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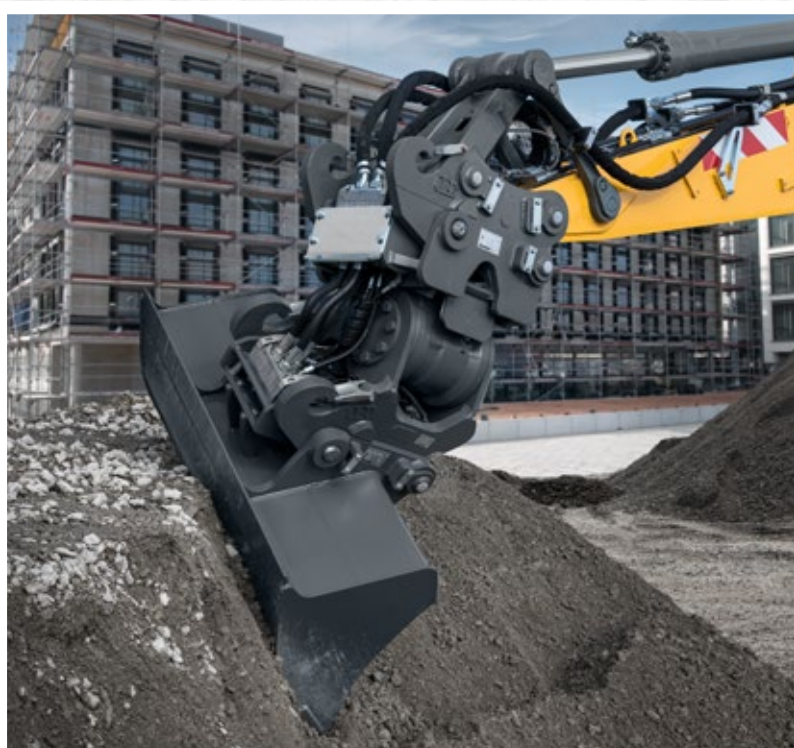
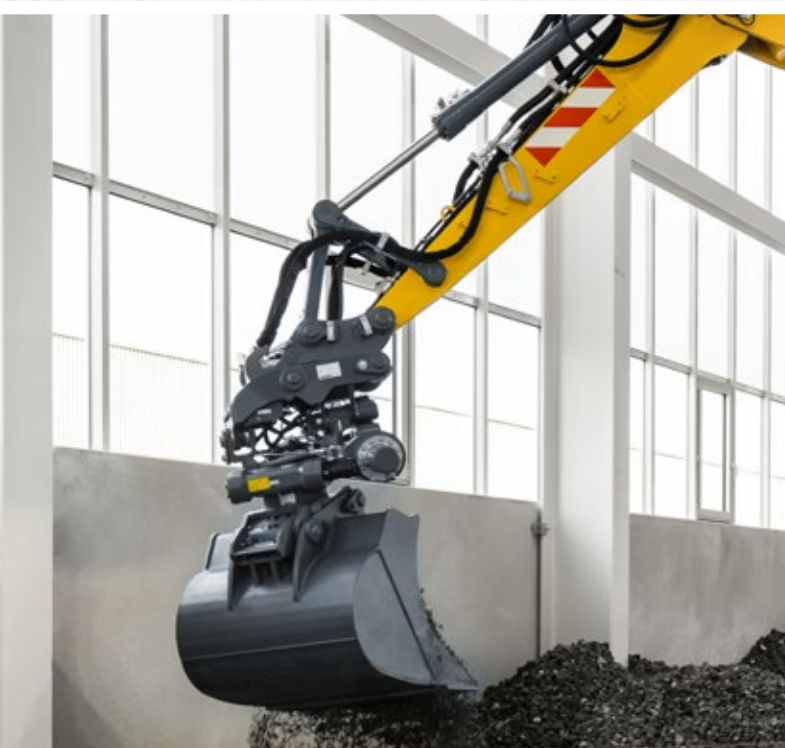
# Tiltrotator Tilt unit

