

REV.
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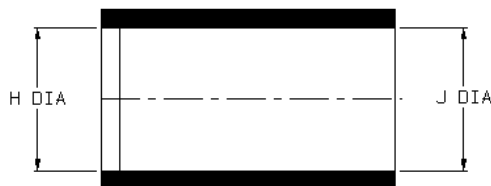
SAE AS85049/141

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4030

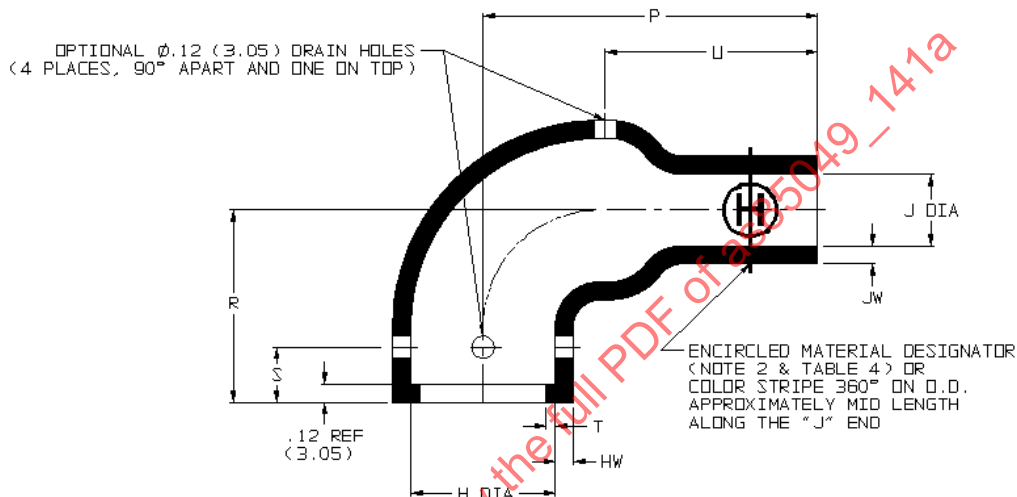
RATIONALE

REVISION NEEDED TO CORRECT FIGURES, TABLES AND PART NUMBER INFORMATION

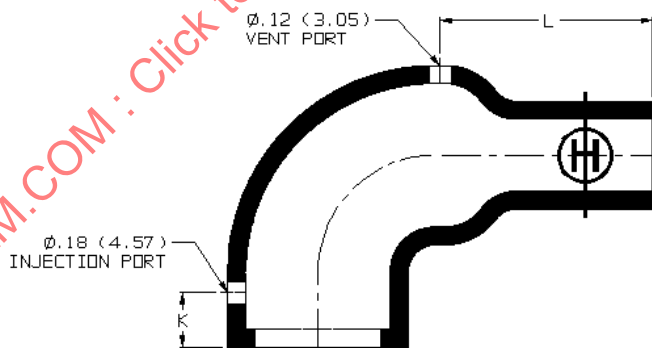
THE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE LATEST ISSUE OF SAE AS85049.



AS SUPPLIED



AS RECOVERED WITH DRAIN HOLES

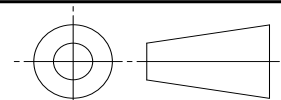


AS RECOVERED WITH INJECTION-VENT PORT

FIGURE 1 – RIGHT ANGLE BOOT (SEE TABLE 1)

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS85049/141A>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8C1

PROCUREMENT SPECIFICATION: AS85049

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) CONNECTOR ACCESSORIES, ELECTRICAL
BOOTS, HEAT-SHRINKABLE, 90°,
CATEGORY 7

SAE AS85049/141
SHEET 1 OF 10

REV.
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TABLE 1 – RIGHT ANGLE BOOT (FIGURE 1)

