

TR06NOX

Tiltrotator

Experience and innovation have led to one of the most advanced tools for excavators – the **NOX Tiltrotator**: continuous 360° rotation and a tilting angle of 2 x 50° make it a universal joint. Combined with a quick change system and various attachments this means highest efficiency at any construction site.

The **NOX Tiltrotator** range is optimally engineered to suit excavators with an operating weight from 3t / 6600 lbs to 6t / 13200 lbs.

Advantages:

- **Precision and safety** due to „smooth“ proportional control (optional).
- **High stability and long service life** thanks to special cast housing.
- **Low overall height** thanks to elliptic rotary actuator: large travel.
- **High and constant tilting force** due to cylinderless rotary actuator.
- **No protruding parts**: excavation with narrow bucket possible in small, deep canals, even under or in between existing tubes.
- **Low maintenance**: worm drive lubricated permanently (grease).

For further information and optional tool combinations see our catalogs

- ① CONSTRUCTION - GENERAL CONSTRUCTION
- ④ CONSTRUCTION - LANDSCAPING & SNOW REMOVAL



Tiltrotator TR06NOX with 360° Rotation

Type	Excavator operating weight (t/lbs)	Self weight ¹⁾ (kg/lbs)	Width A ²⁾ (mm/in)	Length B ²⁾ (mm/in)	Height C ²⁾ (mm/in)	max. Volume bucket (m ³ /cu.ft)	max. Width bucket (mm/in)	Tilting angle (°)	Tilting torque ³⁾ (kNm/ft.lbs)	Rotating torque ⁴⁾ (Nm/ft.lbs)	Rotations / min (RPM)	Rotary feedthrough (l/min / GPM)
TR06NOX	> 3 - 6 / > 6600-13200	120 / 264	185 / 7.28	500 / 19.69	370 / 14.57	0,25 / 8.33	1300 / 51.18	2 x 50	8,5 constant / 6270 constant	4500 / 3320	9,0 ⁵⁾	40 / 10.57

¹⁾ total weight incl. upper suspension, excl. quick change ²⁾ reference: TR06NOX S40/S40 ³⁾ at 25 MPa / 3600 psi ⁴⁾ at 25 MPa / 3600 psi and vertical axis ⁵⁾ CSP & CSS at 30 l/min / 7.93 GPM

Standard package consists of: tiltrotator, control system, upper suspension or coupling, lower coupler or quick change

Control

Type	Description
CSS ⁶⁾	all functions are controlled by on/off solenoid valves and can be run simultaneously
CSP ⁷⁾ SVAB	SVAB RT controller, tilt and rotation are controlled by proportional solenoid valves and can be run simultaneously, extra function and quick coupler are controlled by on/off valves
CSP ⁷⁾ NOXPROP	NOXPROP controller, tilt, rotation and extra function are controlled by proportional solenoid valves and can be run simultaneously, quick coupler is controlled by on/off valves, separate display module, easy and fast installation
DF8 ⁶⁾	for each function (rotate, tilt, quick change, Extra 1) separate double acting hydraulic circuit on excavator dipper
DF10 ⁶⁾	for each function (rotate, tilt, quick change, Extra 1, Extra 2) separate double acting hydraulic circuit on excavator dipper

⁶⁾ original excavator control remains ⁷⁾ installation of **KINSHOFER** comfort control

Control System CSS consists of: controlbox, wiring from existing control sticks to Tiltrotator
Control System CSP consists of: controlbox, 2 joystick grips, wiring from joysticks to Tiltrotator, proportional pressure control valve, display

