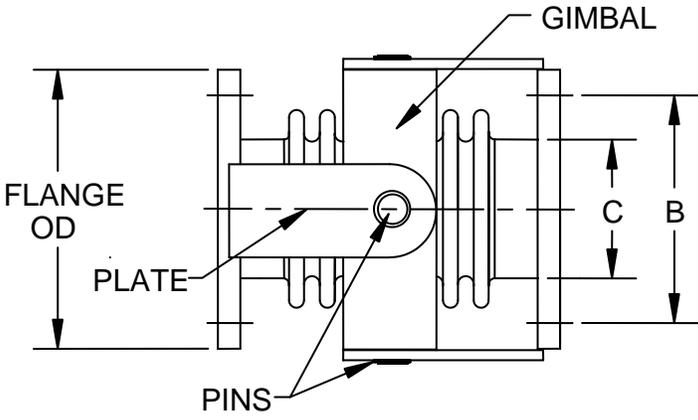


DETAIL SPECIFICATION SHEET

EXPANSION JOINTS, PIPE, METALLIC, GIMBAL

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-17813.



DN	C-NPS inch (mm)	Flange OD inch (mm) ^{1/}	B (bolt circle diameter) inch (mm) ^{1/}
50	2 (50.8)	6 (152.4)	4.75 (120.7)
65	2.5 (76.2)	7 (177.8)	5.5 (139.7)
80	3 (76.2)	7.5 (190.5)	6 (152.4)
90	3.5 (101.6)	8.5 (215.9)	7 (177.8)
100	4 (101.6)	9 (228.6)	7.5 (190.5)
125	5 (127)	10 (254.0)	8.5 (215.9)
150	6 (152.4)	11 (279.4)	9.5 (241.3)
200	8 (203.2)	13.5 (342.9)	11.75 (298.5)
250	10 (254)	16 (406.4)	14.25 (362.0)
300	12 (304.8)	19 (482.6)	17 (431.8)
350	14 (355.6)	21 (533.4)	18.75 (476.3)
400	16 (406.4)	23.5 (596.9)	21.25 (539.8)
450	18 (457.2)	25 (635)	22.75 (577.9)
500	20 (508)	27.5 (698.5)	25 (635)
550	22 (558.8)	-	-
600	24 (609.6)	32 (812.8)	29.5 (749.3)

^{1/} See ASME B16.5, flange dimensions, 150 pound.

NOTES:

1. Dimensions are in inches. Metric equivalents are given for information only.
2. The illustration is for identification purposes only and is not intended to restrict designs and shapes of fastening devices, which conform to the requirements and are within the envelope dimensions.

FIGURE 1. Expansion joint, gimbal.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Construction: Gimbal expansion joints shall be formed by one of the methods described in the EJMA Standards. Gimbal expansion joints shall be constructed with two hinged plate assemblies arranged perpendicular to each other and attached to a common floating gimbal ring. The pin/plate/gimbal construction shall permit angular rotation, in multiple planes, of the pipe sections with respect to one another (see figure 1).

The classification of the expansion joints covered under this specification sheet are as follows:

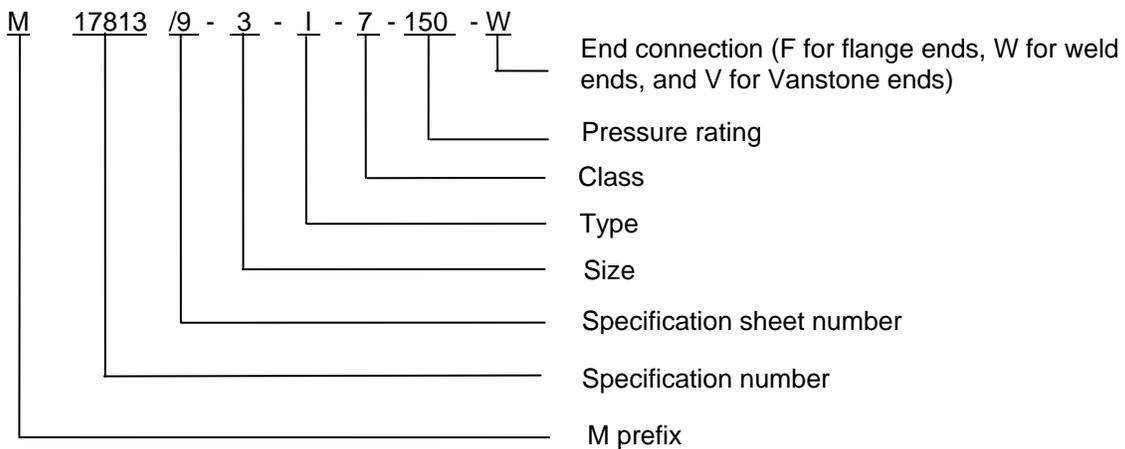
Type I - shall have corrugated bellows.

Class 7 - shall have a gimbaled construction.

Materials and finishes.

Materials and finishes for the bellows and flanges shall be in accordance with MIL-DTL-17813.

The Part or Identifying Number (PIN) consists of the letters M, the basic specification number, specification sheet number, size, type, class, pressure rating, and end connection.



PIN example: M17813/9-3-I-7-150-W

Referenced documents. In addition to MIL-DTL-17813, this document references the following:

- ASME B16.5
- EJMA Standards

MIL-DTL-17813/9

CONCLUDING MATERIAL

Custodians:

Army - AT
Navy - SH
Air Force - 99
DLA - CC

Preparing activity:
DLA - CC

(Project 4730-2009-107)

Review activities:

Army - CE
Navy - MC, SA
Air Force - 71

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 <http://assist.daps.dla.mil>.