

REV.
B

SAE AS3509

RATIONALE

FEDERAL SUPPLY CLASS
5340

AS3509B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

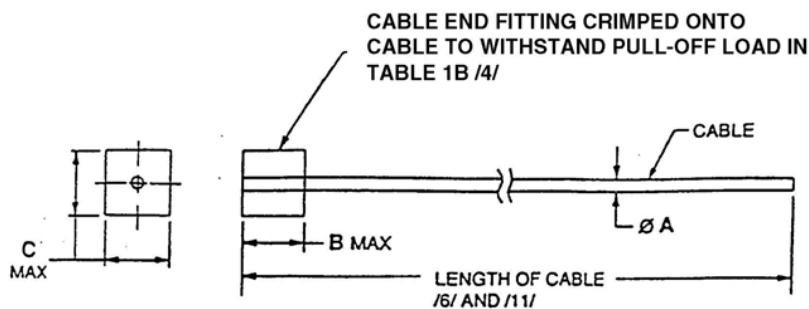


FIGURE 1 - SAFETY CABLE-END FITTING AND CABLE

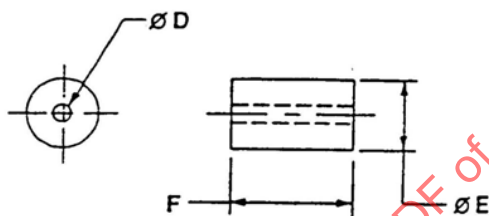


FIGURE 2 - FERRULE

TABLE 1A - DIMENSIONS A-D

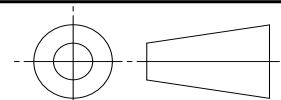
PART NUMBER	Ø A /5/ INCH (mm)	B MAX INCH (mm)	C MAX INCH (mm)	Ø D INCH (mm)
AS3509-01XXX	.022-.026 (0.56-0.66)	.135 (3.43)	.085 (2.16)	.029-.032 (0.74-0.81)
AS3509-02XXX	.032-.038 (0.81-0.97)	.135 (3.43)	.125 (3.18)	.043-.049 (1.09-1.24)
AS3509-03XXX	.040-.046 (1.02-1.17)	.135 (3.43)	.125 (3.18)	.051-.057 (1.30-1.45)
AS3509-04XXX	.062-.072 (1.57-1.83)	.190 (4.83)	.155 (3.94)	.077-.083 (1.96-2.11)

TABLE 1B - DIMENSIONS E-F

PART NUMBER	Ø E INCH (mm)	F INCH (mm)	CABLE TYPE	MINIMUM PULL-OFF LOAD POUND (NEWTON) SEE NOTE /10/
AS3509-01XXX	.089-.091 (2.26-2.31)	.087-.095 (2.21-2.41)	STRAND 1X7	30 (133.4)
AS3509-02XXX	.104-.106 (2.64-2.69)	.156-.164 (3.96-4.17)	CABLE 3X7	70 (311.4)
AS3509-03XXX	.104-.106 (2.64-2.69)	.156-.164 (3.96-4.17)	CABLE 7X7	110 (489.3)
AS3509-04XXX	.149-.151 (3.78-3.84)	.245-.255 (6.22-6.48)	CABLE 7X19	280 (1245.5)

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS3509B>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
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AEROSPACE STANDARD

CABLE, SAFETY, KIT,
NICKEL ALLOY, UNS N0660

SAE AS3509
SHEET 1 OF 3

REV.
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NOTES:

1. MATERIAL: CABLE, END FITTING, AND FERRULE - AMS5687, NICKEL ALLOY WIRE (UNS N0660 NICKEL ALLOY WIRE) CHEMICAL COMPOSITION ONLY.
2. PROCUREMENT SPECIFICATION: AS4536
3. INSTALLATION IN ACCORDANCE WITH AS4536 AND AS567.
- /4/ CABLE END FITTING SHAPE OPTIONAL, HOWEVER, MUST BE WITHIN SPECIFIED ENVELOPE.
- /5/ CUT END OF CABLE OR STRAND SHALL BE FUSED TO PREVENT UNRAVELING AND CAN BE UP TO .006 in (0.1524mm) ABOVE ACTUAL MEASURED DIAMETER. MAXIMUM FUSED END DIAMETER SHALL BE .028, .042, .050 OR .076 FOR -01XXX, -02XXX, -03XXX, OR -04XXX RESPECTIVELY.
- /6/ LENGTH OF CABLE SHALL BE 3.0 in (76.2 mm) INCREMENTS; MINIMUM LENGTH AT 6.0 in (152.4 mm), MAXIMUM LENGTH AT 24.0 in (609.6 mm), $\pm .50$ (12.7 mm).
7. MARK PART NUMBER AND MANUFACTURER IDENTIFICATION PER AS478 CLASS N.
8. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
9. DIMENSIONS ARE IN INCHES, PARENTHESIS ARE IN MILLIMETERS.
- /10/ PULL-OFF LOAD IN POUND-FORCE, PARENTHESIS IN NEWTONS.
- /11/ EXAMPLE OF A KIT PART NUMBER: FOR .032 in (0.8128 mm) NOMINAL DIAMETER SAFETY CABLE AND FERRULE, 9.0 in (228.6 mm) LONG CABLE AND FERRULE (SEE NOTE 12).

AS3509 - 02 09 K ← IDENTIFIES ITEM AS A KIT (SAFETY CABLE AND FERRULE)
 DOCUMENT NUMBER 9.0 in (228.6 mm) LENGTH OF CABLE (FIGURE 1)
 SAFETY CABLE ASSEMBLY ØA PER TABLE 1

EXAMPLE OF A SAFETY CABLE PART NUMBER: FOR .032 in (0.8128 mm) NOMINAL DIAMETER SAFETY CABLE 9.0 in (228.6 mm) LONG.

AS3509 - 02 09 C ← IDENTIFIES ITEM AS A SAFETY CABLE (NO FERRULE)
 DOCUMENT NUMBER 9.0 in (228.6 mm) LENGTH OF CABLE (FIGURE 1)
 SAFETY CABLE ASSEMBLY ØA PER TABLE 1

EXAMPLE OF A FERRULE PART NUMBER: FOR .032 in (0.8128 mm) NOMINAL DIAMETER SAFETY CABLE.

AS3509 - 02 E ← IDENTIFIES ITEM AS A FERRULE (NO SAFETY CABLE)
 DOCUMENT NUMBER SAFETY CABLE ASSEMBLY ØA PER TABLE 1

12. FERRULES SHALL BE PACKAGED IN ACCORDANCE WITH AS4536.
13. DO NOT USE UNASSIGNED PART NUMBERS.

SAE Aerospace An SAE International Group	AEROSPACE STANDARD CABLE, SAFETY, KIT, NICKEL ALLOY, UNS N0660	SAE AS3509 SHEET 2 OF 3	REV. B
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