

SMP

SMP Parts AB



Swingotilt®

ENGLISH 



Swingotilt® is a hydraulic tool for all excavators and backhoe loaders between 3 and 28 tonnes. Swingotilt® increases the opportunities and quickly changes the excavator to a very flexible tool carrier, which increase the machine's areas of use and profitability.



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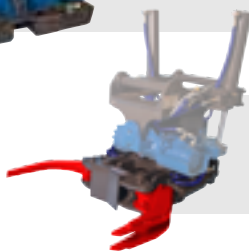
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Swingotilt®

Swingotilt®, Rototilt, Tiltrotator etc... Yes, beloved children have many names, but the fact is that this hydraulic tool for excavators and backhoe loaders is more the rule than the exception these days on most of the machines at workplaces and construction sites around Scandinavia.

A quality tool

Swingotilt® was developed from the normal Rotator, and the first Swingotilts were delivered in the middle of the 1980s with the designations SW1, SW2 etc. It was at the end of the 1980s that it took off and interest grew in Swingotilt® as a working tool. From that time to the present day the product has been continuously developed and it is now an advanced tool of high quality.

We at SMP Parts AB call these the ST models, which is an abbreviation of Swingotilt.

Simplifies work

Swingotilt® functions like a ball joint between the excavator's point and an attached tool, for example, a bucket, and makes it easy to pass obstacles, and simplifies moving heaps, planing, lifting etc. It means that the need to reposition and for manual assistance is radically reduced. It is only the driver's imagination that limits what Swingotilt® can be used for. In addition, safety is improved not only for the driver but for everyone around the excavator.

Advanced control system

Swingotilt® is equipped with an advanced and integrated control system, which makes endless rotation and tilting of up to 40° in each direction possible. This is done by the driver from the cab using buttons integrated in the normal operating levers. The control system is adapted for 12/24 volts, and suitable for all machines on the market. As an extra option a proportional control system is available, where the tilt and rotation speed are controlled steplessly via rollers integrated in the machine's control levers. Integrated grab modules are available as an option on Swingotilt models ST6-ST10, ST15, ST22 and ST28. Swingotilt® is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual.

Infinite rotation and
tilting up to
40° in each direction



For all excavators and backhoe loaders 3 – 6 tonnes

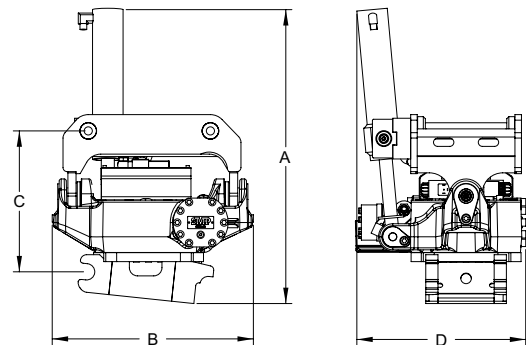
Swingotilt® ST6 suitable for machines such as Volvo EC35/38/45/55/58, TB135/138/145, Hyundai R55, Cat 304CR, Daewoo S55 and others.

Swingotilt® ST6 is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual. ST6 can be adapted for most machines in the size range and is available with most types of Quick Coupling Systems, and with direct mounted upper/lower section.



TECHNICAL SPECIFICATION SWINGOTILT® ST6

- **Infinite rotation**
- **Tilting 2 x 40°**
- **12/24VDC**
- **Grease lubricated rotation**
- **Valve system**
 - System Pro
 - System P
 - System TXSC
 - System TXC
 - System TS



Mounting	S40	S45/50	SMP3
Weight (kg)	140	160	160
Dimensions A/B/C/D	720/495/345/415	735/495/375/470	740/495/375/470
Tilt angle	2 x 40°		
Rotation	Infinite 360°		
Oil flow Min/Max	30 / 70 L/min		
Operating pressure Min/Max	18 / 21 MPa		
Tilt torque at 21 MPa	12,33 kNm		
Rotation speed	7 sec / rotation		
Torque	5000 Nm		

For all excavators and backhoe loaders 6 – 10 tonnes

Swingotilt® ST10 suitable for machines such as Volvo ECR88, Cat 308CR, TB175, New Holland E70, Komatsu PC75, Huddig 1060 and more.

