



PFL 20

Compact load haul dumper for use in mining and tunnel construction

- High breakout forces
- High efficiency
- High productivity
- Convenient and intuitive controls
- Quick and easy maintenance

Technical data

1120-00-000 - 17.06.2025

DEFINITION OF OPTION / OPTIONAL EQUIPMENT

13667-2

In the following, the selectable equipment of the machine is identified by the terms "option" or "optional equipment."

The option describes equipment that can be selected in addition to the standard machine.

The optional equipment describes equipment that replaces other equipment on the machine.

- 3-point safety entry
- Non-slip and color-contrasting entrances and exits
- Articulated joint lock
- Swing arm lock
- Brake test function

The following happens automatically when the driver is absent:

- Travel drive switches to neutral position
- Parking brake is activated
- Steering is deactivated

MAIN FEATURES OF THE MACHINE

13223-4

Compact load haul dumper for use in mining and tunnel construction

Bucket volume *	2.0 m ³
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* Other options available

Breakout force	85 kN
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Tipping load	9,500 kg
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Lifting time	4.5 s
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Lowering time	3.5 s
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Dumping time	2.5 s
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- Z-kinematics with two lifting cylinders and one tilting cylinder

13245-4

SAFETY EQUIPMENT

All machines are designed and manufactured in accordance with the applicable legal requirements. They offer a correspondingly high level of safety for users.

- ROPS/FOPS protective roof
- Locking battery master switch
- Emergency stop button: one on the driver's platform, one outside
- Automatic shutoff when engine-specific parameters are exceeded
- Acoustic reversing signal

OPERATING CONDITIONS

12998-5

Permitted environment temperature *	-20 °C to +40 °C
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** Observe the cold-start limit temperature of the engine*

Permitted longitudinal gradient, maximum	35 %
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Operating altitude without reduction in power, maximum	< 1,500 m
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WEIGHTS AND LOADS

13224-2

Operating weight *	11,500 kg
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Permissible payload, maximum *	4,000 kg
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Permitted front axle load, maximum	10,500 kg
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Permissible rear axle load, maximum	7,000 kg
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** Depending on selected options and optional equipment*

CHASSIS

13225-2

Swivel angle, maximum	±10°
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- Divided chassis with articulated steering
- Fixed front axle and oscillating rear axle
- Rear towing eyes
- Transport lugs for assembly and shaft transport

ENGINE

13227-4

CUMMINS QSB 4.5L-C140 T3 diesel engine

Manufacturer	CUMMINS
Type	QSB 4.5L-C140 T3
Emissions stage EU	Stage III A
Emissions stage USA	EPA Tier 3
USA certification	MSHA
Canada certification	CANMET
Output	104 kW
At speed	2,500 rpm
Alternator	24 V 95 A
Starter motor	24 V 8 kW
Cold start limit temperature	-15 °C

- Catalytic converter with measuring points
- Fuel prefilter and fuel fine filter with water separator
- Dry air filter with pre-filter

ENGINE (OPTIONAL EQUIPMENT)

13228-6

Diesel engine DEUTZ TCD 4.1 L4

Manufacturer	DEUTZ
Type	TCD 4.1 L4
Emissions stage EU	Stage V
Emissions stage USA	EPA Tier 4F
Output	105 kW

At speed	2,200 rpm
Alternator	28 V 100 A
Starter motor	24 V 4 kW
Exhaust gas aftertreatment	DOC DPF SCR
Cold start limit temperature	-15 °C

- Fuel prefilter and fuel fine filter with water separator
- For fuels with sulfur content < 10 mg/kg
- Manual fuel feed pump
- Dry air filter with pre-filter

13230-1

FUEL SYSTEM

Fuel tank capacity	120 L
■ Electrical fill level indicator	

13231-2

TRAVEL DRIVE

Manufacturer	DANA
Type	24.300
Driving speed:	
1st gear	5 km/h
2nd gear	10 km/h
3rd gear	25 km/h
Tractive force (loaded):	
1st gear	140 kN
2nd gear	60 kN
3rd gear	20 kN
Climbing ability (loaded):	
1st gear	>100%

