

EWCAP 6.5mm X 12.5mm Oval Hole

USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

- Hole is measured on finished part including ecoat or paint process
- Burr not to exceed 20% of material thickness (all around)
- Flat to 0.1mm within 6mm of hole

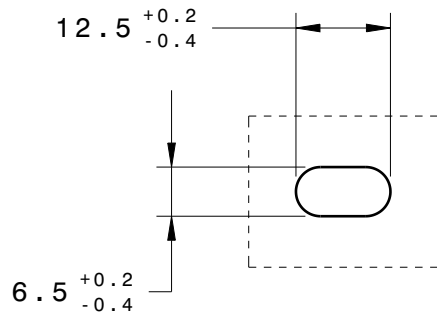
G1

This drawing, or portions of it are controlled by the Electrical Wiring Components Application Partnership (EWCAP) a subgroup of the United States Council for Automotive Research LLC (USCAR LLC).

USCAR is an LLC consisting of members from FCA US LLC, Ford Motor Company and GM Corporation.

Any change to a EWCAP controlled portion of this drawing, including a revision record change must be approved, in writing, by the responsible EWCAP representative from each USCAR member company. Each EWCAP representative authorized to sign for his or her member company is responsible for obtaining all necessary approvals within that company prior to signing for the approval of the change.

EWCAP expressly prohibits any party from changing either any EWCAP controlled portion of this drawing or any associated tooling before receiving approval, signed by the authorized representatives, of the USCAR member companies. Reference to the signed change notice must be entered in the drawing control column.



0.6mm to 4.0mm Thickness to be agreed between supplier and customer
USCAR-44 Table 5.3.2 should be consulted for related testing

168	G1	ADDED NOTE FOR PAGES 1-5	8/11/20	GJD	SJA
	G2	UPDATED NOTE			
160	F1	ADDED SHEET 3	7/28/20	GJD	SJA
139	E6	WAS 0.6mm - 4.0mm	5/30/17	EJF	SJA
	E5	MOVED OR ADDED NOTE			
	E4	TOLERANCES WERE +/- 0.4mm			
	E3	ADDED SHEET 7			
	E2	WAS M8X1.0			
	E1	ADDED VIEW			
130	D	CHANGED NOTE STACK CALLOUT	8/22/16	EJF	SJA
121	C	C1 ADDED SHEETS 5 & 6	4/15/16	EJF	SJA
		C2 ADDED MATERIAL THICKNESS			
	B	B1 ADDED SHEETS 2,3 & 4	11/11/13	EJH	SJA
		B2 UPDATED NOTES			
	A	INITIAL RELEASE	9/16/11	SJA	AC
CHANGE SERIAL NUMBER	LET	REVISION RECORD	DATE	DWN	CHK

TOLERANCES UNLESS OTHERWISE SPECIFIED	THIRD ANGLE PROJECTION
DIMENSIONS ARE IN MILLIMETERS	

EWCAP

SCALE 1:1	DRAWN BY SCOTT ADAMS	CHECKED BY AMY CLARK	DATE 9/16/11
--------------	-------------------------	-------------------------	-----------------

TITLE
HOLE - CONNECTOR CLIP MATING

HellermannTyton®

EWCAP 9.0mm X 17.0mm Oval Hole

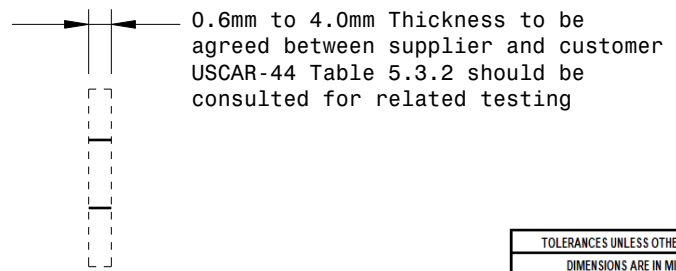
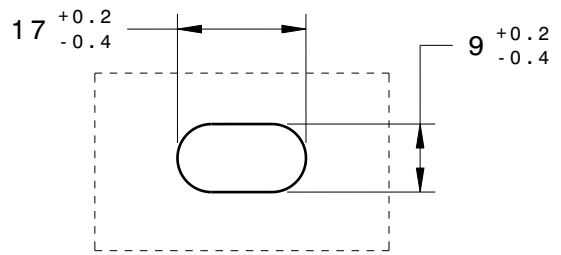
USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

1. Hole is measured on finished part including ecoat or paint process
2. Burr not to exceed 20% of material thickness (all around)
3. Flat to 0.1mm within 6mm of hole

