

Please fill out completely and send to info@kinshofer.com or Fax +49 (0)8021 8899 37

CLIENT/DEALER DATA

Client/Dealer:
Street:
ZIP/City:
Country:
Customer no.:

Date:
Contact:
Email:
Tel.:
Fax:

 In case of order: Delivery address same as above

Client/Dealer:
Street:
ZIP:

Contact:
City:
Country:

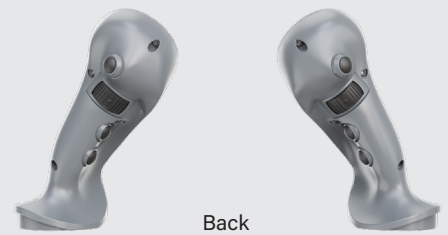
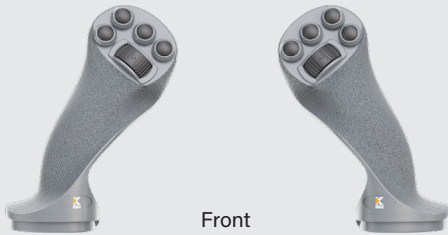
EXCAVATOR/CARRIER MACHINE INFORMATION

Manufacturer:
Year of construction:
Type: tracked wheeled
Control: shield control wheel/track control

Model:
Operating weight:
Voltage: 12V 24V
Drive selector switch: left right

JOYSTICK INFORMATION (only required for NOXProp & NOXProp+)

NOXProp standard design



Please select roller/button combination:


 Standard design
 2x prop roller; 7x s/w buttons

 left right

 F-N-R
 2x prop roller; 6x s/w buttons; 1x drive selector switch

 left right


 add. prop
 3x prop roller; 5x s/w buttons


 left right


 add. prop & F-N-R
 3x prop roller; 4x s/w buttons; 1x drive selector switch

 left right

HYDRAULIC INFORMATION (Please fill in completely)

 Hammer/shear
 (free return line)

 Grab rotation

 Quick coupler

 If additional circuits are existing, please specify:
 e.g. tilt circuit, etc.

Additional hydraulic circuit 1:

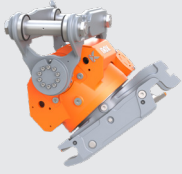
Additional hydraulic circuit 2:

Other:

 Drain line: left right

NOX TILTROTATOR CONFIGURATION

NOX Tiltrotator type:



- TR045NOX (2-4.5t)
- TR07NOX (4-7t)
- TR11NOX (6-11t)
- TR14NOX (10-14t)
- TR19NOX (14-19t)
- TR25NOX (19-25t)

Upper bracket:



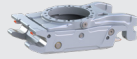
-
- Direct mount
-
- (pinned to the carrier)*



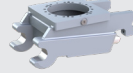
-
- Sandwich
-
- (quick coupler on carrier side)*

Lower quick coupler:

- mechanic
- hydraulic
- fully hydraulic



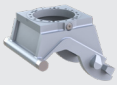
-
- S-Lock (
- Volvo*
-)



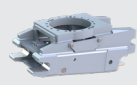
-
- L-Lock (
- Lehnhoff*
-)



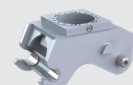
-
- D-Lock (
- Pin to Pin*
-)



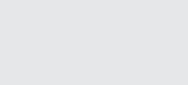
-
- Verachttert



-
- OilQuick



-
- Liebherr



-
- Other model

Type of quick coupler:

Options:



- with lifting hook
- without lifting hook



-
- Gripper
-
- (hydraulic gripping unit)*

FLOW CAPACITIES FOR HYDRAULIC ATTACHMENTS ON EXTRA 1

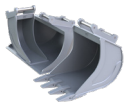
- Standard Flow (70 l/min)
- High Flow (120/150 l/min)
(available for TR14/TR19/TR25)
- CSP PowerLine
- Electric rotary feedthrough

 Rotation sensor: yes

Machine control system:

- Leica
- Trimble
- Topcon
- Moba
- Other:

WHICH ATTACHMENT SHOULD BE USED WITH THE NOX TILTROTATOR?





