

REV.
A

SAE AS81714/63

FEDERAL SUPPLY CLASS
5940

RATIONALE

REVISE TO INCLUDE COMMENTS RECEIVED BY THE GOVERNMENT AND INDUSTRY, REMOVE GOVERNMENT JARGON, UPDATE REFERENCES, ALIGN SPECIFICATION WITH SAE GUIDELINES, AND REVIEW SPECIFICATION FOR KNOWN TECHNICAL PROBLEMS.

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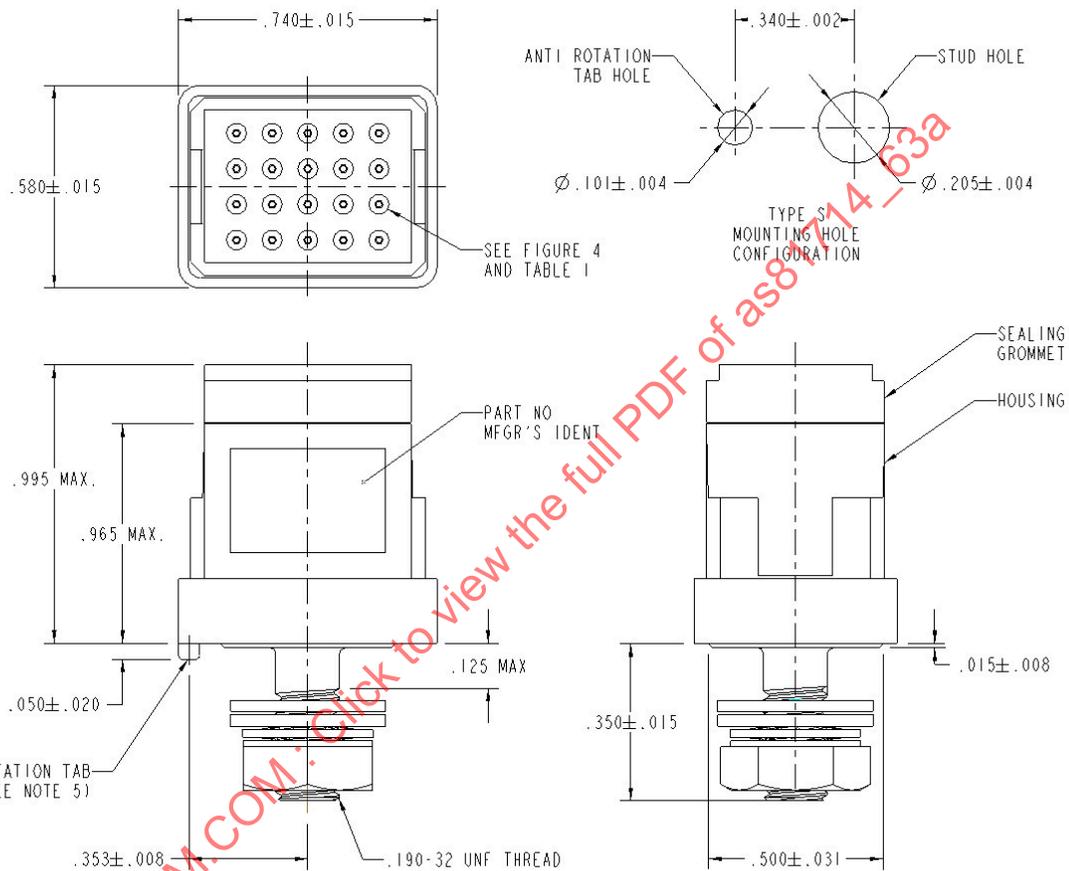
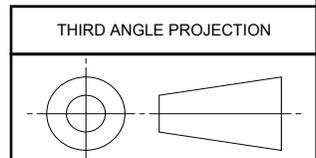


FIGURE 1 - STUD MOUNTING TYPE S

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CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS81714

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD
TERMINAL JUNCTION SYSTEM, TERMINAL JUNCTION BLOCKS, SECTIONAL, GROUNDING MODULES, STUD AND FLANGE TYPE MOUNTING, SERIES II

