

**Technical data (loader)**

### 11 Technical data (loader)

#### 11.1 AX 70

**NOTE**

The technical data refer to 12.5/80 R18 tyres.

##### 11.1.1 Loader

|                                       |          |
|---------------------------------------|----------|
| - Height                              | 2,500 mm |
| - Width - across über outer tyre edge | 1,590 mm |
| - across bucket                       | 1,625 mm |
| - Wheelbase                           | 2,030 mm |
| - Track width                         | 1,250 mm |
| - Operating weight w/o attachment     | 4,715 kg |
| - Ground clearance - Cardan shaft     | 440 mm   |
| - Differential                        | 350 mm   |
| - Turning radius (across the rear)    | 3,540 mm |
| - Articulation angle - left           | 40°      |
| - right                               | 40°      |
| - Swinging angle                      | ±11°     |
| - Climbing ability with payload       | 60 %     |
| - Max. lifting capacity               | 41 kN    |
| - Thrust force                        | 38 kN    |
| - Breakout force                      | 41 kN    |

##### 11.1.2 Engine

|  |                       |
|--|-----------------------|
| - Watercooled diesel engine                              |                       |
| - Type   | 4024HF295A            |
| - 4 cylinders, 4-stroke, direct injection                |                       |
| - Displacement   | 2,440 cm <sup>3</sup> |
| - Power acc. to SAE J 1995                               | 46.0 kW at 2200 rpm   |
| - Emissions class according to RL 97/68 EC step 3 + TIER |                       |

##### 11.1.3 Starter

|   |               |
|---|---------------|
| - | 2.0 kW / 12 V |
|---|---------------|

##### 11.1.4 Alternator

|   |            |
|---|------------|
| - | 70 A, 14 V |
|---|------------|

##### 11.1.5 Hydrostatic drive

**Variant "20 km/h"**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....20 km/h |

**Variant "30 km/h"**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....30 km/h |

##### 11.1.6 Axle loads

|  |          |
|--|----------|
| - Perm. axle loads acc. to StVZO - front | 3,500 kg |
| - rear                                   | 3,500 kg |
| - Perm. total weight acc. to StVZO       | 5,100 kg |

**11.1.7 Tyres**

The following tyres are permitted:

|                         |                |
|-------------------------|----------------|
| - Size                  | 12.5/80 R18    |
| - Tyre pressure - front | 3.0 bar        |
| - rear                  | 2.75 – 3.0 bar |
| - Size                  | 15.5/55 R18    |
| - Tyre pressure - front | 3.25 bar       |
| - rear                  | 3.0 – 3.25 bar |
| - Size                  | 365/70 R18     |
| - Tyre pressure - front | 3.0 bar        |
| - rear                  | 2.75 – 3.0 bar |
| - Size                  | 400/70 R18     |
| - Tyre pressure - front | 2.8 bar        |
| - rear                  | 2.8 bar        |
| - Size                  | 405/70 R18     |
| - Tyre pressure - front | 2.5 bar        |
| - rear                  | 2.5 bar        |
| - Size                  | 425/55 R17     |
| - Tyre pressure - front | 3.0 bar        |
| - rear                  | 2.5 – 3.0 bar  |

**11.1.8 Steering system**

|                                  |              |
|----------------------------------|--------------|
| - Hydrostatic via priority valve |              |
| - Pressure                       | max. 180 bar |

**11.1.9 Brake system**

Service brakes:

1. Hydraulic drum brake (fast loader: disc brake) in the front axle acting on all 4 wheels.
2. Hydrostatic inching brake, acting on all four wheels.

Parking brake:

Mechanic parking brake, acting on all four wheels.

**11.1.10 Electric system**

|           |       |
|-----------|-------|
| - Battery | 66 Ah |
|-----------|-------|

**11.1.11 Hydraulic system**

|                              |            |
|------------------------------|------------|
| - Contents                   | 60 l       |
| - Hydraulic oil reservoir    | 40 l       |
| - Flow rate                  | 60 l/min   |
| - Max. operating pressure    | 250 bar    |
| - 2 lift cylinders           | Ø 70/40 mm |
| - 1 tip cylinders            | Ø 90/50 mm |
| - 1 steering cylinder        | Ø 80/35 mm |
| - Times acc. to DIN ISO 7131 |            |
| - Lift (with payload)        | 4.6 s      |
| - Lower (without load)       | 2.8 s      |
| - Dump 90°                   | 2.2 s      |
| - Tilt 45°                   | 1.5 s      |

**11.1.12 Fuel supply system**

|            |      |
|------------|------|
| - Contents |      |
| Fuel tank  | 70 l |

### 11.1.13 Heating and ventilation system

#### 11.1.14 Return suction filter

- Filter mesh 10 µm abs.
- Bypass response pressure  $p = 2.5 \text{ bar}$

#### 11.1.15 Combination cooler

##### AX 70/20 km/h

- Performance max. 31/12 kW
- Flow rate 89/26 l/min

##### AX 70/30 km/h

- Performance max. 35/15 kW
- Flow rate 89/26 l/min

#### 11.1.16 Noise emission

- Sound power level (LWA) » Noise outside: « 101 dB(A)
- Acoustic power level (LpA) » noise in the driver's cabin: « 80 dB(A)

**11.2 AX 85****NOTE**

The technical data refer to 12.5/80 R18 tyres.

