FEDERAL SUPPLY CLASS
5340

RATIONALE

GRAPHICS REDRAWN. “REQUIREMENTS” AND “NOTES” COMBINED. REFERENCED SPECIFICATIONS UPDATED. PTFE MATERIAL SPECIFICATION UPDATED. TYPO IN HEADING OF TABLE 1 CORRECTED. GENERAL FORMATTING UPDATED TO ALIGN WITH CURRENT DOCUMENT STANDARDIZATION. REVISION INDICATOR NOTE 18 ADDED.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD DS14272. THIS SAE STANDARD MAY RETAIN THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL’S) MAY CONTINUE TO BE MANDATORY FOR DoD CONTRACTS. REQUIREMENTS RELATING TO QPL’S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

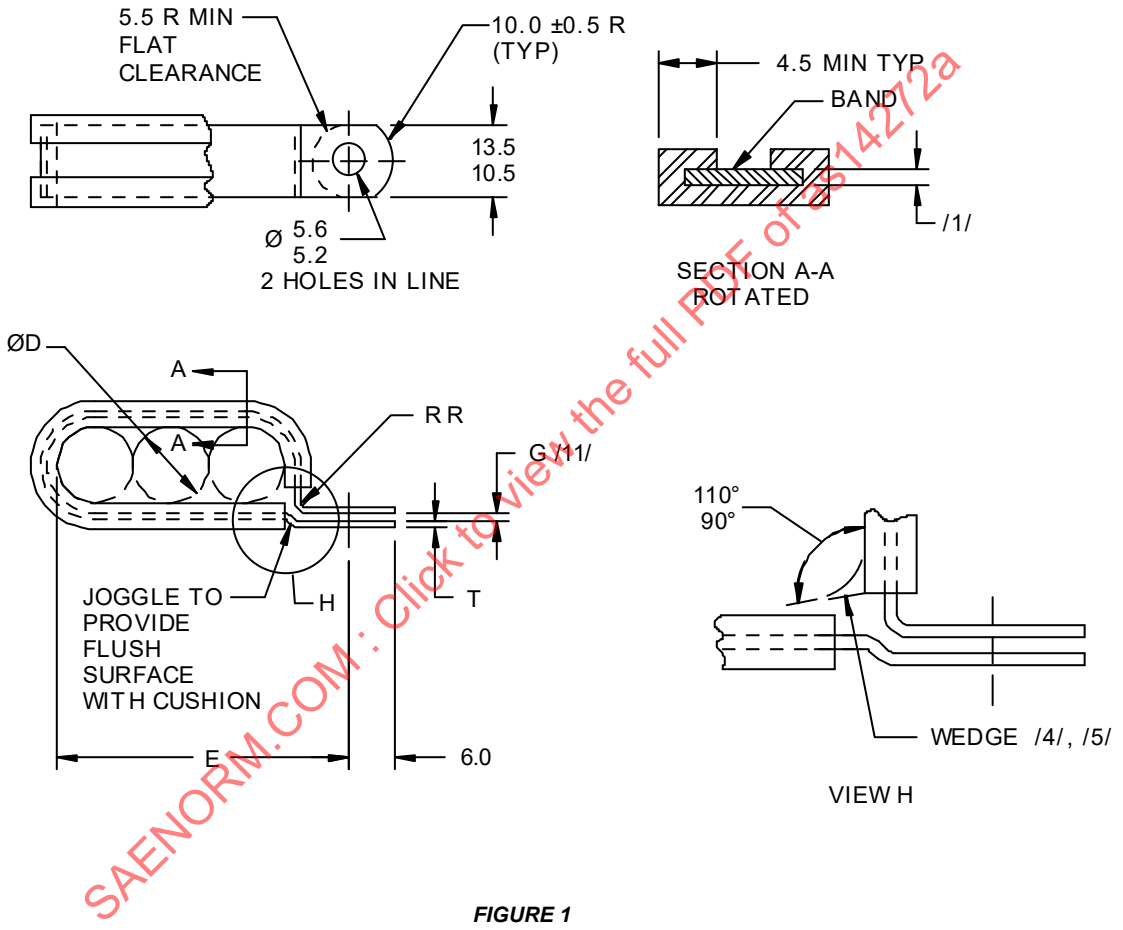
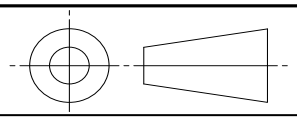


