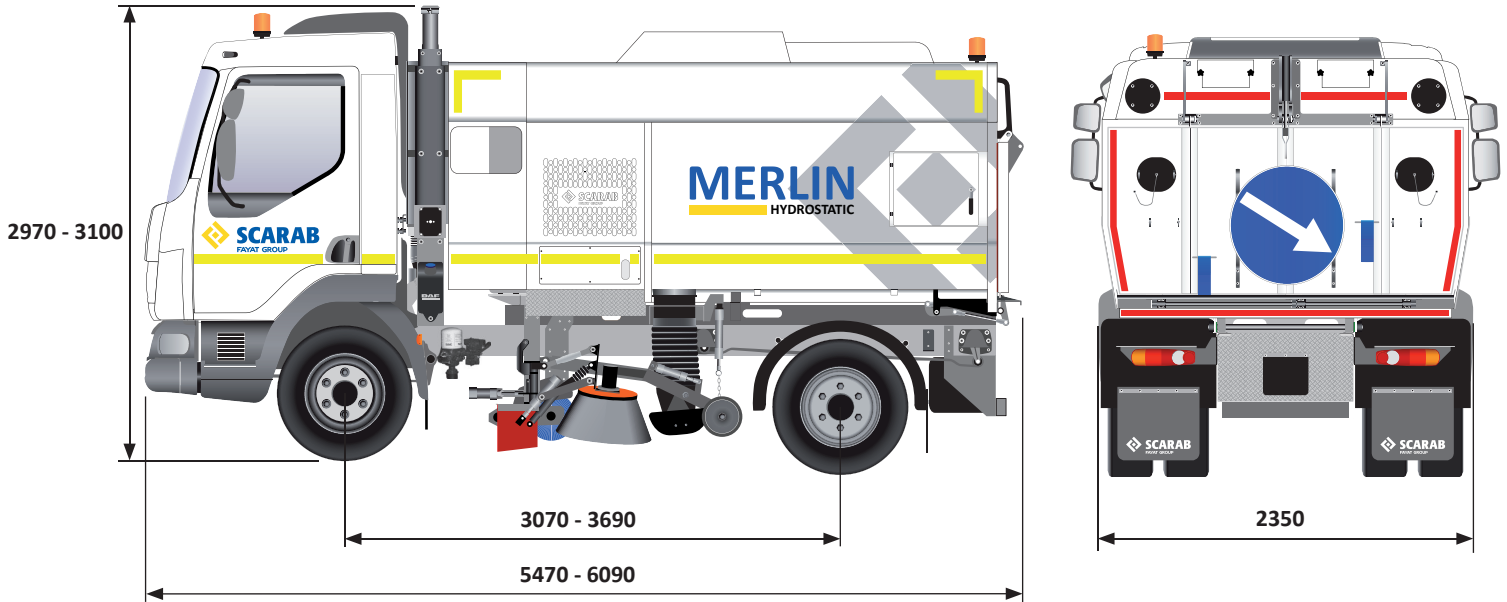


All Dimensions in mm



Dimensions representative and may vary according to chassis type selected

General Data	
Chassis Requirement	10-15 Ton GVW
Wheelbase	3070mm-3690mm
Overall Length*	5640mm
Overall Height*	2970mm
Max Height Hopper Up*	4580mm
Discharge Height*	950mm
Discharge Angle	45 degrees
Door Opening Angle	90 degrees
Filter Mesh Type	Perforated Steel
Low Pressure Pump Output	22.7 lpm / 4.8 Bar
Hydraulic Suction Filtration	125 Micron
Hydraulic Return Filtration	20 micron
Fan Pump Displacement	45cc / rev
Gear Pump(s) Displacement	23cc / rev
Suction Fan Capacity	6000 ft <sup>3</sup> /min / 170m <sup>3</sup> /min
Suction Fan Diameter	905.5mm
Sweeping Speed	0-20mph / 0-32 kph

Sweeping Equipment	
Side Brush Diameter	500mm
Widesweep Brush Diameter	320mm
Side Brush Speed	0-125rpm Fully Variable
Widesweep Brush Speed	0-125rpm Fully Variable
Side Brush Life Expectancy	80 Working Hours
Widesweep Life Expectancy	150 Working Hours
Suction Tube Diameter	250mm
Nozzle Width	740mm

