

## II

(Non-legislative acts)

## REGULATIONS

**COMMISSION IMPLEMENTING REGULATION (EU) 2017/306****of 6 February 2017****indicating design, construction and performance requirements and testing standards for marine equipment****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 on marine equipment and repealing Council Directive 96/98/EC <sup>(1)</sup>, and in particular Article 35(2) thereof,

Whereas:

- (1) In order to facilitate a harmonised, rapid and simple implementation of Directive 2014/90/EU, implementing acts adopted pursuant to that Directive should take the form of Commission Regulations.
- (2) Directive 2014/90/EU requires the Commission to indicate the design, construction and performance requirements and testing standards provided for in the international instruments, as well as the dates from which those requirements and testing standards are to apply.
- (3) Equipment newly subject to harmonised Union requirements as part of Directive 2014/90/EU and its implementing acts should be explicitly listed as a new item in column 1 of the Annex to this Regulation.
- (4) It is reasonable and proportionate to allow a new item which is in conformity with the national requirements for type-approval in force in a Member State before the entry into force of this Regulation to be placed on the market and on board an EU ship for a transitional period.
- (5) The measures provided for in this Regulation are in accordance with the opinion of the Committee on Safe Seas and the Prevention of Pollution from Ships (COSS),

HAS ADOPTED THIS REGULATION:

*Article 1*

The design, construction and performance requirements and the testing standards provided for in the international instruments shall apply to each item of marine equipment as set out in the Annex to this Regulation.

<sup>(1)</sup> OJ L 257, 28.8.2014, p. 146.

*Article 2*

Equipment listed as a new item in column 1 of the Annex to this Regulation, which complies with the national requirements for type-approval in force before 16 March 2017 in a Member State, may continue to be placed on the market and on board a Union ship until 16 March 2020.

*Article 3*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 6 February 2017.

*For the Commission*  
*The President*  
Jean-Claude JUNCKER

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## ANNEX

*General note:* SOLAS Regulations refer to the provisions of the International Convention for the Safety of Life at Sea, as amended.

*General note:* Within certain item designations, column 3 shows some possible product variants under the same item designation. Product variants are independently provisioned and separated by a dotted lined from each other. For certification purpose only the relevant product variant shall be chosen, as appropriate (Example: MED/3.3).

**List of acronyms used**

A.1, Amendment 1 concerning Standard Documents other than IMO.

A.2, Amendment 2 concerning Standard Documents other than IMO.

AC, Amending Corrigendum concerning Standard Documents other than IMO.

CAT, Category for radar equipment as defined in section 1.3 of IEC 62388 (2007)

Circ., Circular.

COLREG, International Regulations for Preventing Collisions at Sea.

COMSAR, IMO's Sub-Committee on Radiocommunications and Search and Rescue.

EN, European Standard.

ETSI, European Telecommunication Standardisation Institute.

FSS, International Code for Fire Safety Systems.

FTP, International Code for Application of Fire Test Procedures.

HSC, High Speed Craft Code.

IBC, International Bulk Chemical Code.

ICAO, International Civil Aviation Organization.

IEC, International Electro-technical Commission.

IGC, International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk.

IMO, International Maritime Organization.

ISO, International Standardisation Organisation.

ITU, International Telecommunication Union.

LSA, Life saving appliance.

MARPOL, International Convention for the Prevention of Pollution from Ships.

MED, Marine Equipment Directive.

MEPC, Marine Environment Protection Committee.

MSC, Maritime Safety Committee.

NO<sub>x</sub>, Nitrogen Oxides.

O<sub>2</sub>/HC systems: Oxygen Hydro Carbon systems.

SOLAS, International Convention for the Safety of Life at Sea.

SO<sub>x</sub>, Sulphur Oxides.

Reg., Regulation.

Res., Resolution.

#### **Notes applicable to the whole of this Annex**

- (a) General: In addition to the testing standards specifically mentioned in this Annex, type-examination (type approval) requires compliance with the applicable requirements of the international conventions and the relevant resolutions and circulars of the IMO. Such compliance is referred to in the modules for conformity assessment in Directive 2014/90/EU.
- (b) Column 3: Where two sets of identifying standards are separated by 'or', each set fulfils all the testing requirements to meet IMO Performance Standards; thus testing to one of these sets is sufficient to demonstrate compliance with the requirements of the relevant international instruments. Conversely, when other separators (comma) are used all the listed references apply.
- (c) Column 6: In order to take into consideration timeframes for shipbuilding, depending on the characteristics of the specific marine equipment, the following interpretations of placing on board (indicated in brackets behind the dates) apply:
  - I: First installation of the equipment in its functional position on board an EU ship as defined in Article 2 of Directive 2014/90/EU.
  - II: First installation of the equipment in its functional position or stowing in its functional position on board an EU ship.
  - III: Delivery of the equipment to the shipyard if this takes place within 30 months before the first installation of the equipment in its functional position.
- (d) The requirements laid down in this Annex shall be without prejudice to carriage requirements in the international conventions.
- (e) Where there are two rows for one marine equipment entry (e.g. MED/1/1.2c), the second (lower) row contains the updated requirements of the international instruments in respect to the ones shown in the first (upper) row.
- (f) In such cases and if no date is given in columns 5 and 6, this indicates that there has been no change in the testing standards and that the marine equipment item concerned shall comply with the requirements indicated in the (second) lower row.

1. Life-saving appliances

Column 2: IMO MSC/Circular 980 should apply except when superseded by the specific instruments referred to in Column 2.

| Number and item designation  | Regulations of SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable  | Testing standards                  | Modules for conformity assessment | Dates for placing on the market | Dates for placing on board |
|--|--|------------------------------------|-----------------------------------|---------------------------------|----------------------------|
| 1  | 2  | 3                                  | 4                                 | 5                               | 6                          |
| MED/1.1<br>— Lifebuoys   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul>   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F                 |                                 |                            |
| MED/1.2a<br>— Position-indicating lights for life-saving appliances:<br>(a) for survival craft and rescue boats, | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul> | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F                 |                                 |                            |

| 1   | 2  | 3   | 4                                | 5 | 6 |
|---|--|---|----------------------------------|---|---|
| <p>MED/1.2a</p> <p>— Position-indicating lights for life-saving appliances:</p> <p>(a) for survival craft and rescue boats,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul>  | <p>— IMO Res.MSC.81(70), as amended.</p>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.2b</p> <p>— Position-indicating lights for life-saving appliances:</p> <p>(b) for lifebuoys,</p>                       | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.2b</p> <p>— Position-indicating lights for life-saving appliances:</p> <p>(b) for lifebuoys,</p>                       | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul>   | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

| 1   | 2   | 3                                  | 4                 | 5 | 6 |
|---|---|------------------------------------|-------------------|---|---|
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/7,<br>— SOLAS 74 Reg. III/22,<br>— SOLAS 74 Reg. III/32,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) II,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.   |                                    |                   |   |   |
| MED/1/1.2c<br>Position-indicating lights for<br>life-saving appliances:<br>(c) for lifejackets. | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/7,<br>— SOLAS 74 Reg. III/22,<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/32,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) II,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                    |                   |   |   |
| MED/1/1.2c<br>Position-indicating lights for<br>life-saving appliances:<br>(c) for lifejackets. | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |

| 1   | 2  | 3                                  | 4                 | 5 | 6 |
|---|--|------------------------------------|-------------------|---|---|
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/7,<br>— SOLAS 74 Reg. III/22,<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/32,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) II,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                    |                   |   |   |
| MED/1.3<br>— Lifebuoys self-activating<br>smoke signals | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/7,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) II,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.  |                                    |                   |   |   |
| MED/1.4<br>— Lifejackets                                | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |



| 1   | 2  | 3  | 4                          | 5 | 6 |
|---|--|--|----------------------------|---|---|
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.922,</li> <li>— IMO MSC.1/Circ.1304,</li> <li>— IMO MSC.1/Circ.1470.</li> </ul>  |  |                            |   |   |
| <p>MED/1.5a</p> <ul style="list-style-type: none"> <li>— Immersion suits and anti-exposure suits designed to be worn in conjunction WITH a lifejacket</li> <li>(a) immersion suit without inherent insulation,</li> </ul> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res. MSC.81(70), as amended.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1   | 2  | 3   | 4                                | 5 | 6 |
|---|--|---|----------------------------------|---|---|
| <p>MED/1.5b</p> <p>— Immersion suits and anti-exposure suits designed to be worn in conjunction WITH a lifejacket</p> <p>(b) immersion suit with inherent insulation,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.5c</p> <p>— Immersion suits and anti-exposure suits designed to be worn in conjunction WITH a lifejacket</p> <p>(c) anti exposure suits.</p>                     | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

| 1  | 2  | 3   | 4                                | 5 | 6 |
|--|--|---|----------------------------------|---|---|
| <p>MED/1.6a</p> <p>— Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket</p> <p>(a) immersion suit without inherent insulation,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.6b</p> <p>— Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket</p> <p>(b) immersion suit with inherent insulation,</p>    | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

| 1   | 2  | 3   | 4                                | 5 | 6 |
|---|--|---|----------------------------------|---|---|
| <p>MED/1.6c</p> <p>— Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket</p> <p>(c) anti exposure suits.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/7,</li> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul> | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.7</p> <p>— Thermal protective aids</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/22,</li> <li>— SOLAS 74 Reg. III/32,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) II,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.1046.</li> </ul>                                 | <p>— IMO Res. MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

| 1   | 2  | 3                                  | 4                 | 5 | 6 |
|---|--|------------------------------------|-------------------|---|---|
| MED/1.8<br>— Rocket parachute flares (pyrotechnics) | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/6,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) III,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                    |                   |   |   |
| MED/1.9<br>— Hand flares (pyrotechnics)             | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) III,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.                           |                                    |                   |   |   |
| MED/1.10<br>— Buoyant smoke signals (pyrotechnics)  | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res. MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) III.   |                                    |                   |   |   |

| 1   | 2   | 3  | 4                                | 5 | 6 |
|---|---|--|----------------------------------|---|---|
| <p>MED/1.11</p> <p>— Line-throwing appliances</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/18,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) VII,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul>  | <p>— IMO Res. MSC.81(70), as amended.</p>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.12</p> <p>— Inflatable liferafts</p>     | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/13,</li> <li>— SOLAS 74 Reg. III/21,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/31,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.811,</li> <li>— IMO MSC.1/Circ.1328.</li> </ul> | <p>— MO Res.MSC.81(70), as amended.</p> <p>And for extended service intervals:</p> <p>— IMO MSC.1/Circ.1328.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| <p>MED/1.13</p> <p>— Rigid liferafts</p>                       | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/21,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/31,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.811.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res. MSC.81(70), as amended,</li> <li>— IMO MSC/Circ.1006.</li> </ul>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.14</p> <p>— Automatically self-righting liferafts</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.809,</li> <li>— IMO MSC/Circ.811,</li> <li>— IMO MSC.1/Circ.1328.</li> </ul>      | <ul style="list-style-type: none"> <li>— IMO Res. MSC.81(70), as amended.</li> </ul> <p>And for extended service intervals:</p> <ul style="list-style-type: none"> <li>— IMO MSC.1/Circ.1328.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| <p>MED/1.15</p> <p>— Canopied reversible liferafts</p>                                     | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.809,</li> <li>— IMO MSC/Circ.811,</li> <li>— IMO MSC.1/Circ.1328.</li> </ul> | <p>— MO Res.MSC.81(70), as amended.</p> <p>And for extended service intervals:</p> <p>— IMO MSC.1/Circ.1328.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/1.16</p> <p>— Float-free arrangements for liferafts (hydrostatic release units)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/13,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC/Circ.811.</li> </ul>                             | <p>— IMO Res.MSC.81(70), as amended.</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |



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| <p>MED/1.17a</p> <p>— Lifeboats:</p> <p>(a) Davit-launched lifeboats:</p> <ul style="list-style-type: none"> <li>— partially enclosed,</li> <li>— totally enclosed.</li> </ul> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/21,</li> <li>— SOLAS 74 Reg. III/31,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC.1/Circ.1423.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res.MSC.81(70), as amended,</li> <li>— IMO MSC/Circ.1006.</li> </ul> | <p>B+D</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/1.17b</p> <p>— Lifeboats:</p> <p>(b) Free-fall lifeboats.</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/21,</li> <li>— SOLAS 74 Reg. III/31,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO MSC.1/Circ.1423.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res.MSC.81(70), as amended,</li> <li>— IMO MSC/Circ.1006.</li> </ul> | <p>B+D</p> <p>B+F</p> <p>G</p> |   |   |

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| MED/1.18<br>— Rigid rescue boats                   | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/21,<br>— SOLAS 74 Reg. III/31,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.1006.                      | B+D<br>B+F<br>G |   |   |
| MED/1.19<br>— Inflated rescue boats                | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/21,<br>— SOLAS 74 Reg. III/31,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. | — IMO Res.MSC.81(70), as amended,<br>— ISO 15372:2000.                         | B+D<br>B+F<br>G |   |   |
| MED/1.20a<br>— Fast rescue boats:<br>(a) inflated, | Type approval requirements<br>— SOLAS 74 Reg. III/4.   | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.1006,<br>— ISO 15372:2000. | B+D<br>B+F<br>G |   |   |

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|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO MSC/Circ.1016,<br>— IMO MSC/Circ.1094.   |  |                 |   |   |
| MED/1.20b<br>— Fast rescue boats:<br>(b) rigid,          | Type approval requirements<br>— SOLAS 74 Reg. III/4.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO MSC/Circ.1016,<br>— IMO MSC/Circ.1094. | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.1006,<br>— ISO 15372:2000. | B+D<br>B+F<br>G |   |   |
| MED/1.20c<br>— Fast rescue boats:<br>(c) rigid-inflated. | Type approval requirements<br>— SOLAS 74 Reg. III/4.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO MSC/Circ.1016,<br>— IMO MSC/Circ.1094. | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.1006,<br>— ISO 15372:2000. | B+D<br>B+F<br>G |   |   |

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| MED/1.21<br>— Launching appliances using falls (davits) | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F<br>G |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/23,<br>— SOLAS 74 Reg. III/33,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                   |                        |   |   |

Item MED/1.22 Float free launching appliances for survival craft — Item deliberately left blank

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| MED/1.23<br>— Launching appliances for free-fall lifeboats | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F<br>G |  |  |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/16,<br>— SOLAS 74 Reg. III/23,<br>— SOLAS 74 Reg. III/33,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                   |                        |  |  |

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| <p>MED/1.24</p> <p>— Liferaft launching appliances (Davits)</p>  | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4,</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. III/12,</p> <p>— SOLAS 74 Reg. III/16,</p> <p>— SOLAS 74 Reg. III/34,</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) I,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) VI,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</p> | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/1.25</p> <p>— Fast rescue boat launching appliances (Davits)</p>  | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. III/26,</p> <p>— SOLAS 74 Reg. III/34,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) I,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) VI.</p>  | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/1.26a</p> <p>— Release mechanism for</p> <p>(a) Lifeboats and rescue boats (Launched by a fall or falls),</p> | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4,</p> <p>— SOLAS 74 Reg. X/3.</p>  | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p>          |   |   |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/16,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br>— IMO MSC.1/Circ.1419.   |                                   |                   |   |   |
| MED/1.26b<br>— Release mechanism for<br>(b) Liferafts (Launched by<br>a fall or falls), | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/16,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br>— IMO MSC.1/Circ.1419. | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |
| MED/1.26c<br>— Release mechanism for<br>(c) Free fall lifeboats.                        | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F |   |   |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/16,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br>— IMO MSC.1/Circ.1419. |  |                 |   |   |
| MED/1.27<br>— Marine evacuation systems | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.81(70), as amended.                        | B+D<br>B+F<br>G |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/15,<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.                                       |  |                 |   |   |
| MED/1.28<br>— Means of rescue           | Type approval requirements<br>— SOLAS 74 Reg. III/4.  | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.810. | B+D<br>B+F      |   |   |

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|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) VI.  |   |                   |   |   |
| MED/1.29<br>— Embarkation ladders        | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. III/11,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.81(70), as amended,<br>— ISO 5489:2008. | B+D<br>B+F        |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/11,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code),<br>— IMO Res.MSC.48(66)-(LSA Code),<br>— IMO Res.MSC.97(73)-(2000 HSC Code),<br>— IMO MSC.1/Circ.1285. |   |                   |   |   |
| MED/1.30<br>— Retro-reflective materials | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res. A.658(16).                                 | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.  |   |                   |   |   |



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Item MED/1.31, Survival craft two-way VHF radio telephone apparatus, — moved to MED/5.17 and MED/5.18.

