

[INCH-POUND]
A-A-59997/2
14 May 2019

COMMERCIAL ITEM DESCRIPTION SPECIFICATION SHEET

CONICAL SEALS, CRUSH, 24 DEGREE FLARED TUBE FITTING, NICKEL

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

SCOPE. This commercial item description (CID) covers the general requirements for conical seals, crush, 24 degree flared tube fitting, nickel. Conical seals, crush, 24 degree flared tube fitting, copper covered by this CID are intended for commercial/industrial applications.

The complete requirements for procuring conical seal, crush, 24 degree flared tube fitting, nickel described herein shall consist of this document and the issue in effect of A-A-59997.

CLASSIFICATION/PART OR IDENTIFICATION NUMBER (PIN). This CID uses a classification system which is included in the PIN as shown in the following example (see NOTES).

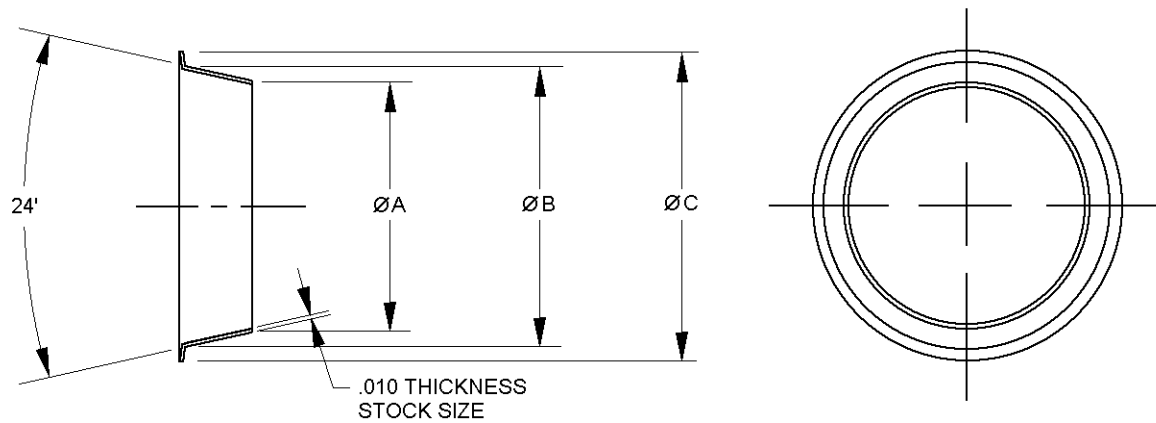
<u>AA59997/2</u>	<u>-04</u>	<u>N</u>
CID number	Size code (see figure 1)	Material and finish code (see table I)

SALIENT CHARACTERISTICS.

Interface and physical dimensions. Conical seals, crush, 24 degree flared tube fitting, nickel supplied to this CID specification sheet shall be as specified herein (see figure 1 and table I).

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data that may improve this document should be sent to: DLA Land and Maritime, ATTN: VAI, P.O. Box 3990, Columbus OH 43218-3990, or fluidflow@dlm.mil. Since contact information can change you may want to verify the currency of the address information using the ASSIST Online database at <https://assist.dla.mil>.

A-A-59997/2



Dash size code	Tubing OD Ref.	A ±.002	B	C ±.003	T material size
-02	1/8	.137	.191	.247	.010
-03	3/16	.198	.269	.307	.010
-04	1/4	.236	.321	.362	.010
-05	5/16	.326	.384	.427	.010
-06	3/8	.388	.443	.477	.010
-08	1/2	.500	.603	.657	.010
-10	5/8	.625	.729	.772	.010
-12	3/4	.750	.853	.942	.010
-16	1	1.018	1.104	1.192	.010
-20	1-1/4	1.496	1.357	1.502	.010
-24	1-1/2	1.522	1.608	1.752	.010
-32	2	2.027	2.109	2.377	.010

NOTES:

1. Dimensions are in inches.
2. Dimensioning and tolerancing in accordance with ASME Y14.5. Unless otherwise specified, tolerances for decimals $\pm .005$ inch, angles $\pm 5^\circ$.
3. Break sharp edges and remove burrs and slivers.
4. Surface texture shall be .005 inches in accordance with ASME B46.1.
5. These parts are soft and easily deformed dimensions B, C, and D shall be verified by installing the seal on a standard fitting of the appropriate size.
6. An out-of-round-seal that does not interfere with installation shall not be cause for rejection.

FIGURE 1. 37° Flared crush seal.

A-A-59997/2

TABLE I. Material and finish code.

Material and finish code	Material and finish
N	Nickel strip 201, annealed, in accordance with ASTM B162 or SAE-AMS5553
NT	Nickel strip 201, annealed, in accordance with ASTM B162 or SAE-AMS5553 Tin plated in accordance with ASTM B545 or SAE-AMS2408
NS	Nickel strip 201, annealed, in accordance with ASTM B162 or SAE-AMS5553 Silver plated in accordance with SAE-AMS2410

Tubing material and fluids to be sealed see table II.

TABLE II. Tubing material and fluids or gases.

Tubing and fitting material	Assembly temperature range	Fluids or gases
Steel	-420°F to +1500°F (-251°C to 816°C)	Hydraulic oil JP-4 JP-5 Liquid hydrogen Liquid nitrogen Oxygen Pneumatics Water

Torque technique. These seals require a second torque technique; see A-A-59997 for torquing techniques.

