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**REV.
E**

AS23190™/4

FEDERAL SUPPLY CLASS
5340

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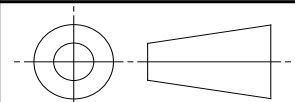
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For more information on this standard, visit

<https://www.sae.org/standards/content/AS23190/4E/>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C2

PROCUREMENT SPECIFICATION: NONE



AEROSPACE STANDARD

MOUNTING HARDWARE, CUSHION CLAMP,
METAL FOR CABLE HARNESS TYING AND SUPPORT,
TYPE V, CLASS 1

AS23190™/4

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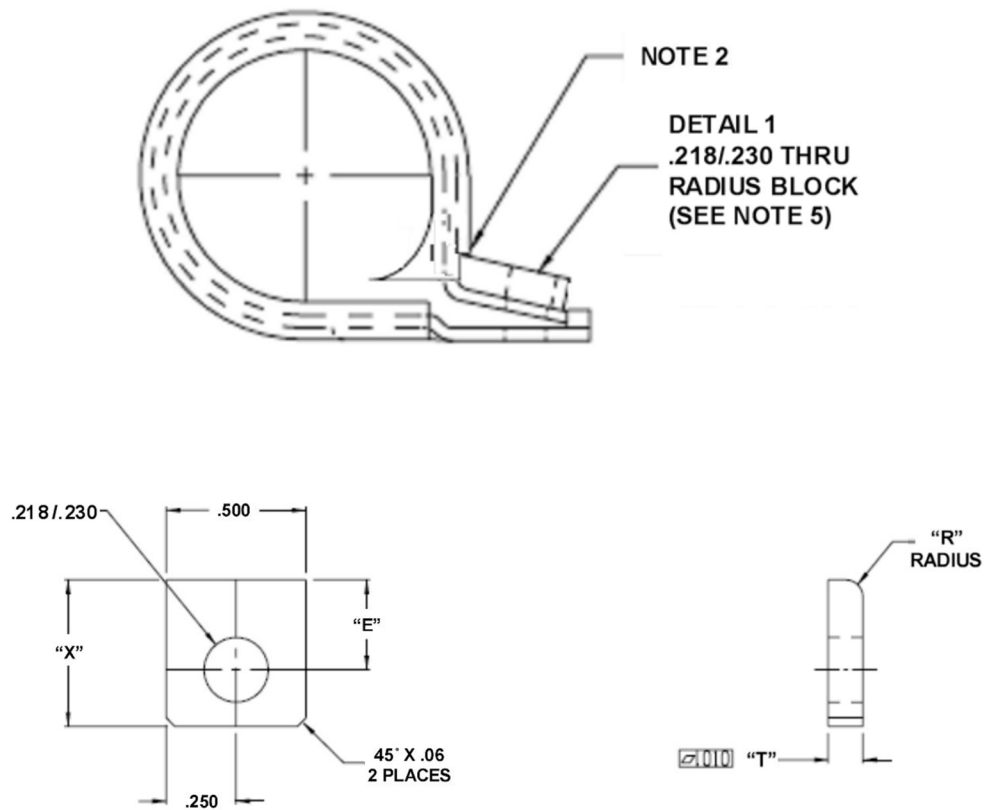
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THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS23190.



Full document details: [SAE AS23190_4E](#)



DETAIL 1 - CUSHION CLAMP (RADIUS BLOCK)

FIGURE 2 - RADIUS BLOCK LOOP CUSHION CLAMP (SEE TABLE 4, FIGURE 1 DIMENSIONS APPLICABLE)

FIGURES 1 AND 2 NOTES:

1. MAXIMUM HEIGHT OF LOCKING DEVICE AS SPECIFIED IN NOTE 4/ OF TABLE 3.
2. CUSHION SHALL BE NOTCHED (.125 HIGH) IN AREA SHOWN TO ACCOMMODATE RADIUS BLOCK.
3. WEIGHT REDUCING HOLES SHALL BE CENTERED IN THIS AREA. LENGTH OF HOLE PATTERN SHALL BE LIMITED TO 270° AREA SHOWN. A FULL RADIUS HOLE IS PERMITTED. NUMBER OF HOLES PER CLAMP SIZE IS LISTED IN TABLE 3.
4. BRIDGES (METAL MATERIAL BETWEEN REDUCING HOLES) AS FOLLOW: SIZE 2 THRU 12 (NO BRIDGE), SIZES 13 THRU 27 (1 BRIDGE), SIZES 28 THRU 40 (2 BRIDGES), SIZES 42 THRU 54 (3 BRIDGES), SIZES 56 THRU 66 (4 BRIDGES). SPACING SHALL COMPLY WITH NOTE 3.
5. RADIUS BLOCK SHALL BE ATTACHED TO CLAMP FOOT EITHER BY WELDING (TWO PLACES MINIMUM) OR ALTERNATE PERMANENT METHOD OTHER THAN THE USE OF ADHESIVE. ONCE FASTENED, CLAMP HALVES SHALL REST TOGETHER WITH NO GAP PRESENT. ADHESIVE BONDING FOR STAINLESS STEEL MATERIAL IS ACCEPTABLE.
6. REFERENCE DIMENSION .58 FOR ALUMINUM CLAMPS SIZES 5 THRU 17.
7. THE CUSHION IN THE CLAMP'S LOCK POSITION SHALL OVERLAP.

