



RELEASE NUMBER	REV LTR	REVISION DESCRIPTION	BY	DATE	APPD
P51145-01	-	INITIAL RELEASE	WJC	04/11/16	CMR
P53369-01	A	UPDATED PART NUMBER TO -XYZ	W2T	05/08/17	CMR

DELIVERY MUST CONFORM EXACTLY WITH DRAWING SPECIFICATIONS AND, WHERE REQUIRED BY Q.A., WITH APPROVED Q.A. SAMPLES. ABSOLUTELY NO CHANGES ARE PERMITTED WITHOUT PRIOR APPROVAL BY DTNA. THIS INCLUDES CHANGES TO: SOFTWARE, MATERIALS, INTERNAL COMPONENTS, MANUFACTURING PROCESSES.

1. SUPPLIER: FEDERAL MOGUL/BENTLEY HARRIS
2. SUPPLIER P/N: 1656503216MXXXX, WHERE 'XXXX' IS THE LENGTH IN MILLIMETERS.
3. DAIMLER DASH NO. INDICATES HEAT SLEEVE LENGTH IN CENTIMETERS WITH 5CM INCREMENTS. MINIMUM LENGTH IS 10CM

EXAMPLE: -045 IS FEDERAL MOGUL P/N 1656503216M0450 AND HAS A LENGTH OF 45 CENTIMETERS.

ITEM NUMBER 04-33225-XYZ	DESCRIPTION HEAT SLV, REFLEX WRAP	DAIMLER		Daimler Trucks North America		
		THE INFORMATION CONTAINED HEREIN IS PROPRIETARY DATA, AND IS NOT FOR DISSEMINATION OR DISCLOSURE, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUBMITTED, EXCEPT AS AUTHORIZED IN WRITING BY DAIMLER TRUCKS NORTH AMERICA LLC (DTNA)				
		MATERIAL APPROVAL	DATE	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME Y14.5M- 1994, WITH EXCEPTION PER DTNA 09ENG-WI037		
		N/A	N/A			
		DRAWN BY	DATE			
		W.CONNELLY	04/11/16			
		CHECKED BY	DATE	THIRD ANGLE PROJECTION  		
		C.RIEFLIN	04/11/16			
		RESPONSIBLE ENGINEER	DATE			
		W.CONNELLY	04/11/16			
APPROVED BY	DATE	UNITS OF MEASURE MM				
C.RIEFLIN	04/11/16					
HEAT SLV, REFLEX WRAP 1463 SERIES						
SUPPLEMENTAL DESCRIPTION 23W02						
ITEM/DRAWING NUMBER 04-33225			REVISION LETTER A	PAGE 1 of 2		

4			3			2	1
FEDERAL-MOGUL SPEC. #	REFERENCE DIAMETER (mm)	DEGREE OF OVER WRAP	SUBSTRATE SPEC. #	FLEXIBLE ALUMINUM FILM SPEC. #	CLOSURE FLAP SPEC. #	REV	
1656501016	10	60° ±45°	97011003	9070800	9070469	C	
1656501316	13	60° ±45°	97011303	9070801	9070469	C	
1656501916	19	60° ±45°	97011903	9070802	9070469	C	
1656502516	25	60° ±45°	97012503	9070803	9070469	C	
1656503216	32	60° ±45°	97013203	9070804	9070806	G	
1656503816	38	60° ±45°	97013803	9070805	9070806	F	

REV	DESCRIPTION	DATE	BY
REL	INITIAL RELEASE	10/13/03	BT
A	THICKNESS NOTE REMOVED	8/5/04	JT
B	THERMAL RESISTANCE CLARIFIED, CHANGED FROM NO DELAMINATION TO EXPOSURE OF FIBERGLASS	11/22/04	BT
C	TAPE OVERLAP DIMENSION REMOVED	2/17/05	BT
D	UPDATED BORDER, REMOVED mm DIMENSION NOTE, UPDATED NOTES, PER ECRN TX-201	8/8/06	BTR
E	NOTES 4 & 8 REVISED, DIAGRAM ROTATED AND FLIPPED, PER ECRN TX-237	10/13/06	JAS
F	38mm SIZE ADDED, DIAGRAMS UPDATED, NOTE 3 ADDED, ECRN TX-323	1/23/07	JAS
G	32mm SIZE ADDED, ECRN TX-779	6/25/09	DAR
H	REMOVED "S" & "E" CONTINUOUS LENGTHS, ECRN TX-822	11/9/09	BTR
I	50MM CUT LENGTH, ECRN TX-837	2/23/2010	BTR

