

*POWDER-TYPE SELF-ACTUATING
FIRE EXTINGUISHER*



“PSFE-1(2)”

*REGISTRATION CERTIFICATE
&
INSTRUCTION MANUAL*

CERTIFICATES AVAILABLE:

№ SSPB.RU.UP001.N00162

№ ROSS RU.BB02.N00829



*MOSCOW
2002*

1. Purpose.

Powder self - actuating fire extinguisher (PSFE) is meant for suppression without participation of man by fire-extinguishing powder of ABC type of ignitions of solid and liquid materials, oil products as well as fires of electrical equipment operating under load with the voltage up to 5000 V in small production areas, storage facilities, accommodation spaces, garages etc. with no people constantly present in them. PSFE is used instead of portable fire extinguishers or in addition to them.

PSFE is not intended for extinguishing ignitions of alkali and alkaline earth metals and materials that burn without access of air.

2. Performance attributes.

- 2.1. Capacity of space protected by one extinguisher, m³..... 5-8
- 2.2. Full mass of extinguisher, kg, not more1,2
- 2.3. Temperature of start up: PSFE - 1.....100°C
PSFE- 2..... 200°C
- 2.4. Overall dimensions (without a holder), mm: diameter 54
length500
- 2.5. Operation temperature from -50°C to +50°C

3. Delivery set.

The delivery set contains:

- fire extinguisher PSFE with a holder..... 1
- certificate and manual (per a box)..... 1

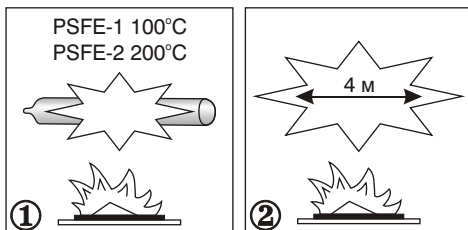
The model of PSFE is indicated on the box.

4. Arrangement and principle of operation.

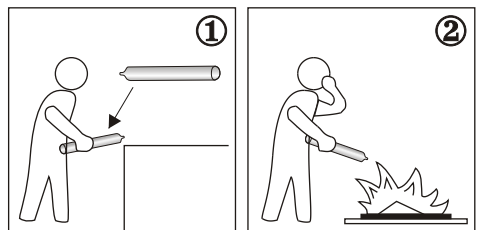
PSFE constitutes a soldered glass flask filled with fire-extinguishing powder with a gas-generating element. The extinguisher is installed in a horizontal position with the aid of a holder above the place of probable inflammation. As the center of combustion appears and the heating of the gas-generating element rises up to 100°C (PSFE-1) or 200°C (PSFE-2) the element is factorized increasing the pressure in the flask and that causes the breakage of the flask and pulse discharge of fire extinguishing powder (fig.1a).

At manual use break the flask at one of its ends and pour the powder on burning area (fig.1b).

(fig.1a) at self-actuation



(fig.1b) at hand operation



5. Safety precautions.

- 5.1. It is not permitted to operate PSFE with cracks on the flask.
 - 5.2. Never place and store PSFE near heating appliances with the temperature exceeding +50°C.
 - 5.3. Avoid the effect of sun rays on PSFE when in storage and service.
 - 5.4. Extinguishing of fire within the area of PSFE location with the aid of other means of fire extinguishing shall be carried out at the distance of not less than 4 m from PSFE. The zone of probable fragments dispersal is up to 4 m.
 - 5.5. While liquidating fire prior to PSFE actuation the work with it should be conducted after the temperature has fallen to room one but not earlier before the expiry of two hours.
- ## 6. Preparing PSFE for operation and installation on objects.

Before installing PSFE inspect it visually to be sure that there are no cracks on the glass flask of the extinguisher. For installing PSFE on objects it is necessary to release the glass flask out of the holder and after fixing the holder the flask is put back.

CAUTION! While releasing the glass flask out of the holder and putting it back take care of the tips of the flask.

PSFE is fixed aflat in the upper area of an object being protected above the point of the most probable emergence of a fire center. The height of PSFE installation is 0,1- 2,0 m above the point of probable inflammation depending on structural features of the object protected. The closeness of PSFE location to the center of inflammation determines the effectiveness and rapidity of its operation. The quantity of PSFE and places of their installation are calculated for certain rooms in compliance with normative documents.

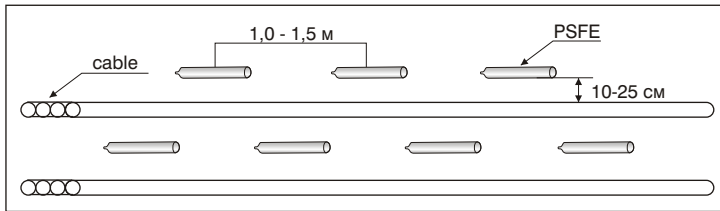
Places recommended for installation:

- closed electrical switch-gear insulator;
- open electrical units and cable wiring;
- domestic electric appliances;
- living quarters, cottages;
- sales outlets, storage rooms;
- garages, rooms for storing of inflammables;
- partition of adjacent rooms.

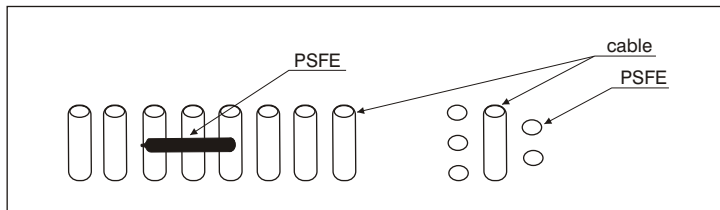
7. Maintenance works.

Visual control and hermeticity test of PSFE are carried out quarterly. For hermeticity test put the extinguisher (the glass flask) into a vessel with cold water. The absence of air blebs says about the hermeticity of the extinguisher. The surface of the PSFE flask should be periodically cleaned off dust and mug by rubbing with a gently damp rag. For ensuring of PSFE normal operation do not commit the mixing of the fire extinguishing powder with the gas-generating element.

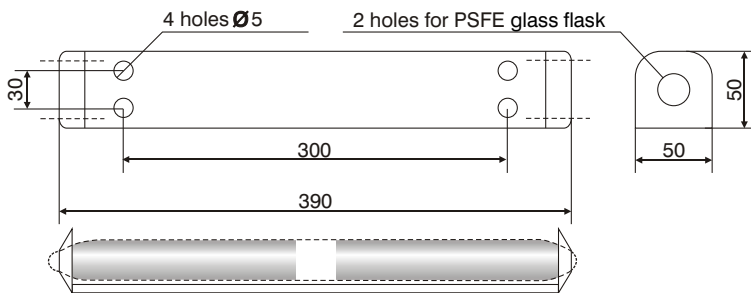
Protection of horizontal cable routings



Protection of vertical cable routings



Scheme of the fastening element (holder)



8. The producer's warranty.

Warranty assurance of the PSFE is 5 years from the day of production on conditions that the rules of operation are observed.

9. Certificate of manufacture.

The PSFE fully corresponds with TU 4854-002-08578309-93 with overpatching 2.

Date of production

Technical control division

PRODUCER:

Limited liability company "EPOTOS 1"
102-B, Altufjevskoe str., Moscow, 127349, Russia
Tel.: (095) 916-6116
www.epotos.com
epotosmail@mtu-net.ru