Item MED/1.32, 9 GHz SAR transponder (SART), — moved to MED/4.18.

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| MED/1.33<br>— Radar reflector for lifeboats and rescue boats (passive) | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — EN ISO 8729:1998,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>Or,<br>— EN ISO 8729:1998,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>Or,<br>— ISO 8729-1:2010,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>Or,<br>— ISO 8729-1:2010,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008). | B+D<br>B+E<br>B+F |  |  |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.A.384(X),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br>— IMO Res.MSC.164(78). |   |                   |  |  |

Item MED/1.34, Compass for lifeboats and rescue boats, — moved to MED/4.23.

Item MED/1.35, Portable fire extinguishing equipment for lifeboats and rescue boats, — moved to MED/3.38.

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| MED/1.36<br>— Lifeboat/rescue boat propulsion engine | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F |  |  |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) V. |                                   |                   |  |  |

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| MED/1.37<br>— Rescue boat propulsion engine — outboard motor     | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.48(66)-(LSA Code) V.  | — IMO Res.MSC.81(70), as amended.   | B+D<br>B+E<br>B+F |   |   |
| MED/1.38<br>— Searchlights for use in lifeboats and rescue boats | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) IV,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. | — IMO Res.MSC.81(70), as amended.   | B+D<br>B+E<br>B+F |   |   |
| MED/1.39<br>— Open reversible liferafts                          | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.36(63)-(1994 HSC Code) Annex 10,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) Annex 11,<br>And for extended service intervals:<br>— IMO MSC.1/Circ.1328. | B+D<br>B+F        |   |   |

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|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) Annex 10,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) Annex 11,<br>— IMO MSC.1/Circ.1328. |   |   |   |   |

Item MED/1.40, Mechanical pilot hoist, — moved to MED/4.48.

|  |   |                                   |                        |  |  |
|--|---|-----------------------------------|------------------------|--|--|
| MED/1.41a<br>— Winches for survival craft and rescue boats:<br>(a) davit launched lifeboats, | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.81(70), as amended. | B+D<br>B+E<br>B+F<br>G |  |  |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. III/16,<br>— SOLAS 74 Reg. III/17,<br>— SOLAS 74 Reg. III/23,<br>— SOLAS 74 Reg. III/24,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) VI,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |                                   |                        |  |  |

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| <p>MED/1.41b</p> <p>— Winches for survival craft and rescue boats:</p> <p>(b) free-fall lifeboats,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/16,</li> <li>— SOLAS 74 Reg. III/17,</li> <li>— SOLAS 74 Reg. III/23,</li> <li>— SOLAS 74 Reg. III/24,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) VI,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul> | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/1.41c</p> <p>— Winches for survival craft and rescue boats:</p> <p>(c) liferafts,</p>           | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/16,</li> <li>— SOLAS 74 Reg. III/17,</li> <li>— SOLAS 74 Reg. III/23,</li> <li>— SOLAS 74 Reg. III/24,</li> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) I,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) VI,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</li> </ul> | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |

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| <p>MED/1.41d</p> <p>— Winches for survival craft and rescue boats:</p> <p>(d) rescue boats,</p>      | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4,</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. III/16,</p> <p>— SOLAS 74 Reg. III/17,</p> <p>— SOLAS 74 Reg. III/23,</p> <p>— SOLAS 74 Reg. III/24,</p> <p>— SOLAS 74 Reg. III/34,</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) I,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) VI,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</p> | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/1.41e</p> <p>— Winches for survival craft and rescue boats:</p> <p>(e) fast rescue boats.</p> | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4,</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. III/16,</p> <p>— SOLAS 74 Reg. III/17,</p> <p>— SOLAS 74 Reg. III/23,</p> <p>— SOLAS 74 Reg. III/24,</p> <p>— SOLAS 74 Reg. III/34,</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) I,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) VI,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</p> | <p>— IMO Res.MSC.81(70), as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |

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| Item MED/1.42, Pilot ladder, — moved to MED/4.49. |  |  |                 |   |   |
| MED/1.43<br>— Rigid/inflated rescue boats         | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.81(70), as amended,<br>— IMO MSC/Circ.1006,<br>— ISO 15372:2000. | B+D<br>B+F<br>G |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. III/21,<br>— SOLAS 74 Reg. III/31,<br>— SOLAS 74 Reg. III/34,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br>— IMO Res.MSC.48(66)-(LSA Code) I,<br>— IMO Res.MSC.48(66)-(LSA Code) V,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 8. |  |                 |   |   |

## 2. Marine pollution prevention

| Number and item designation   | Regulations of Marpol 73/78, as amended, and the relevant resolutions and circulars of the IMO, as applicable | Testing standards                                  | Modules for conformity assessment | First placing on the market | Last placing on board |
|---|---|--|-----------------------------------|-----------------------------|-----------------------|
| 1   | 2   | 3  | 4                                 | 5                           | 6                     |
| MED/2.1<br>Oil-filtering equipment (for an oil content of the effluent not exceeding 15 p.p.m.) | Type approval requirements<br>— MARPOL 73/78 Annex I, Reg. 14.  | — IMO Res.MEPC.107(49),<br>— IMO MEPC.1/Circ. 643. | B+D<br>B+E<br>B+F                 |                             |                       |
|   | Carriage and performance requirements<br>— MARPOL 73/78 Annex I, Reg. 14.<br>— IMO MEPC.1/Circ. 643.          |  |                                   |                             |                       |
| MED/2.2<br>Oil/water interface detectors  | Type approval requirements<br>— MARPOL 73/78 Annex I, Reg. 32.  | — IMO Res.MEPC.5(XIII).                            | B+D<br>B+E<br>B+F                 |                             |                       |

| 1                             | 2  | 3  | 4                 | 5 | 6 |
|-------------------------------|--|--|-------------------|---|---|
| MED/2.3<br>Oil-content meters | Type approval requirements<br>— MARPOL 73/78 Annex I, Reg. 14.                                       | — IMO Res.MEPC.107(49),<br>— IMO MEPC.1/Circ. 643. | B+D<br>B+E<br>B+F |   |   |
|                               | Carriage and performance requirements<br>— MARPOL 73/78 Annex I, Reg. 14.<br>— IMO MEPC.1/Circ. 643. |  |                   |   |   |

Item MED/2.4, Process units intended for attachment to existing oily water separating equipment (for an oil content of the effluent not exceeding 15 p.p.m.), — Item deliberately left blank

|  |  |   |                        |           |                   |
|--|--|---|------------------------|-----------|-------------------|
| MED/2.5<br>Oil discharge monitoring and control system for oil tankers | Type approval requirements<br>— MARPOL 73/78 Annex I, Reg. 31,<br>— IMO MEPC.1/Circ.761 Rev.1,<br>— IMO MEPC.1/Circ.858. | — IMO Res. MEPC.108(49), as amended.  | B+D<br>B+E<br>B+F      |           |                   |
|  | Carriage and performance requirements<br>— MARPOL 73/78 Annex I, Reg. 31.  |   |                        |           |                   |
| MED/2.6<br>Sewage systems  | Type approval requirements<br>— MARPOL 73/78 Annex IV, Reg. 9.   | — IMO Res.MEPC.227(64).   | B+D<br>B+E<br>B+F      |           | 1.1.2018<br>(III) |
|  | Carriage and performance requirements<br>— MARPOL 73/78 Annex IV, Reg. 9.  |   |                        |           |                   |
| MED/2.6<br>Sewage systems  | Type approval requirements<br>— MARPOL 73/78 Annex IV, Reg. 9.   | — IMO Res.MEPC.227(64).<br>(a) including section 4.2 (for use by passenger ships in all areas, including a MARPOL Annex IV special area),<br>(b) not including section 4.2 (for use by ships, other than passenger ships, in all areas and by passenger ships outside MARPOL Annex IV special areas). | B+D<br>B+E<br>B+F<br>G | 16.3.2017 |                   |
|  | Carriage and performance requirements<br>— MARPOL 73/78 Annex IV, Reg. 9.  |   |                        |           |                   |

| 1  | 2  | 3  | 4                      | 5         | 6                 |
|--|--|--|------------------------|-----------|-------------------|
| MED/2.7<br>Shipboard incinerators  | Type approval requirements<br>— MARPOL 73/78 Annex VI, Reg. 16.  | — IMO Res.MEPC.76(40)  | B+D<br>B+E<br>B+F<br>G |           | 1.1.2018<br>(III) |
|  | Carriage and performance requirements<br>— MARPOL 73/78 Annex VI, Reg. 16.<br>— IMO MEPC.1/Circ.793.   |  |                        |           |                   |
| MED/2.7<br>Shipboard incinerators<br>(Incinerator plants with capacities greater than 1 500 kW and up to 4 000 kW)           | Type approval requirements<br>— MARPOL 73/78 Annex VI, Reg. 16.  | — IMO Res. MEPC.244(66).   | B+D<br>B+E<br>B+F<br>G | 16.3.2017 |                   |
|  | Carriage and performance requirements<br>— MARPOL 73/78 Annex VI, Reg. 16.   |  |                        |           |                   |
| MED/2.8<br>NO <sub>x</sub> analyzer for use on board as per NO <sub>x</sub> Technical Code 2008                              | Type approval requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 13).  | — IMO Res. MEPC.177(58) — (NO <sub>x</sub> Technical code 2008), as amended. | B+D<br>B+E<br>B+F<br>G |           |                   |
|  | Carriage and performance requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 13).<br>— IMO Res. MEPC.177(58) — (NO <sub>x</sub> Technical code 2008),<br>— IMO Res.MEPC.198(62),<br>— IMO MEPC.1/Circ. 638. |  |                        |           |                   |
| Item MED/2.9, Equipment using other technological methods to limit SO <sub>x</sub> emissions — Item deliberately left blank. |  |  |                        |           |                   |
| MED/2.10<br>On board exhaust gas cleaning systems  | Type approval requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 4),<br>— IMO Res. MEPC.184(59).   | — IMO Res.MEPC.184(59).  | B+D<br>B+E<br>B+F<br>G |           | 15.5.2018         |
|  | Carriage and performance requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 4),  |  |                        |           |                   |



| 1   | 2  | 3                       | 4                    | 5         | 6 |
|---|--|-------------------------|----------------------|-----------|---|
| MED/2.10<br>On board exhaust gas cleaning systems | Type approval requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 4),<br>— IMO Res.MEPC.259 (68). | — IMO Res.MEPC.259(68). | Scheme A<br>B+F<br>G | 16.3.2017 |   |
|   | Carriage and performance requirements<br>— IMO Res. MEPC.176(58) — (Revised MARPOL Annex VI, Reg. 4).                  |                         | Scheme B<br>G        |           |   |

### 3. Fire protection equipment

| Number and item designation            | Regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable   | Testing standards   | Modules for conformity assessment | First placing on the market | Last placing on board |
|--|---|---|-----------------------------------|-----------------------------|-----------------------|
| 1                                      | 2   | 3   | 4                                 | 5                           | 6                     |
| MED/3.1<br>Primary decks covering      | Type approval requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/6,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.  | B+D<br>B+E<br>B+F                 |                             |                       |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/6,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. |   |                                   |                             |                       |
| MED/3.2<br>Portable fire extinguishers | Type approval requirements<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 4.  | — EN 3-7:2004 incl. A1:2007,<br>— EN 3-8:2006 incl. AC:2007,<br>— EN 3-9:2006 incl. AC:2007,<br>— EN 3-10:2009. | B+D<br>B+E<br>B+F                 |                             |                       |

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|--|--|---|----------------------------|---|---|
|  | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. II-2/18,</li> <li>— SOLAS 74 Reg. II-2/19,</li> <li>— SOLAS 74 Reg. II-2/20,</li> <li>— IMO Res.A.951(23),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 4.</li> <li>— IMO MSC/Circ.1239,</li> <li>— IMO MSC/Circ.1275.</li> </ul> |   |                            |   |   |
| <p>MED/3.3<br/>Fire-fighter's outfit: protective clothing (close proximity clothing)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul>   | <ul style="list-style-type: none"> <li>— Protective clothing for fire fighting;</li> <li>— EN 469:2005 incl. A1:2006 and AC:2006,</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— Protective clothing for fire fighting — Reflective clothing for specialised fire-fighting;</li> <li>— EN 1486:2007,</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— Protective clothing for fire fighting — Protective clothing with a reflective outer surface;</li> <li>— ISO 15538:2001.</li> </ul> <p>Note: Level 2</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
|  | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul>  |   |                            |   |   |

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| <p>MED/3.4<br/>Fire-fighter's outfit: boots</p>  | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.98(73)-(FSS Code) 3.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br/>— IMO Res.MSC.98(73)-(FSS Code) 3.</p> | <p>— EN 15090:2012.</p>                         | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.5<br/>Fire-fighter's outfit: gloves</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.98(73)-(FSS Code) 3.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br/>— IMO Res.MSC.98(73)-(FSS Code) 3.</p> | <p>— EN 659:2003 incl. A1:2008 and AC:2009.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.6<br/>Fire-fighter's outfit: helmet</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.98(73)-(FSS Code) 3.</p>  | <p>— EN 443:2008.</p>                           | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

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|  | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul> |  |                            |   |   |
| <p>MED/3.7<br/>Self-contained compressed-air-operated breathing apparatus<br/><i>Note:</i> For use in accidents involving dangerous goods a positive pressure type mask is required.</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 136:1998 incl. AC:2003,</li> <li>— EN 137:2006,</li> </ul> <p>And where the apparatus is for use in accidents with cargo:,</p> <ul style="list-style-type: none"> <li>— ISO 23269-3:2011.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul> <p>And where the apparatus is for use in accidents with cargo:,</p> <ul style="list-style-type: none"> <li>— IMO Res.MSC.4(48)-(IBC Code) 14,</li> <li>— IMO Res.MSC.5(48)-(IGC Code) 14.</li> </ul> |   |  |                            |   |   |
| <p>MED/3.7<br/>Self-contained compressed-air-operated breathing apparatus<br/><i>Note:</i> For use in accidents involving dangerous goods a positive pressure type mask is required.</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 136:1998 incl. AC:2003,</li> <li>— EN 137:2006,</li> </ul> <p>And where the apparatus is for use in accidents with cargo:,</p> <ul style="list-style-type: none"> <li>— ISO 23269-3:2011.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