D

D

C

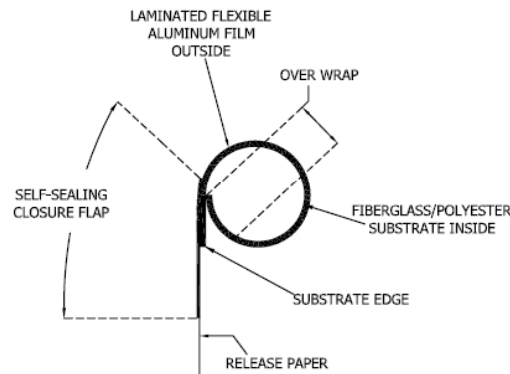
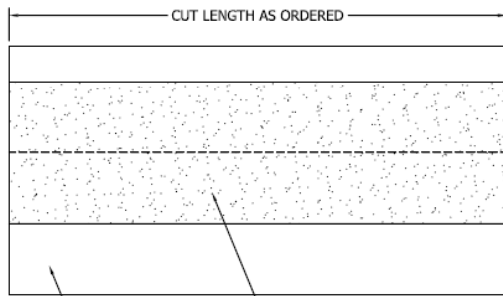
C

B

B

A

A



SELF-SEALING CLOSURE FLAP
EXTENDS 12.7 ± 2.0 BEYOND SUBSTRATE EDGE FOR Ø10-25 SLEEVES
EXTENDS 19.1 ± 2.0 BEYOND SUBSTRATE EDGE FOR Ø32 & 38 SLEEVES

RELEASE PAPER
EXTENDS 12.7 ± 2.0 BEYOND FLAP FOR Ø10-25 SLEEVES
EXTENDS 19.1 ± 2.0 BEYOND FLAP FOR Ø32 & 38 SLEEVES

NOTES:

- REFLEXWRAP 1463 IS A SELF-WRAPPING SLEEVE COMPRISED OF WOVEN FIBERGLASS AND POLYESTER FABRIC FACED WITH ALUMINUM FLEXIBLE FILM. A SELF-SEALING ADHESIVE TAPE WITH RELEASE PAPER IS ATTACHED ALONG THE OVER WRAPPING EDGE OF THE SLEEVE AS A CLOSURE FLAP.
- SUBSTRATE DEFINED ACCORDING TO DRAWING 12050
- PRODUCT OFFERED IN CUT PIECES ≥ 51mm IN LENGTH.
- DEGREE OF OVER WRAP IS MEASURED OVER MANDREL SIZE AS SPECIFIED IN REFERENCE DIAMETER.
- PRODUCT TENSILE STRENGTH IN THE WARP DIRECTION IS 113kgf/25.4mm (250lbf/in) MINIMUM PER ASTM D5035.
- PRODUCT IS SELF-EXTINGUISHING PER ASTM D350
- PRODUCT PASSES BH100-003B FLUID RESISTANCE TEST
- PRODUCT DEMONSTRATES NO EXPOSURE OF FIBERGLASS WHEN EXPOSED TO 200°C FOR 6 HOURS PER BH100-502
- FOR DISCRETE CUT LENGTHS, SPEC. NUMBERS WILL HAVE A SUFFIX "M" FOLLOWED BY 4 DIGITS IN UNITS OF mm INDICATING LENGTH.

CUTTING TOLERANCES	
LENGTH (mm)	TOLERANCES
50.0 TO < 76.2	±3.2mm
76.2 TO < 152.4	±4.8mm
152.4 TO < 304.8	±6.4mm
304.8 TO < 914.4	±12.7mm
914.4 TO < 1215.2	±25.4mm
1219.2 TO < 1524	±38.1mm
> THAN 1524	±50.8mm

GEOMETRIC DIMENSIONS & TOLERANCING
IN ACCORDANCE WITH ASME Y14.5M-1994
ANY CHANGE IN PROCESS OR COMPOSITION
REQUIRES PRIOR ENGINEERING APPROVAL



MONITOR PER APPROVED
CONTROL PLAN INITIAL LAYOUT
WITHIN SPEC.



ONGOING CONTROL PER
APPROVED CONTROL PLAN
INITIAL CAPABILITY 3.0
CONSECUTIVE PCS, Cpk > 1.67



ONGOING CONTROL USE SPEC PER
ASAG GUIDELINES, INITIAL
CAPABILITY: 100 CONSECUTIVE
PCS, Cpk > 1.67

APP. ENGINEER	DATE
DAN ROWCOTSKY	2/13/10
DRAWN	DATE
JESS SYKES	01/22/07
TECH. SERVICES	DATE
RAMESH AVULA	2/13/10
MANUFACTURING	DATE
ALDO VALDERRABANO	2/13/10
QUALITY ASSURANCE	DATE
DEANNA HOLGUIN	2/13/10
PRD	DATE
BILL RUBEL	2/13/10

METRIC DRAWING

FEDERAL-MOGUL
SYSTEMS PROTECTION

MANUF. OF BENTLEYHARRIS® PROTECTION PRODUCTS

TITLE:

REFLEXWRAP 1463

DRAWING NO: 11709

241 WELSH POOL ROAD
EXTON, PA 19341-3294
TELEPHONE: (610) 363-2600

SIZE	REVISION
C	I

SCALE: NTS
SHEET 1 OF 1