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浙江亚宁消防设备有限公司
ZHEJIANG YANING FIRE FIGHTING EQUIPMENT CO.,LTD.



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C 企业简介 Company profile

浙江亚宁消防设备有限公司（原宁波市海曙亚宁消防设备有限公司），是一家专业从事船舶消防设备、军工消防设备设施、消防训练模拟设施生产研制的现代化国家高新企业。公司占地面积2万平方米，生产科研建筑面积2万平方米，建有企业级的技术发展中心和大火实验中心，多年来依靠公司雄厚的技术团队，精良的生产设备、先进的生产工艺使公司在国内船舶制造行业中享有很高的知名度。

公司坚持“以质量求生存”、“以创新求发展”的经营理念，倡导“科技领先拓展市场”的企业精神，先后开发了船用二氧化碳灭火装置、船用七氟丙烷灭火装置、氮气惰化装置、固定式局部水基灭火系统、机舱全淹没灭火系统、车辆舱全淹没灭火系统、水喷淋灭火系统、细水雾喷头、平衡式泡沫比例混合装置、压力式泡沫比例混合装置、空气泡沫枪、空气泡沫比例混合器、消防水泡沫软管站、对外消防系统、消防炮、船用固定式干粉灭火系统、探火式灭火装置、手提式干粉灭火器、手提式二氧化碳灭火器、手提式水基灭火器、推车式水基灭火器、推车式干粉灭火器、推车式二氧化碳灭火器、渔检灭火系统、渔检灭火器、消防救生设备等产品，产品符合国家标准及船级社标准，并通过国家级检验机构检验合格，取得了由中国船级社、法国船级社、美国船级社、意大利船级社、英国船级社、韩国船级社、俄罗斯船级社等认可证书及渔业船舶检验局认可证书。企业通过了ISO9001-2015质量体系认证、ISO14001-2015环境管理体系认证和OHSAS18001-2007职业健康安全管理体系认证。

面向未来，浙江亚宁消防设备有限公司将以崭新的形象，以创新为动力、以市场为导向，发扬“专业、专注、专一”的企业文化精神，用户满意是亚宁的追求，公司员工热忱欢迎国内外客户光临指导，携手奋进共创新辉煌！



Zhejiang Yaning Fire-Fighting Equipment Co.,Ltd.(original : Ningbo Haishu Yaning is a national high-tech modern enterprise engaged in research and production of marine fire-fighting equipment.The company covers an area of 20,000 square meters, construction area of 20,000 square meters, with a high-quality manufacturing and research team, 80 employees people, 16 engineers above the title of senior, built enterprise-level technology development center and a fire test center. Relying on company's strong technical force, sophisticated production equipment and advanced production technology, Yaning achieved a very high visibility in the shipbuilding industry field.

Company adhere to the "Quality for survival", "Innovation for development" business philosophy, advocating "Leading technology occupying market" spirit of enterprise, Yaning has developed Marine carbon dioxide fire extinguishing systems, hfc-227ea fire suppression system, N2 inert gas plant, deck foam system, monitor, foam applicator, fixed water-based local application fire-fighting system, pressure water spray system, water sprinkler system, water mist nozzle, dry chemical system, external fire fighting systems, all types of portable fire extinguishers, all types of wheeled fire extinguishers, fire rescue equipment and other productions used for different types of vessels for fire extinguishing. Our products are in compliance with national standards and classification society standards. We have been approved by national administration, and IACS member CCS, BV, ABS, RINA, LR, KR, RMRS and etc. The company has been recognized by the ISO 9001-2015 enterprise quality system certification and ISO 14001-2015 environmental management system certification.

Facing the future, based on new image, innovation-driven, market-oriented, dedicated, professional attitude to operate marine fire-fighting equipment, user satisfaction is the eternal pursuit of Yaning, sincerely welcome customers at home and abroad to visit and guide, hand in hand to create brilliant tomorrow!

注重专业 Professional
Excellence 追求卓越





亚宁消防

YANING FIRE FIGHTING

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船用二氧化碳灭火装置

MARINE CARBON DIOXIDE FIRE EXTINGUISHING PLANT



制造标准 Approval Standard

船舶行业标准《船用二氧化碳灭火装置》CB/T3294-1998

Marine Professional Standard, Marine Carbon Dioxide Fire Extinguishing Plant, CB/T3294-1998, 中华人民共和国海事局《内河船舶法定检验技术规则》(2011)

Maritime Safety Administration of the P.R.C, Technical Regulations for the Statutory Surveys of Inland Waterways Ships (2011),

中国船级社 (CCS)《钢质海船入级规范》(2018)

CCS-"Rules for the Classification of Sea-Going Steel Ship 2018"

ISO 15371-2015《船舶与海上技术船用厨房烹调设备灭火系统》

ISO 15371-2015 Ships and Marine Technology—Fire-extinguishing Systems for Protection of Galley Cooking Equipment.

IMO MSC.206 (81) 国际消防安全系统规则 (FSS) 规则修正案第5章

IMO MSC.206(81) Amendments to the international code for fire safety systems (fss code) chapter 5.

适用场所 Suitable for places

国际、国内航行的船舶、舰艇和海上石油平台，亦可用于工矿企业、港口、码头、仓库等场所。

Sea-going ships, Engaged in international/Domestic voyages, oil platforms, and such places as plants, mines, docks, and warehouses.

分类 Taxonomy

1、机舱灭火系统 System for machinery spaces

机舱灭火系统主要由气瓶组、气控阀、喷头及管路组成。系统通过遥控施放站进行遥控操纵，在CO₂施放前及施放过程中均伴有电动警报。

System for machinery spaces mainly consists of cylinder unit, pneumatic selection valve, nozzles, pipeline, etc. The system remotely controlled through remote control station. There is alarm before and during the release of CO₂.

2、货舱灭火系统 System for cargo holds

货舱灭火系统由设在灭火站里的气瓶组（根据被保护舱室容积大小分组），三通阀和安装在货舱的喷头组成。系统通过手动转换三通阀开启相应的货舱，再依次手动开启瓶头阀，释放CO₂进行灭火。

System for cargo holds consists of cylinder unit (sectioned by protection volume), tee valve unit, and nozzle in cargo holds. The system is started by manually turning tee valve, then open head valve, and release CO₂ extinguish the fire.



船用二氧化碳灭火装置技术参数 Marine CO₂ Fire Protection Plant Technical Parameter

1、技术参数 technical parameter

型号 model	YN-68/40/20/12/10/8; YNN-68/40/20/12/10/8	
型式 Class	固定式 Fixed	
公称压力 Nominal pressure	14.7MPa	
气瓶容积 Cylinder volume	CO ₂ 储液瓶 CO ₂ cylinder	8L、10L、12L、20L、40L、68L
	N ₂ 瓶 N ₂ cylinder	4L
CO ₂ 充装率 CO ₂ filling rate	≤0.67Kg/L	
环境条件 Environment condition	环境温度 Temperature	-10℃ + 50℃
	相对湿度 Humidity	93 ± 3%
使用电源 Electricity supply	主电源 main supply	AC220V 50HZ/440V 60HZ
	辅电源 Auxiliary supply	DC24V 3A
功率消耗 power	警戒时 Standby	≤30W
	工作时 Working	200W
操作方式 Operation method	手动 Manual	遥控 Remote control
	气动 Pneumatic	
	人力机械 Manual	就地操作 Local operation
释放延时 Release delay	机械延时 Mechanical delay	20-40S
启动气源 Star up air source	使用气体 Gas type	N ₂
	充装压力 Filling pressure	5.9MPa

2、装置外型尺寸 Plant Dimensions

组 装 形 式 Assembly type	瓶 数 Cylinder unit	长度L Length		宽度B Breadth		高度H Height	组 装 形 式 Assembly type	瓶 数 Cylinder unit	长度L Length		宽度B Breadth		高度H Height	组 装 形 式 Assembly type	瓶 数 Cylinder unit	长度L Length		宽度B Breadth		高度H Height
		40L	68L	40L	68L				40L	68L	40L	68L				40L	68L	40L	68L	
单 列 单 拆 Single row	2	605	680	310	350	2000	双 列 单 拆 Double row with single assembly	4	605	680	500	600	2000	双 列 双 拆 Double row with sides assembly	4	605	680	580	680	2000
	3	855	970					6	855	970					6	855	970			
	4	1105	1260					9	1105	1260					9	1105	1260			
	5	1355	1550					10	1355	1550					10	1355	1550			
	6	1605	1840					12	1605	1840					12	1605	1840			
	7	1855	2130					14	1855	2130					14	1855	2130			
	8	2105	2420					16	2105	2420					16	2105	2420			
	9	2355	2710					18	2355	2710					18	2355	2710			
	10	2605	3000					20	2605	3000					20	2605	3000			
	11	2855	3290					22	2855	3290					22	2855	3290			
	12	3105	3580					24	3105	3580					24	3105	3580			

组 装 形 式 Assembly type	瓶 数 Cylinder unit	长度L Length				宽度B Breadth				高度 H Height				组 装 形 式 Assembly type	瓶 数 Cylinder unit	长度L Length				宽度B Breadth				高度 H Height			
		8L	10L	12L	20L	8L	10L	12L	20L	8L	10L	12L	20L			8L	10L	12L	20L	8L	10L	12L	20L	8L	10L	12L	20L
单 列 单 拆 Single row	2	430		580		210	270	860	970	1080	1040	双 列 单 拆 Double row with single assembly	4	430		580		370	430	860	970	1080	1040				
	3	610		825									6	610		825											
	4	790		1070									9	790		1070											
	5	1070		1315									10	1070		1315											
	6	1350		1560									12	1350		1560											
	7	1530		1805									14	1530		1805											
	8	1710		2050									16	1710		2050											
	9	1890		2295									18	1890		2295											
	10	2070		2540									20	2070		2540											
	11	2250		2785									22	2250		2785											
	12	2430		3030									24	2430		3030											

遥控施放箱 Release Control Cabinet



A型/Type



B型/Type

主要技术参数 Main technical parameters

单个气瓶容积 Single cylinder volume	气瓶个数 Number of cylinder	充装气体 Filling gas	充装压力 Filling pressure	延时 Delay
4L	2	N ₂	5.9MPa	20 ~ 40s

气控施放阀 Air Control Valve



连接形式 Connecting style	公称压力(MPa) Nominal pressure	公称通径(mm) Nominal diameter	适用介质 Applicable medium
螺纹、法兰 Thread, Flange	14.7	DN25 ~ DN32	CO ₂
法兰 Flange	14.7	DN40 ~ DN125	CO ₂

施放阀 Release valve

公称压力(MPa) Nominal pressure	公称通径(mm) Nominal diameter	适用介质 Applicable medium
14.7	DN15 ~ DN65	CO ₂



施放报警箱
 Release Alarm Box



气瓶阀
 Cylinder Valve



声光报警器
 Audible and Visible Alarm

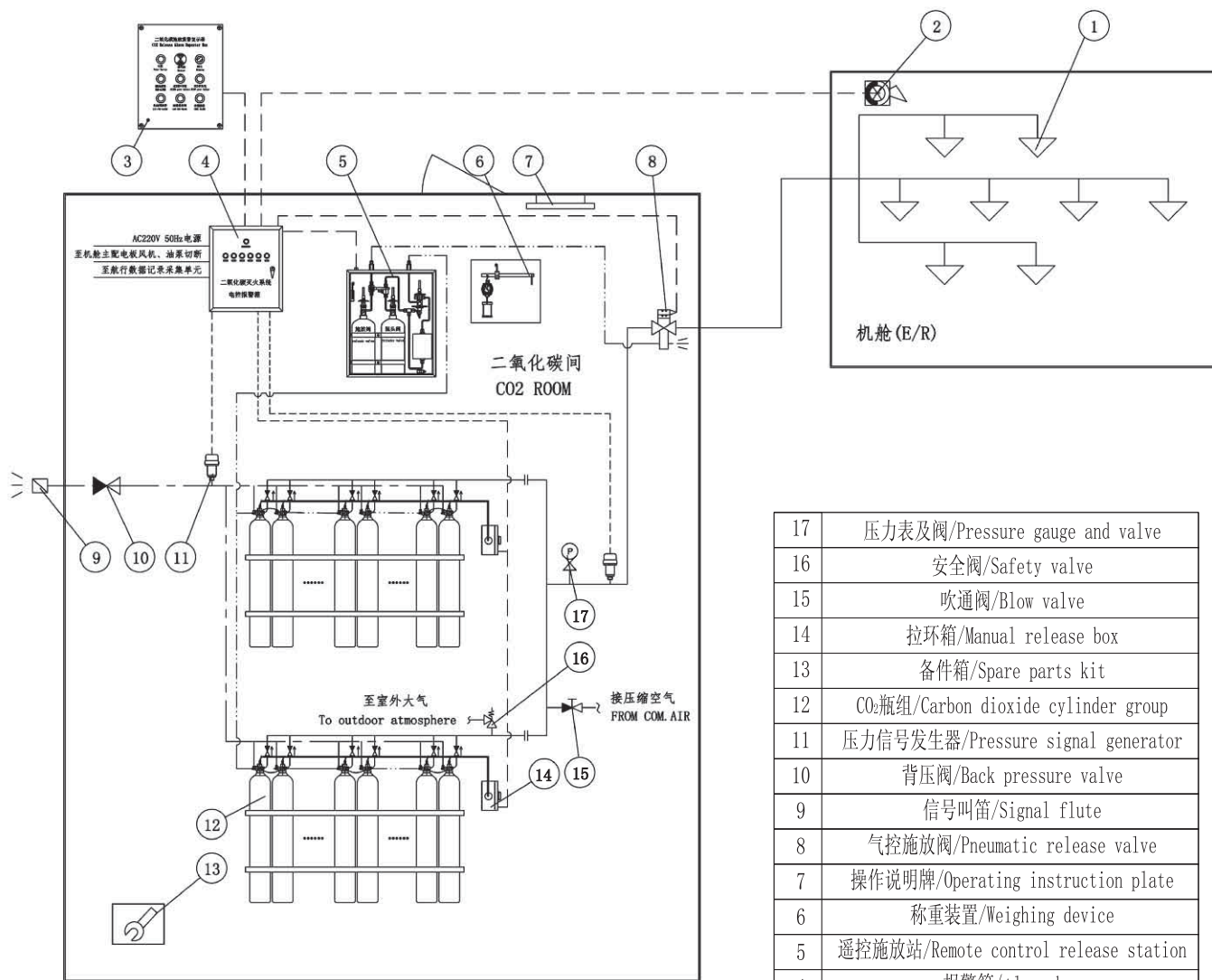


信号叫笛
 Signal Flute



船用二氧化碳灭火装置原理图

System Schematic diagram



管路符号:

