GIA Diesel Locomotive



The diesel hydrodynamic (DHD) locomotives are available in the range of 15 to 45 tonnes.

Technical features

- High speed
- High traction force
- Easy to customize
- Can easily be prepared for tandem operation
- Hydrostatic solution
- Easy to service and maintain
- The chassis and cabin are made of heavyduty plate joined together with continous welds for maximum fatigue strength.
- The end plates consists of very thick plate adaptable to most occuring couple variants.
- The hood plates are made of thick bent plate.
- The DHD has a solid carrying axle with centre mounted conical bevel gear. The gear steps are of precission milled and lapped gear wheels in pairs. The gear housing is in cast steel with solid conical roller bearings.
- The wheel axle is carried in spherical roller bearings in the axle boxes. The bearing is tightened with labyrinth and sleeve cover.
- The axle suspension is a service free rubber element of "Chevron" type mounted directly on the axle box.

- The wheels are of "solid wheel type" with rolled steel design and shrinkage fit between wheel and axle.
- The DHD has a pneumatic brake system with fiber brake shoes acting directly on all wheels. The DHD40 has two brake shoes per wheel. The spring suspended parking/emergency brake of safety type is automatically applied when the air pressure falls.
- The locomotives have pin couplers, Willson.
- The cabin has a folding door. The front window of the cabin is supplied with windscreen wiper and washer. There are one portable fire extinguisher located in the cabin.
- The drivers seat is supplied with adjustable armrest.
- The operating system of the DHD can be a PLC system or a traditional system.

Standard

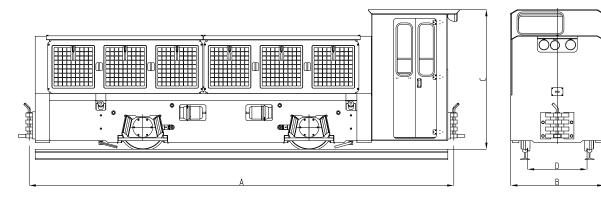
CE mark according to European standards.

Options

- Particle filter, Dinex
- Wagon brakes
- Sanding equipment
- Sprinkler system, FOGMAKER
- Willson couplers or similar
- Climate system

- Camera and monitor
- Radio controlled
- Tandem drive
- Additional cabin for rolling stock

Other options and dimensions on request.



Engine

Deutz water cooler engine including silencer and catalytic purifier.

Standard electric system

Voltage	24 V
Battery capacity	2 x 180 Ah
Generator capacity	55 A
Loud-tone horn	1x24 V 335 Hz

Lamps, 4 white and 2 red (changing when driving in rear direction)

Transmission

Clark, full power shift transmission with torque converter and gear box with 2 or 3 stages forward and reverse, gear through hydraulic wet disc clutches.

Converter with lock-up function gives good high speed performance and good motor brake.

Speed forward/reverse

Engine and transmission	184 kW 36 000	261 kW 8 000
Gear 1	0-13 km/h	0-12 km/h
Gear 2	0-31 km/h	0-21 km/h
Gear 3		0-35 km/h

Volume Data-service

Engine oil volume	21 dm³
Fuel tank	(184kW) 400 dm³ (261 kW) 230 dm³
Axle gear/each	14 dm³

Functional data

Brake area	500 cm²/wheel	
B.P, brake μ =0.16	approx. 64 kN (6400 kp)	
B.P, parking/emergency brake μ =0.13	approx. 52 kN (5200 kp)	

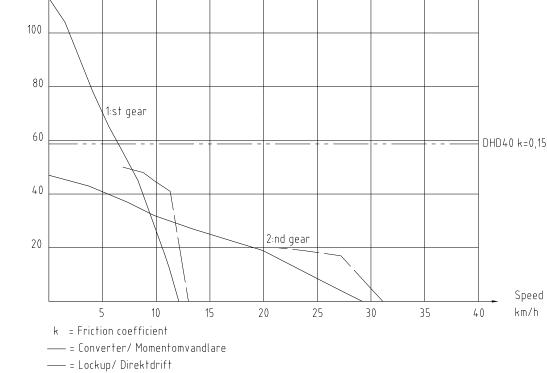
Dimensions and weights

Total length (A) excluding couplers	6 277 - 6 337 mm
Width (B)	1 550 mm
Total height from rail (C)	2 028 , 2 311 mm
Gauge (D)	750 - 900 mm
Weight	40 000 kg
Wheel diameter	920 mm

Contact us for further information.

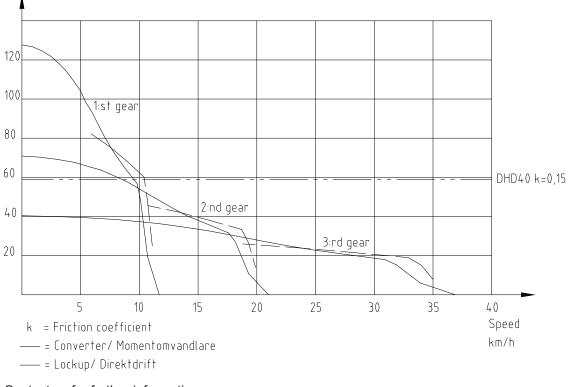
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Engine: Deutz

Type: BF6M1015C 261 kW @2100 rpm. Transmission: Clark 8 000



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