SAE AS81714/63
SHEET 1 OF 6

REV. A

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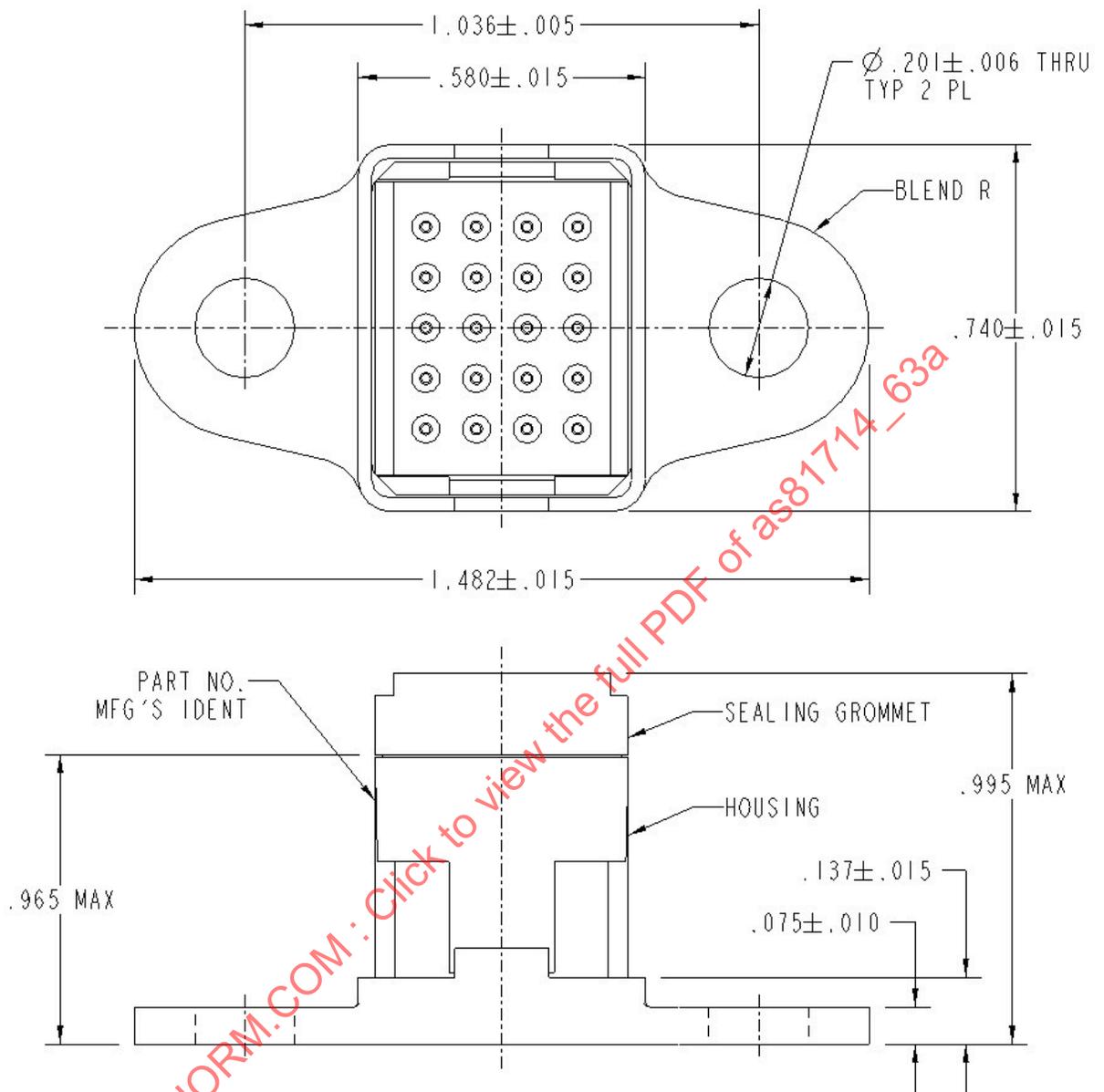


FIGURE 2 - FLANGE MOUNTING TYPE F (ALL EXCEPT BLOCK SIZE 12)

