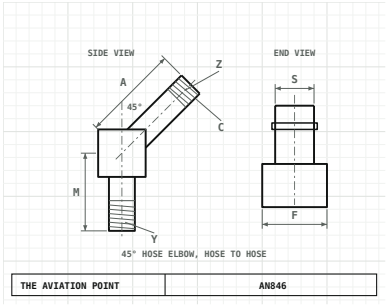
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AN846 — 45° hose elbow, hose to hose

AN846: 45° elbow, hose to hose, dash 4 to 24 in eight material codes.



Engineering drawing · dimensions in inches

Specification

Item	Value
Type	Fitting, elbow, 45°, hose to hose
Material	Copper alloy, CRES types 304, 316, 321 or 347, titanium alloy or aluminum alloy 7075-T73, by code letter
Finish	Materials and finishes per SAE-AS4843/2
Status	Inactive for new design; for new design use SAE-AS5187. Check the current issue before design use.

Dimensions by size

Dimension, in	-4	-6	-8	-10	-12	-16	-20	-24
ID — Hose ID	.250	.375	.500	—	.750	1.000	1.250	1.500
A — A	1.938	1.969	2.000	2.031	2.167	2.167	2.167	2.167
B — B	.438	.469	.500	.531	.563	.563	.563	.563
C — Thread (SAE-AS8879)	.4375-20 UNJF-3A	.5625-18 UNJF-3A	.7500-16 UNJF-3A	—	1.0625-12 UNJ-3A	1.3125-12 UNJ-3A	1.6250-12 UNJ-3A	1.8750-12 UNJ-3A
D — D, +.047 -.000	2.266	2.406	2.500	2.641	2.703	2.750	2.938	3.000
E — E	.156	.188	.219	.250	.250	.250	.281	.281
F — Across wrench pad	.438	.563	.750	.875	1.063	1.313	1.625	1.875
H — Radius	.063	.063	.094	.094	.094	.125	.125	.125
J — Diameter	.438	.563	.750	.875	1.063	1.313	1.625	1.875
L — Approx.	.250	.375	.438	.500	.563	.688	1.000	1.125
M — M, +.047 -.000	1.609	1.656	1.688	1.734	1.766	1.828	1.922	1.969
P — Approx.	.219	.281	.344	.438	.500	.563	.688	.750
R — Radius	.219	.281	.375	.438	.531	.656	.813	.938
S — Diameter	.625	.813	1.000	1.250	1.438	1.688	2.063	2.375
U — Radius	.063	.094	.094	.125	.125	.125	.188	.188
Y — Drill depth, +.047 -.000	1.641	1.719	1.766	1.848	1.891	2.016	2.141	2.250
Z — Drill depth, +.047 -.000	2.297	2.469	2.578	2.750	2.828	2.938	3.156	3.281

Dimensions in inches by dash number; letters as on the standard's drawing. Tolerances ±.016 unless shown. Dash -10: hose ID and thread C are left blank because the standard misprints them for this size.

Part numbers

.250 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-4	.250	Copper alloy	AS5187B04	—
AN846-4D	.250	Aluminum alloy (code replaced by W)	AS5187W04	AS5187W04
AN846-4J	.250	CRES type 304	AS5187J04	—
AN846-4K	.250	CRES type 316	AS5187K04	—
AN846-4R	.250	CRES type 321	AS5187R04	—
AN846-4S	.250	CRES type 347	AS5187R04	AS5187R04
AN846-4T	.250	Titanium alloy	None	—
AN846-4W	.250	Aluminum alloy 7075-T73	AS5187W04	—

.375 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-6	.375	Copper alloy	AS5187B06	—
AN846-6D	.375	Aluminum alloy (code replaced by W)	AS5187W06	AS5187W06
AN846-6J	.375	CRES type 304	AS5187J06	—
AN846-6K	.375	CRES type 316	AS5187K06	—
AN846-6R	.375	CRES type 321	AS5187R06	—
AN846-6S	.375	CRES type 347	AS5187R06	AS5187R06
AN846-6T	.375	Titanium alloy	None	—
AN846-6W	.375	Aluminum alloy 7075-T73	AS5187W06	—

.500 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-8	.500	Copper alloy	AS5187B08	—
AN846-8D	.500	Aluminum alloy (code replaced by W)	AS5187W08	AS5187W08
AN846-8J	.500	CRES type 304	AS5187J08	—
AN846-8K	.500	CRES type 316	AS5187K08	—
AN846-8R	.500	CRES type 321	AS5187R08	—
AN846-8S	.500	CRES type 347	AS5187R08	AS5187R08
AN846-8T	.500	Titanium alloy	None	—
AN846-8W	.500	Aluminum alloy 7075-T73	AS5187W08	—

.625 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-10	.625	Copper alloy	AS5187B10	—
AN846-10D	.625	Aluminum alloy (code replaced by W)	AS5187W10	AS5187W10
AN846-10J	.625	CRES type 304	AS5187J10	—
AN846-10K	.625	CRES type 316	AS5187K10	—
AN846-10R	.625	CRES type 321	AS5187R10	—
AN846-10S	.625	CRES type 347	AS5187R10	AS5187R10
AN846-10T	.625	Titanium alloy	None	—
AN846-10W	.625	Aluminum alloy 7075-T73	AS5187W10	—

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.