PIPE SYMBOL

施放管路

RELEASE PIPE

电气管路

ELECTRIC PIPE

泄漏管路

LEAK PIPE

气控管路

AIR CONTROL PIPE

钢丝绳

ELECTRIC PIPE

17	压力表及阀/Pressure gauge and valve
16	安全阀/Safety valve
15	吹通阀/Blow valve
14	拉环箱/Manual release box
13	备件箱/Spare parts kit
12	CO ₂ 瓶组/Carbon dioxide cylinder group
11	压力信号发生器/Pressure signal generator
10	背压阀/Back pressure valve
9	信号叫笛/Signal flute
8	气控施放阀/Pneumatic release valve
7	操作说明牌/Operating instruction plate
6	称重装置/Weighing device
5	遥控施放站/Remote control release station
4	报警箱/Alarm box
3	复示器/Repeater
2	声光报警器/Audible and visual alarm
1	A型喷嘴/A type nozzle
S. N.	Name



船用七氟丙烷灭火装置

Marine HFC-227ea Fire Suppression Plant



制造标准 Approval Standard

国际消防安全系统规则第5章

Chapter 5 of International Code for Fire Safety Systems

MSC/Circ.848经修正的1974年SOLAS公约所规定适用于机器处所和货油泵舱的固定式气体灭火系统认可导则。

MSC/Circ.848 Revised Guidelines for the Approval of Equivalent Fixed Gas Fire-Extinguishing Systems, as Referred to in Chapter II -2 of SOLAS 74 for Machinery Spaces and Cargo Pump-Rooms.

MSC.1/Circ.1267《经修订的1974年SOLAS公约规定的适用于机器处所和货泵舱的等效固定式灭火系统认可指南》修正案。

MSC.1/Circ.1267《Amendments to Revised Guidelines for the Approval of Equivalent Fixed Gas Fire-extinguishing Systems as Referred to in SOLAS 74 for Machinery Spaces and Cargo Pump-Rooms》

适用范围 Application of the Product

船舶消防、海上石油平台

Marine fire extinguishing system, offshore oil platform

系统组成

System Composition

船用七氟丙烷灭火系统由储存瓶组、储存瓶组架、液体单向阀、集流管、选择阀、安全阀、吹洗阀、压力表、压力信号发生器、管网、喷嘴、药剂、火灾探测器、气体灭火控制器、声光报警器、警铃、放气指示灯、紧急启动/停止按钮等组成。

Marine HFC-227ea fire suppression plant consists of cylinder group, bracket, check valve, manifold pipe, selector valve, safety valve, flush valve, pressure gauge, pressure signal generator, pipeline, nozzle, agent, fire detector, gas fire controller, audible and visual alarm, alarm, release indicator, emergency ON/OFF button and etc.



技术参数 technical parameter

型号 Type	ZQC-10/20/30/40/70/90/120/150/180	可气动启动或电动启动，也可手动现场操作 start with pneumatic or local manual way
充装密度 Filling Density		$\leq 1.125\text{Kg/L}$
设计浓度 Design Concentration		8.5%
工作压力 Working Pressure	公称工作压力 (MPa) Nominal Working Pressure	2.5/4.2
	最大工作压力 (MPa) Maximum Working Pressure	4.2/5.3
气瓶容积 Cylinder Capacity	七氟丙烷容器瓶 (L) HCF-277ea Cylinder	10/20/30/40/70/90/120/150/180
	氮气启动瓶 (L) Nitrogen Pilot Cylinder	4
喷射时间 (S) Spray Time		≤ 10
工作温度范围 (°C) Working Temperature Range		0 ~ 50
喷嘴公称工作压力 (MPa) Nominal Working Pressure of Nozzle		10
单个喷嘴的保护半径 (m) Protection Radius of Single Nozzle		≤ 5
喷嘴的保护高度 (m)		0.3 ~ 5
系统灭火技术方式 Fire Extinguishing Way of System		全淹没 Total Flooding



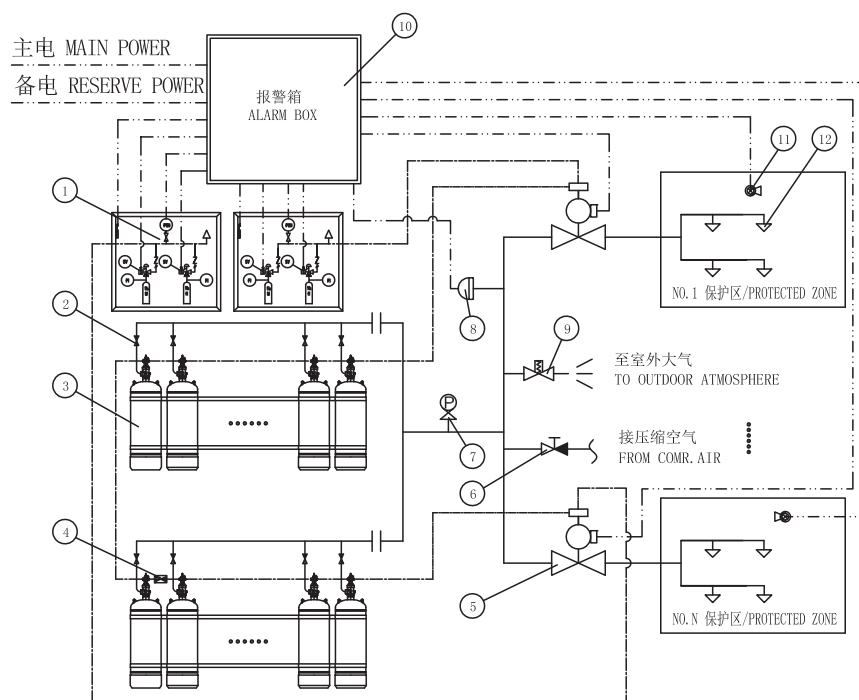


船用七氟丙烷灭火系统原理图

The Schematic diagram of marine HFC-227ea fire suppression plant

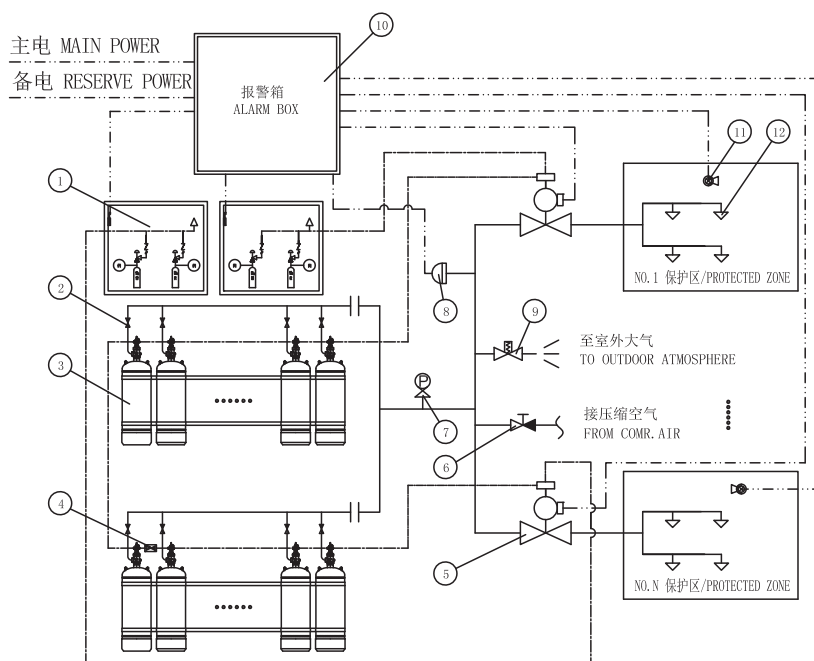
1、电动启动

ELECTRIC START



2、气体启动

GAS START



12	喷头/NOZZLE
11	声光报警器/AUDIBLE AND VISUAL ALARM
10	报警箱/ELECTRIC CONTROL ALARM BOX
9	安全阀/SAFETY VALVE
8	压力信号发生器/PRESSURE SIGNAL GENERATOR
7	压力表及阀/PRESSURE GAUGE AND VALVE
6	吹通阀/BLOW VALVE
5	气控施放阀/PNEUMATIC DISCHARGE VALVE
4	气控单向阀/CHECK VALVE
3	FM200气瓶组/FM200 CYLINDERS GROUP
2	单向阀/CHECK VALVE
1	遥控施放站/REMOTE CONTROL RELEASE STATION
S. N.	NAME

探火式灭火装置

Extinguishing Equipment with Fire Detection Tube

制造标准 Approval Standard

GA 1167-2014 探火管式灭火装置

GA 1167-2014 Extinguishing Equipment with Fire Detection Tube

GB50370-2005 气体灭火系统设计规范

GB50370-2005 Code for Design of Gas Fire Extinguishing Systems

适用范围 Application of Product

外壳相对密封的特殊或重要电气柜,无人工作船、无人机舱及无人处所,带槽盒的电线电缆槽或桥架电池舱、锂电池舱。

Special or important electrical cabinets with relatively sealed outer casings, unmanned workboats, unmanned aircraft cabins and unmanned spaces, wire and cable troughs with trough boxes or bridges, battery compartment, lithium battery compartment.



