

**ROD WIPER**  
**RU1**



Product Performance. Affordability. Availability.



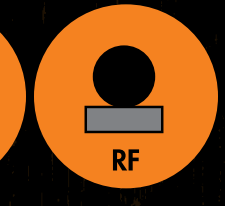
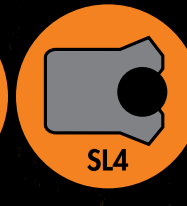
ROD SEAL

RU1



ROD SEAL PROFILE PROFILES

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The RU1 U-Cup is a single acting dual lip rod seal designed to fit standard rod gland housings. The RU1 U-Cup provides effective zero leakage sealing for medium and heavy duty cylinder applications. The ID and OD sealing lips are knife trimmed to provide reliable sealing performance. A molded stabilizing lip on the inside diameter of the u-cup provides enhanced stability, reduced friction and improved sealing performance during dynamic cycling.

The RU1 U-Cup is a single element component made from a high grade of water resistant polyurethane material that can withstand the rigors of heavy duty mining and mobile hydraulic cylinder applications. The RU1 U-Cup is an economical choice for most hydraulic cylinder applications.

The RU1 U-Cup can be utilized in a variety of demanding hydraulic cylinders requiring high reliability and long life performance, which is particularly suited for earth moving and other mobile equipment applications. The product range consists of industry standard sizes to accommodate imperial (inch) dimensioned housings.

## STANDARD MATERIALS

- P92T 92 Shore A Polyurethane (Blue) Recommended for rod diameters < 1.50"
- P94T 94 Shore A Polyurethane (Orange) Recommended for rod diameters > 1.50"

Other material options are available upon request.

