

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	Mold Family	Connects To	Conductor Size	Conductor Outer Diameter, Nominal	Outer Diameter	NB/DN
HDVSC1L	VS	Steel Pipe or Flat Surface	#4 Concentric	5.89mm	609.6 mm Min	600 Min
HDVSC1T	VS	Steel Pipe or Flat Surface	#2 Solid	6.53mm	609.6 mm Min	600 Min
HDVBC1V	VB	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min	600 Min
HDVFC1V	VF	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min	600 Min
HDVSC1V	VS	Steel Pipe or Flat Surface	#2 Concentric	7.42mm	609.6 mm Min	600 Min
HDVVRSD	VV	Steel Pipe or Flat Surface	5/16" Stranded	7.92mm	609.6 mm Min	600 Min
HDVFC1Y	VF	Steel Pipe or Flat Surface	#1 Concentric	8.43mm	609.6 mm Min	600 Min
HDVSC1Y	VS	Steel Pipe or Flat Surface	#1 Concentric	8.43mm	609.6 mm Min	600 Min
HDVBC2C	VB	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min	600 Min
HDVFR2C	VF	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min	600 Min
HDVSC2C	VS	Steel Pipe or Flat Surface	1/0 Concentric	9.47mm	609.6 mm Min	600 Min
HDHSC2G	HS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDHSC2GW	HS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDHTC2G	HT	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDVBC2G	VB	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDVFR2G	VF	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min

CatalogNumber	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter	NB/DN
HDVSC2G	VS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDVSC2GV3C	VS	Steel Pipe	2/0 Concentric	10.62mm	42.2 - 101.6 mm	32 - 90
HDVSC2GW	VS	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDVVF2G	VV	Steel Pipe or Flat Surface	2/0 Concentric	10.62mm	609.6 mm Min	600 Min
HDVVF9C	VV	Steel Pipe or Flat Surface	7/#7 Copperweld	11mm	609.6 mm Min	600 Min
HDVVF9CV6	VV	Steel Pipe	7/#7 Copperweld	11mm	158.75 mm	150
HDVVF2P	VV	Steel Pipe or Flat Surface	4/0 Solid	11.68mm	609.6 mm Min	600 Min
HDVBC2P	VB	Steel Pipe or Flat Surface	4/0 Solid	11.68mm	609.6 mm Min	600 Min
HDHSC2L	HS	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min	600 Min
HDVBC2L	VB	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min	600 Min
HDVFR2L	VF	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min	600 Min
HDVSC2L	VS	Steel Pipe or Flat Surface	3/0 Concentric	11.94mm	609.6 mm Min	600 Min
HDHSC2Q	HS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDHSC2QW	HS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDHTC2Q	HT	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDVBC2Q	VB	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDVFR2Q	VF	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDVSC2Q	VS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min

CatalogNumber	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter	NB/DN
HDVSC2QW	VS	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDVVF2Q	VV	Steel Pipe or Flat Surface	4/0 Concentric	13.41mm	609.6 mm Min	600 Min
HDVSC9FW	VS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min	600 Min
HDVVF9F	VV	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min	600 Min
HDVVF9FV6	VV	Steel Pipe	19/#9 Copperweld	14.53mm	158.75 mm	150
HDVVF9FV8	VV	Steel Pipe	19/#9 Copperweld	14.53mm	219.1 mm	200
HDHSC9F	HS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min	600 Min
HDHSCY6	HS	Steel Pipe or Flat Surface	120 mm ² Concentric	14.4mm	609.6 mm Min	600 Min
HDVBR2V	VB	Steel Pipe or Flat Surface	250 kcmil Concentric	14.61mm	609.6 mm Min	600 Min
HDVBR9FV8	VB	Steel Pipe	19/#9 Copperweld	14.53mm	219.1 mm	200
HDVSC2V	VS	Steel Pipe or Flat Surface	250 kcmil Concentric	14.61mm	609.6 mm Min	600 Min
HDVSC9F	VS	Steel Pipe or Flat Surface	19/#9 Copperweld	14.53mm	609.6 mm Min	600 Min
HDVSC9FV2.50	VS	Steel Pipe	19/#9 Copperweld	14.53mm	73 mm	65
HDHSC3A	HS	Steel Pipe or Flat Surface	300 kcmil Concentric	16mm	609.6 mm Min	600 Min
HDVVF3A	VV	Steel Pipe or Flat Surface	300 kcmil Concentric	16mm	609.6 mm Min	600 Min
HDVVF9G	VV	Steel Pipe or Flat Surface	19/#8 Copperweld	16.31mm	609.6 mm Min	600 Min
HDVVF3D	VV	Steel Pipe or Flat Surface	350 kcmil Concentric	17.3mm	609.6 mm Min	600 Min
HDVVF7D	VV	Steel Pipe or Flat Surface	2/0 Ropelay	18.21mm	609.6 mm Min	600 Min

CatalogNumber	Mold Family	Connects To	Conductor Size	Conductor OuterDiameter, Nominal	Outer Diameter	NB/DN
HDHSC9H	HS	Steel Pipe or Flat Surface	19/#7 Copperweld	18.31mm	609.6 mm Min	600 Min
HDHSD3Q	HS	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min	600 Min
HDHTD3Q	HT	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min	600 Min
HDVSC3Q	VS	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min	600 Min
HDVVF3Q	VV	Steel Pipe or Flat Surface	500 kcmil Concentric	20.65mm	609.6 mm Min	600 Min
HDVVF3QV6	VV	Steel Pipe	500 kcmil Concentric	20.65mm	158.75 mm	150

Table 2/2

Catalog Number	Certifications
HDVSC1L	cUL, UL
HDVSC1T	UL, cUL
HDVBC1V	UL, cUL
HDVFC1V	
HDVSC1V	cUL, UL
HDVVRSD	
HDVFC1Y	
HDVSC1Y	cUL, UL
HDVBC2C	cUL, UL
HDVFR2C	

Catalog Number	Certifications
HDVSC2C	UL, cUL
HDHSC2G	UL, cUL
HDHSC2GW	cUL, UL
HDHTC2G	UL, cUL
HDVBC2G	UL, cUL
HDVFR2G	
HDVSC2G	cUL, UL
HDVSC2GV3C	cUL, UL
HDVSC2GW	UL, cUL
HDVVF2G	
HDVVF9C	
HDVVF9CV6	
HDVVF2P	
HDVBC2P	cUL, UL
HDHSC2L	UL, cUL
HDVBC2L	UL, cUL
HDVFR2L	
HDVSC2L	cUL, UL

Catalog Number	Certifications
HDHSC2Q	UL, cUL
HDHSC2QW	cUL, UL
HDHTC2Q	cUL, UL
HDVBC2Q	UL, cUL
HDVFR2Q	
HDVSC2Q	cUL, UL
HDVSC2QW	UL, cUL
HDVVF2Q	
HDVSC9FW	
HDVVF9F	
HDVVF9FV6	
HDVVF9FV8	
HDHSC9F	
HDHSCY6	cUL, UL
HDVBR2V	UL, cUL
HDVBR9FV8	
HDVSC2V	cUL, UL
HDVSC9F	

Catalog Number	Certifications
HDVSC9FV2.50	
HDHSC3A	
HDVVF3A	
HDVVF9G	
HDVVF3D	
HDVVF7D	
HDHSC9H	
HDHSD3Q	
HDHTD3Q	
HDVSC3Q	
HDVVF3Q	
HDVVF3QV6	

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

APAC

Shanghai:
 + 86 21 2412 1618/19
 Sydney:
 +61 2 9751 8500



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN ILSCO SCHROFF TRACHTE