Thermometer Electrical Test Reports

Box 6

Cryogenic Thermometer Traveller

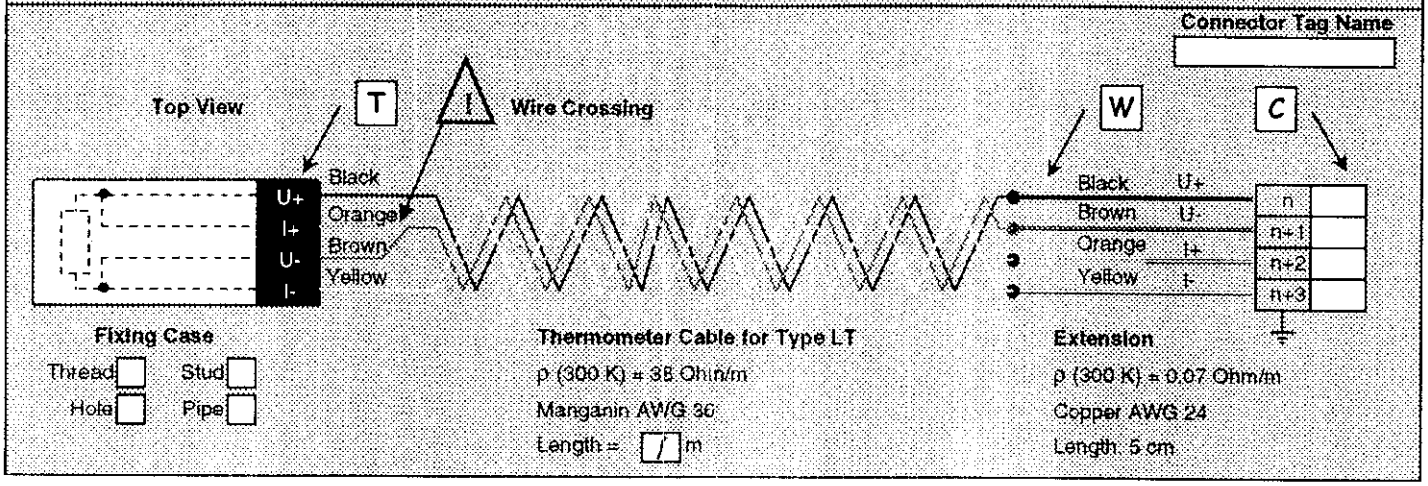
CY1 LINE = X17909

DESCRIPTION*

Part Description:	Cryogenic thermometer	**Instrument Name:**	
CERN Part Identifier:	HCQITELCXT-CR015100	**Top Assembly:**	
Other Identification:	CX_LS_X17909	**Functional Equipment Identifier:**	

* In accordance with LHC-QIT-QA-0002

CABLING



CHECKS

Intervention	Date/ DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U+,I+) [Ohm] 2W	R(U-,I-) [Ohm] 2W	R(U+,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	12-Apr-2002	T	61.84	18.43	18.37	OVL	300	IPN	Joly
Expedition	04-Sep-2003	T	61.15	18.43	18.37	OVL	293.00	CERN	Vauthier
Reception		T W C							
~~EXTENSIONS~~	~~06 July 2004~~	~~T W C~~		~~102.18~~	~~102.40~~	~~OVL~~	~~293.40~~	~~LBNL~~	~~ANDERSON~~
EXTENSIONS	06 July 2004	T W C	61.17	102.29	102.43	OVL	295.1	LBNL	ANDERSON
AFTER INSTALLATION	7/05/04	T W C		101.29	102.43	OPEN			DK/KS
AFTER POWER	8/5/04	T W C		102.3	102.4	OPEN			MJ
AFTER POWER	8/7/04	T W C		102.5	102.7	OPEN			
		T W C							
		T W C							
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BOX 6

T T819A

Cryogenic Thermometer Traveller

Surge Pot (on 3/8 tubing) X 17921

(A)

