



ADVANCE PRODUCTS & SYSTEMS

ISOJOINT[®]

Monolithic Isolating Joints

ISO-9001 CERTIFIED COMPANY - FM537405



ISOJOINT[®] MONOLITHIC ISOLATION JOINTS



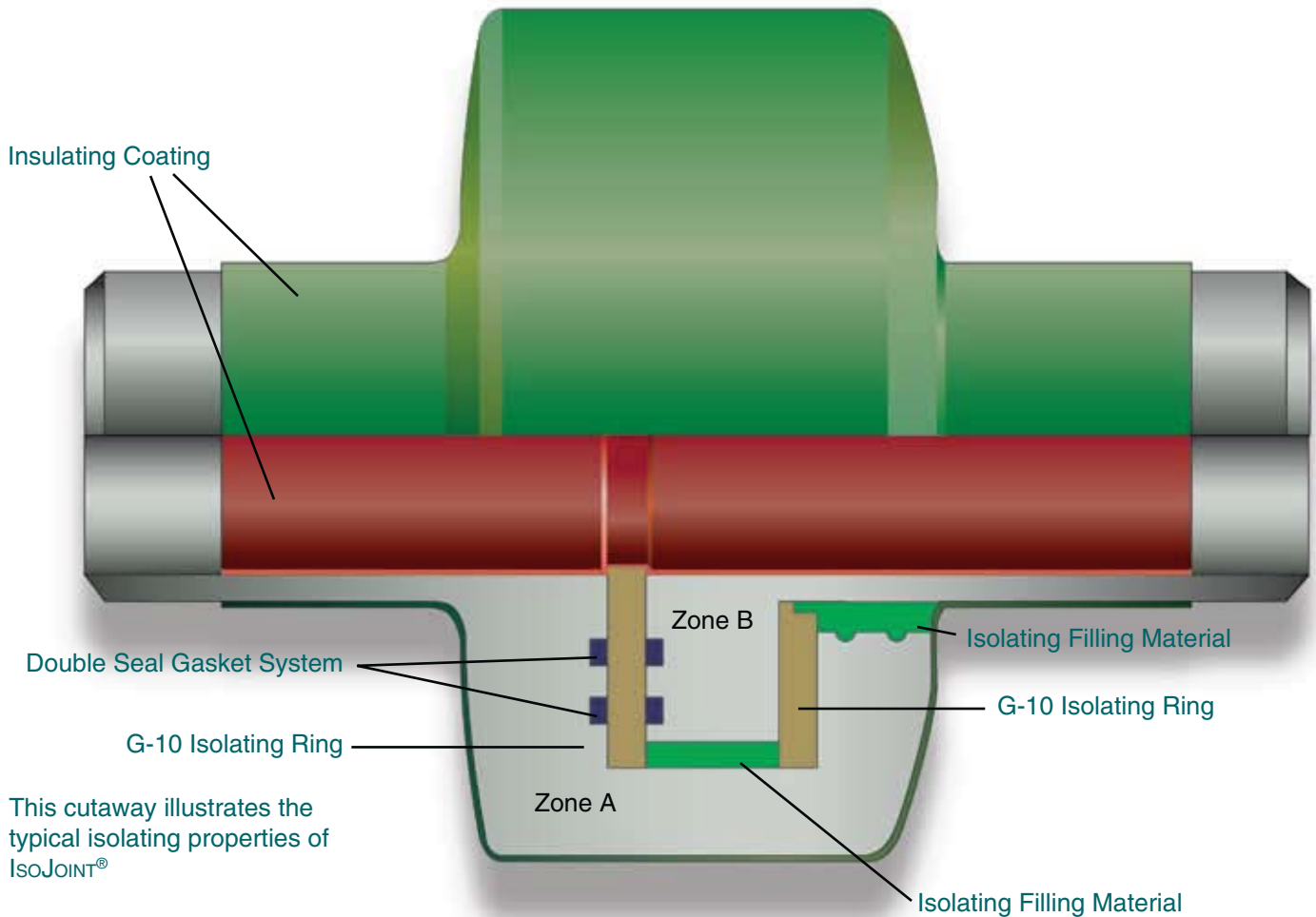
90" Diameter IsoJOINT[®]
Monolithic Isolation Joint