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	MOUNTING HARDWARE, CUSHION CLAMP, METAL FOR CABLE HARNESS TYING AND SUPPORT, TYPE V, CLASS 1		
			

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS23190.

1. MATERIAL: SEE TABLES 1 AND 2.

TABLE 1 - CLAMP LOOP BASE MATERIALS

CLAMP LOOP MATERIAL DESIGNATION	CLAMP LOOP BASE MATERIAL 1/	HEAT TREATMENT	CLAMP LOOP FINISH
A	2024-T42 ALUMINUM ALLOY PER AMS-QQ-A-250/5	AMS2770, AMS2771, OR AMS2772 CONDITION T42	MIL-DTL-5541 CLASS 1A
P	17-7PH CORROSION RESISTANT STEEL PER AMS5528	AMS-H-6875 OR AMS2759/3 TH1100 AFTER FORMING	AMS2700 PASSIVATED
S	AMS5510 STAINLESS STEEL	N/A	AMS2700 PASSIVATED

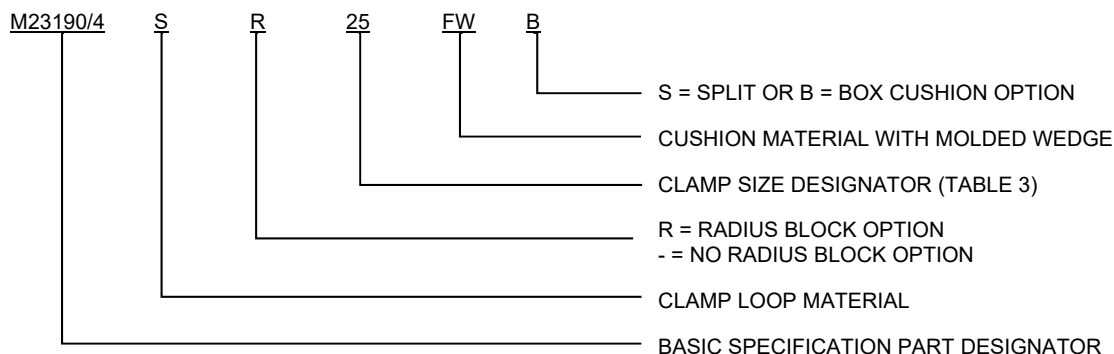
1/ SEE TABLE 3 FOR BLOCK MATERIAL.

TABLE 2 - CLAMP LOOP CUSHION MATERIALS WITH MOLDED WEDGE

CUSHION MATERIAL DESIGNATION	CUSHION COLOR (TEMPERATURE RATING)	CUSHION MATERIAL
EW	PURPLE 1/ 135 °C (275 °F)	MIL-DTL-85052/2 ETHYLENE PROPYLENE
FW	BLUE 205 °C (400 °F)	MIL-DTL-25988, TYPE II, CLASS 1, GRADE 60 FLUOROSILICONE
GW	BLACK WITH BLUE STRIPES 1/ 100 °C (212 °F)	AMS3209 CHLOROPRENE
HW	LIGHT BLUE 260 °C (500 °F)	MIL-DTL-85052/3 SILICONE RUBBER, FABRIC REINFORCED (HIGH TEMPERATURE)
TW	PIGMENTED WHITE 288 °C (550 °F)	POLY-TETRAFLUOROETHYLENE (PTFE) PER AMS3660

1/ MATERIAL IS NOT RECOMMENDED FOR NEW AIRCRAFT DESIGN (SEE APPLICATION NOTES). EXTRUDED MATERIAL GW SHALL BE IDENTIFIED BY A BLUE STRIPE EXTENDING LENGTHWISE ALONG BOTH EDGES OF THE CUSHION. THE STRIPE WIDTH SHALL BE EQUAL TO THE WIDTH OF THE CUSHION EDGE. MOLDED MATERIAL SHALL BE IDENTIFIED BY A BLUE AREA AT THE WEDGE END. THE BLUE AREA SHALL BE ON ONE OR BOTH EDGES OF THE CUSHION AND MAY INCLUDE THE WEDGE AND SHALL HAVE A MINIMUM LENGTH OF .125 INCH TO A MAXIMUM OF .750 INCH. THE BLUE AREA SHALL BE LOCATED WITHIN AN AREA NOT TO EXCEED 1.50 INCH OR 50% OF THE TOTAL CUSHION LENGTH, WHICHEVER IS SMALLER, WHEN MEASURED FROM THE WEDGE END. IN NO CASE SHALL THE BLUE AREA EXTEND BEYOND 50% OF THE CUSHION LENGTH. THE MATERIAL USED FOR THE BLUE IDENTIFIER SHALL BE THE SAME AS THE CUSHION MATERIAL EXCEPT COLOR BLUE. INKING OR OTHER SURFACE COLORING METHODS SHALL NOT BE USED.

2. PART NUMBER EXAMPLE:



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