

THALES



ELECTRONIC PERISCOPES

CK038 Search CH088 Attack



- | Compatible with all modern medium sized submarines
- | Outstanding reliability
- | Electronic weapons system interface
- | Modular design
- | High performance optics
- | Multiple sensor choice
- | Upgradeable
- | Low maintenance costs

ELECTRONIC PERISCOPES

CKO38 Search CHO88 Attack

Suitable for either new build or retrofit applications, these periscopes can be offered in either the traditional search/attack configurations or can be paired with an advanced optronics mast system such as the CMO10 to provide an unrivalled blend of operational capability and reliability.

Modular Design Concept

With a comprehensive range of features available at either initial build or as subsequent upgrades through the supply of modification kits, the CKO38 search periscope and CHO88 attack periscope can be configured to meet the most demanding of operational requirements.

By utilising modular design and construction techniques teamed with an outstanding level of reliability, maintenance activities are reduced to a minimum. The modularity of the periscopes also ensures that the latest developments in sensor technologies can be incorporated by the customer's support staff at any time.

Night Vision Capability

Modern submarine periscopes require a night vision sensor to ensure a full 24 hour operational capability. The principal options to provide this are image intensification or thermal imaging.

The image intensification system allows operation in starlight conditions while the thermal imager can be used in total darkness for navigation, surveillance and ship's safety. Since 1978, Thales has built up an unrivalled expertise in the field of periscope thermal imaging systems, with over 40 periscope TI systems currently in service.

Optronic Mast Interface

Both periscopes can be operated as part of a combined periscope/optronics mast sensor system. Data and images from either the CKO38 or CHO88 can be relayed to the CMO10, the most advanced optronics mast currently available. This takes the CKO38 or CHO88 to a new level of operational capability not previously available from periscope systems

Platform Compatibility

Both the mechanical and optical parameters of the periscopes can be varied to provide an exact match for integration to specific platform installations.

Technical Data

	<i>CKO38 search</i>	<i>CHO88 attack</i>
Tube diameter	190mm	190mm
Mechanical length	10990mm	10929mm
Optical length	10400mm	10400mm
Binocular viewing	●	●
Magnification x1.5	●	●
x3 electronic	●	●
x6	●	●
x12 electronic	●	●
Elevation coverage (line of sight)	-10° to +60°	-10° to +30°
Elevation coverage (edge of field)	-26° to +76°	-26° to +46°
Optical filters	●	●
Inter-ocular adjustment	●	●
Heated eyepieces	●	●
Heated window	●	●
Thermal Imager (TI)	●	●
Image Intensifier (II)	●	●
Low light television (LLTV)	●	●
Colour TV	●	●
35mm still camera	●	●
Digital still camera	●	●
ESM omni facility	●	●
GPS facility	●	●
Comms TX/RX facility	●	●
Single axis stabilisation	●	●
Torque assist rotation	●	●
Torque drive rotation	●	●
Remote control	●	●
Optronics mast interface	●	●
Electronic weapons system interface	●	●
Relative bearing output	●	●
True bearing output	●	●
Target range computer	●	●
Stadiametric range measurement	●	●
Operator raise/lower control	●	●
Built-in-Test (BITE) function	●	●

- Standard Equipment
- Optional Equipment