

# Product Datasheet

## Elastomer Rotary Seal Range

Pioneer Weston R21, an elastomer encapsulated Pioneer R4, favourable for rougher housing bores. Features an elastomeric seal geometry backed by nearly a century of continuous improvement.



**Rubber OD**  
for Rough Bore | Low Viscosity Fluids

### Configurable Options

**Ribbed OD**  
for ease of installation

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

**Stainless Steel Components**  
Improve corrosion resistance

\* Contact Pioneer Weston for advice

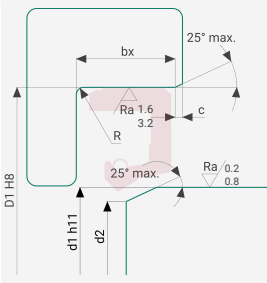
Max Diff. Pressure (bar)

0.5

Ingress Protection

R21 R23 PW SPECIAL

 <b>N1 (NBR)</b> <b>N-70-18</b> -35°C and 110°C	 <b>H1 (HNBR)</b> <b>H-80-40</b> -40°C and 180°C	 <b>F1 (FKM)</b> <b>V-75-27</b> -20°C and 200°C
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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

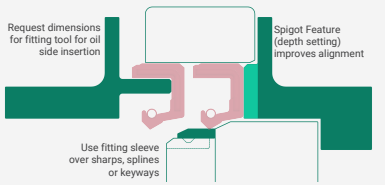
Dimensions in mm

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

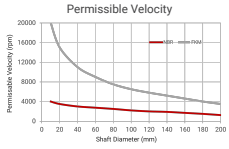
Dimensions in mm

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

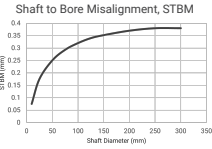
\*\*60HrC min for surface speed >10m/s



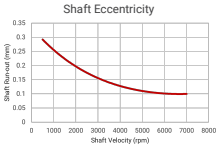
### Application Criteria



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



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



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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