

Engineering Specification PS-126

Torque For Brass Flare Nuts with Copper Bonnets

Purpose:

Provide a specification that addresses torque requirements for shutoff valves containing brass flare nuts with copper bonnets requiring a refrigerant tight seal.*

Scope:

This specification extends to steel or brass shutoff valves and fittings, plated or non-plated, having either steel or brass flare fittings with SAE threads. This specification covers the application listed in the chart below:

Use:

Temperature Range:	-40°F to +300°F
Service Pressure:	700 psig Max.
Burst Pressure:	2500 psig Min.


Torque Recommendations:

S.A.E. Flare Size	Brass Flare Nut Part Number	Copper Bonnet Part Number	Recommended* Torque for Steel Flare Fitting	Recommended* Torque for Brass Flare Fitting
1/4	16804	45392	8 - 10 Ft. - Lbs.	7 - 9 Ft. -Lbs.
5/16	16805	45391	10 - 12 Ft. - Lbs.	8 - 10 Ft. -Lbs.
3/8	16806	45393	15 - 18 Ft. - Lbs.	13 - 16 Ft. -Lbs.
1/2	16807	45394	19 - 23 Ft. - Lbs.	17 - 20 Ft. -Lbs.
5/8	16808	45395	25 - 35 Ft. - Lbs.	21 - 24 Ft. -Lbs.
3/4	45698	45396	37 - 47 Ft. - Lbs.	26 - 29 Ft. -Lbs.

Notes:

1. Prior to applying recommended torque to brass flare nuts, apply a small amount of refrigeration oil to sealing surfaces of flare fitting. The exception is for 5/8 size flare fitting use where it is necessary to apply a small amount of refrigeration oil to the cupped side of the copper bonnet as well as the flare fitting sealing surface to ensure a refrigerant tight seal.*

2.*Leak test per Electronic Leak Test, specification PS-105

<p>Specification Number: PS- 126 (Doc. Control # CDP-060)</p> <p>Revision: B (09/11)</p> <p><i>Torque Specifications for Brass Flare Nuts with Copper Bonnets</i></p>	 <p>Automatic MACHINE PRODUCTS</p> <p>Taunton, MA</p>
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