AEROSPACE STANDARD

AS5261™	REV. A

Issued 2008-08
Revised 2014-04
Reaffirmed 2025-02

Superseding AS5261

(R) Contract, Wire Barrel, Crimp Style

RATIONALE

Revision is required to correct numerous dimensional values in the tables, add table to show detail sheet wire barrel type, update references and align specification with current SAE formatting guidelines.

AS5261A has been reaffirmed to comply with the SAE Five-Year Review policy.

1. SCOPE

1.1 Scope

This specification provides dimensional standards for crimp type contact wire barrel design and is a replacement for MS3190. Some wire barrel designs may exist in AS39029 but are not considered approved for future use, therefore, will not appear in this specification. The crimp barrel sizes listed in this document have been standardized in AS39029 and AS22520 specifications, tools and contacts are available to support these listed sizes. These crimp barrel requirements shall be used for any contact, regardless of whether it is a standard or non-standard contact configuration. The specification lists details for three types of wire barrels: A, B and C. Wire barrel type A is not recommended for new design. Table 4 lists each AS39029 detail sheet wire barrel type.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

AS39029 Contacts, Electrical Connector, General Specification For

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AS5261A/

2.2 Military Specifications

Available from DLA Document Services, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Tel: 215-697-6396, http://quicksearch.dla.mil/.

MIL-DTL-22520 Crimping Tools, Wire Termination, General Specification For

MIL-I-81969 Installation and Removal Tools, Connector, Electrical, Contact, General Specification For

3. NOTES

3.1 A change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document, including technical revisions. Change bars and (R) are not used in original publications, nor in documents that contain editorial changes only.

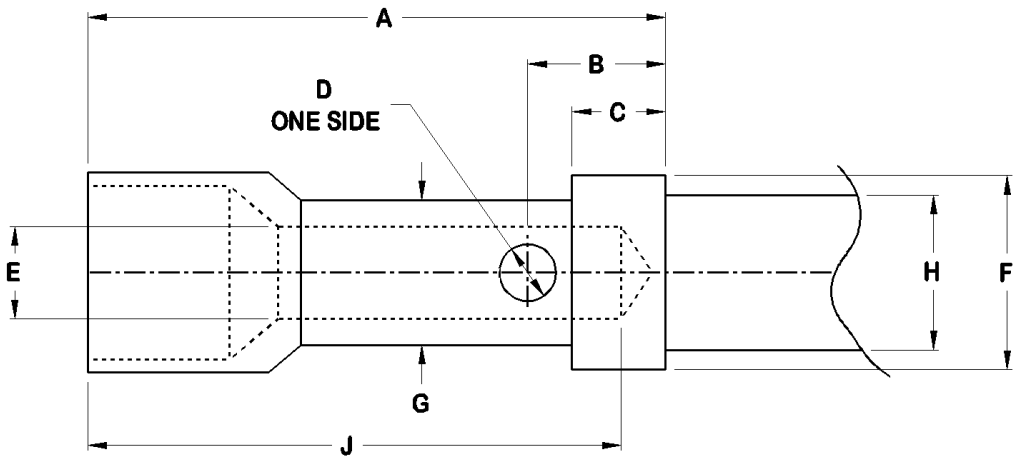

FIGURE 1 - TYPE A
CONFIGURATION AND DIMENSIONS
TYPE “A” NOT RECOMMENDED FOR NEW CONNECTOR DESIGN AFTER 18 OCT 1966. USE TYPE “B” OR “C”.

TABLE 1 - BARREL SIZE AND DIMENSIONS - TYPE A

Barrel Size	Wire Range	A	B	C	D Diameter	E Diameter	F Diameter	G Diameter	H Diameter Maximum	J
20	20-22-24	.308 (7.82) .304 (7.72)	.063 (1.60) .053 (1.35)	.033 (0.84) .029 (0.74)	.032 (0.81) .026 (0.66)	.050 (1.27) .048 (1.22)	.103 (2.62) .100 (2.54)	.078 (1.98) .076 (1.93)	.082 (2.08)	.298 (7.57) .267 (6.78)

NOTES:

1. Material, finish and machined surfaces, shall be as specified on the applicable procurement specification or detail specification sheet for the contact.
2. Dimensions are in inches unless otherwise specified. Metric equivalents are given for information only and are based upon 1.000 inch (25.4 mm). Metric equivalents are in parentheses.
3. All dimensions shown are for finished parts after plating.
4. All diameters to be concentric with each other within .004 inches (0.1 mm) Total Indicator Reading (TIR).
5. Break all sharp edges and remove all burrs.
6. For crimp tools and positioners, see applicable AS39029 detail sheet.
7. See AS22520, AS5259, AS5259/1, and AS39029 for performance requirements of the crimped termination.
8. Type A contact barrels are not recommended for new design (see requirement).

