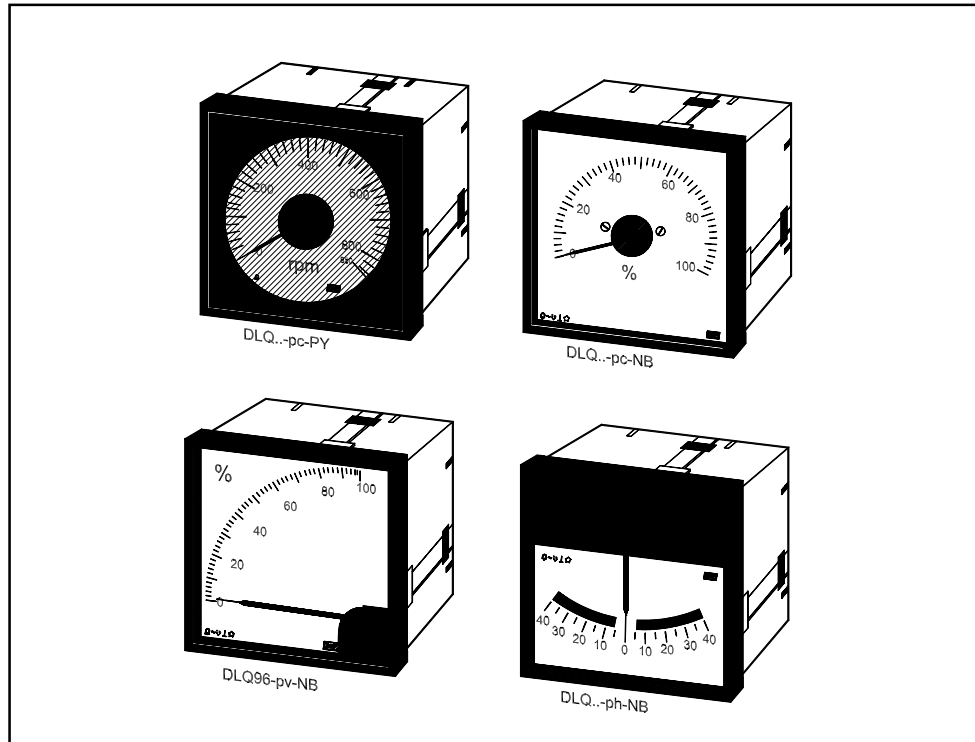


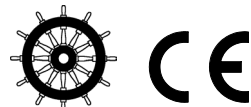
DLQ72/96/144-pc/ph/ps/pv-XX

Marine bridge instrumentation

4189340162E (UK)



- Custom-designed coloured scales and glass
- LED illumination (long life)
- Separate pointer illumination
- Colour spectrum constant throughout dimmer range
- Shock resistant up to 50g
- Enclosure IP52, IP54
- Approved according to the European Marine Directive (except type DLPR96)



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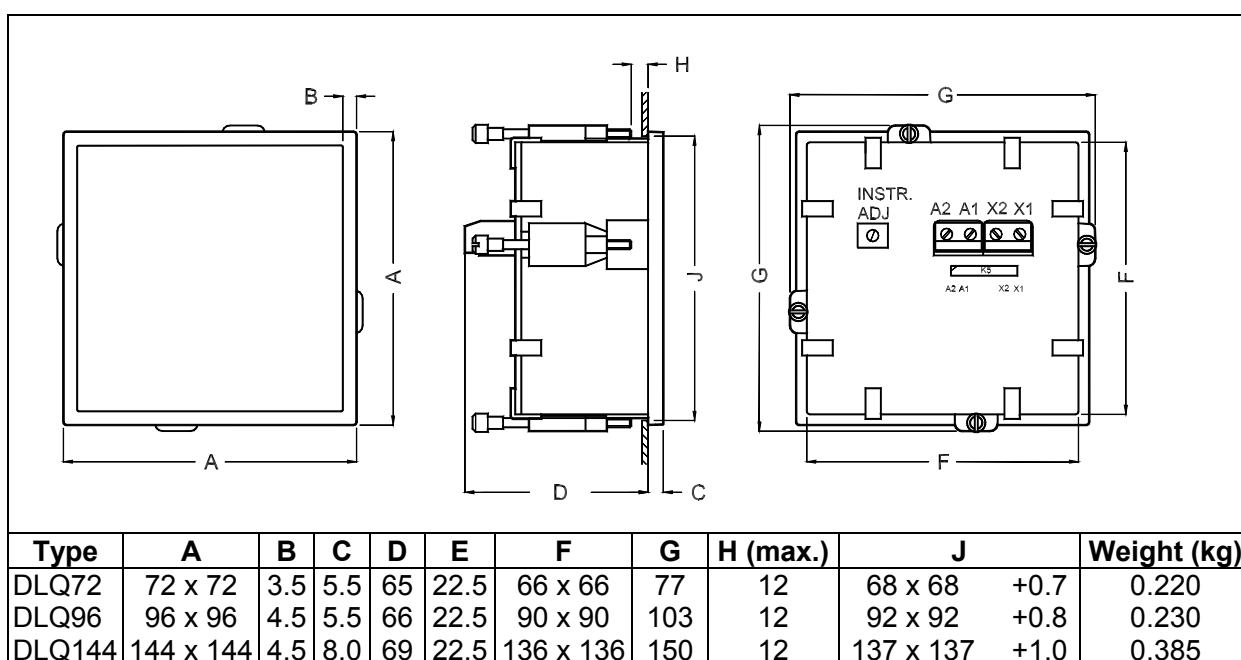
1. Description