技术参数 Technical Parameter

产品名称 Product Name	电气柜及无人处所探火管式灭火装置 Extinguishing Equipment with Fire Detection Tube
产品型号 Product Type	TH-Z-Q00/170-YN
药剂充装量 Agent Filling Amount	1kg, 2kg, 5kg, 8kg, 12kg
灭火介质 Extinguishing Media	七氟丙烷 HFC-227ea
钢瓶材质 Cylinder Material	不锈钢焊接瓶 Stainless Steel Welding Cylinder
设计浓度 Design Concentrate	8.5%
20℃储存压力 Storage Pressure (20℃)	1.6MPa
最小工作压力 Min. Working Pressure	1.1MPa
最大工作压力 Max. Working Pressure	3.4MPa
开启方式 Starting Way	自动 Automatic
工作温度范围 Working Temperature Range	0-50℃
泄压装置动作压力 Pressure Relief Device Operating Pressure	4.5 ± 5%MPa
喷射时间 Discharge Time	≤30s
灭火方式 Extinguishing Way	直接式 Direct Way
火探管动作温度 Operation Temperature	170℃ ± 10%且不大于180℃ 170 °C ± 10% and no more than 180 °C
适用范围 Application	固体火灾、液体火灾、气体火灾、电气火灾 Solid fire, liquid fire, gas fire, electrical fire



系统组成 System Components



瓶头阀
Cylinder Valve



火探管
Detection Tube



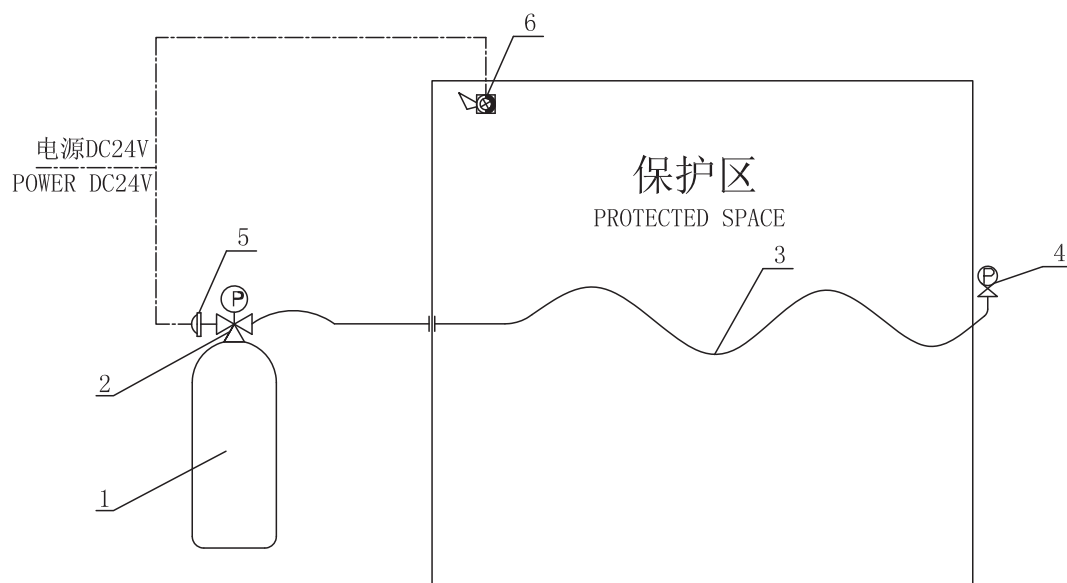
压力表
Pressure Gauge



压力信号发生器
Pressure Signal Generator

探火管式灭火装置原理图

The Schematic Diagram of Extinguishing Equipment with Fire Detection Tube



6	声光报警器/ALARM LIGHT
5	压力信号发生器/PRESSURE GENERATOR
4	压力表及阀/PRESSURE GAUGE AND VALVE
3	探火管/DETECTION TUBING
2	七氟丙烷探火管瓶头阀/CYLINDER VALVE
1	气瓶组/CYLINDER GROUP
S. N.	NAME



氮气惰化装置 N₂ INERT PLANT



氮气瓶组
Nitrogen Cylinder Group



氮气调压箱
N₂ Pressure Regulation Box

制造标准 Approval Standard

《国际消防安全系统规则》

International Code for Fire Safety System

中国船级社 (CCS) 《钢质海船入级规范》(2018)

CCS Rules for Classification of sea-going Steel Ships 2018

适用范围 Application of the Product

化学品船的情化。

Chemicals ship inerting.



一级减压阀
First Stage Reducer



二级减压阀
Second Stage Reducer

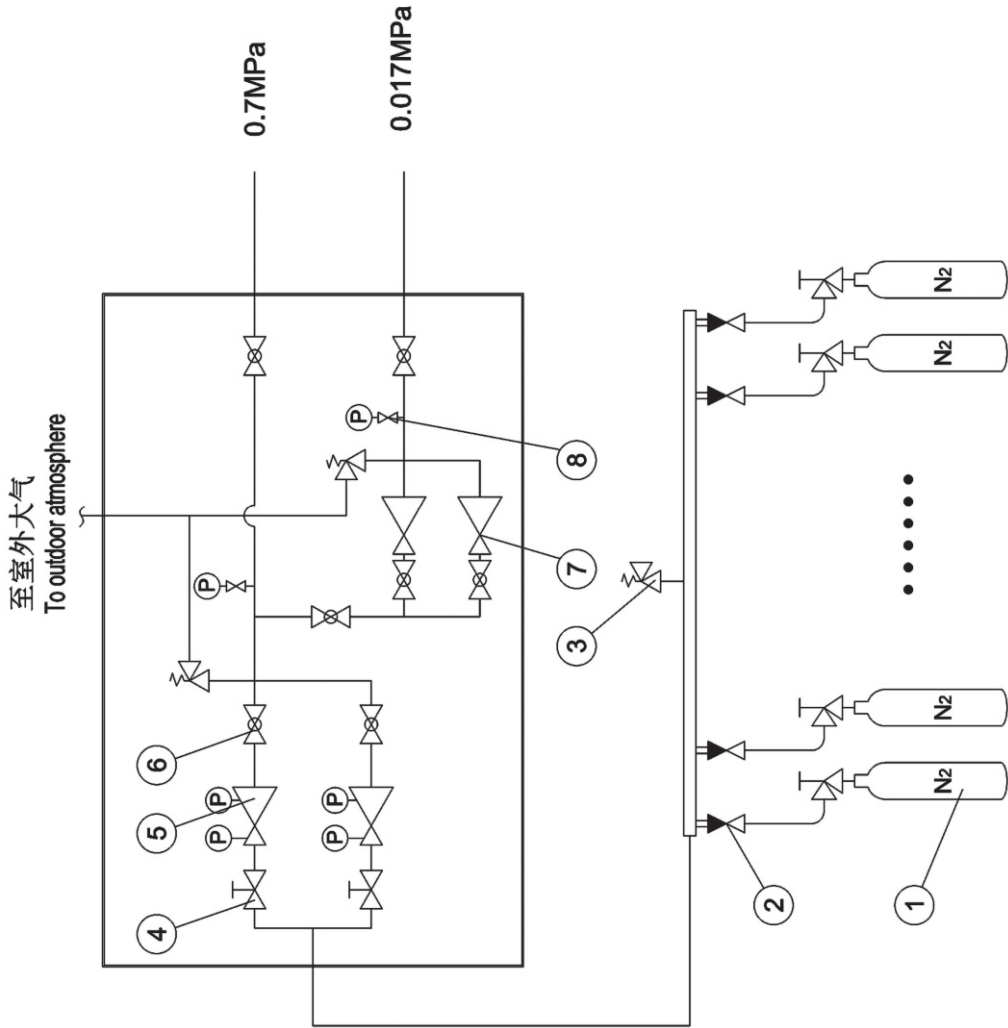
技术参数 Technical Data

型号 Model	YND40/YND50	YND68
储瓶容积 Capacity	40L/50L	68L
充装压力 Nominal pressure	20MPa/15MPa	15MPa
介质 Medium	N ₂	
工作温度范围 Temperature scope	-20℃ ~ +55℃	
一级工作压力出口 First level of outlet pressures	0.7MPa	
二级工作压力出口 Second level of outlet pressures	0.010 ~ 0.020MPa	
操作方式 Operating Mode	手动 Manual	



氮气惰化装置原理图

The Schematic diagram of N2 inert plant



8	压力表及阀/Pressure gauge and valve
7	二级减压器/Second stage reducer
6	截止阀/Stop valve
5	一级减压器/Fist stage reducer
4	进气阀/Inlet valve
3	安全阀/Safety valve
2	止回阀/Check valve
1	氮气瓶组/Nitrogen cylinder group
S. N.	Name



船用固定干粉灭火系统

Marine Version Skid Mounted Dry Chemical Unit

制造标准 Approval Standard

《散装运输液化气体船舶构造与设备规范》(2016)第11章;
Rules for Construction And Equipment Of Ships Carrying Liquefied Gases, Chapter 11.

《国际散装运输液化气体船舶构造和设备规则》第11章及其修正案;
International Code For The Construction and Equipment of Ships Carrying Liquefied Gases in Bulk and its Amendments, Chapter 11.
MSC.1/Circ.1315《经认可的用于保护散装运输液化气体船舶的化学干粉灭火系统指南》。

Guidelines for the Approval of Fixed Dry Chemical Powder Fire-extinguishing Systems for the Protection of Ships Carrying Liquefied Gases in Bulk.

使用范围 Application of the Product

液化气船、液化气加注趸船。

Liquefied petroleum gas, liquefied gas filling barge



技术参数 Technical Data

型号规格 Model specification	干粉容积(kg) Capacity of dry powder	系统工作压力(MPa) System service pressure	驱动气体 Pilot gas	干粉枪喷射率(kg/s) Discharge rate of dry powder applicator	干粉枪射程(m) Dry powder applicator range	干粉炮喷射率(kg/s) Dry powder monitor discharge rate	干粉炮射程 (m) Dry powder monitor range
ZFPC-500(750、1000、1500、2000、2500、3000、3500、4000、4500、5000~10000)	500、750、1000、1500、2000、2500、3000、3500、4000、4500、5000~10000	1.0~1.6	N ₂	FQ3.5/3.5kg/s FQ5/5kg/s	≥12	10/25/35/40/45/45/50kg/s	18/30/38/40/45/50m

装置组成 Plant components



干粉贮罐与驱动瓶组
Dry Powder Tank & Pilot Cylinder Group



电控干粉炮
Electric-controlled Dry powder Monitor



干粉枪
Dry Powder Applicator



干粉炮
Dry Powder Monitor



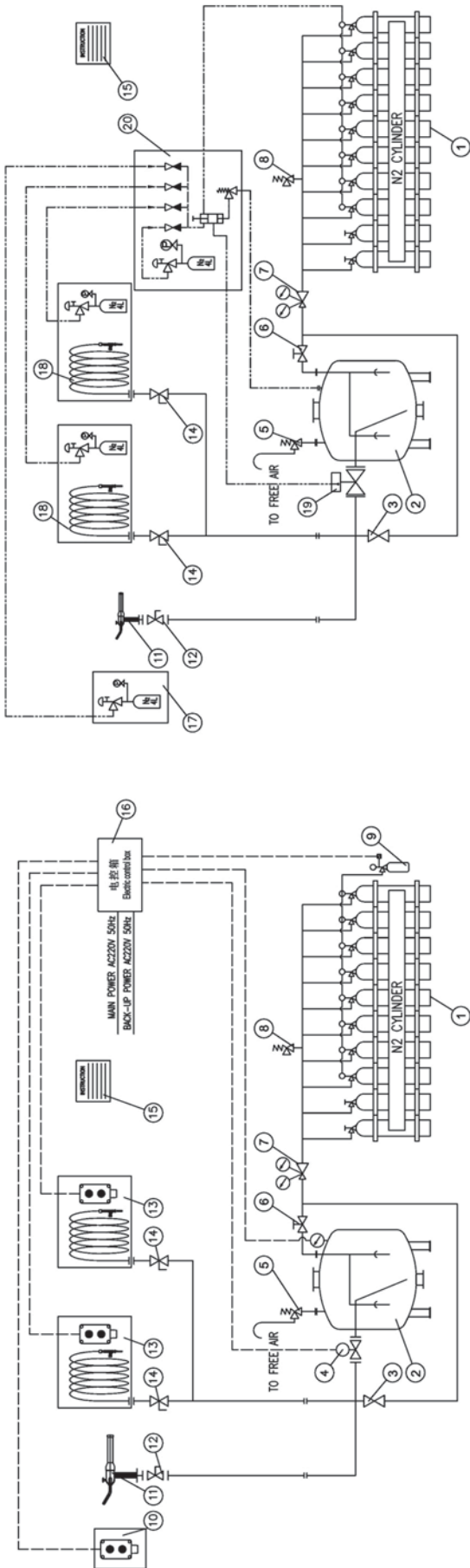
干粉卷盘箱
Dry Powder Bobbin Disk Box

船用固定干粉灭火系统原理图

The Schematic diagram of marine version skid mounted dry chemical unit

1、电气启动 Electric start

2、气体启动 Gas start



管路符号：
PIPE SYMBOL
释放管路
RELEASE PIPE
电气管路
ELECTRIC PIPE

气控管路
AIR CONTROL PIPE

20	定压启动箱/Contant pressure start box	10	防爆开关/Explosion-proof switch
19	气球阀/Pneumatic ball valve	9	电磁启动瓶/Electric pilot cylinder
18	干粉卷盘2/Dry powder bobbin disk box	8	安全阀/Safety valve
17	炮处遥控启动箱/Remote start box near monitor	7	减压器/reducing valve
16	电控箱/Electric control box	6	截止阀/Globe valve
15	操作说明牌/Operating instruction plate	5	安全阀/Safety valve
14	手动球阀2/ball valve	4	电动球阀/Electric ball valve
13	干粉卷盘1/Dry powder bobbin disk box	3	吹洗阀/Flush valve
12	手动球阀1/ball valve	2	干粉罐/Dry powder tank
11	干粉炮/Dry powder monitor	1	氮气瓶组/Nitrogen cylinder group
S.N.	Name	S.N.	Name



压力式泡沫比例混合装置

PRESSURE TYPE FOAM PROPORTIONED PLANT

制造标准 Approval standard

中国船舶行业标准CB/T3571-2014《船用低倍泡沫装置》

Chinese shipbuilding professional standard CB/3571-2014 Marine Low-expansion foam unit

中国国家标准GB/T20031-2005《泡沫灭火系统及部件通用技术条件》

National Standard of P.R.China, General technical specifications for foam fire extinguishing system and components GB/T20031-2005

经 MSC.339(91)修正的《国际消防安全系统规则》第14章
Chapter 14 of International Code for Fire Safety Systems, as amended by MSC.339(91).

