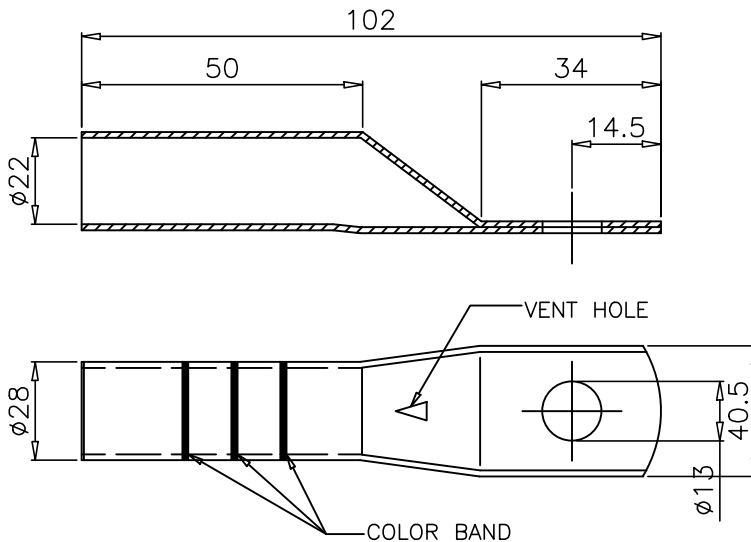


MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 240SQMM X 12 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

- 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

- 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.

- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES

- 5) APPROVAL: UL CERTIFIED.

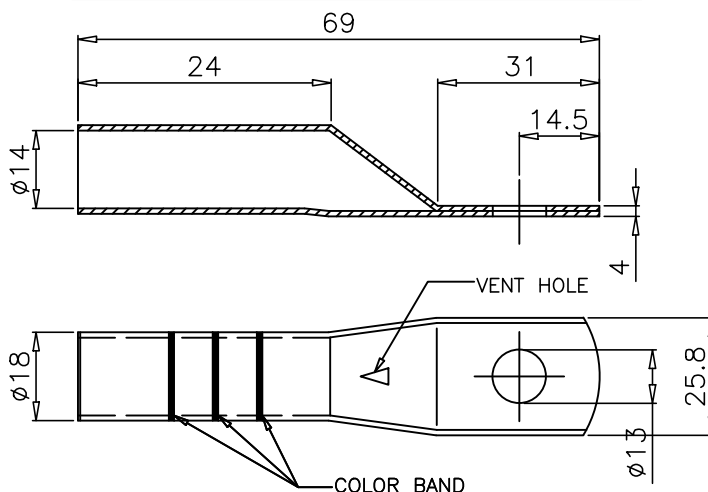
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COPY RIGHT & CONFIDENTIAL THIS DOCUMENT IS THE EXCLUSIVE PROPERTY OF BEML & CONTAINS CONFIDENTIAL INFORMATION. THIS DOCUMENT OR ITS CONTENTS SHALL NOT BE USED, REPRODUCED OR DISCLOSED IN WHOLE OR IN PART, WITHOUT PRIOR WRITTEN PERMISSION OF BEML. THIS DOCUMENT & ALL ITS COPIES SHALL BE RETURNED TO BEML ON DEMAND DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED	MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
			TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
	FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227											
	UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)								QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
	VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.								STATUS:			
	WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96											
<div>COPPER LUG - 185SQMM X 12 STUD</div>												
<div>TECHNICAL REQUIREMENT</div> <div>1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601</div> <div>2) VOLTAGE RATING: 35KV</div> <div>1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG</div> <div>2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES</div> <div>3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.</div> <div>4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES</div> <div>5) APPROVAL: UL CERTIFIED.</div> <div>UN CONTROLLED COPY</div>												
GRADE No.	VALUE	SYMBOL	SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE	COMPANY STD./I.S	Wt. (Kg)			
								MATERIAL				
						PRODUCT	MUMBAI METRO CARS L2 & L7					
						REF DRG						
						MATERIAL						
						HEAT TREAT.	APPD	SYLAJA V	03.12.19			
						SURFACE TREAT.	REVD	K NAGARAJ	03.12.19			
						TITLE	CHKD	DIVYA S	03.12.19			
						Copper lug 185sq mm X 12 stud	DRWN	PALLAVI	03.12.19			
							SCALE		SHEET	Wt.(Kg)		
							NTS		1 OF 1	0		
							DRG No.			ALT		
							525-21961					
SURFACE ROUGHNESS			ALT.NO.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	BEML LIMITED		

FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227		
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)	QUALITY OF WELD JOINTS REF, RD 230 MEDIUM	
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.	STATUS:	
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96		

COPPER LUG - 95SQMM X 12 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

- 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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N1

N2

N3

N4

N5

N6

N7

N8

N9

N10

N11

N12

GRADE No.

VALUE

SYMBOL

SURFACE ROUGHNESS

0.025

0.05

0.1

0.2

0.4

0.8

1.6

3.2

6.3

12.5

25

50

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.

4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES

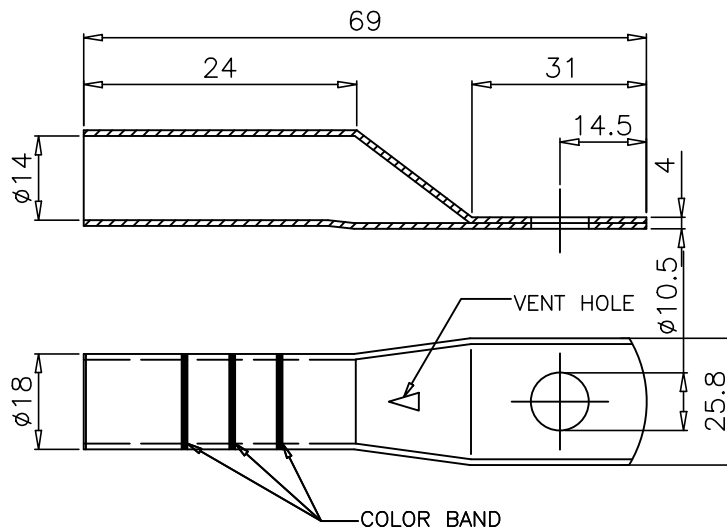
5) APPROVAL: UL CERTIFIED.

