

Link-Seal® Modular Seal Model Properties

WITH EPDM SEAL ELEMENTS



**EPDM (Black)
EPDM (Blue) Low Durometer**

Model "C" or "L" Link-Seal® Modular Seal
Suitable for use in water, direct ground burial and atmospheric conditions. Provides electrical isolation where cathodic protection is required.
Type: Standard
Seal Element: EPDM (Black) or EPDM (Blue)
Pressure Plates: Reinforced Nylon Polymer
Bolts & Nuts: Steel with 2-part Zinc Dichromate & proprietary corrosion inhibiting coating.
Temp. Range: -40 to +250°F (-40 to +121°C)*

Model "S-316" or "LS-316" Link-Seal® Modular Seal
For chemical processing & waste water treatment. EPDM rubber is resistant to most inorganic acids and alkalis, some organic chemicals (acetone, alcohol, ketones).
Type: Stainless
Seal Element: EPDM (Black) or EPDM (Blue)
Pressure Plates: Reinforced Nylon Polymer
Bolts & Nuts: 316 Stainless Steel
Temp. Range: -40 to +250°F (-40 to +121°C)*

* = Sustained operation near temperature limits may affect life expectancy.



EPDM (Black)

Model "S61" Link-Seal® Modular Seal
NSF 61 Certified for use in potable water (drinking water)
Type: Stainless
Seal Element: EPDM (Black)
Pressure Plates: Blue Reinforced Nylon Polymer
Bolts & Nuts: 316 Stainless Steel
Temp. Range: -40 to +250°F (-40 to +121°C)*



* = Sustained operation near temperature limits may affect life expectancy.

WITH NITRILE SEAL ELEMENTS



Nitrile (Green)

Model "O" Link-Seal® Modular Seal
Nitrile rubber is resistant to oils, fuel and many solvents (gasoline, motor oil, kerosene, methane, jet fuel, hydraulic fluid, water, etc.)
Type: Oil Resistant
Seal Element: Nitrile (Green)
NOTE: *Not U.V resistant*
Pressure Plates: Reinforced Nylon Polymer
Bolts & Nuts: Steel with 2-part Zinc Dichromate & proprietary corrosion inhibiting coating
Temp. Range: -40 to +210°F (-40 to +99°C)*

Model "OS-316" Link-Seal® Modular Seal
Combination of oil resistant rubber and stainless steel hardware
Type: Oil Resistant
Seal Element: Nitrile (Green)
NOTE: *Not U.V resistant*
Pressure Plates: Reinforced Nylon Polymer
Bolts & Nuts: 316 Stainless Steel
Temp. Range: -40 to +210 °F (-40 to +99°C)*

* = Sustained operation near temperature limits may affect life expectancy.

WITH SILICONE SEAL ELEMENTS



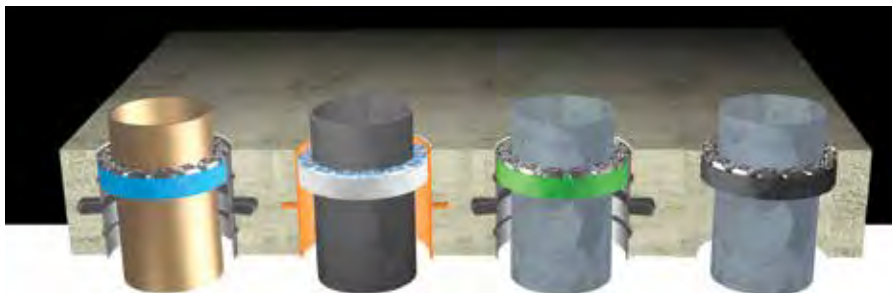
Silicone (Grey)

Model "T" Link-Seal® Modular Seal
Silicone rubber is ideal for temperature extremes. The "T" model is one-hour Factory Mutual approved.
Type: High/Low Temperature
Seal Element: Silicone (Grey)
Pressure Plates: Steel Zinc Dichromate
Bolts: Steel with 2-part Zinc Dichromate & proprietary corrosion inhibiting coating.
Temp. Range: -67 to +400°F (-55 to +204°C)*

Model "FD/FS" Link-Seal® Modular Seal
Double seal for added protection
Type: Fire Seals
Seal Element: Silicone (Grey)
Pressure Plates: Steel zinc dichromate
Bolts: Steel with 2-part Zinc Dichromate & proprietary corrosion inhibiting coating.
Temp. Range: -67 to +400°F (-55 to +204°C)*

NOTE: *Sustains a constant temp. of 325° F (163° C)*

* = Sustained operation near temperature limits may affect life expectancy.