DASH NUMBER	H	H	J	J	P	R	T	HW	JW	S	U	K	L
	DIAMETER AS SUPPLIED MINIMUM	DIAMETER AS RECOVERED MAXIMUM	DIAMETER AS SUPPLIED MINIMUM MATERIAL A, B, H	DIAMETER AS SUPPLIED MINIMUM MATERIAL C, D, G	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED $\pm 20\%$	DIMENSION AS RECOVERED MAXIMUM	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED $\pm 10\%$
01	0.92 (23.4)	0.41 (10.4)	0.92 (23.4)	0.47 (11.9)	0.84 (21.3)	0.65 (16.5)	0.04 (1.0)	0.05 (1.3)	0.05 (1.3)	0.45 (11.4)	0.47 (11.9)	0.60 (15.2)	0.58 (14.7)
02	1.12 (28.4)	0.61 (15.5)	1.12 (28.4)	0.58 (14.7)	1.33 (33.8)	0.76 (19.3)	0.04 (1.0)	0.06 (1.5)	0.05 (1.3)	0.47 (11.9)	1.02 (25.9)	0.75 (19.1)	0.98 (24.9)
03	1.22 (31.0)	0.71 (18.0)	1.22 (31.0)	0.63 (16.0)	1.44 (36.6)	0.83 (21.1)	0.04 (1.0)	0.07 (1.8)	0.07 (0.18)	0.47 (11.9)	1.09 (27.7)	0.75 (19.1)	0.98 (24.9)
04	1.42 (36.1)	0.89 (22.6)	1.42 (36.1)	0.73 (18.5)	1.72 (43.7)	0.90 (22.9)	0.04 (1.0)	0.07 (1.8)	0.07 (0.18)	0.47 (11.9)	1.16 (29.5)	0.75 (19.1)	1.18 (30.0)
05	1.68 (42.7)	1.12 (28.4)	1.68 (42.7)	0.87 (22.1)	2.11 (53.6)	1.14 (29.0)	0.07 (1.8)	0.08 (2.0)	0.08 (2.0)	0.47 (11.9)	1.47 (37.3)	0.76 (19.3)	1.30 (33.0)
06	2.04 (51.8)	1.38 (35.1)	2.04 (51.8)	1.39 (35.3)	3.07 (78.0)	1.32 (33.5)	0.07 (1.8)	0.13 (3.3)	0.13 (3.3)	0.53 (13.5)	2.50 (63.5)	1.00 (25.4)	2.12 (53.8)
07	2.60 (66.0)	1.77 (45.0)	2.60 (66.0)	1.80 (45.7)	3.84 (97.5)	1.64 (41.7)	0.08 (2.0)	0.15 (3.8)	0.15 (3.8)	0.64 (16.3)	2.75 (69.9)	1.00 (25.4)	2.80 (71.1)
08	3.22 (81.8)	2.40 (61.0)	3.22 (81.8)	2.25 (57.2)	4.64 (117.9)	2.03 (51.6)	0.08 (2.0)	0.16 (4.1)	0.16 (4.1)	0.64 (16.3)	3.12 (79.2)	1.00 (25.4)	3.15 (80.0)