ISOJOINT[®] FOR SUPERIOR CATHODIC PROTECTION

ISOJOINT[®] is a true monolithic isolating joint which effectively and efficiently stops short circuits and stray currents from damaging pipelines and equipment. ISOJOINT[®] employs one or more, preassembled pressure seals and isolating ring. Unlike isolating gasket kits, ISOJOINT[®] does not depend on an installer fitting gasket, sleeves and washers into a flange on location. Any one of these parts could be damaged causing a complete breakdown of the isolated flange, thus losing cathodic isolation. Because ISOJOINTS are welded into place as

one piece units, field problems are virtually non-existent and the integrity of the isolation is kept intact.

Furthermore, once installed, ISOJOINT[®] can be buried and forgotten ending your maintenance worries. In contrast, inspection pits and vaults must be used to monitor below ground isolation gaskets. And constant visual inspections of above ground isolation gaskets are necessary to check for shorts in the gaskets. This requires a continuing maintenance program during the entire life of the pipeline.



This cutaway illustrates the typical isolating properties of ISOJOINT®

ISOJOINT® provides for current control by separating pipe work into distinct zones and effectively eliminating long-line currents. This assures increased plant and equipment life by reducing or eliminating corrosion damage. Effective control can be attained where a branch is connected to the mainline, where two pipelines of different material connect or where well-coated pipe meets a poorly coated system.

Advance Products and Systems, Inc., is the exclusive provider of the

ISOJOINT® monolithic weld end isolating joints. The ISOJOINT® is manufactured in sizes ranging from 1/2" diameter to 100" diameter with an ANSI rating of 150# to 2500# and up to API 10,000#. All types of carbon and stainless steel are used in their manufacturing.

For truly superior cathodic isolation, Advance Products and Systems offers an ISOJOINT® manufactured according to ASME VIII Division 1 standards and certified by ISO 9001 Quality Assurance making it the supreme monolithic joint on the market today.



ISOJOINT® MONOLITHIC ISOLATION JOINTS



Advance Products and Systems has IsoJoints® ranging in sizes from 1/2" to 100" diameter.

BENEFITS & ADVANTAGES

- No loss of integrity due to thermal expansion or ground stress as is common with flange isolation gasket kits
- In-factory tested hydrostatically and electrically, to 1 1/2 times their working pressure. Non-destructive testing is also available.
- Maintenance-free, reliable cathodic isolation of equipment in required isolation applications such as compressor stations
- No labor intensive, complicated installation procedure required as with isolation gasket kits
- No inspection pits, vaults or maintenance needed - weld into place and direct bury - reliable, worry-free cathodic isolation
- Non-conductive epoxy coatings help prevent shorts, both externally and internally
- Isolates stray currents impressed on the pipe from exterior forces such as electrical transmission systems, earth currents and currents flowing from point to point
- Excellent bending and torsional resistance
- Earthquake resistant - Acts as a thrust block or joint



Weld end or flanged end type IsoJoints® are available.

ADVANTAGE IN SAVINGS

The notion that flange isolating gasket kits are more cost efficient than monolithic joints is not well supported when figuring in all the variables.

Materials, labor intensive installation, pre-online inspection and continuous maintenance as well as possible and probable replacement of deteriorated gasket kits all add up, ultimately making the ISOJOINT® a very effective and cost efficient method of cathodic isolation.

