

INCH-POUND

AN918 Rev 9
19 July 2011
SUPERSEDING
AN918 Rev 8
21 March 1979

DETAIL SPECIFICATION SHEET

CROSS, PIPE

Reinstated after 19 July 2011. Inactive for new design.
For new design, use SAE-AS4857.

This specification is approved for use by all Departments and
Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and
SAE-AS4842.

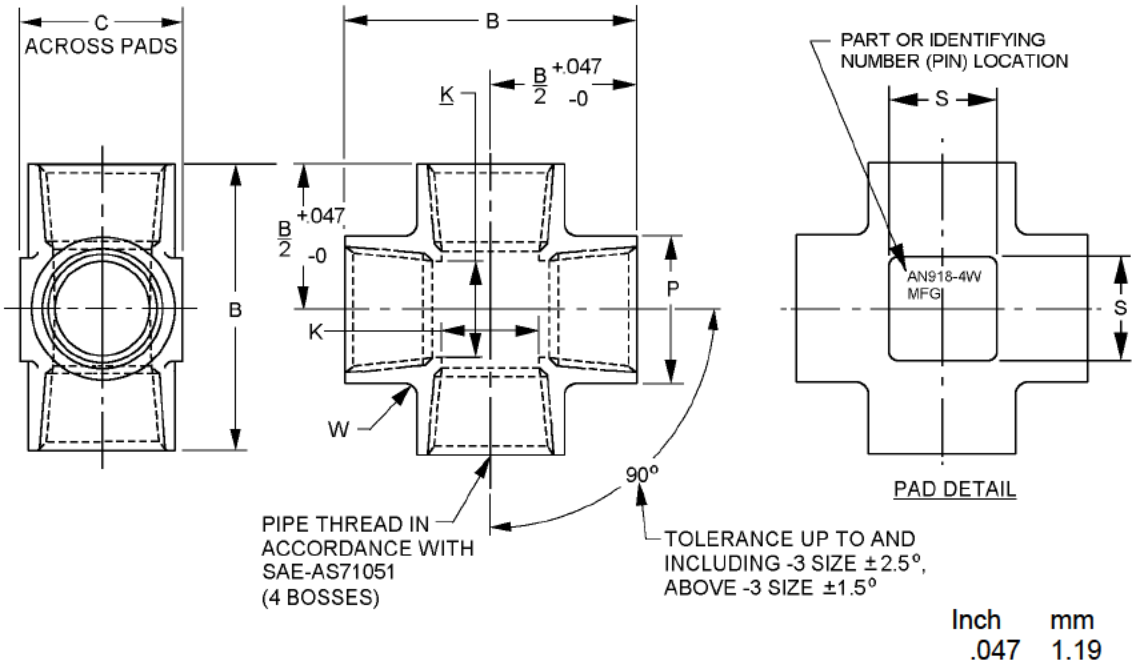


FIGURE 1. Cross dimensions and configurations.

AN918 Rev 9

Dash number	A Pipe thread ANPT SAE-AS71051	B +.094 (2.39) -0.00 inches (mm)	C inches (mm)	K Dia. inches (mm)	
1	1/8-27	1.281 (32.54)	.625 (15.88)	.327 (8.31)	+ .000 - .016 (0.41)
2	1/4-18	1.781 (45.24)	.813 (20.65)	.423 (10.74)	+ .000 - .019 (0.48)
3	3/8-18	1.938 (49.23)	.938 (23.83)	.557 (14.15)	+ .000 - .028 (0.71)
4	1/2-14	2.469 (62.71)	1.188 (30.18)	.688 (17.48)	+ .000 - .034 (0.86)
6	3/4-14	2.688 (68.28)	1.375 (34.93)	.897 (22.78)	+ .000 - .040 (1.02)
8	1-11 1/2	3.250 (82.55)	1.750 (44.45)	1.128 (28.65)	+ .000 - .037 (0.94)
10	1/ 1/4-11 1/2	3.375 (85.73)	2.156 (54.76)	1.471 (37.36)	+ .000 - .036 (0.91)

Dash number	P Dia. inches (mm)	S Approx inches (mm)	W Rad. inches (mm)
1	.578 (14.68)	.500 (12.70)	.063 (1.60)
2	.781 (19.84)	.625 (15.88)	.094 (2.39)
3	.922 (23.42)	.750 (19.05)	.094 (2.39)
4	1.156 (29.36)	.875 (22.23)	.125 (3.18)
6	1.359 (34.52)	1.000 (25.40)	.125 (3.18)
8	1.688 (42.88)	1.125 (28.58)	.125 (3.18)
10	2.094 (53.19)	1.250 (31.75)	.156 (3.96)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are ± 0.016 inch (0.41 mm).
4. Break sharp edges and remove all hanging burrs and slivers
5. Machined surfaces shall be finished to 125 μ m Ra, forged surfaces shall be 250 μ m Ra, unless otherwise specified on the figures. Surface finish shall be in accordance with ASME B46.1.
6. For design features purposes, this standard takes precedence over documents referenced herein.
7. Referenced documents shall be of the issue in effect on date of invitation for bid.

FIGURE 1. Cross dimensions and configurations - Continued.

REQUIREMENTS:

Dimensions and configuration shall be in accordance with figure 1.

