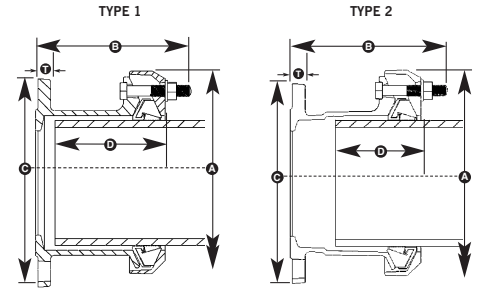


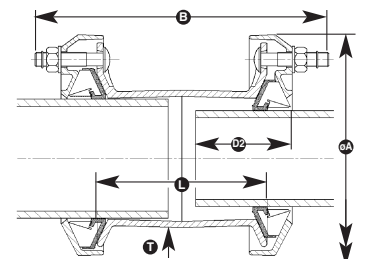
## Dimensions

### Flange Adaptors



| Nom Size | OD Range |       | Flange Details |          |      | Insertion Depth (D) |     |       |     | Dimensions |       |       |      | Bolt Details |      | Working Pressure (Bar) |          |      |          | Weight (Kg) |
|----------|----------|-------|----------------|----------|------|---------------------|-----|-------|-----|------------|-------|-------|------|--------------|------|------------------------|----------|------|----------|-------------|
|          |          |       |                |          |      | Non-liner           |     | Liner |     |            |       |       |      |              |      | Water                  |          | Gas  |          |             |
|          | Min      | Max   | Nom            | Drilling | Type | Min                 | Max | Min   | Max | C          | A     | B     | T    | Size         | Type | Flex                   | Gripping | Flex | Gripping |             |
| 50       | 43.5     | 63.5  | 50             | PN10/16  | 1    | 70                  | 105 | 70    | 95  | 165.0      | 168.0 | 154.0 | 18.0 | 3-M12x60     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 4.4         |
| 65       | 63.0     | 83.7  | 65             | PN10/16  | 1    | 70                  | 105 | 70    | 95  | 185.0      | 188.5 | 154.0 | 18.0 | 3-M12x60     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 5.4         |
| 80       | 85.7     | 107.0 | 80             | PN10/16  | 1    | 70                  | 105 | 70    | 105 | 200.0      | 211.5 | 154.0 | 20.0 | 3-M12x60     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 7.0         |
| 100      | 107.2    | 133.2 | 100            | PN10/16  | 2    | 90                  | 125 | 90    | 120 | 220.0      | 277.0 | 198.0 | 22.0 | 3-M16x80     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 10.2        |
| 125      | 132.2    | 160.2 | 125            | PN10/16  | 1    | 90                  | 125 | 90    | 125 | 250.0      | 304.0 | 198.0 | 22.0 | 3-M16x80     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 11.2        |
| 150      | 158.2    | 192.2 | 150            | PN10/16  | 2    | 95                  | 140 | 95    | 140 | 285.0      | 336.0 | 218.0 | 22.0 | 4-M16x80     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 14.9        |
| 175      | 192.2    | 226.9 | 175            | PN10/16  | 1    | 105                 | 150 | 105   | 145 | 340.0      | 374.0 | 204.0 | 19.0 | 4-M16x80     | HRH  | 16.0                   | 10.0     | 4.0  | 4.0      | 16.4        |
| 200      | 218.1    | 256.0 | 200            | PN10/16  | 2    | 120                 | 185 | 120   | 155 | 340.0      | 417.0 | 252.0 | 19.0 | 4-M16x80     | HRH  | 16.0                   | 10.0     | 4.0  | 4.0      | 22.3        |
| 250      | 266.2    | 310.0 | 250            | PN10/16  | 2    | 150                 | 220 | 150   | 180 | 405.0      | 476.0 | 313.0 | 21.0 | 6-M16x110    | HRH  | 16.0                   | 10.0     | 4.0  | 4.0      | 34.4        |
| 300      | 315.0    | 356.0 | 300            | PN10/16  | 2    | 150                 | 220 | 150   | 185 | 470.0      | 519.0 | 313.0 | 22.5 | 8-M16x110    | HRH  | 16.0                   | 10.0     | 4.0  | 4.0      | 42.2        |