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|  | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul> <p>And where the apparatus is for use in accidents with cargo,</p> <ul style="list-style-type: none"> <li>— IMO Res.MSC.4(48)-(IBC Code) 14,</li> <li>— IMO Res.MSC.5(48)-(IGC Code) 14,</li> <li>— IMO MSC.1/Circ.1499.</li> </ul> |   |                            |   |   |
| <p>MED/3.8<br/>Compressed air line breathing apparatus</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— <i>Note:</i> This equipment is only for high speed craft built under provisions of the 1994 HSC Code.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> </ul>   | <ul style="list-style-type: none"> <li>— EN 14593-1:2005,</li> <li>— EN 14593-2:2005 incl. AC:2005</li> <li>— EN 14594:2005 incl. AC:2005.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.8<br/>Compressed air line breathing apparatus</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— <i>Note:</i> This equipment is only for high speed craft built under provisions of the 1994 HSC Code.</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 14593-1:2005,</li> <li>— EN 14594:2005 incl. AC:2005.</li> </ul>  | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1   | 2  | 3   | 4                 | 5 | 6 |
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|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,   |   |                   |   |   |
| MED/3.9<br>Sprinkler systems components for accommodation spaces, service spaces and control stations equivalent to that referred to in SOLAS 74 Reg. II-2/12 (limited to nozzles and their performance).<br>(Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item) | Type approval requirements<br>— SOLAS 74 Reg. II-2/7,<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 8.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/7,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.44(65),<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO Res.MSC.98(73)-(FSS Code) 8.<br>— IMO MSC/Circ.912. | — IMO Res. A.800(19),as amended.            | B+D<br>B+E<br>B+F |   |   |
| MED/3.10<br>— Nozzles for fixed pressure water spraying fire extinguishing systems for machinery spaces and cargo pump-rooms  | Type approval requirements<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 7.   | — IMO MSC/Circ.1165, Appendix A, as amended | B+D<br>B+E<br>B+F |   |   |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO Res.MSC.98(73)-(FSS Code) 7.<br>— IMO MSC.1/Circ.1313. |   |  |   |   |
| MED/3.11a<br>'A' & 'B' Class divisions fire integrity<br>(a) 'A' class divisions,   | Type approval requirements<br>— SOLAS 74 Reg. II-2/3.2.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3.2.<br>— SOLAS 74 Reg. II-2/9,<br>— IMO MSC/Circ.1120,<br>— IMO MSC.1/Circ.1434.          | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended,<br>— IMO MSC.1/Circ.1435.  | B+D<br>B+E<br>B+F  |   |   |
| MED/3.11b<br>'A' & 'B' Class divisions fire integrity<br>(b) 'B' class divisions.   | Type approval requirements<br>— SOLAS 74 Reg. II-2/3.4.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3.4.<br>— SOLAS 74 Reg. II-2/9.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.  | B+D<br>B+E<br>B+F  |   |   |
| MED/3.12<br>Devices to prevent the passage of flame into the cargo tanks in tankers | Type approval requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/16.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/16.                                   | — P/V valves,<br>— IMO MSC/Circ.677,<br>— ISO 15364:2007,<br>— Flame arresters, detonation flame arresters and high velocity valves,<br>— IMO MSC/Circ.677,<br>— EN ISO 16852:2010. | For equipment other than valves:<br>B+D<br>B+E<br>B+F<br>For valves<br>B+F |   |   |

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| <p>MED/3.12</p> <p>Devices to prevent the passage of flame into the cargo tanks in tankers</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. II-2/16.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. II-2/16.</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 15.</li> </ul>  | <p>(a) P/V valves:</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.677, as amended,</li> <li>— EN ISO 16852:2010,</li> <li>— ISO 15364:2016.</li> </ul> <p>(b) Flame arresters:</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.677, as amended,</li> <li>— EN ISO 16852:2010.</li> </ul> <p>(c) Detonation flame arresters:</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.677, as amended,</li> <li>— EN ISO 16852:2010.</li> </ul> <p>(d) High velocity vent valves:</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.677, as amended,</li> <li>— EN ISO 16852:2010,</li> <li>— ISO 15364:2016.</li> </ul> | <p>For equipment other than valves:</p> <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>For valves</p> <p>B+F</p> |   |   |
| <p>MED/3.13</p> <p>Non-combustible materials</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/3,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/3,</li> <li>— SOLAS 74 Reg. II-2/5,</li> <li>— SOLAS 74 Reg. II-2/9,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</li> </ul> | <p>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p>  |   |   |

Item MED/3.14, Materials other than steel for pipes penetrating 'A' or 'B' Class division, — included in MED/3.26 and MED/3.27.



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| <p>MED/3.15a</p> <p>Materials other than steel for pipes conveying oil or fuel oil (a) plastic pipes and fittings</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 10,</li> <li>— IMO MSC/Circ.1120.</li> </ul> | <p>Pipes and fittings:</p> <ul style="list-style-type: none"> <li>— IMO Res.A.753(18), as amended,</li> <li>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.15b</p> <p>Materials other than steel for pipes conveying oil or fuel oil (b) valves</p>                     | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 10,</li> <li>— IMO MSC/Circ.1120.</li> </ul> | <p>Valves:</p> <ul style="list-style-type: none"> <li>— EN ISO 10497:2010.</li> </ul>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| <p>MED/3.15c</p> <p>Materials other than steel for pipes conveying oil or fuel oil</p> <p>(c) flexible pipe assemblies and compensators</p>                     | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 10,</li> <li>— IMO MSC/Circ.1120.</li> </ul> | <p>Flexible pipe assemblies:</p> <ul style="list-style-type: none"> <li>— EN ISO 15540:2001,</li> <li>— EN ISO 15541:2001.</li> </ul>                                | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.15d</p> <p>Materials other than steel for pipes conveying oil or fuel oil</p> <p>(d) metallic pipe components with resilient and elastomeric seals</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 10,</li> <li>— IMO MSC/Circ.1120.</li> </ul> | <p>Metallic pipe components with resilient and elastomeric seals:</p> <ul style="list-style-type: none"> <li>— ISO 19921:2005,</li> <li>— ISO 19922:2005.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| MED/3.16<br>Fire Doors   | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.   | — IMO Res.MSC.307(88)-(2010 FTP Code),<br>— IMO MSC.1/Circ.1319.             | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.  |  |                   |   |   |
| MED/3.16<br>Fire Doors   | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.   | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended,<br>— IMO MSC.1/Circ.1319. | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9,<br>— IMO MSC.1/Circ.1511.  |  |                   |   |   |
| MED/3.17<br>Fire door control systems components.<br><i>Note:</i> When the term ‘system components’ is used in column 2 it may be that a single component, a group of components or a whole system needs to be tested to ensure that the international requirements are fulfilled. | Type approval requirements<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                           | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.                         |  |                   |   |   |
| MED/3.18a<br>Surface materials and floor coverings with low flame-spread characteristics<br>(a) decorative veneers,  | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— SOLAS 74 Reg. X/3. | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                           | B+D<br>B+E<br>B+F |   |   |

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|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC/Circ.1120. |  |                   |   |   |
| MED/3.18b<br>Surface materials and floor coverings with low flame-spread characteristics<br>(b) paint systems,   | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC/Circ.1120. |  |                   |   |   |
| MED/3.18c<br>Surface materials and floor coverings with low flame-spread characteristics<br>(c) floor coverings. | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/6,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC/Circ.1120. |  |                   |   |   |
| MED/3.18d<br>Surface materials and floor coverings with low flame-spread characteristics<br>(d) pipe insulation covers,   | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC/Circ.1120.                            |  |                   |   |   |
| MED/3.18e<br>Surface materials and floor coverings with low flame-spread characteristics<br>(e) adhesives used in the construction of 'A', 'B' & 'C' class divisions, | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |

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|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.  |  |                   |   |   |
| MED/3.18f<br>Surface materials and floor coverings with low flame-spread characteristics<br>(f) combustible ducts membrane | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC/Circ.1120. | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                                       | B+D<br>B+E<br>B+F |   |   |
| MED/3.19<br>Draperies, curtains and other suspended textile materials and films  | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.<br>— IMO MSC.1/Circ.1456, as amended. | B+D<br>B+E<br>B+F |   |   |

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|                                     | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.                            |  |                   |   |   |
| MED/3.20<br>— Upholstered furniture | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|                                     | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/5,<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. |  |                   |   |   |
| MED/3.21<br>Bedding components      | Type approval requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/9,<br>— SOLAS 74 Reg. X/3.   | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |

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|                            | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3,<br>— SOLAS 74 Reg. II-2/9,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. |  |                   |   |   |
| MED/3.22<br>— Fire dampers | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.   | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |

Item MED/3.23, Non combustible duct penetrations through 'A' class divisions — Item deliberately left blank.

Item MED/3.24, Electric cable transits through 'A' class divisions — Item deliberately left blank.

|  |   |  |                   |  |                    |
|--|---|--|-------------------|--|--------------------|
| MED/3.25<br>'A' and 'B' class fire proof windows and side scuttles                   | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.<br>— IMO MSC/Circ.1120. | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |  |                    |
| MED/3.26a<br>Penetrations through 'A' class divisions<br>(a) electric cable transits | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                         | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |  | 12.1.2018<br>(III) |



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| MED/3.26a<br>Penetrations through 'A' class divisions<br>(a) electric cable transits               | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended,<br>— MSC.1/Circ. 1488.     | B+D<br>B+E<br>B+F | 16.3.2017 |                    |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                            |   |                   |           |                    |
| MED/3.26b<br>Penetrations through 'A' class divisions<br>(b) pipe, duct, trunk, etc. penetrations  | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                            | B+D<br>B+E<br>B+F |           | 12.1.2018<br>(III) |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9,<br>— IMO MSC.1/Circ. 1276. |   |                   |           |                    |
| MED/3.26b<br>Penetrations through 'A' class divisions<br>(b) pipe, duct, trunk, etc. penetrations  | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended,<br>— IMO MSC.1/Circ. 1488. | B+D<br>B+E<br>B+F | 16.3.2017 |                    |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9,<br>— IMO MSC.1/Circ. 1276. |   |                   |           |                    |
| MED/3.27a<br>Penetrations through 'B' class divisions<br>(a) electric cable transits,              | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                            | B+D<br>B+E<br>B+F |           |                    |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                            |   |                   |           |                    |
| MED/3.27b<br>Penetrations through 'B' class divisions<br>(b) pipe, duct, trunk, etc. penetrations. | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.                            | B+D<br>B+E<br>B+F |           |                    |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                            |   |                   |           |                    |

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| <p>MED/3.28</p> <p>Sprinkler systems (limited to sprinkler heads).</p> <p>(Nozzles for fixed sprinkler systems, for high speed craft (HSC) are included under this item)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.44(65),</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 8,</li> <li>— IMO MSC/Circ.912.</li> </ul> | <p>— ISO 6182-1:2014.</p> <p>Or,</p> <p>— EN 12259-1:1999 incl. A1:2001, A2:2004 and A3:2006.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  |                              |
| <p>MED/3.29</p> <p>Fire hoses with diameter ≤ 52 mm</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</li> </ul>   | <p>— EN 14540:2004 incl. A1:2007</p>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>31.7.2017</p> <p>(II)</p> |
| <p>MED/3.29</p> <p>Fire-fighting hoses</p> <p>Non-percolating lay flat fire-fighting hoses (range of the inside diameter from 25 mm to 52 mm)</p>                            | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul>   | <p>— EN 14540:2014.</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. |  |                   |   |                  |
| MED/3.30<br>Portable oxygen analysis and<br>gas detection equipment | Type approval requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3,  | — EN 60945 (2002) incl. IEC 60945 Corr. 1<br>(2008) or IEC 60945 (2002) incl. IEC<br>60945 Corr. 1 (2008),<br>— IEC 60092-504:2001 incl. IEC 60092-504<br>Corr.1: 2011,<br>— IEC 60533:1999,   | B+D<br>B+E<br>B+F |   | 1.6.2019<br>(II) |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 15.                        | And as applicable to:<br>(a) Category 1: (safe area):<br>— EN 50104:2010,<br>— EN 60079-29-1:2007,<br>(b) Category 2: (explosive gas atmospheres):<br>— EN 50104:2010,<br>— EN 60079-29-1:2007,<br>— EN 60079-0:2012 incl. A11:2013,<br>— EN 60079-1:2007 incl. IEC 60079-1<br>Corrigendum 1 (2008),<br>— EN 60079-10-1:2009,<br>— EN 60079-11:2012,<br>— EN 60079-15:2010,<br>— EN 60079-26:2007. |                   |   |                  |

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|---|---|---|----------------------------------|------------------|---|
| <p>MED/3.30</p> <p>Portable oxygen analysis and gas detection equipment</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. VI/3,</li> <li>— SOLAS 74 Reg. XI-1/7.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4,</li> <li>— SOLAS 74 Reg. VI/3,</li> <li>— SOLAS 74 Reg. XI-1/7.</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 15,</li> <li>— IMO MSC.1/Circ.1477.</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945:2002 incl. IEC 60945 Corr. 1:2008, or IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015,</li> </ul> <p>And as applicable to:</p> <p>(a) Category 1: (safe area):</p> <ul style="list-style-type: none"> <li>— EN 50104:2010,</li> <li>— EN 60079-29-1:2007,</li> </ul> <p>(b) Category 2: (explosive gas atmospheres):</p> <ul style="list-style-type: none"> <li>— EN 50104:2010,</li> <li>— EN 60079-29-1:2007,</li> <li>— EN 60079-0:2012 incl. A11:2013,</li> <li>— EN 60079-1:2014,</li> <li>— EN 60079-10-1:2015,</li> <li>— EN 60079-11:2012,</li> <li>— EN 60079-15:2010,</li> <li>— EN 60079-26:2015.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |

Item MED/3.31, Nozzles for fixed sprinkler systems for high speed craft ((HSC), deleted as it is covered by MED/3.9 and MED/3.28.

|   |  |  |                                  |  |  |
|---|--|--|----------------------------------|--|--|
| <p>MED/3.32</p> <p>Fire restricting materials (except furniture) for high speed craft</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO MSC.1/Circ.1457.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |  |  |
|---|--|--|----------------------------------|--|--|

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| MED/3.33<br>Fire restricting materials for furniture for high speed craft | Type approval requirements<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.                           |  |                   |   |   |
| MED/3.34<br>Fire resisting divisions for high speed craft                 | Type approval requirements<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO MSC.1/Circ.1457. |  |                   |   |   |
| MED/3.35<br>Fire doors on high speed craft                                | Type approval requirements<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.                           |  |                   |   |   |
| MED/3.36<br>Fire dampers on high speed craft                              | Type approval requirements<br>— SOLAS 74 Reg. X/3.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended. | B+D<br>B+E<br>B+F |   |   |
|   | Carriage and performance requirements<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.                           |  |                   |   |   |