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.750 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-12	.750	Copper alloy	AS5187B12	—
AN846-12D	.750	Aluminum alloy (code replaced by W)	AS5187W12	AS5187W12
AN846-12J	.750	CRES type 304	AS5187J12	—
AN846-12K	.750	CRES type 316	AS5187K12	—
AN846-12R	.750	CRES type 321	AS5187R12	—
AN846-12S	.750	CRES type 347	AS5187R12	AS5187R12
AN846-12T	.750	Titanium alloy	None	—
AN846-12W	.750	Aluminum alloy 7075-T73	AS5187W12	—

1.250 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-20	1.250	Copper alloy	AS5187B20	—
AN846-20D	1.250	Aluminum alloy (code replaced by W)	AS5187W20	AS5187W20
AN846-20J	1.250	CRES type 304	AS5187J20	—
AN846-20K	1.250	CRES type 316	AS5187K20	—
AN846-20R	1.250	CRES type 321	AS5187R20	—
AN846-20S	1.250	CRES type 347	AS5187R20	AS5187R20
AN846-20T	1.250	Titanium alloy	None	—
AN846-20W	1.250	Aluminum alloy 7075-T73	AS5187W20	—

1.000 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-16	1.000	Copper alloy	AS5187B16	—
AN846-16D	1.000	Aluminum alloy (code replaced by W)	AS5187W16	AS5187W16
AN846-16J	1.000	CRES type 304	AS5187J16	—
AN846-16K	1.000	CRES type 316	AS5187K16	—
AN846-16R	1.000	CRES type 321	AS5187R16	—
AN846-16S	1.000	CRES type 347	AS5187R16	AS5187R16
AN846-16T	1.000	Titanium alloy	None	—
AN846-16W	1.000	Aluminum alloy 7075-T73	AS5187W16	—

1.500 8 part numbers

Part no.	Tube size	Material	Replacement (SAE-AS5187)	New design
AN846-24	1.500	Copper alloy	AS5187B24	—
AN846-24D	1.500	Aluminum alloy (code replaced by W)	AS5187W24	AS5187W24
AN846-24J	1.500	CRES type 304	AS5187J24	—
AN846-24K	1.500	CRES type 316	AS5187K24	—
AN846-24R	1.500	CRES type 321	AS5187R24	—
AN846-24S	1.500	CRES type 347	AS5187R24	AS5187R24
AN846-24T	1.500	Titanium alloy	None	—
AN846-24W	1.500	Aluminum alloy 7075-T73	AS5187W24	—

How to read the part number

Part	Meaning
Format	AN846-<dash><material>
(none)	Material: Copper alloy
J	Material: CRES type 304
K	Material: CRES type 316
S	Material: CRES type 347
R	Material: CRES type 321
T	Material: Titanium alloy (not for oxygen systems)
W	Material: Aluminum alloy 7075-T73
D	Material: Aluminum alloy, replaced by W
Example	AN846-8W — 45° elbow, hose to hose, hose size .500, aluminum alloy 7075-T73

Notes

- Dimensions in inches. Unless otherwise specified, tolerances ±.016.
- Both fitting ends per SAE-AS5132; thread C per SAE-AS8879, with a 1.5-thread relief. Angle between the legs 45° ±2.5°.
- Machined surfaces 125 µin Ra and forged surfaces 250 µin Ra unless otherwise specified (ASME B46.1).
- Part number: AN, the sheet number, the size dash number and the material code letter. Unassigned part numbers shall not be used.
- The aluminum code D has been replaced by W. Titanium alloy (code T) is not for use in oxygen systems.
- For new design use material code R or W. Each part number is listed with its replacement SAE-AS5187 number; evaluate the replacement for the particular application.
- Marking: the AN part number and the manufacturer's CAGE code, name or trademark.
- Approved data governs. Use the part the drawing, SRM or IPC calls for.

SOURCES · AN846 Rev. 8, June 2011 — Elbow, Hose, 45°

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theaviationpoint.com/parts/fittings/an846/

Reference data. The aircraft manufacturer's documentation (SRM / IPC) takes precedence.