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MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 95SQMM X 10 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

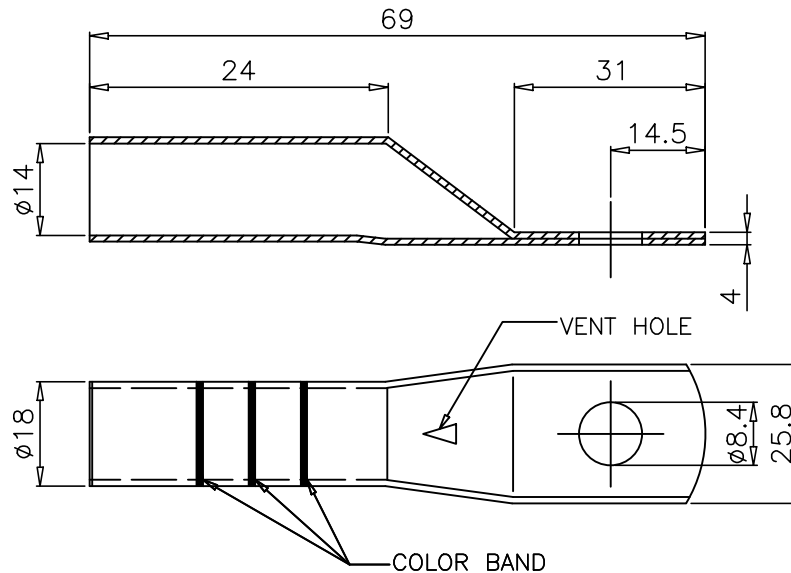
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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
N1	0.025								REF DRG				
N2	0.05								MATERIAL				
N3	0.1								HEAT TREAT.	APPD	SYLAJA V	03.12.19	
N4	0.2								SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
N5	0.4								TITLE	CHKD	DIVYA S	03.12.19	
N6	0.8								Copper lug 95 sq mm X 10 stud	DRWN	PALLAVI	03.12.19	
N7	1.6									SCALE		SHEET	Wt.(Kg)
N8	3.2									NTS		1 OF 1	0
N9	6.3								DRG No.				ALT
N10	12.5								525-21963				0
N11	25								BEML LIMITED				
N12	50												
SURFACE ROUGHNESS													

GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 95SQMM X 8 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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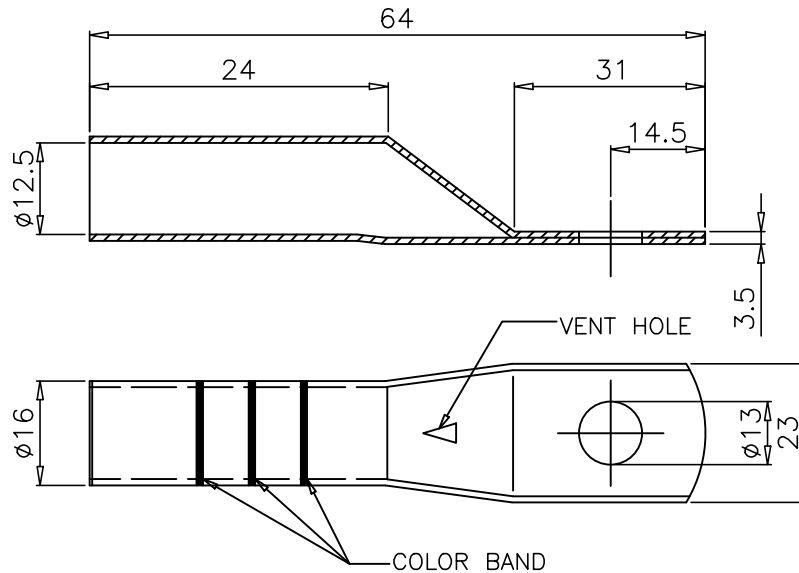
PRODUCT	MUMBAI METRO CARS L2 & L7			
REF DRG				
MATERIAL				
HEAT TREAT.	APPD	SYLAJA V	03.12.19	
SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
TITLE	CHKD	DIVYA S	03.12.19	
Copper lug 95sq mm X 8 stud	DRWN	PALLAVI	03.12.19	
	SCALE	NTS	SHEET	Wt.(Kg)
			1 OF 1	0
DRG No.			ALT	
525-21964			0	



BEML LIMITED

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



COPPER LUG - 70SQMM X 12 STUD



TECHNICAL REQUIREMENT

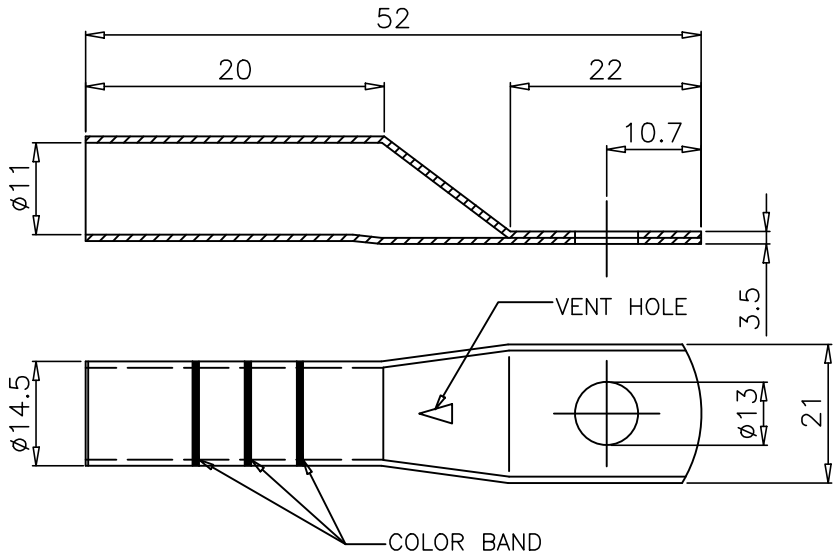
- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238–1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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N8	32	▽	△						PRODUCT	MUMBAI METRO CARS L2 & L7					
N9	6.3								REF DRG						
N10	12.5	▽	△						MATERIAL						
N11	25								HEAT TREAT.	APPD	SYLAJA V	03.12.19			
N12	50	▽	△						SURFACE TREAT.	REVD	K NAGARAJ	03.12.19			
									TITLE	CHKD	DIVYA S	03.12.19			
GRADE No. VALUE	SYMBOL	△							Copper lug 70sq mm X 12 stud	DRWN	PALLAVI	03.12.19			
										SCALE		SHEET	Wt.(Kg)		
										NTS	1 OF 1	0			
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 BEML LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>					DRG No.	525-21965		ALT
															

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 50SQMM X 12 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.

