

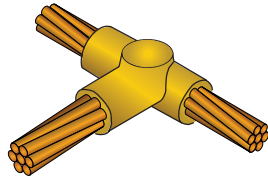


# Table of Contents

- Cable to Cable**
  - TA - Horizontal Tee ..... 3
  - PT - Parallel Horizontal Tee..... 3
  - SS - Horizontal Splice ..... 3
  - PC - Parallel Tap ..... 3
  - XB - Lapped Horizontal Splice ..... 4
  - XA - Horizontal Splice ..... 4
  
- Cable to Bus or Lug**
  - LA - Cable to Lug..... 4
  - LJ - Cable to Bus Bar ..... 4
  
- Cable to Ground Rod**
  - GR - Cable to Ground Rod ..... 5
  - GT - Through Cable to Top of Ground Bar ..... 5
  - GY - Through Cable to Side of Ground Bar ..... 5
  - NC - Through Cable / Tap to Ground Rod ..... 5
  - CADWELD ONE SHOT ..... 6
  - CADWELD PLUS ONE SHOT..... 6
  
- Cable to Rebar**
  - RR - Cable to Rebar ..... 7
  - RD - Cable to Rebar ..... 7
  - RJ - Cable to Rebar ..... 7
  
- Cable to Steel Surface**
  - VS - Cable to Vertical Steel..... 8
  - VB - Cable to Vertical Steel ..... 8
  - VF - Cable to Vertical Steel..... 8
  - HA - Cable to Horizontal Steel ..... 8
  - HS - Cable to Horizontal Steel ..... 8
  
- Materials, Tools & Accessories..... 9**
  
- CADWELD Molds ..... 10-11**

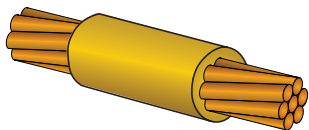
**WARNING**  
Pentair products shall be installed and used only as indicated in Pentair's product instruction sheets and training materials. Instruction sheets are available at [www.erico.pentair.com](http://www.erico.pentair.com) and from your Pentair customer service representative. Improper installation, misuse, misapplication or other failure to completely follow Pentair's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.

# Cable to Cable



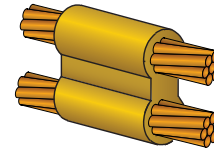
## TA - Horizontal Tee

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
4	6	TAC1L1H	32	32PLUSF20
	4	TAC1L1L	32	32PLUSF20
2 SOL	2 SOL	TAC1T1T	45	45PLUSF20
2	4	TAC1V1L	45	45PLUSF20
	2	TAC1V1V	45	45PLUSF20
1/0	4	TAC2C1L	45	45PLUSF20
	2	TAC2C1V	45	45PLUSF20
	1/0	TAC2C2C	90	90PLUSF20
	4/0	TAC2C2Q	115	115PLUSF20
2/0	4	TAC2G1L	45	45PLUSF20
	2	TAC2G1V	45	45PLUSF20
	1/0	TAC2G2C	90	90PLUSF20
	2/0	TAC2G2G	90	90PLUSF20
3/0	4/0	TAC2G2Q	115	115PLUSF20
	2	TAC2L1V	45	45PLUSF20
	1/0	TAC2L2C	90	90PLUSF20
4/0 SOL	2/0	TAC2L2G	90	90PLUSF20
	3/0	TAC2L2L	115	115PLUSF20
	4/0 SOL	TAC2P2P	150	150PLUSF20
4/0	4	TAC2Q1L	90	90PLUSF20
	2	TAC2Q1V	90	90PLUSF20
	1/0	TAC2Q2C	90	90PLUSF20
	2/0	TAC2Q2G	90	90PLUSF20
	3/0	TAC2Q2L	115	115PLUSF20
	4/0	TAC2Q2Q	150	150PLUSF20
	350	TAC2Q3A	150	150PLUSF20
250	500	TAC2Q3Q	150	150PLUSF20
	2/0	TAC2V2G	90	90PLUSF20
	4/0	TAC2V2Q	150	150PLUSF20
350	250	TAC2V2V	150	150PLUSF20
	4/0	TAC3D2Q	150	150PLUSF20
	350	TAC3D3D	200	200PLUSF20



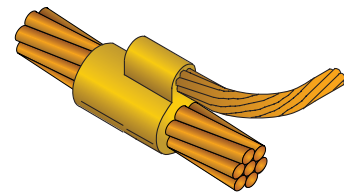
## SS - Horizontal Splice

CONDUCTOR	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
4	SST1L	25	25PLUSF20
2 SOL	SST1T	32	32PLUSF20
2	SST1V	32	32PLUSF20
1/0	SSC2C	45	45PLUSF20
2/0	SSC2G	65	65PLUSF20
3/0	SSC2L	90	90PLUSF20
4/0	SSC2Q	90	90PLUSF20
250	SSC2V	115	115PLUSF20



## PT - Parallel Horizontal Tee

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
2 SOL	2 SOL	PTC1T1T	65	65PLUSF20
2	2	PTC1V1V	65	65PLUSF20
1/0	1/0	PTC2C2C	90	90PLUSF20
	4/0	PTC2C2Q	150	150PLUSF20
2/0	2 SOL	PTC2G1T	90	90PLUSF20
	2	PTC2G1V	90	90PLUSF20
	1/0	PTC2G2C	115	115PLUSF20
	2/0	PTC2G2G	115	115PLUSF20
3/0	4/0	PTC2G2Q	150	150PLUSF20
	1/0	PTC2L2C	115	90PLUSF20
	3/0	PTC2L2L	150	150PLUSF20
4/0	1/0	PTC2Q2C	150	150PLUSF20
	2/0	PTC2Q2G	150	150PLUSF20
	3/0	PTC2Q2L	200	200PLUSF20
	4/0	PTC2Q2Q	200	200PLUSF20

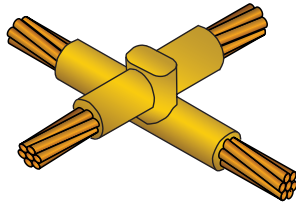


## PC - Parallel Tap

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
6 SOL	6 SOL	PCC1G1G	25	25PLUSF20
6	6	PCC1H1H	25	25PLUSF20
2 SOL	2 SOL	PCC1T1T	65	65PLUSF20
2	2	PCC1V1V	65	65PLUSF20
	6	PCC1T1G	32	32PLUSF20
1/0	6	PCC2C1H	45	45PLUSF20
2/0	6 SOL	PCC2G1G	65	65PLUSF20
	6	PCC2G1H	65	65PLUSF20
3/0	2	PCC2G1V	90	90PLUSF20
	6	PCC2L1H	90	90PLUSF20
4/0	6 SOL	PCC2Q1G	90	90PLUSF20
	6	PCC2Q1H	90	90PLUSF20
	2 SOL	PCC2Q1T	115	115PLUSF20
	2	PCC2Q1V	115	115PLUSF20
	4	PCC2Q1L	90	90PLUSF20
	4/0	PCC2Q2Q	150	150PLUSF20

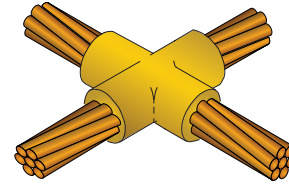
HANDLE CLAMP / FRAME (see page 10)	
PRICE KEY	NOTES
C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
Q	REQUIRES L160 HANDLE CLAMP
T	INCLUDES B399A FRAME, T320 IGNITOR
Z	REQUIRES L159 HANDLE CLAMP

# Cable to Cable • Cable to Bus / Lug



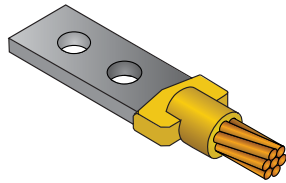
**XB - Lapped Horizontal Splice**

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
6 SOL	6 SOL	XBP1G1G	32	32PLUSF20
4	4	XBC1L1L	65	65PLUSF20
2	2	XBC1V1V	90	90PLUSF20
1/0	1/0	XBQ2C2C	150	150PLUSF20
2/0	2/0	XBQ2G2G	200	200PLUSF20
4/0	2/0	XBQ2Q2G	200	200PLUSF20
	4/0	XBQ2Q2Q	250	250PLUSF20
250	250	XBQ2V2V	(2) 150	300PLUSF20
350	350	XBZ3D3D	500	500PLUSF20
500	500	XBZ3Q3Q	(3) 250	750PLUSF20