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|---|--|--|----------------------------------|---|---|
| <p>MED/3.37a</p> <p>Penetrations through fire resisting divisions on high speed craft</p> <p>(a) electric cable transits,</p>             | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</p>   | <p>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</p>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.37b</p> <p>Penetrations through fire resisting divisions on high speed craft</p> <p>(b) pipe, duct, trunk etc. penetrations.</p> | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</p>   | <p>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</p>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.38</p> <p>— Portable fire-extinguishing equipment for lifeboats and rescue boats</p>   | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. III/4,</p> <p>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. III/34,</p> <p>— IMO Res.A.951(23),</p> <p>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) I,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) IV,</p> <p>— IMO Res.MSC.48(66)-(LSA Code) V,</p> <p>— IMO Res.MSC.97(73)-(2000 HSC Code) 8.</p> | <p>— EN 3-7:2004 incl. A1:2007,</p> <p>— EN 3-8:2006 incl. AC:2007,</p> <p>— EN 3-9:2006 incl. AC:2007,</p> <p>— EN 3-10:2009.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| MED/3.39<br>Nozzles for equivalent water-mist fire extinguishing systems for machinery spaces and cargo pump rooms | Type approval requirements<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 7.  | — IMO MSC/Circ.1165, as amended.   | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO Res.MSC.98(73)-(FSS Code) 7.<br>— IMO MSC.1/Circ.1313,<br>— IMO MSC.1/Circ.1458. |  |                   |   |   |
| MED/3.40<br>Low-location lighting systems (components only)  | Type approval requirements<br>— SOLAS 74 Reg. II-2/13,<br>— IMO Res.MSC.98(73)-(FSS Code) 11.   | — IMO Res.A.752(18),<br>— ISO 15370:2010.  | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/13,<br>— IMO Res.A.752(18),<br>— IMO Res.MSC.98(73)-(FSS Code) 11.  |  |                   |   |   |
| MED/3.41<br>Emergency escape breathing devices (EEBD)  | Type approval requirements<br>— SOLAS 74 Reg. II-2/13.  | — ISO 23269-1:2008,<br>and alternatively:<br>— For self-contained: open-circuit compressed air breathing apparatus with full mask or mouthed piece assembly for escape;,<br>— EN 402:2003; | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/13.<br>— IMO Res.MSC.98(73)-(FSS Code) 3,<br>— IMO MSC/Circ.849.  |  |                   |   |   |

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|   |  | <ul style="list-style-type: none"> <li>— For self-contained open-circuit compressed air breathing apparatus with a hood for escape;</li> <li>— EN 1146:2005;</li> <li>— For self-contained: closed-circuit compressed air breathing apparatus;</li> <li>— EN 13794:2002.</li> </ul> |                                  |   |                             |
| <p>MED/3.42<br/>Inert gas systems components</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/4.</li> <li>— IMO Res.A.567(14),</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 15,</li> <li>— IMO MSC/Circ.353,</li> <li>— IMO MSC/Circ.485,</li> <li>— IMO MSC/Circ.731,</li> <li>— IMO MSC/Circ.1120.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.353, as amended.</li> </ul>   | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |                             |
| <p>MED/3.43<br/>Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/1,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/1,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO MSC.1/Circ.1433.</li> </ul>              | <ul style="list-style-type: none"> <li>— ISO 15371:2009.</li> </ul>   | <p>B+D<br/>B+E<br/>B+F</p>       |   | <p>15.11.2018<br/>(III)</p> |



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| <p>MED/3.43</p> <p>Nozzles for deep fat cooking equipment fire extinguishing systems (automatic or manual type).</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/1,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/1,</li> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO MSC.1/Circ.1433.</li> </ul>  | <p>— ISO 15371:2015.</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |
| <p>MED/3.44</p> <p>Fire-fighters outfit — lifeline</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 3.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO Res.MSC.98(73)-(FSS Code) 3, as amended,</li> <li>— IMO Res.MSC.307(88)-(2010 FTP Code), as amended.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  |   |
| <p>MED/3.45</p> <p>Equivalent fixed gas fire extinguishing systems components (extinguishing medium, head valves and nozzles) for machinery spaces and cargo pump rooms</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 5.</li> </ul>   | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.848, as amended,</li> <li>— IMO MSC.1/Circ.1316.</li> </ul>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  |   |

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|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 5.</li> <li>— IMO MSC/Circ.848,</li> <li>— IMO MSC.1/Circ.1313,</li> <li>— IMO MSC.1/Circ.1316.</li> </ul>  |  |                                  |   |   |
| <p>MED/3.46</p> <p>Equivalent fixed gas fire extinguishing systems for machinery spaces (aerosol systems)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 5.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 5.</li> <li>— IMO MSC/Circ.1270 incl. Corr.1,</li> <li>— IMO MSC.1/Circ.1313.</li> </ul> | <p>— IMO MSC/Circ.1270 incl. Corr.1, as amended.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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| <p>MED/3.47</p> <p>Concentrate for fixed high expansion foam fire extinguishing systems for machinery spaces and cargo pump rooms.</p> <p><i>Note:</i> The fixed high expansion foam fire extinguishing system (including those systems which use inside air from their working spaces for their intended performance), for machinery spaces and cargo pump rooms must still be tested with the approved concentrate to the satisfaction of the administration.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10.</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 6.</li> </ul>   | <p>— IMO MSC/Circ.670.</p>    | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.48</p> <p>Fixed water based local application fire-fighting systems components for use in category A machinery spaces (Nozzles and performance tests).</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</li> </ul> | <p>— IMO MSC.1/Circ.1387.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.49a</p> <p>Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces</p> <p>(a) Prescriptive-based systems as per Circ.1430 Clause 4.</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/19,</li> <li>— SOLAS 74 Reg. II-2/20,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 7.</li> </ul>   | <p>— IMO MSC.1/Circ.1430.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

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|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/19,<br>— SOLAS 74 Reg. II-2/20,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO Res.MSC.98(73)-(FSS Code) 7. |                        |                   |   |   |
| MED/3.49b<br>Fixed waterbased firefighting systems for ro-ro spaces, vehicle spaces and special category spaces<br>(b) Performance-based systems as per Circ. 1430 Clause 5. | Type approval requirements<br>— SOLAS 74 Reg. II-2/19,<br>— SOLAS 74 Reg. II-2/20,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 7.  | — IMO MSC.1/Circ.1430. | B+D<br>B+E<br>B+F |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/19,<br>— SOLAS 74 Reg. II-2/20,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,<br>— IMO Res.MSC.98(73)-(FSS Code) 7. |                        |                   |   |   |

Item MED/3.50, Protective clothing resistant to chemical attack — Item deliberately left blank.

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|---|--|--|----------------------------|------------------|---------------------------|
| <p>MED/3.51a</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(a) Control and indicating equipment</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul>                                 | <ul style="list-style-type: none"> <li>— Control and indicating equipment. Electrical installations in ships:</li> <li>— EN 54-2:1997 incl. AC:1999 and A1:2006.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |                  | <p>1.6.2019<br/>(III)</p> |
| <p>MED/3.51a</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(a) Control and indicating equipment</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242,</li> <li>— IMO MSC.1/Circ.1487.</li> </ul> | <ul style="list-style-type: none"> <li>— Control and indicating equipment. Electrical installations in ships:</li> <li>— EN 54-2:1997 incl. AC:1999 and A1:2006.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |                           |

| 1  | 2  | 3  | 4                                | 5                | 6                            |
|--|--|--|----------------------------------|------------------|------------------------------|
| <p>MED/3.51b</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(b) Power supply equipment,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Power supply equipment:</p> <ul style="list-style-type: none"> <li>— EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51b</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(b) Power supply equipment,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Power supply equipment:</p> <ul style="list-style-type: none"> <li>— EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1  | 2  | 3   | 4                                | 5                | 6                            |
|--|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51c</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(c) Heat detectors — Point detectors,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Heat detectors — Point detectors:</p> <ul style="list-style-type: none"> <li>— EN 54-5:2000 incl. A1:2002.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51c</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(c) Heat detectors — Point detectors,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Heat detectors — Point detectors:</p> <ul style="list-style-type: none"> <li>— EN 54-5:2000 incl. A1:2002.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1   | 2  | 3   | 4                                | 5                | 6                            |
|---|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51d</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(d) Smoke detectors: Point detectors using scattered light, transmitted light or ionization,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Smoke detectors — Point detectors using scattered light, transmitted light or ionisation:</p> <ul style="list-style-type: none"> <li>— EN 54-7:2000 incl. A1:2002 and A2:2006.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51d</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(d) Smoke detectors: Point detectors using scattered light, transmitted light or ionization,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Smoke detectors — Point detectors using scattered light, transmitted light or ionisation;</p> <ul style="list-style-type: none"> <li>— EN 54-7:2015.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |



| 1  | 2  | 3   | 4                                | 5                | 6                            |
|--|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51e</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(e) Flame detectors: Point detectors,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Flame detectors — Point detectors:</p> <ul style="list-style-type: none"> <li>— EN 54-10:2002 incl. A1:2005.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51e</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(e) Flame detectors: Point detectors,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Flame detectors — Point detectors,:</p> <ul style="list-style-type: none"> <li>— EN 54-10:2002 incl. A1:2005,</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                 | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1  | 2  | 3  | 4                                | 5                | 6                            |
|--|--|--|----------------------------------|------------------|------------------------------|
| <p>MED/3.51f</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(f) Manual call points,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <ul style="list-style-type: none"> <li>— Manual call points:</li> <li>— EN 54-11:2001 incl. A1:2005.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51f</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(f) Manual call points,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <ul style="list-style-type: none"> <li>— Manual call points:</li> <li>— EN 54-11:2001 incl. A1:2005.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1  | 2  | 3   | 4                                | 5                | 6                            |
|--|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51 g</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(g) Short circuit isolators,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Short circuit isolators:</p> <ul style="list-style-type: none"> <li>— EN 54-17:2007 incl. AC:2007.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51 g</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(g) Short circuit isolators,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Short circuit isolators:</p> <ul style="list-style-type: none"> <li>— EN 54-17:2007 incl. AC:2007.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1   | 2  | 3   | 4                                | 5                | 6                            |
|---|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51 h</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(h) Input/output devices,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Input/output devices:</p> <ul style="list-style-type: none"> <li>— EN 54-18 (2005) including AC(2007).</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51 h</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(h) Input/output devices,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Input/output devices:</p> <ul style="list-style-type: none"> <li>— EN 54-18:2005 incl. AC:2007.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1  | 2  | 3   | 4                                | 5                | 6                            |
|--|--|---|----------------------------------|------------------|------------------------------|
| <p>MED/3.51i</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(i) Cables.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Cables;</p> <ul style="list-style-type: none"> <li>— EN 60332-1-2:2004,</li> <li>— IEC 60092-376:2003,</li> </ul> <p>And, as applicable, electrical and electronic installations in ships;</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,</li> <li>— IEC 60533:1999.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>1.6.2019</p> <p>(III)</p> |
| <p>MED/3.51i</p> <p>Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces:</p> <p>(i) Cables.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul> | <p>— Cables:</p> <ul style="list-style-type: none"> <li>— EN 60332-1-2:2004,</li> <li>— IEC 60092-376:2003.</li> </ul> <p>And, as applicable, electrical and electronic installations in ships:</p> <ul style="list-style-type: none"> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul>                                  | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                              |

| 1  | 2  | 3  | 4                 | 5         | 6                 |
|--|--|--|-------------------|-----------|-------------------|
| MED/3.52<br>Non-portable and transportable<br>fire extinguishers | Type approval requirements<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. | — EN 1866-1:2007,-<br>— EN 1866-3:2013,<br>Or,<br>— ISO 11601:2008.  | B+D<br>B+E<br>B+F |           |                   |
| MED/3.52<br>Non-portable and transportable<br>fire extinguishers | Type approval requirements<br>— SOLAS 74 Reg. II-2/10,<br>— SOLAS 74 Reg. X/3.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. | — EN 1866-1:2007,<br>— EN 1866-2:2014.<br>Or,<br>— EN 1866-1:2007,<br>— EN 1866-3:2013.<br>Or,<br>— ISO 11601:2008.                      | B+D<br>B+E<br>B+F | 16.3.2017 |                   |
| MED/3.53<br>Fire alarm devices — Sounders                        | Type approval requirements<br>— SOLAS 74 Reg. II-2/7,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.98(73)-(FSS Code) 9.  | Sounders:<br>— EN 54-3:2001 incl. A1:2002 and A2:2006,<br>— IEC 60092-504:2001 incl. IEC 60092-504<br>Corr.1: 2011,<br>— IEC 60533:1999. | B+D<br>B+E<br>B+F |           | 1.6.2019<br>(III) |

| 1   | 2  | 3  | 4                          | 5                | 6 |
|---|--|--|----------------------------|------------------|---|
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242.</li> </ul>   |  |                            |                  |   |
| <p>MED/3.53<br/>Fire alarm devices — Sounders</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/7,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7,</li> <li>— IMO Res.MSC.98(73)-(FSS Code) 9.</li> <li>— IMO MSC.1/Circ.1242,</li> <li>— IMO MSC.1/Circ.1487.</li> </ul> | <p>Sounders:</p> <ul style="list-style-type: none"> <li>— EN 54-3:2014,</li> <li>— IEC 60092-504:2016,</li> <li>— IEC 60533:2015.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

| 1   | 2  | 3   | 4                 | 5         | 6                 |
|---|--|---|-------------------|-----------|-------------------|
| MED/3.54<br>Fixed oxygen analysis and gas detection equipment | Type approval requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3.   | — IEC 60092-504:2001 incl. IEC 60092-504<br>Corr.1: 2011,<br>— IEC 60533:1999.<br>And, as applicable, to:<br>(a) Category 4: (safe area),<br>— EN 50104:2010;<br>(b) Category 3: (explosive gas atmospheres),<br>— EN 50104:2010,<br>— EN 60079-0:2012 incl. A11:2013,<br>— EN 60079-29-1:2007.<br>For combined O <sub>2</sub> /HC systems, additionally:<br>— IMO MSC.1/Circ.1370. | B+D<br>B+E<br>B+F |           | 1.6.2019<br>(III) |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3.<br>— IMO Res.MSC.98(73)-(FSS Code) 15,<br>— for combined O <sub>2</sub> /HC systems additionally:,<br>— IMO MSC.1/Circ.1370. |   |                   |           |                   |
| MED/3.54<br>Fixed oxygen analysis and gas detection equipment | Type approval requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3.   | — IEC 60092-504:2016,<br>— IEC 60533:2015.<br>And as applicable to:<br>(a) Category 4: (safe area),<br>— EN 50104:2010,<br>(b) Category 3: (explosive gas atmospheres),<br>— EN 50104:2010,<br>— EN 60079-0:2012 incl. A11:2013,<br>— EN 60079-29-1:2007.<br>For combined O <sub>2</sub> /HC systems, additionally:<br>— IMO MSC.1/Circ.1370.                                       | B+D<br>B+E<br>B+F | 16.3.2017 |                   |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4,<br>— SOLAS 74 Reg. VI/3.<br>— IMO Res.MSC.98(73)-(FSS Code) 15,<br>— for combined O <sub>2</sub> /HC systems additionally:,<br>— IMO MSC.1/Circ.1370. |   |                   |           |                   |



