S 36 X DirectDrive
Truck-mounted concrete pump

- Vertical reach: 35.10 m
- Concrete output: max. 161 m³/h
- Pressure on concrete: max. 85 bar

MADE IN GERMANY
by SCHWING-Stetter

DIRECT DRIVE

360° CONTINUOUS

330°
The S 36 X DirectDrive from SCHWING

One machine.
Infinite possibilities.

SCHWING’s DirectDrive revolutionises the operation and utilisation of truck-mounted concrete pumps. DirectDrive’s cutting-edge technology combines the advantages of previously defined boom folding types into one machine, significantly increasing the possibilities for jobsite utilisation. As a result, the S 36 X DirectDrive can be used in a wider variety of applications than any other truck-mounted concrete pump in its class. The innovative DirectDrive features the prominent advantages of SCHWING’s truck-mounted concrete pumps: high fuel efficiency, a powerful pump kit, low service costs, and excellent value retention. The S 36 X DirectDrive from SCHWING: a new drive, new possibilities.
The S 36 X DirectDrive from SCHWING

Advantages and benefits at a glance

**Boom**
Thanks to its two drive units, the S 36 X DirectDrive offers a level of boom articulation never before seen in truck-mounted concrete pumps. The third boom stage provides a remarkable opening angle of 330°, while the last boom stage can be continuously rotated a full 360°. Due to its augmented range, the boom can be positioned and folded together much more quickly and in a much more efficient manner. The turntable provides additional flexibility, allowing for 365° rotations in both directions.

**Pump kit**
The SCHWING control block permits fully hydraulic switching of the ROCK and the differential cylinders. This ensures outstanding reliability even in difficult operating conditions and makes servicing the system a breeze.

**Outriggers**
The unique combination of front X and rear H outriggers results in a uniquely small footprint. The support legs are optimally equipped for daily life on the building site – thanks to the protected piston rods and internally led hydraulic lines.

**Remote control SC 30**
The light weight, easy to use and comfortable SC 30 helps minimise fatigue, allowing the operator to focus on the job for extended periods. The powerful batteries guarantee an operating time of at least 8 hours.

**Open hydraulic system**
The key hydraulic components of the S 36 X DirectDrive, such as the valve block and the differential cylinders, are developed and manufactured by SCHWING. Their generous dimensions and the open SCHWING hydraulic system guarantee a low-loss conversion of the engine power into the output rate. Result: the renowned high energy efficiency of SCHWING concrete pumps.

**Concrete valve**
Thanks to its intelligent design, the ROCK valve suffers significantly less wear and tear than other concrete valves. It is also quick to clean and is demonstrably easier to maintain. The advantages for the S 36 X DirectDrive: shorter servicing times, higher machine uptime and lower maintenance costs.

**Supply control**
The water box can be filled and emptied, and the water pump, agitator, spray hose, high pressure cleaner and compressor, all controlled via the standardised supply control. This is the standard for all SCHWING truck-mounted concrete pumps for greater clarity and ease of operation.

**Hinged sidewall**
The 3.20 metre long hinged sidewall comes as standard and features integrated hose/tube mounts. It provides safe and easy storage for hoses, tubes and other accessories on the go. A hinged sidewall with an extended length of 5.00 metres is available as optional equipment.

**VECTOR control**
The machine operator can inspect machine data, operating conditions and settings on S 36 X DirectDrive, changing various parameters, all through the intuitive VECTOR control. The integrated diagnostic system ensures safe operation and also reminds the operator when maintenance is necessary.
The ROCK

Clean faster with less water.

Due to its straight design, in comparison to other concrete valves, the ROCK valve is easier and quicker to clean. It also provides a direct view of the pumping pistons in the delivery cylinder. The pump kit can therefore be cleaned easily and conveniently within just two strokes. This saves water and reduces the time needed for cleaning.

Easy maintenance.

The ROCK valve not only has a significantly longer service life than other concrete valves, it is also easier to maintain. After removing the housing cover, the wear parts are easily accessible and can be replaced quickly and safely. Time-consuming adjustment work is not required after replacement. The ROCK valve’s 15 wearing parts is only half the number used in other concrete valves. The maintenance of the ROCK valve: simple, fast and safe.

Intelligent wear protection.

The wear in the concrete valve is particularly high as the concrete is fed into the outlet at high pressure. In order to minimize this wear, at the most heavily loaded point of the ROCK concrete does not rub on steel, but rather on concrete. This is because the intelligent design of the ROCK leads to the formation of a concrete triangle after each shift. Protected by this concrete layer, the ROCK has a significantly longer service life than other concrete valves. For noticeably more profit per m³.

Pneumatic end hose holder

More comfort, more safety.

The standard, pneumatic end hose holder makes releasing the end hose by hand obsolete. Pushing a button on the SC 30 radio remote control opens the two end hose holders, releasing the end hose. After the concrete placing work is finished and cleaning has been completed, the end hose can be returned to the extendable arm at the push of a button.

1. Open the pneumatic end hose holder by pushing a button on the radio remote control.
2. Extend the end hose from the open end hose holders by rotating the last boom stage.
3. Secure / close the two end hose holders via the radio remote control. The end hose can now swing past the end hose holders unhindered when rotating 360°.

Scraping out the residual concrete

The end hose holder can be opened and closed easily and safely via the SC 30 radio remote control.

