

## **PRYMOS® PM10 - The new generation of EN 3-fire extinguishers of light-weight and robust Kevlar composite**

**Type: PERMANENT PRESSURE - Fire extinguishers PM10 – P9/1  
9 KG ABC-powder extinguishers**

### **1. Innovative light-weight construction for simple and safe operation**

PM10 permanent pressure fire extinguishers agree simplest handling by reduced weight with high extinguishing output, verified product safety and a long service life - maintenance-free for up to 10 years!

The PRYMOS PM10 – P9/1 fire extinguisher is an extinguishing device that has been finally inspected in the factory and is ready for operation for use in industry, commerce and administration. It weighs approx. 25% less than conventional 9 kg powder fire extinguishers of steel. The fire extinguishers are ready for use at once after pulling the safety pint. Pressurisation by the applicator is not necessary.

The general rules on behaviour in case of fire should be observed (also see notes on the subject of fire protection at [www.prymos.com](http://www.prymos.com)).

### **2. Extinguishing power 55 A / 233 B / C**

The PM10 powder extinguisher achieves high EN 2 extinguishing ratings and has 15 LE according to ASR A 2.2. In case of a sudden extinguishing effect, a blocking layer forms that mostly prevents re-ignition at solids fires (fire class A). By diffusion, ABC powder has a good extinguishing effect even in fire locations that are difficult to access.

### **3. Reduced weight from light-weight construction:**

The core of the three-shell fire extinguisher is made of a high-strength Kevlar®-reinforced HDPE-vessel. This ensures high pressure resistance and stability at a concurrently clearly lower weight (-25% in the filled condition).

The hardware was made of nickel-plated brass and therefore is mostly protected against corrosion. The hose is made in a very robust and weather-proof woven structure and suitable for sea water (MED). The suspension tab is attached to the hardware.

**Accessories: Universal wall holder / adapter for Prymos fire extinguisher PM 10 (6 l / kg and 9 l / kg), also for attachment to existing wall holders for conventional fire extinguisher models:**

Universal wall holder for holding (attaching) the fire extinguisher PM10 to existing wall holders of various manufacturers for conventional fire extinguishers of steel. This universal holder (new system) permits simple mounting of the PM10 extinguishers on -present- wall attachments. The universal wall holder permits installation without tools (is simply pushed on). The universal holder can also be screwed directly to the wall, e.g. during initial installation.

#### 4. Product safety

Three patented properties characterise the PM10 fire extinguisher technically and ensure reliable product safety:

The computer-controller Kevlar® vessel wrapping, the high-precision pressure-blown HDPE inner vessel and the massively anchored circlip for installation of the operating hardware that is tight without requiring maintenance for up to 10 years are deemed absolutely innovative.

The fire extinguishers are tested and approved to DIN EN 3 and have additionally been successfully tested according to the EN specifications for gas vessels of composites. 2 redundant magnetic pressure gauges are available for long-term inspection of the operating pressure. The special coating of the outer HP polyethylene jacket protects the inner pressure vessel against damage and UV radiation.

#### 5. Maintenance-free for up to 10 years

Use of corrosion-free vessels and fittings, as well as coordinated high-quality extinguishing agents and propellants ensure functional and operating safety for up to 10 years under regular application conditions\*.

Maintenance is not intended or necessary for a period of up to 10 years. Opening of the PM10 will cause the warranty to expire.

\*under normal site, operating and application conditions according to the danger assessment

The requirements of the ArbStättV remain unaffected.

##### - **Exchange**

After the end of 10 years, the PM10 fire extinguishers will be replaced against an equivalent number of factory-tested PM10 by Prymos upon request (e.g. upon extension of the contract). The required operational fire protection is not interrupted this way. The fire extinguishers are only serviced and inspected according to DIN 14406 by Prymos or experts authorised by Prymos and may be made ready for operation for another 10 years. The fire extinguisher must not be opened during this second 10-year life cycle either in order to preserve the warranty.

##### - **Disposal**

After a service life of 10 years, the fire extinguisher will be replaced. If a fire extinguisher is subject to increased stress for site-related/operational reasons, the service life may shorten accordingly. Disposal can take place through Prymos after the end of the agreed usage period.

#### 6. Specification

The extinguishing performance **55A / 233B / C** of the PRYMOS fire extinguisher PM10 – P9/1 for solids and liquids, as well as gas fires (fire classes A, B and C) has been successfully documented. Prymos PM10 extinguishers have been tested and certified by European certification bodies according to EN 3 standards (BSI, Apragaz, MPA). The corresponding approvals from the officially recognised test bodies for fire extinguishing agents and equipment are available. Live electrical systems at up to 1000 V can be extinguished (1 m safety distance). PRYMOS extinguishing agents meet the requirements according to DIN EN and have been tested and registered by the officially recognised inspection body for fire extinguishing agents and equipment (KB 222/14). The PM10 is highly resilient to chemicals and sea-water-proof (MED 12/UK/2856).

