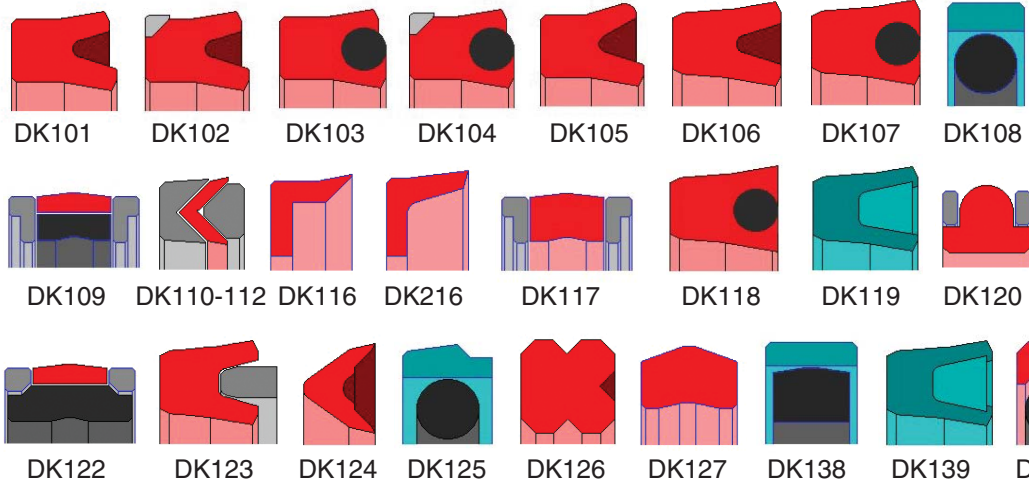


CUSTOM MACHINED SEALS

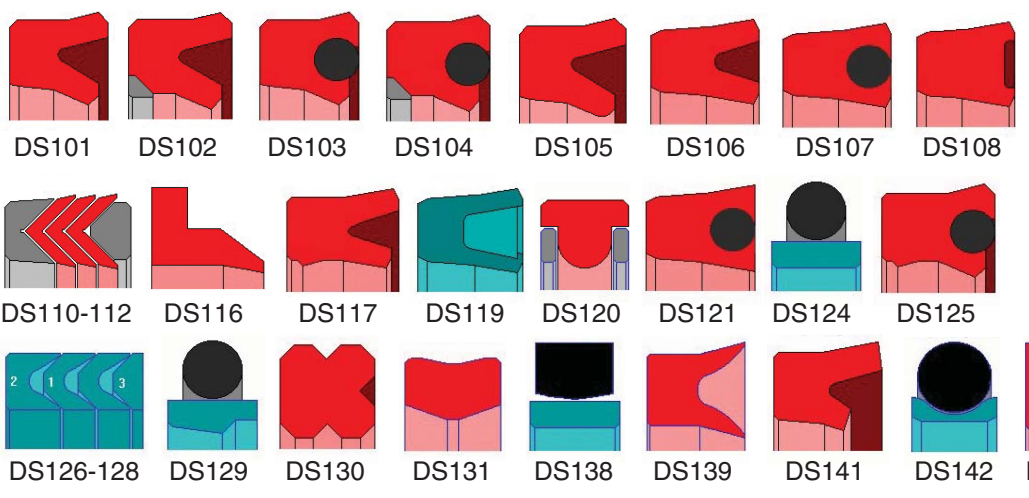
Hydrapak Seals, Inc. provides Seals, Gaskets and O-Rings in an unlimited number of profiles. Below are some standard profiles:

Piston Seals



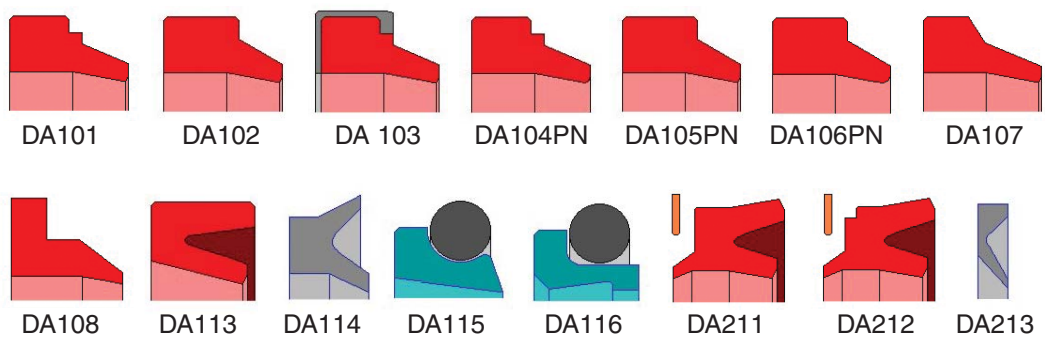
Materials
HPU
NBR
FPM (Viton®)
EPDM
H-NBR
PTFE bronze and glass filled

