

MATERIALS

(unless listed below, see seal material for temperature ranges)

	Aluminum 3600	Bronze 3300	Cast HP 3700	CST 3400	Ductile Iron 3800	SST 3900
Body and Tail	ASTM B26 A356 T6	ASTM B62-83600	ASTM A351- CF3M/CF8M	ASTM A105	ASTM A-536	ASTM A351- CF3M/CF8M
Seals	See Chart	See Chart	See Chart	See Chart	See Chart	See Chart
Balls	Grade 200 CST	Grade 200 CST	Grade 200 CST	Grade 200 CST	Grade 200 CST	Grade 400 SST
Flanges (150/300 lb)	6061-T6	N/A	N/A	ASTM A105	N/A	B16 A182 316/316L
Elbows	6061-T6	N/A	N/A	ASTM A234 WPB	N/A	ASTM A351-CF3M
Piping	6061-T6	N/A	N/A	ASTM A53 Grade B	N/A	ASTM A312 TP 316L

Seal Material	Min Temp C	Max Temp C	Min Temp F	Max Temp F
Buna	-29	100	-20	212
Fluorocarbon	-29	204	-20	400
(PFA) PTFE/Silicone (standard) (FDA Approved)	-46	260	-50	500
EPDM	-46	121	-50	250
(PFA) PTFE/Fluorocarbon (special order) (FDA Approved)	-18	204	0	400
Kalrez®	-18	260	0	500

LUBRICATION

OPW swivel joints should be lubricated periodically, depending on service and operating conditions. **For normal operation, annually is sufficient.** Lubricating more frequently may be required when service is severe such as high temperatures, heavy loads, or constant rotation.