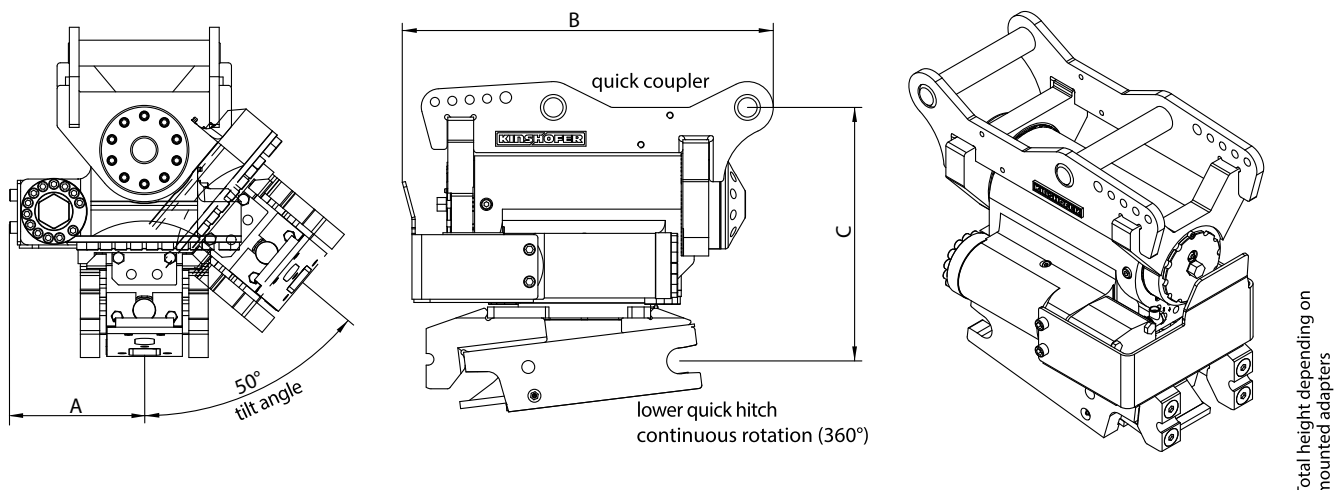
Requirements of Excavator

Hydraulic system: minimum of one single acting hydraulic circuit (hammer valve with free return line to tank)
 double acting hydraulic circuit equally possible for DF8 and DF10 models (not for CSP/CSS)

Operating pressure: **25 MPa (250 bar) / 3600 psi; max. backflow pressure 1 MPa (10 bar) / 144 psi**

Electrics (for CSS and CSP): electric supply 12 V or 24 V

Technical Drawings



Attachments / Sets / Mounting Options

TR06NOX

Especially adapted to the TR06NOX, there are different attachments and sets available.

Below you will find a set of the most common buckets used on the TR06NOX as well as the different available mounting options.

In combination with the **NOX** Tiltrotator, a large variety of possibilities is provided to make your carrier machine work more efficiently - in more than 3 dimensions ...

Find different tool examples on the last pages. For more possible tool combinations, please see our catalogs

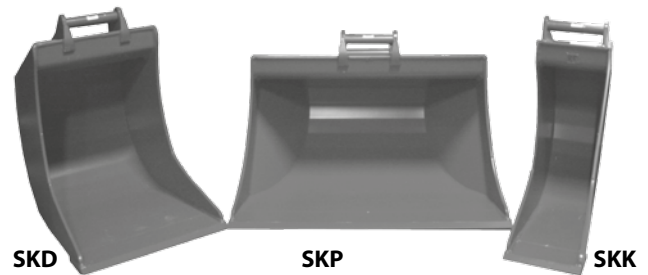
- ① CONSTRUCTION - GENERAL CONSTRUCTION
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Gripper

- **Always mounted** to the tiltrotator, no dismantling necessary when working with other attachments.
- **For handling posts, tubes, etc.**
- Available for **S40 lower quick coupler** (others on request).

Bucket Set includes

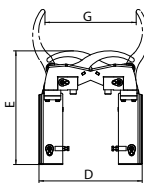
- **SKP Grading Bucket** cleans up and shapes sites.
- **SKD Backhoe Bucket** for trenching.
- **SKK Trench Bucket** for narrow cable channels.



Type	Lower quick coupler	Self weight (approx. kg/lbs)	Dimensions D x E x F (mm/in)	max. Opening width G (mm/in)	Closing time ¹⁾ (sec.)	Closing force (kN/ft.lbs)	Load capacity (kg/lbs)
TRG06	S40	40 / 88	470 x 515 x 140 / 18.50 x 20.28 x 5.51	415 / 16.34	1.5	7,5 / 5530	300 / 660

¹⁾ at 25 l/min. / 6.61 GPM

Technical Drawing



Bucket Set including SKP 6 / SKD 6 / SKK 6

Type	Self weight (approx. kg/lbs)	Width (mm/in)	Volume (litre/c.y.)	Coupler
SKP 6 Grading Bucket	130 / 286	1300 / 51.18	300 / 0.39	S40
SKD 6 Backhoe Bucket	140 / 308	720 / 28.35	280 / 0.37	S40
SKK 6 Trench Bucket	75 / 158	300 / 11.81	160 / 0.21	S40

Tiltrotator TR06NOX Mounting Options

Type	Upper bracket	Lower quick coupler
Nordic Style	direct mount	S40
Nordic Style	S40	S40
Nordic Style	direct mount	S45/50
Nordic Style	S45/50	S45/50
Oilquick	direct mount	OQ40
Oilquick	OQ40	OQ40
Lehnhoff	direct mount	MS03
Lehnhoff	MS03	MS03
Lehnhoff	direct mount	HS03
Lehnhoff	HS03	HS03
Verachtert	direct mount	CW05
Verachtert	CW05	CW05
Verachtert	direct mount	CW10
Verachtert	CW10	CW10
KINSHOFER I-Lock (Pin to Pin)	direct mount	CMI-037
KINSHOFER I-Lock (Pin to Pin)	CMI-37	CMI-037
KINSHOFER I-Lock (Pin to Pin)	direct mount	CMI-045-055
KINSHOFER I-Lock (Pin to Pin)	CMI-045-055	CMI-045-055