S Innovation

PTV

Protected Transit Vehicle

SPECIFICATION SHEET

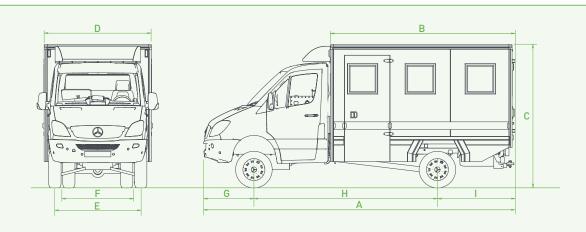


Developed specifically for use in the Oil & Gas sector, the Protected Transit Vehicle (PTV) provides a fully ATEX Zone 2 compliant passenger and cargo transport capability tailored for use in potentially hazardous explosive and toxic environments. The PTV is based upon a 4x4 Mercedes Sprinter that has been adapted for safe use in exploration and extraction operations. The vehicle system is fully ATEX Zone 2 compliant thereby providing the user with the utmost confidence and the employer with the requisite regulatory compliance and on-site safety.

The vehicle occupants are protected from explosive hydrocarbons as well as toxic "sour gas" using an integrated Gas Detection System. Through constant hazardous gas monitoring, filtration and an over-pressured interior, the PTV creates a safe working environment. When the PTV detects a hazardous gas it initiates an evacuation sequence that disables the engine, ventilation system and all non-ATEX rated equipment.

Simultaneously, visual and audible alarms inform both the occupants and surrounding personnel of the threat. The residual over-pressure and sealed interior provide protection from toxic gas ingress to allow the crew time to don their evacuation breathing apparatus. The PTV system can be integrated onto any vehicle type chosen by the customer across a wide range of variants including passenger, cargo and handling.

Α	Length	6225 mm
В	Crew Compartment Length	3600 mm
С	Height	2800 mm
D	Width	2200 mm
Е	Track Width (Front)	1700 mm
F	Track Width (Rear)	1520 mm
G	Front Overhang	1000 mm
Н	Wheelbase	3665 mm
-1	Rear Overhang	1560 mm





Variants - Personnel, Cargo, Tipping Load Bed, Panel Van Gas Detection options including - Oxygen, Hydrogen Sulphide, Carbon Monoxide, Hydrogen, Nitrogen Dioxide, Flammable 1 to 8, Methane, Propane and Carbon Dioxide



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PTV Vehicle Specification

Weight (GVW)	5000 kg	
Payload	(Personnel) 1000 kg	
***************************************	(Cargo) 2000 kg	
Kerb weight	(Personnel) 4000 kg	
•••••	(Cargo) 3000 kg	
Axle loads	Max. permissible load (Front axle) 2000 kg	
•••••	(Rear axle) 3500 kg	
Turning circle	14.2 m	
Speed	20 km/h	
Fuel capacity	100 Litres	
Towing capacity	Max. load (braked/unbraked) 2000 kg/750 kg	
Passengers	10 Crew plus driver (including breathing apparatus)	
Engine Mercede	edes 2143 cc , 4 Cylinder (in-line), 129 hp, 305 Nm Torque	
Transmission	6-Speed Manual or Automatic Transmission	
Drive	ive Rear-Wheel Drive with selectable All-Wheel Dri	
	(Torque distribution: Front axle 35%, Rear axle 65%)	
Tyres	205/75R 16C	
Electrical system	12v DC	
Temperature range	Operational -36 °C to +42 °C	

Suspension and axles

ATEX Protection

Front axle - Independent suspension, shock absorber strut independent front suspension with transverse-leaf parabolic spring and stabiliser Rear axle - Rigid rear axle with parabolic spring, stabiliser and shock absorber

Brakes

Steering

Hydraulic dual-circuit brake with vacuum booster
4 internally ventilated disc brakes
ADAPTIVE ESP® (Electronic Stability Program)
ABS (Anti-lock Braking System), ASR (Acceleration Skid Control)
BAS (Hydraulic Brake Assist), EBD (Electronic Brake Force Distribution)

Gas detection

Integrated Honeywell Sensepoint XCD RFD gas sensors Programmable trip level settings Customisable for specific hazardous gas threats

Environmental protection

Air filtration system with cartridge filter Dynamically maintained over-pressure (100 Pa) Pressure-sealed driver's cabin and crew compartment