4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES

5) APPROVAL: UL CERTIFIED.

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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
									Copper lug 50 sq mm X 12 stud	DRWN	PALLAVI	03.12.19	
										SCALE		SHEET	Wt.(Kg)
										NTS		1 OF 1	0
SURFACE ROUGHNESS									DRG No.				ALT
									525-21966				
									BEML LIMITED				

COPPER LUG - 50SQMM X 10 STUD



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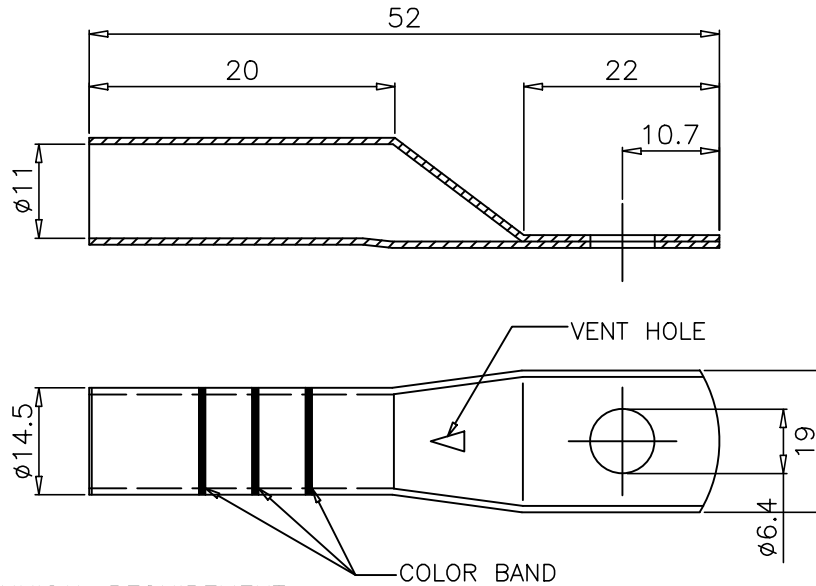
A4

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
	FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227									
	UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)						QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
	VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:			
	WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96									
COPPER LUG - 50SQMM X 8 STUD										
TECHNICAL REQUIREMENT										
1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601										
2) VOLTAGE RATING: 35KV										
1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG										
2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES										
3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.										
4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES										
5) APPROVAL: UL CERTIFIED.										
UN CONTROLLED COPY										
MUMBAI METRO CARS L2 & L7										
REF DRG										
MATERIAL										
HEAT TREAT.										
SURFACE TREAT.										
TITLE										
Copper lug 50 sq mm X 8 stud										
SYLAJA V										
K NAGARAJ										
DIVYA S										
PALLAVI										
SCALE										
NTS										
SHEET										
1 OF 1										
Wt.(Kg)										
0										
DRG No.										
525-21968										
ALT										
0										
BEML LIMITED										
525-21968										

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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 50SQMM X 6 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

UN CONTROLLED COPY

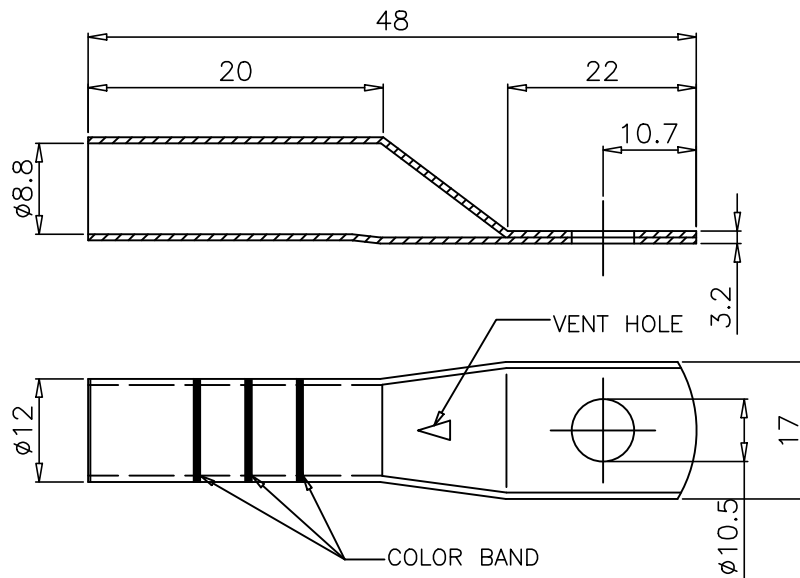
GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
SURFACE ROUGHNESS									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
									Copper lug 50 sq mm X 6 stud	DRWN	PALLAVI	03.12.19	
										SCALE			
										NTS			
										DRG No.			
									BEML LIMITED	SHEET		Wt.(Kg)	
										1 OF 1		0	
										525-21969			
										ALT			
										0			

STATUS:

