Standard sizing charts from our past brochures have been relocated to the website: www.apsonline.com

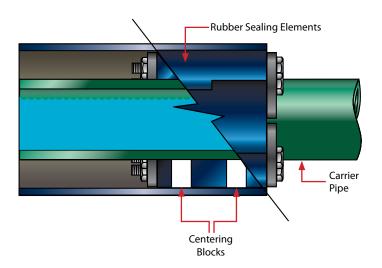
If you would like a hard copy of the Innerlynx® reference charts please contact your Innerlynx® representative or call 1-800-315-6009

Centering Blocks-End Seals Layered Applications

Innerlynx® Centering Blocks

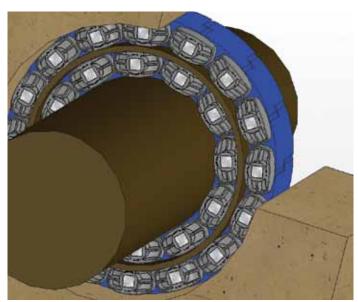
Around pipes of at least 14" in diameter, HDPE centering blocks are embedded into the bottom 25% of the Innerlynx® assembly to assist in centering the carrier pipe during installation.

Unlike pipeline "boots", when used as end seals, on pipes of these sizes, Innerlynx® are set within the casing and are protected from sharp aggregate and equipment, making them perfect end seals for cased pipelines.



Layered Applications

Multiple layers of Innerlynx® assemblies can be successfully installed using intermediate sleeves between wraps when the annular space is wider than the expanded thickness of a single Innerlynx® assembly (as seen in the example below). Call the factory for sizing assistance at 1-800-315-6009.



Wall Sleeves

Why use Wall Sleeves

Protect your investment using APS wall sleeves to provide a better seal than a core drilled hole. In the absence of wall sleeves, mechanical/utility piping vibration can cause costly damage. In addition, wall sleeves make it easier to repair piping without damaging the wall.

APS offers three types of wall sleeves designed to mate with Innerlynx° for leak free performance. Steel, Galvoplast coated steel and HDPE Infinity Sleeves.

Each model is available with a 2" water stop that anchors the sleeve to prevent thrust movement and ensure positive water sealing. APS standard water stops are centered, unless otherwise requested.

Infinity® Wall Sleeve Features

High Density Polyethylene (HDPE)

- Excellent resistance to acids, alkalis and other organic solvents
- · Positive hydrostatic seal
- 16 sizes 2" to 25" diameter
- Lighter than steel
- Resists water migration
- 16" Long
- Locator caps make installation easier
- · Adjust to wall thickness onsite



Gal-vo-plast® Wall Sleeve Features

MODEL: GPWSW are made of steel with a welded steel water stop with Gal-vo-plast® coating.

- Less expensive than galvanized
- More corrosion resistant
- Faster availability, especially for custom wall sleeves
- Longer installation life
- All coating performed in house
- Considerably more economical
- Available in 2" to 120" diameter



Innerlynx® Sizing

How to calculate sizes and amount of Innerlynx® needed to seal your penetration:

Part 1

To figure which IL style number is needed to seal the annular space

I.D. of casing/core drilled hole - O.D. of carrier pipe = Y

 $Y \div 2 = Sealing Range$

Find the correct sealing range and the corresponding style number on the chart adjacent. If there is more than one IL size to choose from, choose the IL size that is closer to the untightened seal range.

Part 2

To figure out how many Innerlynx® are needed to seal the penetration:

I.D. of casing/core drilled hole + O.D. of carrier pipe = Y

Y ÷ 2 = Bolt Circle

Bolt Circle x 3.14 = Circumference of bolt circle

Circumference of bolt circle ÷ chord length = Innerlynx® per seal

Use the chord length matched with proper Innerlynx® number

Example:

8" Ductile Iron Pipe into a 12" core drilled hole

Part 1:

12 - 9.05 = 2.95

 $2.95 \div 2 = 1.475$ seal range

1.475 falls between the range for IL 400

Part 2:

12 + 9.05 = 21.05

21.05 ÷ 2 = 10.525 Bolt Circle

10.525 x 3.14 = 33.0485 Cirumference Bolt Circle

 $33.0485 \div 3.63 = 9.10427 \text{ Number of Innerlynx}^{\circ}$

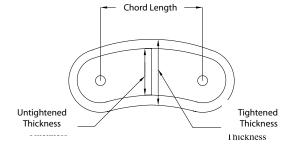
Answer: 9 IL400

Note: If the calculation ends in .79 or lower, round **down** to the nearest whole number. If the calculation ends in .80 or higher round **up** to the nearest whole number.

