

DO NOT
SCALE FROM
THIS PRINT

No. OF POS	"A"	"B"	"C"	"D"
-04	3.00 [0.118]	7.94 [0.313]	17.75 [0.699]	21.75 [0.856]
-05	4.00 [0.157]	8.94 [0.352]	18.75 [0.738]	22.75 [0.896]
-07	6.00 [0.236]	10.94 [0.431]	20.75 [0.817]	24.75 [0.974]
-10	9.00 [0.354]	13.94 [0.549]	23.75 [0.935]	27.75 [1.093]
-15	14.00 [0.551]	18.94 [0.746]	28.75 [1.132]	32.75 [1.289]
-20	19.00 [0.748]	23.94 [0.943]	33.75 [1.329]	37.75 [1.486]
-25	24.00 [0.945]	28.94 [1.139]	38.75 [1.526]	42.75 [1.683]
-30	29.00 [1.142]	33.94 [1.336]	43.75 [1.722]	47.75 [1.880]
-40	39.00 [1.535]	43.94 [1.730]	53.75 [2.116]	57.75 [2.274]

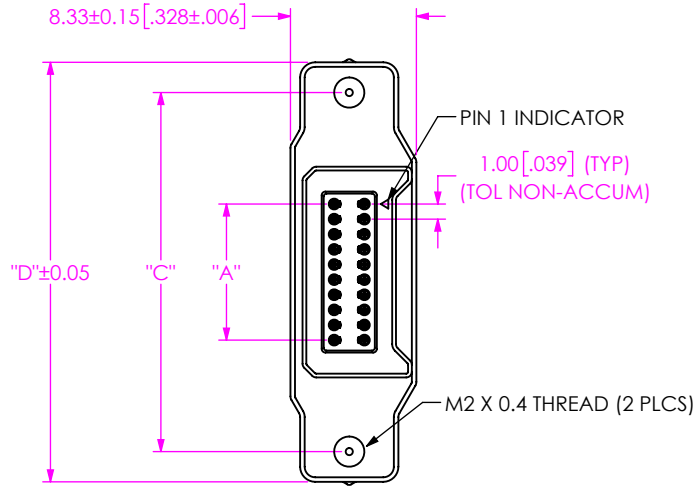


FIG 1
B1SDX-10-XXX-X-XX.X SHOWN

NOTES:

1. MINIMUM PUSHOUT FORCE: 4.445N [1.0 LB].
2. PARTS TO BE PACKAGED IN ASBBLTXXXX BUBBLE BAG.
3. FOR ASSEMBLED LENGTHS LESS THAN 330.2 MM [13.00 IN], TOLERANCE SHALL BE ± 3.18 [1.25], FOR OTHER LENGTHS, TOLERANCE SHALL BE ± 2%.
4. ALL FINISHED GOODS ARE TO BE ELECTRICALLY TESTED INCLUDING HI-POT TEST AT 1000 VOLTS DC. AFTER FINAL ELECTRICAL TEST, LABEL WITH 1 ET STAMP ON THE BODY.
5. THUMB SCREWS TO BE TORQUED TO 0.8 IN-LBS, ALL OTHER FASTENERS TORQUE TO 1.1 TO 1.8 IN-LBS.
6. CONTACT MUST BE INSERTED UNTIL RETENTION FEATURE LOCKS IN PLACE.
7. ASSEMBLIES USING THE FEP OPTION ARE FOR CRIMP APPLICATIONS ONLY.

B1SDX-XX-XXX-X-XX.X-XX

PANEL
-S: NON-PANEL MOUNT

FEP CABLE OPTION
-T: FEP INSULATION
**LEAVE BLANK FOR PVC (SEE NOTE 7)

No OF POSITIONS (PER ROW)
*-04, *-05, *-07, -10, -15, *-20, -25, -30, *-40

WIRE GAUGE (AWG)
-28, -30

COLOR CODE
**C COLOR CODE WIRE (SEE TABLE 2, SHT 2)
-LEAVE BLANK FOR STANDARD WIRE (NOT AVAILABLE FOR FEP OPTION, FEP OPTION ONLY AVAILABLE IN BLUE)

