Specifications
**RATINGS & AXLE LOAD LIMIT (kg)**

<table>
<thead>
<tr>
<th>Ratings</th>
<th>GVM</th>
<th>GCM</th>
<th>Front Axle</th>
<th>Rear Axle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle Load Limit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(STD) 11R22.5-148/145</td>
<td>11R22.5-148/145</td>
<td></td>
<td>6,300</td>
<td>21,000</td>
</tr>
<tr>
<td>(OPT) 295/80R22.5-152/148</td>
<td>295/80R22.5-152/148</td>
<td></td>
<td>7,100</td>
<td>21,000</td>
</tr>
<tr>
<td>(OPT) 275/70R22.5-148/145</td>
<td>275/70R22.5-148/145</td>
<td></td>
<td>6,300</td>
<td></td>
</tr>
</tbody>
</table>

*: GVM Rating are varied depend on tire size.

**CHASSIS DIMENSIONS (mm)**: All dimensions are to standard specifications and unladen chassis

<table>
<thead>
<tr>
<th>Model</th>
<th>WB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Code</td>
<td>FS1ELLG-VXN</td>
</tr>
<tr>
<td>Application</td>
<td>For Dump, Full tractor</td>
</tr>
<tr>
<td>Wheelbase</td>
<td>3,655 + 1,325</td>
</tr>
<tr>
<td>Overall length OL</td>
<td>7,695</td>
</tr>
<tr>
<td>Overall width OW</td>
<td>2,490</td>
</tr>
<tr>
<td>Overall height OH</td>
<td>3,010</td>
</tr>
<tr>
<td>Cab to rear axle center CA</td>
<td>3,630</td>
</tr>
<tr>
<td>Rear overhang (at frame end) ROHF</td>
<td>1,285</td>
</tr>
<tr>
<td>Front Chassis Height HF</td>
<td>1,000</td>
</tr>
<tr>
<td>Rear Chassis Height HR</td>
<td>1,040</td>
</tr>
<tr>
<td>Road clearance (at front axle) RC</td>
<td>270</td>
</tr>
<tr>
<td>Front Tread FT</td>
<td>2,050</td>
</tr>
<tr>
<td>Rear Tread RT</td>
<td>1,845</td>
</tr>
<tr>
<td>Turning radius on tire</td>
<td>7,900</td>
</tr>
<tr>
<td>Turning radius on wall to wall</td>
<td>8,800</td>
</tr>
</tbody>
</table>

**CHASSIS MASS (kg)**: Chassis mass quoted is to standard specifications without spare tire and std. tool set

<table>
<thead>
<tr>
<th>Chassis Mass (kg)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Total)</td>
<td>7,845</td>
</tr>
<tr>
<td>(Front)</td>
<td>4,630</td>
</tr>
<tr>
<td>(Rear)</td>
<td>3,215</td>
</tr>
</tbody>
</table>

**PERFORMANCE & GEAR RATIOS**: Calculations based on 72.0 ton GCM, 11R22.5 tire

<table>
<thead>
<tr>
<th>Max. Speed (km/h)</th>
<th>100 ※</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradeability tanθ (%)</td>
<td>31.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission Gear Ratio</th>
<th>Model</th>
<th>Gear Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>ZF 16AS2630TO</td>
<td>14.120 / 11.677</td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td>9.539 / 7.889</td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td>6.521 / 5.393</td>
</tr>
<tr>
<td>4th</td>
<td></td>
<td>4.565 / 3.776</td>
</tr>
<tr>
<td>5th (Low/High)</td>
<td>ZF 16AS2630TO</td>
<td>3.093 / 2.558</td>
</tr>
<tr>
<td>6th</td>
<td></td>
<td>2.089 / 1.728</td>
</tr>
<tr>
<td>7th</td>
<td></td>
<td>1.428 / 1.181</td>
</tr>
<tr>
<td>8th</td>
<td></td>
<td>1.000 / 0.827</td>
</tr>
<tr>
<td>Rev.</td>
<td></td>
<td>13.074 / 10.812</td>
</tr>
<tr>
<td>Rear Axle</td>
<td>DANA40</td>
<td>3.900</td>
</tr>
</tbody>
</table>

※ With speed limiter
## EQUIPMENTS

### ENGINE
- **Model**: HINO E13C VG
- **Max. output;(ISO NET)**: 353 kW (480 PS) at 1,800 r/min
- **Max. torque;(ISO NET)**: 2,157 N·m (220 kgf·m) at 1,100 r/min
- **Max. engine speed**: 1,900 r/min
- **Type**: Diesel, turbo charged, intercooled, 4-cy., vertical, 6-cyl. in-line, overhead camshaft, water-cooled
- **Combustion system**: Direct injection type
- **Bore and stroke**: 137 x 146 mm
- **Piston displacement**: 12.913 L
- **Compression ratio**: 17.0
- **Engine oil capacity**: 37.0 L
- **Fuel injection pump**: Electronic control common rail
- **Intake system**: Paper element
- **Air compressor**: Stack type, air intake
- **Bore and stroke**: 95 x 70 mm
- **SCR system (Selective Catalytic Reduction system)**: AdBlue tank capacity 28.0 L