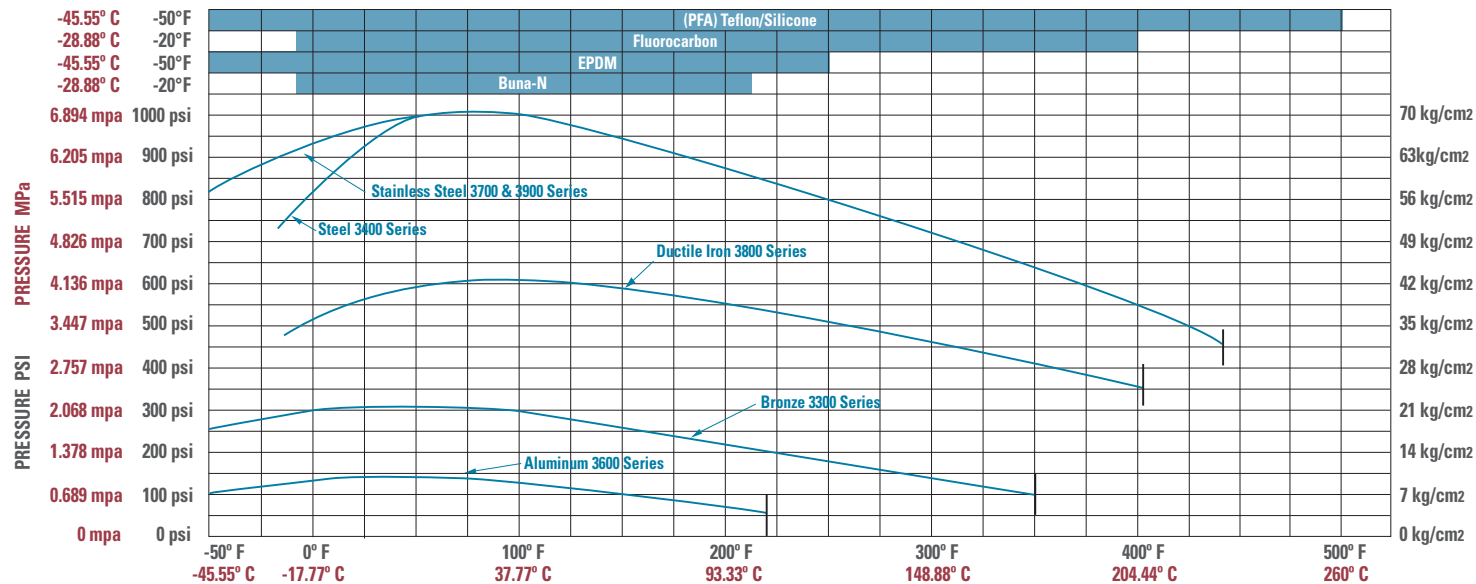
Part

Description

- | | |
|---|--|
| <p>880-0089 High Performance Synthetic Lubricant (14 oz. (400 grams) cartridge</p> <ul style="list-style-type: none"> • Specially formulated to reduce friction and wear • Requires only annual lubrication • Not for use with EPT/EPDM seals | <ul style="list-style-type: none"> • Will not drip, melt or carbonize • Complies with FDA regulation 21CFR178.3570 • Temperature range -40°F - 750°F (-40°C - 398.8°C) |
| <p>885-0085 • High Performance Synthetic Lubricant for EPT Seals</p> | |

Warning: EPT/EPDM Seals require the use of a OPW 885-0085 or a non-petroleum based lubricant.

PRESSURE/TEMPERATURE GUIDE



AVAILABILITY BY MATERIAL, SIZE AND PRESSURE RATING

Material	3/4" 20mm	1" 25mm	1-1/4" 32mm	1-1/2" 40mm	2" 50mm	3" 80mm	4" 100mm	6" 150mm	8" 200mm	10" 250mm	Pressure Rating* 8" & 10" 500 psi max
Steel, Cast, High-Pressure 3200 Series	■	■	■	■							3000 psi 210 kg/cm ² 20.68 mpa
Steel, Fabricated 3400 Series					■	■	■	■	■	■	1000 psi 70 kg/cm ² 6.89 mpa
316 Stainless Steel 3700 & 3900 Series	■	■		■	■	■	■	■	■	■	1000 psi 70 kg/cm ² 6.89 mpa
Aluminum 3600 Series		■		■	■	■	■	■			125 psi 9 kg/cm ² 0.86 mpa
Ductile Iron 3800 Series		■		■	■	■	■				600 psi 42 kg/cm ² 4.13 mpa
Bronze 3300 Series		■		■	■	■					300 psi 21 kg/cm ² 2.06 mpa

*Maximum pressure rating of OPW swivel joints is as shown, or is determined by the flange/end connection rating, whichever is lower. Buna-N seals are standard in all of the above swivel joints, but each is available with seals made of Fluorocarbon GFLT, FEP PTFE/Silicone EPDM, or Kalrez® 6375, depending on the pressures and temperatures of your operation.

SURFACE TREATMENT(S)

Treatments Carbon Steel, Carburized to Rc 45-60 Anodizing for Aluminum

Painting All Steel and Ductile Iron Swivel Joints are Painted with a Rust-Inhibiting Day Primer Finish Paint (Watson Coatings, INC. Water Reducible Enamel Coating, Aqua-Shile High Gloss Blue (WAC - 2569) at -6 to 1 mls Dry Film Thickness.)

SEAL KIT PART NUMBERS

3001K - 1200

Seal Materials	Size
1 - Buna-N	10 - 3/4" & 1"
2 - Fluorocarbon	15 - 1-1/4" & 1-1/2"
3 - PTFE/Silicone	24 - 2"
4 - EPDM	30 - 3"
5 - FDA Nitrile	40 - 4"
9 - Kalrez®	60 - 6" 80 - 8"

IMPORTANT: OPW products should be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. OPW MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE. All illustrations and specifications in this literature are based on the latest product information available at the time of publication. OPW reserves the right to make changes at any time in prices, materials, specifications and models and to discontinue models without notice or obligation.