# Use and Maintenance Technical Manual





Via del Molino, 40 - 52010 Corsalone (AR) - Italy - info@emme-italia.com - Tel. +39.0575.511320 Other branches Emme Antincendio s.r.l. in Italy : Milano - Padova - Roma - P.IVA/ C.F. 11208251006 - R.E.A. AR-159122

## 19118 - Lombardia 18260 : Wheeled Fire Extinguisher, 100 L Water + Additive



- CYLINDER Stainless steel AISI 304, epoxypolyestere powder painting, Red Ral 3000.
- EXTINGUISHING AGENT
- Water + additive .PROPELLANT
- Dehumidified air or Nitrogen (N<sub>2</sub>).
- VALVE
  - 2"-F, brass body, lever with green painting Ral 6029.
- USE
  - A B fire rating
- (solid materials, flammable liquids). • BRACKET
- Chassis on wheels, welded at the cylinder, red painting Ral 3000.

Note: image is for illustrative purpose only, the product purchased can have some differences

100 L water + additive wheeled fire extinguisher, temperature range from +5°C to +60°C, manufactured in accordance to **UNI EN 1866-1 (D.M. 6.3.92)**, certified according to the directive for pressure equipment PED 2014/68/EU.

Quality Product certification guaranteed by Bureau Veritas Italia.

Suitable for use on fire involving electrical voltages up to 1.000 V, at a distance of 1 meter.

APPROVED\CERTIFIED FIRE EXTINGUISHER:

		<u>FIRE</u> <u>RATING :</u>		,∕, A ≅ √	IV	B /	
File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Techincal manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	1/8

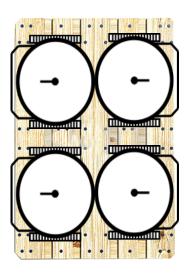
## **TECHNICAL SPECIFICATIONS**

FIRE RATING	A IV B
EXTINGUISHING AGENT	Water+ addittive (2 % SC-6 orchidee + 98 % Water)
PROPELLANT	Dehumidified air or Nitrogen (N <sub>2</sub> ), 15 bar at 20°C
TEMPERATURE RANGE	+5°C / +60°C
NOMINAL CHARGE	100 L.
FULL WEIGHT	~ 154 Kg
DIMENSIONS	Height 1350 +/-10 mm ; Width 580 +/-10 mm Depth 560 +/-15 mm
DISCHARGE TIME	~ 89 seconds
VALVE TIGHTENING TORQUE	Minimum 60 Nm, Maximum 70 Nm
CYLINDER PRESSURE TEST	PT 30 bar
CYLINDER VOLUME	134 L.
SAFETY DEVICE	Set between 21 and 26 bar
CYLINDER MATERIAL	Stainless steel AISI 304
EXTERNAL\INTERNAL TREATMENT	Sandblast and epoxypolyestere powder painting, Red Ral 3000 colour.

### PACKAGING

(Note: the packaging quantities and measurements are indicative and can be subject at change)

<u>STANDARD</u> <u>Maximum nr. 4 pieces for pallet</u> Dimensions pallet 100x120x150(h) cm



## TRANSPORT PROVISIONS

Land transport : ADR exemption as provision 594

Sea transport : IMDG - UN 1044 code 2.2 class Extinguishers

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	2/8



COMPONENTS AND SPARE PARTS

# (1.3) 1 3 C 1.2 1.4 2 6 1.1 7 4 5 9 8

#### Table 1

NUM.	DESCRIPTION	CODE
1	Valve 2"-F	0214RV
1.1	O-ring	0203
1.2	Tamper seal (black)	0286N
1.3	Safety pin	0283R
1.4	Safety device	0263R
2	Pressure gauge	1576
3	Safety pin holder (green)	0285
4	PVC dip tube	0165

NUM.	DESCRIPTION	CODE
5	Cylinder	18339
6	Hose	18422
7	Dispensing nozzle (complete of ball valve with control lever and inox filter for foaming)	2181-3
8	Wheel + wheel stop (diam. 300mm)	0125
ŏ	Thick washer	2148-10
9	Label	18344
	Additive for refill (1 Lt. concentrate - To mix with water)	1470-1 x 2

The spare part at number 1 includes already all others components indicated from 1.1 to 1.4

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	3 di 8

# <u>Maintenance periods for efficiency, methods and subjects</u> <u>accredited for maintenance</u>

## 1) GENERAL PRESCRIPTION

All Fire Fighting Fire Extinguishers produced by Emme Antincendio must be installed, inspected and maintained in accordance with the following manual and with the rules in force in the country of destination.

