

DEC 19, 83

19-273353

PROPERTY OF
ROCKBESTOS-SURRENANT
ENGINEERING DEPT.

SEE ALSO - A3258040
SIGNAL CRP A3258293

APPLICATION

NEXTARY

USED ON

MSR

REVISIONS

NOV	DESCRIPTION	DATE	APPROVED
A	Revised per CN 362-1024 Chg: [unclear] CHK: [unclear]	18 Sept 1983	[Signature]
B	Revised per CN 362-1042 Chg: [unclear] CHK: [unclear]	5 NOV 1983	[Signature]
C	Revised per CN 362-1069 Chg: [unclear] CHK: [unclear]	1983	[Signature]
D	Revised per CN 362-1183 Chg: [unclear] CHK: [unclear]	1983	[Signature]
E	Revised per CN 429-4000 Chg: [unclear] CHK: [unclear]	1983	[Signature]
F	CN 429-4101, CODE C PROP RIGHTS EXP. AT CONCLUSION OF CNTR K013. Chg: [unclear] CHK: [unclear]	08-01-15 1983	[Signature]
G	CN 429-4128, CODE C Chg: [unclear] CHK: [unclear]	08-05-08 1983	[Signature]

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SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REV	G	E	E	E	E	B	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E

REVISION RECORD STATUS OF SHEETS

UNLESS OTHERWISE SPECIFIED

CONTRACT NO. DAB07-86-C-X022

DIMENSIONS ARE IN INCHES

Systems: **ETS** Federal Systems Division
QTE Government Systems Corporation
Needham Heights, Massachusetts

TOLERANCES ANGLES: 2 PL DEC 2 3 PL DEC 2

CABLE, SPECIAL PURPOSE, ELECTRICAL

FORM 780 ED A1

SIZE: **A** FSCM NO. **67032** DWG NO. 19-2733517 SHEET 1 OF 7

NOTES

SEP 23 1992

1. Item: Cable, special purpose, Electrical (twisted pair, shielded and unshielded)
2. Description: The cable shall comply with the requirements of MIL-C-55021 with the additions and exceptions specified herein. For unshielded - unjacketed cables, see Table I. For shielded - jacketed cables, see Table II.
 - 2.1 Individual Conductors: Irradiation crosslinked polyethylene insulated stranded tin coated copper wire conforming to MIL-W-16070/14.
 - 2.1.1 Wire size: See Tables I and II
 - 2.1.2 Stranding: See Tables I and II
 - 2.1.3 Insulation Color: One black (note: Black may appear gray due to irradiation process) and one white in each pair.
 - 2.2 Length of Twist: See Tables I and II
 - 2.3 Shield: The twisted pair cables specified in Table II shall be covered with a single braid type shield of No. 36 AWG of tinned copper wire.
 - 2.3.1 Braid angle: 39° nominal
 - 2.3.2 Minimum Electrical Coverage: 80 percent
 - 2.3.3 Filler: Flame retardant foam polypropylene fillers as required.
 - 2.4 Outer Jacket: Each shielded twisted pair cables, as specified in Table II shall be covered with an outer jacket of irradiated crosslinked polyethylene.
 - 2.4.1 Jacket Thickness: See Table IV
 - 2.4.2 Color: Black
 - 2.5 Overall Dimensions: See Tables I and II
 - 2.6 Working Voltage: 600 volts
 - 2.7 Dielectric Withstanding Voltage: 2.0kV
 - 2.8 Temperature Range: -55°C to +135°C



SIZE:	A	CAGE	67032	DRAWING NO.	19-2733817
	SCALE: NONE				

2.9

Marking: Cable identification shall be clearly and legibly marked at intervals of one to three feet on the outer surface of the outer jacketed cable. A marker tape may be used in lieu of surface marking due to irregular outer jacketed cable shape. Peel marking shall be acceptable in lieu of cable marking for unshielded-in-jacketed and shielded-jacketed cables.

- a) Manufacturer's name or identification
 b) Manufacturer's part number

3. Lot Conformance Testing: The manufacturer shall be responsible for assuring compliance to all requirements of this drawing. Minimum testing on each lot shall consist of the acceptance tests of MIL-C-95021.

4. Suggested source(s) of supply

- a) Judd Wire Inc.
 Turners Falls, MA 01376-2699

CAGE No.: 12703

- b) Brand-lex Co.
 Willimantic, CT 06226

CAGE No.: 71124

- c) Delta Surprenant Wire and Cable Inc.
 Clinton, MA 01510

CAGE No.: 90484

5. Manufacturer's Part No.: See Table III

6. Procuring Activity Part No.: See Tables I, II and III

7. Identification of the suggested source(s) of supply hereon is not to be construed as a guarantee of present or continued availability as a source of supply for the item.