**11.2.1 Loader**

|                                       |          |
|---------------------------------------|----------|
| - Height                              | 2,505 mm |
| - Width - across über outer tyre edge | 1,705 mm |
| - across bucket                       | 1,850 mm |
| - Wheelbase                           | 2,030 mm |
| - Track width                         | 1,320 mm |
| - Operating weight w/o attachment     | 4,887 kg |
| - Ground clearance - Cardan shaft     | 445 mm   |
| - Differential                        | 350 mm   |
| - Turning radius (across the rear)    | 3,540 mm |
| - Articulation angle - left           | 40°      |
| - right                               | 40°      |
| - Swinging angle                      | ±11°     |
| - Climbing ability with payload       | 60 %     |
| - Max. lifting capacity               | 43 kN    |
| - Thrust force                        | 38 kN    |
| - Breakout force                      | 41 kN    |

**11.2.2 Engine**

|  |                       |
|--|-----------------------|
| - Watercooled diesel engine                              |                       |
| - Type   | 4024HF295A            |
| - 4 cylinders, 4-stroke, direct injection                |                       |
| - Displacement   | 2,440 cm <sup>3</sup> |
| - Power acc. to SAE J 1995                               | 46.0 kW at 2200 rpm   |
| - Emissions class according to RL 97/68 EC step 3 + TIER |                       |

**11.2.3 Starter**

|   |               |
|---|---------------|
| - | 2.0 kW / 12 V |
|---|---------------|

**11.2.4 Alternator**

|   |            |
|---|------------|
| - | 70 A, 14 V |
|---|------------|

**11.2.5 Hydrostatic drive****"20 km/h" variant**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....20 km/h |

**"30 km/h" variant**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....30 km/h |

**11.2.6 Axle loads**

|  |          |
|--|----------|
| - Perm. axle loads acc. to StVZO - front | 3,500 kg |
| - rear                                   | 3,500 kg |
| - Perm. total weight acc. to StVZO       | 5,100 kg |

### 11.2.7 Tyres

The following tyres are permitted:

|                 |                |
|-----------------|----------------|
| - Size          | 12.5/80 R18    |
| - Tyre pressure | 3.0 bar        |
| - front         | 2.75 – 3.0 bar |
| - rear          | 15.5/55 R18    |
| - Size          | 3.25 bar       |
| - Tyre pressure | 3.0 – 3.25 bar |
| - front         | 365/70 R18     |
| - rear          | 3.0 bar        |
| - Size          | 2.75 – 3.0 bar |
| - Tyre pressure | 400/70 R18     |
| - front         | 2.8 bar        |
| - rear          | 2.8 bar        |
| - Size          | 405/70 R18     |
| - Tyre pressure | 2.5 bar        |
| - front         | 2.5 bar        |
| - rear          | 425/55 R17     |
| - Size          | 3.0 bar        |
| - Tyre pressure | 2.5 – 3.0 bar  |
| - front         |                |
| - rear          |                |

### 11.2.8 Steering system

|                                  |              |
|----------------------------------|--------------|
| - Hydrostatic via priority valve |              |
| - Pressure                       | max. 180 bar |

### 11.2.9 Brake system

Service brakes:

1. Hydraulic drum brake (fast loader: disc brake) in the front axle acting on all 4 wheels.
2. Hydrostatic inching brake, acting on all four wheels.

Parking brake:

Mechanic parking brake, acting on all four wheels.

### 11.2.10 Electric system

|           |       |
|-----------|-------|
| - Battery | 66 Ah |
|-----------|-------|

### 11.2.11 Hydraulic system

|                              |            |
|------------------------------|------------|
| - Contents                   | 60 l       |
| - Hydraulic oil reservoir    | 40 l       |
| - Flow rate                  | 60 l/min   |
| - Max. operating pressure    | 250 bar    |
| - 2 lift cylinders           | Ø 80/40 mm |
| - 1 tip cylinders            | Ø 90/50 mm |
| - 1 steering cylinder        | Ø 80/35 mm |
| - Times acc. to DIN ISO 7131 |            |
| - Lift (with payload)        | 4.7 s      |
| - Lower (without load)       | 2.9 s      |
| - Dump 90°                   | 2.2 s      |
| - Tilt 45°                   | 1.5 s      |

### 11.2.12 Fuel supply system

|            |      |
|------------|------|
| - Contents |      |
| Fuel tank  | 70 l |

**11.2.13 Heating and ventilation system****11.2.14 Return suction filter**

- Filter mesh 10 µm abs.
- Bypass response pressure p = 2.5 bar

**11.2.15 Combination cooler****AX 85/20 km/h**

- Performance max. 31/12 kW
- Flow rate 89/26 l/min

**AX 85/30 km/h**

- Performance max. 35/15 kW
- Flow rate 89/26 l/min

**11.2.16 Noise emission**

- Sound power level (LWA) » Noise outside: « 101 dB(A)
- Acoustic power level (LpA) » noise in the driver's cabin: « 80 dB(A)

### 11.3 AX 100

**NOTE**

The technical data refer to 365/70 R18 tyres.

