

# X07

## Tiltrotator 5-7 tonnes



### A tiltrotator optimized for compact excavators between 5 and 7 tonnes

Steelwrist small tiltrotators are developed with a focus on flexibility, building height and low weight, that is so important for compact excavators. With a steel cast structure, the weight can be reduced, while strength is maximized.

#### Take on a variety of tasks with a tiltrotator on your compact excavator

Compact excavators are often used in different construction projects like landscaping, material handling, stump removal or light demolition. With the tiltrotator you increase the ability to reach tight spaces, and save time and reduce wear on both machine and surroundings as the need for machine movements at the worksite is minimized. The tiltrotator is exceptionally useful when digging trenches and for sewer lines in utility work, and in combination with a grapple you have a versatile setup for removing debris, or placing and removing trees.

A compact excavator with a tiltrotator is a good choice for construction work at busy and confined sites in the city, with workers and citizens on the move nearby. The tiltrotator brings more manoeuvrability in a sensitive area, while delivering excellent earthmoving capacities and efficiency for the excavator. A Direct Fit configuration is often chosen for compact excavators, where the tiltrotator is permanently mounted to the dipper arm.

Steelwrist quick couplers and tiltrotators follow the symmetrical standard (S-standard), the fastest growing coupler type internationally. The attachment coupler on the tiltrotator has Front Pin Hook (FPH) or Front Pin Lock (FPL), depending on coupler size, for safe work tool changes. The tiltrotator is delivered with a control system that fits your excavator regardless if you need a two or four hose solution.

#### Available with the SQ automatic oil connection technology with SQ40

With an SQ40 tiltrotator coupler on the X07 the Steelwrist SQ technology is made available also for the compact excavators. SQ40 allows for quick changes of high flow-powered work tools, providing the same efficiency as larger SQ couplers. This makes changing powered work tools easier and safer, as it can be done without leaving the cab.

SQ40 follows the symmetrical standard for S40, which means existing work tools with this interface are compatible and the customer can use these directly without any expensive adaptations.

#### Control system

Steelwrist supply two types of tiltrotator control system. The QuantumConnect platform with state-of-the-art components makes installation and operation of the tiltrotator easier than ever before. The platform includes the InstallMate and QuantumConnect apps, and with sophisticated connectivity the system is always up to date. The four hose proportional machine control is the more basic system.

#### Gripper cassette (option)

Equip the tiltrotator with a gripper cassette with a finger gripper that will make your excavator even more flexible, handling objects with precision. The gripper cassette can be retrofitted.

#### Central lubrication (option)

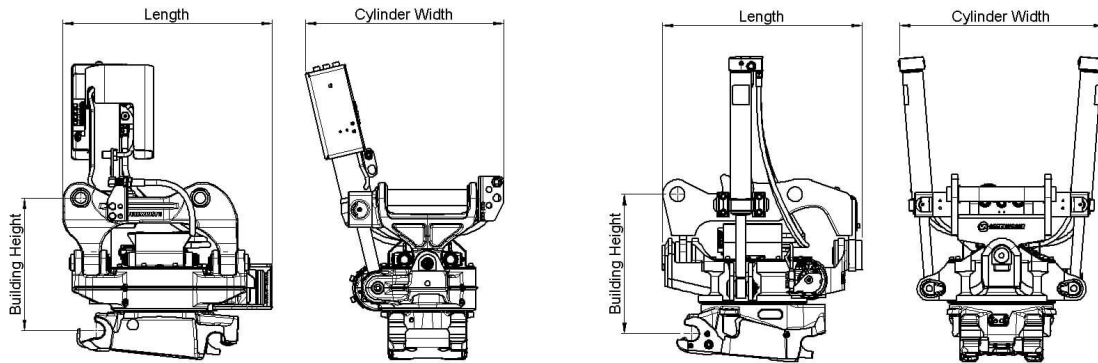
Our tiltrotators can be equipped directly from factory with central lubrication that fits all central lubrication systems on the market.

*The X07 tiltrotator is also available with Verachtert (CW) or Lehnhoff (HS) coupler interface. For Verachtert (CW) the tiltrotator always has a Direct fit configuration.*



