

MODEL C341 FLANGE FOR COPPER TUBING

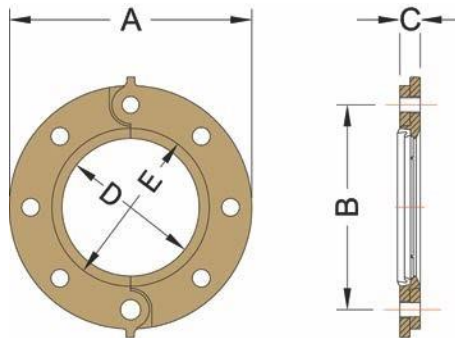
The Model C341 Flange allows for the direct connection of grooved-end copper tubing with ANSI class 125/150 (steel) or ASME B16.24 (copper) class 150 flanged components without the need for heat or lead. Available in sizes 2" – 6" (50 mm – 150 mm) the Model C341 is supplied hinged as a single assembly with a set of hex-head bolt and nut and a pressure responsive gasket. The pressure responsive gasket seals on the outside diameter of the copper tubing and isolates the flange segments from the internal fluid. Pressure rating: up to 300 psi (20 bar) depending on the size and type of copper tubing being used.



Roll Set

As copper tubing is thinner than carbon steel pipe, always use a roll set specifically designed for use on copper tubing.

For Fire Protection pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit **SHURJOINT** website, www.shurjoint.com for details or contact your **SHURJOINT** Representative.



Full warranty terms can be found on www.shurjoint.com

Model C341 Flange for Copper Tubing

| Nominal Size | Pipe O.D. | Max. Working Pressure CWP* | Dimensions | | | Sealing Surface | | Bolts | | Weight |
|--------------|-----------|----------------------------|------------|------|------|-----------------|------|-------|---------|--------|
| | | | A | B | C | D | E | No. | Size | |
| in | in | PSI | in | in | in | in | in | | in | Lbs |
| mm | mm | Bar | mm | mm | mm | mm | mm | | | Kgs |
| 2 | 2.125 | 300 | 6.00 | 4.75 | 0.75 | 2.13 | 3.20 | 4 | 5/8 x 3 | 4.6 |
| 50 | 54.0 | 20 | 152 | 121 | 19 | 54 | 81 | | | 2.1 |
| 2½ | 2.625 | 300 | 7.00 | 5.50 | 0.87 | 2.63 | 3.91 | 4 | 5/8 x 3 | 6.6 |
| 65 | 66.7 | 20 | 178 | 140 | 22 | 67 | 99 | | | 3.0 |
| 3 | 3.125 | 300 | 7.50 | 6.00 | 0.94 | 3.13 | 4.53 | 4 | 5/8 x 3 | 7.7 |
| 80 | 79.4 | 20 | 190 | 152 | 24 | 80 | 115 | | | 3.5 |
| 4 | 4.125 | 300 | 9.00 | 7.50 | 0.94 | 4.13 | 5.53 | 4 | 5/8 x 3 | 9.5 |
| 100 | 104.8 | 20 | 229 | 191 | 24 | 105 | 140 | | | 4.3 |
| 5 | 5.125 | 300 | 10.00 | 8.50 | 0.94 | 5.13 | 6.71 | 8 | ¾ x 3½ | 12.8 |
| 125 | 130.2 | 20 | 254 | 216 | 24 | 130 | 170 | | | 5.8 |
| 6 | 6.125 | 300 | 11.00 | 9.50 | 1.00 | 6.13 | 7.79 | 8 | ¾ x 3½ | 13.6 |
| 150 | 155.6 | 20 | 279 | 241 | 25 | 156 | 198 | | | 6.2 |

* Working Pressure is for connection with roll-grooved Type K copper tubing

** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

MODEL C341 NOTES

• Sealing Surface (D & E):

The sealing surface of the mating flange, the area shown in the illustration between D & E shall be free from gouges, undulations or deformities of any type to ensure optimum sealing.

• Gasket Insertion:

Make sure that the bottom of the gasket (the mating side) is positioned and seated against the bottom of the flange recess.

• Sandwich plates:

The Model C341 flange requires a hard flat face for effective gasket sealing. A sandwich plate is required and should always be used when the mating surface is not adequate, as with the serrated faces of some valves or the rubber faced or rubber lined flange of a wafer valve.