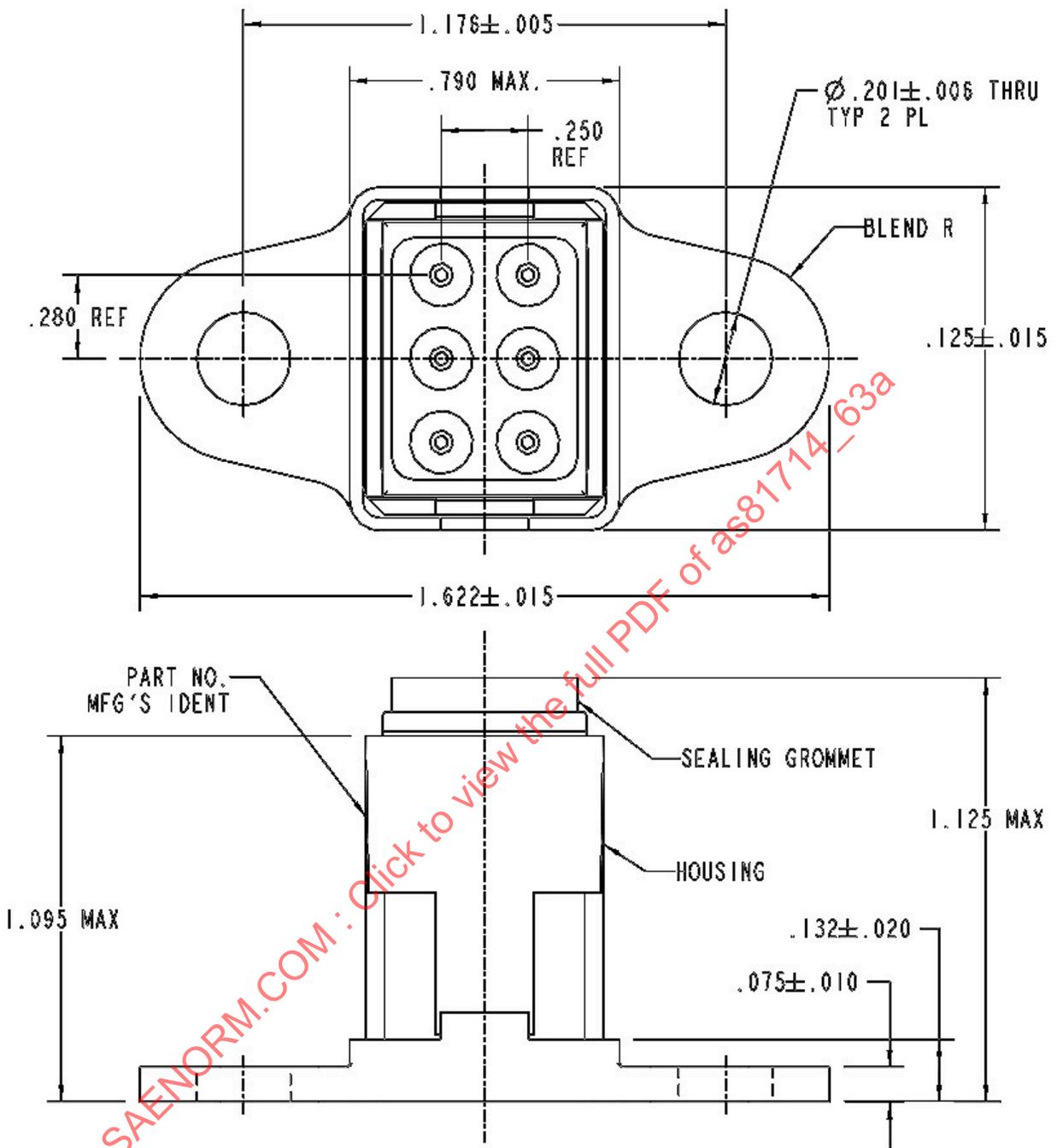
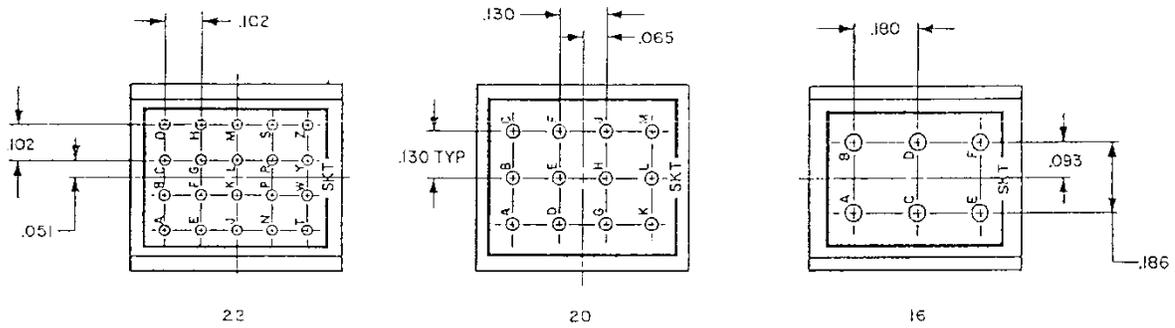