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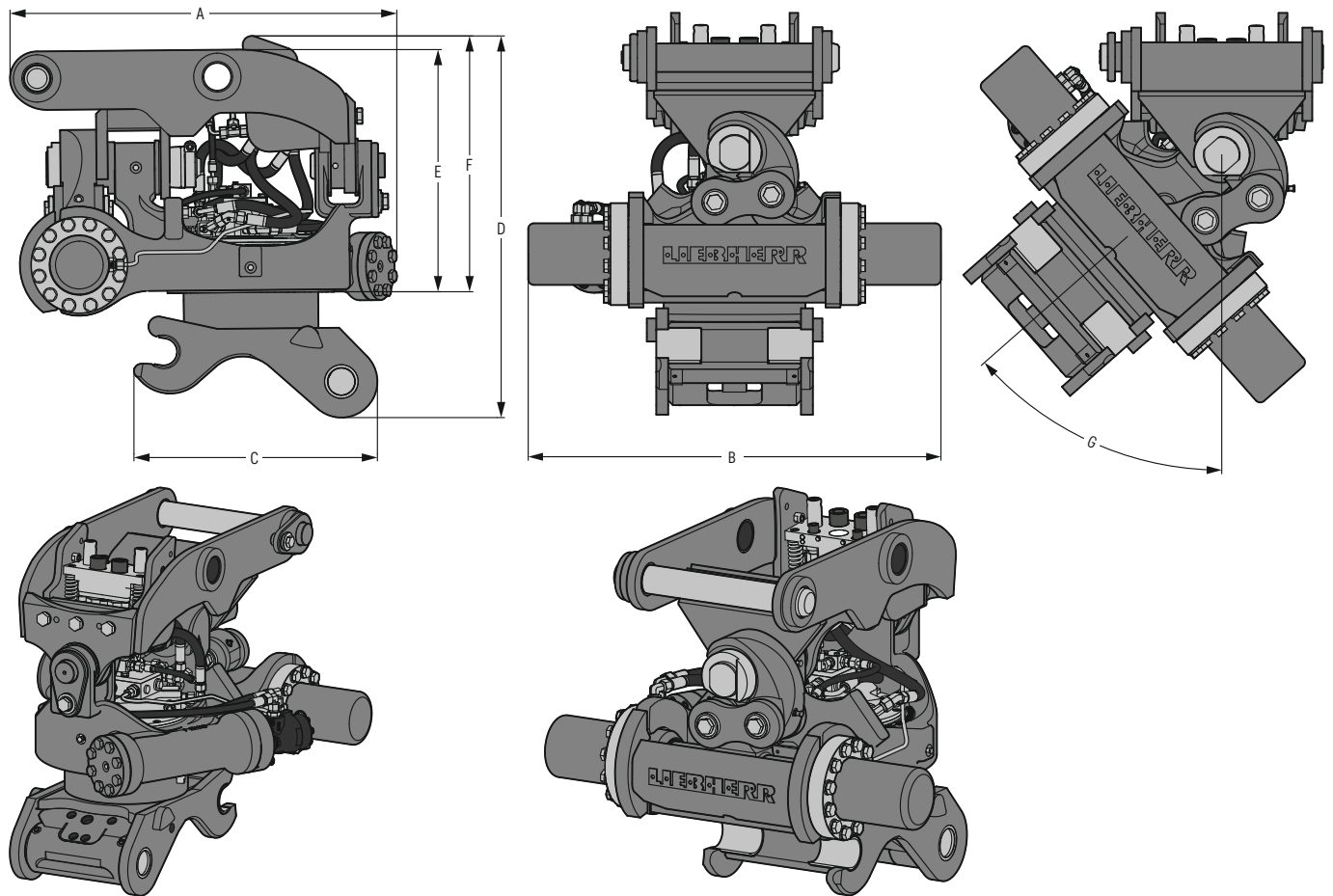
TR 20B / TR 25  
LiTiU 33 / LiTiU 48

