

PAWTUCKET, R.I.

20-35-1130 Entered would be 168/30 net 133/0113

ES-1113, Rev. 2
Date: 11/28/75

* Rev. 2 Changes

MANUFACTURING STANDARD (#18 THRU #6 ONLY)

UL TYPE AVB RE-EXAMINATION-SERVICE APPROVED E-31802

"SWITCHBOARD WIRE" - Asbestos Varnished Cloth Insulated Wire.
Flameproof.

SIZE RANGE

#18 Thru #6AWG
Solid, 7 Str. or Flex. Str.
Tinned Copper unless otherwise
specified.

INSULATION

Sol. & 7 Str. Conductors
(1) 30 Mils Thick. (Tot. 2 Wraps)
V.C. Tape

TEMP. RATING:

90 C

VOLT RATING:

600V.

* MARKERS: (IDENTIFICATION)

1 Black & 1 White Thread
under V.C. Tapes

SPARK VOLTAGE:

6000V.

ASBESTOS:

UL Grade

WAX COMPOUND:

"STD. TOCH" #210-105

COTTON BRAID: (NATURAL)

AWG	MIN. THICK.	MIN. SIZE & PLY
#18-12	.016"	30/2
#10-6	.017"	26/2

OUTER FINISH OVER BRAID:

"STD. TOCH" FLAMEPROOF PAINT
#8384 or Equivalent
(Usually Gray but may be

AWG SIZE

TAPE SIZE
1st. Wrap

TAPE SIZE
2nd. Wrap

#18-Sol. & 7 Str.	1/2"x.007"	1/2"x.007"
#16 " "	1/2"x.007"	1/2"x.007"
#14 " "	1/2"x.007"	3/4"x.007"
#12 " "	5/8"x.007"	3/4"x.007"
#10 " "	1/2"x.010"	5/8"x.010"
#8-Solid	5/8"x.010"	3/4"x.010"
#8-7 Stranded	3/4"x.010"	3/4"x.010"
#6-Sol. & 7 Str.	3/4"x.013"	3/4"x.013"

(2) 20 Mils Thick. WAX IMPREGNATED ASB.
One Layer Only

INSULATION

Flexible Strd. Conductors - 2 Layers Asb.

(1) 10 Mils Thick. WAX IMPREGNATED ASB.

(2) 30 Mils Thick. (Tot. 2 Wraps) V.C. TAPE

AWG SIZE

TAPE SIZE
1st Wrap

TAPE SIZE
2nd Wrap

#18 16/30	1/2"x.007"	1/2"x.007"
#16 26/30	1/2"x.007"	1/2"x.007"
#14 41/30	5/8"x.007"	3/4"x.007"
#12 65/30	1/2"x.010"	3/4"x.010"
#10 104/30	5/8"x.010"	3/4"x.010"
#8 133/.0113	1"x.010"	1"x.010"
#6 133/.0140	3/4"x.013"	3/4"x.013"

(3) 15 Mils Thick. WAX IMPREGNATED ASB
#14 thru #6 0059

20 Mils Thick. WAX IMPREGN.

AMERICAN INSULATED WIRE CORP.
PAWTUCKET, R.I.

-2-

ES-1113, Rev. 2

DIAMETER TABLES

7 Stranded Conductors - (One Layer Asbestos Insulation)

SIZE	COND LAY	DIA. OVER V.C. TAPE	DIA. OVER ASBESTOS	APPROX. FINAL DIA.
18/7-.0159	3/4"	.108"	.148"	.180"
16/7-.0193	3/4"	.118"	.158"	.190"
14/7-.0242	1"	.134"	.174"	.205"
12/7-.0305	1 1/4"	.152"	.192"	.225"
10/7-.0385	1 1/2"	.176"	.216"	.250"
8/7-.0486	2.0	.206"	.246"	.280"
6/7-.0612	2.9	.264"	.324"	.360"

Flexible Stranded Conductors - (Two Layers Asbestos Insulation)

SIZE	COND. LAY	DIA. OVER ASB. INNER LAYER	DIA. OVER V.C. TAPE	DIA. OVER ASB. OUTER LAYER	APPROX. FINAL DIA.	NYCTA Mark.
18 16/30	1"	.068	.128	.158	.190	
16 26/30	1 1/4"	.080	.140	.170	.205	
35-1072 14 41/30 7/168	1 1/2"	.096	.156	.186	.220	.242
35-1072 12 65/30 7/168	1 1/2"	.115	.175	.205	.240	.270
*10 104/30	1 3/4"	.143	.203	.233	.270	
8 133/.0113	2.5	.189	.249	.279	.315	
5-1170* 8 168/30 7/168	2.5	.189	.249	.279	.315	.331
6 133/.014	3.3	.210	.290	.350	.385	

Solid Conductors - (One Layer Asbestos Insulation)

SIZE	DIA. OVER V.C. TAPE	DIA. OVER ASB.	APPROX. FINAL DIA.
18 Solid	.100"	.140"	.175"
16 "	.111"	.151"	.185"
14 "	.124"	.164"	.200"
35-1480 12 " 7-1-68	.141"	.181"	.220"
10 "	.162"	.202"	.240"
35-1170 8 " 7-1-68	.189"	.229"	.270"
6 "	.242"	.302"	.340"

MARKING: Wire to be tagged & labelled as follows:

1. American Insulated Wire Corp.
2. Size AWG Type AVB 600V NEC STD.
3. Month & Year of Mfr. Footage
4. Black & White Mkr. Thrd.
5. "UL" in a circle with the added wording "Listed Asbestos-Varnished Cloth Insul. Wire 858B"

Changed By: R. Brian

Checked By: J. Finnegan

Q.C. Check: G. Pettit

0060