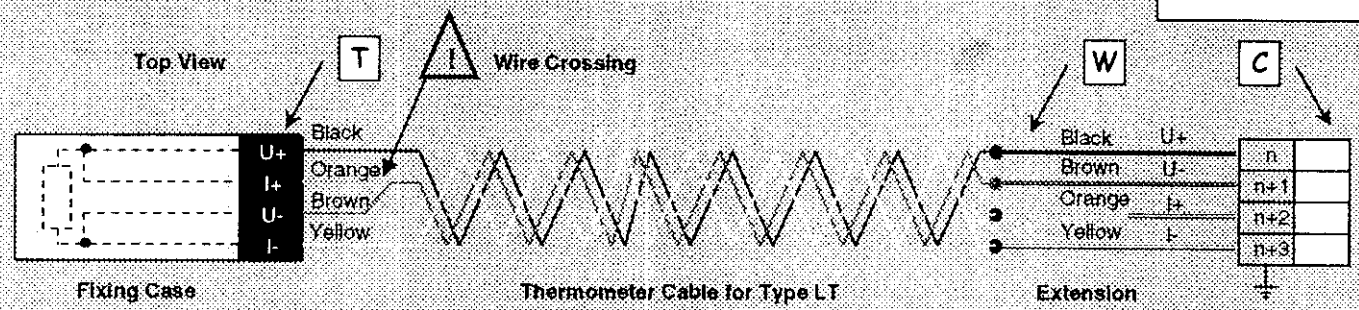
DESCRIPTION*

Part Description:	Cryogenic thermometer	**Instrument Name:**	
CERN Part Identifier:	HCQITELCXT-CR015200	**Top Assembly:**	
Other Identification:	CX_LS_X17921	**Functional Equipment Identifier:**	

* In accordance with LHC-QIT-QA-0002

CABLING

Connector Tag Name



Fixing Case

Thread ☐ Stud ☐

Hole ☐ Pipe ☐

Thermometer Cable for Type LT

ρ (300 K) = 38 Ohm/m

Manganin AWG 36

Length = 1 m

Extension

ρ (300 K) = 0.07 Ohm/m

Copper AWG 24

Length: 5 cm

CHECKS

Intervention	Date DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U-,I-) [Ohm] 2W	R(U+,I+) [Ohm] 2W	R(U-,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	12-Apr-2002	T	61.83	17.06	17.17	OVL	300	IPN	Joly
Expedition	04-Sep-2003	T	61.16	17.06	17.17	OVL	293.00	CERN	Vauthier
Reception		T W C							
~~EXTENSIONS~~	~~06 July 2004~~	~~T W C~~	~~86.08~~	~~100.8~~	~~98.87~~	~~OVL~~	~~293.00~~	~~LBNL~~	~~ANDERSON~~
EXTENSIONS	06 July 2004	T W C	61.21	99.96	99.03	OVL	293.00	LBNL	ANDERSON
After Installation	7/5/04	T W C		100.0	99.0	open			CK/KS
AFTER POWER	8/5/04	T W C		99.9	98.9	open			[illegible]
AFTER POTTING	8/7/04	T W C		100.1	99.1	OPEN			
		T W C							
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BOX 6

TT614B

Cryogenic Thermometer Traveller

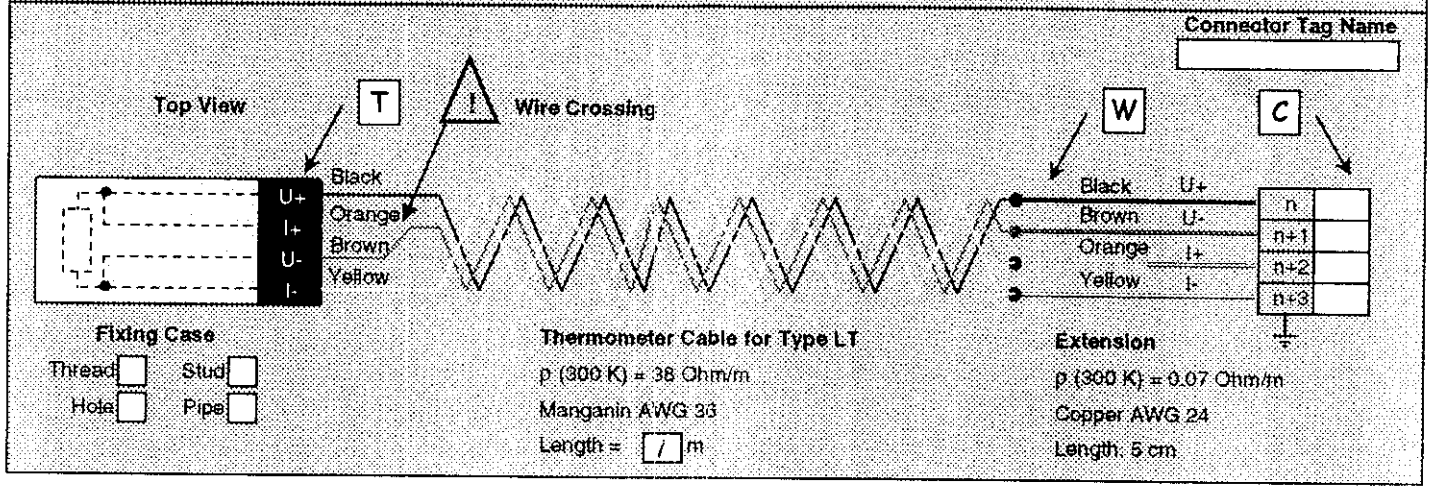
SURGE POT 5/8 Ø LINE (B) X17914

DESCRIPTION*

Part Description:	Cryogenic thermometer	**Instrument Name:**	
CERN Part Identifier:	HCQITELCXT-CR015140	**Top Assembly:**	
Other Identification:	CX_LS_X17914	**Functional Equipment Identifier:**	