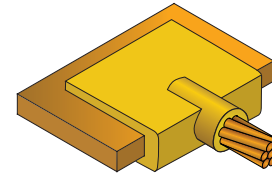
**XA - Horizontal Splice**

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
4	4	XAC1L1L	45	65PLUSF20
2	2	XAC1V1V	65	65PLUSF20
1/0	1/0	XAC2C2C	90	90PLUSF20
2/0	2/0	XAC2G2G	115	115PLUSF20
3/0	3/0	XAC2L2L	150	150PLUSF20
4/0	2/0	XAC2Q2G	150	150PLUSF20
	4/0	XAC2Q2Q	200	200PLUSF20
250	4/0	XAC2V2Q	200	200PLUSF20
	250	XAC2V2V	200	200PLUSF20
350	350	XAC3D3D	250	250PLUSF20
500	4/0	XAD3Q2Q	(2) 150	300PLUSF20
	500	XAD3Q3Q	500	500PLUSF20



**LA - Cable to Lug**

BUS OR LUG SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/8" x 1" Lug / Bus	2 SOL	LAC1TCE	45	45PLUSF20
	2	LAC1VCE	45	45PLUSF20
	1/0	LAC2CCE	45	45PLUSF20
	2/0	LAC2GCE	65	65PLUSF20
	3/0	LAC2LCE	65	65PLUSF20
	4/0	LAC2QCE	65	65PLUSF20
1/4" x 1" Lug / Bus	1/0	LAC2CEE	65	65PLUSF20
	2/0	LAC2GEE	65	65PLUSF20
	4/0 SOL	LAC2PEE	90	90PLUSF20
	4/0	LAC2QEE	90	90PLUSF20
	300	LAC3AEE	90	90PLUSF20
1/4" x 1-1/2" Lug/Bus	350	LAC3DEE	115	115PLUSF20
	4/0	LAC2QEG	90	90PLUSF20
	250	LAC2VEG	90	90PLUSF20
	350	LAC3DEG	115	115PLUSF20
	500	LAC3QEG	200	200PLUSF20

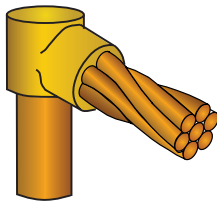


**LJ - Cable to Bus Bar**

BUS OR LUG SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/4" x 1-1/2" & Wider Lug/ Bus	6	LJCEG1H	65	65PLUSF20
	2 SOL	LJCEG1T	65	65PLUSF20
	2	LJCEG1V	65	65PLUSF20
	1/0	LJCEG2C	90	90PLUSF20
	2/0	LJCEG2G	90	90PLUSF20
	3/0	LJCEG2L	90	90PLUSF20
	4/0	LJCEG2Q	90	90PLUSF20
	500	LJCEG3Q	200	200PLUSF20

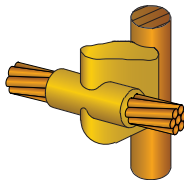
HANDLE CLAMP / FRAME (see page 10)	
PRICE KEY	NOTES
C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
Q	REQUIRES L160 HANDLE CLAMP
T	INCLUDES B399A FRAME, T320 IGNITOR
Z	REQUIRES L159 HANDLE CLAMP

# Cable to Ground Rod



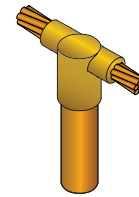
## GR - Cable to Ground Rod

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	6 SOL	GRT161G	32	32PLUSF20
	6	GRT161H	32	32PLUSF20
	4 SOL	GRT161K	32	32PLUSF20
	4	GRT161L	32	32PLUSF20
	2 SOL	GRC161T	65	65PLUSF20
	2	GRC161V	65	65PLUSF20
	1/0	GRC162C	90	90PLUSF20
	2/0	GRC162G	90	90PLUSF20
	3/0	GRC162L	90	90PLUSF20
	4/0	GRC162Q	90	90PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	250	GRC162V	90	90PLUSF20
	500	GRC163Q	115	115PLUSF20
	6 SOL	GRT181G	32	32PLUSF20
	6	GRT181H	32	32PLUSF20
	4 SOL	GRP181K	45	45PLUSF20
	4	GRP181L	45	45PLUSF20
	2 SOL	GRC181T	90	90PLUSF20
	2	GRC181V	90	90PLUSF20
	1/0	GRC182C	90	90PLUSF20
	2/0	GRC182G	90	90PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	3/0	GRC182L	90	90PLUSF20
	4/0	GRC182Q	90	90PLUSF20
	250	GRC182V	90	90PLUSF20
	500	GRC183Q	150	150PLUSF20



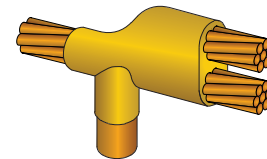
## GY - Through Cable to Side of Ground Bar

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	2 SOL	GYR161T	90	90PLUSF20
	2	GYR161V	90	90PLUSF20
	1/0	GYR162C	115	115PLUSF20
	2/0	GYR162G	115	115PLUSF20
	3/0	GYR162L	150	150PLUSF20
	4/0	GYR162Q	150	150PLUSF20
	250	GYR162V	150	150PLUSF20
	350	GYR163D	250	250PLUSF20
	500	GYF163Q	400	400PLUSF20
	3/4" Copper-bonded Sectional (threaded) or Plain	2 SOL	GYR181T	90
2		GYR181V	90	90PLUSF20
1/0		GYR182C	115	115PLUSF20
2/0		GYR182G	115	115PLUSF20
3/0		GYR182L	150	150PLUSF20
4/0		GYR182Q	150	150PLUSF20
250		GYR182V	200	200PLUSF20
350		GYR283D	300	300PLUSF20
500		GYF183Q	500	500PLUSF20



## GT - Through Cable to Top of Ground Bar

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	6	GTT161G	32	32PLUSF20
	4	GTT161L	32	32PLUSF20
	2 SOL	GTC161T	90	90PLUSF20
	2	GTC161V	90	90PLUSF20
	1/0	GTC162C	90	90PLUSF20
	2/0	GTC162G	115	115PLUSF20
	3/0	GTC162L	115	115PLUSF20
	4/0	GTC162Q	115	115PLUSF20
	250	GTC162V	150	150PLUSF20
	500	GTC163Q	250	250PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	6 SOL	GTP181G	45	45PLUSF20
	6	GTP181H	45	45PLUSF20
	2 SOL	GTC181T	90	90PLUSF20
	2	GTC181V	90	90PLUSF20
	1/0	GTC182C	115	115PLUSF20
	2/0	GTC182G	115	115PLUSF20
	3/0	GTC182L	115	115PLUSF20
	4/0	GTC182Q	115	115PLUSF20
	250	GTC182V	150	150PLUSF20
	500	GTC183Q	250	200PLUSF20



## NC - Through Cable / Tap to Ground Rod

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	2 SOL	NCR161T	115	115PLUSF20
	2	NCR161V	115	115PLUSF20
	1/0	NCR162C	150	150PLUSF20
	2/0	NCR162G	200	200PLUSF20
	3/0	NCR162L	250	250PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	4/0	NCR162Q	250	250PLUSF20
	6	NCR181H	90	90PLUSF20
	2 SOL	NCR181T	115	115PLUSF20
	2	NCR181V	115	115PLUSF20
	1/0	NCR182C	150	150PLUSF20
	2/0	NCR182G	200	200PLUSF20
	3/0	NCR182L	250	250PLUSF20
	4/0	NCR182Q	250	250PLUSF20


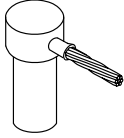
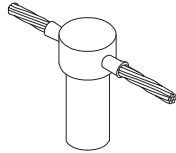
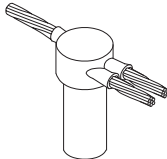
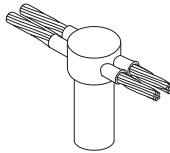
### HANDLE CLAMP / FRAME (see page 10)

C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
T	INCLUDES B399A FRAME, T320 IGNITOR
F	REQUIRES L159 HANDLE CLAMP


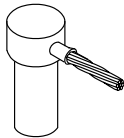
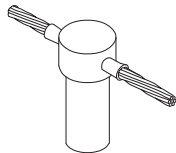
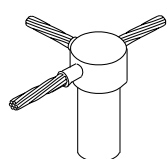
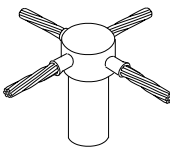
# Cable to Ground Rod

CADWELD ONE SHOTS and CADWELD PLUS ONE SHOTS produce permanent exothermic connections to ground rods that will not loosen, corrode or increase in resistance for the life of the installation. A convenient, single-use ceramic mold eliminates the need for a mold and handle clamps and/or frame.

