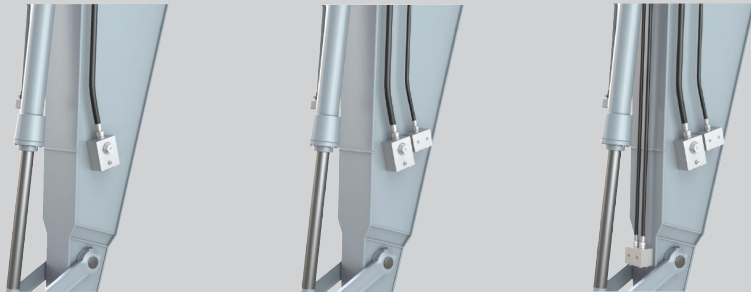


Please complete both pages and send to [info@kinshofer.com](mailto:info@kinshofer.com) or Fax +49 (0)8021 8899 37

**Client / Dealer:**       Date:   
 Street:       Contact:   
 City:       Email:   
 Country:       Tel.:   
 Account no.:       Fax:

**In case of order: Delivery address**       **same as above**  
**Client / Dealer:**       Contact:   
 Street:       City:   
 ZIP:       Country:

**Excavator / machine information:**  
 Manufacturer:       Model:   
 Year of construction:       Operating weight:   
 Type:     tracked     wheeled      Voltage:     12V     24V

**Hydraulic information - please complete:**


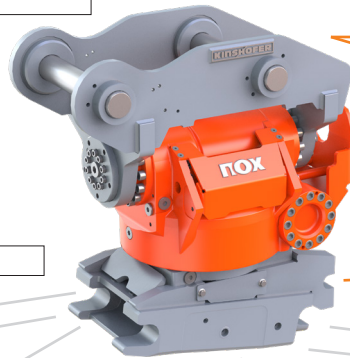
Hammer/shear (free return line)   
  Hammer/shear rotation circuit   
  Hammer/shear rotation circuit quick coupler

 Other additional circuits available?  
 e.g. tilt circuit, etc.

Additional hydraulic circuit 1:   
 Additional hydraulic circuit 2:   
 Other:   
 Drain line:     left     right

**NOX Tiltrotator Type:** TR 
**Upper bracket:**

Direct mount  
 (pin on the carrier, complete \*p. 2)  
 Sandwich  
 (quick coupler on the carrier)

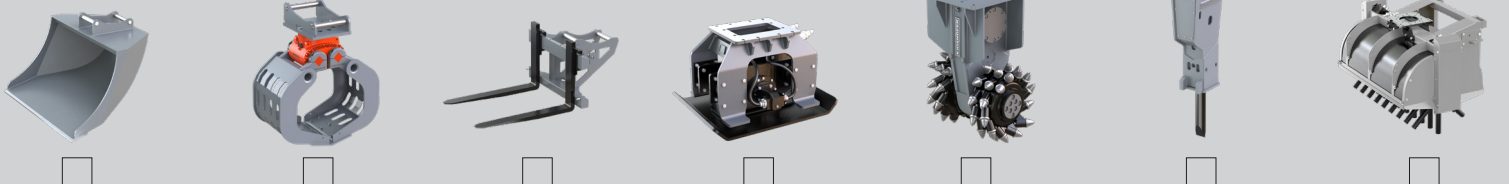


Lifting hook  
 Lifting eye  
 without  
 Gripper


**Lower quick coupler:**

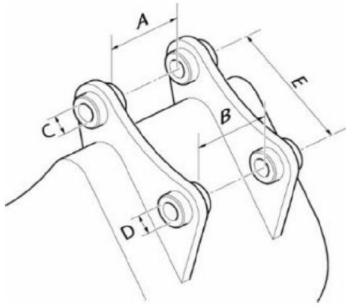
<b>S-Lock</b> (Volvo)  <input type="checkbox"/>	<b>D-Lock</b> (pin to pin)  <input type="checkbox"/>	<b>L-Lock</b> (Lehnhoff)  <input type="checkbox"/>	<b>Verachtart</b>  <input type="checkbox"/>	<b>Q-Lock</b> (OilQuick)  <input type="checkbox"/>	<b>Liebherr</b>  <input type="checkbox"/>	<input type="checkbox"/> Other: <input type="text"/> <input type="text"/> <input type="text"/>
--	--	--	--	---	--	---

Model / Type:      mechanic     hydraulic     fully hydraulic

 Which attachments are you planning to use with the **NOX**?