经 MSC.327(90)修正的《国际消防安全系统规则》第6章
Chapter 6 of International Code for Fire Safety Systems, as amended by MSC.327(90).

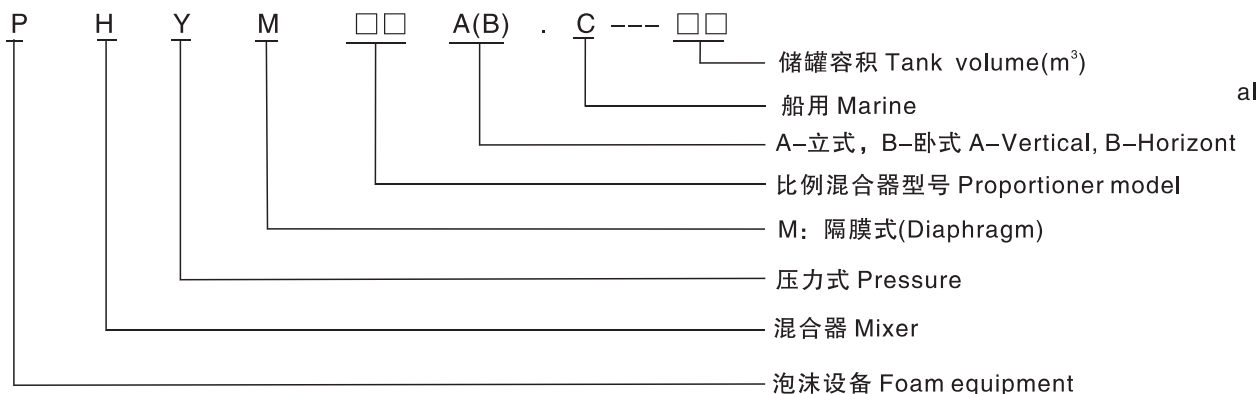


适用范围 Application of the product

适用于1974 SOLAS公约第II-2/10条规定的固定式甲板泡沫灭火系统。

Fit for fixed deck foam fire-extinguishing systems submitted to regulation 10, Chapter II-2 of 1974 SOLAS.

型号及意义 Model and Significance





技术参数 Technical data

PHYM系列产品

PHYM Series Product

形式 Form	压力式 Pressure	负压式 Negative pressure
产品型号 Model	PHYM32/48AC系列/Series; PHYM32/48BC系列/Series; PHYM64/96BC系列/Series	泡沫比例混合器 Foam proportioner
		PH32C
工作压力 Working Pressure(MPa)	0.6 ~ 1.2	0.6 ~ 1.2
混合液流量范围 Foam Solution scope(L/S)	8 ~ 32; 16 ~ 48; 24 ~ 64; 48 ~ 96	4/8/16/24/32
混合比 Mixture Ratio(%)	3%; 6%	3%
卧式罐容积 Horizontal type Tank volume(m ³)	0.2, 0.3, 0.5, 0.7, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.5, 7.6	
立式罐容积 Vertical type Tank volume(m ³)	0.2, 0.3, 0.5, 0.7, 1.0, 1.5, 2.0, 2.5, 3.0	



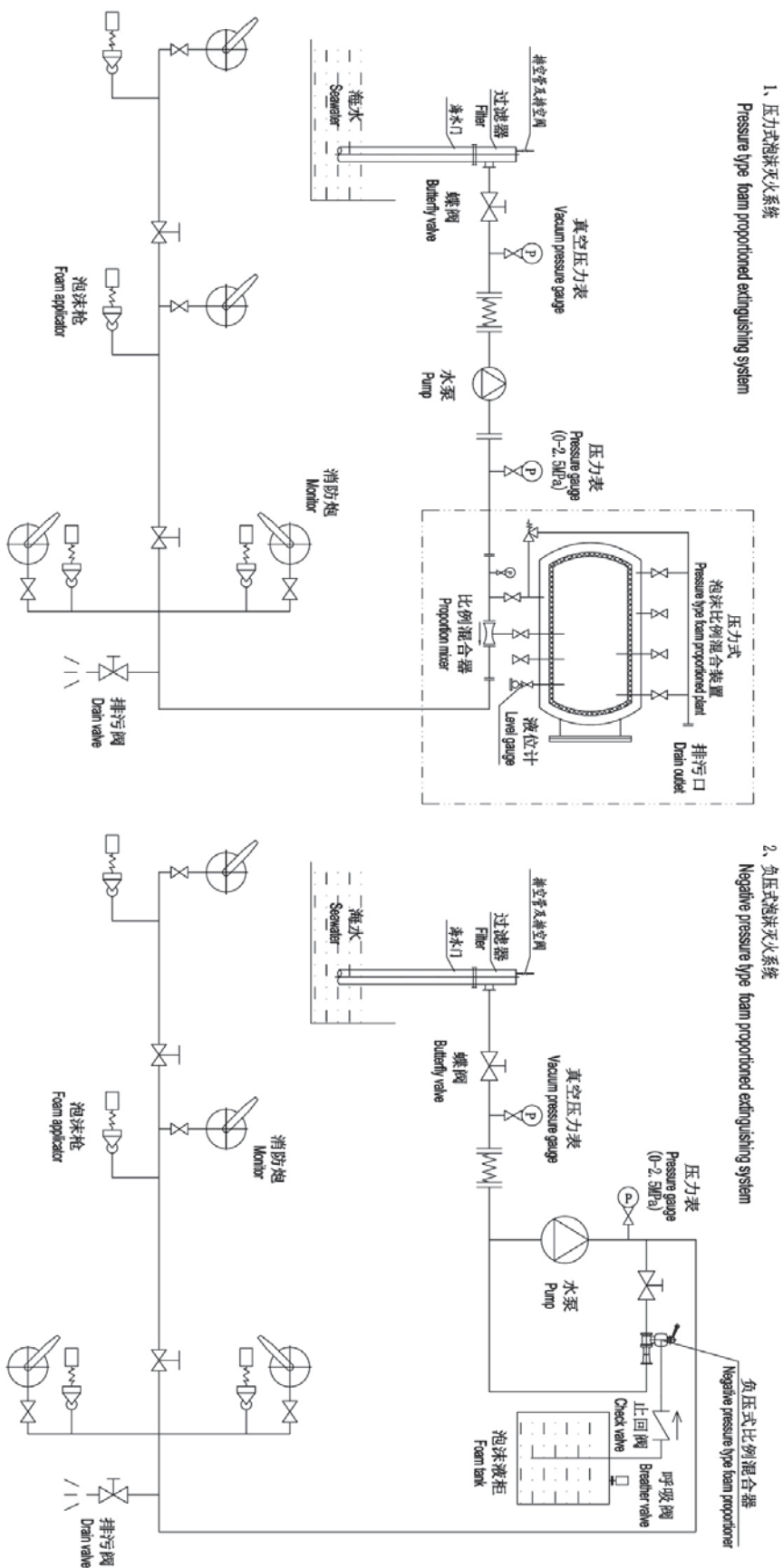
泡沫比例混合器基本参数

Foam Proportioner Basic Parameter

型式 Model	压力(Mpa) Pressure	混合液流量(L/S) Mixing liquid flow	压力损失(MPa) Pressure loss
空气泡沫比例混合器 Air foam proportioner	0.6 ~ 1.2	4 ~ 32	
		16 ~ 48	
		16 ~ 64	
压力式泡沫比例混合器 Pressurized foam proportioner	0.6 ~ 1.2	4 ~ 16	≤0.2
		8 ~ 32	
		16 ~ 48	
		16 ~ 64	
		24 ~ 72	
管线式泡沫比例混合器 Pipeline foam proportioner	0.8 ~ 1.2	≤3.3	≤0.4
		≤6.6	
		≤1.33	
夹入式泡沫比例混合器 Clamping type proportioner	0.6 ~ 1.2	13.3 ~ 100	≤0.2
		20 ~ 200	

泡沫灭火系统原理图

The Schematic diagram of foam extinguishing system





平衡式泡沫比例混合装置

PUMP BALANCED TYPE FOAM PROPORTIONED PLANT



制造标准 Approval Standard

《国际消防安全系统规则》、GB3571-2014《船用低倍泡沫装置》和GB20031-2005《泡沫系统及部件通用技术条件》。

The system is produced in accordance with International Code for fire Safety System、GB3571-2014 Marine low-expansion foam installation and GB20031-2005 General technical specifications for foam fire extinguishing systems and components.

适用范围 Application of the product

油船、化学品船、石油平台。

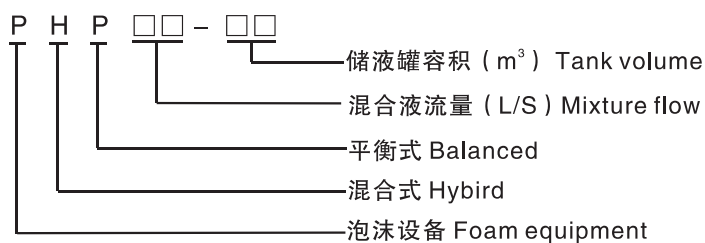
Oil tankers, chemical tankers, oil platform.

主要结构 Main structure

本装置主要由泡沫液储罐、平衡阀、安全阀、泡沫比例混合器、泡沫液泵、电气系统、公共底座和管路附件等构成。

Mainly by atmospheric foam liquid tanks, balance valve, safety valve, foam proportioner, foam pump, electrical plant, common base and piping accessories and other accessories.

型号及意义 Model and meaning



PHP100-50: 表示平衡泡沫比例混合装置, 储液罐容积5m³。泡沫液混合最大流量100L/S。

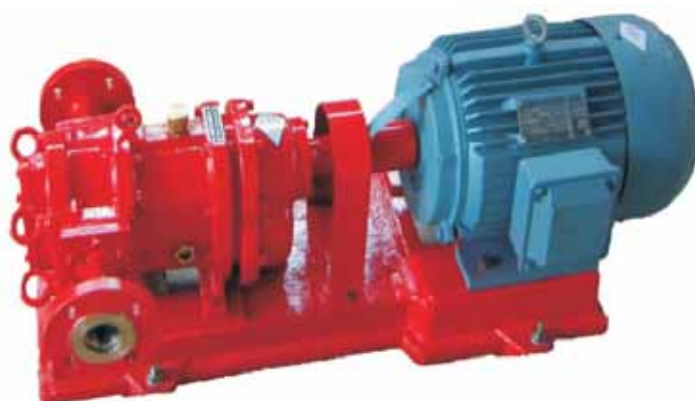


产品性能 Product performance

比例混合器 Proportion mixer	PHP32	PHP48	PHP64	PHP100	PHP120	PHP150	PHP180	PHP200	PHP260
混合液流量范围 Solution Range(L/S)	8 ~ 32	16 ~ 48	24 ~ 64	24 ~ 100	32 ~ 120	48 ~ 150	48 ~ 180	64 ~ 200	64 ~ 260
工作压力范围 Working Pressure range(MPa)	0.6 ~ 1.2								
工作温度 Working Temperature(℃)	0 ~ 45								
储罐容积 Tank Volume(L)	100△								
混合比 Ratio of Mixture(%)	3或6								

注：100△为产品型号100倍计，如PHP32-15，即：15×100=1500L。依次类推

Note:100△ for the product model 100 times as PHP32-15,namely :15 × 100=1500L。 By analogy.