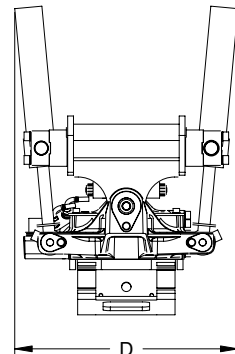
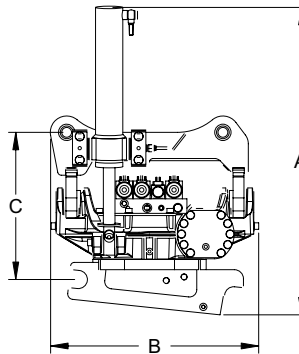
Swingotilt® ST10 is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual. ST10 can be adapted for most machines in the size range and is available with most types of Quick Coupling Systems, and with direct mounted upper/lower section.

Available with double-acting cylinder or telescopic cylinder.



TECHNICAL SPECIFICATION SWINGOTILT® ST10

- **Infinite rotation**
- **Tilting 2 x 40°**
- **12/24VDC**
- **Grease lubricated rotation**
- **Valve system**
 - System Pro
 - System P
 - System TXSC
 - System TXC
 - System TS



Mounting	S45/S50	SMP3
Weight (kg)	260	260
Dimensions A/B/C/D	870/590/430/600	890/640/480/600
Tilt angle	2 x 40°	
Rotation	Infinite 360°	
Oil flow Min/Max	30 / 60 L/min	
Operating pressure Min/Max	18 / 21 MPa	
Tilt torque at 21 MPa	25,30 kNm	
Rotation speed	7 sec / rotation	
Torque	5000 Nm	

For all excavators and backhoe loaders 8 – 15 tonnes

Swingotilt® ST15 suitable for machines such as Volvo EW140, TB1140, Hyundai R110, Hitachi ZX120, Kobelco SK135 and others.

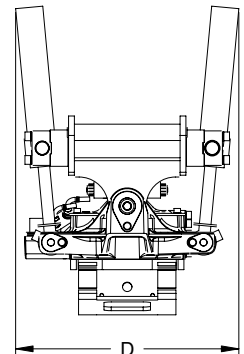
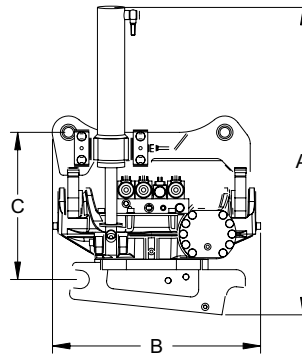
Swingotilt® ST15 is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual. ST15 can be adapted for most machines in the size range and is available with most types of Quick Coupling Systems, and with direct mounted upper/lower section.

Available with double-acting cylinder or telescopic cylinder.



TECHNICAL SPECIFICATION SWINGOTILT® ST15

- **Infinite rotation**
- **Tilting 2 x 40°**
- **12/24VDC**
- **Grease lubricated rotation**
- **Valve system**
 - System Pro
 - System P
 - System TXSC
 - System TXC
 - System TS



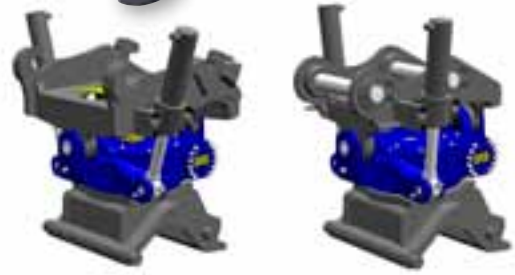
Mounting	S45/S50	S60	SMP2, T620
Weight (kg)	370	390	400
Dimensions A/B/C/D	906/726/465/668	934/726/489/706	1002/807/560/789
Tilt angle	2 x 40°		
Rotation	Infinite 360°		
Oil flow Min/Max	40 / 80 L/min		
Operating pressure Min/Max	18 / 35 MPa		
Tilt torque at 21 MPa	26,40 kNm		
Rotation speed	7 sec / rotation		
Torque	7000 Nm		

For all tracked and wheeled excavators 13 – 22 tonnes

Swingotilt® ST22 suitable for machines such as Volvo EW160, Hyundai R170W, Hitachi ZX160, Cat M316 and others.

