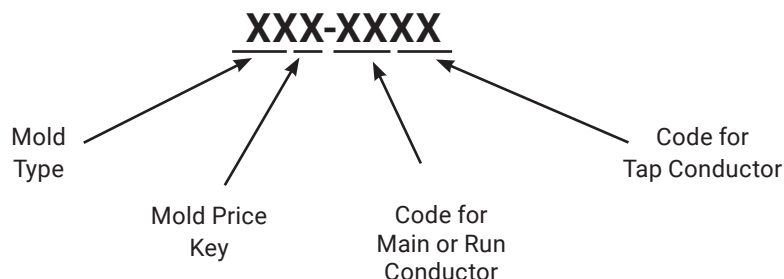


The Cadweld Mold Numbering System

The Cadweld mold part number gives, in code, the complete information of the mold

– type of connection, mold price key, and conductor size(s).



EXAMPLES

TAC-9F9C

↑ ↑ ↑ ↑

Price Key C 7 / #7

Type TA 19 / #9

GTC-P16 9H

↑ ↑ ↑ ↑

Price Key C 19/#7

Type GT 5/8" Copper-Clad Ground Rod

SSC-9F

↑ ↑ ↑

Price Key C

Type SS 19 / #9

VSC-9D-V5C

↑ ↑ ↑ ↑ ↑

Price Key C Vertical Pipe

Type VS Cable 7 / #6 4" - 6" Pipe

Certain tools may be required for various connections.

If required, these tools are listed on the same page as the connection and in Section A.

- Some tools listed in Section A can save you a lot of time.
- Also refer to A9E, Contractor Tips, to make your job easier, and learn about labor saving ideas.

REQUIRED TOOLS SUMMARY

Required tools are listed with each mold. For your reference, handle clamps and and/or frame are summarized below.

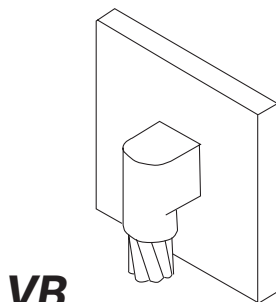
| <u>MOLD</u> | <u>REQUIRED</u> |
|-------------|---------------------------------------|
| A* | Includes frame with handle |
| C, Q & R | Requires L160 |
| D, F & Z | Requires L159 |
| E* | Includes frame but also requires L160 |
| J* | Includes frame but also requires L159 |
| K*, M* & V* | Includes frame with handles |

* To order mold only - without handles or frame - add suffix "M" to mold part number.

Vertical Steel Surface

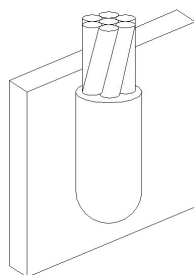
VB / VF

FOR STRANDED COPPER-CLAD STEEL CONDUCTORS



VB

Cable down to vertical steel surface



VF

Cable up to vertical steel surface

VERTICAL STEEL SURFACE

- Connection of vertical cable to vertical flat steel surface or to side of vertical or horizontal steel pipe.
- **A test weld should be made to check the possibility of burn through on thin sections or thin wall pipe.**
- Cable to steel pipe. Add pipe orientation and nominal pipe size to flat surface mold part number. Examples: VFC9CV6, 7/#7 conductor to vertical 6" pipe VFC9AH4, 7/#10 conductor to horizontal 4" pipe.
- Concentric stranded copper cable listed.
- **Bold letter** in mold part number is the price key.

REQUIRED TOOLS

| | | |
|---|-----------------------|------------------|
| Handle Clamps | for C Price Key Molds | Part No. L160 |
| | for D Price Key Molds | L159 |
| Cadweld Plus Control Unit or Flint Ignitor | | PLUSCU T320 |

SUGGESTED TOOLS

| | |
|----------------------|----------------|
| Cable Cleaning Brush | T313 or T314 |
| Slag Removal Spade | B136A or B136B |
| Mold Cleaning Brush | T394 |
| Rasp | T321 |
| Torch Head | T111 |

ACCESSORIES

- See Section A

TYPE VB

| CABLE SIZE (sq mm) | MOLD PART NO. | WELDING MATERIAL ¹ |
|-----------------------|------------------|----------------------------------|
| 7/#10 | VBC9A | 65 |
| 7/#8 | VBC9B | 115 |
| 7/#7 | VBC9C | 115 |
| 7/#6 | VBC9D | 150 |
| 7/#5 | VBC9E | 150 |
| 19/#9 | VBC9F | 200 |
| 19/#8 | VBC9G | 200 |
| 19/#7 | VBC9H | 250 |
| 19/#6 | VBR9J | 2-150 |

