

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SMALL SEA-GOING SHIPS

PART V FIRE PROTECTION

July 2023 **RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SMALL SEA-GOING SHIPS** prepared and edited by Polski Rejestr Statków, hereinafter referred to as PRS, consist of the following Parts:

Part I - Classification Regulations

Part II - Hull

Part III - Hull Equipment

Part IV - Stability and Subdivision

Part V - Fire Protection

Part VI - Machinery Installations and Piping Systems

Part VII - Electrical Equipment and Automation.

With respect to materials and welding, the requirements specified in the *Rules for the Classification and Construction of Sea-going Ships, Part IX – Materials and Welding*, apply.

Part V – Fire Protection, July 2023, was approved by the PRS Board on 29 June 2023 and enters into force on 1 July 2023.

From the entry into force, the requirements of *Part V – Fire Protection* apply, in full, to new ships.

For existing ships, the requirements of *Part V – Fire Protection* are applicable within the scope specified in *Part I – Classification Regulations*.

The requirements of *Part V – Fire Protection* are extended by:

Publication 51/P - Procedural Requirements for Service Suppliers.

Publication 53/P - Plastic Pipelines on Ships.

Publication 29/I - Guidelines for Periodic Inspections of Fire-Extinguishing Systems and Appliances Used on Ships.

Publication 100/P - Safety requirements for sea-going passenger ships and high-speed passenger craft engaged on domestic voyages

© Copyright by Polish Register of Shipping*, 2023

^{*} Polish Register of Shipping means Polski Rejestr Statków S.A., seated in Gdańsk, al. gen. Józefa Hallera 126, 80-416 Gdańsk, Poland, registered in the Register of Entrepreneurs of the National Court Register, under entry number 0000019880. Polish Register of Shipping, its affiliates and subsidiaries, their respective officers, employees or agents are, individually and collectively, referred to as Polish Register of Shipping or as PRS for short.

CONTENTS

Page

General	5
1.1 Application	5
1.2 Definitions	5
1.3 Scope of Survey	5
1.4 Classification Documentation of Fire Protection	5
1.5 Fire Control Plan	6
Ship Construction, Fire Protection of Ship Spaces and Evacuation	6
2.2 Materials for Outfitting of the Ship	8
2.3 Means of Escape	9
2.4 Fire Protection of Accommodation Spaces, Service Spaces and Control Stati	ons 9
Fixed Fire-extinguishing Systems	10
3.1 General Requirements for Fire-Extinguishing Systems	10
3.2 Water Fire Main System	10
3.3 Fixed Gas Fire-extinguishing Systems	11
Fire Signalling Systems	12
5 Fire-fighting Equipment and Spare Parts	12
5.2 Portable and Mobile Fire-Extinguishers	12
5.3 Ship Fire-Fighting Equipment	13
6 Additional Requirements	13
6.1 Passenger Ships – Mark: pas	
	Bł
· ·	13
3	1.1 Application

1 GENERAL

1.1 Application

1.1.1 *Part V – Fire Protection* applies to the structural fire protection, fire-extinguishing systems and fire alarm systems, as well as to the arrangement of fire-fighting equipment in small sea-going ships specified in para.1.1.1, *Part I – Classification Regulations*.

The requirements for passenger ships engaged on international voyages are specified in the *Rules* for the Classification and Construction of Sea-going Ships, Part V – Fire Protection.

- **1.1.2** The requirements, set forth in Chapters 1, 2, 3, 4 and 5 are the basic requirements for all types of ships to be assigned the main symbol of class of ship built under the survey of PRS.
- **1.1.3** The requirements, set forth in Chapter 6, complete the basic requirements and are applicable to a given type of ship to be assigned an additional mark in the symbol of class specified in sub-chapter 3.4.6, *Part I Classification Regulations*.

1.2 Definitions

The definitions relating to the general terminology of the *Rules for the Classification and Construction of Small Sea-going Ships* (hereinafter referred to as the *Rules*) are given in *Part I – Classification Regulations*, while those relating to fire protection are given in *Part V – Fire Protection* of the *Rules for the Classification and Construction of Sea-going Ships*.