G1



TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
EWCAP				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	SCOTT ADAMS	AMY CLARK	9/16/11	
TITLE HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
2 OF 8	EWCAP-007	A	F	
			COMPUTER AIDED DRAWING	

EWCAP 12.0mm X 17.0mm Oval Hole

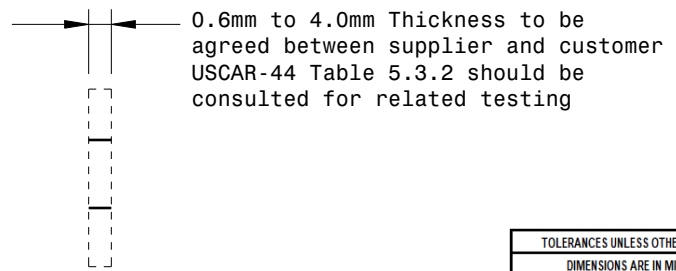
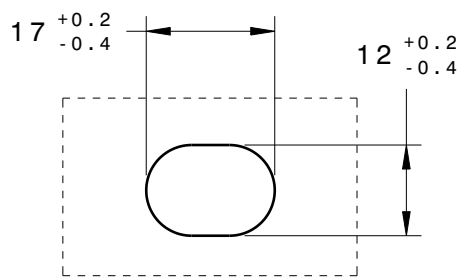
USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

1. Hole is measured on finished part including ecoat or paint process
2. Burr not to exceed 20% of material thickness (all around)
3. Flat to 0.1mm within 6mm of hole

G1



TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
<h1>EWCAP</h1>				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	GABRIEL DUNCAN	SCOTT ADAMS	7/27/20	
HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
3 OF 8	EWCAP-007	A	F	
			COMPUTER AIDED DRAWING	

EWCAP 6.5mm Round Hole

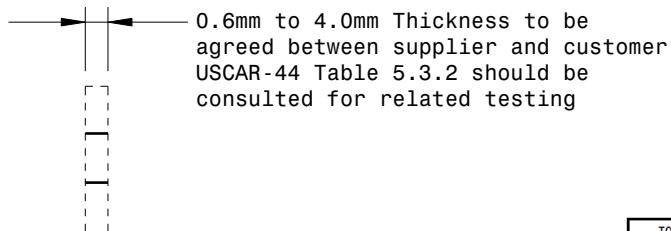
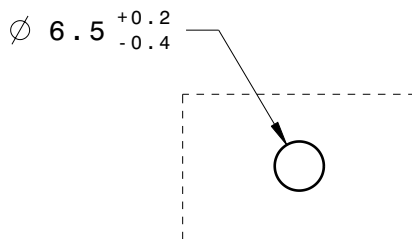
USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

1. Hole is measured on finished part including ecoat or paint process
2. Burr not to exceed 20% of material thickness (all around)
3. Flat to 0.1mm within 6mm of hole

G1



TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
EWCAP				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	SCOTT ADAMS	AMY CLARK	9/16/11	
TITLE HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
4 OF 8	EWCAP-007	A	F	
COMPUTER AIDED DRAWING				

EWCAP 8.0mm Round Hole

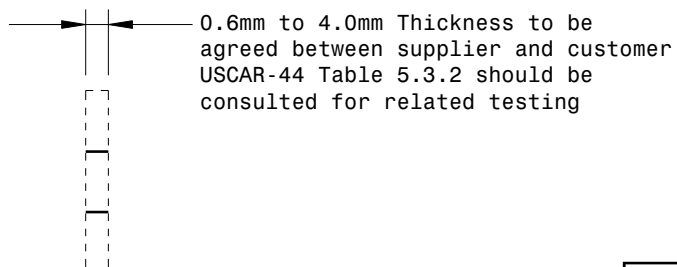
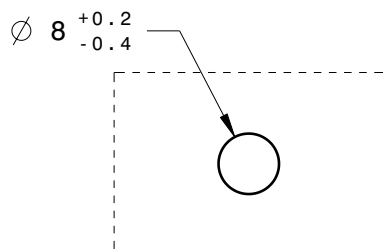
USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

1. Hole is measured on finished part including ecoat or paint process
2. Burr not to exceed 20% of material thickness (all around)
3. Flat to 0.1mm within 6mm of hole

G1



TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
EWCAP				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	SCOTTADAMS	AMY CLARK	9/16/11	
TITLE HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
5 OF 8	EWCAP-007	A	COMPUTER AIDED DRAWING F	