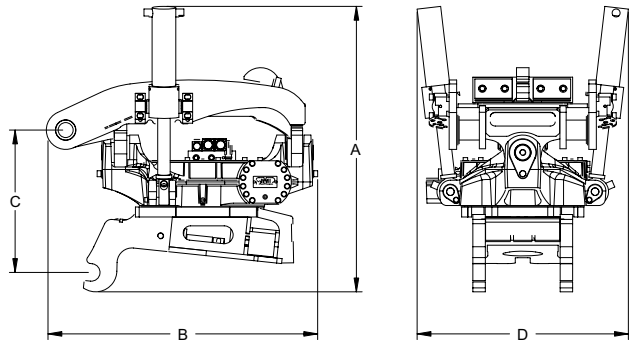
Swingotilt® ST22 is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual. ST22 can be adapted for most machines in the size range and is available with most types of Quick Coupling Systems, and with direct mounted upper/lower section.

Available with double-acting cylinder or telescopic cylinder.



TECHNICAL SPECIFICATION SWINGOTILT® ST22

- **Infinite rotation**
- **Tilting 2 x 40°**
- **12/24VDC**
- **Grease lubricated rotation**
- **Valve system**
 - System Pro
 - System P
 - System TXSC
 - System TXC
 - System TS



Mounting	B20/S1	S60	SMP2, T620
Weight (kg)	650	550	620
Dimensions A/B/C/D	1130/1000/570/850	1000/830/600/830	1060/910/620/850
Tilt angle	2 x 40°		
Rotation	Infinite 360°		
Oil flow Min/Max	40 / 80 L/min		
Operating pressure Min/Max	18 / 35 MPa		
Tilt torque at 21 MPa	52,24 kNm		
Rotation speed	7 sec / rotation		
Torque	7000 Nm		

For all tracked and wheeled excavators 18 – 28 tonnes

Swingotilt® ST28 suitable for machines such as Volvo EC210, Volvo EC240, Hyundai R210, Hitachi ZX210, Cat 321C, Komatsu PC240 and more.

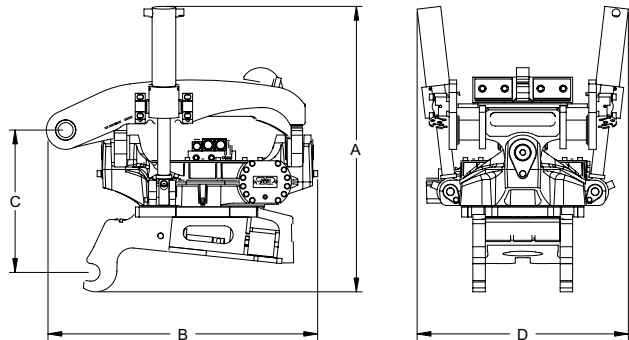
Swingotilt® ST28 is supplied complete with hydraulic hoses, hydraulic connections, wiring and installation manual. ST28 can be adapted for most machines in the size range and is available with most types of Quick Coupling Systems, and with direct mounted upper/lower section.

Available with double-acting cylinder or telescopic cylinder.



TECHNICAL SPECIFICATION SWINGOTILT® ST28

- **Infinite rotation**
- **Tilting 2 x 40°**
- **12/24VDC**
- **Grease lubricated rotation**
- **Valve system**
 - System Pro
 - System P
 - System TXSC
 - System TXC
 - System TS



Mounting	B20/S1/S2 (B27)	S70	SMP1
Weight (kg)	760 (840)	730	740
Dimensions A/B/C/D	1030/1020/570/920	1080/920/670/860	1120/1040/710/870
Tilt angle	2 x 40°		
Rotation	Infinite 360°		
Oil flow Min/Max	50 / 100 L/min		
Operating pressure Min/Max	18 / 35 MPa		
Tilt torque at 21 MPa	52,88 kNm		
Rotation speed	10 sec / rotation		
Torque	7000 Nm		

