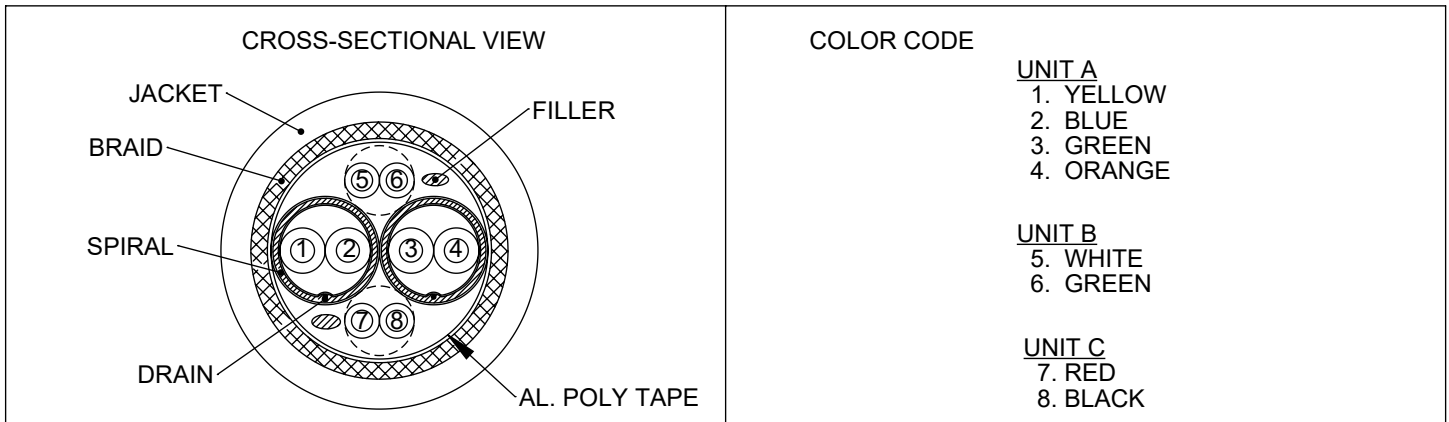



USB BULK CABLE SPECIFICATION



DESCRIPTION: UL STYLE 20276, USB BULK 3.0 HIGH FLEX DRAG CHAIN 28/22 PVC BLK

ITEM		UNIT A: STP	UNIT B: UTP	UNIT C: UTP
CONSTRUCTION AWG		28 AWG	26 AWG	22 AWG
CONDUCTORS	CONDUCTOR SIZE, IN [MM]	19/.003 ± .0003 [.08 ± .008]	19/.004 ± .0003 [.10 ± .008]	42/.004 ± .0003 [.10 ± .008]
	MATERIAL	TINNED COPPER	TINNED COPPER	TINNED COPPER
INSULATION	MATERIAL	FOAM PE	PE	PE
	DIAMETER, IN [MM]	.037 ± .002 [.95 ± .05]	.042 ± .002 [1.06 ± .05]	.049 ± .002 [1.25 ± .05]
AL. POLY TAPE	OVERLAP	25% MIN.	-	-
DRAIN	MATERIAL	TINNED COPPER	-	-
	CONDUCTOR SIZE, IN [MM]	19/.002 [.05]	-	-
SPIRAL	MATERIAL	TINNED COPPER	-	-
POLY TAPE	OVERLAP	25% MIN.(PTFE)	-	-
FILLER	MATERIAL	COTTON YARN		
OUTER TAPE	MATERIAL	AL. POLY TAPE		
	COVERAGE	100%		
BRAID SHIELD	MATERIAL	TINNED COPPER		
	COVERAGE	80% MIN.		
JACKET	MATERIAL	PVC		
	NOM. THICK, IN [MM]	.031 [.80]		
	DIAMETER, IN [MM]	.276 ± .012 [7.0 ± .3]		
	COLOR	BLACK		
MARKING	FD HIGH SPEED CABLE 2×2×28AWG+2×26AWG+2×22AWG (UL FILE NUMBER)  AWM 20276 80°C 30V VW-1 (BATCH NUMBER) ****m L-COM,INC WWW.L-COM.COM			

USB BULK CABLE SPECIFICATION

DESCRIPTION: UL STYLE 20276, USB BULK 3.0 HIGH FLEX DRAG CHAIN 28/22 PVC BLK

**ELECTRICAL CHARACTERISTICS**

1. VOLTAGE RATING: 30V
2. CONDUCTOR RESISTANCE(MAX. AT 20°C ): 239Ω/KM (28AWG); 150Ω/KM(26AWG); 59.4Ω/Km (22AWG)
3. INSULATION RESISTANCE: 100 MΩ-KM MIN. AT 20°C
4. DIELECTRICAL STRENGTH: 500VAC/1 MINUTE

**USB2.0 UNSHIELD TWIST PAIR**

5. DIFFERENTIAL IMPEDANCE: 90Ω±15%
6. DELAY: 5.2 ns/M
7. DELAY SKEW: 100ps
8. ATTENUATION:

FREQ.(MHZ)	.064	.256	.512	.772	1	4	8	12	24	48	96	200	400
dB/cable	.08	.11	.13	.15	.20	.39	.57	.67	.95	1.35	1.90	3.2	5.8

**USB3.0 SHIELD TWIST PAIR**

9. DIFFERENTIAL IMPEDANCE: 90±7Ω
  10. INTRA-PAIR SKEW: 15ps/M
  11. ATTENUATION:
- | FREQ.(MHZ) | 100 | 1250 | 2500 | 7500 |
|------------|-----|------|------|------|
| dB/2.5M    | 1.5 | 5.0  | 7.5  | 25   |
12. DIFFERENTIAL TO COMMON MODE: 20 dB/cable @0.1~7.5GHz

**PHYSICAL CHARACTERISTICS**

1. STORAGE TEMPERATURE: -20°C~+50°C
2. OPERATING TEMPERATURE: -15°C~+60°C(MOVING STATE); -40°C~+80°C(FIXED STATE)
3. MIN. MOVING BEND RADIUS: 10X OD; MIN. FIXED BEND RADIUS: 5X OD
4. FLAMMABILITY RATING: UL VW-1
5. CABLE TO BE RoHS COMPLIANT.
6. DRAG CHAIN TEST: 5 MILLION BENDING CYCLES MIN. (CONDUCTOR RESISTANCE CHANGE RATE: 20% MAX.)  
ROUTE: 0.6M; BENDING RADIUS:75mm; TEST ACCELERATION:60m/s<sup>2</sup>; SPEED:1.4m/s

**PACKAGE**

MODEL NO.	LENGTH	PACKAGING
BU3HFD-2822BK-100F	100 FEET	POLY BAG
BU3HFD-2822BK-500F	500 FEET	POLY BAG or SPOOL
BU3HFD-2822BK-1000F	1,000 FEET	POLY BAG or SPOOL