Rod Seals



Materials
HPU
NBR
FPM (Viton®)
EPDM
H-NBR
PTFE bronze and glass filled

Wipers



Materials
HPU
NBR
FPM (Viton®)
EPDM
H-NBR
PTFE bronze and glass filled

CUSTOM MACHINED SEALS

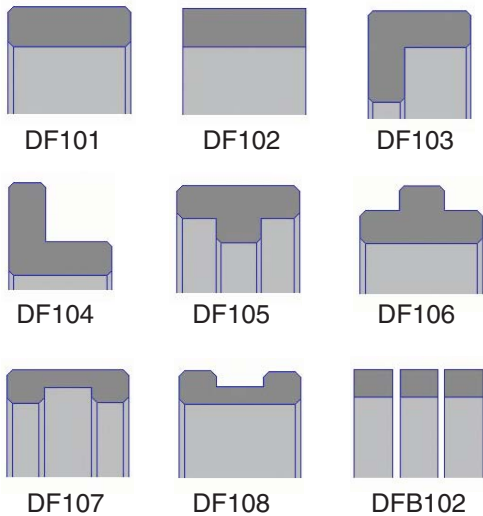
To order see page 4

Backup/Anti-extrusion Rings



Materials
POM
NYLON
PTFE

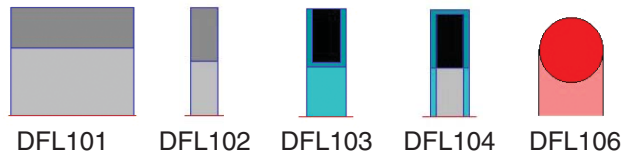
Guide Rings



Materials
POM
NYLON
PTFE

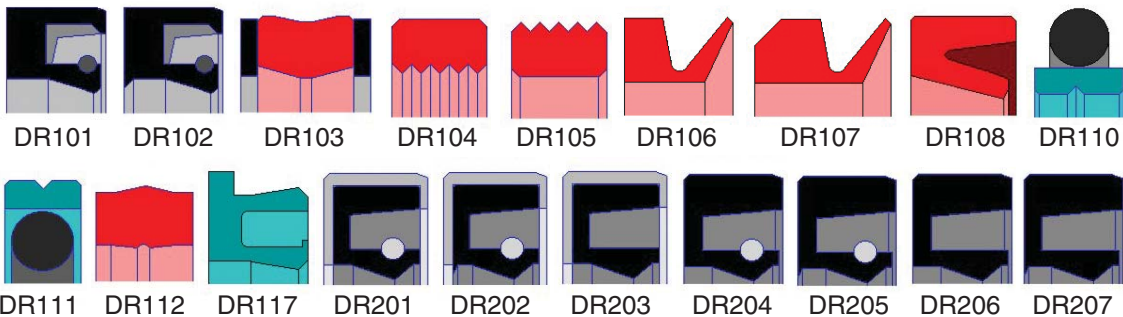


Gaskets



Flat gaskets: All material including silicon	
O-rings:	
HPU	FPM (Viton®)
NBR	EPDM
H-NBR	PTFE

Rotary Seals



Materials
NBR
FPM (Viton®)
EPDM
H-NBR
PTFE
In some cases HPU

CUSTOM MACHINED SEALS

STANDARD MATERIALS

ELASTOMERS

EPDM

Black. Sulfur-cured. Weather and ozone resistant. Not resistant to mineral oil.
 Hardness: 85 Shore A
 Temperature range: -16°F to +302°F (steam)
 Application: Hot water, steam, diluted acids.

FPM (Viton®)

Brown. High heat, chemical resistant.
 Hardness: 85 Shore A
 Temperature range: -4°F to +400°F
 Application: O-rings, multi-use.

NBR (Nitrile, Buna)

Black. Abrasion resistant. Elasticity.
 Hardness: 85 Shore A
 Temperature range: -40°F to +212°F
 Application: Hydraulic, pneumatic seals.

PLASTICS

PA (Nylon)

Dark gray. High pressure, extrusion resistant.
 Hardness: 85 Shore D
 Temperature range: -40°F to +212°F
 Application: Guide rings, back-up rings

POM (Acetal)

White. High pressure, extrusion resistant.
 Hardness: 85 Shore D
 Temperature range: -40°F to +212°F
 Application: Guide rings, back up rings

HPU (Polyurethane)

Red. Extremely abrasion resistant, extrusion and water resistant.
 Hardness: 95 Shore A
 Temperature range: -31°F to +230°F
 Application: Hydraulic seals

PTFE

700 (Virgin)

White. Inert. Chemical resistant. High friction.
 Food compatible, not FDA.
 Hardness: 55 Shore D
 Temperature range: -436°F to +500°F
 Application: Slow speed, cryogenics

701 (25% Glass)

White. Highly inert. High friction. Higher extrusion resistance.
 Hardness: 62 Shore D
 Temperature range: -436°F to +500°F
 Application: Stem guide liners, bearings

702 (15% Glass 5% Moly)

Gray. Extreme extrusion resistance. High tear strength.
 Hardness: 58 Shore D
 Temperature range: -450°F to +550°F
 Application: Dynamic sealing, high-temp

741 (40% Bronze)

Brown with pigments. Similar to 702. Higher specific gravity.
 Hardness: 60 Shore D
 Temperature range: -328°F to +500°F
 Application: Hydraulics, high speed.