SUMMARY

Applications

- On existing and new construction
- On gas, oil, liquid petrochemical and water lines
- Before and from gas distribution stations
- On gas or liquid fuel tanks
- Under or overground usage

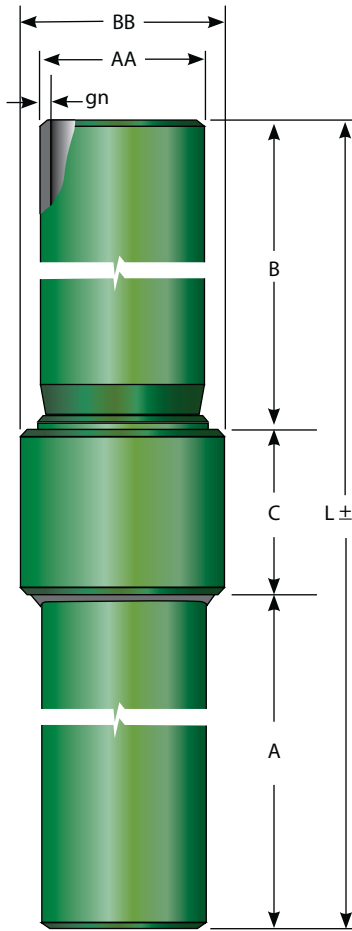
Mechanical Properties

- Bodies of monolithic joints are made as rolled and welded construction of steel sheet or forged bodies
- All test results are available

Electrical Properties

- Highest quality isolating materials
- Spark gaps available for extra isolation
- No sparking breakdown during 1 minute hydrostatic testing
- Isolating resistance above 5MΩ at voltage DC 1kV in dry conditions - standard, higher voltage resistance available
- No breakdown during pressured leak testing

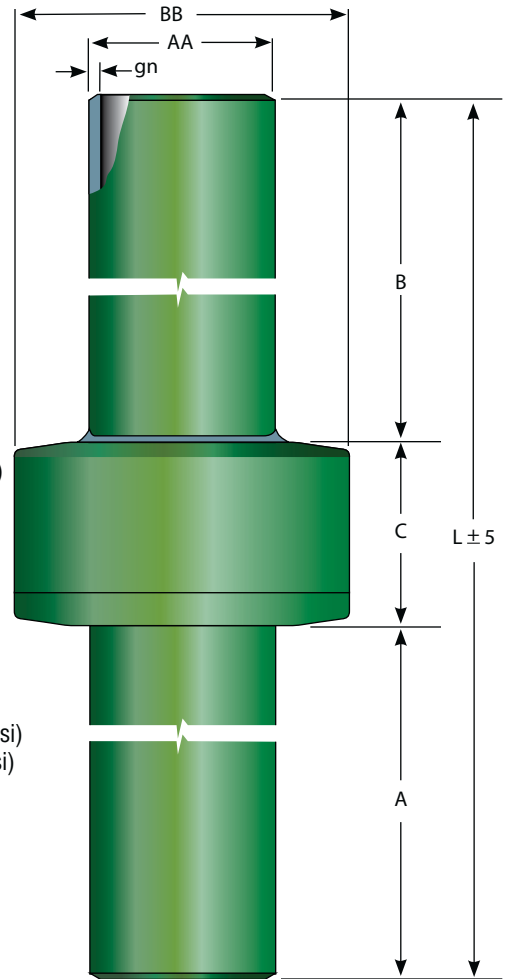
Basic Parameters of Insulating Joints



- ANSI 150 (PN 25)**
- Maximum Operating Pressure, bar - 25,0 (363 psi)
 - Pressure of Strength Test, PT, bar - 37,5 (544 psi)
 - Working Temperature Range TS, °F - -4° to 140°
 - Electrical voltage AC 5kV(50Hz) in 1 min. time (in dry condition)
 - Resistance at voltage DC 1kV (in dry condition) R,MΩ - 5,0

- ANSI 300 (PN 65)**
- Maximum Operating Pressure, bar - 63,0 (914 psi)
 - Pressure of Strength Test, PT, bar - 94,5 (1370 psi)
 - Working Temperature Range TS, °F - -4° to 212°
 - Electrical voltage AC 5kV(50Hz) in 1 min. time (in dry condition)
 - Resistance at voltage DC 1kV (in dry condition) R,MΩ - 5,0

- ANSI 600 (PN 100)**
- Maximum Operating Pressure, bar - 100,0 (1450 psi)
 - Pressure of Strength Test, PT, bar - 150,5 (2183 psi)
 - Working Temperature Range TS, °F - -4° to 212°
 - Electrical voltage AC 5kV(50Hz) in 1 min. time (in dry condition)
 - Resistance at voltage DC 1kV (in dry condition) R,MΩ - 5,0