## TECHNICAL SPECIFICATIONS

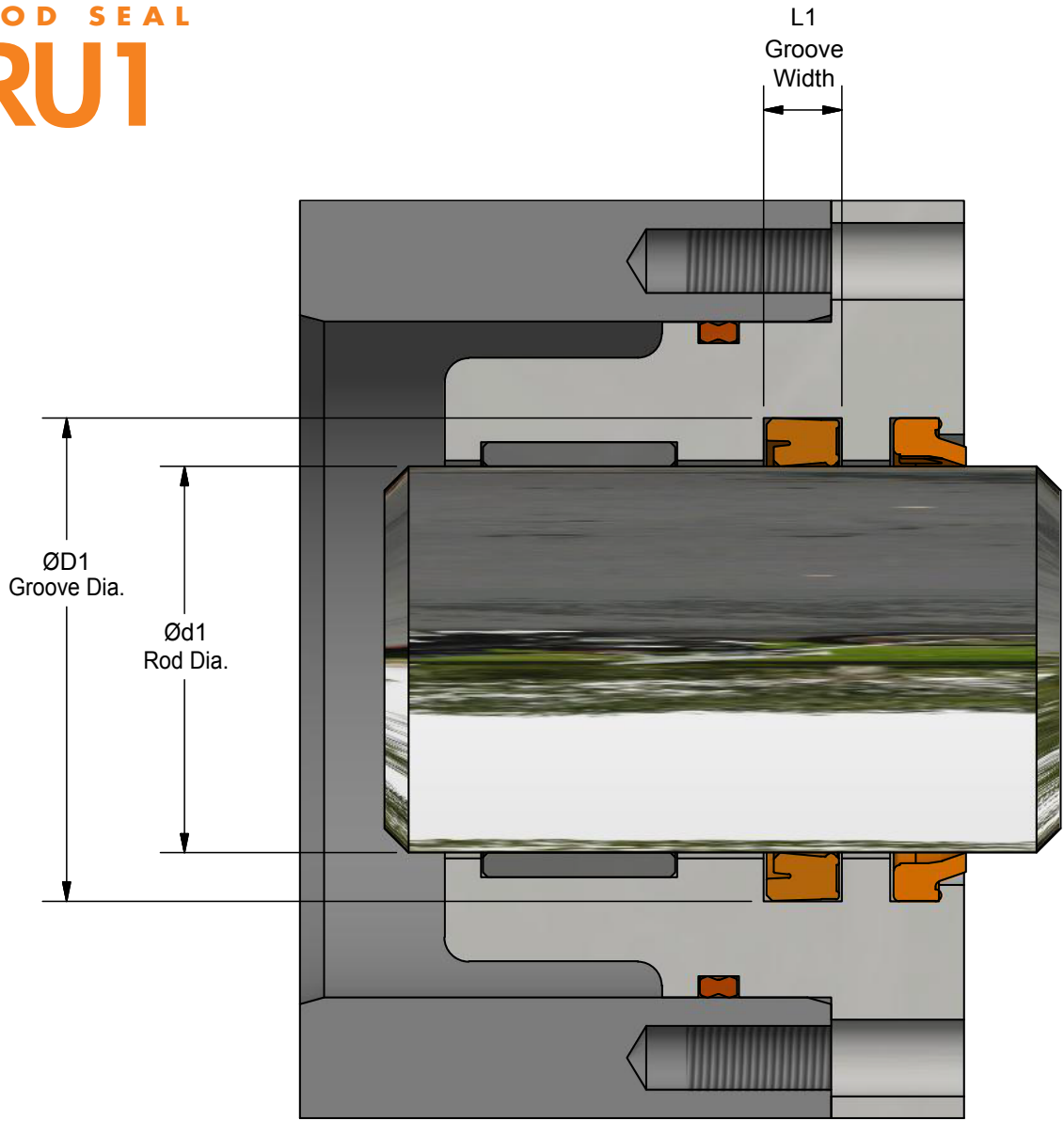
### OPERATING CONDITION

Parameter	Unit	Low Extreme	Normal Operation			High Extreme
Pressure	psi		0	—	5,000	7,500
Temperature	°F	-65	-40	—	250	265
Speed	fps		0	—	3	6
Note	Continuous operation at any one of the extreme conditions may result in substantially reduced seal life.					

### FEATURES

- Single Element Design
- Stable Dual Lip Design
- Excellent Extrusion Resistance
- Excellent Wear Resistance
- Zero Leakage Performance
- Low Compression Set
- Low Friction
- Easy Installation
- Cost Effective
- Robust Design

ROD SEAL  
**RUT**



**EXTRUSION GAPS**

Cross Section	1,500 psi	3,000 psi	5,000 psi
<b>0.125"</b>	0.030"	0.026"	0.016"
<b>0.187"</b>	0.032"	0.028"	0.018"
<b>0.250"</b>	0.034"	0.030"	0.020"
<b>0.312"</b>	0.036"	0.032"	0.022"
<b>0.375"</b>	0.038"	0.034"	0.024"
<b>0.500"</b>	0.040"	0.036"	0.026"

Maximum recommended diametrical extrusion gap when using wear rings.

