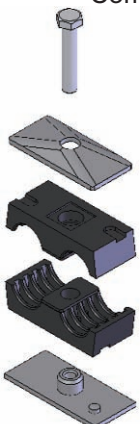


Ordering Examples

TW

Complete Clamp for Weld Mounting




Consists of:

- 1 HEX Bolts
- 1 TCP Cover Plate
- 1 CLH Clamp Set (2 halves)
- 1 TWP Weld Plate

UT

Complete Clamp for Strut Mounting



Consists of:

- 1 HEX Bolts
- 1 TCP Cover Plate
- 1 CLH Clamp Set (2 halves)
- 1 UCN Unistrut Clip

R0T

Complete Clamp for RAL-0 Mounting




Consists of:

- 1 HEX Bolts
- 1 TCP Cover Plate
- 1 CLH Clamp Set (2 halves)
- 2 RCN-0 Rail Nut

**R1T
R4T**

Complete Clamp for Ral-1 Mounting



Consists of:

- 1 HEX Bolts
- 1 TCP Cover Plate
- 1 CLH Clamp Set (2 halves)
- 1 RCN-4 Rail Nut

TWSK

Stacking Kit

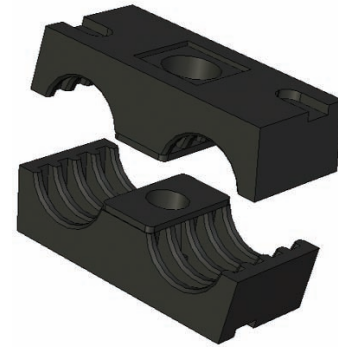


Consists of:

- 1 SAF Cover Plate
- 1 STB Stacking Bolt
- 1 CLH Clamp Set (2 halves)

Clamp Pair Selection

Behringer's clamp pairs are available in different materials and incorporate a modular insert by group size. Twin series pipe clamps are available in sizes from 1/4 in. (6.35 mm) through 1.66in. (42 mm) OD Sizes.



Clamp Pair Selection and Part Numbers

| Behringer Group | Pipe Size | Tube Size | Metric OD (mm) | Imperial OD (Inch) | Clamp Halves (See material code for *) |
|-----------------|-----------|-----------|----------------|--------------------|--|
| T1 | | 1/4 | 6.4 | 0.250 | TS-CLH-01-*-025 |
| | | 3/8 | 9.5 | 0.375 | TS-CLH-01-*-038 |
| | | | 12.0 | 0.472 | TS-CLH-01-*-047 |
| T2 | | 1/4 | 6.4 | 0.250 | TS-CLH-02-*-025 |
| | | 3/8 | 9.5 | 0.375 | TS-CLH-02-*-038 |
| | | 1/2 | 12.7 | 0.500 | TS-CLH-02-*-050 |
| | 1/4 | | 14.0 | 0.540 | TS-CLH-02-*-054 |
| | 5/8 | | 16.0 | 0.620 | TS-CLH-02-*-062 |
| T3 | | 3/4 | 19.0 | 0.750 | TS-CLH-03-*-075 |
| | 1/2 | | 21.3 | 0.840 | TS-CLH-03-*-084 |
| | | 7/8 | 22.2 | 0.870 | TS-CLH-03-*-087 |
| | | 1 | 25.4 | 1.000 | TS-CLH-03-*-100 |
| T4 | | 7/8 | 22.2 | 0.870 | TS-CLH-04-*-087 |
| | | 1 | 25.4 | 1.000 | TS-CLH-04-*-100 |
| | 3/4 | | 26.7 | 1.050 | TS-CLH-04-*-105 |
| | | 1 1/8 | 28.6 | 1.125 | TS-CLH-04-*-112 |
| T5 | | 1 1/4 | 32.0 | 1.250 | TS-CLH-05-*-125 |
| | 1 | | 33.4 | 1.315 | TS-CLH-05-*-132 |
| | | 1 1/2 | 38.1 | 1.500 | TS-CLH-05-*-150 |
| | 1 1/4 | | 42.2 | 1.660 | TS-CLH-05-*-166 |