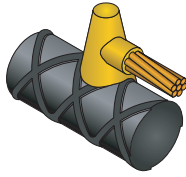
## CADWELD ONE SHOT

GROUND ROD	CONCENTRIC CONDUCTOR		CADWELD ONE SHOT			
	SOLID	STRANDED	Type GR	Type GT	Type NT	Type NX
1/2"	6, 8 3, 4 1, 2	8 4, 6 2, 3	GR1141G GR1141L GR1141V	GT1141G GT1141L GT1141V	NT1141G NT1141L NT1141V	NX1141G NX1141L
5/8"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1161G GR1161L GR1161V GR1162C GR1162G GR1162Q	GT1161G GT1161L GT1161V GT1162C GT1162G	NT1161G NT1161L NT1161V	NX1161G NX1161L NX1161V
3/4"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1181G GR1181L GR1181V GR1182C GR1182G GR1182Q	GT1181G GT1181L GT1181V GT1182C GT1182G	NT1181G NT1181L NT1181V	NX1181G NX1181L NX1181V
						
Requires flint ignitor p/n T320 (sold separately)						

## CADWELD PLUS ONE SHOT

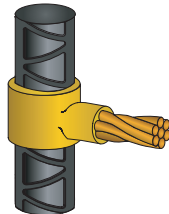
GROUND ROD	CONCENTRIC CONDUCTOR		CADWELD PLUS ONE SHOT			
	SOLID	STRANDED	Type GR	Type GT	Type NT	Type NX
1/2"	6, 8 3, 4 1, 2	8 4, 6 2, 3	GR1141GPLUS GR1141LPLUS GR1141VPLUS	GT1141GPLUS GT1141LPLUS GT1141VPLUS	NT1141GPLUS NT1141LPLUS NT1141VPLUS	NX1141GPLUS NX1141LPLUS NX1141VPLUS
5/8"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1161GPLUS GR1161LPLUS GR1161VPLUS GR1162CPLUS GR1162GPLUS GR1162QPLUS	GT1161GPLUS GT1161LPLUS GT1161VPLUS GT1162CPLUS GT1162GPLUS	NT1161GPLUS NT1161LPLUS NT1161VPLUS	NX1161GPLUS NX1161LPLUS NX1161VPLUS
3/4"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1181GPLUS GR1181LPLUS GR1181VPLUS GR1182CPLUS GR1182GPLUS GR1182QPLUS	GT1181GPLUS GT1181LPLUS GT1181VPLUS GT1182CPLUS GT1182GPLUS	NT1181GPLUS NT1181LPLUS NT1181VPLUS	NX1181GPLUS NX1181LPLUS NX1181VPLUS
						
Requires CADWELD PLUS control unit p/n PLUSCU (sold separately)						

# Cable to Rebar



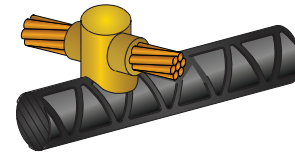
## RR - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	1/0	RRC522C	90	90PLUSF20	B141A
	2/0	RRC522G	90	90PLUSF20	B141A
	3/0	RRC522L	115	115PLUSF20	B141A
	4/0	RRC522Q	115	115PLUSF20	B141A
#5	4	RRA531L	32	32PLUSF20	B143A
	2	RRA531V	45	45PLUSF20	B143A
	1/0	RRC532C	90	90PLUSF20	B141A
	2/0	RRC532G	90	90PLUSF20	B141A
#6	3/0	RRC532L	115	115PLUSF20	B141A
	4/0	RRC532Q	115	115PLUSF20	B141A
	4	RRA541L	32	32PLUSF20	B143B
	2	RRA541V	45	45PLUSF20	B143B
#6	1/0	RRH542C	90	90PLUSF20	B144C
	2/0	RRH542G	90	90PLUSF20	B144C
	3/0	RRH542L	115	115PLUSF20	B144C
	4/0	RRH542Q	115	115PLUSF20	B144C



## RJ - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	6	RJC521H	45	45PLUSF20	B140A
	4	RJC521L	65	65PLUSF20	B140A
	2	RJC521V	65	65PLUSF20	B140A
	1/0	RJC522C	115	115PLUSF20	B140A
	2/0	RJC522G	115	115PLUSF20	B140A
	3/0	RJC522L	150	150PLUSF20	B140A
	4/0	RJC522Q	150	150PLUSF20	B140A
#5	1/0	RJC532C	115	115PLUSF20	B140A
	2/0	RJC532G	115	115PLUSF20	B140A
	3/0	RJC532L	150	150PLUSF20	B140A
	4/0	RJC532Q	150	150PLUSF20	B140A
#6	1/0	RJC542C	115	115PLUSF20	B140B
	2/0	RJC542G	115	115PLUSF20	B140B
	3/0	RJC542L	150	150PLUSF20	B140B
	4/0	RJC542Q	150	150PLUSF20	B140B



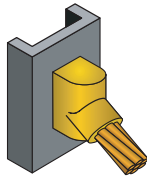
## RD - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	4	RDC521L	65	65PLUSF20	B141A
	2 SOL	RDC521T	65	65PLUSF20	B141A
	2	RDC521V	90	90PLUSF20	B141A
	1/0	RDM522C	115	115PLUSF20	B141A
	2/0	RDM522G	115	115PLUSF20	B141A
	3/0	RDM522L	150	150PLUSF20	B141A
	4/0	RDM522Q	150	150PLUSF20	B141A
#5	4	RDC531L	65	65PLUSF20	B141A
	2	RDC531V	90	90PLUSF20	B141A
	2/0	RDM532G	115	115PLUSF20	B141A
	3/0	RDM532L	150	150PLUSF20	B141A
#6	4/0	RDM532Q	150	150PLUSF20	B141A
	4	RDH541L	65	65PLUSF20	B144C
	2	RDH541V	90	90PLUSF20	B144C
	2/0	RDH542G	115	115PLUSF20	B144C
#6	3/0	RDH542L	150	150PLUSF20	B144A
	4/0	RDH542Q	150	150PLUSF20	B144A
	2/0	RDH562G	115	115PLUSF20	B144C
	3/0	RDH562L	150	150PLUSF20	B144A
#8	4/0	RDH562Q	150	150PLUSF20	B144A
	250	RDH562V	150	150PLUSF20	B144A

### HANDLE CLAMP / FRAME (see page 10)

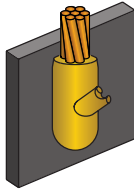
A	INCLUDES FRAME WITH HANDLE
C	REQUIRES L160 HANDLE CLAMP
H	INCLUDES TOGGLE FRAME WITH HANDLE
M	INCLUDES FRAME WITH HANDLE

# Cable to Steel Surface



## VS - Cable to Vertical Steel

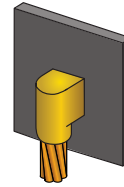
SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	6	VSC1H	45	45PLUSF20
	4	VSC1L	45	45PLUSF20
	2 SOL	VSC1T	45	45PLUSF20
	2	VSC1V	45	45PLUSF20
	1/0	VSC2C	90	90PLUSF20
	2/0	VSC2G	90	90PLUSF20
	3/0	VSC2L	115	115PLUSF20
	4/0	VSC2Q	115	115PLUSF20
	500	VSC3Q	200	200PLUSF20
1-1/4" to 4" Pipe	2 SOL	VSC1VV3C	45	45PLUSF20
1-1/2" to 4" Pipe	4	VSC1LV3C	45	45PLUSF20
	2	VSC1TV3C	45	45PLUSF20
2" to 4" Pipe	2/0	VSC2GV3C	90	90PLUSF20
	4/0	VSC2QV3C	115	115PLUSF20
4" to 6" Pipe	2 SOL	VSC1TV5C	45	45PLUSF20
	4/0	VSC2QV5C	115	115PLUSF20



## VF - Cable to Vertical Steel

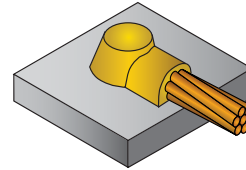
SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	4	VFC1L	65	65PLUSF20
	2 SOL	VFC1T	65	65PLUSF20
	2	VFC1V	65	65PLUSF20
	2/0	VFC2G	150	150PLUSF20
	3/0	VFR2L	200	200PLUSF20
	4/0	VFR2Q	200	200PLUSF20
2" to 4" Pipe	2 SOL	VFC1TV3C	65	65PLUSF20

HANDLE CLAMP / FRAME (see page 10)	
A	INCLUDES FRAME WITH HANDLE
C	REQUIRES L160 HANDLE CLAMP
R	REQUIRES L160 HANDLE CLAMP



