

Cable to Steel, Heavy Duty



Heavy duty connections were originally developed to be used on reclaimed cable. The heavy duty connections use a larger size connection cavity in the mold and a larger size welding material than the equivalent standard duty connection.

The larger size welding material supplies extra BTU's to melt the heavy oxide coating on the conductor and to overcome some severe field conditions. Heavy duty connections eliminate cutting the run conductor on certain types of connections, reduce cable cleaning requirements for old or reclaimed cable, and increase reliability under adverse field conditions.

Heavy duty connections are increasingly being specified for copper-coated steel conductor connections.

CERTIFICATIONS



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 1/2

Catalog Number	Article Number	Mold Family	Connects To	Conductor Size	Conductor Outer Diameter, Nominal	Outer Diameter
HDVSC1L	240292	VS	Steel Pipe or Flat Surface	#4 Concentric	5.89mm	609.6 mm Min
HDVSC1T		VS	Steel Pipe or Flat Surface	#2 Solid	6.53mm	609.6 mm Min
HDVBC1V		VB	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min
HDVFC1V		VF	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min
HDVSC1V		VS	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min
HDVVRSD		VV	Steel Pipe or Flat Surface	5/16" Stranded	7.92mm	609.6 mm Min
HDVFC1Y		VF	Steel Pipe or Flat Surface	#1 Concentric	8.43mm	609.6 mm Min
HDVSC1Y		VS	Steel Pipe or Flat Surface	#1 Concentric	8.43mm	609.6 mm Min
HDVBC2C		VB	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min
HDVFR2C		VF	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min
HDVSC2C		VS	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min
HDHSC2G		HS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDHSC2GW		HS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDHTC2G		HT	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDVBC2G		VB	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDVFR2G		VF	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min

CatalogNumber	Article Number	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter
HDVSC2G		VS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDVSC2GV3C		VS	Steel Pipe	2/0 Concentric	10.62mm	42.2 - 101.6 mm
HDVSC2GW		VS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDVVF2G		VV	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min
HDVVF9C		VV	Steel Pipe or Flat Surface	7/#7 Copperweld	11mm	609.6 mm Min
HDVVF9CV6		VV	Steel Pipe	7/#7 Copperweld	11mm	158.75 mm
HDVVF2P		VV	Steel Pipe or Flat Surface	4/0 Solid	11.68mm	609.6 mm Min
HDVBC2P		VB	Steel Pipe or Flat Surface	4/0 Solid	11.68mm	609.6 mm Min
HDHSC2L		HS	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min
HDVBC2L		VB	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min
HDVFR2L		VF	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min
HDVSC2L		VS	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min
HDHSC2Q		HS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDHSC2QW		HS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDHTC2Q		HT	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDVBC2Q		VB	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDVFR2Q		VF	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDVSC2Q		VS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min

CatalogNumber	Article Number	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter
HDVSC2QW		VS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDVVF2Q		VV	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min
HDVSC9FW		VS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min
HDVVF9F		VV	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min
HDVVF9FV6		VV	Steel Pipe	19/#9 Copperweld	14.53mm	158.75 mm
HDVVF9FV8		VV	Steel Pipe	19/#9 Copperweld	14.53mm	219.1 mm
HDHSC9F		HS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min
HDHSCY6		HS	Steel Pipe or Flat Surface	120 mm ² Concentric	14.4mm	609.6 mm Min
HDVBR2V		VB	Steel Pipe or Flat Surface	250 kcmil Concentric	14.61mm	609.6 mm Min
HDVBR9FV8		VB	Steel Pipe	19/#9 Copperweld	14.53mm	219.1 mm
HDVSC2V		VS	Steel Pipe or Flat Surface	250 kcmil Concentric	14.61mm	609.6 mm Min
HDVSC9F		VS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min
HDVSC9FV2.50		VS	Steel Pipe	19/#9 Copperweld	14.53mm	73 mm
HDHSC3A		HS	Steel Pipe or Flat Surface	300 kcmil Concentric	16mm	609.6 mm Min
HDVVF3A		VV	Steel Pipe or Flat Surface	300 kcmil Concentric	16mm	609.6 mm Min
HDVVF9G		VV	Steel Pipe or Flat Surface	19/#8 Copperweld	16.31mm	609.6 mm Min
HDVVF3D		VV	Steel Pipe or Flat Surface	350 kcmil Concentric	17.3mm	609.6 mm Min
HDVVF7D		VV	Steel Pipe or Flat Surface	2/0 Ropelay	18.21mm	609.6 mm Min