All fire extinguishers must be recharged after partial use with original spare parts.

Every ordinary / extraordinary maintenance operation must be carried out using original spare parts and compliant with the declared certified prototype. The described below maintenance operations must be carried out by recognized personnel qualified by the company Emme Antincendio.

Fire extinguishers are classified into two categories that provide for specific construction standards:

• portable fire extinguishers: fire extinguishers designed to be transported and operated by hand, with a mass not exceeding 20 kg under operating conditions. Reference standard: EN 3-7

• wheeled fire extinguishers: wheel fire extinguishers designed to be transported and operated by hand, with a mass greater than 20 kg. Reference standards: EN 1866-1

Moreover, in relation to the extinguishing agent contained in them, they are identified in:

- water based fire extinguishers including foam extinguishers;
- powder fire extinguishers;
- carbon dioxide fire extinguishers;
- clean agent extinguishers;

## 2) <u>REFERENCE RULES</u>

All Fire Fighting extinguishers produced by Emme Antincendio are manufactured in compliance with the following rules:

- EN 3-7: 2008 Portable fire extinguishers;
- EN 1866-1: 2008 Wheeled fire extinguishers;
- PED Directive 2014/68/EU pressure equipment;
- MED Directive 2014/90/EU devices for marine use (only for products bearing the relative MED certification

mark, see pag 1 of this document)

## 3) INSTALLATION

1) Install fire extinguishers in areas with large spaces and free from obstacles.

2) Do not expose the fire extinguisher to the atmospheric agents or chemicals agents.

(Note: in these cases protect the fire extinguisher with a special cabinet or protective cover.)

- 3) Do not expose the fire extinguisher to the direct sunlight.
- 4) Verify that the gauge pressure indicator is inside the green area.
- 5) Keep children away from fire extinguisher.
- 6) For Marine equipment or outdoor installation we recommend use of cover or cabinet.

## 4) MODALITY AND PRECAUTIONS FOR THE USE

1) Follow the operative instructions reported in the marking label stamped on the body of the fire extinguisher :







1) UNWIND THE HOSE 2) REMOVE SAFETY PIN

3) OPEN THE VALVE

4) HOLD THE HOSE, SQUEEZE GRIP LEVER AND AIM THE JET AT BASE OF FIRE

File name Type of document		Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	4 di 8

REPRODUCTION IS PROHIBITED

2) Do not through the fire extinguisher on to the fire.

3) This fire extinguisher is a pressurized vessel and must not be pierced, dented or subjected to external damage.

4) Do not direct the extinguishing agent at another person.

## 5) STEPS AND FREQUENCY RELATED TO MAINTENANCE OPERATIONS (For stored pressure fire extinguishers)

Note: The user have to complies to the national or international rules, if they are more restrictive of the below table

Tabl	e 2
------	-----

Ref.	Periodicity	Step	Operations
5.1	12 Months	Inspection	Check internal pressure using an independent tool.
5.2	5 Years	Maintenance	Replace the extinguishing agent. Check the dispensing valve and if a not compliance is detected replace it
5.3	10 Years	Hydrotest tank	Check the state of conservation and carry out the hydraulic test of the tank with special machinery. Is raccomended the replacement of dispensing valve
5.4	*20 Years		Is recommended the replacement of the fire extinguisher.

\* If the extinguisher is installed in particularly unfavorable environments, the recommended time can be reduced. (a reduction to 10 years is advisable)

N.B. : All the operations must be calculated from the date of placing on the market.

For the hydraulic test refer to the date stamped on the tank.

#### 5.1) Inspection steps

1	Check the stability and the correct wheel handling.
2	Check the internal pressure with an appropriate independent tool.
3	Check the safety seal and the safety pin conditions.
4	Remove the hose and check the correct internal passage with compressed air.
5	Record the inspection activity on the maintenance tag and on the fire protection register.

#### 5.2) Maintenance steps

1	Check the stability and the correct wheel handling. Check the marking label and replace it if necessary.
2	Discharge the fire extinguisher from the extinguishing agent.
3	Screw off the dispensing valve.
4	Check internally the cylinder and make sure that no signs of corrosion are present. For the hose, check the internal passage with compressed air.
5	Recharge the fire extinguisher with new extinguishing agent.
6	Check the dispensing valve and if it is found not compliance replace it with a new one. Screw the valve back on with a tightening torque: minimum 60 Nm - maximum 70 Nm
7	Pressurize the extinguisher (15 bar at 20 °C) with dehumidified air or nitrogen and check if there are leaks.
8	Reinsert the safety pin and relative seal, screw the dispensing hose back on.
9	Record the activity on the maintenance tag and on the maintenance register.

