REF TEK

130 Family of Seismic Recorders

Cable Drawings

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Revision History:

Rev	Date	Reason for change	Affected Pages
0.1	7/05/03	Initial release	All
B	8/4/03	Created separate book	All
C	9/2/03	Added 130-8874 series sensor cables	Section 1-2
	9/9/03	Added ANSS Internal cables drawings	Section 1-3
	10/21/05	Added GPS extender cable option	Section 1-1
D	**2/9/06**	**Added 130-8206 Ruggedized Palm cable Figure 1-25**	**1-31**
	12/07/07	**Added 130-8005A and 130-8006A inter-connect cables for new Rt506J and RT526H**	**1-2 and 1-3**

List of Figures

130-01 Internal Cables

Section 1
130-01 Internal Cables

1.1 130-01 Internal Cables

Refer to the table below for the internal cable assemblies for the 130 DAS famiily

Cable	Description	Connection
130-8005	Internal Disk Interconnect cable for board revisions prior to RT506J and RT526H boards	RT506 CPU to RT526 Well Board
130-8006	Internal Status cable for board revisions prior to RT506J and RT526H boards	RT506 CPU to RT526 Well Board
130-8005A	Internal Disk Interconnect cable for rev “J” and later revision (CPU board) to (Well board)	RT506 CPU to RT526 Well Board
130-8006A	Internal Status cable for rev “J” and later revisions) (CPU board) to (Well Board)	RT506 CPU to RT526 Well Board

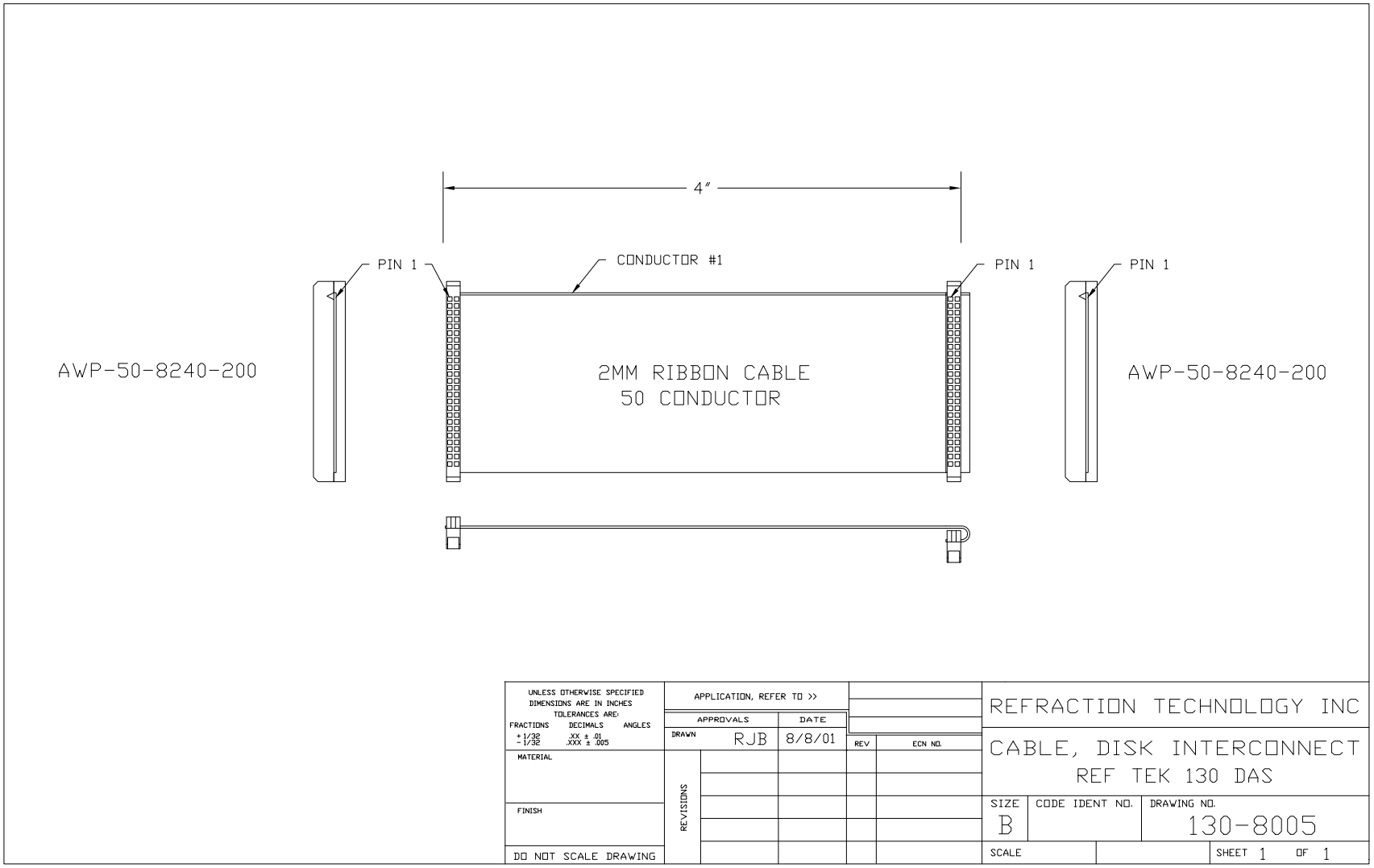


Figure 1 - 1 130-8005 - Internal Disk Interconnect

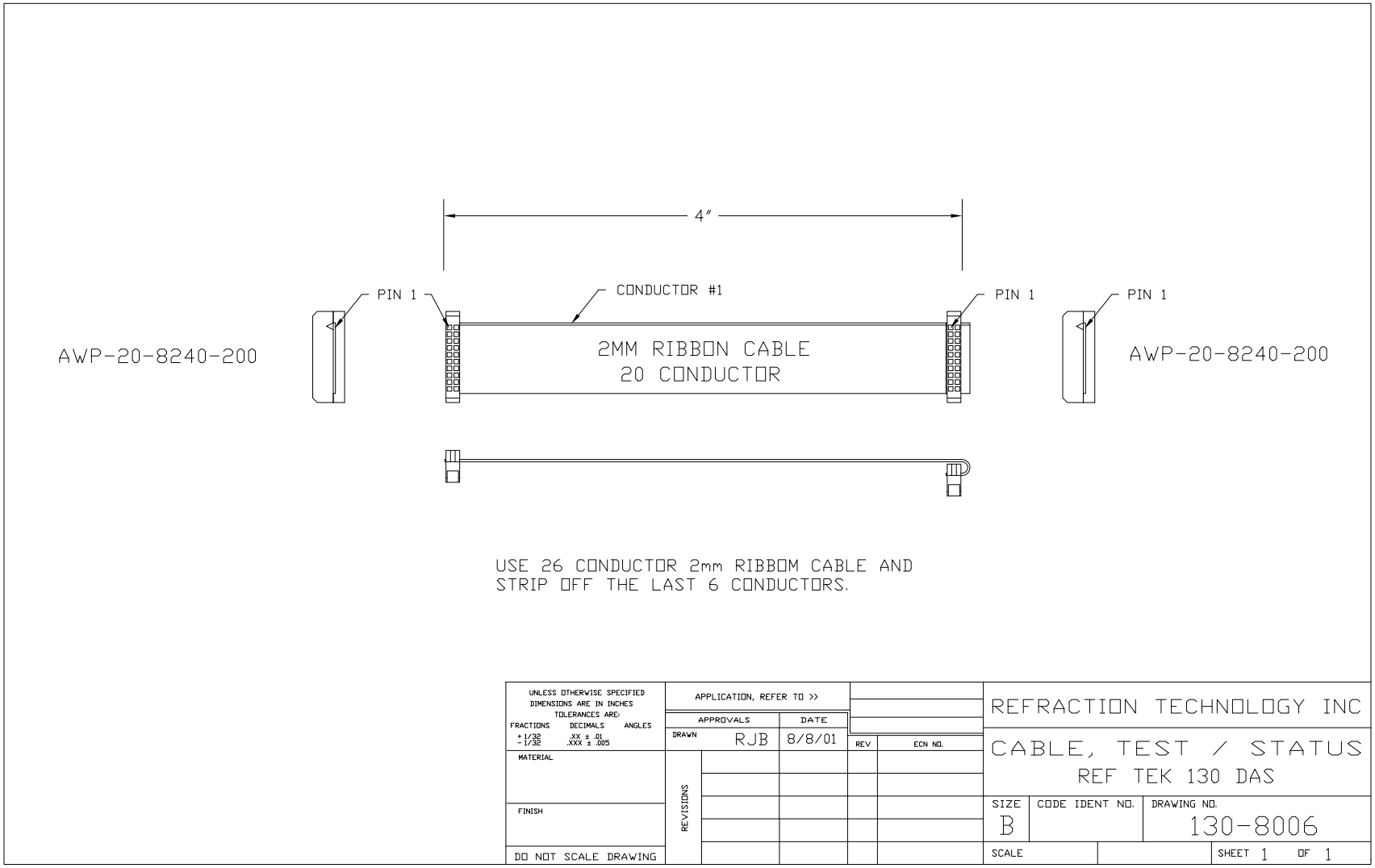


Figure 1 - 2 130-8006 - Status

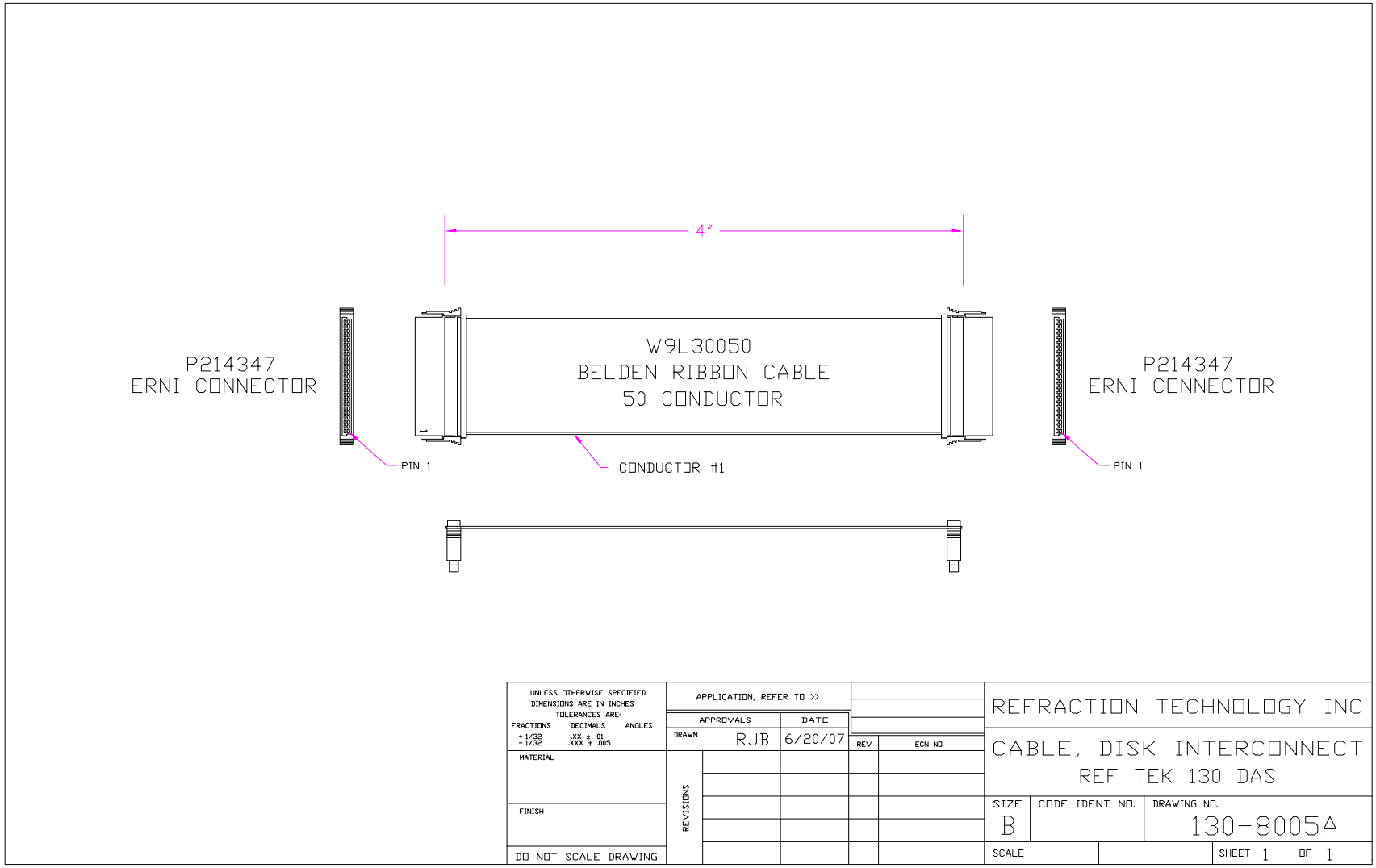


Figure 1 - 3 130-8005A Internal Disk Interconnect

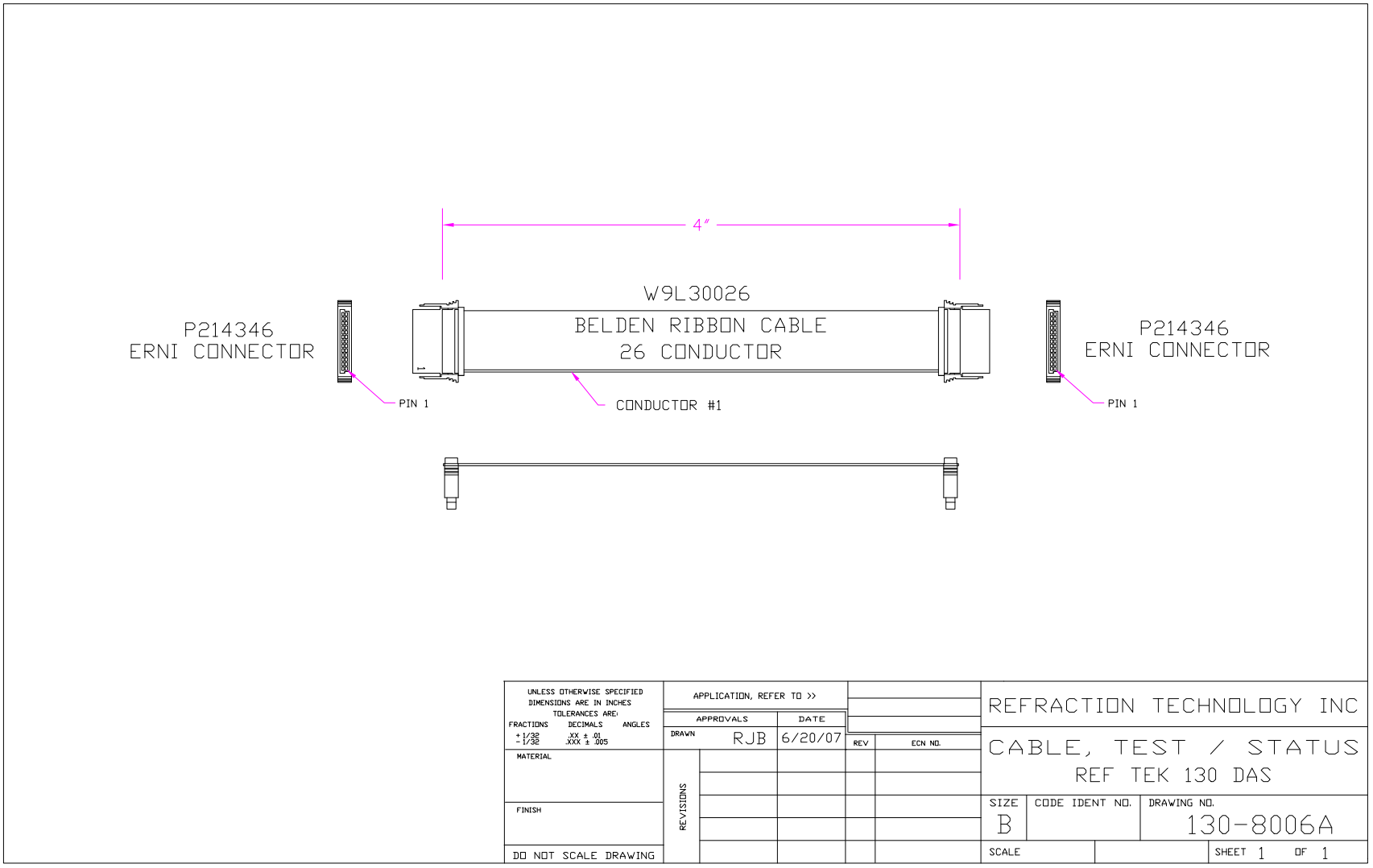


Figure 1 - 4 130-8006A Internal Status cable

1.2 130 Family External Cables

REF TEK does not normally supply the channel input connector cable assemblies; but the PT06SE14-19P mating half of the standard connector can be supplied together with the cable pinout data. The user can then fabricate a cable to meet local requirements.

Refer to the table below for optional DAS typical connector assembly details and cable diagrams of the more frequently used cables.

Cable	Description	Connection
130-8004	130 (Y-Cable) to Serial (DCE) and Ethernet RJ45 cable **25-pin - Serial (DCE)**	Ethernet connects to hub or network connection. Serial connects to (DCE) equipment.
130-8004A	130 (Y-Cable) to Serial (DCE) and Ethernet RJ45 cable **9-pin - Serial (DCE)**	Ethernet connects to hub or network connection. Serial connects to (DCE) equipment.
130-8004B	130 (Y-Cable) to Serial (DCE) and Ethernet RJ45 cable **25-pin - Serial (DCE) with trigger**	Ethernet connects to hub or network connection. Serial connects to (DCE) equipment (w/ trigger).
130-8004C	130 (Y-Cable) to Serial (DCE) and Ethernet RJ45 cable **9-pin - Serial (DCE) with trigger**	Ethernet connects to hub or network connection. Serial connects to (DCE) equipment (w/ trigger).
130-8004D	Ethernet/PC	
130-8014	130 (Y-Cable) to Serial (DTE) and Ethernet RJ45 cable	Ethernet connects to hub or network connection. Serial connects to DTE equipment
130-8015	GPS to DAS cable	Connects to DAS-GPS
130-8018	DAS Command and Control Port to PC cable	Connects to PC serial port
130-8019	Ethernet cable	Connects to hub or network
130-8023	Ethernet Crossover	Connect directly to PC or laptop ethernet port
130-8024	130 (Y-Cable) to Serial (DCE) and Ethernet RJ45 cable Ethernet and Black Box Modem	Ethernet connects to hub or network connection. Serial connects to (DCE) equipment
130-8025	PDA cable	130 to PDA
130-8026	DAS Net to Freewave (DB-9)	Connects to Freewave
130-8039	12V Power cable for DAS	12V Supply
130-8039A	12V Power cable for 130-SM	12V Supply
130-8075	12V Power cable for DAS and 130-ED	12V supply
130-8080	Extender to extender cable	130-GPS
130-8103	PDA CLIE'™ cable	130 to CLIE PDA
130-8137	130-SM modem cable	Phone line
130-8154	130-Modem cable	130 to 130-Modem cable

Cable	Description	Connection
130-8206	Ruggedized PDA cable	130 to Ruggedized Palm
130-8811	Splitter box to S-13 Sensor	130 to 3 S-13 Sensors

Cable	Optional Sensor Cables	Connection
130-8830	CMG-5T Seismometer cable	130 DAS channel connector
130-8841	131A Sensor cable	130 DAS channel connector
130-8850	KS-2000 Sensor cable	130 DAS channel connector
130-8871	STS-2 Seismometer cable	130 DAS channel connector
130-8874	CMG/PUBB Sensor cable	130 DAS channel connector
130-8874A	CMG-40 w/ +12V and -12V Output	130 DAS channel connector
130-8874B	CMG/PUBB Sensor cable for CMG-3T	130 DAS channel connector
130-8885	S13J Sensor cable	130 DAS channel connector
130-8892	L-4C-3D Seismometer cable	130 DAS channel connector
130-8895	FBA11 Accelerometer cable	130 DAS channel connector