Technical data

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2nd gear	42 %
3rd gear	12 %

- Hydrodynamic travel drive
- "Full power shift" transmission
- Automated transmission control
- Single-stage torque converter
- Drive reversible under load
- Continuous all-wheel drive

AXES

13232-3

Manufacturer	KESSLER
Front axle type	D71
Front axle differential	LS 30%
Rear axle type	D71
Rear axle differential	LS 30%

SERVICE BRAKE

13233-1

- Spring-applied, hydraulically released (SAHR)
- Oil-immersed multi-disk brakes

PARKING BRAKE

11332-1

- Spring-applied, hydraulically released (SAHR)
- Hand pump to release the brake in case of system failure

EMERGENCY BRAKE

13234-1

- The parking brake also acts as an auxiliary brake

TIRES

13247-1

Tire size	12.00x20
Tire filling	Air

TIRES (OPTIONAL EQUIPMENT)

13248-1

Tire size	12.00x20
Tire filling	PUR

STEERING

13235-1

- Hydraulic articulated steering with a double-acting cylinder
- Joystick steering
- Emergency steering

HYDRAULICS

13236-1

Hydraulic tank capacity	90 L
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- Inspection glasses for min/max indication
- Temperature sensor
- Electrical fill level monitoring
- All fittings as JIC version

ELECTRICS

13237-1

Supply voltage	24 V
Number of batteries	2 pcs.
Battery voltage	12 V
Battery charge	155 Ah

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ELECTRICS (OPTIONAL)

- Jump start socket
- Enhanced sealing of the connectors with grease filling and sealing tape

12822-3

Driver's seat

- Lap belt
- synthetic leather cover
- Adjustable backrest and seat cushion
- Height adjustable
- Mechanical suspension

LIGHTING

All headlights and lamps as LED variants:

- Four work lights at the front and rear, two each for close-range and long-range illumination
- Two work lights on the canopy, directed to the rear
- Two yellow strobes
- Rear working lights active while reversing

13238-3

LIGHTING (OPTIONS)

- Turn signal lights red / green

13244-2

DRIVER'S STAND

13239-7

Open cab

- Open cab with hatch
- ROPS/FOPS certified
- Front protective grille
- Interior lighting
- Reading lamp
- Document box
- Joystick operation of the kinematics, travel drive and steering
- All drive relevant switches, displays and controls are located within reach of the operator

Diagnostic display 4.3"

- Active faults and fault history
- Parameter changes with authorization levels
- Miscellaneous engine data and operating data

DRIVER'S PLATFORM (OPTIONAL EQUIPMENT)

13241-3

Closed cabin

- Closed cab with door
- ROPS/FOPS certified
- Windshield made of laminated safety glass
- Wiper/washer system for windshield
- Heating
- Ventilation
- Interior lighting
- Reading lamp
- Ventilation for windshield
- Document box
- Joystick operation of the kinematics, travel drive and steering
- All drive relevant switches, displays and controls are located within reach of the operator

Driver's seat

- 3-point seat belt
- synthetic leather cover
- Adjustable backrest and seat cushion
- Height adjustable
- Mechanical suspension

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DRIVER'S PLATFORM (OPTIONAL)

13243-3

- Air conditioning system
- Reversing camera system
- Vandalism protection
- Reversing signal, can be acknowledged
- Driver's seat contact switch
- Driver's seat belt contact switch
- Brake test function
- Engine start warning with delayed start *

* Only in conjunction with the radio remote control option

WORK EQUIPMENT

13249-2

ST bucket

Volume, maximum
(for bulk density 1.9 - 2.0 t/m³):

Heaped	2.0 m ³
Level	1.7 m ³

WORK EQUIPMENT (OPTIONAL)