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID.

Source of documents.

COMMERCIAL ITEM DESCRIPTIONS

A-A-59997 - Conical Seal, Crush, 24 Degree Flared Tube Fitting, General Requirements For

(Copies of these documents are available online at <https://quicksearch.dla.mil>.)

Other Publications

ASME

ASME Y14.5 - Dimensioning and Tolerancing

ASME B46.1 - Surface Texture (Surface Roughness, Waviness, and Lay)

(Copies of these documents are available online at <https://www.asme.org>.)

A-A-59997/2

ASTM INTERNATIONAL

- ASTM B162 - Standard Specification for Nickel Plate, Sheet, and Strip
- ASTM B545 - Standard Specification for Electrodeposited Coatings of Tin

(Copies of these documents are available online at <https://www.astm.org>.)

SAE INTERNATIONAL

- SAE-AMS2408 - Plating, Tin
- SAE-AMS2410 - Plating, Silver Nickel Strike, High Bake
- SAE-AMS5553 - Nickel, Sheet and Strip Low (0.02 max) Carbon Annealed - UNS N02201

(Copies of these documents are available online at <https://www.sae.org>.)

Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict acquisition to only the manufacturers shown.)

Vendor CAGE <u>number</u>	Vendor name <u>and address</u>
33447	SECO Seals Inc. 1370 Logan Ave. Unit K Costa Mesa, CA 92626 714-546-3778 E-mail: secoseals@aol.com
64162.	Del Aerospace, Inc. 330-J South Kellogg Avenue Goleta, CA 93117 E-mail: delaero@earthlink.net

Part number (P/N) supersession data. These CID PINs supersede the following MFR's P/N's as shown in table III. This information is being provided to assist in reducing proliferation in the Government inventory system.

A-A-59997/2

TABLE III. P/N supersession data.

Dash number (see table I) AA59997/2	MFR's CAGE	MFR's P/N <u>1/</u>	MFR's CAGE	MFR's P/N <u>1/</u>
-02N	33447	SECO11N-02	64162	DY24-N-2
-03N	33447	SECO11N-03	64162	DY24-N-3
-04N	33447	SECO11N-04	64162	DY24-N-4
-05N	33447	SECO11N-05	64162	DY24-N-5
-06N	33447	SECO11N-06	64162	DY24-N-6
-08N	33447	SECO11N-08	64162	DY24-N-8
-10N	33447	SECO11N-10	64162	DY24-N-10
-12N	33447	SECO11N-12	64162	DY24-N-12
-16N	33447	SECO11N-16	64162	DY24-N-16
-20N	33447	SECO11N-20	64162	DY24-N-20
-24N	33447	SECO11N-24	64162	DY24-N-24
-32N	33447	SECO11N-32	64162	DY24-N-32

Dash number (see table I) AA59997/2	MFR's CAGE	MFR's P/N <u>1/</u>	MFR's CAGE	MFR's P/N <u>1/</u>
-02NT	33447	SECO11NT-02	64162	DY24-NT-2
-03NT	33447	SECO11NT-03	64162	DY24-NT-3
-04NT	33447	SECO11NT-04	64162	DY24-NT-4
-05NT	33447	SECO11NT-05	64162	DY24-NT-5
-06NT	33447	SECO11NT-06	64162	DY24-NT-6
-08NT	33447	SECO11NT-08	64162	DY24-NT-8
-10NT	33447	SECO11NT-10	64162	DY24-NT-10
-12NT	33447	SECO11NT-12	64162	DY24-NT-12
-16NT	33447	SECO11NT-16	64162	DY24-NT-16
-20NT	33447	SECO11NT-20	64162	DY24-NT-20
-24NT	33447	SECO11NT-24	64162	DY24-NT-24
-32NT	33447	SECO11NT-32	64162	DY24-NT-32

(See note at end of table)

A-A-59997/2

TABLE III. P/N supersession data - Continued.

Dash number (see table I) AA59997/2	MFR's CAGE	MFR's P/N <u>1/</u>	MFR's CAGE	MFR's P/N <u>1/</u>
-02NS	33447	SECO11NS-02	64162	DY24-NS-2
-03NS	33447	SECO11NS-03	64162	DY24-NS-3
-04NS	33447	SECO11NS-04	64162	DY24-NS-4
-05NS	33447	SECO11NS-05	64162	DY24-NS-5
-06NS	33447	SECO11NS-06	64162	DY24-NS-6
-08NS	33447	SECO11NS-08	64162	DY24-NS-8
-10NS	33447	SECO11NS-10	64162	DY24-NS-10
-12NS	33447	SECO11NS-12	64162	DY24-NS-12
-16NS	33447	SECO11NS-16	64162	DY24-NS-16
-20NS	33447	SECO11NS-20	64162	DY24-NS-20
-24NS	33447	SECO11NS-24	64162	DY24-NS-24
-32NS	33447	SECO11NS-32	64162	DY24-NS-32

1/ The manufacturer's P/N shall not be used for acquisition to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown.

MILITARY INTERESTS:

Custodians:

Army - AV
Navy - AS
Air Force - 11
DLA - CC

Review activities:

Army - AT, MI
Navy - MC, SH
Air Force - 71

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FAS

Preparing Activity:

DLA - CC

Project 4730-2019-012

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.dla.mil>.