| 1   | 2   | 3   | 4                          | 5 | 6 |
|---|---|---|----------------------------|---|---|
| <p>MED/3.55<br/>Dual purpose type nozzles<br/>(spray/jet type)</p>                      | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</p> | <p>— Hand-held branchpipes for fire service use<br/>— Combination branchpipes PN 16;,<br/>— EN 15182-1:2007 incl. A1:2009,<br/>— EN 15182-2:2007 incl. A1:2009,<br/>— Hand-held branchpipes for fire service use<br/>— Smooth bore jet and/or one fixed spray<br/>jet angle branchpipes PN 16;,<br/>— EN 15182-1:2007 incl. A1:2009.</p>                                      | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.55<br/>Dual purpose type nozzles<br/>(spray/jet type)</p>                      | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</p> | <p>— Hand-held branchpipes for fire service use<br/>— Combination branchpipes PN 16;,<br/>— EN 15182-1:2007 incl. A1:2009,<br/>— EN 15182-2:2007 incl. A1:2009,<br/>— Hand-held branchpipes for fire service use<br/>— Smooth bore jet and/or one fixed spray<br/>jet angle branchpipes PN 16;,<br/>— EN 15182-1:2007 incl. A1:2009,<br/>— EN 15182-3:2007 incl. A1:2009.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.56<br/>Fixed firefighting hose systems<br/>Hose reels with semi-rigid hose</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— SOLAS 74 Reg. X/3.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</p> | <p>— EN 671-1:2012</p>  | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1   | 2   | 3   | 4                          | 5 | 6 |
|---|---|---|----------------------------|---|---|
| <p>MED/3.57<br/>Medium Expansion Foam Fire Extinguishing Systems components — Fixed Deck Foam for Tankers</p>                       | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10.8.1,<br/>— IMO Res.MSC.98(73)-(FSS Code) 14,<br/>— IMO MSC/Circ.1239,<br/>— IMO MSC.1/Circ.1276.</p>                                    | <p>— IMO MSC/Circ.798.</p>                                      | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.58<br/>Fixed Low Expansion Foam Fire Extinguishing Systems Components for Machinery Spaces and Tanker Deck Protection.</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/10.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/10.<br/>— IMO Res.MSC.98(73)-(FSS Code) 6,<br/>— IMO Res.MSC.98(73)-(FSS Code) 14,<br/>— IMO MSC/Circ.1239,<br/>— IMO MSC.1/Circ.1276.</p> | <p>— IMO MSC.1/Circ.1312,<br/>— IMO MSC.1/Circ.1312/Corr.1.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.59<br/>Expansion Foam for Fixed Fire Extinguishing Systems for Chemical Tankers</p>  | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/1,<br/>— IMO Res.MSC.4(48)-(IBC Code) 11.</p> <hr/> <p>Carriage and performance requirements<br/>— IMO Res.MSC.4(48)-(IBC Code) 11.<br/>— IMO MSC/Circ.553.</p>  | <p>— IMO MSC.1/Circ.1312,<br/>— IMO MSC.1/Circ.1312/Corr.1.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1  | 2   | 3                             | 4                          | 5 | 6 |
|--|---|-------------------------------|----------------------------|---|---|
| <p>MED/3.60</p> <p>— Nozzles for fixed pressure water-spraying fire-extinguishing systems for cabin balconies</p>  | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.98(73)-(FSS Code) 7.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. II-2/10,<br/>— IMO Res.MSC.98(73)-(FSS Code) 7.<br/>— IMO MSC.1/Circ.1313.</p> | <p>— IMO MSC.1/Circ.1268.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |
| <p>MED/3.61a</p> <p>(a) Inside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces.</p> <p><i>Note:</i> Inside/Outside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces shall be tested with the approved concentrate to the satisfaction of the Administration</p> | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. II-2/10.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. II-2/10.<br/>— IMO Res.MSC.98(73)-(FSS Code) 6.</p>   | <p>— IMO MSC.1/Circ.1384.</p> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1   | 2  | 3                             | 4                                | 5 | 6 |
|---|--|-------------------------------|----------------------------------|---|---|
| <p>MED/3.61b</p> <p>(b) Outside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces.</p> <p><i>Note:</i> Inside/Outside air high expansion foam systems for the protection of machinery spaces, cargo pump rooms, vehicle and ro-ro spaces, special category spaces and cargo spaces shall be tested with the approved concentrate to the satisfaction of the Administration</p> | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. II-2/10.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. II-2/10.</p> <p>— IMO Res.MSC.98(73)-(FSS Code) 6.</p> | <p>— IMO MSC.1/Circ.1384.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |
| <p>MED/3.62</p> <p>Dry chemical powder extinguishing systems</p>  | <p>Type approval requirements</p> <p>— SOLAS 74 Reg. II-2/1.</p> <hr/> <p>Carriage and performance requirements</p> <p>— SOLAS 74 Reg. II-2/1.</p> <p>— IMO Res.MSC.5(48)-(IGC Code) 11.</p>   | <p>— IMO MSC.1/Circ.1315.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   |   |

| 1  | 2  | 3   | 4                          | 5                | 6                         |
|--|--|---|----------------------------|------------------|---------------------------|
| <p>MED/3.63<br/>Sample extraction smoke detection systems components</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/7,<br/>— SOLAS 74 Reg. II-2/19,<br/>— SOLAS 74 Reg. II-2/20.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/7,<br/>— SOLAS 74 Reg. II-2/19,<br/>— SOLAS 74 Reg. II-2/20.<br/>— IMO Res.MSC.98(73)-(FSS Code) 10.</p> | <p>— IMO Res.MSC.98(73)-(FSS Code) 10.<br/>And for:<br/>— Control and indicating equipment. Electrical installations in ships:<br/>— EN 54-2:1997 incl. AC:1999 and A1:2006;<br/>— Power supply equipment:<br/>— EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006;<br/>— Aspiring smoke detectors:<br/>— EN 54-20:2006 incl. AC:2008.<br/>And, as applicable, electrical and electronic installations in ships:<br/>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,<br/>— IEC 60533:1999.<br/>And, as applicable for explosive atmospheres:<br/>— EN 60079-0:2012 incl. A11:2013.</p> | <p>B+D<br/>B+E<br/>B+F</p> |                  | <p>1.6.2019<br/>(III)</p> |
| <p>MED/3.63<br/>Sample extraction smoke detection systems components</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. II-2/7,<br/>— SOLAS 74 Reg. II-2/19,<br/>— SOLAS 74 Reg. II-2/20.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. II-2/7,<br/>— SOLAS 74 Reg. II-2/19,<br/>— SOLAS 74 Reg. II-2/20.<br/>— IMO Res.MSC.98(73)-(FSS Code) 10.</p> | <p>— IMO Res.MSC.98(73)-(FSS Code) 10.<br/>And for:<br/>— Control and indicating equipment. Electrical installations in ships:<br/>— EN 54-2:1997 incl. AC:1999 and A1:2006;<br/>— Power supply equipment:<br/>— EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006;</p>   | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |                           |

| 1  | 2   | 3  | 4                 | 5         | 6                 |
|--|---|--|-------------------|-----------|-------------------|
|  |   | <ul style="list-style-type: none"> <li>— Aspiring smoke detectors:</li> <li>— EN 54-20:2006 incl. AC:2008.</li> </ul> And, as applicable, electrical and electronic installations in ships: <ul style="list-style-type: none"> <li>— IEC 60092-504:2016</li> <li>— IEC 60533:2015</li> </ul> And, as applicable for explosive atmospheres: <ul style="list-style-type: none"> <li>— EN 60079-0:2012 incl. A11:2013.</li> </ul> |                   |           |                   |
| MED/3.64<br>C class divisions                      | Type approval requirements<br>— SOLAS 74 Reg. II-2/3.10.  | — IMO Res.MSC.307(88)-(2010 FTP Code), as amended.   | B+D<br>B+E<br>B+F |           |                   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/3.10.<br>— SOLAS 74 Reg. II-2/9.                                    |  |                   |           |                   |
| MED/3.65<br>Fixed hydrocarbon gas detection system | Type approval requirements<br>— SOLAS 74 Reg. II-2/4.   | — IMO MSC.1/Circ.1370,<br>— EN 60079-0:2012 incl. A11:2013,<br>— EN 60079-29-1:2007,<br>— IEC 60092-504:2001 incl. IEC 60092-504 Corr.1: 2011,<br>— IEC 60533:1999.  | B+D<br>B+E<br>B+F |           | 1.6.2019<br>(III) |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4.<br>— IMO Res.MSC.98(73)-(FSS Code) 16,<br>— IMO MSC.1/Circ.1370. |  |                   |           |                   |
| MED/3.65<br>Fixed hydrocarbon gas detection system | Type approval requirements<br>— SOLAS 74 Reg. II-2/4.   | — IMO MSC.1/Circ.1370,<br>— EN 60079-0:2012 incl. A11:2013,<br>— EN 60079-29-1:2007,<br>— IEC 60092-504:2016,<br>— IEC 60533:2015.   | B+D<br>B+E<br>B+F | 16.3.2017 |                   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/4.<br>— IMO Res.MSC.98(73)-(FSS Code) 16,<br>— IMO MSC.1/Circ.1370. |  |                   |           |                   |

| 1   | 2   | 3                                | 4                 | 5         | 6                  |
|---|---|----------------------------------|-------------------|-----------|--------------------|
| MED/3.66<br>Evacuation guidance systems used as an alternative to low-location lighting systems | Type approval requirements<br>— SOLAS 74 Reg. II-2/13.                                      | — IMO MSC.1/Circ.1168.           | B+D<br>B+E<br>B+F |           |                    |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/13.<br>— IMO MSC.1/Circ.1168. |                                  |                   |           |                    |
| MED/3.67<br>Helicopter facility foam fire-fighting appliances                                   | Type approval requirements<br>— SOLAS 74 Reg. II-2/18.                                      | — EN 13565-1:2003 incl. A1:2007. | B+D<br>B+E<br>B+F |           |                    |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/18.<br>— IMO MSC.1/Circ.1431. |                                  |                   |           |                    |
| MED/3.68<br>Galley Exhaust Duct Fixed Fire Extinguishing Systems components                     | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — ISO 15371:2009.                | B+D<br>B+E<br>B+F |           | 30.4.2018<br>(III) |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                            |                                  |                   |           |                    |
| MED/3.68<br>Galley Exhaust Duct Fixed Fire Extinguishing Systems components                     | Type approval requirements<br>— SOLAS 74 Reg. II-2/9.                                       | — ISO 15371:2015.                | B+D<br>B+E<br>B+F | 16.3.2017 |                    |
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/9.                            |                                  |                   |           |                    |

| 1   | 2  | 3                         | 4                                | 5                | 6 |
|---|--|---------------------------|----------------------------------|------------------|---|
| <p>MED/3.69</p> <p>Mobile water monitor for ships constructed on or after 1 January 2016 designed to carry five or more tiers of containers on or above the weather deck (new item)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg.II-2/10.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg.II-2/10.</li> <li>— MSC.1/Circ.1472.</li> </ul>   | <p>— MSC.1/Circ.1472.</p> | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |
| <p>MED/3.70</p> <p>Fire-fighting hoses</p> <p>Semi-rigid hoses for fixed systems (new item)</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 7.</li> </ul> | <p>— EN 694 (2014).</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |
| <p>MED/3.71</p> <p>Fixed firefighting hose systems</p> <p>Hose systems with lay-flat hose (new item)</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. II-2/10,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul>   | <p>— EN 671-2:2012.</p>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |



| 1 | 2   | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. II-2/10,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 7,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 7. |   |   |   |   |

#### 4. Navigation equipment

Notes applicable to section 4: Navigation equipment.

Column 2: Resolution A.1021(26) and Resolution MSC.302(87) shall be considered, as applicable, for all the navigation equipment — they refer to ‘Code on alerts and indicators, 2009’, and to ‘Adoption of performance standards for bridge alert management’ respectively.

| Number and item designation                      | Regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable  | Testing standards  | Modules for conformity assessment | First placing on the market | Last placing on board |
|--|--|--|-----------------------------------|-----------------------------|-----------------------|
| 1  | 2  | 3  | 4                                 | 5                           | 6                     |
| MED/4.1<br>Magnetic compass<br>Class A for ships | Type approval requirements<br>— SOLAS 74 Reg. V/18,<br>— SOLAS 74 Reg. X/3,<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. V/19,<br>— IMO Res.A.382(X),<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13,<br>— IMO Res.MSC.302(87). | — ISO 1069:1973,<br>— ISO 25862:2009,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br><br>Or,<br>— ISO 1069:1973,<br>— ISO 25862:2009,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008). | B+D<br>B+E<br>B+F<br>G            |                             |                       |

| 1  | 2   | 3   | 4                                | 5 | 6                          |
|--|---|---|----------------------------------|---|----------------------------|
| <p>MED/4.2<br/>Transmitting heading device<br/>THD (magnetic method)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. V/19,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.116(73),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— ISO 22090-2:2014,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 22090-2:2014,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |                            |
| <p>MED/4.3<br/>Gyro compass</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.424(XI),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.191(79).</li> </ul>  | <ul style="list-style-type: none"> <li>— ISO 8728:1998,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— IEC 62288 Ed. 2.0 (2014-07)</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 8728:1997,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series,</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul>   | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   | <p>25.7.2017<br/>(III)</p> |

| 1                       | 2  | 3   | 4                      | 5         | 6 |
|-------------------------|--|---|------------------------|-----------|---|
| MED/4.3<br>Gyro compass | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.424(XI),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— ISO 8728:2014,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 8728:2014,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | B+D<br>B+E<br>B+F<br>G | 16.3.2017 |   |

Item MED/4.4, Radar equipment, — moved to MED/4.34, MED/4.35 and MED/4.3.6

Item MED/4.5. Automatic radar plotting aid (ARPA), — moved to MED/4.34.

| 1  | 2  | 3  | 4                                | 5 | 6 |
|--|--|--|----------------------------------|---|---|
| <p>MED/4.6<br/>Echo-sounding equipment</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.224(VII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.74(69) Annex 4,</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN ISO 9875:2001 incl. ISO Technical Corr. 1:2006,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 9875:2000 incl. ISO Technical Corr. 1:2006,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

| 1  | 2   | 3  | 4                                | 5 | 6 |
|--|---|--|----------------------------------|---|---|
| <p>MED/4.7<br/>Speed and distance measuring equipment (SDME)</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.694(17),<br/>— IMO Res.A.824(19),<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.302(87).</p> | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61023:2007,<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),<br/>— EN 62288:2014,<br/>Or,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61023 (2007),<br/>— IEC 61162 series:<br/>— IEC 61162-1 ed4.0 (2010-11)<br/>— IEC 61162-2 ed1.0 (1998-09)<br/>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/>— IEC 61162-450 ed1.0 (2011-06),<br/>— IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

Item MED/4.8, Rudder angle, rpm, pitch indicator, — moved to items MED/4.20, MED/4.21 and MED/4.22.

| 1   | 2  | 3   | 4                                   | 5 | 6 |
|---|--|---|-------------------------------------|---|---|
| <p>MED/4.9<br/>Rate-of-turn indicator</p> | <p>Type approval requirements<br/> — SOLAS 74 Reg. V/18,<br/> — SOLAS 74 Reg. X/3,<br/> — IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/> — IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p> <hr/> <p>Carriage and performance requirements<br/> — SOLAS 74 Reg. V/19,<br/> — IMO Res.A.526(13),<br/> — IMO Res.A.694(17),<br/> — IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/> — IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br/> — IMO Res.MSC.191(79),<br/> — IMO Res.MSC.302(87).</p> | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/> — EN 61162 series:<br/> — EN 61162-1 (2011)<br/> — EN 61162-2 (1998)<br/> — EN 61162-3 (2008)<br/> — EN 61162-450 (2011),<br/> — ISO 20672:2007 incl Corr 1 (2008),<br/> — EN 62288:2014,<br/> Or,<br/> — IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/> — IEC 61162 series:<br/> — IEC 61162-1 ed4.0 (2010-11)<br/> — IEC 61162-2 ed1.0 (1998-09)<br/> — IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/> — IEC 61162-450 ed1.0 (2011-06),<br/> — ISO 20672:2007 incl Corr 1 (2008),<br/> — IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/> B+E<br/> B+F<br/> G</p> |   |   |

Item MED/4.10 Direction finder — Item deliberately left blank.

