

TR18NOX

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 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 9t / 19800 lbs to 18t / 39600 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 tilt 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 TR18NOX 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)
TR18NOX	> 9 - 18 / >19800-39600	460 / 1012	225 / 8.86	740 / 29.13	530 / 20.87	1,0 / 33.33	2000 / 78.74	2 x 50	22,5 constant / 16595 constant	8000 / 5900	7,0 ⁵⁾	120 / 31.7

¹⁾ total weight incl. upper suspension, excl. quick change ²⁾ reference: TR18NOX S60/S60 ³⁾ at 25 MPa / 3600 psi ⁴⁾ at 25 MPa / 3240 psi and vertical axis ⁵⁾ CSP & CSS at 40 l/min / 10.57 GPM

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

Control

Type Description

- CSS⁶⁾** all functions are controlled by on/off solenoid valves and can be run simultaneously
- CSP⁷⁾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
- CSP⁷⁾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
- DF4⁸⁾**** - Tilt function, Extra 1 (Extra 2 as an option) and quick-coupler are controlled by changing over between the functions of circuit 1
- Rotation function is controlled by circuit 2
- DF8⁶⁾** for each function (rotate, tilt, quick change, Extra 1) separate double acting hydraulic circuit on excavator dipper
- DF10⁶⁾** for each function (rotate, tilt, quick change, Extra 1, Extra 2) separate double acting hydraulic circuit on excavator dipper

* available January 2015 ** two hydraulic circuits needed

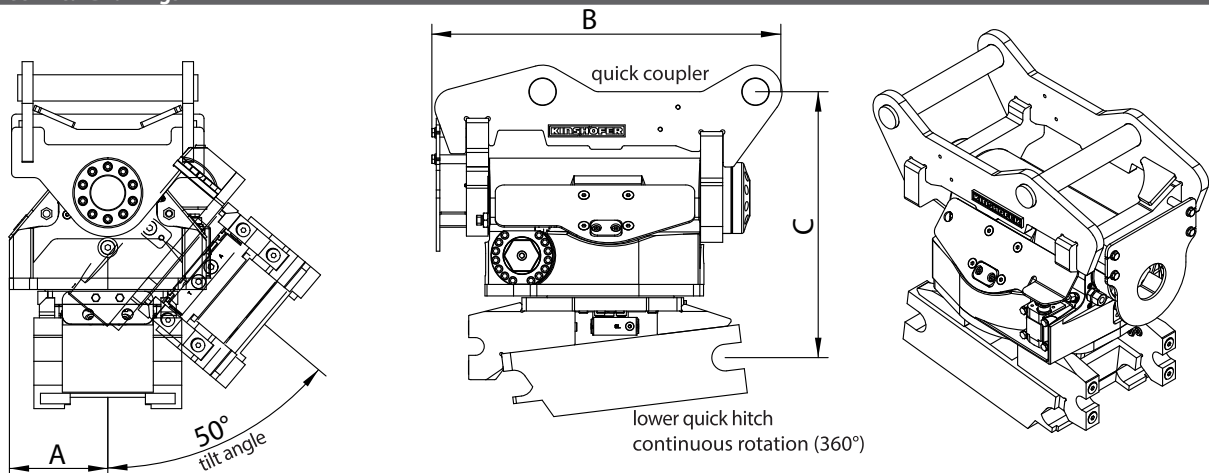
⁶⁾ original excavator control remains ⁷⁾ installation of **KINSHOFER** comfort control ⁸⁾ installation of control; original joysticks remains

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 DF4, 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



Total height depending on mounted adapters

Attachments / Sets / Mounting Options

TR18NOX

Especially adapted to the TR18NOX, there are different attachments and sets available.

Below you will find a set of the most common buckets used on the TR18NOX 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

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- ④ CONSTRUCTION - LANDSCAPING & SNOW REMOVAL

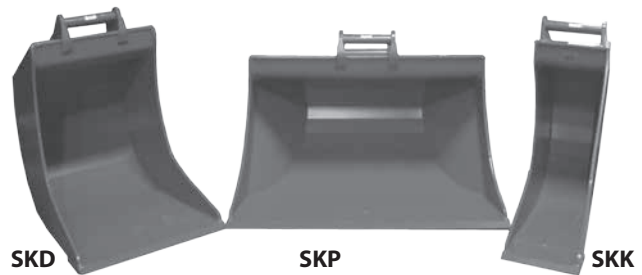


Gripper

- **Always mounted** to the tiltrotator, no dismantling necessary when working with other attachments.
- **For handling posts, tubes, etc.**
- Available for **S60 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.

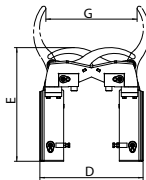


Gripper

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/lbf)	Load capacity (kg/lbs)
TRG18	S60	113 / 249	470 x 515 x 140 / 18.50 x 20.28 x 5.51	713 / 28.07	1.7	18 / 3960	900 / 1980

¹⁾ at 25 l/min. / 6.61 GPM

Technical Drawing



Bucket Set including SKP 18 / SKD 18 / SKK 22

Type	Self weight (approx. kg/lbs)	Width (mm/in)	Volume (litre/c.y.)	Coupler
SKP 18 Grading Bucket	380 / 836	1700 / 66.93	750 / 0.98	S60
SKD 18 Backhoe Bucket	400 / 880	900 / 35.43	650 / 0.85	S60
SKK 22 Trench Bucket	270 / 594	400 / 15.75	340 / 0.44	S60

Tiltrotator TR18NOX Mounting Options

Type	Upper bracket	Lower quick coupler
Nordic Style	direct mount	S60
Nordic Style	S60	S60
Oilquick	direct mount	OQ60-5
Oilquick	OQ60-5	OQ60-5
Oilquick	direct mount	OQ70-55
Oilquick	OQ70-55	OQ70-55
Gjerstad	direct mount	S1/NTP10/B20
Gjerstad	S1/NTP10/B20	S1/NTP10/B20
Lehnhoff	direct mount	MS10
Lehnhoff	MS10	MS10
Lehnhoff	direct mount	HS10
Lehnhoff	HS10	HS10
Verachttert	direct mount	CW20/30
Verachttert	CW20/30	CW20/30
KINSHOFER X-Lock (Pin to Pin)	direct mount	CMX-130
KINSHOFER X-Lock (Pin to Pin)	CMX-130	CMX-130
KINSHOFER X-Lock (Pin to Pin)	direct mount	CMX-170
KINSHOFER X-Lock (Pin to Pin)	CMX-170	CMX-170