The illuminated instruments types DLQ72/96/144-pc/ph/ps/pv-XX based on a moving coil system are designed for indication of rpm, pitch and rudder angle.

The light intensity can be altered by means of a common dimmer for all instruments. Dimming of an instrument can be done with a 1k Ω potentiometer.

2. Mounting instructions

DLQ72/96/144 is designed for installation in bridge consoles.

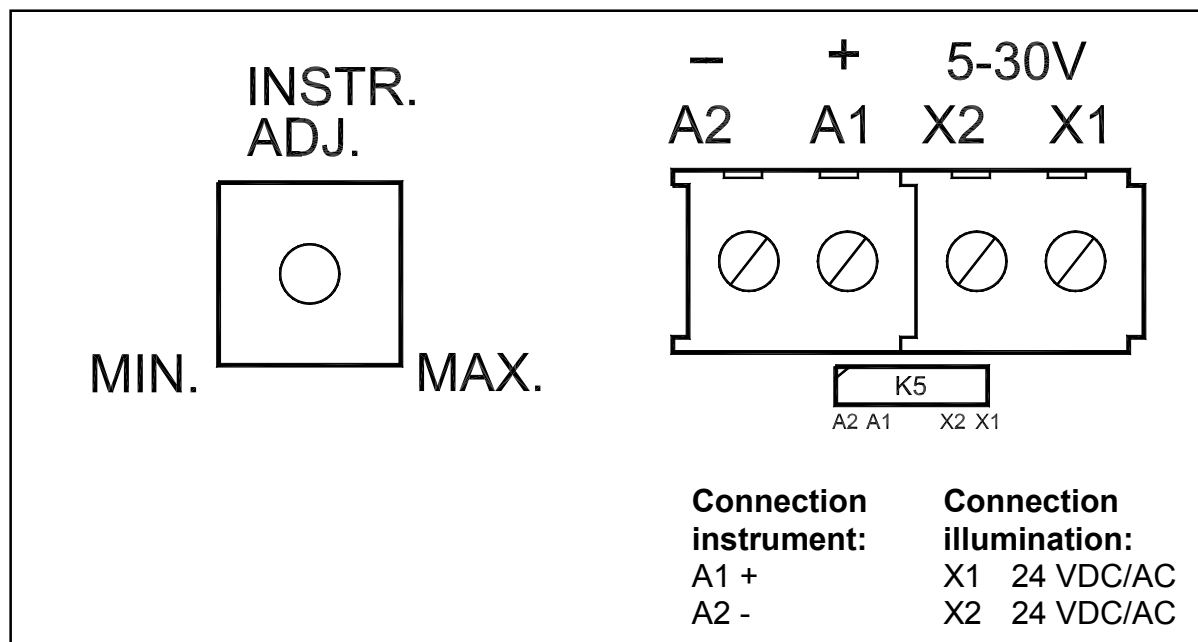


The instrument is mounted by means of the 2 fixing elements. For instruments with IP54 protection, use all 4 fixing elements and the rubber gasket (included in the packing).

3. Connection

DLQ72/96/144 is protected against ESD (static electricity). Therefore, when connecting the instrument, no special protection from ESD is needed.

After mounting the instrument in the console connect the terminal on the rear side to the cable. Cable dimensions between 0.2 and 2.5 mm² can be used for the screw terminals. An alternative connection is a 26AWG flat cable. The connection order for the AWG cable is identical to the connection order for the screw terminals.



4. Adjustment and Control

The potentiometer marked "INSTR. ADJ." located on the rear side can be used for adjusting the deflection of the instrument within +/-10% of full-scale (or according to information on type sign) to fit the scaling of the indicator to the existing installation. Please note that instruments with measuring range 0...1mA and 0.5...0...0.5mA do not have this adjustment (the potentiometer is sealed with a label).

The mechanical zero adjustment is placed on the front of the instrument. It is adjusted to zero with no input signal to the instrument. By maximum input or a known input the reading is adjusted by means of the potentiometer "INSTR. ADJ".

Please note that instruments with mechanically prestressed measuring range not as standard are equipped with a zero adjuster.