* In accordance with LHC-QIT-QA-0002

CABLING



CHECKS

Intervention	Date/ DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U-,I-) [Ohm] 2W	R(U+,I+) [Ohm] 2W	R(U+,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	12-Apr-2002	T	62.04	16.61	16.53	OVL	300	IPN	Joly
Expedition	04-Sep-2003	T	61.42	16.61	16.53	OVL	293.00	CERN	Vauthier
Reception		T W C							
~~EXTENSIONS~~	~~06 July 2004~~	T W C		~~100.81~~	~~94.68~~	~~OVL~~	~~293.0~~	~~L BNC~~	~~Anderson~~
EXTENSIONS	06 July 2004	T W C	61.29	100.38	100.98	OVL	295.0	L BNC	Anderson
After Installation	7/5/04	T W C		[illegible]	100.02	OPEN			GL/KS
AFTER SOLDER	8/5/04	T W C		[illegible]	[illegible]	OPEN			ML
AFTER POTTING	8/7/04	T W C		85.0	100.2	OPEN			
		T W C							
		T W C							
		T W C			

Cryogenic Thermometer Traveller

LHC TANK X17915

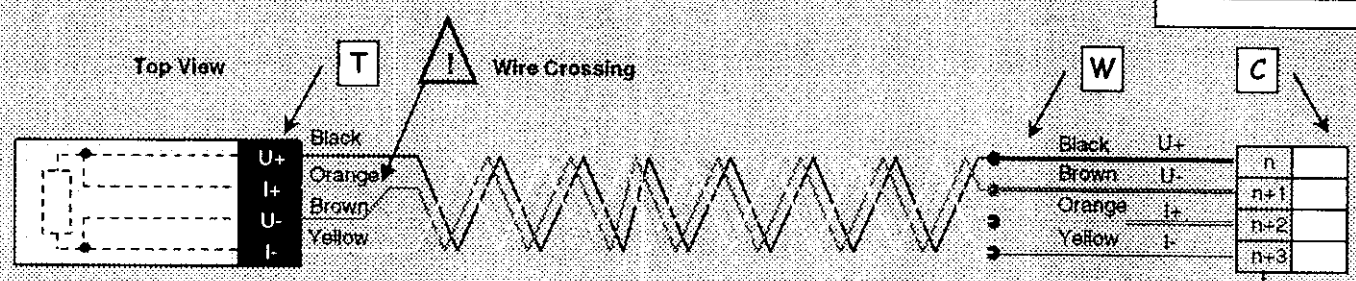
DESCRIPTION*

Part Description:	Cryogenic thermometer	**Instrument Name:**	
CERN Part Identifier:	HCQITELCXT-CR015150	**Top Assembly:**	
Other Identification:	CX_LS_X17915	**Functional Equipment Identifier:**	

* In accordance with LHC-QIT-QA-0002

CABLING

Connector Tag Name



Fixing Case

Thread ☐ Stud ☐

Hole ☐ Pipe ☐

Thermometer Cable for Type LT

ρ (300 K) = 38 Ohm/m

Manganin AWG 36

Length = 1 m

Extension

ρ (300 K) = 0.07 Ohm/m

Copper AWG 24

Length: 5 cm

CHECKS

Intervention	Date/ DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U-,I-) [Ohm] 2W	R(U+,I+) [Ohm] 2W	R(U+,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	*12-Apr-2002*	T [redacted]	*60.23*	*25.68*	*25.91*	*OVL*	*300*	*IPN*	*Joly*
Expedition	*04-Sep-2003*	T [redacted]	*59.63*	*25.68*	*25.91*	*OVL*	*293.00*	*CERN*	*Vauthier*
Reception		T W C							
~~EXTENSION~~	~~06 July 2004~~	~~T W C~~		~~109.38~~	~~107.71~~	~~OVL~~	~~293.10~~	~~LBNL~~	~~Anderson~~
EXTENSION	06 July 2004	T W C	59.50	109.20	108.8	OVL	295.2	LBNL	ANDERSON
[illegible]	[illegible]	T W C							
AFTER SOLDER	8/5/04	T W C		104.1	107.5	OPEN			MJ
AFTER POTTING	8/7/04	T W C		109.3	108.0	OPEN			
		T W C							
		T W C							
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BOX 6

