

WATER SPRINKLER-WS28








SALIENT FEATURES

- Sturdy turbocharged Cummins diesel engine for sustained power and fuel economy.
- Allison automatic powershift transmission with torque converter eliminates operator's errors, automatically adjusts to varying loads faster, giving minimum cycle time. Hydraulic retarder increases service brake's life.
- Dependable air over hydraulic wedge actuated shoe type service brakes.
- Orbitrol full time hydraulic power steering.
- Emergency steering is a standard fitment.
- Unique hydair II suspension on front and drive offers improved operator's comfort, increases tyre life, reduces shock loads on frame and tank structures and eliminates heavy cumbersome leaf springs on front axle.
- Traction sensing differential transfers enough power to the wheel on firmer footing when other wheel starts spinning.
- Higher tank capacity for longer duration of sprinkling.
- Special anti corrosive treatment of tank interior for longer life.
- Water tank with baffles minimises surging and improves control over vehicle.
- Pressurised discharge through sprinkling nozzles, higher spreading width for effective dust settling.
- Quick adaptability for fire fighting.
- Adaptability of self filling of tank for cross country utilization.




WS28 WATER SPRINKLER SPECIFICATIONS





|  Engine | |  STEERING SYSTEM | | |
|--|--|---|---|------------------|
| Make | Cummins (India) | Type | Orbitrol, full time power steering | |
| Model | NTA-855-C - BC III - 380 | Cylinder | | |
| Type | Diesel water cooled, 4 cycle, turbo charged and after cooled | Type | Double acting piston type | |
| Net power (FHP) | 272 kW (365 hp) @2100 rpm | Quantity | One | |
| Maxmium net torque | 1450 N-m (148 kgm) @ 1350 rpm | Bore x stroke | 114.4 mm x 434.6 mm | |
| No. of Cylinders | 6, inline | Relief pressure | 12.3 MPa (125 kg/cm ²) | |
| Bore & Stroke | 140 mm x 152 mm | Turning angle | 45° | |
| Displacement | 14,010 cc | Turning circle dia. | 14.32 m | |
| Electricals | | Emergency steering | Electrically driven hydraulic pump & motor | |
| Alternator | 24V, 30 A |  BRAKE SYSTEM | | |
| Starting motor | 24 V, 7.5 kW | Service brakes | | |
| Battery | 2 x 12 V x 200 Ah | Front and rear | Dual shoe type, air-over-hydraulic, wedge actuated | |
|  POWER TRAIN | | Emergency | Air over hydraulic, system protection valves, dual relay valves and tank provide automatic brake application upon loss of operating pressure in the service brake system. | |
| Torque convertor | | Parking brake | Internal expanding type | |
| Model | TC 497 |  TYRES & RIMS | | |
| Stall ratio | 2.7 : 1 | Size | 18.00 - 25, 32 PR(E-3) tubeless, Rock grip | |
| Transmission | | Optional | 18.00 - 25, 32 PR(E-4) tubeless, Rock grip | |
| Model | AVTEC CLBT 754 | Rim size | 13.00 x 25 | |
| Type | Powershift with lock-up clutch |  SUSPENSION | | |
| Final drive | | Type | | |
| Type | Double reduction | Front | Wheel mounted, hydro-pneumatic, integral rebound control | |
| Differential | Traction sensing automatic | Rear | Axle mounted, hydropneumatic | |
| Ratio | | Cylinder | Front | Rear |
| Bevel set | 2.92 : 1 | Quantity | 2 | 2 |
| Final set | 5.5 : 1 | Bore x stroke | 216 mm x 365.3 mm | 216mm x 265.2 mm |
| Total reduction | 16.06 : 1 |  FRAME | | |
| Travel speeds (km/h) | | Type | Box section frame made of high tensile strength alloy steel | |
| Range | Forward | | | |
| 1st | 7.72 | | | |
| 2nd | 12.34 | | | |
| 3rd | 19.42 | | | |
| 4th | 28.47 | | | |
| 5th | 39.97 | | | |
| Reverse | 4.11 | | | |

WS28 WATER SPRINKLER SPECIFICATIONS





|  HYDRAULIC SYSTEM | |
|---|--|
| Hydraulic pump | |
| Type | Gear pump |
| Capacity | 232 ltr/min @2100 r/min |
| Rotation | CCW |
| Relief valve pressure - Hoist Motor | 125 kg/cm ² 140 kg/cm ² |
| MOTOR | |
| HP developed | 25 @ 120 kg/cm ² system pressure |
| Rated flow | 110 ltrs/min @ 2900 rpm |

|  SYSTEM REFILL CAPACITIES | |
|---|-----------------|
| System | Capacity (ltrs) |
| Cooling systems | 83 |
| Crank case | 40 |
| Transmission & torque converter | 32 |
| Final drive | 40 |
| Fuel tank | 397 |
| Hydraulic system | 185 |
| Water Tank | 28,000 |
| Air chambers, main and auxillary tank | 125 |
| Suspensions | |
| Front | 17 |
| Rear | 8.8 |

|  CABIN |
|---|
| Standard heavy duty all steel sound suppressed and heat insulated "ENVIRONMENTAL CABIN" engineered to provide superb working comfort and excellent visibility for maximum production efficiency. Features include : Fully visible front toughened glass tilted @ 15° pressurised cab with fresh forced air circulation and stale air exhaust, fully adjustable suspension operator's seat with safety seat belt and provided with rubberised floor mat |