Integrated grab module

**For Swingotilt® ST6, ST10,
ST15, ST22 and ST28**

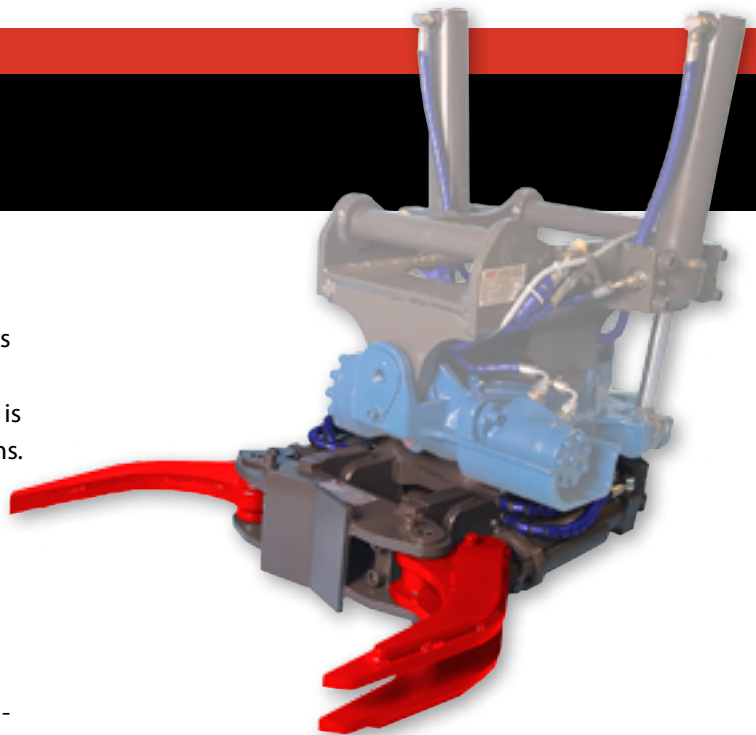
SMP's Grab module simplifies different work tasks in buildings and other sites. Allows smooth and simple handling of curb stones, posts, timber, and is also extremely useful when laying pipes and drains.

The Grab module is **easy to install on/ remove from** Swingotilt®, and is not bulky. The tools are attached under Swingotilt® as usual, and are used in the traditional way.

The grab module is manufactured for high durability, strength and low weight. Lifting is secure due to the integrated load retention valves in the hydraulic cylinders and with three finger grab as standard.

NB:

Grab module Swingotilt® ST6 = only GM S45/S50.



TECHNICAL SPECIFICATION GRAB MODULE

Grab module	Claw opening (mm)	Load (kg)	Weight (kg)
GM S45/50	600	Max 700	65
GM S60	800	Max 1000	130
GM S70	800	Max 1000	130
GM S1/S2	800	Max 1000	130
GM SMP1/2	800	Max 1000	130

Valve system/Control system

Standard system with international designations

1. System Pro

2. System P

3. System TXSC

4. System TXC

5. System TS

Explanations:

T [tilt] = Tilt function.
Tilts right/left

S [swing] = Rotation.
Rotates right/left

X [extra] = Extra function.
Outlet on right or left
side of the tool mounting

C [coupler] = Quick
Coupling.
Hydraulic lock function
on the tool mounting

1. System Pro – Proportional control of functions

The Swingotilt is fitted with proportionally controlled valves, allowing variable and continuous operation of all functions independently of one other, using a joystick equipped with integrated proportional rollers. The system utilizes the machine's hammer or crusher hydraulics.

2. System P – Parallel control of functions

Using the P-system it is possible to operate all functions independently of each other using the buttons in the control levers. The oil flow to the Swingotilt is regulated using a foot pedal or electrically. The system uses the base machine's hammer or crusher hydraulics.

3. System TXSC – Tilt + Extra + Swing + Coupler

The TXSC system allows one to change between the functions tilt, rotation, extra function or Quick Coupling. The system uses single crusher hydraulics.

4. System TXC – Tilt + Extra + Coupler

The TXSC system allows one to change between tilt, extra function or Quick Coupling. The system uses double crusher hydraulics. The single hydraulic circuit goes directly to rotation.

5. System TS – Tilt + Swing

Changes between tilt and rotation. The system uses single crusher hydraulics.

NB:

Electric locking available only on certain models of Quick Couplers.
Contact SMP Parts AB for details.



SMP Parts AB reserves the right to design modifications without prior notice

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