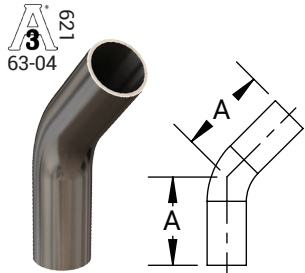


**High Purity BioPharm Fittings**

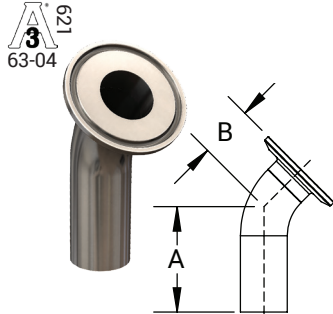
**45° Weld Elbows - T2KS**



BPE Table DT-4.1.1-4  
ASME BPE 2019

| Tube O.D. | A (in) | Nominal Wall (in) | PL Finish - SF1 | PM Finish - SF4 |
|-----------|--------|-------------------|-----------------|-----------------|
| 1/2"      | 2.250  | 0.065             | T2KS-050PL      | T2KS-050PM      |
| 3/4"      | 2.250  | 0.065             | T2KS-075PL      | T2KS-075PM      |
| 1"        | 2.250  | 0.065             | T2KS-100PL      | T2KS-100PM      |
| 1-1/2"    | 2.500  | 0.065             | T2KS-150PL      | T2KS-150PM      |
| 2"        | 3.000  | 0.065             | T2KS-200PL      | T2KS-200PM      |
| 2-1/2"    | 3.375  | 0.065             | T2KS-250PL      | T2KS-250PM      |
| 3"        | 3.625  | 0.065             | T2KS-300PL      | T2KS-300PM      |
| 4"        | 4.500  | 0.083             | T2KS-400PL      | T2KS-400PM      |
| 6"        | 6.250  | 0.109             | T2KS-600PL      | T2KS-600PM      |

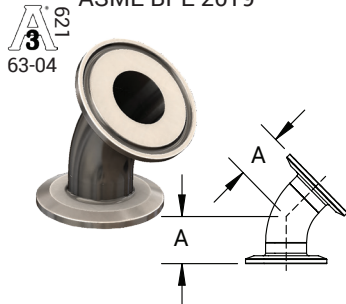
**45° Clamp x Weld Elbows - T2KM**



BPE Table DT-4.1.1-5  
ASME BPE 2019

| Tube O.D. | A (in) | B (in) | Nominal Wall (in) | PL Finish - SF1 | PM Finish - SF4 |
|-----------|--------|--------|-------------------|-----------------|-----------------|
| 1/2"      | 2.250  | 1.000  | 0.065             | T2KM-050PL      | T2KM-050PM      |
| 3/4"      | 2.250  | 1.000  | 0.065             | T2KM-075PL      | T2KM-075PM      |
| 1"        | 2.250  | 1.125  | 0.065             | T2KM-100PL      | T2KM-100PM      |
| 1-1/2"    | 2.500  | 1.438  | 0.065             | T2KM-150PL      | T2KM-150PM      |
| 2"        | 3.000  | 1.750  | 0.065             | T2KM-200PL      | T2KM-200PM      |
| 2-1/2"    | 3.375  | 2.063  | 0.065             | T2KM-250PL      | T2KM-250PM      |
| 3"        | 3.625  | 2.375  | 0.065             | T2KM-300PL      | T2KM-300PM      |
| 4"        | 4.500  | 3.125  | 0.083             | T2KM-400PL      | T2KM-400PM      |
| 6"        | 6.250  | 5.250  | 0.109             | T2KM-600PL      | T2KM-600PM      |