Additionally, for the ships constructed of materials other than steel, the definitions relating to structural fire protection (e.g. fire-resisting divisions, smoke-tight divisions, fire-restricting materials, etc.) given in the *Rules for the Classification and Construction of High Speed Craft, Part V – Fire Protection*, Chapter 1, apply.

1.3 Scope of Survey

Requirements for supervision of production and assembly of fire protection structures, fire protection systems and equipment are given in the *Rules for the |Classification and Construction of Sea-going Ships, Part V – Fire Protection*, subchapter 1.3.

For the ships constructed of materials other than steel, requirements for supervision of production and assembly of fire protection structures, fire protection systems and equipment are given in the *Rules for the Classification and Construction of High Speed Craft, Part V – Fire Protection*, subchapter 1.3.

1.4 Classification Documentation of Fire Protection

- **1.4.1** Prior to the commencement of the ship construction, the following technical documentation is to be submitted to the PRS Head Office for consideration and approval:
 - .1 plan of structural fire protection, indicating the arrangement of spaces, means of escape and the arrangement of fire divisions or fire-resisting divisions;
 - .2 plan of doors, windows and skylights;
 - .3 plan of deck coverings and insulation of spaces;
 - **.4** diagrams of fire-extinguishing systems, including the arrangement of piping and equipment, as well as the extinguishing agent quantity calculation;
 - **.5** plan of ship equipment, including a list of materials used for outfitting of the ship and of their certificates;
 - **.6** the arrangement of fire-fighting equipment;
 - .7 plan of liquid gas installation for domestic purposes (if any);
 - **.8** drawings of equipment and systems posing additional fire risk to the ship.



1.4.2 For ships undergoing alteration, the documentation specified above, relating to the alteration, is subject to consideration and approval.

1.5 Fire Control Plan

- **1.5.1** *Fire control plan* is to be kept on board ships of gross tonnage above 150, ships engaged on international voyages and on all passenger ships. *Fire control plan* is to indicate:
 - **.1** A and B Class divisions or fire-resisting divisions, doors and closures of openings in these divisions;
 - .2 control stations:
 - .3 means of escape (stairways, ladders, doors and manholes), as well as directions of escape routes from all areas and spaces on the ship to the open deck;
 - .4 spaces fitted with fire detection and fire alarm system, spaces protected by fixed fire-extinguishing systems, as well as the arrangement of: fire-extinguishing medium cylinders, fire pumps, shut-off valves, fire hydrants and control devices;
 - .5 the arrangement of fire-fighting equipment;
 - **.6** position of remote shutting off ventilation system and the location of openings closures for spaces protected by carbon dioxide fire-extinguishing system;
 - .7 arrangement of fuel supply and lubricating oil tanks, located outside the double bottom and the arrangement of remote control of shut-off valves of these tanks and stopping oil fuel pumps;
 - **.8** fire alarm call points and equipment.
- **1.5.2** The graphic symbols used in *Fire control plan* are to be in accordance with IMO Resolution A.952(23), as amended; all the descriptions are to be in the official language of the Flag State.
- **1.5.3** *Fire control plan* is to be exhibited in the ship in a visible place; it is to be available also on the navigation bridge and in control station.

2 SHIP CONSTRUCTION, FIRE PROTECTION OF SHIP SPACES AND EVACUATION

2.1 Ship Construction

2.1.1 General Requirements

- **2.1.1.1** Onboard the ships constructed of steel, bulkheads, decks and deckhouses, as well as fuel tanks are to be constructed of steel, while onboard the ships constructed of materials other than steel the above structures shall be constructed of light metal alloys or glass-polyester laminates, approved as fire-restricting materials.
- **2.1.1.2** All bulkheads and walls required to be A or B Class divisions or fire-resisting divisions are to extend from deck to deck and to the ship's side or other boundaries.
- **2.1.1.3** Openings in fire divisions or fire-resisting divisions are to be provided with permanently fitted closing arrangements of fire integrity not lower than that of the division, in which they are fitted. The number of the openings is to be reduced to the minimum quantity practicable.
- **2.1.1.4** Pipings, cables and ventilation ducts penetrations through fire divisions or fire-resisting divisions are to be properly made and ensure structure integrity, and when they require insulation they shall be insulated for a distance of at least 450 mm on both sides of the division with insulating material of the same fire integrity as the division.



