WATER MIST EXTINGUISHER 09 LTRS CAPACITY (BACK PACK TYPE/ HIGH PRESSURE)

SNo.	Parameters	Technical Specifications	Trial Directives
1.	**Nomenclature/ Name product/gadget/ equipment**	High pressure water mist CAF fire extinguisher Back- pack type, ultra-light, Carbon composite with Pet liner pressure vessel 9 ltrs and air cylinder.	To be checked physically by BOOs.
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 + Al: 2007-08 (E) Standard mandatorily applicable for the complete system."	To be checked and verified with relevant EN certificates.
3.	**Mounting type**	Backpack	To be checked physically by BOOs.
4.	**Configuration/ Description**	It shall be mounted on a sturdy frame suitably cushioned for comfort, provided with shoulder pads for carrying as a BOOs. 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.	To be checked physically by the BOOs.
5.	**Model & make**	Model Number shall be permanently marked as declared in Accredited Laboratory Test Report.	To be checked physically and verified with relevant certificates by the BOOs.
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.	To be checked physically by the BOOs.
7.	**Air Cylinder Material**	Ultra-light Carbon composite with PET	To be checked and verified with relevant EN & PESO certificates.
8.	**Type of Foam**	Standard AFFF Compound conforming for higher fire rating A55, B233, Spreading coefficient for Standard AFFF Compound shall be +5 minimum, concentrations shall be 6%.	To be checked and verified with relevant certificates from Govt./NABL accredited lab.
9.	**Commercial Brand Name, laboratory test report/ fire ratings with foam**	Commercial Brand Name of the Standard 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.	To be checked and verified with relevant certificates from Govt./NABL accredited lab.

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10.	**Characteristics of extinguishing medium AFFF Compound with infrared spectrogram (to be furnished).**	Characteristics of extinguishing medium of Standard AFFF of Compound shall be- Density: 1.04 (kg/cm³, Viscosity: 1.35 (m²/s, pH Factor 7.8, Refractive Index 1.34 @ 20 +/- 2°C (accredited laboratory test report required)	To be checked and verified with relevant certificates from Govt./NABL accredited lab.
11.	**Pressure Vessel Material & Capacity (Nominal Charge)**	Ultra-light Carbon Composite with PET Liner of 9 liter capacity.	To be physically checked and verified with relevant certificates by the BOOs.
12.	**Extinguishing gun material**	Stainless Steel	To be checked and verified with relevant certificates.
13.	**Weight of extinguishing gun**	Shall not more than 800 gram.	To be checked physically by BO0s.
14.	**Length of standard of Hose for backpack system**	Hose shall be EN marked, not less than 1.3 meters for backpack system.	To be checked physically and verified with relevant certificates by BOOS.
15.	**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.	To be checked physically by BOOs.
16.	**Air Cylinder Capacity (Ltrs)**	2 litre	To be checked physically by BOOs.
17.	**Air Cylinder pressure (Bar)**	300 bar	To be checked physically by BO0s.
18.	**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 + Al: 2007-08 (E) Standard.) ≥ 37.6 Bar for Ultra-light Carbon composite with PET Liner vessel.	To be checked and verified with relevant EN certificates
19.	**Lancing Distance of Gun**	More than 15+/-2 meter	To be tested physically by BOOs.
20.	**Minimum operating time**	25+/-2 second	To be tested physically by BOOs.
21.	**Operating temperature**	System shall be designed for 60°C or more and minimum 5º 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.	To be checked and verified with relevant certificates.

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22.	**Fire Rating**	Class A, Class B and Electrical Fire Rating with standard 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.	To be checked and verified with relevant certificates of EN.
23.	**Approval**	PED (Pressure Equipment Directives) approval as per 2014/68/EU (Encumbrance Certificate).	To be checked and verified with relevant certificates as per EN by BOOS.
24.	**Pressure Gauge**	Pressure Vessel shall be fitted with a pressure gauge (CE Marked).	To be checked physically with relevant certificates.
25.	**NOC certificate) (No objection**	Air cylinder and its valve & Pressure Vessel containing body No. from Petroleum and Explosives Safety Organization (PESO)/approval of CCE Nagpur is mandatory.	To be checked and verified with relevant certificates.
26.	**Pressure Vessel**	Pressure Vessel shall be CE marked from Notified body.	To be checked and verified with relevant certificates
27.	**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.	To be checked and verified with relevant certificates.
28.	**Test Reports**	Test Report No. should be declared/ mentioned with date.	To be checked and verified with relevant certificates as per EN.
29.	**Declaration about Govt. Accredited Laboratory where Test Conducted**	Name of ILAC/ NABL/ Central Govt. Accredited Laboratory where Test Conducted is required.	Firm to submit certificates from NABL/International lab for confirming.
30.	**Pre dispatch inspection**	Pre Dispatch Inspection (PDI) of product shall be carried out by CISF Fire/Delhi Fire/NDRF officers as per specification, at the vendor site where all the testing facilities are available.	To be carried out by BO0s at vendor's site.