Other attachments:

Please complete the boxes below carefully as required. Missing Information will cause delay in order process!

**Excavator / machine specifications:**

**Upper: dipper\* / D-Lock\***

A (mm):

B (mm):

C (mm):

D (mm):

E (mm):

**Lower: bucket / D-Lock only**
 same specs as upper

A (mm):

B (mm):

C (mm):

D (mm):

E (mm):

**Control system:**

- CSP (two hose system)     
  DF04 (four hose system)     
  DF10 (direct feed)     
  no control system

**NOXPROP:**

front

back

standard design

back

front



2x prop roller  
and 7x on/off button  
left and right side


**Options:**

 F-N-R

 add. prop

 add. prop & F-N-R

 F-N-R

 add. prop

 add. prop & F-N-R

 Hand rest left

 Hand rest right

**Rotation sensor:**

- yes       NOXProp+ grading system / autocalibration

Gateway grading system:

- Leica       Trimble       Topcon       Moba       MTS

Wheel / track steering control:

- Comments:

**Other options:**

Swivel options:

- High Flow (CSP & DF10)       electrical

DF10 switching option\*:

- Upgrade kit; switch valve to split Tilt to Extra 1

(\*not possible with High Flow swivel)

- Upgrade kit; switch valve to split Extra 1 to Extra 2 (Gripper)

Quick coupler safety options:

- OilQuick Lock Support  
 Kinshofer safety sensor kit (L-Lock & S-Lock)  
 Kinshofer quick coupler control (DF10)  
 Others

Installation:

- Kinshofer / authorized service partner       customer

Notes:

# 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 adaption.  
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.

**Excavator basis**

With quick coupler      Without quick coupler

"Sandwich" mount upper brackets      Direct mount upper brackets

System S-Lock      System L-Lock      System OilQuick      Universal upper bracket

Other upper brackets, depending on existing quick coupler possible      Lifting hook      Lifting eye      Other quick coupler adapters available on request

---

**Base unit NOX Tiltrotator**

	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	10 kNm	16 kNm	26 kNm	40,5 kNm	44 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	4600 Nm	6400 Nm	7800 Nm	8800 Nm	9300 Nm
Hydraulic pressure max.	25	25	27	30	30	30
Recomm. pump capacity CSP	30-80	30-80	40-100	80-160	100-180	120-200
Recomm. pump capacity DF04/06/10	15 / 32	15 / 32	21 / 40	40 / 45	60 / 50	70 / 70
Electric swivel	-	optional	optional	optional	optional	optional

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**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**

▷ Simultaneous use of all functions

Fully proportional, smooth operation

**Control system - DF04**

▷ Tilt can be switched to extra 1 or extra 2

▷ No simultaneous use of tilt and extra

▷ Hydraulic quick coupler required

**Control system - DF06**

▷ 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**

▷ All functions controlled by the excavator

▷ No electric installation

▷ Up to 2 extra functions available

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**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

---

**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**

▷ Optional rotation sensor for 2D and 3D control

▷ Original joysticks can be used

**Control unit - DF06 / DF10**

▷ Original joysticks can be used

▷ Optional rotation sensor for 2D and 3D control

▷ No additional control unit needed

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

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**

KINSHOFER SMARTFLOW D-LOCK / X-LOCK / T620

OilQuick

**LQC - Hydraulic**

SYSTEM L-LOCK

SYSTEM S-LOCK

SYSTEM D-LOCK

SYSTEM X-LOCK

SYSTEM OILQUICK

SYSTEM VERACHTERT

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

**LQC - Mechanical**

SYSTEM L-LOCK

SYSTEM S-LOCK

SYSTEM OILQUICK

SYSTEM LIEBHERR

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**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

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**Ripper tooth**

**Hedge trimmer**

**Tree cutter**

**Hydraulic brush**

**Drum cutter**

▷ High flow needed

▷ Drain line needed

**Compactor**

▷ Hohe Durchflussleistung notwendig

▷ Leckdichtung notwendig

**Ballast tamper**

▷ High flow & 1 x extra function needed

▷ No gripper possible

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