A4

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 35SQMM X 10 STUD



TECHNICAL REQUIREMENT

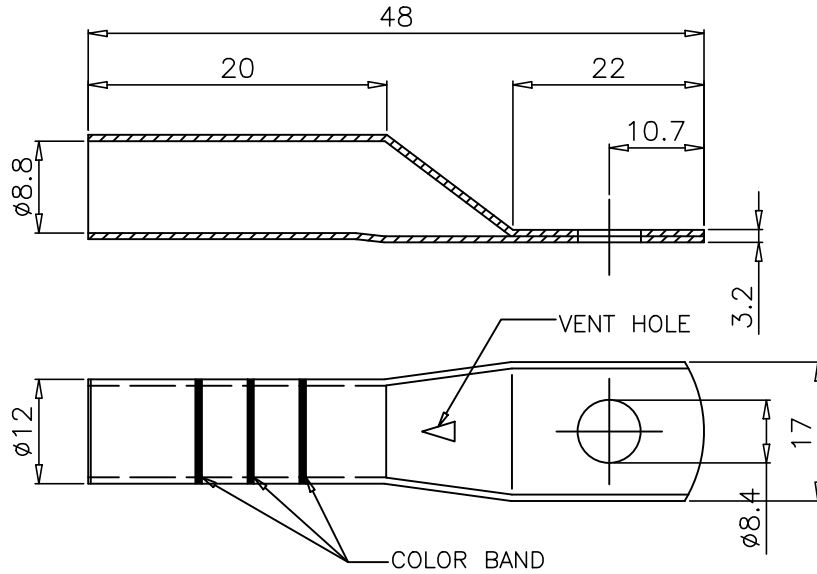
- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

UN CONTROLLED COPY

N8	3.2	▽	△						PRODUCT	MUMBAI METRO CARS L2 & L7				
N9	6.3								REF DRG					
N10	12.5	△	△						MATERIAL					
N11	25								HEAT TREAT.	APPD	SYLAJA V		03.12.19	
N12	50	▽	△						SURFACE TREAT.	REVD	K NAGARAJ		03.12.19	
									TITLE	CHKD	DIVYA S		03.12.19	
										DRWN	PALLAVI		03.12.19	
GRADE No.	VALUE	SYMBOL	△						Copper lug 35sq mm X 10 stud		SCALE		SHEET	Wt.(Kg)
									NTS		1 OF 1	0		
SURFACE ROUGHNESS		ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	BEM LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>		DRG No.		525-21971		ALT

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 35SQMM X 8 STUD



TECHNICAL REQUIREMENT

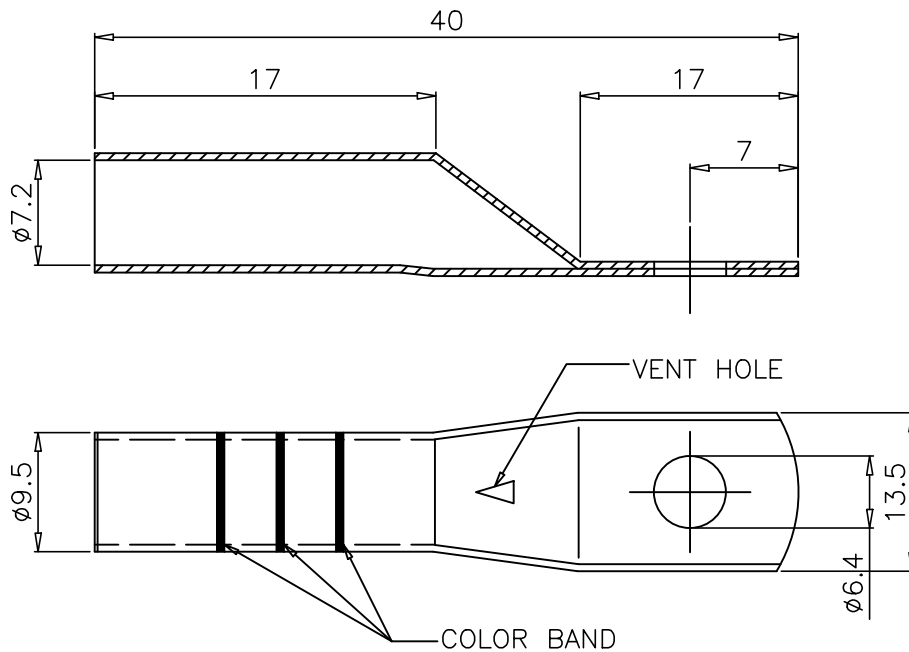
- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

UN CONTROLLED COPY

GRADE No.	VALUE	SYMBOL	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
							REF DRG				
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	MATERIAL				
							HEAT TREAT.	APPD	SYLAJA V	03.12.19	
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
							TITLE	CHKD	DIVYA S	03.12.19	
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	Copper lug 35sq mm X 8 stud	DRWN	PALLAVI	03.12.19	
								SCALE	NTS	SHEET	Wt.(Kg)
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	BEML LIMITED	1 OF 1		0	
								DRG No.		ALT	
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	BEML LIMITED	525-21972		0	

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 25SQMM X 6 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.

- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES

- 5) APPROVAL: UL CERTIFIED.

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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
									Copper lug 25sq mm X 6 stud	DRWN	PALLAVI	03.12.19	
										SCALE	NTS	SHEET	Wt.(Kg)
												1 OF 1	0
										DRG No.	525-21973		ALT
													0

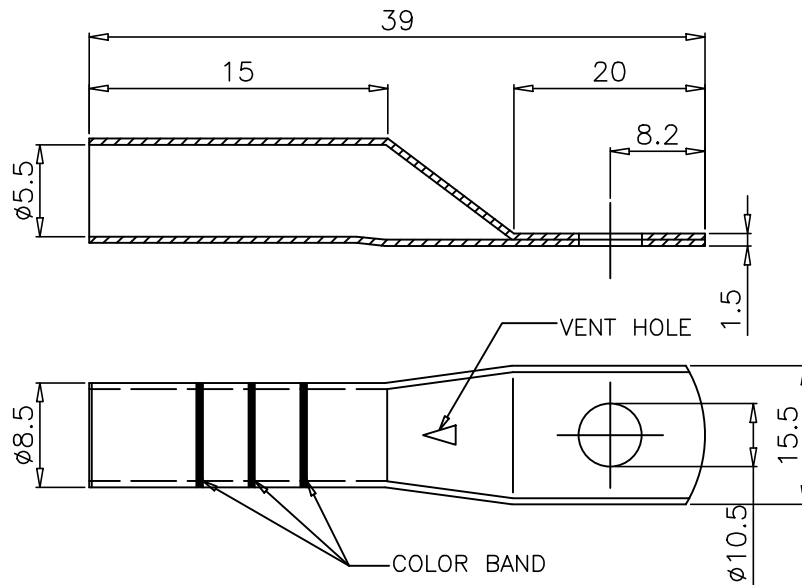


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			TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~	
	FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227												
	UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)								QUALITY OF WELD JOINTS REF, RD 230 MEDIUM				
	VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.										STATUS:		
	WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96												
COPPER LUG - 16SQMM X 12 STUD													
TECHNICAL REQUIREMENT													
1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601													
2) VOLTAGE RATING: 35KV													
1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG													
2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES													
3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.													
4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES													
5) APPROVAL: UL CERTIFIED.													
UN CONTROLLED COPY													
GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
										DRWN	PALLAVI	03.12.19	
									SCALE	SHEET		Wt.(Kg)	
									NTS	1 OF 1		0	
SURFACE ROUGHNESS									DRG No.	525-21974		ALT	
									beml BEML LIMITED		0		

