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Submitted for recognition as an American National Standard

## FILTER-BASE MOUNTING

**Foreword**—This reaffirmed document has been changed only to reflect the new SAE Technical Standards Board Format.

1. **Scope**—This SAE Recommended Practice identifies the necessary dimensional characteristics of filter-base mounting configurations to accept the more commonly used lubricating oil and diesel fuel spin-on filters. This SAE document is basically equivalent to the ISO 6415-1981 and ISO 7654-1983 except for differences detailed in the Rationale.

### 2. References

2.1 **Applicable Publications**—The following publications form a part of this specification to the extent specified herein.

2.1.1 ISO PUBLICATIONS—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ISO 6415-1981—Internal combustion engines—Spin-on filters for lubricating oil—Dimensions

ISO 7654-1983—Compression ignition engines—Spin-on fuel filters—Mounting and connecting dimensions

### 3. General Information

3.1 **Lubricating Oil Spin-On Filter-Base Mounting**—Figure 1 is a composite drawing which outlines the base mounting and clearance requirements for spin-on oil filters.

Table 1 lists the insert thread size and gasket seal diameters of the base mounts for the more commonly used spin-on oil filters.

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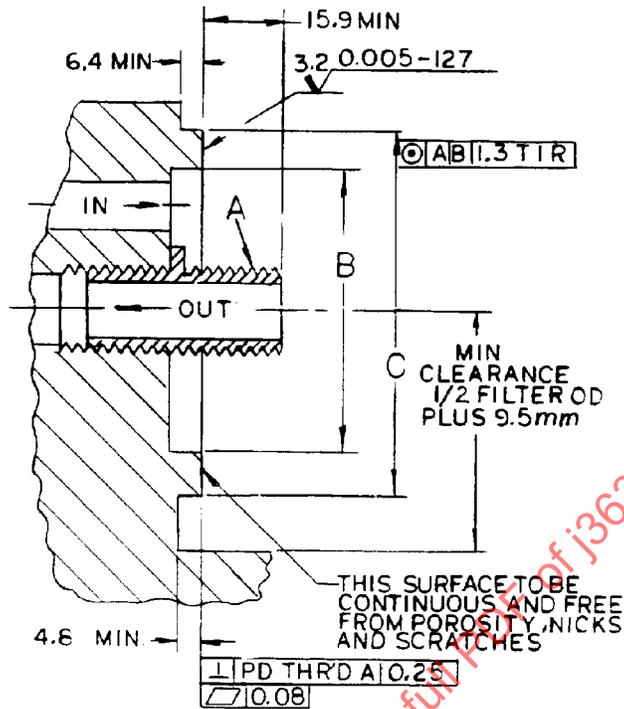


FIGURE 1—LUBRICATING OIL SPIN-ON FILTER-BASE MOUNTING

TABLE 1—LUBRICATING OIL FILTER-BASE MOUNTING DIMENSIONS

Insert Thread Sizes	B ID mm	C OD mm
* 5/8-18 UNF2A	59.0 ± 1.0	79.0 ± 1.0
* 3/4-16 UNF2A	59.0 ± 1.0	79.0 ± 1.0
* 13/16-16 UN2A	59.0 ± 1.0	79.0 ± 1.0
13/16-16 UN2A	75.0 ± 1.0	93.0 ± 1.0
* 7/8-16 UNF2A	59.0 ± 1.0	79.0 ± 1.0
1-12 UNF2A	59.0 ± 1.0	79.0 ± 1.0
* 1/16 UN2A	59.0 ± 1.0	79.0 ± 1.0
* 1 1/8-16 UN2A	87.0 ± 1.0	113.0 ± 1.0
1 1/2-12 UNF2A	87.0 ± 1.0	113.0 ± 1.0
* 1 1/2-16 UN2A	87.0 ± 1.0	113.0 ± 1.0
M-18 X 1.5-6H	59.0 ± 1.0	79.0 ± 1.0
* M-20 X 1.5-6H	59.0 ± 1.0	79.0 ± 1.0
M-20 X 1.5-6H	75.0 ± 1.0	93.0 ± 1.0



TABLE 2—DIESEL FUEL FILTER-BASE MOUNTING DIMENSIONS

(A) Insert Thread Sizes	B ID mm	C OD mm>
5/8-11 UNC2A	59.0 ± 1.0	79.0 ± 1.0
13/16-12 UN2A	75.0 ± 1.0	93.0 ± 1.0
* 13/16-18 UNS2A	59.0 ± 1.0	79.0 ± 1.0
* 7/8-14 UNF2A	59.0 ± 1.0	79.0 ± 1.0
7/8-16 UN2A	59.0 ± 1.0	79.0 ± 1.0
* 15/16-16 UN2A	59.0 ± 1.0	79.0 ± 1.0
1-12 UNF2A	75.0 ± 1.0	93.0 ± 1.0
* 1-14 UNS2A	59.0 ± 1.0	79.0 ± 1.0
1 1/16-16 UN2A	87.0 ± 1.0	113.0 ± 1.0
* 1 1/4-12 UNF2A	87.0 ± 1.0	113.0 ± 1.0
* 1 3/8-16 UNF2A	87.0 ± 1.0	113.0 ± 1.0
* M-14 X 1.5-6H	59.0 ± 1.0	79.0 ± 1.0
M-16 X 1.5-6H	59.0 ± 1.0	79.0 ± 1.0

PREPARED BY THE SAE FILTER TEST METHODS STANDARDS COMMITTEE