### SERVICE BRAKE
- **Type**: Full air, dual circuit, "S" cam type, leading & trailing shoes for front and rear
- **Wheel brake ass'y**: Drum diameter x Lining width
  - Front: 406.4 x 152 mm
  - Rear: 406.4 x 203 mm
- **Air dryer**: Equipped without heater
- **ABS system**: Equipped without ASR
- **Auto brake shoes adjuster**: Equipped

### RETARDER
- **Type**: Hino engine retarder + Transmission "INTARDER"

### SECONDARY AND PARKING BRAKE
- **Type**: Spring brake acting on front and rear forward wheels, for emergency and parking purpose, manual control

### STEERING
- **Type**: Telescopic and tilt steering column with locking device Recirculating ball with hydraulic booster integral type
- **Gear ratio**: 23.4 - 25.2

### FRONT SUSPENSION
- **Type**: Semi-elliptic tapered leaf springs with double acting shock absorbers and stabilizer
- **Dimensions of springs**: Span 1,700 mm, Width 90 mm

### REAR SUSPENSION
- **Type**: Air bag suspension with double acting shock absorbers

### WHEEL AND TIRE
- **Wheel type**: 10-stud disc wheels (ISO type)
- **Rim size**: 22.5 x 8.25 - offset 165 mm (Steel wheel)
- **Tire size**: 11R22.5-148/145 R/T/AR
- **Number of tires**: Ten (10) numbers (Excluding spare tire)

### FUEL TANK
- **Capacity**: 390 L

### PROPELLER SHAFT
- **Propeller shaft ass'y**: Round bearing type

### FRONT AXLE
- **Front axle ass'y**: MF78IR series
- **Type**: Reversed Elliot, "I" section beam

### REAR AXLE
- **Type**: Tandem axle, dual drive with inter axle differential and manual differential lock, full floating single reduction, single speed by hypoid gearings

### TRANSMISSION
- **Type**: ZF, sixteen forward and two reverse speeds, overdrive, synchromesh 1st - 16th
- **Control**: Mechanical auto type

### CHASSIS FRAME
- **Type**: Ladder-shaped channel section side rails
- **Rear chassis width**: 840 mm
- **Max. section (depth x flange x thickness)**: 300 x 90 x 8.0 mm
- **Tensile strength**: 620 N/mm² (63 kgf/mm²)
- **Hooks**: Equipped for front (Removable type)
# CAB

1. **Type**
   Forward control, all steel welded construction, full floating cab suspension (front: air, rear: coil) with hand-operated oil-pump tilting mechanism
2. **Seating capacity**
   Two
3. **Driver's seat**
   ISRI 6860 7-way adjustable built-in seat belt
4. **Assistant's seat**
   Urethane foam pads, high back, reclining only
5. **Seat cover**
   Fabric
6. **Air suspension seat**
   Driver's only
7. **Seat belts**
   3-point type on driver's and assistant's seat
8. **Center console**
   Equipped
9. **Outside mirror**
   Two, flat type with heater and remote control
10. **Side under mirror**
    Equipped with heater
11. **Mirror stay**
    Door mounting
12. **Windshield wipers**
    Electric, triple, intermittent and 2-speed
13. **Sun visor and over-head console**
    Driver's only
14. **Ventilator**
    Forced type by electric blower
15. **Car heater**
    Equipped
16. **Car audio**
    Antenna only
17. **Floor mat**
    Vinyl type
18. **Air inlet filter**
    Mesh type
19. **Cab step**
    Equipped
20. **Trim**
    Full trim type (side, roof and back)
21. **Door lock**
    Key less entry
22. **Cab pockets**
    Equipped at both door side and assistant's seat
23. **Ash tray**
    Driver's only
24. **Cruise control**
    Equipped
25. **Radiator grille**
    Equipped (Paint)
26. **Quarter window garnish**
    Equipped
27. **Foot rest**
    Equipped
28. **Air bag system**
    Equipped

# INSTRUMENTS

1. **Meter and gauges**
   km-kg system
   Speedometer with trip meter
   Odometer
   Tachometer
   Fuel gauge
   Coolant temperature gauge
   Air pressure gauge
   Shift indicator
   AdBlue gauge
2. **Warning, lamps and buzzers**
   Engine over-run warning buzzer
   Engine oil pressure warning lamp and buzzer
   Air pressure warning lamp and buzzer

