VISUAL OIL ANALYSIS

Oil Sight Glass Level Monitor

Inspect, analyze, and remove contaminants as well as manage your oil levels.

APPLICATIONS

- Pumps
- Gearboxes
- Storage Tanks

DES-CASE®

Overview

Oil Sight Glass Level Monitor:
Key Benefits

- 360˚ view of oil clarity and color
- Monitor oil level
- Attaches to machine drain ports
- Detect accumulation of water and contaminants

The Overview:

The Oil Sight Glass Level Monitor (OSGL) allows you to view oil color, clarity and accumulation of water or other contaminants while monitoring the level of the oil in the reservoir. It is available in multiple lengths ranging from 3" to 24" to correspond to the distance from the oil reservoir access port and the maximum height the oil will reach. A dual port version is available with a second 3/8" NPT port opposite the installation nipple to allow the installation of a sampling tube to draw representative oil samples without pulling outside contaminants.

By the Numbers:

1–Des-Case ND-2 Breather

2–Length of Level Monitoring Area

3–Idle/Maximum Oil Level Marker

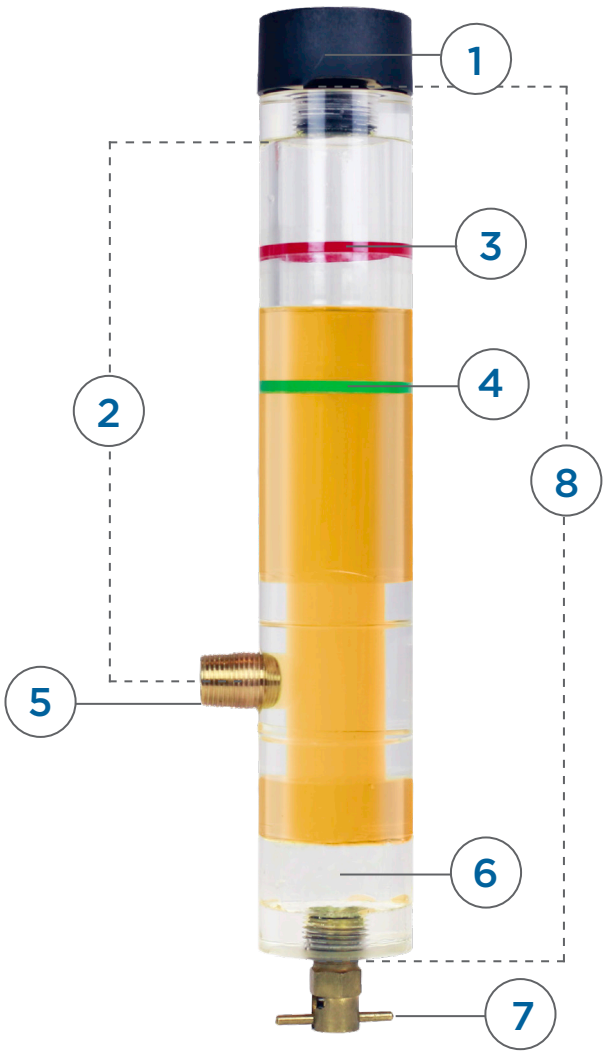
4–Running/Minimum Oil Level Marker

5–3/8" NPT Port (dual port models available)

6–Water Accumulation Area

7–1/4" Brass Drain Valve

8–Overall Length of Acrylic Bottle



Specifications

Material:
- Stain-resistant acrylic
- Brass fittings standard
- Des-Case ND-2 breather 0.3µ absolute ($ß_{0.3}$≥1000)

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, mineral and synthetic oils

Available Options:
- 3/8" NPT single port or dual ports
- Lengths ranging from 3" to 24"
- Stainless steel fittings
- Magnetic drain valve for collecting ferrous material