Part Number	Rod Dia. "d1"	Groove Dia. "D1"	Groove Width "L1"
RU1-12500375-187-P94T	0.375	0.625	0.218
RU1-18700375-312-P94T	0.375	0.750	0.343
RU1-12500500-187-P94T	0.500	0.750	0.218
RU1-12500562-187-P94T	0.593	0.813	0.218
RU1-12500625-187-P94T	0.625	0.875	0.218
RU1-18700625-281-P94T	0.625	1.000	0.312
RU1-12500687-187-P94T	0.687	0.937	0.218
RU1-12500750-125-P94T	0.750	1.000	0.156
RU1-12500750-187-P94T	0.750	1.000	0.218
RU1-12500750-250-P94T	0.750	1.000	0.281
RU1-18700750-312-P94T	0.750	1.125	0.343
RU1-12500812-187-P94T	0.812	1.062	0.218
RU1-12500812-250-P94T	0.812	1.062	0.281
RU1-12500875-187-P94T	0.875	1.125	0.218
RU1-12500875-250-P94T	0.875	1.125	0.281
RU1-25000875-341-P94T	0.875	1.375	0.372
RU1-12501000-187-P94T	1.000	1.250	0.218
RU1-12501000-250-P94T	1.000	1.250	0.281
RU1-15601000-219-P94T	1.000	1.312	0.281
RU1-18701000-187-P94T	1.000	1.375	0.218
RU1-18701000-250-P94T	1.000	1.375	0.281
RU1-18701000-312-P94T	1.000	1.375	0.343
RU1-25001000-250-P94T	1.000	1.500	0.281
RU1-25001000-341-P94T	1.000	1.500	0.372
RU1-25001000-375-P94T	1.000	1.500	0.406
RU1-12501062-250-P94T	1.062	1.312	0.281
RU1-12501125-187-P94T	1.125	1.375	0.218
RU1-12501125-250-P94T	1.125	1.375	0.281
RU1-18701125-312-P94T	1.125	1.500	0.343
RU1-25001125-250-P94T	1.125	1.625	0.281
RU1-18701187-250-P94T	1.187	1.562	0.281
RU1-12501250-187-P94T	1.250	1.500	0.218
RU1-12501250-250-P94T	1.250	1.500	0.281
RU1-18701250-187-P94T	1.250	1.625	0.218
RU1-18701250-250-P94T	1.250	1.625	0.281
RU1-18701250-312-P94T	1.250	1.625	0.343
RU1-25001250-250-P94T	1.250	1.750	0.281
RU1-25001250-375-P94T	1.250	1.750	0.406
RU1-12501375-187-P94T	1.375	1.625	0.218
RU1-12501375-250-P94T	1.375	1.625	0.281
RU1-15601375-219-P94T	1.375	1.688	0.281
RU1-18701375-187-P94T	1.375	1.750	0.218
RU1-18701375-312-P94T	1.375	1.750	0.343
RU1-25001375-375-P94T	1.375	1.875	0.406
RU1-18701437-312-P94T	1.437	1.812	0.343
RU1-12501500-250-P94T	1.500	1.750	0.281
RU1-18701500-187-P94T	1.500	1.875	0.218
RU1-18701500-250-P94T	1.500	1.875	0.281
RU1-18701500-312-P94T	1.500	1.875	0.343
RU1-18701500-375-P94T	1.500	1.875	0.406
RU1-25001500-250-P94T	1.500	2.000	0.281
RU1-25001500-341-P94T	1.500	2.000	0.372
RU1-25001500-375-P94T	1.500	2.000	0.406
RU1-31201500-375-P94T	1.500	2.125	0.406
RU1-12501625-250-P94T	1.625	1.875	0.281
RU1-18701625-281-P94T	1.625	2.000	0.281
RU1-18701625-312-P94T	1.625	2.000	0.343
RU1-18701625-375-P94T	1.625	2.000	0.406
RU1-25001625-375-P94T	1.625	2.125	0.406
RU1-12501750-250-P94T	1.750	2.000	0.281
RU1-18701750-250-P94T	1.750	2.125	0.281
RU1-18701750-312-P94T	1.750	2.125	0.343