# ELECTRICAL EQUIPMENT

1. **Type**
   24 volt, negative earth
2. **Batteries**
   Number per vehicle 12 V x 2, series-connection
   Capacity 120 A-h \( \{432 \text{ kC} \} \) at 20-hour rate
3. **Alternator**
   Type With built-in rectifier and voltage regulator
   Capacity 24 V, 60 A
4. **Starter**
   Type Pinion shift
   Capacity 24 V, 6.0 kW
5. **Lamps**
   Headlamps
   Fog lamp (White halogen)
   Cornering lamp
   Side marker lamp
   Side flasher lamp
   Stop/Tail lamps
   Back-up lamp
   Directional indicator and hazard lamps (front, side and back)
   End out marker lamps
   Map lamp
   Step lamp (Driver's only
   Air horn (EC type)
6. **Horn**
7. **Back up buzzer**
   Equipped

# TRAILER EQUIPMENTS

1. **Trailer hand brake**
   Equipped
### OPTIMAL EQUIPMENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>EQUIPMENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGINE</strong></td>
<td>Air cleaner</td>
<td>□ Dual paper element</td>
</tr>
<tr>
<td><strong>ENGINE</strong></td>
<td>Air dryer</td>
<td>□ Equipped with heater</td>
</tr>
<tr>
<td><strong>SERVICE BRAKE</strong></td>
<td>Tire size</td>
<td>□ 295/80R22.5-152/148</td>
</tr>
<tr>
<td><strong>SERVICE BRAKE</strong></td>
<td>Rim size</td>
<td>□ 22.5 x 8.25 - offset 165 mm (Aluminum wheel)</td>
</tr>
<tr>
<td><strong>SERVICE BRAKE</strong></td>
<td>Spare tire</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>SERVICE BRAKE</strong></td>
<td>Spare tire carrier</td>
<td>□ Not equipped (temporary bracket)</td>
</tr>
<tr>
<td><strong>SERVICE BRAKE</strong></td>
<td>Tire inflator</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Cab tilt system</td>
<td>□ Electrical oil-pump tilting mechanism</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Cab mounting type</td>
<td>□ Air suspension (front and rear)</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Seating capacity</td>
<td>□ Three</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Center seat</td>
<td>□ Equipped with tray (set for three seating capacity)</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Center over-head console</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Center console</td>
<td>□ Not equipped (set for three seating capacity)</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Floor mat</td>
<td>□ Carpet type</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Sun visor and over-head console</td>
<td>□ Two, for driver's and assistant's</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Air conditioner</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Front air spoiler</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Radiator grille</td>
<td>□ Equipped (Plating)</td>
</tr>
<tr>
<td><strong>WHEEL AND TIRE</strong></td>
<td>Insect protection</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>INSTRUMENTS</strong></td>
<td>Instrument panel</td>
<td>□ Wood tone type</td>
</tr>
<tr>
<td><strong>INSTRUMENTS</strong></td>
<td>Tachograph</td>
<td>□ One day use</td>
</tr>
<tr>
<td><strong>INSTRUMENTS</strong></td>
<td>Battery capacity</td>
<td>□ 150 A·h {540 kC} at 20-hour rate</td>
</tr>
<tr>
<td><strong>INSTRUMENTS</strong></td>
<td>Alternator</td>
<td>□ 24 V, 90 A</td>
</tr>
<tr>
<td><strong>INSTRUMENTS</strong></td>
<td>Reading lamp</td>
<td>□ Fluorescent lamp</td>
</tr>
<tr>
<td><strong>ELECTRICAL EQUIPMENT</strong></td>
<td>Electrical converter</td>
<td>□ 12V (harness type)</td>
</tr>
<tr>
<td><strong>ELECTRICAL EQUIPMENT</strong></td>
<td>Headlamp leveling</td>
<td>□ Manual type</td>
</tr>
<tr>
<td><strong>ELECTRICAL EQUIPMENT</strong></td>
<td>Discharge headlamps</td>
<td>□ Equipped (with headlamp leveling and headlamp cleaner)</td>
</tr>
<tr>
<td><strong>ELECTRICAL EQUIPMENT</strong></td>
<td>Headlamp cleaner</td>
<td>□ Equipped</td>
</tr>
<tr>
<td><strong>ELECTRICAL EQUIPMENT</strong></td>
<td>Engine start device</td>
<td>□ 2kW intake heater</td>
</tr>
</tbody>
</table>

Note: All specifications of the products are with normal manufacturing allowances and tolerances. Hino Motors, Ltd. reserves the right to alter specifications at any time without prior notice. Figures of axle capacity can be changed by the operating conditions and specifications of equipments concerned. When selecting optional equipment, consult Hino technical staff as the adaptation of some of the optional equipment on production line may require an extra lead time.

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