

# DNV Certified Category & Fiber Cables

PRODUCT BULLETIN



## Benefits

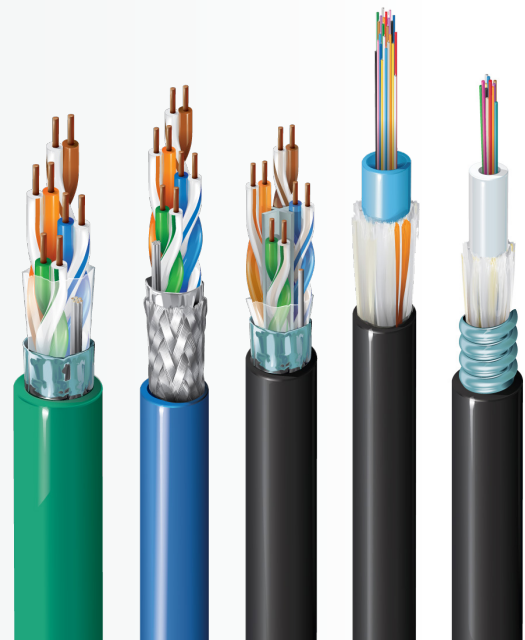
- Achieve reliable, multi-gigabit network performance
- Eliminate slow network speeds and maximize uptime
- Enhance guest satisfaction and improve staff productivity
- Reduce installation time and costs
- Support emerging technology, including in-cabin WiFi and IPTV

## Key Features

- Certified type approval for data communication cables and fiber cables in DNV GL-classed ships
- Data communication cables available in Category 5e, 6, 6A and 7.
- Fiber cables available in:
  - Standard Central Loose Tube design from 2-24 fiber count, SM and MM fiber types
  - Fire Resistant, Corrugated Steel Tape armored Central Loose Tube design from 2-24 fiber count, SM and MM fiber types
- Seamless compatibility with Belden connectivity

## Key Applications

- Common area and in-cabin Wi-Fi
- IPTV
- PoE Lighting
- Device charging stations
- Onboard security cameras



## Central Loose Tube Fiber cables

In loose tube cables, the coated fiber “floats” within a rugged, abrasion resistant, oversized tube which is filled with optical gel. Since the tube does not have direct contact with the fiber, any cable material expansion or contraction will not cause stress on the fiber. Much of the external stress placed on the tube also will not be transferred to the fiber.

The non-hygroscopic gel prevents water from entering the tube. The loose tube cables are proven the best solution for harsh environment conditions in the outdoors. The Central Loose tube designs are the economical option for low fiber counts (up to 24 fibers). The cable design offers a smaller overall dimension and ensures a more efficient use of conduit space than typical multi loose tube.

### Fiber Types

Fiber Type	Fiber Grade code (x)
OM1 - 62.5/125 Multi Mode	1
OM2 - 50/125 Multi Mode	2
OM3 - 50/125 Multi Mode	D
OM4 - 50/125 Multi Mode	E
OM5 - 50/125 Multi Mode	C
OS2 - G.657A1/G.652D	8
OS2 - G.657A2	F
OS2 - G.657B3	I
G.655 C&D	7

### Standard Central Loose Tube cable

#### Construction

- Black UV resistant LSZH jacket
- Fiber Glass Strength Members
- 3.3mm Buffer Tube
- Diameter 7.6mm
- Weight 70 kg/km

### Mechanical

- Tensile strength 500N @ 0.33% fiber strain
- Crush Resistance 10kN/m

### Safety

- Reaction to fire:
  - IEC 60332-1
  - IEC 60332-3-22
- Smoke Density:
  - IEC 61034-2
- Halogen Free:
  - IEC 60754-1: zero
  - IEC 60754-2: > 4.3 pH; ≤ 10 μS/mm

### Ordering Information:

Part Number	FIBER COUNT	Certificate No:
GUSNVx02	2	TAE00004FE
GUSNVx04	4	
GUSNVx06	6	
GUSNVx08	8	
GUSNVx12	12	
GUSNVx16	16	
GUSNVx24	24	

<https://approvalfinder.dnv.com/#search?company=Belden>



## Fire Resistant, CST armored Central Loose Tube cable

### Construction:

- Black UV resistant LSZH jacket
- Corrugated Steel Tape armor
- Fiber Glass Strength Members
- 3.3mm Buffer Tube
- Diameter 9.0 mm
- Weight 110 kg/km

### Mechanical

- Tensile strength 500N @ 0.33% fiber strain
- Crush Resistance 10kN/m

### Safety

- Reaction to fire:
  - IEC 60332-1
  - IEC 60332-3-22
- Circuit Integrity:
  - IEC 60331-25: E120
- Halogen Free:
  - IEC 60754-1: zero
  - IEC 60754-2: > 4.3 pH; ≤ 10 μS/mm

### Ordering Information:

Part Number	FIBER COUNT	Certificate No:
GUCNVx02	2	TAE00004FD
GUCNVx04	4	
GUCNVx06	6	
GUCNVx08	8	
GUCNVx12	12	
GUCNVx16	16	
GUCNVx24	24	

