions**

| Nominal cross-section | Cross-section code | Recommended<br>outer Ø range<br>Tolerance H10<br>D (mm) |      | Groove depth range F (mm) | Groove width min.  G (mm) | Radius<br>max.<br>R (mm) |
|-----------------------|--------------------|---|------|---------------------------|---------------------------|--------------------------|
|                       |                    | ≥   | ≤    |                           |                           |                          |
| 3/16"                 | 04                 | 50  | 300  | 4.72 - 4.78               | 9.9                       | 0.75                     |
| 1/4"                  | 05                 | 80  | 1000 | 6.05 - 6.12               | 11.8                      | 0.75                     |
| 3/8"                  | 06                 | 150   | 1200 | 9.47 - 9.58               | 16.0                      | 0.75                     |
| 1/2"                  | 07                 | 200   | 3000 | 12.70 - 12.80             | 21.0                      | 0.75                     |

**Ordering example** Outside groove 100 mm

HRI M010000 04 XXX Y

HRI

M010000 outer groove diameter in mm times 100

04 cross-section code corresponding to a 4.62 mm groove height

XXX jacket material

spring-energizer material

