

Model AZ Casing Spacers

AZ non-metallic casing spacers are designed for use with water and sewer pipes 3.85" to 13.75" in diameter.

They are an economical alternative to banded woods skids and stainless steel bands for inserting pipes into casings. AZ spacers also eliminate the need for sand or grout filling of the annular space in the casing.

All are adaptable to a wide variety of carrier pipe O.D.'s found on **PVC Pressure/Sewer Pipe, DI-Ductile Iron, C-900, P.E., and IPS-Steel Pipes.**

Features:

- Variable O.D.'s of casing spacer to fit multiple sized space.
- Manufactured from UV resistant polypropylene.
- Runner heights may be interchanged or field cut to adjust for grade.
- Corrosion protection - only metal components are steel bolts/nuts.
- One piece molded construction for maximum load bearing.
- Allen Head Bolts for improved spacer tightening.

Basic Installation

Always Wear and Use Safety Equipment!



1. Size the AZ casing spacer. Make sure you have all the segments and bolts.



2. Assemble segments. Align nuts into grooves and hand tighten bolt.



3. Wrap AZ spacer around pipe and secure by tightening bolts.

**Note Tool: Allen Wrench
3/16" (5mm)**



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Segment Types



AZ1 Type/Runner Height

AZ1-16	5/8"
AZ1-25	1"
AZ1-36	1-1/2"
AZ1-55	2-1/4"
AZ1-75	3"
AZ1-90	3-1/2"
AZ1-110	4-1/2"



AZ2 Type/Runner Height

AZ2-16	5/8"
AZ2-25	1"
AZ2-36	1-1/2"
AZ2-55	2-1/4"
AZ2-75	3"
AZ2-90	3-1/2"
AZ2-110	4-1/2"

Specification Material Chart:

Band/Runner Segments

UV resistant polypropylene

Specifications Value

Compressive Strength	3,000 psi (211 kg/sq. cm)
Temperature	-40°F. + 180°F. (-40°C to +82°C)
Impact Strength	1.5 ft. lb/in. (0.8 joules/cm)
Dielectric Strength	800 Volts/mil. min.
Color	Black

Load Carrying Capacity 770 lbs. (340kg) per spacer
The maximum load bearing capacity per spacer is based on 1-1/2" (36mm) skid height in a cylindrical casing.

Specification for AZ Casing Spacers

Designed for 3.85" through 13.75" O.D. carrier pipes. Casing spacers shall be AZ segmented type molded in high density UV resistant polypropylene. Each spacer segment shall be a, "non-welded" molded piece designed for accommodating variable pipe O.D.'s by attachment of the required number of segments. Minimum spacer width shall be 5.2" (132mm). Runner height shall be sized correctly to provide adequate pipe support without the bell or joint contacting the casing during installation. Approved ISO 9001:2000
Manufacturer: Pipeline Seal & Insulator, Inc., Houston, Texas, U.S.A.

AZ Ordering Information

Ordering Code Example

Nominal Pipe Dia.	O.D. Range	Segments Per Spacer	AZ1 Model#	Runner Height (Inch)	Quantity
4"	(3.85"-5.1")	3 AZ1	AZ1-16	5/8"	20 Spacer Ordering Code AZ2-55 AZ Model Carrier Pipe O.D. 9.05" Actual Casing I.D. 17.25" Actual Bell or Joint O.D. 11.5" Position in Casing S S = Just Clear Bell C = Centered/Restrained 20 AZ2-55 (9.05"x17.25") 11.5" S
6"	(5.1"-6.9")	4 AZ1	AZ1-25	1"	
6"	(6.37"-8.5")	5 AZ1	AZ1-36	1-1/2"	
			AZ1-55	2-1/4"	
			AZ1-75	3"	
			AZ1-90	3-1/2"	
			AZ1-110	4-1/2"	
Nominal Pipe Dia.	O.D. Range	Segments Per Spacer	AZ2 Model#	Runner Height (Inch)	
8"	(7.99"-9.05")	3 AZ2	AZ2-16	5/8"	
10"	(10.23"-12.20")	4 AZ2	AZ2-25	1"	
12"	(11.88"-13.75")	4 AZ2 + 1 AZ1	AZ2-36	1-1/2"	
			AZ2-55	2-1/4"	
			AZ2-75	3"	
			AZ2-90	3-1/2"	
			AZ2-110	4-1/2"	

Following are examples on how to size AZ Casing Spacers for various applications. **For exact centering and adjusting for grade elevation changes contact PSI.**

How to Size your Installation Application (Examples)

Centered & Restrained with Equal Length Runners - C

9.05" C-900 pipe (9.05" O.D. barrel & 11.5" O.D. bell) inside a 18" casing with a 0.375" wall thickness.

A. Find carrier pipe O.D. (9.05") and choose the proper size and number of segments.

One spacer would require 3 AZ2 Segments

B. Determine maximum runner height with equal length runners.

Casing I.D.	17.25"
Less Carrier Pipe O.D.	<u>-9.05"</u>
	8.20"
Less Annular Space Clearance	<u>-1.00"</u>
	7.20"

Divide this number (7.20") by 2 to obtain the total allowable runner height = 3.60"

C. Choose a runner height of this value or less. Verify Runner Height Selection will clear bell.

Solution: Use AZ2-90 (Runner Height = 3-1/2")

Note: This combination will restrain the pipe from flotation within the casing pipe by allowing only about 1.6" of clearance between the top runners and the casing I.D. This will center the carrier pipe within approximately 0.8" of exact center.

Just Clear the Bell - S (suggested minimum clearance is at least 0.8" (0.4" on both sides)

9.05" C-900 pipe (9.05" O.D. barrel & 11.5" O.D. bell) inside a 18" casing with a 0.375" wall thickness.

Determine minimum runner height.

(Just to Clear Bell.)	Bell O.D.	11.5"
	Add 0.8" Clearance	<u>+0.80"</u>
		12.30"
	Less Barrel O.D.	<u>-9.05"</u>
		3.25"

Divide this number (3.25") by 2 to obtain the minimum runner height to just clear the bell = 1.62"

Choose a runner height between 1.62" and the maximum allowable runner height (3.60") determined in the above example.

Solution: Use AZ2-55 (Runner Height = 2-1/4")

Warranty

All products are warranted against failure caused by manufacturing defects for a period of one year. Any product found to be so defective and returned within one year from date of shipment will be replaced without charge. The above warranty is made in lieu of, and we disclaim, any and all other warranties of merchantability and fitness for a particular purpose, and buyer agrees to accept the products without any such warranties. We hereby disclaim any obligation or liability for consequential damages, labor costs or any other claims or liabilities of any kind whatsoever.