FIGURE 1

For more information on this standard, visit
https://www.sae.org/standards/content/AS14272A

THIRD ANGLE PROJECTION



ISSUED 2000-08 REAFFIRMED 2014-11 REVISED 2020-12

CUSTODIAN: G-3/G-3E

PROCUREMENT SPECIFICATION: MIL-C-8603

SAE INTERNATIONAL

AEROSPACE STANDARD

(R) CLAMP, LOOP, CUSHIONED, ELONGATED, METRIC

AS14272™
SHEET 1 OF 4

REV. A

NOTES:

/1/ MATERIAL:

BAND:

a. CODE LETTER D - ALUMINUM ALLOY, 2024-0 PER AMS-QQ-A-250/5, HEAT TREATED TO T42 CONDITION IN ACCORDANCE WITH AMS2770.

b. CODE LETTER C - CORROSION RESISTANT STEEL, TYPE 302 IN ACCORDANCE WITH AMS5516 ANNEALED OR TYPE 321 IN ACCORDANCE WITH AMS5510.

CUSHION:

a. CODE LETTER E - ETHYLENE PROPYLENE IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

b. CODE LETTER F - NITRILE RUBBER, 65-75 DUROMETER "A" IN ACCORDANCE WITH AMS3215 AND PROCUREMENT SPECIFICATION, 1.6 MM THICK.

c. CODE LETTER G - CHLOROPRENE RUBBER, 65-75 DUROMETER "A" IN ACCORDANCE WITH AMS3209 AND PROCUREMENT SPECIFICATION, 1.6 MM THICK.

d. CODE LETTER H - SILICONE RUBBER, 55-65 DUROMETER "A" IN ACCORDANCE WITH AMS3303, 1.6 MM THICK.

e. CODE LETTER J - FLUOROSILICONE RUBBER IN ACCORDANCE WITH MIL-DTL-25988, TYPE II, CLASS 1, GRADE 60, 1.6 MM THICK.

f. CODE LETTER T - POLYTETRAFLUOROETHYLENE (PTFE) IN ACCORDANCE WITH AMS3660, 0.6 MM THICK. /3/

2. FINISH:

MATERIAL CODE LETTER C - PASSIVATED IN ACCORDANCE WITH AMS2700.

MATERIAL CODE LETTER D - CHEMICAL FILM PER MIL-DTL-5541, CLASS 1A.

/3/ SURFACE TREATMENT:

CUSHIONS FABRICATED FROM PTFE SHALL BE SODIUM TREATED IN ACCORDANCE WITH THE SURFACE TREATMENT PARAGRAPHS OF AMS2491 TO REDUCE THE MATERIAL'S LUBRICITY.

ALL OTHER PARAGRAPHS OF AMS2491 SHALL NOT APPLY.

/4/ WHEN SPECIFIED, THE WEDGE SHALL BE INTEGRALLY MOLDED TO CUSHION USING PRESSURE AND HEAT TO ACCOMPLISH A BOND BETWEEN CUSHION AND WEDGE. /8/

/5/ THE WEDGE SHALL OVERLAP AND TOUCH THE OPPOSITE END OF THE CUSHION WHEN CLAMP MOUNTING HOLES ARE ALIGNED AND THE CLAMP IS COMPLETELY CLOSED.

6. CUSHION SELECTION GUIDE:

CHLOROPRENE (MATERIAL CODE LETTER G):	RECOMMENDED FOR GENERAL PURPOSE USE IN AREAS CONTAMINATED WITH PETROLEUM BASE HYDRAULIC FLUID AND OCCASIONAL FUEL SPLASH. EXCELLENT OZONE RESISTANCE. NOT RESISTANT TO PHOSPHATE ESTER BASED FLUIDS. NOT FOR USE WITH TITANIUM TUBING. COLOR SHALL BE BLACK WITH A BLUE IDENTIFIER IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
POLYTETRAFLUOROETHYLENE (PTFE): (MATERIAL CODE LETTER T)	RECOMMENDED FOR USE AT ELEVATED TEMPERATURES IN HYDROCARBON FUEL CONTAMINATED AREAS. ALSO RECOMMENDED FOR USE IN AREAS CONTAMINATED WITH PHOSPHATE TYPE HYDRAULIC FLUIDS AND OTHER SYNTHETIC LUBRICANTS. EXCELLENT OZONE RESISTANCE. COLOR SHALL BE SOLID BROWN.
FLUOROSILICONE: (MATERIAL CODE LETTER J)	RECOMMENDED FOR USE AT ELEVATED TEMPERATURES IN PETROLEUM BASED FLUID CONTAMINATED AREAS. NOT RESISTANT TO PHOSPHATE ESTER BASED FLUIDS. EXCELLENT OZONE RESISTANCE. COLOR SHALL BE SOLID BLUE.