Clamp Halves Material Codes (*)

| | |
|----------|--|
| P | [PP] Polypropylene Black Color |
| S | [SP] Santoprene Beige Color |

Custom Sizes

Custom sizes can be made by specially boring the clamp pair to any desired size. To order a special size, first find the group that this will fall under. All groups are available starting with 1/4 in. OD and can be used up to the maximum OD size in the chart below. This is expressed in the part number as a two-digit number (G#) Once you have determined your group size, simply add the desired OD of the line to be secured in the 3 digit end number of the clamp pair (XXX) by rounding the number to two decimals and dropping the decimal point. The part number will look like this:

TS-CLH-G#-*-XXX

Example: For a line with OD of 1.08 in., this would fall within the group T4. The Part number will be as follows:

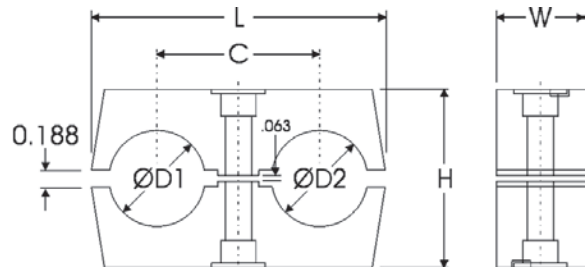
TS-CLH-04-*-108

Special Bore Range by Group

| Group (G#) | Range |
|------------|---------------------------|
| 01 | 0.25 in through 0.472 in. |
| 02 | 0.25 in through 0.675 in. |
| 03 | 0.25 in through 1.000 in. |
| 04 | 0.25 in through 1.125 in. |
| 05 | 0.25 in through 1.660 in. |

Clamp Pair Dimensions

Dimensions for the clamp pairs can be found at the right and in the chart below. As a general rule of thumb, the outside diameter of the line to be secured should not vary over or under the ØD dimension in the chart by more than ½ of the tension clearance dimension, or no more than 0.030 in. If an acceptable size is not available, custom sizes can be made to order.



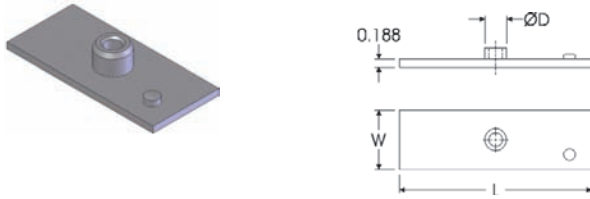
Clamp Pair Dimensional Information

| Behringer Group | Metric ØD (mm) | Imperial ØD (Inch) | Clamp Halves (See page 1 for complete order numbers) | L | C | H | W | Weight Ea. |
|-----------------|----------------|--------------------|---|-------------------------|------------------------|------------------------|------------------------|------------|
| T1 | 6.4 | 0.250 | TS-CLH-01*-025 | 1.406 in. (36 mm) | 0.781 in. (20 mm) | 0.781 in. (20 mm) | 1.195 in. (30.4 mm) | 0.02 lbs |
| | 9.5 | 0.375 | TS-CLH-01*-038 | | | | | |
| | 12.0 | 0.472 | TS-CLH-01*-047 | | | | | |
| T2 | 6.4 | 0.250 | TS-CLH-02*-025 | 2.188 in. (56 mm) | 1.250 in. (32 mm) | 1.000 in. (25.4) | 1.195 in. (30.4 mm) | 0.03 lbs |
| | 9.5 | 0.375 | TS-CLH-02*-038 | | | | | |
| | 12.7 | 0.500 | TS-CLH-02*-050 | | | | | |
| | 14.0 | 0.540 | TS-CLH-02*-054 | | | | | |
| T3 | 19.0 | 0.750 | TS-CLH-03*-075 | 2.688 in. (68.3 mm) | 1.438 in. (36.5 mm) | 1.500 in. (38.1 mm) | 1.195 in. (30.4 mm) | 0.07 lbs |
| | 21.3 | 0.840 | TS-CLH-03*-084 | | | | | |
| | 22.2 | 0.870 | TS-CLH-03*-087 | | | | | |
| | 25.4 | 1.000 | TS-CLH-03*-100 | | | | | |
| T4 | 22.2 | 0.870 | TS-CLH-04*-087 | 3.188 in. (81 mm) | 1.813 in. (46.1 mm) | 1.750 in. (44.4 mm) | 1.195 in. (30.4 mm) | 0.09 lbs |
| | 25.4 | 1.000 | TS-CLH-04*-100 | | | | | |
| | 26.7 | 1.050 | TS-CLH-04*-105 | | | | | |
| | 28.6 | 1.125 | TS-CLH-04*-112 | | | | | |
| T5 | 32.0 | 1.250 | TS-CLH-05*-125 | 4.063 in. (103.2 mm) | 2.188 in. (56 mm) | 2.250 in. (57.1 mm) | 1.195 in. (30.4 mm) | 0.15 lbs |
| | 33.4 | 1.315 | TS-CLH-05*-132 | | | | | |
| | 38.1 | 1.500 | TS-CLH-05*-150 | | | | | |
| | 42.2 | 1.660 | TS-CLH-05*-166 | | | | | |