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 16SQMM X 10 STUD



TECHNICAL REQUIREMENT

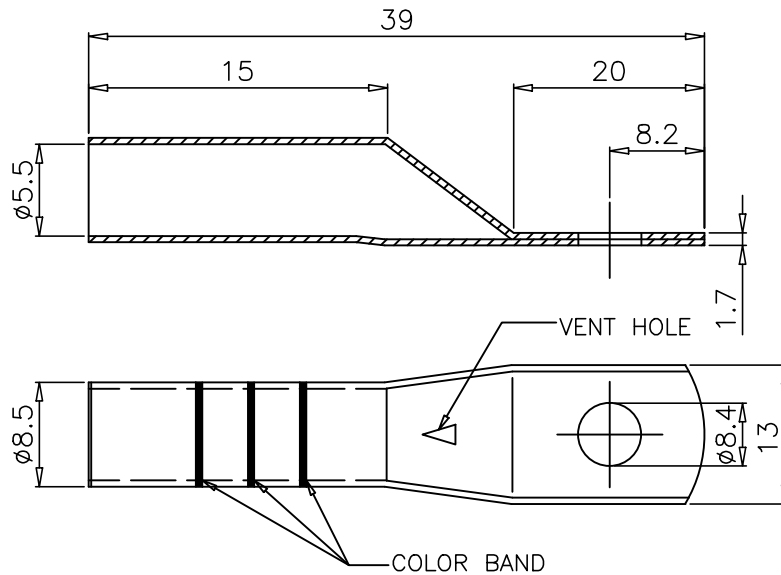
- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
									Copper lug 16sq mm X 10 stud	DRWN	PALLAVI	03.12.19	
										SCALE		SHEET	Wt.(Kg)
										NTS		1 OF 1	0
SURFACE ROUGHNESS									BEML LIMITED				ALT
									525-21975				

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 16SQMM X 8 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7			
									REF DRG				
									MATERIAL				
									HEAT TREAT.	APPD	SYLAJA V	03.12.19	
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19	
									TITLE	CHKD	DIVYA S	03.12.19	
									Copper lug 16 sq mm X 8 stud	DRWN	PALLAVI	03.12.19	
										SCALE		SHEET	Wt.(Kg)
										NTS		1 OF 1	0
SURFACE ROUGHNESS									DRG No.				ALT
									525-21976				

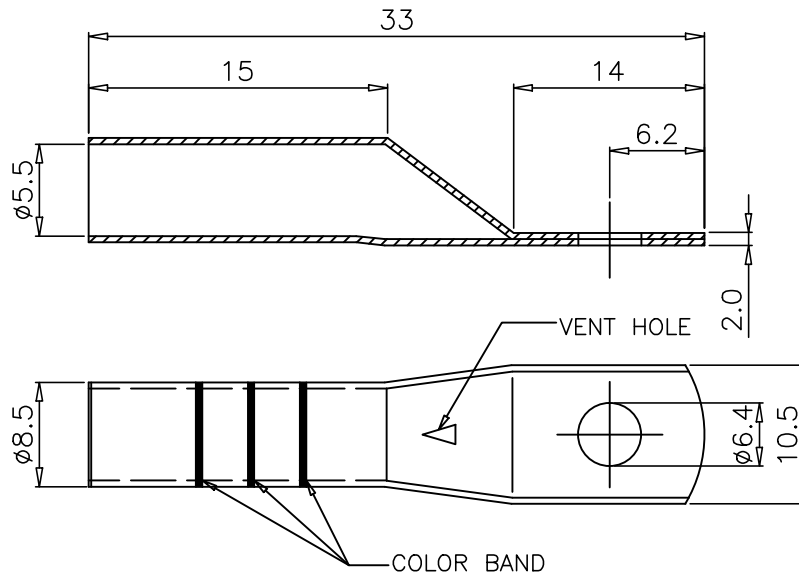


BEML LIMITED

GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	SURFACE ROUGHNESS
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50								

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315–1000	1000–2000	2000–4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



COPPER LUG -16SQMM X 6 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
 - 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
 - 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

