Visual Oil Analysis:

3-D BullsEye®

Inspect the oil level easily and accurately with a 360˚ view of what's happening inside your system.

Applications:

- Pumps
- Gearboxes
- Storage Tanks
- Viewport Replacement

ESCO A DES-CASE Product Line

The **Overview**

3-D BullsEye:
Key Benefits

- 360˚ magnified view of oil level & condition
- Durable stain-resistant acrylic
- Lasts longer than traditional viewports
- Easy to install and maintain

The Overview:
The 3-D BullsEye is machined from one solid piece of impact-resistant cast acrylic and allows immediate and accurate visual oil level monitoring from virtually any angle. The inherently stain-resistant acrylic holds up to hydrocarbon and petroleum-based products, hydraulic fluids, most silicone fluids and fuels.

The **Specs**

Material:
- Stain-resistant acrylic
- Brass fittings standard on 1/4", 3/8" NPT, M10X1.0, M10X1.5, & M12X1.5

Recommended Temperature Range:
- -40˚F to 230˚F
- -40˚C to 82˚C

Maximum Operating Pressure:
- 65 psi
- 4.48 bar

Chemical Compatibility:
- All gear, mineral and synthetic oils

Available Options:
- NPT, metric, BSPP threads

Sizing:

Description	Part Number	Outside Diameter		Length from Last Thread	
		(in)	(cm)	(in)	(mm)
NPT Sizes					
1/4"NPT	DC-3DB0250	1	2.540	1.375	34.925
3/8"NPT	DC-3DB0375	1.125	2.858	1.375	34.925
1/2"NPT	DC-3DB0500	0.875	2.223	1	25.400
3/4"NPT	DC-3DB0750	1.125	2.858	1.375	34.925
1"NPT	DC-3DB1000	1.375	3.493	1.375	34.925
1-1/4"NPT	DC-3DB1250	1.175	4.445	1.375	34.925
1-1/2"NPT	DC-3DB1500	2	5.080	1.375	34.925
2"NPT	DC-3DB2000	2.5	6.350	1.5	38.100
BSPP Sizes					
1/2" BSPP	DC-3DBBSPP0500	1.25	31.75	1.156	29.36
3/4"BSPP	DC-3DBBSPP0750	1.50	38.10	1.281	32.54
1"BSPP	DC-3DBBSPP1000	1.75	44.45	1.344	34.14
Metric Sizes					
M10X1.0	DC-3DBM10X1.0	0.875	2.223	1.00	25.400
M10X1.5	DC-3DBM10X1.5	0.875	2.223	1.00	25.400
M12X1.5	DC-3DBM12X1.5	0.875	2.223	1.00	25.400
M16X1.5	DC-3DBM16X1.0	1	2.540	1.00	25.400
M20X1.5	DC-3DBM20X1.0	1.25	3.175	1.06	26.975
M22X1.5	DC-3DBM22X1.0	1.25	3.175	1.06	26.975
M24X1.5	DC-3DBM24X1.0	1.375	3.493	1.13	28.575
M26X1.5	DC-3DBM26X1.0	1.5	3.810	1.19	30.150
M27X1.5	DC-3DBM27X1.0	1.5	3.810	1.19	30.150
M30X1.5	DC-3DBM30X1.0	1.75	4.445	1.25	31.750
M30X2.0	DC-3DBM30X2.0	1.75	4.445	1.25	31.750
M33X1.5	DC-3DBM33X1.0	1.75	4.445	1.25	31.750

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

The **Questions**

How should the 3-D BullsEye be installed?
Installers should apply pipe dope or Teflon tape to the threads of the 3-D BullsEye. The 3-D BullsEye should be hand tightened. If there is any evidence of oil leakage, tighten 1/4 turn and re-inspect. Continue the 1/4 turn followed by inspection until there is no oil leakage. When installed properly, the 3-D BullsEye can withstand equipment vibration.

How can I clean/replace the 3-D BullsEye?
Since the 3-D BullsEye is installed at the top of the oil level, you will need to wait for the machinery to be turned off before attempting to remove the 3-D BullsEye. Some oil will need to be drained to prevent spillage. Once removed, the 3-D BullsEye can easily be cleaned with soap and water. Extended periods of direct sunlight can cause “film” to build up in the 3-D BullsEye, but this can typically be wiped away when cleaned.

How durable is the acrylic used in the 3-D BullsEye?
Acrylic is extremely durable and stain resistant, and it is capable of withstanding years of exposure to sun, rain and other extreme weather conditions. Des-Case keeps the wall thicknesses robust to enhance the strength and ensure they withstand the environments they are installed in.

I’m concerned about the 3-D BullsEye breaking. What can I do to prevent this?
The 3-D BullsEye is extremely tough and will require extreme force to break. It is not recommended for use on mobile equipment because of the increased risk of having a high-impact collision.

When should I replace my 3-D BullsEye?
Because the 3-D BullsEye is made from one solid piece of acrylic, it has the longest life expectancy of all the VOA products. Years of exposure to sunlight, extreme weather or caustic chemicals will degrade the acrylic over time. Watch for fogging and crazing (small cracks appearing on the surface of the acrylic). Given enough time, the 3-D BullsEye will degrade to a point where it is difficult to see, at which point you would need to replace it.

DES-CASE®

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