<https://approvalfinder.dnv.com/#search?company=Belden>



## Ordering Information

### DNV GL Certified Shipboard Data Communication Cables

Description		Belden Part Number						
		IEC 60332-1 Flame Retardancy <sup>1</sup>				IEC 60332-3-22/24/25 Flame Retardancy <sup>2</sup>		
Color	Length	U/FTP	F/UTP	S/FTP	F/FTP	U/FTP	F/FTP	SF/UTP
CAT 7 Shielded Cables, 4-pair, 23 AWG, LSZH, DNV								
Blue	500m (1640 ft)	-	-	-	-	-	-	1885VNC.06500
Gray	500m (1640 ft)	-	-	-	-	-	-	1885VNC.08500
White	500m (1640 ft)	-	-	-	-	-	-	1885VNC.09500
CAT 6A Shielded Cables, 4-pair, 23 AWG, LSZH, DNV								
Blue	500m (1640 ft)		-		10GXV01.06500	10GXV03.06500	10GXV91.06500	-
Gray	500m (1640 ft)		-		10GXV01.08500	10GXV03.08500	10GXV91.08500	-
White	500m (1640 ft)		-		10GXV01.09500	10GXV03.09500	10GXV91.09500	-
CAT 6 Shielded Cables, 4-pair, 23 AWG, LSZH, DNV								
Blue	500m (1640 ft)	-		-	-	-	-	-
Gray	500m (1640 ft)	-		-	-	-	-	-
White	500m (1640 ft)	-		-	-	-	-	-
CAT 5e Shielded Cables, 4-pair, 24 AWG, LSZH, DNV								
Blue	500m (1640 ft)	-		-	-	-	-	1633VHC.06500
Gray	500m (1640 ft)	-		-	-	-	-	1633VHC.08500
White	500m (1640 ft)	-		-	-	-	-	1633VHC.09500

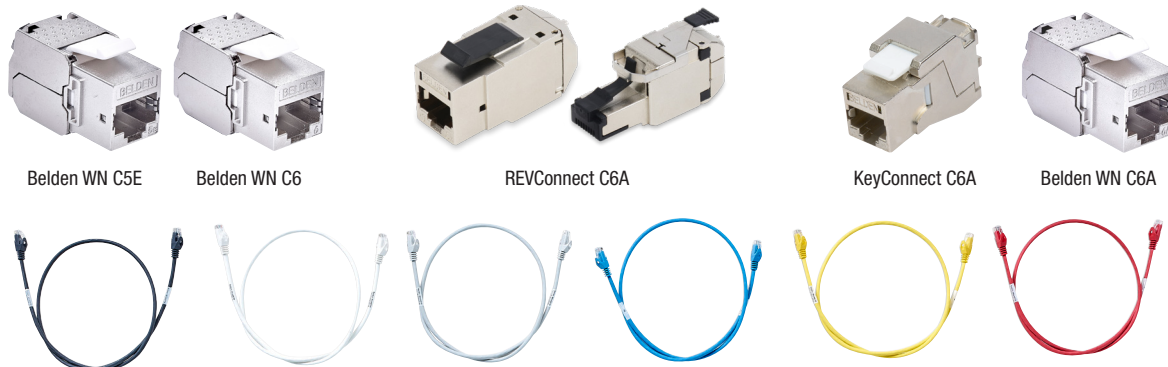
<sup>1</sup> Tested for flame propagation for a single small insulated cable to IEC 60332-1 minimum flame-retardant requirements.

<sup>2</sup> Tested for flame propagation on bunched cables according to IEC 60332-3-22/24/25

### Certified Shipboard Data Communication Connectivity

Description	Belden Part Number						
	CAT5E	CAT6	CAT6A			CAT7	
	1633V-Series	7860V-Series	10GXV-Series			1885V-Series	
IEC 60332-1	1633VNH.06500	7860VNH.06500	10GXV01.06500	10GXV02.06500	-	1885VNC.06500	
60332-3-22/24/25	1633VHC.06500	-	10GXV91.06500	10GXV92.06500	10GXV03.06500	-	
Jacks	CU-JS5ME	CU-JS6ME	RVAMJKSM-B24			AX104562	CU-JSAME
Plug	-	-	RVAFPSME-B24			-	-
Patch Cord, 1m	CU-LPS5BL001M	CU-LPS6BL001M	CAE4106001M			CAE4106001M	CU-LPSABL001M
Patch Cord, 2m	CU-LPS5BL002M	CU-LPS6BL002M	CAE4106002M			CAE4106002M	CU-LPSABL002M
Patch Cord, 3m	CU-LPS5BL003M	CU-LPS6BL003M	CAE4106003M			CAE4106003M	CU-LPSABL003M
Certification	GHMT	GHMT	ETL			-	GHMT
Warranty	25-Year						

Note: DNV cables ETL certification is based on cable construction accompanied by declaration



© 2022 | Belden, Belden Sending All The Right Signals, Hirschmann, GarrettCom, Tofino Security, Lumberg Automation and the Belden logo are trademarks or registered trademarks of Belden Inc. or its affiliated companies in the United States and other jurisdictions. Belden and other parties may also have trademark rights in other terms used herein.