2.1.2 Machinery Spaces

- **2.1.2.1** Machinery spaces together with casings are to be enclosed by bulkheads, walls and decks ensuring smoke-tightness.
- **2.1.2.2** Bulkheads, walls or decks separating machinery spaces from accommodation spaces, service spaces and control stations onboard ships constructed of steel are to be of A-30 Class standard, while these structures onboard ships constructed of materials other than steel shall be fire-resisting divisions, for which the fire-resistance time shall amount to at least 30 min.
- **2.1.2.3** For ships constructed of materials other than steel, bulkheads, sides and decks enclosing machinery spaces, located above the level of 200 mm below the ballast waterline, shall be constructed to fire-resisting division standard.
- **2.1.2.4** Stairways, ladders and floor plating of normal passageways in machinery spaces are to be constructed of steel, while onboard ships constructed of materials other than steel these structures shall be constructed of non-combustible materials and shall be permanently fitted.
- **2.1.2.5** Insulation materials used in machinery spaces shall be non-flammable and the insulation surfaces shall be impenetrable for petrol products and their vapours.
- **2.1.2.6** Doors fitted in machinery spaces are to be reasonably gastight and self-closing.
- **2.1.2.7** All ventilation openings of the machinery space shall be fitted with tight means of closing, controlled from outside of the machinery space.
- **2.1.2.8** Machinery spaces are to be provided with suitable ventilation system to permit the release of smoke from the space in the event of fire, after completion of fire-fighting operation.
- **2.1.2.9** Outside the machinery space, means of control are to be provided for: stopping ventilating fans, stopping oil fuel transfer pumps and closing the valves on fuel tanks situated beyond the double bottom in this space. The controls are to be located close to the exit from the space and in an easily accessible position.

2.1.3 Accommodation Spaces, Service Spaces and Control Stations

- **2.1.3.1** Onboard ships constructed of steel, the boundaries of corridors and staircases in accommodation spaces, service spaces and control stations are to be constructed of steel or are to be of at least B-0 Class standard, while for ships constructed of materials other than steel these structures shall be of fire-resisting division standard.
- **2.1.3.2** The boundaries and decks separating control stations from accommodation spaces and service spaces, the stairway enclosures, as well as the walls and decks in the lifeboat and liferaft embarkation areas onboard ships constructed of steel are to be constructed of steel or are to be of B-15 Class standard, while those onboard ships constructed of materials other than steel shall be of fire-resisting division standard.
- **2.1.3.3** Ventilation openings may be made in the lower part of the door fitted in corridor walls, except the boundaries of the stairways; the area of the opening is not to exceed 0.05 m^2 . These openings are to be fitted with a grill made of non-combustible material.
- **2.1.3.4** Stairs and ladders installed in accommodation spaces, service spaces and control stations or leading to these spaces are to be constructed of steel or steel equivalent material, while onboard ships constructed of materials other than steel these structures shall be made of noncombustible materials and shall be permanently fitted.



2.1.4 Galleys

- **2.1.4.1** Galleys are to be located as far as possible from the spaces which constitute fire risk, i.e. machinery spaces and store-rooms for paints and flammable liquids.
- **2.1.4.2** Onboard ships constructed of steel, the walls and decks separating galleys from accommodation spaces are to be constructed of steel or are to be of at least B-15 Class standard, while these structures onboard ships constructed of materials other than steel shall be fire-resisting divisions,

2.1.5 Store-Rooms for Paints and Flammable Liquids

- **2.1.5.1** Onboard ships constructed of steel, the walls and decks separating store-rooms for paints and flammable liquids from accommodation spaces, service spaces and control stations are to be of A-0 Class standard, while these structures onboard ships constructed of materials other than steel shall be of fire-resisting division standard.
- **2.1.5.2** Flammable liquids of a flash-point not exceeding 60° C, indispensable on board, are to be stored in metallic receivers-canisters inside store-rooms. The canisters are to be securely fastened to the shelf.
- **2.1.5.3** Where the arrangement for a separate paints and flammable liquids store-room is not practicable, metallic canisters filled with such liquids can be stored in steel cabinets or boxes on the open deck. Such cabinets or boxes are to be adequately ventilated.