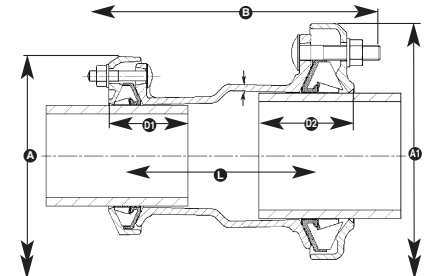
Non-Liner = Installation on pipe which does not require a Stainless Steel Support Liner - e.g. Steel, Cast Iron, Ductile Iron  
 Liner = Installation on pipe which requires a Stainless Steel Support Liner - e.g. PE, thin walled PVC



### Couplings

| Nom Size | OD Range |       | Insertion Depth (D) |     |       |     | Dimensions |       |        |     | Bolt Details |      | Working Pressure (Bar) |          |      |          | Weight (Kg) |
|----------|----------|-------|---------------------|-----|-------|-----|------------|-------|--------|-----|--------------|------|------------------------|----------|------|----------|-------------|
|          |          |       | Non-liner           |     | Liner |     | Overall    |       | Sleeve |     |              |      | Water                  |          | Gas  |          |             |
|          | Min      | Max   | Min                 | Max | Min   | Max | A          | B     | L      | T   | Size         | Type | Flex                   | Gripping | Flex | Gripping |             |
| 50       | 43.5     | 63.5  | 70                  | 95  | 70    | 95  | 168.0      | 242.0 | 144.0  | 7.0 | 6-M12x65     | CRX  | 16.0                   | 16.0     | 4.0  | 4.0      | 5.0         |
| 65       | 63.0     | 83.7  | 70                  | 95  | 70    | 95  | 188.5      | 242.0 | 144.0  | 7.0 | 6-M12x65     | CRX  | 16.0                   | 16.0     | 4.0  | 4.0      | 5.9         |
| 80       | 85.7     | 107.0 | 70                  | 105 | 70    | 105 | 211.5      | 267.0 | 170.0  | 7.0 | 6-M12x65     | CRX  | 16.0                   | 16.0     | 4.0  | 4.0      | 7.5         |
| 100      | 107.2    | 133.2 | 90                  | 125 | 90    | 120 | 277.0      | 326.0 | 180.0  | 7.0 | 6-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 13.3        |
| 125      | 132.2    | 160.2 | 90                  | 125 | 90    | 125 | 304.0      | 316.0 | 180.0  | 6.0 | 6-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 14.2        |
| 150      | 158.2    | 192.2 | 95                  | 140 | 95    | 140 | 336.0      | 352.0 | 213.0  | 7.0 | 8-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 19.7        |
| 175      | 192.2    | 226.9 | 105                 | 150 | 105   | 145 | 374.0      | 357.0 | 213.0  | 7.0 | 8-M16x85     | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 21.4        |
| 200      | 218.1    | 256.0 | 120                 | 165 | 120   | 155 | 417.0      | 364.0 | 220.0  | 7.0 | 8-M16x85     | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 26.6        |
| 250      | 266.2    | 310.0 | 150                 | 220 | 150   | 180 | 476.0      | 504.0 | 300.0  | 8.0 | 12-M16x115   | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 49.7        |
| 300      | 315.0    | 356.0 | 150                 | 220 | 150   | 185 | 519.0      | 504.0 | 300.0  | 7.0 | 16-M16x115   | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 56.8        |