Item MED/4.11. Loran equipment — Item deliberately left blank.

Item MED/4.12, Chaika equipment — Item deliberately left blank

Item MED/4.13 Decca navigator equipment — Item deliberately left blank.

| 1                                 | 2  | 3  | 4                                | 5 | 6 |
|-----------------------------------|--|--|----------------------------------|---|---|
| <p>MED/4.14<br/>GPS equipment</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.112(73),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61108-1:2003,</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61108-1 Ed. 2.0 (2003),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

| 1                             | 2   | 3  | 4                      | 5 | 6 |
|-------------------------------|---|--|------------------------|---|---|
| MED/4.15<br>GLONASS equipment | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13</li> <li>— IMO Res.MSC.113(73),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61108-2:1998,</li> <li>— EN 61162 series:               <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61108-2 Ed. 1.0 (1998),</li> <li>— IEC 61162 series:               <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | B+D<br>B+E<br>B+F<br>G |   |   |



| 1  | 2  | 3   | 4                                | 5 | 6 |
|--|--|---|----------------------------------|---|---|
| <p>MED/4.16<br/>Heading control system (HCS)</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/18.<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.342(IX),<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.64(67) Annex 3,<br/>— IMO Res.MSC.302(87).</p> | <p>— ISO 11674:2006,<br/>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),<br/>— EN 62288:2014.<br/>Or,<br/>— ISO 11674:2006,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61162 series:<br/>— IEC 61162-1 ed4.0 (2010-11)<br/>— IEC 61162-2 ed1.0 (1998-09)<br/>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/>— IEC 61162-450 ed1.0 (2011-06),<br/>— IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

Item MED/4.17, Mechanical pilot hoist, — moved to MED/1.40.

| 1   | 2   | 3  | 4                                | 5 | 6 |
|---|---|--|----------------------------------|---|---|
| <p>MED/4.18<br/>Search and rescue locating devices (SRLD):<br/>9 GHz SAR transponder (SART)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/6,</li> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. III/26,</li> <li>— IMO Res.A.530(13),</li> <li>— IMO Res.A.802(19),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14,</li> <li>— ITU-R M.628-5 (03/2012),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61097-1:2007.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-1 (2007).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

Item MED/4.19, Radar equipment for high speed craft, — moved to MED/4.37.

| 1  | 2  | 3   | 4                                | 5 | 6                        |
|--|--|---|----------------------------------|---|--------------------------|
| <p>MED/4.20<br/>Rudder angle indicator</p>         | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— ISO 20673:2007.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— ISO 20673:2007.</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |                          |
| <p>MED/4.21<br/>Propeller revolution indicator</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— ISO 22554:2007.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series,</li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— ISO 22554:2007.</li> </ul>  | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   | <p>15.3.2018<br/>(I)</p> |

| 1  | 2  | 3   | 4                                | 5                | 6 |
|--|--|---|----------------------------------|------------------|---|
|  | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79).</li> </ul>   |   |                                  |                  |   |
| <p>MED/4.21<br/>Propeller revolution indicator</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— ISO 22554:2015.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— ISO 22554:2015.</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> | <p>16.3.2017</p> |   |

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| <p>MED/4.22<br/>Pitch indicator</p>                        | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— ISO 22555:2007.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— ISO 22555:2007,</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
| <p>MED/4.23<br/>Compass for lifeboats and rescue boats</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul>   | <ul style="list-style-type: none"> <li>— ISO 1069:1973,</li> <li>— ISO 25862:2009,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</li> </ul>   | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) V,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> |   |                                  |   |   |
| <p>MED/4.23<br/>Magnetic compass Class B for<br/>lifeboats and rescue boats</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/4,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul>  | <ul style="list-style-type: none"> <li>— ISO 1069:1973,</li> <li>— ISO 25862:2009,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/34,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) IV,</li> <li>— IMO Res.MSC.48(66)-(LSA Code) V,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> |   |                                  |   |   |

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|---|---|---|------------------------|---|---|
| Item MED/4.24, Automatic radar plotting aid (ARPA) for high speed craft, — moved to MED/4.37. |   |   |                        |   |   |
| Item MED/4.25, Automatic tracking aid (ATA), — moved to MED/4.35.                             |   |   |                        |   |   |
| Item MED/4.26, Automatic tracking aid (ATA) for high speed craft, — moved to MED/4.38.        |   |   |                        |   |   |
| Item MED/4.27, Electronic plotting aid, — moved to MED/4.36.                                  |   |   |                        |   |   |
| Item MED/4.28, Integrated bridge system, — moved to MED/4.30.                                 |   |   |                        |   |   |
| MED/4.29<br>Voyage data recorder (VDR)  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. V/20,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/20,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— IMO Res.MSC.333(90).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series:               <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 61996-1:2013 incl. IEC 61996-1 Corr.1 (2014),</li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series:               <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> </ul> | B+D<br>B+E<br>B+F<br>G |   |   |

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|  |   | <ul style="list-style-type: none"> <li>— IEC 61996-1 Ed. 2.0 (2013-05) incl. IEC 61996-1 Corr.1 (2014),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul>  |   |   |                             |
| <p>MED/4.30</p> <p>Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.232(82),</li> <li>— IMO SN.1/Circ.266,</li> <li>— [ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— EN 61174 (2008),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series,</li> <li>— IEC 61174 (2008),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   | <p>31.8.2017</p> <p>(I)</p> |



| 1  | 2   | 3  | 4   | 5                | 6 |
|--|---|--|---|------------------|---|
| <p>MED/4.30</p> <p>Electronic chart display and information system (ECDIS) with backup, and raster chart display system (RCDS)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.232(82),</li> <li>— IMO Res.MSC.302(87),</li> <li>— IMO SN.1/Circ.266.</li> </ul> <p>[ECDIS back-up and RCDS are only applicable when this functionality is included in the ECDIS. The module B certificate shall indicate whether these options were tested].</p> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 61174:2015,</li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 61174 Ed. 4.0 (2015),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> | <p>16.3.2017</p> |   |

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| <p>MED/4.31<br/>Gyro compass for high-speed craft</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.821(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— IMO MSC.1/Circ.1349.</li> </ul> | <ul style="list-style-type: none"> <li>— ISO 16328:2014,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 16328:2014,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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| <p>MED/4.32<br/>Universal automatic identification system equipment (AIS)</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.- IMO Res.MSC.74(69),</li> <li>— IMO Res.MSC.191(79),</li> <li>— ITU-RM-1371-5 (02-2014) Note: ITU-RM 1371-5 (02-2014) shall only be applicable in accordance with requirements of IMO Res.MSC.74(69).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 61993-2:2013,</li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 61993-2 (2012),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
| <p>MED/4.33<br/>Track control system<br/>(working at ship's speed from minimum manoeuvring speed up to 30 knots)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.74(69),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 62065 (2014),</li> <li>— EN 62288:2014.</li> </ul>   | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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|   |   | <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62065 Ed. 2.0 (2014-02),</li> <li>— IEC 62288 Ed. 2.0 (2014-07)._</li> </ul>   |                                  |   |   |
| <p>MED/4.34<br/>Radar equipment CAT 1</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.278(VIII),<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.192(79),<br/>— IMO Res.MSC.302(87),<br/>— ITU-R M.1177-4 (04/11).</p> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> </ul> </li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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|---|---|---|----------------------------------|---|---|
|   |   | <ul style="list-style-type: none"> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul>  |                                  |   |   |
| <p>MED/4.35<br/>Radar equipment CAT 2</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62388:2013,</li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62388 Ed. 2.0 (2013-06),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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| MED/4.36<br>Radar equipment CAT 3 | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series:               <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013,</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series:               <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> | B+D<br>B+E<br>B+F<br>G |   |   |

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| <p>MED/4.37<br/>Radar equipment for high speed craft applications (CAT 1H and CAT 2H)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.- IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— MSC.1/Circ.1349,</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013,</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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| <p>MED/4.38a</p> <p>Radar equipment approved with a chart option, namely:</p> <p>(a) CAT 1C,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |



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| <p>MED/4.38b</p> <p>Radar equipment approved with a chart option, namely:</p> <p>(b) CAT 2C,</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |

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| <p>MED/4.38c</p> <p>Radar equipment for high speed craft applications approved with a chart option, namely:</p> <p>(c) CAT 1HC</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— ITU-R M.1177-4 (04/11),</li> <li>— IMO Res.MSC.302(87),</li> <li>— IMO MSC.1/Circ.1349.</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— EN 62388:2013.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |

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| <p>MED/4.38d</p> <p>Radar equipment for high speed craft applications approved with a chart option, namely:</p> <p>(d) CAT 2HC</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— IMO Res.A.278(VIII),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.192(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— IMO MSC.1/Circ.1349,</li> <li>— ITU-R M.1177-4 (04/11).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— IEC 62388 Ed. 2.0 (2013-06).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— EN 62388:2013.</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |
| <p>MED/4.39</p> <p>Radar reflector — passive type</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul>   | <ul style="list-style-type: none"> <li>— ISO 8729-1:2010,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— ISO 8729-1:2010,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</li> </ul>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> <p>G</p> |   |   |

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|   | Carriage and performance requirements<br>— SOLAS 74 Reg. V/19,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.164(78).  |   |                        |   |   |
| MED/4.40<br>Heading control system for high speed craft | Type approval requirements<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.  | — ISO 16329:2003,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— EN 61162 series:<br>— EN 61162-1 (2011)<br>— EN 61162-2 (1998)<br>— EN 61162-3 (2008)<br>— EN 61162-450 (2011),<br>— EN 62288:2014.   | B+D<br>B+E<br>B+F<br>G |   |   |
|   | Carriage and performance requirements<br>— IMO Res.A.694(17),<br>— IMO Res.A.822(19),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.191(79),<br>— IMO Res.MSC.302(87),<br>— IMO MSC.1/Circ.1349. | Or,<br>— ISO 16329:2003,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 61162 series:<br>— IEC 61162-1 ed4.0 (2010-11)<br>— IEC 61162-2 ed1.0 (1998-09)<br>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br>— IEC 61162-450 ed1.0 (2011-06),<br>— IEC 62288 Ed. 2.0 (2014-07). |                        |   |   |

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| <p>MED/4.41<br/>Transmitting heading device<br/>THD (GNSS method)</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br/>— IMO Res.MSC.116(73),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.302(87).</p> | <p>— ISO 22090-3:2014,<br/>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),<br/>— EN 62288:2014.</p> <p>Or,<br/>— ISO 22090-3:2014,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61162 series:<br/>— IEC 61162-1 ed4.0 (2010-11)<br/>— IEC 61162-2 ed1.0 (1998-09)<br/>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/>— IEC 61162-450 ed1.0 (2011-06),<br/>— IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
| <p>MED/4.42<br/>Searchlight for high speed craft</p>                  | <p>Type approval requirements<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p>  | <p>— ISO 17884:2004,<br/>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).<br/>Or,<br/>— ISO 17884:2004,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</p>  | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

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|   | Carriage and performance requirements<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.  |  |                        |   |                    |
| MED/4.43<br>Night vision equipment for high speed craft | Type approval requirements<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.   | — ISO 16273:2003,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 62288 Ed. 2.0 (2014-07).<br>Or,<br>— ISO 16273:2003,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 62288 Ed. 2.0 (2014-07). | B+D<br>B+E<br>B+F<br>G |   | 26.3.2017<br>(III) |
| MED/4.43<br>Night vision equipment for high speed craft | Carriage and performance requirements<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.94(72),<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.191(79).<br><br>Type approval requirements<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13. | — ISO 16273:2003,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— EN 62288:2014.<br>Or,<br>— ISO 16273:2003,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 62288 Ed. 2.0 (2014-07).               | B+D<br>B+E<br>B+F<br>G |   |                    |

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|  | Carriage and performance requirements<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.94(72),<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.191(79). |   |                        |   |   |
| MED/4.44<br>Differential beacon receiver for<br>DGPS and DGLONASS Equip-<br>ment | Type approval requirements<br>— SOLAS 74 Reg. V/18,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.                                      | — EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 61108-4 (2004),<br>— EN 61162 series:<br>— EN 61162-1 (2011)<br>— EN 61162-2 (1998)<br>— EN 61162-3 (2008)<br>— EN 61162-450 (2011),   | B+D<br>B+E<br>B+F<br>G |   |   |
|  | Carriage and performance requirements<br>— SOLAS 74 Reg. V/19,<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.114(73). | Or,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 61108-4 (2004),<br>— IEC 61162 series:<br>— IEC 61162-1 ed4.0 (2010-11)<br>— IEC 61162-2 ed1.0 (1998-09)<br>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br>— IEC 61162-450 ed1.0 (2011-06). |                        |   |   |

Item MED/4.45, Chart facilities for shipborne radar — intentionally left blank, as it is covered by MED/4.38.

| 1   | 2   | 3   | 4                                | 5 | 6 |
|---|---|---|----------------------------------|---|---|
| <p>MED/4.46<br/>Transmitting heading device<br/>THD (Gyroscopic method)</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br/>— IMO Res.MSC.116(73),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.302(87).</p> | <p>— ISO 22090-1:2014,<br/>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),<br/>— EN 62288:2014,<br/>Or,<br/>— ISO 22090-1:2014,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61162 series:<br/>— IEC 61162-1 ed4.0 (2010-11)<br/>— IEC 61162-2 ed1.0 (1998-09)<br/>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/>— IEC 61162-450 ed1.0 (2011-06),<br/>— IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
| <p>MED/4.47<br/>Simplified voyage data recorder<br/>(S-VDR)</p>             | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/20.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/20.<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.163(78),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.302(87).</p>  | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),</p>  | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |



| 1 | 2 | 3   | 4 | 5 | 6 |
|---|---|---|---|---|---|
|   |   | <ul style="list-style-type: none"> <li>— EN 61996-2:2008,</li> <li>— EN 62288:2014.</li> </ul> Or, <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series:               <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 61996-2 (2007),</li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> |   |   |   |