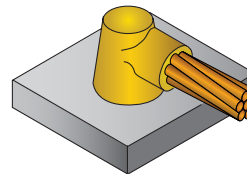
## VB - Cable to Vertical Steel

SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	4	VBC1L	65	45PLUSF20
	2 SOL	VBC1T	65	45PLUSF20
	2	VBC1V	65	45PLUSF20
	1/0	VBC2C	115	45PLUSF20
	2/0	VBC2G	115	90PLUSF20
	3/0	VBC2L	150	90PLUSF20
	4/0 SOL	VBC2P	150	115PLUSF20
	4/0	VBC2Q	150	115PLUSF20
	500	VBR3Q	(2) 150	200PLUSF20
	1-1/4" to 3-1/2" Pipe	4/0	VBC2QV3C	150
1-1/4" to 4" Pipe	2 SOL	VBC1TV3C	65	45PLUSF20
	4 SOL	VBC1KV3C	65	45PLUSF20
	2	VBC1VV3C	65	90PLUSF20



## HA - Cable to Horizontal Steel

CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
6 SOL	HAA1G	45	45PLUSF20
6	HAA1H	45	45PLUSF20
4	HAA1L	45	45PLUSF20
2 SOL	HAA1T	45	45PLUSF20
2	HAA1V	45	45PLUSF20



## HS - Cable to Horizontal Steel

CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/0	HSC2C	90	90PLUSF20
2/0	HSC2G	90	90PLUSF20
3/0	HSC2L	115	115PLUSF20
4/0	HSC2Q	115	115PLUSF20
250	HSC2V	115	115PLUSF20
350	HSC3D	200	200PLUSF20
500	HSC3Q	200	200PLUSF20



# Materials, Tools & Accessories



Traditional CADWELD



CADWELD PLUS

CADWELD WELDING MATERIAL		
TRADITIONAL	CADWELD PLUS	QTY. PER CARTON
15	15PLUSF20	20
25	25PLUSF20	20
32	32PLUSF20	20
45	45PLUSF20	20
65	65PLUSF20	20
90	90PLUSF20	10
115	115PLUSF20	10
150	150PLUSF20	10
200	200PLUSF20	10
250	250PLUSF20	10
(2) 150	300PLUSF20	10
(2) 200	400PLUSF20	10
500	500PLUSF20	10

REBAR PACKING			
P/N	DESCRIPTION		QTY. PER CARTON
B140A	Copper Shim, 0.13" x 3" x 1.5"		50
B140B	Copper Shim, 0.013" x 3" x 2.5"		50
B141A*	Copper Shim, 0.13" x 3" x 1.5"		50
B143A	Ceramic Packing, 0.25" x 1.75" x 1.77"		20
B143B	Ceramic Packing, 0.25" x 2" x 1.75"		20
B144A	Ceramic Packing, 0.25" x 3" x 3"		20
B144C	Ceramic Packing, 0.25" x 3" x 3"		20

\*Each piece of B141A includes 2 copper shims as required per rebar connection

## CADWELD Welding Material

CADWELD welding material consists of copper oxide and aluminum, packaged by weight (in grams) in plastic tubes. Each tube contains starting material at the bottom of the plastic tube. Welding material is packaged in containers along with metal disks. Standard welding material (F20) is packaged in tubes with clear caps and is used for all grounding connections with the exception of those to cast iron or rail.

## CADWELD EXOLON

CADWELD EXOLON produces the same permanent bonds as traditional CADWELD without smoke and other emissions. CADWELD EXOLON molds and welding material can be ordered by adding an XL prefix to the part numbers (contact Pentair or authorized agent for details).

## CADWELD PLUS

CADWELD PLUS simplifies the method of making exothermic connections by eliminating the need for starting material or a separate disk. With the CADWELD PLUS Control Unit, welds can be completed up to 6 feet away. Each CADWELD PLUS package is color coded for easy identification.



L160  
Handle Clamps  
(Includes T320)



T313  
Card Cleaning Brush



T314  
Cable Cleaning Brush



T321  
Rasp



T394  
Mold Cleaning Brush



T403  
Mold Sealer



T320  
Flint Ignitor



PLUSCU  
CADWELD PLUS  
Control Unit



T111  
Surefire™ Torch Head



B160V  
Chain Support Clamp



B396  
Magnetic Handle  
Clamp



B265  
Cable Clamp

# CADWELD Molds

A graphite mold is used for making most CADWELD connections. CADWELD molds will generally last an average of 50 or more connections under normal usage.

## Price Key and Handle Clamp and/or Frames

Handle clamps are required for most molds. Specialized frames with handles are used on some molds. Flint igniters are included with handle clamps. The following handle clamps are most widely used.

L160 for all molds having a "C", "E", "R" and "Q" mold price key (3" wide molds)

L159 for all molds having a "D", "F", "J" and "Z" mold price key (4" wide molds)

Handle Clamps with an "XL" prefix are for use with the CADWELD EXOLON system and do not come with a flint igniter. Mini E-Z Change Clamps for use with mini-welders.

Pictured below are the molds and / or frames and handles for the various price key molds:



"A" Price Key Mold  
Includes Hold Down Frame



"C", "D", "F", "R", "Q" and "Z"  
Price Key Mold L160 or L159  
Handle Clamp Required



"E" and "J" Price Key Mold  
L160 or L159 Handle Clamp  
Required



"M" and "V" Price Key Mold  
Includes Frame with Handles

# CADWELD Molds



"H" Price Key Mold  
Includes Hold Down Frame  
with Handles



"G", "K", and "L" Price Key Mold  
Includes Frame with Handles



"T", "P" and "N" Price Key Mold  
Includes Mini-EZ Handle Clamp  
To order mold only, add an "M"  
suffix to the part number  
(for example, SST1TM)

## Mold Options



### SPLIT CRUCIBLE MOLDS

Molds made with a horizontal opening and solid crucible section may be specified as a split crucible type. The advantage of the split crucible mold is easier cleaning.

To order a mold with a split crucible, add an "L" suffix to the mold part number (for example, TAC2G2GL).



### WEAR PLATES

Wear Plates reduce mechanical abrasion of molds at cable entry points and help prevent leakage of molten metal (particularly on larger 7 strand conductor). These features prolong mold life.

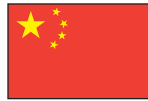
To order a mold with wear plates, add a "W" suffix to the mold part number (for example, PTC2G2GW).



www.erico.pentair.com



**AUSTRALIA**  
Phone 1-800-263-508  
Fax 1-800-423-091



**CHINA**  
Phone +86-21-3430-4878  
Fax +86-21-5831-8177



**HUNGARY**  
Phone 06-800-16538  
Fax +39-0244-386-107



**NORWAY**  
Phone 800-100-73  
Fax 800-100-66



**SWITZERLAND**  
Phone 0800-55-86-97  
Fax 0800-55-96-15



**BELGIUM**  
Phone 0800-757-48  
Fax 0800-757-60



**DENMARK**  
Phone 808-89-372  
Fax 808-89-373



**INDONESIA**  
Phone +62-21-575-0941  
Fax +62-21-575-0942



**POLAND**  
Phone +48-71-349-04-60  
Fax +48-71-349-04-61



**THAILAND**  
Phone +66-2-267-5776  
Fax +66-2-636-6988



**BRAZIL**  
Phone +55-11-3623-4333  
Fax +55-11-3621-4066



**FRANCE**  
Phone 0-800-901-793  
Fax 0-800-902-024



**ITALY**  
Phone 800-870-938  
Fax 800-873-935



**SINGAPORE**  
Phone +65-6-268-3433  
Fax +65-6-268-1389



**UNITED ARAB EMIRATES**  
Phone +971-4-881-7250  
Fax +971-4-881-7270



**CANADA**  
Phone +1-800-677-9089  
Fax +1-800-677-8131



**GERMANY**  
Phone 0-800-189-0272  
Fax 0-800-189-0274



**MEXICO**  
Phone +52-55-5260-5991  
Fax +52-55-5260-3310



**SPAIN**  
Phone 900-993-154  
Fax 900-807-333



**UNITED KINGDOM**  
Phone 0808-2344-670  
Fax 0808-2344-676



**CHILE**  
Phone +56-2-370-2908  
Fax +56-2-369-5657



**HONG KONG**  
Phone +852-2764-8808  
Fax +852-2764-4486



**NETHERLANDS**  
Phone 0800-0200-135  
Fax 0800-0200-136



**SWEDEN**  
Phone 020-790-908  
Fax 020-798-964



**UNITED STATES**  
Phone 1-800-753-9221  
Fax +1-440-248-0723

Surefire is a trademark of the Newell Company.

© 2007, 2015 Pentair All Rights Reserved  
Pentair, CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH and LENTON are owned by Pentair or its global affiliates. All other trademarks are the property of their respective owners. Pentair reserves the right to change specifications without prior notice.

