

**PIPE\* - SIMULTANEOUS WELD** 5 meter (16.4') lengths

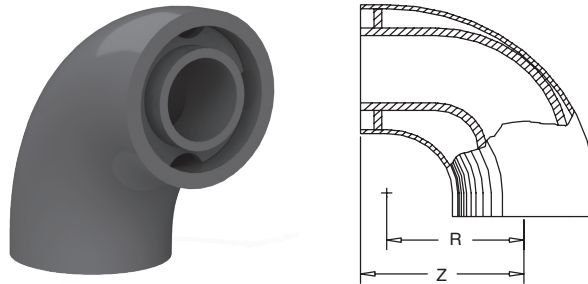
| Size      |         | PRO150 x PRO150        |       |      |       |         | Part Number |
|-----------|---------|------------------------|-------|------|-------|---------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |      |       |         |             |
| mm        | inch    | OD1                    | OD2   | ID1  | ID2   |         |             |
| 32 x 90   | 1 x 3   | 1.26                   | 3.54  | 1.02 | 2.90  | 5210134 |             |
| 63 x 110  | 2 x 4   | 2.48                   | 4.33  | 2.02 | 3.54  | 5210420 |             |
| 90 x 160  | 3 x 6   | 3.54                   | 6.30  | 2.90 | 5.15  | 5210531 |             |
| 110 x 200 | 4 x 8   | 4.33                   | 7.87  | 3.54 | 6.44  | 5210583 |             |
| 160 x 250 | 6 x 10  | 6.30                   | 9.84  | 5.15 | 8.05  | 5210627 |             |
| 200 x 315 | 8 x 12  | 7.87                   | 12.40 | 6.44 | 10.14 | 5210660 |             |
| 250 x 355 | 10 x 14 | 9.84                   | 13.98 | 8.05 | 11.43 | 5210702 |             |

| Size      |         | PRO150 x PRO45                        |       |       |       |         | Part Number |
|-----------|---------|---------------------------------------|-------|-------|-------|---------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |       |       |         |             |
| mm        | inch    | OD1                                   | OD2   | ID1   | ID2   |         |             |
| 63 x 110  | 2 x 4   | 2.48                                  | 4.33  | 2.02  | 4.06  | 5312420 |             |
| 90 x 160  | 3 x 6   | 3.54                                  | 6.30  | 2.90  | 5.91  | 5312531 |             |
| 110 x 200 | 4 x 8   | 4.33                                  | 7.87  | 3.54  | 7.39  | 5312583 |             |
| 160 x 250 | 6 x 10  | 6.30                                  | 9.84  | 5.15  | 9.23  | 5312627 |             |
| 200 x 315 | 8 x 12  | 7.87                                  | 12.40 | 6.44  | 11.63 | 5312660 |             |
| 250 x 355 | 10 x 14 | 9.84                                  | 13.98 | 8.05  | 13.10 | 5312702 |             |
| 315 x 400 | 12 x 16 | 12.40                                 | 15.75 | 10.14 | 14.77 | 5312690 |             |
| 355 x 450 | 14 x 18 | 13.98                                 | 17.72 | 11.43 | 16.61 | 5312710 |             |
| 400 x 500 | 16 x 20 | 15.75                                 | 19.68 | 12.88 | 18.46 | 5312726 |             |

| Size      |         | PRO45 x PRO45          |       |       |       |         | Part Number |
|-----------|---------|------------------------|-------|-------|-------|---------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |       |       |       |         |             |
| mm        | inch    | OD1                    | OD2   | ID1   | ID2   |         |             |
| 110 x 200 | 4 x 8   | 4.33                   | 7.87  | 4.06  | 7.39  | 5388583 |             |
| 160 x 250 | 6 x 10  | 6.30                   | 9.84  | 5.91  | 9.23  | 5388627 |             |
| 200 x 315 | 8 x 12  | 7.87                   | 12.40 | 7.39  | 11.63 | 5388660 |             |
| 250 x 355 | 10 x 14 | 9.84                   | 13.98 | 9.24  | 13.10 | 5388702 |             |
| 315 x 400 | 12 x 16 | 12.40                  | 15.75 | 11.64 | 14.77 | 5388690 |             |
| 355 x 450 | 14 x 18 | 13.98                  | 17.72 | 13.12 | 16.61 | 5388710 |             |
| 400 x 500 | 16 x 20 | 15.75                  | 19.68 | 14.78 | 18.46 | 5388726 |             |

\*Pipe is sold in 5 meter lengths (16.4').

Double Wall Piping System



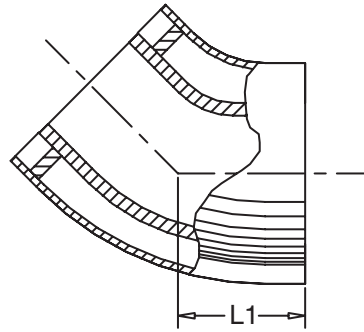
**90 DEGREE ELBOW**

| Size      |         | PRO150 x PRO150        |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |             |
| mm        | inch    | Z                      | R     | Part Number |
| 32 x 90   | 1 x 3   | 3.94                   | 3.35  | 5203134     |
| 63 x 110  | 2 x 4   | 4.88                   | 4.13  | 5203420     |
| 90 x 160  | 3 x 6   | 7.08                   | 6.10  | 5203531     |
| 110 x 200 | 4 x 8   | 7.87                   | 7.68  | 5203583     |
| 160 x 250 | 6 x 10  | 11.22                  | 10.04 | 5203627     |
| 200 x 315 | 8 x 12  | 13.39                  | 11.81 | 5203660     |
| 250 x 355 | 10 x 14 | 13.40                  | 11.81 | 5203702     |

| Size      |         | PRO150 x PRO45                        |       |             |
|-----------|---------|---------------------------------------|-------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
| mm        | inch    | Z                                     | R     | Part Number |
| 63 x 110  | 2 x 4   | 4.72                                  | 4.33  | 5304420     |
| 90 x 160  | 3 x 6   | 6.69                                  | 6.10  | 5304531     |
| 110 x 200 | 4 x 8   | 8.66                                  | 7.76  | 5304583     |
| 160 x 250 | 6 x 10  | 11.41                                 | 10.43 | 5304627     |
| 200 x 315 | 8 x 12  | 13.38                                 | 11.81 | 5304660     |
| 250 x 355 | 10 x 14 | 13.39                                 | 11.81 | 5304702     |
| 315 x 400 | 12 x 16 | 13.58                                 | 11.81 | 5304690     |
| 355 x 450 | 14 x 18 | 17.71                                 | 15.80 | 5304710     |
| 400 x 500 | 16 x 20 | 17.71                                 | 15.80 | 5304726     |

| Size      |         | PRO45 x PRO45          |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |       |             |
| mm        | inch    | Z                      | R     | Part Number |
| 110 x 200 | 4 x 8   | 8.66                   | 7.76  | 5372583     |
| 160 x 250 | 6 x 10  | 11.41                  | 10.43 | 5372627     |
| 200 x 315 | 8 x 12  | 13.38                  | 11.81 | 5372660     |
| 250 x 355 | 10 x 14 | 13.40                  | 11.80 | 5372702     |
| 315 x 400 | 12 x 16 | 13.80                  | 11.80 | 5372690     |
| 355 x 450 | 14 x 18 | 17.71                  | 15.80 | 5372710     |
| 400 x 500 | 16 x 20 | 17.71                  | 15.80 | 5372726     |

Duo-Pro®  
 Pro150, Pro45



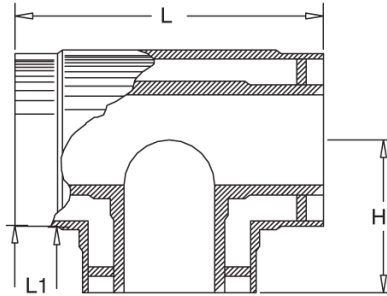
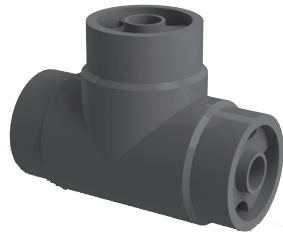
**45 DEGREE ELBOW**

**Double Wall  
Piping System**

| Size      |         | PRO150 x PRO150        |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |             |
| mm        | inch    | L1                     | Part Number |
| 32 x 90   | 1 x 3   | 4.00                   | 5205134     |
| 63 x 110  | 2 x 4   | 4.25                   | 5205420     |
| 90 x 160  | 3 x 6   | 6.00                   | 5205531     |
| 110 x 200 | 4 x 8   | 6.50                   | 5205583     |
| 160 x 250 | 6 x 10  | 8.50                   | 5205627     |
| 200 x 315 | 8 x 12  | 10.00                  | 5205660     |
| 250 x 355 | 10 x 14 | 8.50                   | 5205702     |

| Size      |         | PRO150 x PRO45                        |             |
|-----------|---------|---------------------------------------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
| mm        | inch    | L1                                    | Part Number |
| 63 x 110  | 2 x 4   | 5.00                                  | 5307420     |
| 90 x 160  | 3 x 6   | 6.00                                  | 5307531     |
| 110 x 200 | 4 x 8   | 6.00                                  | 5307583     |
| 160 x 250 | 6 x 10  | 6.00                                  | 5307627     |
| 200 x 315 | 8 x 12  | 6.50                                  | 5307660     |
| 250 x 355 | 10 x 14 | 8.25                                  | 5307702     |
| 315 x 400 | 12 x 16 | 9.50                                  | 5307690     |
| 355 x 450 | 14 x 18 | 12.00                                 | 5307710     |
| 400 x 500 | 16 x 20 | 14.00                                 | 5307726     |

| Size      |         | PRO45 x PRO45          |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |             |
| mm        | inch    | L1                     | Part Number |
| 110 x 200 | 4 x 8   | 6.00                   | 5370583     |
| 160 x 250 | 6 x 10  | 6.00                   | 5370627     |
| 200 x 315 | 8 x 12  | 6.25                   | 5370660     |
| 250 x 355 | 10 x 14 | 8.25                   | 5370702     |
| 315 x 400 | 12 x 16 | 9.50                   | 5370690     |
| 355 x 450 | 14 x 18 | 12.00                  | 5370710     |
| 400 x 500 | 16 x 20 | 14.00                  | 5370726     |



**TEE**

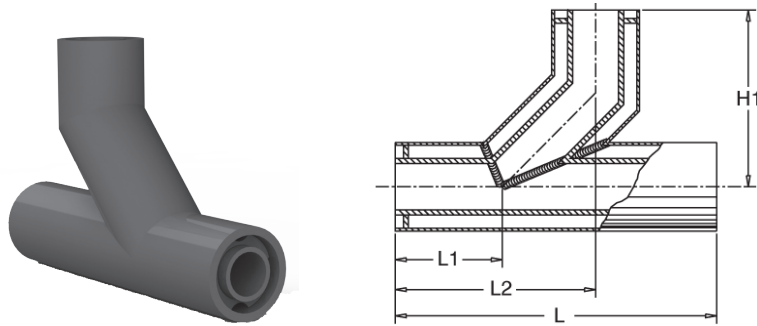
| Size      |         | PRO150 x PRO150        |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |             |
| mm        | inch    | L                      | H     | Part Number |
| 32 x 90   | 1 x 3   | 8.15                   | 4.17  | 5201134     |
| 63 x 110  | 2 x 4   | 9.45                   | 4.72  | 5201420     |
| 90 x 160  | 3 x 6   | 12.4                   | 6.3   | 5201531     |
| 110 x 200 | 4 x 8   | 15.59                  | 7.8   | 5201583     |
| 200 x 315 | 8 x 12  | 21.26                  | 10.83 | 5201660     |
| 250 x 355 | 10 x 14 | 26.57                  | 13.46 | 5201702     |

Note: 6x10 PRO150 x PRO150 TEE can be made custom. Contact factory for options.

| Size      |         | PRO150 x PRO45                        |       |             |
|-----------|---------|---------------------------------------|-------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
| mm        | inch    | L                                     | H     | Part Number |
| 63 x 110  | 2 x 4   | 8.46                                  | 4.29  | 5301420     |
| 90 x 160  | 3 x 6   | 10.94                                 | 5.51  | 5301531     |
| 110 x 200 | 4 x 8   | 13.39                                 | 6.69  | 5301583     |
| 160 x 250 | 6 x 10  | 17.25                                 | 8.66  | 5301627     |
| 200 x 315 | 8 x 12  | 21.06                                 | 10.63 | 5301660     |
| 250 x 355 | 10 x 14 | 26.93                                 | 13.46 | 5301702     |
| 315 x 400 | 12 x 16 | 27.36                                 | 13.78 | 5301690     |
| 355 x 450 | 14 x 18 | 35.43                                 | 17.72 | 5301710     |
| 400 x 500 | 16 x 20 | 35.43                                 | 17.72 | 5301726     |

| Size      |         | PRO45 x PRO45          |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |       |             |
| mm        | inch    | L                      | H     | Part Number |
| 110 x 200 | 4 x 8   | 17.24                  | 8.66  | 5374583     |
| 160 x 250 | 6 x 10  | 21.06                  | 10.63 | 5374627     |
| 200 x 315 | 8 x 12  | 26.93                  | 13.46 | 5374660     |
| 250 x 355 | 10 x 14 | 27.36                  | 13.78 | 5374702     |
| 315 x 400 | 12 x 16 | 35.43                  | 17.72 | 5374690     |
| 355 x 450 | 14 x 18 | 35.43                  | 17.72 | 5374710     |
| 400 x 500 | 16 x 20 | 35.43                  | 17.72 | 5374726     |

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 Pro150, Pro45



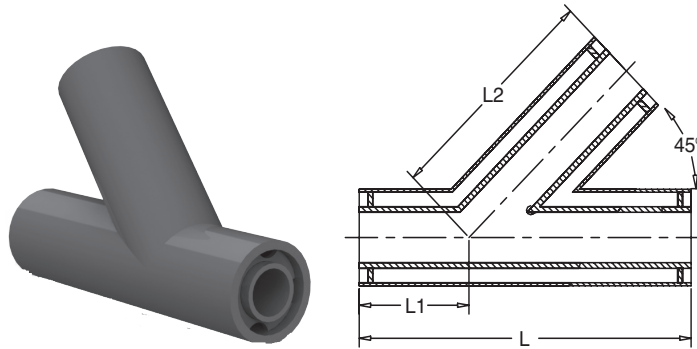
**SANITARY TEE**

| Size      |         | PRO150 x PRO150<br>SDR 11 / MOP 5 PSI |       |       |       |             |
|-----------|---------|---------------------------------------|-------|-------|-------|-------------|
| mm        | inch    | L                                     | L1    | L2    | H1    | Part Number |
| 32 x 90   | 1 x 3   | 18.00                                 | 6.00  | 12.00 | 10.00 | 5227134     |
| 63 x 110  | 2 x 4   | 18.00                                 | 6.00  | 12.00 | 10.00 | 5227420     |
| 90 x 160  | 3 x 6   | 24.00                                 | 8.00  | 16.00 | 13.00 | 5227531     |
| 110 x 200 | 4 x 8   | 30.00                                 | 10.00 | 20.00 | 16.00 | 5227583     |
| 160 x 250 | 6 x 10  | 36.00                                 | 12.00 | 24.00 | 18.50 | 5227627     |
| 200 x 315 | 8 x 12  | 42.00                                 | 14.00 | 28.00 | 21.75 | 5227660     |
| 250 x 355 | 10 x 14 | 48.00                                 | 16.00 | 32.00 | 24.25 | 5227702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ MOP 5 PSI |       |       |       |             |
|-----------|---------|--|-------|-------|-------|-------------|
| mm        | inch    | L  | L1    | L2    | H1    | Part Number |
| 63 x 110  | 2 x 4   | 18.00                                    | 6.00  | 12.00 | 10.00 | 5327420     |
| 90 x 160  | 3 x 6   | 24.00                                    | 8.00  | 16.00 | 13.00 | 5327531     |
| 110 x 200 | 4 x 8   | 30.00                                    | 10.00 | 20.00 | 16.00 | 5327583     |
| 160 x 250 | 6 x 10  | 36.00                                    | 12.00 | 24.00 | 18.50 | 5327627     |
| 200 x 315 | 8 x 12  | 42.00                                    | 14.00 | 28.00 | 21.75 | 5327660     |
| 250 x 355 | 10 x 14 | 48.00                                    | 16.00 | 32.00 | 24.25 | 5327702     |
| 315 x 400 | 12 x 16 | 54.00                                    | 18.00 | 36.00 | 28.00 | 5327690     |
| 355 x 450 | 14 x 18 | 60.00                                    | 20.00 | 40.00 | 31.25 | 5327710     |
| 400 x 500 | 16 x 20 | 66.00                                    | 22.00 | 44.00 | 34.75 | 5327726     |

| Size      |         | PRO45 x PRO45<br>SDR 33/ MOP 5 PSI |       |       |       |             |
|-----------|---------|------------------------------------|-------|-------|-------|-------------|
| mm        | inch    | L                                  | L1    | L2    | H1    | Part Number |
| 110 x 200 | 4 x 8   | 30.00                              | 10.00 | 20.00 | 16.00 | 5382583     |
| 160 x 250 | 6 x 10  | 36.00                              | 12.00 | 24.00 | 18.50 | 5382627     |
| 200 x 315 | 8 x 12  | 42.00                              | 14.00 | 28.00 | 21.75 | 5382660     |
| 250 x 355 | 10 x 14 | 48.00                              | 16.00 | 32.00 | 24.25 | 5382702     |
| 315 x 400 | 12 x 16 | 54.00                              | 18.00 | 36.00 | 28.00 | 5382690     |
| 355 x 450 | 14 x 18 | 60.00                              | 20.00 | 40.00 | 31.25 | 5382710     |
| 400 x 500 | 16 x 20 | 66.00                              | 22.00 | 44.00 | 34.75 | 5382726     |

Double Wall  
Piping System



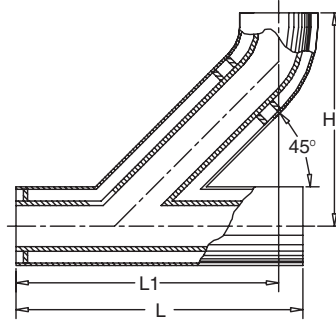
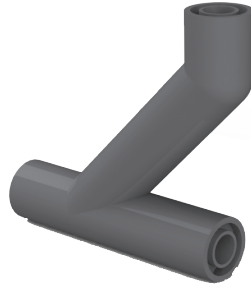
**LATERAL**

| Size      |         | PRO150 x PRO150<br>SDR 11/ MOP 5 PSI |    |    |             |
|-----------|---------|--------------------------------------|----|----|-------------|
| mm        | inch    | L                                    | L1 | L2 | Part Number |
| 32 x 90   | 1 x 3   | 18                                   | 6  | 12 | 5239134     |
| 63 x 110  | 2 x 4   | 18                                   | 6  | 12 | 5239420     |
| 90 x 160  | 3 x 6   | 24                                   | 8  | 16 | 5239531     |
| 110 x 200 | 4 x 8   | 30                                   | 10 | 20 | 5239583     |
| 160 x 250 | 6 x 10  | 26                                   | 12 | 24 | 5239627     |
| 200 x 315 | 8 x 12  | 42                                   | 14 | 28 | 5239660     |
| 250 x 355 | 10 x 14 | 48                                   | 16 | 32 | 5239702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ MOP 5 PSI |    |    |             |
|-----------|---------|--|----|----|-------------|
| mm        | inch    | L  | L1 | L2 | Part Number |
| 63 x 110  | 2 x 4   | 18                                       | 6  | 12 | 5340420     |
| 90 x 160  | 3 x 6   | 24                                       | 8  | 16 | 5340531     |
| 110 x 200 | 4 x 8   | 30                                       | 10 | 20 | 5340583     |
| 160 x 250 | 6 x 10  | 36                                       | 12 | 24 | 5340627     |
| 200 x 315 | 8 x 12  | 42                                       | 14 | 28 | 5340660     |
| 250 x 355 | 10 x 14 | 28                                       | 16 | 32 | 5340702     |
| 315 x 400 | 12 x 16 | 54                                       | 18 | 36 | 5340690     |
| 355 x 450 | 14 x 18 | 60                                       | 20 | 40 | 5340710     |
| 400 x 500 | 16 x 20 | 64                                       | 21 | 48 | 5340726     |

| Size      |         | PRO45 x PRO45<br>SDR 33/ MOP 5 PSI |    |    |             |
|-----------|---------|------------------------------------|----|----|-------------|
| mm        | inch    | L                                  | L1 | L2 | Part Number |
| 110 x 200 | 4 x 8   | 30                                 | 10 | 20 | 5378583     |
| 160 x 250 | 6 x 10  | 36                                 | 12 | 24 | 5378627     |
| 200 x 315 | 8 x 12  | 42                                 | 14 | 28 | 5378660     |
| 250 x 355 | 10 x 14 | 48                                 | 16 | 32 | 5378702     |
| 315 x 400 | 12 x 16 | 54                                 | 18 | 36 | 5378690     |
| 355 x 450 | 14 x 18 | 60                                 | 20 | 40 | 5378710     |
| 400 x 500 | 16 x 20 | 64                                 | 21 | 48 | 5378726     |

Duo-Pro®  
 Pro150, Pro45



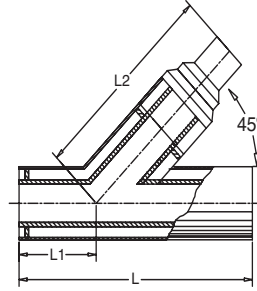
**LATERAL WITH 1/8 BEND**

| Size      |         | PRO150 x PRO150   |       |       |             |
|-----------|---------|-------------------|-------|-------|-------------|
|           |         | SDR 11/ MOP 5 PSI |       |       |             |
| mm        | inch    | L                 | L1    | H1    | Part Number |
| 32 x 90   | 1 x 3   | 18                | 17.25 | 15.25 | 5237134     |
| 63 x 110  | 2 x 4   | 18                | 18    | 16.5  | 5237420     |
| 90 x 160  | 3 x 6   | 24                | 23.25 | 21.5  | 5237531     |
| 110 x 200 | 4 x 8   | 30                | 28.5  | 25    | 5237583     |
| 160 x 250 | 6 x 10  | 36                | 34.75 | 31.25 | 5237627     |
| 200 x 315 | 8 x 12  | 42                | 40.75 | 36.75 | 5237660     |
| 250 x 355 | 10 x 14 | 48                | 44.5  | 37    | 5237702     |

| Size      |         | PRO150 x PRO45         |        |        |             |
|-----------|---------|------------------------|--------|--------|-------------|
|           |         | SDR 11 x 33/ MOP 5 PSI |        |        |             |
| mm        | inch    | L                      | L1     | H1     | Part Number |
| 63 x 110  | 2 x 4   | 18                     | 18     | 16.5   | 5338420     |
| 90 x 160  | 3 x 6   | 24                     | 23.25  | 21.5   | 5338531     |
| 110 x 200 | 4 x 8   | 30                     | 28.5   | 24     | 5338583     |
| 160 x 250 | 6 x 10  | 36                     | 33     | 26.75  | 5338627     |
| 200 x 315 | 8 x 12  | 42                     | 38.125 | 30.375 | 5338660     |
| 250 x 355 | 10 x 14 | 48                     | 45.5   | 39.125 | 5338702     |
| 315 x 400 | 12 x 16 | 54                     | 51.75  | 45.375 | 5338690     |
| 355 x 450 | 14 x 18 | 60                     | 56.5   | 48.25  | 5338710     |
| 400 x 500 | 16 x 20 | 64                     | 60     | 52.5   | 5338726     |

| Size      |         | PRO45 x PRO45     |        |        |             |
|-----------|---------|-------------------|--------|--------|-------------|
|           |         | SDR 33/ MOP 5 PSI |        |        |             |
| mm        | inch    | L                 | L1     | H1     | Part Number |
| 110 x 200 | 4 x 8   | 30                | 38.5   | 24     | 5380583     |
| 160 x 250 | 6 x 10  | 36                | 33     | 26.75  | 5380627     |
| 200 x 315 | 8 x 12  | 42                | 38.125 | 30.375 | 5380660     |
| 250 x 355 | 10 x 14 | 48                | 45.5   | 39.125 | 5380702     |
| 315 x 400 | 12 x 16 | 54                | 51.75  | 45.375 | 5380690     |
| 355 x 450 | 14 x 18 | 60                | 56.5   | 48.25  | 5380710     |
| 400 x 500 | 16 x 20 | 64                | 60     | 52.5   | 5380726     |

Double Wall Piping System

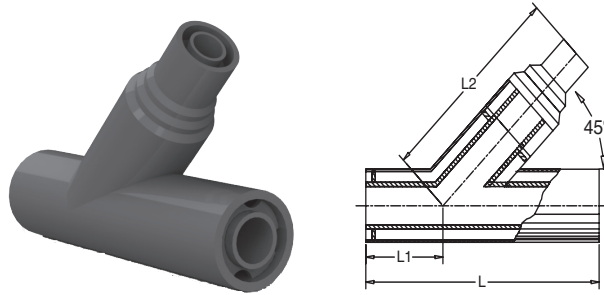


**REDUCING LATERAL**

| Size                    |                   | PRO150 x PRO150<br>SDR 11/ MOP 5 PSI |    |       |             |
|-------------------------|-------------------|--------------------------------------|----|-------|-------------|
|                         |                   | L                                    | L1 | L2    | Part Number |
| mm                      | inch              |                                      |    |       |             |
| (90 x 63)(160 x 110)    | (3 x 2)(6 x 4)    | 24                                   | 8  | 16.5  | 5235743     |
| (110 x 63)(200 x 110)   | (4 x 2)(8 x 4)    | 30                                   | 10 | 25.25 | 5235744     |
| (140 x 90)(200 x 160)   | (4 x 3)(8 x 6)    | 30                                   | 10 | 22    | 5235746     |
| (160 x 63)(250 x 110)   | (6 x 2)(10 x 4)   | 36                                   | 12 | 30    | 5235892     |
| (160 x 90)(250 x 160)   | (6 x 3)(10 x 6)   | 36                                   | 12 | 27    | 5235747     |
| (160 x 110)(250 x 200)  | (6 x 4)(10 x 8)   | 36                                   | 12 | 25.25 | 5235748     |
| (200 x 63)(315 x 110)   | (8 x 2)(12 x 4)   | 42                                   | 14 | 36    | 5235890     |
| (200 x 90)(315 x 160)   | (8 x 3)(12 x 6)   | 42                                   | 14 | 34.5  | 5235896     |
| (200 x 110)(315 x 200)  | (8 x 4)(12 x 8)   | 42                                   | 14 | 32.75 | 5235895     |
| (200 x 160)(315 x 250)  | (8 x 6)(12 x 10)  | 42                                   | 14 | 29.75 | 5235893     |
| (250 x 90) (355 x 160)  | (10 x 3)(14 x 6)  | 48                                   | 16 | 39    | 5235898     |
| 250 x 110(355 x 200)    | (10 x 4)(14 x 8)  | 48                                   | 16 | 37.5  | 5235903     |
| (250 x 160) (355 x 250) | (10 x 6)(14 x 10) | 48                                   | 16 | 34.5  | 5235902     |
| (250 x 200)(355 x 315)  | (10 x 8)(14 x 12) | 48                                   | 16 | 30.5  | 5235899     |

Duo-Pro®  
 Pro150, Pro45

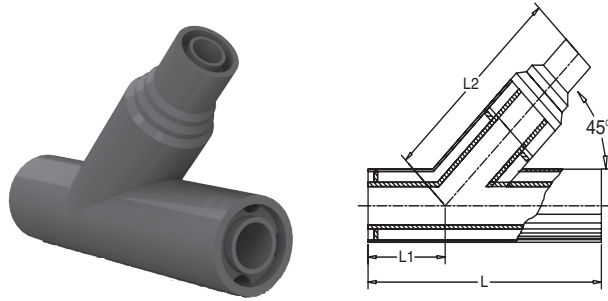




**REDUCING LATERAL**

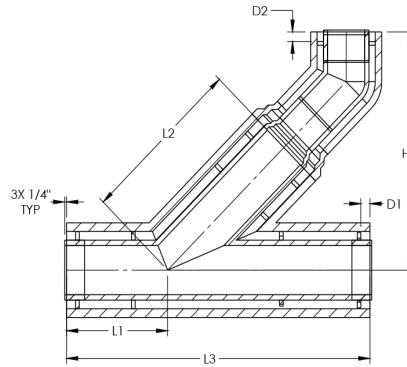
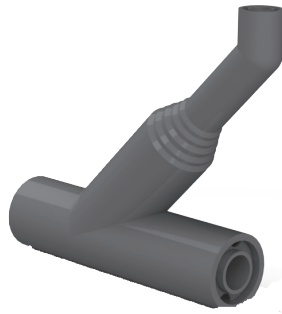
| Size                   |                    | PRO150 x PRO45         |    |       |             |
|------------------------|--------------------|------------------------|----|-------|-------------|
|                        |                    | SDR 11 x 33/ MOP 5 PSI |    |       |             |
| mm                     | inch               | L                      | L1 | L2    | Part Number |
| (90 x 63)(160 x 110)   | (3 x 2)(6 x 4)     | 24                     | 8  | 16.5  | 5336743     |
| (110 x 63)(200 x 110)  | (4 x 2)(8 x 4)     | 30                     | 10 | 25.25 | 5336744     |
| (140 x 90)(200 x 160)  | (4 x 3)(8 x 6)     | 30                     | 10 | 22    | 5336746     |
| (160 x 63)(250 x 110)  | (6 x 2)(10 x 4)    | 36                     | 12 | 31.75 | 5336892     |
| (160 x 90)(250 x 160)  | (6 x 3)(10 x 6)    | 36                     | 12 | 27    | 5336747     |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 36                     | 12 | 25.25 | 5336748     |
| (200 x 63)(315 x 110)  | (8 x 2)(12 x 4)    | 42                     | 14 | 36.37 | 5336890     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)    | 42                     | 14 | 34.5  | 5336896     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 42                     | 14 | 32.75 | 5336895     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 42                     | 14 | 29.75 | 5336893     |
| (250 x 90)(355 x 160)  | (10 x 3)(14 x 6)   | 48                     | 16 | 40.37 | 5336898     |
| 250 x 110)(355 x 200)  | (10 x 4)(14 x 8)   | 48                     | 16 | 37.5  | 5336903     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 48                     | 16 | 34.5  | 5336902     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 48                     | 16 | 30.5  | 5336899     |
| (315 x 110)(400 x 200) | (12 x 4)(16 x 8)   | 54                     | 18 | 45    | 5336923     |
| (315 x 160)(400 x 200) | (12 x 6)(16 x 10)  | 54                     | 18 | 43.5  | 5336904     |
| (315 x 200)(400 x 355) | (12 x 8)(16 x 12)  | 54                     | 18 | 40.5  | 5336915     |
| (355 x 250)(400 x 355) | (12 x 10)(16 x 14) | 54                     | 18 | 36.15 | 5336910     |
| (355 x 200)(450 x 355) | (14 x 8)(18 x 12)  | 60                     | 20 | 40    | 5336916     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 60                     | 20 | 40    | 5336921     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 60                     | 20 | 40    | 5336928     |
| (400 x 200)(500 x 315) | (16 x 8)(20 x 12)  | 64                     | 22 | 44    | 5336917     |
| (400 x 250)(500 x 450) | (16 x 10)(20 x 14) | 64                     | 22 | 44    | 5336922     |
| (400 x 315)(500 x 400) | (16 x 12)(20 x 16) | 64                     | 22 | 44    | 5336912     |
| (400 x 355)(500 x 450) | (16 x 14)(20 x 18) | 64                     | 22 | 44    | 5336913     |

