

PSM Instrumentation LTD

Unit 3
Burrell Road Ind. Estate
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United Kingdom
Telephone: 44-14444-10040
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MA Certificate No. 09-SO1682501-X1

Product: Water Level Detectors on Bulk Carriers

Model: BULKSAFE IWT 4000 Series

Intended Service:

Water ingress detection system used on board of ACC and ACCU bulk carriers and offshore installations

Description:

The BULKSAFE IWT 4000 water ingress detection system comprises a micro processor based centralised control and alarm panel housing various electrical components and MTL 700 or 7700 intrinsically safe barriers connect to Optima 260 or 360 series pressure sensitive diaphragm/LVDT level detectors via a deck termination assembly or a suitable junction box. The panel provides distinct audible pre-alarm and main alarm conditions as well as system malfunction alarms. Channel override facilities are program selected. The detector can be tested remotely. The filter elements are replaceable.

Ratings:

Power supply input: 110/240 V AC and 24 V DC

Output signals: N/O or N/C functions

Detector operating temperatures: -25 Â°C to 95 Â°C

Detector enclosure protection: IP68 (immersion for 20 days in 20 M water in a hyperbaric chamber)

Safe barrier category: [EEx ia] II C, certificate No. BAS01ATEX7202 and BAS99ATEX7285 with variants and certificate of conformity for the MTL 700 and 7000 series

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. Recommended cable glands are PSM Instrument 390 Stainless steel bulkhead glands, type 256, pressure tested to 110 PSI, or any other marine approved type sealant. The alarm system must not be configured with overrides for holds or spaces, which are neither designed nor intended to carry water ballast.

Comments:

Tests and approval are for hardware only. Each vessel configuration and external connection is to be specifically approved.

Notes / Drawings / Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

The control and alarm panel has been environmentally tested in accordance with Intertek ETL Semko report No. 03012608 dated February 2004. According to the test specification for the level detector, the material used is a mixture of 50% North Sea water and 50% samples of fine cargo material continuously stirred in a test chamber to form a slurry solution. The samples are coal dust; iron ore, wheat and aggregate particles.

Term of Validity:

This product/model is covered under Product Design Assessment (PDA) Certificate # 04-LD440160-1-PDA, dated 20/May/2010. This PDA Certificate expires 19/May/2015. It will remain valid for 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first). It is valid for all vessels contracted on or before the date of the Rules used in this evaluation.

STANDARDS

ABS Rules:

2010 Steel Vessel Rules 1-1-4/7.7 and 4-9-7/7



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National:

NA

International:

IMO SOLAS XII/12, MSC 145(77), IACS UR SC180 and IEC 60529

Government Authority:

NA

EUMED:

NA

Others:

NA



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