

# **Cable to Rail**



nVent ERICO Cadweld applications for railway properties utilize the nVent ERICO Cadweld Plus F80 and the nVent ERICO Cadweld F80 welding material alloys. nVent ERICO Cadweld exothermically welded connections are engineered to provide a permanent, molecular bond that will not loosen or corrode, enabling connection of dissimilar materials. The connections are designed to perform for the life of the conductor and/or installation. The nVent ERICO Cadweld connection has a current carrying capacity equal to or greater than that of the conductor and will withstand repeated fault currents without failing during operation. Once completed, installers can clearly ensure quality by visually inspecting the new connection.

#### **DIAGRAMS**











#### **FEATURES**

Forms a permanent, low resistance connection

Provides a molecular bond

nVent ERICO Cadweld Exothermic Connections are rated with the same current capacity as the conductor

Portable installation equipment with no external source of power required

Installers can be easily trained to make nVent ERICO Cadweld Exothermic Connections

Connections can be visually inspected

# **SPECIFICATIONS**

Table 1/1					
Catalog Number	Mold Family	Conductor Size	Conductor Outer Diameter, Nominal	Rail Type	Orientation
PB13ST1ERH	ST	#8 Concentric	3.71mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13ST1ERI52LH	ST	#8 Concentric	3.71mm	RI52	Left Hand

Catalog Number	Mold Family	Conductor Size	Conductor Outer Diameter, Nominal	Rail Type	Orientation
PB13ST1ERI52RH	ST	#8 Concentric	3.71mm	RI52	Right Hand
PB13ST1GRI59LH	ST	#6 Solid	4.11mm	RI59 Girder Rail	Left Hand
PB13ST1HLH	ST	#6 Concentric	4.67mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST1HRH	ST	#6 Concentric	4.67mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP1H	TP	#6 Concentric	4.67mm	85 lb to 150 lb T- Rail Sections	
PB10QT1L84C	QT	#4 Concentric	5.89mm	84 lb Composite	
PB13ST1L150BLH	ST	#4 Concentric	5.89mm	150 lb Bethlehem	Left Hand
PB13ST1LLH	ST	#4 Concentric	5.89mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST1LRH	ST	#4 Concentric	5.89mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP1L	ТР	#4 Concentric	5.89mm	85 lb to 150 lb T- Rail Sections	
PB13ST1VRH	ST	#2 Concentric	7.42mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP1V	TP	#2 Concentric	7.42mm	85 lb to 150 lb T- Rail Sections	
PB10QT1Y84C	QT	#1 Concentric	8.43mm	84 lb Composite	
PB13ST1YLH	ST	#1 Concentric	8.43mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST1YRH	ST	#1 Concentric	8.43mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13ST2CRH	ST	1/0 Concentric	9.47mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13ST2G30ASLH	ST	2/0 Concentric	10.62mm	30 lb ASCE	Left Hand
PB13ST2G60ASLH	ST	2/0 Concentric	10.62mm	60 lb ASCE	Left Hand

Catalog Number	Mold Family	Conductor Size	Conductor Outer Diameter, Nominal	Rail Type	Orientation
PB13ST2GLH	ST	2/0 Concentric	10.62mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST2GRH	ST	2/0 Concentric	10.62mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP2G	TP	2/0 Concentric	10.62mm	85 lb to 150 lb T- Rail Sections	
PB13TP2G60AS	TP	2/0 Concentric	10.62mm	60 lb ASCE	
PB13ST2LLH	ST	3/0 Concentric	11.94mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST2Q150BRH	ST	4/0 Concentric	13.41mm	150 lb Bethlehem	Right Hand
PB13ST2Q171CRL H	ST	4/0 Concentric	13.41mm	171 lb Crane Rail	Left Hand
PB13ST2Q171CRR H	ST	4/0 Concentric	13.41mm	171 lb Crane Rail	Right Hand
PB13ST2Q175CRL H	ST	4/0 Concentric	13.41mm	175 lb Crane Rail	Left Hand
PB13ST2Q175CRR H	ST	4/0 Concentric	13.41mm	175 lb Crane Rail	Right Hand
PB13ST2Q30ASLH	ST	4/0 Concentric	13.41mm	30 lb ASCE	Left Hand
PB13ST2Q30ASRH	ST	4/0 Concentric	13.41mm	30 lb ASCE	Right Hand
PB13ST2Q40ASRH	ST	4/0 Concentric	13.41mm	60 lb ASCE	Right Hand
PB13ST2QLH	ST	4/0 Concentric	13.41mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST2QRH	ST	4/0 Concentric	13.41mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP2Q	TP	4/0 Concentric	13.41mm	85 lb to 150 lb T- Rail Sections	

