

Engineering Specification PS-121

Torque For Valve Core Part Number: 16828

Purpose:

Provide a specification that addresses torque requirements when assembling valve cores in flare fittings requiring a refrigerant tight seal*.

Scope:

This specification extends to machined threaded 1/4 and 3/16 SAE flare fittings in both steel and brass. This specification covers the application listed in the chart below:


Temperature Range:	-40°F to +275°F
Service Pressure:	700 psig Max.
Burst Pressure:	2500 psig Min.
Complies with:	ARI Standard 720-76; S.A.E. J639

Torque Recommendations:

Fitting Size and/or Type	Type Material	Recommended Seating Torque	Valve Core Pin Height
1/4 or 3/16	Steel or Brass	1 1/2 to 3 In-Lbs	+ .010 to - .035
J639 High Side	Steel or Brass	1 1/2 to 3 In-Lbs	- .240 to - .285
J639 Low Side	Steel or Brass	1 1/2 to 3 In-Lbs	- .240 to - .285

Notes:

1. Prior to installing a valve core in a fitting, it must be dipped in refrigeration oil.
2. In order to insure an effective seal, it is recommended that prior to exposing the valve core to temperatures in excess of 225°F, that the valve core be seated to a torque of 3 In-Lbs maximum. If this not done, it may be necessary to re-torque the valve core, due to temperature. Because of the compression set of the valve core seal material, there may be a small decrease in residual torque on the valve core.
3. In order to prevent damage to the valve core seal material, when performing subsequent brazing or similar operations, the valve core must be removed from the fitting.
4. *Leak test per Electronic Leak Test, specification PS-105

<p>Specification Number: PS- 121 (Doc. Control # CDP-052)</p> <p>Revision: B (09/11)</p> <p><i>Torque Specifications for Valve Cores (P/N 16828)</i></p>	 <p>Automatic MACHINE PRODUCTS</p> <p>Taunton, MA</p>
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