

# COMPASSES



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## ***PYSER OPTICS - FRANCIS BARKER COMPASSES***

Pyser Optics Francis Barker M-73 and M-88 hand held Liquid Prismatic compasses are in service with many defence forces around the world, and have been for many years. Highly accurate and shock resistant, the compasses are built to withstand the toughest conditions and they have all the features required for taking a bearing from either a map or a distant object, by day or night.

All Pyser Optics Francis Barker prismatic hand-bearing compasses are built to meet the exacting specification demanded by military users. They are available in a range of finishes with a choice of either mils, degrees or dual graduations. Depending on the requirement the compasses can be supplied with either a leather sling case or a fabric pouch. Each compass is fully repairable with spares readily available resulting in lower total ownership costs than other similar units.

Advantages of the Pyser Optics Francis Barker liquid prismatic compass over many other types of compass include:

- Ease of reading
- Prism sighting system eliminates parallax errors
- Speed of compass needle settling
- Sighting directly onto the target
- Clear resolution of the bearing reading
- Clarity in relating the target object to the bearing



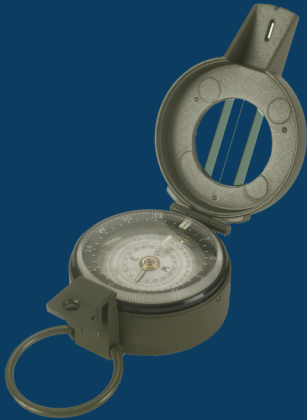
## M-73 Liquid Prismatic Compass



**Part No's.:** 120601 - M-73 Degrees Version  
120621 - M-73 Mils Version  
120671 - Leatherette Case

The Francis Barker M-73 Liquid Prismatic Compass is a robust, precision instrument of predominantly brass construction, designed to withstand the most arduous climate conditions. Quick, precise settlement of the liquid filled dial assembly allows rapid use of the compass in field conditions. Five self-luminous tritium light sources enable full night and daylight operation. Every component of the M-73 can be replaced leading to years of continuous, reliable use.

## M-88 Liquid Prismatic Compass



**Part No's.:** 120991 - M-88 Degrees/Mils Dual Version  
120971 - Green fabric case and strap

The Francis Barker M-88 Liquid Prismatic Compass is built to the same exacting standards as the M-73, but is made from aluminium alloy making it very lightweight. Five self-luminous tritium light sources enable full night and daylight operation. The dial assembly is mounted in a liquid filled sealed capsule designed to allow the full servicing of the compass to sub-assembly level. Extensive environmental testing and rigorous quality control measures ensure that the M-88 can operate with precision in the most difficult climatic conditions.

## M-73 24ct Gold Plated Brass Presentation Compass



**Part No's.:** 120650-24G - M-73 24ct Gold Brass Presentation Compass

Through generations of skilled and experienced craftsmen, the application of advanced manufacturing techniques and the use of only the finest raw materials, Pyser Optics has built a reputation for accuracy and reliability across their compass product range.

Pyser Optics capabilities range from the manufacture of very accurate mechanical components produced on automatic, computer-controlled machine tools, to delicate and intricate hand finishing and assembly tasks required for the manufacture of specialist instrumentation. This 2021 Special edition. model has been designed to echo the WWII production standard with cardinal point engraving on the outer body case.

## NATO Survival Compass



**Part No.:** 160501 - NATO survival compass

A small north seeking, bearing compass with luminous points built to full military specifications. The compass, a standard NATO inventory item, is specified by the British Army and is designed for survival use. Of brass construction, the survival compass is highly resistant to corrosion. Able to perform in the harshest of operational scenarios, it is one of the most advanced survival compasses in the world today.

# TECHNICAL SPECIFICATIONS

M-73 120601

M-73 120621

M-88 120991

NATO 160501

## Divisions

360 degrees

6400 mils

360 degrees/6400 mils

360 degrees

## Colour

Matt Black

Matt Black

Olive Green

Matt Black

## Size

60x85x34mm

60x85x34mm

60x85x38mm

15x15x15mm

## Weight

210g

210g

125g

3g

## Composition

Brass body anodised aluminium alloy lid

Brass body anodised aluminium alloy lid

Anodised aluminium alloy lid and body

Brass body

## Inner Compass

Brass with nickel silver diaphragm sealing aluminium top ring

Brass with nickel silver diaphragm sealing aluminium top ring

Plastic sealed capsule

Dry suspension

## Compass Pivot

Niva tipped brass

Niva tipped brass

Niva tipped brass

Niva tipped brass

## Jewel

Synthetic white sapphire

Synthetic white sapphire

Synthetic white sapphire

## Night Illumination

5 Tritium self-luminous lights

5 Tritium self-luminous lights

5 Tritium self-luminous lights

Green phosphorised paint

## Liquid

Purified kerosene

Purified kerosene

Purified kerosene

None

## Accuracy by reading

One half of one division

One half of one division

One half of one division

## Accuracy by estimation

+/- 15 degrees

## Operating temperature

-30° to +55°C

-30° to +55°C

-20° to +55°C

+/- 15 degrees

All specifications and designs correct at the time of publishing but may change in the future for product upgrade and improvements.

For transportation purposes, the M-73/M-88 are classed as UN2911 Radio Active Material - Excepted Package

All goods are supplied under our standard conditions of trade

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