

# **SPECIFICATIONS FOR BLEEDER PLUGS USED IN WELLHEAD APPLICATIONS**

## **TECHNICAL REPORT TR0701**

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SPECIFICATION FOR BLEEDER PLUGS  
USED IN WELLHEAD APPLICATIONS**

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This document submitted for industry acceptance. We solicit any corrections, revisions and comments that you may offer.

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# Specifications for Bleeder Plugs Used in Wellhead Applications

## 1 General

This specification establishes the minimum requirements for bleeder plugs for use in API-6A applications.

## 2 Normative References

The following references are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ANSI/API Specification 6A 19th Edition / ISO 10423:2003, Specification for Wellhead and Christmas Tree Equipment.

NACE MR0175 / ISO 15156, Standard material requirements - Sulfide stress cracking resistant metallic materials for oilfield equipment.

ASME B1.1, Unified inch screw threads.

ASME B1.20.1, Pipe Threads, general purpose (inch)

ISO 10422:1993, Petroleum and natural gas industries - Threading, gauging, and thread inspection of casing, tubing and line pipe threads - Specification

## 3 Design

**3.1** Bleeder plugs shall meet the requirements of API-6A Clause 4 in addition to those in 3.2 through 3.4.

**3.2** Bleeder plugs shall be capable of maintaining a leak-tight seal at the rated working pressures and temperatures, in addition to hydrostatic test pressures.

**3.3** Bleeder plugs shall be "stingable", that is, capable of relieving the internal pressure by moving the sealing element sufficiently off of the seat with a pressure relief tool fully extended without damaging the fitting or any internal components. The access hole for the stinger tool shall have a

minimum diameter of .180" and shall have a ball depth of .630" +/- .010 from the face of the fitting.

**3.4** Bleeder plugs shall be provided with a cap incorporating a secondary seal on the end of the fitting and vent holes to release potential leakage prior to removal of the cap.

## **4 Dimensions**

**4.1** Bleeder plug dimensions for 5,000 and 10,000 psi working pressure shall be in accordance with Table 1 and Figure 1. NPT threads shall be in accordance with ASME B1.20.1. Line pipe threads shall be in accordance with ISO 10422. Tolerance on angles, unless otherwise noted shall be +/- .5°.

**4.2** Bleeder plug dimensions for 15,000 psi and 20,000 psi working pressure shall be in accordance with Table 2 and Figure 2. All straight threads shall be in accordance with ASME B1.1. Male threads shall be class 2A. Tolerance on angles, unless otherwise noted shall be +/- .5°.

**4.3** Bleeder plug preparation dimensions for 15,000 psi and 20,000 psi working pressure shall be in accordance with API-6A Clause 10.1 1.

## **5. Materials**

Selection of the Bleeder plug materials shall be the responsibility of the end user. Bleeder plugs directly exposed to well-bore fluid and used in sour service (API-6A material classes DD, EE, FF, and HH) shall meet the requirements of NACE MR0175 / ISO 15156.

## **6 Quality Control**

**6.1** Product Specification Levels (PSL), as defined in API-6A, are not applicable to Bleeder plugs. The quality control requirements shall be the same as for bull plugs and valve-removal plugs in accordance with API-6A Table 26.

**6.2** Hydrostatic Test of the Bleeder plugs shall be in accordance with the Bleeder Plug manufacturer's standard.

## **7. Marking**

Bleeder plugs shall be marked with the Bleeder Plug manufacturer's standard marking data.

### 8 Storing and shipping

Bleeder plugs shall be stored and shipped in accordance with API-6A Clause 9.