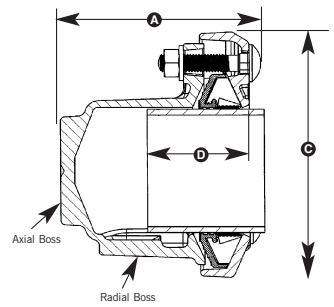
Non-Liner = Installation on pipe which does not require a Stainless Steel Support Liner - e.g. Steel, Cast Iron, Ductile Iron  
 Liner = Installation on pipe which requires a Stainless Steel Support Liner - e.g. PE, thin walled PVC



### Reducers

| Nom Size  | OD Range  |       |           |       | Insertion Depth - (Non-Liner) |     |                |     | Insertion Depth - (Liner) |     |                |     | Dimensions |       |        |       | Bolt Details |          |           | Working Pressure (Bar) |           |      |      | Weight (Kg) |          |
|-----------|-----------|-------|-----------|-------|-------------------------------|-----|----------------|-----|---------------------------|-----|----------------|-----|------------|-------|--------|-------|--------------|----------|-----------|------------------------|-----------|------|------|-------------|----------|
|           | Small End |       | Large End |       | Small End (D1)                |     | Large End (D2) |     | Small End (D1)            |     | Large End (D2) |     | Overall    |       | Sleeve |       |              |          |           | Water                  |           | Gas  |      |             |          |
|           | Min       | Max   | Min       | Max   | Min                           | Max | Min            | Max | Min                       | Max | Min            | Max | Min        | Max   | A      | A1    | B            | L        | T         | Small End              | Large End | Type | Flex |             | Gripping |
| 80 x 100  | 85.7      | 107.0 | 107.2     | 133.2 | 70                            | 105 | 90             | 125 | 70                        | 105 | 90             | 120 | 211.5      | 277.0 | 291.5  | 170.0 | 7.0          | 3-M12x65 | 3-M16x85  | CSX                    | 16.0      | 16.0 | 4.0  | 4.0         | 10.3     |
| 100 x 125 | 107.2     | 133.2 | 132.2     | 160.2 | 90                            | 125 | 90             | 125 | 90                        | 120 | 90             | 125 | 277.0      | 304.0 | 321.0  | 180.0 | 7.0          | 3-M16x85 | 3-M16x85  | CSX                    | 16.0      | 16.0 | 4.0  | 4.0         | 14.2     |
| 100 x 150 | 107.2     | 133.2 | 158.2     | 192.2 | 90                            | 125 | 95             | 140 | 90                        | 120 | 95             | 140 | 277.0      | 336.0 | 323.0  | 180.0 | 7.0          | 3-M16x85 | 4-M16x85  | CSX                    | 16.0      | 16.0 | 4.0  | 4.0         | 17.0     |
| 125 x 150 | 132.2     | 160.2 | 158.2     | 192.2 | 90                            | 125 | 95             | 140 | 90                        | 125 | 95             | 140 | 304.0      | 336.0 | 318.0  | 180.0 | 6.0          | 3-M16x85 | 4-M16x85  | CSX                    | 16.0      | 16.0 | 4.0  | 4.0         | 17.5     |
| 175 x 200 | 192.2     | 226.9 | 218.1     | 256.0 | 105                           | 150 | 120            | 165 | 105                       | 145 | 120            | 155 | 374.0      | 417.0 | 357.0  | 213.0 | 7.0          | 4-M16x85 | 4-M16x85  | CSX                    | 16.0      | 10.0 | 4.0  | 4.0         | 24.8     |
| 200 x 250 | 218.1     | 256.0 | 266.2     | 310.0 | 120                           | 165 | 150            | 220 | 120                       | 155 | 150            | 180 | 417.0      | 476.0 | 394.0  | 280.0 | 7.0          | 4-M16x85 | 6-M16x115 | CSX                    | 16.0      | 10.0 | 4.0  | 4.0         | 42.6     |