泡沫泵
Foam pump



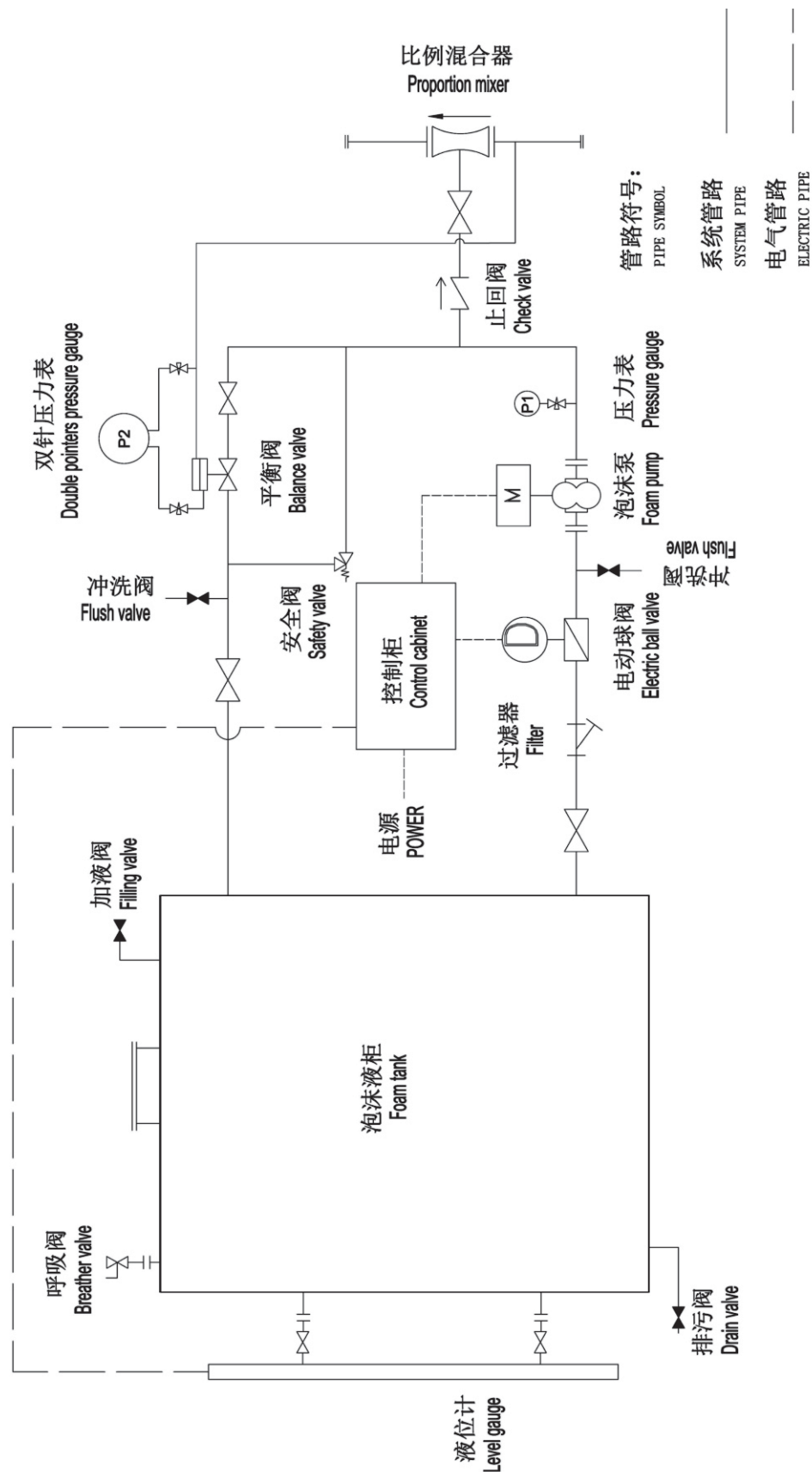
泡沫液柜
Foam Tank



泡沫液柜
Foam Tank

平衡式泡沫比例混合装置原理图

The Schematic diagram of pump balanced type foam proportioned plant





消防炮 Monitor

制造标准 Approval Standard

中国国家标准GB19156-2003《消防炮通用技术条件》

National Standard of P.R.China,GB19156-2003 General specifications for fire monitors.

中国国家标准GB19157-2003《远控消防炮系统通用技术条件》

National Standard of P.R.China,GB19157-2003 General specifications for remote control fire monitors system.

中国船舶行业标准CB/T3571-2014《船用低倍泡沫装置》

Chinese shipbuilding professional standard CB/T3571-2014

Marine Low-expansion foam Unit.

国际海事组织MSC.98 (73) 国际消防安全系统规则

IMO MSC.98 (73) international code for fire safety systems.

适用范围 Application of the Product

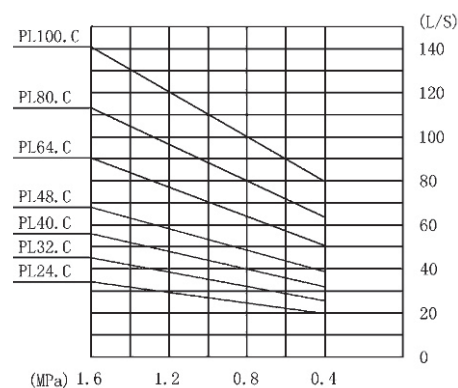
油船、化学品船、公务船、工程船、石油平台等。

Oil tankers, chemical tankers, public service ship, working ship, oil platform.

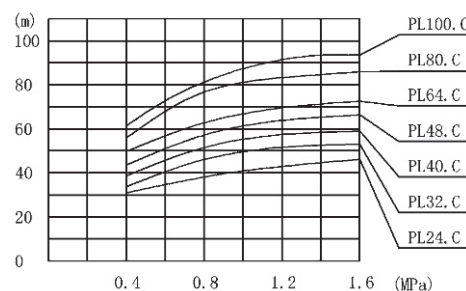
1.手动消防炮 Manual Monitor

技术参数 Technical Data

型号 Model (PL_.C)	24	32	40	48	64	80	100
额定流量（ L/S) Flow Rate	24	32	40	48	64	80	100
泡沫射程(m) Foam Spray Range(m)	≥40	≥45	≥50	≥55	≥60	≥70	≥75
水射程(m) Water Spray Range(m)	≥45	≥50	≥55	≥60	≥65	≥75	≥80
额定工作压力（ MPa) Nominal WP (MPa)	0.8MPa						
工作压力范围（ MPa) Pressure Range(MPa)	0.4—1.2MPa						
发泡倍数（ 20℃) Expansion Ratio(20℃)	≥5.5						
25%析液时间（ 20℃) Drainage Time(20℃)	≥2.5min						
水平转角（ ° ） Horizontal Rotate Angle	360°						
垂直转角（ ° ） Vertical Rotate Angle	≤-30° ～ ≥+60°						
图纸批准号 DWG Approval NO.	SH07A00067				SH11A00497		
检验标准 Inspection Standard	GB19156—2003《消防炮通用技术条件》 General Specifications for Fire Monitors						



压力——流量曲线图
Pressure-Flow Curve Graph

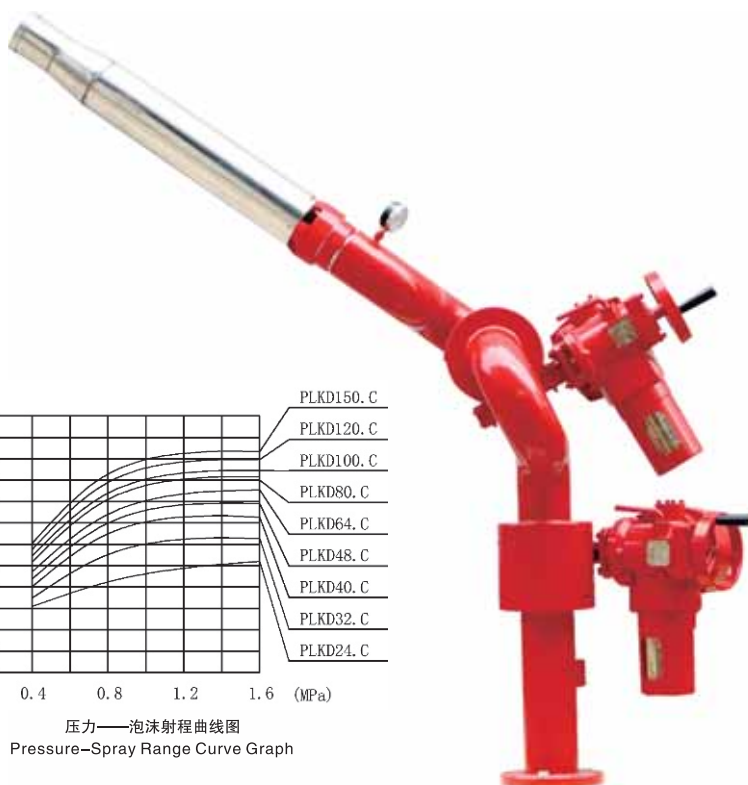
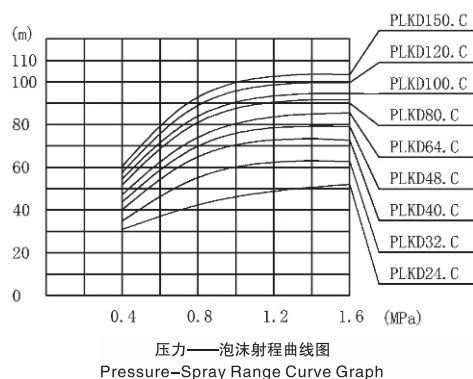
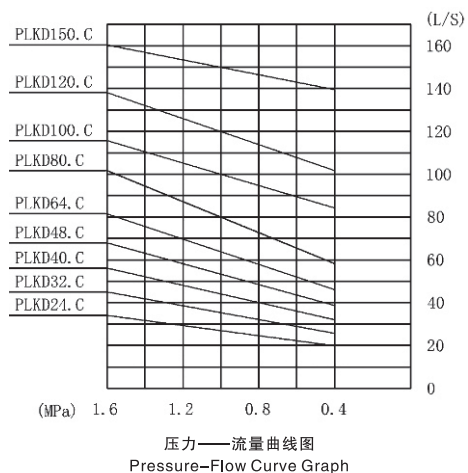


压力——泡沫射程曲线图
Pressure-Spray Range Curve Graph



2、电控消防炮

Electric-controlled Monitor



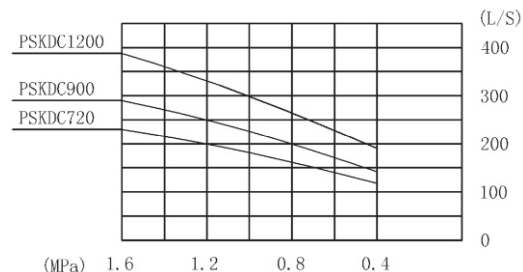
技术参数 Technical Data

型号 Type (PLKD_.C)		24	32	40	48	64	80	100	120	150
额定工作压力(MPa) Nominal WP(MPa)		0.8MPa				1.0MPa		1.2MPa		1.4MPa
工作压力范围(MPa) Pressure Range(MPa)		0.4—1.2MPa								0.4—1.4MPa
流量(L/S) Flow Rate	泡沫 Foam	24	32	40	48	64	80	100	120	150
	水Water	24	32	40	48	64	80	100	120	150
射程(m) Range	泡沫 Foam	≥40	≥48	≥55	≥60	≥70	≥80	≥85	≥90	≥95
	水 Water	≥45	≥55	≥65	≥70	≥75	≥85	≥90	≥95	≥100
水平回转角度(°) Horizontal Rotate Angle		270°								
仰俯角(°) Pitching Angle		-30~+60°								
发泡倍数(20℃) Expansion Rate		≥6								
25%析液时间(20℃) 25% Drainage Time		≥2.5min								
电源 Power		AC380V/50Hz; DC24V								
电机功率 Motor Power		0.37KW								
图纸批准号 DWG Approval NO.		SH13A00385								
检验标准 Inspection Standard		GB19156—2003《消防炮通用技术条件》 GB19157—2003《远控消防炮系统通用技术条件》 General Specifications for Fire Monitors; General Specifications for Remote Controlled Fire Monitor Systems;								

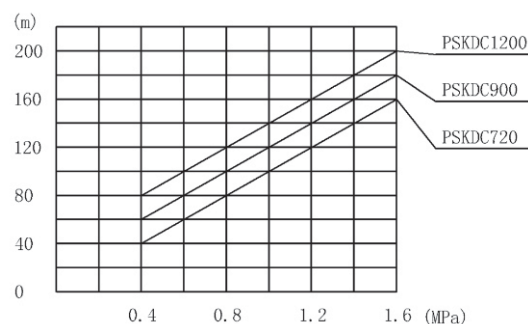


3、电控消防水炮

Electric-controlled Water Monitor



压力——流量曲线图
Pressure-Flow Curve Graph



压力——射程曲线图
Pressure-Spray Range Curve Graph

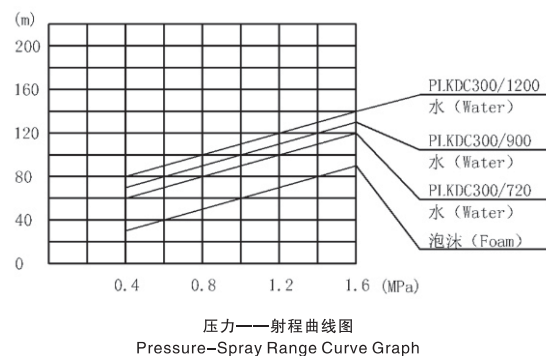
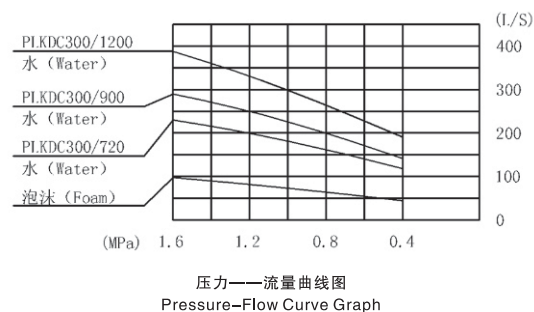
技术参数 Technical Data