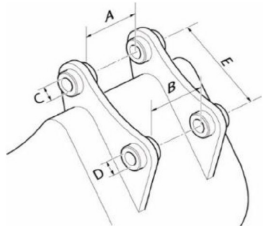






Additional attachments:

EXCAVATOR-/MACHINE SPECIFICATIONS



Upper (dipper)

A (mm):	<input style="width: 100%;" type="text"/>
B (mm):	<input style="width: 100%;" type="text"/>
C (mm):	<input style="width: 100%;" type="text"/>
D (mm):	<input style="width: 100%;" type="text"/>
E (mm):	<input style="width: 100%;" type="text"/>

Lower (bucket)

-
- Same specs as upper

A (mm):	<input style="width: 100%;" type="text"/>
B (mm):	<input style="width: 100%;" type="text"/>
C (mm):	<input style="width: 100%;" type="text"/>
D (mm):	<input style="width: 100%;" type="text"/>
E (mm):	<input style="width: 100%;" type="text"/>

INSTALLATION

 KINSHOFER / authorized service partner:

 By customer:

Company:	<input style="width: 100%;" type="text"/>
Installer:	<input style="width: 100%;" type="text"/>
Tel.:	<input style="width: 100%;" type="text"/>

Company:	<input style="width: 100%;" type="text"/>
Installer:	<input style="width: 100%;" type="text"/>
Tel.:	<input style="width: 100%;" type="text"/>

STEP-BY-STEP CONFIGURATION OF YOUR NOX TILTROTATOR BASED ON YOUR MACHINE!



Is your excavator equipped with a quick coupler or not?

"Sandwich" mount: Select the suitable quick coupler adaptation.
Direct mount: Universal bracket with individual pin-to-pin distance and pin diameter.

NOX Tiltrotator base unit suitable for the excavator tonnage.

Which hydraulic lines are pre-installed on the excavator?

Which control system is suitable for the pre-installed hydraulic lines?

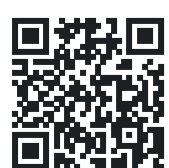
Which attachment will be operated with the NOX?
If high flow is required please choose the NOX HF option.
This also applies to pre-owned attachments.

Selection of the control system

For CSP, please choose the appropriate joystick depending on your machine configuration.

When selecting the lower quick coupler, you can choose between fully hydraulic, hydraulic or mechanical quick coupler system. Then choose the right quick coupler manufacturer for your application.

All attachments are well suited for the use on a NOX Tiltrotator and are manufactured by KINSHOFER.



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Excavator basis

"Sandwich" mount upper brackets

Direct mount upper brackets

Base unit NOX Tiltrotator

*Specifications depend on the machine configuration	TR06NOX	TR07NOX	TR11NOX	TR14NOX	TR19NOX	TR25NOX
Operating weight	3 - 6t	4 - 7t	6 - 11t	10 - 14t	14 - 19t	19 - 25t
Weight* (from)	180 kg	200 kg	320 kg	485 kg	580 kg	860 kg
Width* A (from)	205 mm	205 mm	215 mm	240 mm	230 mm	260 mm
Length* B (from)	460 mm	460 mm	580 mm	610 mm	645 mm	845 mm
Height* C (from)	365 mm	420 mm	475 mm	565 mm	580 mm	650 mm
Recomm. bucket width max.	1100 mm	1100 mm	1300 mm	1600 mm	1700 mm	2000 mm
Breakout force max. (ISO)	35 kN	50 kN	75 kN	110 kN	150 kN	170 kN
Tilt angle	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°
Tilt torque (constant)	8,5 kNm	11 kNm	16 kNm	31 kNm	40,5 kNm	51,7 kNm
Rotation speed	9 per min	8,5 per min	8,5 per min	8,5 per min	8,5 per min	8,5 per min
Rotation torque	4500 Nm	4700 Nm	7500 Nm	11000 Nm	12000 Nm	15000 Nm
Hydraulic pressure max.	25 MPa	25 MPa	27 MPa	30 MPa	30 MPa	30 MPa
Recomm. pump capacity CSP	30-80 l/min	30-80 l/min	40-100 l/min	80-160 l/min	100-180 l/min	120-200 l/min
Recomm. pump capacity DF04/06/10	15 / 32 l/min	15 / 32 l/min	21 / 40 l/min	40 / 45 l/min	60 / 50 l/min	70 / 70 l/min
Electric swivel	-	optional	optional	optional	optional	optional