Capacities	
Hopper Voided Volume**	6.2m <sup>3</sup>
Hopper Payload Volume**	5.5m <sup>3</sup>
Actual Payload Capacity*	5000 - 6000kg
Fuel Tank*	150 litres
Water Tank	1250 litres
Hydraulic Tank	25 litres
Hydrostatic Gearbox	5 litres

\* Dependent on chassis selected

\*\* All Scarab Hopper Capacities are measured in accordance with European Standard EN15429

# Technical Specification

# Merlin Hydrostatic

## Hydrostatic System

Infinitely variable speed control to optimise sweeping  
Engine needs only to be running at approx. 1200 RPM ensuring long life  
Selection of hydrostatic forward and reverse by single lever  
Vehicle speed from zero up to 15 - 20 mph (20 - 32 kph)  
20% gradeability fully laden  
Uses single (vehicle) engine to ensure low fuel consumption and emissions

## Suction Fan

905.5mm diameter  
2000rpm Standard, low noise. 2200rpm Boost, hi-power  
Capacity 6000 ft<sup>3</sup>/min (170m<sup>3</sup>/min)  
Stainless Steel standard

## Suction Nozzle

Robust all-steel construction  
740mm mouth width  
250mm diameter suction tube  
Adjustable wear-resistant flaps  
Low-Pressure water jets  
Heavy Duty rubber-tyred wheels

## Brushes

500mm diameter steel-tined side brushes  
320mm diameter polypropylene-segmented widesweep  
Fully proportional variable speed to all brushes from 0-125rpm from in the cab

## Hopper

6.2m<sup>3</sup> Gross Hopper Volume, constructed entirely of corrosion-resistant stainless steel  
Hydraulically-operated rear door with safety check valve  
Twin side loading doors  
Automatic self-deploying hopper prop  
Twin body drains at different levels  
Auto-blanking flaps to suction tubes  
Stainless Steel swing-down mesh suction filter screen  
Access for suction fan cleaning

## Hydraulic System

In plated steel piping where possible  
10 micron filters to ensure maximum protection  
Hydraulic valve block in easily-accessible location  
25 litre steel oil tank with 10 micron return filter  
Low oil automatic shut-off  
Sight glass

## Water System

Self-priming low pressure water pump for dust suppression  
Solenoid-controlled valving from the CAN Bus system

## Water Tank

1250 litre GRP water tank with large access lid for cleaning  
Sight glass with level indicator  
Hydrant connector with regulation air break

## Pneumatic System

Fitted with a pressure regulator, filter/water separator  
Pneumatic solenoid valves to control the side brush, wide sweep brush, suction nozzle and gear change  
Located for easy servicing in a protected compartment

## CAN Bus Control

The Scarab proven CANbus system, in service since 2003  
Compact panel adjacent to the driver's seat contains all controls for operating the main sweeper functions  
LCD screen displays relevant operating data and provides system diagnostics and a fault-finding facility  
Satellite control panel for frequently used operations mounted conveniently to hand, and incorporates the forward/reverse selector

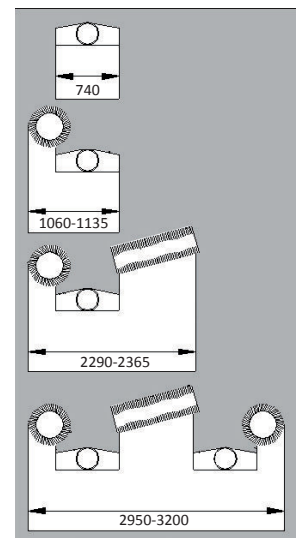
## Sweeping Widths

Suction Nozzle only

Suction Nozzle and Side Brush

Suction Nozzle, Side Brush and Widesweep

Both Nozzles, Both Side Brushes and Widesweep



## Options

A comprehensive Options List is available for the Merlin, including Hi-Volume Pumps, Water Tanks and many others. Please contact the Scarab Sales Department for more information