Sizing:
Outside diameter: 1.75"/4.45cm

Part Number	Level Monitoring Area		Overall Length	
	(in)	(cm)	(in)	(cm)
Single Port				
DC-OSGL3	3	7.62	6.75	17.15
DC-OSGL6	6	15.24	9.75	24.77
DC-OSGL9	9	22.86	12.75	32.39
DC-OSGL12	12	30.48	15.75	40.01
DC-OSGL15	15	38.10	18.75	47.63
DC-OSGL18	18	45.72	21.75	55.25
DC-OSGL24	24	60.96	27.75	70.49
Dual Port				
DC-OSGL3DP	3	7.62	6.75	17.15
DC-OSGL6DP	6	15.24	9.75	24.77
DC-OSGL9DP	9	22.86	12.75	32.39
DC-OSGL12DP	12	30.48	15.75	40.01
DC-OSGL15DP	15	38.10	18.75	47.63
DC-OSGL18DP	18	45.72	21.75	55.25
DC-OSGL24DP	24	60.96	27.75	70.49

Questions

Why would I need to use the Oil Sight Glass Level Monitor?

When seeing and maintaining the level of oil in your reservoir is critical, the OSGL provides all the benefits of the Oil Sight Glass plus the ability to constantly monitor the level of the reservoir oil. The dual port model has a second 3/8" NPT thread at 180° to allow the installation of a drain valve or access to the oil reservoir utilizing a pitot tube and a pitot sample adapter. This all-in-one product provides continuous monitoring of the clarity, color, sediment, water contamination and level of the oil.

Does the Oil Sight Glass Level Monitor work with all oils?

Yes, the OSGL will collect sediment and free-flowing water from any oils. They are best used with high-quality synthetic oils, as synthetics tend to do a more efficient job separating water.

Where is the best place to install the Oil Sight Glass Level Monitor?

We recommend installing the OSGL at the lowest point of the oil reservoir; typically the drain port. Water contamination will separate from high quality oils and migrate to the OSGL where it can be purged from the system. Unwanted sediment and particles are visible in the OSGL. Upon inspection, the user can determine the appropriate action to initiate.

What materials is the Oil Sight Glass Level Monitor made from and how resistant is it to corrosion?

The OSGL is manufactured from strong, stain-resistant cast acrylic. The drain valve is made from brass with a vulcanized rubber seal. Both materials have excellent resistance to hydrocarbon and petroleum-based products, hydraulic fluids, most silicone fluids, and fuels. A detailed chemical resistance chart is available upon request.

Are alternate materials available for the hardware?

The brass hardware will provide excellent performance for most applications; however, 304 stainless steel hardware is available for environments that cannot accept brass.

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

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. Lastly, venting the OSGL with a DC-ND-2 at the top helps to provide accurate oil level readings.

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

Water and other contaminants tend to sink to the bottom of a reservoir. Because of this, samples taken from the drain of the OSGL will typically be “dirtier” than the rest of the oil in the reservoir. The dual port model allows users to run a pitot tube into their reservoir to pull a representative oil sample.

Why would we use the magnet drain valve?

The strong pull from this rare earth magnet will attract and hold microscopic ferrous particles. Further analysis of these particles can help determine what component is failing for replacement. The magnet drain valve is easily interchanged with the standard drain valve on any OSG or OSGL product.

When should I replace my Oil Sight Glass Level Monitor?

The OSGL will last for years, but different applications can shorten the life of the product. Years of exposure to sunlight, extreme weather or caustic chemicals will degrade the acrylic over time. Watch for fogging, crazing (small cracks appearing on the surface of the acrylic) or oil weeping from bonded surfaces. These are signs that the product is in need of replacement. If installed outside and exposed to harsh conditions, the products should be replaced every 2-3 years. Indoor applications typically have a life-span of 3-5 years. It is highly recommended that you never use an OSGL for more than 5 years without replacing it.

+1.615.672.8800 • descase.com • +31 (0) 182.24.48.88