**LIEBHERR**

Attachments



# Tiltrotator TR 20B



## Machine range

Liebherr machines	
Wheeled excavator – Compact	A 913 Compact – A 918 Compact
Wheeled excavator	A 914 – A 918
Crawler excavator – Compact	R 914 Compact
Railroad excavator	R 914 Rail, A 922 Rail, A 924 Rail

Other machine makes	
Weight class	approx. 14 – 18 t
(see operating manual for exact specification)	

## Dimensions<sup>1)</sup> / weights<sup>1)</sup>

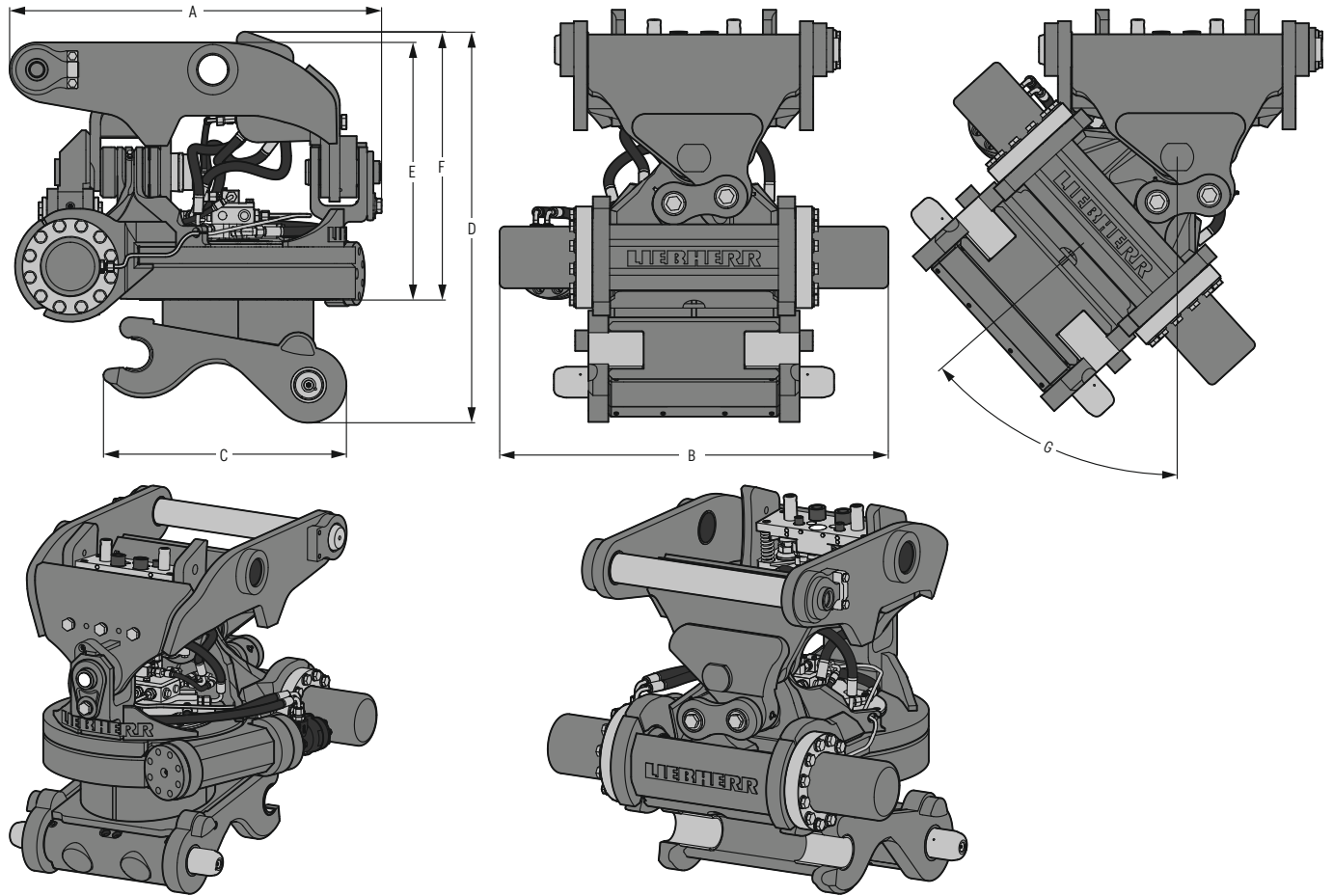
A Length	B Width	C Length mounting	D Pin to pin height with mounting	E Pin to pin height without mounting	F Pin to pin height without mounting, with LIKUFIX	G Tilt angle	Weight
855 mm	870 mm	540 mm	845 mm	540 mm	570 mm	2 x 50°	576 kg