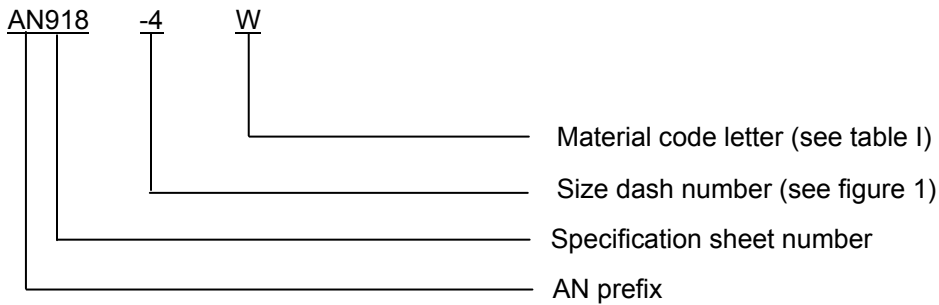
Materials and finishes shall be in accordance with SAE-AS4842, see table I for material code.

TABLE I. Material and code letters.

Code letter	Material
Blank	Copper alloy
J	Corrosion resistant steel (CRES), type 304
K	CRES, type 316
R	CRES, type 321
T 1/	Titanium
W	Aluminum alloy 7075-T73

1/ Not for use in oxygen systems.

PIN: The PIN consists of the prefix “AN” the specification sheet number, a dash number for pipe size, and material code letter. Unassigned PIN’s shall not be used.



PIN example: AN918-4W indicates a cross, 1/2-14 ANPT internal pipe threads, aluminum alloy 7075-T73.

Marking: Part shall be permanently marked with the AN PIN, and include the manufacturers CAGE, name, or trademark.

Supersession data:

Due to stress corrosion cracking aluminum alloys 2014 and 2024 “D” designator has been replaced by aluminum alloy 7075 “W” designator. Example: AN918-8D use AN918-8W.

Metal cracking due to high temperatures CRES alloy 347 “S” designator has been replaced by CRES alloy 321 “R” designator. Example: AN918-8S use AN918-8R.

Table II provides a detailed cross-reference of cancelled AN918 PINs and replacement SAE-AS4858 PINs. Users are cautioned to evaluate replacements for their particular application.

CAUTION: The superseding information is valid as of the date of this specification and may be superseded by subsequent revisions of the superseding document.

AN918 Rev 9

TABLE II. Cross-reference data.

AN PIN (inactive)	Pipe size	Replacement AS PIN (for new design)	Replacement AN PIN (inactive)
AN918-1	.125	AS4858-01	
AN918-1D	.125	AS4858W01	AN918-1W
AN918-1J	.125	AS4858J01	
AN918-1K	.125	AS4858K01	
AN918-1R	.125	AS4858R01	
AN918-1S	.125	AS4858R01	AN918-1R
AN918-1T	.125	None	
AN918-1W	.125	AS4858W01	
AN918-2	.250	AS4858-02	
AN918-2D	.250	AS4858W02	AN918-2W
AN918-2J	.250	AS4858J02	
AN918-2K	.250	AS4858K02	
AN918-2R	.250	AS4858R02	
AN918-2S	.250	AS4858R02	AN918-2R
AN918-2T	.250	None	
AN918-2W	.250	AS4858W02	
AN918-3	.375	AS4858-03	
AN918-3D	.375	AS4858W03	AN918-3W
AN918-3J	.375	AS4858J03	
AN918-3K	.375	AS4858K03	
AN918-3R	.375	AS4858R03	
AN918-3S	.375	AS4858R03	AN918-3R
AN918-3T	.375	None	
AN918-3W	.375	AS4858W03	
AN918-4	.500	AS4858-04	
AN918-4D	.500	AS4858W04	AN918-4W
AN918-4J	.500	AS4858J04	
AN918-4K	.500	AS4858K04	
AN918-4R	.500	AS4858R04	
AN918-4S	.500	AS4858R04	AN918-4R
AN918-4T	.500	None	
AN918-4W	.500	AS4858W04	

AN918 Rev 9

TABLE II. Cross-reference data - Continued.

AN PIN (inactive)	Pipe size	Replacement AS PIN (for new design)	Replacement AN PIN (inactive)
AN918-6	.750	AS4858-06	
AN918-6D	.750	AS4858W06	AN918-6W
AN918-6J	.750	AS4858J06	
AN918-6K	.750	AS4858K06	
AN918-6R	.750	AS4858R06	
AN918-6S	.750	AS4858R06	AN918-6R
AN918-6T	.750	None	
AN918-6W	.750	AS4858W06	
AN918-8	1.000	AS4858-08	
AN918-8D	1.000	AS4858W08	AN918-8W
AN918-8J	1.000	AS4858J08	
AN918-8K	1.000	AS4858K08	
AN918-8R	1.000	AS4858R08	
AN918-8S	1.000	AS4858R08	AN918-8R
AN918-8T	1.000	None	
AN918-8W	1.000	AS4858W08	
AN918-10	1.250	AS4858-10	
AN918-10D	1.250	AS4858W10	AN918-10W
AN918-10J	1.250	AS4858J10	
AN918-10K	1.250	AS4858K10	
AN918-10R	1.250	AS4858R10	
AN918-10S	1.250	AS4858R10	AN918-10R
AN918-10T	1.250	None	
AN918-10W	1.250	AS4858W10	

Changes from previous issues. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to SAE-AS4842, this document references the following:

ASME B46.1
 SAE-AS4857
 SAE-AS4858
 SAE-AS71051

CONCLUDING MATERIAL

Custodians:

Army - AV
Navy - AS
Air Force - 99
DLA - CC

Preparing activity:
DLA - CC

(Project 4730-2011-079)

Review activities:

Navy - MC. SH
Air Force - 71

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>.