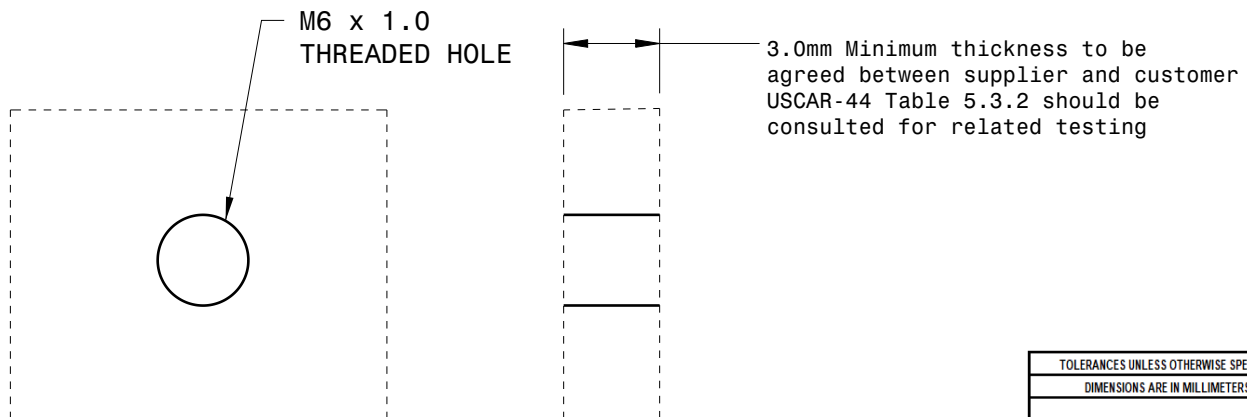
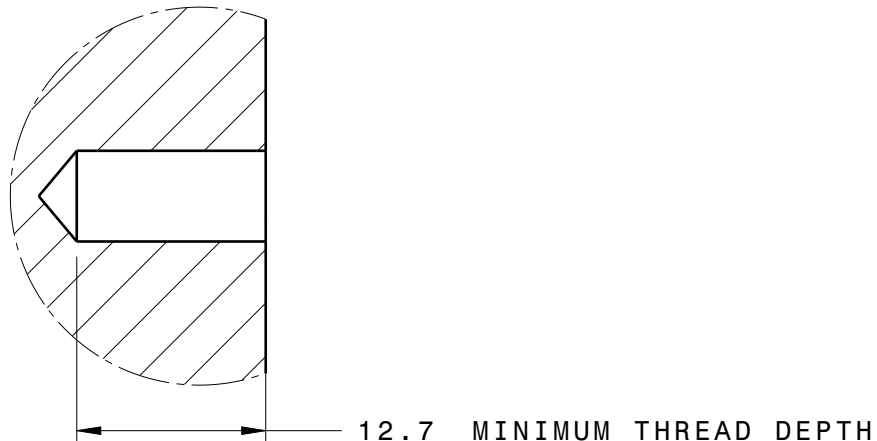
EWCAP M6 X 1.0 Threaded Hole

USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

- 1. Hole is measured on finished part including ecoat or paint process



TOLERANCES UNLESS OTHERWISE SPECIFIED		THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS			
EWCAP			
SCALE	DRAWN BY	CHECKED BY	DATE
1:1	SCOTT ADAMS	AMY CLARK	9/16/11
TITLE HOLE - CONNECTOR CLIP MATING			
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL
6 OF 8	EWCAP-007	A	F

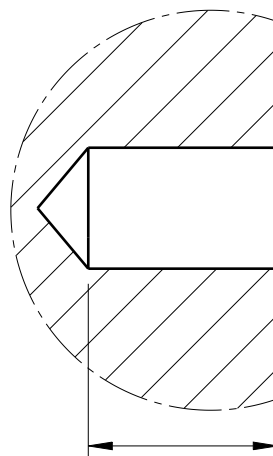
EWCAP M8 X 1.25 Threaded Hole

USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

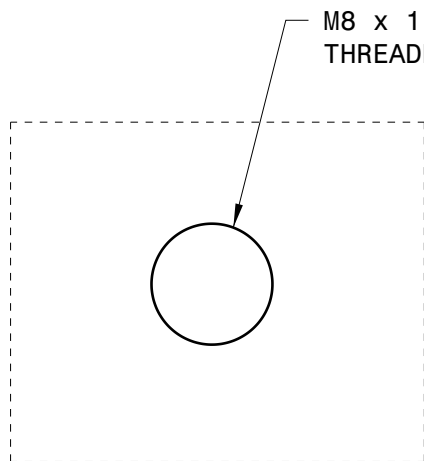
G2

Notes

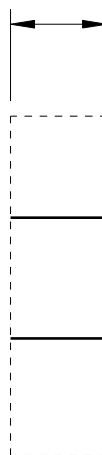
- 1. Hole is measured on finished part including ecoat or paint process



