

REV.
A

AIR3276™

FEDERAL SUPPLY CLASS

RATIONALE

REDRAW ENTIRE STANDARD TO MAKE CLEAR REPRODUCTION COPIES. ALSO TO REVISE THE TABLE AND ILLUSTRATION TO MATCH THE MANUFACTURER'S CURRENT DATASHEETS.

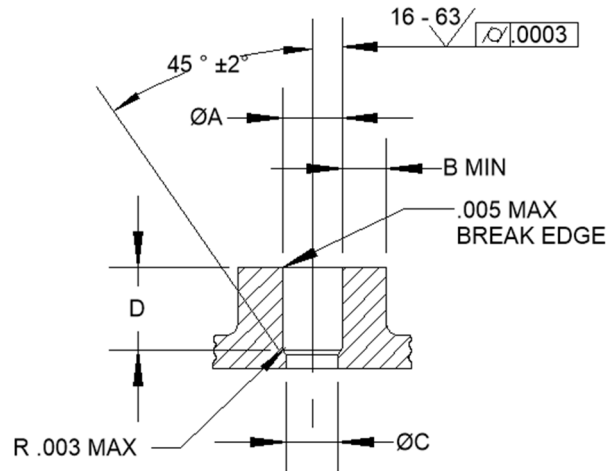


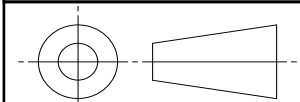
FIGURE 1

TABLE 1

NOMINAL DIAMETER OF PLUG	A			B MIN	C MAX	D MIN	
	CLASS 1	CLASS 2	CLASS 3			SHORT	LONG
.093	.0937-.0962	.0937-.0952	.0937-.0942	.070	.062	.097	.145
.125	.1250-.1275	.1250-.1265	.1250-.1255	.094	.093	.125	.195
.156	.1562-.1587	.1562-.1577	.1562-.1567	.117	.125	.130	.250
.187	.1875-.1900	.1875-.1890	.1875-.1880	.140	.156	.152	.253
.218	.2187-.2212	.2187-.2202	.2187-.2192	.164	.187	.187	.312
.250	.2500-.2525	.2500-.2515	.2500-.2505	.188	.218	.212	.352
.281	.2812-.2837	.2812-.2827	.2812-.2817	.211	.250	.250	.375
.343	.3437-.3462	.3437-.3452	.3437-.3442	.257	.312	.295	.437
.406	.4062-.4087	.4062-.4077	.4062-.4067	.305	.375	.325	.500
.468	.4687-.4712	.4687-.4702	.4687-.4692	.351	.437	.350	.562
.531	.5312-.5337	.5312-.5327	.5312-.5317	.398	.500	.486	.625
.656	.6562-.6587	.6562-.6577	.6562-.6567	.492	.625	.490	.685

For more information on this standard, visit
<https://www.sae.org/standards/content/AIR3276A/>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE



AEROSPACE INFORMATION REPORT

BOSS - PLUG/PIN, EXPANSION TYPE
HOLE PREPARATION

AIR3276™
SHEET 1 OF 2

REV.
A



Documents

TABLE 2

NOMINAL DIAMETER OF PLUG	E PROOF PRESSURE (PSI X 1000) /5/											
	ALUMINUM						STAINLESS STEEL					
	CLASS 1		CLASS 2		CLASS 3		CLASS 1		CLASS 2		CLASS 3	
	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG
.093		10		13		16		18		20		24
.125		10		13		16	14	18	16	20	20	24
.156	8	10	9	13	12	16	8	18	9	24	10	28
.187	8	10	9	13	10	15	12	18	14	24	16	28
.218	8	9	9	12	10	15	10	16	12	22	14	26
.250	8	9	9	12	10	14	12	16	14	22	16	25
.281	8	9	9	12	10	14	12	18	14	20	16	24
.343	6	8	8	11	10	14	10	18	12	20	14	22
.406	6	8	8	10	10	13	10	16	12	18	14	21
.468	6	7	8	10	10	12	10	16	12	18	14	20
.531	6	6	8	8	10	12	10	14	12	16	14	18
.656	3	4	4	7	5	10	6	10	8	14	10	16

NOTES:

1. MINIMUM WALL THICKNESS, DIMENSION B, IS REQUIRED TO PRODUCE THE PROOF PRESSURE SPECIFIED IN COLUMN E.
2. DIMENSIONS SPECIFIED IN COLUMN B PROVIDE STRESSES AT THE OUTSIDE OF THE BOSS WHICH WILL NOT EXCEED 20000 PSI FOR ALUMINUM PLUG IN ALUMINUM BOSSES OR 46100 PSI FOR 416 CRES PLUGS IN 416 CRES BOSSES (26-32 HRC).
3. DIAMETER A TOLERANCE CLASS SELECTION IS BASED ON PLUG LENGTH PROOF PRESSURE REQUIREMENTS.
4. THE SHOULDER PRODUCED BY C DIAMETER AND THE 45° CHAMFER IS REQUIRED TO SUPPORT THE PLUG WHILE DRIVING THE PIN. VARIATIONS IN THESE FEATURES MAY ALLOW THE PLUG TO MOVE DOWN THE BORE UPON DRIVING THE PIN WHICH CAN CAUSE REDUCED PROOF PRESSURES.
- /5/ PROOF PRESSURES INDICATED ARE FOR 2024-T4 ALUMINUM PLUGS IN 2024-T4 ALUMINUM BOSSES, 303 CRES PLUGS IN 303 CRES BOSSES, AND 416 CRES PLUGS IN 416 CRES BOSSES (26-32 HRC). USERS OF THIS STANDARD ARE ADVISED TO CONSULT WITH THE PART MANUFACTURERS FOR MOST CURRENT PRESSURE RATINGS.
6. DIAMETER "A" IS .010 OVERSIZE FOR REPAIR PLUG.
7. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36-1978. REQUIREMENTS PER ANSI B46.1-1978.
8. DIMENSIONING AND TOLERANCING: ANSI Y14.5-1973.
9. ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED. DIMENSIONS APPLY AFTER FINISH.
10. REVISION INDICATOR: 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.

	AEROSPACE INFORMATION REPORT		AIR3276™ SHEET 2 OF 3	REV. A
	BOSS - PLUG/PIN, EXPANSION TYPE HOLE PREPARATION			

 Documents

