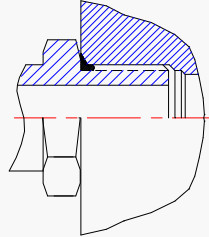


METRIC BOSS SEPARABLE FITTING



DESIGN CONCEPT:

The concept of MA2012 Boss design provides an internally threaded port to mate with fittings for use in extreme tight areas. The design of the Boss accommodates mating with Straight threaded fitting end per MA2093. An O-ring that is installed on the hex face of the mating fitting end and compressed against the front seat of the Boss surface accomplishes sealing.

O-ring materials shall be selected based on compatibility with system fluid and temperature requirements. This design concept is handy for fluid connections on actuators, instrument gages, manifolds, pumps, reservoirs, etc. It is also an ideal fitting design for drainage purpose as well.

DESIGN ADVANTAGES:

- X Sealing efficiency is accomplished by changing new O-ring per each repeated usage. Thus, wear and tear of both mating fittings are kept to minimum to reduce down time and high repair cost.
- X Assembly of Boss connections can be made in place for production and repair applications.
- X Design concept allows fitting connections be installed in extreme tight areas.
- X Fittings are available in Cres, Titanium Alloy and Aluminum Alloy materials which are virtually compatible for use with just about any tube materials.
- C No special tooling is required except standard torque wrenches for fitting installation.

STANDARD PROCUREMENT SPECIFICATION FOR BOSS FITTINGS

SAE MA2005 or ISO7169 specifications define Form, Fit, Function and Procurement requirements for Boss fittings.

APPROVAL STATUS

Airdrome fittings are approved for use in various military and commercial programs at GTRE, HAL, Ilyushin, Kazan, P&W. etc.

FITTING MATERIAL SELECTION

Fittings and nuts are offered in the following materials for use with various tubing materials, fluid and operating temperature:

MATERIAL AND CODING

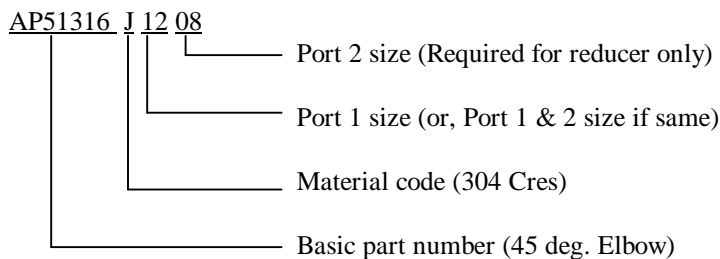
Titanium Alloy	Code T	Indicates 6AL-4V per AMS4928.
Cres	Code J	Indicates 304 per AMS-QQ-S-763.
	Code K	Indicates 316 per AMS-QQ-S-763.
	Code R	Indicates 321 per AMS-QQ-S-763.
	Code S	Indicates 347 per AMS-QQ-S-763.
Carbon steel	Code -	Indicates 4130 per MIL-S-6758 or 4140 per MIL-S-5626.
Aluminum Alloy	Code D	Indicates 2024-T6 or T851 per QQ-A-225/6 for bar/plate stock materials or 2014-T6 per QQ-A-367 for forging material.
	Code W	Indicates 7075-T73 per QQ-A-225/9 for bar/plate stock materials or per QQ-A-367 for forging material.

SIZE AND MATERIAL VERSUS OPERATING PRESSURE

Fitting/tubing operating pressures vary according to size and material. The following shows standard size range and corresponding operating pressures:

FITTING SIZE	DN	OPERATING PRESSURE (kPa) PER FITTING MATERIAL	
		Ti Alloy & Cres	Alum Alloy
03	3.0	21000	21000
04	4.0	21000	21000
05	5.0	21000	21000
06	6.0	21000	21000
08	8.0	21000	21000
10	10.0	21000	21000
12	12.0	21000	21000
14	14.0	21000	21000
16	16.0	21000	21000
18	18.0	21000	21000
20	20.0	21000	21000
25	25.0	21000	10500
32	32.0	10500	10500
40	40.0	10500	10500

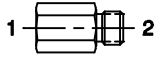
EXAMPLE OF PART NUMBER FOR ORDERING FITTINGS



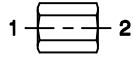
Note: Contact Airdrome Precision Components for special fitting configuration, material and/or size not listed in this catalog.



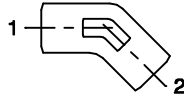
AP51162



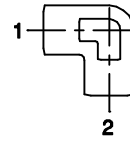
AP51164



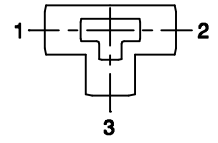
AP51163



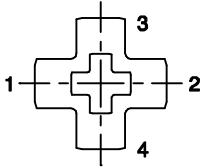
AP51316



AP51317



AP51568



AP51785

Metric Boss Fittings					
Fitting Shape	Port Sequence for Airdrome Part No.				Airdrome Standard
	(See Example of Part No.)				
	1	2	3	4	
Plug	M				AP 51162
Straight	F	M			AP 51164
	F	F			AP 51163
45 deg. Elbow	F	F			AP 51316
90 deg. Elbow	F	F			AP 51317
Tee	F	F	F		AP 51568
Cross	F	F	F	F	AP 51785

Note: 1. F = Female Metric Boss port,
M = Male Metric Boss port.