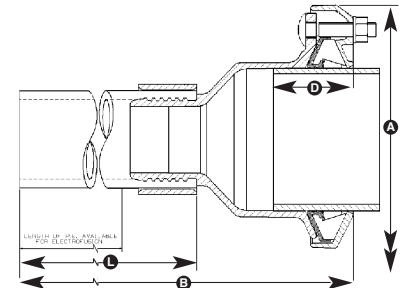
Non-Liner = Installation on pipe which does not require a Stainless Steel Support Liner - e.g. Steel, Cast Iron, Ductile Iron  
 Liner = Installation on pipe which requires a Stainless Steel Support Liner - e.g. PE, thin walled PVC



## End Caps

| Nom Size | OD Range |       | Insertion Depth (D) |     |       |     | Outlet Details - BSP Drilling |        |       |     | Dimensions |       | Bolt Details |      | Working Pressure (Bar) |          |      |          | Weight (Kg) |
|----------|----------|-------|---------------------|-----|-------|-----|-------------------------------|--------|-------|-----|------------|-------|--------------|------|------------------------|----------|------|----------|-------------|
|          |          |       | Non-liner           |     | Liner |     | Radial                        |        | Axial |     |            |       |              |      | Water                  |          | Gas  |          |             |
|          | Min      | Max   | Min                 | Max | Min   | Max | Min                           | Max    | Min   | Max | A          | C     | Size         | Type | Flex                   | Gripping | Flex | Gripping |             |
| 50       | 43.5     | 63.5  | 70                  | 105 | 70    | 95  | 1/2"                          | 3/4"   | 1/2"  | 2"  | 131.0      | 154.0 | 3-M12x65     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 2.8         |
| 65       | 63.0     | 83.7  | 70                  | 105 | 70    | 95  | 1/2"                          | 3/4"   | 1/2"  | 2"  | 131.0      | 154.0 | 3-M12x65     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 3.3         |
| 80       | 85.7     | 107.0 | 70                  | 105 | 70    | 105 | 1/2"                          | 3/4"   | 1/2"  | 2"  | 144.0      | 154.0 | 3-M12x65     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 4.2         |
| 100      | 107.2    | 133.2 | 90                  | 125 | 90    | 120 | 1/2"                          | 1"     | 1/2"  | 2"  | 160.0      | 198.0 | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 7.6         |
| 125      | 132.2    | 160.2 | 90                  | 125 | 90    | 125 | 1/2"                          | 1"     | 1/2"  | 2"  | 178.0      | 198.0 | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 9.6         |
| 150      | 158.2    | 192.2 | 95                  | 140 | 95    | 140 | 1/2"                          | 1"     | 1/2"  | 2"  | 183.0      | 218.0 | 4-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 11.8        |
| 175      | 192.2    | 226.9 | 105                 | 150 | 105   | 145 | 1/2"                          | 1"     | 1/2"  | 2"  | 185.0      | 204.0 | 4-M16x85     | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 13.8        |
| 200      | 218.1    | 256.0 | 120                 | 185 | 120   | 155 | 1/2"                          | 1 1/2" | 1/2"  | 2"  | 215.0      | 252.0 | 4-M16x85     | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 18.8        |
| 250      | 266.2    | 310.0 | 150                 | 220 | 150   | 180 | 1/2"                          | 2"     | 1/2"  | 2"  | 256.0      | 313.0 | 6-M16x115    | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 32.2        |
| 300      | 315.0    | 356.0 | 150                 | 220 | 150   | 185 | 1/2"                          | 2"     | 1/2"  | 2"  | 248.0      | 313.0 | 8-M16x115    | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 40.0        |

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 Liner = Installation on pipe which requires a Stainless Steel Support Liner - e.g. PE, thin walled PVC



