

NOTES:

- 1. PREPARED IN ACCORDANCE WITH MIL-STD-100A.
- 2. THIS DOCUMENT COVERS A COLORED POLYTETRAFLUOROETHYLENE INSULATED, SINGLE CONDUCTOR ELECTRICAL WIRE, WITH A 200°C MAXIMUM TEMPERATURE RATING AND A MAXIMUM POTENTIAL RATING OF 600 VOLTS RMS.
- 3. REQUIREMENTS.
 - 3.1 DESIGN, CONSTRUCTION AND PHYSICAL DIMENSIONS SHALL BE AS SPECIFIED HEREIN. (SEE TABLE I).
 - 3.2 CONDUCTOR.
 - 3.2.1 WIRE, ELECTRICAL, SOLID ROUND, SOFT OR DRAWN AND ANNEALED COPPER IN ACCORDANCE WITH QQ-W-343, TYPE S. AWG SIZE SHALL BE IN ACCORDANCE WITH TABLE I HEREIN.
 - 3.2.2 COATING. COMMERCIAL PURE SILVER NO LESS THAN 40 MICROINCHES THICK. THE COATING CONTINUITY AND THICKNESS SHALL BE TESTED IN ACCORDANCE WITH ASTM 8298-50T.
 - 3.2.3 CONDUCTOR SHALL PASS THE SOLDERABILITY TEST SPECIFIED IN MIL-STD-202, METHOD 208.
 - 3.3 INSULATION. THE INSULATION SHALL BE EXTRUDED POLYTETRAFLUOROETHYLENE MEETING THE REQUIREMENTS OF MIL-W-16878. DIAMETER OVER INSULATION SHALL BE IN ACCORDANCE WITH TABLE I HEREIN.
 - 3.3.1 INSULATION COLOR. THE COLOR OF THE INSULATION SHALL CONFORM TO MIL-STD-104. THE COLORS LISTED BELOW ARE COVERED BY THIS DOCUMENT (SEE TABLE I):

BLACK	GR. Y
BROWN	BLUE
RED	PURPLE
ORANGE	GRAY
YELLOW	WHITE
 - 3.4 PHYSICAL AND ELECTRICAL REQUIREMENTS SHALL BE AS SPECIFIED IN MIL-W-16878/4, TABLE II.
 - 3.5 MANUFACTURER'S IDENTIFICATION BY COLORED THREAD WILL NOT BE REQUIRED.
 - 3.6 MARKING. SPOOLS OR COILS SHALL BE MARKED WITH THE SPECIFICATION CONTROL DRAWING NO. WITH APPLICABLE DASH NO., MANUFACTURER'S IDENTIFICATION, AND MANUFACTURER'S PART NO.
- 4. QUALITY ASSURANCE PROVISIONS.
 - 4.1 RESPONSIBILITY FOR INSPECTION. THE SUPPLIER SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL INSPECTION REQUIREMENTS SPECIFIED HEREIN. THE SUPPLIER SHALL UTILIZE HIS OWN OR ANY OTHER INSPECTION FACILITIES AND SERVICES ACCEPTABLE TO THE PROCURING ACTIVITY. INSPECTION RECORDS SHALL BE MADE AVAILABLE TO THE PROCURING ACTIVITY WHEN SPECIFIED IN THE CONTRACT OR ORDER.
 - 4.2 QUALITY ASSURANCE INSPECTION SHALL BE IN ACCORDANCE WITH MIL-W-16878/4 EXCEPT THAT IN THE EVENT OF ANY CONFLICT BETWEEN MIL-W-16878/4 INDIVIDUAL PART REQUIREMENTS AND THOSE HEREIN, THE LATTER SHALL GOVERN. THE FINISHED WIRE SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN.
- 5. PREPARATION FOR DELIVERY. LEVEL C IN ACCORDANCE WITH MIL-C-12000 SUPPLIED ON NON-RETURNABLE STEEL SPOOLS OR IN COILS.
- 6. SUGGESTED SOURCES OF SUPPLY:

ITT-SURPRENANT DIVISION
172 STERLING STREET
CLINTON, MASS 01510

CODE IDENT NO. 90484

VENDOR'S ITEM NO. SEE TABLE I.

