



Description:

Mining ground rail locomotive type DLP50F is designed for transportation of material or persons in horizontal mine roadways on rail tracks gauges 550, 600, 620, 630, 750 or 900 mm with max. track inclination of up to 35 %.

The locomotive may be operated in gaseous mines with hazardous atmospheric conditions 2 according to ČSN EN 1127-2 (EN 1127-2) and in areas with hazard of methane and coal dust explosion according to § 232 and § 233 Regulation ČBÚ No. 22/1989 Coll., as amended, including mines with danger of outbursts of coal and dust and mines classified as dangerous in terms of rock bumps, excluding areas with the potential of methane explosion classified according to § 242 para. 3, of the same regulation. Design of the locomotive makes it fall within group I category M2 according to Government Regulation no. 116/2016 Coll. (Directive 2014/34/EU) as amended.

The locomotive is separable into three main assembly units in order to facilitate its transport to site. The locomotive is controlled from 2 driver's cabins, which are equipped with control, monitoring and safety elements and appliances used for safe control thereof. The cabin design provides a good operator's view of the track and reliable protection against injury and adverse external conditions.

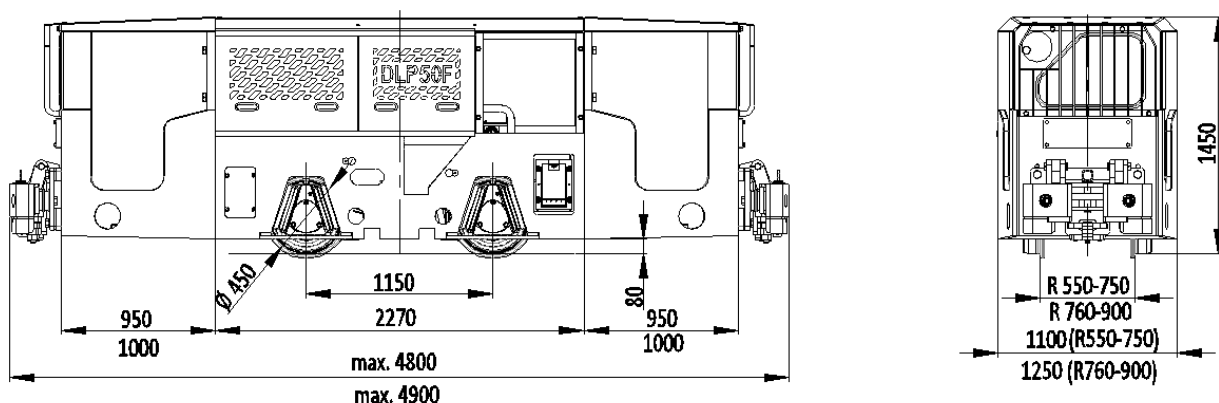
The motor part consists of a four-cylinder diesel engine CUMMINS A2300F and a hydraulic drive. The engine is adapted for use in mining conditions with exhaust and intake tract protections against initiation of methane explosion and its transfer into unprotected atmosphere. The exhaust gas is cooled by water in a special exhaust box in order to keep its temperature below 70°C. The engine is started by a hydraulic starter.

The power transmission onto travelling wheels axles is provided by hydraulic system and gears with automatic power regulation through interconnected gearboxes located on the axles.

The hydraulic system enables a smooth start with possibility of maximum torque use, a smooth change of locomotive's output parameters at a constant input parameter of combustion engine, an excellent dynamic properties, a perfect protection against overloading of the engine and efficient braking of the locomotive. The operating mode of the locomotive, speed, motor-hours, pressure and temperature values of diesel hydraulic aggregate are monitored by electronic controlling and safety system. By exceeding the pre-set values the engine shuts down and the locomotive stops.

Engine output	36 kW
Track gauge	550, 600, 620, 630, 750, 900 mm
Wheelbase	1150 mm
Diameter of wheels	450 mm
Length	4800 mm (for 550 ÷ 750 mm gauge) 4900 mm (for 760 ÷ 900 mm gauge)
Width	1100 mm (for 550 ÷ 750 mm gauge) 1250 mm (for 760 ÷ 900 mm gauge)
High	1450 mm
Length of middle part	2270 mm
Max. traction force	20 ± 5% kN
Speed - continuous regulation	0 – 20 km/hour
Total weight of fully equipped locomotive	8,2 ± 5% t
Weight of middle part	cca 5,5 t
Max. permissible track inclination	± 35 ‰
Min. curve radius	8 m
Max. permissible wheel wear diameter	406 mm

Dimensional drawing:





MINING GROUND RAIL LOCOMOTIVE DLP50F

KL-DLP50F-EN

Version Valid from

1 5.10.2015

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Ordering:

When ordering please state the requested type of device, order number, number of pieces, requested amount of documentation (Operating instructions, Spare parts catalogue etc. – two sets of documentation supplied as standard).

Ordering key:

ORDER NUMBER	TRACK GAUGE (mm)
104-00-00000-9-21	550
104-00-00000-9-01	600
104-00-00000-9-31	620-630
104-00-00000-9-11	750
104-00-00000-9-41	900
104-00-00000-9-11-E	750
104-00-00000-9-19-E	750
104-00-00000-9-01-E	600

Example of ordering:

Order of 1 locomotive DLP50F with wheel track 600 mm with 2 sets of documentation.

TYPE	ORDER NUMBER	QTY	DOCUMENTATION	SPECIFIC REQUESTS
Locomotive DLP50F	104-00-00000-9-01	1	2 SETS	

Delivery date: 3 months from confirmation of the binding order



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