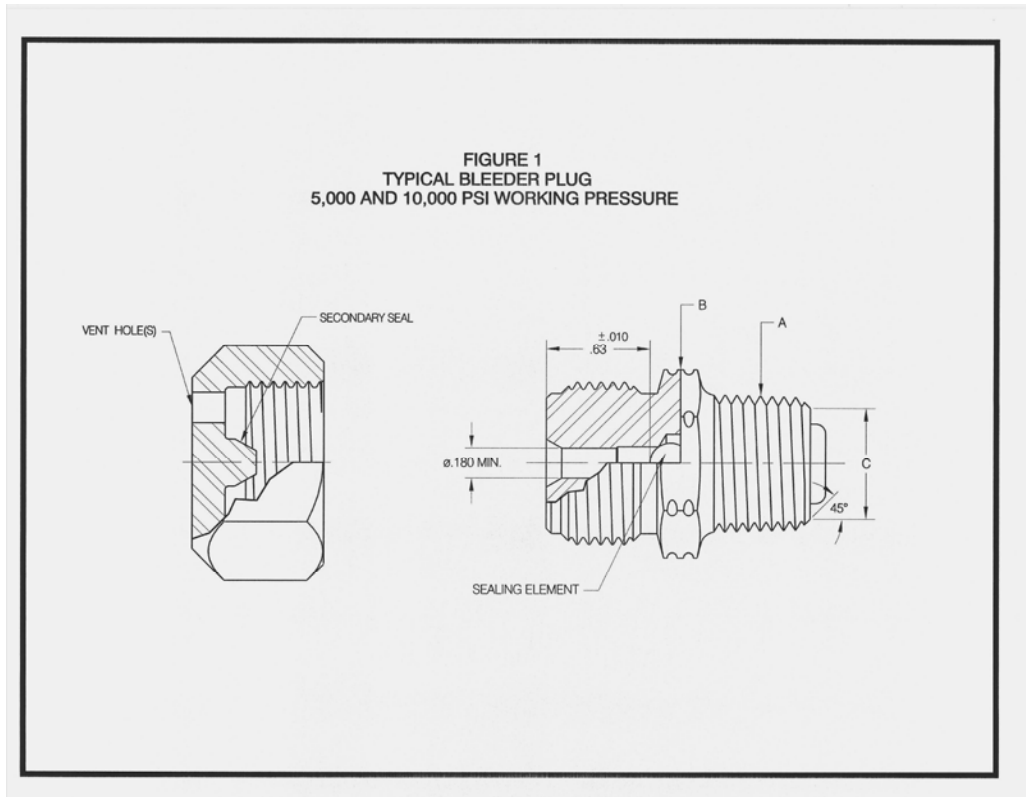


Table 1- Bleeder Plug dimensions for 5,000 and 10,000 psi rated working pressure

US Customary Units -See Figure 1

Nominal Outlet Size	Threads per inch	Thread Type	Maximum working pressure	Nominal Hex Size	Chamfer Diameter
A	TPI			B	C
in	(ref)		psi	in	+/- 0.010
1/2	14	Line Pipe or NPT	10,000	1	0.68
3/4	14	Line Pipe or NPT	5,000	1-1/8	0.89
1	11-1/2	Line Pipe or NPT	5,000	1-5/16	1.12

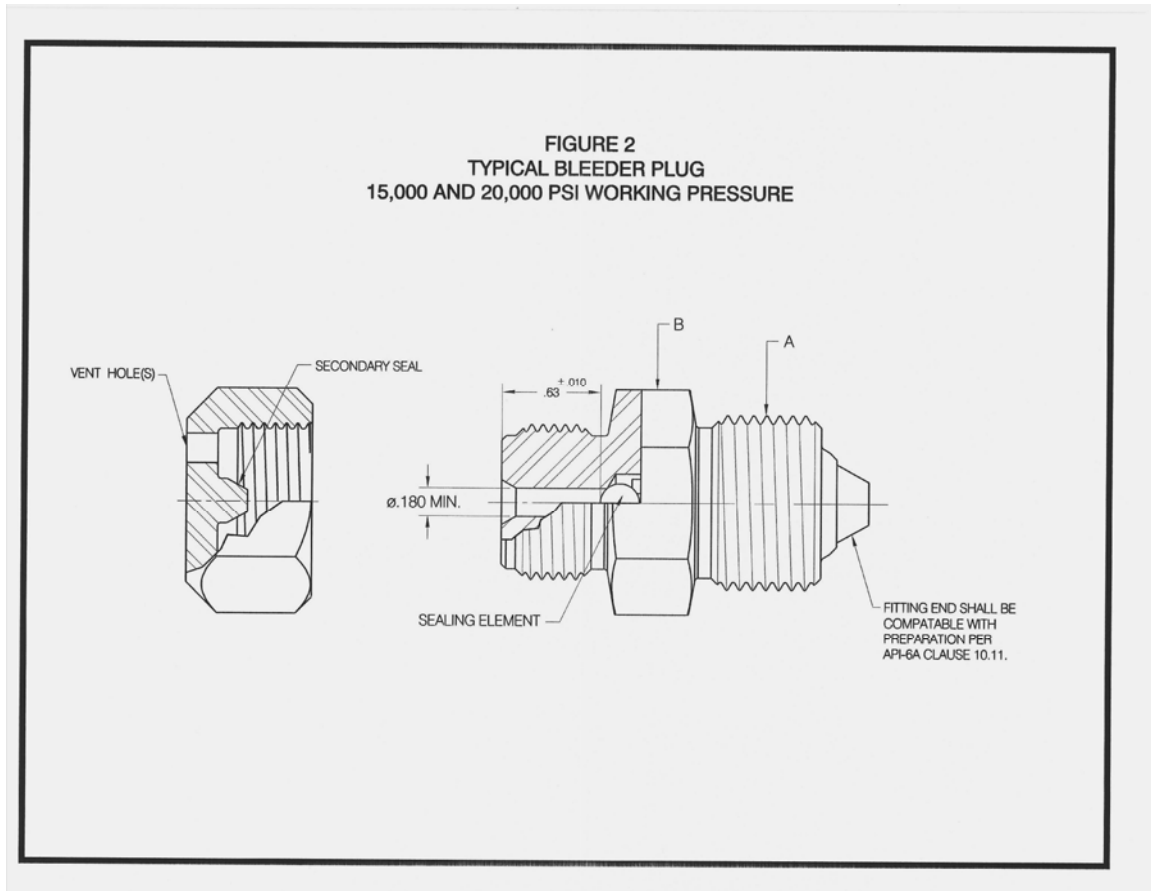


Table 2 – Bleeder Plug dimensions for 15,000 and 20000 psi rated working pressure				
US Customary Units – See Figure 2				
Nominal Outlet Size	Threads per inch	Thread Type	Maximum working pressure	Nominal Hex Size
A	TPI			B
in	(ref)		psi	in
1 1/8	12	UNF-2A	20,000	1-1/4