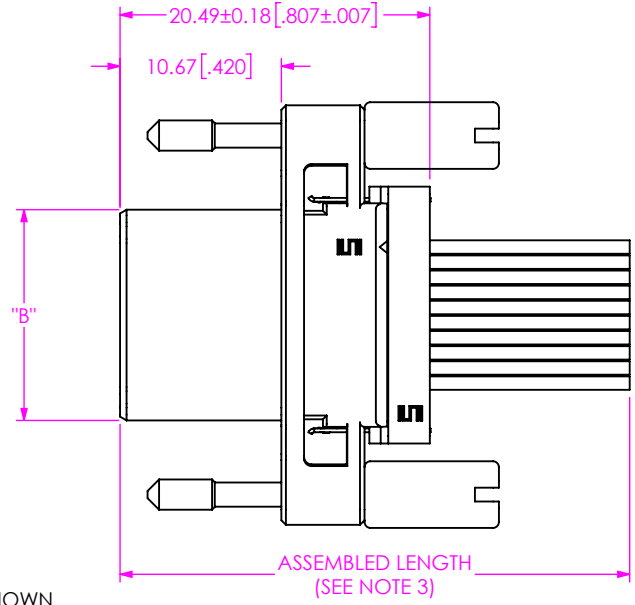
PINOUT
 (LEAVE BLANK FOR SINGLE END ASSEMBLY)
-1: PIN 1 TO PIN 1
-2: PIN 1 TO PIN 2
-3: PIN 1 TO PIN N
-4: PIN 1 TO PIN N-1

EMI SHIELD
(LEAVE BLANK FOR NON EMI SHIELDED)
-E: EMI SHIELD (SEE SHEET 4)

ASSEMBLED LENGTH
(SPECIFY IN INCHES) 06.0 IN MINIMUM

PLATING SPECIFICATION
-H: 30µ" GOLD IN CONTACT AREA, FLASH GOLD ON TAIL

(* = NOT TOOLED)
(= NOT AVAILABLE WITH -E)
(** = NOT RELEASED)



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	<p>MATERIAL: INSULATOR: MAIN BODY: LCP, COLOR: BLACK REAR BODY: LCP, COLOR: NATURAL CONTACT: BeCu SHIELD: ZINC ALLOY, PLATING: NICKEL LATCH & SCREW: STAINLESS STEEL CABLE: JACKET: SEE CALLOUT WIRE: TINNED COPPER</p>		
<p>520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail info@SAMTEC.com code 55322</p>		<p>BY: G DETHY 03/16/2021</p>	<p>SHEET 1 OF 7</p>

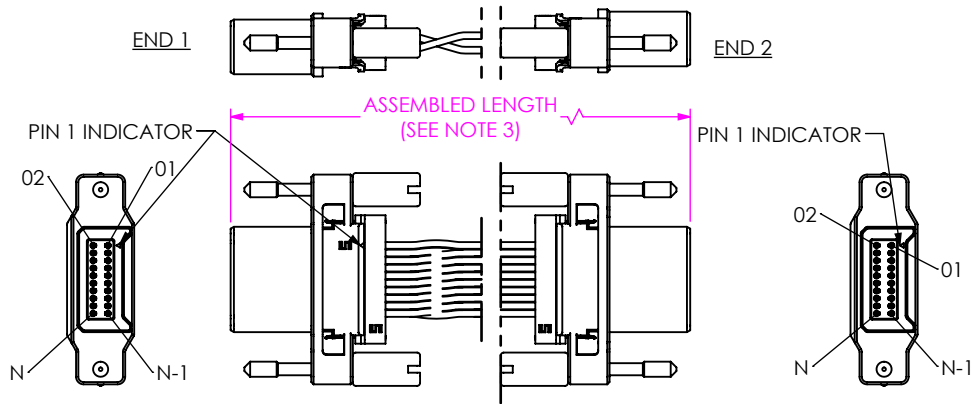


FIG 2
B1SDX-10-XXX-X-XX.X-1 SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