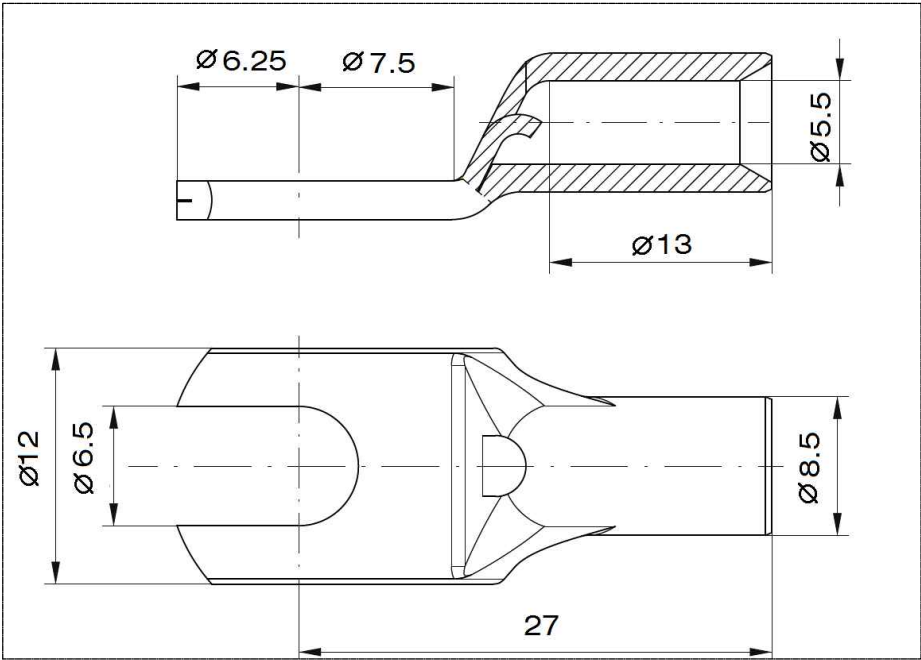
UN CONTROLLED COPY

N8	3.2	▽	△					PRODUCT	MUMBAI METRO CARS L2 & L7						
N9	6.3							REF DRG							
N10	12.5	▽	△					MATERIAL							
N11	25							HEAT TREAT.	APPD	SYLAJA V			03.12.19		
N12	50	▽	△					SURFACE TREAT.	REVD	K NAGARAJ			03.12.19		
	TITLE							CHKD	DIVYA S			03.12.19			
								DRWN	PALLAVI			03.12.19			
GRADE No.	VALUE	SYMBOL	△					Copper lug 16 sq mm X 6 stud							
								SCALE		SHEET	Wt.(Kg)				
								NTS		1 OF 1	0				
								DRG No.						ALT	
								BEML LIMITED						525-21977	
SURFACE ROUGHNESS		ALT.NO.	ECN NO/CHANGES		DATE	BY	CHKD	APPD							

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MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG -16SQMM FORK TYPE



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV
- 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

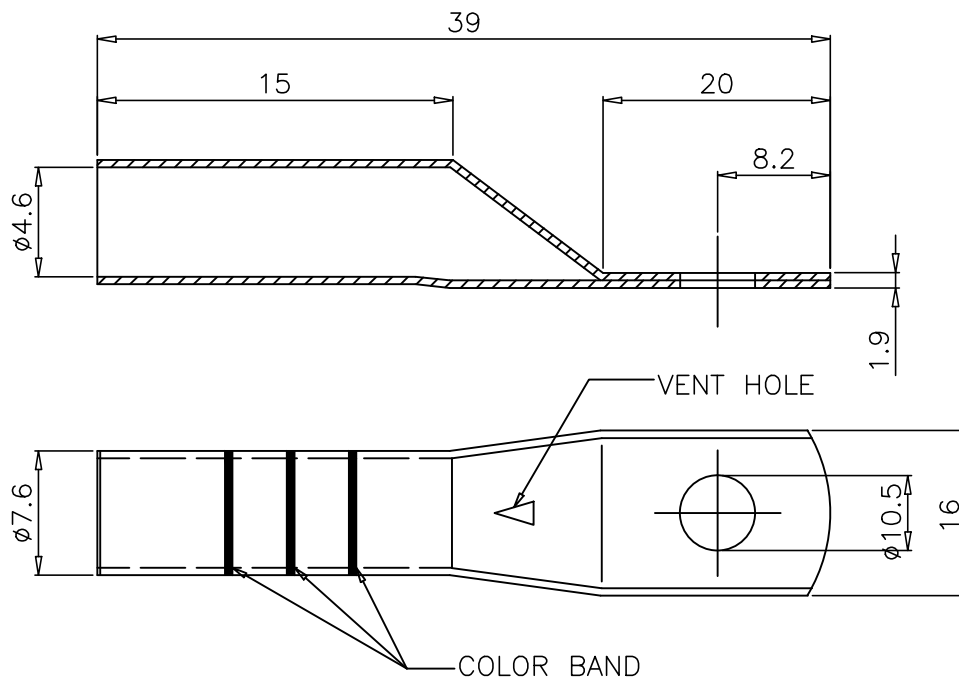
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GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7		
									REF DRG			
SURFACE ROUGHNESS									MATERIAL			
									HEAT TREAT.	APPD	SYLAJA V	03.12.19
									SURFACE TREAT.	REVD	K NAGARAJ	03.12.19
									TITLE	CHKD	DIVYA S	03.12.19
									Copper lug 16 sq mm (FORK TYPE)	DRWN	PALLAVI	03.12.19
										SCALE	1 OF 1	Wt.(Kg)
										NTS	0	
										DRG No.	525-21978	
									BEML LIMITED			ALT
												0

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FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227		
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)	QUALITY OF WELD JOINTS REF, RD 230 MEDIUM	
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.	STATUS:	
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96		

COPPER LUG - 10SQMM X 10 STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

UN CONTROLLED COPY

N8	3.2	SYMBOL						ALT NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7				
N9	6.3													REF DRG					
N10	12.5													MATERIAL					
N11	25													HEAT TREAT.	APPD	SYLAJA V	03.12.19		
N12	50													SURFACE TREAT.	REVD	K NAGARAJ	03.12.19		
GRADE No.	VALUE	SYMBOL											TITLE	CHKD	DIVYA S	03.12.19			
													DRWN	PALLAVI	03.12.19				
													SCALE			SHEET	Wt.(Kg)		
													NTS			1 OF 1	0		
													DRG No.					ALT	
SURFACE ROUGHNESS														525-21979					
BEML LIMITED NEW FRONTIERS. NEW DREAMS																			

