



## PFL 10

### Loading solution for mining

- 🔧 **Highest breakout force in its class**
- 🔧 **Low operating costs per metric ton**
- 🔧 **Small envelop size with high payload**
- 🔧 **Side entry for maximum operator safety**
- 🔧 **High efficiency** due to high performance drive line technology

## Technical data

1105-00-000 - Rev.11

### MAIN FEATURES

Z-Kinematic, two lifting cylinders, one tipping cylinder	
Bucket volume:	
heaped	1.3 m <sup>3</sup>
struck	1.1 m <sup>3</sup>
Traction force	50 kN
Tipping load	8,000 kg
Raising time	4.0 s
Lowering time	3.0 s
Dumping time	2.5 s

### OPERATING CONDITIONS

Operating temperature	-20 °C *up to +40 °C
Permissible longitudinal gradient	max. 35 %
Operating altitude above sea-level	< 1,500 m
* note cold start limit temperature of the diesel engine	

### CHASSIS

Divided chassis with articulated-joint	
Rigid mounted front axle and oscillating rear axle	
Angle of oscillation	+/- 8°
Towing eye rear	
Lifting eyes for assembly and shaft transport	

### WEIGHTS AND PERMITTED AXLE LOADS

Total operating weight	9,000 kg*
* depending on selected options	
Payload	2,700 kg
Front axle load, loaded	8,500 kg
Rear axle load, loaded	5,500 kg

### DIESEL ENGINE

#### Diesel / Deutz BF4M 2012 C

Exhaust stage	EU stage II / EPA Tier 2
Power	84 kW at 2,000 rpm
Exhaust system	Catalytic with measuring points
Generator / Starter	28 V, 55 A / 24 V, 4 kW
Cold start limit temperature	-15 °C
Fuel prefilter and fuel fine filter with water separator	
Engine monitoring and operating data on diagnostic display	
Dry air filter with pre-filter	

### FUEL SYSTEM

Fuel tank capacity	110 l
Electric level indicator	

### AXLES

Manufacturer	Kessler
Type	D71
Differential	open

### STEERING

Hydraulic-articulated steering with one double-acting hydraulic cylinders	
Joystick steering	
Emergency steering	

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1105-00-000 - Rev.11

### DRIVE LINE

Hydrostatic drive

Reversible under load

All wheel drive

Manufacturer Danfoss

Type H1

Drive performance:

- 1<sup>st</sup> Gear 5 km/h
- 2<sup>nd</sup> Gear 18 km/h

Traction force /

Gradeability:

- maximal 70 kN / 75 %
- 1<sup>st</sup> Gear (5 km/h) 32 kN / 29 %
- 2<sup>nd</sup> Gear (18 km/h) 6 kN / 5 %

### SERVICE BRAKE

Spring-applied, hydraulically released (SAHR)

In the axle housings located oil-immersed multiple disc brakes

### PARKING BRAKE SYSTEM

Spring-applied, hydraulically released (SAHR)

Hand pump to release the brake in case of system failure

### AUXILIARY BRAKE

The parking brake acts simultaneously as an auxiliary brake

### TIRES

Tire size 9.00x20

### HYDRAULIC SYSTEM

Tank capacity 70 l

Inspection glasses for min/max indication

Temperature sensor

Electric level indicator, control of minimum level

All fittings in DIN type

### ELECTRIC SYSTEM

Operating voltage 24 V

Battery 2x 12 V, 155 Ah

Lockable main switch

Emergency stop button, one in the drivers canopy, one outside

Reverse alarm

In case of driver absence occurs automatically:

- Switching the traction drive in neutral gear
- Activation of the parking brake
- Deactivation of the steering and working hydraulics

### ONBOARD DIAGNOSTICS

Display of operational data of drive line, sensors, actuators

Change of parameters with user roles

Diagnosis of active faults

## Technical data

1105-00-000 - Rev.11

### LIGHTING (LED)

Four front and four rear work lights, two each for the illumination of the rear and two for the long-range with high and low beacon

Two working light mounted on the canopy, directed backwards

Flashing beacon, yellow

### FINISH

Driver's canopy RAL 1007

Chassis / Drive components RAL 9005

### DRIVER'S CANOPY

Open drivers canopy

- ROPS-/FOPS certification
- Three-point entrance from the side with a half door
- Operation of the kinematic and the driving direction by joysticks
- Controls and displays clearly arranged and within easy reach

Driver's seat

- With lap belt
- Synthetic leather cover
- Adjustment of back rest and seat

## Accessories

### ACCESSORIES AND EQUIPMENT (INCLUDED)

Frame articulation locking device

Mechanical boom locking device

Central lubrication block

Portable fire extinguisher

Wheel chocks

Tool kit with bag

Safety helmet and ear protection

Two triangular safety reflectors

First-aid kit

### DOCUMENTATION

A printed version of the operating instructions in the document box on the vehicle