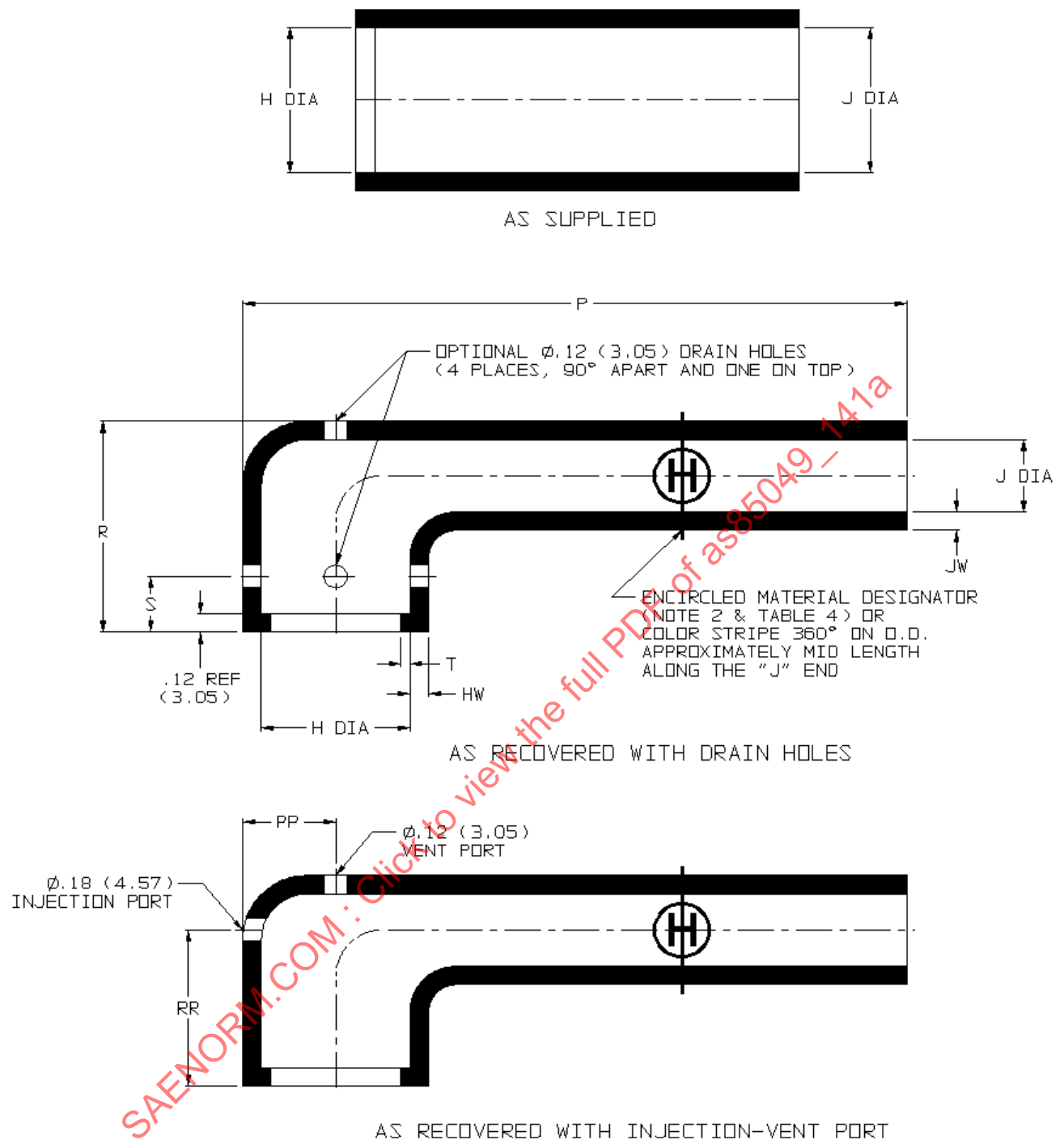


FIGURE 2 – RIGHT ANGLE LOW PROFILE BOOT (SEE TABLE 2)

TABLE 2 – RIGHT ANGLE LOW PROFILE BOOT (FIGURE 2)