序号 NO.	型号 Type		PSKDC1200	PSKDC900	PSKDC720
	项目 Item				
1	额定工作压力 Nominal Working Pressure		1.2MPa		
2	工作压力范围 Working Pressure Range		0.4 ~ 1.6MPa		
3	流量 Flow Rate	水/Water	1200m³/h	900m³/h	720m³/h
4	射程 Spray Range	水/Water	≥ 160m	≥ 140m	≥ 120m
5	水平回转角 Horizontal Rotate Angle		300°		
6	仰俯角 Vertical Angle		-30° ~ +70°		
7	电源/Power		AC380V, 50Hz; DC24V		
8	电机功率 Motor Power		水平回转：1.1KW，俯仰回转：2.2KW; Horizontal Rotate:1.1KW, Vertical Rotate: 2.2KW		
9	遥控距离 Remote Control Distance		≤ 150m		
10	连接方式/Connect Way		法兰连接，DN200 1.6MPa HG/T20592-2009; Flange Connect, DN200 1.6MPa HG/T20592-2009		



4、电控消防泡沫/水两用炮

Electric-controlled Foam/Water Dual Monitor



技术参数 Technical Data

序号 NO.	型号 Type 项目 Item		PLKDC300/1200	PLKDC300/900	PLKDC300/720
1	额定工作压力 Nominal Working Pressure		1.2MPa		
2	工作压力范围 Working Pressure Range		0.4 ~ 1.6MPa		
3	流量 Flow Rate	水/Water	1200m³/h	900m³/h	720m³/h
		泡沫/Foam	300m³/h		
4	射程 Spray Range	水/Water	≥ 120m	≥ 110m	≥ 100m
		泡沫/Foam	≥ 70m		
5	水平回转角 Horizontal Rotate Angle		300°		
6	仰俯角 Vertical Angle		-30° ~ +70°		
7	发泡倍数 Expansion Rate		≥ 6		
8	25%析液时间 25% Drainage Time		≥ 2.5min		
9	电源/Power		AC380V, 50Hz; DC24V		
10	电机功率 Motor Power		水平回转：1.1KW, 俯仰回转：2.2KW; Horizontal Rotate:1.1KW, Vertical Rotate:2.2KW		
11	遥控距离 Remote Control Distance		≤ 150m		
12	连接方式/Connect Way		法兰连接，DN200 1.6MPa HG/T20592-2009; Flange Connect, DN200 1.6MPa HG/T20592-2009;		



消防炮塔

Fire Monitor Tower

制造标准 Approval Standard

中国国家标准GBJ 135-90《高耸结构设计规范》
GBJ 135-90 Code for Design of Tall-slender Structures
中国国家标准GB50017-2003《钢结构设计规范》
GB 50017-2003 Design Code for Steel Structures

适用范围 Application of the Product

船舶、码头、石油及化工企业、海上石油平台辅助船等。
Ships, dock, oil or chemical enterprise,
offshore oil platform auxiliaryship and etc.



技术参数 Technical Data

型号 Type	TP8	TP10	TP12	TP16	TP18	TP20
上平台高度 (m) Height	8	10	12	16	18	20
平台间距 (m) Distance	2.5 (如有设中、下平台if have middle or lower platform)					
泡沫 (水管道) Foam (Water Pipe)	$\leq 80\text{L/S}$ 时, 使用6"管道 less than 80 L/S, cw 6" pipe. $\leq 150\text{L/S}$ 时, 使用8"管道 less than 150 L/S, cw 8" pipe.					
水幕耗水量 (L/S) Water Consumption of Water Curtain	≥ 6					



船用对外消防泵

Marine External Fire Pump



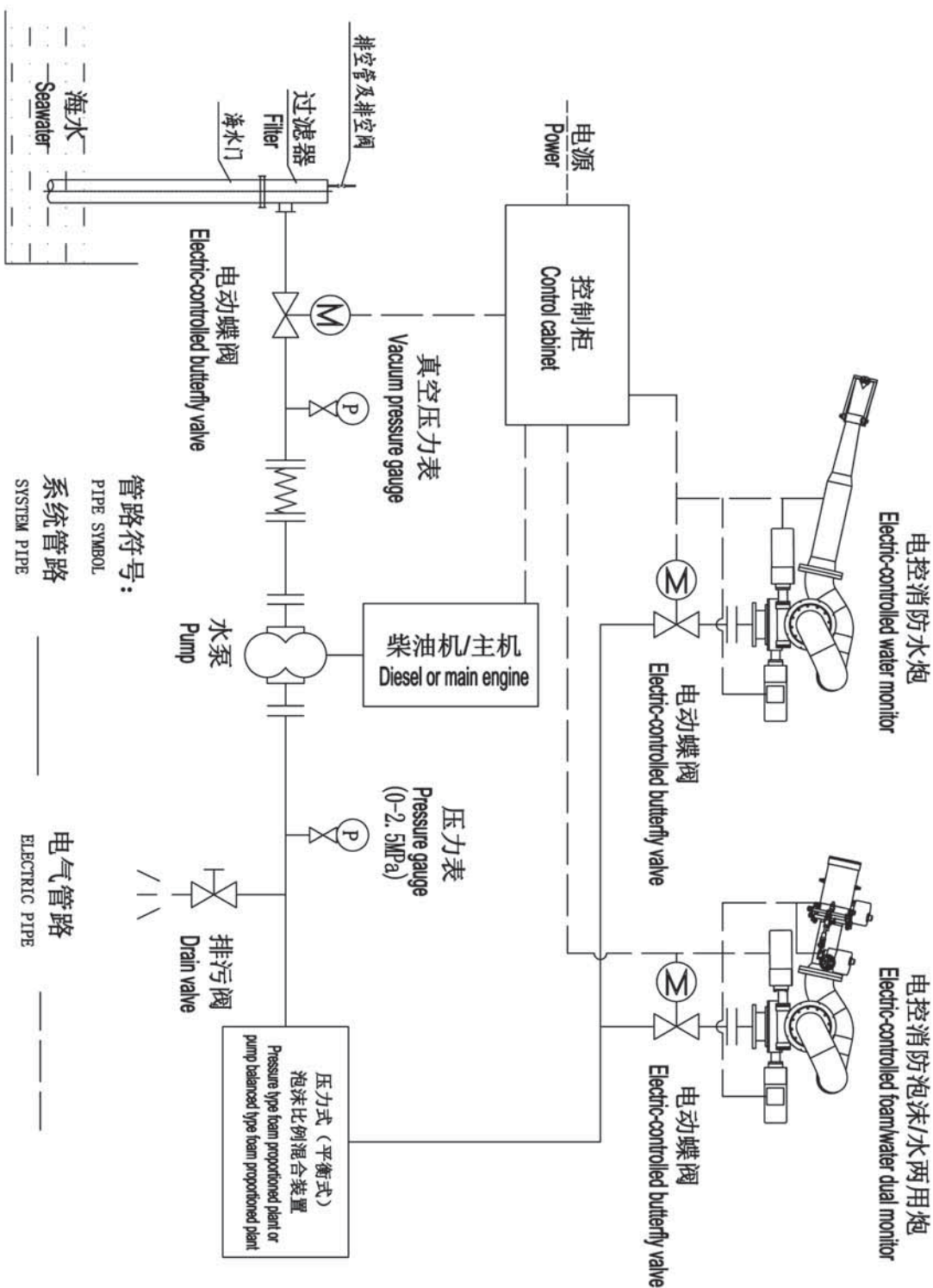
泵型号 Type	流量(m ³ /h) Flow Rate	扬程(m) Lift Range	转速(rpm) Speed	汽蚀余量(m) NPSH	轴功率(KW) Shaft Power	配套功率(KW) Mating Power	效率(%) Efficiency
350CXB300-565	1500	140	1800	4.5	715	850	79
350CXB300-565(A)	1200	140	1800	3.5	587	700	78
300CXB250-565	1000	140	1800	3	496	600	77
350CXB250-565(A)	800	140	1800	2.5	410	500	75
250CXB200-565	600	140	1800	2.5	314	400	73
200CXB150-565	400	140	1800	2.5	218	275	70
200CXB150-565(A)	300	140	1800	2.5	164	200	70

注：该系列水泵可根据其动力转速的变化来改变流量及扬程，最大流量可达2400 m³/h以上，最高扬程可达160m以上。

Note: this series of water pumps can change the flow rate and lift range according to its rotate speed, the maximum flow rate can get to more than 2400 m³/h, and the highest lift range can get to more than 160m.

对外消防灭火系统原理图

The Schematic diagram of external fire extinguishing system





空气泡沫枪/泡沫背桶

Foam Applicator/Foam Bucket



PQ8A.C



PQ8B.C



制造标准 Approval Standard

中国国家标准GB20031-2005《泡沫灭火系统及部件通用技术条件》

National Standard of P.R.China, GB20031-2005 General technical specifications for foam fire extinguishing system.

中国船舶行业标准CB/T3571-2014《船用低倍泡沫装置》

Chinese shipbuilding professional standard CB/T3571-2014 Marine Low-expansion foam Unit.

经 MSC.339(91)修正的《国际消防安全系统规则》第14章

Chapter 14 of International Code for Fire Safety Systems, as amended by MSC.339(91)

适用范围 Application of the Product

船舶消防

Marine fire-fighting

空气泡沫枪技术参数 Foam Gun Technical Data

产品型号 Model	PQ8A.C	PQ8B.C
工作压力 WORKING Pressure(MPa)	0.5MPa	0.5MPa
混合液流量Foam Concentrate Flow Rate(L/S)	8	8
射程 Range(m)	22	22
可携式背桶	/	20L



消防水/泡沫软管站

Fire Water/Foam Hose Reel Station



固定式
Fixed Type



移动式
Wheeled Type

制造标准 Approval Standard

中国国家标准GB15090-2005《消防软管卷盘》

National Standard of P.R.China, GB15090-2005 Fire Hose Reel

适用范围 Application of the Product

石油平台、船舶、输油码头、厂矿企业、化工部门、油库、加油站

技术参数 Technical Data

型号/Model	SJP8	SJP16	PJP8	PJP16
额定压力(MPa) Working Pressure	0.7		0.7	
额定流量(L/S) Rated Flow	8±8%	16±8%	8±8%	16±8%
射程(m) Range	18~28		≥18	
混合比 Ratio of Mixture	/		3%或/or 6%	
泡沫液类型 Model of Foam concentrate	/		AFFF	
泡沫液箱容积 (L) Capacity of Foam concentrate Box	/		100~500	

固定式局部水基灭火系统

FIXED WATER-BASED LOCAL APPLICATION FIRE FIGHTING SYSTEMS

中高压固定式局部水基灭火系统

Mid-High Pressure Fixed Water-based Local Application Firefighting System

制造标准 Approval standard

1974年国际海上人命安全公约及其修正案第II-2章第10.5.6条
 Regulations 10.5.6, Chapter II-2 of of International Convention for the
 Safety of Life at Sea, 1974, as Amended.
 MSC.1/Circ.1387 《经修订的适用于A类机器处所的固定式局部水基灭火
 系统认可导则》
 MSC.1/Circ.1387 Revised Guidelines for the Approval of Fixed Water-
 based Local Application Firefighting Systems for Use in Category A
 Machinery Spaces.

适用范围 Application of the product

A类机器处所及类似危险区域局部灭火。
 Fixed local application fire-extinguishing in category A machinery
 spaces and similar risks.



产品主要明细 Product description

产品名称 Product Name	中高压局部水基灭火系统 MP&HP of Fixed Water-based Local Application Fire Fighting System
型号 Type	YNXSWC3
喷头安装高度 Installation Height	0.5—7m
喷头最大水平距离 Max. Horizontal Spacing	2.8m
喷头布置形式 Nozzle Arrangement Form	1 × 1、1 × 2、1 × 3
	2 × 2、2 × 3、3 × 3
最大工作压力 Max. Working Pressure	/
最小工作压力 Min. Working Pressure	3MPa
喷头流量系数 Flow Factor K	1.6
喷雾锥角度 Spray Angle	100°
喷头材料 Material	QAL9-2



低压固定式局部水基灭火系统

Low Pressure Fixed Water-based Local Application Firefighting System

制造标准 Approval standard

1974年国际海上人命安全公约及其修正案II-2章第10.5.6条
Regulations 10.5.6, Chapter II-2 of of International Convention for the
Safety of Life at Sea, 1974, as Amended.
MSC.1/Circ.1387 《经修订的适用于A类机器处所的固定式局部水基灭
火系统认可导则》
MSC.1/Circ.1387 Revised Guidelines for the Approval of Fixed Water-
based Local Application Firefighting Systems for Use in Category A
Machinery Spaces.

适用范围 Application of the product

A类机器处所及类似危险区域固定式局部灭火。
Fixed local application fire-extinguishing in category A machinery
spaces and similar risks.