<sup>1)</sup> based on standard tiltrotator TR 20B with mounting SWA 33 LIKUFIX machine side and mounting SWA 33 hydraulic on the underside tiltrotator

## Technical data

Rotary drive		Tilting drive	
Hydraulic pressure max.	Flow rate max.	Hydraulic pressure max.	Flow rate max.
17 MPa/170 bar	50 l/min.	35 MPa/350 bar	200 l/min.

# Tiltrotator TR 25



## Machine range

### Liebherr machines

Wheeled excavator - Compact	A 918 Compact
Wheeled excavator	A 916 - A 924 Heavy Lift
Crawler excavator - Compact	R 920 Compact - R 926 Compact
Crawler excavator	R 918 - R 928
Railroad excavator	A 922 Rai, A 924 Rail

### Other machine makes

Weight class	approx. 18 - 24 t
(see operating manual for exact specification)	

## Dimensions<sup>1)</sup> / weights<sup>1)</sup>

A Length	B Width	C Length mounting	D Pin to pin height with mounting	E Pin to pin height without mounting	F Pin to pin height without mounting, with LIKUFIX	G Tilt angle	Weight
885 mm	880 mm	580 mm	940 mm	615 mm	640 mm	2 x 50°	830 kg

<sup>1)</sup> based on standard tiltrotator TR 25 with mounting SWA 48 LIKUFIX machine side and mounting SWA 48 hydraulic on the underside tiltrotator

## Technical data

Hydraulic pressure max.	Rotary drive		Hydraulic pressure max.	Tilting drive	
	Flow rate max.			Flow rate max.	
17 MPa/170 bar		50 l/min.	35 MPa/350 bar		200 l/min.

# Tiltrotator overview of functions and equipment

Hydraulic excavator equipment options	Description	Movement possibilities
<ul style="list-style-type: none"> <li>- Medium pressure circuit (rotary drive)</li> <li>- Liebherr quick coupler (mechanical or hydraulic)</li> </ul>	<ul style="list-style-type: none"> <li>- Tiltrotator for installation on stick on mechanical or hydraulic Liebherr quick coupler</li> <li>- Rotating and tilting switchable</li> </ul>	<ul style="list-style-type: none"> <li>- Rotating or tilting (controlled by rocker switch in joystick)</li> </ul>
<ul style="list-style-type: none"> <li>- Medium pressure circuit (rotary drive)</li> <li>- High pressure circuit (AHS)</li> <li>- Liebherr quick coupler (mechanical or hydraulic)</li> </ul>	<ul style="list-style-type: none"> <li>- Tiltrotator for installation on stick on mechanical or hydraulic Liebherr quick coupler</li> <li>- Rotating and tilting simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>- Rotating and tilting simultaneously</li> </ul>
<ul style="list-style-type: none"> <li>- Medium pressure circuit (rotary drive)</li> <li>- High pressure circuit (AHS)</li> <li>- LIKUFIX</li> </ul>	<ul style="list-style-type: none"> <li>- Tiltrotator for installation on LIKUFIX attached to stick</li> <li>- Rotating and tilting simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>- Rotating and tilting simultaneously<sup>1)</sup></li> </ul>
<ul style="list-style-type: none"> <li>- Medium pressure circuit</li> <li>- Quick coupler from other manufacturers</li> </ul>	<ul style="list-style-type: none"> <li>- Tiltrotator for installation on the quick coupler from other manufacturers (universal mounting)</li> <li>- Universal mounting on bottom side of tiltrotator</li> <li>- Rotating and tilting switchable</li> </ul>	<ul style="list-style-type: none"> <li>- Rotating or tilting (controlled by rocker switch in joystick)</li> </ul>
<ul style="list-style-type: none"> <li>- Medium pressure circuit</li> <li>- High pressure circuit</li> <li>- Quick coupler from other manufacturers (consultation with Liebherr-Hydraulikbagger GmbH required)</li> </ul>	<ul style="list-style-type: none"> <li>- Tiltrotator for installation on the quick coupler from other manufacturers (universal mounting)</li> <li>- Universal mounting on bottom side of tiltrotator</li> <li>- Rotating and tilting switchable</li> </ul>	<ul style="list-style-type: none"> <li>- Rotating and tilting simultaneously</li> </ul>