12.7 MINIMUM THREAD DEPTH



M8 x 1.25 THREADED HOLE



3.75mm Minimum thickness to be agreed between supplier and customer
USCAR-44 Table 5.3.2 should be consulted for related testing

TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
EWCAP				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	SCOTT ADAMS	AMY CLARK	9/16/11	
TITLE HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
7 OF 8	EWCAP-007	A	F	

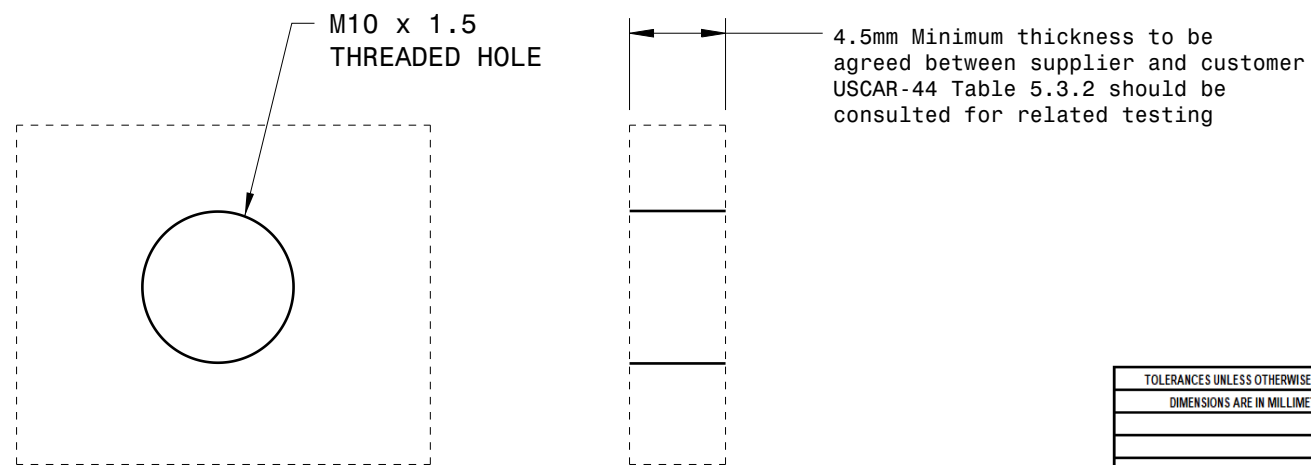
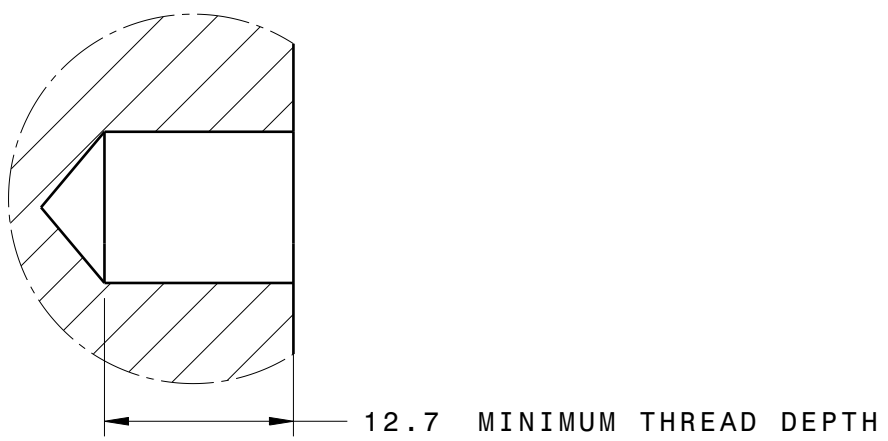
EWCAP M10 X 1.5 Threaded Hole

USCAR testing requirements for retainer clips are in the specification USCAR-44, available from SAE International.

G2

Notes

- 1. Hole is measured on finished part including ecoat or paint process



TOLERANCES UNLESS OTHERWISE SPECIFIED			THIRD ANGLE PROJECTION	
DIMENSIONS ARE IN MILLIMETERS				
EWCAP				
SCALE	DRAWN BY	CHECKED BY	DATE	
1:1	SCOTT ADAMS	AMY CLARK	9/16/11	
TITLE HOLE - CONNECTOR CLIP MATING				
SHEET	DRAWING NUMBER	DO NOT SCALE DRAWING	REVISION LEVEL	
8 OF 8	EWCAP-007	A	F	