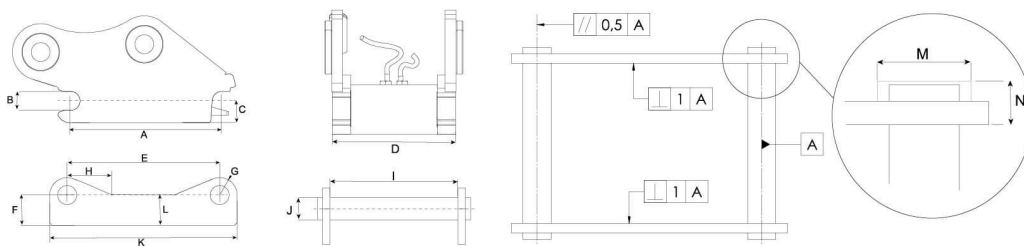
## Technical specification

| Tiltrotator                      | X07         | X07         | X07         | X07         | X07         | X07         | X07         |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Machine Interface                | S40         | S45         | S50         | DF          | DF          | DF          | DF          |
| Tiltrotator Quick Coupler        | S40         | S45         | S50         | S40         | SQ40        | S45         | S50         |
| Machine weight [lb]              | 11000-15400 | 11000-15400 | 11000-15400 | 11000-15400 | 11000-15400 | 11000-15400 | 11000-15400 |
| Max Breakout torque [kNm]        | 65          | 65          | 65          | 65          | 65          | 65          | 65          |
| Weight from [lb]                 | 429         | 429         | 429         | 429         | 429         | 429         | 429         |
| Gripper weight [lb]              | 99          | 121         | 121         | 99          | 121         | 121         | 121         |
| Building height [inch]           | 14.57       | 15.59       | 15.59       | 15.75       | 15.55       | 15.79       | 15.79       |
| Length [inch]                    | 23.23       | 25          | 25          | 25.63       | 23.23       | 25.63       | 25.63       |
| Cylinder width [inch]            | 18.90       | 23.11       | 23.11       | 22.60       | 22.87       | 22.60       | 22.60       |
| Max tilt angle [degrees]         | ±45         | ±45         | ±45         | ±45         | ±45         | ±45         | ±45         |
| Max width dipper arm [inch]      | –           | –           | –           | 9.45        | 9.45        | 9.45        | 9.45        |
| Pin diameter [inch]              | –           | –           | –           | 1.77-2.17   | 1.77-2.17   | 1.77-2.17   | 1.77-2.17   |
| Pin distance [cc-measure] [inch] | –           | –           | –           | 8.66-12.20  | 9-12.20     | 8.66-12.20  | 8.66-12.20  |
| Tilt Torque [kNm]                | 13,8        | 13,8        | 13,8        | 13,8        | 13,8        | 13,8        | 13,8        |
| Rotational Torque [kNm]          | 5,2         | 5,2         | 5,2         | 5,2         | 5,2         | 5,2         | 5,2         |
| Hydraulic AUX with gripper       | 1           | 1           | 1           | 1           | 1           | 1           | 1           |
| Hydraulic AUX without gripper    | 1           | 1           | 1           | 1           | 1           | 1           | 1           |
| Lifting hook [lb]                | –           | –           | –           | 4400        | 4400        | 4400        | 4400        |
| Oil Flow [gallons/min]           | 11          | 11          | 11          | 11          | 11          | 11          | 11          |
| Max pressure [bar]               | 210         | 210         | 210         | 210         | 210         | 210         | 210         |
| Max Pressure Separate AUX [bar]  | –           | –           | –           | –           | –           | –           | –           |
| Safety solution                  | FPH         | FPL         | FPL         | FPH         | FPH         | FPL         | FPL         |