Double Wall Piping System



**REDUCING LATERAL**

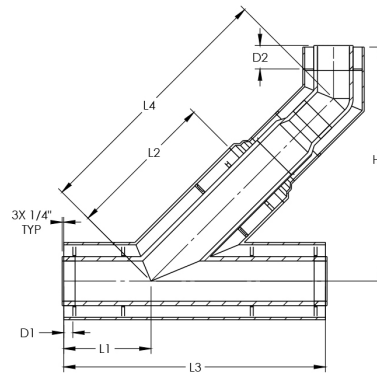
| Size                   |                    | PRO45 x PRO45<br>SDR 33/ MOP 5 PSI |    |       |             |
|------------------------|--------------------|------------------------------------|----|-------|-------------|
| mm                     | inch               | L                                  | L1 | L3    | Part Number |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 36                                 | 12 | 25.25 | 5383748     |
| (200 x 63)(315 x 110)  | (8 x 2)(12 x 4)    | 42                                 | 14 | 36.37 | 5383890     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)    | 42                                 | 14 | 34.50 | 5383896     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 42                                 | 14 | 32.75 | 5383895     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 42                                 | 14 | 29.75 | 5383893     |
| (250 x 90)(355 x 160)  | (10 x 3)(14 x 6)   | 48                                 | 16 | 40.37 | 5383898     |
| 250 x 110)(355 x 200)  | (10 x 4)(14 x 8)   | 48                                 | 16 | 37.50 | 5383903     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 48                                 | 16 | 34.50 | 5383902     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 48                                 | 16 | 30.50 | 5383899     |
| (315 x 110)(400 x 200) | (12 x 4)(16 x 8)   | 54                                 | 18 | 44.00 | 5383923     |
| (315 x 160)(400 x 200) | (12 x 6)(16 x 10)  | 54                                 | 18 | 41.00 | 5383904     |
| (315 x 200)(400 x 355) | (12 x 8)(16 x 12)  | 54                                 | 18 | 37.50 | 5383915     |
| (355 x 250)(400 x 355) | (12 x 10)(16 x 14) | 54                                 | 18 | 35.65 | 5383910     |
| (355 x 200)(450 x 355) | (14 x 8)(18 x 12)  | 60                                 | 20 | 40    | 5383916     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 60                                 | 20 | 40    | 5383921     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 60                                 | 20 | 40    | 5383928     |
| (400 x 200)(500 x 315) | (16 x 8)(20 x 12)  | 64                                 | 22 | 44    | 5383917     |
| (400 x 250)(500 x 450) | (16 x 10)(20 x 14) | 64                                 | 22 | 44    | 5383922     |
| (400 x 315)(500 x 400) | (16 x 12)(20 x 16) | 64                                 | 22 | 44    | 5383912     |
| (400 x 355)(500 x 450) | (16 x 14)(20 x 18) | 64                                 | 22 | 44    | 5383913     |
|                        |                    |                                    |    |       |             |



**REDUCING LATERAL WITH 1/8 BEND**

| Size                   |                   | PRO150 x PRO150   |       |       |       |      |      |             |
|------------------------|-------------------|-------------------|-------|-------|-------|------|------|-------------|
|                        |                   | SDR 11/ MOP 5 PSI |       |       |       |      |      |             |
| mm                     | inch              | L1                | L2    | L3    | H1    | D1   | D2   | Part Number |
| (90 x 63)(160 x 110)   | (3 x 2)(6 x 4)    | 8.00              | 10.25 | 24.00 | 20.25 | 0.75 | .625 | 5237743     |
| (110 x 63)(200 x 110)  | (4 x 2)(8 x 4)    | 10.00             | 16.50 | 30.00 | 26.25 | 1.00 | .625 | 5237744     |
| (140 x 90)(200 x 160)  | (4 x 3)(8 x 6)    | 10.00             | 16.50 | 36.00 | 25.75 | 1.00 | .075 | 5237746     |
| (160 x 63)(250 x 110)  | (6 x 2)(10 x 4)   | 12.00             | 18.25 | 36.00 | 28.00 | 1.25 | .625 | 5237892     |
| (160 x 90)(250 x 160)  | (6 x 3)(10 x 6)   | 12.00             | 18.25 | 36.00 | 29.25 | 1.25 | 0.75 | 5237747     |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)   | 12.00             | 18.25 | 36.00 | 28.00 | 1.25 | 1.00 | 5237748     |
| (200 x 63)(315 x 110)  | (8 x 2)(12 x 4)   | 14.00             | 22.75 | 42.00 | 35.00 | 1.25 | .625 | 5237890     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)   | 14.00             | 22.75 | 42.00 | 34.75 | 1.25 | .075 | 5237896     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)   | 14.00             | 22.75 | 42.00 | 33.50 | 1.25 | 1.00 | 5237895     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)  | 14.00             | 22.75 | 42.00 | 31.25 | 1.25 | 1.25 | 5237893     |
| (250 x 90)(355 x 160)  | (10 x 3)(14 x 6)  | 16.00             | 25.00 | 48.00 | 36.00 | 1.25 | 0.75 | 5237898     |
| 250 x 110)(355 x 200)  | (10 x 4)(14 x 8)  | 16.00             | 25.00 | 48.00 | 37.00 | 1.25 | 1.00 | 5237903     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10) | 16.00             | 25.00 | 48.00 | 34.50 | 1.25 | 1.25 | 5237902     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12) | 16.00             | 25.00 | 48.00 | 32.00 | 1.25 | 1.25 | 5237899     |

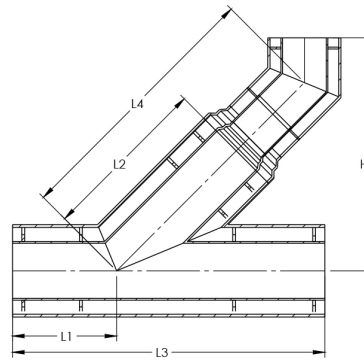
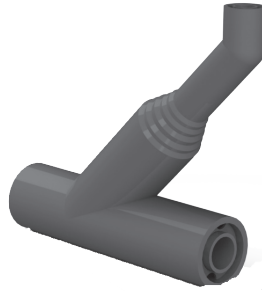
Double Wall Piping System



**REDUCING LATERAL WITH 1/8 BEND**

| Size                   |                    | PRO150 x PRO45     |       |       |       |       |      |      |             |
|------------------------|--------------------|--------------------|-------|-------|-------|-------|------|------|-------------|
|                        |                    | SDR 11 x 33/ MOP 5 |       |       |       |       |      |      |             |
| mm                     | inch               | L1                 | L2    | L3    | L4    | H1    | D1   | D2   | Part Number |
| (90 x 63)(160 x 110)   | (3 x 2)(6 x 4)     | 8.00               | 12.50 | 24.00 | 21.50 | 20.25 | .75  | .625 | 5338743     |
| (110 x 63)(200 x 110)  | (4 x 2)(8 x 4)     | 10.00              | 16.50 | 30.00 | 30.00 | 26.25 | 1.00 | .625 | 5338744     |
| (140 x 90)(200 x 160)  | (4 x 3)(8 x 6)     | 10.00              | 16.50 | 36.00 | 28.00 | 25.75 | 1.00 | .625 | 5338746     |
| (160 x 63)(250 x 110)  | (6 x 2)(10 x 4)    | 12.00              | 18.25 | 36.00 | 33.75 | 29.25 | 1.25 | .625 | 5338892     |
| (160 x 90)(250 x 160)  | (6 x 3)(10 x 6)    | 12.00              | 18.25 | 36.00 | 32.75 | 29.25 | 1.25 | .75  | 5338747     |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 12.00              | 18.25 | 36.00 | 31.00 | 28.00 | 1.25 | 1.00 | 5338748     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)    | 14.00              | 22.75 | 42.00 | 40.50 | 34.75 | 1.25 | .75  | 5338896     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 14.00              | 22.75 | 42.00 | 38.75 | 33.50 | 1.25 | 1.00 | 5338895     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 14.00              | 22.75 | 42.00 | 35.75 | 31.25 | 1.25 | 1.25 | 5338893     |
| 250 x 110)(355 x 200)  | (10 x 4)(14 x 8)   | 16.00              | 25.00 | 48.00 | 43.50 | 37.00 | 1.25 | 1.00 | 5338903     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 16.00              | 25.00 | 48.00 | 40.50 | 34.50 | 1.25 | 1.25 | 5338902     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 16.00              | 25.00 | 48.00 | 37.00 | 32.00 | 1.25 | 1.25 | 5338899     |
| (315 x 110)(400 x 200) | (12 x 4)(16 x 8)   | 18.00              | 26.50 | 54.00 | 44.00 | 37.00 | 1.25 | 1.00 | 5338923     |
| (315 x 160)(400 x 200) | (12 x 6)(16 x 10)  | 18.00              | 26.50 | 54.00 | 44.00 | 37.00 | 1.25 | 1.25 | 5338904     |
| (315 x 200)(400 x 355) | (12 x 8)(16 x 12)  | 18.00              | 26.50 | 54.00 | 41.50 | 35.00 | 1.25 | 1.25 | 5338915     |
| (355 x 250)(400 x 355) | (12 x 10)(16 x 14) | 18.00              | 26.50 | 54.00 | 41.50 | 35.00 | 1.25 | 1.25 | 5338910     |
| (355 x 200)(450 x 355) | (14 x 8)(18 x 12)  | 20.00              | 40.00 | 60.00 | 46.00 | 38.25 | 1.25 | 1.00 | 5338916     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 20.00              | 40.00 | 60.00 | 46.00 | 38.25 | 1.25 | 1.25 | 5338921     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 20.00              | 40.00 | 60.00 | 46.50 | 38.50 | 1.25 | 1.25 | 5338928     |

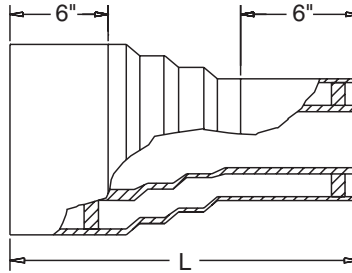
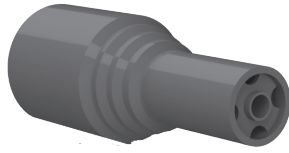
Duo-Pro®  
 Pro150, Pro45



**REDUCING LATERAL WITH 1/8 BEND**

| Size                    |                    | PRO45 x PRO45     |       |       |       |       |         | Part Number |
|-------------------------|--------------------|-------------------|-------|-------|-------|-------|---------|-------------|
|                         |                    | SDR 33/ MOP 5 PSI |       |       |       |       |         |             |
| mm                      | inch               | L1                | L2    | L3    | L4    | H1    |         |             |
| (160 x 110)(250 x 200)  | (6 x 4)(10 x 8)    | 12.00             | 18.25 | 36.00 | 31.00 | 28.00 | 5380748 |             |
| (200 x 63)(315 x 110)   | (8 x 2)(12 x 4)    | 14.00             | 22.75 | 42.00 | 38.75 | 32.00 | 5380890 |             |
| (200 x 110)(315 x 200)  | (8 x 4)(12 x 8)    | 14.00             | 22.75 | 42.00 | 38.75 | 33.50 | 5380895 |             |
| (200 x 160)(315 x 250)  | (8 x 6)(12 x 10)   | 14.00             | 22.75 | 42.00 | 35.75 | 31.25 | 5380893 |             |
| (250 x 90) (355 x 160)  | (10 x 3)(14 x 6)   | 16.00             | 25.00 | 48.00 | 42.00 | 37.00 | 5280898 |             |
| 250 x 110)(355 x 200)   | (10 x 4)(14 x 8)   | 16.00             | 25.00 | 48.00 | 43.50 | 37.00 | 5380903 |             |
| (250 x 160) (355 x 250) | (10 x 6)(14 x 10)  | 16.00             | 25.00 | 48.00 | 40.50 | 34.50 | 5380902 |             |
| (250 x 200)(355 x 315)  | (10 x 8)(14 x 12)  | 16.00             | 25.00 | 48.00 | 37.00 | 32.00 | 5380899 |             |
| (315 x 110)(400 x 200)  | (12 x 4)(16 x 8)   | 18.00             | 26.50 | 54.00 | 42.00 | 36.00 | 5380923 |             |
| (315 x 160) (400 x 200) | (12 x 6)(16 x 10)  | 18.00             | 26.50 | 54.00 | 44.00 | 37.00 | 5380904 |             |
| (315 x 200)(400 x 355)  | (12 x 8)(16 x 12)  | 18.00             | 26.50 | 54.00 | 41.50 | 35.00 | 5380915 |             |
| (355 x 250) (400 x 355) | (12 x 10)(16 x 14) | 18.00             | 26.50 | 54.00 | 45.00 | 37.00 | 5380910 |             |
| (355 x 200)(450 x 355)  | (14 x 8)(18 x 12)  | 20.00             | 40.00 | 60.00 | 46.00 | 38.25 | 5380916 |             |
| (355 x 250) (450 x 355) | (14 x 10)(18 x 14) | 20.00             | 40.00 | 60.00 | 46.00 | 38.25 | 5380921 |             |
| (355 x 315) (450 x 400) | (14 x 12)(18 x 16) | 20.00             | 40.00 | 60.00 | 46.00 | 38.50 | 5380928 |             |

Double Wall Piping System

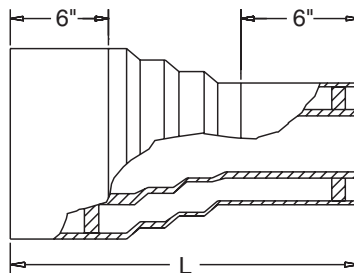
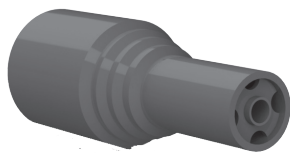


**CONCENTRIC REDUCER**

| Size                   |                    | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |             |
|------------------------|--------------------|---|-------------|
| mm                     | inch               | L   | Part Number |
| (63 x 32)(110 x 90)    | (2 x 1)(4 x 3)     | 7.125                                     | 5256740     |
| (90 x 32)(160 x 90)    | (3 x 1)(6 x 3)     | 16.5                                      | 5256741     |
| (90 x 63)(160 x 110)   | (3 x 2)(6 x 4)     | 15.25                                     | 5256743     |
| (110 x 63)(200 x 110)  | (4 x 2)(8 x 4)     | 17.75                                     | 5256744     |
| (110 x 90)(200 x 160)  | (4 x 3)(8 x 6)     | 14.5                                      | 5256746     |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 15.75                                     | 5256748     |
| (160 x 90)(250 x 160)  | (6 x 3)(10 x 6)    | 17.75                                     | 5256747     |
| (160 x 63)(250 x 110)  | (6 x 2)(10 x 4)    | 19  | 5256892     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 16  | 5256893     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 19  | 5256895     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)    | 21  | 5256896     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 14.5                                      | 5256899     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 18.5                                      | 5256902     |
| (250 x 110)(355 x 200) | (10 x 4)(14 x 8)   | 21.5                                      | 5256903     |
| (315 x 250)(400 x 355) | (12 x 10)(16 x 14) | 15  | 5256910     |
| (315 x 200)(400 x 315) | (12 x 8)(16 x 12)  | 16.8                                      | 5256915     |
| (315 x 160)(400 x 250) | (12 x 6)(16 x 10)  | 20.5                                      | 5256904     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 15  | 5256928     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 17  | 5256921     |
| (355 x 200)(450 x 315) | (14 x 8)(18 x 12)  | 18.5                                      | 5256916     |

| Size                   |                    | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
|------------------------|--------------------|---|-------------|
| mm                     | inch               | L   | Part Number |
| (63 x 32)(110 x 90)    | (2 x 1)(4 x 3)     | 7.125   | 5361740     |
| (90 x 32)(160 x 90)    | (3 x 1)(6 x 3)     | 16.5  | 5361741     |
| (90 x 63)(160 x 110)   | (3 x 2)(6 x 4)     | 15.25   | 5361743     |
| (110 x 63)(200 x 110)  | (4 x 2)(8 x 4)     | 17.75   | 5361744     |
| (110 x 90)(200 x 160)  | (4 x 3)(8 x 6)     | 14.5  | 5361746     |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 15.75   | 5361748     |
| (160 x 90)(250 x 160)  | (6 x 3)(10 x 6)    | 17.75   | 5361747     |
| (160 x 63)(250 x 110)  | (6 x 2)(10 x 4)    | 19  | 5361892     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 16  | 5361893     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 19  | 5361895     |
| (200 x 90)(315 x 160)  | (8 x 3)(12 x 6)    | 21  | 5361896     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 14.5  | 5361899     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 18.5  | 5361902     |
| (250 x 110)(355 x 200) | (10 x 4)(14 x 8)   | 21.5  | 5361903     |
| (315 x 250)(400 x 355) | (12 x 10)(16 x 14) | 15  | 5361910     |
| (315 x 200)(400 x 315) | (12 x 8)(16 x 12)  | 16.8  | 5361915     |
| (315 x 160)(400 x 250) | (12 x 6)(16 x 10)  | 20.5  | 5361904     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 15  | 5361928     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 17  | 5361921     |
| (355 x 200)(450 x 315) | (14 x 8)(18 x 12)  | 18.5  | 5361916     |

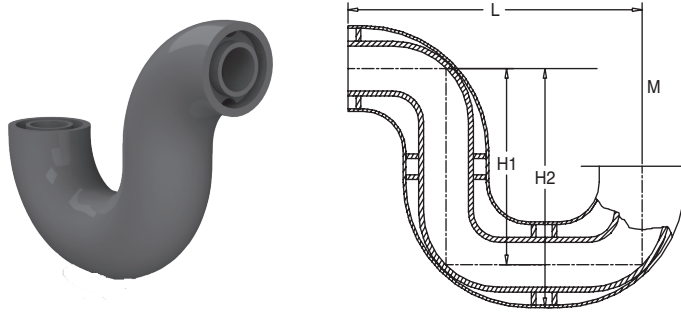
Duo-Pro®  
 Pro150, Pro45



### CONCENTRIC REDUCER

| Size                   |                    | PRO45 x PRO45          |             |
|------------------------|--------------------|------------------------|-------------|
|                        |                    | SDR 33 / PN 3 / 45 PSI |             |
| mm                     | inch               | L                      | Part Number |
| (160 x 110)(250 x 200) | (6 x 4)(10 x 8)    | 15.75                  | 5384748     |
| (200 x 160)(315 x 250) | (8 x 6)(12 x 10)   | 16                     | 5384893     |
| (200 x 110)(315 x 200) | (8 x 4)(12 x 8)    | 19                     | 5384895     |
| (250 x 200)(355 x 315) | (10 x 8)(14 x 12)  | 14.5                   | 5384899     |
| (250 x 160)(355 x 250) | (10 x 6)(14 x 10)  | 18.5                   | 5384902     |
| (250 x 110)(355 x 200) | (10 x 4)(14 x 8)   | 21.5                   | 5384903     |
| (315 x 250)(400 x 355) | (12 x 10)(16 x 14) | 20.5                   | 5384910     |
| (315 x 200)(400 x 315) | (12 x 8)(16 x 12)  | 16.5                   | 5384915     |
| (315 x 160)(400 x 250) | (12 x 6)(16 x 10)  | 15                     | 5384904     |
| (355 x 315)(450 x 400) | (14 x 12)(18 x 16) | 18.5                   | 5384928     |
| (355 x 250)(450 x 355) | (14 x 10)(18 x 14) | 17                     | 5384921     |
| (355 x 200)(450 x 315) | (14 x 8)(18 x 12)  | 15                     | 5384916     |

Double Wall Piping System



**P-TRAP**

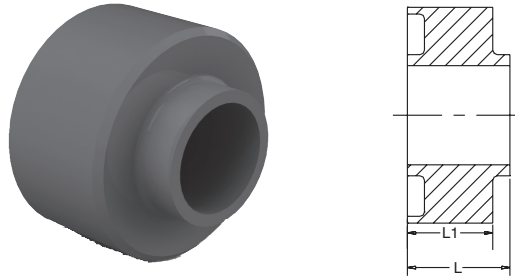
| Size      |        | PRO150 x PRO150      |        |        |             |
|-----------|--------|----------------------|--------|--------|-------------|
|           |        | SDR 11/ PN 10/ 5 PSI |        |        |             |
| mm        | inch   | L                    | H1     | H2     | Part Number |
| 32 x 90   | 1 x 3  | 11.625               | 7.625  | 9.375  | 5213134     |
| 63 x 110  | 2 x 4  | 14.375               | 9.5    | 11.75  | 5213420     |
| 90 x 160  | 3 x 6  | 21                   | 13.875 | 17.125 | 5213531     |
| 110 x 200 | 4 x 8  | 23.375               | 15.5   | 19.375 | 5213583     |
| 160 x 250 | 6 x 10 | 33.5                 | 22.25  | 27.125 | 5213627     |
| 200 x 315 | 8 x 12 | 40                   | 26.5   | 32.75  | 5213660     |

| Size      |         | PRO150 x PRO45                     |        |        |             |
|-----------|---------|------------------------------------|--------|--------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / MOP 5 PSI |        |        |             |
| mm        | inch    | L                                  | H1     | H2     | Part Number |
| 63 x 110  | 2 x 4   | 14.375                             | 9.5    | 11.75  | 5315420     |
| 90 x 160  | 3 x 6   | 21                                 | 13.875 | 17.125 | 5315531     |
| 110 x 200 | 4 x 8   | 23.375                             | 15.5   | 19.375 | 5315583     |
| 160 x 250 | 6 x 10  | 33.5                               | 22.25  | 27.125 | 5315627     |
| 200 x 315 | 8 x 12  | 40                                 | 26.5   | 32.75  | 5315660     |
| 250 x 355 | 10 x 14 | 42.5                               | 26.8   | 36.5   | 5315702     |

| Size      |         | PRO45 x PRO45             |       |        |             |
|-----------|---------|---------------------------|-------|--------|-------------|
|           |         | SDR 33 / PN 3 / MOP 5 PSI |       |        |             |
| mm        | inch    | L                         | H1    | H2     | Part Number |
| 110 x 200 | 4 x 8   | 23.375                    | 15.5  | 19.375 | 5376583     |
| 160 x 250 | 6 x 10  | 33.5                      | 22.25 | 27.125 | 5376627     |
| 200 x 315 | 8 x 12  | 40                        | 26.5  | 32.75  | 5376660     |
| 250 x 355 | 10 x 14 | 42.5                      | 26.8  | 36.5   | 5376702     |

Duo-Pro®  
 Pro150, Pro45





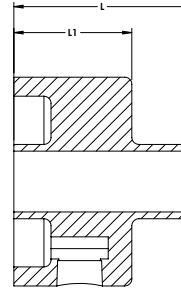
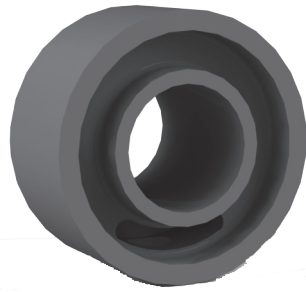
**DOGBONE® END TERMINATION**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |      |             |
|-----------|---------|---|------|-------------|
| mm        | inch    | L   | L1   | Part Number |
| 32 x 90   | 1 x 3   | 3.00                                      | 2.25 | 5247134     |
| 63 x 110  | 2 x 4   | 3.00                                      | 2.25 | 5247420     |
| 90 x 160  | 3 x 6   | 3.00                                      | 2.25 | 5247531     |
| 110 x 200 | 4 x 8   | 3.00                                      | 2.25 | 5247583     |
| 160 x 250 | 6 x 10  | 3.00                                      | 2.25 | 5247627     |
| 200 x 315 | 8 x 12  | 3.00                                      | 2.25 | 5247660     |
| 250 x 355 | 10 x 14 | 2.25                                      | 1.50 | 5247702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |      |             |
|-----------|---------|---|------|-------------|
| mm        | inch    | L   | L1   | Part Number |
| 63 x 110  | 2 x 4   | 3.00  | 2.25 | 5333420     |
| 90 x 160  | 3 x 6   | 3.00  | 2.25 | 5333531     |
| 110 x 200 | 4 x 8   | 3.00  | 2.25 | 5333583     |
| 160 x 250 | 6 x 10  | 3.00  | 2.25 | 5333627     |
| 200 x 315 | 8 x 12  | 3.00  | 2.25 | 5333660     |
| 250 x 355 | 10 x 14 | 2.25  | 1.50 | 5333702     |
| 315 x 400 | 12 x 16 | 2.25  | 1.50 | 5333690     |
| 355 x 450 | 14 x 18 | 2.25  | 1.50 | 5333710     |
| 400 x 500 | 16 x 20 | 2.25  | 1.50 | 5333726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |      |             |
|-----------|---------|---|------|-------------|
| mm        | inch    | L                                       | L1   | Part Number |
| 110 x 200 | 4 x 8   | 3.00                                    | 2.25 | 5367583     |
| 160 x 250 | 6 x 10  | 3.00                                    | 2.25 | 5367627     |
| 200 x 315 | 8 x 12  | 3.00                                    | 2.25 | 5367660     |
| 250 x 355 | 10 x 14 | 2.25                                    | 1.50 | 5367702     |
| 315 x 400 | 12 x 16 | 2.25                                    | 1.50 | 5367690     |
| 355 x 450 | 14 x 18 | 2.25                                    | 1.50 | 5367710     |
| 400 x 500 | 16 x 20 | 2.25                                    | 1.50 | 5367726     |

Double Wall  
Piping System



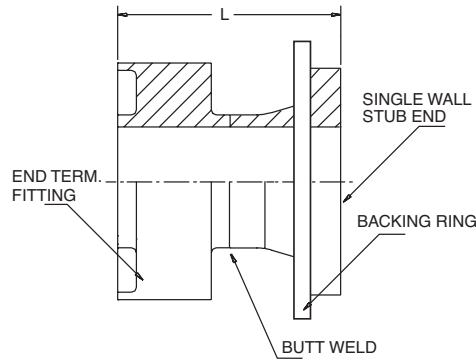
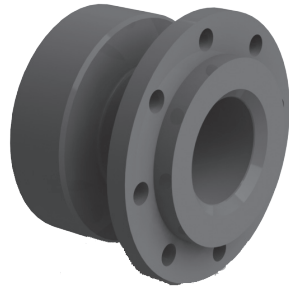
### DOGBONE® END TERMINATION WITH 1/2" TAP

| Size      |         | PRO150 x PRO150        |      |             |
|-----------|---------|------------------------|------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |      |             |
| mm        | inch    | L                      | L1   | Part Number |
| 32 x 90   | 1 x 3   | 3                      | 2.25 | 5248134     |
| 63 x 110  | 2 x 4   | 3                      | 2.25 | 5248420     |
| 90 x 160  | 3 x 6   | 3                      | 2.25 | 5248531     |
| 110 x 200 | 4 x 8   | 3                      | 2.25 | 5248583     |
| 160 x 250 | 6 x 10  | 3                      | 2.25 | 5248627     |
| 200 x 315 | 8 x 12  | 3                      | 2.25 | 5248660     |
| 250 x 355 | 10 x 14 | 3.5                    | 1.50 | 5248702     |

| Size      |         | PRO150 x PRO45                        |      |             |
|-----------|---------|---------------------------------------|------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |      |             |
| mm        | inch    | L                                     | L1   | Part Number |
| 63 x 110  | 2 x 4   | 3                                     | 2.25 | 5334420     |
| 90 x 160  | 3 x 6   | 3                                     | 2.25 | 5334531     |
| 110 x 200 | 4 x 8   | 3                                     | 2.25 | 5334583     |
| 160 x 250 | 6 x 10  | 3                                     | 2.25 | 5334627     |
| 200 x 315 | 8 x 12  | 3                                     | 2.25 | 5334660     |
| 250 x 355 | 10 x 14 | 3.5                                   | 1.50 | 5334702     |
| 315 x 400 | 12 x 16 | 3.5                                   | 1.50 | 5334690     |
| 355 x 450 | 14 x 18 | 3.5                                   | 1.50 | 5334710     |
| 400 x 500 | 16 x 20 | 3.5                                   | 1.50 | 5334726     |

| Size      |         | PRO45 x PRO45          |      |             |
|-----------|---------|------------------------|------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |      |             |
| mm        | inch    | L                      | L1   | Part Number |
| 110 x 200 | 4 x 8   | 3                      | 2.25 | 5368583     |
| 160 x 250 | 6 x 10  | 3                      | 2.25 | 5368627     |
| 200 x 315 | 8 x 12  | 3                      | 2.25 | 5368660     |
| 250 x 355 | 10 x 14 | 3.5                    | 1.50 | 5368702     |
| 315 x 400 | 12 x 16 | 3.5                    | 1.50 | 5368690     |
| 355 x 450 | 14 x 18 | 3.5                    | 1.50 | 5368710     |
| 400 x 500 | 16 x 20 | 3.5                    | 1.50 | 5368726     |

Duo-Pro®  
Pro150, Pro45



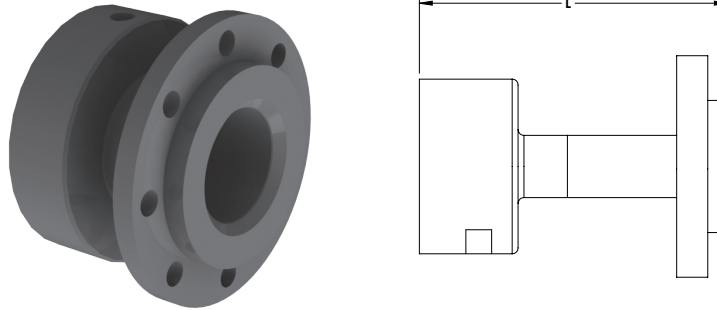
**DOGBONE® FLANGED END TERMINATION**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 32 x 90   | 1 x 3   | 4.75                                      | 5249134     |
| 63 x 110  | 2 x 4   | 4.75                                      | 5249420     |
| 90 x 160  | 3 x 6   | 6   | 5249531     |
| 110 x 200 | 4 x 8   | 6   | 5249583     |
| 160 x 250 | 6 x 10  | 6   | 5249627     |
| 200 x 315 | 8 x 12  | 6   | 5249660     |
| 250 x 355 | 10 x 14 | 7   | 5249702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 63 x 110  | 2 x 4   | 4.75  | 5335420     |
| 90 x 160  | 3 x 6   | 6   | 5335531     |
| 110 x 200 | 4 x 8   | 6   | 5335583     |
| 160 x 250 | 6 x 10  | 6   | 5335627     |
| 200 x 315 | 8 x 12  | 6   | 5335660     |
| 250 x 355 | 10 x 14 | 7   | 5335702     |
| 315 x 400 | 12 x 16 | 7.25  | 5335690     |
| 355 x 450 | 14 x 18 | 6.75  | 5335710     |
| 400 x 500 | 16 x 20 | 6.75  | 5335726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L                                       | Part Number |
| 110 x 200 | 4 x 8   | 6                                       | 5369583     |
| 160 x 250 | 6 x 10  | 6                                       | 5369627     |
| 200 x 315 | 8 x 12  | 6                                       | 5369660     |
| 250 x 355 | 10 x 14 | 7                                       | 5369702     |
| 315 x 400 | 12 x 16 | 7.25                                    | 5369690     |
| 355 x 450 | 14 x 18 | 6.75                                    | 5369710     |
| 400 x 500 | 16 x 20 | 6.75                                    | 5369726     |