Get your FREE Innerlynx® calculator app.







IL	Sealing Range		Chord	Min	Min	Max
Size	Untightened	Tightened	Length	Qty	Pipe	Pipe
200	0.50	0.63	1.15	4	0.84	12.75
265	0.59	0.79	1.58	5	1.90	16.00
275	0.63	0.78	0.89	4	0.50	1.05
300	0.70	0.88	1.50	4	1.32	9.84
310	0.65	0.88	2.22	6	3.96	16.00
315	0.83	1.03	1.47	5	1.63	12.40
325	0.93	1.19	3.15	7	6.63	27.99
340	1.02	1.32	1.52	5	1.38	12.75
360	1.25	1.65	2.08	5	2.13	16.00
400	1.41	1.81	3.63	6	6.13	48.03
410	1.41	1.81	2.62	5	2.75	12.75
425	1.13	1.50	3.60	7	6.90	48.03
440	1.74	2.19	3.94	8	8.13	48.03
475	1.61	2.00	2.68	5	2.38	48.03
500	2.39	2.81	3.90	8	8.13	50.80
525	2.20	2.50	3.95	8	8.13	48.03
575	1.81	2.35	3.16	8	6.13	61.61
600	3.20	4.00	6.06	8	12.13	118.11
625	3.28	4,00	4.09	9	8.13	78.74
650	2.67	3.20	4.16	10	10.75	78.74
700	3.74	4.32	6.02	8	12.13	118.11

Having trouble sizing Innerlynx®?



Call the factory with all information applicable: 1-800-315-6009
Online calculator available at www.apsonline.com/innerlynx

Innerlynx® Installation Instructions



Innerlynx® Check List

- 1. Make sure installation area is free of dirt or debris.
- 2. Make sure pipe is centered in sleeve or hole.
- 3. Make sure pressure plates and bolt heads are facing out.
- 4. Make sure that Innerlynx are hand-tightend only.
- 5. Make sure that the carrier pipe is supported.
- 6. Make sure that you use an anti-seizing compound if using stainless steel hardware.

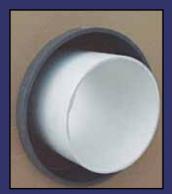


Innerlynx® Don'ts

- 1. Never use power tools or air tools on any Innerlynx bolt.
- 2. Do not tighten bolts more than a couple of turns at a time.
- 3. Do not tighten bolts completely at one time.
- 4. Do not use Innerlynx as a mean of pipe support.
- 5. Do not install Innerlynx® on uneven surfaces.
- 6. Do not tighten in a star pattern. Do go clockwise.



Please Read Above Before Installing



1. Center the pipe, cable or conduit in wall sleeve, casing or core drilled hole. Make sure around the pipe. Check to be sure all bolt the pipe will be adequately supported on both ends. Innerlynx° are not intended to support the weight of the pipe.



2. Connect both ends of the belt assembly heads are facing the installer.



3. Slide Innerlynx assembly into annular space. Lubrication with thin soap/water solution may help if tight.



4. Assembly may fit tightly or be loose depending on fit designed for your annular space.



5. Use HAND tools only. DO NOT USE power or air driven tools. This not only voids your warranty, but does not let Innerlynx work to its full potential.



6. Start at the bolt located at 12 o'clock with 2-3 turns of wrench/ratchet. Continue clockwise. <u>Do not</u> tighten in a star pattern.



7. Repeat process until rubber begins to slightly bulge and bolt is tight. Make one more turn on each bolt around the entire assembly.



8. Installation is complete. If the seal doesn't appear to be correct using the instructions provided, call Advance Products & Systems, Inc. at 800-315-6009