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 PRODUCTS, INC.

The Overview

3-D BullsEye: Key Benefits

- 360° view of oil level & condition
- Lasts longer than traditional viewports
- Easy to install and maintain
- UV resistant

The Overview:

The 3-D BullsEye, made of a high-performance transparent polyamide, allows immediate and accurate visual oil level monitoring from virtually any angle. Engineered to outperform and outlast traditional viewports, the inherently strong material provides excellent impact, chemical and UV resistance.



The Specs

Material:

- Transparent Polyamide
- Brass fittings standard on 1/4", 3/8" NPT, M10X1.0, M10X1.5, & M12X1.5

Recommended Temperature Range:

- -40°F to 200°F
- -40°C to 93°C

Maximum Operating Pressure:

• 65 psi at 200°F

Sizing:

Chemical Compatibility:

• All gear, mineral and synthetic oils

Available Options:

• NPT, metric, BSPP threads

Description	Part Number	Outside Diameter		Length from Last Thread	
		(in)	(cm)	(in)	(mm)
NPT Sizes (Polyamide)					
1/4"NPT	3DB0250	0.74	1.88	0.728	1.849
3/8"NPT	3DB0375	0.9	2.286	0.738	1.875
1/2"NPT	3DB0500	0.8	2.032	0.923	2.344
3/4"NPT	3DB0750	1	2.54	0.974	2.474
1"NPT	3DB1000	1.26	3.2	1.1	2.794
1-1/4"NPT	3DB1250	1.6	4.064	1.135	2.883
1-1/2"NPT	3DB1500	1.85	4.699	1.234	3.134
2"NPT	3DB2000	2.32	5.893	1.513	3.843
BSPP Sizes (Polyamide)					
1/2"BSPP	3DBBSPP0500	0.88	2.235	1	2.54
3/4"BSPP	3DBBSPP0750	1.1	2.794	1	2.54
1"BSPP	3DBBSPP1000	1.37	3.48	1.2	3.048
Metric Sizes (Polyamide)					
M10x1.0	3DBM10X1.0	0.45	1.143	0.621	1.577
M10x1.5	3DBM10X1.5	0.42	1.067	0.621	1.577
M12x1.5	3DBM12X1.5	0.525	1.334	0.671	1.704
M16x1.5	3DBM16x1.5	0.68	1.727	1	2.54
M20x1.5	3DBM20X1.5	0.834	2.118	1	2.54
M22x1.5	3DBM22X1.5	0.94	2.388	1	2.54
M24x1.5	3DBM24X1.5	1.03	2.616	1.1	2.794
M26x1.5	3DBM26X1.5	1.07	2.718	1.1	2.794
M27x1.5	3DBM27X1.5	1.1	2.794	1.1	2.794
M30x1.5	3DBM30X1.5	1.23	3.124	1.2	3.048
M30x2.0	3DBM30X2.0	1.35	3.429	1.2	3.048
M33x1.5	3DBM33X1.5	1.3	3.302	1.2	3.048

Contact Esco at info@esco-inc.com 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 with a strap wrench and re-inspect. Continue the 1/4 turn tightening method followed by inspection until leaking stops. 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 it. Some oil will need to be drained to prevent spillage. Once removed, the 3-D BullsEye can 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 material used in the 3-D BullsEye?

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

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. However 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?

Years of exposure to extreme weather or caustic chemicals will degrade the polyamide over time. Watch for fogging and crazing (small cracks appearing on the surface of the polyamide). Given enough time, the 3-D BullsEye will degrade to a point where it is difficult to see and it will need to be replaced.