

**Description:**

The ground rail locomotive PLP50F is traction equipment for transporting materials or persons in ground mines on rail tracks with the track gauge of 600 – 900 mm with the maximum track gradient of 35‰.

The locomotive has been designed for use for the equipment group II (non-mining) category 3 as per the European Parliament and Council Directive 94/9/EC and Governmental Decree No. 23/2003 Coll.

The locomotive is demountable into two main assemblies in order to facilitate its transport to the site. The locomotive is controlled from the cabin, which is equipped with controlling, handling and safety elements and appliances used for safe control thereof. The cabin design guarantees a good operator's view of the track and reliable protection against injury and adverse external effects. The locomotive is equipped with four-cylinder diesel engine Cummins A 2300 with hydrostatic transmission. The exhaust gases go through the exhaust-gas catalyst and spark arrester. Engine is started by an electric starter. The power is transmitted to the traveling wheel axle by mechanical transmission installed on axles. The hydrostatic transmission is ensured by a system of direct hydraulic engine control, which ensures the engine output regulation in the optimum working mode based on the locomotive load and pressure in the hydraulic system. The locomotive working mode, speed, machine-hours made, pressure and temperature values of diesel-hydraulic unit, breakdowns, etc. are monitored by the electronic control and safety system. When the values are exceeded (e.g. when the cooling liquid temperature is exceeded) or in case of a breakdown, the engine switches off and the locomotive stops.



# GROUND RAIL LOCOMOTIVE PLP50F

**KL-PLP50F-EN**

Version | Valid from

0 | 5.5.2009

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**Technical parameters:**

Track gauge	R = 600 ÷ 900 mm
Drawing force	20 ± 5% kN
Speed	0 – 18 km per hour
Number of driven axles	2
Wheel base	1300 mm
Wheel diameter	450 mm
Clear height above track	80 mm
Engine cooling	forced water system
Engine lubrication	pressure
Injection pump control	electro-mechanical
Direction control	electro-hydraulic
Brake control	hydraulic
Operating environment temperature	-30 °C to + 40 °C (limited by use of cooling liquid)

**Engine**

Diesel engine type	Cummins A 2300
Engine rating	36 kW
Maximum speed	2800 rpm
Idle speed	900 rpm
Number of cylinders	4
Cylinder volume	2290 cm <sup>3</sup>
Engine cylinder capacity	2,3 l
Specific fuel consumption	245 – 254 g/kW
Fuel type	diesel fuel
Engine emission class	TIER 4

**Operating media**

Fuel tank	70 l
Hydraulic oil tank	80 l
Engine cooling system	20 l
Sandblast systems	10 + 10 l
Engine oil filling	7 l

**Locomotive dimensions and weight**

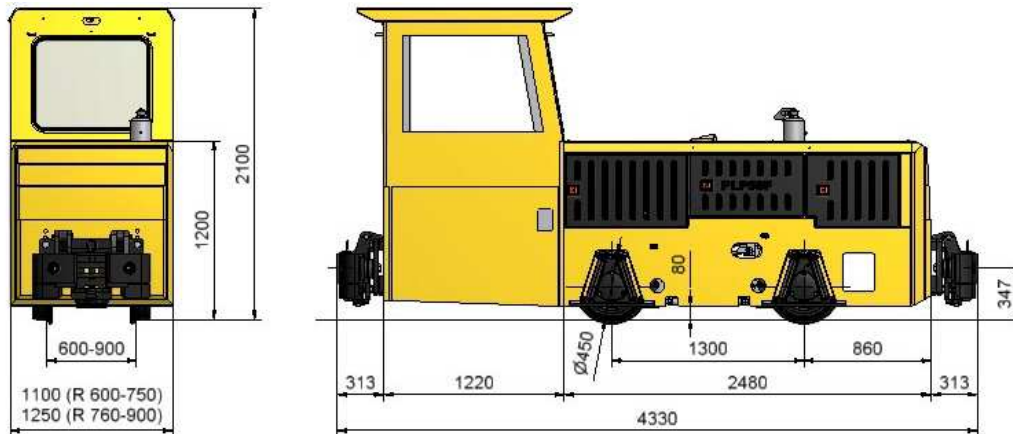
Length (maximum with buffers)	4330 mm
Length (without buffers)	3700 mm
Width	1100 mm (R 600÷750), 1250 mm (R 760÷900)
Height	2100 mm
Weight	8,2 ± 5% t

**Track parameters**

Maximum track gradient	35‰ (35:1000)
Minimum track curve radius	10 m



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**Dimensional drawing :**

**Ordering:**

In the order, please specify the required machine type, ordering No. according to the key below, quantity, specific requirements (electronic form of documentation) and required number of the technical documentation sets (Operation Instructions, Spare Parts Catalog, etc. – as a standard, we supply 2 sets of this documentation) and specific requirements (such as track gauge of 620 mm).

**Ordering key:**

TYPE	TRACK GAUGE	ORDERING NUMBER
PLP50F	600	105-00-00000-9-04
PLP50F	900	105-00-00000-9-24

**ATTENTION!** A track gauge outside the range of 600 – 900 mm only based on a special order, the order number will be allocated based on a binding order and the lead time for such locomotive is specific!

**Example of ordering:**

Order for 1 ground rail locomotive PLP50F with a track gauge of 600 mm with supply of 3 technical documentation sets.

MACHINE TYPE	SUPPLY NUMBER	ITEMS NUMBER	ACCOMPANYING DOCUMENTATION	SPECIFIC REQUIREMENTS
PLP50F	105-00-00000-9-04	1	3 SETS	

**Delivery date:** 16 weeks from confirmation the definite order

**Customs classification:** 8602 90 00 00