• Caution:

The Model C341 flanges shall not be used as anchor points for tie-rods across non-restrained joints. Do not use Model C341 flanges within 90 degrees of one another on a standard fitting when the outside dimensions cause interference.

Performance Data

| Model C341 Flange for Copper Tubing | | | | | | | | | | | | | |
|-------------------------------------|----------------|----------------------|--------------------------------------|--------------------------------|----------------------|--------------------------------------|--------------------------------|----------------------|--------------------------------------|--------------------------------|------------------|--------------------------------------|--------------------------------|
| Nominal Size | Pipe O.D. | Type “K” ASTMB-88 | | | Type “L” ASTMB-88 | | | Type “M” ASTMB-88 | | | DWV ASTM B-88 | | |
| | | Wall Thick | Max. Joint Working Pressure | Max. Permis. End Load | Wall Thick | Max. Joint Working Pressure | Max. Permis. End Load | Wall Thick | Max. Joint Working Pressure | Max. Permis. End Load | Wall Thick | Max. Joint Working Pressure | Max. Permis. End Load |
| | | | in mm | PSI Bar | | Lbs kN | in mm | | PSI Bar | Lbs kN | | in mm | PSI Bar |
| 2 50 | 2.125 54.0 | 0.083 2.1 | 300 20 | 1,065 4.7 | 0.070 1.8 | 300 20 | 1,065 4.7 | 0.058 1.5 | 250 17 | 890 3.9 | -- -- | -- -- | -- -- |
| 2½ 65 | 2.625 66.7 | 0.095 2.4 | 300 20 | 1,625 7.2 | 0.080 2.0 | 300 20 | 1,625 7.23 | 0.065 1.7 | 250 17 | 1,350 6.0 | -- -- | -- -- | -- -- |
| 3 80 | 3.125 79.4 | 0.109 2.8 | 300 20 | 2,300 10.2 | 0.090 2.3 | 300 20 | 2,300 10.2 | 0.072 1.8 | 250 17 | 1,415 6.3 | 0.045 1.1 | 100 7 | 765 3.4 |
| 4 100 | 4.125 104.8 | 0.134 3.4 | 300 20 | 4,005 17.8 | 0.110 2.8 | 300 20 | 4,005 17.8 | 0.095 2.4 | 250 17 | 3,340 14.9 | 0.058 1.5 | 100 7 | 1,335 5.9 |
| 5 125 | 5.125 130.2 | 0.160 4.1 | 300 20 | 6,190 27.6 | 0.125 3.2 | 300 20 | 6,190 27.6 | 0.109 2.8 | 200 14 | 4,125 18.4 | 0.072 1.8 | 100 7 | 2,060 9.2 |
| 6 150 | 6.125 155.6 | 0.192 4.9 | 300 20 | 8,840 3.93 | 0.140 3.6 | 300 20 | 8,840 3.93 | 0.122 3.2 | 200 14 | 5,890 26.2 | 0.083 2.1 | 100 7 | 2,945 1.31 |

MATERIAL SPECIFICATIONS

• Housing:

Ductile Iron to ASTM A536, Gr. 65-45-12 and or ASTM A395, Gr. 65-45-15, min. tensile strength 65,000 psi (448MPa).

• Coating:

Epoxy coated in copper color.

• Rubber Gasket:

Grade E-pw EPDM (Color code: Double Green stripe) certified under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals..

For additional details contact **Shurjoint**.

• Standard Hex Bolts & Nuts:

Plated hex bolt conforming to ASTM A307 with hex nut (1 set of nut and bolt is supplied). Bolts and nuts for the flange connection to be supplied by installer.

General Notes:

- **Maximum Working Pressure (CWP)** listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact **Shurjoint** for additional information.
- **Max. End Load** is calculated based on the maximum working pressure (CWP).
- **Listed and or Approved Pressures** are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the **Shurjoint** website.
- **Field joint test:** For one time only the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- **Warning:** Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- **The 10 Year Limited Warranty** applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- **Shurjoint** reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

***Shurjoint** product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact **Shurjoint** Technical Service. **Shurjoint** reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on **Shurjoint** products previously subsequently sold.*