

SCANIA

SPECIFICATION

P-, G- and R-series

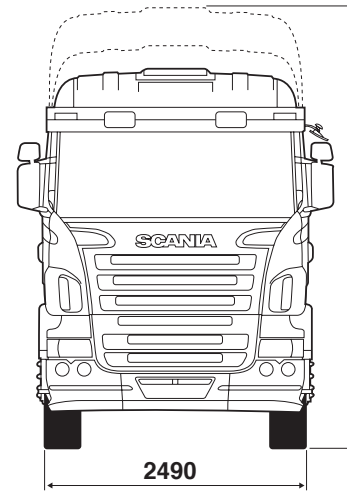
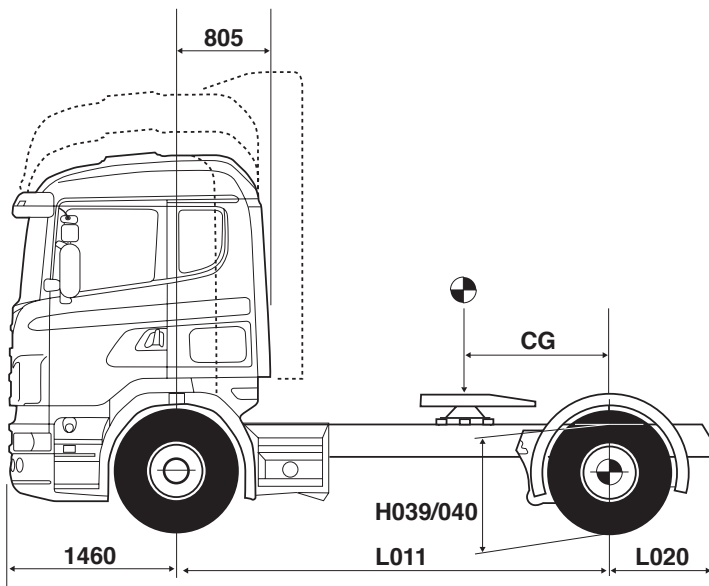
R/G 410 LA4x2MNA

Euro 6

45000Kg GTW

TWO AXLE TRACTOR

R



G	3090
R	3160
Day Cab	3330
Sleeper Cab	3400
Highline Cab	3530
Topline Cab	N/A

DIMENSIONS (mm)

L011	3300	3550	3700
L020	780	780	780
Sleeper Cab	CG Max	548	593
	CG Min	365	395
		409	
Fifth Wheel position to suit 16.5m overall length	N/A	510	660 forward of drive axle centre line

H039 unladen	H040 laden	Chassis Height
1000 mm	970 mm	Normal (N)
878 mm	854 mm	Low (L) [†]
813 mm	787 mm	Extra Low (E) [†] – N/A with 3.3m A/D. Air suspension front and rear mandatory

CG dimension for imposed load calculated for standard model at standard GB plated weights. This dimension can be varied to suit specific trailer swing clearances but may result in a reduction in imposed load. Height dimension measured to top of frame at rear axle centreline

[†]Both 'L' and 'E' dimensions assume '60 series' tyre fitment

PLATED WEIGHTS – AWR

	Front Axle	Rear Axle	GVW	GTW
Design Gross	Kg 7500 [†]	11500	19000	45000
Legal Max in GB	Kg 7100 [¶]	11500	18000	40000

[†] Front axle capacity up to a maximum of 9000 kg available as option.

[¶] Legal front axle capacity limited by tyres.

Plated weights dependent on statutory tyre limitations.

CHASSIS/CAB WEIGHTS

(Tolerance +/- 2.5%)

Axle distance	Front	Rear	Total (kg)
3300	5129	1810	6939
3550	5117	1866	6983
3700	5126	1872	6998

Chassis cab weight includes 20 litres of fuel, oil and water.

Driver not included. See overleaf for option weights.

R/G 410 LA4x2MNA

SL5451285
August 13

ENGINE (EURO 6)

Scania '13 litre' vertical six cylinder in-line turbocharged intercooled direct injection diesel with Scania XPI.