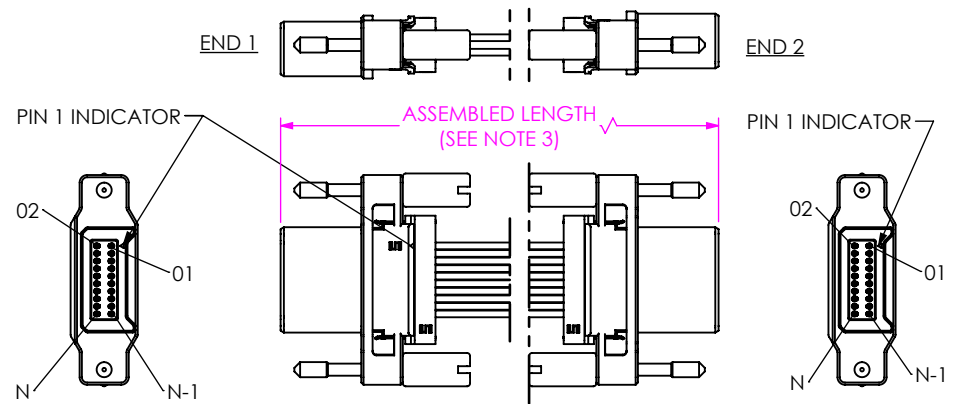


FIG 3
B1SDX-10-XXX-X-XX.X-2 SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

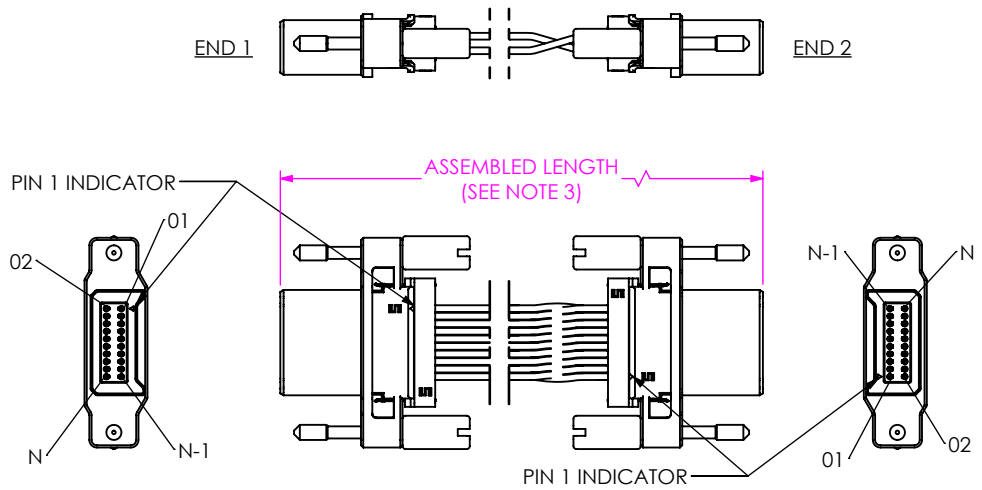


FIG 4
B1SDX-10-XXX-X-XX.X-3 SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

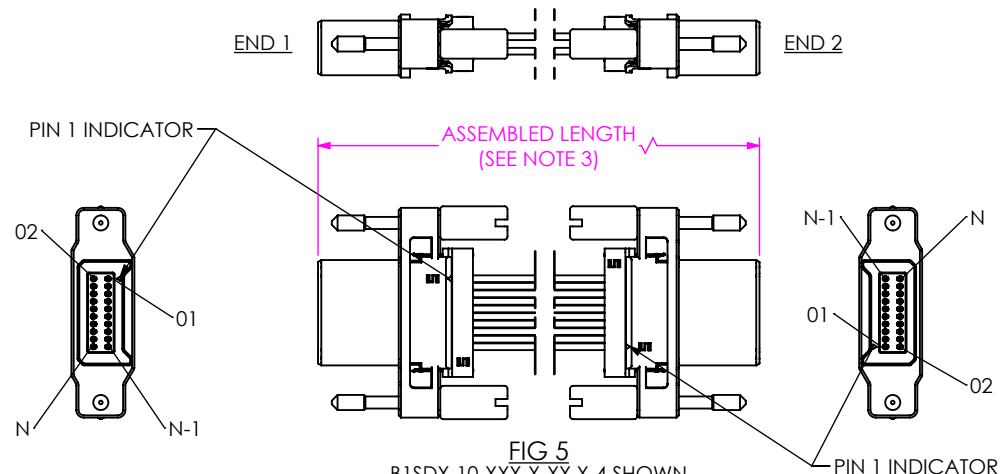


FIG 5
B1SDX-10-XXX-X-XX.X-4 SHOWN
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