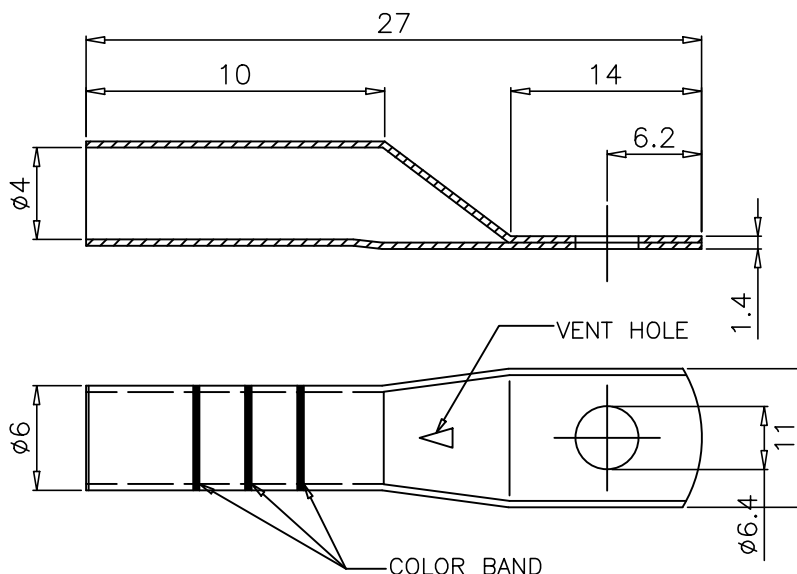
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			TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
	FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227											
	UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)								QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
	VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.								STATUS:			
	WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96											
COPPER LUG - 6SQMM X 8 STUD												
TECHNICAL REQUIREMENT												
1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601												
2) VOLTAGE RATING: 35KV												
1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG												
2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES												
3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.												
4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES												
5) APPROVAL: UL CERTIFIED.												
UN CONTROLLED COPY												
GRADE No.	VALUE	SYMBOL	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	PRODUCT	MUMBAI METRO CARS L2 & L7		
									REF DRG			
									MATERIAL			
									HEAT TREAT.	APPD	SYLAJA V	03.12.19
									SURFACE TREAT.	REVCD	K NAGARAJ	03.12.19
									TITLE	CHKD	DIVYA S	03.12.19
										DRWN	PALLAVI	03.12.19
									SCALE	NTS	1 OF 1	Wt.(Kg)
												0
									DRG No.	525-21980		ALT
									beml BEML LIMITED		0	
SURFACE ROUGHNESS												

UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)	QUALITY OF WELD JOINTS REF. RD 230 MEDIUM
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STATUS:

WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96

COPPER LUG - 6SQMM X 6 STUD







TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

- 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.

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N8	3.2	▽	△					PRODUCT	MUMBAI METRO CARS L2 & L7				
N9	6.3							REF DRG					
N10	12.5	▽	△					MATERIAL					
N11	25							HEAT TREAT.	APPD	SYLAJA V		03.12.19	
N12	50	▽	△					SURFACE TREAT.	REVD	K NAGARAJ		03.12.19	
GRADE No.	VALUE							SYMBOL	TITLE	CHKD	DIVYA S		03.12.19
									DRWN	PALLAVI		03.12.19	
									SCALE		SHEET	Wt.(Kg)	
									NTS		1 OF 1	0	
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD		DRG No.					ALT
								 beml BEML LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>					
								525-21981					

FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227		
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)	QUALITY OF WELD JOINTS REF, RD 230 MEDIUM	
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.	STATUS:	
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96		

Technical drawing of a 100 ml volumetric flask, showing side and top views with dimensions in millimeters.

Side View Dimensions:

- Total height: 27
- Height of the main body: 10
- Height of the neck: 14
- Radius of the neck: 6.2
- Radius of the base: $\phi 4$
- Radius of the bottom: 1.6

Top View Dimensions:

- Radius of the main body: $\phi 6$
- Radius of the neck: $\phi 5.4$
- Radius of the bottom: 10

Labels:

- VENT HOLE
- COLOR BAND

1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

- 1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238—1:2003.
- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.
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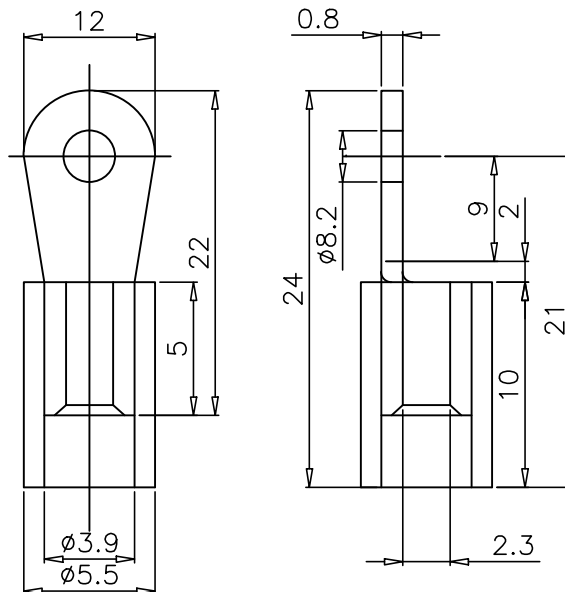
bentley
NEW FRONTIERS. NEW DREAMS.

STATUS:

A4

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:				
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 2.5SQMM X 8 STUD (INSULATED TYPE)



TECHNICAL REQUIREMENT

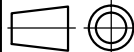
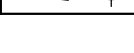


- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES
5) APPROVAL: UL CERTIFIED.
6) FIRE PERFORMANCE : EN45545-2 (HL3)

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N8	32	△	△						PRODUCT	MUMBAI METRO CARS L2 & L7				
N9	6.3								REF DRG					
N10	12.5	△	△						MATERIAL					
N11	25								HEAT TREAT.		APPD	SYLAJA V	03.12.19	
N12	50	△	△						SURFACE TREAT.	REVD	K NAGARAJ	03.12.19		
									TITLE	CHKD	DIVYA S	03.12.19		
									Copper lug 2.5 sq mm X 8 stud (Insulated type)	DRWN	PALLAVI	03.12.19		
GRADE No.	VALUE	SYMBOL	△						SCALE		SHEET	Wt.(Kg)		
									NTS		1 OF 1	0		
SURFACE ROUGHNESS		ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 BEML LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>		DRG No.		ALT		
										525-21984				

COPPER LUG - 1.5SQMM X 6 STUD

Technical drawing of a Copper Lug (1.5SQMM X 6 STUD) showing two views: Front View and Side View.