¹ For Cadweld Plus add suffix "PLUSF20"
(refer page 44)

TYPE VF

| CABLE SIZE (sq mm) | MOLD PART NO. | WELDING MATERIAL ¹ |
|-----------------------|------------------|----------------------------------|
| 7/#10 | VFC9A | 90 |
| 7/#8 | VFC9B | 150 |
| 7/#7 | VFC9C | 150 |
| 7/#6 | VFR9D | 200 |
| 7/#5 | VFR9E | 200 |
| 19/#9 | VFR9F | 200 |
| 19/#8 | VFR9G | 250 |
| 19/#7 | VFF9H | 2-150 |
| 19/#6 | VFF9J | 2-200 |

Technical Information

BARE CLASS A, B, AND C CONCENTRIC STRANDED CONDUCTOR

Based on A.S.T.M. Standard Specifications.

| Cadweld Cable code | Size in Circular mils | Size A.W.G. | Conductor Dia. In. | NUMBER OF WIRES / Strand Dia. Inches | | | | |
|--------------------|-----------------------|-------------|--------------------|--------------------------------------|--------|--------|-------|-------|
| | | | | 7 | 19 | 37 | 61 | 91 |
| 4Y | 1,000,000 | | 1.152 | | | .1644* | .1280 | .1048 |
| 4Q | 800,000 | | 1.031 | | | .1470* | .1145 | .0938 |
| 4L | 750,000 | | .998 | | | .1424* | .1109 | .0908 |
| 4G | 700,000 | | .964 | | | .1375* | .1071 | .0877 |
| 3X | 600,000 | | .893 | | | .1273 | .0992 | .0812 |
| 3Q | 500,000 | | .813 | | .1622* | .1162 | .0905 | |
| 3H | 400,000 | | .728 | | .1451 | .1040 | .0810 | |
| 3D | 350,000 | | .681 | | .1357 | .0973 | .0757 | |
| 3A | 300,000 | | .630 | | .1257 | .0900 | .0701 | |
| 2V | 250,000 | | .575 | | .1147 | .0822 | .0640 | |
| 2Q | 211,600 | 4/0 | .528 | .1739 | .1055 | .0756 | | |
| 2L | 167,800 | 3/0 | .470 | .1548 | .0940 | .0673 | | |
| 2G | 133,100 | 2/0 | .419 | .1379 | .0837 | .0600 | | |
| 2C | 105,500 | 1/0 | .373 | .1228 | .0745 | .0534 | | |
| 1Y | 83,690 | 1 | .332 | .1093 | .0664 | .0476 | | |
| 1V | 66,370 | 2 | .292 | .0974 | .0591 | | | |
| 1Q | 52,630 | 3 | .260 | .0867 | .0526 | | | |
| 1L | 41,740 | 4 | .232 | .0772 | .0469 | | | |
| 1H | 26,240 | 6 | .184 | .0612 | .0372 | | | |
| 1E | 16,510 | 8 | .146 | .0486 | .0295 | | | |
| 1B | 10,380 | 10 | .116 | .0385 | .0234 | | | |
| | 6,530 | 12 | .092 | .0305 | .0185 | | | |
| | 4,110 | 14 | .073 | .0242 | .0147 | | | |

* Class AA

BARE SOLID COPPER WIRE

Based on A.S.T.M. Standard Specifications

| Cadweld Cable code | Size A.W.G. | Cross Sectional Area Circular Mils | Wire Dia. In. |
|--------------------|-------------|------------------------------------|---------------|
| 2P | 4/0 | 211,600 | .4600 |
| 2K | 3/0 | 167,800 | .4096 |
| 2F | 2/0 | 133,100 | .3648 |
| 2B | 1/0 | 105,500 | .3249 |
| 1X | 1 | 83,690 | .2893 |
| 1T | 2 | 66,370 | .2576 |
| 1P | 3 | 52,630 | .2294 |
| 1K | 4 | 41,740 | .2043 |
| 1G | 6 | 26,250 | .1620 |
| 1D | 8 | 16,510 | .1285 |
| 1A | 10 | 10,380 | .1019 |
| | 12 | 6,530 | .0808 |
| | 14 | 4,110 | .0664 |