## Pecat

| Nom Size    | UltraGrip End |       | PE Pipe End |     | Insertion Depth (D) |     |       |     | Dimensions |       |             |                                    | Bolt Details |      | Working Pressure (bar) |          |      |          | Weight (Kg) |
|-------------|---------------|-------|-------------|-----|---------------------|-----|-------|-----|------------|-------|-------------|------------------------------------|--------------|------|------------------------|----------|------|----------|-------------|
|             | OD Range      |       | OD          | SDR | Non-liner           |     | Liner |     | Overall    |       | PE Pipe End |                                    |              |      | Water                  |          | Gas  |          |             |
|             | Min           | Max   |             |     | Min                 | Max | Min   | Max | A          | B     | L           | Length Available For Electrofusion | Size         | Type | Flex                   | Gripping | Flex | Gripping |             |
| DN80 x 90   | 85.7          | 107.7 | 90          | 11  | 70                  | 105 | 70    | 105 | 211.5      | 657.5 | 500.0       | 420                                | 3-M12x65     | HRH  | 16.0                   | 16.0     | 4.0  | 4.0      | 6.8         |
| DN100 x 110 | 107.2         | 133.2 | 110         | 11  | 90                  | 125 | 90    | 120 | 277.0      | 689.0 | 500.0       | 400                                | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 12.0        |
| DN100 x 125 | 107.2         | 133.2 | 125         | 11  | 90                  | 125 | 90    | 120 | 277.0      | 682.0 | 500.0       | 400                                | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 12.7        |
| DN125 x 110 | 132.2         | 160.2 | 110         | 11  | 90                  | 125 | 90    | 125 | 304.0      | 703.0 | 500.0       | 390                                | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 13.5        |
| DN125 x 125 | 132.2         | 160.2 | 125         | 11  | 90                  | 125 | 90    | 125 | 304.0      | 697.0 | 500.0       | 390                                | 3-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 14.2        |
| DN150 x 160 | 158.2         | 192.2 | 160         | 11  | 95                  | 140 | 95    | 140 | 336.0      | 711.5 | 500.0       | 380                                | 4-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 20.6        |
| DN150 x 180 | 158.2         | 192.2 | 180         | 11  | 95                  | 140 | 95    | 140 | 336.0      | 708.5 | 500.0       | 380                                | 4-M16x85     | CSX  | 16.0                   | 16.0     | 4.0  | 4.0      | 23.8        |
| DN200 x 225 | 218.1         | 256.0 | 225         | 11  | 120                 | 185 | 120   | 155 | 417.0      | 725.0 | 500.0       | 370                                | 4-M16x85     | CSX  | 16.0                   | 10.0     | 4.0  | 4.0      | 33.8        |

## Material Specification and Standards

### Flange Adaptors / Couplings / Reducing Couplings / End Caps / Pecatadaptors

#### End Ring and Centre Sleeve

S.G. Iron to BS EN 1563:1997 Grade EN-GJS-450-10

#### Flange Adaptor Body

S.G. Iron to BE EN 1563:1997 Grade EN-GJS-450-10

**Gripper and Carrier** - Acetal Copolymer Grade M25 or equivalent

**Washer** - Stainless steel

**Gaskets** - EPDM Compound Grade E to BS EN 681-1:1996 WA, WBS listed

Nitrile Compound to DIN 3535 Part3, KTW and DVGW approved

**Flange Drilling** - All flanges are drilled to BS EN 1092 (formerly BS 4504)

7005 with the rating as per table

Note: Pipe used for Pecatadaptor is black PE100 SDR 11.

### Flange Adaptors / Couplings / End Caps

#### Bolts

Stainless steel to BS EN 3506-1:Grade A2 Property Class 80 or 70

#### Coating

End Ring and Centre Sleeve: Rilsan Nylon 11 (Black)

Bolts: Neolube

Nuts: Dacromet coated

UltraGrip is designed and manufactured under Quality Management Systems certified to BS EN ISO 9001:2000 and the requirements of ISO 14001.

Viking Johnson operates a policy of continual product improvement and innovation, and reserves the right to modify details in this publication. Information is correct at time of publishing. Additional dimensional information is available from our Marketing Department.

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