NITRILE:
(MATERIAL CODE LETTER F) — FOR USE PRIMARILY IN FUEL IMMERSION AND FUEL VAPORS. NOT RESISTANT TO PHOSPHATE ESTER BASED FLUIDS. GOOD OZONE RESISTANCE. NOT FOR USE WITH TITANIUM TUBING. COLOR SHALL BE SOLID YELLOW.

SILICONE:
(MATERIAL CODE LETTER H) — RECOMMENDED FOR USE AT ELEVATED TEMPERATURES IN TO PHOSPHATE ESTER BASED FLUID AND OTHER SYNTHETIC FLUID CONTAMINATED AREAS. NOT RESISTANT TO PETROLEUM BASED FLUIDS. EXCELLENT OZONE RESISTANCE. COLOR SHALL BE SOLID (PIGMENTED) WHITE.

ETHYLENE PROPYLENE:
(MATERIAL CODE LETTER E) — RECOMMENDED FOR USE IN AREAS CONTAMINATED WITH PHOSPHATE ESTER HYDRAULIC FLUID AND OTHER SYNTHETIC FLUIDS. EXCELLENT OZONE RESISTANCE. NOT RESISTANT TO PETROLEUM BASED FLUIDS. COLOR SHALL BE SOLID PURPLE.

/7/ MATERIAL CODES:

CODES INDICATE BAND AND CUSHION MATERIALS. DO NOT SPECIFY BAND AND CUSHION COMBINATIONS NOT LISTED. MAXIMUM RECOMMENDED TEMPERATURE IS INDICATED IN PARENTHESIS.

DE = ALUMINUM BAND WITH ETHYLENE PROPYLENE CUSHION (100 °C)
DF = ALUMINUM BAND WITH NITRILE CUSHION (100 °C)
DG = ALUMINUM BAND WITH CHLOROPRENE CUSHION (100 °C)
CE = CRES BAND WITH ETHYLENE PROPYLENE CUSHION (135 °C)
CF = CRES BAND WITH NITRILE CUSHION (100 °C)
CG = CRES BAND WITH CHLOROPRENE CUSHION (100 °C)
CH = CRES BAND WITH SILICONE CUSHION (204 °C)
CJ = CRES BAND WITH FLUOROSILICONE CUSHION (232 °C)
CT = CRES BAND WITH PTFE CUSHION (260 °C)

/8/ PART NUMBER:

THE PART NUMBER SHALL CONSIST OF THE BASIC DS SHEET NUMBER, FOLLOWED BY THE CODE LETTER “W” FOR WEDGE (IF SPECIFIED), FOLLOWED BY A DASH NUMBER TAKEN FROM TABLE 1, FOLLOWED BY NUMBER OF TUBES OR WIRE BUNDLES, FOLLOWED BY THE MATERIAL CODES.

EXAMPLE:

DS14272 - 22 3 CF

- MATERIAL CODE /7/
- NUMBER OF TUBES OR WIRE BUNDLES TO BE CLAMPED (2, 3, OR 4)
- DASH NUMBER FROM TABLE 1
- REPLACE DASH WITH CODE LETTER “W” FOR WEDGE (IF REQUIRED) /4/
- BASIC DS PART NUMBER

DS14272-223CF - INDICATES CLAMP, LOOP, CUSHIONED, ELONGATED, FOR 22 MM ØD TUBING OR WIRE BUNDLES, 3 TUBES OR BUNDLES, CRES BAND MATERIAL WITH NITRILE CUSHION MATERIAL.

DS14272W223CF - INDICATES CLAMP, LOOP, CUSHIONED, ELONGATED, WITH WEDGE, FOR 22 MM ØD TUBING OR WIRE BUNDLES, 3 TUBES OR BUNDLES, CRES BAND MATERIAL WITH NITRILE CUSHION MATERIAL.