FIGURE 3 - FLANGE MOUNTING TYPE F, BLOCK SIZE 12

 An SAE International Group	AEROSPACE STANDARD	SAE AS81714/63 SHEET 3 OF 6	REV. A
	TERMINAL JUNCTION SYSTEM, TERMINAL JUNCTION BLOCKS, SECTIONAL, GROUNDING MODULES, STUD AND FLANGE TYPE MOUNTING, SERIES II		



ALL DIMENSIONS OF THIS FIGURE ARE REFERENCE DIMENSIONS.

FIGURE 4 - TYPE S AND F

TABLE 1 - TOOLING

COMPONENT DESIGNATOR	BUSSING ARRANGEMENT	TYPE	CONTACT INSERTING/ REMOVAL TOOL	END SEALING PLUG	FIGURE
22	22	S & F	M81969/16-04	MS27488-22-2	4
20	20	S & F	M81969/14-02	MS27488-20-2	4
16	16	S & F	M81969/14-03	MS27488-16-2	4
12 (SEE REQUIREMENT 6)	12	F ONLY	M89169/16-03	MS27488-12-2	3

INCH	MM	INCH	MM	INCH	MM	INCH	MM
.002	0.05	.065	1.65	.186	4.72	.740	18.79
.004	1.01	.075	1.90	.201	5.10	.790	20.06
.005	0.12	.093	2.36	.205	5.20	.965	24.51
.006	0.15	.101	2.56	.250	6.35	.995	25.27
.008	0.20	.102	2.59	.280	7.11	1.036	26.31
.010	0.25	.125	3.17	.340	8.63	1.095	27.81
.015	0.38	.130	3.30	.350	8.89	1.125	28.57
.020	0.50	.132	3.35	.353	8.96	1.176	29.87
.031	0.78	.137	3.47	.500	12.7	1.482	37.64
.050	1.27	.180	4.57	.580	14.73	1.622	41.19
.051	1.29						

REQUIREMENTS:

1. FINISH

THE STUD/STUD BASE FOR TYPE "S", AND THE FLANGE FOR TYPE "F" SHALL BE GOLD PLATED IN ACCORDANCE WITH MIL-DTL-45204, TYPE I, GRADE C, CLASS 00 OVER A SUITABLE NICKEL UNDERPLATE.

2. THE ASSEMBLY SHALL BE MOUNTED IN A TEST FIXTURE, AS SHOWN IN FIGURE 5, WITH AN ADAPTER ATTACHED TO THE STUD OR FLANGE AS NECESSARY. APPLY THE REQUIRED LOAD AT DISTANCE "L" FROM THE TEST FIXTURE AS SHOWN. THE LOAD SHALL CREATE A BENDING MOMENT OF 20 INCH-LBS. FOR SIZES 22, 20 AND 16, AND 30 INCH-LBS. FOR SIZE 12. APPLY THE LOAD AT A RATE OF APPROXIMATELY 1 LB. PER SECOND UNTIL THE REQUIRED FORCE IS ACHIEVED AND KEEP IT APPLIED FOR 15 SECONDS BEFORE RELEASING. THERE SHALL BE NO EVIDENCE OF SEPARATION BETWEEN THE HOUSING AND THE STUD OR SHELL BASE, OR ANY OTHER DAMAGE DETRIMENTAL TO THEIR NORMAL OPERATION.