	'410'
Type:	DC 13-115
Swept Volume:	12.74 litres
Bore:	130 mm
Stroke:	160 mm
Compression Ratio:	20:1
*Max. Power:	302kW (410 h.p.) at 1900 rev/min
*Max. Torque:	2150 Nm (1586 lbf.ft) between 1000 & 1300 rev/min
Engine Management System:	EMS incorporating Cruise Control and speed limiter
Emission Control:	Scania SCR
Cooling:	Water cooled with rubber mounted 2 row radiator and electronically regulated fan
Coolant Capacity:	55 litres
Oil Capacity:	40 litres
Air Cleaner:	Dry replaceable paper element
Engine Driven P.T.O. provision:	ED120

Options:-

(1) Details as above except for the following:-

	'450'
Type:	DC13-124
*Max. Power:	331kW (450 h.p.) at 1900 rev/min
*Max. Torque:	2350 Nm (1733 lbf.ft) between 1000 & 1300 rev/min

Emission Control: Scania EGR/SCR

(2) Details as above except for the following:-

	'490'
Type:	DC13-125
*Max. Power:	360kW (490 h.p.) at 1900 rev/min
*Max. Torque:	2500 Nm (1844 lbf.ft) between 1000 & 1300 rev/min

Emission Control: Scania EGR/SCR

*With fan at max. slip

CLUTCH

Type:	Single dry plate
Operation:	Air assisted with clutch wear protection

GEARBOX

Type:	Scania GRS905 fourteen speed with synchromesh on all except two crawler gears. Incorporating range change and splitter
Oil Capacity:	16.5 litres (17.5 litres with oil cooler)

Options:-

(1) Oil cooler – standard with DC13-124 and DC13-125 engines

GEAR RATIOS

	Low Range Split		High Range Split	
	L	H	L	H
Crawler	16.41:1	13.28:1		
	11.32:1	9.16:1	7.19:1	5.82:1
	4.63:1	3.75:1	3.02:1	2.44:1
	1.92:1	1.55:1	1.24:1	1.00:1
Reverse	14.77:1			

Options:-

(1) Type: Scania GRS0905 fourteen speed overdrive range change/splitter including two crawler gears

(2) Opticruise: Gearchange management system.

REAR AXLE

Type:	Scania ADA1100
Capacity:	11500 Kg
	Pressed steel housing with magnetic oil drain plug.

Options:-

(1) Type: Scania ADA1300

Capacity: 13000 kg – F950 frame mandatory, 'H' duty class only

REAR AXLE GEAR

Type:	Scania R780
	Single reduction hypoid. Crown wheel and pinion matched during manufacture. Pneumatically operated differential lock.

FRONT AXLE

Type:	Scania AM740 I section rigid beam – AMA740 if air suspension AMA860 with air suspension on 'Extra Low' chassis
Capacity:	7500Kg
Options:-	
(1) Scania AM950 – capacity 9000 kg.	
(2) Scania AMA860 – air only – capacity 8000 kg.	

STEERING

Type:	Recirculating ball. Hydraulically assisted power steering				
Steering wheel:	Diameter 450mm. Lock to lock 4.9 turns				
Turning circle:	Kerb to kerb				
3.30m A/D	12.4m	3.55m A/D	13.0m	3.70m A/D	13.5m

SUSPENSION

Type Front:	Semi-elliptic parabolic springs with swinging shackles and threaded shackle pins. Anti-roll bar.
Type Rear:	Quarter elliptic with air bellows (A). Chassis height may be raised or lowered to assist loading. Double acting telescopic shock absorbers are fitted to both axles.

SPRING SIZE

	Front
Length:	1820mm
No. of leaves	2 x 32mm
Design Capacity	7500Kg

Options:-

(1) Air suspension on front axle – design capacity 7500 or 8000 kg.

Mandatory with 'E' Extra Low frame height.

(2) 3 x 29mm leaves – design capacity 8500 kg.

(3) 4 x 28mm leaves – design capacity 9000 kg.

WHEELS & TYRES

8.25 x 22.5 ten stud spigot mounted disc wheels fitted with 295/80R22.5 radial tubeless tyres.

Options:-

(1) 9.00 x 22.5 wheels with 315/80R22.5 tyres, (2) 11.75 x 22.5 wheels with 385/65R22.5 or 385/55R22.5 tyres - front axle only, (3) Aluminium wheels - Machined or Polished surface finish, (4) Front wheel embellishers, (5) Tyre Pressure Monitoring (TPM).