Double Wall Piping System



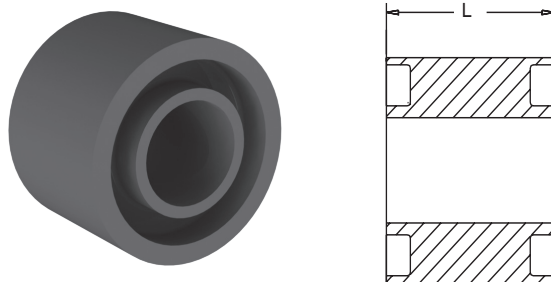
**DOGBONE® FLANGED END TERMINATION WITH 1/2" TAP**

| Size      |         | PRO150 x PRO150        |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |             |
| mm        | inch    | L                      | Part Number |
| 32 x 90   | 1 x 3   | 4.75                   | 5250134     |
| 63 x 110  | 2 x 4   | 4.75                   | 5250420     |
| 90 x 160  | 3 x 6   | 6                      | 5250531     |
| 110 x 200 | 4 x 8   | 6                      | 5250583     |
| 160 x 250 | 6 x 10  | 6                      | 5250627     |
| 200 x 315 | 8 x 12  | 6                      | 5250660     |
| 250 x 355 | 10 x 14 | 7                      | 5250702     |

| Size      |         | PRO150 x PRO45                        |             |
|-----------|---------|---------------------------------------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
| mm        | inch    | L                                     | Part Number |
| 63 x 110  | 2 x 4   | 4.75                                  | 5339420     |
| 90 x 160  | 3 x 6   | 6                                     | 5339531     |
| 110 x 200 | 4 x 8   | 6                                     | 5339583     |
| 160 x 250 | 6 x 10  | 6                                     | 5339627     |
| 200 x 315 | 8 x 12  | 6                                     | 5339660     |
| 250 x 355 | 10 x 14 | 7                                     | 5339702     |
| 315 x 400 | 12 x 16 | 7.25                                  | 5339690     |
| 355 x 450 | 14 x 18 | 6.75                                  | 5339710     |
| 400 x 500 | 16 x 20 | 6.75                                  | 5339726     |

| Size      |         | PRO45 x PRO45          |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |             |
| mm        | inch    | L                      | Part Number |
| 110 x 200 | 4 x 8   | 6                      | 5371583     |
| 160 x 250 | 6 x 10  | 6                      | 5371627     |
| 200 x 315 | 8 x 12  | 6                      | 5371660     |
| 250 x 355 | 10 x 14 | 7                      | 5371702     |
| 315 x 400 | 12 x 16 | 7.25                   | 5371690     |
| 355 x 450 | 14 x 18 | 6.75                   | 5371710     |
| 400 x 500 | 16 x 20 | 6.75                   | 5371726     |

Duo-Pro®  
 Pro150, Pro45



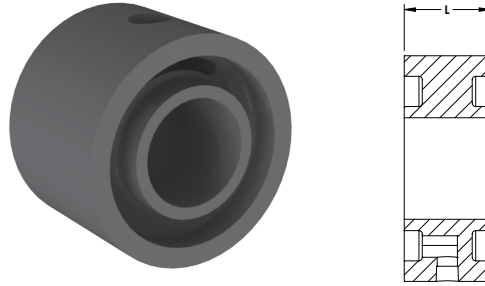
**SOLID DOGBONE®**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 32 x 90   | 1 x 3   | 3.00                                      | 5216134     |
| 63 x 110  | 2 x 4   | 3.00                                      | 5216420     |
| 90 x 160  | 3 x 6   | 3.00                                      | 5216531     |
| 110 x 200 | 4 x 8   | 3.00                                      | 5216583     |
| 160 x 250 | 6 x 10  | 3.00                                      | 5216627     |
| 200 x 315 | 8 x 12  | 3.00                                      | 5216660     |
| 250 x 355 | 10 x 14 | 2.25                                      | 5216702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 63 x 110  | 2 x 4   | 3.00  | 5318420     |
| 90 x 160  | 3 x 6   | 3.00  | 5318531     |
| 110 x 200 | 4 x 8   | 3.00  | 5318583     |
| 160 x 250 | 6 x 10  | 3.00  | 5318627     |
| 200 x 315 | 8 x 12  | 3.00  | 5318660     |
| 250 x 355 | 10 x 14 | 2.25  | 5318702     |
| 315 x 400 | 12 x 16 | 2.25  | 5318690     |
| 355 x 450 | 14 x 18 | 2.25  | 5318710     |
| 400 x 500 | 16 x 20 | 2.25  | 5318726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L                                       | Part Number |
| 110 x 200 | 4 x 8   | 3.00                                    | 5392583     |
| 160 x 250 | 6 x 10  | 3.00                                    | 5392627     |
| 200 x 315 | 8 x 12  | 3.00                                    | 5392660     |
| 250 x 355 | 10 x 14 | 2.25                                    | 5392702     |
| 315 x 400 | 12 x 16 | 2.25                                    | 5392690     |
| 355 x 450 | 14 x 18 | 2.25                                    | 5392710     |
| 400 x 500 | 16 x 20 | 2.25                                    | 5392726     |

Double Wall  
Piping System

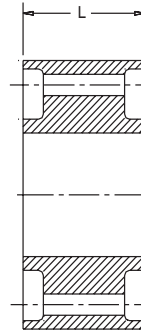
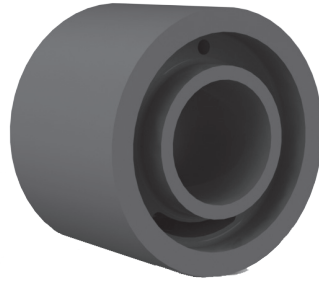
**SOLID DOGBONE® WITH TAP**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 32 x 90   | 1 x 3   | 3   | 5214134     |
| 63 x 110  | 2 x 4   | 3   | 5214420     |
| 90 x 160  | 3 x 6   | 3   | 5214531     |
| 110 x 200 | 4 x 8   | 3   | 5214583     |
| 160 x 250 | 6 x 10  | 3   | 5214627     |
| 200 x 315 | 8 x 12  | 3   | 5214660     |
| 250 x 355 | 10 x 14 | 3   | 5214702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 63 x 110  | 2 x 4   | 3   | 5314420     |
| 90 x 160  | 3 x 6   | 3   | 5314531     |
| 110 x 200 | 4 x 8   | 3   | 5314583     |
| 160 x 250 | 6 x 10  | 3   | 5314627     |
| 200 x 315 | 8 x 12  | 3   | 5314660     |
| 250 x 355 | 10 x 14 | 3   | 5314702     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L                                       | Part Number |
| 110 x 200 | 4 x 8   | 3                                       | 5398583     |
| 160 x 250 | 6 x 10  | 3                                       | 5398627     |
| 200 x 315 | 8 x 12  | 3                                       | 5398660     |
| 250 x 355 | 10 x 14 | 3                                       | 5398702     |
| 315 x 400 | 12 x 16 | 3                                       | 5398690     |
| 355 x 450 | 14 x 18 | 3                                       | 5398710     |
| 400 x 500 | 16 x 20 | 3                                       | 5398726     |

Duo-Pro®  
 Pro150, Pro45



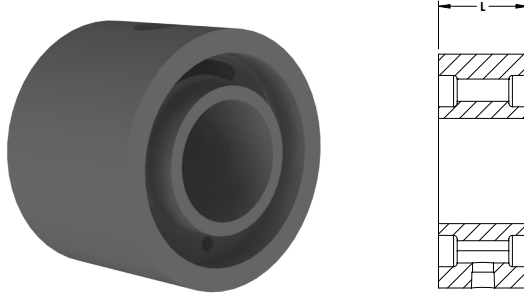
**ANNULAR DOGBONE®**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 32 x 90   | 1 x 3   | 3   | 5218134     |
| 63 x 110  | 2 x 4   | 3   | 5218420     |
| 90 x 160  | 3 x 6   | 3   | 5218531     |
| 110 x 200 | 4 x 8   | 3   | 5218583     |
| 160 x 250 | 6 x 10  | 3   | 5218627     |
| 200 x 315 | 8 x 12  | 3   | 5218660     |
| 250 x 355 | 10 x 14 | 3   | 5218702     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L   | Part Number |
| 63 x 110  | 2 x 4   | 3   | 5321420     |
| 90 x 160  | 3 x 6   | 3   | 5321531     |
| 110 x 200 | 4 x 8   | 3   | 5321583     |
| 160 x 250 | 6 x 10  | 3   | 5321627     |
| 200 x 315 | 8 x 12  | 3   | 5321660     |
| 250 x 355 | 10 x 14 | 3   | 5321702     |
| 315 x 400 | 12 x 16 | 3   | 5321690     |
| 355 x 450 | 14 x 18 | 3   | 5321710     |
| 400 x 500 | 16 x 20 | 3   | 5321726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |             |
|-----------|---------|---|-------------|
| mm        | inch    | L                                       | Part Number |
| 110 x 200 | 4 x 8   | 3                                       | 5394583     |
| 160 x 250 | 6 x 10  | 3                                       | 5394627     |
| 200 x 315 | 8 x 12  | 3                                       | 5394660     |
| 250 x 355 | 10 x 14 | 3                                       | 5394702     |
| 315 x 400 | 12 x 16 | 3                                       | 5394690     |
| 355 x 450 | 14 x 18 | 3                                       | 5394710     |
| 400 x 500 | 16 x 20 | 3                                       | 5394726     |

Double Wall  
Piping System



**ANNULAR DOGBONE® WITH TAP**

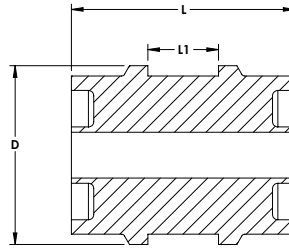
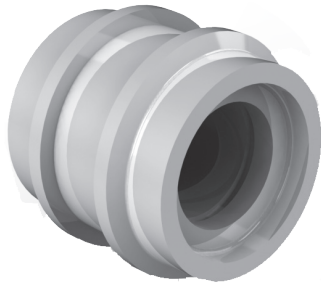
| Size      |         | PRO150 x PRO150        |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |             |
| mm        | inch    | L                      | Part Number |
| 32 x 90   | 1 x 3   | 3                      | 5222134     |
| 63 x 110  | 2 x 4   | 3                      | 5222420     |
| 90 x 160  | 3 x 6   | 3                      | 5222531     |
| 110 x 200 | 4 x 8   | 3                      | 5222583     |
| 160 x 250 | 6 x 10  | 3                      | 5222627     |
| 200 x 315 | 8 x 12  | 3                      | 5222660     |
| 250 x 355 | 10 x 14 | 3                      | 5222702     |

| Size      |         | PRO150 x PRO45                        |             |
|-----------|---------|---------------------------------------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
| mm        | inch    | L                                     | Part Number |
| 63 x 110  | 2 x 4   | 3                                     | 5323420     |
| 90 x 160  | 3 x 6   | 3                                     | 5323531     |
| 110 x 200 | 4 x 8   | 3                                     | 5323583     |
| 160 x 250 | 6 x 10  | 3                                     | 5323627     |
| 200 x 315 | 8 x 12  | 3                                     | 5323660     |
| 250 x 355 | 10 x 14 | 3                                     | 5323702     |
| 315 x 400 | 12 x 16 | 3                                     | 5323690     |
| 355 x 450 | 14 x 18 | 3                                     | 5323710     |
| 400 x 500 | 16 x 20 | 3                                     | 5323726     |

| Size      |         | PRO45 x PRO45          |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |             |
| mm        | inch    | L1                     | Part Number |
| 110 x 200 | 4 x 8   | 3                      | 5399583     |
| 160 x 250 | 6 x 10  | 3                      | 5399627     |
| 200 x 315 | 8 x 12  | 3                      | 5399660     |
| 250 x 355 | 10 x 14 | 3                      | 5399702     |
| 315 x 400 | 12 x 16 | 3                      | 5399690     |
| 355 x 450 | 14 x 18 | 3                      | 5399710     |
| 400 x 500 | 16 x 20 | 3                      | 5399726     |

Duo-Pro®  
 Pro150, Pro45





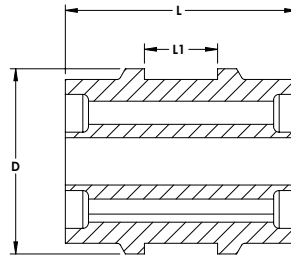
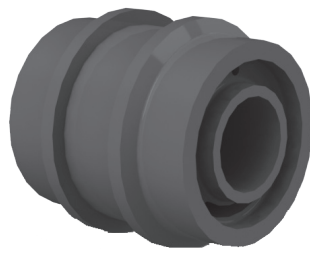
**SOLID RESTRAINT DOGBONE®**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |       |             |
|-----------|---------|---|-------|-------------|
| mm        | inch    | L1  | D     | Part Number |
| 32 x 90   | 1 x 3   | 1.63                                      | 4.54  | 5217134     |
| 63 x 110  | 2 x 4   | 1.63                                      | 5.33  | 5217420     |
| 90 x 160  | 3 x 6   | 2.40                                      | 7.30  | 5217531     |
| 110 x 200 | 4 x 8   | 2.40                                      | 8.87  | 5217583     |
| 160 x 250 | 6 x 10  | 1.63                                      | 10.84 | 5217627     |
| 200 x 315 | 8 x 12  | 1.63                                      | 13.40 | 5217660     |
| 250 x 355 | 10 x 14 | 1.58                                      | 14.75 | 5217702     |
| 315 x 400 | 12 x 16 | 1.58                                      | 16.75 | 5217690     |
| 355 x 450 | 14 x 18 | 1.58                                      | 18.50 | 5217710     |
| 400 x 500 | 16 x 20 | 1.58                                      | 20.50 | 5217726     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
|-----------|---------|---|-------|-------------|
| mm        | inch    | L1  | D     | Part Number |
| 63 x 110  | 2 x 4   | 1.63  | 5.33  | 5317420     |
| 90 x 160  | 3 x 6   | 2.40  | 7.30  | 5317531     |
| 110 x 200 | 4 x 8   | 2.40  | 8.87  | 5317583     |
| 160 x 250 | 6 x 10  | 1.63  | 10.84 | 5317627     |
| 200 x 315 | 8 x 12  | 1.63  | 13.40 | 5317660     |
| 250 x 355 | 10 x 14 | 1.58  | 14.75 | 5317702     |
| 315 x 400 | 12 x 16 | 1.58  | 16.75 | 5317690     |
| 355 x 450 | 14 x 18 | 1.58  | 18.50 | 5317710     |
| 400 x 500 | 16 x 20 | 1.58  | 20.50 | 5317726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |       |             |
|-----------|---------|---|-------|-------------|
| mm        | inch    | L1                                      | D     | Part Number |
| 110 x 200 | 4 x 8   | 2.40                                    | 8.87  | 5391583     |
| 160 x 250 | 6 x 10  | 1.63                                    | 10.84 | 5391627     |
| 200 x 315 | 8 x 12  | 1.63                                    | 13.40 | 5391660     |
| 250 x 355 | 10 x 14 | 1.58                                    | 14.75 | 5391702     |
| 315 x 400 | 12 x 16 | 1.58                                    | 16.75 | 5391690     |
| 355 x 450 | 14 x 18 | 1.58                                    | 18.50 | 5391710     |
| 400 x 500 | 16 x 20 | 1.58                                    | 20.50 | 5391726     |

Double Wall Piping System



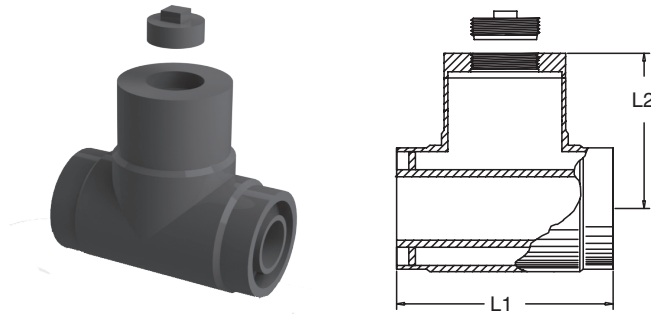
**ANNULAR RESTRAINT DOGBONE®**

| Size      |         | PRO150 x PRO150<br>SDR 11/ PN 10/ 150 PSI |      |       |             |
|-----------|---------|---|------|-------|-------------|
| mm        | inch    | L   | L1   | D     | Part Number |
| 32 x 90   | 1 x 3   | 3.63                                      | 1.63 | 4.54  | 5219134     |
| 63 x 110  | 2 x 4   | 3.63                                      | 1.63 | 5.33  | 5219420     |
| 90 x 160  | 3 x 6   | 4.40                                      | 2.40 | 7.30  | 5219531     |
| 110 x 200 | 4 x 8   | 4.40                                      | 2.40 | 8.87  | 5219583     |
| 160 x 250 | 6 x 10  | 3.63                                      | 1.63 | 10.84 | 5219627     |
| 200 x 315 | 8 x 12  | 3.63                                      | 1.63 | 13.40 | 5219660     |
| 250 x 355 | 10 x 14 | 5.00                                      | 1.58 | 14.75 | 5219702     |
| 315 x 400 | 12 x 16 | 5.00                                      | 1.58 | 16.75 | 5219690     |
| 355 x 450 | 14 x 18 | 5.00                                      | 1.58 | 18.50 | 5219710     |
| 400 x 500 | 16 x 20 | 5.00                                      | 1.58 | 20.50 | 5219726     |

| Size      |         | PRO150 x PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |      |       |             |
|-----------|---------|---|------|-------|-------------|
| mm        | inch    | L   | L1   | D     | Part Number |
| 63 x 110  | 2 x 4   | 3.63  | 1.63 | 5.33  | 5319420     |
| 90 x 160  | 3 x 6   | 4.40  | 2.40 | 7.30  | 5319531     |
| 110 x 200 | 4 x 8   | 4.40  | 2.40 | 8.87  | 5319583     |
| 160 x 250 | 6 x 10  | 3.63  | 1.63 | 10.84 | 5319627     |
| 200 x 315 | 8 x 12  | 3.63  | 1.63 | 13.40 | 5319660     |
| 250 x 355 | 10 x 14 | 5.00  | 1.58 | 14.75 | 5319702     |
| 315 x 400 | 12 x 16 | 5.00  | 1.58 | 16.75 | 5319690     |
| 355 x 450 | 14 x 18 | 5.00  | 1.58 | 18.50 | 5319710     |
| 400 x 500 | 16 x 20 | 5.00  | 1.58 | 20.50 | 5319726     |

| Size      |         | PRO45 x PRO45<br>SDR 33 / PN 3 / 45 PSI |      |       |             |
|-----------|---------|---|------|-------|-------------|
| mm        | inch    | L                                       | L1   | D     | Part Number |
| 110 x 200 | 4 x 8   | 4.40                                    | 2.40 | 8.87  | 5395583     |
| 160 x 250 | 6 x 10  | 3.63                                    | 1.63 | 10.84 | 5395627     |
| 200 x 315 | 8 x 12  | 3.63                                    | 1.63 | 13.40 | 5395660     |
| 250 x 355 | 10 x 14 | 5.00                                    | 1.58 | 14.75 | 5395702     |
| 315 x 400 | 12 x 16 | 5.00                                    | 1.58 | 16.75 | 5395690     |
| 355 x 450 | 14 x 18 | 5.00                                    | 1.58 | 18.50 | 5395710     |
| 400 x 500 | 16 x 20 | 5.00                                    | 1.58 | 20.50 | 5395726     |

Duo-Pro®  
 Pro150, Pro45



**ACCESS TEE WITH THREADED PLUG\***

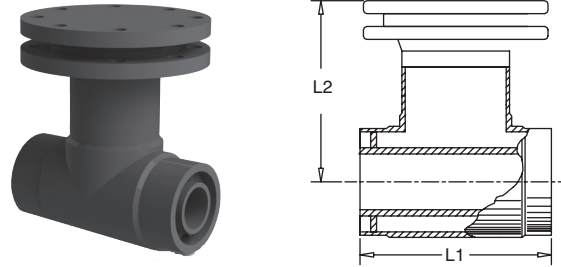
| Size      |         | PRO150 x PRO150        |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |             |
| mm        | inch    | L1                     | L2    | Part Number |
| 32 x 90   | 1 x 3   | 7.25                   | 6.63  | 5204134     |
| 63 x 110  | 2 x 4   | 9.50                   | 7.25  | 5204420     |
| 90 x 160  | 3 x 6   | 13.00                  | 9.75  | 5204531     |
| 110 x 200 | 4 x 8   | 15.63                  | 11.00 | 5204583     |
| 160 x 250 | 6 x 10  | 17.50                  | 12.25 | 5204627     |
| 200 x 315 | 8 x 12  | 21.75                  | 13.75 | 5204660     |
| 250 x 355 | 10 x 14 | 27.00                  | 15.25 | 5204702     |

| Size      |         | PRO150 x PRO45                        |       |             |
|-----------|---------|---------------------------------------|-------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
| mm        | inch    | L                                     | L2    | Part Number |
| 63 x 110  | 2 x 4   | 9.50                                  | 7.25  | 5303420     |
| 90 x 160  | 3 x 6   | 13.00                                 | 9.75  | 5303531     |
| 110 x 200 | 4 x 8   | 15.63                                 | 11.00 | 5303583     |
| 160 x 250 | 6 x 10  | 17.50                                 | 12.25 | 5303627     |
| 200 x 315 | 8 x 12  | 21.75                                 | 13.75 | 5303660     |
| 250 x 355 | 10 x 14 | 27.00                                 | 15.25 | 5303702     |
| 315 x 400 | 12 x 16 | 27.00                                 | 16.75 | 5303690     |
| 355 x 450 | 14 x 18 | 37.50                                 | 18.25 | 5303710     |

| Size      |         | PRO45 x PRO45          |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |       |             |
| mm        | inch    | L                      | L2    | Part Number |
| 110 x 200 | 4 x 8   | 15.63                  | 11.00 | 5375583     |
| 160 x 250 | 6 x 10  | 17.50                  | 12.25 | 5375627     |
| 200 x 315 | 8 x 12  | 21.75                  | 13.75 | 5375660     |
| 250 x 355 | 10 x 14 | 27.00                  | 15.25 | 5375702     |
| 315 x 400 | 12 x 16 | 27.00                  | 16.75 | 5375690     |
| 355 x 450 | 14 x 18 | 37.50                  | 18.25 | 5375710     |
| 400 x 500 | 16 x 20 | 35.24                  | 20.72 | 5375726     |

\*Includes EPDM gasket. Threaded plug rated 5psi.

Double Wall Piping System



**ACCESS TEE WITH FLANGED COVER\***

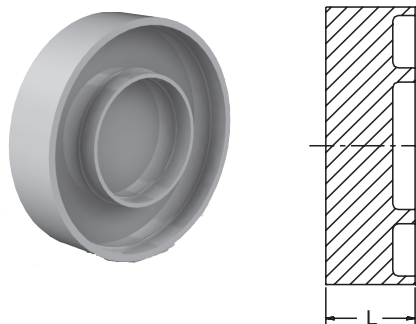
| Size      |         | PRO150 x PRO150        |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |             |
| mm        | inch    | L1                     | L2    | Part Number |
| 32 x 90   | 1 x 3   | 7.25                   | 6.63  | 5202134     |
| 63 x 110  | 2 x 4   | 9.50                   | 7.25  | 5202420     |
| 90 x 160  | 3 x 6   | 13.00                  | 9.75  | 5202531     |
| 110 x 200 | 4 x 8   | 15.63                  | 11.00 | 5202583     |
| 160 x 250 | 6 x 10  | 17.50                  | 12.25 | 5202627     |
| 200 x 315 | 8 x 12  | 21.75                  | 13.75 | 5202660     |
| 250 x 355 | 10 x 14 | 27.00                  | 15.25 | 5202702     |

| Size      |         | PRO150 x PRO45                        |       |             |
|-----------|---------|---------------------------------------|-------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
| mm        | inch    | L                                     | L2    | Part Number |
| 63 x 110  | 2 x 4   | 9.50                                  | 7.25  | 5355420     |
| 90 x 160  | 3 x 6   | 13.00                                 | 9.75  | 5355531     |
| 110 x 200 | 4 x 8   | 15.63                                 | 11.00 | 5355583     |
| 160 x 250 | 6 x 10  | 17.50                                 | 12.25 | 5355627     |
| 200 x 315 | 8 x 12  | 21.75                                 | 13.75 | 5355660     |
| 250 x 355 | 10 x 14 | 27.00                                 | 15.25 | 5355702     |
| 315 x 400 | 12 x 16 | 27.00                                 | 16.75 | 5355690     |
| 355 x 450 | 14 x 18 | 37.50                                 | 18.25 | 5355710     |
| 400 x 500 | 16 x 20 | 37.25                                 | 23.50 | 5355726     |

| Size      |         | PRO45 x PRO45          |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |       |             |
| mm        | inch    | L                      | L2    | Part Number |
| 110 x 200 | 4 x 8   | 15.63                  | 11.00 | 5373583     |
| 160 x 250 | 6 x 10  | 17.50                  | 12.25 | 5373627     |
| 200 x 315 | 8 x 12  | 21.75                  | 13.75 | 5373660     |
| 250 x 355 | 10 x 14 | 27.00                  | 15.25 | 5373702     |
| 315 x 400 | 12 x 16 | 27.00                  | 16.75 | 5373690     |
| 355 x 450 | 14 x 18 | 37.50                  | 18.25 | 5373710     |
| 400 x 500 | 16 x 20 | 37.25                  | 23.50 | 5373726     |

\*Includes EPDM gasket - does not include nuts and bolts.

Duo-Pro®  
 Pro150, Pro45



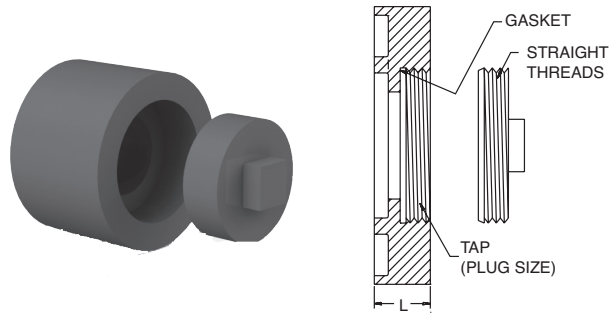
**CAP**

| Size      |         | PRO150 x PRO150        |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |             |
| mm        | inch    | L                      | Part Number |
| 32 x 90   | 1 x 3   | 2.00                   | 5220134     |
| 63 x 110  | 2 x 4   | 2.00                   | 5220420     |
| 90 x 160  | 3 x 6   | 2.00                   | 5220531     |
| 110 x 200 | 4 x 8   | 2.00                   | 5220583     |
| 160 x 250 | 6 x 10  | 2.00                   | 5220627     |
| 200 x 315 | 8 x 12  | 2.00                   | 5220660     |
| 250 x 355 | 10 x 14 | 2.00                   | 5220702     |

| Size      |         | PRO150 x PRO45                        |             |
|-----------|---------|---------------------------------------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
| mm        | inch    | L                                     | Part Number |
| 63 x 110  | 2 x 4   | 2.00                                  | 5320420     |
| 90 x 160  | 3 x 6   | 2.00                                  | 5320531     |
| 110 x 200 | 4 x 8   | 2.00                                  | 5320583     |
| 160 x 250 | 6 x 10  | 2.00                                  | 5320627     |
| 200 x 315 | 8 x 12  | 2.00                                  | 5320660     |
| 250 x 355 | 10 x 14 | 2.00                                  | 5320702     |
| 315 x 400 | 12 x 16 | 2.00                                  | 5320690     |
| 355 x 450 | 14 x 18 | 2.00                                  | 5320710     |
| 400 x 500 | 16 x 20 | 2.00                                  | 5320726     |

| Size      |         | PRO45 x PRO45          |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |             |
| mm        | inch    | L                      | Part Number |
| 110 x 200 | 4 x 8   | 2.00                   | 5393583     |
| 160 x 250 | 6 x 10  | 2.00                   | 5393627     |
| 200 x 315 | 8 x 12  | 2.00                   | 5393660     |
| 250 x 355 | 10 x 14 | 2.00                   | 5393702     |
| 315 x 400 | 12 x 16 | 2.00                   | 5393690     |
| 355 x 450 | 14 x 18 | 2.00                   | 5393710     |
| 400 x 500 | 16 x 20 | 2.00                   | 5393726     |

Double Wall Piping System



**CLEANOUT WITH PLUG\***

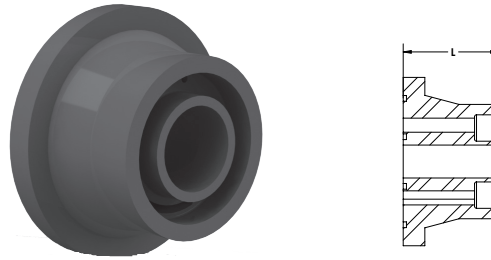
| Size      |         | PRO150 x PRO150          |     |             |
|-----------|---------|--------------------------|-----|-------------|
|           |         | SDR 11/ PN 10/ MOP 5 PSI |     |             |
| mm        | inch    | L                        | TAP | Part Number |
| 32 x 90   | 1 x 3   | 3.00                     | 2"  | 5232134     |
| 63 x 110  | 2 x 4   | 3.00                     | 3"  | 5232420     |
| 90 x 160  | 3 x 6   | 3.00                     | 4"  | 5232531     |
| 110 x 200 | 4 x 8   | 3.00                     | 4"  | 5232583     |
| 160 x 250 | 6 x 10  | 3.00                     | 6"  | 5232627     |
| 200 x 315 | 8 x 12  | 3.00                     | 6"  | 5232660     |
| 250 x 355 | 10 x 14 | 2.25                     | 6"  | 5232702     |

| Size      |         | PRO150 x PRO45                     |     |             |
|-----------|---------|------------------------------------|-----|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / MOP 5 PSI |     |             |
| mm        | inch    | L                                  | TAP | Part Number |
| 63 x 110  | 2 x 4   | 3.00                               | 3"  | 5332420     |
| 90 x 160  | 3 x 6   | 3.00                               | 4"  | 5332531     |
| 110 x 200 | 4 x 8   | 3.00                               | 4"  | 5332583     |
| 160 x 250 | 6 x 10  | 3.00                               | 6"  | 5332627     |
| 200 x 315 | 8 x 12  | 3.00                               | 6"  | 5332660     |
| 250 x 355 | 10 x 14 | 2.25                               | 6"  | 5332702     |
| 315 x 400 | 12 x 16 | 2.25                               | 6"  | 5332690     |
| 355 x 450 | 14 x 18 | 2.25                               | 6"  | 5332710     |
| 400 x 500 | 16 x 20 | 2.25                               | 6"  | 5332726     |

| Size      |         | PRO45 x PRO45             |     |             |
|-----------|---------|---------------------------|-----|-------------|
|           |         | SDR 33 / PN 3 / MOP 5 PSI |     |             |
| mm        | inch    | L                         | TAP | Part Number |
| 110 x 200 | 4 x 8   | 3.00                      | 4"  | 5377583     |
| 160 x 250 | 6 x 10  | 3.00                      | 6"  | 5377627     |
| 200 x 315 | 8 x 12  | 3.00                      | 6"  | 5377660     |
| 250 x 355 | 10 x 14 | 2.25                      | 6"  | 5377702     |
| 315 x 400 | 12 x 16 | 2.25                      | 6"  | 5377690     |
| 355 x 450 | 14 x 18 | 2.25                      | 6"  | 5377710     |
| 400 x 500 | 16 x 20 | 2.25                      | 6"  | 5377726     |

\*Machined fittings. 5psi drainage rating.