Protection of the ROCK inside by concrete triangle
The drive for more possibilities

With its DirectDrive, SCHWING breaks the limits of previously known boom folding types. The extraordinary flexibility of the last two boom stages open up entirely new prospects for operators of the S 36 X DirectDrive. Unusual pumping challenges can be overcome quickly and safely. Thanks to its wide range of applications, the S 36 X DirectDrive can be better utilised than any other truck-mounted concrete pump in its class.

Innovation by SCHWING

The DirectDrive developed by SCHWING engineers is a completely new drive concept for the boom stages of a truck-mounted concrete pump. Instead of a hydraulic cylinder, a hydraulic rotary actuator is installed in the joint, allowing for boom movements that were unthinkable until now. This grants the third boom stage a remarkable opening angle of 330°, while the fourth boom stage can endlessly rotate through a full 360°. SCHWING’s DirectDrive components are manufactured in Austria and Germany.

Excellent response behaviour

The control block and hydraulic motor are installed next to one another in the DirectDrive. By controlling the DirectDrive hydraulic motor directly, the operator’s control commands are immediately translated into movements, making it possible to manoeuvre the boom of the S 36 X DirectDrive with extreme precision and responsiveness.

All-round power

Thanks to the toothed annular piston (shown in red) engaging with the internal gearing as it rotates, the DirectDrive hydraulic motor generates an especially high torque. At the same time, this innovative drive concept ensures safe and virtually wear-free operation.

Nothing out of the ordinary

Despite its revolutionary boom, the boom piping of the S 36 X DirectDrive has a standard design. In order to guarantee a high level of safety when pumping and to prevent blockages caused by pipe radii that are too narrow, only standard elbows with large radii and an inside micrometer of 275 mm are used for the S 36 X DirectDrive. In addition to the increased operational safety, this also makes it easier and more economical to stock up on the required wear parts.

One for all

R, RZ, ZR or Z: with its unique flexibility, the DirectDrive makes the dilemma of choosing between the classic boom folding types a thing of the past. The S 36 X DirectDrive adapts perfectly to any construction site situation due to its extraordinary mobility. And it does so in no time at all: the last boom stage can be folded in from both sides and swung past boom stage 3. This saves time when relocating the machine and after finishing with the concreting work, providing additional flexibility during complex installation situations.
The outrigger systems EASy and EASyflex extend the range of applications of the S 36 X DirectDrive. With EASy, the concrete pump can be safely supported on one side, if required. Thereby covering a working range of 138°. EASyflex provides further outrigger combinations and as such, more flexibility on the jobsite. In this way, pump applications can be achieved with the maximum working safety even in difficult, restricted spaces. More flexibility for more safety.

EASy and EASyflex

The outrigger spreads as specified are measured from the centre of the outrigger leg. Any cribbing or underlay timbers must be taken into account when determining the required set-up area.

* from front bumper
## Technical data

### Performance
<table>
<thead>
<tr>
<th>Pump kit</th>
<th>P2023-110/75</th>
<th>P2023-110/75</th>
<th>P2023-110/75</th>
<th>P2025-120/80</th>
<th>P2025-120/80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive l/min</td>
<td>380</td>
<td>635</td>
<td>636</td>
<td>835</td>
<td>836</td>
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<tr>
<td>Delivery cylinders mm</td>
<td>230 x 2,000</td>
<td>230 x 2,000</td>
<td>230 x 2,000</td>
<td>250 x 2,000</td>
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<tr>
<td>Concrete output max. m³/h</td>
<td>98</td>
<td>136</td>
<td>161</td>
<td>136</td>
<td>161</td>
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<tr>
<td>Pressure on concrete max. bar</td>
<td>85</td>
<td>85</td>
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</tr>
<tr>
<td>Stroke rate max. 1/min.</td>
<td>20</td>
<td>27</td>
<td>32</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td>Concrete valve</td>
<td>M-ROCK</td>
<td>M-ROCK</td>
<td>M-ROCK</td>
<td>B-ROCK</td>
<td>B-ROCK</td>
</tr>
</tbody>
</table>

### Hydraulic system
- **Design**: Open system
- **Hydraulic tank l**: 385

### Boom
- **36 DirectDrive**
  - **Delivery line**: DN 125
  - **Length of end hose m**: 3.50 (Option: 1.00 + 2.50)
  - **Vertical reach m**: 35.10
  - **Reach depth m**: 22.65
  - **Horizontal reach m**: 31.10
  - **Net horizontal reach m**: 28.60° (from front bumper)
  - **Number of boom sections**: 4
  - **Height of the inflexion points m**: 3.99 / 12.39 / 19.95 / 27.45
  - **Slew range**: 2 x 365°
  - **Folding height m**: 8.32

### Support
- **Outrigger width, front m**: 6.21
- **Outrigger width, rear m**: 5.70
- **Outrigger load, front kN**: 190
- **Outrigger load, rear kN**: 150

### Chassis (examples**)
- **Mercedes-Benz Arocs 2740**
- **MAN TGS 26.360**
  - **Axles configuration**: 6x4 / 6x4
  - **Wheelbase**: 4,200 / 4,200
  - **Length**: 11,200 / 11,235

### Miscellaneous
- **Water tank l**: 420

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*depending on the chassis **other chassis possible