DASH NUMBER	H	H	J	J	J	P	R	T	HW	JW	S	PP	RR
	DIAMETER AS SUPPLIED MINIMUM	DIAMETER AS RECOVERED MAXIMUM	DIAMETER AS SUPPLIED MINIMUM MATERIAL A, B, H	DIAMETER AS SUPPLIED MINIMUM MATERIAL C, D, G	DIAMETER AS RECOVERED MAXIMUM	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED $\pm 20\%$	DIMENSION AS RECOVERED MAXIMUM	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED $\pm 10\%$	DIMENSION AS RECOVERED $\pm 10\%$
09	0.88 (22.4)	0.45 (11.4)	0.88 (22.4)	0.55 (14.0)	0.25 (6.4)	4.14 (105.2)	0.73 (18.5)	0.04 (1.0)	0.06 (1.5)	0.06 (1.5)	0.47 (11.9)	0.27 (6.9)	0.49 (12.4)
10	1.01 (25.7)	0.59 (15.0)	1.01 (25.7)	0.63 (16.0)	0.30 (7.6)	4.88 (124.0)	0.78 (19.8)	0.04 (1.0)	0.06 (1.5)	0.06 (1.5)	0.47 (11.9)	0.33 (8.4)	0.59 (15.0)
11	1.16 (29.5)	0.74 (18.8)	1.16 (29.5)	0.72 (18.3)	0.33 (8.4)	5.76 (146.3)	0.82 (20.8)	0.04 (1.0)	0.07 (1.8)	0.06 (1.5)	0.47 (11.9)	0.41 (10.4)	0.61 (15.5)
12	1.34 (34.0)	0.90 (22.9)	1.34 (34.0)	0.84 (21.3)	0.39 (9.9)	6.78 (172.2)	0.86 (21.8)	0.04 (1.0)	0.07 (1.8)	0.06 (1.5)	0.47 (11.9)	0.48 (12.2)	0.62 (15.7)
13	1.47 (37.3)	1.16 (29.5)	1.47 (37.3)	0.91 (23.1)	0.43 (10.9)	7.29 (185.2)	0.96 (24.4)	0.07 (1.8)	0.08 (2.0)	0.06 (1.5)	0.47 (11.9)	0.61 (15.5)	0.70 (17.8)
14	1.72 (43.7)	1.34 (34.0)	1.72 (43.7)	1.07 (27.2)	0.48 (12.2)	8.41 (213.6)	1.08 (27.4)	0.07 (1.8)	0.08 (2.0)	0.06 (1.5)	0.47 (11.9)	0.72 (18.3)	0.78 (19.8)
15	1.97 (50.0)	1.62 (41.1)	1.97 (50.0)	1.24 (31.5)	0.57 (14.5)	8.84 (224.5)	1.16 (29.5)	0.07 (1.8)	0.09 (2.3)	0.06 (1.4)	0.47 (11.9)	0.83 (21.1)	0.82 (20.8)
16	2.47 (62.7)	1.85 (47.0)	2.47 (62.7)	1.54 (39.1)	0.71 (18.0)	8.95 (227.3)	1.31 (33.3)	0.08 (2.0)	0.10 (2.5)	0.06 (1.4)	0.63 (16.0)	0.95 (24.1)	0.92 (23.4)
17	2.73 (69.3)	2.35 (59.7)	2.73 (69.3)	1.70 (43.2)	0.79 (20.1)	9.19 (233.4)	1.38 (35.1)	0.08 (2.0)	0.10 (2.5)	0.06 (1.4)	0.63 (16.0)	1.18 (30.0)	0.93 (23.6)
18	3.22 (81.8)	2.64 (67.1)	3.22 (81.8)	2.01 (51.1)	0.91 (23.1)	9.33 (237.0)	1.75 (44.5)	0.08 (2.0)	0.10 (2.5)	0.06 (1.4)	0.63 (16.0)	1.31 (33.3)	1.23 (31.2)

TABLE 3 – RIGHT ANGLE LOW PROFILE MINIATURE BOOT (FIGURE 3)

