

# Product Datasheet

## Elastomer Rotary Seal Range

Pioneer Weston R6 features an elastomeric seal geometry backed by nearly a century of continuous improvement. Featuring an auxiliary dust lip designed for greater ingress protection compared to our Pioneer R4 range.



**N1 (NBR)**  
**N-70-18**  
-35°C and 110°C



**H1 (HNBR)**  
**H-80-40**  
-40°C and 180°C



**F1 (FKM)**  
**V-75-27**  
-20°C and 200°C

**Ground OD**  
Metal OD for precision fitment

**Auxiliary Dust Lip**  
Improved ingress protection\*

### Configurable Options

**Poly-Sealant Paint**  
For rough\* housing bores

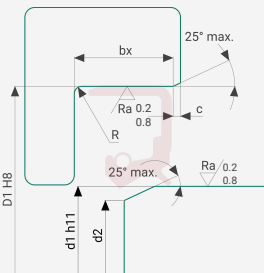
**PWHydro Aid**  
Hydrodynamic aid to improve fluid transfer at high speeds\*

**Stainless Steel Components**  
Improve corrosion resistance

\*Surface Speed Limited- 8m/s  
\* Contact Pioneer Weston for advice

**Max Diff. Pressure (bar)**  
**0.5**

**Ingress Protection**  
**R4 R6 PW SPECIAL**



| Shaft, d1 | d1-d2 |
|-----------|-------|
| 0-10      | 1.5   |
| 10-20     | 2.0   |
| 20-30     | 2.5   |
| 30-40     | 3.0   |
| 40-50     | 3.5   |
| 50-70     | 4.0   |
| 70-90     | 4.5   |
| 90-110    | 5.0   |
| 110-130   | 5.5   |
| 130-250   | 7.0   |
| 250-500   | 11.0  |

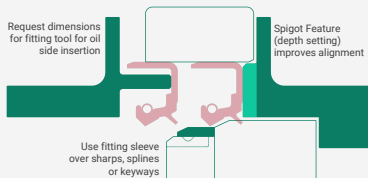
Dimensions in mm

| Bore, D1 | c            | R         |
|----------|--------------|-----------|
| ≤100     | 0.70 to 1.00 | 0.75 max. |
| >100     | 1.20 to 1.50 | 1.00 max. |

Dimensions in mm

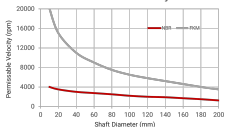
Shaft hardness **55-60Hrc\*\*** (0.3 Depth)  
Shaft ground finish with no lay  
**bx**=seal width +0.3

\*\*60Hrc min for surface speed >10m/s



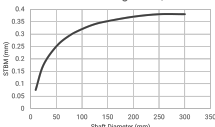
### Application Criteria

Permissible Velocity



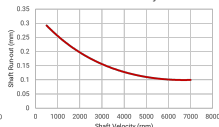
Approximate permissible velocity when provided with adequate lubrication, heat dissipation under no pressure.

Shaft to Bore Misalignment, STBM



Eccentricities (TLR) between bore and shaft centerline should be kept to minimum to prevent unbalanced load. Approximate values shown.

Shaft Eccentricity



Locate seal close to bearing to reduce excessive eccentricity/ shaft run-out (TLR). Approximate values shown.

Pioneer Weston technical solutions available via global ERIKS Sealing and Polymer divisions & our website.

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