Duo-Pro®  
 Pro150, Pro45



**STUB END - FLOW-THROUGH - FLAT FACE**

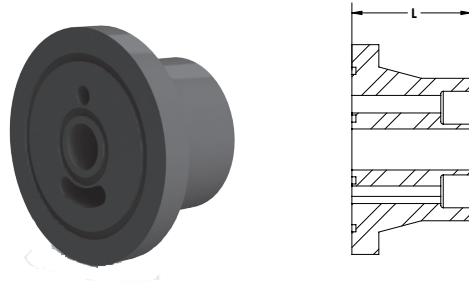
| Size      |         | PRO150 X PRO150        |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |             |
| mm        | inch    | L                      | Part Number |
| 32 x 90   | 1 x 3   | 2.96                   | 5233134     |
| 63 x 110  | 2 x 4   | 3.00                   | 5233420     |
| 90 x 160  | 3 x 6   | 3.25                   | 5233531     |
| 110 x 200 | 4 x 8   | 4.00                   | 5233583     |
| 160 x 250 | 6 x 10  | 4.00                   | 5233627     |
| 200 x 315 | 8 x 12  | 3.50                   | 5233660     |
| 250 x 355 | 10 x 14 | 3.50                   | 5233702     |
| 315 x 400 | 12 x 16 | 3.50                   | 5233690     |

| Size      |         | PRO150 X PRO45                        |             |
|-----------|---------|---------------------------------------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |             |
| mm        | inch    | L                                     | Part Number |
| 63 x 110  | 2 x 4   | 3.00                                  | 5357420     |
| 90 x 160  | 3 x 6   | 3.25                                  | 5357531     |
| 110 x 200 | 4 x 8   | 4.00                                  | 5357583     |
| 160 x 250 | 6 x 10  | 4.00                                  | 5357627     |
| 200 x 315 | 8 x 12  | 3.50                                  | 5357660     |
| 250 x 355 | 10 x 14 | 3.50                                  | 5357702     |
| 315 x 400 | 12 x 16 | 3.50                                  | 5357690     |
| 355 x 450 | 14 x 18 | 3.50                                  | 5357710     |
| 400 x 500 | 16 x 20 | 3.50                                  | 5357726     |

| Size      |         | PRO45 X PRO45          |             |
|-----------|---------|------------------------|-------------|
|           |         | SDR 33 / PN 3 / 45 PSI |             |
| mm        | inch    | L                      | Part Number |
| 110 x 200 | 4 x 8   | 4.00                   | 5389583     |
| 160 x 250 | 6 x 10  | 4.00                   | 5389627     |
| 200 x 315 | 8 x 12  | 3.50                   | 5389660     |
| 250 x 355 | 10 x 14 | 3.50                   | 5389702     |
| 315 x 400 | 12 x 16 | 3.50                   | 5389690     |
| 355 x 450 | 14 x 18 | 3.50                   | 5389710     |
| 400 x 500 | 16 x 20 | 3.50                   | 5389726     |

For field assembly: (one) flat face flange, (one) O-ring flange and (two) backing rings (in containment size) are required (not included in price). O-ring flange is supplied with EPDM O-rings. Consult factory for assistance.

Double Wall  
Piping System



**STUB END - FLOW-THROUGH O-RING FLANGE**

| Size      |         | PRO150 X PRO150<br>SDR 11/ PN 10/ 150 PSI |                    |
|-----------|---------|---|--------------------|
| mm        | inch    | L   | FKM<br>Part Number |
| 32 x 90   | 1 x 3   | 2.96                                      | 5257134            |
| 63 x 110  | 2 x 4   | 3.00                                      | 5257420            |
| 90 x 160  | 3 x 6   | 3.25                                      | 5257531            |
| 110 x 200 | 4 x 8   | 4.00                                      | 5257583            |
| 160 x 250 | 6 x 10  | 4.00                                      | 5257627            |
| 200 x 315 | 8 x 12  | 3.50                                      | 5257660            |
| 250 x 355 | 10 x 14 | 3.50                                      | 5257702            |
| 315 x 400 | 12 x 16 | 3.50                                      | 5257690            |

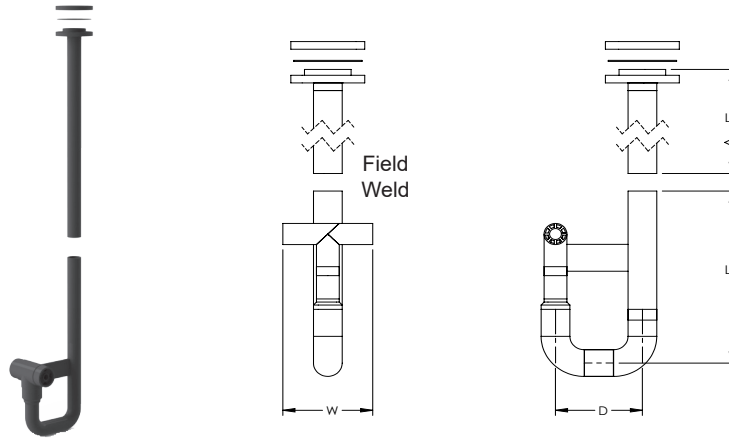
| Size      |         | PRO150 X PRO45<br>SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |                    |
|-----------|---------|---|--------------------|
| mm        | inch    | L   | FKM<br>Part Number |
| 63 x 110  | 2 x 4   | 3.00  | 5351420            |
| 90 x 160  | 3 x 6   | 3.25  | 5351531            |
| 110 x 200 | 4 x 8   | 4.00  | 5351583            |
| 160 x 250 | 6 x 10  | 4.00  | 5351627            |
| 200 x 315 | 8 x 12  | 3.50  | 5351660            |
| 250 x 355 | 10 x 14 | 3.50  | 5351702            |
| 315 x 400 | 12 x 16 | 3.50  | 5351690            |
| 355 x 450 | 14 x 18 | 3.50  | 5351710            |
| 400 x 500 | 16 x 20 | 3.50  | 5351726            |

| Size      |         | PRO45 X PRO45<br>SDR 33 / PN 3 / 45 PSI |                    |
|-----------|---------|---|--------------------|
| mm        | inch    | L                                       | FKM<br>Part Number |
| 110 x 200 | 4 x 8   | 4.00                                    | 5397583            |
| 160 x 250 | 6 x 10  | 4.00                                    | 5397627            |
| 200 x 315 | 8 x 12  | 3.50                                    | 5397660            |
| 250 x 355 | 10 x 14 | 3.50                                    | 5397702            |
| 315 x 400 | 12 x 16 | 3.50                                    | 5397690            |
| 355 x 450 | 14 x 18 | 3.50                                    | 5397710            |
| 400 x 500 | 16 x 20 | 3.50                                    | 5397726            |

For field assembly: (one) flat face flange, (one) O-ring flange and (two) backing rings (in containment size) are required (not included in price). O-ring flange is supplied with FKM O-rings. Consult factory for assistance.

Duo-Pro®  
Pro150, Pro45





**LOW POINT LEAK DETECTION STATION**

| Size      |         | PRO150 X PRO150        |       |       |       |             | Part Number |
|-----------|---------|------------------------|-------|-------|-------|-------------|-------------|
| mm        | inch    | SDR 11/ PN 10/ 150 PSI |       |       |       |             |             |
| mm        | inch    | D                      | W     | L1    | L2    | Part Number |             |
| 32 x 90   | 1 x 3   | 10.38                  | 9.63  | 19.13 | 36.00 | 5252134     |             |
| 63 x 110  | 2 x 4   | 8.00                   | 8.00  | 18.00 | 36.00 | 5252420     |             |
| 90 x 160  | 3 x 6   | 16.00                  | 9.75  | 13.38 | 36.00 | 5252531     |             |
| 110 x 200 | 4 x 8   | 14.50                  | 9.50  | 14.50 | 36.00 | 5252583     |             |
| 160 x 250 | 6 x 10  | 24.00                  | 13.00 | 14.00 | 36.00 | 5252627     |             |
| 200 x 315 | 8 x 12  | 18.75                  | 13.50 | 18.00 | 36.00 | 5252660     |             |
| 250 x 355 | 10 x 14 | 22.00                  | 13.50 | 18.00 | 36.00 | 5252702     |             |
| 315 x 400 | 12 x 16 | 23.00                  | 16.00 | 13.00 | 36.00 | 5252690     |             |

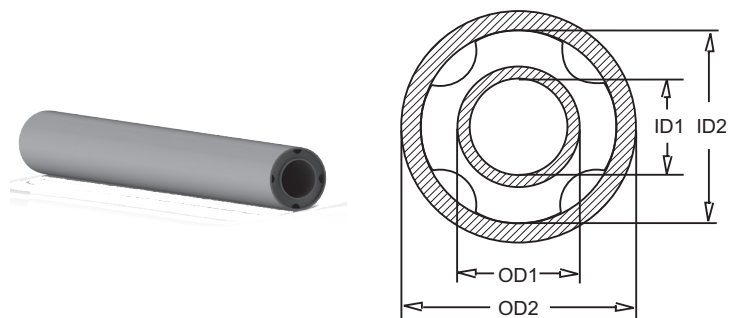
| Size      |         | PRO150 X PRO45                        |       |       |       |             | Part Number |
|-----------|---------|---------------------------------------|-------|-------|-------|-------------|-------------|
| mm        | inch    | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |       |       |             |             |
| mm        | inch    | D                                     | W     | L1    | L2    | Part Number |             |
| 63 x 110  | 2 x 4   | 8.00                                  | 8.00  | 18.00 | 36.00 | 5337420     |             |
| 90 x 160  | 3 x 6   | 16.00                                 | 9.75  | 13.38 | 36.00 | 5337531     |             |
| 110 x 200 | 4 x 8   | 14.50                                 | 9.50  | 14.50 | 36.00 | 5337583     |             |
| 160 x 250 | 6 x 10  | 24.00                                 | 13.00 | 14.00 | 36.00 | 5337627     |             |
| 200 x 315 | 8 x 12  | 18.75                                 | 13.50 | 18.00 | 36.00 | 5337660     |             |
| 250 x 355 | 10 x 14 | 22.00                                 | 13.50 | 18.00 | 36.00 | 5337702     |             |
| 315 x 400 | 12 x 16 | 23.00                                 | 16.00 | 13.00 | 36.00 | 5337690     |             |

| Size      |         | PRO45 X PRO45          |       |       |       |             | Part Number |
|-----------|---------|------------------------|-------|-------|-------|-------------|-------------|
| mm        | inch    | SDR 33 / PN 3 / 45 PSI |       |       |       |             |             |
| mm        | inch    | D                      | W     | L1    | L2    | Part Number |             |
| 110 x 200 | 4 x 8   | 14.50                  | 9.50  | 14.50 | 36.00 | 5364583     |             |
| 160 x 250 | 6 x 10  | 24.00                  | 13.00 | 14.00 | 36.00 | 5364627     |             |
| 200 x 315 | 8 x 12  | 18.75                  | 13.50 | 18.00 | 36.00 | 5364660     |             |
| 250 x 355 | 10 x 14 | 22.00                  | 13.50 | 18.00 | 36.00 | 5364702     |             |
| 315 x 400 | 12 x 16 | 23.00                  | 16.00 | 13.00 | 36.00 | 5364690     |             |
| 355 x 450 | 14 x 18 | 29.00                  | 18.25 | 18.00 | 36.00 | 5364710     |             |
| 400 x 500 | 16 x 20 | 33.75                  | 23.50 | 18.00 | 36.00 | 5364726     |             |

Station consists of access tee, (two) 90's, 2" or 4" riser pipe (4' long), stub end, backing ring and flange. Includes EPDM gasket - does not include nuts and bolts. Access cover to be shipped separately and installed in field.

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Duo-Pro®  
Pro150, Pro45

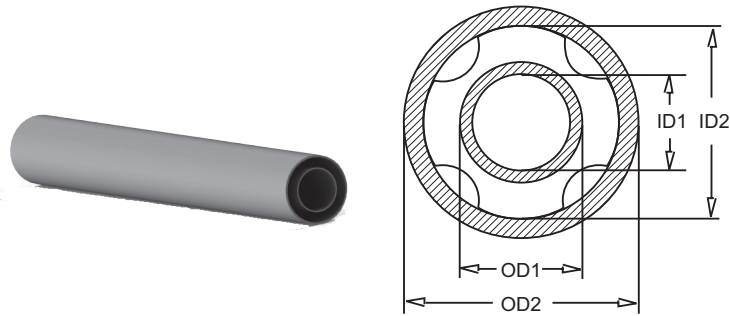


**SIMULTANEOUS WELD PIPE\*** 5 meter (16.4') lengths

| Size      |        | PVDF x PVDF |       |      |       | Part Number |
|-----------|--------|-------------|-------|------|-------|-------------|
|           |        | OD1         | OD2   | ID1  | ID2   |             |
| 32 x 90   | 1 x 3  | 1.26        | 3.54  | 1.07 | 3.32  | 6225134     |
| 63 x 110  | 2 x 4  | 2.48        | 4.33  | 2.24 | 4.06  | 6225420     |
| 90 x 160  | 3 x 6  | 3.54        | 6.30  | 3.32 | 5.91  | 6225531     |
| 110 x 200 | 4 x 8  | 4.33        | 7.87  | 4.06 | 7.39  | 6225583     |
| 160 x 250 | 6 x 10 | 6.30        | 9.84  | 5.91 | 9.24  | 6225627     |
| 200 x 315 | 8 x 12 | 7.87        | 12.40 | 7.39 | 11.64 | 6225660     |

\*Pipe is sold in 5 meter lengths (16.4').

Double Wall  
Piping System



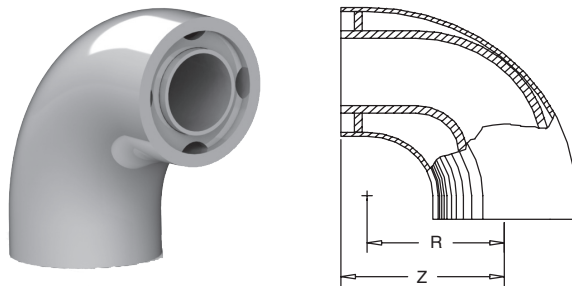
**STAGGERED WELD PIPE\*** 5 meters(16.4') lengths

| Size      |         | PVDF x PRO150<br>MOP 150 PSI |       |      |       |             |
|-----------|---------|------------------------------|-------|------|-------|-------------|
| mm        | inch    | OD1                          | OD2   | ID1  | ID2   | Part Number |
| 32 x 90   | 1 x 3   | 1.26                         | 3.54  | 1.07 | 2.90  | 6023134     |
| 63 x 110  | 2 x 4   | 2.48                         | 4.33  | 2.24 | 3.54  | 6023420     |
| 90 x 160  | 3 x 6   | 3.54                         | 6.30  | 3.32 | 5.15  | 6023531     |
| 110 x 200 | 4 x 8   | 4.33                         | 7.87  | 4.06 | 6.44  | 6023583     |
| 160 x 250 | 6 x 10  | 6.30                         | 9.84  | 5.91 | 8.05  | 6023627     |
| 200 x 315 | 8 x 12  | 7.87                         | 12.40 | 7.39 | 10.14 | 6023660     |
| 250 x 355 | 10 x 14 | 9.84                         | 13.98 | 9.24 | 11.43 | 6023702     |

| Size      |         | PVDF x PRO45<br>MOP x 45 PSI |       |       |       |             |
|-----------|---------|------------------------------|-------|-------|-------|-------------|
| mm        | inch    | OD1                          | OD2   | ID1   | ID2   | Part Number |
| 63 x 110  | 2 x 4   | 2.48                         | 4.33  | 4.06  | 2.24  | 6123420     |
| 90 x 160  | 3 x 6   | 3.54                         | 6.30  | 5.91  | 3.32  | 6123531     |
| 110 x 200 | 4 x 8   | 4.33                         | 7.87  | 7.39  | 4.06  | 6123583     |
| 160 x 250 | 6 x 10  | 6.30                         | 9.84  | 9.23  | 5.91  | 6123627     |
| 200 x 315 | 8 x 12  | 7.87                         | 12.40 | 11.63 | 7.39  | 6123660     |
| 250 x 355 | 10 x 14 | 9.84                         | 13.98 | 13.10 | 9.24  | 6123702     |
| 315 x 400 | 12 x 16 | 12.40                        | 15.75 | 14.77 | 11.64 | 6123690     |



**\*Staggered welding of dissimilar materials requires two welding machines and special installation. Asahi Field tech training highly recommended.**



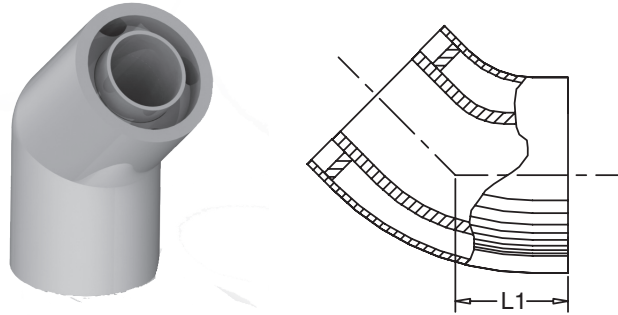
### 90 DEGREE ELBOW

| Size      |        | PVDF x PVDF |      |             |
|-----------|--------|-------------|------|-------------|
|           |        | MOP 150 PSI |      |             |
| mm        | inch   | Z           | R    | Part Number |
| 32 x 90   | 1 x 3  | 4.06        | 3.58 | 6203134     |
| 63 x 110  | 2 x 4  | 4.85        | 4.25 | 6203420     |
| 90 x 160  | 3 x 6  | 7.13        | 6.18 | 6203531     |
| 110 x 200 | 4 x 8  | 8.55        | 7.72 | 6203583     |
| 160 x 250 | 6 x 10 | 11.31       | 9.85 | 6203627     |

| Size      |         | PVDF x PRO150 |       |             |
|-----------|---------|---------------|-------|-------------|
|           |         | MOP 150 PSI   |       |             |
| mm        | inch    | Z             | R     | Part Number |
| 32 x 90   | 1 x 3   | 3.94          | 3.35  | 6003134     |
| 63 x 110  | 2 x 4   | 4.88          | 4.13  | 6003420     |
| 90 x 160  | 3 x 6   | 7.08          | 6.10  | 6003531     |
| 110 x 200 | 4 x 8   | 7.87          | 7.68  | 6003583     |
| 160 x 250 | 6 x 10  | 11.22         | 10.04 | 6003627     |
| 200 x 315 | 8 x 12  | 13.39         | 11.81 | 6003660     |
| 250 x 355 | 10 x 14 | 13.40         | 11.81 | 6003702     |

| Size      |         | PVDF x PRO45     |       |             |
|-----------|---------|------------------|-------|-------------|
|           |         | MOP 150 x 45 PSI |       |             |
| mm        | inch    | Z                | R     | Part Number |
| 63 x 110  | 2 x 4   | 4.72             | 4.33  | 6103420     |
| 90 x 160  | 3 x 6   | 6.69             | 6.10  | 6103531     |
| 110 x 200 | 4 x 8   | 8.66             | 7.76  | 6103583     |
| 160 x 250 | 6 x 10  | 11.41            | 10.43 | 6103627     |
| 200 x 315 | 8 x 12  | 13.38            | 11.81 | 6103660     |
| 250 x 355 | 10 x 14 | 13.39            | 11.81 | 6103702     |
| 315 x 400 | 12 x 16 | 13.58            | 11.81 | 6103690     |

Double Wall  
Piping System



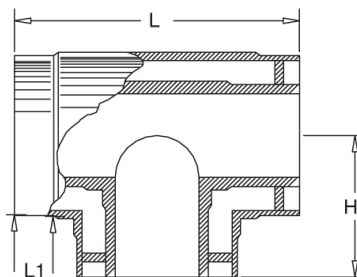
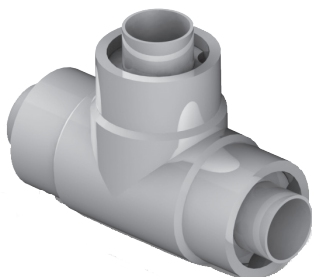
**45 DEGREE ELBOW**

| Size      |        | PVDF x PVDF |             |
|-----------|--------|-------------|-------------|
|           |        | MOP 150 PSI |             |
| mm        | inch   | L1          | Part Number |
| 32 x 90   | 1 x 3  | 5.00        | 6201134     |
| 63 x 110  | 2 x 4  | 5.00        | 6201420     |
| 90 x 160  | 3 x 6  | 6.00        | 6201531     |
| 110 x 200 | 4 x 8  | 6.00        | 6201583     |
| 160 x 250 | 6 x 10 | 6.00        | 6201627     |
| 200 x 315 | 8 x 12 | 8.00        | 6201660     |

| Size      |         | PVDF x PRO150 |             |
|-----------|---------|---------------|-------------|
|           |         | MOP 150 PSI   |             |
| mm        | inch    | L1            | Part Number |
| 32 x 90   | 1 x 3   | 4.00          | 6001134     |
| 63 x 110  | 2 x 4   | 4.25          | 6001420     |
| 90 x 160  | 3 x 6   | 6.00          | 6001531     |
| 110 x 200 | 4 x 8   | 6.50          | 6001583     |
| 160 x 250 | 6 x 10  | 8.50          | 6001627     |
| 200 x 315 | 8 x 12  | 10.00         | 6001660     |
| 250 x 355 | 10 x 14 | 8.50          | 6001702     |

| Size      |         | PVDF x PRO45     |             |
|-----------|---------|------------------|-------------|
|           |         | MOP 150 x 45 PSI |             |
| mm        | inch    | L1               | Part Number |
| 63 x 110  | 2 x 4   | 5.00             | 6101420     |
| 90 x 160  | 3 x 6   | 6.00             | 6101531     |
| 110 x 200 | 4 x 8   | 6.00             | 6101583     |
| 160 x 250 | 6 x 10  | 6.00             | 6101627     |
| 200 x 315 | 8 x 12  | 6.50             | 6101660     |
| 250 x 355 | 10 x 14 | 10.00            | 6101702     |
| 315 x 400 | 12 x 16 | 12.00            | 6101690     |

Duo-Pro®  
PVDF



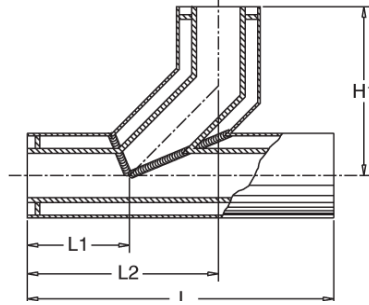
**TEE**

| Size      |        | PVDF x PVDF |      |             |
|-----------|--------|-------------|------|-------------|
|           |        | MOP 150 PSI |      |             |
| mm        | inch   | L           | H    | Part Number |
| 32 x 90   | 1 x 3  | 7.13        | 3.82 | 6205134     |
| 63 x 110  | 2 x 4  | 8.50        | 4.33 | 6205420     |
| 90 x 160  | 3 x 6  | 10.98       | 5.51 | 6205531     |
| 110 x 200 | 4 x 8  | 17.56       | 8.78 | 6205583     |
| 160 x 250 | 6 x 10 | 17.56       | 8.54 | 6205627     |

| Size      |        | PVDF x PRO150 |      |             |
|-----------|--------|---------------|------|-------------|
|           |        | MOP 150 PSI   |      |             |
| mm        | inch   | L             | H    | Part Number |
| 32 x 90   | 1 x 3  | 8.15          | 4.17 | 6005134     |
| 63 x 110  | 2 x 4  | 9.45          | 4.72 | 6005420     |
| 90 x 160  | 3 x 6  | 12.4          | 6.3  | 6005531     |
| 110 x 200 | 4 x 8  | 15.59         | 7.8  | 6005583     |
| 160 x 250 | 6 x 10 | 18.5          | 9.25 | 6005627     |

| Size      |        | PVDF x PRO45     |       |             |
|-----------|--------|------------------|-------|-------------|
|           |        | MOP 150 x 45 PSI |       |             |
| mm        | inch   | L                | H     | Part Number |
| 63 x 110  | 2 x 4  | 8.46             | 4.29  | 6105420     |
| 90 x 160  | 3 x 6  | 10.94            | 5.51  | 6105531     |
| 110 x 200 | 4 x 8  | 13.39            | 6.69  | 6105583     |
| 160 x 250 | 6 x 10 | 17.25            | 8.66  | 6105627     |
| 200 x 315 | 8 x 12 | 21.06            | 10.63 | 6105660     |

Double Wall Piping System



**SANITARY TEE**

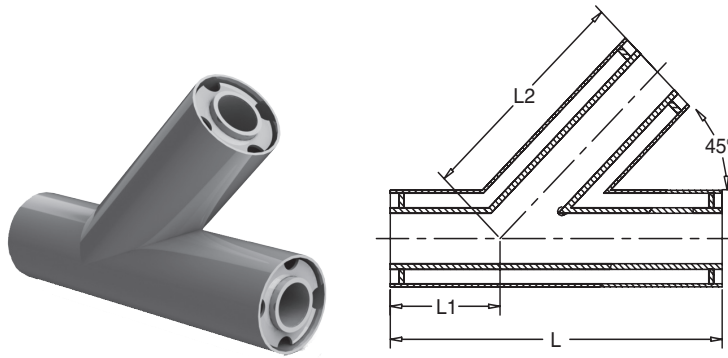
| Size      |         | PVDF x PVDF |       |       |       |         | Part Number |
|-----------|---------|-------------|-------|-------|-------|---------|-------------|
|           |         | MOP 5 PSI   |       |       |       |         |             |
| mm        | inch    | L2          | L     | H1    | L1    |         |             |
| 63 x 110  | 2 x 4   | 12.00       | 18.00 | 9.00  | 6.00  | 6213134 |             |
| 90 x 160  | 3 x 6   | 16.00       | 24.00 | 12.50 | 8.00  | 6213420 |             |
| 110 x 200 | 4 x 8   | 20.00       | 30.00 | 15.50 | 10.00 | 6213531 |             |
| 160 x 250 | 6 x 10  | 24.00       | 36.00 | 15.50 | 12.00 | 6213583 |             |
| 200 x 315 | 8 x 12  | 28.00       | 42.00 | 21.75 | 14.00 | 6213627 |             |
| 250 x 355 | 10 x 14 | 32.00       | 48.00 | 24.25 | 16.00 | 6213660 |             |

| Size      |        | PVDF x PRO150 |       |       |       |         | Part Number |
|-----------|--------|---------------|-------|-------|-------|---------|-------------|
|           |        | MOP 5 PSI     |       |       |       |         |             |
| mm        | inch   | L2            | L     | H1    | L1    |         |             |
| 32 x 90   | 1 x 3  | 12.00         | 18.00 | 9.00  | 6.00  | 6013134 |             |
| 63 x 110  | 2 x 4  | 12.00         | 18.00 | 9.00  | 6.00  | 6013420 |             |
| 90 x 160  | 3 x 6  | 16.00         | 24.00 | 12.50 | 8.00  | 6013531 |             |
| 110 x 200 | 4 x 8  | 20.00         | 30.00 | 15.50 | 10.00 | 6013583 |             |
| 160 x 250 | 6 x 10 | 24.00         | 36.00 | 15.50 | 12.00 | 6013627 |             |
| 200 x 315 | 8 x 12 | 28.00         | 42.00 | 21.75 | 14.00 | 6013660 |             |

| Size      |         | PVDF x PRO45 |       |       |       |         | Part Number |
|-----------|---------|--------------|-------|-------|-------|---------|-------------|
|           |         | MOP 5 PSI    |       |       |       |         |             |
| mm        | inch    | L2           | L     | H1    | L1    |         |             |
| 63 x 110  | 2 x 4   | 12.00        | 18.00 | 9.00  | 6.00  | 6113420 |             |
| 90 x 160  | 3 x 6   | 16.00        | 24.00 | 12.50 | 8.00  | 6113531 |             |
| 110 x 200 | 4 x 8   | 20.00        | 30.00 | 15.50 | 10.00 | 6113583 |             |
| 160 x 250 | 6 x 10  | 24.00        | 36.00 | 15.50 | 12.00 | 6113627 |             |
| 200 x 315 | 8 x 12  | 28.00        | 42.00 | 21.75 | 14.00 | 6113660 |             |
| 250 x 355 | 10 x 14 | 32.00        | 48.00 | 24.25 | 16.00 | 6113702 |             |
| 315 x 400 | 12 x 16 | 36.00        | 54.00 | 28.00 | 18.00 | 6113690 |             |







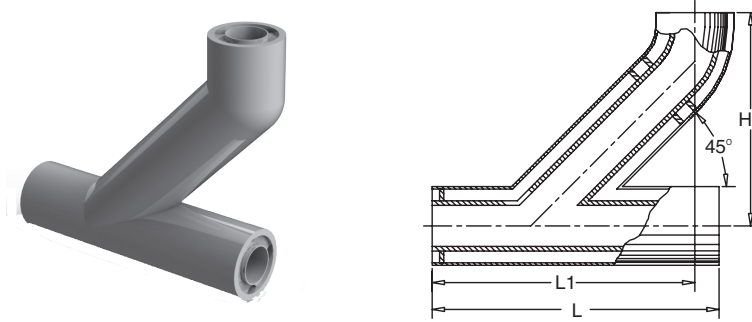
**LATERAL**

| Size      |        | PVDF x PVDF |    |    |             |
|-----------|--------|-------------|----|----|-------------|
|           |        | MOP 5 PSI   |    |    |             |
| mm        | inch   | L           | L1 | L2 | Part Number |
| 32 x 90   | 1 x 3  | 18          | 6  | 12 | 6209134     |
| 63 x 110  | 2 x 4  | 18          | 6  | 12 | 6209420     |
| 90 x 160  | 3 x 6  | 24          | 8  | 16 | 6209531     |
| 110 x 200 | 4 x 8  | 30          | 10 | 20 | 6209583     |
| 160 x 250 | 6 x 10 | 36          | 12 | 24 | 6209627     |
| 200 x 315 | 8 x 12 | 42          | 14 | 28 | 6209660     |

| Size      |        | PVDF x PRO150 |    |    |             |
|-----------|--------|---------------|----|----|-------------|
|           |        | MOP 5 PSI     |    |    |             |
| mm        | inch   | L             | L1 | L2 | Part Number |
| 32 x 90   | 1 x 3  | 18            | 6  | 12 | 6009134     |
| 63 x 110  | 2 x 4  | 18            | 6  | 12 | 6009420     |
| 90 x 160  | 3 x 6  | 24            | 8  | 16 | 6009531     |
| 110 x 200 | 4 x 8  | 30            | 10 | 20 | 6009583     |
| 160 x 250 | 6 x 10 | 36            | 12 | 24 | 6009627     |
| 200 x 315 | 8 x 12 | 42            | 14 | 28 | 6009660     |

| Size      |         | PVDF x PRO45 |    |    |             |
|-----------|---------|--------------|----|----|-------------|
|           |         | MOP 5 PSI    |    |    |             |
| mm        | inch    | L            | L1 | L2 | Part Number |
| 63 x 110  | 2 x 4   | 18           | 6  | 12 | 6109420     |
| 90 x 160  | 3 x 6   | 24           | 8  | 16 | 6109531     |
| 110 x 200 | 4 x 8   | 30           | 10 | 20 | 6109583     |
| 160 x 250 | 6 x 10  | 36           | 12 | 24 | 6109627     |
| 200 x 315 | 8 x 12  | 42           | 14 | 28 | 6109660     |
| 250 x 355 | 10 x 14 | 48           | 16 | 32 | 6109702     |
| 315 x 400 | 12 x 16 | 54           | 18 | 36 | 6109690     |