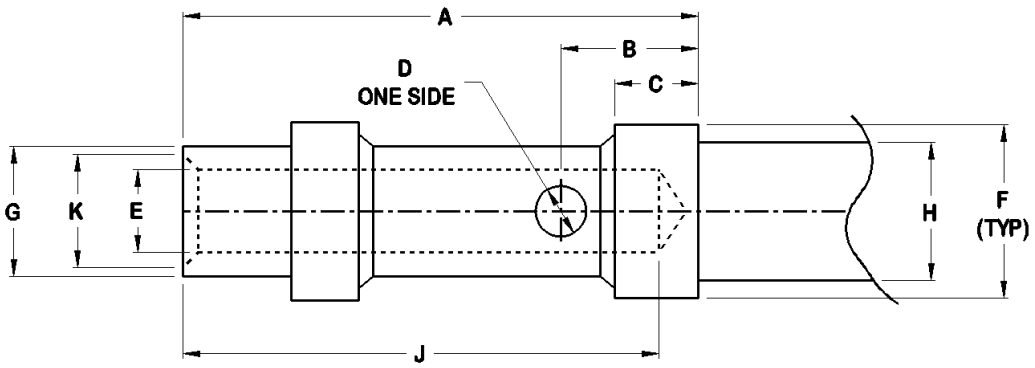

FIGURE 2 - TYPE B
CONFIGURATION AND DIMENSIONS

TABLE 2 - BARREL SIZE AND DIMENSIONS - TYPE B

Barrel Size	Wire Range	A	B	C	D Diameter	E Diameter
16	16, 18, 20	.345 (8.76) .341 (8.66)	.079 (2.01) .073 (1.85)	.048 (1.22) .044 (1.17)	.042 (1.07) .036 (0.91)	.068 (1.73) .066 (1.68)
12	12, 14	.345 (8.76) .341 (8.66)	.079 (2.01) .073 (1.85)	.048 (1.22) .044 (1.17)	.042 (1.07) .036 (0.91)	.102 (2.59) .098 (2.49)
8	8	.520 (13.21) .510 (12.95)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.17)	.066 (1.68) .060 (1.52)	.184 (4.67) .179 (4.55)
4	4	.520 (13.21) .510 (12.95)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.17)	.066 (1.68) .060 (1.52)	.286 (7.26) .279 (7.09)
0	0	.675 (17.15) .665 (16.89)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.17)	.066 (1.68) .060 (1.52)	.458 (11.63) .451 (11.46)

TABLE 2 - BARREL SIZE AND DIMENSIONS - TYPE B (CONTINUED)

Barrel Size	Wire Range	F Diameter	G Diameter	H Diameter Maximum	J	K Diameter
16	16, 18, 20	.148 (3.76) .144 (3.66)	.105 (2.67) .101 (2.57)	.123 (3.12)	.328 (8.33) .297 (7.54)	.090 (2.29) .080 (2.03)
12	12, 14	.202 (5.13) .198 (5.03)	.153 (3.89) .147 (3.73)	.171 (4.34)	.328 (8.33) .297 (7.54)	.125 (3.18) .115 (2.92)
8	8	.313 (7.95) .303 (7.70)	.269 (6.83) .263 (6.68)	.257 (6.53)	.534 (13.56) .480 (12.19)	.230 (5.84) .220 (5.59)
4	4	.419 (10.64) .415 (10.54)	.380 (9.65) .370 (9.40)	.376 (9.55)	.534 (13.56) .480 (12.19)	.364 (9.25) .354 (8.99)
0	0	.611 (15.52) .607 (15.42)	.568 (14.43) .558 (14.17)	.548 (13.92)	.690 (17.53) .636 (16.15)	.542 (13.77) .532 (13.51)

NOTES:

1. Material, finish and machined surfaces, shall be as specified on the applicable procurement specification or detail specification sheet for the contact.
2. Dimensions are in inches unless otherwise specified. Metric equivalents are given for information only and are based upon 1.000 inch (25.4 mm). Metric equivalents are in parentheses.
3. All dimensions shown are for finished part after plating.
4. All diameters to be concentric with each other within .005 Total Indicator Reading (TIR).
5. See the applicable AS39029 detail sheet for crimp tools and positioners.
6. See AS22520, AS5259, AS5259/1, and AS39029 for the performance requirements of the crimped termination.
7. Finished parts shall have no sharp edges or burrs.