Catalog Number	Mold Family	Conductor Size	Conductor Outer Diameter, Nominal	Rail Type	Orientation
PB13ST2V171CRL H	ST	250 kcmil Concentric	14.61mm	171 lb Crane Rail	Left Hand
PB13ST2V171CRR H	ST	250 kcmil Concentric	14.61mm	171 lb Crane Rail	Right Hand
PB13ST9FLH	ST	19/#9 Copperweld	14.53mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB13ST9FRH	ST	19/#9 Copperweld	14.53mm	85 lb to 150 lb T- Rail Sections	Right Hand
PB13TP9F	TP	19/#9 Copperweld	14.53mm	85 lb to 150 lb T- Rail Sections	
PB13ST3Q171CRL H	ST	500 kcmil Concentric	20.65mm	171 lb Crane Rail	Left Hand
PB13ST3Q171CRR H	ST	500 kcmil Concentric	20.65mm	171 lb Crane Rail	Right Hand
PB13ST3Q175CRL H	ST	500 kcmil Concentric	20.65mm	175 lb Crane Rail	Left Hand
PB13ST3Q175CRR H	ST	500 kcmil Concentric	20.65mm	175 lb Crane Rail	Right Hand
PB13ST3QLH	ST	500 kcmil Concentric	20.65mm	85 lb to 150 lb T- Rail Sections	Left Hand
PB72QT3Q84C	QT	500 kcmil Concentric	20.65mm	84 lb Composite	
PB72QT3S150B	QT	500 kcmil Ropelay	26.42mm	150 lb Bethlehem	
PB72RX3S150BLH	RX	500 kcmil Ropelay	26.42mm	150 lb Bethlehem	Left Hand
PB72RX3S150BRH	RX	500 kcmil Ropelay	26.42mm	150 lb Bethlehem	Right Hand
PB53RX4Y150BLH	RX	10 mm <sup>2</sup> Concentric	29.26mm	150 lb Bethlehem	Left Hand
PB53RX4Y150BRH	RX	10 mm² Concentric	29.26mm	150 lb Bethlehem	Right Hand

Catalog Number	Mold Family	Conductor Size	Conductor Outer Diameter, Nominal	Rail Type	Orientation
PB72QT4Y150B	QT	10 mm² Concentric	29.26mm	150 lb Bethlehem	
PB72QT4Y84C	QT	10 mm² Concentric	29.26mm	84 lb Composite	
PB72QT4Y85A	QT	10 mm <sup>2</sup> Concentric	29.26mm	85 lb Composite	
PB72QW4Y85ALH	QW	10 mm <sup>2</sup> Concentric	29.26mm	85 lb Composite	Left Hand
PB72QW4Y85ARH	QW	10 mm <sup>2</sup> Concentric	29.26mm	85 lb Composite	Right Hand
PB53RX5A150BLH	RX	1000 kcmil Ropelay	33.78mm	150 lb Bethlehem	Left Hand
PB53RX5A150BRH	RX	1000 kcmil Ropelay	33.78mm	150 lb Bethlehem	Right Hand

# ADDITIONAL PRODUCT DETAILS

For applications such as computer room, tunnel or other low-ventilation areas, specify a smokeless nVent ERICO Cadweld Exolon mold. Add an XL prefix to the standard mold part number when ordering (for example, a PB10GR162G becomes XLPB10GR162G). Similarly, nVent ERICO Cadweld Exolon welding material is also designated by the XL prefix (for example, PB90 becomes XLPB90).

Rail materials, characteristics, use, and locations of weld should be considered when selecting connections to a rail.

XXXX-XX	XXXX-XX-XX-XX-L-M-W			
XXXX	Price Key			
XX	Mold Family			
XX	Conductor Code			
XX	Rail Type			
XX*	Orientation	LH = Left Hand RH = Right Hand		
L*	Split Crucible	Crucible section is split on molds designed with horizontal opening for easier cleaning		
M*	Mold Only			
W*	Wear Plates	Reduce mechanical abrasion of molds at cable entry points		

<sup>\*</sup> Empty if none

## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause

product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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