Link-Seal® Modular Seal Model Properties

MATERIAL PROPERTIES OF LINK-SEAL® MODULAR SEAL ELEMENTS

Property	ASTM Method	EPDM (EPDM L)	Nitrile	Silicone
Hardness (shore A)	D-2240	50 ±5 (40 ±5)	50 ±5	50 ±5
Tensile	D-412	1450 psi	1300 psi	860 psi
Elongation	D-412	400%	300%	250%
Compression Set	S-395	15% 22 hrs. @ 158° F (70° C)	45% 22 hrs. @ 212° F (100° C)	40% 22 hrs. @ 350° F (177° C)
Specific Gravity	D-297	1.10	1.15	1.40

MATERIAL PROPERTIES OF COMPOSITE PRESSURE PLATES

Property	ASTM Method	Value
Izod Impact - Notched	D-256	2.05 ft-lb/in
Tensile Strength @ Yield	D-638	20,000 psi
Tensile Strength - Break	D-638	20,250 psi
Flexural Strength @ Yield	D-790	30,750 psi
Flexural Modulus	D-790	1,124,000 psi
Elongation, Break	D-638	11.07%
Specific Gravity	D-792	1.38
Moisture Content	–	0.18%

Link-Seal® Model	Tool Size/ Type Req.	Bolt Head Type
LS-200, LS-275	4mm, Allen	
LS-300, LS-315	6mm, Allen	
LS-325, LS-340, LS-360	13mm, Hex	
LS-400, LS-410, LS-425, LS-475	17mm, Hex	
LS-500, LS-525, LS-575	19mm, Hex	
LS-600	30mm, Hex	
LS-650	19mm, Hex	

BOLT & NUT SPECIFICATION

Standard: Carbon Steel

Carbon steel, zinc dichromated per ASTM B633, with an additional corrosion inhibiting proprietary organic coating. (passes 1470 hour salt spray test)
Tensile Strength = 60,000 psi, minimum.

An independent 1,470 hour salt spray test run in accordance to ASTM B117-97 has proven Link-Seal® modular seals' Zinc Dichromated Carbon Steel bolts, with proprietary corrosion inhibiting coating, to be superior when compared with competitive manufactures.

Test Criteria

Bolts subject to exposure in Salt Spray Cabinet for 1,470 hours according to ASTM B117-97.

The Link-Seal® Zinc Dichromated Carbon Steel bolt with proprietary corrosion inhibiting coating will provide greater resistance to the most hostile environmental conditions on earth.

Option: Stainless Steel

ANSI Type = 316, Per ASTM F593-95
Tensile Strength = 85,000 psi, average



INDEPENDENT LABORATORY TEST

The Newly Engineered Force Dispersion Pressure Plates have been fully tested by an independent laboratory to ensure design theory translates into the capability to handle the rigors of real world applications.