Cryogenic Thermometer Traveller

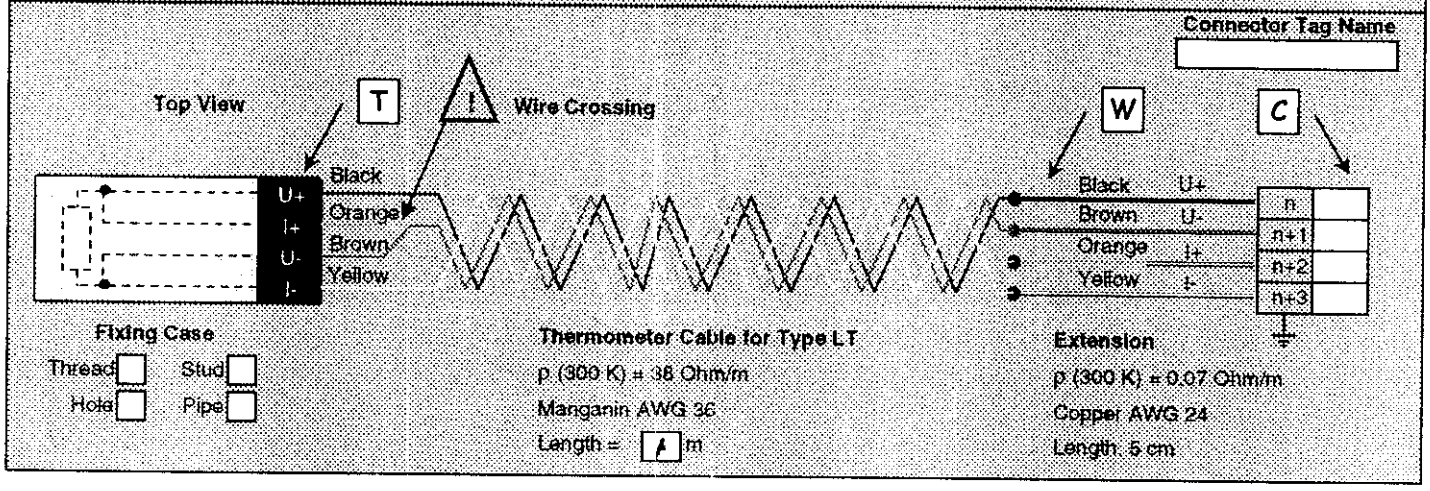
D H LINE X 17916

DESCRIPTION*

Part Description:	Cryogenic thermometer	Instrument Name:	
CERN Part Identifier:	HCQITELCXT-CR015160	Top Assembly:	
Other Identification:	CX_LS_X17916	Functional Equipment Identifier:	

* In accordance with LHC-QIT-QA-0002

CABLING



CHECKS

Intervention	Date/ DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U-,I-) [Ohm] 2W	R(U+,I+) [Ohm] 2W	R(U+,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	12-Apr-2002	T	60.44	23.56	23.31	OVL	300	IPN	Joly
Expedition	04-Sep-2003	T	59.86	23.56	23.31	OVL	293.00	CERN	Vauthier
Reception		T W C							
~~EXTENSIONS~~	~~06 July 2004~~	T W C		~~108.00~~	~~106.58~~	OVL	~~293.4~~	~~LBNL~~	~~Anderson~~
EXTENSIONS	06-July 2004	T W C	59.73	107.00	106.82	OVL	295.0	LBNL	Anderson
After Installation	05-Aug-2004	T W C		107.6	106.8	OL			KS/CK
AFTER POWER	6/5/04	T W C		107.6	106.7	OPEN			MJ
AFTER POWER	9/7/04	T W C		90.0	89.9	OPEN			
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Cryogenic Thermometer Traveller