FRAME

Type:	F800-50 for 'M' class F950-50 for 'H' class and Extra Low chassis
	Flat top constant depth 'U' channel with riveted crossmembers
Sidemember Dimensions:	

F800 - 270 x 90 x 8mm

F950 - 270 x 90 x 9.5mm

Width over parallel section of frame = 770mm

Bumper: Aerodynamic incorporating FUP

Options:-

(1) Side skirts (N/A with Extra Low chassis)
– 580mm deep – N/A with XW fuel tanks
– 730mm deep

(2) Steel bumper – increases front overhang to 1510mm

(3) Centre tow pin – steel bumper only

BRAKE SYSTEM

Type:	Ventilated disc brakes on all axles. Dual circuit, full air, EC brake system incorporating Category 1 ABS and Traction Control. Electronic signalling with pneumatic back-up. Pad wear indicator. Brake pipes manufactured from either rust protected steel or high impact synthetics
Service Circuit:	Actuates all tractor and trailer brakes
Secondary Circuit:	First position of park brake lever actuates tractor spring brakes plus trailer brakes
Parking Brake:	Actuates spring chambers on both axles
Exhaust Brake:	Air actuated operated by brake pedal
Brake Antifreeze Protection:	Air dryer
Brake Wear Adjusters:	Automatic
Options:- (1) Scania Hydraulic Retarder	
(2) ESP - Electronic stability programme	

BRAKE DIMENSIONS

Pad lining area:	2 x 190cm ² on all axles
Swept area of each disc:	2 x 940cm ²

ELECTRICAL SYSTEM

Type: 24V neg (-ve) earth **Alternator:** 100A

Batteries: Twin 180 Ah

Rear H.I. lamps, Reversing lights, Battery connection – 200A.

Options:-

(1) 140Ah batteries, **(2)** 225Ah batteries – left or rear mounted, **(3)** 150A Alternator, **(4)** Dual battery system, **(5)** Bodywork electrical preparation – see separate document.

FUEL TANK

1 x 300 litre RHS aluminium
AdBlue tank on RHS - capacity 47 litres.

Options:- Capacity - 80 litres

Options:- (Minimum axle distance in brackets)

Steel –G		Aluminium – W		Aluminium – XW	
LH side	RH side	LH side	RH side	LH side	RH side
150	150	200	200	¹ 640(3550)	² 500(3700)
200	200	300	300	¹ 700(3550)	² 550(3550)
300(3700)	300(3550)	350	350	¹ 750(3700)	
		400	400(3550)	² 860(3550)	
		500	500(3700)	² 950(3550)	
		600(3550)		² 1000(3700)	
		700(3700)			

Mandatory battery position – ¹=LHS, ²=Rear – suspension dependencies may apply with XW tanks. Tank sizes can be supplied in LH + RH combinations of the above (except XW where RH is only available together with LH) but steel and aluminium cannot be mixed. Max. volume for EU cross border traffic is 1500 litres. Aluminium tanks are not available with 'E' frame height. Sides viewed from rear.

GENERAL EQUIPMENT

Fixed 5th wheel - 245mm above frame
Lead-on ramps - N/A with 3300mm axle distance
Double Manwalk with step and coupling lamp
Rear Wings
Front tow pin

Options:-

- (1)** 5th wheel position in front of drive axle centre line - 210 to 760mm in 50mm increments
- (2)** Sliding 5th wheel - 263mm above frame
- (3)** Vertical exhaust outlet – N/A with ADR to EXIII/EXIII or FL.
- (4)** ADR to EXIII/EXIII, FL, OX or AT
- (5)** Scania Lane Departure Warning (LDW)
- (6)** Adaptive Cruise Control (ACC) – retarder mandatory.

INSTRUMENTS & CONTROLS

Two man, one day, EC digital tachograph, rev-counter and gauges for coolant temperature and fuel. Central display for vehicle information and warning messages. Six speed wipers with four jet integral screen wash. Halogen headlamps adjustable from cab for correction of beam height. Warning lights for all major systems grouped within easy vision.

Instrument panel of modular design with switches and controls grouped according to usage. All instruments are back-lit and non-reflective. Impact absorbing, adjustable steering wheel with column lock.