Tolerance h9

Tolerance H9

Tolerance -0.000 / +0.010

Part Number	Rod Dia. "d1"	Groove Dia. "D1"	Groove Width "L1"
RU1-18701750-375-P94T	1.750	2.125	0.406
RU1-25001750-250-P94T	1.750	2.250	0.281
RU1-25001750-341-P94T	1.750	2.250	0.372
RU1-25001750-375-P94T	1.750	2.250	0.406
RU1-25001750-500-P94T	1.750	2.250	0.531
RU1-31201750-437-P94T	1.750	2.375	0.468
RU1-18701875-312-P94T	1.875	2.250	0.343
RU1-18701875-375-P94T	1.875	2.250	0.406
RU1-25001875-375-P94T	1.875	2.375	0.406
RU1-12502000-250-P94T	2.000	2.250	0.281
RU1-18702000-250-P94T	2.000	2.375	0.281
RU1-18702000-312-P94T	2.000	2.375	0.343
RU1-18702000-375-P94T	2.000	2.375	0.406
RU1-25002000-250-P94T	2.000	2.500	0.281
RU1-25002000-312-P94T	2.000	2.500	0.343
RU1-25002000-341-P94T	2.000	2.500	0.372
RU1-25002000-375-P94T	2.000	2.500	0.406
RU1-25002000-750-P94T	2.000	2.500	0.781
RU1-31202000-312-P94T	2.000	2.625	0.343
RU1-31202000-500-P94T	2.000	2.625	0.531
RU1-37502000-625-P94T	2.000	2.750	0.656
RU1-18702125-375-P94T	2.125	2.500	0.406
RU1-25002250-341-P94T	2.250	2.750	0.372
RU1-25002250-375-P94T	2.250	2.750	0.406
RU1-31202250-500-P94T	2.250	2.875	0.531
RU1-18702375-375-P94T	2.375	2.750	0.406
RU1-25002375-375-P94T	2.375	2.875	0.406
RU1-18702500-312-P94T	2.500	2.875	0.343
RU1-18702500-375-P94T	2.500	2.875	0.406
RU1-25002500-250-P94T	2.500	3.000	0.281
RU1-25002500-375-P94T	2.500	3.000	0.406
RU1-31202500-500-P94T	2.500	3.125	0.531
RU1-37502500-625-P94T	2.500	3.250	0.656
RU1-18702625-375-P94T	2.625	3.000	0.406
RU1-25002625-500-P94T	2.625	3.125	0.531
RU1-31202625-625-P94T	2.625	3.250	0.656
RU1-25702735-312-P94T	2.735	3.250	0.343
RU1-18702750-375-P94T	2.750	3.125	0.406
RU1-25002750-312-P94T	2.750	3.250	0.343
RU1-25002750-375-P94T	2.750	3.250	0.406
RU1-31202750-375-P94T	2.750	3.375	0.406
RU1-31202750-500-P94T	2.750	3.375	0.531
RU1-37502750-625-P94T	2.750	3.500	0.656
RU1-18702875-375-P94T	2.875	3.250	0.406
RU1-25002875-375-P94T	2.875	3.375	0.406
RU1-18703000-375-P94T	3.000	3.375	0.406
RU1-21803000-281-P94T	3.000	3.438	0.312
RU1-25003000-375-P94T	3.000	3.500	0.406
RU1-25003000-625-P94T	3.000	3.500	0.656
RU1-25003000-750-P94T	3.000	3.500	0.781
RU1-31203000-500-P94T	3.000	3.625	0.531
RU1-37503000-625-P94T	3.000	3.750	0.656
RU1-18703125-625-P94T	3.125	3.500	0.656
RU1-18703188-375-P94T	3.188	3.562	0.406
RU1-18703250-375-P94T	3.250	3.625	0.406
RU1-18703250-562-P94T	3.250	3.625	0.593
RU1-25003250-375-P94T	3.250	3.750	0.406
RU1-31203250-500-P94T	3.250	3.875	0.531
RU1-25003375-375-P94T	3.375	3.875	0.406
RU1-18703500-375-P94T	3.500	3.875	0.406
RU1-25003500-312-P94T	3.500	4.000	0.343
RU1-25003500-375-P94T	3.500	4.000	0.406
RU1-31203500-500-P94T	3.500	4.125	0.531