Hardware Selection and Dimensions

Twin Weld Plate [TWP]

The typical mounting configuration where the clamp is welded to the support structure.

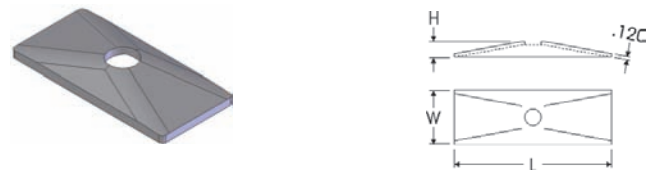


| Group | Order Number | L | W | ØD | Thread | Weight |
|-------|------------------------|-------------------------|----------------------|----------------------|------------------------------|----------|
| T1 | TS-TWP-01-* XXX | 1.449 in. (37 mm) | 1.188 in. (30 mm) | 0.460 in. (12 mm) | 1/4 - 20 UNC (M6 metric) | 0.08 lbs |
| T2 | TS-TWP-02-* XXX | 2.188 in. (56 mm) | 1.188 in. (30 mm) | 0.550 in. (14 mm) | 5/16 - 18 UNC (M8 metric) | 0.14 lbs |
| T3 | TS-TWP-03-* XXX | 2.688 in. (68.3 mm) | 1.188 in. (30 mm) | 0.550 in. (14 mm) | 5/16 - 18 UNC (M8 metric) | 0.17 lbs |
| T4 | TS-TWP-04-* XXX | 3.188 in. (81 mm) | 1.188 in. (30 mm) | 0.550 in. (14 mm) | 5/16 - 18 UNC (M8 metric) | 0.2 lbs |
| T5 | TS-TWP-05-* XXX | 4.063 in. (103.2 mm) | 1.188 in. (30 mm) | 0.550 in. (14 mm) | 5/16 - 18 UNC (M8 metric) | 0.26 lbs |

| | | |
|---------------------|-------------|--|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |
| XXX Threads: | 56H | 5/16 - 18 UNC Thread (standard) |
| | 38H | 3/8 - 16 UNC Thread (special) |
| | -MET | By adding the " MET " designation after the material designation above, the threads are metric thread |

Twin Cover Plate [TCP]

The cover plate is the typical top fixture used to secure twin series pipe clamps.



| Group | Order Number | L | W | H | Weight |
|-------|--------------|----------------------|------------------------|---------------------|----------|
| T1 | TS-TCP-01-* | 1.225 in. (31 mm) | 0.905 in. (23 mm) | - | 0.05 lbs |
| T2 | TS-TCP-02-* | 2.040 in. (52 mm) | 1.200 in. (30.5 mm) | 0.266 in. (7 mm) | 0.08 lbs |
| T3 | TS-TCP-03-* | 2.542 in. (65 mm) | 1.200 in. (30.5 mm) | 0.266 in. (7 mm) | 0.10 lbs |
| T4 | TS-TCP-04-* | 2.870 in. (73 mm) | 1.205 in. (30.6 mm) | 0.266 in. (7 mm) | 0.11 lbs |
| T5 | TS-TCP-05-* | 3.688 in. (94 mm) | 1.220 in. (31 mm) | 0.266 in. (7 mm) | 0.14 lbs |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | Y | Yellow Zinc Plated Steel |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |

Twin Hex Bolts [HEX]

The Hexagon head bolts are used with clamps with cover plates



| Group | Order Number | L | Thread | Weight |
|-------|------------------------|-----------------------|------------------------------|----------|
| T1 | TS-HEX-01-* XXX | 1.00 in. (25.4 mm) | 1/4 - 20 UNC (M6 metric) | 0.02 lbs |
| T2 | TS-HEX-02-* XXX | 1.25 in. (32 mm) | 5/16 - 18 UNC (M8 metric) | 0.03 lbs |
| T3 | TS-HEX-03-* XXX | 1.75 in. (44 mm) | 5/16 - 18 UNC (M8 metric) | 0.04 lbs |
| T4 | TS-HEX-04-* XXX | 2.00 in. (50.8 mm) | 5/16 - 18 UNC (M8 metric) | 0.05 lbs |
| T5 | TS-HEX-05-* XXX | 2.50 in. (63 mm) | 5/16 - 18 UNC (M8 metric) | 0.06 lbs |

| | | |
|---------------------|-------------|--|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | Y | Yellow Zinc Plated Steel |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |
| XXX Threads: | 56H | 5/16 - 18 UNC Thread (standard) |
| | 38H | 3/8 - 16 UNC Thread (special) |
| | -MET | By adding the " MET " designation after the material designation above, the threads are metric thread |

Twin Stacking Bolt [STB]

The stacking bolt is used when another clamp module will be stacked on top of the existing bottom clamp. The head of the stacking bolt has a female thread for the next bolt on top to engage.



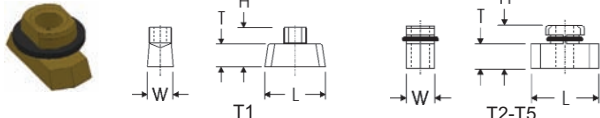
| Group | Order Number | L1 | L2 | Thread | Weight |
|-------|------------------------|----------------------|-----------------------|------------------------------|----------|
| T1 | N/A | - | - | - | - |
| T2 | TS-STB-02-* XXX | 0.625 in. (16 mm) | 1.25 in. (32 mm) | 5/16 - 18 UNC (M8 metric) | 0.04 lbs |
| T3 | TS-STB-03-* XXX | 1.125 in. (29 mm) | 1.75 in. (44 mm) | 5/16 - 18 UNC (M8 metric) | 0.05 lbs |
| T4 | TS-STB-04-* XXX | 1.375 in. (35 mm) | 2.00 in. (50.8 mm) | 5/16 - 18 UNC (M8 metric) | 0.06 lbs |
| T5 | TS-STB-05-* XXX | 1.875 in. (48 mm) | 2.50 in. (63 mm) | 5/16 - 18 UNC (M8 metric) | 0.06 lbs |

| | | |
|---------------------|-------------|--|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | Y | Yellow Zinc Plated Steel |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |
| XXX Threads: | 56H | 5/16 - 18 UNC Thread (standard) |
| | 38H | 3/8 - 16 UNC Thread (special) |
| | -MET | By adding the " MET " designation after the material designation above, the threads are metric thread |

Hardware Selection and Dimensions

Rail Nut [RCN-0]

The RCN-0 is for use when mounting Behringer's RAL-0, and competitor's standard rails.