OTHER MATERIALS

RUBBERS

- NBR (white)
- H-NBR
- H-NBR (FDA approved)
- T-NBR (Low-temp)
- EPDM (FDA-approved)
- MVQ (Silicone)
- MVQ (Silicone FDA-approved)
- FPM (FDA-approved Viton®)
- TFE/P (Aflas®)

ENGINEERED PLASTICS

- CHPU (Cast Urethane-96A)
- CHPU (Cast Urethane-55D)
- CHPU (Cast Urethane-72D)
- LTPU (Low-temp Urethane)
- HTPU (Hi-temp Urethane)
- SLPU (with solid lubricants)
- Polypropylene
- UHMWPE
- ETFE (Tefzel®)
- Polyethylene
- PCTFE
- 703 PPS Carbon, Moly/PTFE
- 706 (15% Glass/PTFE)
- 711 (25% Carbon/PTFE)
- 713 (60% Bronze/PTFE)
- 716 (15% Graphite/PTFE)
- 734 (10% Carbon/PTFE)
- 745 PEEK™
- 755 (10% Ekonol/PTFE)
- 756 (Polyamide/PTFE)
- 771 (Mineral Moly/PTFE)
- 782 (Carbon Fiber/PTFE)
- Rulon®

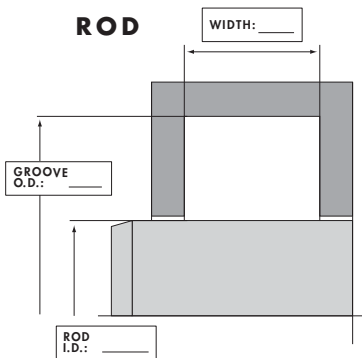
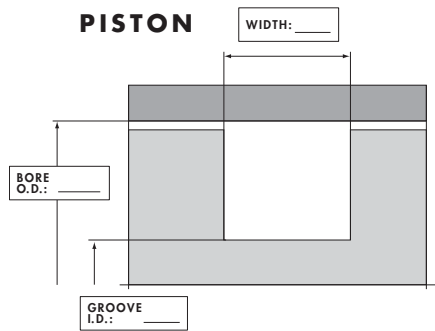
Note: Please call for materials not listed above.

CUSTOM MACHINED SEALS

- 1 Confirm your application: is it a piston or a rod?
- 2 Fill out the form on this page, including quantity, dimensions (see diagram below) and special conditions or problems.
- 3 Select a suitable profile from the appropriate categories on pages 1-2.
- 4 Select a suitable material for the application.
- 5 Please call or e-mail HydraPak Seals with any questions.
- 6 E-mail the completed form to sales@hydrapakseals.com or fax it to 1-800-626-1848.

APPLICATION

Please provide prints with all necessary dimensions and tolerances if possible.



Name: _____
 Company: _____
 Address: _____
 City: _____
 State or Providence: _____
 ZIP/Postal Code: _____
 Telephone: () _____
 Fax: _____

SEAL TYPE/ENVIRONMENT

- Dynamic:** Reciprocating Oscillating Rotary
 Static: Face Seal I.D. - O.D.
 Custom:

Fluid to be sealed: _____

Pressure:

Normal psi _____ Min. psi _____ Max psi _____

Temperature:

Normal °F _____ Min. °F _____ Max °F _____

Speed:

cycles/minute ____ stroke length ____ ave. speed ____

Profile Number (see pages 1-2) _____

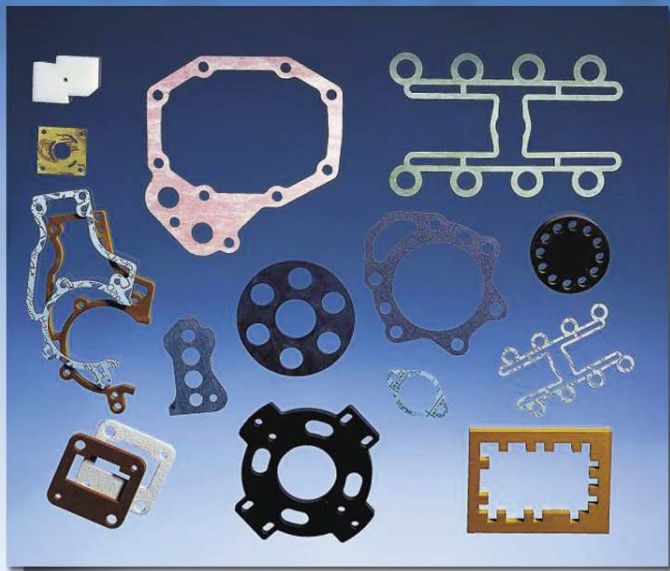
Special requirements for the seal and/or specific environment or operating conditions:

WATERJET CUTTING

WATERJET CUTTING

WATERJET CUTTING

Custom Gaskets to Order



- Prototypes
- One of a Kind
- Close Tolerance
- No Heat Effect Zone
- No Tooling Charges
- Quality Finish
- Long and Short runs
- Wide Range of Materials

**We specialize in
Custom Gaskets**



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