Tolerance h9

Tolerance H9

Tolerance -0.000 / +0.010

Part Number	Rod Dia. "d1"	Groove Dia. "D1"	Groove Width "L1"
RU1-37503500-625-P94T	3.500	4.250	0.656
RU1-25003625-375-P94T	3.625	4.125	0.406
RU1-18703750-375-P94T	3.750	4.125	0.406
RU1-25003750-375-P94T	3.750	4.250	0.406
RU1-25003750-500-P94T	3.750	4.250	0.531
RU1-25003750-562-P94T	3.750	4.250	0.593
RU1-25003875-375-P94T	3.875	4.375	0.406
RU1-18704000-375-P94T	4.000	4.375	0.406
RU1-25004000-312-P94T	4.000	4.500	0.343
RU1-25004000-375-P94T	4.000	4.500	0.406
RU1-25004000-562-P94T	4.000	4.500	0.593
RU1-25004000-750-P94T	4.000	4.500	0.781
RU1-31204000-375-P94T	4.000	4.625	0.406
RU1-31204000-500-P94T	4.000	4.625	0.531
RU1-37504000-500-P94T	4.000	4.750	0.531
RU1-37504000-625-P94T	4.000	4.750	0.656
RU1-37504250-625-P94T	4.250	5.000	0.656
RU1-25004375-375-P94T	4.375	4.875	0.406
RU1-25004500-375-P94T	4.500	5.000	0.406
RU1-31204500-500-P94T	4.500	5.125	0.531
RU1-31204500-625-P94T	4.500	5.125	0.656
RU1-37504500-625-P94T	4.500	5.250	0.656
RU1-31204625-625-P94T	4.625	5.250	0.656
RU1-18704750-375-P94T	4.750	5.125	0.406
RU1-25004750-625-P94T	4.750	5.250	0.656
RU1-25004875-375-P94T	4.875	5.375	0.406
RU1-25005000-375-P94T	5.000	5.500	0.406
RU1-25005000-562-P94T	5.000	5.500	0.593
RU1-25005000-750-P94T	5.000	5.500	0.781
RU1-31205000-500-P94T	5.000	5.625	0.531
RU1-37505000-625-P94T	5.000	5.750	0.656
RU1-25005125-562-P94T	5.125	5.625	0.593
RU1-43705125-500-P94T	5.125	6.000	0.531
RU1-25005375-625-P94T	5.375	5.875	0.656
RU1-31205375-625-P94T	5.375	6.000	0.656
RU1-18705500-375-P94T	5.500	5.875	0.406
RU1-25005500-375-P94T	5.500	6.000	0.406
RU1-25005500-562-P94T	5.500	6.000	0.593
RU1-31205500-312-P94T	5.500	6.125	0.343
RU1-37505500-625-P94T	5.500	6.250	0.656
RU1-25005625-375-P94T	5.625	6.125	0.406
RU1-25006000-562-P94T	6.000	6.500	0.593
RU1-25006000-562-P94T	6.000	6.500	0.593
RU1-25006000-750-P94T	6.000	6.500	0.781
RU1-37506000-625-P94T	6.000	6.750	0.656
RU1-25006375-375-P94T	6.375	6.875	0.406
RU1-37506500-625-P94T	6.500	7.250	0.656
RU1-25007000-562-P94T	7.000	7.500	0.593
RU1-25007000-562-P94T	7.000	7.500	0.593
RU1-25007000-750-P94T	7.000	7.500	0.781
RU1-37507000-625-P94T	7.000	7.750	0.656
RU1-25007250-375-P94T	7.250	7.750	0.406
RU1-37507750-625-P94T	7.750	8.500	0.656
RU1-25008000-562-P94T	8.000	8.500	0.593
RU1-37508000-625-P94T	8.000	8.750	0.656
RU1-25008125-375-P94T	8.125	8.625	0.406
RU1-25008125-750-P94T	8.125	8.625	0.781
RU1-25009000-562-P94T	9.000	9.500	0.593
RU1-25009125-375-P94T	9.125	9.625	0.406
RU1-37509250-625-P94T	9.250	10.000	0.656
RU1-25009375-750-P94T	9.375	9.875	0.781
RU1-25009750-375-P94T	9.750	10.250	0.406
RU1-25010000-562-P94T	10.000	10.500	0.593

Tolerance h9

Tolerance H9

Tolerance -0.000 / +0.010



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