

Technical Specification

FOR

SARSYS SVFT Volvo V90 CFME

Continuous Friction Measuring Equipment (CFME) Technical Specification

Host Vehicle Description	
Host vehicle model	Volvo V90 B5
Engine output	250 HP
No of cylinders	Four cylinder
Engine's Volume	1,969 cm ³
Type of fuel	Petrol Mild Hybrid
Standard exhaust gas emission standard	EURO 6
Transmission	Automatic 8 gear
Drive	Front wheels
Steering Wheel Servo	Standard
ABS (ABS – Anti-lock Braking System)	Standard
EDB (EDB – Electronic Brake-pressure Distribution)	Standard
ESP (ESP – Electronic Stability Program)	Standard
Automatic Cruise control	Standard
Driver's seat height and depth adjustable	Standard
Steering wheel height and depth adjustable	Standard
Electrical Rear Glass heating	Standard
Power Windows	Standard
Climate control	Standard
Vehicle body color (Standard)	White
Optional vehicle color: any color including airport yellow	Optional
LED Roof bar	Standard

Continuous Friction Measuring Equipment (CFME) Description	
Measuring system type	SARSYS CFME
Measuring principle	Fixed Slip
Measuring wheel	No: 1
Reference wheel(s)	No: 1
Measuring wheel tire size:	4.00x8
Compatible with following measuring tire types:	
	Trelleborg T520
	Trelleborg T49

	ASTM E1551
Measuring wheel fitted to	Transmission arm mounted on vehicle Chassis
Rear axle type	Original Volvo
Free wheel between reference wheel and measuring wheel	Standard
Connection type between freewheel hub and measuring wheel	Chains
Slip ratio	15%
Friction measuring method	Torque on connection chains
Friction measuring sensor	Load cell
Means of movement generation of measuring wheel transmission arm	Load cell
Vertical load control	Hydraulics
Vertical load measuring	Load cell
Distance and speed measuring method	Pulse sensor on reference wheel axle
Inspection shaft and hatch for friction measuring system reachable from the host vehicles boot	Standard
Corrosion prevention on inspection shaft and hatch:	
<ul style="list-style-type: none"> • Zink precoating 	Standard
<ul style="list-style-type: none"> • Powder coating 	Standard
Suspension type	Volvo Original
Measuring wheel ground clearance when elevated (transport mode)	80 mm

Control & Presentation Monitor	
Type	Touch Screen alt. Ipad
Screen size	10.1"
Operating Software Language	
Operating software language	English
Operating language in onther language than English	Optional
Data collection	
Beckhoff Embedded PC Series CX5100 or equivalent with SARSYS measuring system software	

Optional CFME Equipment	
GPRS	
GPS	
Surface and ambient air temp sensor	
Follow Me Roofbar	
Repainting to airport yellow or other non standard colors	
Black paint with foiled yellow checkers	

Optional Self Watering System	
Water film distributed in front of measuring wheel	Standard
Water film thickness	1 mm
Water film beam	70 mm
Water tank size	480 l
Max continuous measuring distance (ca)	6,8000m
Tank material	Plastic
Water pump type	Mechanic
Water distribution measuring type	Water pressure regulation
Waterdistribution control and speed adjustment	Manual
Water filling connectors	Cam Lock
Water evacuation valve	Standard
Water overflow protection pipe	Standard

Features	
Standard Measuring Report in PDF	Standard
Measuring data excel enabled	Standard
Free wheel, disconnecting measuring wheel from reference wheels when system is idle	Standard
Self watering system	Optional
Data transmission via radio link	Optional
GPS positioning of vehicle and measuring points (10m averages)	Optional
Measuring Speed	20 – 120 km / h
Standard Measuring Speed(s)	65 and 96 km/h
Ground and ambient air temperature displayed in real time and in measuring report	Optional

Measuring qualifications	
Equipment is Approved to, but not limited to, measuring according to the following standards:	
Operational friction measuring	ICAO Annex 14
	SCAA
	FAA AC 150.5200
Functional friction measuring	
	ICAO Annex 14
	FAA AC 150.5320
	ASTM 2340
	ETL 02-14

Standard Accessories	
Calibration equipment	
USB Stick	

Standard Tool Kit

CE Approval	
The product is in conformity with the provisions of the following EC-directives and normative documents:	
Machinery Directive	2006/42/EC
Low Volt Directive	2006/95/EC
Electro Magnetic Compatibility (Modular approach ¹)	2004/108/EC

Documentation		
Vehicle and friction measuring equipment spare parts catalogue	English	Standard
	Other languages	Optional
Workshop drawings of vehicle components and friction measuring equipment on a USB	English	Standard
	Other languages	Optional
Vehicle and friction measuring equipment Operating and Maintenance manual on USB	English	Standard
	Other languages	Optional

Training		
Electro, hydraulic and automatic components maintenance training.		Optional
Calibration Training	In Sweden	Standard
	At Customer	Optional
Operational training	In Sweden	Standard
	At Customer	Optional

Warranty		
Vehicle Warranty	12 months	Standard
	24 months	Optional
CFME warranty	12 months	Standard
	24 months	Optional

¹ Electrical components assembled according to the manufacturer's instructions.