2.2 Materials for Outfitting of the Ship

- **2.2.1** Insulating materials used in machinery spaces, accommodation spaces, service spaces and control stations are to be non-combustible. In spaces where petrol products may be present, the insulation surface is to be impenetrable to these products and their vapours.
- **2.2.2** Combustible insulation may be used in refrigerated compartments and cargo holds, provided its exposed surface is tightly covered with a metal plate or other non-combustible material.
- **2.2.3** Exposed surfaces of decks, walls and ceilings within accommodation spaces, service spaces and control stations, as well as the concealed surfaces (e.g. behind walls, ceilings panellings and linings) in these spaces are to have low flame-spread characteristics. Exposed surfaces materials of furniture in these spaces are to have low flame-spread characteristics.
- **2.2.4** It is recommended that the amount of combustible materials used for partition walls, linings, decorative finish, furniture and other equipment of accommodation spaces, service spaces and control stations should be minimized.
- **2.2.5** Paints, varnishes and other finishes used on exposed interior surfaces of accommodation spaces, service spaces and control stations are not to be capable of producing excessive quantities of smoke and toxic substances, i.e. the quantities hazardous to people and the environment.
- **2.2.6** Primary deck coverings, if applied within accommodation spaces, service spaces and control stations, are to be made of materials which will not give rise to smoke, toxic or explosive hazards at elevated temperatures.
- **2.2.7** Waste receptacles are to be constructed of non-combustible materials, be capable of being closed and shall have no openings in the sides or bottom.



2.3 Means of Escape

- **2.3.1** Corridors, stairways and ladders are to be so arranged as to provide for each accommodation space and for each space, with access for the crew, ready means of escape to the open deck.
- **2.3.2** Where practicable (having regard to the size of the spaces and the number of the crew who will normally be accommodated), two exits, as widely separated as possible, are to be provided from each accommodation and service spaces area, at each deck. One of the exits is to be through the doors giving access to the open deck, without the necessity to pass through spaces containing a possible source of fire; the other exit may be an emergency escape through a hatch or window with a clear opening area not less than 0.36 m²; it is recommended that this exit should also provide direct access to the open deck.
- **2.3.3** From each machinery space, two exits as widely separated as possible are to be provided; one of the exits may be an emergency escape. Where a skylight is to be used as an emergency escape, it is to be capable of being opened from both sides.
- **2.3.4** Where the size or configuration of the machinery space or accommodation space makes it impracticable (the maximum distance to the door in that space is 5 m), one of these means of escape may be omitted.

2.4 Fire Protection of Accommodation Spaces, Service Spaces and Control Stations

- **2.4.1** In ships with a length of 15 m and above, where considerable quantities of combustible materials which constitute fire risk are used in the fitting out of accommodation spaces, service spaces and control stations, fire detection and alarm system, including alarms in control station, complying with the requirements of Chapter 4 shall be installed in these spaces.
- **2.4.2** Accommodation spaces, service spaces and control stations are to be provided with portable fire-fighting equipment in accordance with the requirements of Chapter 5.

2.5 Fire Protection of Machinery Spaces

- **2.5.1** Machinery spaces containing engines with a total power output of 120 kW and more, are to be provided with a fixed carbon dioxide fire-extinguishing system complying with the requirements of Chapter 3.
- **2.5.2** Machinery spaces containing engines with a total power output of less than 120 kW shall be provided with a portable fire-extinguisher containing extinguishing medium in volume appropriate to reach minimum fire-extinguishing concentration in the protected space, sufficient for filling the machinery space from outside through an easily accessible opening.
- **2.5.3** Machinery spaces which are not continuously manned are to be provided with fire detection and alarm system complying with the requirements of Chapter 4.
- **2.5.4** Machinery spaces are to be provided with portable fire-fighting equipment in accordance with the requirements of Chapter 5.