## **7. Technical data**

s. enclosed technical data sheet for PM10 powder permanent pressure extinguishers (page 5)

## **8. Areas of use**

The PM10 – P9/1 is recommended for use where extinguish damage is negligible but highest extinguishing performance is required due to its specific properties: Offshore, chemical & petro industry, production operations, parking garages, heating facilities, marine, outdoor premises such as operating yards, waste and disposal operations. It can be used to extinguish solids fires, liquid fires and gas fires.

## **9. Application**

Remove the fire extinguisher from the wall holder. Then the safety pin to break the seal, then pull out the safety pin. Take the hose and point the nozzle against the fire source from a distance of at least 1 metre. Push the actuation lever. Spray the extinguishing agent directly at the fire source in intervals; observe the extinguishing direction from bottom up. Observe a sufficient safety distance from the fire source. After extinguishing the flames, the fire extinguisher should be emptied further onto the burning materials.

## **10. Storage**

Store at temperatures of +5 °C to 40 °C at the destination.

## 11. Delivery packages

Fire extinguisher PM10 P9/1	
Item unit:	1
Including simple wall holder for attachment	1
Packaging units:	
Single shipping:	1
Pallet (110 x 110 cm):	50

## 12. Good for the environment – better climate balance

The PM10 fire extinguisher is nearly CO<sub>2</sub>-neutral and 100% recyclable. It is manufactured in a state-of-the-art, purity-compatible production that does not require welding, degreasing, sand blasting and painting and thus barely produces any wastes. This way, residual material disposal is not necessary; energy consumption remains low.

## 13. Certificates

PM10 fire extinguishers have been certified by several international test institutes according to the following standards:

GS Geprüfte Sicherheit	- Certificate no. SP215/14 (MPA Dresden)
DIN EN3	- Acceptance certificate SP215/14 (MPA Dresden)
BS EN3	- Licence no.KM68321 British Approvals for Fire Equipment
EN3 Standard	- Apragaz, Approval no. EN3-7:11/259
CE	- 0029
LPCB	- Loss Prevention Certification Board Ref. no. 1193a/01
MED (sea-water proof)	- 12/UK/2856

**DIN EN3**



**MPA Dresden**



**CE**  
0029



## Technical data sheet for the POWDER PERMANENT PRESSURE EXTINGUISHER

### PM10 P - 6 kg and 9 kg

**PM 10 Powder-fire extinguishers with ABC-powder**

**Light-weight and maintenance-free for up to 10 years\* by using high-strength ultra-light Kevlar® composites.**

#### AREAS OF USE:

- Outdoor areas
- Chemical and petro industries
- Production sites
- Parking garages and underground car parks
- Operating yards, waste and disposal operations
- Marine and shipping, offshore
- Heating system

#### MAIN ADVANTAGES:

- Maintenance-free\* for up to 10 years
- up to 10 years guaranteed readiness for operation\*
- 20 years' service life (pressure vessel)
- 25% weight benefit = better handling
- Very simple operation
- Low extinguishing damage
- Corrosion-free
- High resilience to chemicals
- Sea-water proof (MED) - suitable for shipping and offshore
- 100% recyclable and environmentally friendly due to no maintenance requirements\*

#### PRODUCT AND SERVICE FEATURES:

- Extinguishes fires from burning liquids and solids as well as gas fires
- Nickel-coated brass fitting in solidly anchored circlip
- Hose line in highly robust and weather-proof design
- hand lever trigger – for both carrying and triggering
- Three-shell core of high-strength Kevlar®-reinforced high-density polyethylene for highest resistance
- With suspension tab at the hardware
- Universal wall holder/adaptor - fits on any present wall holder

#### TECHNICAL DATA:

	PM10 fire extinguisher EN3	
Prymos Fireworld:	ABC - powder extinguisher	
Type	PM10-P6/1	PM10-P9/1
Approval number	SP 214/14	SP 215/14
Extinguishing agent	ABC-powder	ABC-powder
Extinguishing agent quantity	6 kg	9 kg
Total weight approx.	8.4 kg	11.7 kg
Rating	43 A / 233 B / C	55 A / 233 B / C
LE (A/B-rating)**	12 LE	15 LE
Propellant	Nitrogen	Nitrogen
Operating pressure	12 bar	12 bar
Function range °C	-30 °C - +60 °C	-30 °C - +60 °C
Approx. function duration in sec.	18 seconds	25 seconds
Ejection distance in m	5.0 m	7.0 m
Device height	570 mm	640 mm
Vessel diameter	178 mm	210 mm
Maintenance-free *	Up to 10 years	Up to 10 years
Function	Permanent pressure	Permanent pressure

\* under normal site, operating and application conditions according to the danger assessment  
 \*\* according to worksite directive ASR A 2.2

**DIN EN 3**



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