Double Wall Piping System



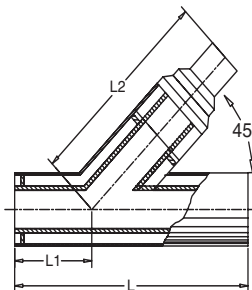
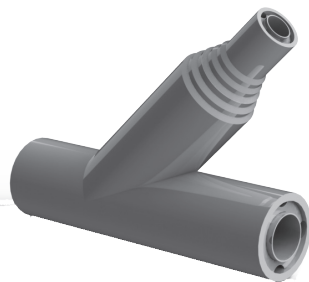
**LATERAL WITH 1/8 BEND**

| Size      |        | PVDF x PVDF<br>MOP 5 PSI |        |        |         | Part Number |
|-----------|--------|--------------------------|--------|--------|---------|-------------|
| mm        | inch   | L                        | L1     | H1     |         |             |
| 32 x 90   | 1 x 3  | N/A                      | N/A    | N/A    | 6211134 |             |
| 63 x 110  | 2 x 4  | 18                       | 18     | 16.5   | 6211420 |             |
| 90 x 160  | 3 x 6  | 24                       | 23.25  | 21.5   | 6211531 |             |
| 110 x 200 | 4 x 8  | 30                       | 28.5   | 24     | 6211583 |             |
| 160 x 250 | 6 x 10 | 36                       | 33     | 26.75  | 6211627 |             |
| 200 x 315 | 8 x 12 | 42                       | 38.125 | 30.375 | 6211660 |             |

| Size      |        | PVDF x PRO150<br>MOP 5 PSI |       |       |         | Part Number |
|-----------|--------|----------------------------|-------|-------|---------|-------------|
| mm        | inch   | L                          | L1    | H1    |         |             |
| 32 x 90   | 1 x 3  | 18                         | 17.25 | 15.25 | 6011134 |             |
| 63 x 110  | 2 x 4  | 18                         | 18    | 16.5  | 6011420 |             |
| 90 x 160  | 3 x 6  | 24                         | 23.25 | 21.5  | 6011531 |             |
| 110 x 200 | 4 x 8  | 30                         | 38.5  | 25    | 6011583 |             |
| 160 x 250 | 6 x 10 | 36                         | 34.75 | 31.25 | 6011627 |             |
| 200 x 315 | 8 x 12 | 42                         | 40.75 | 36.75 | 6011660 |             |

| Size      |         | PVDF x PRO45<br>MOP 5 PSI |        |        |         | Part Number |
|-----------|---------|---------------------------|--------|--------|---------|-------------|
| mm        | inch    | L                         | L1     | H1     |         |             |
| 63 x 110  | 2 x 4   | 18                        | 18     | 16.5   | 6111420 |             |
| 90 x 160  | 3 x 6   | 24                        | 23.25  | 21.5   | 6111531 |             |
| 110 x 200 | 4 x 8   | 30                        | 28.5   | 24     | 6111583 |             |
| 160 x 250 | 6 x 10  | 36                        | 33     | 26.75  | 6111627 |             |
| 200 x 315 | 8 x 12  | 42                        | 38.125 | 30.375 | 6111660 |             |
| 250 x 355 | 10 x 14 | 48                        | 45.5   | 39.125 | 6111702 |             |
| 315 x 400 | 12 x 16 | 54                        | 51.75  | 45.375 | 6111690 |             |

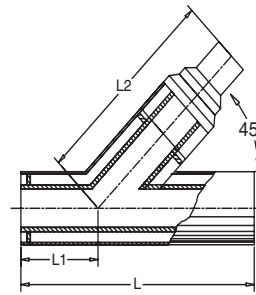
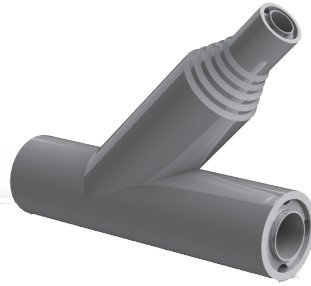




### REDUCING LATERAL

| Size                   |              | PVDF x PVDF |    |       |             |
|------------------------|--------------|-------------|----|-------|-------------|
|                        |              | MOP 5 PSI   |    |       |             |
| mm                     | inch         | L           | L1 | L2    | Part Number |
| (90 x 63)(160 x 110)   | (3x2)(6x4)   | 24          | 8  | 16.5  | 6219743     |
| (110 x 63)(200 x 110)  | (4x2)(8x4)   | 30          | 20 | 25.25 | 6219744     |
| (140 x 90)(200 x 160)  | (4x3)(8x6)   | 30          | 20 | 22    | 6219746     |
| (160 x 63)(250 x 110)  | (6x2)(10x4)  | 36          | 12 | 31.75 | 6219892     |
| (160 x 90)(250 x 160)  | (6x3)(10x6)  | 36          | 12 | 27    | 6219747     |
| (160 x 110)(250 x 200) | (6x4)(10x8)  | 36          | 12 | 25.25 | 6219748     |
| (200 x 63)(315 x 110)  | (8x2)(12x4)  | 42          | 14 | 36.37 | 6219890     |
| (200 x 90)(315 x 160)  | (8x3)(12x6)  | 42          | 14 | 34.5  | 6219896     |
| (200 x 110)(315 x 200) | (8x4)(12x8)  | 42          | 14 | 32.75 | 6219895     |
| (200 x 160)(315 x 250) | (8x6)(12x10) | 42          | 14 | 29.75 | 6219893     |

Double Wall  
Piping System

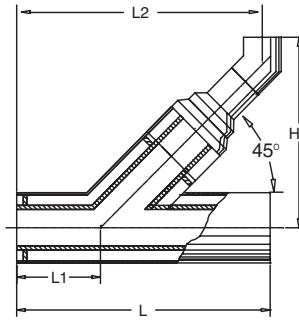
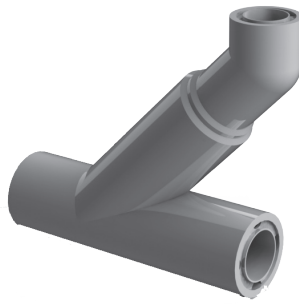


**REDUCING LATERAL**

| Size                   |              | PVDF x PRO150 |    |       |             |
|------------------------|--------------|---------------|----|-------|-------------|
|                        |              | MOP 5 PSI     |    |       |             |
| mm                     | inch         | L             | L1 | L2    | Part Number |
| (90 x 63)(160 x 110)   | (3x2)(6x4)   | 24            | 8  | 16.5  | 6019743     |
| (110 x 63)(200 x 110)  | (4x2)(8x4)   | 30            | 20 | 25.5  | 6019744     |
| (140 x 90)(200 x 160)  | (4x3)(8x6)   | 30            | 20 | 22    | 6019746     |
| (160 x 63)(250 x 110)  | (6x2)(10x4)  | 36            | 12 | 31.76 | 6019892     |
| (160 x 90)(250 x 160)  | (6x3)(10x6)  | 36            | 12 | 27    | 6019747     |
| (160 x 110)(250 x 200) | (6x4)(10x8)  | 36            | 12 | 25.25 | 6019748     |
| (200 x 63)(315 x 110)  | (8x2)(12x4)  | 42            | 14 | 36.37 | 6019890     |
| (200 x 90)(315 x 160)  | (8x3)(12x6)  | 42            | 14 | 34.5  | 6019896     |
| (200 x 110)(315 x 200) | (8x4)(12x8)  | 42            | 14 | 32.75 | 6019895     |
| (200 x 160)(315 x 250) | (8x6)(12x10) | 42            | 14 | 29.75 | 6019893     |
| (250 x 90)(355 x 160)  | (10x3)(14x6) | 48            | 16 | 40.37 | 6019898     |

| Size                   |                | PVDF x PRO45 |    |       |             |
|------------------------|----------------|--------------|----|-------|-------------|
|                        |                | MOP 5 PSI    |    |       |             |
| mm                     | inch           | L            | L1 | L2    | Part Number |
| (90 x 63)(160 x 110)   | (3x2)(6x4)     | 24           | 8  | 16.5  | 6119743     |
| (110 x 63)(200 x 110)  | (4x2)(8x4)     | 30           | 10 | 25.25 | 6119744     |
| (140 x 90)(200 x 160)  | (4x3)(8x6)     | 30           | 10 | 22    | 6119746     |
| (160 x 63)(250 x 110)  | (6x2)(10x4)    | 36           | 12 | 31.75 | 6119892     |
| (160 x 90)(250 x 160)  | (6x3)(10x6)    | 36           | 12 | 27    | 6119747     |
| (160 x 110)(250 x 200) | (6x4)(10x8)    | 36           | 12 | 25.25 | 6119748     |
| (200 x 63)(315 x 110)  | (8x2)(12x4)    | 42           | 14 | 36.37 | 6119890     |
| (200 x 90)(315 x 160)  | (8x3)(12x6)    | 42           | 14 | 34.5  | 6119896     |
| (200 x 110)(315 x 200) | (8x4)(12x8)    | 42           | 14 | 32.75 | 6119895     |
| (200 x 160)(315 x 250) | (8x6)(12x10)   | 42           | 14 | 29.75 | 6119893     |
| (250 x 90)(355 x 160)  | (10x3)(14x6)   | 48           | 16 | 40.37 | 6119898     |
| (250 x 110)(355 x 200) | (10x4)(14x8)   | 48           | 16 | 37.5  | 6119903     |
| (250 x 160)(355 x 250) | (10x6)(14x10)  | 48           | 16 | 34.5  | 6119902     |
| (250 x 200)(355 x 315) | (10x8)(14x12)  | 48           | 16 | 30.5  | 6119899     |
| (315 x 110)(400 x 200) | (12x4)(16x8)   | 54           | 18 | 35    | 6119923     |
| (315 x 160)(400 x 200) | (12x6)(16x10)  | 54           | 18 | 40.5  | 6119904     |
| (315 x 200)(400 x 355) | (12x8)(16x12)  | 54           | 18 | 36.15 | 6119915     |
| (355 x 250)(400 x 355) | (12x10)(16x14) | 54           | 18 | 35.5  | 6119910     |

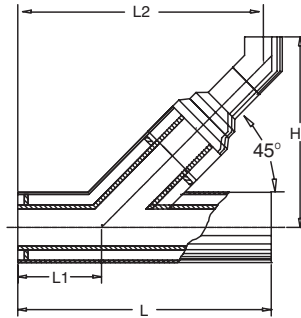
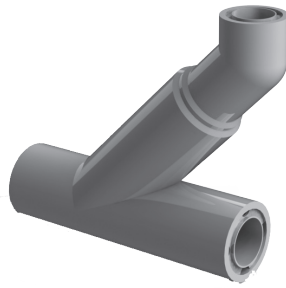




**REDUCING LATERAL WITH 1/8 BEND**

| Size                   |              | PVDF x PVDF |    |       |       |         | Part Number |
|------------------------|--------------|-------------|----|-------|-------|---------|-------------|
|                        |              | MOP 5 PSI   |    |       |       |         |             |
| mm                     | inch         | L           | L1 | L2    | H1    |         |             |
| (90 x 63)(160 x 110)   | (3x2)(6x4)   | 24          | 8  | 21.5  | 20.25 | 6221743 |             |
| (110 x 63)(200 x 110)  | (4x2)(8x4)   | 30          | 10 | 30    | 26.25 | 6221744 |             |
| (140 x 90)(200 x 160)  | (4x3)(8x6)   | 36          | 10 | 28    | 25.75 | 6221746 |             |
| (160 x 63)(250 x 110)  | (6x2)(10x4)  | 36          | 12 | 32.75 | 29.25 | 6221892 |             |
| (160 x 90)(250 x 160)  | (6x3)(10x6)  | 36          | 12 | 32.75 | 29.25 | 6221747 |             |
| (160 x 110)(250 x 200) | (6x4)(10x8)  | 36          | 12 | 31    | 28    | 6221748 |             |
| (200 x 63)(315 x 110)  | (8x2)(12x4)  | 42          | 14 | 40.5  | 34.75 | 6221890 |             |
| (200 x 90)(315 x 160)  | (8x3)(12x6)  | 42          | 14 | 40.5  | 34.75 | 6221896 |             |
| (200 x 110)(315 x 200) | (8x4)(12x8)  | 42          | 14 | 38.75 | 33.5  | 6221895 |             |
| (200 x 160)(315 x 250) | (8x6)(12x10) | 42          | 14 | 35.75 | 31.25 | 6221893 |             |

Double Wall  
Piping System

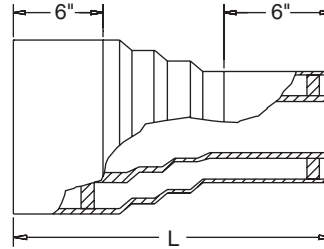
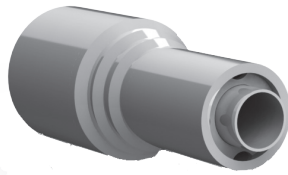


**REDUCING LATERAL WITH 1/8 BEND**

| Size                   |              | PVDF x PRO150 |    |       |       |         | Part Number |
|------------------------|--------------|---------------|----|-------|-------|---------|-------------|
|                        |              | MOP 5 PSI     |    |       |       |         |             |
| mm                     | inch         | L             | L1 | L2    | H1    |         |             |
| (90 x 63)(160 x 110)   | (3x2)(6x4)   | 24            | 8  | 21.5  | 20.25 | 6021743 |             |
| (110 x 63)(200 x 110)  | (4x2)(8x4)   | 30            | 10 | 30    | 26.25 | 6021744 |             |
| (140 x 90)(200 x 160)  | (4x3)(8x6)   | 36            | 10 | 28    | 25.75 | 6021746 |             |
| (160 x 63)(250 x 110)  | (6x2)(10x4)  | 36            | 12 | 32.75 | 29.25 | 6021892 |             |
| (160 x 90)(250 x 160)  | (6x3)(10x6)  | 36            | 12 | 32.75 | 29.25 | 6021747 |             |
| (160 x 110)(250 x 200) | (6x4)(10x8)  | 36            | 12 | 31    | 28    | 6021748 |             |
| (200 x 63)(315 x 110)  | (8x2)(12x4)  | 42            | 14 | 40.5  | 34.75 | 6021890 |             |
| (200 x 90)(315 x 160)  | (8x3)(12x6)  | 42            | 14 | 40.5  | 34.75 | 6021896 |             |
| (200 x 110)(315 x 200) | (8x4)(12x8)  | 42            | 14 | 38.75 | 33.5  | 6021895 |             |
| (200 x 160)(315 x 250) | (8x6)(12x10) | 42            | 14 | 35.75 | 31.25 | 6021893 |             |

| Size                   |                | PVDF x PRO45 |    |       |       |         | Part Number |
|------------------------|----------------|--------------|----|-------|-------|---------|-------------|
|                        |                | MOP 5 PSI    |    |       |       |         |             |
| mm                     | inch           | L            | L1 | L2    | H1    |         |             |
| (90 x 63)(160 x 110)   | (3x2)(6x4)     | 24           | 8  | 21.5  | 20.25 | 6121743 |             |
| (110 x 63)(200 x 110)  | (4x2)(8x4)     | 30           | 10 | 30    | 26.25 | 6121744 |             |
| (140 x 90)(200 x 160)  | (4x3)(8x6)     | 36           | 10 | 28    | 25.75 | 6121746 |             |
| (160 x 63)(250 x 110)  | (6x2)(10x4)    | 36           | 12 | 32.75 | 29.25 | 6121892 |             |
| (160 x 90)(250 x 160)  | (6x3)(10x6)    | 36           | 12 | 32.75 | 29.25 | 6121747 |             |
| (160 x 110)(250 x 200) | (6x4)(10x8)    | 36           | 12 | 31    | 28    | 6121748 |             |
| (200 x 63)(315 x 110)  | (8x2)(12x4)    | 42           | 14 | 40.5  | 34.75 | 6121890 |             |
| (200 x 90)(315 x 160)  | (8x3)(12x6)    | 42           | 14 | 40.5  | 34.75 | 6121896 |             |
| (200 x 110)(315 x 200) | (8x4)(12x8)    | 42           | 14 | 38.75 | 33.5  | 6121895 |             |
| (200 x 160)(315 x 250) | (8x6)(12x10)   | 42           | 14 | 35.75 | 31.25 | 6121893 |             |
| (250 x 90)(355 x 160)  | (10x3)(14x6)   | 48           | 16 | 46.5  | 40    | 6121898 |             |
| (250 x 110)(355 x 200) | (10x4)(14x8)   | 48           | 16 | 43.5  | 37    | 6121903 |             |
| (250 x 160)(355 x 250) | (10x6)(14x10)  | 48           | 16 | 40.5  | 34.5  | 6121902 |             |
| (250 x 200)(355 x 315) | (10x8)(14x12)  | 48           | 16 | 37    | 32    | 6121899 |             |
| (315 x 110)(400 x 200) | (12x4)(16x8)   | 54           | 18 | 50    | 41    | 6121923 |             |
| (315 x 160)(400 x 200) | (12x6)(16x10)  | 54           | 18 | 47    | 39    | 6121904 |             |
| (315 x 200)(400 x 355) | (12x8)(16x12)  | 54           | 18 | 44    | 37    | 6121915 |             |
| (355 x 250)(400 x 355) | (12x10)(16x14) | 54           | 18 | 41.5  | 35    | 6121910 |             |





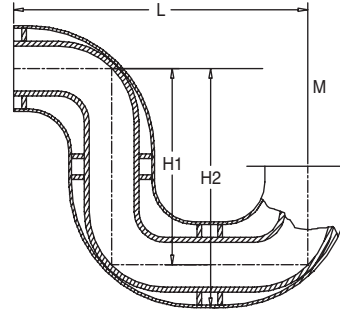
**CONCENTRIC REDUCER**

| Size               |              | PVDF x PVDF<br>MOP 150 PSI |             |
|--------------------|--------------|----------------------------|-------------|
| mm                 | inch         | L                          | Part Number |
| (63x32)(110x90)    | (2x1)(4x3)   | 13.13                      | 6215740     |
| (90x32)(160x90)    | (3x1)(6x3)   | 16.5                       | 6215741     |
| (90x63)(160x110)   | (3x2)(6x4)   | 15.25                      | 6215743     |
| (110x63)(200x110)  | (4x2)(8x4)   | 17.75                      | 6215744     |
| (110x90)(200x160)  | (4x3)(8x6)   | 14.5                       | 6215746     |
| (160x110)(250x200) | (6x4)(10x8)  | 15.75                      | 6215748     |
| (160x90)(250x160)  | (6x3)(10x6)  | 17.75                      | 6215747     |
| (160x63)(250x110)  | (6x2)(10x4)  | 19                         | 6215892     |
| (200x160)(315x250) | (8x6)(12x10) | 18                         | 6215893     |
| (200x110)(315x200) | (8x4)(12x8)  | 19                         | 6215895     |
| (200x90)(315x160)  | (8x3)(12x6)  | 21                         | 6215896     |

| Size               |              | PVDF x PRO150<br>MOP 150 PSI |             |
|--------------------|--------------|------------------------------|-------------|
| mm                 | inch         | L                            | Part Number |
| (63x32)(110x90)    | (2x1)(4x3)   | 13.13                        | 6015740     |
| (90x32)(160x90)    | (3x1)(6x3)   | 16.50                        | 6015741     |
| (90x63)(160x110)   | (3x2)(6x4)   | 15.25                        | 6015743     |
| (110x63)(200x110)  | (4x2)(8x4)   | 17.75                        | 6015744     |
| (110x90)(200x160)  | (4x3)(8x6)   | 14.50                        | 6015746     |
| (160x110)(250x200) | (6x4)(10x8)  | 15.75                        | 6015748     |
| (160x90)(250x160)  | (6x3)(10x6)  | 17.75                        | 6015747     |
| (160x63)(250x110)  | (6x2)(10x4)  | 19.00                        | 6015892     |
| (200x160)(315x250) | (8x6)(12x10) | 16.00                        | 6015893     |
| (200x110)(315x200) | (8x4)(12x8)  | 19.00                        | 6015895     |
| (200x90)(315x160)  | (8x3)(12x6)  | 21.00                        | 6015896     |

| Size               |               | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|--------------------|---------------|----------------------------------|-------------|
| mm                 | inch          | L                                | Part Number |
| (90x63)(160x110)   | (3x2)(6x4)    | 15.25                            | 6115743     |
| (110x63)(200x110)  | (4x2)(8x4)    | 17.75                            | 6115744     |
| (110x90)(200x160)  | (4x3)(8x6)    | 14.50                            | 6115746     |
| (160x110)(250x200) | (6x4)(10x8)   | 15.75                            | 6115748     |
| (160x90)(250x160)  | (6x3)(10x6)   | 17.75                            | 6115747     |
| (160x63)(250x110)  | (6x2)(10x4)   | 19.00                            | 6115892     |
| (200x160)(315x250) | (8x6)(12x10)  | 16.00                            | 6115893     |
| (200x110)(315x200) | (8x4)(12x8)   | 19.00                            | 6115895     |
| (200x90)(315x160)  | (8x3)(12x6)   | 21.00                            | 6115896     |
| (250x200)(355x315) | (10x8)(14x12) | 14.65                            | 6115899     |
| (250x160)(355x250) | (10x6)(14x10) | 17.52                            | 6115902     |
| (250x110)(355x200) | (10x4)(14x8)  | 19.96                            | 6115903     |

Double Wall  
Piping System



**P-TRAP**

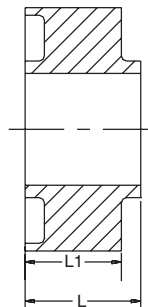
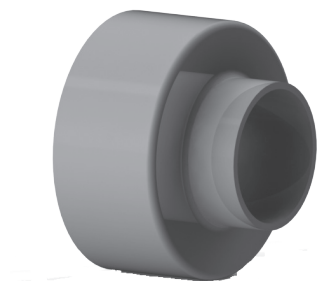
| Size      |        | PVDF x PVDF |       |       |             |
|-----------|--------|-------------|-------|-------|-------------|
|           |        | MOP 150 PSI |       |       |             |
| mm        | inch   | L           | H1    | H2    | Part Number |
| 32 x 90   | 1 x 3  | 14.50       | 9.63  | 11.38 | 6207134     |
| 63 x 110  | 2 x 4  | 14.25       | 9.44  | 11.69 | 6207420     |
| 90 x 160  | 3 x 6  | 21.00       | 13.94 | 17.50 | 6207531     |
| 110 x 200 | 4 x 8  | 25.63       | 17.06 | 21.38 | 6207583     |
| 160 x 250 | 6 x 10 | 33.44       | 22.19 | 27.75 | 6207627     |

| Size      |        | PVDF x PRO150 |       |       |             |
|-----------|--------|---------------|-------|-------|-------------|
|           |        | MOP 150 PSI   |       |       |             |
| mm        | inch   | L             | H1    | H2    | Part Number |
| 32 x 90   | 1 x 3  | 11.57         | 7.63  | 9.40  | 6007134     |
| 63 x 110  | 2 x 4  | 14.42         | 9.53  | 11.70 | 6007420     |
| 90 x 160  | 3 x 6  | 21.02         | 13.93 | 17.08 | 6007531     |
| 110 x 200 | 4 x 8  | 23.36         | 15.49 | 19.43 | 6007583     |
| 160 x 250 | 6 x 10 | 33.44         | 22.21 | 27.13 | 6007627     |
| 200 x 315 | 8 x 12 | 39.95         | 26.55 | 32.75 | 6007660     |

| Size      |        | PVDF x PRO45     |       |       |             |
|-----------|--------|------------------|-------|-------|-------------|
|           |        | MOP 150 x 45 PSI |       |       |             |
| mm        | inch   | L                | H1    | H2    | Part Number |
| 63 x 110  | 2 x 4  | 14.25            | 9.44  | 11.69 | 6107420     |
| 90 x 160  | 3 x 6  | 21.00            | 13.94 | 17.50 | 6107531     |
| 110 x 200 | 4 x 8  | 25.63            | 17.06 | 21.38 | 6107583     |
| 160 x 250 | 6 x 10 | 33.44            | 22.19 | 27.75 | 6107627     |
| 200 x 315 | 8 x 12 | 35.63            | 26.25 | 32.75 | 6107660     |

Duo-Pro®  
PVDF





**DOGBONE® END TERMINATION**

| Size      |        | PVDF x PVDF |      |             |
|-----------|--------|-------------|------|-------------|
|           |        | MOP 150 PSI |      |             |
| mm        | inch   | L           | L2   | Part Number |
| 32 x 90   | 1 x 3  | 3.00        | 2.25 | 6228134     |
| 63 x 110  | 2 x 4  | 3.00        | 2.25 | 6228420     |
| 90 x 160  | 3 x 6  | 3.00        | 2.25 | 6228531     |
| 110 x 200 | 4 x 8  | 3.00        | 2.25 | 6228583     |
| 160 x 250 | 6 x 10 | 3.00        | 2.25 | 6228627     |
| 200 x 315 | 8 x 12 | 3.00        | 2.25 | 6228660     |

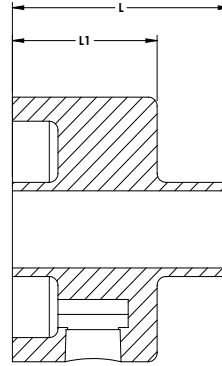
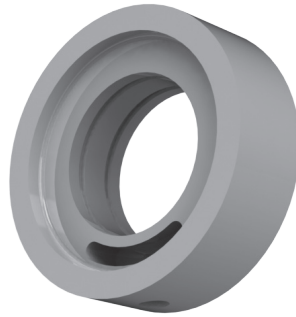
| Size      |         | PVDF x PRO150 |             |
|-----------|---------|---------------|-------------|
|           |         | MOP 150 PSI   |             |
| mm        | inch    | L             | Part Number |
| 32 x 90   | 1 x 3   | 3.00          | 6033134     |
| 63 x 110  | 2 x 4   | 3.00          | 6033420     |
| 90 x 160  | 3 x 6   | 3.00          | 6033531     |
| 110 x 200 | 4 x 8   | 3.00          | 6033583     |
| 160 x 250 | 6 x 10  | 3.00          | 6033627     |
| 200 x 315 | 8 x 12  | 3.00          | 6033660     |
| 250 x 355 | 10 x 14 | 2.25          | 6033702     |

O-ring style Dogbone®

| Size      |         | PVDF x PRO45     |             |
|-----------|---------|------------------|-------------|
|           |         | MOP 150 x 45 PSI |             |
| mm        | inch    | L                | Part Number |
| 63 x 110  | 2 x 4   | 3.00             | 6137420     |
| 90 x 160  | 3 x 6   | 3.00             | 6137531     |
| 110 x 200 | 4 x 8   | 3.00             | 6137583     |
| 160 x 250 | 6 x 10  | 3.00             | 6137627     |
| 200 x 315 | 8 x 12  | 3.00             | 6137660     |
| 250 x 355 | 10 x 14 | 2.25             | 6137702     |
| 315 x 400 | 12 x 16 | 2.25             | 6137690     |

O-ring style Dogbone®.

**Double Wall  
Piping System**



## DOGBONE® END TERMINATION WITH 1/2 TAP

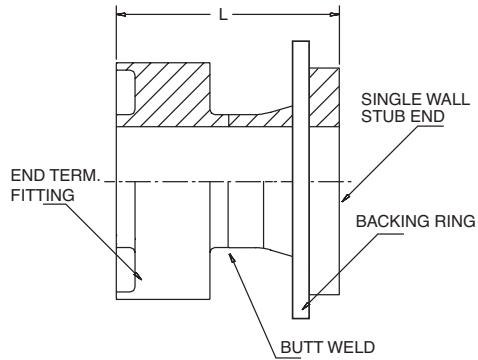
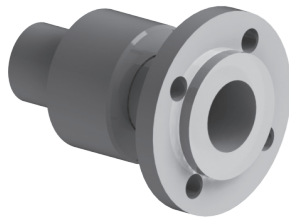
| Size      |        | PVDF x PVDF<br>MOP 150 PSI |             |
|-----------|--------|----------------------------|-------------|
| mm        | inch   | L                          | Part Number |
| 32 x 90   | 1 x 3  | 3.0                        | 6224134     |
| 63 x 110  | 2 x 4  | 3.0                        | 6224420     |
| 90 x 160  | 3 x 6  | 3.0                        | 6224531     |
| 110 x 200 | 4 x 8  | 3.0                        | 6224583     |
| 160 x 250 | 6 x 10 | 3.0                        | 6224627     |
| 200 x 315 | 8 x 12 | 3.0                        | 6224660     |

| Size      |         | PVDF x PRO150<br>MOP 150 PSI |             |
|-----------|---------|------------------------------|-------------|
| mm        | inch    | L                            | Part Number |
| 32 x 90   | 1 x 3   | 3.0                          | 6034134     |
| 63 x 110  | 2 x 4   | 3.0                          | 6034420     |
| 90 x 160  | 3 x 6   | 3.0                          | 6034531     |
| 110 x 200 | 4 x 8   | 3.0                          | 6034583     |
| 160 x 250 | 6 x 10  | 3.0                          | 6034627     |
| 200 x 315 | 8 x 12  | 3.0                          | 6034660     |
| 250 x 355 | 10 x 14 | 3.0                          | 6034702     |

O-ring style Dogbone®.

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|---------|----------------------------------|-------------|
| mm        | inch    | L                                | Part Number |
| 63 x 110  | 2 x 4   | 3.0                              | 6138420     |
| 90 x 160  | 3 x 6   | 3.0                              | 6138531     |
| 110 x 200 | 4 x 8   | 3.0                              | 6138583     |
| 160 x 250 | 6 x 10  | 3.0                              | 6138627     |
| 200 x 315 | 8 x 12  | 3.0                              | 6138660     |
| 250 x 355 | 10 x 14 | 3.0                              | 6138702     |
| 315 x 400 | 12 x 16 | 3.0                              | 6138690     |

O-ring style Dogbone®.



**DOGBONE® FLANGED END TERMINATION**

| Size      |        | PVDF x PVDF<br>MOP 150 PSI |             |
|-----------|--------|----------------------------|-------------|
| mm        | inch   | L                          | Part Number |
| 32 x 90   | 1 x 3  | 4.75                       | 6230134     |
| 63 x 110  | 2 x 4  | 4.75                       | 6230420     |
| 90 x 160  | 3 x 6  | 6                          | 6230531     |
| 110 x 200 | 4 x 8  | 6                          | 6230583     |
| 160 x 250 | 6 x 10 | 6                          | 6230627     |
| 200 x 315 | 8 x 12 | 6                          | 6230660     |

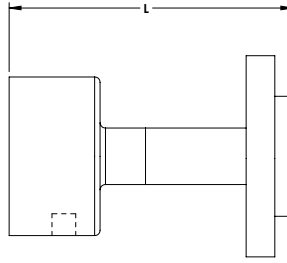
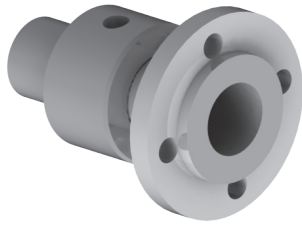
| Size      |         | PVDF x PRO150<br>MOP 150 PSI |             |
|-----------|---------|------------------------------|-------------|
| mm        | inch    | L                            | Part Number |
| 32 x 90   | 1 x 3   | 4.75                         | 6035134     |
| 63 x 110  | 2 x 4   | 4.75                         | 6035420     |
| 90 x 160  | 3 x 6   | 6                            | 6035531     |
| 110 x 200 | 4 x 8   | 6                            | 6035583     |
| 160 x 250 | 6 x 10  | 6                            | 6035627     |
| 200 x 315 | 8 x 12  | 6                            | 6035660     |
| 250 x 355 | 10 x 14 | 7                            | 6035702     |

O-ring style Dogbone®.

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|---------|----------------------------------|-------------|
| mm        | inch    | L                                | Part Number |
| 63 x 110  | 2 x 4   | 4.75                             | 6139420     |
| 90 x 160  | 3 x 6   | 6                                | 6139531     |
| 110 x 200 | 4 x 8   | 6                                | 6139583     |
| 160 x 250 | 6 x 10  | 6                                | 6139627     |
| 200 x 315 | 8 x 12  | 6                                | 6139660     |
| 250 x 355 | 10 x 14 | 7                                | 6139702     |
| 315 x 400 | 12 x 16 | 7.25                             | 6139690     |

O-ring style Dogbone®.