E721C-NAEN E649LT07NAEN 00920M7



# Table of Contents

## Cable to Cable

TA - Horizontal Tee .....	3
PT - Parallel Horizontal Tee.....	3
SS - Horizontal Splice .....	3
PC - Parallel Tap.....	3
XB - Lapped Horizontal Splice .....	4
XA - Horizontal Splice .....	4

## Cable to Bus or Lug

LA - Cable to Lug.....	4
LJ - Cable to Bus Bar .....	4

## Cable to Ground Rod

GR - Cable to Ground Rod.....	5
GT - Through Cable to Top of Ground Bar .....	5
GY - Through Cable to Side of Ground Bar .....	5
NC - Through Cable / Tap to Ground Rod .....	5
CADWELD ONE SHOT.....	6
CADWELD PLUS ONE SHOT.....	6

## Cable to Rebar

RR - Cable to Rebar .....	7
RD - Cable to Rebar .....	7
RJ - Cable to Rebar .....	7

## Cable to Steel Surface

VS - Cable to Vertical Steel.....	8
VB - Cable to Vertical Steel .....	8
VF - Cable to Vertical Steel.....	8
HA - Cable to Horizontal Steel .....	8
HS - Cable to Horizontal Steel .....	8

## Materials, Tools & Accessories..... 9

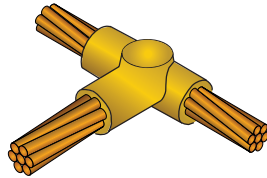
## CADWELD Molds .....

10-11

### WARNING

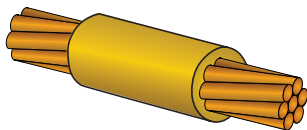
Pentair products shall be installed and used only as indicated in Pentair's product instruction sheets and training materials. Instruction sheets are available at [www.erico.pentair.com](http://www.erico.pentair.com) and from your Pentair customer service representative. Improper installation, misuse, misapplication or other failure to completely follow Pentair's instructions and warnings may cause product malfunction, property damage, serious bodily injury and/or death, and void your warranty.

# Cable to Cable



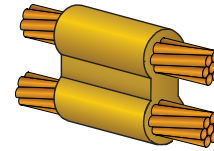
## TA - Horizontal Tee

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
4	6	TAC1L1H	32	32PLUSF20
	4	TAC1L1L	32	32PLUSF20
2 SOL	2 SOL	TAC1T1T	45	45PLUSF20
2	4	TAC1V1L	45	45PLUSF20
	2	TAC1V1V	45	45PLUSF20
1/0	4	TAC2C1L	45	45PLUSF20
	2	TAC2C1V	45	45PLUSF20
	1/0	TAC2C2C	90	90PLUSF20
	4/0	TAC2C2Q	115	115PLUSF20
2/0	4	TAC2G1L	45	45PLUSF20
	2	TAC2G1V	45	45PLUSF20
	1/0	TAC2G2C	90	90PLUSF20
	2/0	TAC2G2G	90	90PLUSF20
3/0	4/0	TAC2G2Q	115	115PLUSF20
	2	TAC2L1V	45	45PLUSF20
	1/0	TAC2L2C	90	90PLUSF20
4/0 SOL	2/0	TAC2L2G	90	90PLUSF20
	3/0	TAC2L2L	115	115PLUSF20
	4/0 SOL	TAC2P2P	150	150PLUSF20
4/0	4	TAC2Q1L	90	90PLUSF20
	2	TAC2Q1V	90	90PLUSF20
	1/0	TAC2Q2C	90	90PLUSF20
	2/0	TAC2Q2G	90	90PLUSF20
	3/0	TAC2Q2L	115	115PLUSF20
	4/0	TAC2Q2Q	150	150PLUSF20
	350	TAC2Q3A	150	150PLUSF20
250	500	TAC2Q3Q	150	150PLUSF20
	2/0	TAC2V2G	90	90PLUSF20
	4/0	TAC2V2Q	150	150PLUSF20
350	250	TAC2V2V	150	150PLUSF20
	4/0	TAC3D2Q	150	150PLUSF20
	350	TAC3D3D	200	200PLUSF20



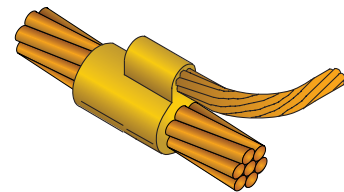
## SS - Horizontal Splice

CONDUCTOR	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
4	SST1L	25	25PLUSF20
2 SOL	SST1T	32	32PLUSF20
2	SST1V	32	32PLUSF20
1/0	SSC2C	45	45PLUSF20
2/0	SSC2G	65	65PLUSF20
3/0	SSC2L	90	90PLUSF20
4/0	SSC2Q	90	90PLUSF20
250	SSC2V	115	115PLUSF20



## PT - Parallel Horizontal Tee

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
2 SOL	2 SOL	PTC1T1T	65	65PLUSF20
2	2	PTC1V1V	65	65PLUSF20
1/0	1/0	PTC2C2C	90	90PLUSF20
	4/0	PTC2C2Q	150	150PLUSF20
2/0	2 SOL	PTC2G1T	90	90PLUSF20
	2	PTC2G1V	90	90PLUSF20
	1/0	PTC2G2C	115	115PLUSF20
	2/0	PTC2G2G	115	115PLUSF20
3/0	4/0	PTC2G2Q	150	150PLUSF20
	1/0	PTC2L2C	115	90PLUSF20
	3/0	PTC2L2L	150	150PLUSF20
4/0	1/0	PTC2Q2C	150	150PLUSF20
	2/0	PTC2Q2G	150	150PLUSF20
	3/0	PTC2Q2L	200	200PLUSF20
	4/0	PTC2Q2Q	200	200PLUSF20

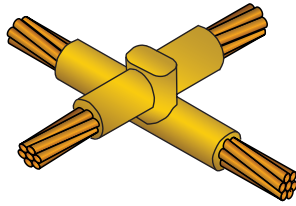


## PC - Parallel Tap

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
6 SOL	6 SOL	PCC1G1G	25	25PLUSF20
6	6	PCC1H1H	25	25PLUSF20
2 SOL	2 SOL	PCC1T1T	65	65PLUSF20
2	2	PCC1V1V	65	65PLUSF20
	6	PCC1T1G	32	32PLUSF20
1/0	6	PCC2C1H	45	45PLUSF20
2/0	6 SOL	PCC2G1G	65	65PLUSF20
	6	PCC2G1H	65	65PLUSF20
3/0	2	PCC2G1V	90	90PLUSF20
	6	PCC2L1H	90	90PLUSF20
4/0	6 SOL	PCC2Q1G	90	90PLUSF20
	6	PCC2Q1H	90	90PLUSF20
	2 SOL	PCC2Q1T	115	115PLUSF20
	2	PCC2Q1V	115	115PLUSF20
	4	PCC2Q1L	90	90PLUSF20
	4/0	PCC2Q2Q	150	150PLUSF20

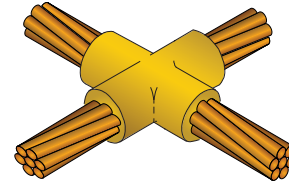
HANDLE CLAMP / FRAME (see page 10)	
PRICE KEY	NOTES
C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
Q	REQUIRES L160 HANDLE CLAMP
T	INCLUDES B399A FRAME, T320 IGNITOR
Z	REQUIRES L159 HANDLE CLAMP

# Cable to Cable • Cable to Bus / Lug



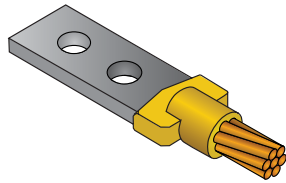
**XB - Lapped Horizontal Splice**

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
6 SOL	6 SOL	XBP1G1G	32	32PLUSF20
4	4	XBC1L1L	65	65PLUSF20
2	2	XBC1V1V	90	90PLUSF20
1/0	1/0	XBQ2C2C	150	150PLUSF20
2/0	2/0	XBQ2G2G	200	200PLUSF20
4/0	2/0	XBQ2Q2G	200	200PLUSF20
	4/0	XBQ2Q2Q	250	250PLUSF20
250	250	XBQ2V2V	(2) 150	300PLUSF20
350	350	XBZ3D3D	500	500PLUSF20
500	500	XBZ3Q3Q	(3) 250	750PLUSF20



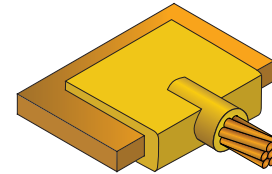
**XA - Horizontal Splice**

CONDUCTOR		MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Run	Tap			
4	4	XAC1L1L	45	65PLUSF20
2	2	XAC1V1V	65	65PLUSF20
1/0	1/0	XAC2C2C	90	90PLUSF20
2/0	2/0	XAC2G2G	115	115PLUSF20
3/0	3/0	XAC2L2L	150	150PLUSF20
4/0	2/0	XAC2Q2G	150	150PLUSF20
	4/0	XAC2Q2Q	200	200PLUSF20
250	4/0	XAC2V2Q	200	200PLUSF20
	250	XAC2V2V	200	200PLUSF20
350	350	XAC3D3D	250	250PLUSF20
500	4/0	XAD3Q2Q	(2) 150	300PLUSF20
	500	XAD3Q3Q	500	500PLUSF20