2.6 Ships with Liquefied Gas (Propane/Butane) Installation for Domestic Purposes

Where liquefied gas (propane/butane) installation is provided on the ship, it is to comply with the requirements specified in sub-chapter 7.3, *Part V* of the *Rules for the Classification and Construction of Inland Waterways Vessels*.



3 FIXED FIRE-EXTINGUISHING SYSTEMS

3.1 General Requirements for Fire-Extinguishing Systems

- **3.1.1** Fire-extinguishing systems are to be so constructed as to be reliable and readily available for operation under any service conditions.
- **3.1.2** Pressure vessels and extinguishing medium cylinders, used in fire-extinguishing systems, shall comply with the requirements of national/international standards applied in shipbuilding.
- **3.1.3** In fire-extinguishing systems, metal pipes are to be used. The pipes are to be adequately protected against corrosion. It is recommended that steel pipes should be hot-galvanized both inside and outside.
- **3.1.4** The use of plastic pipes in water-based fire-extinguishing systems in the ship spaces/areas is permitted, provided the pipes passed the fire examinations/tests in accordance with *Publication No. 53/P (Resolution A.753(18) and Resolution MSC.313(88))* and taking into account their arrangement, as specified in Table 4.1.3 of this *Publication*.
- **3.1.5** In fire-extinguishing systems, the use of fire-extinguishing medium, which either by itself or under expected conditions of use gives off toxic gases in such quantities as to endanger persons or is harmful to the environment, is not permitted.
- **3.1.6** Pipes, joints, as well as pipe penetrations in bulkheads and decks forming fire divisions are to comply with the requirements of Chapter 15, *Part VI Machinery Installations and Piping Systems*.

3.2 Water Fire Main System

3.2.1 Application

- **3.2.1.1** Self-propelled ships with a length of 12 m and above, as well as all ships fitted with main propulsion engines of the total power output of 75 kW and more are to be provided with water fire main system consisting of fire pumps, water supply pipings, hydrant valves and fire hoses with nozzles.
- **3.2.1.2** The water fire main system is to comply with the requirements set forth in Chapter 3.2, *Part V Fire Protection* of the *Rules for the Classification and Construction of Sea-going Ships* and the requirements of this subchapter.

3.2.2 Fire Pumps

- **3.2.2.1** In ships of 150 gross tonnage and upwards, the water fire main system is to be fitted with two fire pumps; one of the pumps is to be an independent fire pump while the other pump may be driven from the main engine. The capacity of each fire pump is to be at least $15 \text{ m}^3/\text{h}$.
- **3.2.2.2** In ships of less than 150 gross tonnage, the water fire main system is to be fitted with one power fire pump having a capacity of at least $15 \text{ m}^3/\text{h}$ (the pump may be driven from the main engine) and one manually operated fire pump.
- **3.2.2.3** The fire pump is to develop such pressure that during its operation at full capacity, the range of water jet discharged through 12 mm nozzle is not less than 6 m.
- **3.2.2.4** Sanitary, ballast, bilge or general use pumps may be used as fire pumps, provided they are not used for pumping oil flammable liquids.



3.2.2.5 Provision is to be made for starting electrically driven fire pump from the place where it is located and from control station.

3.2.3 Pipes and Fire Hydrants

- **3.2.3.1** The diameter of the water fire main pipes is to be such as to ensure uniform distribution of the maximum required amount of water.
- **3.2.3.2** In ships operating in winter conditions, the water fire main pipes located in non-heated spaces and on open deck are to be provided with shut-off valves and drain cocks. A notice is to be fitted at the hydrant and cock informing on the necessity to drain this section of the pipe after it has been used.
- **3.2.3.3** Fire hydrants are to consist of stop valve and connecting pipe conforming to standards acceptable to the Flag State Administration. Fire hydrants are to be painted red.
- **3.2.3.4** Fire hydrants, as well as the fire main fittings are to be made from bronze, brass or other metal alloys resistant to the corrosive effect of sea water.
- **3.2.3.5** Fire hydrants are to be so placed that fire hoses may be easily and quickly coupled to them. The number and arrangement of fire hydrants are to be sufficient to provide at least one jet of water to any part of the ship by means of a single fire hose having the maximum length specified in 3.3.5.1. At least two fire hydrants are to be provided on the ship.
- **3.2.3.6** Machinery space having sufficient size to afford the connection and use of fire hose with a nozzle inside the space is to be fitted with at least one fire hydrant. Where this requirement cannot be met, the fire hydrant is to be located outside the space, close to the entrance to this space.