DASH NUMBER	H	H	J	J	J	P	R	T	HW	JW	S	U ^{1/}
	DIAMETER AS SUPPLIED MINIMUM	DIAMETER AS RECOVERED MAXIMUM	DIAMETER AS SUPPLIED MINIMUM MATERIAL A, B, H	DIAMETER AS SUPPLIED MINIMUM MATERIAL C, D, G	DIAMETER AS RECOVERED MAXIMUM	DIMENSION AS RECOVERED ±10%	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED REF	DIMENSION AS RECOVERED ±20%	DIMENSION AS RECOVERED MAXIMUM	DIMENSION AS RECOVERED ±10%	DIMENSION AS RECOVERED ±10%
19	0.76 (19.3)	0.51 (13.0)	0.25 (6.4)	0.18 (4.6)	0.08 (2.0)	1.75 (44.5)	0.64 (16.3)	0.04 (1.0)	0.06 (1.5)	0.05 (1.1)	0.47 (11.9)	0.22 (5.6)
20	1.03 (26.2)	0.75 (19.1)	0.30 (7.6)	0.22 (5.6)	0.10 (2.5)	2.65 (67.3)	0.71 (18.0)	0.04 (1.0)	0.07 (1.8)	0.05 (1.1)	0.47 (11.9)	0.33 (8.4)
21	1.35 (34.3)	1.02 (25.9)	0.38 (9.7)	0.26 (6.6)	0.12 (3.0)	3.20 (81.3)	0.74 (18.8)	0.04 (1.0)	0.07 (1.8)	0.05 (1.1)	0.47 (11.9)	0.45 (11.4)
22	1.72 (43.7)	1.34 (34.0)	0.45 (11.4)	0.31 (7.9)	0.14 (3.6)	4.55 (115.6)	0.84 (21.3)	0.07 (1.8)	0.07 (1.8)	0.05 (1.1)	0.47 (11.9)	0.61 (15.5)

^{1/} DIMENSION APPLICABLE FOR INJECTION AND VENT PORT

TABLE 4 - AVAILABLE MATERIALS

MATERIAL DESIGNATOR 2/	MATERIAL 4/	OPERATING TEMPERATURE RANGE	MATERIAL DESIGNATOR COLOR STRIPE 2/	SHRINK TEMPERATURE 3/
A 1/	POLYOLEFIN SEMI-RIGID	-55 TO +135 °C (-67 TO +275 °F)	WHITE	121 °C (250 °F)
B 1/	POLYOLEFIN FLEXIBLE	-55 TO +135 °C (-67 TO +275 °F)	RED	100 °C (212 °F)
C	SILICONE	-75 TO +180 °C (-103 TO +356 °F)	ORANGE	135 °C (275 °F)
D	FLEXIBLE FLUORO-ELASTOMER	-55 TO +200 °C (-67 TO +392 °F)	YELLOW	175 °C (347 °F)
G 1/	POLYOLEFIN HALOGEN, FREE	-30 TO +105 °C (-22 TO +221 °F)	GREEN	120 °C (248 °F)
H 1/	ELASTOMERIC, /	-75 TO +150 °C (-103 TO +275 °F)	BLUE	135 °C (275 °F)

1/ OPTIONAL ADHESIVE MATERIAL APPLIED ON INSIDE SURFACE SHALL BE CONTROLLED BY THE SUPPLIER TO MAINTAIN THE ADHESION AT OPERATING TEMPERATURE.

2/ MATERIAL DESIGNATOR SHALL BE A CONTINUOUS COLOR STRIPE RING, APPROXIMATELY 1/8 INCH WIDE, OR AN ENCIRCLED MATERIAL DESIGNATOR LOCATED AS SHOWN IN FIGURES 1 THRU 3. COLOR OR MATERIAL DESIGNATOR SHALL REMAIN DISTINGUISHABLE OVER THE SPECIFIED TEMPERATURE RANGE. THE SIZE OF THE MATERIAL DESIGNATOR SHALL BE RECOGNIZABLE AFTER RECOVERED, AND THE COLOR SHALL BE CONTRASTING TO THE COLOR OF THE BOOT AT THE MANUFACTURERS CHOICE.

3/ COMPONENTS SHRINK UPON APPLICATION OF HEAT IN EXCESS OF VALUES LISTED.

4/ MATERIAL SHALL BE CERTIFIED TO AS5258.

NOTES:

1. DIMENSIONS ARE IN INCHES
2. UNLESS OTHERWISE SPECIFIED TOLERANCES SHALL BE: .XX = ± .020 (0.51mm), .XXX = ± .010 (0.25mm)
3. METRIC EQUIVALENTS ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED ON 25.4mm = 1 INCH. METRIC EQUIVALENTS ARE SHOWN IN PARENTHESES.