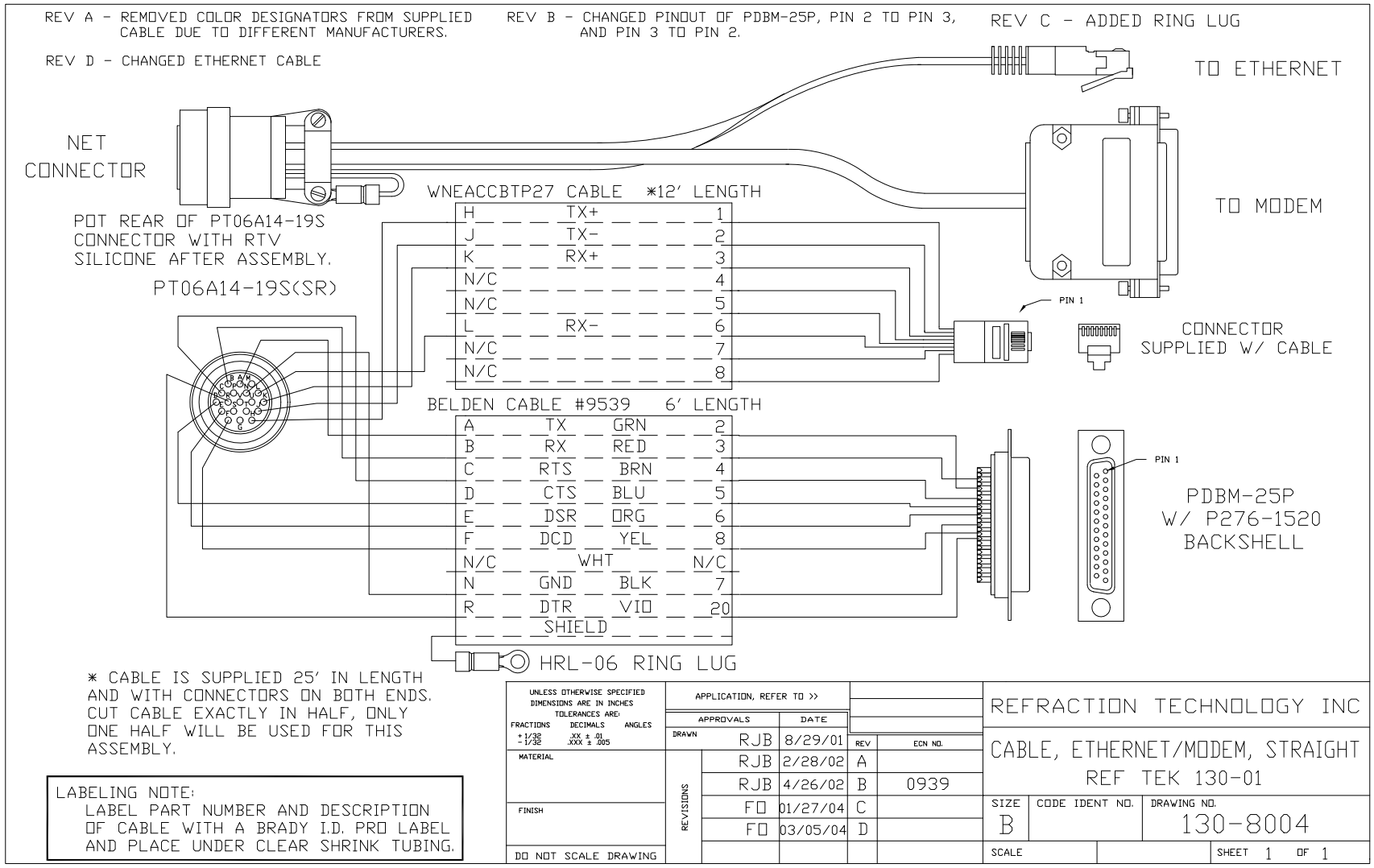


Figure 1 - 5 130-8004 - Ethernet/Modem

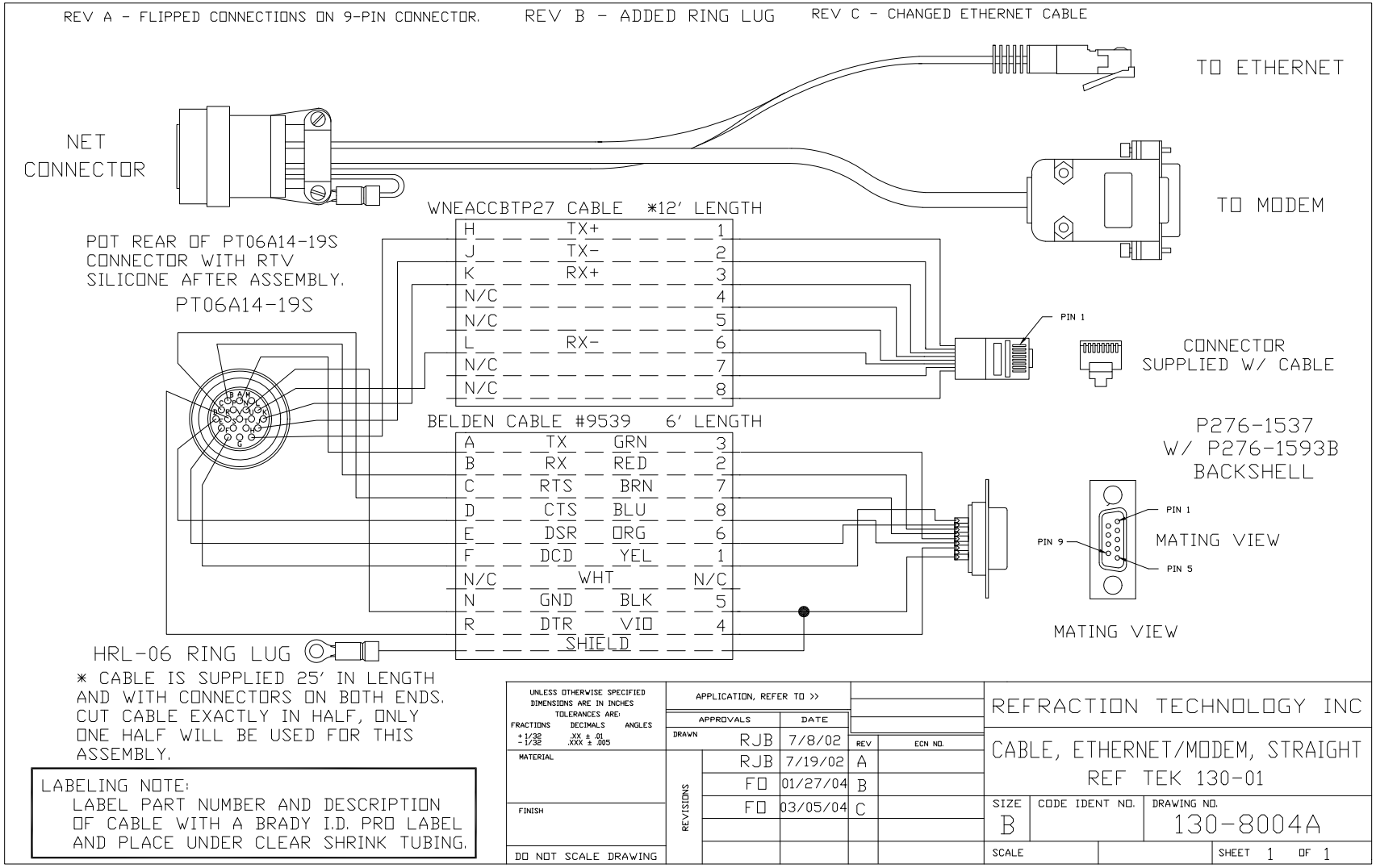


Figure 1 - 6 130-8004A - Ethernet/Modem

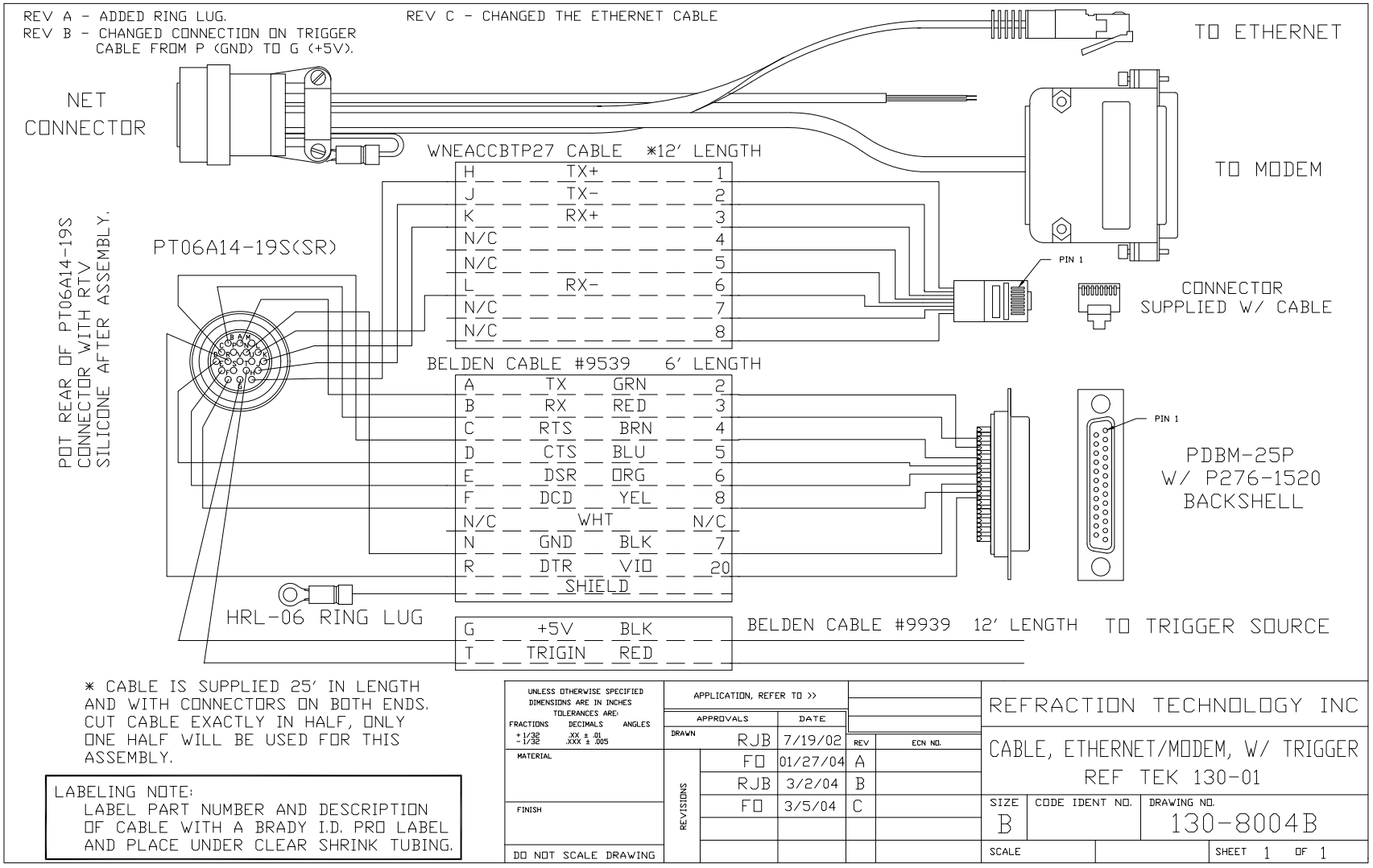


Figure 1 - 7 130-8004B - Ethernet Modem with trigger

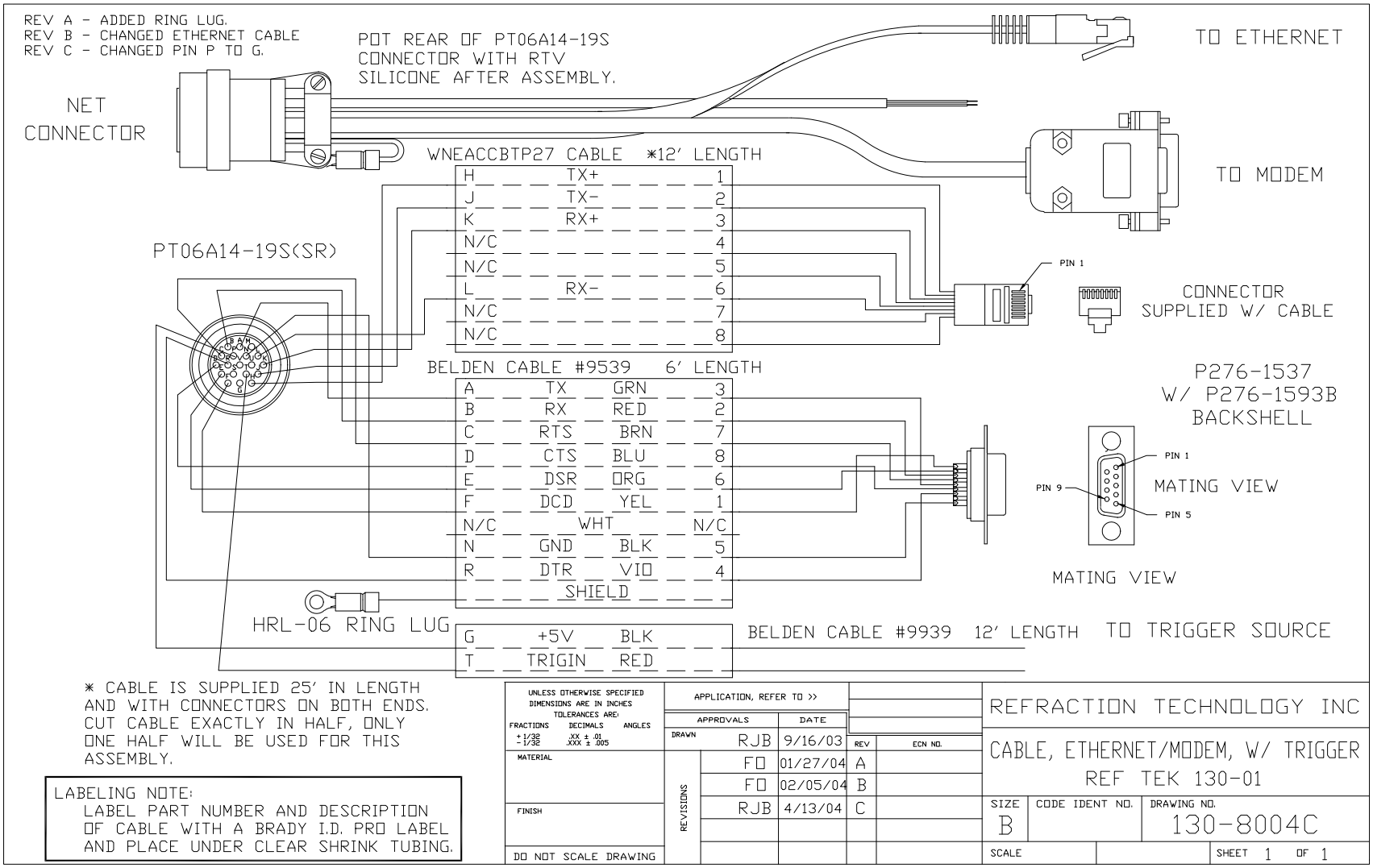


Figure 1 - 8 130-8004C - Ethernet/Modem with Trigger

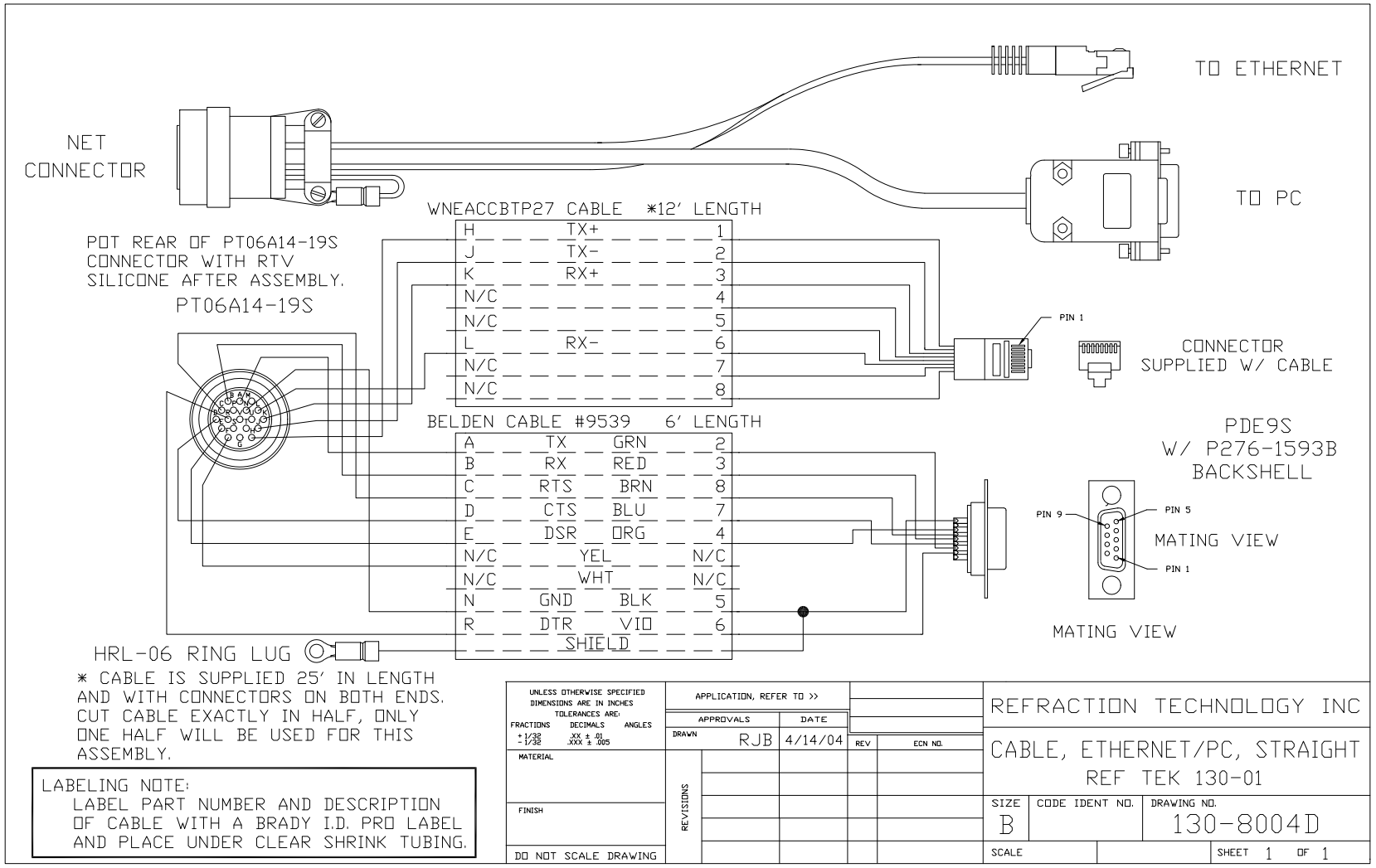


Figure 1 - 9 130-8004D Ethernet/PC

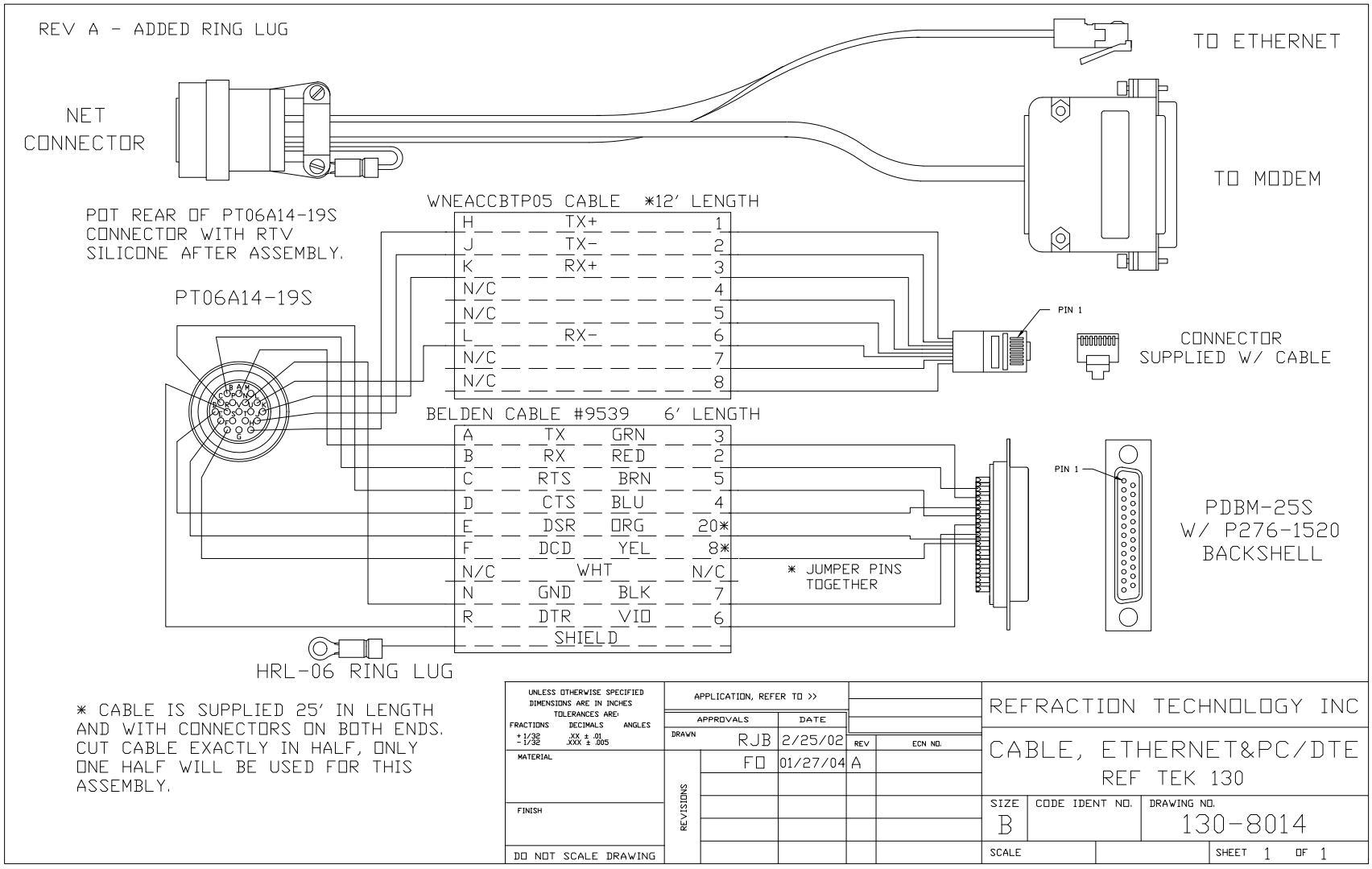


Figure 1 - 10 130-8014 - Ethernet PC/DTE

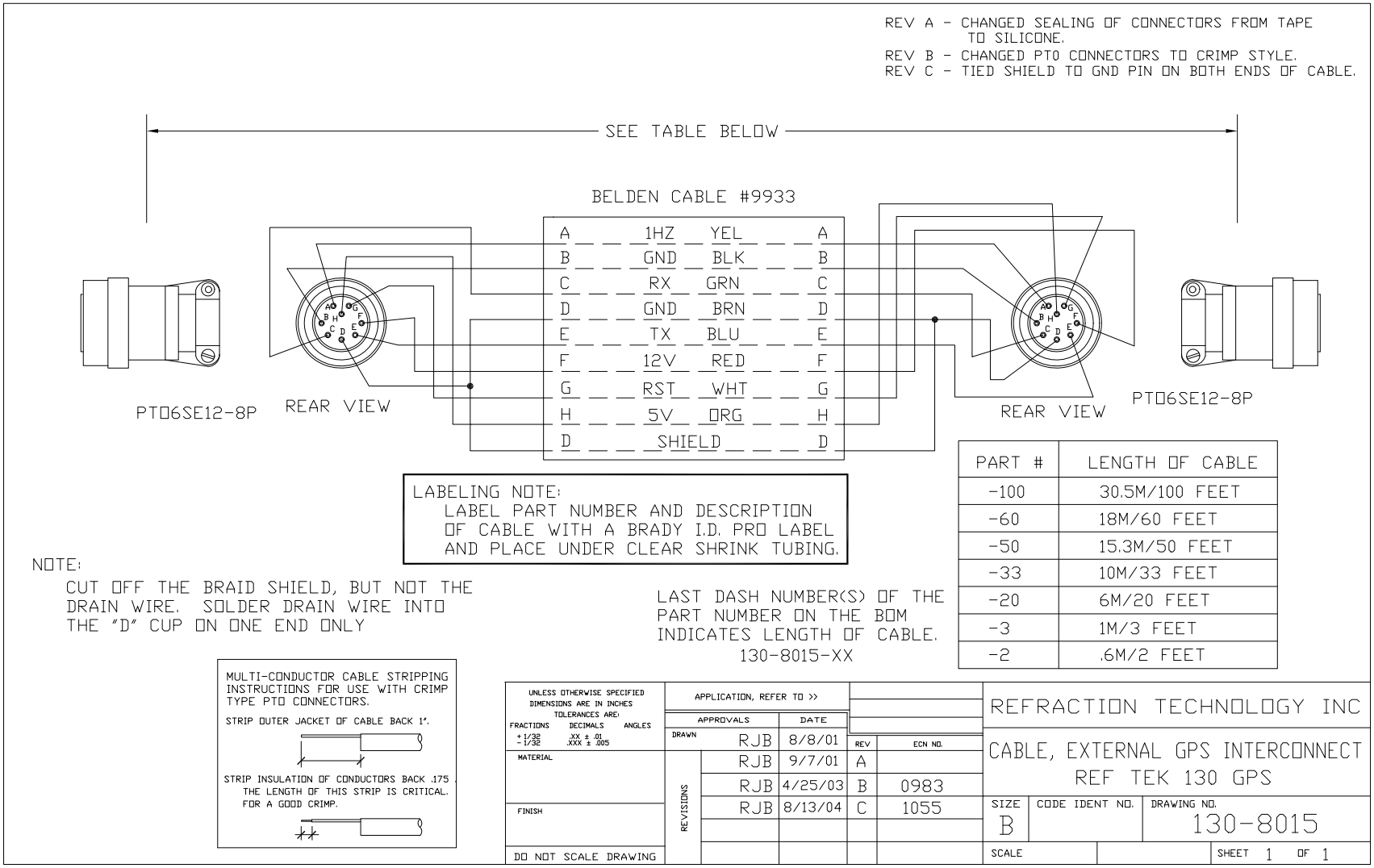


Figure 1 - 11 130-8015 - External GPS Interconnect

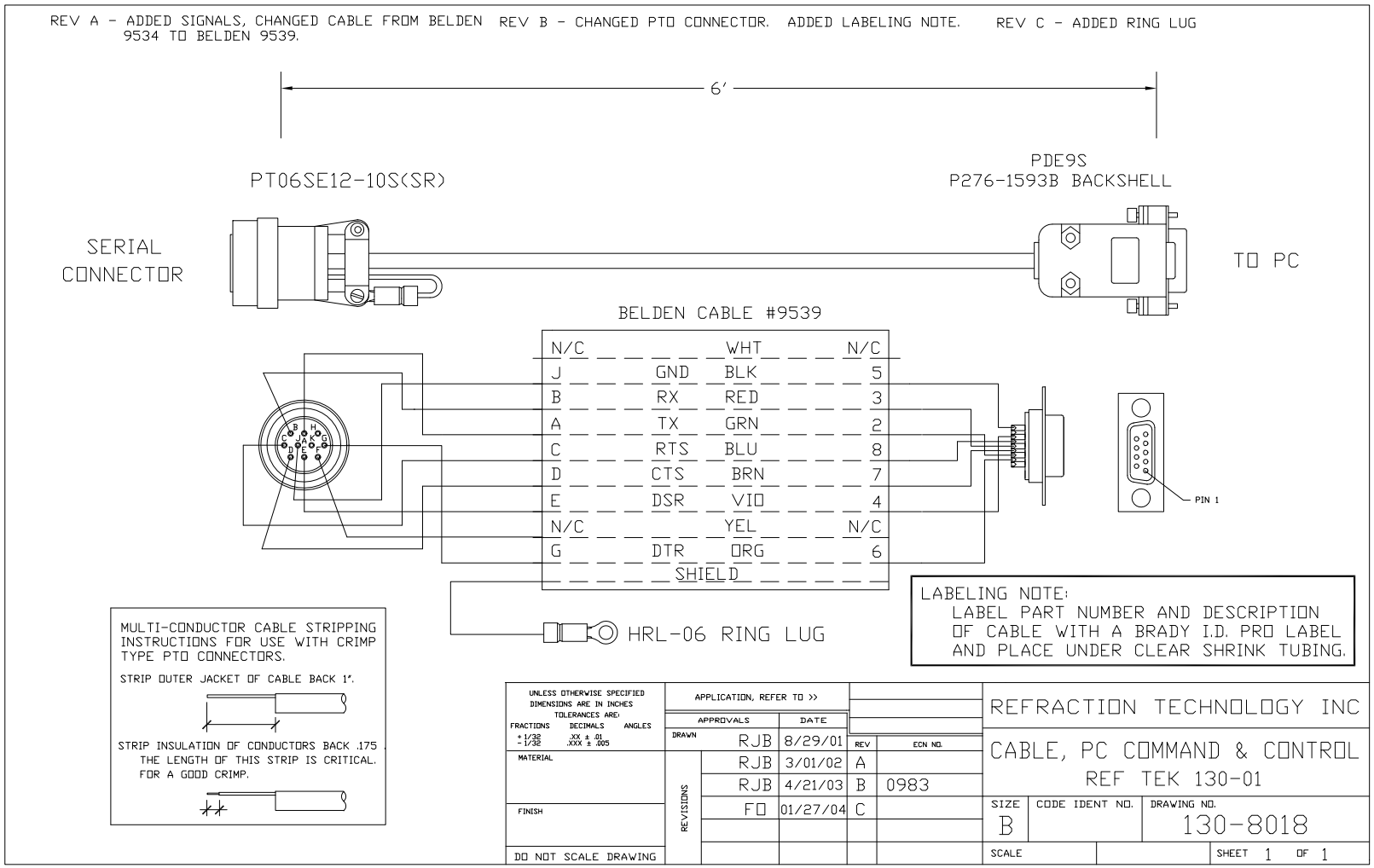