SIZE A	CAGE 67012	DRAWING NO. 19-2733517	
		SCALE: NONE	SHEET 3

TABLE 1
(UNSHIELDED- UNJACKETED) CABLES

Producing Activity Part No. 19-2733917	Wire Size (AWG)	Stranding (No. of Strands/AWG)	Length of Twist (Inches)	Overall Dimensions - DIA. (Inches-Nominal)
-1	30	7/38	2.0 ±0.5	0.064 ±.008
-2	28	7/36		0.070 ±.008
-3	26	7/34 OR 19/38	2.5 ±0.5	0.080 ±.008
-4	24	7/32 OR 19/36		0.090 ±.008
-5	22	7/30 OR 19/34	3.5 ±0.5	0.104 ±.010
-6	20	7/28 OR 19/32 OR 10/30		0.120 ±.010
-7	18	7/26 OR 19/30	0.140 ±.010	0.140 ±.010
-8	16	19/29 OR 26/30		0.158 ±.010
-9	14	19/27 OR 41/30	0.206 ±.010	

SIZE	CODE IDENT. NO.	DRAWING NO.
A	67032	19-2733917
SCALE:	NONE	REV. <i>E</i>
		SHEET 4

TABLE II
(SHIELDED - JACKETED CABLES)

Producing Activity Part No. 19-2733517	Wire Size (AWG)	Stranding (No. of Strands/AWG)	Length of TW (Inches)	Overall Dimension - DIA. (Inches-Nominal)
-10	30	7/30	2.0 ±0.5	0.119 ±.010
	28	7/36		0.123 ±.010
-12	26	7/34 or 19/30	2.5 ±0.5	0.133 ±.015
	24	7/32 or 19/36		0.143 ±.015
-14	22	7/30 or 19/34	0.167 ±.015	
-15	20	7/28 or 19/32 or 10/30	2.5 ±0.5	0.183 ±.015
	18	7/26 or 19/30		0.203 ±.015
-17	16	19/29 or 26/30	3.5 ±0.5	0.221 ±.015
	14	19/27 or 41/30		0.249 ±.015

SIZE CODE IDENT. NO. DRAWING NO.

A

67032

19-2733517

SCALE:

NONE

REV.

E

SHEET

5

19-2733517
5

TABLE III - MANUFACTURER'S PART NUMBERS

SEP 23 1992

Projecting Activity Part No. 19-2733517	Judd Wire Div. Part No.	BRAND-REX Part No.	ITT SUPREMAVT Part No.
-1	M0702164	T-12279	2-XMB7360-2RHL
-2	M0702135	T-12280	2-XMB7360-2RHL
-3	M0702166	T-12260	2-XMB7340-2RHL
-4	M0702167	T-12261	2-XMB7320-2RHL
-5	M0702170	T-12281	2-XMB7300-2.5RHL
-6	M0702172	T-12282	2-XMB7280-2.5RHL
-7	M0702174	T-12283	2-XMB7260-2.5RHL
-8	M0702176	T-12284	2-XMB19290-3.5RHL
-9	M0702178	T-12285	2-XMB19270-3.5RHL
-10	M0702180	T-12286	20136
-11	M0702182	T-12287	20137
-12	M0702184	T-12282	20138
-13	M0702186	T-12288	20139 L-G02024-000 631PES
-14	M0702188	T-12263	20140
-15	M0702190	T-12289	20141
-16	M0702192	T-12290	20142
-17	M0702194	T-12291	20143
-18	M0702196	T-12292	20144

SIZE	CODE IDENT. NO.	DRAWING NO.
A	67032	19-2733517

SCALE:	NONE
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REV.	8	SHEET	6
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TABLE IV - JACKET THICKNESS

Procuring Activity Part No. 19-2733517	Jacket Thickness (Inches - Nominal)	
	JUDS WIRE	BRAND-RSX DELTA SUPPLEMENT
-1		
-2		
-3		
-4		
-5		
-6		
-7		
-8		
-9		
-10	0.015	0.010
-11	0.015	0.010
-12	0.015	0.010
-13	0.015	0.010
-14	0.020	0.010
-15	0.020	0.010
-16	0.020	0.010
-17	0.020	0.010
-18	0.020	0.010

SIZE A	CAGE 67032	DRAWING NO. 19-2733517	
		SCALE: NONE	SHEET 1
REV. E		SHEET 1	