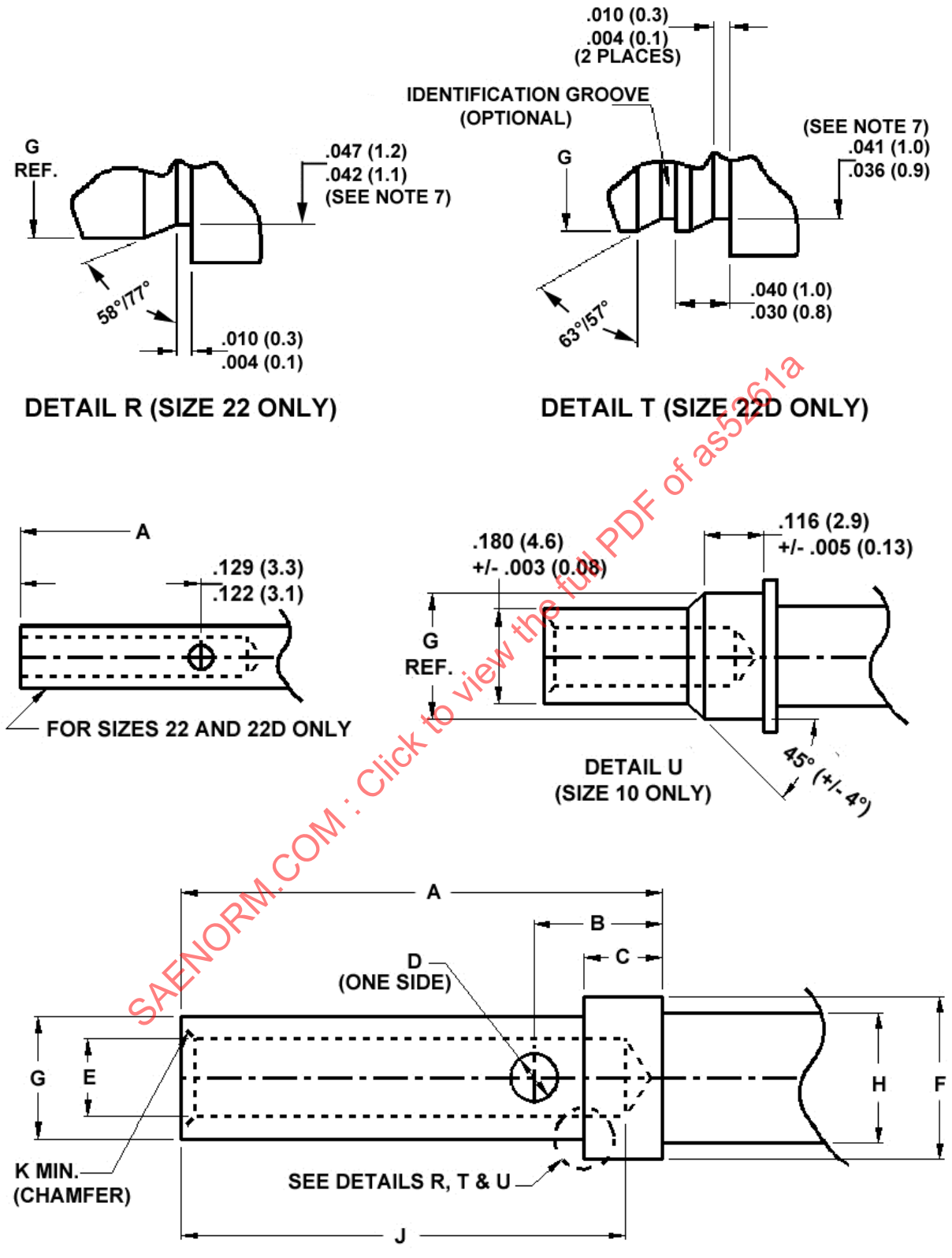

FIGURE 3 - TYPE C
CONFIGURATION AND DIMENSIONS

TABLE 3 - BARREL SIZE AND DIMENSIONS - TYPE C

Barrel Size	Wire Range	A	B	C	D Diameter	E Diameter
22D	22, 24, 26, 28	.270 (6.86) .260 (6.60)	N/A	.033 (0.84) .029 (0.74)	.022 (0.56) .018 (0.46)	.0355 (0.90) .0335 (0.85)
22	22, 24, 26, 28	.270 (6.86) .260 (6.60)	N/A	.033 (0.84) .029 (0.74)	.022 (0.56) .018 (0.46)	.0375 (0.95) .0355 (0.90)
20	20, 22, 24	.270 (6.86) .260 (6.60)	.078 (1.98) .072 (1.83)	.033 (0.84) .029 (0.74)	.032 (0.81) .026 (0.66)	.048 (1.22) .046 (1.17)
16	16, 18, 20	.270 (6.86) .260 (6.60)	.088 (2.24) .082 (2.08)	.033 (0.84) .029 (0.74)	.042 (1.07) .036 (0.91)	.068 (1.73) .066 (1.68)
12	12,14	.270 (6.86) .260 (6.60)	.088 (2.24) .082 (2.08)	.033 (0.84) .029 (0.74)	.042 (1.07) .036 (0.91)	.102 (2.59) .098 (2.49)
10	10	.438 (11.13) .424 (10.77)	.115 (2.92) .108 (2.74)	.033 (0.84) .029 (0.74)	.052 (1.32) .046 (1.17)	.140 (3.56) .134 (3.40)
8	8	.520 (13.21) .510 (12.95)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.12)	.066 (1.68) .060 (1.52)	.184 (4.67) .179 (4.55)
4	4	.520 (13.21) .510 (12.95)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.12)	.066 (1.68) .060 (1.52)	.286 (7.26) .279 (7.09)
0	0	.675 (17.15) .665 (16.89)	.094 (2.39) .084 (2.13)	.048 (1.22) .044 (1.12)	.066 (1.68) .060 (1.52)	.458 (11.63) .451 (11.45)

TABLE 3A - BARREL SIZE AND DIMENSIONS - TYPE C (CONTINUED)

Barrel Size	Wire Range	F Diameter	G Diameter	H Diameter Maximum	J	K Minimum (Chamfer)