3.2.4 Fire Hoses and Fire Hose Nozzles

- **3.2.4.1** The length of fire hoses is not to exceed 15 m on open decks and in superstructures, and 10 m in machinery spaces.
- **3.2.4.2** Fire hoses coupled with the hose nozzles are to be kept in the close vicinity of fire hydrants for which they are intended. Fire hoses provided outside spaces are to be stowed in hose boxes, painted red. Within accommodation spaces, fire hoses are to be stowed in boxes, on reels and are to be permanently connected to fire hydrants. The number of fire hoses with nozzles is to correspond to the number of fire hydrants installed on the ship.
- **3.2.4.3** All fire hose nozzles are to be of dual-purpose type, i.e. of spray/jet type incorporating a shutoff.
- **3.2.4.4** The fire hose nozzles with standard diameters: 12, 16 or 19 mm, selected to match the capacity of the pump/pumps, are to be used. The diameter of the fire hose nozzles used in accommodation and service spaces is not to exceed 12 mm.

3.3 Fixed Gas Fire-extinguishing Systems

Gas fire-extinguishing systems shall comply with applicable requirements contained in Chapter 3 of the *Rules for the Classification and Construction of Sea-going Ships, Part V – Fire Protection.*

Onboard ships constructed of materials other than steel, the gas fire-extinguishing systems shall comply with applicable requirements specified in Chapter 3 of the *Rules for the Classification and Construction of High Speed Craft, Part V – Fire Protection*, for fixed gas fire-extinguishing systems, except for required twice use of them.



4 FIRE SIGNALLING SYSTEMS

The fire detection and signaling systems shall comply with applicable requirements contained in Chapter 4 of the *Rules for the Classification and Construction of Sea-going Ships, Part V – Fire Protection*.

Onboard ships constructed of materials other than steel, the fire detection and signaling systems shall comply with applicable requirements specified in Chapter 4 of the *Rules for the Classification* and Construction of High Speed Craft, Part V – Fire Protection.

5 FIRE-FIGHTING EQUIPMENT AND SPARE PARTS

5.1 General Requirements

- **5.1.1** Fire-fighting equipment is to be located in visible and easily accessible places on the ship, and is to be securely fixed, in a manner allowing for its immediate use.
- **5.1.2** The locations of fire-fighting equipment are to be marked with signs consistent with the symbols used in *Fire control plan*. The signs are to be made of photoluminescent material.
- **5.1.3** Fire-fighting equipment is to be kept in good working condition and is to be available for immediate use at all times. The equipment is not to be used for purposes other than fire fighting.

5.2 Portable and Mobile Fire-Extinguishers

- **5.2.1** Portable powder fire-extinguishers are to have a capacity of at least 5 kg; foam fire-extinguishers at least 9 *l*. The total mass of portable fire-extinguisher cannot exceed 20 kg.
- **5.2.2** Fire-extinguishers with fire efficiency equivalent to that of 9 *l* foam fire- extinguisher may be considered equivalent.
- **5.2.3** The fire-extinguisher is to be suitable for putting out the type of fire most likely to occur in the space or in the vicinity of the space for which the extinguisher is intended.
- **5.2.4** In control stations, as well as in other spaces containing electric and electronic equipment or devices essential for the safety of the ship, portable fire-extinguishers are to be provided whose extinguishing media are neither electrically conductive nor harmful to the equipment and devices.

Where carbon dioxide fire-extinguishers are used, the capacity of the fire-extinguisher is to be such that concentration of CO_2 , after its release, will not constitute health danger to the persons present in the space, i.e. will not exceed 5 % of the net volume of the space. For the purpose of this requirement, the volume of CO_2 is to be calculated at 0.56 m³/kg. For example, 5 kg CO_2 fire-extinguisher can be used in a space of more than 56 m³ net volume.