产品主要明细 Product description



产品名称 Product Name	低压局部水基灭火系统 LP of Fixed Water-based Local Application Fire Fighting System
型号 Type	YNXSWC-L
喷头安装高度 Installation Height	0.5—7m
喷头最大水平距离 Max. Horizontal Spacing	2.2m
喷头布置形式 Nozzle Arrangement Form	1 × 1、1 × 2、1 × 3
	2 × 2、2 × 3、3 × 3
最大工作压力 Max. Working Pressure	1.2MPa
最小工作压力 Min. Working Pressure	0.8MPa
喷头流量系数 Flow Factor K	5.4
喷雾锥角度 Spray Angle	120°
喷头材料 Material	QAL9-2



火灾报警单元 Fire Alarm Unit



感烟探测器
Smoke detector



火焰探测器
Flame detector



手动报警按钮
Manual alarm button



声光报警器
Audible and Visual Alarm



火灾显示盘(嵌入式)
Fire Display Panel
embedded



火灾显示盘(壁挂式)
Fire Display Panel
wall-mounted



火灾报警控制器(嵌入式)
Fire Alarm Controller
embedded



火灾报警控制器
Fire Alarm Controller

火灾控制单元 Fire Control Unit



远程控制箱
Remote Control Box



水泵控制柜
Water Pump Control Cabinet

喷射部件 Spray Components



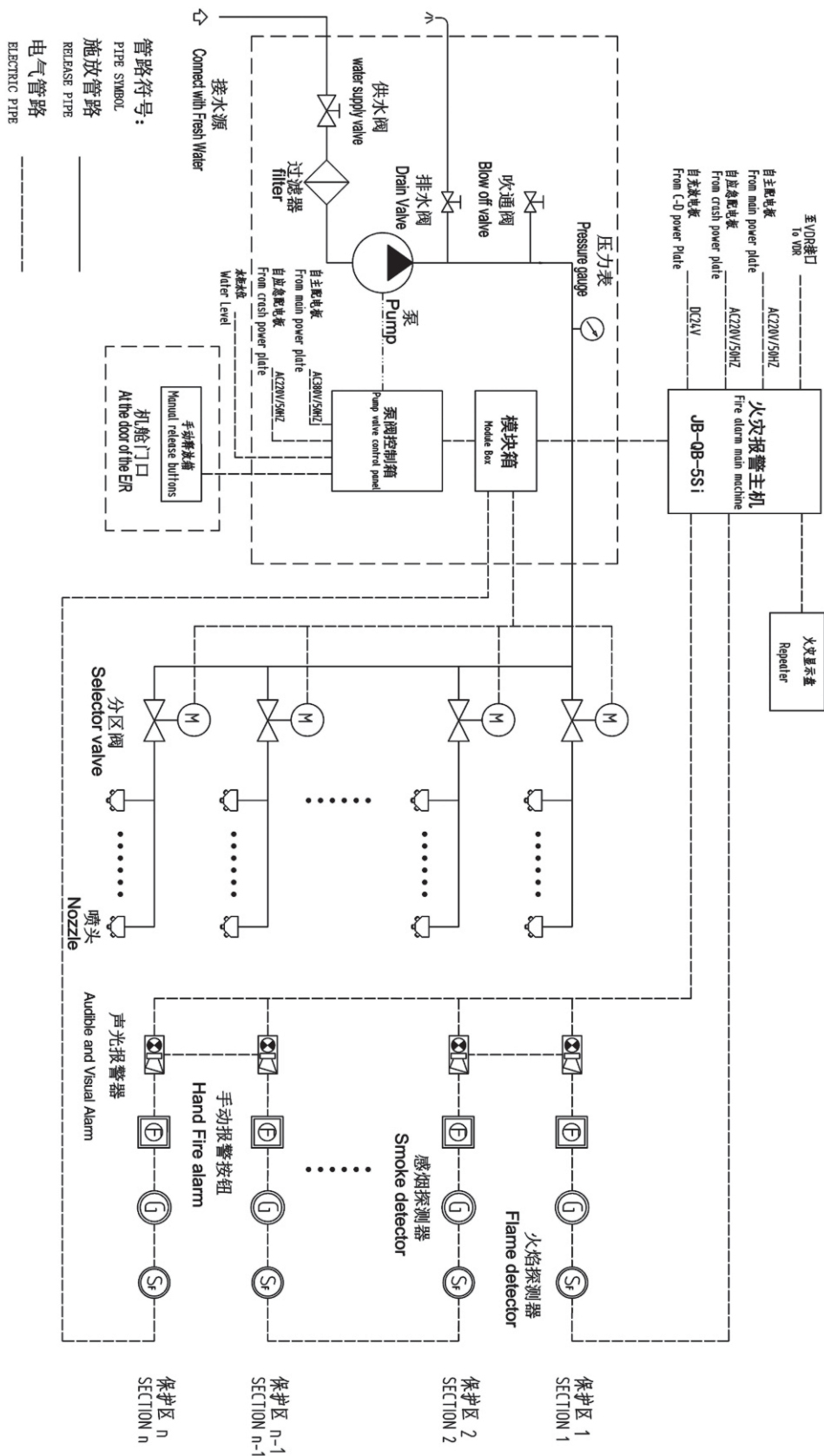
中高压细水雾喷头
Middle-high pressure water mist nozzle



低压细水雾喷头
Low pressure water mist nozzle

固定式局部水基灭火系统原理图

The Schematic diagram of fixed water-based local application fire fighting system





喷淋装置

Fire Extinguishing System of Water Spray
(自动喷水器、探火和失火报警系统)
(Automatic sprinkler fire detection and fire alarm system)



制造标准 Approval Standard

经MSC.327(90)和MSC.339(91)修正的《国际消防安全系统规则》第8章

Chapter 8 of International Code for Fire Safety System, as Amended by MSC.327(90) and MSC.339(91)

经MSC.265(84)和MSC.284(86)修订的与SOLAS公约II-2/12条规定等效的喷水器系统认可指南修正案(A.800(19)决议)

MSC.265(84) and MSC.284(86) Amendments to the Revised Guidelines for Approval of Sprinkler Systems Equivalent to that Referred to in SOLAS Regulation II-2/12 (Resolution A.800(19)).

MSC.44(65)高速船固定喷水系统的标准

MSC.44(65) Standard for Fixed Sprinkler Systems for High Speed Craft

适用范围 Application of the product

国际、国内航行船舶。Ships engaged on international/Domestic voyages.

湿式报警阀

Wet alarm valve



型号 Model	公称通径 DN(mm)	公称压力 Nominal (MPa)	延迟时间 Delay time (s)	外形尺寸 Dimensions (mm)
ZSFZ100	100	1.2	15 < t < 60	980 × 310 × 455
ZSFZ150	150			1030 × 340 × 480
SFZ200	200			1085 × 360 × 540



主要零部件 Main components



压力水柜 Pressure water tank



喷淋泵 Spray Pump



报警探头 alarm probe



水泵控制箱
water pump control box



水流指示器
water flow indicator



洒水喷头
Sprinkler head



固定式压力水雾灭火系统

FIXED PRESSURE WATER SPRAY SYSTEM

制造标准 Approval Standard

1974年国际海上人命安全公约及其修正案第II-2章第10条;
SOLAS Convention, 1974 Chapter 2, item 10
MSC/Circ.1165《经修订的机器处所和货泵舱的等效水基灭火系统认可指南》及其修正案;
MSC/Circ.1165 revised guidelines for the approval of equivalent water-based fire - extinguishing system for machinery spaces and cargo pump-rooms.
经MSC.217(82)和MSC.339 (91) 修正的《国际消防案全系统规则》第7章
MSC.217(82) and MSC.339 (91) FSS Code Chapter 7

适用范围 Application of Product

机舱、货泵舱、空压机间等机器处所。
Engine room, cargo pump room, compressor room and other machinery spaces.

技术参数 Technical Parameter

固定式压力水雾灭火装置技术参数表 Technical Parameter of Fixed Pressure Water Spray System

产品型号 Product Type		YW – A	YW – B		YW – C	
喷头型号 Nozzle Type		SSF-WH-8-1.65	ZSTWB27-90	ZSTWB54-120	ZSTWC27-90	ZSTWC54-120
系统设计压力 Design Pressure		15MPa	1.6MPa			
喷头最大水平间距 Max Hori. Space	天花板 Ceiling	2.8m × 2.8m	3.5m × 3.5m			
	舱底 Bottom	2.8m × 2.0m	3.0m × 2.0m			
喷头流量系数 K K Factor		1.65	27 ± 1.5	54 ± 3	27 ± 1.5	54 ± 3
最大围闭空间高度 Max Enclosed Height		7m	9m			
喷头在天花板下的距离 Distance Under Ceiling		≥0.1m	≥0.1m			
最大安装高度 Max Install Height	天花板 Ceiling	≤7m	≤9m			
	舱底 Bottom	0.65m	0.65m			
距舱壁最大距离 Max Distance to Cabin		≤1.2m	≤1.7m			
最大围闭空间容积 Max Enclosed Volume		3000m ³				

系统组成 System Components



柴油机泵
Diesel Fire Pump



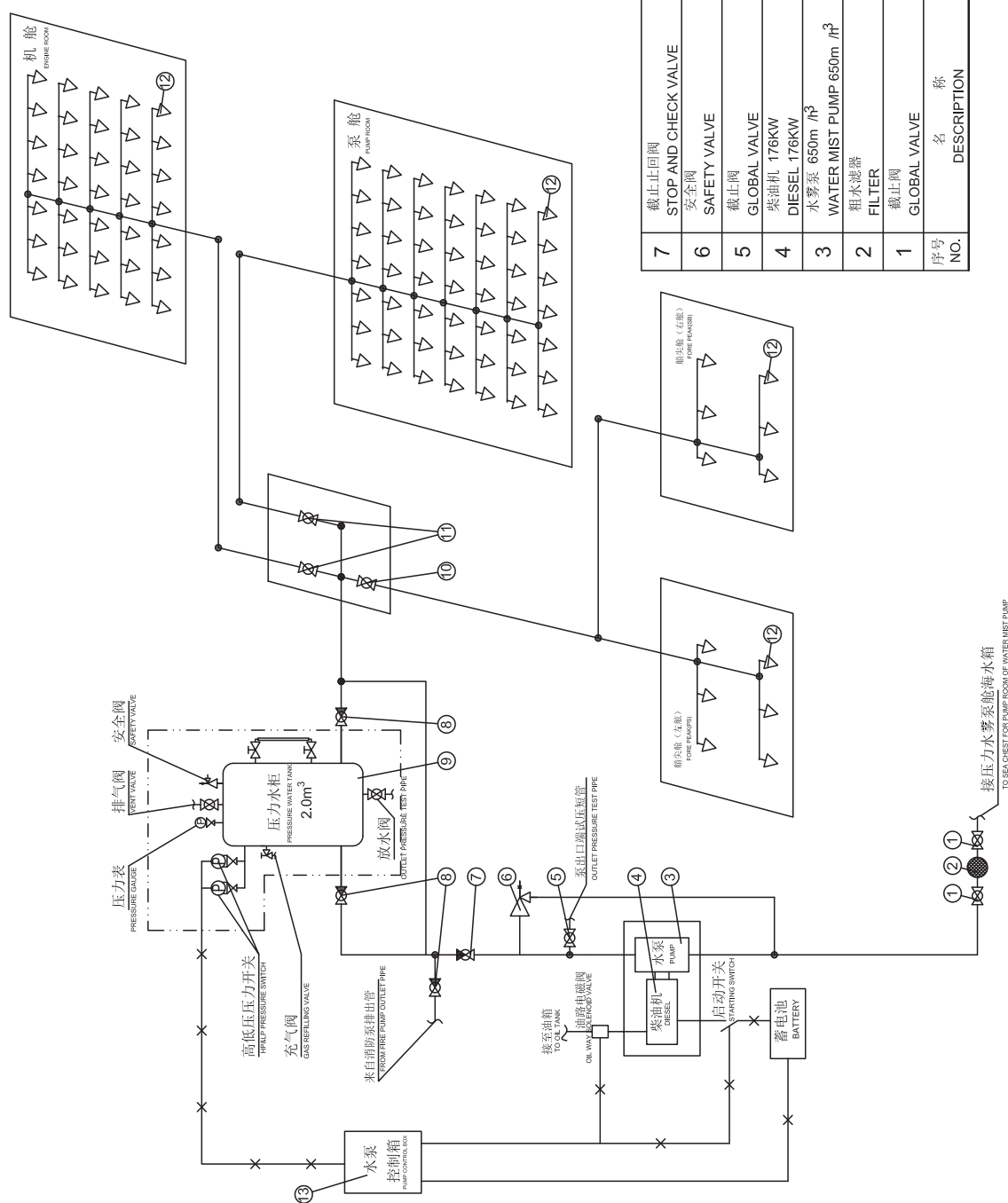
压力水柜
Pressure Water Tank



水雾喷嘴
Water Spray Nozzle

固定式压力水雾灭火系统原理图

SCHEMATIC DIAGRAM OF FIXED PRESSURE WATER SPRAY SYSTEM





滚装处所压力水雾系统

Pressure Water Spray System for RO-RO Space

制造标准 Approval Standard

1974年国际海上人命安全公约及其修正案第II-2章第10条；
SOLAS Convention, 1974 Chapter 2, item 10
MSC.1/Circ.1430 《经修订用于滚装处所和特种处所固定式水基灭火系统设计和认可指南》。
MSC.1/Circ.1430 Revised Guidelines for the Design and Approval of Fixed water-based Fire-fighting System for Ro-Ro spaces and Special Category spaces.
经MSC.217(82)和MSC.339 (91) 修正的《国际消防案全系统规则》第7章
MSC.217(82) and MSC.339 (91) FSS Code Chapter 7

适用范围 Application of Product

车辆滚装处所、特种处所等。
Ro-Ro Spaces Special Category Spaces and etc.