DASH NO.	COLOR	AWG SIZE	FINISHED WIRE SIZE (DIA OVER INSUL)		MAXIMUM CONDUCTOR RESISTANCE (D.C.) OHMS/1000 FT AT 20°C	COLD BEND TEST MANDREL DIA (MAX) INCHES	VEHICLE ITEM NO.
			MIN	MAX			ITT SUPPLIANT-DIVISION
P001	BLACK	28	.029	.039	69.0		WTE 28A (BLACK)
P002	BLACK	26	.032	.043	44.5		WTE 26A (BLACK)
P003	BLACK	24	.036	.048	27.2		WTE 24A (BLACK)
P004	BLACK	22	.041	.054	17.2		WTE 22A (BLACK)
P005	BLACK	20	.048	.062	10.8		WTE 20A (BLACK)
P006	BLACK	18	.056	.074	6.78		WTE 18A (BLACK)
P007	BLACK	16	.067	.087	4.26		WTE 16A (BLACK)
P101	BROWN	28	.029	.039	69.0		WTE 28A (BROWN)
P102	BROWN	26	.032	.043	44.5		WTE 26A (BROWN)
P103	BROWN	24	.036	.048	27.2		WTE 24A (BROWN)
P104	BROWN	22	.041	.054	17.2		WTE 22A (BROWN)
P105	BROWN	20	.048	.062	10.8		WTE 20A (BROWN)
P106	BROWN	18	.056	.074	6.78		WTE 18A (BROWN)
P107	BROWN	16	.067	.087	4.26		WTE 16A (BROWN)
P201	RED	28	.029	.039	69.0		WTE 28A (RED)
P202	RED	26	.032	.043	44.5		WTE 26A (RED)
P203	RED	24	.036	.048	27.2		WTE 24A (RED)
P204	RED	22	.041	.054	17.2		WTE 22A (RED)
P205	RED	20	.048	.062	10.8		WTE 20A (RED)
P206	RED	18	.056	.074	6.78		WTE 18A (RED)
P207	RED	16	.067	.087	4.26		WTE 16A (RED)
P301	ORN	28	.029	.039	69.0		WTE 28A (ORN)
P302	ORN	26	.032	.043	44.5		WTE 26A (ORN)
P303	ORN	24	.036	.048	27.2		WTE 24A (ORN)
P304	ORN	22	.041	.054	17.2		WTE 22A (ORN)
P305	ORN	20	.048	.062	10.8		WTE 20A (ORN)
P306	ORN	18	.056	.074	6.78		WTE 18A (ORN)
P307	ORN	16	.067	.087	4.26		WTE 16A (ORN)
P401	YEL	28	.029	.039	69.0		WTE 28A (YEL)
P402	YEL	26	.032	.043	44.5		WTE 26A (YEL)
P403	YEL	24	.036	.048	27.2		WTE 24A (YEL)
P404	YEL	22	.041	.054	17.2		WTE 22A (YEL)
P405	YEL	20	.048	.062	10.8		WTE 20A (YEL)
P406	YEL	18	.056	.074	6.78		WTE 18A (YEL)
P407	YEL	16	.067	.087	4.26		WTE 16A (YEL)
P501	GRN	28	.029	.039	69.0		WTE 28A (GRN)
P502	GRN	26	.032	.043	44.5		WTE 26A (GRN)
P503	GRN	24	.036	.048	27.2		WTE 24A (GRN)
P504	GRN	22	.041	.054	17.2		WTE 22A (GRN)
P505	GRN	20	.048	.062	10.8		WTE 20A (GRN)
P506	GRN	18	.056	.074	6.78		WTE 18A (GRN)
P507	GRN	16	.067	.087	4.26		WTE 16A (GRN)
P601	BLUE	28	.029	.039	69.0		WTE 28A (BLUE)
P602	BLUE	26	.032	.043	44.5		WTE 26A (BLUE)
P603	BLUE	24	.036	.048	27.2		WTE 24A (BLUE)
P604	BLUE	22	.041	.054	17.2		WTE 22A (BLUE)
P605	BLUE	20	.048	.062	10.8		WTE 20A (BLUE)
P606	BLUE	18	.056	.074	6.78		WTE 18A (BLUE)
P607	BLUE	16	.067	.087	4.26		WTE 16A (BLUE)
P701	PRP	28	.029	.039	69.0		WTE 28A (PRP)
P702	PRP	26	.032	.043	44.5		WTE 26A (PRP)
P703	PRP	24	.036	.048	27.2		WTE 24A (PRP)
P704	PRP	22	.041	.054	17.2		WTE 22A (PRP)

WTE
A
GIV
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WTE


TABLE 1 (CONTINUED)

DASH NO.	COLOR	AWG SIZE	FINISHED WIRE SIZE (DIA OVER INSUL)		MAXIMUM CONDUCTOR RESISTANCE (D.C.) OHMS/1000 FT AT 20°C	COLD BEND TEST MANDREL DIA (MAX) INCHES	VENDOR ITEM NO.
			MIN	MAX			ITT SURPRENANT DIVISION
P705	PRP	20	.048	.062	10.8	↑	WTE 20A (PRP)
P706	PRP	18	.056	.074	6.78		WTE 18A (PRP)
P707	PRP	16	.067	.087	4.26		WTE 16A (PRP)
P801	GRAY	28	.039	.039	69.0		WTE 28A (GRAY)
P802	GRAY	26	.032	.043	44.5		WTE 26A (GRAY)
P803	GRAY	24	.036	.048	27.2		WTE 24A (GRAY)
P804	GRAY	22	.041	.054	17.2	WTE 22A (GRAY)	
P805	GRAY	20	.048	.062	10.8	WTE 20A (GRAY)	
P806	GRAY	18	.056	.074	6.78	WTE 18A (GRAY)	
P807	GRAY	16	.067	.087	4.26	WTE 16A (GRAY)	
P901	WHITE	28	.029	.039	69.0	↓	WTE 28A (WHT)
P902	WHITE	26	.032	.043	44.5		WTE 26A (WHT)
P903	WHITE	24	.036	.048	27.2		WTE 24A (WHT)
P904	WHITE	22	.041	.054	17.2		WTE 22A (WHT)
P905	WHITE	20	.048	.062	10.8		WTE 20A (WHT)
P906	WHITE	18	.056	.074	6.78		WTE 18A (WHT)
P907	WHITE	16	.067	.087	4.26		WTE 16A (WHT)

S273MRI36

S273MRI36

DESIGN ACTIVITY TRANSFERRED TO CODE IDENT 50007
 SPECIFICATION CONTROL DRAWING

QTY REQD	CODE IDENT NO.	PART NO. OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FINISH
			WIRE, ELECTRICAL, SOLID CONDUCTOR, PTFE INSULATED	
PARTS LIST				
		 RAYTHEON COMPANY LEXINGTON, MASS. 02178		
DRAWING TITLE				
WIRE, ELECTRICAL, SOLID CONDUCTOR PTFE INSULATED				
SIZE	CODE IDENT NO.	DRAWING NO.		
D	49956	S273MRI36		
SCALE NONE				SHEET

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES: ANGLES ± —
 FRACTIONS ± —
 3 PLACE DECIMALS ± —
 2 PLACE DECIMALS ± —
 1 PLACE DECIMALS ± —
 MATERIAL:

Blue