Double Wall  
Piping System



## DOGBONE® FLANGED END TERMINATION WITH 1/2 TAP

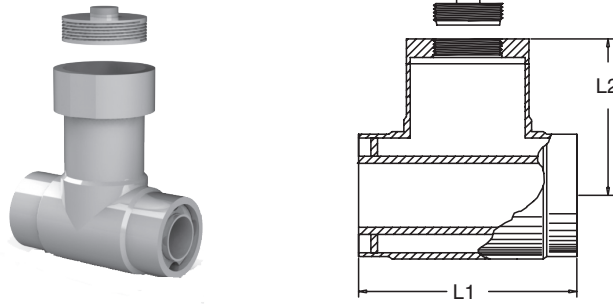
| Size      |        | PVDF x PVDF<br>MOP 150 PSI |             |
|-----------|--------|----------------------------|-------------|
| mm        | inch   | L                          | Part Number |
| 32 x 90   | 1 x 3  | 4.75                       | 6231134     |
| 63 x 110  | 2 x 4  | 4.75                       | 6231420     |
| 90 x 160  | 3 x 6  | 6                          | 6231531     |
| 110 x 200 | 4 x 8  | 6                          | 6231583     |
| 160 x 250 | 6 x 10 | 6                          | 6231627     |
| 200 x 315 | 8 x 12 | 6                          | 6231660     |

| Size      |         | PVDF x PRO150<br>MOP 150 PSI |             |
|-----------|---------|------------------------------|-------------|
| mm        | inch    | L                            | Part Number |
| 32 x 90   | 1 x 3   | 4.75                         | 6036134     |
| 63 x 110  | 2 x 4   | 4.75                         | 6036420     |
| 90 x 160  | 3 x 6   | 6                            | 6036531     |
| 110 x 200 | 4 x 8   | 6                            | 6036583     |
| 160 x 250 | 6 x 10  | 6                            | 6036627     |
| 200 x 315 | 8 x 12  | 6                            | 6036660     |
| 250 x 355 | 10 x 14 | 7                            | 6036702     |

O-ring style Dogbone®.

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|---------|----------------------------------|-------------|
| mm        | inch    | L                                | Part Number |
| 63 x 110  | 2 x 4   | 4.75                             | 6140420     |
| 90 x 160  | 3 x 6   | 6                                | 6140531     |
| 110 x 200 | 4 x 8   | 6                                | 6140583     |
| 160 x 250 | 6 x 10  | 6                                | 6140627     |
| 200 x 315 | 8 x 12  | 6                                | 6140660     |
| 250 x 355 | 10 x 14 | 7                                | 6140702     |
| 315 x 400 | 12 x 16 | 7.25                             | 6140690     |

O-ring style Dogbone®.



**ACCESS TEE WITH THREADED PLUG\***

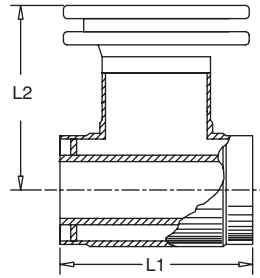
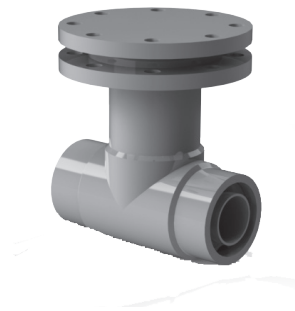
| Size      |        | PVDF x PVDF            |       |             |
|-----------|--------|------------------------|-------|-------------|
|           |        | SDR 33 / PN 3 / 45 PSI |       |             |
| mm        | inch   | L1                     | L2    | Part Number |
| 32 x 90   | 1 x 3  | 7.25                   | 6.63  | 6204134     |
| 63 x 110  | 2 x 4  | 9.50                   | 7.25  | 6204420     |
| 90 x 160  | 3 x 6  | 13.00                  | 9.75  | 6204531     |
| 110 x 200 | 4 x 8  | 15.63                  | 11.00 | 6204583     |
| 160 x 250 | 6 x 10 | 17.50                  | 12.25 | 6204627     |

| Size      |         | PVDF x PRO150          |       |             |
|-----------|---------|------------------------|-------|-------------|
|           |         | SDR 11/ PN 10/ 150 PSI |       |             |
| mm        | inch    | L1                     | L2    | Part Number |
| 32 x 90   | 1 x 3   | 7.25                   | 6.63  | 6004134     |
| 63 x 110  | 2 x 4   | 9.50                   | 7.25  | 6004420     |
| 90 x 160  | 3 x 6   | 13.00                  | 9.75  | 6004531     |
| 110 x 200 | 4 x 8   | 15.63                  | 11.00 | 6004583     |
| 160 x 250 | 6 x 10  | 17.50                  | 12.25 | 6004627     |
| 200 x 315 | 8 x 12  | 21.75                  | 13.75 | 6004660     |
| 250 x 355 | 10 x 14 | 27.00                  | 15.25 | 6004702     |

| Size      |         | PVDF x PRO45                          |       |             |
|-----------|---------|---------------------------------------|-------|-------------|
|           |         | SDR 11 x 33/ PN 10 x 3 / 150 x 45 PSI |       |             |
| mm        | inch    | L1                                    | L2    | Part Number |
| 63 x 110  | 2 x 4   | 9.50                                  | 7.25  | 6104420     |
| 90 x 160  | 3 x 6   | 13.00                                 | 9.75  | 6104531     |
| 110 x 200 | 4 x 8   | 15.63                                 | 11.00 | 6104583     |
| 160 x 250 | 6 x 10  | 17.50                                 | 12.25 | 6104627     |
| 200 x 315 | 8 x 12  | 21.75                                 | 13.75 | 6104660     |
| 250 x 355 | 10 x 14 | 27.00                                 | 15.25 | 6104702     |
| 315 x 400 | 12 x 16 | 27.00                                 | 16.76 | 6104690     |

Includes EPDM gasket. Threaded plug rated 5psi

Double Wall  
Piping System



### ACCESS TEE WITH FLANGED COVER

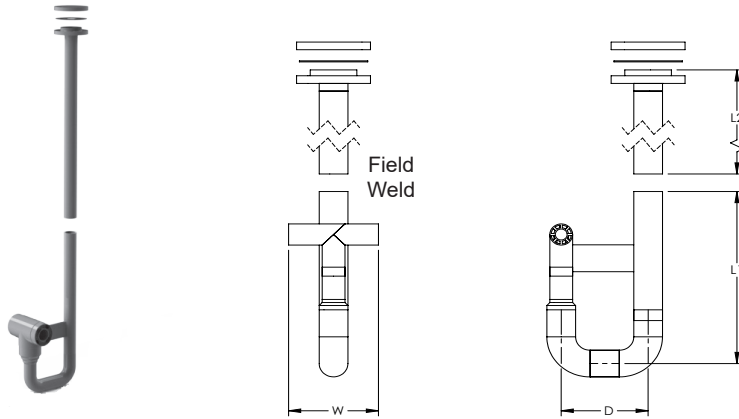
| Size      |        | PVDF x PVDF |       |             |
|-----------|--------|-------------|-------|-------------|
|           |        | MOP 150 PSI |       |             |
| mm        | inch   | L1          | L2    | Part Number |
| 32 x 90   | 1 x 3  | 7.00        | 7.00  | 6202134     |
| 63 x 110  | 2 x 4  | 8.50        | 7.50  | 6202420     |
| 90 x 160  | 3 x 6  | 11.00       | 8.00  | 6202531     |
| 110 x 200 | 4 x 8  | 17.50       | 12.75 | 6202583     |
| 160 x 250 | 6 x 10 | 19.50       | 13.25 | 6202627     |

| Size      |        | PVDF x PRO150 |       |             |
|-----------|--------|---------------|-------|-------------|
|           |        | MOP 150 PSI   |       |             |
| mm        | inch   | L1            | L2    | Part Number |
| 32 x 90   | 1 x 3  | 7.30          | 8.00  | 6002134     |
| 63 x 110  | 2 x 4  | 9.50          | 8.50  | 6002420     |
| 90 x 160  | 3 x 6  | 13.00         | 11.00 | 6002531     |
| 110 x 200 | 4 x 8  | 15.16         | 12.75 | 6002583     |
| 160 x 250 | 6 x 10 | 17.30         | 13.25 | 6002627     |

| Size      |         | PVDF x PRO45     |       |             |
|-----------|---------|------------------|-------|-------------|
|           |         | MOP 150 x 45 PSI |       |             |
| mm        | inch    | L1               | L2    | Part Number |
| 63 x 110  | 2 x 4   | 8.78             | 7.40  | 6102420     |
| 90 x 160  | 3 x 6   | 13.62            | 9.92  | 6102531     |
| 110 x 200 | 4 x 8   | 15.14            | 12.42 | 6102583     |
| 160 x 250 | 6 x 10  | 18.70            | 14.52 | 6102627     |
| 250 x 355 | 10 x 14 | 26.93            | 18.18 | 6102702     |
| 315 x 400 | 12 x 16 | 27.48            | 18.70 | 6102690     |

Includes EPDM gasket - does not include nuts and bolts.





**LOW POINT LEAK DETECTION STATION**

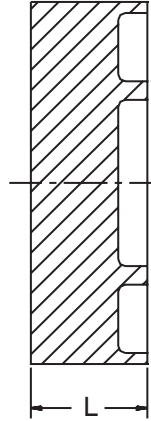
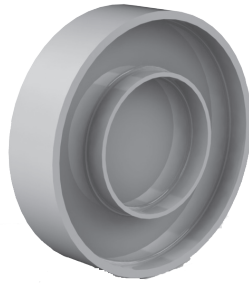
| Size      |        | PVDF x PVDF<br>MOP 150 PSI |       |       |       |             |
|-----------|--------|----------------------------|-------|-------|-------|-------------|
| mm        | inch   | D                          | W     | H1    | H2    | Part Number |
| 32 x 90   | 1 x 3  | 10.38                      | 9.63  | 19.13 | 36.00 | 6252134     |
| 63 x 110  | 2 x 4  | 8.00                       | 8.00  | 18.00 | 36.00 | 6252420     |
| 90 x 160  | 3 x 6  | 16.00                      | 9.75  | 13.38 | 36.00 | 6252531     |
| 110 x 200 | 4 x 8  | 14.50                      | 9.50  | 14.50 | 36.00 | 6252583     |
| 160 x 250 | 6 x 10 | 24.00                      | 13.00 | 14.00 | 36.00 | 6252627     |
| 200 x 315 | 8 x 12 | 18.75                      | 13.50 | 18.00 | 36.00 | 6252660     |

| Size      |         | PVDF x PRO150<br>MOP 150 PSI |       |       |       |             |
|-----------|---------|------------------------------|-------|-------|-------|-------------|
| mm        | inch    | D                            | W     | H1    | H2    | Part Number |
| 32 x 90   | 1 x 3   | 10.38                        | 9.63  | 19.13 | 36.00 | 6052134     |
| 63 x 110  | 2 x 4   | 8.00                         | 8.00  | 18.00 | 36.00 | 6052420     |
| 90 x 160  | 3 x 6   | 16.00                        | 9.75  | 13.38 | 36.00 | 6052531     |
| 110 x 200 | 4 x 8   | 14.50                        | 9.50  | 14.50 | 36.00 | 6052583     |
| 160 x 250 | 6 x 10  | 24.00                        | 13.00 | 14.00 | 36.00 | 6052627     |
| 200 x 315 | 8 x 12  | 18.75                        | 13.50 | 18.00 | 36.00 | 6052660     |
| 250 x 355 | 10 x 14 | 22.00                        | 13.50 | 18.00 | 36.00 | 6052702     |
| 315 x 400 | 12 x 16 | 23.00                        | 16.00 | 13.00 | 36.00 | 6052690     |

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |       |       |       |             |
|-----------|---------|----------------------------------|-------|-------|-------|-------------|
| mm        | inch    | D                                | W     | H1    | H2    | Part Number |
| 63 x 110  | 2 x 4   | 8.00                             | 8.00  | 18.00 | 36.00 | 6152420     |
| 90 x 160  | 3 x 6   | 16.00                            | 9.75  | 13.38 | 36.00 | 6152531     |
| 110 x 200 | 4 x 8   | 14.50                            | 9.50  | 14.50 | 36.00 | 6152583     |
| 160 x 250 | 6 x 10  | 24.00                            | 13.00 | 14.00 | 36.00 | 6152627     |
| 200 x 315 | 8 x 12  | 18.75                            | 13.50 | 18.00 | 36.00 | 6152660     |
| 250 x 355 | 10 x 14 | 22.00                            | 13.50 | 18.00 | 36.00 | 6152702     |
| 315 x 400 | 12 x 16 | 23.00                            | 16.00 | 13.00 | 36.00 | 6152690     |

Station consists of access tee, (two) -90's, 2" or 4" riser pipe (4' long), stub end, backing ring and flange. Includes EPDM gasket - does not include nuts and bolts. Access cover to be shipped separately and installed in field.

Double Wall Piping System

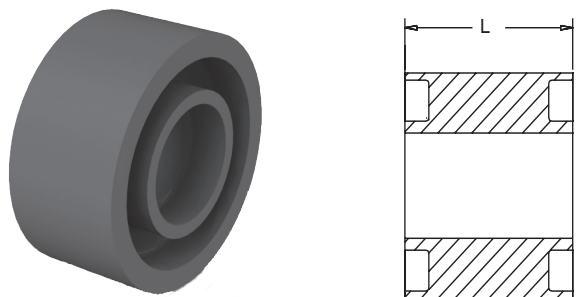


**CAP**

| Size      |        | PVDF x PVDF |             |
|-----------|--------|-------------|-------------|
|           |        | MOP 150 PSI |             |
| mm        | inch   | L           | Part Number |
| 32 x 90   | 1 x 3  | 2.00        | 6251134     |
| 63 x 110  | 2 x 4  | 2.00        | 6251420     |
| 90 x 160  | 3 x 6  | 2.00        | 6251531     |
| 110 x 200 | 4 x 8  | 2.00        | 6251583     |
| 160 x 250 | 6 x 10 | 2.00        | 6251627     |
| 200 x 315 | 8 x 12 | 2.00        | 6251660     |

Caps are not available in dissimilar material systems.





**SOLID DOGBONE®**

| Size      |        | PVDF x PVDF<br>MOP 150 PSI |             |
|-----------|--------|----------------------------|-------------|
| mm        | inch   | L                          | Part Number |
| 32 x 90   | 1 x 3  | 3.00                       | 6226134     |
| 63 x 110  | 2 x 4  | 3.00                       | 6226420     |
| 90 x 160  | 3 x 6  | 3.00                       | 6226531     |
| 110 x 200 | 4 x 8  | 3.00                       | 6226583     |
| 160 x 250 | 6 x 10 | 3.00                       | 6226627     |
| 200 x 315 | 8 x 12 | 3.00                       | 6226660     |

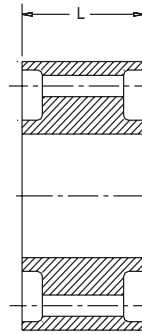
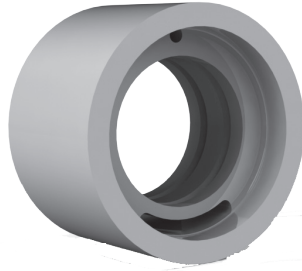
| Size      |         | PVDF x PRO150<br>MOP 150 PSI |             |
|-----------|---------|------------------------------|-------------|
| mm        | inch    | L                            | Part Number |
| 32 x 90   | 1 x 3   | 3.00                         | 6026134     |
| 63 x 110  | 2 x 4   | 3.00                         | 6026420     |
| 90 x 160  | 3 x 6   | 3.00                         | 6026531     |
| 110 x 200 | 4 x 8   | 3.00                         | 6026583     |
| 160 x 250 | 6 x 10  | 3.00                         | 6026627     |
| 200 x 315 | 8 x 12  | 3.00                         | 6026660     |
| 250 x 355 | 10 x 14 | 2.25                         | 6026702     |
| 315 x 400 | 12 x 16 | 2.25                         | 6026690     |

O-ring style Dogbone®.

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|---------|----------------------------------|-------------|
| mm        | inch    | L                                | Part Number |
| 63 x 110  | 2 x 4   | 3.00                             | 6132420     |
| 90 x 160  | 3 x 6   | 3.00                             | 6132531     |
| 110 x 200 | 4 x 8   | 3.00                             | 6132583     |
| 160 x 250 | 6 x 10  | 3.00                             | 6132627     |
| 200 x 315 | 8 x 12  | 3.00                             | 6132660     |
| 250 x 355 | 10 x 14 | 2.25                             | 6132702     |
| 315 x 400 | 12 x 16 | 2.25                             | 6132690     |

O-ring style Dogbone®.

Double Wall  
Piping System



**ANNULAR DOGBONE®**

| Size      |        | PVDF x PVDF<br>MOP 150 PSI |             |
|-----------|--------|----------------------------|-------------|
| mm        | inch   | L                          | Part Number |
| 32 x 90   | 1 x 3  | 3.0                        | 6229134     |
| 63 x 110  | 2 x 4  | 3.0                        | 6229420     |
| 90 x 160  | 3 x 6  | 3.0                        | 6229531     |
| 110 x 200 | 4 x 8  | 3.0                        | 6229583     |
| 160 x 250 | 6 x 10 | 3.0                        | 6229627     |
| 200 x 315 | 8 x 12 | 3.0                        | 6229660     |

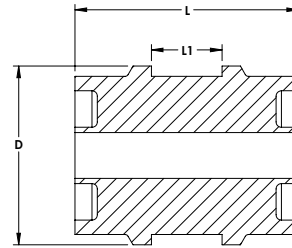
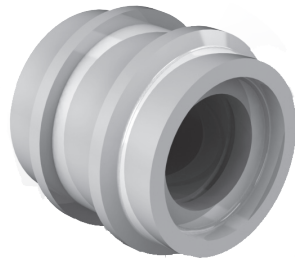
| Size      |         | PVDF x PRO150<br>MOP 150 PSI |             |
|-----------|---------|------------------------------|-------------|
| mm        | inch    | L                            | Part Number |
| 32 x 90   | 1 x 3   | 3.0                          | 6028134     |
| 63 x 110  | 2 x 4   | 3.0                          | 6028420     |
| 90 x 160  | 3 x 6   | 3.0                          | 6028531     |
| 110 x 200 | 4 x 8   | 3.0                          | 6028583     |
| 160 x 250 | 6 x 10  | 3.0                          | 6028627     |
| 200 x 315 | 8 x 12  | 3.0                          | 6028660     |
| 250 x 355 | 10 x 14 | 3.0                          | 6028702     |
| 315 x 400 | 12 x 16 | 3.0                          | 6028690     |

O-ring style Dogbone®.

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|---------|----------------------------------|-------------|
| mm        | inch    | L                                | Part Number |
| 63 x 110  | 2 x 4   | 3.0                              | 6135420     |
| 90 x 160  | 3 x 6   | 3.0                              | 6135531     |
| 110 x 200 | 4 x 8   | 3.0                              | 6135583     |
| 160 x 250 | 6 x 10  | 3.0                              | 6135627     |
| 200 x 315 | 8 x 12  | 3.0                              | 6135660     |
| 250 x 355 | 10 x 14 | 3.0                              | 6135702     |
| 315 x 400 | 12 x 16 | 3.0                              | 6135690     |

O-ring style Dogbone®.





**SOLID RESTRAINT DOGBONE®**

| Size      |        | PVDF x PVDF<br>MOP 150 PSI |      |       |             |
|-----------|--------|----------------------------|------|-------|-------------|
| mm        | inch   | L                          | L1   | D     | Part Number |
| 32 x 90   | 1 x 3  | 3.63                       | 1.63 | 4.54  | 6227134     |
| 63 x 110  | 2 x 4  | 3.63                       | 1.63 | 5.33  | 6227420     |
| 90 x 160  | 3 x 6  | 4.40                       | 2.40 | 7.30  | 6227531     |
| 110 x 200 | 4 x 8  | 4.40                       | 2.40 | 8.87  | 6227583     |
| 160 x 250 | 6 x 10 | 3.63                       | 1.63 | 10.84 | 6227627     |
| 200 x 315 | 8 x 12 | 3.63                       | 1.63 | 13.40 | 6227660     |

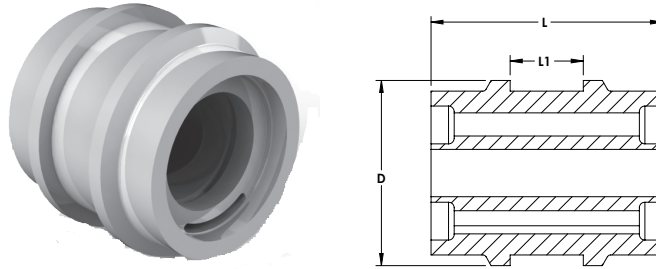
| Size      |         | PVDF x PRO150<br>MOP 150 PSI |      |       |             |
|-----------|---------|------------------------------|------|-------|-------------|
| mm        | inch    | L                            | L1   | D     | Part Number |
| 32 x 90   | 1 x 3   | 3.63                         | 1.63 | 4.54  | 6027134     |
| 63 x 110  | 2 x 4   | 3.63                         | 1.63 | 5.33  | 6027420     |
| 90 x 160  | 3 x 6   | 4.40                         | 2.40 | 7.30  | 6027531     |
| 110 x 200 | 4 x 8   | 4.40                         | 2.40 | 8.87  | 6027583     |
| 160 x 250 | 6 x 10  | 3.63                         | 1.63 | 10.84 | 6027627     |
| 200 x 315 | 8 x 12  | 3.63                         | 1.63 | 13.40 | 6027660     |
| 250 x 355 | 10 x 14 | 5.00                         | 1.58 | 14.75 | 6027702     |
| 315 x 400 | 12 x 16 | 5.00                         | 1.58 | 16.75 | 6027690     |

O-ring style Dogbone®

| Size      |         | PVDF x PRO45<br>MOP 150 x 45 PSI |      |       |             |
|-----------|---------|----------------------------------|------|-------|-------------|
| mm        | inch    | L                                | L1   | D     | Part Number |
| 63 x 110  | 2 x 4   | 3.63                             | 1.63 | 5.33  | 6133420     |
| 90 x 160  | 3 x 6   | 4.40                             | 2.40 | 7.30  | 6133531     |
| 110 x 200 | 4 x 8   | 4.40                             | 2.40 | 8.87  | 6133583     |
| 160 x 250 | 6 x 10  | 3.63                             | 1.63 | 10.84 | 6133627     |
| 200 x 315 | 8 x 12  | 3.63                             | 1.63 | 13.40 | 6133660     |
| 250 x 355 | 10 x 14 | 5.00                             | 1.58 | 14.75 | 6133702     |
| 315 x 400 | 12 x 16 | 5.00                             | 1.58 | 16.75 | 6133690     |

O-ring style Dogbone®

**Double Wall  
Piping System**



**ANNULAR RESTRAINT DOGBONE®**

| Size      |        | PVDF x PVDF<br>MOP 150 PSI |      |       |             |
|-----------|--------|----------------------------|------|-------|-------------|
|           |        | L                          | L1   | D     | Part Number |
| mm        | inch   |                            |      |       |             |
| 32 x 90   | 1 x 3  | 3.63                       | 1.63 | 4.54  | 6237134     |
| 63 x 110  | 2 x 4  | 3.63                       | 1.63 | 5.33  | 6237420     |
| 90 x 160  | 3 x 6  | 4.40                       | 2.40 | 7.30  | 6237531     |
| 110 x 200 | 4 x 8  | 4.40                       | 2.40 | 8.87  | 6237583     |
| 160 x 250 | 6 x 10 | 3.63                       | 1.63 | 10.84 | 6237627     |
| 200 x 315 | 8 x 12 | 3.63                       | 1.63 | 13.40 | 6237660     |

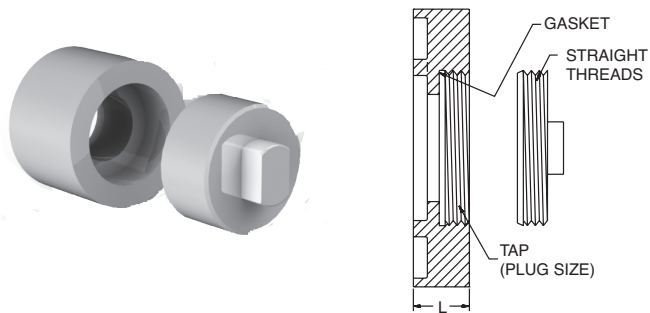
| Size      |         | PVDF x P150<br>MOP 150 PSI |      |       |             |
|-----------|---------|----------------------------|------|-------|-------------|
|           |         | L                          | L1   | D     | Part Number |
| mm        | inch    |                            |      |       |             |
| 32 x 90   | 1 x 3   | 3.63                       | 1.63 | 4.54  | 6029134     |
| 63 x 110  | 2 x 4   | 3.63                       | 1.63 | 5.33  | 6029420     |
| 90 x 160  | 3 x 6   | 4.40                       | 2.40 | 7.30  | 6029531     |
| 110 x 200 | 4 x 8   | 4.40                       | 2.40 | 8.87  | 6029583     |
| 160 x 250 | 6 x 10  | 3.63                       | 1.63 | 10.84 | 6029627     |
| 200 x 315 | 8 x 12  | 3.63                       | 1.63 | 13.40 | 6029660     |
| 250 x 355 | 10 x 14 | 5.00                       | 1.58 | 14.75 | 6029702     |
| 315 x 400 | 12 x 16 | 5.00                       | 1.58 | 16.75 | 6029690     |

O-ring style Dogbone®

| Size      |         | PVDF x P45<br>MOP 150 x 45 PSI |      |       |             |
|-----------|---------|--------------------------------|------|-------|-------------|
|           |         | L                              | L1   | D     | Part Number |
| mm        | inch    |                                |      |       |             |
| 63 x 110  | 2 x 4   | 3.63                           | 1.63 | 5.33  | 6136420     |
| 90 x 160  | 3 x 6   | 4.40                           | 2.40 | 7.30  | 6136531     |
| 110 x 200 | 4 x 8   | 4.40                           | 2.40 | 8.87  | 6136583     |
| 160 x 250 | 6 x 10  | 3.63                           | 1.63 | 10.84 | 6136627     |
| 200 x 315 | 8 x 12  | 3.63                           | 1.63 | 13.40 | 6136660     |
| 250 x 355 | 10 x 14 | 5.00                           | 1.58 | 14.75 | 6136702     |
| 315 x 400 | 12 x 16 | 5.00                           | 1.58 | 16.75 | 6136690     |

O-ring style Dogbone®





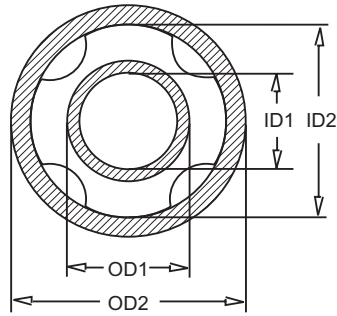
**CLEANOUT WITH PLUG\***

| Size      |        | PVDF x PVDF |      |             |
|-----------|--------|-------------|------|-------------|
|           |        | MOP 5 PSI   |      |             |
| mm        | inch   | L           | Tap  | Part Number |
| 32 x 90   | 1 x 3  | 3.00        | 2.00 | 6232134     |
| 63 x 110  | 2 x 4  | 3.00        | 3.00 | 6232420     |
| 90 x 160  | 3 x 6  | 3.00        | 4.00 | 6232531     |
| 110 x 200 | 4 x 8  | 3.00        | 4.00 | 6232583     |
| 160 x 250 | 6 x 10 | 3.00        | 6.00 | 6232627     |
| 200 x 315 | 8 x 12 | 3.00        | 6.00 | 6232660     |

\*Includes EPDM gasket. Threaded plug rated 5psi

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Duo-Pro®  
PVDF



**SIMULTANEOUS WELD PIPE\*** 5 meter (16.4') lengths

| Size      |       | ECTFE x ECTFE |      |      |      |             |
|-----------|-------|---------------|------|------|------|-------------|
|           |       | MOP 150 PSI   |      |      |      |             |
| mm        | inch  | OD1           | OD2  | ID1  | ID2  | Part Number |
| 32 x 90   | 1 x 3 | 1.26          | 3.54 | 1.07 | 3.32 | 8802134     |
| 63 x 110  | 2 x 4 | 2.48          | 4.33 | 2.24 | 4.06 | 8802420     |
| 90 x 160  | 3 x 6 | 3.54          | 6.30 | 3.20 | 6.14 | 8802531     |
| 110 x 200 | 4 x 8 | 4.73          | 7.87 | 5.91 | 7.48 | 8802583     |

\*Pipe is sold in 5 meter lengths (16.4').

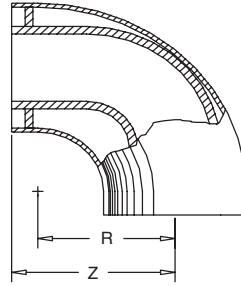
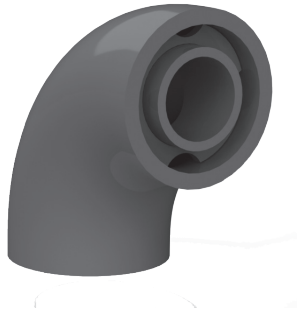
**STAGGERED WELD PIPE\*** 5 meter (16.4') lengths

| Size      |       | ECTFE x PRO150 |      |      |      |             |
|-----------|-------|----------------|------|------|------|-------------|
|           |       | MOP 150 PSI    |      |      |      |             |
| mm        | inch  | OD1            | OD2  | ID1  | ID2  | Part Number |
| 32 x 90   | 1 x 3 | 1.26           | 3.54 | 1.07 | 2.90 | 8102134     |
| 63 x 110  | 2 x 4 | 2.48           | 4.33 | 2.24 | 3.54 | 8102420     |
| 90 x 160  | 3 x 6 | 3.54           | 6.30 | 3.32 | 5.15 | 8102531     |
| 110 x 200 | 4 x 8 | 4.33           | 7.87 | 4.06 | 6.44 | 8102583     |

\*Staggered welding of dissimilar materials requires two welding machines and special installation. Asahi Field tech training highly recommended.

| Size      |       | ECTFE x PRO45    |      |      |      |             |
|-----------|-------|------------------|------|------|------|-------------|
|           |       | MOP 150 x 45 PSI |      |      |      |             |
| mm        | inch  | OD1              | OD2  | ID1  | ID2  | Part Number |
| 63 x 110  | 2 x 4 | 2.48             | 4.33 | 4.06 | 2.24 | 8202420     |
| 90 x 160  | 3 x 6 | 3.54             | 6.30 | 5.91 | 3.32 | 8202531     |
| 110 x 200 | 4 x 8 | 4.33             | 7.87 | 7.39 | 4.06 | 8202583     |

\*Staggered welding of dissimilar materials requires two welding machines and special installation. Asahi Field tech training highly recommended.