**LA - Cable to Lug**

BUS OR LUG SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/8" x 1" Lug / Bus	2 SOL	LAC1TCE	45	45PLUSF20
	2	LAC1VCE	45	45PLUSF20
	1/0	LAC2CCE	45	45PLUSF20
	2/0	LAC2GCE	65	65PLUSF20
	3/0	LAC2LCE	65	65PLUSF20
	4/0	LAC2QCE	65	65PLUSF20
1/4" x 1" Lug / Bus	1/0	LAC2CEE	65	65PLUSF20
	2/0	LAC2GEE	65	65PLUSF20
	4/0 SOL	LAC2PEE	90	90PLUSF20
	4/0	LAC2QEE	90	90PLUSF20
	300	LAC3AEE	90	90PLUSF20
1/4" x 1-1/2" Lug/Bus	350	LAC3DEE	115	115PLUSF20
	4/0	LAC2QEG	90	90PLUSF20
	250	LAC2VEG	90	90PLUSF20
	350	LAC3DEG	115	115PLUSF20
	500	LAC3QEG	200	200PLUSF20



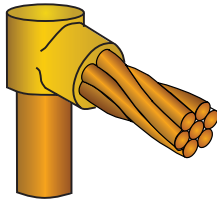
**LJ - Cable to Bus Bar**

BUS OR LUG SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/4" x 1-1/2" & Wider Lug/ Bus	6	LJCEG1H	65	65PLUSF20
	2 SOL	LJCEG1T	65	65PLUSF20
	2	LJCEG1V	65	65PLUSF20
	1/0	LJCEG2C	90	90PLUSF20
	2/0	LJCEG2G	90	90PLUSF20
	3/0	LJCEG2L	90	90PLUSF20
	4/0	LJCEG2Q	90	90PLUSF20
	500	LJCEG3Q	200	200PLUSF20

HANDLE CLAMP / FRAME (see page 10)	
PRICE KEY	NOTES
C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
Q	REQUIRES L160 HANDLE CLAMP
T	INCLUDES B399A FRAME, T320 IGNITOR
Z	REQUIRES L159 HANDLE CLAMP

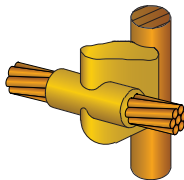


# Cable to Ground Rod



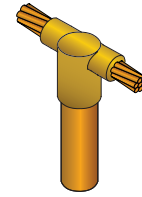
## GR - Cable to Ground Rod

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	6 SOL	GRT161G	32	32PLUSF20
	6	GRT161H	32	32PLUSF20
	4 SOL	GRT161K	32	32PLUSF20
	4	GRT161L	32	32PLUSF20
	2 SOL	GRC161T	65	65PLUSF20
	2	GRC161V	65	65PLUSF20
	1/0	GRC162C	90	90PLUSF20
	2/0	GRC162G	90	90PLUSF20
	3/0	GRC162L	90	90PLUSF20
	4/0	GRC162Q	90	90PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	250	GRC162V	90	90PLUSF20
	500	GRC163Q	115	115PLUSF20
	6 SOL	GRT181G	32	32PLUSF20
	6	GRT181H	32	32PLUSF20
	4 SOL	GRP181K	45	45PLUSF20
	4	GRP181L	45	45PLUSF20
	2 SOL	GRC181T	90	90PLUSF20
	2	GRC181V	90	90PLUSF20
	1/0	GRC182C	90	90PLUSF20
	2/0	GRC182G	90	90PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	3/0	GRC182L	90	90PLUSF20
	4/0	GRC182Q	90	90PLUSF20
	250	GRC182V	90	90PLUSF20
	500	GRC183Q	150	150PLUSF20



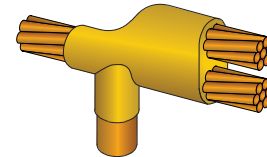
## GY - Through Cable to Side of Ground Bar

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	2 SOL	GYR161T	90	90PLUSF20
	2	GYR161V	90	90PLUSF20
	1/0	GYR162C	115	115PLUSF20
	2/0	GYR162G	115	115PLUSF20
	3/0	GYR162L	150	150PLUSF20
	4/0	GYR162Q	150	150PLUSF20
	250	GYR162V	150	150PLUSF20
	350	GYR163D	250	250PLUSF20
	500	GYF163Q	400	400PLUSF20
	3/4" Copper-bonded Sectional (threaded) or Plain	2 SOL	GYR181T	90
2		GYR181V	90	90PLUSF20
1/0		GYR182C	115	115PLUSF20
2/0		GYR182G	115	115PLUSF20
3/0		GYR182L	150	150PLUSF20
4/0		GYR182Q	150	150PLUSF20
250		GYR182V	200	200PLUSF20
350		GYR283D	300	300PLUSF20
500		GYF183Q	500	500PLUSF20



## GT - Through Cable to Top of Ground Bar

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	6	GTT161G	32	32PLUSF20
	4	GTT161L	32	32PLUSF20
	2 SOL	GTC161T	90	90PLUSF20
	2	GTC161V	90	90PLUSF20
	1/0	GTC162C	90	90PLUSF20
	2/0	GTC162G	115	115PLUSF20
	3/0	GTC162L	115	115PLUSF20
	4/0	GTC162Q	115	115PLUSF20
	250	GTC162V	150	150PLUSF20
	500	GTC163Q	250	250PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	6 SOL	GTP181G	45	45PLUSF20
	6	GTP181H	45	45PLUSF20
	2 SOL	GTC181T	90	90PLUSF20
	2	GTC181V	90	90PLUSF20
	1/0	GTC182C	115	115PLUSF20
	2/0	GTC182G	115	115PLUSF20
	3/0	GTC182L	115	115PLUSF20
	4/0	GTC182Q	115	115PLUSF20
	250	GTC182V	150	150PLUSF20
	500	GTC183Q	250	200PLUSF20



## NC - Through Cable / Tap to Ground Rod

GROUND ROD SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
5/8" Copper-bonded Sectional (threaded) or Plain	2 SOL	NCR161T	115	115PLUSF20
	2	NCR161V	115	115PLUSF20
	1/0	NCR162C	150	150PLUSF20
	2/0	NCR162G	200	200PLUSF20
	3/0	NCR162L	250	250PLUSF20
3/4" Copper-bonded Sectional (threaded) or Plain	4/0	NCR162Q	250	250PLUSF20
	6	NCR181H	90	90PLUSF20
	2 SOL	NCR181T	115	115PLUSF20
	2	NCR181V	115	115PLUSF20
	1/0	NCR182C	150	150PLUSF20
	2/0	NCR182G	200	200PLUSF20
	3/0	NCR182L	250	250PLUSF20
	4/0	NCR182Q	250	250PLUSF20


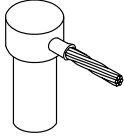
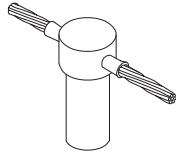
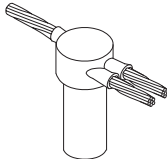
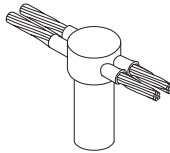
### HANDLE CLAMP / FRAME (see page 10)

C	REQUIRES L160 HANDLE CLAMP
P	INCLUDES B399C FRAME, T320 IGNITOR
T	INCLUDES B399A FRAME, T320 IGNITOR
F	REQUIRES L159 HANDLE CLAMP


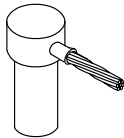
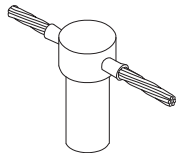
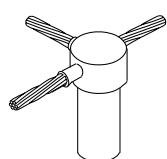
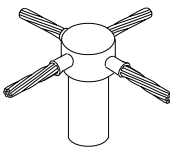
# Cable to Ground Rod

CADWELD ONE SHOTS and CADWELD PLUS ONE SHOTS produce permanent exothermic connections to ground rods that will not loosen, corrode or increase in resistance for the life of the installation. A convenient, single-use ceramic mold eliminates the need for a mold and handle clamps and/or frame.