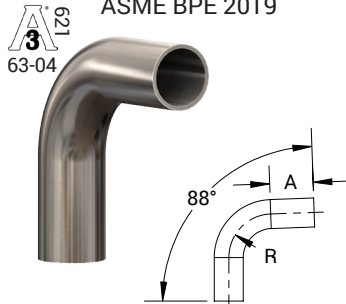
**45° Clamp x Clamp Elbows - T2KMP**



BPE Table DT-4.1.1-6  
ASME BPE 2019

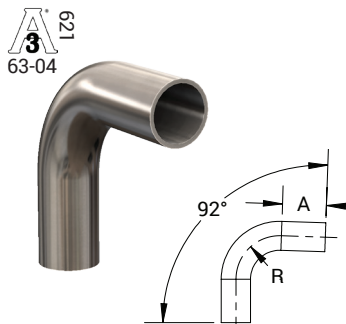
| Tube O.D. | A (in) | PL Finish - SF1 | PM Finish - SF4 |
|-----------|--------|-----------------|-----------------|
| 1/2"      | 1.000  | T2KMP-050PL     | T2KMP-050PM     |
| 3/4"      | 1.000  | T2KMP-075PL     | T2KMP-075PM     |
| 1"        | 1.125  | T2KMP-100PL     | T2KMP-100PM     |
| 1-1/2"    | 1.438  | T2KMP-150PL     | T2KMP-150PM     |
| 2"        | 1.750  | T2KMP-200PL     | T2KMP-200PM     |
| 2-1/2"    | 2.063  | T2KMP-250PL     | T2KMP-250PM     |
| 3"        | 2.375  | T2KMP-300PL     | T2KMP-300PM     |
| 4"        | 3.125  | T2KMP-400PL     | T2KMP-400PM     |
| 6"        | 5.250  | T2KMP-600PL     | T2KMP-600PM     |

**88° Weld Elbows - T2S88**



| Tube O.D. | A (in) | R (in) | Nominal Wall (in) | PL Finish - SF1 | PM Finish - SF4 |
|-----------|--------|--------|-------------------|-----------------|-----------------|
| 1/2"      | 1.94   | 1.06   | 0.065             | T2S88-050PL     | T2S88-050PM     |
| 3/4"      | 1.98   | 1.02   | 0.065             | T2S88-075PL     | T2S88-075PM     |
| 1"        | 1.50   | 1.50   | 0.065             | T2S88-100PL     | T2S88-100PM     |
| 1-1/2"    | 1.50   | 2.25   | 0.065             | T2S88-150PL     | T2S88-150PM     |
| 2"        | 1.75   | 3.00   | 0.065             | T2S88-200PL     | T2S88-200PM     |
| 2-1/2"    | 1.75   | 3.75   | 0.065             | T2S88-250PL     | T2S88-250PM     |
| 3"        | 1.75   | 4.50   | 0.065             | T2S88-300PL     | T2S88-300PM     |
| 4"        | 2.00   | 6.00   | 0.083             | T2S88-400PL     | T2S88-400PM     |
| 6"        | 2.50   | 9.00   | 0.109             | T2S88-600PL     | T2S88-600PM     |

**92° Weld Elbows - T2S92**



| Tube O.D. | A (in) | R (in) | Nominal Wall (in) | PL Finish - SF1 | PM Finish - SF4 |
|-----------|--------|--------|-------------------|-----------------|-----------------|
| 1/2"      | 1.94   | 1.06   | 0.065             | T2S92-050PL     | T2S92-050PM     |
| 3/4"      | 1.98   | 1.02   | 0.065             | T2S92-075PL     | T2S92-075PM     |
| 1"        | 1.50   | 1.50   | 0.065             | T2S92-100PL     | T2S92-100PM     |
| 1-1/2"    | 1.50   | 2.25   | 0.065             | T2S92-150PL     | T2S92-150PM     |
| 2"        | 1.75   | 3.00   | 0.065             | T2S92-200PL     | T2S92-200PM     |
| 2-1/2"    | 1.75   | 3.75   | 0.065             | T2S92-250PL     | T2S92-250PM     |
| 3"        | 1.75   | 4.50   | 0.065             | T2S92-300PL     | T2S92-300PM     |
| 4"        | 2.00   | 6.00   | 0.083             | T2S92-400PL     | T2S92-400PM     |
| 6"        | 2.50   | 9.00   | 0.109             | T2S92-600PL     | T2S92-600PM     |

NOTE: BPE 2019 Specifications  
PL Finish – SF1

O.D. = 32Ra Mechanically Polished  
I.D. = 20Ra Mechanically Polished

PM Finish – SF4

O.D. = 32Ra Mechanically Polished  
I.D. = 15Ra Mechanically Polished and Electropolished

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