Figure 1 - 12 130-8018 - PC command and control

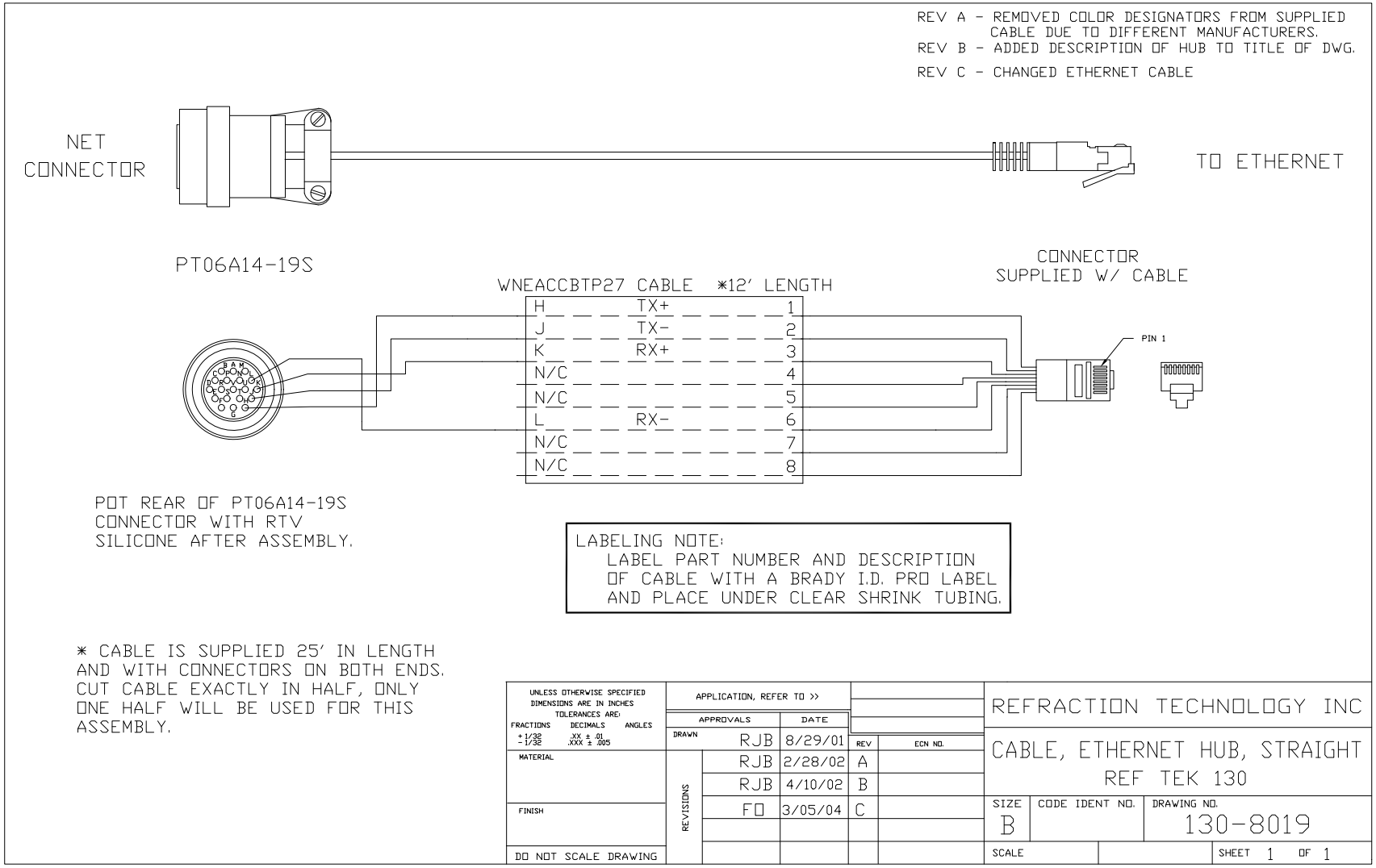


Figure 1 - 13 130-8019 - Ethernet Hub Straight

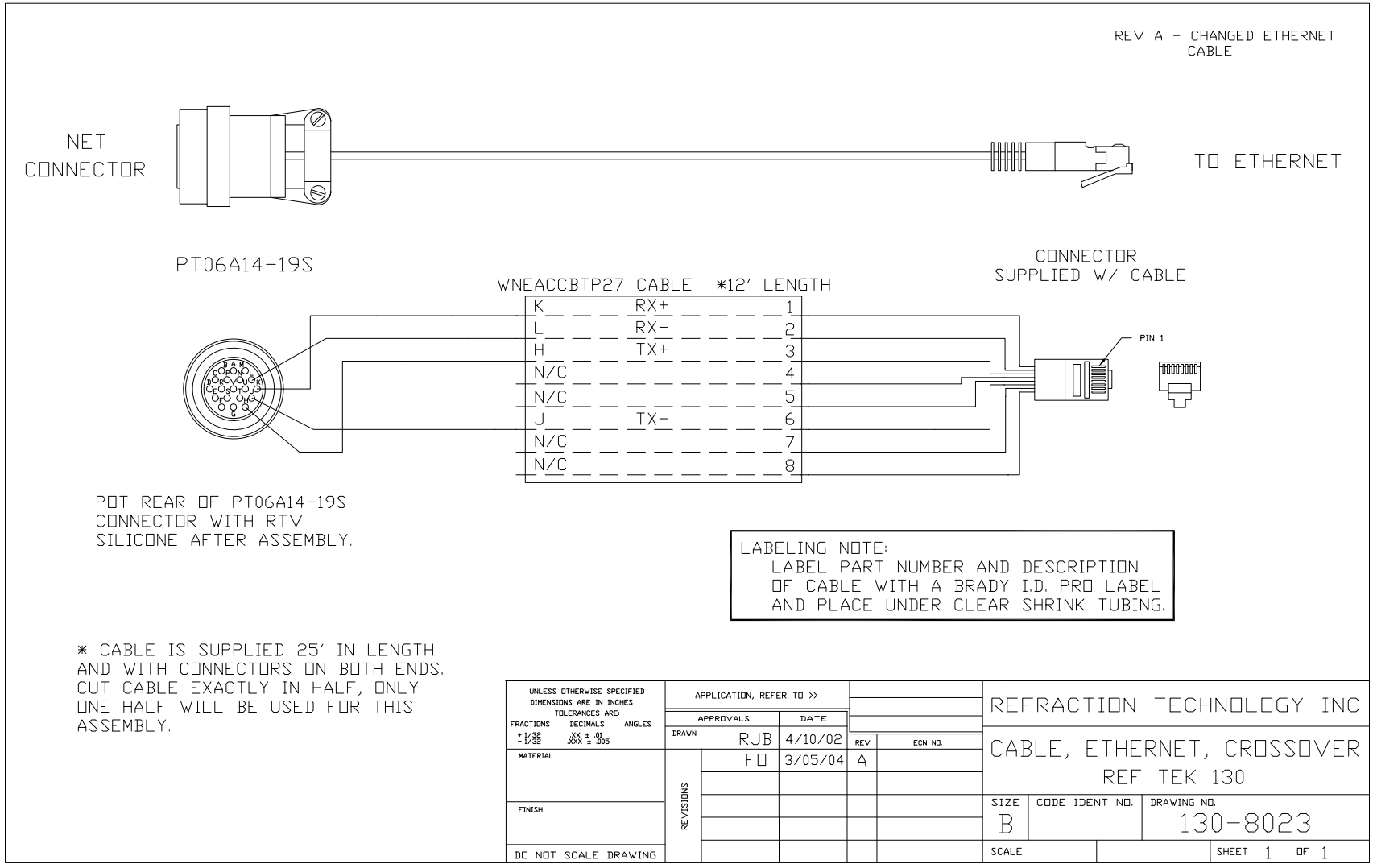


Figure 1 - 14 130-8023 - Ethernet Crossover

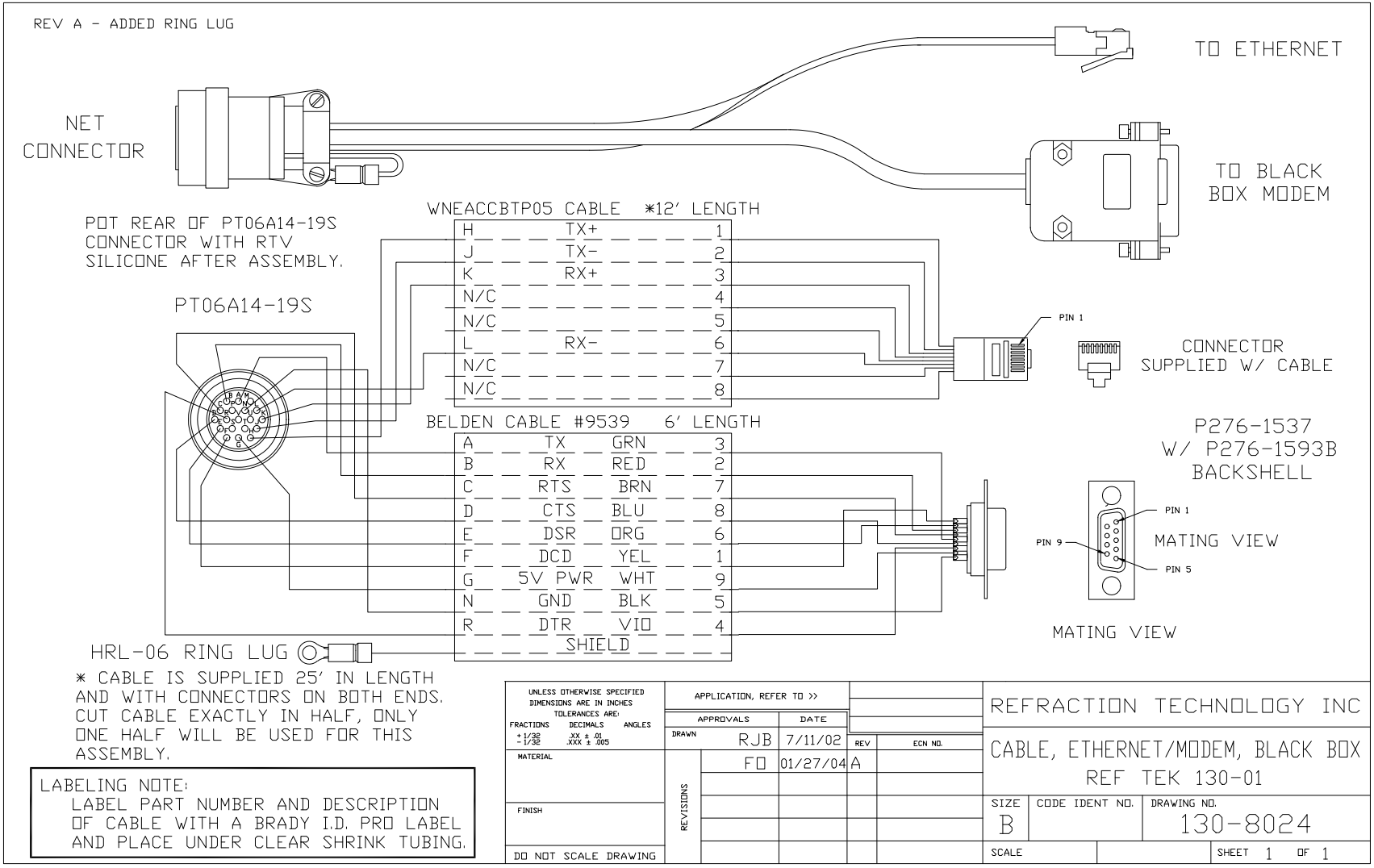


Figure 1 - 15 130-8024 - Ethernet/Modem Black Box

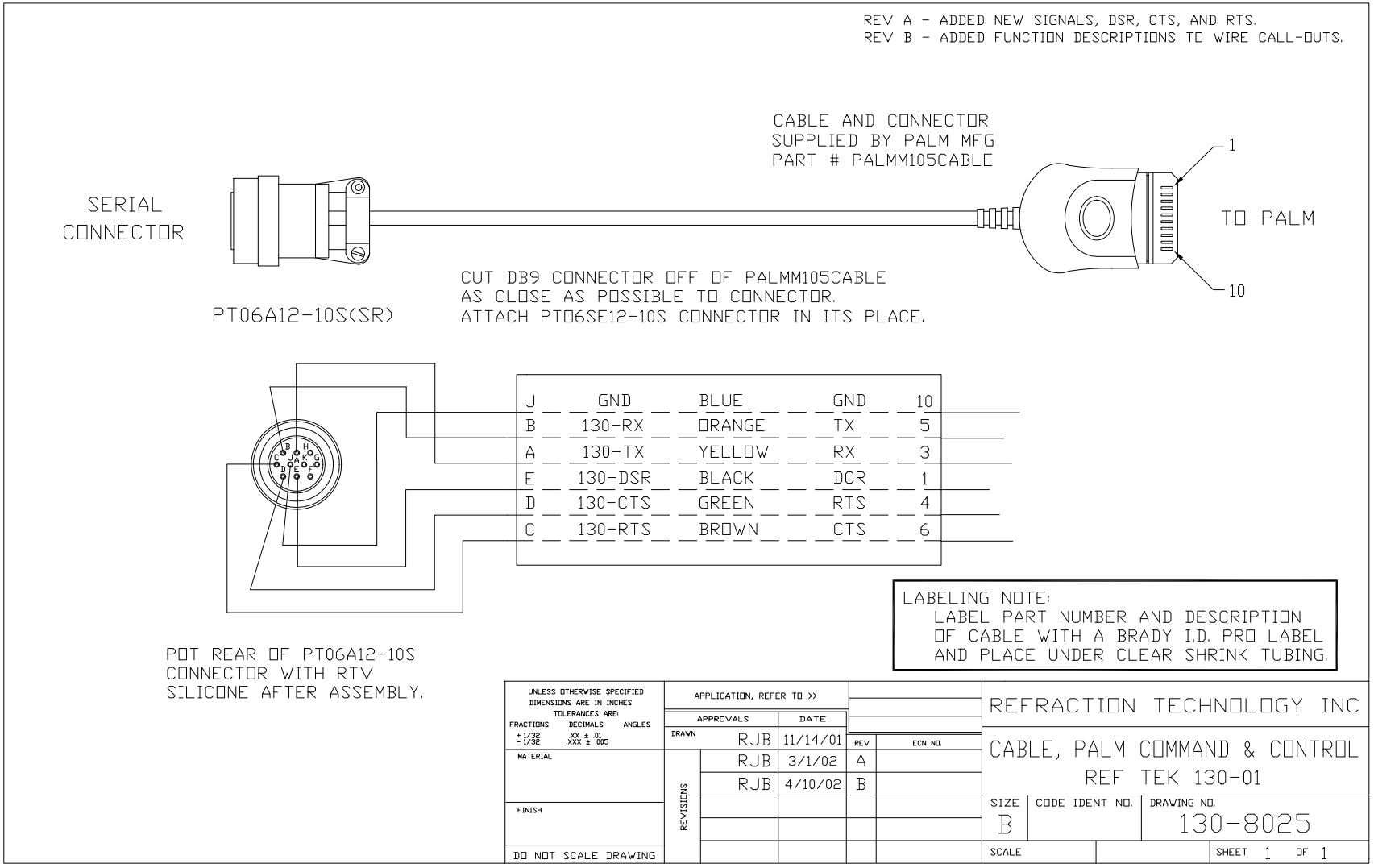


Figure 1 - 16 130-8025 - PDA to DAS, Command and Control

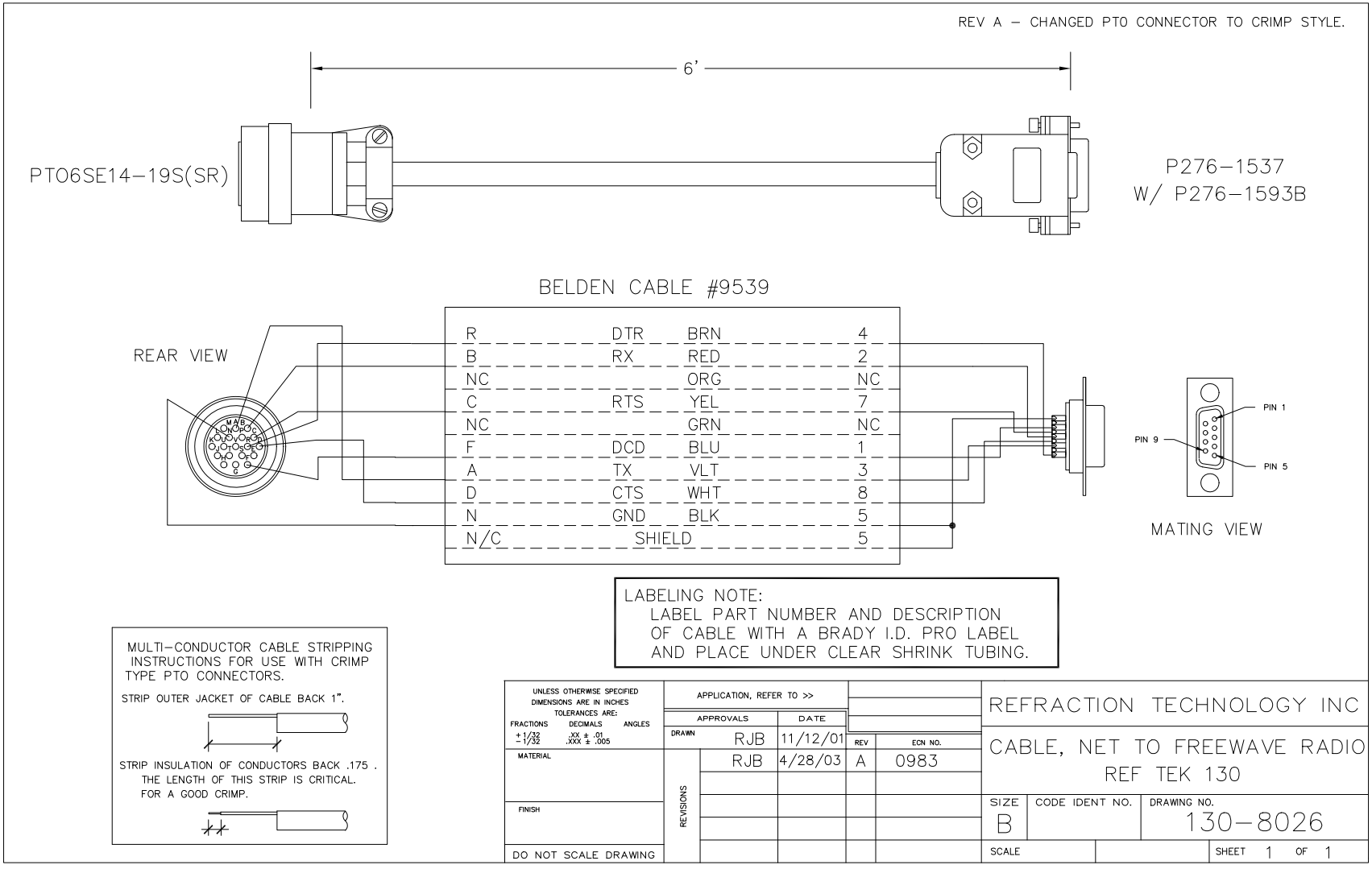


Figure 1 - 17 130-8026 - NET to Freewave Radio

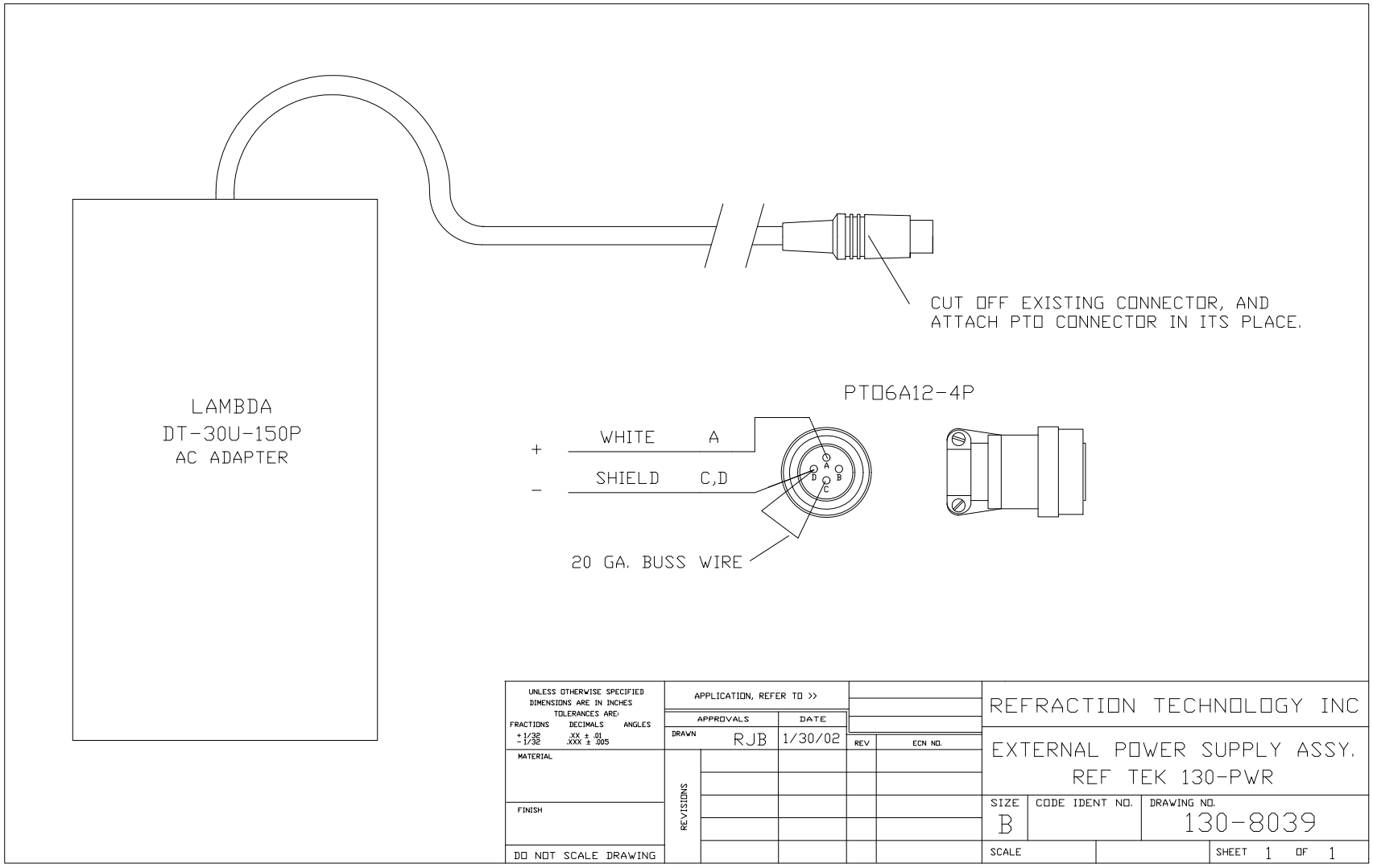


Figure 1 - 18 130-8039 - Ext Power supply assy

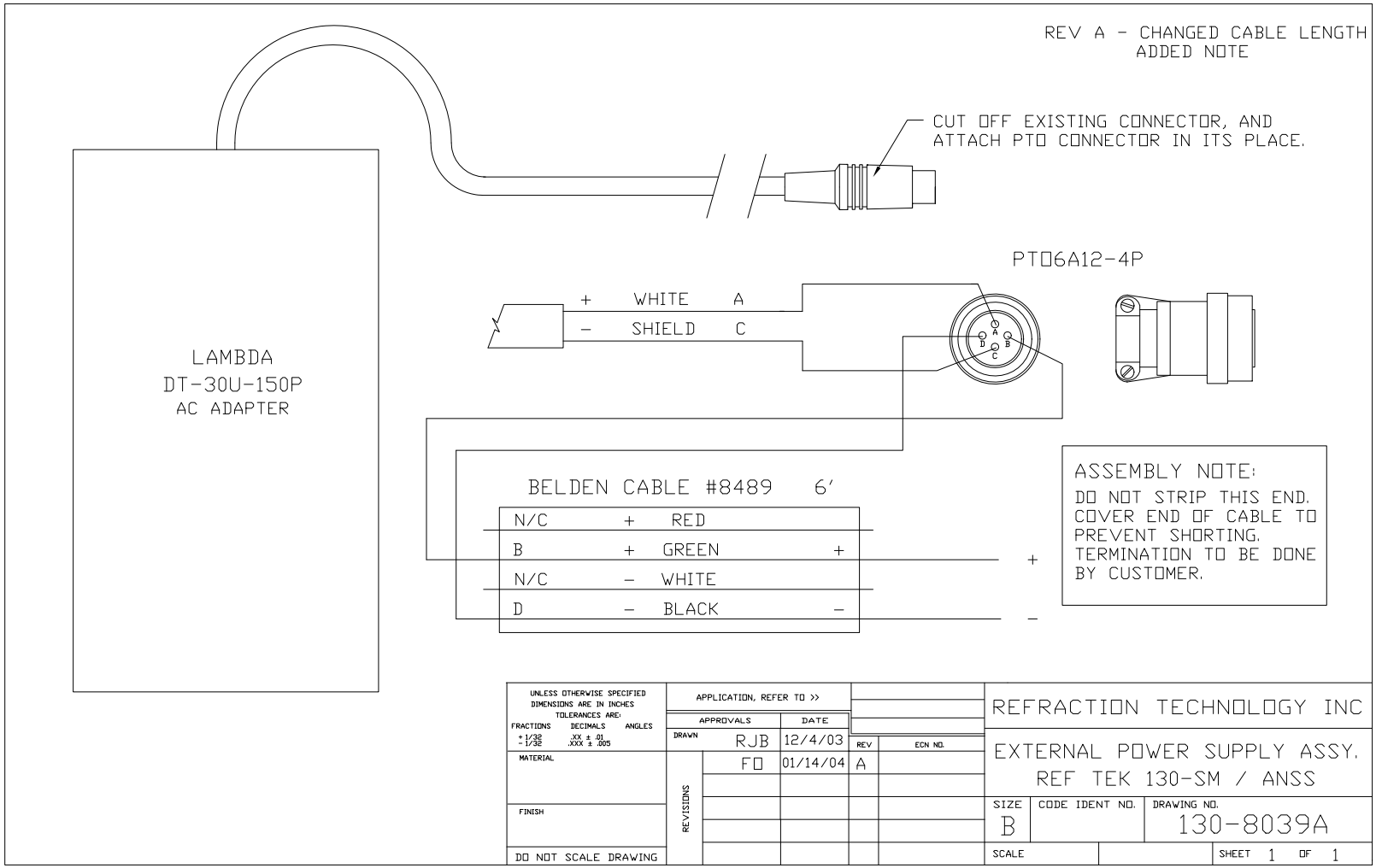