13251-2

LD bucket

Volume, maximum
(for bulk density ≤1.5 t/m³):

Heaped	2.5 m ³
Level	2.1 m ³

HD bucket

Volume, maximum
(for bulk density 2.1 - 3.0 t/m³):

Heaped	1.6 m ³
Level	1.3 m ³

FIRE PROTECTION

12818-6

- Handheld fire extinguisher

FIRE PROTECTION (OPTIONAL EQUIPMENT)

12993-3

- HRD fire-extinguishing system (PROTECFIRE) with manual release and dry extinguishing agent
- HRD fire-extinguishing system (PROTECFIRE) with automatic release and dry extinguishing agent
- HRD fire-extinguishing system (ANSUL) with manual release and liquid agent
- HRD fire-extinguishing system (ANSUL) with automatic release and liquid agent
- Portable fire extinguisher (ANSUL) with 7.7 kg of dry extinguishing agent

PAINTWORK

13866-1

Cab/chassis color	RAL 1007
Drive components color	RAL 9005

ACCESSORIES

12249-5

- Two wheel chocks
- Two triangular safety reflectors
- Tool kit with bag
- Safety helmet and ear protection
- First aid kit

ACCESSORIES (OPTIONS)

13246-3

- Spare wheel
- Expanded tool set
- Central lubrication system
- Folding railing on the rear carriage

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Remote control operation

- Robust
- High wearing comfort
- Reliable
- Coordinated displays and control elements

DOCUMENTATION

- A printed operating manual in the local language in the document box
- Operating instructions, spare parts list and wiring diagrams in electronic form via online access

11344-3

DOCUMENTATION (OPTIONAL)

- An additional operating manual in local language, in printed form, included with the machine
- A spare parts list in local language or English, in printed form

12825-4

MACHINE SOFTWARE

- Software user interface language executed in national language

12263-2

MAINTENANCE PACKAGES (OPTIONAL EQUIPMENT)

- Service package, 2000 operating hours
- Service package, 3000 operating hours
- Service package, 5000 operating hours

12824-3

PAUS CONNECT CLOUD (OPTIONAL)

11355-8



The PAUS CONNECT CLOUD collects and visualizes data, messages or location information of the machine.

The data is transmitted to the cloud using a built-in telemetric unit.

Your advantages:

- Faster service
- Life cycle cost management
- data transmission via existing WLAN and/or mobile phone networks
- intermediate storage of all data in the absence of connectivity (up to 30 days)
- Access to the PAUS CONNECT CLOUD
- remote diagnosis/remote maintenance
- statistical application evaluation
- vibrational monitoring
- individual evaluations and statistics

CUSTOMER SERVICE

11353-2

Repair work and maintenance work are central points in customer care. Here, PAUS is broadly positioned and offers its customers and dealers worldwide an extensive service program. Trained employees are available on our service hotline, as are competent contacts at our local dealers.