Also please note that if the potentiometer "INSTR. ADJ." is sealed with a label, the maximum adjustment is not possible.

5. Technical specifications

Accuracy: Class 1.5 (-10...15...30...55°C) to EN 60051 and IEC 51.

Illumination: Long-life LEDs.

Dimmer: 24VDC/AC, regulation range 5...30V.

Consumption: DLQ72/96/114-N: max. 40/80/150mA/24V (pointer not illuminated).

DLQ72/96/144-P: max. 60/110/200mA/24V (pointer illumin.)

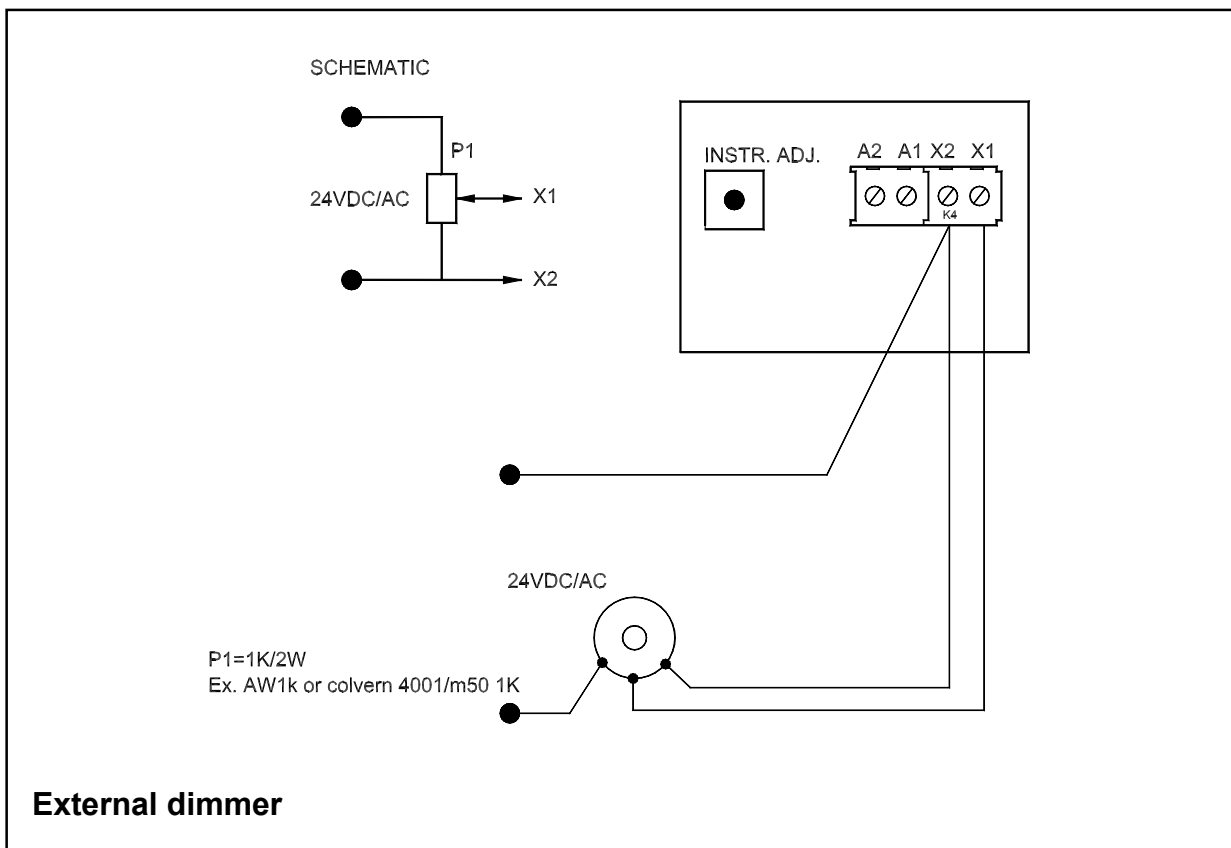
Galvanic separation: 2kV - 50Hz - 1 min



Compass

- safety distance: 1 m
- EMC: To EN 50081-1/2, EN 50082-1/2, SS4361503 (PL4) and IEC 255-22-1.
- Connections: Screw terminals.
- Cable dimensions: 0.2...2.5mm²
- Alternative connection: Male/female connector for 26AWG cable.
- Materials: Outer plastic materials are self-extinguishing to UL94 (VO).
- Protection: IP52 or IP54 (with rubber gasket and 4 fixing elements) to IEC 529 and EN 60529.
- Weight: DLQ72/96: approx. 0.3kg
DLQ144: approx. 0.5kg

If protection against voltage transients (surge pulse) in the auxiliary supply (X1 and X2) is required, this protection must be built into the auxiliary supply no more than 10 m from the DLQ instrument and meet the requirements of the class or the legislation. The protection can be integral in the light dimmer unit, if such is used.



Errors and changes excepted