

# **MS5837 Series O-Ring mount** APPLICATION NOTE

## O-Ring evaluation assembly for MS5837 Series (02BA to 30BA)

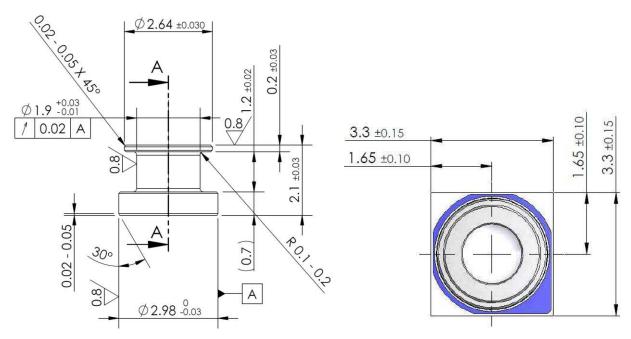
### Features

- MS5837 Series Metal lid dimensions and tolerances.
- O-Ring hardness and material used in the evaluation assembly.
- O-Ring Sizes and tolerances used in the evaluation assembly.
- O-ring mount grease used in the evaluation assembly.
- O-ring receptacle cylinder used in the evaluation assembly.
- Evaluation assembly.

## Disclaimer.

The following O-Ring evaluation assembly is exclusively given as a general information, in no case it can be used as a qualified assembly for the final application.

## MS5837 Series - metal lid dimensions and tolerances.





O-Ring hardness (Shore A) used in the evaluation assembly.

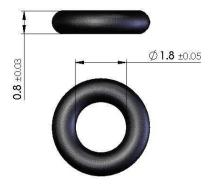
Nitrile rubber (NBR) 70 Shore A.

O-Ring sizes and tolerances used in the evaluation assembly.

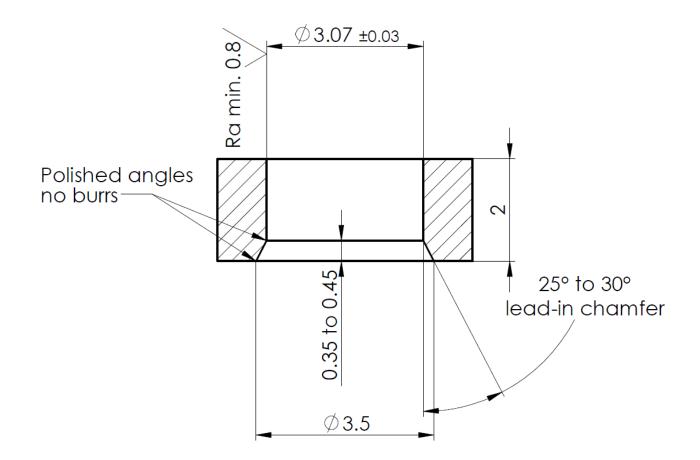
ID: 1.8mm ± 0.05; Cord: 0.8mm ± 0.03. Watch industry O-Ring standard: NIHS62-02.

O-Ring mount grease used in the evaluation assembly.

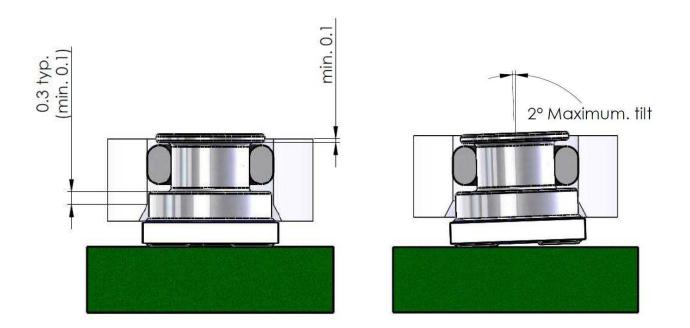
NLGI Grade 2, PFPE grease.



O-Ring receptacle cylinder sizes and tolerances used in the evaluation assembly.



## Evaluation assembly.



#### Assembly steps.

Step 1: Press the O-ring into the MS5837 lid groove. It must be coated with an application suitable grease before this step. Step 2: Mount the sensor into the housing cylinder by pressing the O-ring against the lead-in chamfer.

It is recommended to design the assembly stiffness such a way that the minimum overlap of 0.1mm (0.3 typ.) is achieved. This overlap must be guaranteed in the final assembly under all external conditions. (Pressure; Temperature; Shock)

The final assembly must be free of shearing hard contact between the sensor lid (piston) and the cylinder of the housing.

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