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MAPSCO CHANGE ORDER – Specification Job Analysis

[REFER TO LMSSC 2.3.5-T4-MPeng-1.1-S]

DOCUMENT NUMBER, REVISION, AND TITLE		EXPANDABLE BRAIDED SLEEVING	
MD 1009 E			
FUNDING SOURCE ADC	REQUESTED BY Recommendation from MP11567-1	CHANGE REQUEST EPDM CA 0438242 TechOps/MAPSCO/SAD	
IMPLEMENTING ENGINEER J. L. Hua	SUBJECT MATTER EXPERT ENGINEER J. L. Hua	MAPSCO CHAIRMAN H. A. Costes	
RESPONSE SCHEDULE	EFFECTIVITY (THE DATE THIS REVISION SHALL BE IN EFFECT AND USE SHALL COMMENCE.)		
<input type="radio"/> 10-DAY <input checked="" type="radio"/> 3-DAY	FOR OUT-OF-HOUSE USAGE, EFFECTIVE UPON RELEASE. FOR IN-HOUSE USAGE, THE EFFECTIVITY OF THIS REVISION IS THE DATE THAT THE APPLICABLE MPS IS APPROVED. USE THE PREVIOUS REVISION UNTIL THIS REVISION BECOMES EFFECTIVE.		
<input type="radio"/> EMERGENCY	CONFORMANCE (THE DATE BY WHICH ALL IMPACTED ORGANIZATIONS SHALL HAVE COMPLETED ALL DOCUMENTS OR OTHER ACTIONS REQUIRED BY THIS CHANGE)		
	CONFORMANCE DATE OF THE EPS SHALL BE 06/07/07.		
IMPACT (Severity)			
 SEVERITY LEVEL: GREEN <ul style="list-style-type: none"> ● EPS-22-645 			
<p>RED: Significant impact; current inventories must be determined, non-conformance created, material impounded and dispositioned; or processes must be shut down, non-conformance created and dispositioned; procurements must be cancelled; drawings in release must be stopped.</p> <p>YELLOW: Medium impact; current material inventories must be impounded for possible retesting, relabeling, dispositioned if non-conforming, etc.; processes and instructions modified; procurements must be reviewed; certifications possibly modified; engineering usage must be reviewed.</p> <p>GREEN: No impact to current inventories or production; possible minor impact to documents or drawing.</p>			
REASON FOR CHANGE			
<p>Revision generated as a result of Supplier changing their product line. Color classification table will be revised to accurately reflect that change.</p> <p>The "MD 1009-30X2 (white)" product was never bought nor specified on a drawing. This revision changes the description from "MD 1009-30X2 (white)" to "MD 1009-30X2 (tan/natural)".</p>			
<p>See EPDM for all responses (Refer to CA number above). Non-response in EPDM results in the application of 10-day (standard priority), 3-day (high priority), or emergency rules which will constitute approval/no impact. Response is mandatory from reviewers whose names appear in bold type below.</p>			
<p>MANDATORY REVIEWERS: J. Hua (SME), M. Lang (Manufacturing), L. DeHart (MPS), J. Sena (CDO), R. Harpole (Procurement), J. Larson (PCE), F. Seidl (M&P Lab), A. Janto (Material Planning), K. Truong (PA Receiving Inspection), P. Bartholic (PA Supplier Qual)</p> <p>STANDARD REVIEWERS: D. Barilca (Denver Mfg), M. Berg (Ala QA), J. Blyskal (DCMA), B. Boehler (Denver QA), R. Bragg (M&P), T. Brooks (Denver Mfg), W. Brukwinski (FBM/M&P), C. Chappell (M&P), S. Countryman (ERAS), J. Drlik (M&P), C. Fischer (M&P), H. Green (M&P), M. Hanichak (M&P CPC), D. Himmelblau (M&P), K. Jain (M&P), G. Jensen (M&P), L. Kidd (PA/QA), M. Liphardt (Denver Materials), D. Ma (M&P), J. Nunzir (M&P), E. Pense (M&P), B. Petrie (M&P), D. Petrini (PTS&M Procurement), D. Ramirez (THAAD Mfg), N. Rodriguez (Material Planning) J. Spaulding (M&P), T. Stankunas (M&P), T. Van Cleave (FBM/M&P), Y. Wang (Avionics Mfg), R. Willig (DCMA)</p> <p>ADDITIONAL REVIEWERS: T. Tran</p>			