Item MED/4.48 'Mechanical pilot hoist' is deliberately left blank (as IMO Res.MSC.308(88), in force on 1 July 2012, quotes: 'Mechanical pilot hoists shall not be used')

|                          |   |   |                        |  |  |
|--------------------------|---|---|------------------------|--|--|
| MED/4.49<br>Pilot ladder | Type approval requirements <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/23,</li> <li>— SOLAS 74 Reg. X/3.</li> </ul>  | <ul style="list-style-type: none"> <li>— IMO Res. A.1045(27),</li> <li>— ISO 799:2004.</li> </ul> | B+D<br>B+E<br>B+F<br>G |  |  |
|                          | Carriage and performance requirements <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/23,</li> <li>— IMO Res. A.1045(27),</li> <li>— IMO MSC/Circ.1428.</li> </ul> |   |                        |  |  |

| 1                          | 2  | 3   | 4                      | 5 | 6 |
|----------------------------|--|---|------------------------|---|---|
| MED/4.50<br>DGPS Equipment | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.112(73),</li> <li>— IMO Res.MSC.114(73),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61108-1:2003,</li> <li>— EN 61108-4:2004,</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61108-1 (2003),</li> <li>— IEC 61108-4 (2004),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | B+D<br>B+E<br>B+F<br>G |   |   |

| 1  | 2  | 3  | 4                                | 5 | 6 |
|--|--|--|----------------------------------|---|---|
| <p>MED/4.51<br/>DGLONASS Equipment</p>       | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. V/19,<br/>— IMO Res.A.694(17),<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br/>— IMO Res.MSC.113(73),<br/>— IMO Res.MSC.114(73),<br/>— IMO Res.MSC.191(79),<br/>— IMO Res.MSC.302(87).</p> | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— EN 61108-2:1998,<br/>— EN 61108-4:2004,<br/>— EN 61162 series:<br/>— EN 61162-1 (2011)<br/>— EN 61162-2 (1998)<br/>— EN 61162-3 (2008)<br/>— EN 61162-450 (2011),<br/>— EN 62288:2014.</p> <p>Or,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61108-2 Ed. 1.0 (1998),<br/>— IEC 61108-4 (2004),<br/>— IEC 61162 series:<br/>— IEC 61162-1 ed4.0 (2010-11)<br/>— IEC 61162-2 ed1.0 (1998-09)<br/>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)<br/>— IEC 61162-450 ed1.0 (2011-06),<br/>— IEC 62288 Ed. 2.0 (2014-07).</p> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |
| <p>MED/4.52<br/>Daylight signalling lamp</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. V/18,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code),<br/>— IMO Res.MSC.97(73)-(2000 HSC Code).</p>   | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— ISO 25861:2007.</p> <p>Or,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— ISO 25861:2007.</p>   | <p>B+D<br/>B+E<br/>B+F</p>       |   |   |

| 1                                 | 2   | 3  | 4                      | 5 | 6 |
|-----------------------------------|---|--|------------------------|---|---|
|                                   | Carriage and performance requirements<br>— SOLAS 74 Reg. V/19,<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code),<br>— IMO Res.MSC.95(72),<br>— IMO Res.MSC.97(73)-(2000 HSC Code).                                     |  |                        |   |   |
| MED/4.53<br>Radar target enhancer | Type approval requirements<br>— SOLAS 74 Reg. V/18,<br>— SOLAS 74 Reg. X/3,<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.   | — ISO 8729-2:2009,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).<br>Or,<br>— ISO 8729-2:2009,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008). | B+D<br>B+E<br>B+F<br>G |   |   |
|                                   | Carriage and performance requirements<br>— SOLAS 74 Reg. V/19,<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.<br>— IMO Res.MSC.164(78),<br>— ITU-R M.1176-1 (02/13). |  |                        |   |   |
| MED/4.54<br>Bearing Device        | Type approval requirements<br>— SOLAS 74 Reg. V/18.   | — ISO 25862:2009,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).<br>Or,<br>— ISO 25862:2009,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).   | B+D<br>B+E<br>B+F<br>G |   |   |
|                                   | Carriage and performance requirements<br>— SOLAS 74 Reg. V/19.  |  |                        |   |   |

| 1  | 2   | 3   | 4                      | 5 | 6 |
|--|---|---|------------------------|---|---|
| MED/4.54<br>Compass Bearing Device   | Type approval requirements<br>— SOLAS 74 Reg. V/18.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. V/19.   | — ISO 25862:2009,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).<br>Or,<br>— ISO 25862:2009,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).        | B+D<br>B+E<br>B+F<br>G |   |   |
| MED/4.55<br>Search and rescue locating devices (SRLD):<br>AIS SART equipment | Type approval requirements<br>— SOLAS 74 Reg. III/4,<br>— SOLAS 74 Reg. IV/14.<br><br>Carriage and performance requirements<br>— SOLAS 74 Reg. III/6,<br>— SOLAS 74 Reg. III/26,<br>— SOLAS 74 Reg. IV/7,<br>— IMO Res.MSC.246(83),<br>— ITU-R M.1371-5 (2014),<br>— IMO Res.MSC.302(87). | — EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— EN 61097-14:2010.<br>Or,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br>— IEC 61097-14 (2010). | B+D<br>B+E<br>B+F<br>G |   |   |

| 1  | 2  | 3  | 4                      | 5 | 6 |
|--|--|--|------------------------|---|---|
| MED/4.56<br>Galileo Equipment                              | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.813(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.233(82),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61108-3:2010,</li> <li>— EN 61162 series:               <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61108-3 (2010),</li> <li>— IEC 61162 series:               <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07).</li> </ul> | B+D<br>B+E<br>B+F<br>G |   |   |
| MED/4.57<br>Bridge Navigational Watch Alarm System (BNWAS) | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.128(75),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87),</li> <li>— MSC.1/Circ.1474.</li> </ul>   | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series:               <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— IEC 62616(2010) incl. IEC 62616 Corr. 1 (2012).</li> </ul>  | B+D<br>B+E<br>B+F<br>G |   |   |

| 1  | 2   | 3  | 4                                | 5 | 6 |
|--|---|--|----------------------------------|---|---|
|  |   | <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 62616(2010) incl. IEC 62616 Corr. 1 (2012).</li> </ul>  |                                  |   |   |
| <p>MED/4.58<br/>Sound reception system</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code),</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code).</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code),</li> <li>— IMO Res.MSC.86(70),</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code),</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— ISO 14859:2012.</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> </ul> </li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |

| 1  | 2  | 3   | 4                                | 5 | 6 |
|--|--|---|----------------------------------|---|---|
|  |  | <ul style="list-style-type: none"> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— ISO 14859:2012.</li> </ul>   |                                  |   |   |
| <p>MED/4.59<br/>Integrated navigation system</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/15,</li> <li>— SOLAS 74 Reg. V/18,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. V/19,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 13,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 13.</li> <li>— IMO Res.MSC.191(79),</li> <li>— IMO Res.MSC.252(83),</li> <li>— IMO Res. MSC.302(87).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— EN 62288:2014,</li> <li>— IEC 61924-2 Ed. 1.0 (2012-12).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— IEC 62288 Ed. 2.0 (2014-07),</li> <li>— IEC 61924-2 Ed. 1.0 (2012-12).</li> </ul> | <p>B+D<br/>B+E<br/>B+F<br/>G</p> |   |   |



## 5. Radio-communication equipment

Notes applicable to section 5: Radiocommunication equipment.

Column 3: In case of conflicting requirements between IMO MSC/Circ.862 and the product testing standards, the IMO MSC/Circ.862 requirements shall take precedence.

| Number and item designation   | Regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable   | Testing standards  | Modules for conformity assessment | First placing on the market | Last placing on board |
|---|---|--|-----------------------------------|-----------------------------|-----------------------|
| 1   | 2   | 3  | 4                                 | 5                           | 6                     |
| MED/5.1<br>VHF radio capable of transmitting and receiving DSC and radiotelephony | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.385(X),</li> <li>— IMO Res.A.524(13),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.803(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.489-2 (10/95),</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04),</li> <li>— ITU-R M.689-3 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 843-2 V1.2.1 (2004-06),</li> <li>— ETSI EN 301 925 V1.4.1 (2013-05).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p>  |                             | 21.3.2019<br>(III)    |

| 1  | 2  | 3  | 4                                | 5                | 6                             |
|--|--|--|----------------------------------|------------------|-------------------------------|
| <p>MED/5.1</p> <p>VHF radio capable of transmitting and receiving DSC and radiotelephony</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.385(X),</li> <li>— IMO Res.A.524(13),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.803(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.489-2 (10/95),</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 843-2 V2.1. 1 (2016-03),</li> <li>— ETSI EN 301 925 V1.4.1 (2013-05).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                               |
| <p>MED/5.2</p> <p>VHF DSC watch-keeping receiver</p>   | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul>   | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-2 V1.2.1 (2004-06).</li> </ul>  | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>21.3.2019</p> <p>(III)</p> |

| 1   | 2   | 3  | 4                          | 5                | 6 |
|---|---|--|----------------------------|------------------|---|
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.803(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.489-2 (10/95),</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04)</li> </ul>     |  |                            |                  |   |
| <p>MED/5.2<br/>VHF DSC watch-keeping receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.803(19),</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-2 V2.1.1 (2016-03).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

| 1                                  | 2  | 3   | 4                          | 5 | 6                          |
|------------------------------------|--|---|----------------------------|---|----------------------------|
|                                    | <ul style="list-style-type: none"> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.489-2 (10/95),</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15).</li> </ul>  |   |                            |   |                            |
| <p>MED/5.3<br/>NAVTEX receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.148(77),</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.540-2 (06/90),</li> <li>— ITU-R M.625-4 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI EN 300 065-1 V1.2.1 (2009-01),</li> <li>— ETSI EN 301 843-4 V1.2.1 (2004-06),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-6 (2012-01).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   | <p>21.3.2019<br/>(III)</p> |

| 1                          | 2  | 3  | 4                 | 5         | 6                  |
|----------------------------|--|--|-------------------|-----------|--------------------|
| MED/5.3<br>NAVTEX receiver | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.148(77),</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.540-2 (06/90),</li> <li>— ITU-R M.625-4 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI EN 300 065-1 V1.2.1 (2009-01),</li> <li>— ETSI EN 301 843-4 V2.1.1 (2016-03).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-6 (2012-01).</li> </ul>  | B+D<br>B+E<br>B+F | 16.3.2017 |                    |
| MED/5.4<br>EGC receiver    | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul>   | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI ETS 300 460 ed.1 (1996-05),</li> <li>— ETSI ETS 300 460/A1 (1997-11),</li> <li>— ETSI EN 300 829 V1.1.1 (1998-03),</li> <li>— ETSI EN 301 843-1 V1.3.1 (2012-08),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-4 (2012).</li> </ul> | B+D<br>B+E<br>B+F |           | 21.3.2019<br>(III) |

| 1                               | 2  | 3   | 4                          | 5                | 6 |
|---------------------------------|--|---|----------------------------|------------------|---|
|                                 | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.570(14),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.306(87),</li> <li>— IMO COMSAR Circ.32.</li> </ul>  |   |                            |                  |   |
| <p>MED/5.4<br/>EGC receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.570(14),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.306(87),</li> <li>— IMO COMSAR Circ.32.</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI ETS 300 460 ed.1 (1996-05),</li> <li>— ETSI ETS 300 460/A1 (1997-11),</li> <li>— ETSI EN 301 843-1 V2.1.1 (2016-03).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-4 (2012).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

| 1  | 2  | 3  | 4                          | 5 | 6 |
|--|--|--|----------------------------|---|---|
| <p>MED/5.5<br/>HF marine safety information (MSI) equipment (HF NBDP receiver)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.699(17),</li> <li>— IMO Res.A.700(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.492-6 (10/95),</li> <li>— ITU-R M.540-2 (06/90),</li> <li>— ITU-R M.625-4 (03/12),</li> <li>— ITU-R M.688 (06/90).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series,</li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1  | 2  | 3   | 4                          | 5 | 6 |
|--|--|---|----------------------------|---|---|
| <p>MED/5.5<br/>HF marine safety information (MSI) equipment (HF NBDP receiver)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.699(17),</li> <li>— IMO Res.A.700(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.492-6 (10/95),</li> <li>— ITU-R M.540-2 (06/90),</li> <li>— ITU-R M.625-4 (03/12),</li> <li>— ITU-R M.688 (06/90).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06),</li> </ul> </li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |



| 1   | 2   | 3   | 4                          | 5 | 6 |
|---|---|---|----------------------------|---|---|
| <p>MED/5.6<br/>406 MHz EPIRB (COSPAS-SAR-SAT)</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/7,</li> <li>— IMO Res.A.662(16),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.696(17),</li> <li>— IMO Res.A.810(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.633-4 (12/10),</li> <li>— ITU-R M.690-3 (03/15).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,<br/><i>Note: IMO MSC/Circ.862 is applicable only to the optional remote activation device, not to the EPIRB itself.</i></li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI EN 300 066 V1.3.1 (2001-01),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,<br/><i>Note: IMO MSC/Circ.862 is applicable only to the optional remote activation device, not to the EPIRB itself.</i></li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-2 ed3.0 (2008).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

Item MED/5.7 'Lband EPIRB (INMARSAT)', — deliberately left blank.

Item MED/5.8 'MF DSC Reciver', — deliberately left blank.

