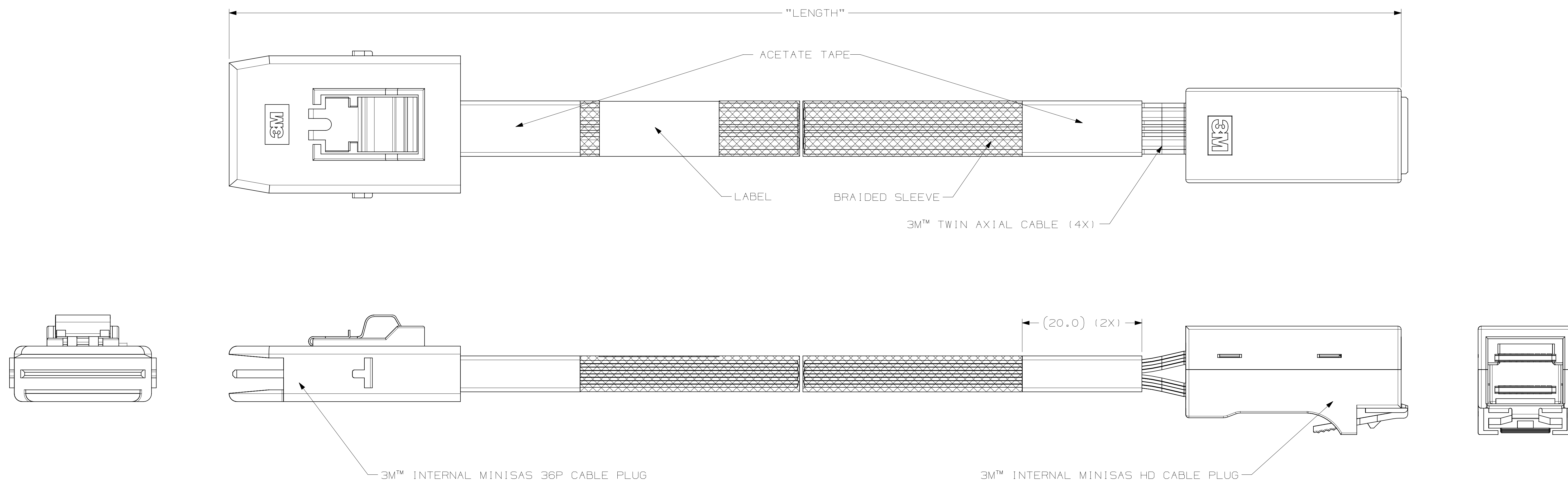


3M™ HIGH ROUTABILITY INTERNAL MINISAS HD CABLE ASSEMBLIES, 8U SERIES
 VISIT <http://www.3Mconnectors.com>