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~~SHAPE
DRAWING~~

MATERIAL
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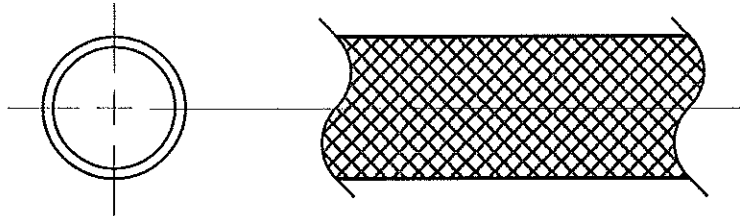
Documentation Lead and MAPSCO Chairman

CONTRACT:
ADC

RELEASE:
EPDM CA 0438242



NOTE: A hard copy of this document may not be the revision currently in effect. The current version is always the version on the Lockheed Martin Intranet.



Material Drawing Classification System

MD 1009- X 0 X X Sleaving

- Color per Table III
- Size per Table II
- Material per Table I
- Material drawing number

Temperature Ratings (A)

-10XX	125 °C
-20XX	150 °C
-30XX	200 °C

(A) For engineering information only; Not to be used for acceptance or rejection.

05-30-07/pas

EXPANDABLE BRAIDED SLEEVING

MD 1009 E

CAGE CODE 06887

SHEET 1 OF 5



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~~SHAPE
DRAWING~~

**MATERIAL
DRAWING**

REQUIREMENTS:

1. Material shall be as specified in Table I (verify during qualification only).
2. The braided sleeving sizes and tolerances shall be as specified in Table II.
3. The color of the sleeving shall be as specified in Table III. -20XX constructions will have a single tracer strand of contrasting color.
4. Workmanship shall be in accordance with highest grades of manufacturing practices covering this material. Material shall be suitable for its intended use and shall be free of defects detrimental to its function.
5. Marking: Each spool shall be identified with MD 1009 and applicable classification.
6. Length: Unless specified otherwise, continuous length shall be supplied and no length shall be less than 100 feet for all sizes specified in Table II.

TABLE I. MATERIAL

Classification	Material
-10XX	Polyester which approximates the major infrared absorption bands shown in Figure 1 when tested in accordance with ASTM E 168.
-20XX	E-CTFE fluoropolymer (Halar®)
-30XX	guard strands of PEEK (polyetheretherketone) and support strands of PPS (polyphenylene sulfide)

TABLE II. CONSTRUCTION DETAILS

Type	Nominal Inside Diameter (Inch)	Inside Diameter Range (Inch)		Wall (A) Thickness (Inch) Nominal	Weight (A) (lb/100ft) Nominal		
		Min	Max		-10XX	-20XX	-30XX
-X01X	1 3/4	1 1/4	2 3/4	.025	2.7	3.8	1.8
-X02X	1 1/4	3/4	1 3/4	.025	1.6	2.3	1.6
-X03X	3/4	1/2	1 3/8	.025	1.2	1.8	1.2
-X04X	1/2	1/4	7/8	.025	0.8	1.2	0.8
-X05X	1/4	1/8	1/2	.025	0.24	0.40	0.3
-X06X	1/8	3/32	1/4	.025	0.16	0.27	0.1

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CAGE CODE 06887		SHEET 2 OF 5

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~~SHAPE
DRAWING~~

MATERIAL
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TABLE III. COLOR

Dash Number	Color
-10X1	Black
-10X2	Tan (Natural)
-10X3	Red
-20X1	Black with White Tracer
-20X2 ¹	Tan (Natural)
-20X4	White with Black Tracer
-30X1	Black
-30X2 ¹	Tan (Natural)

Notes:

- 20X2 is no longer available for new design.
 -30X2 in white is no longer available for new design.