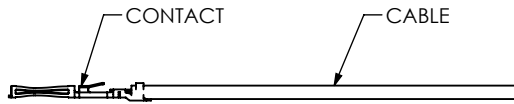
TABLE 2
B1SDX COLOR CODED WIRE SEQUENCE
COLOR

	BROWN	RED	ORANGE	YELLOW	GREEN	BLUE	VIOLET	GRAY	WHITE	BLACK
	DWC-XX-01-300	DWC-XX-02-300	DWC-XX-03-300	DWC-XX-04-300	DWC-XX-05-300	DWC-XX-13-300	DWC-XX-07-300	DWC-XX-08-300	DWC-XX-09-300	DWC-XX-10-300
END 1	1	2	3	4	5	6	7	8	9	10
PIN #	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
	71	72	73	74	75	76	77	78	79	80

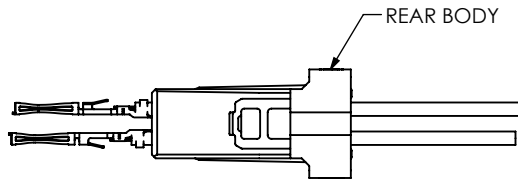
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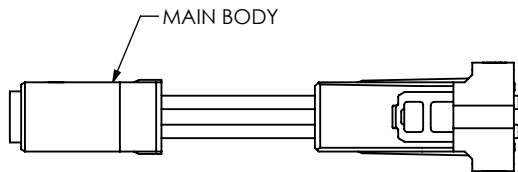
DESCRIPTION:
1MM BARREL CABLE ASSEMBLY
DWG. NO.
B1SDX-XX-XXX-X-XX.X-XX
BY: G DETHY 03/16/2021 SHEET 2 OF 7



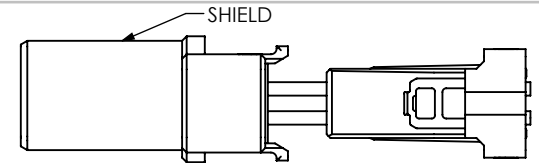
IN PROCESS 1
CRIMP CONTACTS



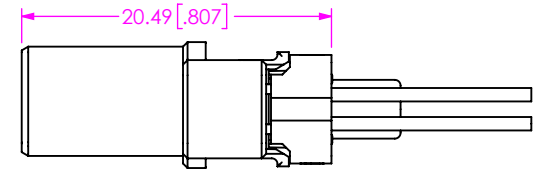
IN PROCESS 2
FILL CONTACTS/CABLES THRU REAR BODY



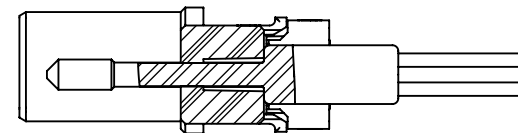
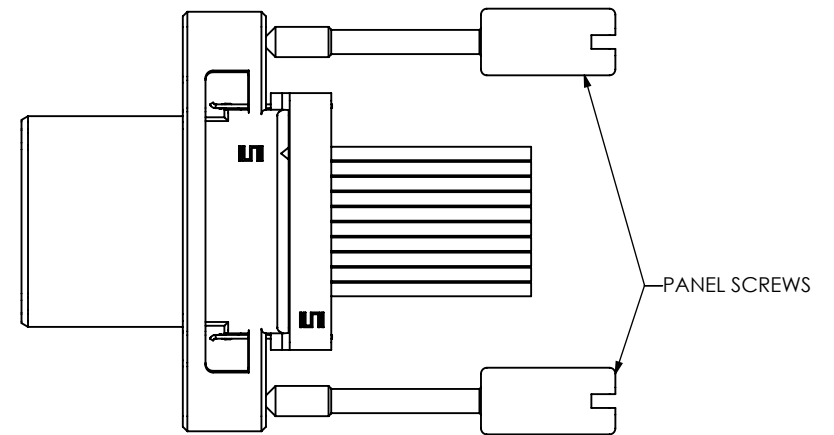
IN PROCESS 3
INSERT CONTACTS INTO BODY
(SEE NOTE 6)