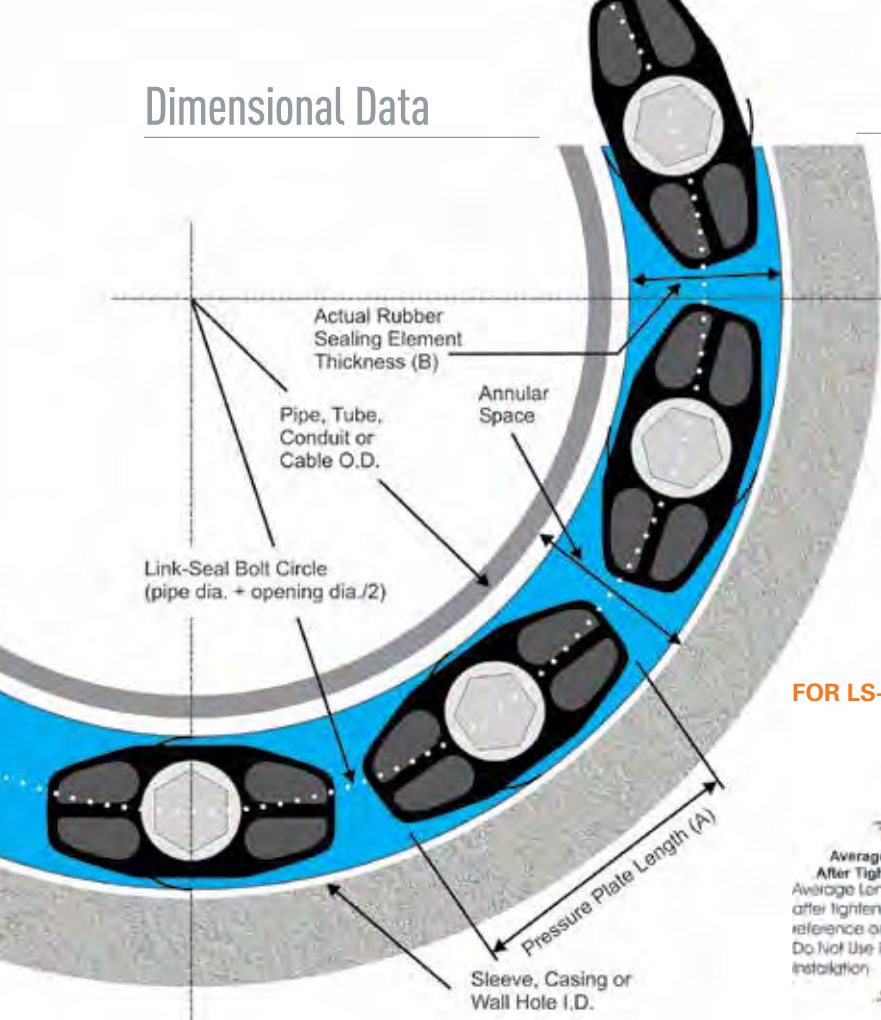
In addition, the new design has an average of 15% more strength than previous Link-Seal® Modular Seal versions.



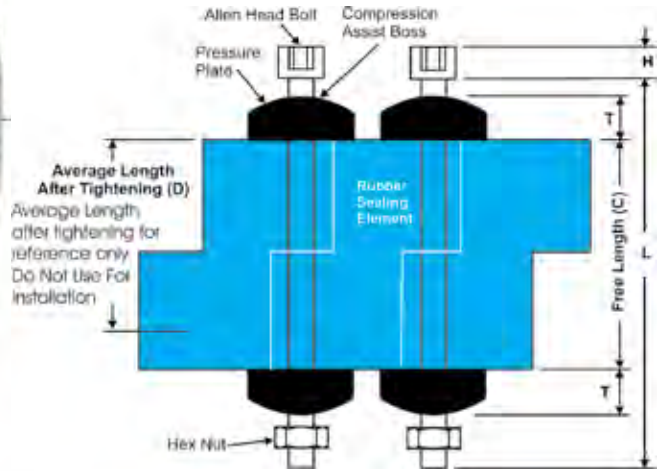
1,470 hour salt spray test performed by an independent laboratory. Test results are available on request.

To provide consistency and worldwide compatibility, GPT now offers all Link-Seal® Modular Seal sizes with metric bolts. The new bolts adhere to metric specifications as used by most all countries outside the U.S.A. Smaller Link-Seal® Modular Seals (sizes LS-200, LS-275, LS-300, and LS-315) will consist of metric Allen head or socket cap bolt heads while the balance of the line will use standard hex head metric bolts.