**90 DEGREE ELBOW**

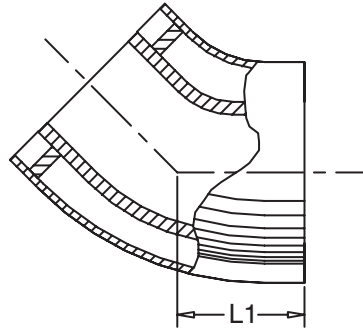
| Size      |       | ECTFE x ECTFE |      |             |
|-----------|-------|---------------|------|-------------|
|           |       | MOP 150 PSI   |      |             |
| mm        | inch  | Z             | R    | Part Number |
| 32 x 90   | 1 x 3 | 4.06          | 3.58 | 8805134     |
| 63 x 110  | 2 x 4 | 4.85          | 4.25 | 8805420     |
| 90 x 160  | 3 x 6 | 7.08          | 6.10 | 8805531     |
| 110 x 200 | 4 x 8 | 7.87          | 7.68 | 8805583     |

| Size      |       | ECTFE x PRO150 |      |             |
|-----------|-------|----------------|------|-------------|
|           |       | MOP 150 PSI    |      |             |
| mm        | inch  | Z              | R    | Part Number |
| 32 x 90   | 1 x 3 | 3.94           | 3.35 | 8105134     |
| 63 x 110  | 2 x 4 | 4.88           | 4.13 | 8105420     |
| 90 x 160  | 3 x 6 | 7.08           | 6.10 | 8105531     |
| 110 x 200 | 4 x 8 | 7.87           | 7.68 | 8105583     |

| Size      |       | ECTFE x PRO45    |      |             |
|-----------|-------|------------------|------|-------------|
|           |       | MOP 150 x 45 PSI |      |             |
| mm        | inch  | Z                | R    | Part Number |
| 63 x 110  | 2 x 4 | 4.72             | 4.33 | 8205420     |
| 90 x 160  | 3 x 6 | 6.69             | 6.10 | 8205531     |
| 110 x 200 | 4 x 8 | 8.66             | 7.76 | 8205583     |





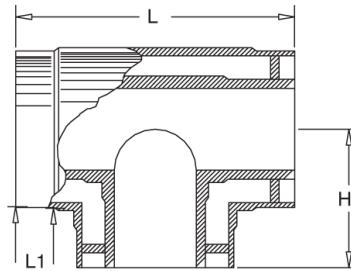
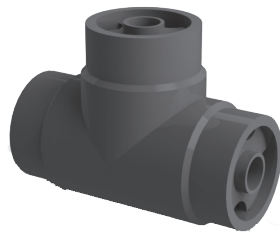


**45 DEGREE ELBOW**

| Size      |       | ECTFE x ECTFE |             |
|-----------|-------|---------------|-------------|
|           |       | MOP 150 PSI   |             |
| mm        | inch  | L1            | Part Number |
| 32 x 90   | 1 x 3 | 5.00          | 8808134     |
| 63 x 110  | 2 x 4 | 6.00          | 8808420     |
| 90 x 160  | 3 x 6 | 6.00          | 8808531     |
| 110 x 200 | 4 x 8 | 6.50          | 8808583     |

| Size      |       | ECTFE x PRO150 |             |
|-----------|-------|----------------|-------------|
|           |       | MOP 150 PSI    |             |
| mm        | inch  | L1             | Part Number |
| 32 x 90   | 1 x 3 | 4.00           | 8108134     |
| 63 x 110  | 2 x 4 | 4.25           | 8108420     |
| 90 x 160  | 3 x 6 | 6.00           | 8108531     |
| 110 x 200 | 4 x 8 | 6.50           | 8108583     |

| Size      |       | ECTFE x PRO45    |             |
|-----------|-------|------------------|-------------|
|           |       | MOP 150 x 45 PSI |             |
| mm        | inch  | L1               | Part Number |
| 63 x 110  | 2 x 4 | 5.00             | 8208420     |
| 90 x 160  | 3 x 6 | 6.00             | 8208531     |
| 110 x 200 | 4 x 8 | 6.00             | 8208583     |

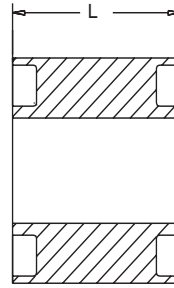
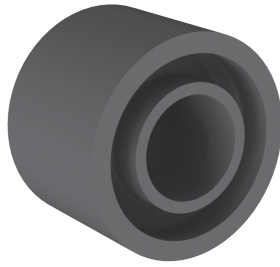


**TEE**

| Size      |       | ECTFE x ECTFE |      |             |
|-----------|-------|---------------|------|-------------|
|           |       | MOP 150 PSI   |      |             |
| mm        | inch  | L1            | H1   | Part Number |
| 32 x 90   | 1 x 3 | 7.13          | 3.62 | 8811134     |
| 63 x 110  | 2 x 4 | 8.50          | 4.33 | 8811420     |
| 90 x 160  | 3 x 6 | 10.98         | 5.51 | 8811531     |
| 110 x 200 | 4 x 8 | 17.56         | 8.78 | 8811583     |

| Size      |       | ECTFE x PRO150 |      |             |
|-----------|-------|----------------|------|-------------|
|           |       | MOP 150 PSI    |      |             |
| mm        | inch  | L1             | H1   | Part Number |
| 32 x 90   | 1 x 3 | 8.15           | 4.17 | 8111134     |
| 63 x 110  | 2 x 4 | 9.45           | 4.72 | 8111420     |
| 90 x 160  | 3 x 6 | 12.40          | 6.30 | 8111531     |
| 110 x 200 | 4 x 8 | 15.59          | 7.80 | 8111583     |

| Size      |       | ECTFE x PRO45    |      |             |
|-----------|-------|------------------|------|-------------|
|           |       | MOP 150 x 45 PSI |      |             |
| mm        | inch  | L1               | H1   | Part Number |
| 63 x 110  | 2 x 4 | 8.46             | 4.29 | 8211420     |
| 90 x 160  | 3 x 6 | 10.94            | 5.51 | 8211531     |
| 110 x 200 | 4 x 8 | 13.39            | 6.69 | 8211583     |



**SOLID DOGBONE®**

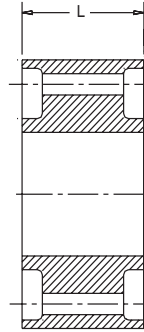
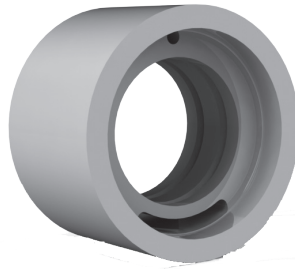
| Size     |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|----------|-------|------------------------------|-------------|
| mm       | inch  | L                            | Part Number |
| 32 x 90  | 1 x 3 | 3                            | 8830134     |
| 63 x 110 | 2 x 4 | 3                            | 8830420     |

| Size      |       | ECTFE x PRO150<br>MOP 150 PSI |       |             |
|-----------|-------|-------------------------------|-------|-------------|
| mm        | inch  | L                             | Oring | Part Number |
| 32 x 90   | 1 x 3 | 3                             | 2-322 | 8130134     |
| 63 x 110  | 2 x 4 | 3                             | 2-333 | 8130420     |
| 90 x 160  | 3 x 6 | 3                             | 2-341 | 8130531     |
| 110 x 200 | 4 x 8 | 3                             | 2-348 | 8130583     |

O-ring style Dogbone®

| Size      |       | ECTFE x PRO45<br>MOP 150 x 45 PSI |       |             |
|-----------|-------|-----------------------------------|-------|-------------|
| mm        | inch  | L                                 | Oring | Part Number |
| 63 x 110  | 2 x 4 | 3                                 | 2-333 | 8230420     |
| 90 x 160  | 3 x 6 | 3                                 | 2-341 | 8230531     |
| 110 x 200 | 4 x 8 | 3                                 | 2-348 | 8230583     |

O-ring style Dogbone®.



**ANNULAR DOGBONE®**

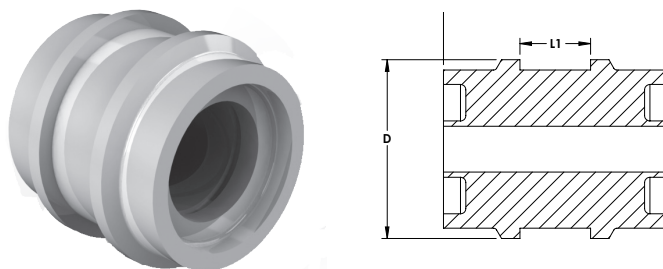
| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-----------|-------|------------------------------|-------------|
| mm        | inch  | L                            | Part Number |
| 32 x 90   | 1 x 3 | 3                            | 8845134     |
| 63 x 110  | 2 x 4 | 3                            | 8845420     |
| 90 x 160  | 3 x 6 | 2.5                          | 8845531     |
| 110 x 200 | 4 x 8 | 2.5                          | 8845583     |

| Size      |       | ECTFE x PRO150<br>MOP 150 PSI |             |
|-----------|-------|-------------------------------|-------------|
| mm        | inch  | L                             | Part Number |
| 32 x 90   | 1 x 3 | 3                             | 8145134     |
| 63 x 110  | 2 x 4 | 3                             | 8145420     |
| 90 x 160  | 3 x 6 | 3                             | 8145531     |
| 110 x 200 | 4 x 8 | 3                             | 8145583     |

O-ring style Dogbone®.

| Size      |       | ECTFE x PRO45<br>MOP 150 x 45 PSI |             |
|-----------|-------|-----------------------------------|-------------|
| mm        | inch  | L                                 | Part Number |
| 63 x 110  | 2 x 4 | 3                                 | 8245420     |
| 90 x 160  | 3 x 6 | 3                                 | 8245531     |
| 110 x 200 | 4 x 8 | 3                                 | 8245583     |

O-ring style Dogbone®.



**SOLID RESTRAINT DOGBONE®**

| Size     |       | ECTFE x ECTFE* |      |      |             |
|----------|-------|----------------|------|------|-------------|
|          |       | MOP 150 PSI    |      |      |             |
| mm       | inch  | L              | L1   | OD   | Part Number |
| 32 x 90  | 1 x 3 | 3.63           | 1.63 | 4.54 | 8885134     |
| 63 x 110 | 2 x 4 | 3.63           | 1.63 | 5.33 | 8885420     |

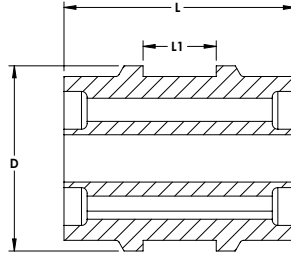
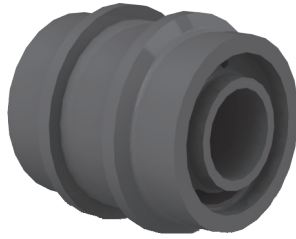
\*3 x 6 and 4 x 8 sizes are not available.

| Size      |       | ECTFE x PRO150 |      |      |             |
|-----------|-------|----------------|------|------|-------------|
|           |       | MOP 150 PSI    |      |      |             |
| mm        | inch  | L              | L1   | OD   | Part Number |
| 32 x 90   | 1 x 3 | 3.63           | 1.63 | 4.54 | 8185134     |
| 63 x 110  | 2 x 4 | 3.63           | 1.63 | 5.33 | 8185420     |
| 90 x 160  | 3 x 6 | 4.40           | 2.40 | 7.30 | 8185531     |
| 110 x 200 | 4 x 8 | 4.40           | 2.40 | 8.87 | 8185583     |

O-ring style Dogbone®.

| Size      |       | ECTFE x PRO45    |      |      |             |
|-----------|-------|------------------|------|------|-------------|
|           |       | MOP 150 x 45 PSI |      |      |             |
| mm        | inch  | L                | L1   | OD   | Part Number |
| 63 x 110  | 2 x 4 | 3.63             | 1.63 | 5.33 | 8285420     |
| 90 x 160  | 3 x 6 | 4.40             | 2.40 | 7.30 | 8285531     |
| 110 x 200 | 4 x 8 | 4.40             | 2.40 | 8.87 | 8285583     |

O-ring style Dogbone®.



**ANNULAR RESTRAINT DOGBONE®**

| Size     |       | ECTFE x ECTFE* |      |      |             |
|----------|-------|----------------|------|------|-------------|
|          |       | MOP 150 PSI    |      |      |             |
| mm       | inch  | L              | L1   | OD   | Part Number |
| 32 x 90  | 1 x 3 | 3.63           | 1.63 | 4.54 | 8895134     |
| 63 x 110 | 2 x 4 | 3.63           | 1.63 | 5.33 | 8895420     |

\*3 x 6 and 4 x 8 sizes are not available.

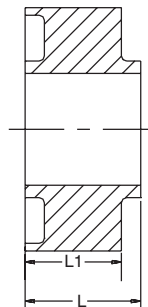
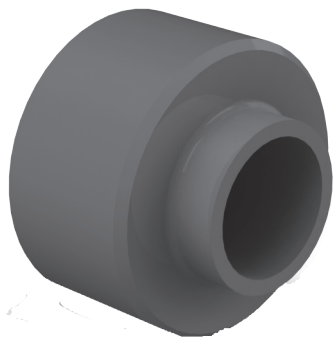
| Size      |       | ECTFE x PRO150 |      |      |             |
|-----------|-------|----------------|------|------|-------------|
|           |       | MOP 150 PSI    |      |      |             |
| mm        | inch  | L              | L1   | OD   | Part Number |
| 32 x 90   | 1 x 3 | 3.63           | 1.63 | 4.54 | 8195134     |
| 63 x 110  | 2 x 4 | 3.63           | 1.63 | 5.33 | 8195420     |
| 90 x 160  | 3 x 6 | 4.40           | 2.40 | 7.30 | 8195531     |
| 110 x 200 | 4 x 8 | 4.40           | 2.40 | 8.87 | 8195583     |

O-ring style Dogbone®.

| Size      |       | ECTFE x PRO45    |      |      |             |
|-----------|-------|------------------|------|------|-------------|
|           |       | MOP 150 x 45 PSI |      |      |             |
| mm        | inch  | L                | L1   | OD   | Part Number |
| 63 x 110  | 2 x 4 | 3.63             | 1.63 | 5.33 | 8295420     |
| 90 x 160  | 3 x 6 | 4.40             | 2.40 | 7.30 | 8295531     |
| 110 x 200 | 4 x 8 | 4.40             | 2.40 | 8.87 | 8295583     |

O-ring style Dogbone®.





**DOGBONE® END TERMINATION**

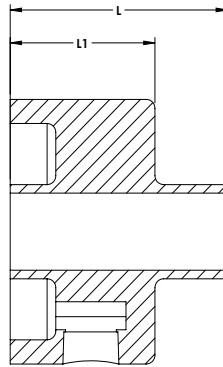
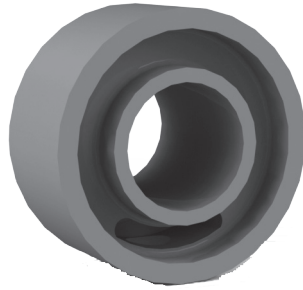
| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-----------|-------|------------------------------|-------------|
| mm        | inch  | L                            | Part Number |
| 32 x 90   | 1 x 3 | 3.60                         | 8833134     |
| 63 x 110  | 2 x 4 | 3.60                         | 8833420     |
| 90 x 160  | 3 x 6 | 2.50                         | 8833531     |
| 110 x 200 | 4 x 8 | 2.50                         | 8833583     |

| Size      |       | ECTFE X PRO150<br>MOP 150 PSI |             |
|-----------|-------|-------------------------------|-------------|
| mm        | inch  | L                             | Part Number |
| 32 x 90   | 1 x 3 | 3.60                          | 8133134     |
| 63 x 110  | 2 x 4 | 3.80                          | 8133420     |
| 90 x 160  | 3 x 6 | 4.40                          | 8133531     |
| 110 x 200 | 4 x 8 | 4.00                          | 8133583     |

O-ring style Dogbone®.

| Size      |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |             |
|-----------|-------|-----------------------------------|-------------|
| mm        | inch  | L                                 | Part Number |
| 63 x 110  | 2 x 4 | 3.60                              | 8233420     |
| 90 x 160  | 3 x 6 | 4.40                              | 8233531     |
| 110 x 200 | 4 x 8 | 4.40                              | 8233583     |

O-ring style Dogbone®.



**DOG BONE® END TERMINATION WITH 1/2" TAP**

| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-----------|-------|------------------------------|-------------|
| mm        | inch  | L                            | Part Number |
| 32 x 90   | 1 x 3 | 3.00                         | 8834134     |
| 63 x 110  | 2 x 4 | 3.00                         | 8834420     |
| 90 x 160  | 3 x 6 | 2.50                         | 8834531     |
| 110 x 200 | 4 x 8 | 2.50                         | 8834583     |

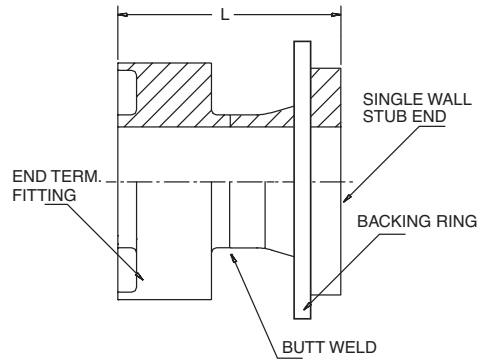
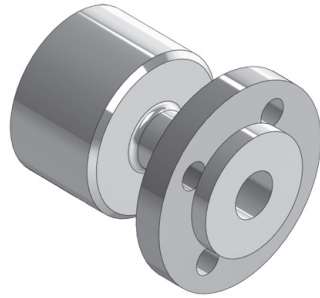
| Size      |       | ECTFE X PRO150<br>MOP 150 PSI |             |
|-----------|-------|-------------------------------|-------------|
| mm        | inch  | L                             | Part Number |
| 32 x 90   | 1 x 3 | 3.00                          | 8134134     |
| 63 x 110  | 2 x 4 | 3.00                          | 8134420     |
| 90 x 160  | 3 x 6 | 3.00                          | 8134531     |
| 110 x 200 | 4 x 8 | 3.00                          | 8134583     |

O-ring style Dogbone®.

| Size      |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |             |
|-----------|-------|-----------------------------------|-------------|
| mm        | inch  | L                                 | Part Number |
| 63 x 110  | 2 x 4 | 3.00                              | 8234420     |
| 90 x 160  | 3 x 6 | 3.00                              | 8234531     |
| 110 x 200 | 4 x 8 | 3.00                              | 8234583     |

O-ring style Dogbone®.





**DOGBONE® FLANGED END TERMINATION**

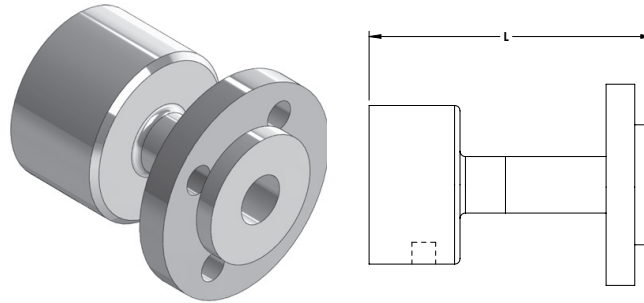
| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-----------|-------|------------------------------|-------------|
| mm        | inch  | L                            | Part Number |
| 32 x 90   | 1 x 3 | 4.75                         | 8825134     |
| 63 x 110  | 2 x 4 | 4.75                         | 8825420     |
| 90 x 160  | 3 x 6 | 5.50                         | 8825531     |
| 110 x 200 | 4 x 8 | 5.50                         | 8825583     |

| Size      |       | ECTFE X PRO150<br>MOP 150 PSI |             |
|-----------|-------|-------------------------------|-------------|
| mm        | inch  | L                             | Part Number |
| 32 x 90   | 1 x 3 | 4.75                          | 8125134     |
| 63 x 110  | 2 x 4 | 4.75                          | 8125420     |
| 90 x 160  | 3 x 6 | 6.00                          | 8125531     |
| 110 x 200 | 4 x 8 | 6.00                          | 8125583     |

O-ring style Dogbone®.

| Size      |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |             |
|-----------|-------|-----------------------------------|-------------|
| mm        | inch  | L                                 | Part Number |
| 63 x 110  | 2 x 4 | 4.75                              | 8225420     |
| 90 x 160  | 3 x 6 | 6.00                              | 8225531     |
| 110 x 200 | 4 x 8 | 6.00                              | 8225583     |

O-ring style Dogbone®.



**DOGBONE® FLANGED END TERMINATION WITH 1/2" TAP**

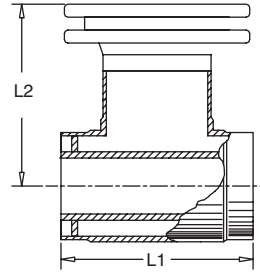
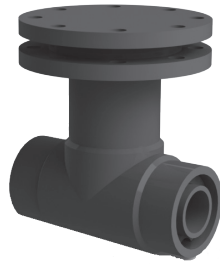
| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-----------|-------|------------------------------|-------------|
| mm        | inch  | L                            | Part Number |
| 32 x 90   | 1 x 3 | 4.75                         | 8826134     |
| 63 x 110  | 2 x 4 | 4.75                         | 8826420     |
| 90 x 160  | 3 x 6 | 5.50                         | 8826531     |
| 110 x 200 | 4 x 8 | 5.50                         | 8826583     |

| Size      |       | ECTFE X PRO150<br>MOP 150 PSI |             |
|-----------|-------|-------------------------------|-------------|
| mm        | inch  | L                             | Part Number |
| 32 x 90   | 1 x 3 | 4.75                          | 8126134     |
| 63 x 110  | 2 x 4 | 4.75                          | 8126420     |
| 90 x 160  | 3 x 6 | 6.00                          | 8126531     |
| 110 x 200 | 4 x 8 | 6.00                          | 8125583     |

O-ring style Dogbone®.

| Size      |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |             |
|-----------|-------|-----------------------------------|-------------|
| mm        | inch  | L                                 | Part Number |
| 63 x 110  | 2 x 4 | 4.75                              | 8226420     |
| 90 x 160  | 3 x 6 | 6.00                              | 8226531     |
| 110 x 200 | 4 x 8 | 6.00                              | 8226583     |

O-ring style Dogbone®.



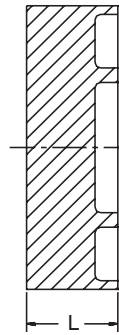
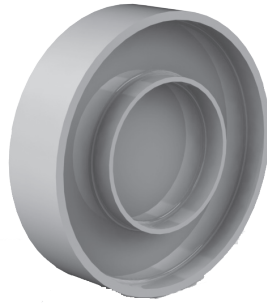
**ACCESS TEE WITH FLANGED COVER\***

| Size      |       | ECTFE x ECTFE<br>MOP 150 PSI |       |             |
|-----------|-------|------------------------------|-------|-------------|
| mm        | inch  | L1                           | L2    | Part Number |
| 32 x 90   | 1 x 3 | 7.25                         | 6.63  | 8865134     |
| 63 x 110  | 2 x 4 | 9.50                         | 7.25  | 8865420     |
| 90 x 160  | 3 x 6 | 11.00                        | 8.00  | 8865531     |
| 110 x 200 | 4 x 8 | 17.50                        | 12.75 | 8865583     |

| Size      |       | ECTFE X PRO150<br>MOP 150 PSI |       |             |
|-----------|-------|-------------------------------|-------|-------------|
| mm        | inch  | L1                            | L2    | Part Number |
| 32 x 90   | 1 x 3 | 7.25                          | 6.63  | 8165134     |
| 63 x 110  | 2 x 4 | 9.50                          | 7.25  | 8165420     |
| 90 x 160  | 3 x 6 | 13.00                         | 9.75  | 8165531     |
| 110 x 200 | 4 x 8 | 15.63                         | 11.00 | 8165583     |

| Size      |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |       |             |
|-----------|-------|-----------------------------------|-------|-------------|
| mm        | inch  | L1                                | L2    | Part Number |
| 63 x 110  | 2 x 4 | 9.50                              | 7.25  | 8265420     |
| 90 x 160  | 3 x 6 | 13.00                             | 9.75  | 8265531     |
| 110 x 200 | 4 x 8 | 15.63                             | 11.00 | 8265583     |

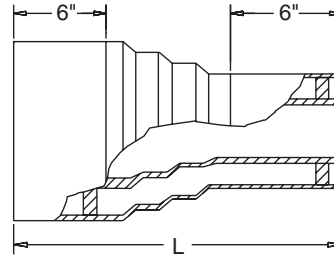
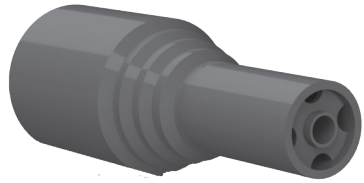
Includes EPDM gasket.



**CAP\***

| Size      |       | ECTFE x ECTFE |             |
|-----------|-------|---------------|-------------|
|           |       | MOP 150 PSI   |             |
| mm        | inch  | L             | Part Number |
| 32 x 90   | 1 x 3 | 2.00          | 8815134     |
| 63 x 110  | 2 x 4 | 2.00          | 8815420     |
| 90 x 160  | 3 x 6 | 2.50          | 8815420     |
| 110 x 200 | 4 x 8 | 2.50          | 8815420     |

\*Caps are not available for dissimilar material systems



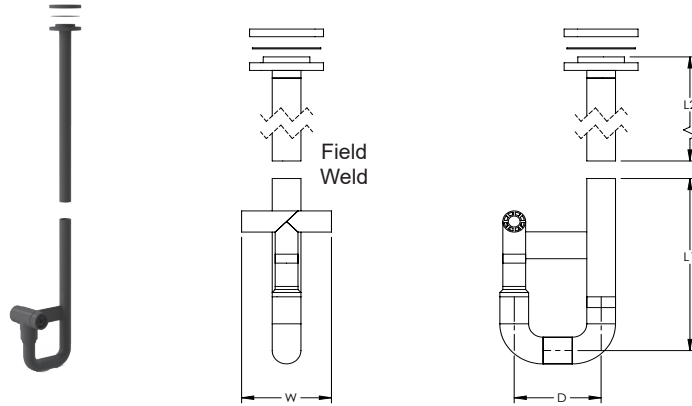
**CONCENTRIC REDUCER**

| Size              |            | ECTFE x ECTFE<br>MOP 150 PSI |             |
|-------------------|------------|------------------------------|-------------|
| mm                | inch       | L                            | Part Number |
| (63x32)(110x90)   | (2x1)(4x3) | 16.50                        | 8820740     |
| (90x63)(160x110)  | (3x2)(6x4) | 15.75                        | 8820743     |
| (110x90)(200x160) | (4x3)(8x6) | 15.00                        | 8820746     |

| Size              |            | ECTFE X PRO150<br>MOP 150 PSI |             |
|-------------------|------------|-------------------------------|-------------|
| mm                | inch       | L                             | Part Number |
| (63x32)(110x90)   | (2x1)(4x3) | 16.50                         | 8120740     |
| (90x32)(160x90)   | (3x1)(6x3) | 15.25                         | 8120741     |
| (90x63)(160x110)  | (3x2)(6x4) | 17.75                         | 8120743     |
| (110x63)(200x110) | (4x2)(8x4) | 14.50                         | 8120744     |

| Size              |            | ECTFE X PRO45<br>MOP 150 X 45 PSI |             |
|-------------------|------------|-----------------------------------|-------------|
| mm                | inch       | L                                 | Part Number |
| (63x32)(110x90)   | (2x1)(4x3) | 16.50                             | 8220740     |
| (90x32)(160x90)   | (3x1)(6x3) | 15.25                             | 8220741     |
| (90x63)(160x110)  | (3x2)(6x4) | 17.75                             | 8220743     |
| (110x63)(200x110) | (4x2)(8x4) | 14.50                             | 8220744     |





**LOW POINT LEAK DETECTION STATION**

| Size      |       | Dimensions |      |       |       | ECTFE X ECTFE<br>MOP 150 PSI |
|-----------|-------|------------|------|-------|-------|------------------------------|
| mm        | inch  | D          | W    | H1    | H2    | Part Number                  |
| 32 x 90   | 1 x 3 | 10.38      | 9.63 | 19.13 | 36.00 | 8835134                      |
| 63 x 110  | 2 x 4 | 8.00       | 8.00 | 18.00 | 36.00 | 8835420                      |
| 90 x 160  | 3 x 6 | 16.00      | 9.75 | 12.38 | 36.00 | 8835531                      |
| 110 x 200 | 4 x 8 | 14.50      | 9.50 | 14.50 | 36.00 | 8835583                      |

| Size      |       | Dimensions |      |       |       | ECTFE X PRO150<br>MOP 150 PSI |
|-----------|-------|------------|------|-------|-------|-------------------------------|
| mm        | inch  | D          | W    | H1    | H2    | Part Number                   |
| 32 x 90   | 1 x 3 | 10.38      | 9.63 | 19.13 | 36.00 | 8135134                       |
| 63 x 110  | 2 x 4 | 8.00       | 8.00 | 18.00 | 36.00 | 8135420                       |
| 90 x 160  | 3 x 6 | 16.00      | 9.75 | 13.38 | 36.00 | 8135531                       |
| 110 x 200 | 4 x 8 | 14.50      | 9.50 | 14.50 | 36.00 | 8135583                       |

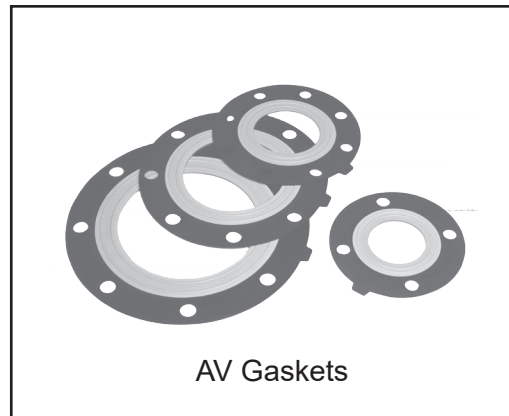
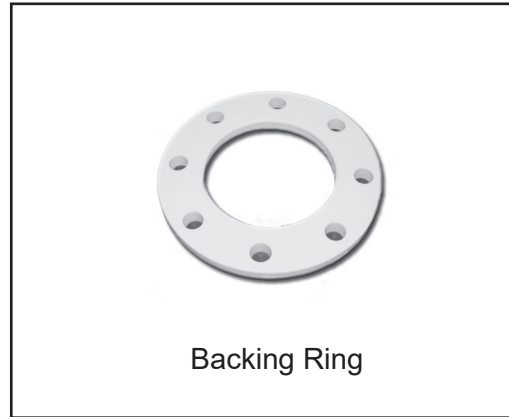
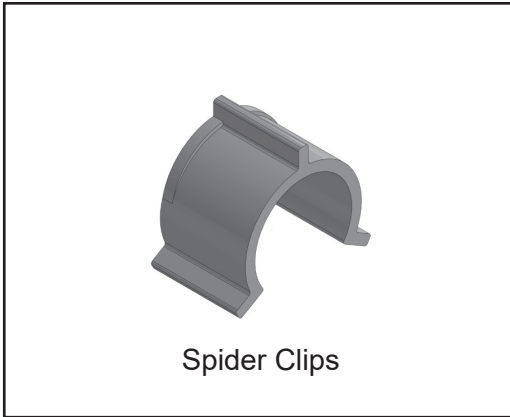
| Size      |       | Dimensions |      |       |       | ECTFE X PRO45<br>MOP 150 X 45 PSI |
|-----------|-------|------------|------|-------|-------|-----------------------------------|
| mm        | inch  | D          | W    | H1    | H2    | Part Number                       |
| 63 x 110  | 2 x 4 | 8.00       | 8.00 | 18.00 | 36.00 | 8235420                           |
| 90 x 160  | 3 x 6 | 16.00      | 9.75 | 13.38 | 36.00 | 8235531                           |
| 110 x 200 | 4 x 8 | 14.50      | 9.50 | 14.50 | 36.00 | 8235583                           |

Station consists of access tee, (2) 90's, 2" or 4" riser pipe (4' long), stub end, backing ring and flange. Includes EPDM gasket - does not include nuts and bolts. Access cover to be shipped separately and installed in field.