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EXPANDABLE BRAIDED SLEEVING

MD 1009 E

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SHEET 3 OF 5

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MATERIAL
DRAWING

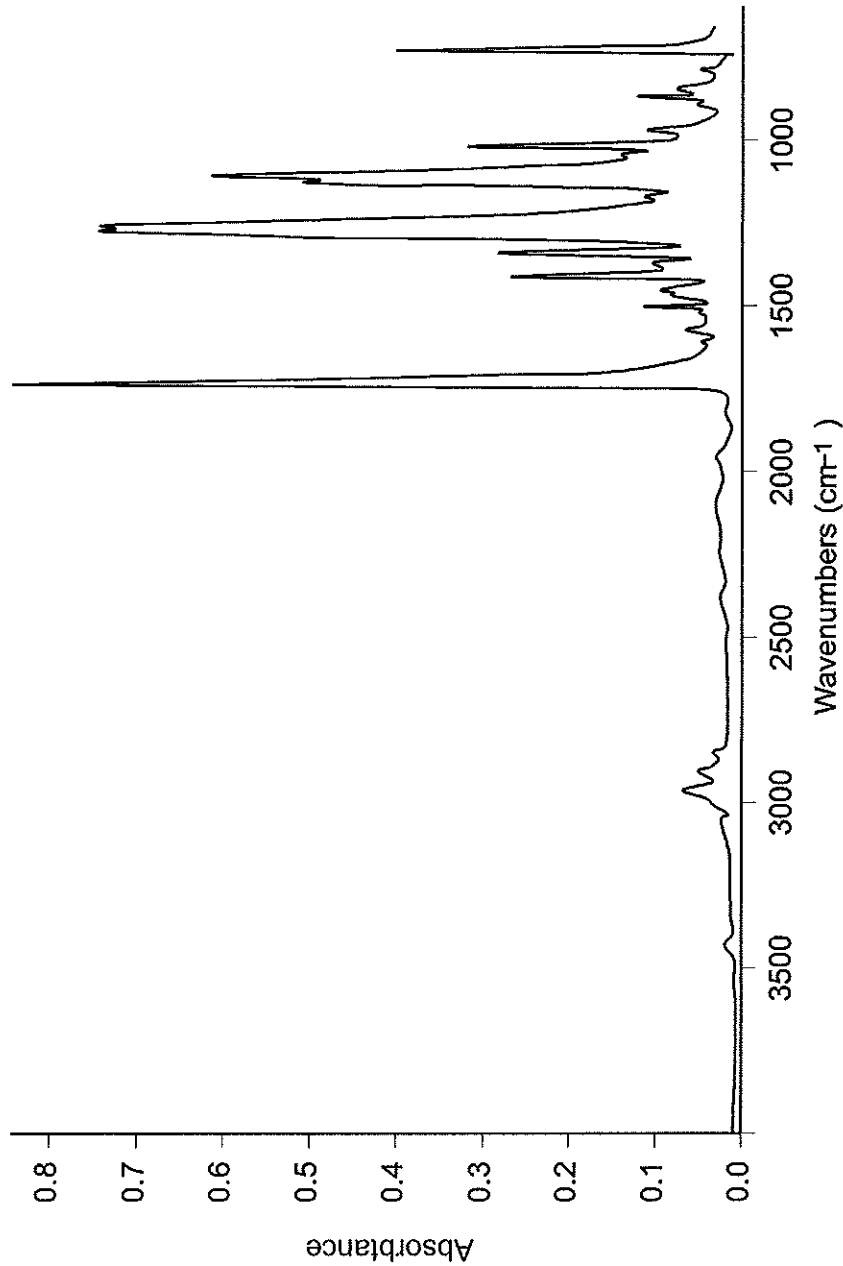


FIGURE 1. INFRARED SPECTRUM (FOR -10XX ONLY)

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EXPANDABLE BRAIDED SLEEVING

MD 1009 E

SHEET 4 OF 5

NOTES:

1.1 Intened Use

1. The expandable braided sleeving is intended for a use as a tough physical protection over wires, cables, hoses, tubes, bundles and harnesses.
2. The expandable braided sleeving is capable of expanding up to three times its initial diameter.

1.2 Supersession. For classifications with supersessions, the superseding drawing is interchangeable with the cancelled drawing in all known applications. Design disclosure documentation referencing the superseded drawing need not be revised to call out the superseding drawing.

TABLE IV. SUPERSESSION DATA

Cancelled / Superseded Designation	New Designation
MD 1035-0100	MD 1009-2012
MD 1035-0200	MD 1009-2022
MD 1009-0XX	MD 1009-10XX

1.3 Changes. The technical and selected non-technical changes to this specification are indicated by changebars in the margin (not applicable on original document).

1. Revision "A" added a red color (-X0X3).
2. Revision "B" added natural and clear to -X0X2 color requirement and updated format of Figure 1, Infrared Spectrum.
3. Revision "C" expanded dash number to include material designation. Two new materials added.
4. Revision "D" updated Table III color.
5. Revision "E" updated Table III color.