Figure 1 - 19 130-8039A 130-SM Power

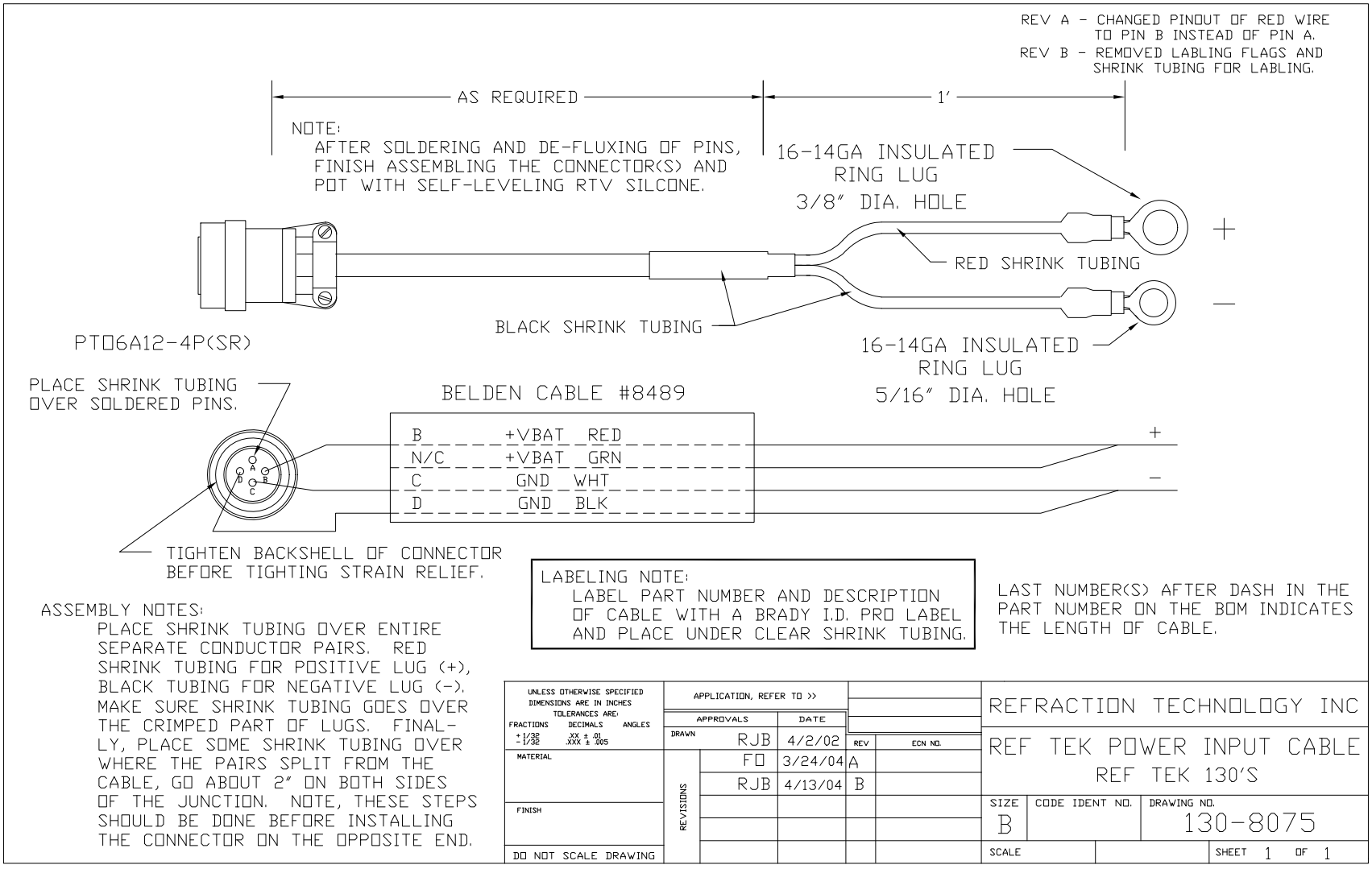


Figure 1 - 20 130-8075 - Power Input Cable

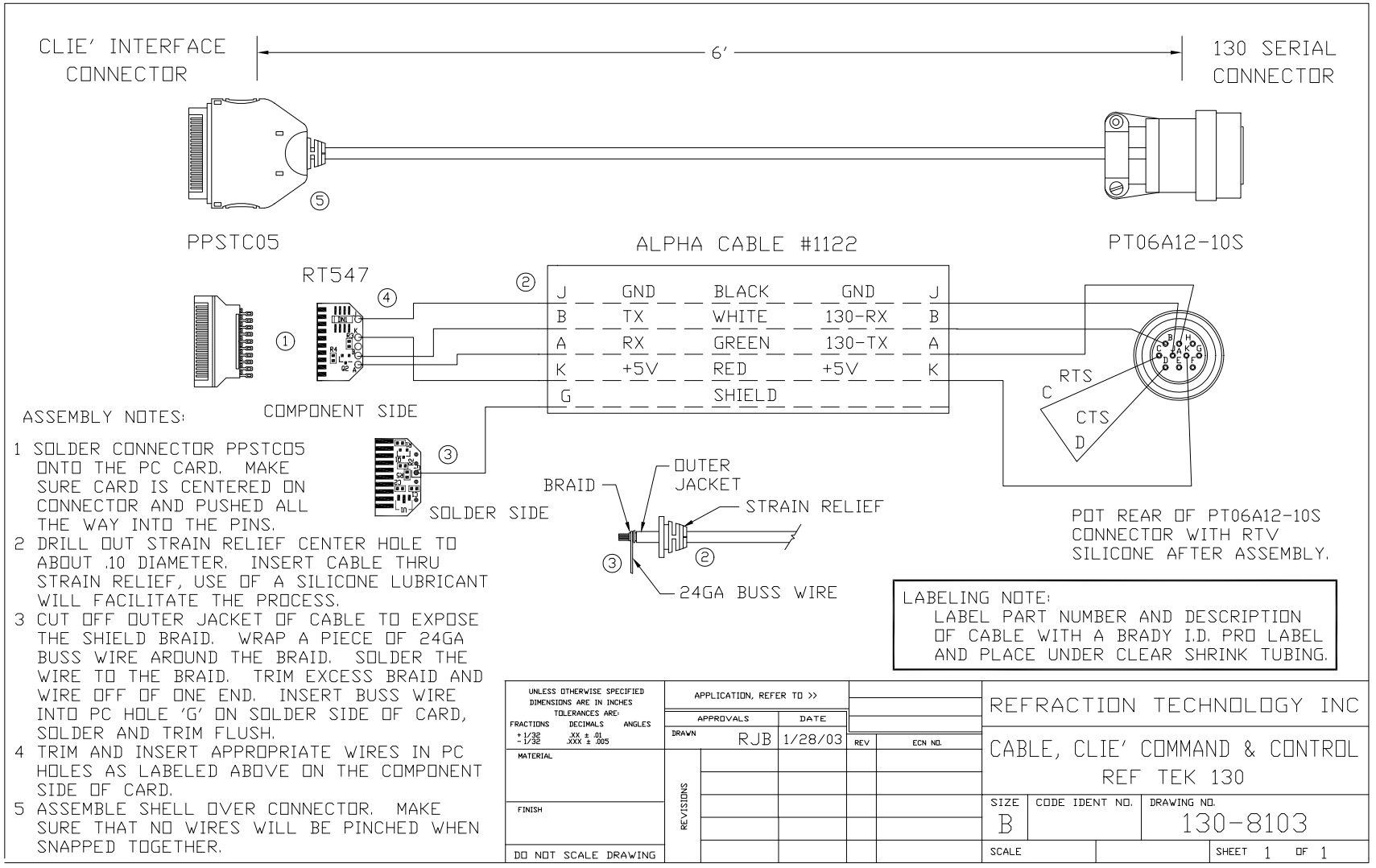


Figure 1 - 21 130-8103 - CLIE' Command and Control

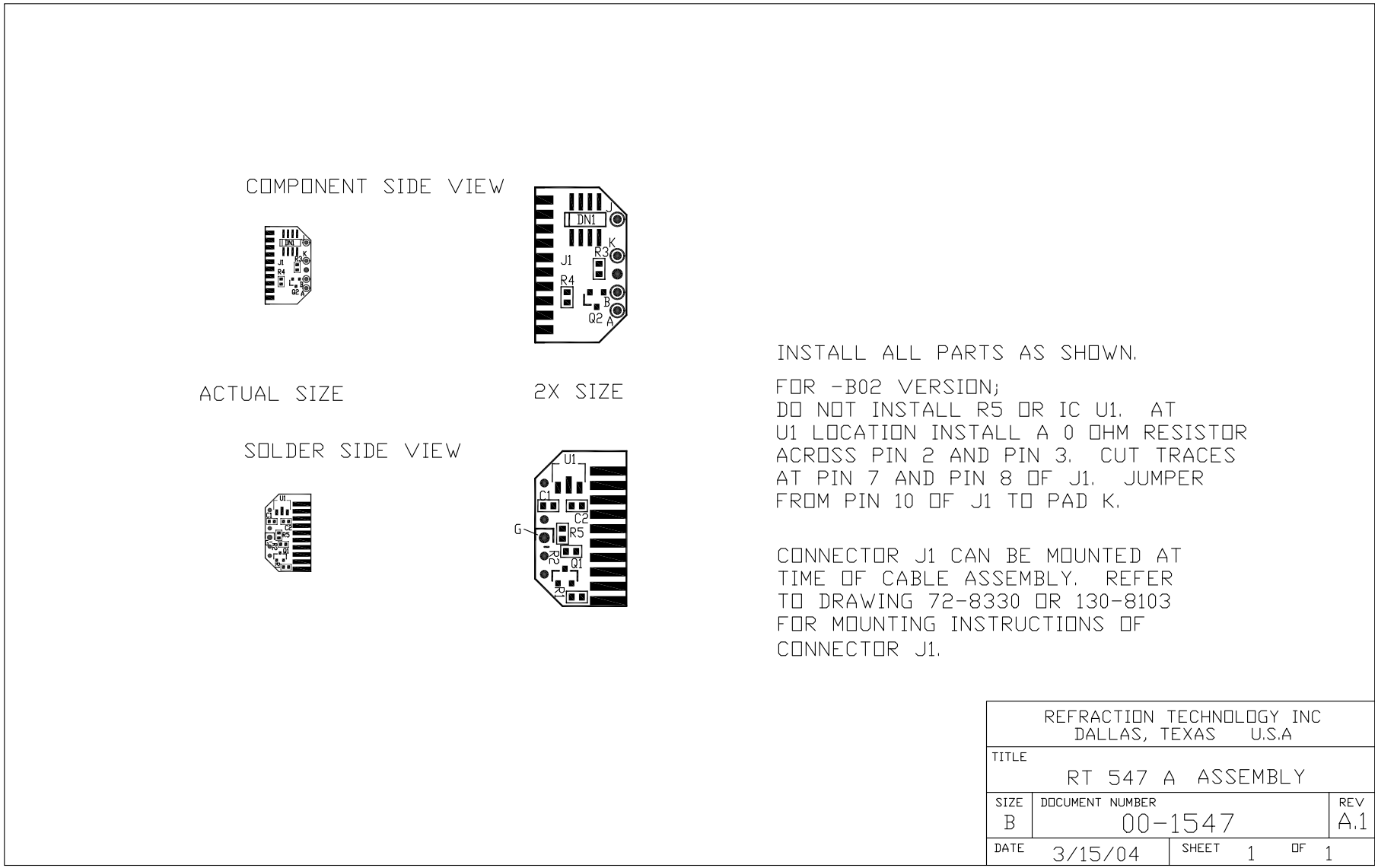
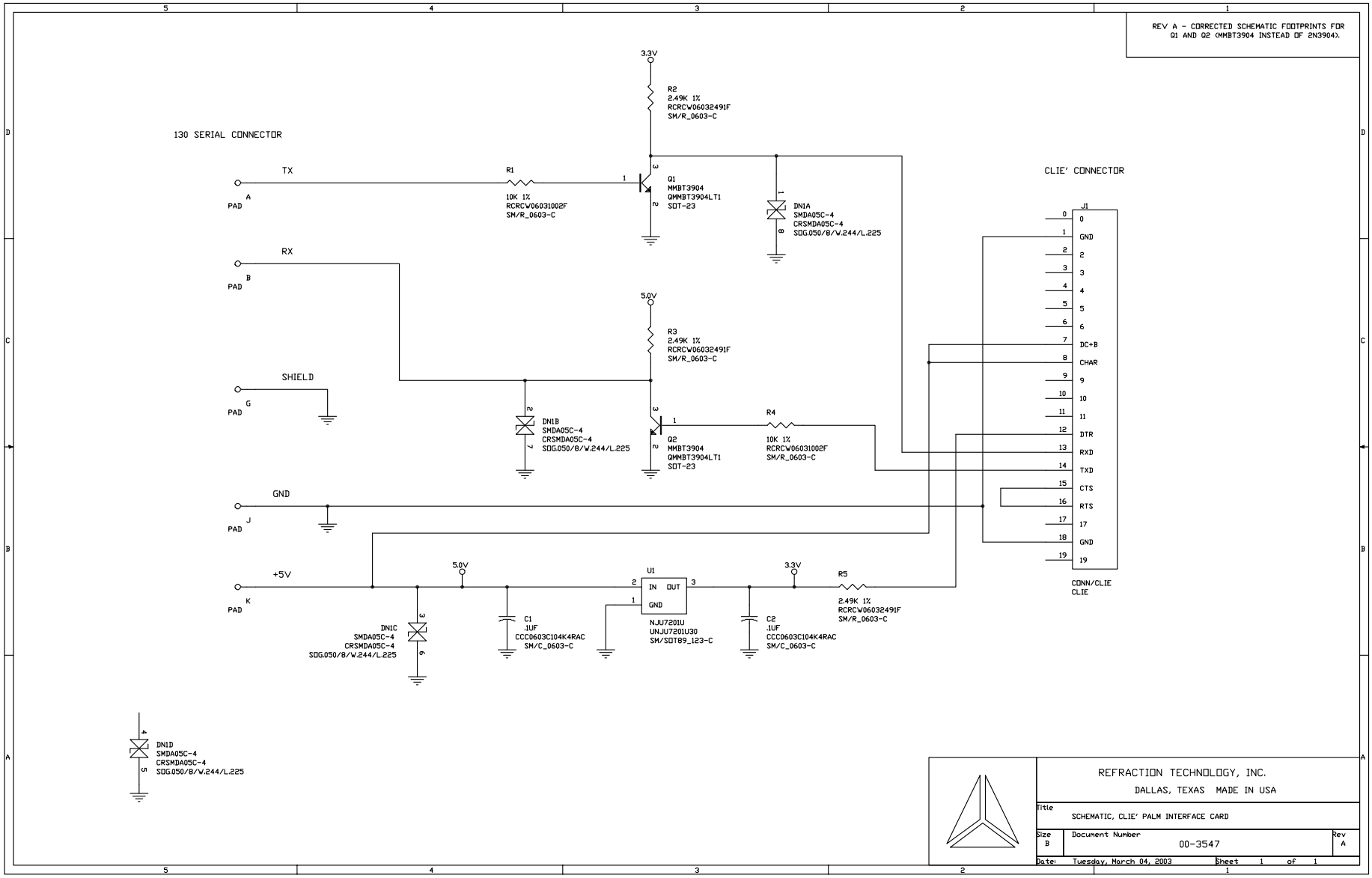


Figure 1 - 22 RT547 CLEA' board


REV A - CORRECTED SCHEMATIC FOOTPRINTS FOR Q1 AND Q2 (MMBT3904 INSTEAD OF 2N3904).
130 SERIAL CONNECTOR
TX
RX
SHIELD
GND
+5V
PAD
R1
10K 1%
RCRCW06031002F
SM/R_0603-C
R2
2.49K 1%
RCRCW06032491F
SM/R_0603-C
R3
2.49K 1%
RCRCW06032491F
SM/R_0603-C
R4
10K 1%
RCRCW06031002F
SM/R_0603-C
R5
2.49K 1%
RCRCW06032491F
SM/R_0603-C
3.3V
5.0V
Q1
MMBT3904
QMMBT3904LT1
SOT-23
Q2
MMBT3904
QMMBT3904LT1
SOT-23
DN1A
SMDA05C-4
CRSMDA05C-4
SOG.050/8/W.244/L.225
DN1B
SMDA05C-4
CRSMDA05C-4
SOG.050/8/W.244/L.225
DN1C
SMDA05C-4
CRSMDA05C-4
SOG.050/8/W.244/L.225
DN1D
SMDA05C-4
CRSMDA05C-4
SOG.050/8/W.244/L.225
C1
.1UF
CCC0603C104K4RAC
SM/C_0603-C
C2
.1UF
CCC0603C104K4RAC
SM/C_0603-C
U1
IN
OUT
GND
NJU7201U
UNJU7201U30
SM/SOT89_123-C
CLIE' CONNECTOR
J1
0
GND
2
3
4
5
6
DC+B
CHAR
9
10
11
DTR
RXD
TXD
CTS
RTS
17
GND
19
CONN/CLIE
CLIE
REFRACTION TECHNOLOGY, INC.
DALLAS, TEXAS MADE IN USA
Title
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Size
B
Document Number
00-3547
Rev
A
Date: Tuesday, March 04, 2003
Sheet 1 of 1