ANSI 150 (PN25)

ANSI 300 (PN65) & ANSI 600 (PN 100)

| DN | | ANSI 150 (PN 25) | | | | | | | | | | | | Weight | | | |
|------|------|------------------|-------------|--------|------|--------|--------|--------|-----|--------|-----|--------|-----|--------|------|------|--------|
| in | mm | AA | | gn min | | BB | | A | | B | | C | | L | | lbs | kg |
| | | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | | |
| 1/2" | 15 | .917 | 21,3 | .125 | 3,2 | 1.326 | 33,7 | 7.874 | 200 | 8.070 | 205 | 1.771 | 45 | 17.716 | 450 | 1 | 0,5 |
| 3/4" | 20 | 1.059 | 26,9 | .125 | 3,2 | 1.326 | 33,7 | 7.874 | 200 | 8.070 | 205 | 1.771 | 45 | 17.716 | 450 | 2 | 1,0 |
| 1" | 25 | 1.326 | 33,7 | .125 | 3,2 | 1.669 | 42,4 | 7.874 | 200 | 8.070 | 205 | 1.771 | 45 | 17.716 | 450 | 3 | 1,3 |
| 5/4" | 32 | 1.669 | 42,4 | .125 | 3,2 | 2.007 | 51,0 | 7.874 | 200 | 8.070 | 205 | 1.771 | 45 | 17.716 | 450 | 4 | 1,8 |
| 6/4" | 40 | 1.901 | 48,3 | .141 | 3,6 | 2.374 | 60,3 | 7.874 | 200 | 8.070 | 205 | 1.771 | 45 | 17.716 | 450 | 4.5 | 2,1 |
| 2" | 50 | 2.374 | 60,3 | .141 | 3,6 | 2.996 | 76,1 | 7.874 | 200 | 8.267 | 210 | 2.362 | 60 | 18.503 | 470 | 6.5 | 3,0 |
| 2" | 65 | 2.996 | 76,1 | .157 | 4,0 | 4.000 | 101,6 | 8.661 | 220 | 8.464 | 215 | 4.527 | 115 | 21.653 | 550 | 10 | 4,5 |
| 3" | 80 | 3.500 | 88,9 | .177 | 4,5 | 4.250 | 108,0 | 8.661 | 220 | 8.464 | 215 | 4.527 | 115 | 21.653 | 550 | 13 | 6,0 |
| 4" | 100 | 4.250/4.500 | 108,0/114,3 | .196 | 5,0 | 5.236 | 133,0 | 9.448 | 240 | 9.251 | 235 | 4.921 | 125 | 23.622 | 600 | 22 | 10,0 |
| 5" | 125 | 5.236 | 133,0 | .196 | 5,0 | 6.259 | 159,0 | 9.842 | 250 | 9.448 | 240 | 6.299 | 160 | 25.590 | 650 | 55 | 25,0 |
| 6" | 150 | 6.259/6.625 | 159,0/168,3 | .220 | 5,6 | 7.625 | 193,7 | 9.842 | 250 | 9.448 | 240 | 6.299 | 160 | 25.590 | 650 | 62 | 28,0 |
| 6" | 200 | 8.625 | 219,1 | .248 | 6,3 | 9.625 | 244,5 | 11.811 | 300 | 11.811 | 300 | 7.874 | 200 | 31.496 | 800 | 132 | 60,0 |