Front View Dimensions:

- Top width: 10
- Top height: 18
- Bottom width: $\phi 3.2$
- Bottom height: 5

Side View Dimensions:

- Top thickness: 0.8
- Top width: $\phi 6.4$
- Top height: 6
- Top width: 2
- Bottom width: $\phi 1.8$
- Bottom height: 10
- Bottom height: 18
- Bottom width: $\phi 4.8$

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST / ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.
- 6) FIRE PERFORMANCE : EN45545-2 (HL3)

PRODUCT	MUMBAI METRO CARS L2 & L7				
REF DRG					
MATERIAL					
HEAT TREAT.	APPD	SYLAJA V	03.12.19		
SURFACE TREAT.	REVD	K NAGARAJ	03.12.19		
TITLE	CHKD	DIVYA S	03.12.19		
Copper lug 1.5 sq mm X 6 stud	DRWN	PALLAVI	03.12.19		
	SCALE		SHEET	Wt.(Kg)	
	NTS		1 OF 1	0	
 BEML LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>		DRG No.		ALT	
		525-21985			

Technical drawing of a mechanical part, showing front and side views with dimensions.





Front View (Left):

- Overall width: 10
- Overall height: 18
- Bottom section height: 5
- Bottom section diameter: $\phi 3.2$
- Top section features a semi-circular profile.

Side View (Right):

- Overall height: 18
- Overall width: $\phi 4.8$
- Top section height: 0.8
- Section below top section height: 6
- Section below that height: 2
- Section below that height: 10
- Bottom section diameter: $\phi 1.8$
- Internal hole diameter: $\phi 5.2$

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG
- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.
- 4) FIRM TO PROVIDE TYPE TEST / ROUTINE TEST CERTIFICATES
- 5) APPROVAL: UL CERTIFIED.
- 6) FIRE PERFORMANCE : EN45545-2 (HL3)

PRODUCT	MUMBAI METRO CARS L2 & L7				
REF DRG					
MATERIAL					
HEAT TREAT.	APPD	SYLAJA V		03.12.19	
SURFACE TREAT.	REVD	K NAGARAJ		03.12.19	
TITLE	CHKD	DIVYA S		03.12.19	
Copper lug 1.5 sq mm X 5 stud	DRWN	PALLAVI		03.12.19	
	SCALE		SHEET	Wt.(Kg)	
	NTS		1 OF 1	0	
 BEM LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>		DRG No.			ALT
		525-21986			

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TECHNICAL REQUIREMENT

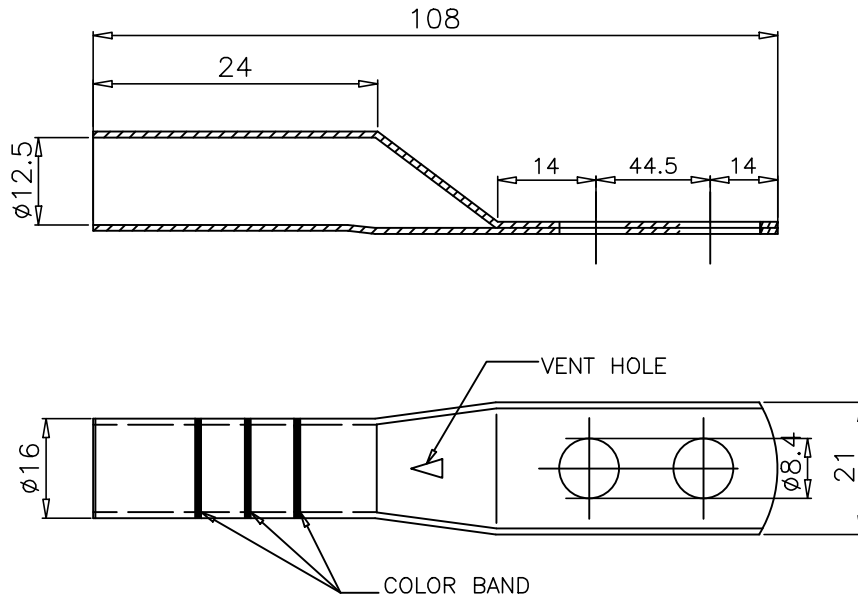
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NEW FRONTIERS. NEW DREAMS.

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

COPPER LUG - 70SQMM X 8 2H STUD



TECHNICAL REQUIREMENT

- 1) MATERIAL: HIGH CONDUCTIVITY COPPER 99.9% AS PER EN 1652:1997 /EN13601
- 2) VOLTAGE RATING: 35KV

1.SIZE AND STUD DIA SHOULD BE MARKED ON THE FRONT SIDE OF THE LUG

2.COLOR CODE TO BE PROVIDED ON THE BARREL FOR EASY SELECTION OF LUGS AND CRIMPING DIES

- 3) APPLICABLE STANDARDS: BS 4579:PART1:1988/IEC 61238-1:2003.

- 4) FIRM TO PROVIDE TYPE TEST/ ROUTINE TEST CERTIFICATES

- 5) APPROVAL: UL CERTIFIED.

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SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE	COMPANY STD./I.S	Wt. (Kg)
N1	0.025					
N2	0.05					
N3	0.1					
N4	0.2					
N5	0.4					
N6	0.8					
N7	1.6					
N8	3.2					
N9	6.3					
N10	12.5					
N11	25					
N12	50					
GRADE No.	VALUE	SYMBOL				
SURFACE ROUGHNESS	ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD
<div> <div> <div>PRODUCT</div> <div>MUMBAI METRO CARS L2 & L7</div> </div> <div> <div>REF DRG</div> <div></div> </div> <div> <div>MATERIAL</div> <div></div> </div> <div> <div>HEAT TREAT.</div> <div></div> </div> <div> <div>SURFACE TREAT.</div> <div></div> </div> <div> <div>TITLE</div> <div>Copper lug 70 sq.mm, 2H 8 stud (DOUBLE HOLE)</div> </div> <div> <div>APPD</div> <div>SYLAJA V</div> <div>08.02.20</div> </div> <div> <div>REVD</div> <div>K NAGARAJ</div> <div>08.02.20</div> </div> <div> <div>CHKD</div> <div>K NAGARAJ</div> <div>08.02.20</div> </div> <div> <div>DRWN</div> <div>PALLAVI</div> <div>08.02.20</div> </div> <div> <div>SCALE</div> <div>NTS</div> <div>1 OF 1</div> <div>Wt.(Kg)</div> <div>0</div> </div> <div> <div>DRG No.</div> <div>525-21995</div> <div>ALT</div> <div>0</div> </div> </div>						
<div> <div>BEML LIMITED</div> <div>525-21995</div> </div>						