

L-Lock-P™ Liner End Seal

Technical Data Sheet

SCOPE

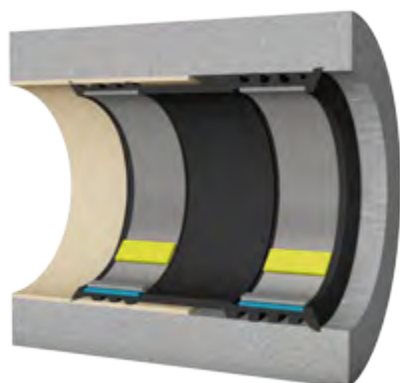
This Data Sheet describes the function of the L-Lock-P™ Liner End Seal, its principle of operation, and the component materials of the seal and their physical properties.

PRODUCT APPLICATION

L-Lock-P™ Liner End Seals are designed to prevent infiltration/exfiltration at liner end in most types of pipe including steel, cast iron, concrete and plastic. They are designed to a pressure rating of 20 bar (290 psi).

PRINCIPLE OF OPERATION

L-Lock-PTM Liner End Seals prevents infiltration and exfiltration by covering the interface between liner end and host pipe with a flexible rubber seal and compressing the rubber seal against the inside diameter of the pipe on either side with expansion bands.



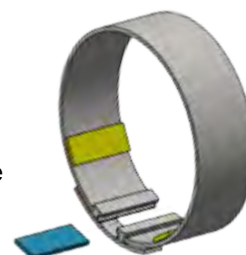
The compressive force on either side of the interface point is the result of increasing the effective diameter of the stainless-steel expansion bands.

The expansion band diameter is increased using a high force hydraulic expansion tool. Once expanded, a spacer is inserted that provides a positive mechanical lock when the expansion tool is removed.



Depending on the diameter of the pipe, there will be between one and three Steel Expansion Bands and Spacer Inserts to ensure an even distribution of compressive force on the rubber seal.

The number of bands required by diameter size are tabulated on the following page.



MATERIAL

L-Lock-P™ Mechanical Seals are lead-free and certified for potable water (NSF 372 and NSF 61).

The flexible rubber seal is made of high tensile strength EPDM rubber 70 Shore A.

All the metallic parts are stainless steel SS 316.



ADDITIONAL FEATURES

Seal pattern underneath the band creates high seal contact pressure to pipe ID surface

MATERIAL PROPERTIES

Physical Property	Specification	Value
EPDM Flexible Seal		
Hardness	ASTM D2240 (Shore a durometer)	70 Shore A
Tensile strength	ASTM D412	1957 PSI/13.5 MPa Nominal
Elongation	ASTM D412	350 % min
Compression Set	ASTM D395 (70 °C 22 hrs)	25 % max
SS 316 Parts		
Tensile Strength	ASTM A666	70,000 PSI min
Elongation	ASTM A666	40 %

STANDARD CONFIGURATION

Expansion points	Min Diameter	Max Diameter
1	6"	24"
2	25"	47"
3	48"	96"

Check the L-Lock-P™ Installation Guide for a detailed explanation of the preparation, assembly and installation of the Mechanical Seal.