3M PART NUMBERING SCHEME

8UH4 - XXX 13 - 00 - X.XX

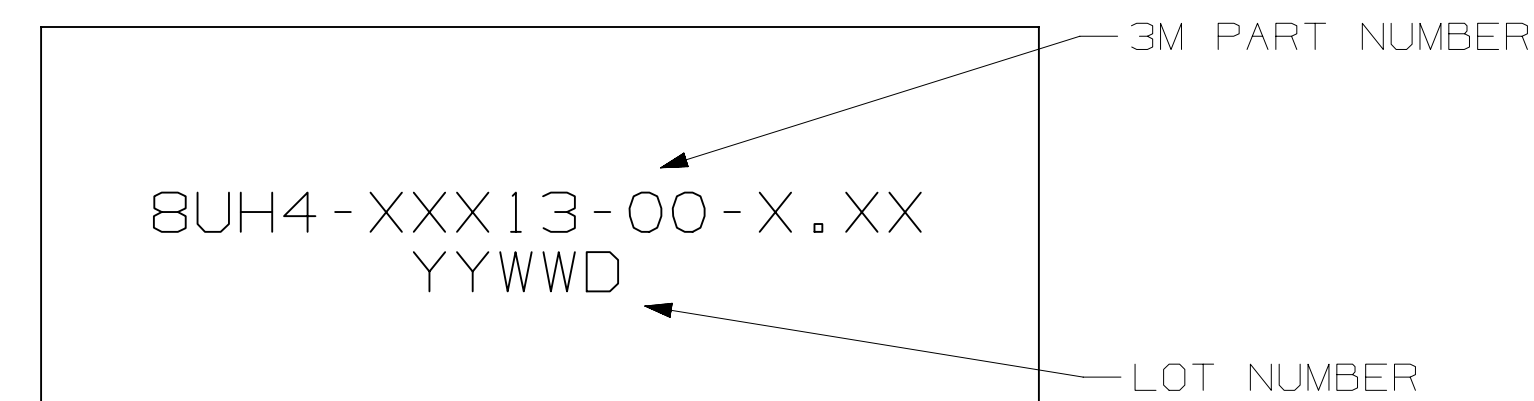
"LENGTH" IN METERS

"LENGTH" TOLERANCE

±10MM FOR "LENGTH" 0.5 METER MAX
 ±15MM FOR "LENGTH" MORE THAN 0.5 METER

TABLE 1: DESCRIPTION FOR "XXX"

XXX	PINOUT	BRAIDED SLEEVE
BA1	STD MINISAS 4i TO STD MINISAS HD 4i, WITH SIDEBANDS (SEE TABLE 2)	YES
BA2	STD MINISAS 4i TO STD MINISAS HD 4i, WITH SIDEBANDS (SEE TABLE 2)	NO
DB1	MINISAS 4i TO MINISAS HD 4i, WITHOUT SIDEBANDS (SEE TABLE 3)	YES
DB2	MINISAS 4i TO MINISAS HD 4i, WITHOUT SIDEBANDS (SEE TABLE 3)	NO