IN PROCESS 4
FILL SHIELD OVER BODY



IN PROCESS 5
FILL REAR BODY TO SHIELD



IN PROCESS 6
INSERT PANEL SCREWS

TABLE 3

Series	Wire Gauge	Main Body	Rear Body	Shield	Contact	Cable	Panel Screw
B1SD	28 AWG	IBT1-XX-1	B1SDR-XX	B1SDS-XX-N	CC508-XX-X-X	DWC-28-XX-300	CPS-M2-18-X-S
	30 AWG					DWC-30-XX-300	
B1SDT	28 AWG					DWCT-28-01-TC	
	30 AWG					DWCT-30-01-TC	

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 DWG. NO. B1SDX-XX-XXX-X-XX.X-XX
 BY: G DETHY 03/16/2021 SHEET 3 OF 7

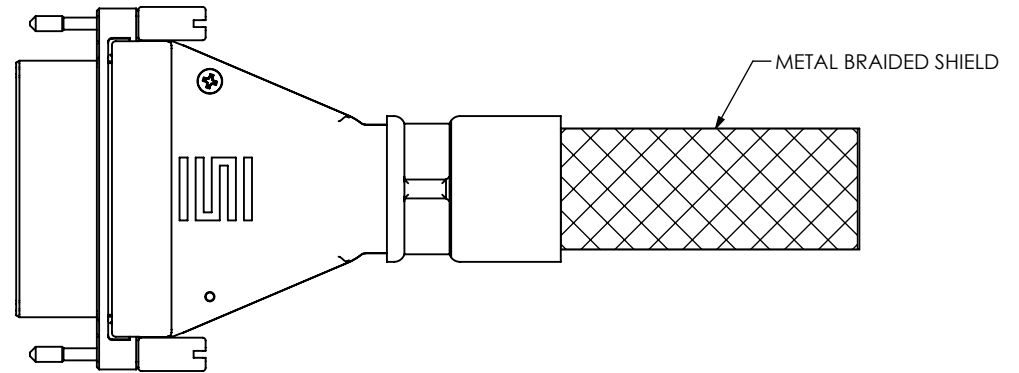
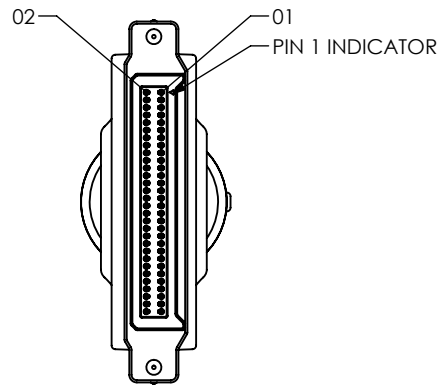
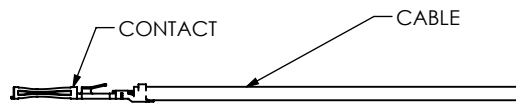
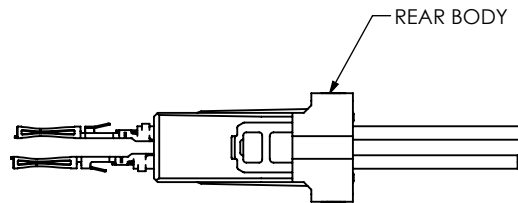


FIG 6
 B1SDX-30-XXX-X-XX.X-EX SHOWN
 (DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 1)

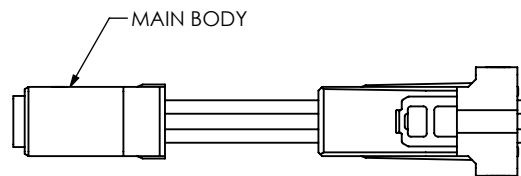
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<p>SHEET SCALE: 1:2 DO NOT SCALE DRAWING</p>	<p>DESCRIPTION: 1MM BARREL CABLE ASSEMBLY</p>
	<p>DWG. NO. B1SDX-XX-XXX-X-XX.X-XX</p> <p>BY: G DETHY 03/16/2021 SHEET 4 OF 7</p>