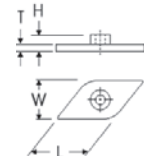
| Group | Order Number | L | W | T | Thread | Weight |
|-------|------------------------|------------------------|------------------------|-----------------------|------------------|----------|
| T1 | ST-RCN-99-* RN0 | 0.950 in. (24 mm) | 0.405 in. (10.2 mm) | 0.210 in. (5.3 mm) | 1/4 - 20 UNC | 0.02 lbs |
| T2-T5 | TS-RCN-99-* RN0 | 1.000 in. (25.4 mm) | 0.420 in. (10.7 mm) | 0.210 in. (5.3 mm) | 5/16 - 18 UNC | 0.02 lbs |

| | | |
|--------------------|----------|---|
| *Materials: | Y | Yellow Zinc Plated Steel (Standard Material Groups T2-T5) |
| | Z | Zinc Plated Steel (Group T1 as standard, special T2-T5) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Standard Material Group T1) |

Weight Ea. approx. 0.02 lbs each

Rail Nut [RCN-1/RCN-4]

The RCN-1 and RCN-4 are used only when mounting to Behringer's proprietary RAL-1



| Group | Order Number | L | W | T | H | Thread |
|-------|------------------------|------------------------|----------------------|-----------------------|----------------------|------------------|
| T1 | ST-RCN-99-* RN1 | 1.075 in. (27.3 mm) | 0.783 in. (20 mm) | 0.175 in. (4.4 mm) | 0.405 in. (10 mm) | 1/4 - 20 UNC |
| T2-T5 | TS-RCN-99-* RN4 | 1.075 in. (27.3 mm) | 0.783 in. (20 mm) | 0.175 in. (4.4 mm) | 0.550 in. (14 mm) | 5/16 - 18 UNC |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special order) |

Weight Ea. Approx. 0.04 lbs.

Mounting Rail [RAL-0]

Behringer's RAL-0 can be used to mount clamps with RCN-0 rail nuts only.



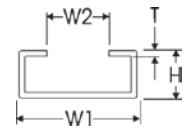
| Group | Order Number | W1 | W2 | L | T | H |
|-------|------------------------|---------------------|----------------------|-----------|----------|----------------------|
| 0-7A | ST-RA0-99-* xxx | 1.125 in. (28mm) | 0.438 in. (11 mm) | See Below | 14 gauge | 0.438 in. (11 mm) |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Special Order) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Standard Material) |

xxx Length:
6FT 72 in. (1829 mm) Length (Standard Length)
3FT 36 in. (914 mm) Length (Special Length)
 Custom sizes available on request

Mounting Rail [RAL-1]

Behringer's Proprietary RAL-1 can be used to mount both clamps with RCN-1 and RCN-4 rail nuts above as well as the TWP weld plates. This allows more flexibility of inventories and simplifies installation and field modifications.



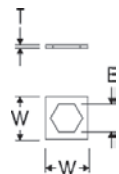
| Group | Order Number | W1 | W2 | L | T | H |
|-------|------------------------|---------------------|----------------------|-----------|----------|----------------------|
| 0-7A | ST-RA1-99-* xxx | 1.125 in. (28mm) | 0.438 in. (11 mm) | See Below | 14 gauge | 0.438 in. (11 mm) |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |

xxx Length:
6FT 72 in. (1829 mm) Length (Standard Length)
3FT 36 in. (914 mm) Length (Special Length)
 Custom sizes available on request

Safety Plate [SAF]

The safety plate is used in conjunction with the STB stacking bolts. This ensures that the stacking bolts will remain locked in place when tightening the clamp module stacked above it.

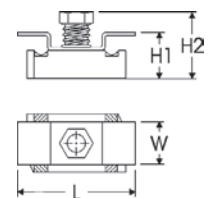
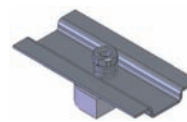


| Group | Order Number | W | B | T | Weight |
|---------|--------------|----------------------|----------------------|-----------------------|---------|
| T1 | N/A | - | - | - | - |
| T2 - T5 | TS-SAF-02-* | 0.719 in. (18 mm) | 0.510 in. (13 mm) | 0.105 in. (2.7 mm) | 0.1 oz. |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | Y | Yellow Zinc Plated Steel |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |

Unistrut Clip Nut [UCN]

The UCN nut is used to adapt Behringer's pipe clamps to standard strut. This allows for even greater flexibility and mounting possibilities.