11354-2

SPARE PARTS

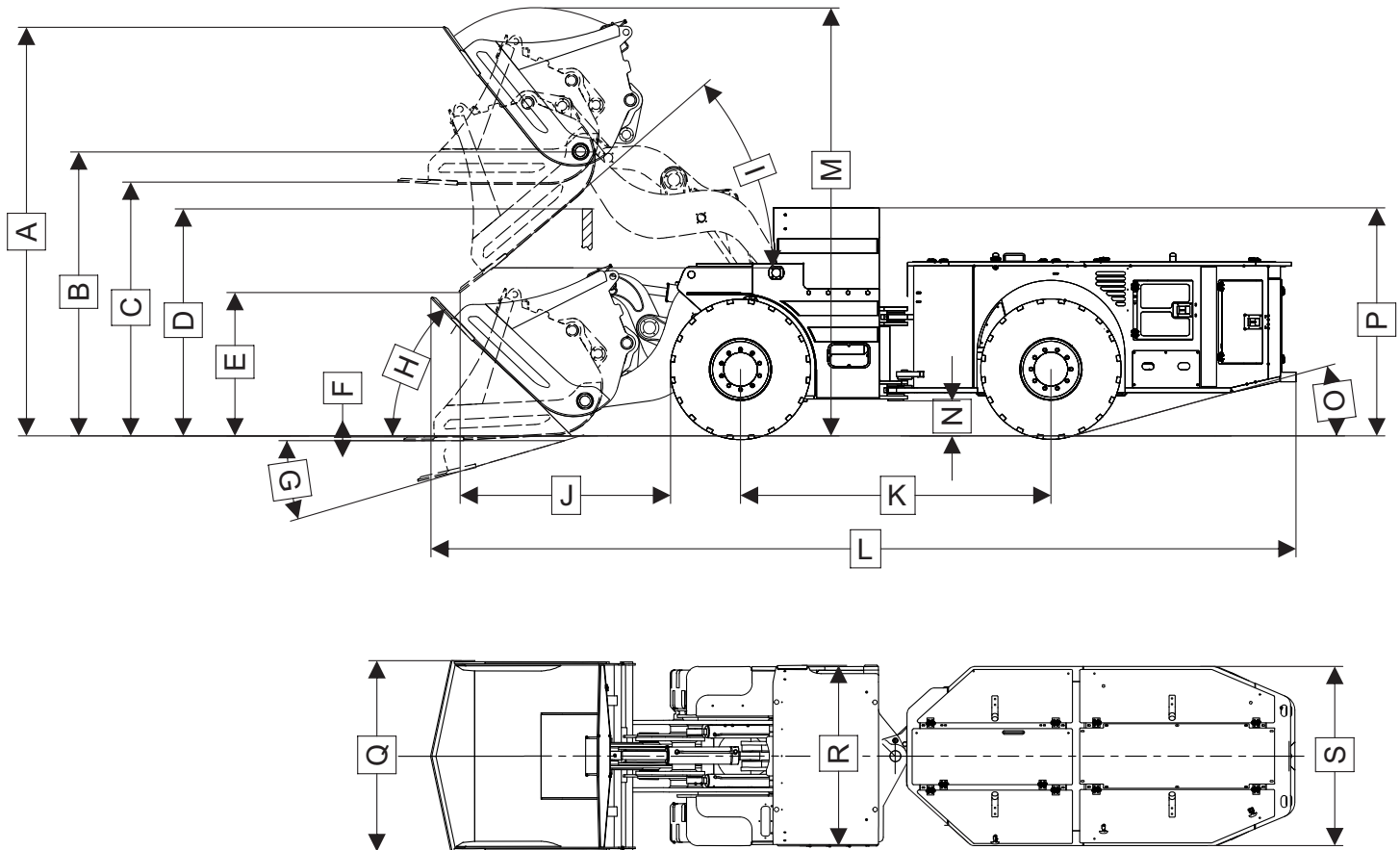
We attach great importance to a high level of availability of PAUS spare parts. In addition to maintenance and service parts, which are available at any time, customers and dealers are able to purchase spare parts for engines, axles, transmissions, etc. easily and quickly through us. Benefit from our on-line catalog with refined spare parts lists.

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DIMENSIONS

11145-4



250430-01

Dimension	Value	Unit
A	3,600	mm
B	2,550	mm
C	2,280	mm
D	2,150	mm
E	1,380	mm
F	62	mm
G	13	°
H	45	°
I	40	°