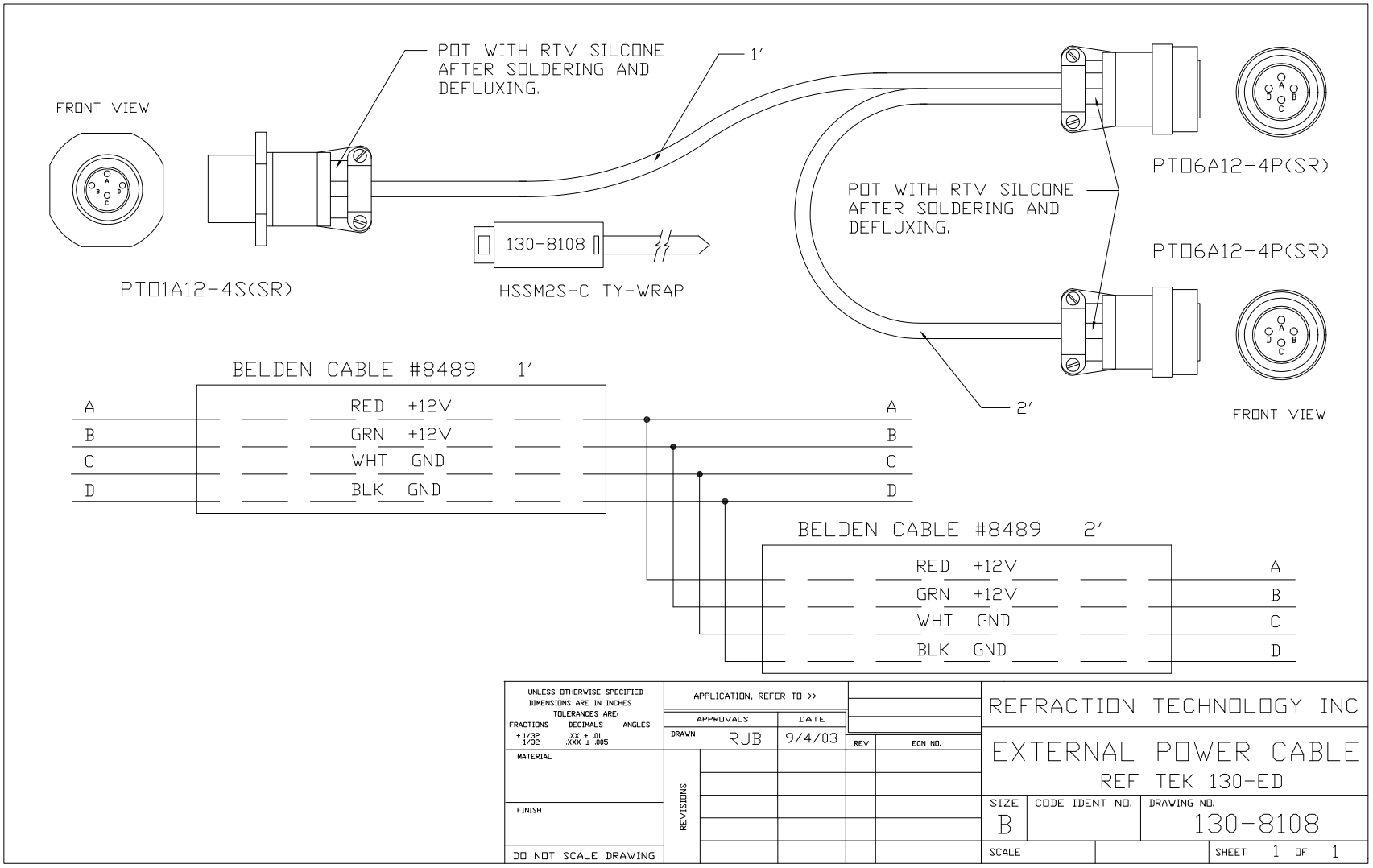

Figure 1 - 23 130-8108 - External Power Cable

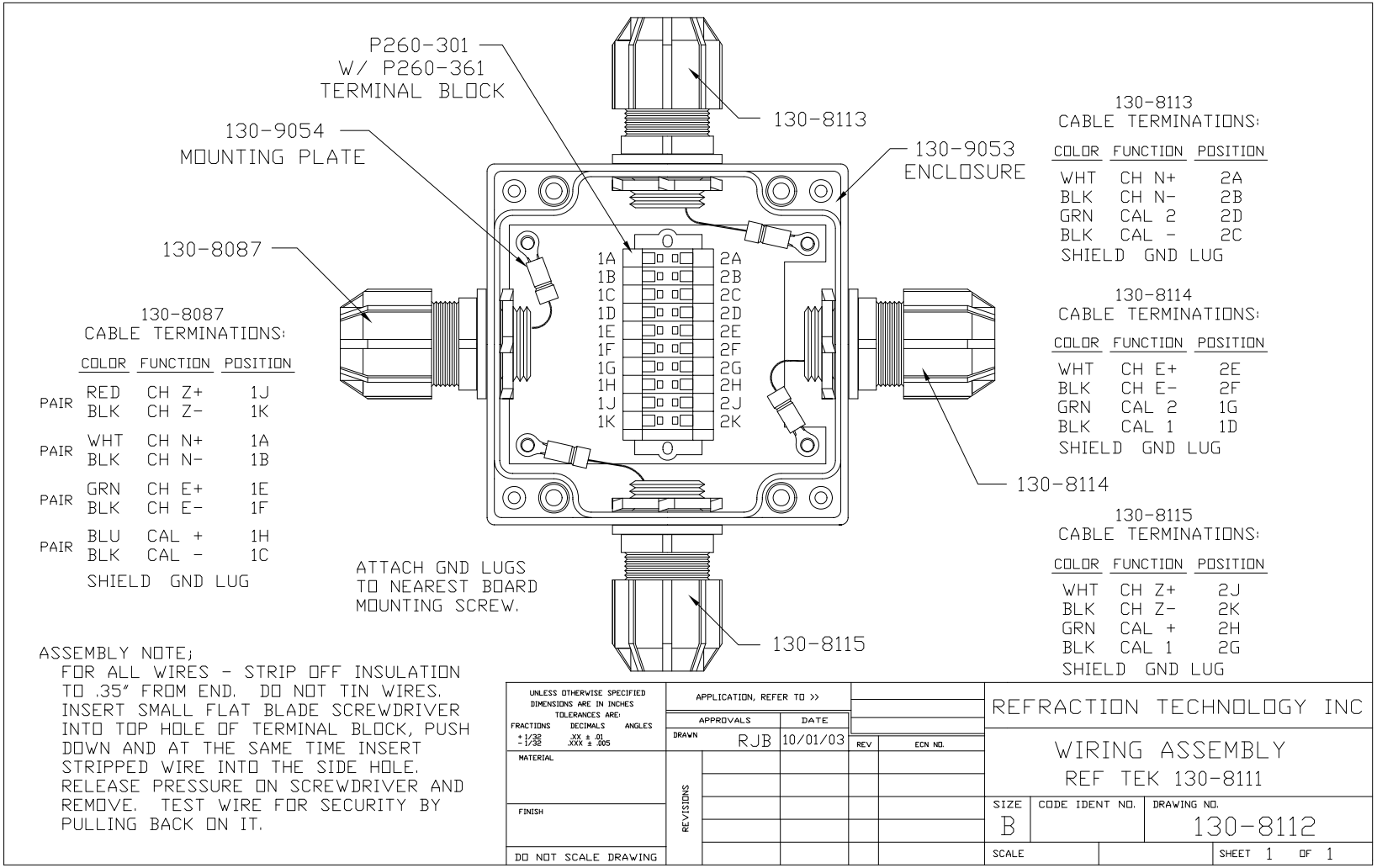

Figure 1 - 24 130-8111 S-13 Splitter Box

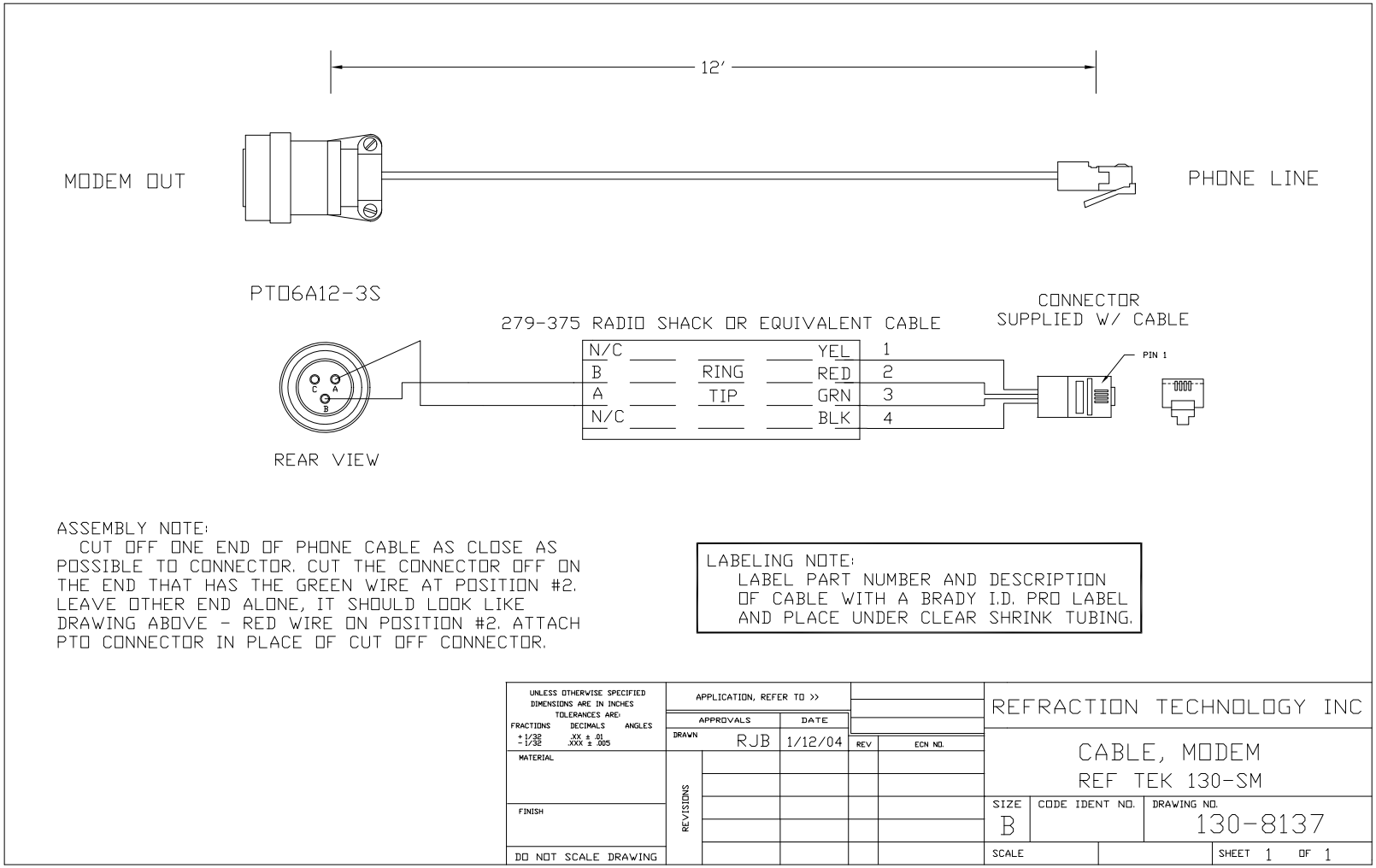

Figure 1 - 25 130-8137 130-SM Modem

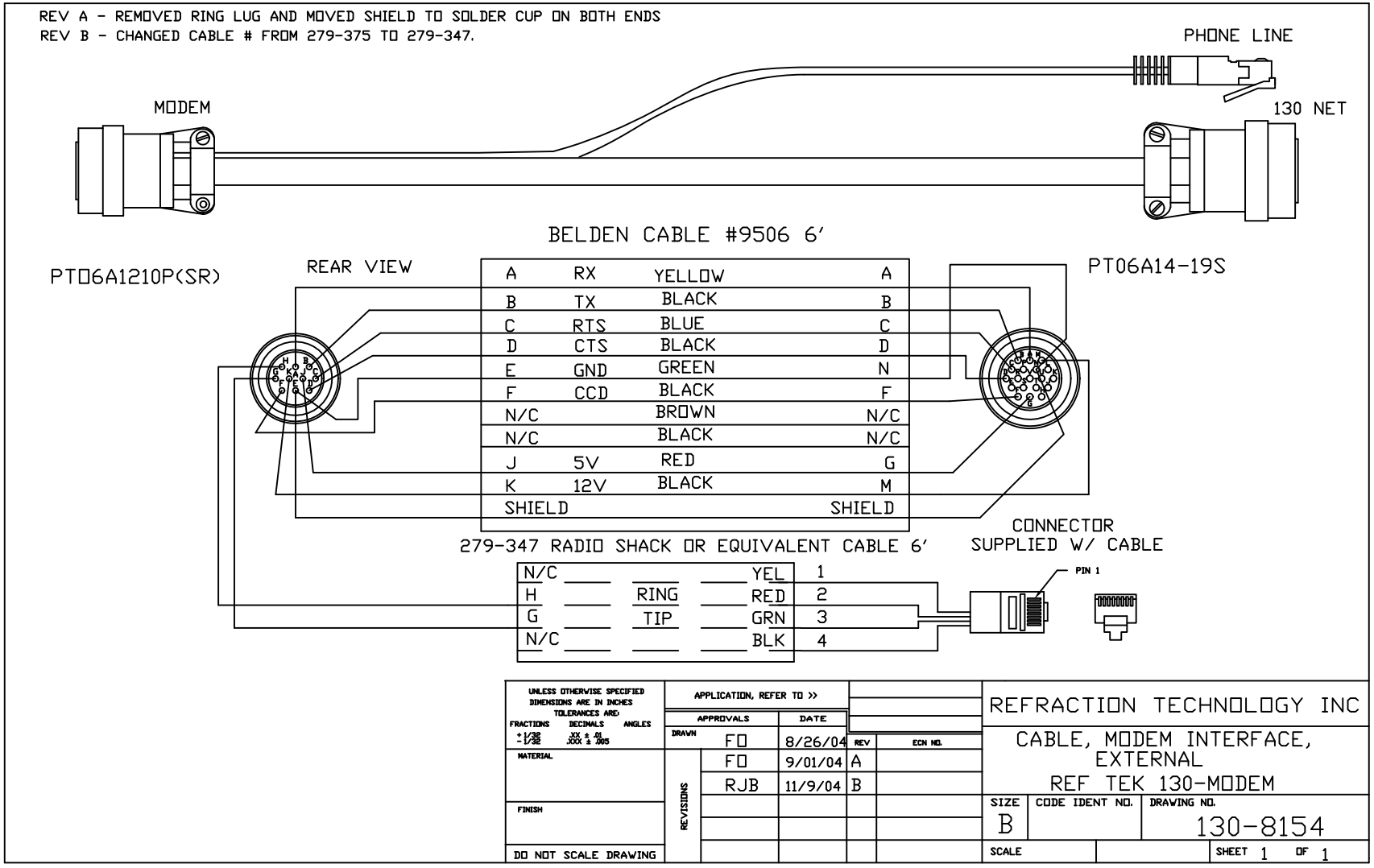

Figure 1 - 26 130-8154 130-Modem cable

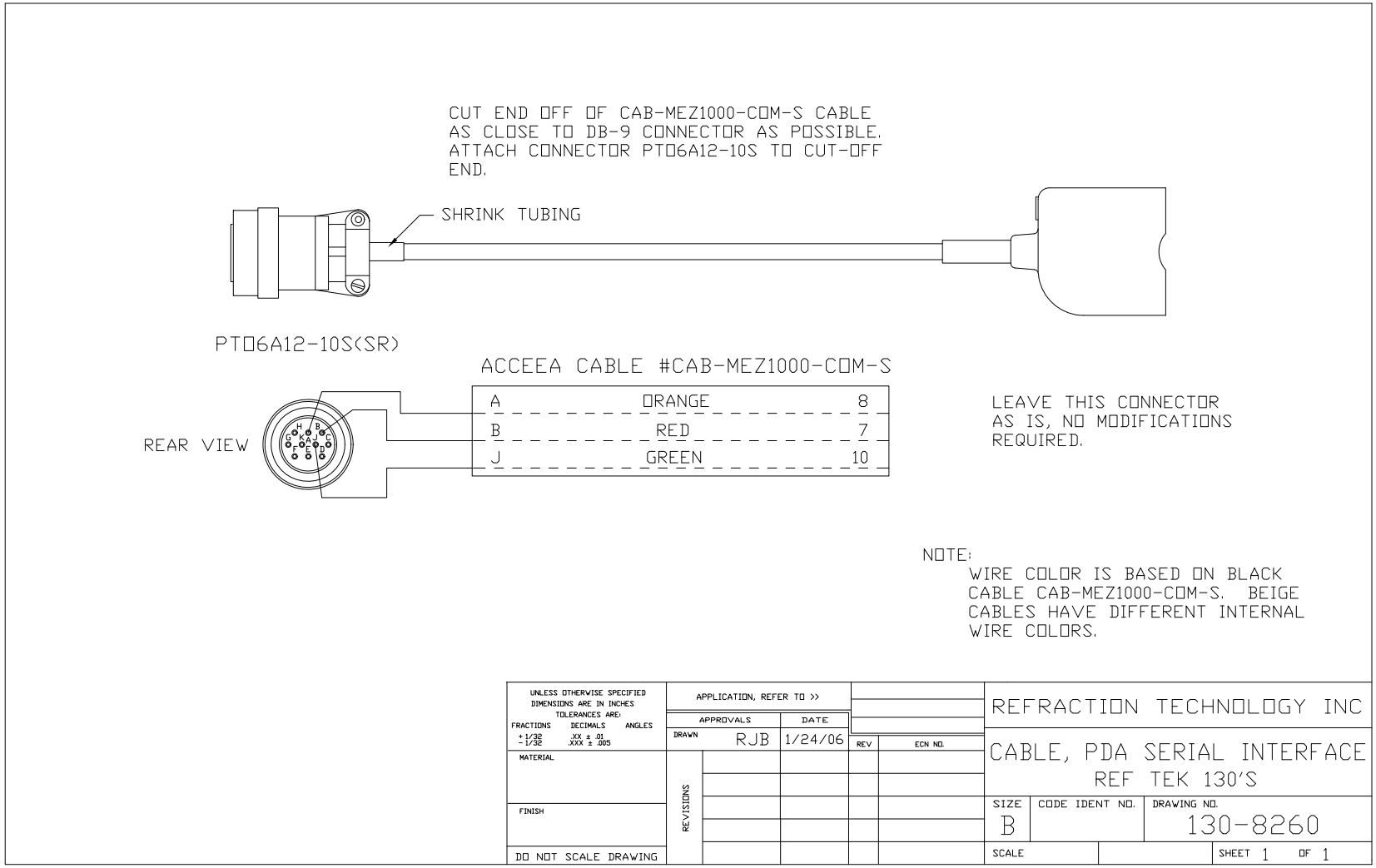

Figure 1 - 27 130-8260 Ruggedized Palm cable

1.3 Seismometer Cables

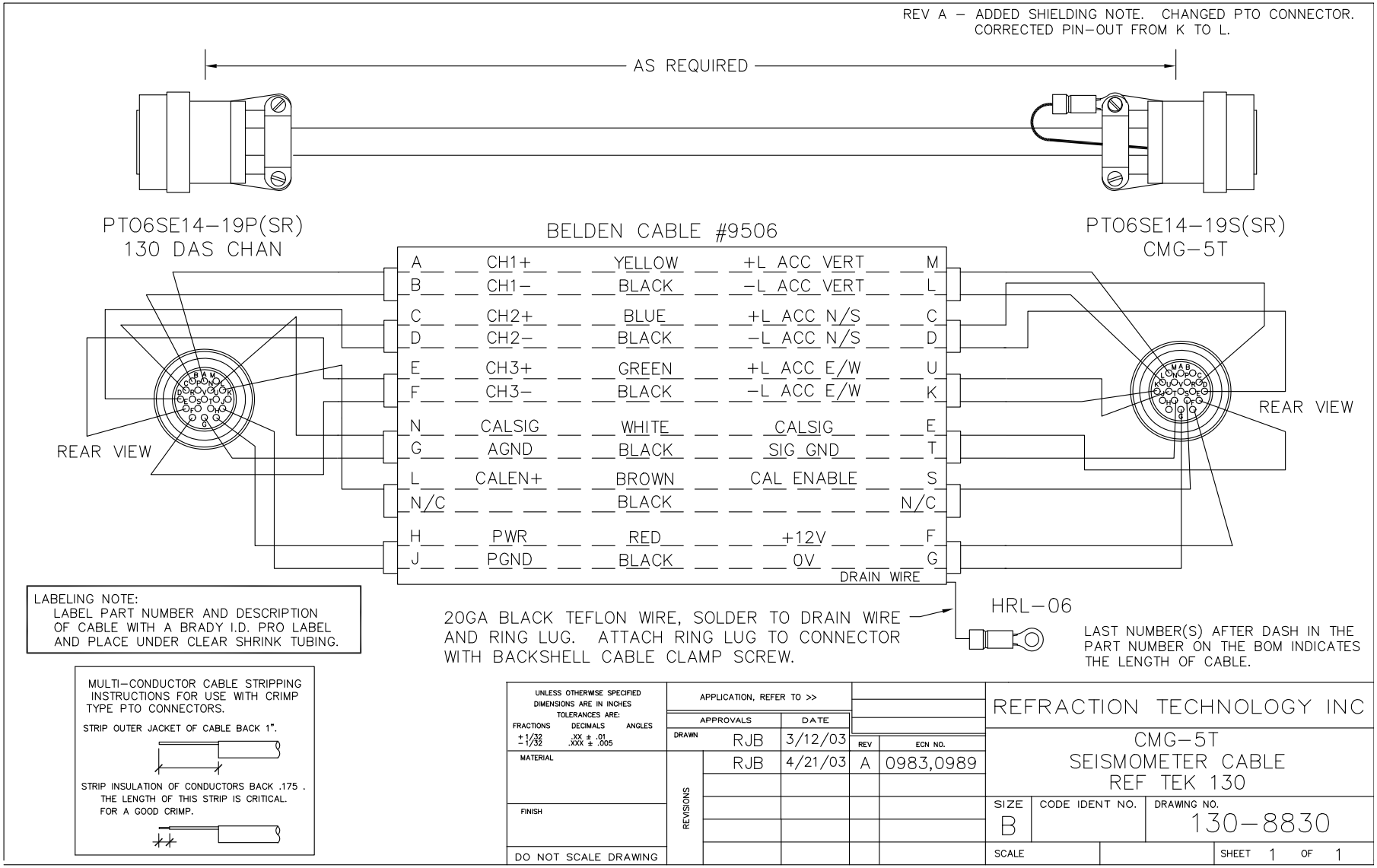

Figure 1 - 28 130-8830 - CMG-5T Seismometer Cable

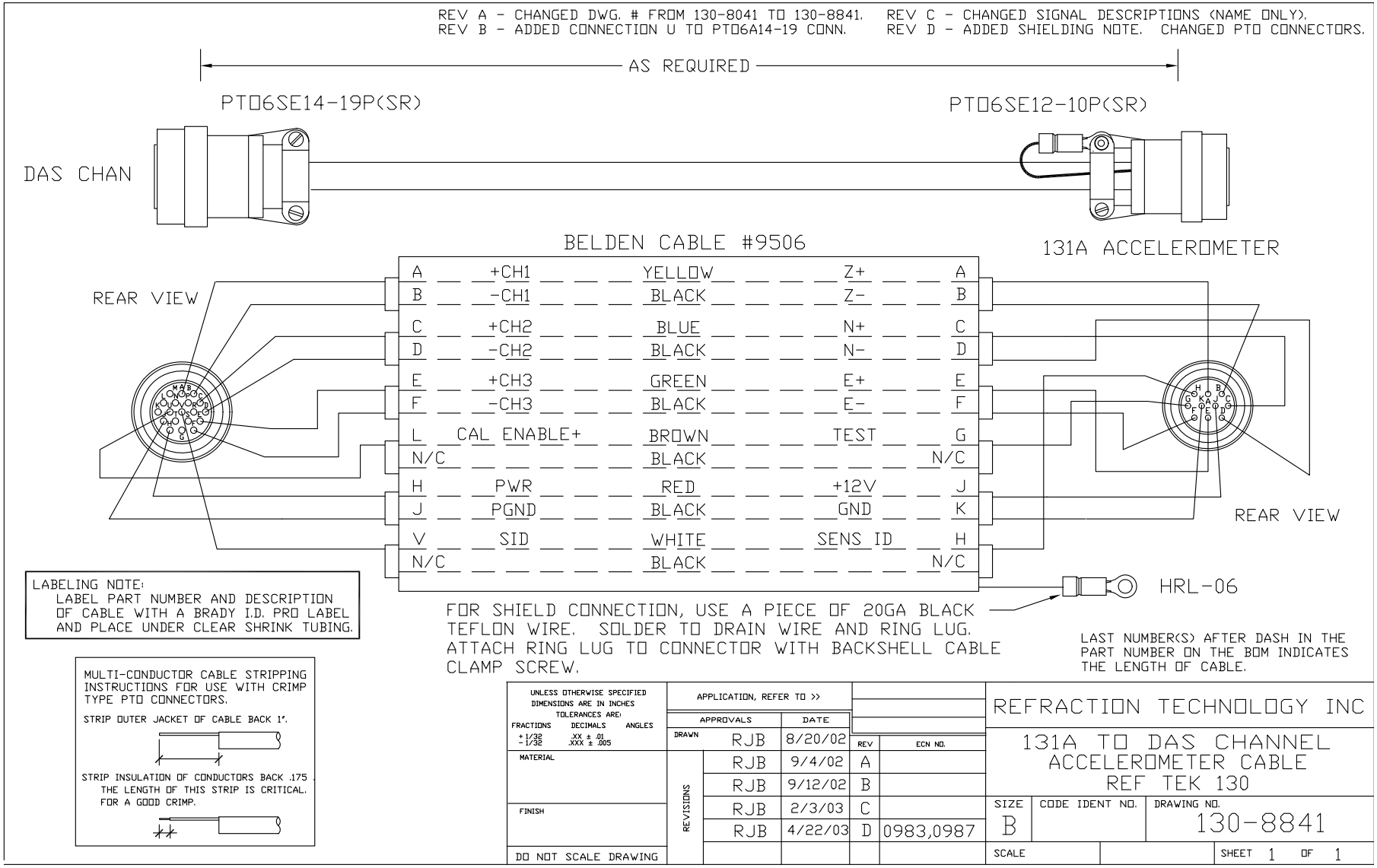