CAB

CR19 Sleeper Cab

Please see separate specification – 'Scania Cabs' for equipment levels.

Options:-

- (1)** CR16 Day Cab, **(2)** CR19 Highline, **(3)** CR19 Topline,
- (4)** CG14 Short Cab, **(5)** CG16 Day Cab, **(6)** CG19 Sleeper,
- (7)** CG19 Highline.

P.T.O. OPTIONS

For applicability and specification information please visit :-

www.scania.co.uk/trucks/ > Bodybuilder > Bodywork Information > Power take-offs and hydraulics.

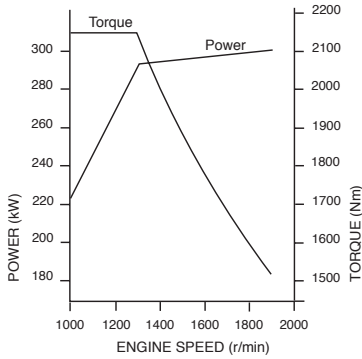
WEIGHTS FOR OPTIONAL EQUIPMENT IN KILOGRAMS (Front – Rear – Total)

Axle Distance	33	35	37
DC13-124/125 engines	+57 -4 +53	+57 -4 +53	+57 -4 +53
ADA1300 rear axle	0 +21 +21	0 +21 +21	0 +21 +21
AMA 950 front axle	+13 0 +13	+13 0 +13	+13 0 +13
Air suspension front	+40 +15 +55	+40 +15 +55	+40 +15 +55
3 x 29mm front springs	+44 0 +44	+44 0 +44	+44 0 +44
4 x 28mm front springs	+70 0 +70	+70 0 +70	+70 0 +70
9.00x22.5 Wheels + 315/80 Tyres	+18 +36 +54	+18 +36 +54	+18 +36 +54
11.75x22.5 Wheels + 385/65 Tyres	+54 N/A +54	+54 N/A +54	+54 N/A +54
11.75x22.5 Wheels + 385/55 Tyres	+46 N/A +46	+46 N/A +46	+46 N/A +46
Aluminium Wheels			
8.25x22.5	-24 -48 -72	-24 -48 -72	-24 -48 -72
9.00x22.5	-30 -60 -90	-30 -60 -90	-30 -60 -90
11.75x22.5	-44 N/A -44	-44 N/A -44	-44 N/A -44
F950 frame	+25 +25 +50	+25 +25 +50	+25 +25 +50
FUP steel bumper	+67 -13 +54	+67 -13 +54	+67 -13 +54
Centre tow pin	+29 -5 +24	+29 -5 +24	+29 -5 +24
Side skirts	+18 +17 +35	+18 +18 +36	+19 +18 +37
Retarder	+97 +24 +121	+98 +23 +121	+99 +22 +121
140Ah Batteries	-14 -3 -17	-14 -3 -17	-14 -3 -17
225Ah Batteries	+31 +8 +39	+31 +8 +39	+31 +8 +39
Dual Batteries	+22 +2 +24	+22 +2 +24	+22 +2 +24
Std. Tank Full	+109 +115 +224	+117 +107 +224	+121 +103 +224
*1 x 500l W	+62 +122 +184	+71 +113 +184	+75 +109 +184
*1 x 350 + 1 x 500l W	+204 +304 +508	+230 +278 +508	+257 +251 +508
Sliding 5th wheel	+7 +53 +60	+9 +51 +60	+11 +49 +60
Vertical exhaust outlet	+45 +12 +57	+45 +12 +57	+45 +12 +57
CR16 cab with defl.	-173 +8 -165	-173 +8 -165	-173 +8 -165
CR19 Highline cab with defl.	+40 +2 +42	+40 +2 +42	+40 +2 +42
CR19 Topline cab with defl.	+128 +7 +135	+128 +7 +135	+128 +7 +135
CG14 short cab with defl.	-201 +5 -196	-201 +5 -196	-201 +5 -196
CG16 day cab with defl.	-184 +9 -175	-184 +9 -175	-184 +9 -175
CG19 sleeper cab with defl.	-69 -4 -73	-69 -4 -73	-69 -4 -73
CG19 Highline cab with defl.	-34 -2 -36	-34 -2 -36	-34 -2 -36
Delete air deflectors – EG Series PTOs	-65 -15 -80	-65 -15 -80	-65 -15 -80
EK Series PTOs	+15 +3 +18	+15 +3 +18	+15 +3 +18
	+42 +5 +47	+42 +5 +47	+42 +5 +47