<sup>1)</sup> when combined with a hydraulic quick coupler on the underside of the tiltrotator, a 14-pin signal contact strip and the control unit for the second quick coupler adapter are always required on the machine side

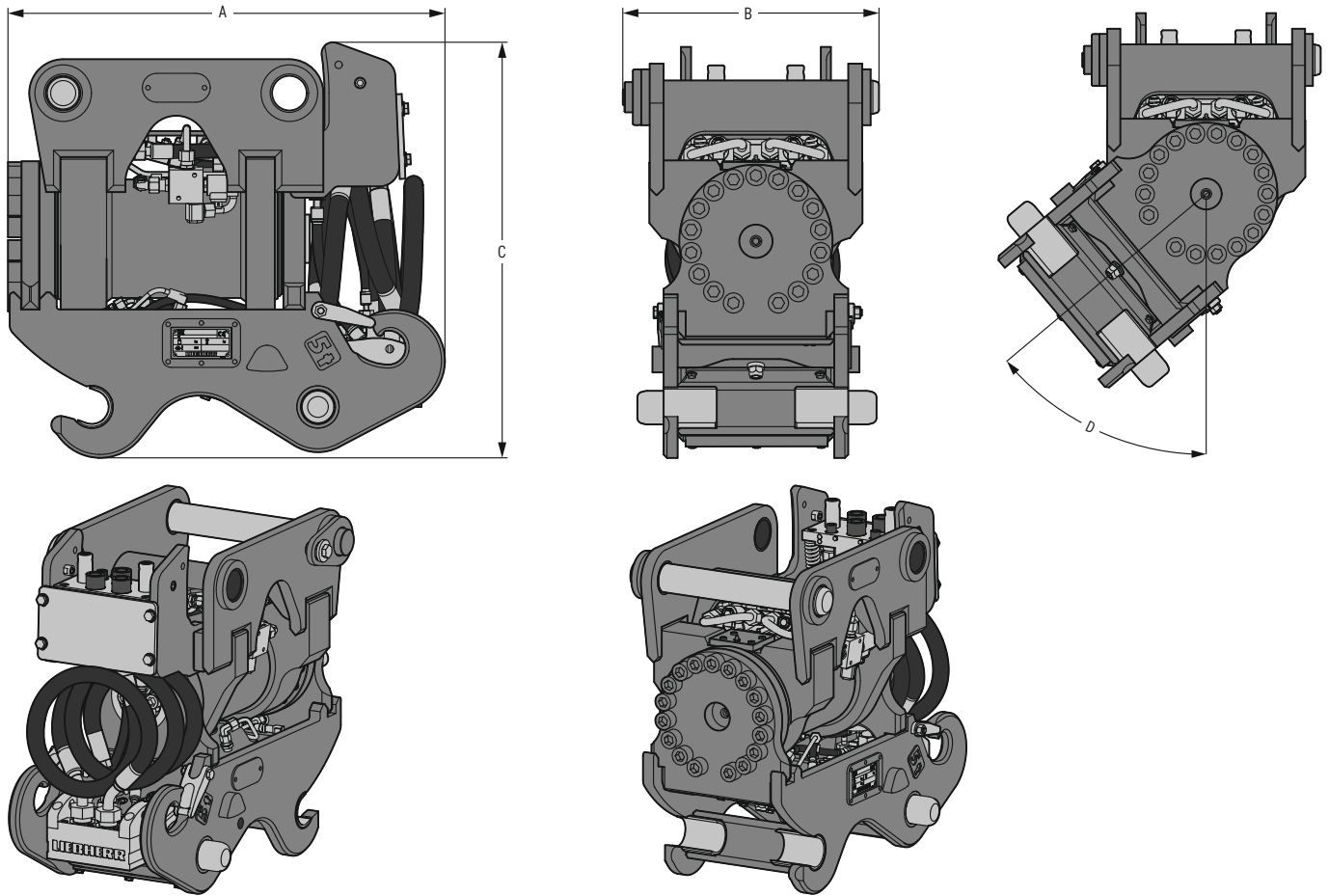


Control unit for second quick coupler adapter



14-pin signal contact strip

# Tilt unit LiTiU 33



## Machine range

### Liebherr machines

Wheeled excavator - Compact	A 914 Compact - A 918 Compact