| Group | Order Number | L | W | H1 | H2 | Thread |
|-------|--------------|----------------------|----------------------|------------------------|------------------------|------------------|
| T1 | ST-UCN-99-* | 1.660 in. (42 mm) | 0.635 in. (16 mm) | 0.525 in. (13 mm) | 0.813 in. (20.5 mm) | 1/4 - 20 UNC |
| T2-T5 | TS-UCN-23-2 | 1.500 in. (38 mm) | 2.090 in. (53 mm) | 0.730 in. (18.5 mm) | 1.080 in. (27.5 mm) | 5/18 - 18 UNC |
| T4-T5 | TS-UCN-45-2 | 1.500 in. (38 mm) | 3.150 in. (80 mm) | 0.730 in. (18.5 mm) | 1.080 in. (27.5 mm) | 5/18 - 18 UNC |

| | | |
|--------------------|----------|---|
| *Materials: | Z | Zinc Plated Steel (Standard Material) |
| | T | AISI 304 Grade Stainless Steel (A2 - 1.4301/1.4305) |
| | X | AISI 316 Grade Stainless Steel (A4 - 1.4401/1.4571) |
| | C | Unplated Carbon Steel (Special Order) |

Complete Assembly Ordering Code

Chart 1 Chart 2 Chart 3 Chart 4 Chart 5
TW T 5150 - PP - MET

① Clamp Configuration

| | |
|-----------------|--|
| TW | Complete Clamp for Weld Mounting |
| R0T | Complete Clamp for mounting to RAL-0 |
| R1T/ R4T | Complete Clamp for mounting to RAL-1 |
| UT | Complete Clamp for mounting to Strut Channel |
| TWSK | Stacking Kit |

② Hardware Materials

| | |
|-------------|---|
| Omit | Electro-Zinc Dichromate Plating RCN-0 rail nuts are still supplied as untreated carbon steel. Zinc plating available for these parts on request. |
| T | AISI 304 Stainless Steel (A2 - 1.4301/1.4305) |
| X | AISI 316/316Ti Stainless Steel (A4 - 1.4401/1.4571) |
| C | Untreated Carbon Steel |

④ Clamp Pair Material

| | |
|-----------|---------------|
| PP | Polypropylene |
| SP | Santoprene |

⑤ Threads

| | |
|-------------|-----------------------|
| Omit | UNC Thread (Standard) |
| MET | Metric Thread |

③ Clamp Group and Size

| Behringer Group | Pipe Size | Tube Size | Metric OD (mm) | Imperial OD (Inch) | Clamp Halves (Set of 2) |
|-----------------|-----------|-----------|----------------|--------------------|-------------------------|
| T1 | | 1/4 | 6.4 | 0.250 | 1025 |
| | | 3/8 | 9.5 | 0.375 | 1038 |
| | | | 12.0 | 0.472 | 10472 |
| T2 | 1/8 | 1/4 | 6.4 | 0.250 | 2025 |
| | | 3/8 | 9.5 | 0.375 | 2038 |
| | 1/4 | 1/2 | 12.7 | 0.500 | 20405 |
| | | 5/8 | 14.0 | 0.540 | 2050 |
| T3 | 1/2 | 1 | 16.0 | 0.620 | 20540 |
| | | 3/4 | 19.0 | 0.750 | 2062 |
| | | 7/8 | 21.3 | 0.840 | 3075 |
| T4 | 3/4 | 1 | 22.2 | 0.870 | 30840 |
| | | 7/8 | 22.2 | 0.870 | 3087 |
| | 1 1/8 | 1 | 25.4 | 1.000 | 3100 |
| | | 1 1/8 | 26.7 | 1.050 | 4087 |
| T5 | 1 | 1 1/4 | 28.6 | 1.125 | 4100 |
| | | 1 1/2 | 32.0 | 1.250 | 41050 |
| | 1 1/4 | 1 | 33.4 | 1.315 | 41125 |
| | | 1 1/2 | 38.1 | 1.500 | 5125 |
| | | 1 1/4 | 42.2 | 1.660 | 51315 |
| | | | | | 5150 |
| | | | | | 51660 |