22D	22, 24, 26, 28	.062 (1.57) .060 (1.52)	.048 (1.22) .046 (1.17)	.062 (1.57)	.141 (3.58) MINIMUM	.002 (0.05)
22	22, 24, 26	.071 (1.80) .069 (1.75)	.052 (1.32) .050 (1.27)	.062 (1.57)	.141 (3.58) MINIMUM	.002 (0.05)
20	20, 22, 24	.094 (2.39) .091 (2.31)	.070 (1.78) .068 (1.73)	.078 (1.98)	.209 (5.31) MINIMUM	.002 (0.05)
16	16, 18, 20	.130 (3.30) .127 (3.23)	.103 (2.62) .101 (2.57)	.113 (2.87)	.209 (5.31) MINIMUM	.005 (0.13)
12	12, 14	.182 (4.62) .179 (4.55)	.151 (3.84) .148 (3.76)	.161 (4.09)	.209 (5.31) MINIMUM	.005 (0.13)
10	10	.242 (6.16) .238 (6.05)	.213 (5.41) .207 (5.26)	.215 (5.46)	.385 (9.78) .355 (9.02)	.005 (0.13)
8	8	.313 (7.95) .303 (7.69)	.269 (6.83) .262 (6.65)	.257 (6.53)	.534 (13.56) .485 (12.32)	.005 (0.13)
4	4	.419 (10.64) .414 (10.52)	.380 (9.65) .370 (9.40)	.376 (9.55)	.534 (13.56) .480 (12.19)	.005 (0.13)
0	0	.615 (15.62) .607 (15.42)	.568 (14.43) .558 (14.17)	.548 (13.91)	.690 (17.53) .580 (14.73)	.005 (0.13)

NOTES:

1. Material, finish and machined surfaces, shall be as specified on the applicable procurement specification or detail specification sheet for the contact.

2. Dimensions are in inches unless otherwise specified. Metric equivalents are given for information only and are based upon 1.000 inch (25.4 mm). Metric equivalents are in parentheses.

3. All dimensions shown are for finished part after plating.

4. Unless otherwise specified, all diameters to be concentric with each other within .005 inches (0.13 mm) Total Indicator Reading (TIR).