#### 11.3.1 Loader

|   |                   |
|---|-------------------|
| - Height                                      | 2,455 mm          |
| - Width - across über outer tyre edge         | 1,750 mm          |
| - across bucket                               | 1,850 mm          |
| - Wheelbase                                   | 2,030 mm          |
| - Track width                                 | 1,400 mm          |
| - Operating weight w/o attachment             | 5,165 kg          |
| - Ground clearance - Cardan shaft             | 415 mm            |
| - Differential                                | 350 mm            |
| - Turning radius (across the rear) left/right | 3,670 mm/3,790 mm |
| - Articulation angle - left                   | 40°               |
| - right                                       | 40°               |
| - Swinging angle                              | ±11°              |
| - Climbing ability with payload               | 60 %              |
| - Max. lifting capacity                       | 44.5 kN           |
| - Thrust force                                | 38 kN             |
| - Breakout force                              | 43 kN             |

#### 11.3.2 Engine

|  |                       |
|--|-----------------------|
| - Watercooled diesel engine                              |                       |
| - Type   | 4024HF295B            |
| - 4 cylinders, 4-stroke, direct injection                |                       |
| - Displacement   | 2,440 cm <sup>3</sup> |
| - Power acc. to SAE J 1995                               | 49 kW at 2200 rpm     |
| - Emissions class according to RL 97/68 EC step 3 + TIER |                       |

#### 11.3.3 Starter

|   |               |
|---|---------------|
| - | 2.0 kW / 12 V |
|---|---------------|

#### 11.3.4 Alternator

|   |            |
|---|------------|
| - | 70 A, 14 V |
|---|------------|

#### 11.3.5 Hydrostatic drive

**"20 km/h" variant**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....20 km/h |

**"30 km/h" variant**

|                  |               |
|------------------|---------------|
| - Drive stage I  | 0.....7 km/h  |
| - Drive stage II | 0.....30 km/h |

#### 11.3.6 Axle loads

|  |          |
|--|----------|
| - Perm. axle loads acc. to StVZO - front | 3,500 kg |
| - rear                                   | 3,500 kg |
| - Perm. total weight acc. to StVZO       | 5,500 kg |

**11.3.7 Tyres**

The following tyres are permitted:

|                 |                |
|-----------------|----------------|
| - Size          | 365/70 R18     |
| - Tyre pressure | 3.0 bar        |
| - front         | 2.75 – 3.0 bar |
| - rear          | 400/70 R18     |
| - Size          | 400/70 R18     |
| - Tyre pressure | 2.8 bar        |
| - front         | 2.8 bar        |
| - rear          | 405/70 R18     |
| - Size          | 405/70 R18     |
| - Tyre pressure | 2.5 bar        |
| - front         | 2.5 bar        |
| - rear          | 425/55 R17     |
| - Size          | 425/55 R17     |
| - Tyre pressure | 3.0 bar        |
| - front         | 2.5 – 3.0 bar  |
| - rear          |                |

**11.3.8 Steering system**

|                                  |              |
|----------------------------------|--------------|
| - Hydrostatic via priority valve |              |
| - Pressure                       | max. 180 bar |

**11.3.9 Brake system**

Service brakes:

1. Hydraulically operated disc brake at the front axle, acting on all 4 wheels
2. Hydrostatic inching brake, acting on all four wheels.

Parking brake:

Mechanic parking brake, acting on all four wheels.

**11.3.10 Electric system**

|           |       |
|-----------|-------|
| - Battery | 66 Ah |
|-----------|-------|

**11.3.11 Hydraulic system**

|                              |             |
|------------------------------|-------------|
| - Contents                   | 60 l        |
| - Hydraulic oil reservoir    | 40 l        |
| - Flow rate                  | 60 l/min    |
| - Max. operating pressure    | 250 bar     |
| - 2 lift cylinders           | Ø 90/45 mm  |
| - 1 tip cylinders            | Ø 100/50 mm |
| - 1 steering cylinder        | Ø 80/35 mm  |
| - Times acc. to DIN ISO 7131 |             |
| - Lift (with payload)        | 4.8 s       |
| - Lower (without load)       | 2.9 s       |
| - Dump 90°                   | 2.3 s       |
| - Tilt 45°                   | 1.6 s       |

**11.3.12 Fuel supply system**

|            |      |
|------------|------|
| - Contents |      |
| Fuel tank  | 70 l |

**11.3.13 Heating and ventilation system**

### 11.3.14 Return suction filter

- Filter mesh 10 µm abs.
- Bypass response pressure p = 2.5 bar

### 11.3.15 Combination cooler

- Performance max. 35/15 kW
- Flow rate 89/26 l/min

### 11.3.16 Noise emission

- Sound power level (LWA) » Noise outside: « 101 dB(A)
- Acoustic power level (LpA) » noise in the driver's cabin: « 80 dB(A)