





PRODUCT BRIEF

Pipeline Casing Insulator is a patented series of polyethylene insulators that are universally applicable in the installation of pipelines when the carrier pipe runs inside a casing. They are used to support the coated pipe within a tubular casing, to electrically insulate the pipe from the tubular casing and to prevent damage to the coated surface of the pipe when the pipe is installed within the casing.

SCOPE OF APPLICATION

When the pipeline is buried in the ground, for instance, at underground road, river, railway and highway crossings, the pipeline is generally further protected by being enclosed within a tubular casing. The pipeline is supported within the casing by a Pipeline Casing Insulator. The Pipeline Casing Insulator, in addition to its supportive function, electrically insulates the pipeline from the casing. This insulative function is necessary for the cathodic protection of the pipeline, and also, for preventing electric current loss when the pipeline is used as a conduit for electrical cables. Furthermore, the Casing Insulator prevents damage to the outer coated surface of the pipeline when the pipeline is drawn through the casing during installation.





GENERAL FEATURES

Pipeline Casing Insulator is a high-density, polyethylene product, injection molded to provide low cost insulator of highest quality. It offers the following general features:

- Easy Installation: Minimal coefficient of friction of the polyethylene material allows the carrier pipe to be more easily pulled through the casing thus helping in easy installation of the carrier pipe within the casing.
- Cathodic Protection: Insulating properties like excellent dielectric resistance and low moisture absorption of the polyethylene material used ensures of meting with all the requirements of cathodic protection and yielding minimal electric current loss.
- Coating Protection: High impact strength and excellent abrasion resistance of the polyethylene material prevents damage to the coated surface of the pipe when the pipe is installed within the casing and ensures long time resistance from chemical corrode minimizing cold flow of the coating on the carrier pipe.
- Concentricity: Wide range of skid heights ensures the concentricity of the carrier pipe in the casing.

SPECIAL FEATURES

Our Pipeline Casing Insulator offers some specific features over traditional casing insulators.

- Excellent Design: Designed and manufactured under the guidance of experts and engineers from Tsinghua University, Beijing University of Chemical Technology and China Petroleum Pipeline Bureau, Our Pipeline Casing Insulator are ensured of having highest quality, best design and excellent performance level meeting or exceeding industry standards.
- Excellent Fastness: Reinforcement measures such as steel straps are used to fasten insulators firmly on the carrier pipe preventing slippage or looseness of the insulators and avoiding them from sliding along the carrier pipe.
- **Enhanced Coating Protection**: On the inner wall of the *Insulator*, a rubber plate is affixed to enhance the coating protection of the pipeline and insuring the quality of the product as well as speeding up the construction process.
- Quick Installation: Electric Wrench is supplied for quick installation, speeding up the construction process further and saving costs.









RECOMMENDED SPACING

The general "rule of thumb" of the pipeline industry is to space Casing Insulators 8 to 15 ft apart. The recommended spacing for our Pipeline Casing Insulator is to position two of the insulators at each end of the casing and then space the insulators 6 to 8 ft apart. Actual spacing may vary depending on local regulations and design specifications.



DIMENSIONS AND SPECIFICATIONS

Pipeline Casing Insulator is designed for use in most carrier pipes within casings and suitable for all pipe diameters from 38mm upwards. Wide range of skid heights is available to suit specific requirements. We also design and manufacture Insulators as per customer's specific requirements.



Segment Model Dimensions

Model Type	Carrier Pipe OD (mm)	Height (mm)	Width (mm)	Parts (no)	Fastener Type	Bolts (no)	Steel Strap
ZDA	OD>800	50	130	2	M8x60	2	Yes
ZDB	157<0D<425	36	130	2	M6x60	2	No
		55	130	2	M6x60	2	No
ZDC	403 <od<806< td=""><td>50</td><td>130</td><td>2</td><td>M8x60</td><td>2</td><td>No</td></od<806<>	50	130	2	M8x60	2	No
ZDD	38 <od<157< td=""><td>25</td><td>60</td><td>1</td><td>N.S.</td><td>2</td><td>No</td></od<157<>	25	60	1	N.S.	2	No









Rroduct Dimensions & Objectifications

Carrier Pipe Size		Carrier Pipe OD (mm)		Model	Number of Segments		Fastener Bolt		
Inches	mm	Minimum	Maximum	Туре	Full 4pi Full 2pi		Total Segs.	Number/Size	
4.5	115	109	118	ZDD	-	-	12	2	120-140
5.0	120	118	128		-	-	13	2	120-140
	130	128	138		-	-	14	2	140-160
5.5	140	138	148		-	-	15	2	160-180
6.0	6.0 150	148	157		-	-	16	2	160-180
6.0		157	215		-	5	5	10	M6x70
9.0	200	203	230		3	-	3	6	M6x70
8.0	200	234	272		3	1	4	8	M6x70
10	250	254	272		3	1	4	8	M6x70
10	230	269	310	ZUB	4		4	8	M6x70
12	300	302	350		4	1	5	10	M6x70
12	300	337	385		5		5	10	M6x70
14	350	370	425		5	1	6	12	M6x70
16	400	403	425	ZDC	4		4	8	M8x70
10	400	455	483		4	1	5	10	M8x70
20	E00	504	535		5		5	10	M8x70
	500	553	590		5	1	6	12	M8x70
24	600	605	642		6		6	12	M8x70
24		654	699		6	1	7	14	M8x70
28	700	706	751		7		7	14	M8x70
28		754	806		7	1	8	16	M8x70
32	800	806	858	ZDA	8		8	16	M8x70
32		855	913		8	1	9	18	M8x70
36	900	907	965		9		9	18	M8x70
30	900	955	1020		9	1	10	20	M8x70
	1000	1007	1075		10		10	20	M8x70
40		1056	1132		10	1	11	22	M8x70
40		1108	1183		11		11	22	M8x70
		1157	1239		11	1	12	24	M8x70
48	1200	1209	1291		12		12	24	M8x70
		1257	1346		12	1	13	26	M8x70
		1309	1398		13		13	26	M8x70
		1358	1454		13	1	14	28	M8x70
56	1400	1410	1506		14		14	28	M8x70
		1458	1561		14	1	15	30	M8x70
		1510	1614		15		15	30	M8x70
		1559	1670		15	1	16	32	M8x70