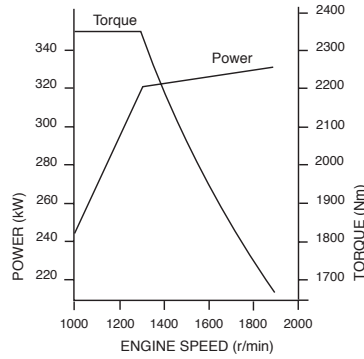
* Additional to standard tank full of fuel.

ENGINE PERFORMANCE

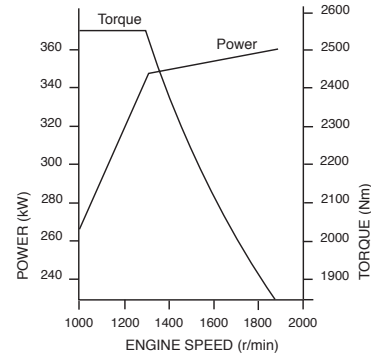
'410' DC13-115



'450' DC13-124

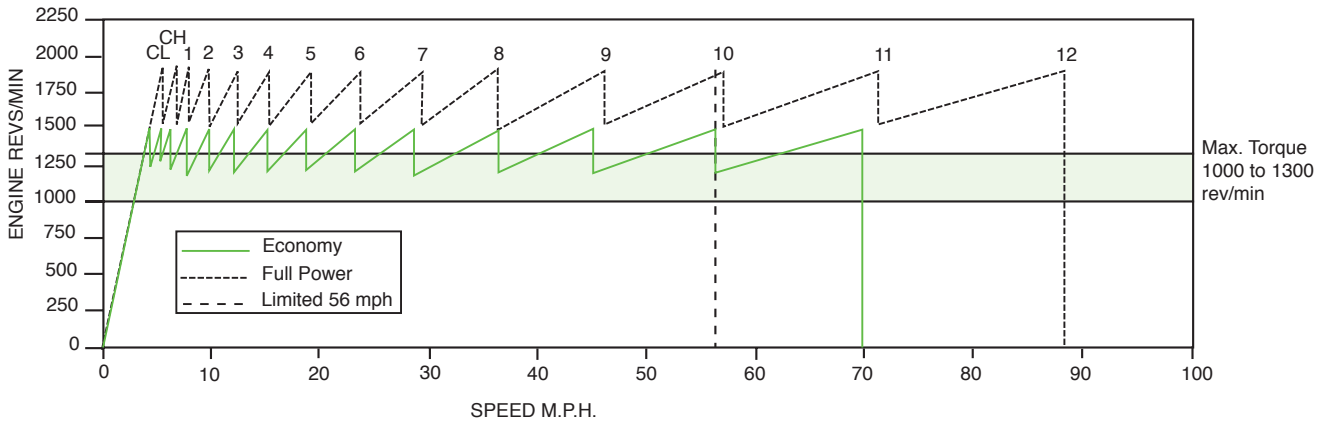


'490' DC13-125



Net engine performance to 80/1269*1999/99EC

GEAR STEP DIAGRAM



SPEED/GRADEABILITY

Gradeability may be limited by tyre adhesion.

Axle gear/ Ratio	Optimum Cruising Speed M.P.H.	Gradeability - steady climb - in percent		
		DC13-115 40T	DC13-124 40T	DC13-125 40T
R 780 2.59 Std	51 - 56	>35	>35	>35
R 780 2.71	49 - 56	>35	>35	>35
R 780 2.92	46 - 56	>35	>35	>35
R 780 3.08	43 - 56	>35	>35	>35
R 780 3.27	41 - 54	>35	>35	>35
R 780 3.42	39 - 51	>35	>35	>35
R 780 3.80	35 - 46	>35	>35	>35

Calculations assume standard specifications. Performance achieved in operation will depend on conditions, bodywork, gear ratios and tyre specification.

The specifications contained in this publication are intended as a general guide, and not as representations as to the product described, nor as binding in detail.

