

**TECHNICAL SPECIFICATIONS/ QRs OF WATER MIST EXTINGUISHER 09/10 LTRS
CAPACITY (BACK PACK TYPE/ HIGH PRESSURE)**

Sl.	Technical Parameter	QRs/ Specification
1.	Nomenclature/ Name of product/gadget/equipment	High pressure water mist CAF fire extinguisher Back-pack type, ultra light, Carbon composite with Pet liner pressure vessel 9/10 ltrs and air cylinder.
2.	Conformity	The Water Mist & CAF(Back Pack) high pressure extinguisher shall be confirmed to EN 3-7:2004+A1:2007-08 standards The complete system shall be tested for compliance from an internationally/ nationally accredited laboratory for compliance to all 30 clauses (3.2, 3.15, 4.2, 4.3, 4.4, 4.5, 6.1, 6.2, 6.3, 7.1.1, 7.1.2, 7.2, 7.3, 7.4, 8.1, 8.2, 9.2, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6.1 & 10.6.2, 14.1, 14.2, 15.2, 15.3, 16.1, 16.2) of EN 3 - 7:2004 + A1: 2007-08 (E) Standard mandatorily applicable for the complete system."
3.	Mounting type	Backpack
4.	Configuration/ Description	It shall be mounted on a sturdy frame suitably cushioned for comfort, provided with shoulder pads for carrying as a backpack and a handle to be carried by hand. All materials used shall be of fire retardant type. Backpack shall be supplied with air cylinders.
5.	Model & make	Model Number shall be permanently marked as declared in Accredited Laboratory Test Report.
6.	Main Components:	Pressure vessel shall be hold the media with safety valve. compressed air cylinder coupled with a reducer, hose pipes for discharge of water mist media, extinguishing gun.

CONSTRUCTION:

7.	Air Cylinder Material	Ultra light Carbon composite with PET
8.	Type of Foam	Special AFFF Compound conforming for higher fire rating A55, B233, Spreading coefficient for special AFFF Compound shall be +5 minimum, concentrations shall be 6%.
9.	Commercial Brand Name, laboratory test report/ fire ratings with foam	Commercial Brand Name of the Special foam (fire extinguishing medium) as per accredited laboratory test report wherein higher fire ratings i.e A55, B233, E1000 V (Die Electric Suitability) achieved, to be declared.
10.	Characteristics of extinguishing medium of AFFF Compound with infrared spectrogram (to be furnished).	Characteristics of extinguishing medium of Special AFFF Compound shall be- Density : 1.04 (kg/cm ³ , Viscosity : 1.35 (m ² /s, pH Factor 7.8, Refractive Index 1.34 @ 20 +/- 2°C (accredited laboratory test report required)

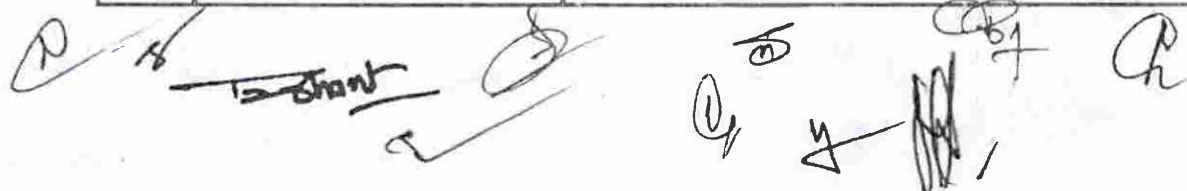
11.	Pressure Vessel Material & Capacity (Nominal Charge)	Ultra light Carbon Composite with PET Liner of 9/10 liter capacity.
12.	Minimum wall thickness of pressure vessel (mm)	Minimum wall thickness of pressure vessel should be 5 mm
13	Extinguishing gun material	Stainless Steel
14.	Weight of extinguishing gun.	Shall not more than 750 +/-50 gram.
15.	Length of standard of Hose for backpack system	Hose shall be EN marked, not less than 1.3 meters for backpack system.
16.	Weight of fully charged Backpack system	Weight of fully charged Ultra light Carbon composite with PET liner Backpack system shall be not more than 20kg.

PERFORMANCE :-

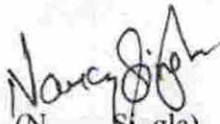
17.	Air Cylinder Capacity (Ltrs)	2 litre
18.	Air Cylinder pressure (Bar)	300 bar
19.	High Pressure Type	High Pressure Type (Dynamic Operating pressure to be tested in the accredited laboratory test report which will be considered as high pressure for as per clause No. 3.15 of EN 3 - 7:2004 + A1: 2007-08 (E) Standard.) \geq 37.6 Bar for Ultra-light Carbon composite with PET Liner vessel .
20.	Lancing Distance of Gun	More than 15 +/-2 meter
21.	Minimum operating time	25 +/-2 second
22.	Operating temperature	System shall be designed for 60 ⁰ C or more and minimum 5 ⁰ C or less and certified by the manufacturer as per Clause 7.4 of EN 3-7:2004+A1:2007-08 standards as per the accredited test report for backpack system.
23.	Fire Rating	Class A, Class B and Electrical Fire Rating with Special AFFF Compound for backpack 55A, 233B, E1000V (Die Electric suitability) with commercial brand name of fire extinguishing medium as per accredited laboratory test report for Backpack System.

CERTIFICATION:-


Sl.	Technical Parameter	QRs/ Specification
24.	Approval	PED (Pressure Equipment Directives) approval as per 97/23/EC (Encumbrance Certificate).
25.	Pressure Gauge	Pressure Vessel shall be fitted with a pressure gauge (CE Marked).



26.	NOC (No objection certificate)	No objection certificate (NOC) for Air cylinder and its valve & Pressure Vessel containing body No. from Petroleum and Explosives Safety Organization (PESO)/approval of CCE Nagpur is mandatory.
27.	Pressure Vessel	Pressure Vessel shall be CE marked from Notified body.
28.	Consent from OEM	Specific consent of the OEM for the value additions made along with a confirmation that fire ratings of the equipment would not be affected by these value additions.
29.	Test Reports	Test Report No. should be declared/ mentioned with date.
30.	Declaration about Govt. Accredited Laboratory where Test Conducted	Name of ILAC/NABL/ Central Govt. Accredited Laboratory where Test Conducted is required.
31.	Pre dispatch inspection	Pre Dispatch Inspection (PDI) of product shall be carried out by C S F Fire officers as per specification, at the vendor site where all the testing facilities are available.


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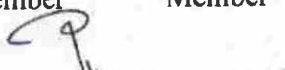

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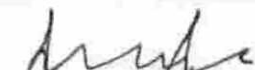

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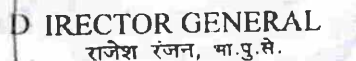

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