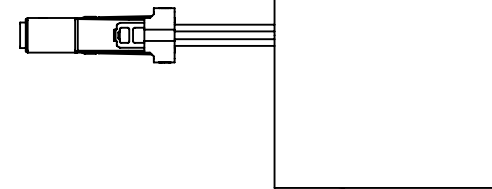
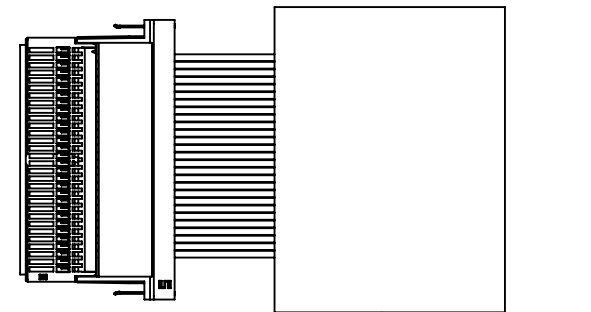
IN PROCESS 1 -EX
CRIMP CONTACTS



IN PROCESS 2 -EX
FILL CONTACTS/CABLES THRU REAR BODY



IN PROCESS 3 -EX
INSERT CONTACTS INTO BODY
(SEE NOTE 6)



HEAT SHRINK TUBING
(SEE TABLE 7)

IN PROCESS 4 -EX
(B1SDX-30-XXX-XX.X-EX SHOWN)
GENTLY PULL HEAT SHRINK TUBE OVER BODY

TABLE 7	
No. OF POS	HEAT SHRINK P/N
-04	HST-0.630-02-BLK-A-4
-05	
-07	
-10	HST-0.945-02-BLK-A-4
-15	
-20	HST-1.260-02-BLK-A-4
-25	
-30	
-40	

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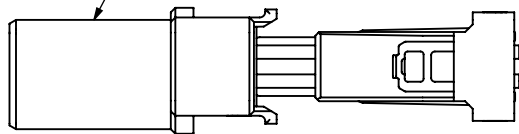


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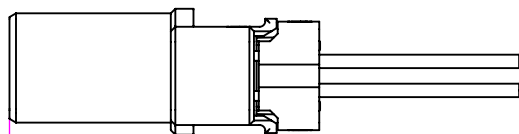
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DESCRIPTION: 1MM BARREL CABLE ASSEMBLY
DWG. NO. B1SDX-XX-XXX-X-XX.X-XX
BY: G DETHY 03/16/2021 SHEET 5 OF 7

REVISION C SHIELD

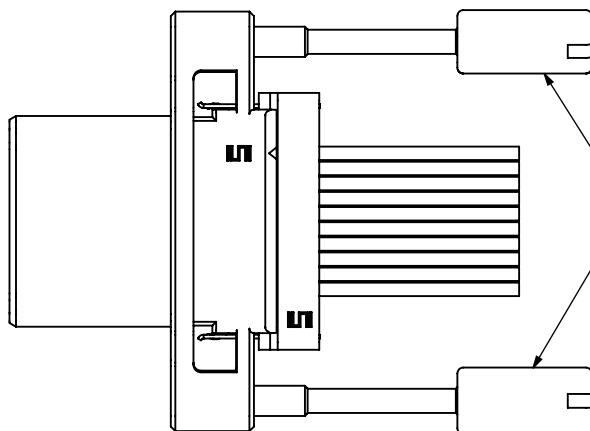


IN PROCESS 5-EX
FILL SHIELD OVER BODY

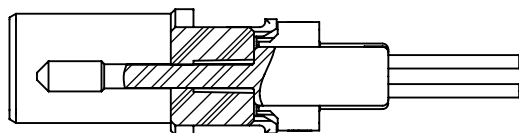


20.49 [.807]