| 10" | 250 | 10.748 | 273,0 | .248 | 6,3 | 11.751 | 298,5 | 12.598 | 320 | 12.598 | 320 | 10.236 | 260 | 35.433 | 900 | 143 | 65,0 |
| 12" | 300 | 12.751 | 323,9 | .279 | 7,1 | 14.000 | 355,6 | 11.811 | 300 | 11.811 | 300 | 11.811 | 300 | 35.433 | 900 | 243 | 110,0 |
| 14" | 350 | 14.011 | 355,9 | .279 | 7,1 | 16.000 | 406,4 | 11.811 | 300 | 11.811 | 300 | 11.811 | 300 | 35.433 | 900 | 265 | 120,0 |
| 16" | 400 | 16 | 406,4 | .314 | 8,0 | 17.519 | 445,0 | 11.811 | 300 | 11.811 | 300 | 11.811 | 300 | 35.433 | 900 | 441 | 200,0 |
| 18" | 450 | 17.992 | 457,0 | .314 | 8,0 | 20.000 | 508,0 | 11.811 | 300 | 11.811 | 300 | 11.811 | 300 | 35.433 | 900 | 463 | 210,0 |
| 20" | 500 | 20 | 508,0 | .314 | 8,0 | 21.456 | 545,0 | 13.779 | 350 | 13.779 | 350 | 11.811 | 300 | 39.370 | 1000 | 474 | 215,0 |
| 24" | 600 | 24.015 | 610,0 | .346 | 8,8 | 25.787 | 655,0 | 13.779 | 350 | 13.779 | 350 | 11.811 | 300 | 39.370 | 1000 | 496 | 225,0 |
| 28" | 700 | 27.992 | 711,0 | .346 | 8,8 | 29.842 | 758,0 | 13.779 | 350 | 13.779 | 350 | 11.811 | 300 | 39.370 | 1000 | 670 | 304,0 |
| 32" | 800 | 32 | 813,0 | .393 | 10,0 | 33.858 | 860,0 | 15.748 | 400 | 15.748 | 400 | 11.811 | 300 | 43.307 | 1100 | 853 | 387,0 |
| 36" | 900 | 35.984 | 914,0 | .393 | 10,0 | 37.392 | 965,0 | 15.748 | 400 | 15.748 | 400 | 11.811 | 300 | 43.307 | 1100 | 963 | 437,0 |
| 40" | 1000 | 40 | 1016,0 | .433 | 11,0 | 42.125 | 1070,0 | 17.716 | 450 | 17.716 | 450 | 15.748 | 400 | 51.181 | 1300 | 1554 | 705,0 |
| 42" | 1050 | 42 | 1067,0 | .433 | 11,0 | 44.291 | 1125,0 | 17.716 | 450 | 17.716 | 450 | 15.748 | 400 | 51.181 | 1300 | 1609 | 730,0 |
| 44" | 1100 | 44 | 1118,0 | .492 | 12,5 | 46.259 | 1175,0 | 21.653 | 550 | 21.653 | 550 | 15.748 | 400 | 59.055 | 1500 | 1817 | 824,0 |
| 48" | 1200 | 47.992 | 1219,0 | .492 | 12,5 | 50.196 | 1275,0 | 19.685 | 500 | 19.685 | 500 | 19.685 | 500 | 59.055 | 1500 | 2425 | 1100,0 |
| 56" | 1400 | 55.984 | 1422,0 | .559 | 14,2 | 58.267 | 1480,0 | 27.559 | 700 | 27.559 | 700 | 19.685 | 500 | 74.803 | 1900 | 3435 | 1558,0 |