Duo-Pro®  
Piping System

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# Piping System Accessories



Accessories



**BACKING RING\***

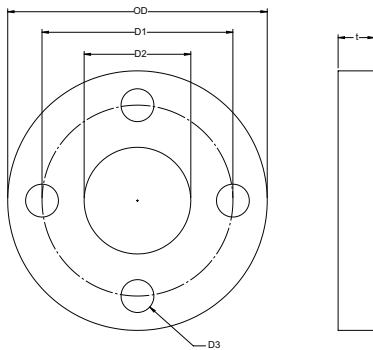


**Backing Ring**

| Size    |       | Description | PP - Grey   |
|---------|-------|-------------|-------------|
| mm      | inch  |             | Part Number |
| 20      | 1/2   | ANSI 150#   | 5046005     |
| 25      | 3/4   | ANSI 150#   | 5046007     |
| 32      | 1     | ANSI 150#   | 5046010     |
| 40      | 1-1/4 | ANSI 150#   | 5046012     |
| 50      | 1-1/2 | ANSI 150#   | 5046015     |
| 63      | 2     | ANSI 150#   | 5046020     |
| 75      | 2-1/2 | ANSI 150#   | 5046025     |
| 90      | 3     | ANSI 150#   | 5046030     |
| 110     | 4     | ANSI 150#   | 5046040     |
| 160     | 6     | ANSI 150#   | 5046060     |
| 200/225 | 8     | ANSI 150#   | 5046080     |
| 250/280 | 10    | ANSI 150#   | 5046100     |
| 315     | 12    | ANSI 150#   | 5046120     |

\*DIN bolt pattern PN 10/16 available.

**Accessories**



| Size    |       | Dimensions |        |        |       |       |        |                 |
|---------|-------|------------|--------|--------|-------|-------|--------|-----------------|
| mm      | inch  | OD         | D1     | D2     | D3    | t     | Weight | # of Bolt Holes |
| 20      | 1/2   | 3.740      | 2.380  | 1.102  | 0.630 | 0.472 | 0.463  | 4               |
| 25      | 3/4   | 4.016      | 2.750  | 1.339  | 0.630 | 0.472 | 0.529  | 4               |
| 32      | 1     | 4.488      | 3.120  | 1.654  | 0.630 | 0.630 | 0.807  | 4               |
| 40      | 1-1/4 | 5.118      | 3.500  | 2.008  | 0.630 | 0.630 | 1.235  | 4               |
| 50      | 1-1/2 | 5.236      | 3.880  | 2.441  | 0.630 | 0.709 | 1.193  | 4               |
| 63      | 2     | 6.378      | 4.750  | 3.071  | 0.787 | 0.709 | 1.788  | 4               |
| 75      | 2-1/2 | 7.244      | 5.500  | 3.622  | 0.787 | 0.709 | 2.352  | 4               |
| 90      | 3     | 7.638      | 6.000  | 4.370  | 0.787 | 0.709 | 2.271  | 4               |
| 110     | 4     | 9.016      | 7.500  | 5.236  | 0.787 | 0.709 | 3.342  | 8               |
| 160     | 6     | 11.142     | 9.500  | 7.008  | 0.866 | 0.945 | 5.115  | 8               |
| 200/225 | 8     | 13.583     | 11.750 | 9.291  | 0.866 | 0.945 | 7.474  | 8               |
| 250/280 | 10    | 16.220     | 14.250 | 11.339 | 0.984 | 1.024 | 13.669 | 12              |
| 315     | 12    | 19.173     | 17.000 | 13.307 | 0.984 | 1.260 | 28.748 | 12              |

225mm (9") and 200mm (8") stub ends use 8" ANSI backing rings.  
Consult factory for backing rings larger than 315mm (12").

## BACKING RING\*

| Size    |       | Description | PP - Black* |
|---------|-------|-------------|-------------|
| mm      | inch  |             | Part Number |
| 20      | 1/2   | ASNI 150#   | 5146005     |
| 25      | 3/4   | ASNI 150#   | 5146007     |
| 32      | 1     | ASNI 150#   | 5146010     |
| 40      | 1-1/4 | ASNI 150#   | 5146012     |
| 50      | 1-1/2 | ASNI 150#   | 5146015     |
| 63      | 2     | ASNI 150#   | 5146020     |
| 75      | 2-1/2 | ASNI 150#   | 5146025     |
| 90      | 3     | ASNI 150#   | 5146030     |
| 110     | 4     | ASNI 150#   | 5146040     |
| 160     | 6     | ASNI 150#   | 5146060     |
| 200/225 | 8     | ASNI 150#   | 5146080     |
| 250/280 | 10    | ASNI 150#   | 5146100     |
| 315     | 12    | ASNI 150#   | 5146120     |



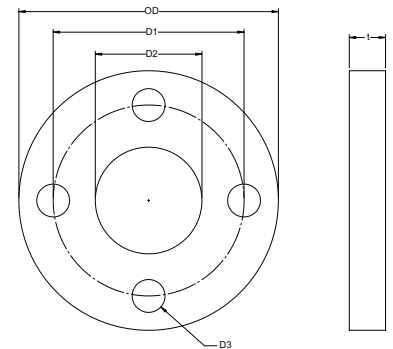
Backing Ring

\*DIN bolt pattern PN 10/16 available.

\*PP black UV resistant.

Accessories

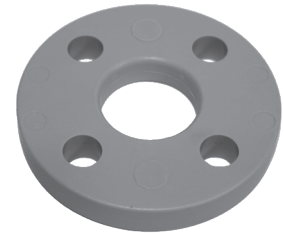
| Size    |       | Dimensions |        |        |       |       |        |                 |
|---------|-------|------------|--------|--------|-------|-------|--------|-----------------|
| mm      | inch  | OD         | D1     | D2     | D3    | t     | Weight | # of Bolt Holes |
| 20      | 1/2   | 3.740      | 2.380  | 1.102  | 0.630 | 0.472 | 0.463  | 4               |
| 25      | 3/4   | 4.016      | 2.750  | 1.339  | 0.630 | 0.472 | 0.529  | 4               |
| 32      | 1     | 4.488      | 3.120  | 1.654  | 0.630 | 0.630 | 0.807  | 4               |
| 40      | 1-1/4 | 5.118      | 3.500  | 2.008  | 0.630 | 0.630 | 1.235  | 4               |
| 50      | 1-1/2 | 5.236      | 3.880  | 2.441  | 0.630 | 0.709 | 1.193  | 4               |
| 63      | 2     | 6.378      | 4.750  | 3.071  | 0.787 | 0.709 | 1.788  | 4               |
| 75      | 2-1/2 | 7.244      | 5.500  | 3.622  | 0.787 | 0.709 | 2.352  | 4               |
| 90      | 3     | 7.638      | 6.000  | 4.370  | 0.787 | 0.709 | 2.271  | 4               |
| 110     | 4     | 9.016      | 7.500  | 5.236  | 0.787 | 0.709 | 3.342  | 8               |
| 160     | 6     | 11.142     | 9.500  | 7.008  | 0.866 | 0.945 | 5.115  | 8               |
| 200/225 | 8     | 13.583     | 11.750 | 9.291  | 0.866 | 0.945 | 7.474  | 8               |
| 250/280 | 10    | 16.220     | 14.250 | 11.339 | 0.984 | 1.024 | 13.669 | 12              |
| 315     | 12    | 19.173     | 17.000 | 13.307 | 0.984 | 1.260 | 28.748 | 12              |



225mm (9") and 200mm (8") stub ends use 8" ANSI backing rings.  
Consult factory for backing rings larger than 315mm (12").

**BACKING RING\***

| Size    |       | Description | Ductile Iron+ | 316 SS++    |
|---------|-------|-------------|---------------|-------------|
| mm      | inch  |             | Part Number   | Part Number |
| 20      | 1/2   | ANSI 150#   | -             | 504501005   |
| 25      | 3/4   | ANSI 150#   | 5048007       | 504501007   |
| 32      | 1     | ANSI 150#   | 5048010       | 504501010   |
| 40      | 1-1/4 | ANSI 150#   | 5048012       | -           |
| 50      | 1-1/2 | ANSI 150#   | 5048015       | 504501015   |
| 63      | 2     | ANSI 150#   | 5048020       | 504501020   |
| 75      | 2-1/2 | ANSI 150#   | 5048025       | -           |
| 90      | 3     | ANSI 150#   | 5048030       | 504501030   |
| 110     | 4     | ANSI 150#   | 5048040       | 504501040   |
| 160     | 6     | ANSI 150#   | 5048060       | 504501060   |
| 200/225 | 8     | ANSI 150#   | 5048080       | 504501080   |
| 250/280 | 10    | ANSI 150#   | 5048100       | 504501100   |
| 315     | 12    | ANSI 150#   | 5048120       | 504501120   |
| 355     | 14    | ANSI 150#   | 5048140       | -           |
| 400     | 16    | ANSI 150#   | 5048160       | -           |
| 450     | 18    | ANSI 150#   | 5048180       | -           |
| 500     | 20    | ANSI 150#   | 5048200       | -           |
| 550     | 22    | ANSI 150#   | 5048220       | -           |
| 630     | 24    | ANSI 150#   | 5048240       | -           |

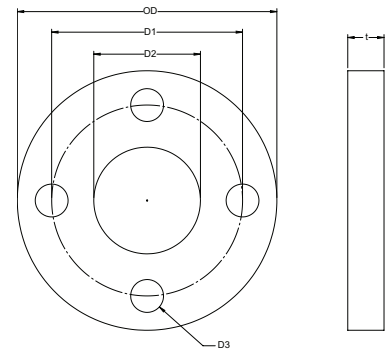


**Backing Ring**

Accessories

\*DIN bolt pattern PN 10/16 available.  
 +DI backing rings not recommended for socket stub ends.  
 ++ Contact A/A for current Stainless Steel pricing.

| Size    |       | Dimensions |        |        |       |       |        |    | # of Bolt Holes |
|---------|-------|------------|--------|--------|-------|-------|--------|----|-----------------|
| mm      | inch  | OD         | D1     | D2     | D3    | t     | Weight |    |                 |
| 20      | 1/2   | 3.740      | 2.380  | 1.102  | 0.630 | 0.472 | 0.463  | 4  |                 |
| 25      | 3/4   | 4.016      | 2.750  | 1.339  | 0.630 | 0.472 | 0.529  | 4  |                 |
| 32      | 1     | 4.488      | 3.120  | 1.654  | 0.630 | 0.630 | 0.807  | 4  |                 |
| 40      | 1-1/4 | 5.118      | 3.500  | 2.008  | 0.630 | 0.630 | 1.235  | 4  |                 |
| 50      | 1-1/2 | 5.236      | 3.880  | 2.441  | 0.630 | 0.709 | 1.193  | 4  |                 |
| 63      | 2     | 6.378      | 4.750  | 3.071  | 0.787 | 0.709 | 1.788  | 4  |                 |
| 75      | 2-1/2 | 7.244      | 5.500  | 3.622  | 0.787 | 0.709 | 2.352  | 4  |                 |
| 90      | 3     | 7.638      | 6.000  | 4.370  | 0.787 | 0.709 | 2.271  | 4  |                 |
| 110     | 4     | 9.016      | 7.500  | 5.236  | 0.787 | 0.709 | 3.342  | 8  |                 |
| 160     | 6     | 11.142     | 9.500  | 7.008  | 0.866 | 0.945 | 5.115  | 8  |                 |
| 200/225 | 8     | 13.583     | 11.750 | 9.291  | 0.866 | 0.945 | 7.474  | 8  |                 |
| 250/280 | 10    | 16.220     | 14.250 | 11.339 | 0.984 | 1.024 | 13.669 | 12 |                 |
| 315     | 12    | 19.173     | 17.000 | 13.307 | 0.984 | 1.260 | 22.500 | 12 |                 |
| 355     | 14    | 21.000     | 19.750 | 14.800 | 1.130 | 1.380 | 30.000 | 12 |                 |
| 400     | 16    | 23.500     | 21.250 | 16.930 | 1.130 | 1.440 | 35.000 | 16 |                 |
| 450     | 18    | 25.000     | 22.750 | 18.500 | 1.250 | 1.560 | 39.000 | 16 |                 |
| 500     | 20    | 27.500     | 25.000 | 21.250 | 1.250 | 1.690 | 56.000 | 20 |                 |
| 630     | 24    | 32.000     | 29.500 | 25.000 | 1.380 | 2.130 | 74.000 | 20 |                 |



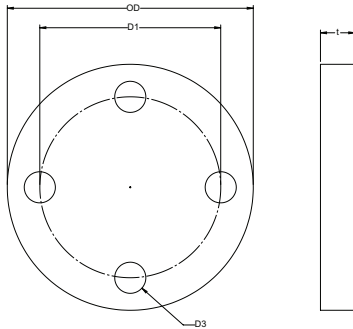
### PP BLIND FLANGE



**PP  
Blind Flange**

| Size |       | Description             | 230 PSI<br>Part Number |
|------|-------|-------------------------|------------------------|
| mm   | inch  |                         |                        |
| 20   | 1/2   | Steel Insert, ANSI 150# | 5042005                |
| 25   | 3/4   | Steel Insert, ANSI 150# | 5042007                |
| 32   | 1     | Steel Insert, ANSI 150# | 5042010                |
| 40   | 1-1/4 | Steel Insert, ANSI 150# | 5042012                |
| 50   | 1-1/2 | Steel Insert, ANSI 150# | 5042015                |
| 63   | 2     | Steel Insert, ANSI 150# | 5042020                |
| 75   | 2-1/2 | Steel Insert, ANSI 150# | 5042025                |
| 90   | 3     | Steel Insert, ANSI 150# | 5042030                |
| 110  | 4     | Steel Insert, ANSI 150# | 5042040                |
| 160  | 6     | Steel Insert, ANSI 150# | 5042060                |
| 200  | 8     | Steel Insert, ANSI 150# | 5042080                |
| 250  | 10    | Steel Insert, ANSI 150# | 5042100                |
| 315  | 12    | Steel Insert, ANSI 150# | 5042120                |

**Accessories**



| Size |       | OD     | D1     | D3    | t     | Weight<br>(lbs) | # of<br>Bolt Holes |
|------|-------|--------|--------|-------|-------|-----------------|--------------------|
| mm   | inch  |        |        |       |       |                 |                    |
| 20   | 1/2   | 3.740  | 2.380  | 0.630 | 0.472 | 0.569           | 4                  |
| 25   | 3/4   | 4.016  | 2.750  | 0.630 | 0.472 | 0.750           | 4                  |
| 32   | 1     | 4.488  | 3.120  | 0.630 | 0.630 | 1.118           | 4                  |
| 40   | 1-1/4 | 5.118  | 3.500  | 0.630 | 0.630 | 1.614           | 4                  |
| 50   | 1-1/2 | 5.236  | 3.880  | 0.630 | 0.709 | 1.775           | 4                  |
| 63   | 2     | 6.378  | 4.750  | 0.787 | 0.709 | 2.690           | 4                  |
| 75   | 2-1/2 | 7.244  | 5.500  | 0.787 | 0.709 | 3.400           | 4                  |
| 90   | 3     | 7.638  | 6.000  | 0.787 | 0.709 | 4.057           | 4                  |
| 110  | 4     | 9.016  | 7.500  | 0.787 | 0.709 | 6.504           | 8                  |
| 160  | 6     | 11.142 | 9.500  | 0.866 | 0.945 | 11.244          | 8                  |
| 200  | 8     | 13.583 | 11.750 | 0.866 | 0.945 | 17.461          | 8                  |
| 250  | 10    | 16.220 | 14.250 | 0.984 | 1.024 | 33.400          | 12                 |
| 315  | 12    | 19.173 | 17.000 | 0.984 | 1.260 | 63.493          | 12                 |

### PVDF BLIND FLANGE LINER

| Size |       | Description | Not Pressure Rated<br>Part Number |
|------|-------|-------------|-----------------------------------|
| mm   | inch  |             |                                   |
| 20   | 1/2   | ANSI 150#   | 5427005                           |
| 25   | 3/4   | ANSI 150#   | 5427007                           |
| 32   | 1     | ANSI 150#   | 5427010                           |
| 40   | 1-1/4 | ANSI 150#   | 5427012                           |
| 50   | 1-1/2 | ANSI 150#   | 5427015                           |
| 63   | 2     | ANSI 150#   | 5427020                           |
| 75   | 2-1/2 | ANSI 150#   | 5427025                           |
| 90   | 3     | ANSI 150#   | 5427030                           |
| 110  | 4     | ANSI 150#   | 5427040                           |
| 160  | 6     | ANSI 150#   | 5427060                           |
| 200  | 8     | ANSI 150#   | 5427080                           |

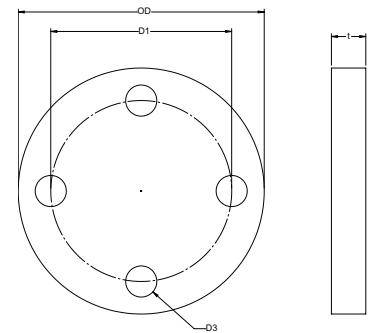


**PVDF  
Blind Flange**

Machined item non-returnable / non-cancelable.  
Not for pressure applications unless utilized with pressure rated blind flange see above.

Accessories

| Size |       | OD     | D1     | D3    | t     | Weight (lbs) | # of Bolt Holes |
|------|-------|--------|--------|-------|-------|--------------|-----------------|
| mm   | inch  |        |        |       |       |              |                 |
| 20   | 1/2   | 3.740  | 2.380  | 0.630 | 0.669 | 0.258        | 4               |
| 25   | 3/4   | 4.016  | 2.750  | 0.630 | 0.669 | 0.340        | 4               |
| 32   | 1     | 4.488  | 3.120  | 0.630 | 0.669 | 0.507        | 4               |
| 40   | 1-1/4 | 5.118  | 3.500  | 0.630 | 0.669 | 0.732        | 4               |
| 50   | 1-1/2 | 5.236  | 3.880  | 0.630 | 0.669 | 0.805        | 4               |
| 63   | 2     | 6.378  | 4.750  | 0.787 | 0.669 | 1.220        | 4               |
| 75   | 2-1/2 | 7.244  | 5.500  | 0.787 | 0.669 | 1.542        | 4               |
| 90   | 3     | 7.638  | 6.000  | 0.787 | 0.669 | 1.840        | 4               |
| 110  | 4     | 9.016  | 7.500  | 0.787 | 0.669 | 2.950        | 8               |
| 160  | 6     | 11.142 | 9.500  | 0.866 | 0.669 | 5.100        | 8               |
| 200  | 8     | 13.583 | 11.750 | 0.866 | 0.669 | 7.920        | 8               |
| 250  | 10    | 16.220 | 14.250 | 0.984 | 0.669 | 15.150       | 12              |
| 315  | 12    | 19.173 | 17.000 | 0.984 | 0.669 | 28.800       | 12              |



**AV Gaskets**

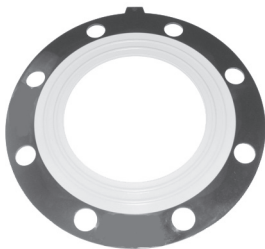
Please consult current Valve List Price book to ensure the list prices on all AV gaskets are current. Current Valve Price book supersedes this pricing.



**EPDM**  
Durometer 65-70



**PVDF**  
Durometer 83-85



**PTFE**  
Durometer 95-100

**CT GASKETS -PTFE\***



**PTFE**

\* Non stock-special order

**AV Gaskets - EPDM**

| Size   | Description | Part Number |
|--------|-------------|-------------|
| 1/2"   | EPDM        | 3113005     |
| 3/4"   | EPDM        | 3113007     |
| 1"     | EPDM        | 3113010     |
| 1-1/4" | EPDM        | 3113012     |
| 1-1/2" | EPDM        | 3113015     |
| 2"     | EPDM        | 3113020     |
| 2-1/2" | EPDM        | 3113025     |
| 3"     | EPDM        | 3113030     |
| 4"     | EPDM        | 3113040     |
| 6"     | EPDM        | 3113060     |
| 8"     | EPDM        | 3113080     |
| 10"    | EPDM        | 3113100     |
| 12"    | EPDM        | 3113120     |

**AV Gaskets - PVDF**

| Size   | Description | Part Number |
|--------|-------------|-------------|
| 1/2"   | PVDF        | 3115005     |
| 3/4"   | PVDF        | 3115007     |
| 1"     | PVDF        | 3115010     |
| 1-1/2" | PVDF        | 3115015     |
| 2"     | PVDF        | 3115020     |
| 3"     | PVDF        | 3115030     |
| 4"     | PVDF        | 3115040     |
| 6"     | PVDF        | 3115060     |
| 8"     | PVDF        | 3115080     |
| 10"    | PVDF        | 3115100     |

**AV Gaskets - PTFE**

| Size   | Description | Part Number |
|--------|-------------|-------------|
| 1/2"   | PTFE        | 3114005     |
| 3/4"   | PTFE        | 3114007     |
| 1"     | PTFE        | 3114010     |
| 1-1/4" | PTFE        | 3114012     |
| 1-1/2" | PTFE        | 3114015     |
| 2"     | PTFE        | 3114020     |
| 2-1/2" | PTFE        | 3114025     |
| 3"     | PTFE        | 3114030     |
| 4"     | PTFE        | 3114040     |
| 6"     | PTFE        | 3114060     |
| 8"     | PTFE        | 3114080     |
| 10"    | PTFE        | 3114100     |
| 12"    | PTFE        | 3114120     |

General grade, available cleaned and bagged.

| Size |      | Description | Part Number |
|------|------|-------------|-------------|
| mm   | inch |             |             |
| 355  | 14   | ANSI 150#   | 3116140     |
| 400  | 16   | ANSI 150#   | 3116160     |
| 450  | 18   | ANSI 150#   | 3116180     |
| 500  | 20   | ANSI 150#   | 3116200     |
| 630  | 24   | ANSI 150#   | 3116240     |

**Accessories**

**SPIDER CLIP - PP**

| Size      |         | PRO150 X 150 | PRO150 X 45 | PRO45 X 45  |
|-----------|---------|--------------|-------------|-------------|
| mm        | inch    | Part Number  | Part Number | Part Number |
| 32 x 90   | 1 X 3   | 5244134      | -           | -           |
| 63 x 110  | 2 X 4   | 5244420      | 5346420     | -           |
| 90 x 160  | 3 X 6   | 5244531      | 5346531     | -           |
| 110 x 200 | 4 X 8   | 5244583      | 5346583     | 5346583     |
| 160 x 250 | 6 X 10  | 5244627      | 5346627     | 5346627     |
| 200 x 315 | 8 X 12  | 5244660      | 5346660     | 5346660     |
| 250 x 355 | 10 X 14 | 5244702      | 5346702     | 5346702     |
| 315 x 400 | 12 X 16 | 5244690      | 5346690     | 5346690     |
| 355 x 450 | 14 X 18 | 5244710      | 5346710     | 5346710     |
| 400 x 500 | 16 X 20 | -            | 5346726     | 5346726     |



**PP  
Spider Clip**

**SPIDER CLIP - PVDF**

| Size      |         | PRO150 X 150 | PRO150 X 45 | PRO45 X 45  |
|-----------|---------|--------------|-------------|-------------|
| mm        | inch    | Part Number  | Part Number | Part Number |
| 32 x 90   | 1 X 3   | 5244134      | -           | -           |
| 63 x 110  | 2 X 4   | 5244420      | 5346420     | -           |
| 90 x 160  | 3 X 6   | 5244531      | 5346531     | -           |
| 110 x 200 | 4 X 8   | 5244583      | 5346583     | 5346583     |
| 160 x 250 | 6 X 10  | 5244627      | 5346627     | 5346627     |
| 200 x 315 | 8 X 12  | 5244660      | 5346660     | 5346660     |
| 250 x 355 | 10 X 14 | 5244702      | 5346702     | 5346702     |
| 315 x 400 | 12 X 16 | 5244690      | 5346690     | 5346690     |
| 355 x 450 | 14 X 18 | 5244710      | 5346710     | 5346710     |
| 400 x 500 | 16 X 20 | -            | 5346726     | 5346726     |

**SPIDER CLIP - PE (FOR CHEM PROLINE®)**

| Sizes     |         | SDR         | Part Number |
|-----------|---------|-------------|-------------|
| mm        | inches  |             |             |
| 32 x 90   | 1 x 3   | SDR 11 x 11 | 4784134     |
| 63 x 110  | 2 x 4   | SDR 11 X 33 | 4784420     |
| 90 x 169  | 3 x 6   | SDR 11 x 33 | 4784531     |
| 110 x 200 | 4 x 8   | SDR 11 x 33 | 4784583     |
| 200 x 250 | 6 x 10  | SDR 11 x 33 | 4784627     |
| 200 x 315 | 8 x 12  | SDR 11 x 33 | 4784660     |
| 250 x 355 | 10 x 14 | SDR 11 x 33 | 4784702     |
| 315 x 400 | 12 x 16 | SDR 11 x 33 | 4784690     |



**PE  
Spider Clip**

**SUPPORT DISC - PP**

**PP  
Support  
Disc**

| Size      |         | PRO150 X 150 | PRO150 X 45 | PRO45 X 45  |
|-----------|---------|--------------|-------------|-------------|
| mm        | inch    | Part Number  | Part Number | Part Number |
| 32 x 90   | 1 X 3   | 5242134      | -           | -           |
| 63 x 110  | 2 X 4   | 5242420      | 5344420     | -           |
| 90 x 160  | 3 X 6   | 5242531      | 5344531     | -           |
| 110 x 200 | 4 X 8   | 5242583      | 5344583     | 5344583     |
| 160 x 250 | 6 X 10  | 5242627      | 5344627     | 5344627     |
| 200 x 315 | 8 X 12  | 5242660      | 5344660     | 5344660     |
| 250 x 355 | 10 X 14 | 5242702      | 5344702     | 5344702     |
| 315 x 400 | 12 X 16 | -            | 5344690     | 5344690     |
| 355 x 450 | 14 X 18 | -            | 5344710     | 5344710     |
| 400 x 500 | 16 X 20 | -            | 5344726     | 5344726     |

Required if full pipe length is cut. Must be installed before welding pipe.

**SUPPORT DISC - PVDF**

**PVDF  
Support  
Disc**

| Size      |        | PVDF X PVDF |
|-----------|--------|-------------|
| mm        | inch   | Part Number |
| 32 x 90   | 1 X 3  | 6238134     |
| 63 x 110  | 2 X 4  | 6238420     |
| 90 x 160  | 3 X 6  | 6238531     |
| 110 x 200 | 4 X 8  | 6238583     |
| 160 x 250 | 6 X 10 | 6238627     |
| 200 x 315 | 8 X 12 | 6236660     |

Required if full pipe length is cut. Must be installed before welding pipe.

**SUPPORT DISC - PE (FOR CHEM PROLINE®)**

**PE  
Support  
Disc**

| Sizes     |         | SDR         | Part Number |
|-----------|---------|-------------|-------------|
| mm        | inches  |             |             |
| 32 x 90   | 1 x 3   | SDR 11 x 11 | 4744134     |
| 63 x 110  | 2 x 4   | SDR 11 X 33 | 4744420     |
| 90 x 169  | 3 x 6   | SDR 11 x 33 | 4744531     |
| 110 x 200 | 4 x 8   | SDR 11 x 33 | 4744583     |
| 200 x 250 | 6 x 10  | SDR 11 x 33 | 4744627     |
| 200 x 315 | 8 x 12  | SDR 11 x 33 | 4744660     |
| 250 x 355 | 10 x 14 | SDR 11 x 33 | 4744702     |
| 315 x 400 | 12 x 16 | SDR 11 x 33 | 4744690     |

Required if full pipe length is cut. Must be installed before welding pipe.

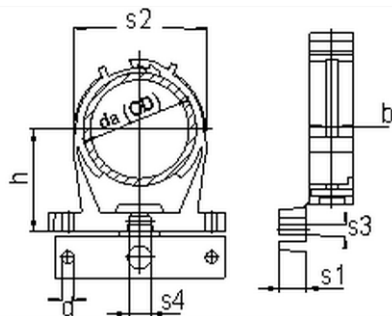




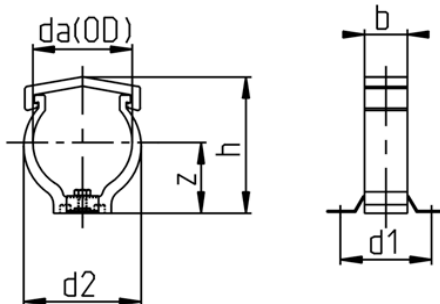
**PIPE CLIPS**

| Size |       | Description  | Part Number |
|------|-------|--------------|-------------|
| mm   | inch  |              |             |
| 20   | 1/2   | Snap Clips   | 5349005     |
| 25   | 3/4   | Snap Clips   | 5349007     |
| 32   | 1     | Snap Clips   | 5349010     |
| 40   | 1-1/4 | Snap Clips   | 5349012     |
| 50   | 1-1/2 | Snap Clips   | 5349015     |
| 63   | 2     | 2 Piece Clip | 5246020     |
| 75   | 2-1/2 | 2 Piece Clip | 5246025     |
| 90   | 3     | 2 Piece Clip | 5246030     |
| 110  | 4     | 2 Piece Clip | 5246040     |
| 160  | 6     | 2 Piece Clip | 5246060     |
| 200  | 8     | 2 Piece Clip | 5246080     |
| 225  | 9     | 2 Piece Clip | 5246090     |

Accessories



| Size |       | h    | s1   | s2   | s3/d | s4   | b    |
|------|-------|------|------|------|------|------|------|
| mm   | inch  |      |      |      |      |      |      |
| 20   | 1/2   | 1.06 | 0.24 | 1.14 | 0.26 | 0.35 | 0.55 |
| 25   | 3/4   | 1.18 | 0.40 | 1.34 | 0.26 | 0.35 | 0.63 |
| 32   | 1     | 1.24 | 0.45 | 1.54 | 0.26 | 0.35 | 0.63 |
| 40   | 1-1/4 | 1.46 | 0.55 | 1.97 | 0.26 | 0.35 | 0.69 |
| 50   | 1-1/2 | 1.61 | 0.59 | 2.20 | 0.26 | 0.35 | 0.79 |



| Size |       | z    | d1   | d2    | h     | b    |
|------|-------|------|------|-------|-------|------|
| mm   | inch  |      |      |       |       |      |
| 63   | 2     | 2.04 | 2.91 | 3.07  | 3.74  | 1.16 |
| 75   | 2-1/2 | 2.40 | 3.23 | 3.70  | 4.41  | 1.57 |
| 90   | 3     | 2.63 | 3.22 | 4.25  | 5.03  | 1.57 |
| 110  | 4     | 3.14 | 3.22 | 5.39  | 5.98  | 1.57 |
| 160  | 6     | 4.56 | 4.33 | 7.24  | 8.54  | 2.36 |
| 200  | 8     | 5.82 | 4.33 | 9.37  | 10.50 | 2.36 |
| 225  | 9     | 6.22 | 4.33 | 10.28 | 11.46 | 2.36 |



**PIPE CLIPS**

| Size |      | Description | Part Number |
|------|------|-------------|-------------|
| mm   | inch |             |             |
| 250  | 10   | Snap Clips  | 5350100     |
| 280  | 11   | Snap Clips  | 5350110     |
| 315  | 12   | Snap Clips  | 5350120     |
| 355  | 14   | Snap Clips  | 5350140     |
| 400  | 16   | Snap Clips  | 5350160     |

10-16" pipe clips are special order.

Accessories

| Size |      | B     | D    | E    | d3   | Z1    | Z2   |
|------|------|-------|------|------|------|-------|------|
| mm   | inch |       |      |      |      |       |      |
| 250  | 10   | 7.88  | 0.98 | 1.57 | 0.51 | 7.19  | 5.61 |
| 280  | 11   | 7.88  | 0.98 | 1.57 | 0.51 | 7.78  | 6.12 |
| 315  | 12   | 8.86  | 0.98 | 1.57 | 0.51 | 8.6   | 6.75 |
| 355  | 14   | 10.12 | 1.18 | 1.97 | 0.67 | 10.87 | 8.27 |
| 400  | 16   | 11.34 | 1.18 | 1.97 | 0.67 | 11.85 | 9.06 |