CatalogNumber	Article Number	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter
HDHSC9H		HS	Steel Pipe or Flat Surface	19/#7 Copperweld	18.31mm	609.6 mm Min
HDHSD3Q		HS	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min
HDHTD3Q		HT	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min
HDVSC3Q		VS	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min
HDVVF3Q		VV	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min
HDVVF3QV6		VV	Steel Pipe	500 kcmil Concentric	20.65mm	158.75 mm

Table 2/2

Catalog Number	Article Number	NB/DN	Certifications
HDVSC1L	240292	600 Min	cUL, UL
HDVSC1T		600 Min	UL, cUL
HDVBC1V		600 Min	UL, cUL
HDVFC1V		600 Min	
HDVSC1V		600 Min	cUL, UL
HDVVRSD		600 Min	
HDVFC1Y		600 Min	
HDVSC1Y		600 Min	cUL, UL
HDVBC2C		600 Min	cUL, UL
HDVFR2C		600 Min	

Catalog Number	Article Number	NB/DN	Certifications
HDVSC2C		600 Min	UL, cUL
HDHSC2G		600 Min	UL, cUL
HDHSC2GW		600 Min	cUL, UL
HDHTC2G		600 Min	UL, cUL
HDVBC2G		600 Min	UL, cUL
HDVFR2G		600 Min	
HDVSC2G		600 Min	cUL, UL
HDVSC2GV3C		32 - 90	cUL, UL
HDVSC2GW		600 Min	UL, cUL
HDVVF2G		600 Min	
HDVVF9C		600 Min	
HDVVF9CV6		150	
HDVVF2P		600 Min	
HDVBC2P		600 Min	cUL, UL
HDHSC2L		600 Min	UL, cUL
HDVBC2L		600 Min	UL, cUL
HDVFR2L		600 Min	
HDVSC2L		600 Min	cUL, UL

Catalog Number	Article Number	NB/DN	Certifications
HDHSC2Q		600 Min	UL, cUL
HDHSC2QW		600 Min	cUL, UL
HDHTC2Q		600 Min	cUL, UL
HDVBC2Q		600 Min	UL, cUL
HDVFR2Q		600 Min	
HDVSC2Q		600 Min	cUL, UL
HDVSC2QW		600 Min	UL, cUL
HDVVF2Q		600 Min	
HDVSC9FW		600 Min	
HDVVF9F		600 Min	
HDVVF9FV6		150	
HDVVF9FV8		200	
HDHSC9F		600 Min	
HDHSCY6		600 Min	cUL, UL
HDVBR2V		600 Min	UL, cUL
HDVBR9FV8		200	
HDVSC2V		600 Min	cUL, UL
HDVSC9F		600 Min	

Catalog Number	Article Number	NB/DN	Certifications
HDVSC9FV2.50		65	
HDHSC3A		600 Min	
HDVVF3A		600 Min	
HDVVF9G		600 Min	
HDVVF3D		600 Min	
HDVVF7D		600 Min	
HDHSC9H		600 Min	
HDHSD3Q		600 Min	
HDHTD3Q		600 Min	
HDVSC3Q		600 Min	
HDVVF3Q		600 Min	
HDVVF3QV6		150	

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 TAC2Q2Q becomes XLTAC2Q2Q). Similarly, nVent ERICO Cadweld Exolon welding material is also designated by the XL prefix (for example, 150 becomes XL150).

A test weld should be made to check for the possibility of burn through on thin sections and to determine detrimental metallurgical effects.

HD-XX-X-XX-XX-L-M-W		
HD	Heavy Duty Designation	
XX	Mold Family	
X	Price Key	
XX	Conductor Code	
XX	Pipe Size	
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

* 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.

North America

+1.800.753.9221
Option 1 – Customer Care
Option 2 – Technical
Support

Europe

Netherlands:
+31 800-0200135
France:
+33 800 901 793

Europe

Germany:
800 1890272
Other Countries:
+31 13 5835404

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