| DN | | ANSI 300 (PN 65) | | | | | | | | | | | | | | | |
|--------|------|------------------|-------------|--------|------|--------|--------|--------|------|--------|------|--------|-----|--------|------|--------|--------|
| in | mm | AA | | gn min | | BB | | A | | B | | C | | L | | Weight | |
| | | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | lbs | kg |
| 1/2" | 15 | .917 | 21,3 | .125 | 3,2 | 2.374 | 60,3 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 3 | 1,4 |
| 3/4" | 20 | 1.059 | 26,9 | .125 | 3,2 | 2.559 | 65,0 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 3.5 | 1,6 |
| 1" | 25 | 1.326 | 33,7 | .125 | 3,2 | 2.996 | 76,1 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 4.5 | 2,0 |
| 5/4" | 32 | 1.669 | 42,4 | .141 | 3,6 | 3.500 | 88,9 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 6 | 2,7 |
| 6/4" | 40 | 1.901 | 48,3 | .141 | 3,6 | 3.500 | 88,9 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 8 | 3,5 |
| 2" | 50 | 2.374 | 60,3 | .216 | 5,5 | 4.000 | 101,6 | 5.551 | 141 | 5.700 | 145 | 2.519 | 64 | 13.779 | 350 | 9 | 4,0 |
| 2 1/2" | 65 | 2.996 | 76,1 | .196 | 5,0 | 5.236 | 133,0 | 6.338 | 161 | 6.181 | 157 | 3.228 | 82 | 15.748 | 400 | 18 | 8,0 |
| 3" | 80 | 3.500 | 88,9 | .220 | 5,6 | 5.500 | 139,7 | 6.338 | 161 | 6.181 | 157 | 3.228 | 82 | 15.748 | 400 | 22 | 10,0 |
| 4" | 100 | 4.250/4.500 | 108,0/114,3 | .248 | 6,3 | 7.000 | 177,8 | 8.031 | 204 | 8.188 | 208 | 3.464 | 88 | 19.685 | 500 | 42 | 19,0 |
| 5" | 125 | 5.236 | 133,0 | .248 | 6,3 | 7.625 | 193,7 | 8.031 | 204 | 8.188 | 208 | 3.464 | 88 | 19.685 | 500 | 77 | 35,0 |
| 6" | 150 | 6.259/6.625 | 159,0/168,3 | .279 | 7,1 | 10.748 | 273,0 | 9.330 | 237 | 9.330 | 237 | 4.960 | 126 | 23.622 | 600 | 117 | 53,0 |
| 8" | 200 | 8.625 | 219,1 | .279 | 7,1 | 12.750 | 323,9 | 9.330 | 237 | 9.330 | 237 | 4.960 | 126 | 23.622 | 600 | 183 | 83,0 |
| 10" | 250 | 10.748 | 273,0 | .279 | 7,1 | 14.000 | 355,6 | 11.299 | 287 | 11.299 | 287 | 4.960 | 126 | 27.559 | 700 | 187 | 85,0 |
| 12" | 300 | 12.751 | 323,9 | .314 | 8,0 | 17.992 | 457,0 | 11.181 | 284 | 11.181 | 284 | 5.196 | 132 | 27.559 | 700 | 265 | 120,0 |
| 14" | 350 | 14.011 | 355,9 | .314 | 8,0 | 17.992 | 457,0 | 11.181 | 284 | 11.181 | 284 | 5.196 | 132 | 27.559 | 700 | 309 | 140,0 |
| 16" | 400 | 16 | 406,4 | .314 | 8,0 | 20.000 | 508,0 | 11.102 | 282 | 10.078 | 256 | 6.377 | 162 | 27.559 | 700 | 364 | 165,0 |
| 18" | 450 | 17.992 | 457,0 | .346 | 8,8 | 24.015 | 610,0 | 13.267 | 337 | 13.385 | 340 | 8.779 | 223 | 35.433 | 900 | 661 | 300,0 |
| 20" | 500 | 20 | 508,0 | .346 | 8,8 | 25.984 | 660,0 | 15.236 | 387 | 15.354 | 390 | 8.779 | 223 | 39.370 | 1000 | 772 | 350,0 |
| 24" | 600 | 24.015 | 610,0 | .393 | 10,0 | 31.889 | 810,0 | 15.236 | 387 | 15.354 | 390 | 8.779 | 223 | 39.370 | 1000 | 1323 | 600,0 |
| 28" | 700 | 27.992 | 711,0 | .492 | 12,5 | 34.055 | 865,0 | 13.464 | 342 | 13.582 | 345 | 12.322 | 313 | 39.370 | 1000 | 1653 | 750,0 |
| 32" | 800 | 32 | 813,0 | .559 | 14,2 | 38.385 | 975,0 | 13.464 | 342 | 13.582 | 345 | 12.322 | 313 | 39.370 | 1000 | 2006 | 910,0 |
| 36" | 900 | 35.984 | 914,0 | .559 | 14,2 | 44.000 | 1118,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 2066 | 937,0 |
| 40" | 1000 | 40 | 1016,0 | .629 | 16,0 | 48.228 | 1225,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 3752 | 1702,0 |
| 42" | 1050 | 42 | 1067,0 | .629 | 16,0 | 52.000 | 1321,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 3704 | 1680,0 |
| 44" | 1100 | 44 | 1118,0 | .708 | 18,0 | 52.000 | 1321,0 | 27.559 | 700 | 27.559 | 700 | 15.748 | 400 | 70.866 | 1800 | 4012 | 1820,0 |
| 48" | 1200 | 47.992 | 1219,0 | .787 | 20,0 | 55.984 | 1422,0 | 39.370 | 1000 | 39.370 | 1000 | 19.685 | 500 | 98.425 | 2500 | 4431 | 2010,0 |
| 56" | 1400 | 55.984 | 1422,0 | .787 | 20,0 | 67.322 | 1710,0 | 39.370 | 1000 | 39.370 | 1000 | 19.685 | 500 | 98.425 | 2500 | 6283 | 2850,0 |