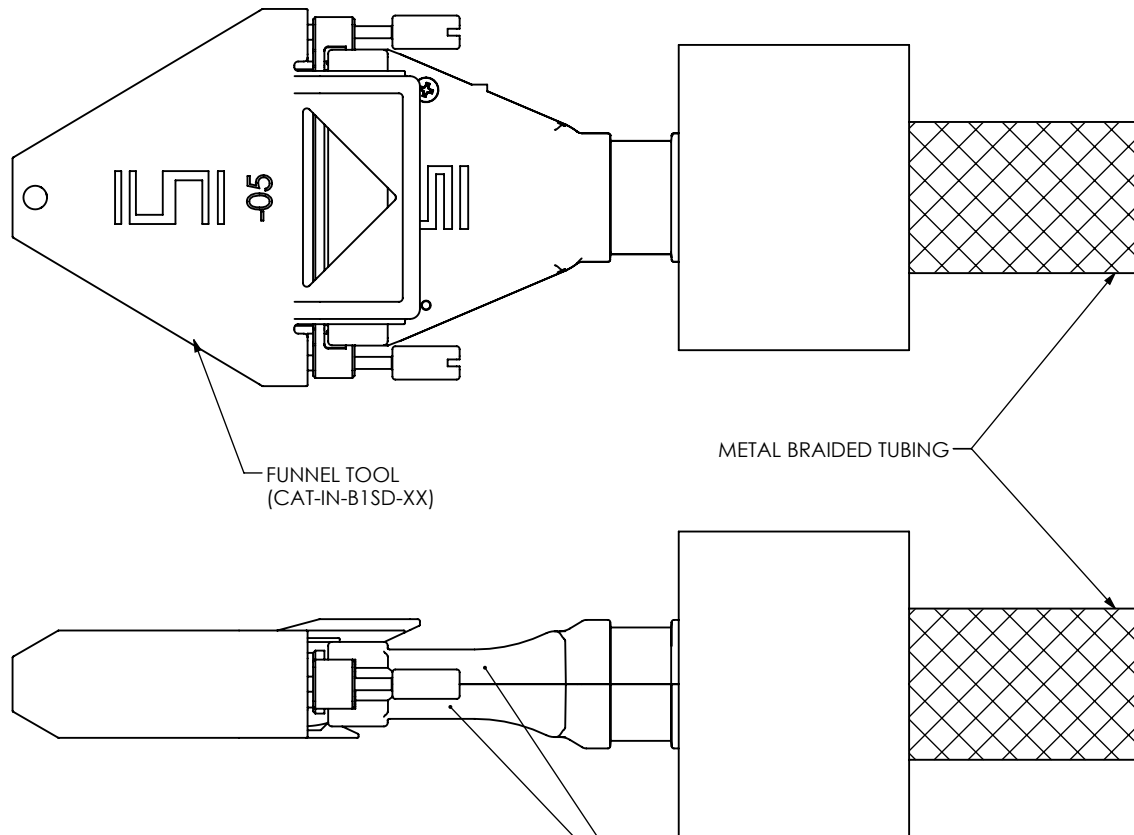
IN PROCESS 6-EX
FILL REAR BODY TO SHIELD



PANEL
SCREWS



IN PROCESS 7-EX
INSERT PANEL SCREWS



FUNNEL TOOL
(CAT-IN-B1SD-XX)

METAL BRAIDED TUBING

EMI SHIELD
(SH188-XX-X)

IN PROCESS 8-EX
ADD EMI SHIELD HOUSINGS,
ADD CAT-IN-B1SD-XX TO EMI SHIELD,
GENTLY PULL METAL BRAID TUBE OVER
CAT-IN-B1SD-XX

TABLE 8

No. OF POS	METAL BRAIDED P/N
-04	
-05	B1SD-08-06-09.00-SC
-07	
-10	
-15	B1SD-08-06-10.50-SC
-20	
-25	
-30	B1SD-08-06-15.00-SC
-40	