技术参数 Technical Parameter

滚装处所压力水雾技术参数表 Technical Parameter of Pressure Water Spray System for RO-RO Space

名称 Name		滚装处所及特种处所用固定式水基灭火装置 Pressure Water Spray System for RO-RO Space
型号 Type		YW - CGT
系统设计压力 Design Pressure		1.6MPa
灭火介质 Medium		淡水、海水 fresh water, sea water
系统启动方式 Starting Mode		电气手动、手动 Electrical Manual & Manual
喷头 N O Z Z L E	型号 Type	ZSTWC-20/90、ZSTWC-20/120、ZSTWC-20/125、ZSTWC-20/150
		ZSTWC-27/90、ZSTWC-27/120、ZSTWC-27/125、ZSTWC-27/150
		ZSTWC-54/90、ZSTWC-54/120、ZSTWC-54/125、ZSTWC-54/150
		ZSTWC-67/90、ZSTWC-67/120、ZSTWC-67/125、ZSTWC-67/150
工作压力范围 Working Pressure		0.35-1.2MPa
型式 Type		开式 open
材质 Material		HPb59-1
安装高度 Install Height		≤9m
最大水平间距 Max Horizontal Space		3.0m×3.0m
喷头在天花板下距离 Distance Under Ceiling		≤0.6m

系统组成 System Components



水雾泵
Water Mist Pump



水泵控制箱
Pump Control Box

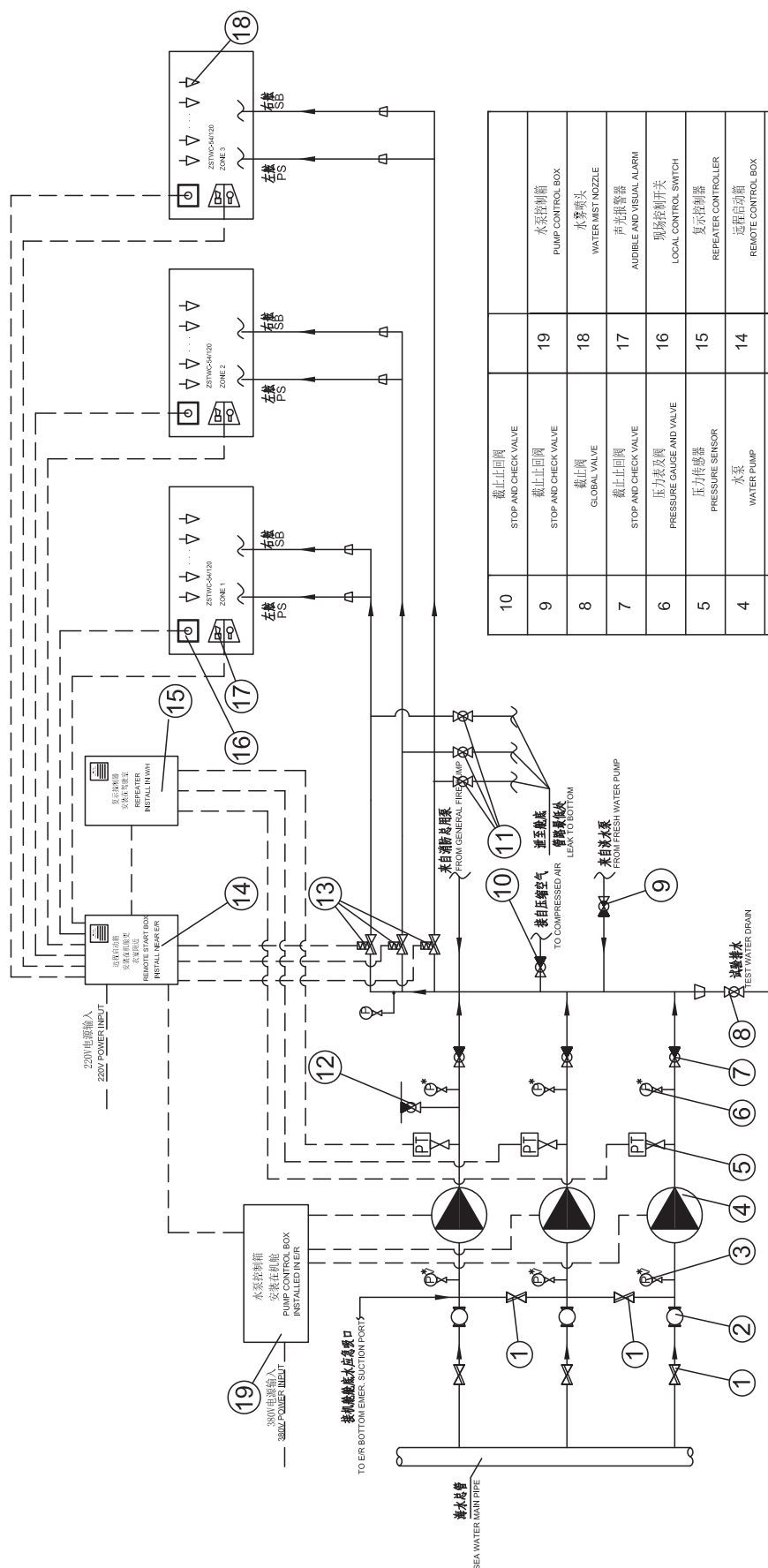


水雾喷嘴
Water Spray Nozzle



滚装处所压力水雾系统原理图

SCHEMATIC DIAGRAM OF PRESSURE WATER SPRAY SYSTEM FOR RO-RO SPACE



序号 NO.	名称 DESCRIPTION	序号 NO.	名称 DESCRIPTION
10	截止止回阀 STOP AND CHECK VALVE	19	水泵控制箱 PUMP CONTROL BOX
9	截止止回阀 STOP AND CHECK VALVE	18	水雾喷头 WATER MIST NOZZLE
8	截止止回阀 STOP AND CHECK VALVE	17	声光报警器 AUDIBLE AND VISUAL ALARM
7	截止止回阀 STOP AND CHECK VALVE	16	现场控制开关 LOCAL CONTROL SWITCH
6	压力表及阀 PRESSURE GAUGE AND VALVE	15	重复控制器 REPEATER CONTROLLER
5	压力传感器 PRESSURE SENSOR	14	远控启动箱 REMOTE CONTROL BOX
4	水泵 WATER PUMP	13	电动蝶阀 ELECTRICAL BUTTERFLY VALVE
3	真空压力表及阀 VACUUM GAUGE AND VALVE	12	截止止回阀 STOP AND CHECK VALVE
2	海水过滤器 SEA WATER FILTER	11	截止止回阀 STOP AND CHECK VALVE
1	手动蝶阀 MANUAL BUTTERFLY VALVE		

手提式灭火器

PORTABLE FIRE EXTINGUISHER

适用范围 Application of the Product

各类船舶、油库、石油平台、码头等。

Various types of ships, oil depot, oil platforms, wharf.

手提式干粉灭火器

PORTABLE DRY POWDER FIRE EXTINGUISHER



型号 Model	MFZ/ABC5	MFZ/ABC6	MFZ/ABC8
灭火剂量 Extinguishant weight	5kg	6kg	8kg
筒体工作压力 Working press.of Body	1.2MPa		
有效喷射时间 Effective Discharge Duration	≥13s		
有效喷射距离 Effective Discharge Distance	≥3.5m		≥4.5m
喷射剩余率Rate of Residual Extinguishing Medium	≤15%		
灭火级别 Fire Extinguishing Rank	3A 89B		4A 144B
喷射滞后时间Delayed-action time	≤5s		

手提式水基灭火器

PORTABLE WATER SPRAY FIRE EXTINGUISHER

型号 Model	MPZ/9
灭火剂类型/数量/Type/Quantity of Extinguishing Agent	AFFF 3%
灭火剂量 Extinguishant weight	9L
有效喷射时间 Effective Discharge Duration	≥40s
有效喷射距离 Effective Discharge Distance	≥ 4.0m
喷射剩余率 Rate of Residual Extinguishing Medium	≤15%
灭火级别 Fire Extinguishing Rank	2A 89B
喷射滞后时间 Delayed-action time	≤5s



MPZ/9

手提式二氧化碳灭火器

PORTABLE CARBON DIOXIDE FIRE EXTINGUISHERS



MT/5



MT/7

型号 Model	MT/5	MT/7
灭火剂量 Extinguishant weight	5kg	7kg
筒体工作压力 Working press.of Body	17.0MPa	
有效喷射时间 Effective Discharge Duration	≥8s	≥9s
有效喷射距离 Effective Discharge Distance	≥2.5m	
喷射剩余率Rate of Residual Extinguishing Medium	≤15%	
灭火级别 Fire Extinguishing Rank	34B	55B
喷射滞后时间Delayed-action time	≤5s	



推车式灭火器

Wheeled foam extinguisher

推车式干粉灭火器

WHEELED DRY POWDER FIRE EXTINGUISHER



型号 Model	MFTZ/ABC35	MFTZ/ABC50
灭火剂量 Extinguishant weight(kg)	35Kg	50Kg
有效喷射时间 Effective Discharge Duration	≥30s	≥30s
有效喷射距离 Effective Discharge Distance	≥6m	≥10m
喷射滞后时间 Delayed-action time	≤5s	≤5s
喷射剩余率 Rate of Residual Extinguishing Medium	≤10%	≤10%
筒体工作压力 Working press.of Body	1.2MPa	1.2MPa
灭火级别 Fire Extinguishing Rank	6A 144B	6A 233B

推车式水基灭火器

WHEELED WATER SPRAY AFFF FOAM FIRE EXTINGUISHER



MPTZ45



MPTZ65



MPTZ135

型号 Model	MPTZ/45	MPTZ/65	MPTZ/135
灭火剂量 Extinguishant weight	45L	65L	135L
有效喷射时间 Effective Discharge Duration	≥40 ~ ≤210s		
有效喷射距离 Effective Discharge Distance	≥6	≥8	≥10
喷射剩余率 Rate of Residual Extinguishing Medium	≤10%		
公称压力 Nominal pressure	1.2MPa		
灭火剂 Extinguishing Agent	AFFF 3%		
灭火剂剩余率 Residual Rate of Agent	10%		
灭火级别 Fire Extinguishing Rank	4A 144B	6A 183B	6A 233B



推车式水基灭火器

WHEELED WATER SPRAY AFFF FOAM FIRE EXTINGUISHER



MPT/45



MPT/65



MPT/135

型号 Model	MPT/45	MPT/65	MPT/135
公称压力 Nominal pressure (MPa)	1.2	1.2	1.2
泡沫液充装量 Extinguishant weight	45L	65L	135L
有效喷射时间 Effective Discharge Duration	≥40 ~ ≤210s	≥40 ~ ≤210s	≥40 ~ ≤210s
有效喷射距离 Effective Discharge Distance	≥6m	≥8m	≥10m
喷射剩余率Rate of Residual Extinguishing Medium	≤10%	≤10%	≤10%
灭火剂成分 Extinguishing Agent Composition	AFFF3%	AFFF3%	AFFF3%
灭火级别 Fire Extinguishing Rank	4A 144B	6A 183B	6A 233B

适用范围 Application of the Product

各类船舶、油库、石油平台、码头等。

Various types of ships, oil depot, oil platforms, wharf.



推车式CO₂灭火器

WHEELED CARBON DIOXIDE FIRE EXTINGUISHERS



型号 Model	MTT/24
灭火剂重量 Extinguishant weight	24kg
筒体工作压力 Working press.of Body	15MPa
有效喷射时间 Effective Discharge Duration	20s
有效喷射距离 Effective Discharge Distance	/
喷射剩余率 Rate of Residual Extinguishing Medium	≤10%
喷射滞后时间 Delayed-action time	≤5s
灭火级别 Fire Extinguishing Rank	55B