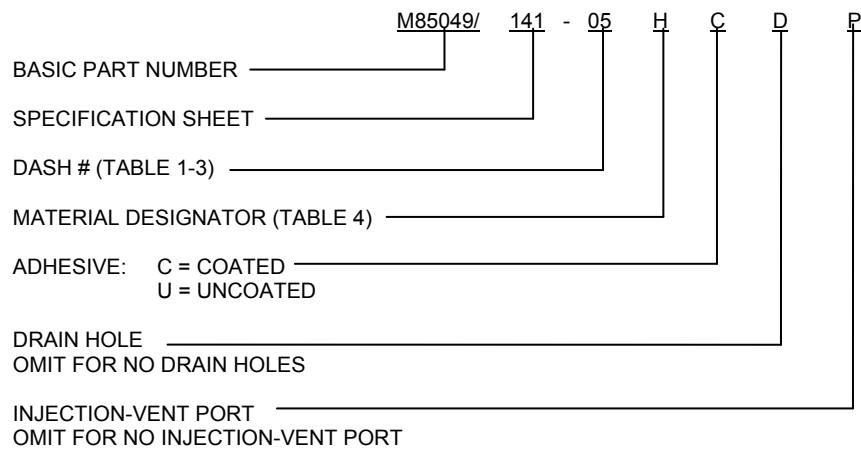
REQUIREMENTS:

CONNECTOR ACCESSORY DESIGN AND CONSTRUCTION:

1. DIMENSIONS AND CONFIGURATIONS AS SPECIFIED IN FIGURES 1 THRU 3 AND TABLES 1 THRU 3. DIMENSIONS H AND J REDUCED BY 0.06 (1.5mm) INCHES WHEN ADHESIVE IS USED (SEE EXAMPLE PART NUMBER).
2. MATERIAL TYPE AND IDENTIFICATION AS SPECIFIED IN TABLE 4

 An SAE International Group	AEROSPACE STANDARD	SAE AS85049/141 SHEET 7 OF 10	REV. A
	(R) CONNECTOR ACCESSORIES, ELECTRICAL BOOTS, HEAT-SHRINKABLE, 90°, CATEGORY 7		

3. PART OR IDENTIFYING NUMBER (PIN) EXAMPLE:



QUALIFICATIONS:

THE CONNECTOR ACCESSORIES SHALL MEET QUALIFICATION REQUIREMENTS OF SAE AS85049 CATEGORY 7 AND HEREIN. ONLY QUALIFICATION BY CERTIFICATION OF DIMENSIONS AND MATERIALS IS REQUIRED.

APPLICATION NOTES:

MAY BE USED IN CONJUNCTION WITH AS85049/60 (-1, AND -2 CONFIGURATIONS), AS85049/62, M85049/69, AS85049/82 THRU /90, AS85049/109 THRU /117 ADAPTERS

SUPERSESION DATA:

SUPERSESION OR EQUIVALENT DATA FOR REFERENCE ONLY

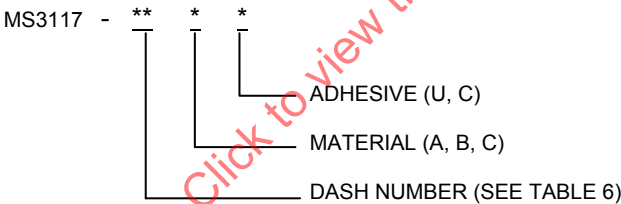


TABLE 5- AS3117 SUPERSESION BY AS85049/141
CROSS REFERENCE

DASH #		MATERIAL		ADHESIVE		DRAIN HOLE		INJECTION-VENT PORTS	
MS3117	/141	MS3117	/141	MS3117	/141	MS3117	/141	MS3117	/141
FIG 1 -01 THRU -10	FIG 2 -09 THRU -18	B	A	C	C	REQ	D	NONE	BLANK
FIG 2 -11 THRU -18	FIG 1 -01 THRU -08	A	B	U	U	NONE	BLANK		
		C	D						