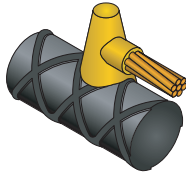
## CADWELD ONE SHOT

GROUND ROD	CONCENTRIC CONDUCTOR		CADWELD ONE SHOT			
	SOLID	STRANDED	Type GR	Type GT	Type NT	Type NX
1/2"	6, 8 3, 4 1, 2	8 4, 6 2, 3	GR1141G GR1141L GR1141V	GT1141G GT1141L GT1141V	NT1141G NT1141L NT1141V	NX1141G NX1141L
5/8"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1161G GR1161L GR1161V GR1162C GR1162G GR1162Q	GT1161G GT1161L GT1161V GT1162C GT1162G	NT1161G NT1161L NT1161V	NX1161G NX1161L NX1161V
3/4"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1181G GR1181L GR1181V GR1182C GR1182G GR1182Q	GT1181G GT1181L GT1181V GT1182C GT1182G	NT1181G NT1181L NT1181V	NX1181G NX1181L NX1181V
						
Requires flint ignitor p/n T320 (sold separately)						

## CADWELD PLUS ONE SHOT

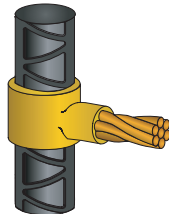
GROUND ROD	CONCENTRIC CONDUCTOR		CADWELD PLUS ONE SHOT			
	SOLID	STRANDED	Type GR	Type GT	Type NT	Type NX
1/2"	6, 8 3, 4 1, 2	8 4, 6 2, 3	GR1141GPLUS GR1141LPLUS GR1141VPLUS	GT1141GPLUS GT1141LPLUS GT1141VPLUS	NT1141GPLUS NT1141LPLUS NT1141VPLUS	NX1141GPLUS NX1141LPLUS NX1141VPLUS
5/8"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1161GPLUS GR1161LPLUS GR1161VPLUS GR1162CPLUS GR1162GPLUS GR1162QPLUS	GT1161GPLUS GT1161LPLUS GT1161VPLUS GT1162CPLUS GT1162GPLUS	NT1161GPLUS NT1161LPLUS NT1161VPLUS	NX1161GPLUS NX1161LPLUS NX1161VPLUS
3/4"	6, 8 3, 4 1, 2 2/0, 1/0	8 4, 6 2, 3 1/0, 1 2/0 4/0	GR1181GPLUS GR1181LPLUS GR1181VPLUS GR1182CPLUS GR1182GPLUS GR1182QPLUS	GT1181GPLUS GT1181LPLUS GT1181VPLUS GT1182CPLUS GT1182GPLUS	NT1181GPLUS NT1181LPLUS NT1181VPLUS	NX1181GPLUS NX1181LPLUS NX1181VPLUS
						
Requires CADWELD PLUS control unit p/n PLUSCU (sold separately)						

# Cable to Rebar



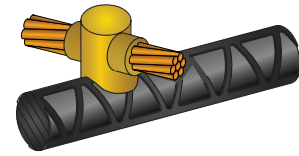
## RR - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	1/0	RRC522C	90	90PLUSF20	B141A
	2/0	RRC522G	90	90PLUSF20	B141A
	3/0	RRC522L	115	115PLUSF20	B141A
	4/0	RRC522Q	115	115PLUSF20	B141A
#5	4	RRA531L	32	32PLUSF20	B143A
	2	RRA531V	45	45PLUSF20	B143A
	1/0	RRC532C	90	90PLUSF20	B141A
	2/0	RRC532G	90	90PLUSF20	B141A
#6	3/0	RRC532L	115	115PLUSF20	B141A
	4/0	RRC532Q	115	115PLUSF20	B141A
	4	RRA541L	32	32PLUSF20	B143B
	2	RRA541V	45	45PLUSF20	B143B
#6	1/0	RRH542C	90	90PLUSF20	B144C
	2/0	RRH542G	90	90PLUSF20	B144C
	3/0	RRH542L	115	115PLUSF20	B144C
	4/0	RRH542Q	115	115PLUSF20	B144C



## RJ - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	6	RJC521H	45	45PLUSF20	B140A
	4	RJC521L	65	65PLUSF20	B140A
	2	RJC521V	65	65PLUSF20	B140A
	1/0	RJC522C	115	115PLUSF20	B140A
	2/0	RJC522G	115	115PLUSF20	B140A
	3/0	RJC522L	150	150PLUSF20	B140A
	4/0	RJC522Q	150	150PLUSF20	B140A
#5	1/0	RJC532C	115	115PLUSF20	B140A
	2/0	RJC532G	115	115PLUSF20	B140A
	3/0	RJC532L	150	150PLUSF20	B140A
	4/0	RJC532Q	150	150PLUSF20	B140A
#6	1/0	RJC542C	115	115PLUSF20	B140B
	2/0	RJC542G	115	115PLUSF20	B140B
	3/0	RJC542L	150	150PLUSF20	B140B
	4/0	RJC542Q	150	150PLUSF20	B140B



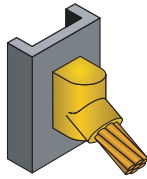
## RD - Cable to Rebar

REBAR SIZE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N	PACKING P/N
#4	4	RDC521L	65	65PLUSF20	B141A
	2 SOL	RDC521T	65	65PLUSF20	B141A
	2	RDC521V	90	90PLUSF20	B141A
	1/0	RDM522C	115	115PLUSF20	B141A
	2/0	RDM522G	115	115PLUSF20	B141A
	3/0	RDM522L	150	150PLUSF20	B141A
	4/0	RDM522Q	150	150PLUSF20	B141A
#5	4	RDC531L	65	65PLUSF20	B141A
	2	RDC531V	90	90PLUSF20	B141A
	2/0	RDM532G	115	115PLUSF20	B141A
	3/0	RDM532L	150	150PLUSF20	B141A
#5	4/0	RDM532Q	150	150PLUSF20	B141A
	4	RDH541L	65	65PLUSF20	B144C
	2	RDH541V	90	90PLUSF20	B144C
	2/0	RDH542G	115	115PLUSF20	B144C
#6	3/0	RDH542L	150	150PLUSF20	B144A
	4/0	RDH542Q	150	150PLUSF20	B144A
	2/0	RDH562G	115	115PLUSF20	B144C
	3/0	RDH562L	150	150PLUSF20	B144A
#8	4/0	RDH562Q	150	150PLUSF20	B144A
	250	RDH562V	150	150PLUSF20	B144A

### HANDLE CLAMP / FRAME (see page 10)

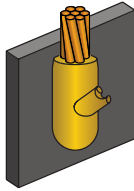
A	INCLUDES FRAME WITH HANDLE
C	REQUIRES L160 HANDLE CLAMP
H	INCLUDES TOGGLE FRAME WITH HANDLE
M	INCLUDES FRAME WITH HANDLE

# Cable to Steel Surface



## VS - Cable to Vertical Steel

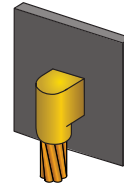
SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	6	VSC1H	45	45PLUSF20
	4	VSC1L	45	45PLUSF20
	2 SOL	VSC1T	45	45PLUSF20
	2	VSC1V	45	45PLUSF20
	1/0	VSC2C	90	90PLUSF20
	2/0	VSC2G	90	90PLUSF20
	3/0	VSC2L	115	115PLUSF20
	4/0	VSC2Q	115	115PLUSF20
	500	VSC3Q	200	200PLUSF20
1-1/4" to 4" Pipe	2 SOL	VSC1VV3C	45	45PLUSF20
1-1/2" to 4" Pipe	4	VSC1LV3C	45	45PLUSF20
	2	VSC1TV3C	45	45PLUSF20
2" to 4" Pipe	2/0	VSC2GV3C	90	90PLUSF20
	4/0	VSC2QV3C	115	115PLUSF20
4" to 6" Pipe	2 SOL	VSC1TV5C	45	45PLUSF20
	4/0	VSC2QV5C	115	115PLUSF20



## VF - Cable to Vertical Steel

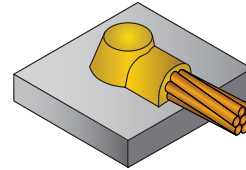
SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	4	VFC1L	65	65PLUSF20
	2 SOL	VFC1T	65	65PLUSF20
	2	VFC1V	65	65PLUSF20
	2/0	VFC2G	150	150PLUSF20
	3/0	VFR2L	200	200PLUSF20
	4/0	VFR2Q	200	200PLUSF20
2" to 4" Pipe	2 SOL	VFC1TV3C	65	65PLUSF20

HANDLE CLAMP / FRAME (see page 10)	
A	INCLUDES FRAME WITH HANDLE
C	REQUIRES L160 HANDLE CLAMP
R	REQUIRES L160 HANDLE CLAMP



