



OceanTools

C3-DDC

Compact subsea dye detection camera

The **C3-DDC** subsea dye detection camera offers high quality monochrome video in low light level conditions, for use with a subsea blacklight leak detection lamp.



Overview

The **C3-DDC** dye detection camera is designed for use with **L5 BlackLight** subsea leak detection lamps to highlight the presence of Rhodamine (including **C-Dye 530**) or Fluorescein dyes in water.

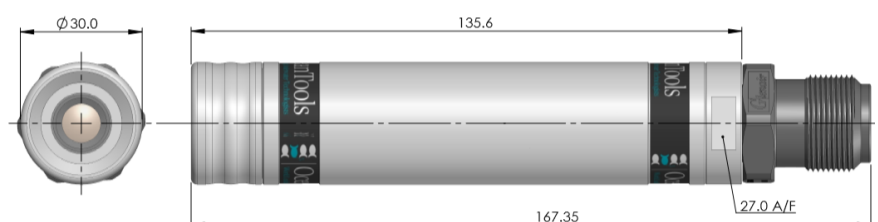
The monochrome camera is fitted with a band pass filter to enable the detection of fluorescence from agitated tracer dyes. It has a wide input voltage range of 12–26VDC and is offered in a 30mm diameter housing with a 4000m depth rating and various underwater connectors.

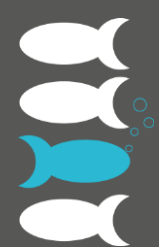
The **C3-DDC** may be used to identify leaks from subsea infrastructure such as manifolds, wellheads or pipelines if a suitable dye has been added to the infrastructure fluids, or during casing cementing operations to detect cement returns.

For smaller leaks, **DyeTector** systems combine a high intensity LED light source and a sophisticated optical multiplier to detect even the smallest amounts of fluorescence from agitated dye molecules. Advanced detection electronics convert the measurements to digital data.

Key Features

- Detect Rhodamine or Fluorescein
- 800 TVL resolution
- 0.2 Lux low-light sensitivity
- Titanium housing
- 4000m standard depth rating





Specifications

		C3-DDC	
Optical	Target dye	Rhodamine	Fluorescein
	Detection wavelength	545–605nm	485–585nm
	Standard lens	2.97mm	
	Focus	Manually adjustable	
	Depth of field	200mm to infinity	
	FOV in air	120°(D) x 90.8°(H) x 64.7°(V)	
	FOV in water	93°(D) x 67.6°(H) x 46.7°(V)	
	Iris control	Electronic iris	
Video	Sensor type	1/3.2" SONY STARVIS CMOS (Progressive Scan) (WDR)	
	Pixel resolution	1297(H) x 977(V) 800 TVL	
	Min illumination	0.2 Lux @ F2.0	
	Signal to noise ratio	>50dB	
	Video output	Composite (75ohm) 1V pk to pk	
	Video format	CCIR, EIA, PAL & NTSC	
Environmental & Electrical	Operating depth	4000m	
	Operating temperature	-10°C to +50°C	
	Storage temperature	-20°C to +60°C	
	Voltage	12–26VDC	
	Current	100mA typical	
Mechanical	Length incl connector	168mm	
	Length excl connector	134mm	
	Diameter	30mm	
	Weight in air	Up to 0.4kg	
	Weight in water	Up to 0.3kg	
	Housing material	Titanium Grade 5	
	Viewing port material	Sapphire (scratch resistant)	
	Standard connector	Glenair G5507-1508 (alternatives available)	

Product datasheets, GA drawings, case studies and other supporting documents are available to download from data.oceantools.co.uk

All specifications are subject to change without notice. E&OE.

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