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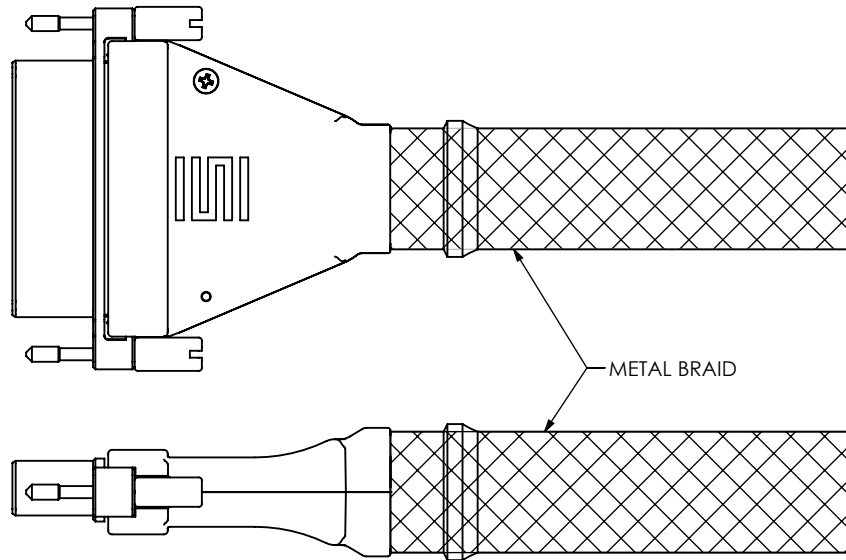
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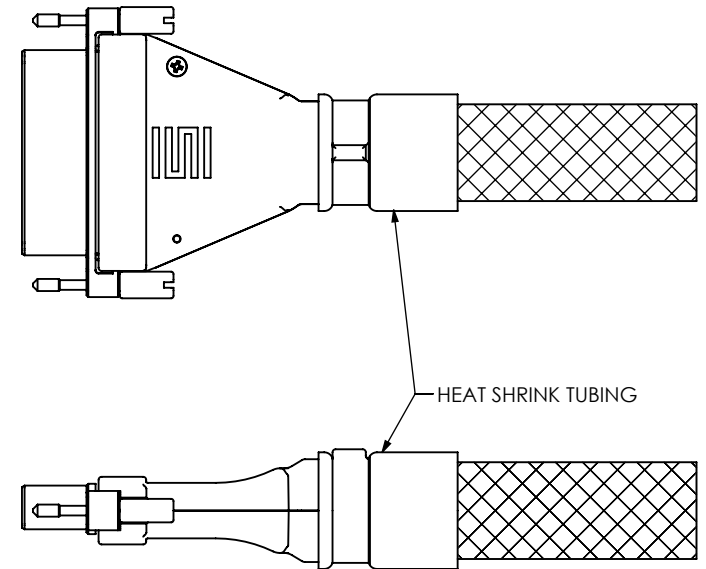
DESCRIPTION:
1MM BARREL CABLE ASSEMBLY

DWG. NO.
B1SDX-XX-XXX-X-XX.X-XX

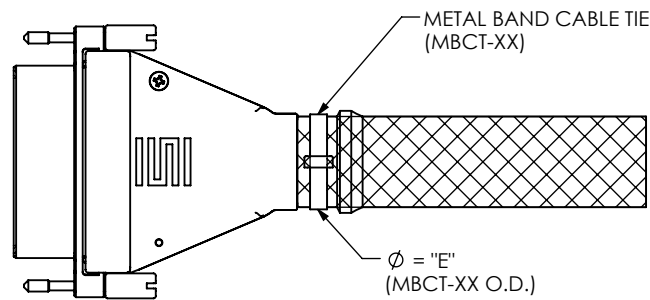
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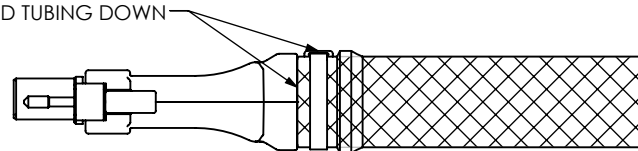
IN PROCESS 8 -EX
FIT BRAID TO SHIELD



IN PROCESS 10 -EX
ACTIVATE HEAT SHRINK TUBING BY APPLYING HEAT



ADD BAND CLAMP TO SHIELD
THEN TRIM BRAIDED TUBING DOWN



IN PROCESS 9 -EX
ADD BAND CLAMP TO SHIELD

No. OF POS	"E" MBCT-XX O.D.
-04	9.26 [0.365]
-05	9.26 [0.365]
-07	10.26 [0.404]
-10	10.76 [0.424]
-15	12.26 [0.483]
-20	14.26 [0.561]
-25	15.26 [0.601]
-30	16.76 [0.660]
-40	20.26 [0.798]

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SHEET SCALE: 2:1
DO NOT SCALE DRAWING

DESCRIPTION: 1MM BARREL CABLE ASSEMBLY
DWG. NO. B1SDX-XX-XXX-X-XX.X-XX
BY: G DETHY 03/16/2021 SHEET 7 OF 7