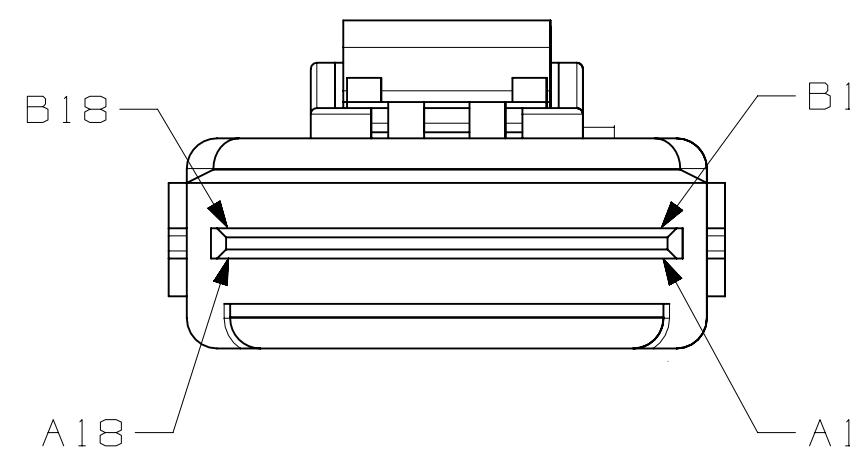


LABEL INFORMATION

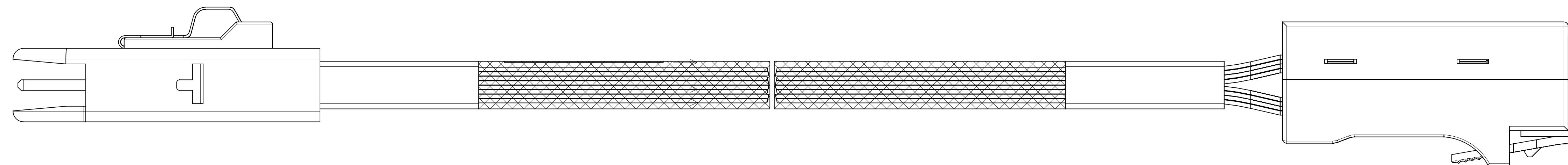
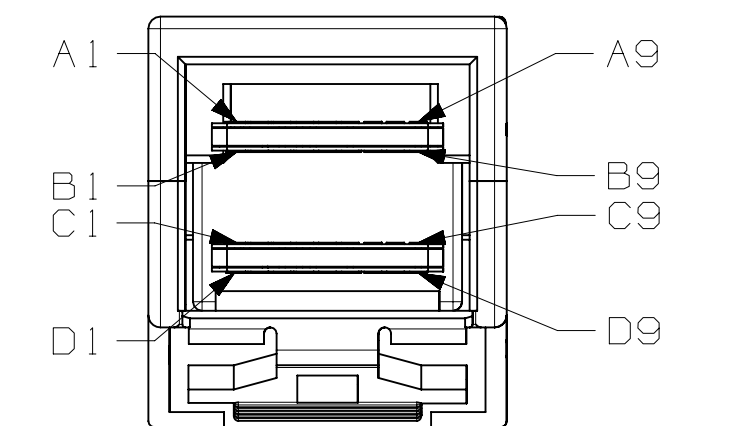
DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DISTRIBUTION CODES		DRY	KOK HOE LEE	DATE	MFG	DATE
		CHKD	YUNLONG QIAO	DATE	APPRV	DATE
				JUL 31, 2013	SAJJIT BANDHU	JUL 31, 2013
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DO NOT SCALE DRAWING	SCALE 1/4	TOLERANCES EXCEPT AS NOTED		3M 3M Center St. Paul, MN 55144		
THIRD ANGLE PROJECTION		INCHES		TITLE		
		MILLIMETERS		INTERNAL MINISAS HD TO 36P MINISAS HYBRID CABLE ASSEMBLY		
MAX SURFACE ROUGHNESS		.00 ± .05		CAGE NUMBER		
125	<input type="checkbox"/> ALL SURFACES	.000 ± .005		D 78-5100-2622-8		
	<input checked="" type="checkbox"/> MARKED ONLY	ANGLES ±1°		REV. A		
				MODEL		
				SHT 1 OF 2		

78-9101-7271-3
DRAWING NUMBER

MINISAS 4i
 CABLE PLUG
 CONNECTOR



MINISAS HD 4i
 CABLE PLUG
 CONNECTOR



WIRING DIAGRAMS

MINISAS 4i CABLE PLUG CONNECTOR		MINISAS HD 4i CABLE PLUG CONNECTOR	
POSITION	SYMBOL	SYMBOL	POSITION
B18	GROUND	—	GROUND A9
B17	Tx3-	→	Rx3- A8
B16	Tx3+	→	Rx3+ A7
B15	GROUND	—	GROUND B9
B14	Tx2-	→	Rx2- B8
B13	Tx2+	→	Rx2+ B7
B12	GROUND	—	GROUND B6
B11	SIDEBAND	↔	SIDEBAND D1
B10	SIDEBAND	↔	SIDEBAND C1
B9	SIDEBAND	↔	SIDEBAND B1
B8	SIDEBAND	↔	SIDEBAND A1
B7	GROUND	—	GROUND A6
B6	Tx1-	→	Rx1- A5
B5	Tx1+	→	Rx1+ A4
B4	GROUND	—	GROUND A3
B3	Tx0-	→	Rx0- B5
B2	Tx0+	→	Rx0+ B4
B1	GROUND	—	GROUND B3
A18	GROUND	—	GROUND C9
A17	Rx3-	←	Tx3- C8
A16	Rx3+	←	Tx3+ C7
A15	GROUND	—	GROUND D9
A14	Rx2-	←	Tx2- D8
A13	Rx2+	←	Tx2+ D7
A12	GROUND	—	GROUND D6
A11	SIDEBAND	↔	SIDEBAND D2
A10	SIDEBAND	↔	SIDEBAND C2
A9	SIDEBAND	↔	SIDEBAND B2
A8	SIDEBAND	↔	SIDEBAND A2
A7	GROUND	—	GROUND C6
A6	Rx1-	←	Tx1- C5
A5	Rx1+	←	Tx1+ C4
A4	GROUND	—	GROUND C3
A3	Rx0-	←	Tx0- D5
A2	Rx0+	←	Tx0+ D4
A1	GROUND	—	GROUND D3