Operating instructions, spare parts list and wiring diagrams in electronic form via online access

## Accessories (options)

1105-00-000 - Rev.11

### OTHER OPTIONS

Hydraulic fittings in JIC type

Paus Connect

- Telemetry unit for data transfer to the Paus Connect Cloud
- 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
  - Two-way communication
  - Authorisation of machine use
  - User administration with controlled data access
  - Individual evaluations and statistics
- Direct access at the machine for read out data transfer

External power socket

Extended sealing of connectors

- Grease filling
- Sealing filling

Central automatic lubricating system

PUR foamed tyres

Spare wheel

Extended tool kit

Service packages for 2,000 operating hours

Service packages for 3,000 operating hours

Additional one operating instructions and Spare part list in national language in printed form

### DRIVE

**Diesel engine, Manufacturer / Type** **Deutz / TCD 3.6 L4**

Exhaust stage EU stage V / EPA Tier 4F

Power 80 kW at 2,000 rpm

Exhaust system DOC, DPF and SCR

Generator / Starter 28 V, 80 A / 24 V, 4 kW

Cold start limit temperature -15 °C

Fuel prefilter and fuel fine filter with water separator

Engine monitoring and operating data on diagnostic display

Dry air filter with pre-filter

Fuels with a sulphur content < 50 mg/kg only

**Diesel Engine, Manufacturer / Type** **Cummins / QSB 3.3**

Exhaust stage EU stage IIIA / EPA Tier 3

Power 74kW at 2,200 rpm

Exhaust system Catalytic with measuring points

Generator / Starter 28 V, 80 A / 24 V, 4kW

Cold start limit temperature -23°C

Fuel prefilter and fuel fine filter with water separator

Engine monitoring and operating data on diagnostic display

Dry air filter with pre-filter

Further equipment and options on request

## Accessories (options)

1105-00-000 - Rev.11

### DRIVE

<b>Diesel engine, Manufacturer / Type</b>	Deutz / BF4M 2012
Exhaust stage	EU stage II / EPA Tier 2
Power	61 kW at 2,300 rpm* <small>*(at 4,000 m a.s.l. at 20°C)</small>
Exhaust system	Catalytic with measuring points
Cold start limit temperature	-15 °C
Fuel prefilter and fuel fine filter with water separator	
Engine monitoring and operating data on diagnostic display	
Dry air filter with pre-filter	

### WORK EQUIPMENT

Bucket „LD “(for bulk density: $\leq 1.8 \text{ t/m}^3$ ), volume heaped	1.4 m <sup>3</sup>
Bucket „HD “(for bulk density: $2.1 - 3.0 \text{ t/m}^3$ ), volume heaped:	1.0 m <sup>3</sup>

Further equipment and options on request

All machines are designed and manufactured in accordance with the latest safety standards, including the currently valid European Machinery Directive and the ISO standard for mobile machines for underground mining. This means that even the basic version of the machines provides a high level of safety for the operator, which can be supplemented as required with additional optional safety equipment.

The standard equipment includes the following safety features:

- ROPS/FOPS canopy(s)
- Braking system („fail-safe“)
- Emergency stop button
- Three-point safety entrance
- etc.

## Safety (options)

### SAFETY EQUIPMENT

Radio remote control

- Radio remote control with very good characteristics regarding robustness, Comfort and reliability
- Coordinated displays and controls

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Brake test

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Three-point-belt

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Driver's seat contact monitoring

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Belt monitoring driver's seat

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Rear view camera system

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HRD fire suppression system automatic

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HRD fire suppression system manual

### COMFORT EQUIPMENT

Reverse alarm acknowledgeable

### LIGHTING

Direction lights red/green

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Rear working lights active during reversing

Further equipment and options on request

## Service

1105-00-000 - Rev.11

### CUSTOMER SERVICE

Repairs and maintenance work are central points in customer service. Here, Paus is broadly positioned and offers its customers and dealers worldwide an extensive service program. Thus, trained employees are available under our service hotline as well as competent contact persons at our dealers on site.

### PAUS CONNECT

Cloud, which captures and displays all data, messages and location.

Your advantages:

- Faster service
- Life cycle cost management

*More information on page 5*

### SPARE PARTS

We attach great importance to a high availability of Paus spare parts. In addition to maintenance and service parts, which are available at any time, customers and dealers have the possibility to obtain spare parts for engines, axles, gearboxes, etc. easily and quickly through us. Benefit from our online catalog with elaborated spare parts lists.



## Dimensions

### DIMENSIONS

Length	approx. 6,500 mm
Wide	approx. 1,480 mm
Height	approx. 1,900 mm
Height with bucket extended	approx. 3,300 mm

### TURNING RADIUS

Outside	approx. 4,450 mm
Inside	approx. 2,400 mm



## Dimensions

1105-00-000 - Rev.11

