

Product Bulletin

PB 339

Belden[®] CSA Tray-Rated VFD Cable

CSA Tray-Rated cable added to Belden's line of innovative Variable Frequency Drive (VFD) cables.

Belden CSA Tray-Rated VFD Cable Offered in Gauge Sizes from 14 to 4/0 with Copper Tape Shield and a Symmetrical Design Belden CSA Tray-Rated VFD (Variable Frequency Drive) cable is the economical solution for motor-to-drive connections, noise sensitive applications requiring shielded power cable and other solid state power supplies with variable frequency needs. The cable is designed to contain common mode currents, and decrease capacitive coupling and reflected wave voltage. It is proven to outperform substitute cables, even in the most demanding environments.

Belden CSA Tray-Rated VFD Cable Key Design Features:

- Symmetric Bare Grounds. Balanced ground wires prevent induced ground currents since they tie the current carrying copper foil shield to the drive without giving a jumping off point to the enclosure or panel. This shielding system reduces the likelihood of high frequency currents seeking alternate routes back to the drive.
- Shield Termination Directly at the Drive.

By terminating the shield directly at the drive, unshielded cable exposure is reduced thereby decreasing the opportunities for noise release in the enclosure.

- Enhanced XLPO Insulation and Single Conductors. The cable uses Enhanced XLPO insulation and single conductors for high dielectric and low capacitance. This reduces the energy required to charge the cable and also lessens reflected wave voltages.
- Individual Motor Lead Set Shielding.
 Each motor lead set is placed in a shielding suitable for all frequencies on the cable.
 This prevents capacitive interaction with the other cables and reduces capacitive charging currents.

Belden CSA Tray-Rated VFD cable is compatible with economical connectors and cable glands from all major manufactures with application suitable ratings.



Cable Specifications

- 1000V CSA C22.2 #230 Tray Cable
- CSA C22.2 #38 Thermoset Insulated Wires and Cable
- CSA FT-4 Vertical Tray Flame Test
- IEEE 1202/383 Vertical Tray Flame Test (70,000 BTUs)
- Bare Copper Conductors
- Class B Stranding
- XLPO Cross Linked Polyolefin Insulation
- 90°C Wet/Dry
- CEC Part 1, Suitable for Use in Hazardous Locations
- Direct Burial
- RoHS Compliant
- CE Approved
- RW90 Conductors

Variable Frequency Drive Cable – CSA

14 to 4/0 AWG with Dual Copper Tape Shield

Description	Part	AWG	Cond. Stranding	Standard Lengths		Standard Unit Wt.		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	No.			Ft.	m	Lbs.	kg	Inch	mm	Lbs.	N	Inch	mm
Three Stranded BC Circuit Cond	l uctors + (3) S	Symmet	rical BC G	rounds •	(2) Spira	l Coppei	r Tape Sh	nields (10	0% Cove	erage)			
XLPO Insulation • Black	k Sunlight-	and (Dil-Resist	ant PV	C Jacke	t							
1000V CSA TC CCSA C22.2 #230 CSA C22.2 #38 CSA FT-4 IEEE 1202/383	29550C	14	7x22	1000	304.8	134.0	60.8	0.43	10.92	162	75	4.3	109.2
	295510	12	7x20	1000	304.8	146.0	66.2	0.46	11.68	258	117	4.6	116.8
	29552C	10	7x18	1000	304.8	238.0	107.9	0.51	12.95	444	201	5.1	129.5
	29553C	8	7x16	1000	304.8	340.0	154.2	0.65	16.51	576	261	6.5	165.1
Direct Burial RW90 Rated Circuit Conductors 90°C Wet/Dry	29554C	6	7x14	1000	304.8	468.0	212.3	0.72	18.28	915	415	7.3	185.4
	29555C	4	7x12	1000	304.8	517.0	234.5	0.83	21.08	1450	658	8.3	210.8
	29556C	2	7x10	1000	304.8	984.0	446.3	0.99	25.15	2300	1043	10.0	254.0
	29557C	1	19x14	1000	304.8	1193.0	541.1	1.13	28.70	2650	1202	11.5	292.1
	29558C	1/0	19x13	1000	304.8	1439.0	652.7	1.21	30.73	3537	1604	12.3	312.4
	29559C	2/0	19x12	1000	304.8	1734.0	786.5	1.31	33.27	4200	1905	13.3	337.8
	29560C	3/0	19x11	1000	304.8	2150.0	975.2	1.42	36.07	5025	2279	14.3	363.2
	29561C	4/0	19x10	1000	304.8	2599.0	1178.9	1.54	39.12	6670	3025	15.5	393.7