

TIGER-VAC · II 2GD EX D IIA T3 GB / EX T IIIC T200°C DB IP6X -- LCIE 03 ATEX 6297 -- EN 17348 LC

Tiger-Vac EXP1-55 (DMB) TE



The Tiger-Vac EXP1-55 (DMB) TE is the flagship of the TE series for hangar and field operations where operator safety is critical. The Dead Man Brake (DMB) cart requires active pressure on the brake handle to roll -- release the handle and the rear brakes engage automatically, stopping the unit. This eliminates the risk of a 98 kg machine rolling away on a sloped hangar floor with 170 L of fuel inside. Same motor and flow as EXP1-55 (TC) TE (single-phase TEFC, 224 m³/h, 1550 mmH₂O, 50 mm inlet), but larger footprint (104 x 86 cm) to accommodate the DMB mechanism. ATEX II 2GD certified -- LCIE 03 ATEX 6297 with EN 17348 LC for flammable and non-flammable liquids.

APPLICATIONS

- Defueling and depuddling of military aircraft (F-35, legacy fighters) in hangars
- Recovery of JP-8, Jet A-1 and diesel spills around refueling stations
- Depot work with fuel residues in defense logistics (NSN/NATO)
- Civilian aviation MRO -- wing-tank emptying during service checks
- Chemical industry with flammable solvents (toluene, acetone, alcohols) in Zone 1/21

Technical specifications

ATEX marking	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348 LC
Internal / external zone	-- / 21
Motor type	1-faset TEFC-motor, eksplosionssikret (Ex d IIA T3 Gb / Ex t IIIC T200°C Db), 1.0 kW / 4.5 A
Airflow	224 m ³ /h
Vacuum	152 mbar (1550 mmH ₂ O)
Container	151 L
Sound pressure	78 dB(A)
Filter class	Stainless steel mesh filter
Filter type	Rustfri staa mesh-filter med clamp (part 213433) -- aktivt kulfilter (211045) som tilvalg
Primary filter	Rustfri staa mesh-filter (213433) + strainer basket 211796. Statisk ledende konstruktion (< 10 ohm).
Cleaning system	Ingen (manuel) -- mesh-filter aftages og skylles rent
Collection system	Detachable container
Material	AISI 304 rustfri staa (undtagen vogn)
IP class	IP6X
Power	1.0 kW
Current	4.5 A
Voltage	230 V / 50 Hz / 1~
Inlet	Diameter 50 mm
Dimensions (L x W x H)	1040 x 860 x 1370 mm
Weight	98 kg

Questions and answers

What is Dead Man Brake and why is it important?

Dead Man Brake (DMB) is a mechanical safety system that engages the rear brakes when the operator releases the brake handle. It means the unit CANNOT roll away without active supervision -- an important risk reduction when a 98 kg machine with 170 L of flammable contents stands on a sloped hangar floor or at an open fuel tank. The principle is the same as on industrial forklifts and locomotives: if the operator collapses, falls ill, or leaves the unit, it stops itself. DMB is required in many defense procurements following MEEP program specifications.

What's the difference between EXP1-55 (DMB) TE and EXP1-55 (TC) TE?

Both share the same motor, flow, vacuum, tank capacity and filtration. The difference is the cart: TC = Tilt Cart with tipping for emptying, DMB = Dead Man Brake with self-engaging brake. TC is optimised for easy emptying (tipping), DMB for operator safety (anti-runaway). DMB is 30 kg heavier (98 kg vs 68 kg) and has a larger footprint (104 x 86 cm vs 102 x 76 cm). Choose TC when frequent emptying is daily. Choose DMB when the unit works unattended or on sloped surfaces.

Contact and advisory

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