

VISUAL OIL ANALYSIS:

Oil Sight Glass

Innovative solution to oil inspection and easy elimination of accumulated water.



APPLICATIONS:

- Pumps
- Gearboxes
- Storage Tanks
- Fluid-Lubricated Machinery

The Overview

Oil Sight Glass:

Key Benefits

- 360° view of oil
- Easily collect and drain water
- Durable and UV resistant
- Excellent chemical compatibility
- Dual-mount design for easy vertical or horizontal installation

By the Numbers:

- 1-Brass hex nipple (optional stainless steel)
- 2-High-performance polyamide bottle
- 3-Collected water
- 4-Brass drain valve (optional stainless steel or magnet drain)

The Overview:

The Oil Sight Glass (OSG), made of a high-performance transparent polyamide, allows immediate visual inspection of the oil and the ability to drain any accumulated water. The OSG is installed directly to a drain port located at the bottom of a reservoir or with an elbow for drain ports located on the side of the equipment. The spring loaded drain valve is utilized to purge any accumulated water. Any sediment or particles in the lubricating fluid will migrate to the OSG where, upon inspection, the user can determine the appropriate action.



Horizontal Installation



Vertical Installation

The Specs

Material:

- Transparent polyamide
- Brass hex nipple
- Brass drain valve

Recommended Temperature Range:

- -40 °F to 200 °F
- -40 °C to 93 °C

Maximum Operating Pressure:

- 65 psi
- 4.48 bar

Chemical Compatibility:

- All gear and mineral oil and most synthetic oils

Available Options:

- 1/4", 3/8", and 1/2"NPT Hex nipples
- 1oz and 3oz
- 16 oz and 32 oz sizes available in acrylic
- Stainless steel fittings
- Magnetic drain valve for collecting ferrous material

Sizing:

Part Number	Description	Overall Length		Outside Diameter	
		(in)	(cm)	(in)	(cm)
Sizes					
DC-OSG1X250	1oz X 1/4"	3.0	7.62	1.72	4.37
DC-OSG1X375	1oz X 3/8"	3.0	7.62	1.72	4.37
DC-OSG1X500	1oz X 1/2"	3.0	7.62	1.72	4.37
DC-OSG3X250	3oz X 1/4"	3.15	8.0	2.50	6.35
DC-OSG3X375	3oz X 3/8"	3.15	6.35	2.50	6.35
DC-OSG3X500	3oz X 1/2"	3.15	6.35	2.50	6.35
High-Volume Vertical Acrylic Sizes					
DC-OSG16X500	16oz X 1/2"	5	12.70	3.50	8.89
DC-OSG32X500	32oz X 1/2"	5	12.70	4.50	11.43

NOTE: Vertical and horizontal acrylic available in 1 oz and 3 oz sizes while supplies last.

Contact Des-Case at sales@descase.com for guidance on chemical compatibility, recommended temperature or pressure ratings.



The Questions

Do I still need a desiccant breather if using the Oil Sight Glass?

Yes. Desiccant breathers prevent moisture and contaminants from entering the fill port of equipment and pull moisture from the headspace. However, a desiccant breather cannot remove large amounts of water already mixed into the oil. That is why combining the use of desiccant breathers with oil filtration and an OSG to isolate and remove free-flowing water from the oil is best practice. Additionally, the OSG will act as an early indicator of a contaminants problem.

How durable is polyamide?

Polyamide is extremely durable and impact resistant. With excellent weathering and UV resistance, it is capable of withstanding years of exposure to sun, rain and other extreme conditions.

Does the Oil Sight Glass replace the need for oil filtration?

While the OSGs will isolate and remove free-flowing water, it is still recommended that you utilize other filtration systems to remove all water contamination from your oil. The OSG will be an early indicator of contamination problems and can help find the source of such problems, but the OSG alone will not prevent moisture from entering your reservoir or remove any water that has become emulsified in the oil. Contact us at sales@descase.com for more information on filtration systems.

Can the Oil Sight Glass replace my oil sampling program?

Oil sampling and analysis is still recommended, as it is best practice. The OSGs are part of a comprehensive preventative maintenance program, and they will show users early indications of various forms of contamination.

Can I pull an oil sample from the Oil Sight Glass?

Water and other contaminants tend to sink to the bottom of a reservoir. Because of this, samples taken from the OSG will typically be “dirtier” than the rest of the oil in the reservoir. Best practice dictates that a sample should be drawn from the center of an oil reservoir. Sampling tubes can be utilized in conjunction with the OSG to draw a representative oil sample to be analyzed.

Can I use the Oil Sight Glass in freezing conditions?

The OSG can safely be used in temperatures as low as -40°F as long as they are not allowed to fill completely with water.

I'm concerned about the Oil Sight Glass breaking. What can I do to prevent this?

Although very durable and impact resistant, it's best to install the OSG in a location that is protected from mobile equipment or other high-impact hazards. It is also recommended that users install a ball-valve between the drain port and the OSG. The ball-valve allows instantaneous shut off of oil flow if necessary.

How can I clean/replace the VOA products without having to drain the oil from my equipment?

Installing a ball-valve between your drain port and the OSG will allow users to shut off the flow of oil in order to clean or replace the product. Cleaning the products typically requires just soap and water. Cleaning agents should be avoided, as they can cause fogging, crazing and degradation.