Wheeled excavator	A 914 - A 918
Crawler excavator - Compact	R 914 Compact - R 920 Compact
Railroad excavator	R 914 Rail, A 922 Rail, A 924 Rail

### Other machine makes

Weight class (see operating manual for exact specification)	approx. 14 - 18 t
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## Dimensions<sup>1)</sup> / weights<sup>1)</sup>

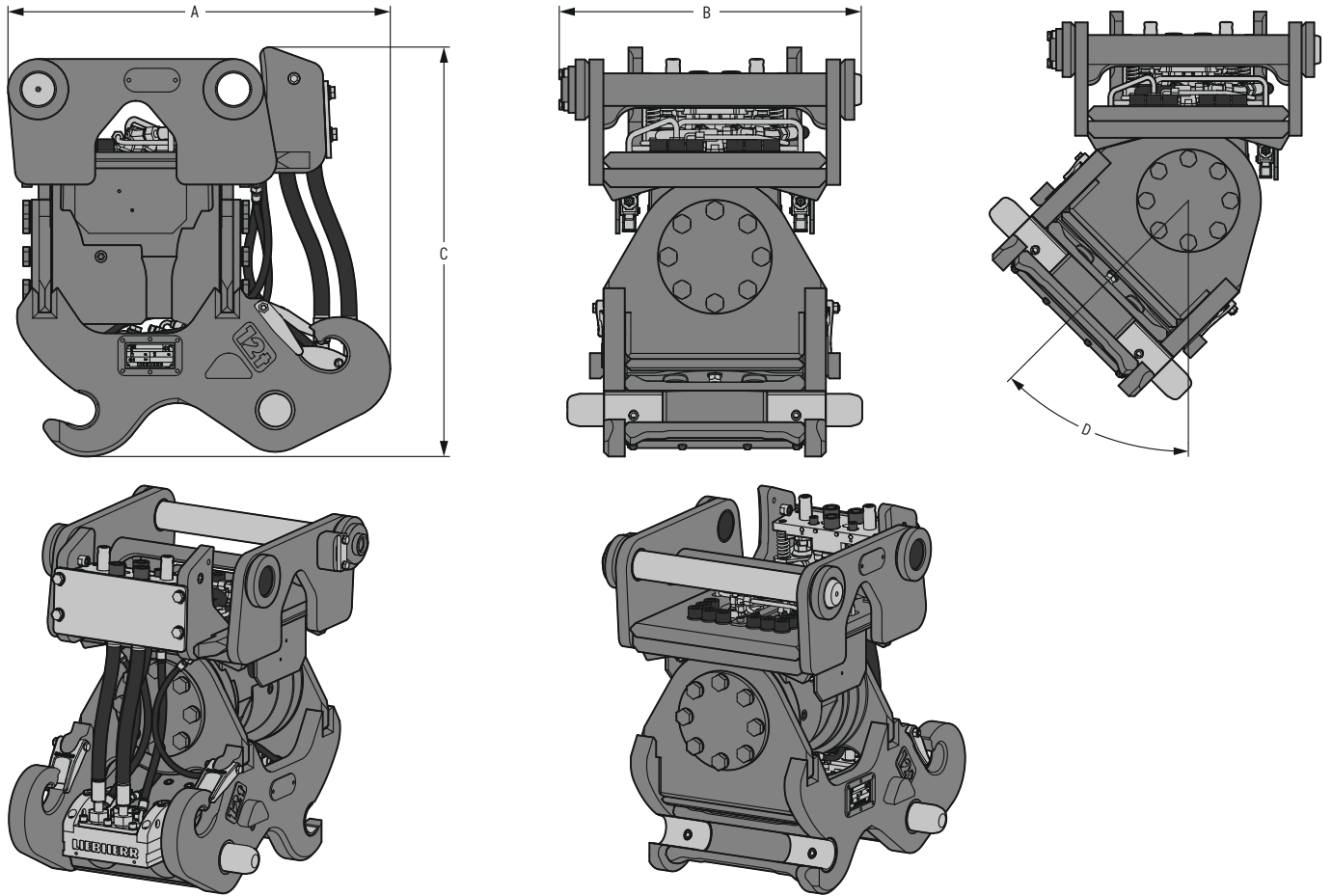
A Length	B Width	C Height	D Tilt angle	Weight
773 mm	458 mm	735 mm	50°	410 kg