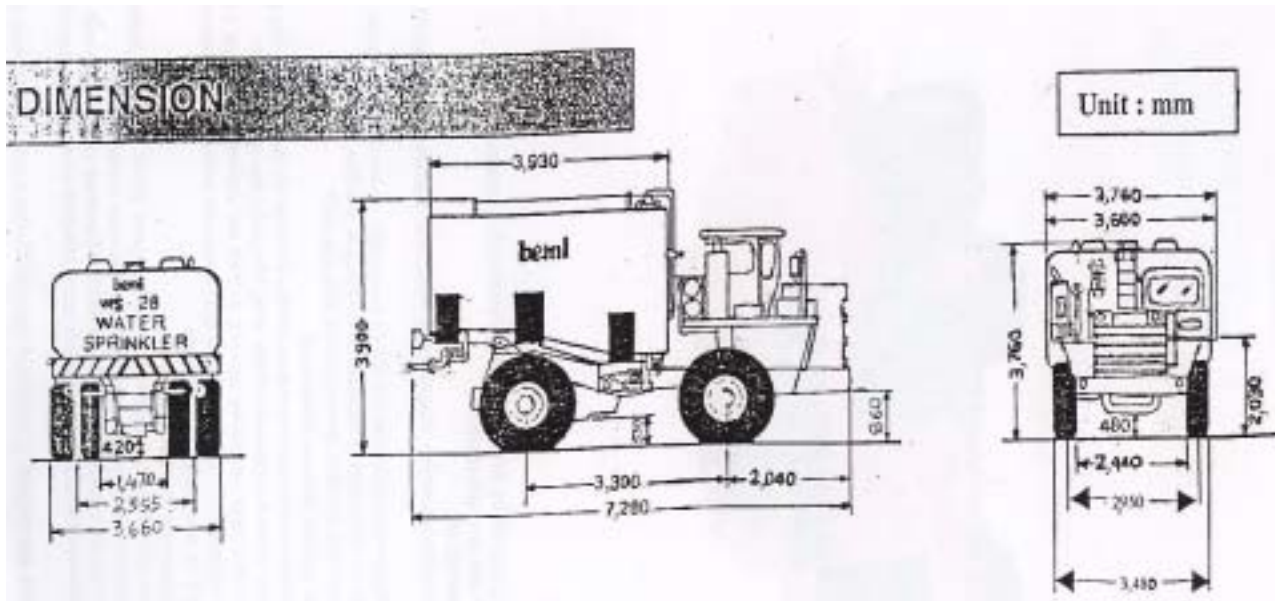
| WEIGHT DISTRIBUTION | | |
|----------------------------|-----------|-----------|
| Axle | Empty | Loaded |
| Front | 11,700 kg | 16,160 kg |
| Rear | 10,800 kg | 34,340 kg |

|  Water System | |
|---|---|
| Pump | |
| Type | Centrifugal |
| Capacity | 600 ltrs./min. @ 70 m head |
| Drive | Hydraulic motor through flexible coupling |
| Piping | |
| Suction | 80 mm |
| Discharge | 50 mm |
| Valves | Butterfly type |
| Sprinkling | |
| Pressurised Sprinkling | Constant sprinkling velocity maintained by a centrifugal pump |
| Spreading width | 10,000 mm |
| Gravity Sprinkling | Through perforated manifold connected to tank bottom |
| Nozzles | Fish tail type |
| Positions | Close jet and spary |
| Self filling | By connecting the pump suction to outside reservoir or pond through armoured hose, foot valve unit. |
| Fire fighting unit adaption | Quick connecting adaptor provided for fire fighting with canvas hose & triple purpose nozzle. |

|  TANK | |
|---|--|
| Construction | All welded reinforced, 6mm thick steel plates. Cross baffles to avoid heavy surging. |
| Interior coating | Coated with special anti-corrosive black paint. |

DIMENSION

in mm



GENERAL : Vandalism protection caps (Radiator & fuel tank), Head & tail lights, Twin air horn, Alternator, Electric starter, Stator key switch, Emergency power steering, Road condition valve, Wind shield wiper, Wind shield washer, Wheel brake lock, RH & LH mirror, Sunvisor, Co-passengers's seat, Portable fire extinguishers, Standard tool kit, Armoured hose, Parking brake valve, Tilt steering wheel and column, Fuel tank indicating 1/4, 1/2, 3/4 and full level, Foot valve unit, Fire fighting canvas hose with triple purpose nozzle

GAUGES : Ammeter, Air pressure gauges, Engine coolant temperature and Oil pressure, gauges, Tachometer, Speedometer, Air cleaner restriction gauge, Transmission oil temperature and pressure gauge, Electrical hour meter.

GUARDS : Engine & transmission belly guards, Drive line protector, Dirt and water shield for brake assemblies, Hydraulic Oil splash guard at the rear of horse collar

LIGHTING : Head light Hi-beam indicator, Backup light, Turn signal lamp, Low lubrication oil pressure indicator, High water temperature indicator, Parking brake indicator, Emergency steering lamp.

ALARMS: Low air pressure alarm, High water temperature alarm, Low lubrication oil pressure alarm, Back up alarm.

OPTIONAL ACCESSORIES : Hydrair service kit, Electronic water level indicator, Transmission oil temperature alarm, Transmission oil pressure alarm, Cold weather starting aid, Auto emergency steering, Tyre inflation kit, Radiator-coolant level indicator, Front pressurised sprinkling, Auto lube system, Auto fire system, Air conditioner, Full fledged fire fighting system attachment, Rops cabin.

Note :

- 1) Materials & specifications are subject to change without notice.
- 2) Illustrations may include optional equipment and accessories and may not include all standard accessories.
- 3) All the specifications meets relevant ISO standard.