## S-Standard

### Symmetrical Quick Couplers for Excavators (S-standard)



Dimensions and tolerance table

| Measure-<br>ments<br>(mm) | S30<br>/150   | S30<br>/190   | S40<br>/240   | S45<br>/240   | S50           | S60           | S70           | S80           | S90<br>/250   | S90<br>/320   | S100          | S120          |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| A                         | 199,8<br>±0,2 | 229,8<br>±0,2 | 299,8<br>±0,2 | 299,8<br>±0,2 | 429,8<br>±0,2 | 429,8<br>±0,2 | 479,8<br>±0,2 | 599,8<br>±0,2 | 669,8<br>±0,2 | 749,8<br>±0,2 | 749,8<br>±0,2 | 899,8<br>±0,2 |
| B                         | 30<br>H9      | 30<br>H9      | 40<br>H9      | 40<br>H9      | 45<br>H9      | 50<br>H9      | 60<br>H9      | 70<br>H9      | 80<br>H9      | 90<br>H9      | 100<br>H9     | 120<br>H9     |
| C                         | Max<br>40     | Max<br>45     | Max<br>50     | Max<br>50     | Max<br>65     | Max<br>65     | Max<br>80     | Max<br>100    | Max<br>115    | Max<br>125    | Max<br>150    | Max<br>200    |
| D                         | 148<br>±1     | 178<br>±1     | 198<br>±1     | 238<br>±1     | 288<br>±1     | 288<br>±1     | 338<br>±1     | 448<br>±1     | 588<br>±1     | 618<br>±1     | 748<br>±1     | 868<br>±1     |
| E                         | 200,5<br>±0,5 | 230,5<br>±0,5 | 300,5<br>±0,5 | 300,5<br>±0,5 | 430,5<br>±0,5 | 430,5<br>±0,5 | 480,5<br>±0,5 | 600,5<br>±0,5 | 670,5<br>±0,5 | 750,5<br>±0,5 | 750,5<br>±0,5 | 900,5<br>±0,5 |
| F                         | Min<br>45     | Min<br>50     | Min<br>55     | Min<br>55     | Min<br>70     | Min<br>70     | Min<br>85     | Min<br>115    | Min<br>135    | Min<br>155    | Min<br>175    | Min<br>240    |
| G                         | Max<br>30     | Max<br>30     | Max<br>40     | Max<br>40     | Max<br>45     | Max<br>45     | Max<br>60     | Max<br>75     | Max<br>90     | Max<br>110    | Max<br>125    | Max<br>145    |
| H                         | Max<br>85     | Max<br>85     | Max<br>100    | Max<br>100    | Max<br>125    | Max<br>125    | Max<br>150    | Max<br>250    | Max<br>250    | Max<br>250    | Max<br>250    | Max<br>250    |
| I                         | 152<br>±1     | 162<br>±1     | 202<br>±1     | 242<br>±1     | 272<br>±1     | 272<br>±1     | 342<br>±1     | 452<br>±1     | 592<br>±1     | 622<br>±1     | 752<br>±1     | 872<br>±1     |
| J                         | 30<br>±1      | 30<br>±1      | 40<br>±1      | 40<br>±1      | 45<br>±1      | 50<br>±1      | 60<br>±1      | 70<br>±1      | 80<br>±1      | 90<br>±1      | 100<br>±1     | 120<br>±1     |
| K                         | Max<br>280    | Max<br>290    | Max<br>380    | Max<br>380    | Max<br>520    | Max<br>520    | Max<br>600    | Max<br>740    | Max<br>830    | Max<br>1000   | Max<br>1150   | Max<br>1250   |
| L                         | Max<br>45     | Max<br>50     | Max<br>55     | Max<br>55     | Max<br>70     | Max<br>70     | Max<br>85     | Max<br>115    | Max<br>135    | Max<br>200    | Max<br>200    | Max<br>300    |
| M                         | Max<br>62     | Max<br>62     | Max<br>72     | Max<br>72     | Max<br>77     | Max<br>77     | Max<br>92     | Max<br>102    | Max<br>122    | Max<br>132    | Max<br>142    | Max<br>162    |
| N                         | Max<br>25     | Max<br>25     | Max<br>28     | Max<br>28     | Max<br>30     | Max<br>30     | Max<br>35     | Max<br>40     | Max<br>55     | Max<br>70     | Max<br>75     | Max<br>80     |

Load table

| Quick<br>Coupler<br>Size | Width<br>(mm) | Shaft<br>o-c<br>(mm) | Shaft<br>diameter<br>(mm) | Minimum<br>Positive<br>Torque<br>(kNm) | Minimum<br>Negative<br>Torque<br>(kNm) | Max<br>recommended<br>machine weight<br>(ton) |
|--------------------------|---------------|----------------------|---------------------------|----------------------------------------|----------------------------------------|-----------------------------------------------|
| S30/150                  | 150           | 200                  | 30                        | 28                                     | 20                                     | 2                                             |
| S30/180                  | 180           | 230                  | 30                        | 28                                     | 20                                     | 2                                             |
| S40                      | 200           | 300                  | 40                        | 35                                     | 23                                     | 6                                             |
| S40/240                  | 240           | 300                  | 40                        | 40                                     | 26                                     | 7                                             |
| S45                      | 290           | 430                  | 45                        | 65                                     | 42                                     | 11                                            |
| S50                      | 270           | 430                  | 50                        | 65                                     | 42                                     | 11                                            |
| S60                      | 340           | 480                  | 60                        | 150                                    | 75                                     | 18                                            |
| S70                      | 450           | 600                  | 70                        | 300                                    | 195                                    | 30                                            |
| S80                      | 590           | 670                  | 80                        | 600                                    | 390                                    | 40                                            |
| S90/620                  | 620           | 750                  | 90                        | 1000                                   | 650                                    | 70                                            |
| S90/750                  | 750           | 750                  | 90                        | 1000                                   | 650                                    | 70                                            |
| S100                     | 750           | 900                  | 100                       | 1200                                   | 775                                    | 85                                            |
| S120                     | 925           | 870                  | 120                       | 1600                                   | 1000                                   | 100                                           |