Item MED/5.9 'Two-tone alarm generator', — deliberately left blank.

| 1  | 2   | 3   | 4                                | 5                | 6                             |
|--|---|---|----------------------------------|------------------|-------------------------------|
| <p>MED/5.10</p> <p>MF radio capable of transmitting and receiving DSC and radiotelephony</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/9,</li> <li>— SOLAS 74 Reg. IV/10,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.804(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 373-1 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V1.1.1(2004-06).</li> </ul>   | <p>B+D</p> <p>B+E</p> <p>B+F</p> |                  | <p>21.3.2019</p> <p>(III)</p> |
| <p>MED/5.10</p> <p>MF radio capable of transmitting and receiving DSC and radiotelephony</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on H3E are no longer applicable in the testing standards</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul>  | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 373-1 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V2.1.1 (2016-03).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |                               |

| 1   | 2   | 3  | 4                          | 5 | 6                          |
|---|---|--|----------------------------|---|----------------------------|
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/9,</li> <li>— SOLAS 74 Reg. IV/10,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.804(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul>  |  |                            |   |                            |
| <p>MED/5.11<br/>MF DSC watch-keeping receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/9,</li> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.804(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V1.1.1(2004-06).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   | <p>21.3.2019<br/>(III)</p> |

| 1   | 2   | 3   | 4                          | 5                | 6 |
|---|---|---|----------------------------|------------------|---|
|   | <ul style="list-style-type: none"> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul>   |   |                            |                  |   |
| <p>MED/5.11<br/>MF DSC watch-keeping receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/9,</li> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.804(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series:</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V2.1.1 (2016-03).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

| 1   | 2  | 3   | 4                          | 5 | 6 |
|---|--|---|----------------------------|---|---|
|   | <ul style="list-style-type: none"> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul>   |   |                            |   |   |
| <p>MED/5.12<br/>Inmarsat-B SES<br/><i>Note:</i> The service will be discontinued on and after 31 December 2016.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.570(14),</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.808(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO COMSAR Circ.32.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   |   |

| 1                                  | 2   | 3  | 4                          | 5 | 6                          |
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| <p>MED/5.13<br/>Inmarsat-C SES</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.570(14),</li> <li>— IMO Res.A.664(16),</li> <li><i>Note:</i> for Res. A.644(16): applicable only if the Inmarsat C SES supports EGC functions</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.807(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.306(87),</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO COMSAR Circ.32.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI ETS 300 460 ed.1 (1996-05),</li> <li>— ETSI ETS 300 460/A1 (1997-11),</li> <li>— ETSI EN 300 829 V1.1.1 (1998-03),</li> <li>— ETSI EN 301 843-1 V1.3.1 (2012-08).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-4 (2012),</li> <li>— IEC 61162 Series.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   | <p>21.3.2019<br/>(III)</p> |

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|------------------------------------|---|--|----------------------------|------------------|---|
| <p>MED/5.13<br/>Inmarsat-C SES</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.570(14),</li> <li>— IMO Res.A.664(16),</li> <li>Note for Res. A.664(16): applicable only if the Inmarsat C SES supports EGC functions</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.807(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.306(87),</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO COMSAR Circ.32.</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI ETS 300 460 ed.1 (1996-05),</li> <li>— ETSI ETS 300 460/A1 (1997-11),</li> <li>— ETSI EN 301 843-1 V2.1.1 (2016-03).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-4 (2012),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06).</li> </ul> </li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

| 1  | 2  | 3  | 4                                | 5 | 6                             |
|--|--|--|----------------------------------|---|-------------------------------|
| <p>MED/5.14</p> <p>MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on A3H are no longer applicable in testing standards.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.476-5 (10/95),</li> <li>— ITU-R M.492-6 (10/95),</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04),</li> <li>— ITU-R M.625-4 (03/12),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10),</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 373-1 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V1.1.1(2004-06).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> |   | <p>21.3.2019</p> <p>(III)</p> |



| 1  | 2  | 3  | 4                                | 5                | 6 |
|--|--|--|----------------------------------|------------------|---|
| <p>MED/5.14</p> <p>MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony</p> <p><i>Note:</i> In line with IMO and ITU decisions, the requirements for Two Tone Alarm generator and transmission on A3H are no longer applicable in testing standards.</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO MSC/Circ.862,</li> <li>— IMO MSC.1/Circ.1460,</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.476-5 (10/95),</li> <li>— ITU-R M.492-6 (10/95),</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15)</li> <li>— ITU-R M.625-4 (03/12),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI ETS 300 067 ed.1 (1990-11),</li> <li>— ETSI ETS 300 067/A1 ed.1 (1993-10),</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 373-1 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V2.1.1 (2016-03).</li> </ul> | <p>B+D</p> <p>B+E</p> <p>B+F</p> | <p>16.3.2017</p> |   |

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|---|---|---|----------------------------|---|----------------------------|
| <p>MED/5.15<br/>MF/HF DSC scanning watch<br/>keeping receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-13 (10/09),</li> <li>— ITU-R M.541-9 (05/04)</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series,</li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V1.1.1(2004-06),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-3 (1994),</li> <li>— IEC 61097-8 (1998),</li> <li>— IEC 61162 Series.</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   | <p>21.3.2019<br/>(III)</p> |

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|---|--|---|----------------------------|------------------|---|
| <p>MED/5.15<br/>MF/HF DSC scanning watch<br/>keeping receiver</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <hr/> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/10,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.806(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO COMSAR Circ.32,</li> <li>— ITU-R M.493-14 (09/15),</li> <li>— ITU-R M.541-10 (10/15),</li> <li>— ITU-R M.1173-1 (03/12).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— EN 61162 series: <ul style="list-style-type: none"> <li>— EN 61162-1 (2011)</li> <li>— EN 61162-2 (1998)</li> <li>— EN 61162-3 (2008)</li> <li>— EN 61162-450 (2011),</li> </ul> </li> <li>— ETSI EN 300 338-1 V1.3.1 (2010-02),</li> <li>— ETSI EN 300 338-2 V1.3.1 (2010-02),</li> <li>— ETSI EN 301 033 V1.4.1 (2013-09),</li> <li>— ETSI EN 301 843-5 V2.1.1 (2016-03).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-3 (1994),</li> <li>— IEC 61097-8 (1998),</li> <li>— IEC 61162 series: <ul style="list-style-type: none"> <li>— IEC 61162-1 ed4.0 (2010-11)</li> <li>— IEC 61162-2 ed1.0 (1998-09)</li> <li>— IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07)</li> <li>— IEC 61162-450 ed1.0 (2011-06).</li> </ul> </li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |

Item MED/5.16 Aeronautical two way VHF radio telephone apparatus — Item deliberately left blank.

| 1  | 2   | 3  | 4                          | 5                | 6                          |
|--|---|--|----------------------------|------------------|----------------------------|
| <p>MED/5.17<br/>Portable survival craft two-way VHF radiotelephone apparatus</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. IV/14,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</p> <hr/> <p>Carriage and performance requirements<br/>— SOLAS 74 Reg. III/6,<br/>— IMO Res.A.694(17),<br/>— IMO Res.A.809(19),<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.<br/>— IMO Res.MSC.149(77),<br/>— ITU-R M.489-2 (10/95).</p> | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— ETSI EN 300 225 V1.4.1 (2004-12),<br/>— ETSI EN 301 843-2 V1.2.1 (2004-06),<br/>Or,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61097-12 (1996).</p> | <p>B+D<br/>B+E<br/>B+F</p> |                  | <p>7.12.2018<br/>(III)</p> |
| <p>MED/5.17<br/>Portable survival craft two-way VHF radiotelephone apparatus</p> | <p>Type approval requirements<br/>— SOLAS 74 Reg. IV/14,<br/>— SOLAS 74 Reg. X/3,<br/>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,<br/>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</p>   | <p>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— ETSI EN 300 225 V1.5.1 (2015-12),<br/>— ETSI EN 301 843-2 V2.1.0 (2015-12).<br/>Or,<br/>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),<br/>— IEC 61097-12 (1996).</p> | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |                            |

| 1   | 2   | 3  | 4                          | 5 | 6                          |
|---|---|--|----------------------------|---|----------------------------|
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/6,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.809(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— IMO Res.MSC.149(77),</li> <li>— ITU-R M.489-2 (10/95).</li> </ul> |  |                            |   |                            |
| <p>MED/5.18<br/>Fixed survival craft two-way<br/>VHF radiotelephone apparatus</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul>  | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI EN 301 466 V1.1.1 (2000-10),</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-12 (1996).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |   | <p>7.12.2018<br/>(III)</p> |
|   | <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/6,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.809(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> </ul>  |  |                            |   |                            |

| 1   | 2  | 3   | 4                          | 5                | 6 |
|---|--|---|----------------------------|------------------|---|
|   | <ul style="list-style-type: none"> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— ITU-R M.489-2 (10/95).</li> </ul>  |   |                            |                  |   |
| <p>MED/5.18<br/>Fixed survival craft two-way<br/>VHF radiotelephone apparatus</p> | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul> <p>Carriage and performance requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. III/6,</li> <li>— IMO Res.A.694(17),</li> <li>— IMO Res.A.809(19),</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 8,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 8,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> <li>— ITU-R M.489-2 (10/95).</li> </ul> | <ul style="list-style-type: none"> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— ETSI EN 301 466 V1.2.1 (2015-12).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-12 (1996).</li> </ul>  | <p>B+D<br/>B+E<br/>B+F</p> | <p>16.3.2017</p> |   |
| <p>MED/5.19<br/>Inmarsat-F77</p>  | <p>Type approval requirements</p> <ul style="list-style-type: none"> <li>— SOLAS 74 Reg. IV/14,</li> <li>— SOLAS 74 Reg. X/3,</li> <li>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,</li> <li>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.</li> </ul>   | <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-13 (2003).</li> </ul> <p>Or,</p> <ul style="list-style-type: none"> <li>— IMO MSC/Circ.862,</li> <li>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008),</li> <li>— IEC 61097-13 (2003).</li> </ul> | <p>B+D<br/>B+E<br/>B+F</p> |                  |   |

| 1 | 2   | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
|   | Carriage and performance requirements<br>— SOLAS 74 Reg. IV/10,<br>— IMO Res.A.570(14),<br>— IMO Res.A.694(17),<br>— IMO Res.A.808(19),<br>— IMO Res.MSC.36(63)-(1994 HSC Code) 14,<br>— IMO Res.MSC.97(73)-(2000 HSC Code) 14.<br>— IMO MSC/Circ.862,<br>— IMO COMSAR Circ.32. |   |   |   |   |

#### 6. Equipment required under COLREG 72

| Number and item designation  | Regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable   | Testing standards  | Modules for conformity assessment | First placing on the market | Last placing on board |
|------------------------------|---|--|-----------------------------------|-----------------------------|-----------------------|
| 1                            | 2   | 3  | 4                                 | 5                           | 6                     |
| MED/6.1<br>Navigation lights | Type approval requirements<br>— COLREG 72 Annex I/14.<br><br>Carriage and performance requirements<br>— COLREG 72 Annex I/14,<br>— IMO Res.A.694(17),<br>— IMO Res.MSC.253(83). | — EN 14744:2005 incl. AC:2006,<br>— EN 60945 (2002) incl. IEC 60945 Corr. 1 (2008).<br><br>Or,<br>— EN 14744:2005 incl. AC:2006,<br>— IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008). | B+D<br>B+E<br>B+F<br>G            |                             |                       |

#### 7. Bulk carrier safety equipment

This chapter currently has no items.

8. Equipment under SOLAS Chapter II-1

| Number and item designation        | Regulation SOLAS 74, as amended, and the relevant resolutions and circulars of the IMO, as applicable   | Testing standards  | Modules for conformity assessment | First placing on the market | Last placing on board |
|------------------------------------|---|--|-----------------------------------|-----------------------------|-----------------------|
| 1                                  | 2   | 3  | 4                                 | 5                           | 6                     |
| MED/8.1<br>— Water level detectors | Type approval requirements<br>— SOLAS 74 Reg. II-1/22-1,<br>— SOLAS 74 Reg. II-1/25,<br>— SOLAS 74 Reg. XII/12.   | — IEC 60092-504:2001 incl. IEC 60092-504<br>Corr.1: 2011,<br>— IEC 60529 Ed. 2.2 (2013),<br>— IMO Res.MSC.188(79),<br>— IMO MSC.1/Circ.1291. | B+D<br>B+E<br>B+F                 |                             | 22.11.2019<br>(III)   |
|                                    | Carriage and performance requirements<br>— SOLAS 74 Reg. II-1/25,<br>— SOLAS 74 Reg. XII/12.<br>— IMO Res.A.1021(26),<br>— IMO Res.MSC.188(79),<br>— IMO MSC.1/Circ.1464 Rev.1. |  |                                   |                             |                       |
| MED/8.1<br>— Water level detectors | Type approval requirements<br>— SOLAS 74 Reg. II-1/22-1,<br>— SOLAS 74 Reg. II-1/25,<br>— SOLAS 74 Reg. XII/12.   | — IEC-60092-504:2016,<br>— IEC 60529 Ed. 2.2 (2013),<br>— IMO Res.MSC.188(79),<br>— IMO MSC.1/Circ.1291.                                     | B+D<br>B+E<br>B+F                 | 16.3.2017                   |                       |
|                                    | Carriage and performance requirements<br>— SOLAS 74 Reg. II-1/25,<br>— SOLAS 74 Reg. XII/12.<br>— IMO Res.A.1021(26),<br>— IMO Res.MSC.188(79),<br>— IMO MSC.1/Circ.1464 Rev.1. |  |                                   |                             |                       |



## 9. Equipment for which the set of standards for MED certification is not complete

Note applicable to section 9:

1. A set of standards for MED certification is deemed to be complete where

- IMO Provisions for:
    - Type approval,
    - Carriage Requirements, and,
  - Testing Standards,
- are available and appropriate.

### 1. Life-saving appliances

| No.       | Item designation   |
|-----------|--|
| MED/9/1.1 | Radar reflector for liferafts  |
| MED/9/1.2 | Immersion suit materials   |
| MED/9/1.3 | Float-free launching appliances for survival craft   |
| MED/9/1.5 | Public address & general emergency alarm system (when used as fire alarm device item A.1/3.53 shall apply) |

### 2. Marine pollution prevention

| No.       | Item designation   |
|-----------|--|
| MED/9/2.3 | Equipment using other equivalent methods to reduce on board NO <sub>x</sub> emissions  |
| MED/9/2.4 | Equipment using other technological methods to limit SO <sub>x</sub> emissions   |
| MED/9/2.5 | On board NO <sub>x</sub> analysers using a measurement method other than the Direct Measurement and Monitoring Method of the NO <sub>x</sub> Technical Code 2008 |

### 3. Fire protection equipment

| No.        | Item designation   |
|------------|--|
| MED/9/3.8  | Electric safety lamp   |
| MED/9/3.9  | Protective clothing resistant to chemical attack                                 |
| MED/9/3.13 | Compressed airline breathing apparatus (High Speed Craft)                        |
| MED/9/3.21 | Paint lockers and flammable liquid lockers fire extinguishing systems components |
| MED/9/3.24 | Portable Foam Applicator Units   |
| MED/9/3.26 | Gaseous Fuel Systems Used for Domestic Purposes (components)                     |
| MED/9/3.27 | Fixed Gas Fire Extinguishing Systems (CO <sub>2</sub> ) components.              |
| MED/9/3.31 | Water Spraying Hand Operated System  |
| MED/9/3.33 | Fire hoses with diameter > 52 mm   |

**4. Navigation equipment**

| No.        | Item designation  |
|------------|---|
| MED/9/4.11 | Combined GPS/GLONASS equipment  |
| MED/9/4.16 | Bridge equipment system   |
| MED/9/4.19 | Magnetic compass for high speed craft                                   |
| MED/9/4.20 | Track control system for — high-speed craft                             |
| MED/9/4.24 | Thrust indicator  |
| MED/9/4.25 | Lateral thrust, pitch and mode indicators                               |
| MED/9/4.30 | Bridge equipment system   |
| MED/9/4.33 | Track control system (working at ship's speed from 30 knots and above)  |
| MED/9/4.34 | Equipment with Long Range Identification and Tracking (LRIT) capability |
| MED/9/4.37 | Electronic Inclinator   |
| MED/9/4.38 | Loran-C equipment   |
| MED/9/4.39 | Chayka equipment  |

**5. Radiocommunication equipment**

| No.       | Item designation                                   |
|-----------|--|
| MED/9/5.1 | VHF EPIRB  |
| MED/9/5.2 | Radio reserve source of energy                     |
| MED/9/5.4 | Distress panel                                     |
| MED/9/5.5 | Distress alarm or alert panel                      |
| MED/9/5.6 | L- band EPIRB (INMARSAT)                           |
| MED/9/5.7 | Ship security alert system                         |
| MED/9/5.8 | Aeronautical two way VHF radio telephone apparatus |

**6. Equipment required under COLREG 72**

| No.       | Item designation        |
|-----------|-------------------------|
| MED/9/6.2 | Sound signal appliances |

**7. Bulk carrier safety equipment**

| No.       | Item designation                       |
|-----------|--|
| MED/9/7.1 | Loading instrument                     |
| MED/9/7.2 | Water level detectors on bulk carriers |

**8. SOLAS Chapter II-1 equipment**

| No.       | Item designation   |
|-----------|--|
| MED/9/8.1 | Cold-weather starting of generator sets (starting devices) |