- **5.2.5** Carbon dioxide fire-extinguishers are not to be located in accommodation spaces and explosion hazardous spaces.
- **5.2.6** Fire-extinguishers are to be installed in such a way that their effectiveness will not be impaired by the weather conditions, vibrations or other external factors.
- **5.2.7** In ships operating in winter conditions, fire-extinguishers are to be stowed in heated spaces so as to preclude the possibility of freezing.
- 5.2.8 For each type of fire-extinguisher used on the ship, additional fire-extinguishers to constitute 50% of the required number of fire-extinguishers on board, but not less than two, are to be provided.



5.2.9 Fire-extinguishers are to be subjected to periodical examinations every 12 months by service suppliers, approved by PRS or the Flag State Administration.

Service suppliers wishing to obtain PRS approval are to comply with the requirements of *Publication No. 51/P – Procedural Requirements for Service Suppliers.*

5.3 Ship Fire-Fighting Equipment

The number and arrangement of fire-fighting equipment for all types of ships to be assigned the main symbol of class are given in Table 5.3.

Table 5.3
Ship fire-figthing equipment

Item	Equipment	Number and arrangement
1	Fire hose with dual-purpose nozzle	equal to the number of the ship's fire hydrants
2	Portable foam 9 l fire-extinguisher or powder 5 l fire-extinguisher	 a) in corridors, in accommodation and service spaces area – three fire-extinguishers or more, depending on the size of the space. The distance from the fire-extinguisher is not to be more than 10 m. b) in machinery space – two fire-extinguishers. c) in the vicinity of paints and flammable liquids store-room – one fire-extinguisher.
3	Fire-extinguisher intended for extinction of fire in equipment under voltage, e.g. 5 kg carbon dioxide fire-extinguisher	a) on the navigation bridge – one fire-extinguisher b) in galley space – one fire-extinguisher c) in the space having electrical equipment – one fire-extinguisher d) at switchboards – one fire-extinguisher per switchboard of 20kW and more
4	Mobile 25 kg powder fire-extinguisher or equivalent	in accordance with additional requirements for ships to be assigned additional mark in the symbol of class
5	10 <i>l</i> steel bucket with a line	on the open deck – one fire-extinguisher
6	Fire blanket	a) in machinery space – one pc. b) in galley space – one pc.
7	Crowbar and fire axe	in accommodation area – one pc.
8	Fire-resistant gloves	in accommodation area – one pair

6 ADDITIONAL REQUIREMENTS

The requirements, set forth in Chapter 6, are applicable to ships to be assigned additional marks in the symbol of class and are to be considered as supplementary to those given in Chapters 1 to 5, which constitute the basic requirements for all types of ships.

6.1 Passenger ships – mark pas A, pas B, pas C or pas D

Passenger ships engaged on domestic voyages which are to be assigned additional mark pas A, pas B, pas C or pas D in the symbol of class should comply with the applicable requirements of 4 Chapter II-2 of *Publication 100/P* as far as practicable and reasonable.

6.2 Tugs - Mark: hol

The present requirements are applicable to tugs intended for towing crude oil tankers, product carriers and tank barges carrying products having a flash-point not exceeding 60° C.



- **6.2.1** Such tugs are to comply with the following requirements:
 - .1 exhaust pipes are to be provided with spark arresters or anti-spark screens;
 - .2 fender beams are to be constructed of anti-spark materials or are to be covered with such materials;
 - .3 emergency lighting and signal lights are to be electrical, of intrinsically safe type.

6.3 Fishing Vessels - Mark: sr

It is recommended that fishing vessels, in addition to the requirements of the present Part of the *Rules*, should comply with the applicable voluntary guidelines of the *Code of Safety for Fishermen* and *Fishing vessels*, 2005, see MSC 79/23/Add.3, Annex 38).

List of amendments effective as of 1 July 2023

Item	Title/Subject	Source
Page 2	Reference to Publication 100/P, added	PRS
1.1.1 6.1	Amendments related to the issuance of the new Publication 100/P	PRS