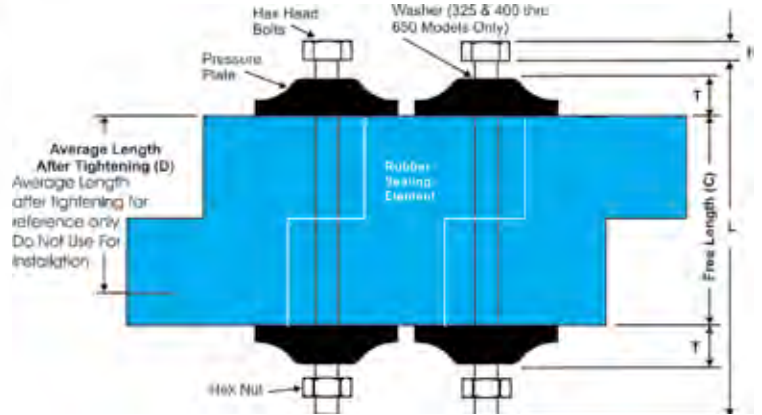
Dimensional Data



FOR LS-200 THROUGH LS-315



FOR LS-325 THROUGH LS-650



* DIMENSIONAL DATA FOR MODELS C, L, O, S-316, S61, LS-316 & OS-316

Link-Seal Model No.	Rubber Sealing Elements			Pressure Plates		Bolts				Weight for 10 Link Sections (lbs)	Min. Required Seating Width
	Actual Thickness (B)	Free Length (C)	Avg. Length After Tightening (D)	(A)	(T)	Allen Head Hex Across Flats	(H)	Thread Size	(L)		
LS-200*	0.48"	1.75"	1.38"	1.06"	0.31"	4mm Allen (0.157")	4.95mm (0.195")	M5-0.8	70mm (2.755")	0.70	2.25"
LS-275*	0.61"	1.75"	1.38"	0.97"	0.31"	4mm Allen (0.157")	4.95mm (0.195")	M5-0.8	70mm (2.755")	0.75	2.25"
LS-300*	0.69"	2.37"	1.87"	1.56"	0.44"	6mm Allen (0.236")	7.87mm (0.310")	M8-1.25	90mm (3.543")	2.15	3.00"
LS-315*	0.81"	2.37"	1.87"	1.44"	0.44"	6mm Allen (0.236")	7.87mm (0.310")	M8-1.25	90mm (3.543")	2.30	3.00"
LS-325*	0.88"	2.63"	2.00"	3.13"	1.00"	13mm (0.511")	5.30mm (0.215")	M8-1.25	90mm (3.543")	5.50	4.00"
LS-340*	1.00"	2.70"	2.25"	1.48"	0.66"	13mm (0.511")	5.30mm (0.215")	M8-1.25	120mm (4.720")	3.30	4.00"
LS-360*	1.24"	2.70"	2.25"	2.05"	0.77"	13mm (0.511")	5.30mm (0.215")	M8-1.25	120mm (4.720")	5.10	4.00"
LS-400*	1.38"	3.50"	2.75"	3.50"	1.06"	17mm (0.669")	6.40mm (0.250")	M10-1.5	130mm (5.118")	12.00	5.00"
LS-410*	1.43"	3.37"	2.87"	2.52"	0.88"	17mm (0.669")	6.40mm (0.250")	M10-1.5	130mm (5.118")	8.20	5.00"
LS-425*	1.06"	3.00"	2.25"	3.50"	1.19"	17mm (0.669")	6.40mm (0.250")	M10-1.5	130mm (5.118")	10.00	5.00"
LS-475*	1.56"	3.38"	2.63"	2.63"	0.88"	17mm (0.669")	6.40mm (0.250")	M10-1.5	130mm (5.118")	10.00	5.00"
LS-500*	2.25"	3.75"	2.75"	3.63"	1.06"	19mm (0.748")	7.50mm (0.300")	M12-1.75	140mm (5.511")	22.50	5.00"
LS-525*	2.06"	3.75"	2.87"	3.63"	1.06"	19mm (0.748")	7.50mm (0.300")	M12-1.75	140mm (5.511")	21.00	5.00"
LS-575*	1.81"	3.75"	3.00"	3.00"	1.00"	19mm (0.748")	7.50mm (0.300")	M12-1.75	140mm (5.511")	15.50	5.00"
LS-600*	3.09"	4.00"	3.00"	6.00"	1.90"	30mm (0.748")	12.50mm (0.490")	M20-2.5	180mm (7.086")	60.60	6.00"
LS-650*	2.71"	3.98"	3.00"	3.96"	1.19"	19mm (0.748")	7.50mm (0.300")	M12-1.75	140mm (5.511")	26.10	6.00"