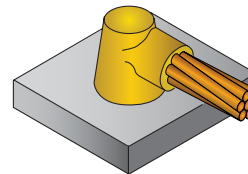
## VB - Cable to Vertical Steel

SURFACE	CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
Flat Surface	4	VBC1L	65	45PLUSF20
	2 SOL	VBC1T	65	45PLUSF20
	2	VBC1V	65	45PLUSF20
	1/0	VBC2C	115	45PLUSF20
	2/0	VBC2G	115	90PLUSF20
	3/0	VBC2L	150	90PLUSF20
	4/0 SOL	VBC2P	150	115PLUSF20
	4/0	VBC2Q	150	115PLUSF20
	500	VBR3Q	(2) 150	200PLUSF20
	1-1/4" to 3-1/2" Pipe	4/0	VBC2QV3C	150
1-1/4" to 4" Pipe	2 SOL	VBC1TV3C	65	45PLUSF20
	4 SOL	VBC1KV3C	65	45PLUSF20
	2	VBC1VV3C	65	90PLUSF20



## HA - Cable to Horizontal Steel

CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
6 SOL	HAA1G	45	45PLUSF20
6	HAA1H	45	45PLUSF20
4	HAA1L	45	45PLUSF20
2 SOL	HAA1T	45	45PLUSF20
2	HAA1V	45	45PLUSF20



## HS - Cable to Horizontal Steel

CABLE SIZE	MOLD	WELDING MATERIAL (QTY) P/N	CADWELD PLUS WELDING MATERIAL P/N
1/0	HSC2C	90	90PLUSF20
2/0	HSC2G	90	90PLUSF20
3/0	HSC2L	115	115PLUSF20
4/0	HSC2Q	115	115PLUSF20
250	HSC2V	115	115PLUSF20
350	HSC3D	200	200PLUSF20
500	HSC3Q	200	200PLUSF20

# Materials, Tools & Accessories



Traditional CADWELD



CADWELD PLUS

CADWELD WELDING MATERIAL		
TRADITIONAL	CADWELD PLUS	QTY. PER CARTON
15	15PLUSF20	20
25	25PLUSF20	20
32	32PLUSF20	20
45	45PLUSF20	20
65	65PLUSF20	20
90	90PLUSF20	10
115	115PLUSF20	10
150	150PLUSF20	10
200	200PLUSF20	10
250	250PLUSF20	10
(2) 150	300PLUSF20	10
(2) 200	400PLUSF20	10
500	500PLUSF20	10

REBAR PACKING			
P/N	DESCRIPTION		QTY. PER CARTON
B140A	Copper Shim, 0.13" x 3" x 1.5"		50
B140B	Copper Shim, 0.013" x 3" x 2.5"		50
B141A*	Copper Shim, 0.13" x 3" x 1.5"		50
B143A	Ceramic Packing, 0.25" x 1.75" x 1.77"		20
B143B	Ceramic Packing, 0.25" x 2" x 1.75"		20
B144A	Ceramic Packing, 0.25" x 3" x 3"		20
B144C	Ceramic Packing, 0.25" x 3" x 3"		20

\*Each piece of B141A includes 2 copper shims as required per rebar connection

## CADWELD Welding Material

CADWELD welding material consists of copper oxide and aluminum, packaged by weight (in grams) in plastic tubes. Each tube contains starting material at the bottom of the plastic tube. Welding material is packaged in containers along with metal disks. Standard welding material (F20) is packaged in tubes with clear caps and is used for all grounding connections with the exception of those to cast iron or rail.

## CADWELD EXOLON

CADWELD EXOLON produces the same permanent bonds as traditional CADWELD without smoke and other emissions. CADWELD EXOLON molds and welding material can be ordered by adding an XL prefix to the part numbers (contact Pentair or authorized agent for details).

## CADWELD PLUS

CADWELD PLUS simplifies the method of making exothermic connections by eliminating the need for starting material or a separate disk. With the CADWELD PLUS Control Unit, welds can be completed up to 6 feet away. Each CADWELD PLUS package is color coded for easy identification.



L160  
Handle Clamps  
(Includes T320)



T313  
Card Cleaning Brush



T314  
Cable Cleaning Brush



T321  
Rasp



T394  
Mold Cleaning Brush



T403  
Mold Sealer



T320  
Flint Ignitor



PLUSCU  
CADWELD PLUS  
Control Unit



T111  
Surefire™ Torch Head



B160V  
Chain Support Clamp



B396  
Magnetic Handle  
Clamp



B265  
Cable Clamp

# CADWELD Molds

A graphite mold is used for making most CADWELD connections. CADWELD molds will generally last an average of 50 or more connections under normal usage.

## Price Key and Handle Clamp and/or Frames

Handle clamps are required for most molds. Specialized frames with handles are used on some molds. Flint igniters are included with handle clamps. The following handle clamps are most widely used.

L160 for all molds having a "C", "E", "R" and "Q" mold price key (3" wide molds)

L159 for all molds having a "D", "F", "J" and "Z" mold price key (4" wide molds)

Handle Clamps with an "XL" prefix are for use with the CADWELD EXOLON system and do not come with a flint igniter. Mini E-Z Change Clamps for use with mini-welders.

Pictured below are the molds and / or frames and handles for the various price key molds:



"A" Price Key Mold  
Includes Hold Down Frame



"C", "D", "F", "R", "Q" and "Z"  
Price Key Mold L160 or L159  
Handle Clamp Required



"E" and "J" Price Key Mold  
L160 or L159 Handle Clamp  
Required



"M" and "V" Price Key Mold  
Includes Frame with Handles

# CADWELD Molds



"H" Price Key Mold  
Includes Hold Down Frame  
with Handles



"G", "K", and "L" Price Key Mold  
Includes Frame with Handles



"T", "P" and "N" Price Key Mold  
Includes Mini-EZ Handle Clamp  
To order mold only, add an "M"  
suffix to the part number  
(for example, SST1TM)

## Mold Options



### SPLIT CRUCIBLE MOLDS

Molds made with a horizontal opening and solid crucible section may be specified as a split crucible type. The advantage of the split crucible mold is easier cleaning.

To order a mold with a split crucible, add an "L" suffix to the mold part number (for example, TAC2G2GL).



### WEAR PLATES

Wear Plates reduce mechanical abrasion of molds at cable entry points and help prevent leakage of molten metal (particularly on larger 7 strand conductor). These features prolong mold life.

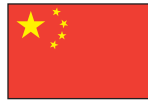
To order a mold with wear plates, add a "W" suffix to the mold part number (for example, PTC2G2GW).



www.erico.pentair.com



**AUSTRALIA**  
Phone 1-800-263-508  
Fax 1-800-423-091



**CHINA**  
Phone +86-21-3430-4878  
Fax +86-21-5831-8177



**HUNGARY**  
Phone 06-800-16538  
Fax +39-0244-386-107



**NORWAY**  
Phone 800-100-73  
Fax 800-100-66



**SWITZERLAND**  
Phone 0800-55-86-97  
Fax 0800-55-96-15



**BELGIUM**  
Phone 0800-757-48  
Fax 0800-757-60



**DENMARK**  
Phone 808-89-372  
Fax 808-89-373



**INDONESIA**  
Phone +62-21-575-0941  
Fax +62-21-575-0942



**POLAND**  
Phone +48-71-349-04-60  
Fax +48-71-349-04-61



**THAILAND**  
Phone +66-2-267-5776  
Fax +66-2-636-6988



**BRAZIL**  
Phone +55-11-3623-4333  
Fax +55-11-3621-4066



**FRANCE**  
Phone 0-800-901-793  
Fax 0-800-902-024



**ITALY**  
Phone 800-870-938  
Fax 800-873-935



**SINGAPORE**  
Phone +65-6-268-3433  
Fax +65-6-268-1389



**UNITED ARAB EMIRATES**  
Phone +971-4-881-7250  
Fax +971-4-881-7270



**CANADA**  
Phone +1-800-677-9089  
Fax +1-800-677-8131



**GERMANY**  
Phone 0-800-189-0272  
Fax 0-800-189-0274



**MEXICO**  
Phone +52-55-5260-5991  
Fax +52-55-5260-3310



**SPAIN**  
Phone 900-993-154  
Fax 900-807-333



**UNITED KINGDOM**  
Phone 0808-2344-670  
Fax 0808-2344-676



**CHILE**  
Phone +56-2-370-2908  
Fax +56-2-369-5657



**HONG KONG**  
Phone +852-2764-8808  
Fax +852-2764-4486



**NETHERLANDS**  
Phone 0800-0200-135  
Fax 0800-0200-136



**SWEDEN**  
Phone 020-790-908  
Fax 020-798-964



**UNITED STATES**  
Phone 1-800-753-9221  
Fax +1-440-248-0723

Surefire is a trademark of the Newell Company.

© 2007, 2015 Pentair All Rights Reserved  
Pentair, CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH and LENTON are owned by Pentair or its global affiliates. All other trademarks are the property of their respective owners. Pentair reserves the right to change specifications without prior notice.

E721C-NAEN E649LT07NAEN 00920M7