0

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	5 di 8

#### 5.3) Hydraulic test phases

A stability test must be carried out on it every 10 years since the production date stamped on the tank. This operation consists of a hydraulic pressure test to be carried out on the basis of the punched "PT" value.

1	Check the stability and the correct wheel handling. Check the marking label and replace it if necessary.
2	Discharge the fire extinguisher from the extinguishing agent.
3	Screw off and replace the dispensing valve.
4	Check internally the cylinder and make sure that no signs of corrosion are present. For the hose, check the internal passage with compressed air.
5	Hydraulic test of the cylinder with suitable tool: maintain hydraulic pressure at "PT" for 30 seconds and proceed with depressurization. Check that the cylinder does not show any deformation, breakage or stability anomalies.
6	Proceed with the rinsing/removal of any residuals.
7	Recharge the fire extinguisher with new extinguishing agent.
8	Is recommended the replacement of dispensing valve. Screw the valve back on with a tightening torque: minimum 60 Nm - maximum 70 Nm
9	Pressurize the extinguisher (15 bar at 20 °C) with dehumidified air or nitrogen and check if there are leaks.
10	Reinsert the safety pin and relative seal, screw the dispensing hose back on.
11	Record the activity on the maintenance tag and on the maintenance register.

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	6 di 8

## Executive details inspection phases, Maintenance, Hydraulic test

<ul> <li>1 - Check: stability and correct wheel handling, cleaning and general conditions.</li> <li>Check the marking label and replace it if damaged.</li> </ul>	<b>2</b> - Discharge completely the extinguisher from the extinguishing agent with appropriate collecting instruments .				
<b>3</b> - Screw off and remove the valve.	<ul> <li>4 - Check the inside of the tank with the appropriate inspection lamp.</li> <li>Also check that the dipsensing hose and nozzle is not obstructed, checking the correct passage of compressed air inside it,</li> <li>if necessary replace it with a new one.</li> <li>Replace the o-ring, clean and grease the parts.</li> </ul>				
<b>5</b> - Hydraulic cylinder test: maintain hydraulic pressure at "PT" for 30 seconds and proceed with depressurization.	<b>6</b> - Proceed with the rising\removal of any residuals.				
<b>7</b> - Recharge the fire extinguisher with new extinguishing agent.	<b>8</b> - Reinstall the dip tube and dispensing valve. Perform the operation with suitable torque wrench, making sure you have set the correct tightening torque.				
<ul> <li>9 - Pressurize the extinguisher with pliers, check that there are no pressure losses, using the appropriate leak detector.</li> <li>Reinstall the safety pin and relative seal.</li> </ul>	<b>10</b> - Screw the dispensing hose back on. Check the correct reading of the pressure gauge				
11 - Record the activity on the maintenance tag and on the maintenance register.					

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	7 di 8

© REPRODUCTION IS PROHIBITED

## 19118 - Lombardia 18260 : Wheeled Fire Extinguisher, 100 L Water + Additive

#### 5.4) Twenty-year control

If the extinguisher is decommissioned, it must be disposed of in accordance with local waste management regulations. Before disassembling or disposing the extinguisher it MUST BE DEPRUSSERIZED

by competent personnel.

The fire extinguisher must be disposed in accordance with national rules and regulations, by authorized personnel/ companies.

\*If the fire extiguisher is installed in particularly unfavorable environments, the timing can be reduced (See table 2 point 5.4)

### 6) SPARE PARTS LIST AND MAINTENANCE TOOLS

#### 6.1) List of components and spare parts

For the spare parts list see the table 1 at pag 3. For more details see web site www.emme-italia.com

#### 6.2) Inspection/Maintenance Tools

For a complete list of recommended tools see web site www.emme-italia.com. It is recommended to use instruments with controlled calibration and periodically verified (at least every 12 months) with certified sample instrument.

File name	Type of document	Fire Extinguisher Model	Date	Rele.	Check	Rev.	Pag.
19118 - Lombardia 18260_Technical manual	Use and Maintenance technical manual	19118 - Lombardia 18260	12/01/2024	M.R		1	8 di 8