| DN | | ANSI 600 (PN100) | | | | | | | | | | | | | | | |
|--------|------|------------------|-------------|--------|------|--------|--------|--------|------|--------|------|--------|-----|--------|------|--------|--------|
| in | mm | AA | | gn min | | BB | | A | | B | | C | | L | | Weight | |
| | | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | lbs | kg |
| 1/2" | 15 | .917 | 21,3 | .125 | 3,2 | 2.374 | 60,3 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 3 | 1,4 |
| 3/4" | 20 | 1.059 | 26,9 | .125 | 3,2 | 2.559 | 65,0 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 3.5 | 1,6 |
| 1" | 25 | 1.326 | 33,7 | .125 | 3,2 | 2.996 | 76,1 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 4.5 | 2,0 |
| 5/4" | 32 | 1.669 | 42,4 | .141 | 3,6 | 3.500 | 88,9 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 6 | 2,7 |
| 6/4" | 40 | 1.901 | 48,3 | .141 | 3,6 | 3.500 | 88,9 | 4.724 | 120 | 4.724 | 120 | 2.362 | 60 | 11.811 | 300 | 8 | 3,5 |
| 2" | 50 | 2.374 | 60,3 | .216 | 5,5 | 4.000 | 101,6 | 5.551 | 141 | 5.700 | 145 | 2.519 | 64 | 13.779 | 350 | 9 | 4,0 |
| 2 1/2" | 65 | 2.996 | 76,1 | .196 | 5,0 | 5.236 | 133,0 | 6.338 | 161 | 6.181 | 157 | 3.228 | 82 | 15.748 | 400 | 18 | 8,0 |
| 3" | 80 | 3.500 | 88,9 | .220 | 5,6 | 5.500 | 139,7 | 6.338 | 161 | 6.181 | 157 | 3.228 | 82 | 15.748 | 400 | 22 | 10,0 |
| 4" | 100 | 4.250/4.500 | 108,0/114,3 | .248 | 6,3 | 7.000 | 177,8 | 8.031 | 204 | 8.188 | 208 | 3.464 | 88 | 19.685 | 500 | 42 | 19,0 |
| 5" | 125 | 5.236 | 133,0 | .248 | 6,3 | 7.625 | 193,7 | 8.031 | 204 | 8.188 | 208 | 3.464 | 88 | 19.685 | 500 | 77 | 35,0 |
| 6" | 150 | 6.259/6.625 | 159,0/168,3 | .279 | 7,1 | 10.748 | 273,0 | 9.330 | 237 | 9.330 | 237 | 4.960 | 126 | 23.622 | 600 | 117 | 53,0 |
| 8" | 200 | 8.625 | 219,1 | .314 | 8,0 | 12.750 | 323,9 | 9.330 | 237 | 9.330 | 237 | 4.960 | 126 | 23.622 | 600 | 156 | 71,0 |
| 10" | 250 | 10.748 | 273,0 | .346 | 8,8 | 14.000 | 355,6 | 10.511 | 267 | 10.905 | 277 | 6.141 | 156 | 27.559 | 700 | 205 | 93,0 |
| 12" | 300 | 12.751 | 323,9 | .346 | 8,8 | 17.992 | 457,0 | 9.606 | 244 | 10.000 | 254 | 7.952 | 202 | 27.559 | 700 | 397 | 180,0 |
| 14" | 350 | 14.011 | 355,9 | .393 | 10,0 | 17.992 | 457,0 | 9.724 | 247 | 9.881 | 251 | 7.952 | 202 | 27.559 | 700 | 397 | 180,0 |
| 16" | 400 | 16 | 406,4 | .433 | 11,0 | 20.000 | 508,0 | 13.464 | 342 | 13.228 | 336 | 8.740 | 222 | 35.433 | 900 | 494 | 224,0 |