Excavator hydraulic supply

PRE-INSTALLED LINES
▷ 1 x hammer line (free return to tank)

PRE-INSTALLED LINES
▷ 1 x shear line (double-acting hydr. circuit)
▷ 1 x rotation line (double-acting hydr. circuit)

PRE-INSTALLED LINES
▷ 1 x shear line (double-acting hydr. circuit)
▷ 1 x rotation line (double-acting hydr. circuit)
▷ 1 x quick coupler line according to DIN EN 474 or ISO 13031

PRE-INSTALLED LINES
▷ 1 x tilt line (double-acting hydr. circuit)
▷ 1 x rotation line (double-acting hydr. circuit)
▷ 1 x quick coupler line according to DIN EN 474 or ISO 13031

Control system - CSP NOXProp+ / CSP NOXProp / SVAB-GP

CSP CONTROL
▷ Simultaneous use of all functions
Fully proportional, smooth operation

Control system - DF04

DF04 CONTROL
▷ Tilt can be switched to extra 1 or extra 2
▷ No simultaneous use of tilt and extra

Control system - DF06

DF06 CONTROL
▷ All functions controlled by the excavator
▷ Tilt can be switched to extra function (hydr. attachment)
▷ Electric installation needed
▷ Up to 1 extra function available

Control system - DF10

DF10 CONTROL
▷ All functions controlled by the excavator
▷ No electric installation
▷ Up to 2 extra functions available

Can be used with CSP as well (1 line must have free return to tank)

Sandwich mount in combination with a hydraulic quick coupler requires an additional quick coupler installation set

Flow requirements CSP NOXProp+ / CSP NOXProp / SVAB-GP

Standard flow or non hydr. attachments only

High flow attachments

Flow requirements - DF04

Standard flow or non hydr. attachments only

Flow requirements - DF06 / DF10

Standard flow or non hydr. attachments only

High flow attachments

CSP SF

CSP HF
▷ Not available for TR06NOX, TR07NOX & TR11NOX

CSP PL
▷ additional high flow circuit (Powerline) necessary
▷ Separate control of high flow attachments independent from NOX

DF04 SF

DF06 SF / DF10 SF

DF10 HF
▷ Extra 1 is a high flow line with increased cross-sectional area for flow

Control units CSP NOXProp+ / CSP NOXProp / SVAB-GP

NOXProp+
▷ Compatible with Leica, Trimble, Topcon or Moba 2D and 3D control
▷ Rotation sensor is included

NOXProp
▷ All parameters can be adjusted individually with laptop
▷ All functions can be controlled proportionally

Control unit - DF04

DF04
▷ Optional rotation sensor for 2D and 3D control
▷ Original joysticks can be used

Control unit - DF06 / DF10

DF06 / DF10
▷ Original joysticks can be used
▷ Optional rotation sensor for 2D and 3D control
▷ No additional control unit needed

NOXProp+ & NOXProp are not available for TR06NOX

For joystick steering or additional proportional function as adjustable boom or power line

Standard joysticks
▷ 2 x prop wheel
▷ 7 x push button

F-N-R
▷ 2 x prop wheel
▷ 6 x push button
▷ 1 x F-N-R button

Additional prop
▷ 3 x prop wheel
▷ 5 x push button

Additional prop & F-N-R
▷ 3 x prop wheel
▷ 5 x push button
▷ 1 x F-N-R button

Lower quick coupler - Hydraulic versions

LQC - Fully hydraulic

LQC - Hydraulic

Lower quick coupler - Mechanical versions (only in combination with DF06 / DF10)

LQC - Mechanical

Other quick coupler systems available on request

Attachment options

Integrated gripper
When using the gripper with CSP-HF, the remaining extra function is not proportional only ON/OFF

Bucket set

Levelling bar with roller

Demolition & sorting grab
No gripper with CSP HF possible

Multi purpose grab
No gripper with CSP HF possible

Multi-Grip

Pallet fork (mech./hydr.)
No gripper with CSP HF possible on hydr. pallet fork

Ripper tooth

Hedge trimmer

Tree cutter

Hydraulic brush

Drum cutter
▷ High flow needed
▷ Drain line needed

Compactor
▷ High flow needed
▷ Drain line needed

Ballast tamper
▷ High flow & 1 x extra function needed
▷ No gripper possible