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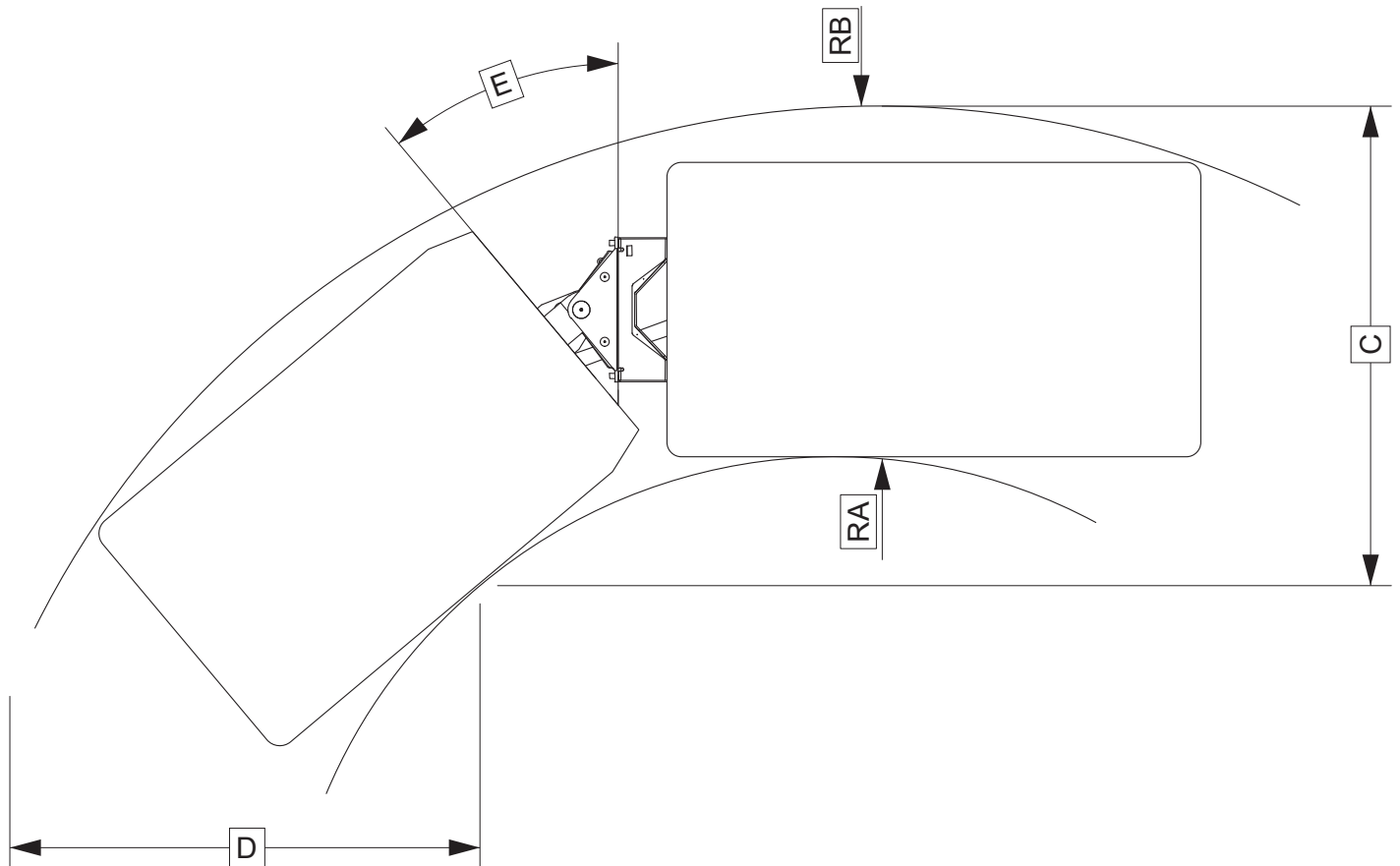
Dimension	Value	Unit
J	1,650	mm
K	2,600	mm
L	7,250	mm
M	3,720	mm
N	260	mm
O	13	°
P	1,890	mm
Q	1,600	mm
R	1,520	mm
S	1,500	mm

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TURNING RADIUS

5286-3



The illustration may not match the scope of delivery

Dimension	Note	Value	Unit
RA		2450	mm
RB		4700	mm
C		2950	mm
D		2950	mm
E	Steering angle, maximum	44	°