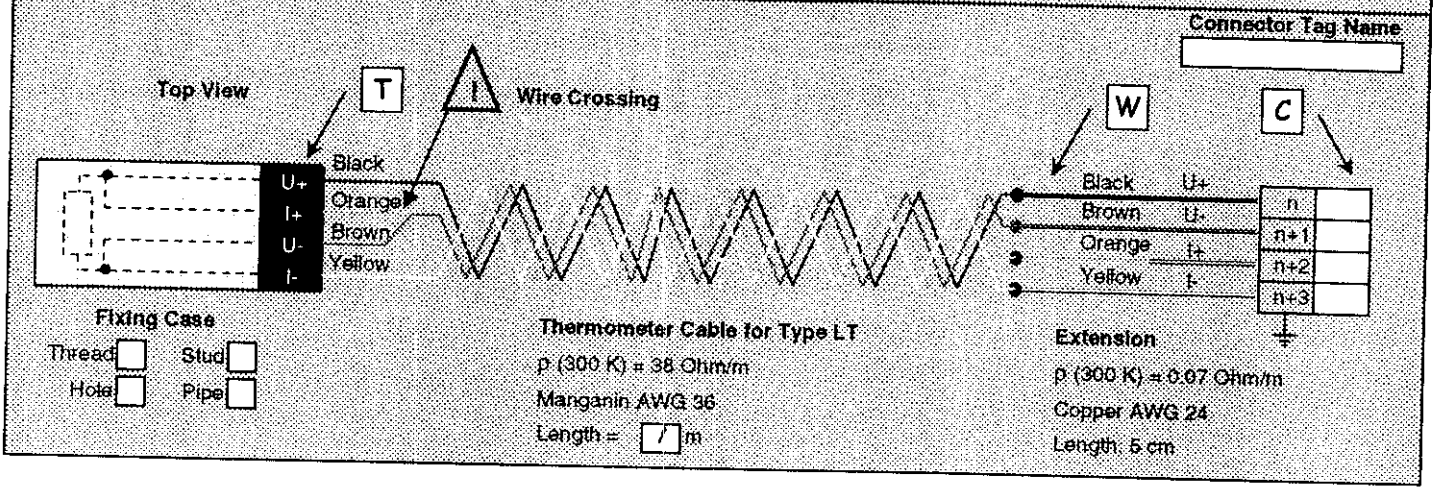
CY2 LINE TT813 X17917

DESCRIPTION*

Part Description:	Cryogenic thermometer	Instrument Name:	
CERN Part Identifier:	HCQITELCXT-CR015170	Top Assembly:	
Other Identification:	CX_LS_X17917	Functional Equipment Identifier:	

* In accordance with LHC-QIT-QA-0002

CABLING



CHECKS

Intervention	Date/ DD-MMM-YYYY	Check Point	R(U+,U-,I+,I-) [Ohm] 4W	R(U-,I-) [Ohm] 2W	R(U+,I+) [Ohm] 2W	R(U+,GND) [Ohm] 2W	Temperature [K]	Firm/Laboratory	Checked by
Calibration	12-Apr-2002	T	60.43	20.06	20.02	OVL	300	IPN	Joly
Expedition	04-Sep-2003	T	59.72	20.06	20.02	OVL	293.00	CERN	Vauthier
Reception		T W C							
		T W C		103.50	102.91	OVL			
EXTENSIONS	06 July 2004	T W C	59.67	103.71	102.92	OVL	295.2	LBNL	Anderson
AFTER INSTALLING	7/5/04	T W C		103.7	102.90	OPEN			DAIKS
AFTER SOLDER	5/5/04	T W C		103.3	102.3	OPEN			MJ
AFTER POWER	9/7/04	T W C		103.6	96.6	OPEN			
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In Case of problem, do not hesitate to contact R...

Meyer Tool & Mfg., Inc.
4601 SOUTHWEST HWY., OAK LAWN, ILLINOIS 60453
708 / 425-9080
FAX 708 / 425-2612

CONTINUITY TESTING
MTM-MP-1020

Function Designator, Tag or Description		Resistance ohms	Assembly Step	By Date
CERAMAFAB #18866-01-W	LBX PS3	" "	AFTER	MJ
25	U +	.6	SOLDERING	8/5/04
26	U −	.6		
27	I +	.6		
28	I −	.6		
	LBX PS4			
29	U +	.6		
30	U −	.6		
31	I +	.6		
32	I −	.5		

Multimeter Make and MTM Serial Number: FLUKE 85 47700002

Test Report Form TR-1020A
Rev. B

Meyer Tool & Mfg., Inc.
4601 SOUTHWEST HWY., OAK LAWN, ILLINOIS 60453
708 / 425-9080
FAX 708 / 425-2612

CONTINUITY TESTING
MTM-MP-1020

Function Designator, Tag or Description		Resistance ohms	Assembly Step	By Date
CERAMASEAL	LBX PS3		AFTER POTTING	J.K. MJ 8/6/04
18866-01-W				
25	U+	.6		
26	U-	.6		
27	I+	.6		
28	I-	.6		
	LBX PS4			
29	U+	.6		
30	U-	.6		
31	I+	.6		
32	I-	.6		

Multimeter Make and MTM Serial Number: FLUKE 85
47900002

Test Report Form TR-1020A
Rev. B