SYMBOLS	
→	←
HIGH SPEED SERIAL DIFFERENTIAL PAIRS	
→	←
SIGNAL RETURN	
—	—
POWER AND MANAGEMENT INTERFACE	

TABLE 2: WITH SIDEBANDS

MINISAS 4i CABLE PLUG CONNECTOR		MINISAS HD 4i CABLE PLUG CONNECTOR	
POSITION	SYMBOL	SYMBOL	POSITION
B18	GROUND	—	GROUND A9
B17	Tx3-	→	Rx3- A8
B16	Tx3+	→	Rx3+ A7
B15	GROUND	—	GROUND B9
B14	Tx2-	→	Rx2- B8
B13	Tx2+	→	Rx2+ B7
B12	GROUND	—	GROUND B6
B11	SIDEBAND	NC	SIDEBAND D1
B10	SIDEBAND	NC	SIDEBAND C1
B9	SIDEBAND	NC	SIDEBAND B1
B8	SIDEBAND	NC	SIDEBAND A1
B7	GROUND	—	GROUND A6
B6	Tx1-	→	Rx1- A5
B5	Tx1+	→	Rx1+ A4
B4	GROUND	—	GROUND A3
B3	Tx0-	→	Rx0- B5
B2	Tx0+	→	Rx0+ B4
B1	GROUND	—	GROUND B3
A18	GROUND	—	GROUND C9
A17	Rx3-	←	Tx3- C8
A16	Rx3+	←	Tx3+ C7
A15	GROUND	—	GROUND D9
A14	Rx2-	←	Tx2- D8
A13	Rx2+	←	Tx2+ D7
A12	GROUND	—	GROUND D6
A11	SIDEBAND	NC	SIDEBAND D2
A10	SIDEBAND	NC	SIDEBAND C2
A9	SIDEBAND	NC	SIDEBAND B2
A8	SIDEBAND	NC	SIDEBAND A2
A7	GROUND	—	GROUND C6
A6	Rx1-	←	Tx1- C5
A5	Rx1+	←	Tx1+ C4
A4	GROUND	—	GROUND C3
A3	Rx0-	←	Tx0- D5
A2	Rx0+	←	Tx0+ D4
A1	GROUND	—	GROUND D3

SYMBOLS	
→	←
HIGH SPEED SERIAL DIFFERENTIAL PAIRS	
→	←
SIGNAL RETURN	
—	—
POWER AND MANAGEMENT INTERFACE	

TABLE 3: WITHOUT SIDEBANDS

NOTES

1. ROHS COMPLIANT. SEE REGULATORY INFORMATION APPENDIX IN "ROHS COMPLIANCE" SECTION AT 3Mconnectors.com (E1 & C1 APPLY)
2. REFER TO DRAWING NO. 78-5100-2363-9 FOR DETAILS ON 3M™ INTERNAL MINISAS 36P CABLE ASSEMBLY.
3. REFER TO DRAWING NO. 78-5100-2555-0 FOR DETAILS ON 3M™ INTERNAL MINISAS HD CABLE ASSEMBLY.
4. UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
5. PRODUCT SPECIFICATION: 78-5102-0195-3

DESIGN REFERENCE	NEXT ASSEMBLY	A 0049227	JUL 31, 2013	KHL	SB
DISTRIBUTION CODES	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
	DATE	DATE	DATE		
	DRY	KOK HOE LEE	JUL 31, 2013	MFG	
	DATE	DATE	DATE		
	CHKD	YUNLONG QIAO	JUL 31, 2013	APPRV	SAJJIT BANDHU
	DATE	DATE	DATE		
DIVISION		DIVISION CODE		3M Center St. Paul, MN 55144	
DO NOT SCALE DRAWING		SCALE 1/4		TOLERANCES EXCEPT AS NOTED	
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS	
INTERPRET PER ASME Y14.5 - 1994		.00		0 ± .1	
MAX SURFACE ROUGHNESS		.00		.05	
125		.000 ± .005		.000 ± .005	
☑ ALL SURFACES		ANGLES ± 1°		CAGE NUMBER	
☑ MARKED ONLY				D 78-5100-2622-8	
				REV. A	
				MODEL	
				SHT 2 OF 2	