| 18" | 450 | 17.992 | 457,0 | .433 | 11,0 | 24.015 | 610,0 | 13.464 | 342 | 13.228 | 336 | 8.740 | 222 | 35.433 | 900 | 749 | 340,0 |
| 20" | 500 | 20 | 508,0 | .472 | 12,0 | 25.984 | 660,0 | 13.070 | 332 | 12.332 | 313 | 13.976 | 355 | 39.370 | 1000 | 1058 | 480,0 |
| 24" | 600 | 24.015 | 610,0 | .492 | 12,5 | 31.889 | 810,0 | 13.070 | 332 | 12.332 | 313 | 13.976 | 355 | 39.370 | 1000 | 1565 | 710,0 |
| 28" | 700 | 27.992 | 711,0 | .559 | 14,2 | 34.055 | 865,0 | 11.811 | 300 | 11.811 | 300 | 15.748 | 400 | 39.370 | 1000 | 2094 | 950,0 |
| 32" | 800 | 32 | 813,0 | .559 | 14,2 | 38.385 | 975,0 | 11.811 | 300 | 11.811 | 300 | 15.748 | 400 | 39.370 | 1000 | 2756 | 1250,0 |
| 36" | 900 | 35.984 | 914,0 | .629 | 16,0 | 44.000 | 1118,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 5004 | 2270,0 |
| 40" | 1000 | 40 | 1016,0 | .708 | 18,0 | 48.228 | 1225,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 4938 | 2240,0 |
| 42" | 1050 | 42 | 1067,0 | .708 | 18,0 | 52.000 | 1321,0 | 19.685 | 500 | 19.685 | 500 | 15.748 | 400 | 55.118 | 1400 | 5353 | 2428,0 |
| 44" | 1100 | 44 | 1118,0 | .787 | 20,0 | 52.000 | 1321,0 | 27.559 | 700 | 27.559 | 700 | 15.748 | 400 | 70.866 | 1800 | 5908 | 2680,0 |
| 48" | 1200 | 47.992 | 1219,0 | .866 | 22,0 | 55.984 | 1422,0 | 39.370 | 1000 | 39.370 | 1000 | 19.685 | 500 | 98.425 | 2500 | 8377 | 3800,0 |
| 56" | 1400 | 55.984 | 1422,0 | .944 | 24,0 | 67.322 | 1710,0 | 39.370 | 1000 | 39.370 | 1000 | 19.685 | 500 | 98.425 | 2500 | 9921 | 4500,0 |

TO ORDER PLEASE SPECIFY THE FOLLOWING

1. Diameter of pipe
2. ANSI rating
3. Grade of pipe material
4. Wall thickness
5. Product to be transported
6. Temperature of transported material (160°F is standard. Higher temperature materials available upon request.)
7. Additional X-ray, Non-destructive testing. Electrical and hydrostatic testing is standard. (Please state requirements)

OTHER PRODUCTS AVAILABLE

- Kleerband® Flange Protectors
- Radolid® Nut Protective Caps
- Casing Insulators and End Seals
- Innerlynx® - Modular Mechanical Seals
- Cathodic Isolating Gaskets
- Foreman Night Caps
- Safety Spray Shields
- U-Bolt Cote® - Coated U-bolts

BSI Management
Systems America, Inc.

ISO 9001:2008
REGISTERED
COMPANY

CERTIFICATE # FM 537405
FORMERLY QMI # 1041990



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