Figure 1 - 29 130-8841 - 131A to DAS channel accelerometer

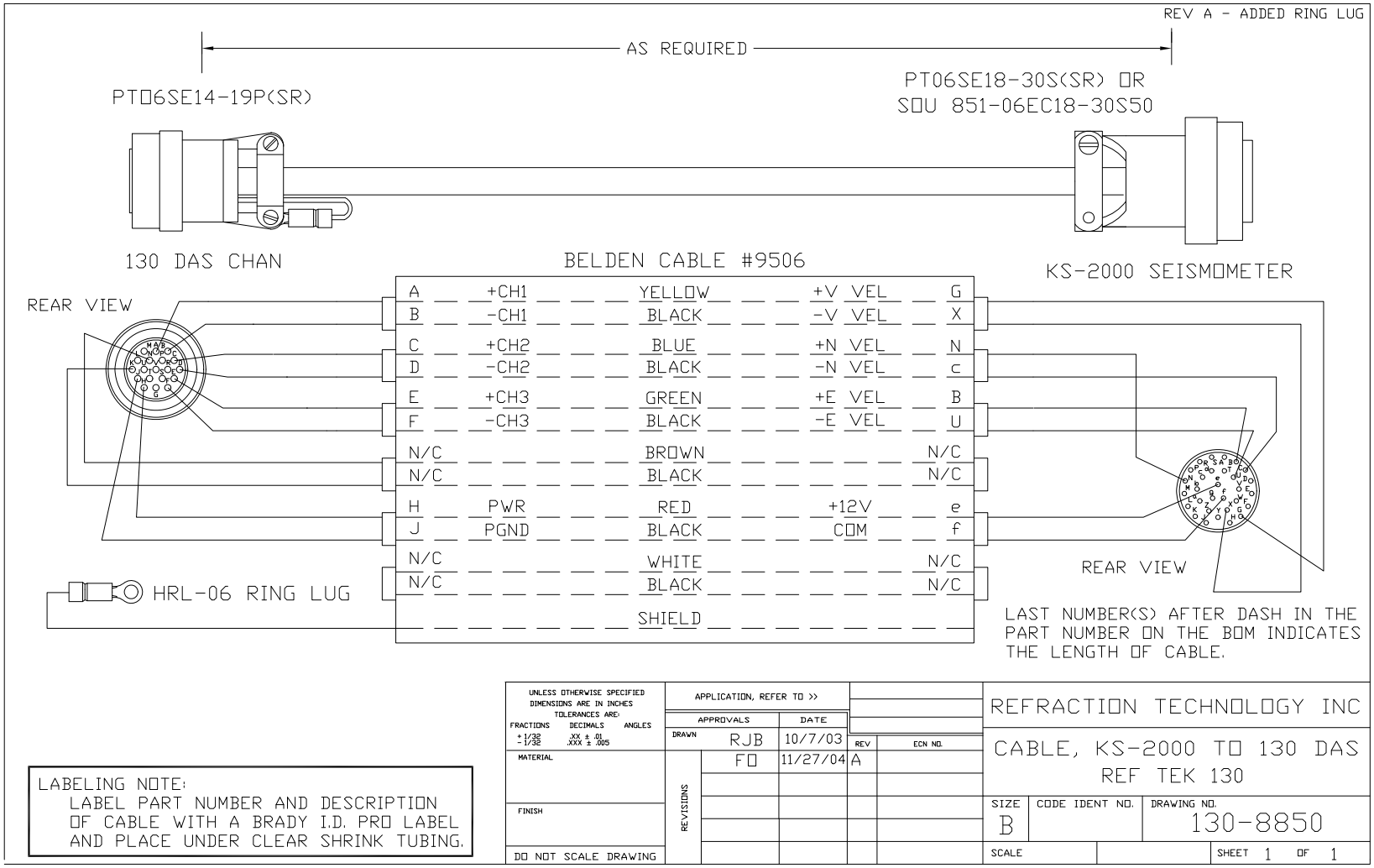

Figure 1 - 30 130-8850 KS-2000 Sensor cable

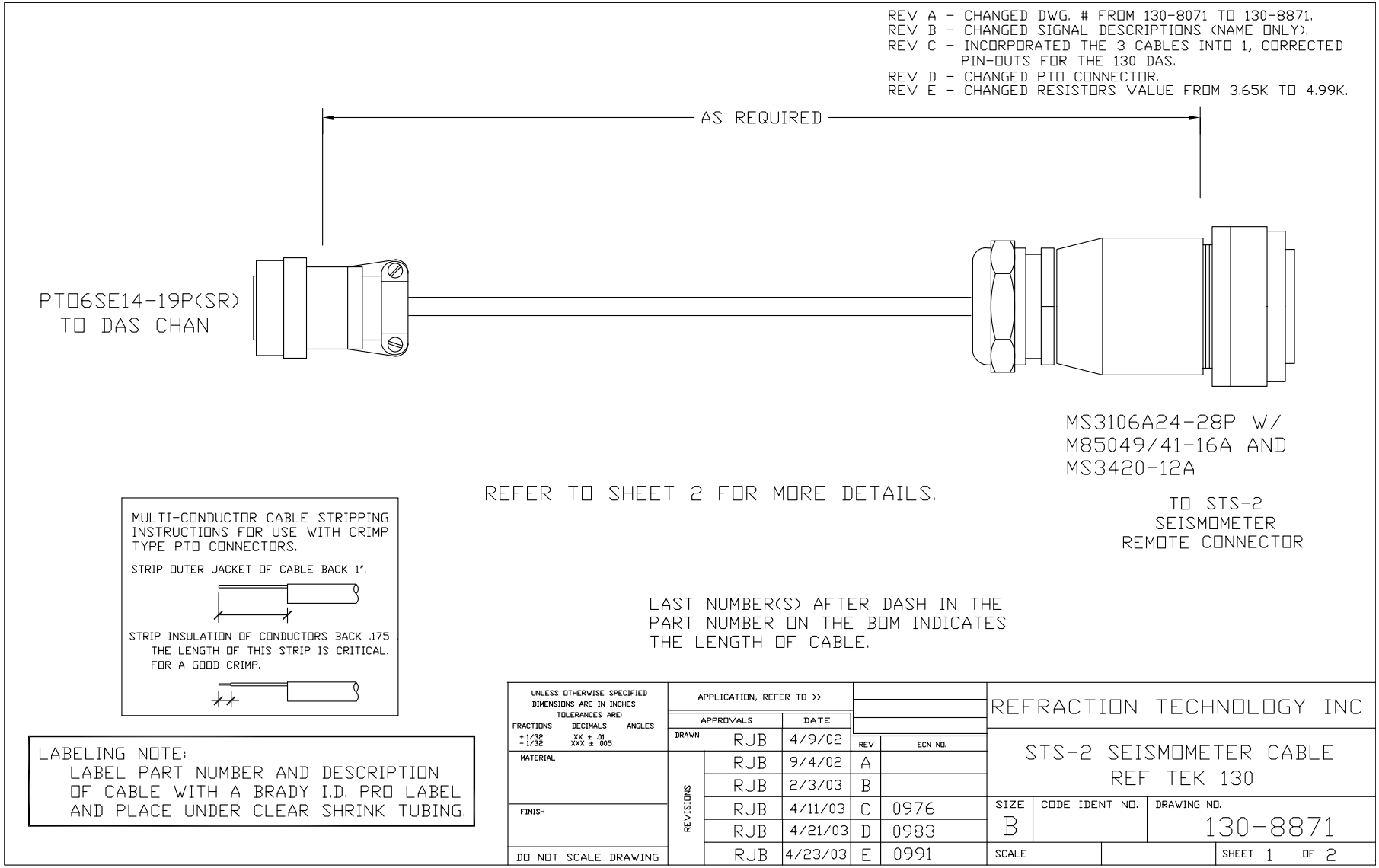

Figure 1 - 31 130-8871 - STS-2 Seismometer

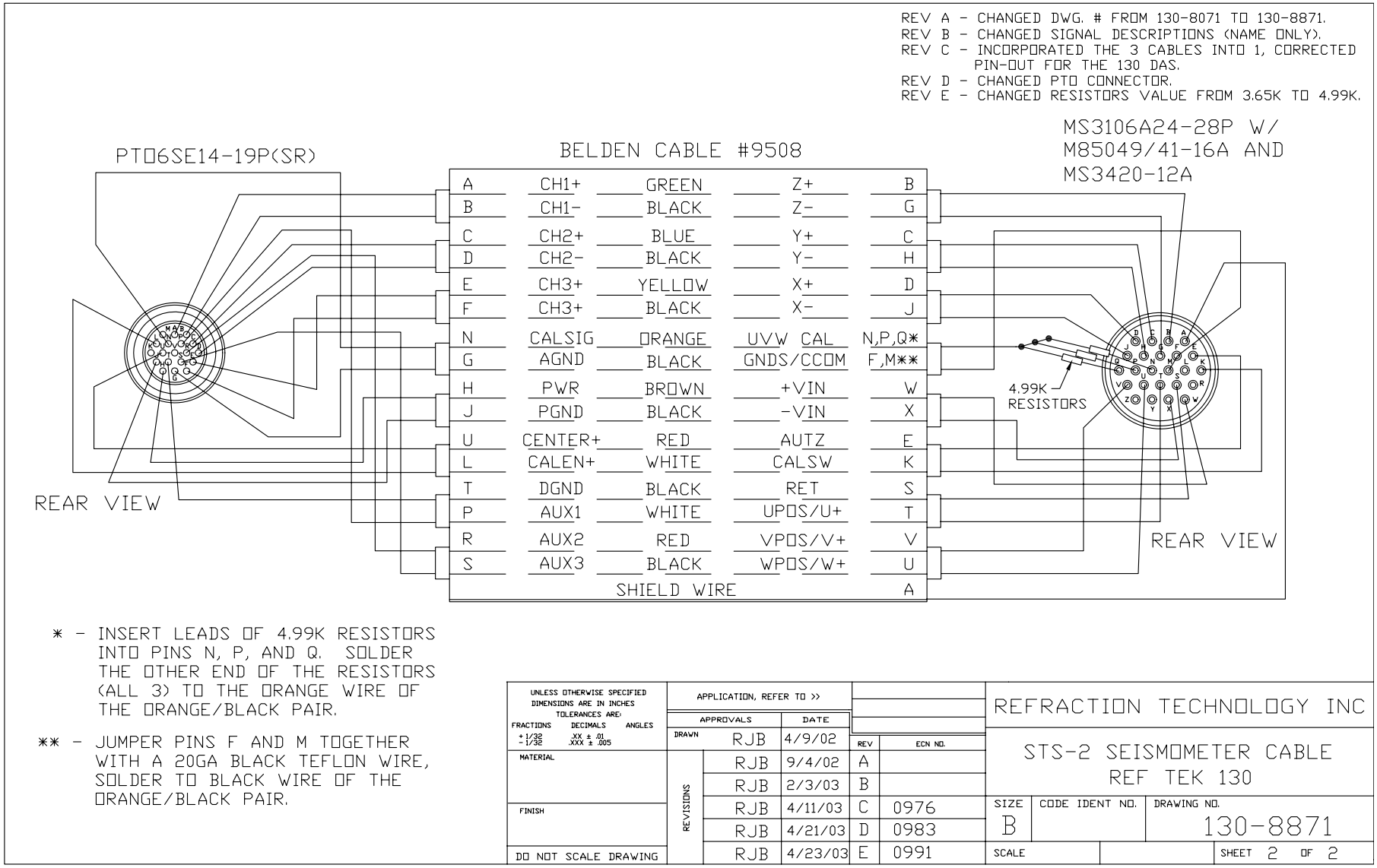

Figure 1 - 32 130-8871 - STS-2 Seismometer wire list

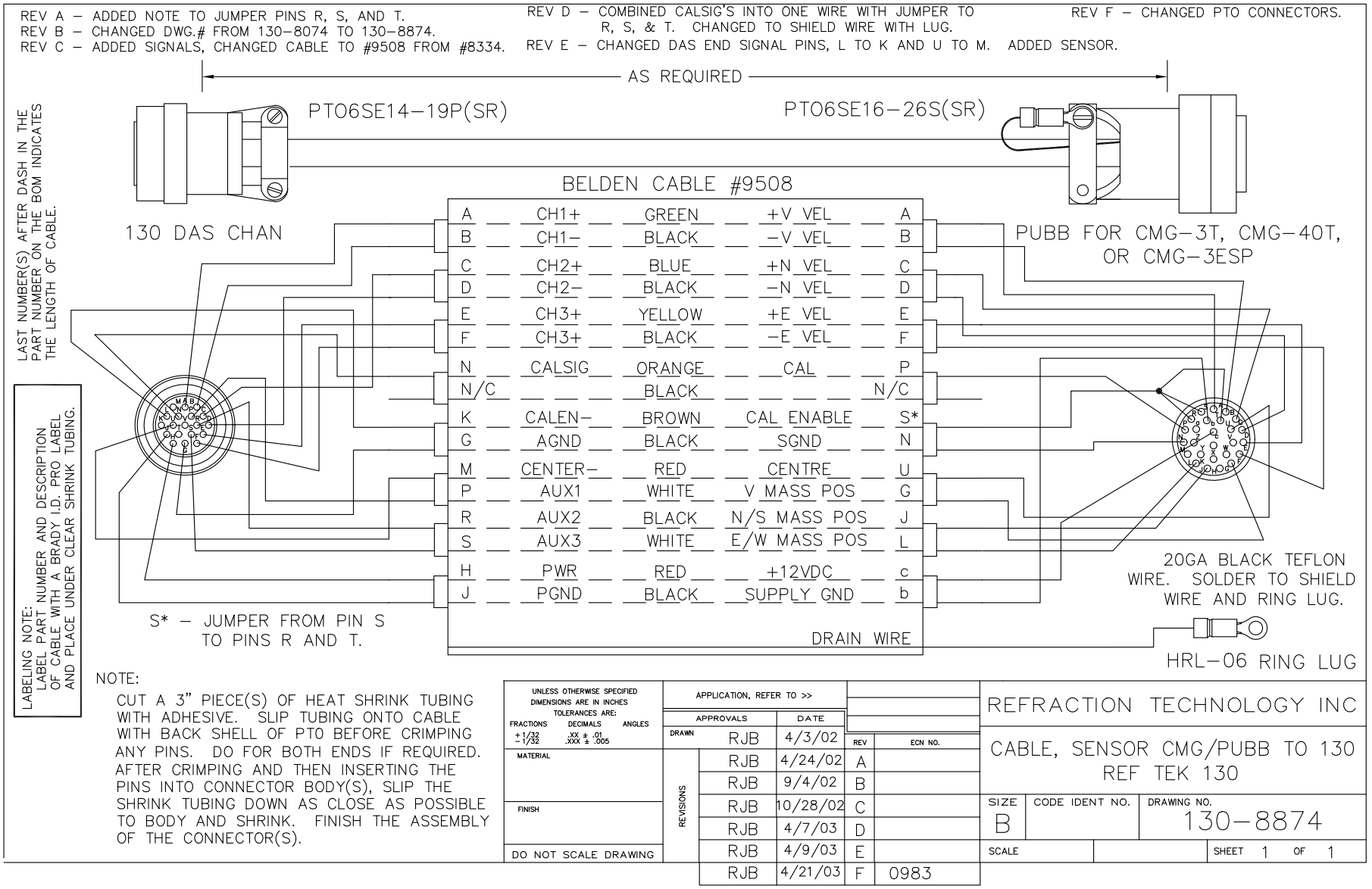

Figure 1 - 33 130-8874 - Sensor CMG/PUBB to 130

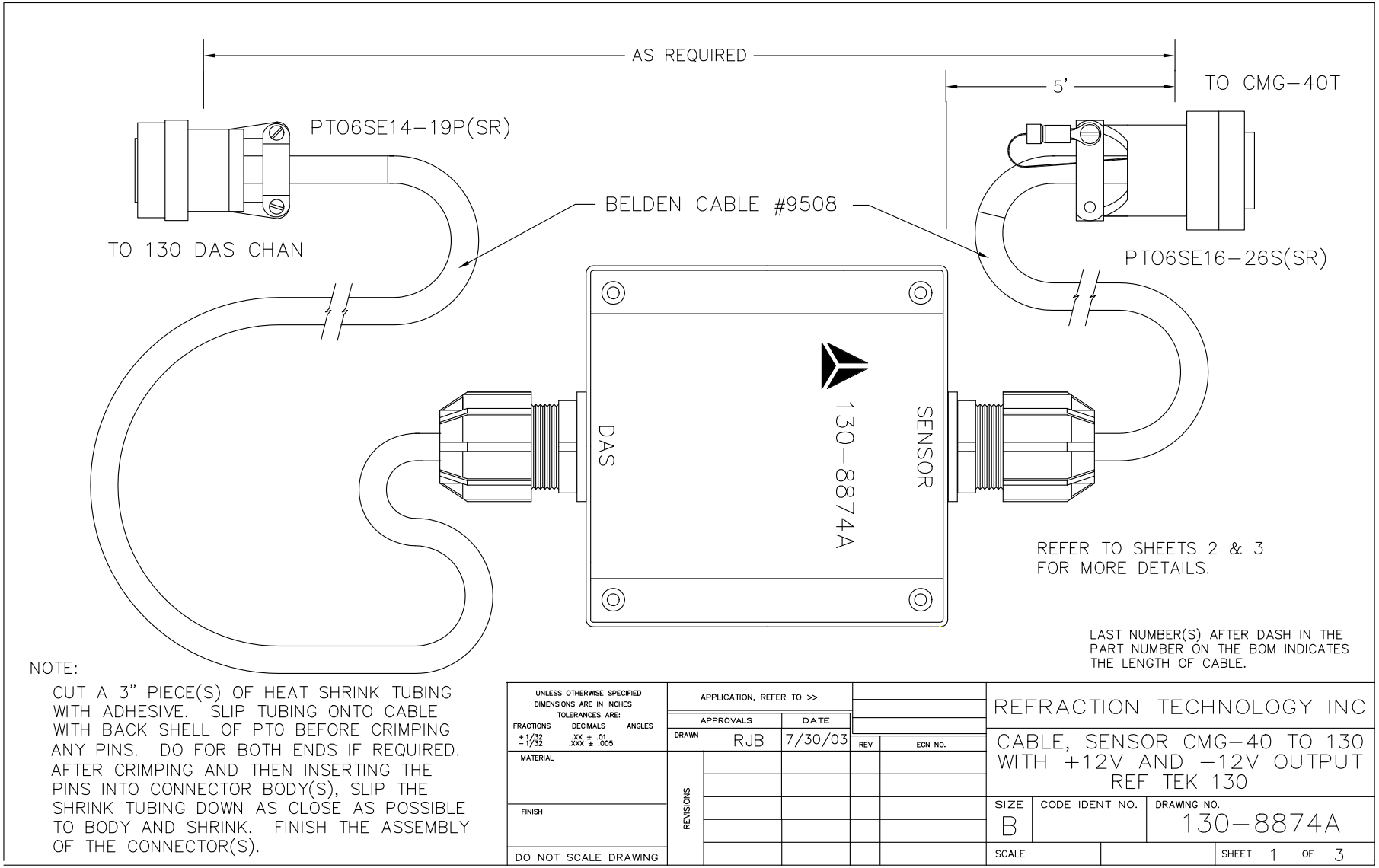

Figure 1 - 34 130-8874A - Sensor CMG-40 to 130 with +12

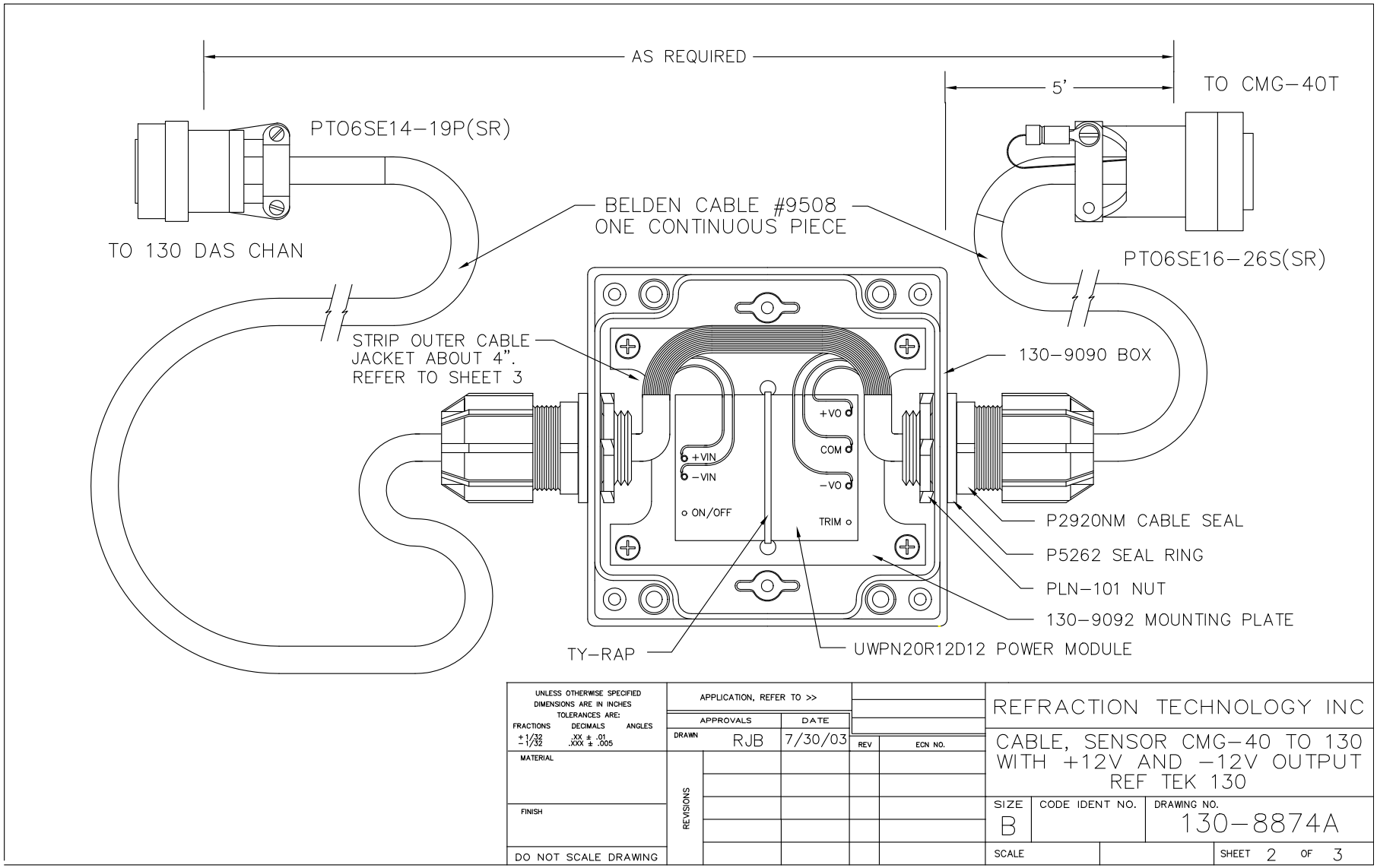

Figure 1 - 35 130-8874A - CMG-40 to 130 (Sheet 2 of 3)

