

OFFICE OF THE PRINCIPAL

# ASKA SCIENCE COLLEGE, ASKA

(Accredited B++ by NAAC)
P. O. NUAGAM - 761111, ASKA

DIST. GANJAM, ODISHA

Letter No. 232/2022

Date: 04/03/2012

Ph.: 06822 - 273013 (O)

Sealed Quotation are invited from interested suppliers for **five (05) no's** of fire extinguisher for our college Library as per the following specifications on or before

20.03.2022

# **Specifications:**

ABC Type (MAP 90) 2 Kg Capacity Stored Pressure

### Construction

- 1. Vessel used in the manufacturing should be constructed using Deep Drawn Technology and MIG welding.
- 2. The Diameter of shell up to 108mm.
- 3. Sheet metal thickness should not less than: 1.60MM.
- 4. There should be carrying handle with length not less than 75mm.
- 5. Material use of construction should be [Steel CR2(DC01)].
- 6. Valve Construction: Forging and Machining.
- 7. Internal Coating of Can: Epoxy Powder coating.
- 8. External Coating of Can: Epoxy Polyester Powder coating.
- 9. Gross weight should be within range 3.44kg to 3.70kg
- 10. Content mass should be 1.95kg to 2.10kg
- 11. Serial no. and date of manufacturing should be embossed on the body of the fire extinguisher.

## Performance

- 1. Each vessel needs to be checked for tensile strength upto 35 kgf/cm² and Manufacturer has to submit Hydrostatic pressure testing certificate for the same.
- 2. Service pressure and Maximum service pressure of extinguisher should be 15bar and 17.3bar respectively.
- 3. Minimum burst pressure of extinguisher shall not be less than 55bar and crack should not occur at welding upto 80bar. Actual burst pressure should be above than 150bar with no crack at welding seam.
- 4. In-house Helium Leak Detection Testing is must to ensure maintenance of Stored Pressure in the cylinder over a period of 5 years and provide certificate for the same.
- There should be a Tamper-proof a metal pin.
- 6. The fire extinguisher must have a Magnetic Pressure Gauge to enable the checking of pressure gauge's correct working without dismantling or opening the cylinder.
- Discharge time should not less than 13 Seconds.
- 8. Fire Extinguisher must have controllable discharge mechanism to provide flexibility of releasing extinguishing agent on targeted fire location.
- 9. Bulk range throw should be minimum 2.3 meters.
- 10. As per IS: 15683, Fire rating should be class A: 3A and class B: 70B.
- 11. As per EN 3-7, Fire rating should be for class A: 13A and class B: 55B
- 12. Applicable on Class A, B, C and electrically started Fire.

### Certification

- The current and valid BIS certification IS 15683:2018 needs to be submitted along with the offer.
- The Product should be certified by any EN notified body as per EN 3-7, EN 3-8, EN 3-9.
- The firm shall submit the product certificate from an EN notified body.
- Dry Chemical powder used as extinguishing agent should be Mono Ammonium Phosphate (MAP) 90% concentration.
  - The Product should be EN PED Approved and CE marked.
- The extinguisher should be pressurized using high grade Dry Nitrogen as per IS 1747 standard. OEM declaration should be submitted.
- The firm should submit the product performance test report from NABL accredited Lab as per IS 15683.

#### Co2 (Aluminum) 02 Kg.

#### Construction

- 1. Vessel used in the manufacturing should be constructed using Cold Impact Extrusion.
- 2. Diameter of shell up to 110 mm and mounted on trolley.
- 3. Sheet metal thickness should not less than: 5.0 mm.
- 4. Used/Unused readiness Indicator to identify the used extinguishers from the unused extinguishers.
- 5. Material of construction should be [Al Alloy 6061].
- 6. Valve Construction: Forging & Machining.
- 7. External Coating of Can: Epoxy Polyester Powder coating.
- 8. Gross weight should be within the range of 6.40 to 6.60 kg.
- 9. Content mass should be within the range of 1.90 to 2.00 kg.
- 10. Serial no. and date of manufacturing should be embossed on the body of the fire extinguisher.

#### Performance

- 1. Service pressure and Maximum service pressure of extinguisher should be 70 bar and 156 bar respectively.
- Discharge time should not less than 10 Secs.
- 3. Fire Extinguisher must have controllable discharge mechanism to provide flexibility of releasing extinguishing agent on targeted fire location.
- 4. Bulk range throw should be minimum 2.0 Meters.
- 5. Applicable on Class B, C & Electrical Started Fire.
- 6. As per IS 15683, Fire rating should be class B: 34 B.
- 7. As per EN 3-7, Fire rating should be for class B: 34B

## Certification

- 1. The current and valid BIS certification IS: 15683 needs to be submitted along with offer.
- 2. The Product should be certified by any EN notified body as per EN 3-7, EN 3-8, EN 3-9.
- 3. The firm shall submit the product certificate from an EN notified body.
- 4. The vessel should be PESO Approved.
- 5. The Product should be EN PED Approved and CE marked.
- 6. The Co2 Cylinder shall be conforms to all the requirement given in ISO: 7866.
- 7. The bidder must have valid PESO license to refill and store compressed gas cylinders as per Gas Cylinder rules 2004
- 8. Minimum Fire rating as per IS: 15683 Class B: 34B needs to be provided for the extinguisher.
- 9. The firm should submit the product performance test report from NABL accredited Lab.

Principal
Principal
Aska Science College,
PO: Nuagam (Aska) Ganjam