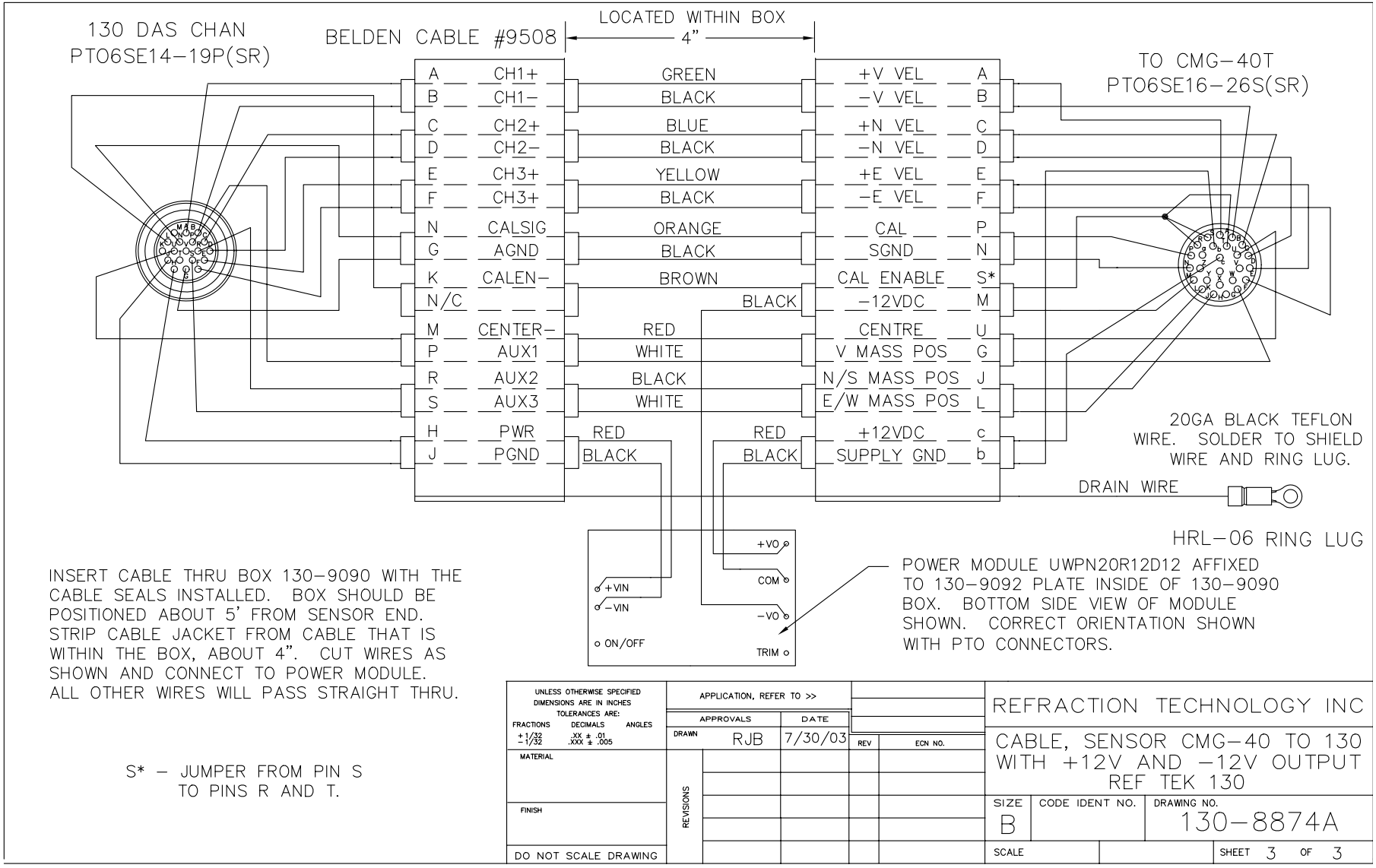

Figure 1 - 36 130-8874A - CMG-40 to 130 (Sheet 3 of 3)

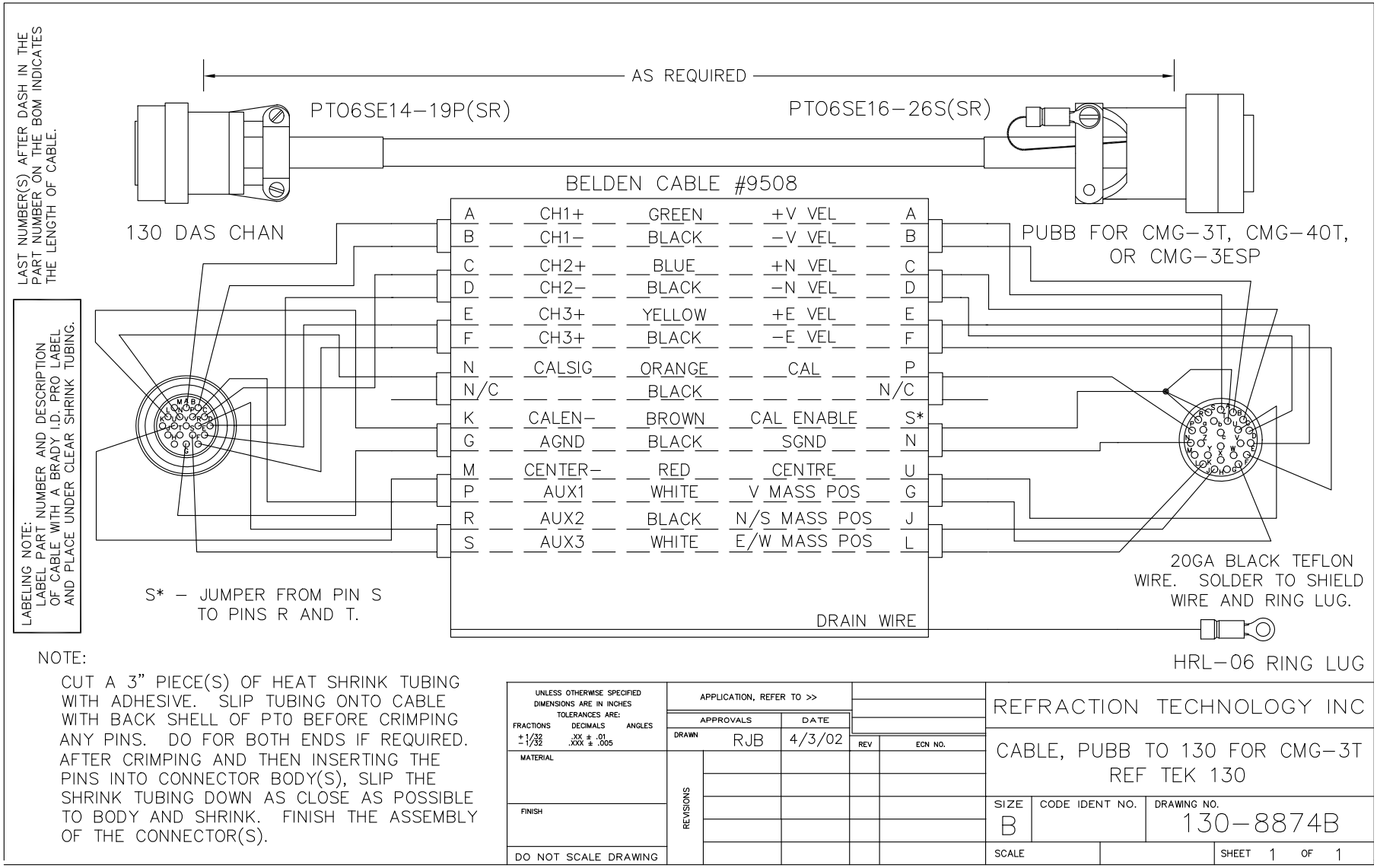

Figure 1 - 37 130-8874B - PUBB to 130 for CMG-3T

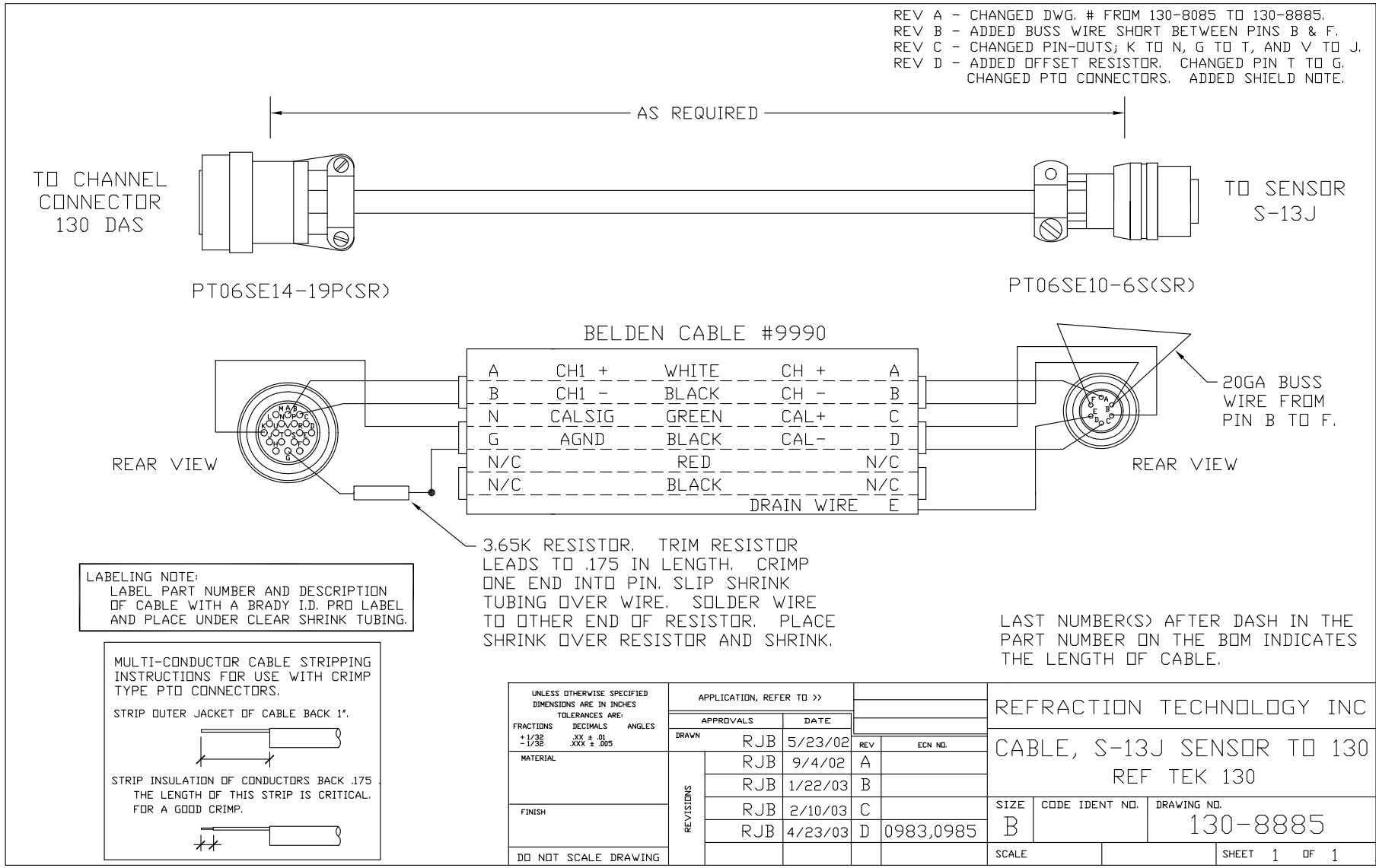

Figure 1 - 38 130-8885 - S-13J Sensor to 130

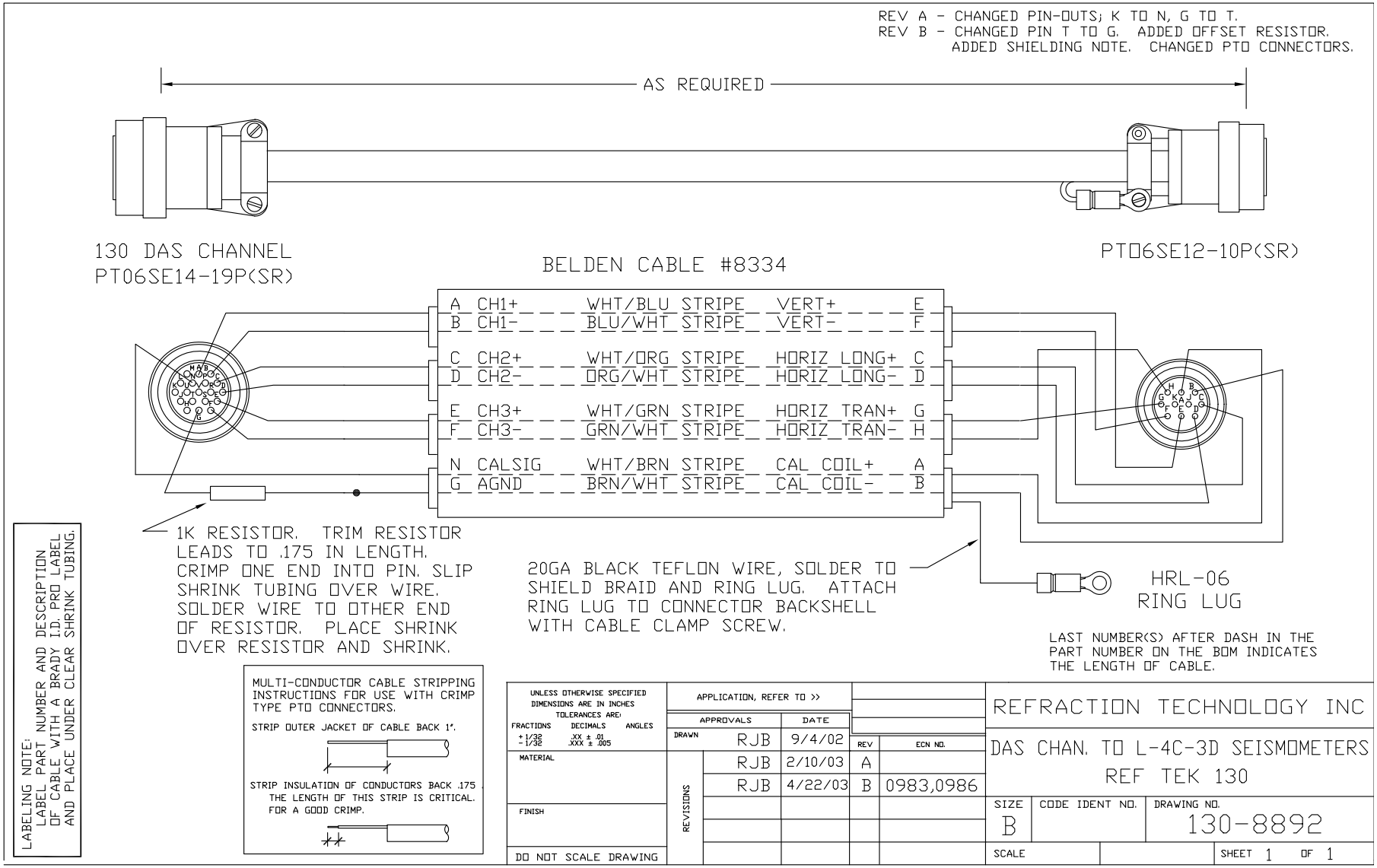

Figure 1 - 39 130-8892 - DAS to L-4C-3D Seismometer

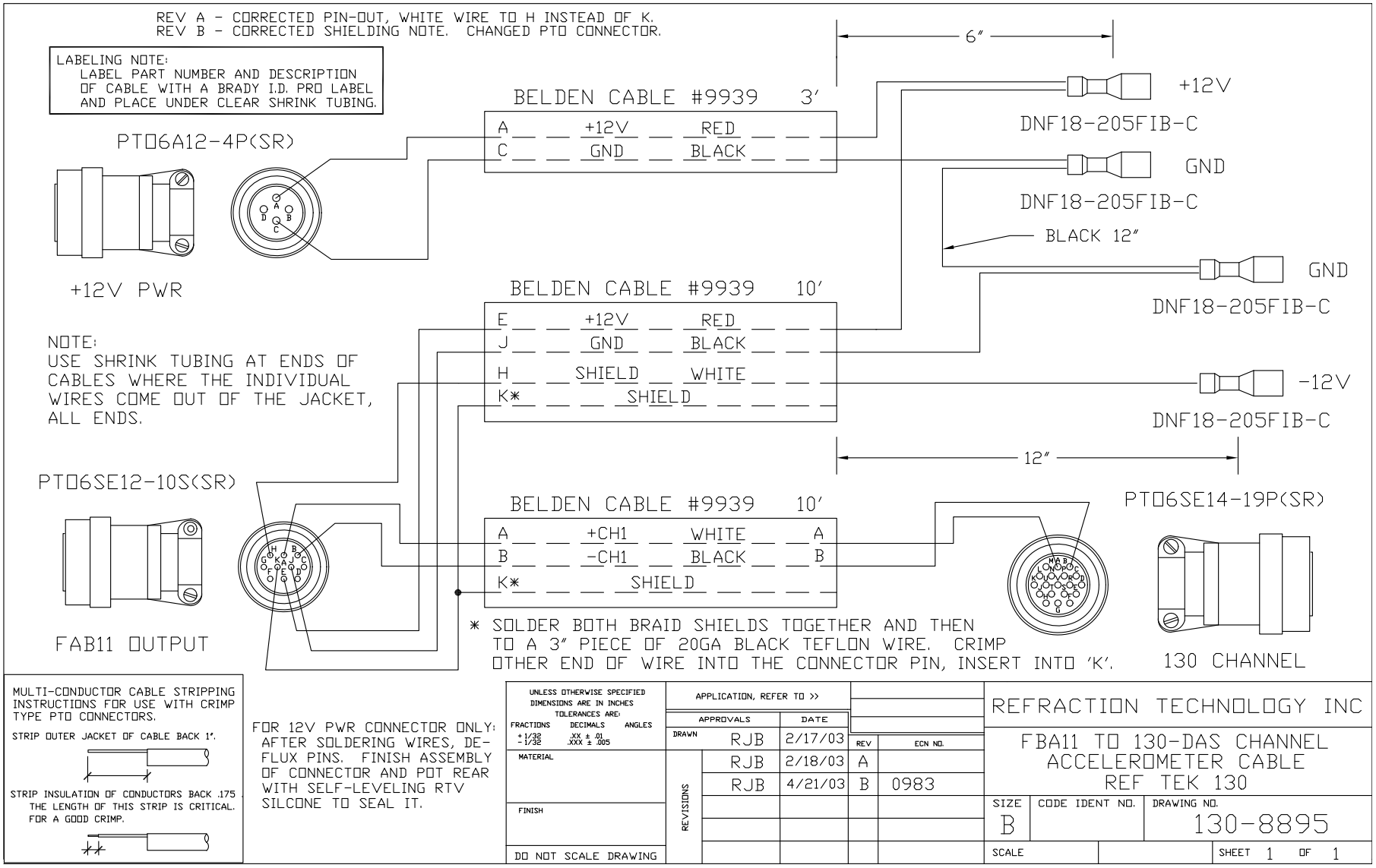

Figure 1 - 40 130-8895 - FBA11 to 130-DAS