<sup>1)</sup> based on standard tilt unit LiTiU 33 with both side SWA 33 LIKUFIX (underside of tilt unit and machine side mounting)

## Technical data

Bolt diameter	Torque	Holding torque	Standard operating pressure	Operating pressure max.	Displacement
60 mm	13,300 Nm (at 207 bar)	40,725 Nm (at 207 bar)	150 bar	224 bar (secured by pressure relief valve)	approx. 14.5 cm <sup>3</sup> / angular degree

# Tilt unit LiTiU 48



## Machine range

### Liebherr machines

Wheeled excavator - Compact	A 916 Compact - A 918 Compact
Wheeled excavator	A 916 - A 924 Heavy Lift
Crawler excavator - Compact	R 920 Compact
Crawler excavator	R 918 - R 926
Railroad excavator	A 922 Rail, A 924 Rail

### Other machine makes

Weight class (see operating manual for exact specification)	approx. 18 - 24 t
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## Dimensions<sup>1)</sup> / weights<sup>1)</sup>

A Length	B Width	C Height	D Tilt angle	Weight
822 mm	650 mm	881 mm	45°	740 kg

<sup>1)</sup> based on standard tilt unit LiTiU 48 with both side SWA 48 LIKUFIX (underside of tilt unit and machine side mounting)

## Technical data

Bolt diameter	Torque	Holding torque	Standard operating pressure	Operating pressure max.	Displacement
70 mm	16,000 Nm (at 150 bar)	30,000 Nm (at 150 bar)	150 bar	180 bar (secured by pressure relief valve)	25 cm <sup>3</sup> / angular degree

# Equipment

	TR 20B	TR 25	LITIU 33	LITIU 48
<b>Mounting machine side</b>				
Screw coupling	+	+		
SW stick mechanical	+	+		
SWA 33 mechanical	+	+		
SWA 33 hydraulic	+	+		
SWA 33 LIKUFIX	●	+	● <sup>1)2)</sup>	
SWA 48 mechanical	+	+		
SWA 48 hydraulic		+		
SWA 48 LIKUFIX		●		● <sup>1)2)</sup>
Universal mounting	+	+		

	TR 20B	TR 25	LITIU 33	LITIU 48
<b>Mounting attachment side</b>				
Screw coupling	+	+		
SW stick mechanical	+	+		
SWA 33 mechanical	●	+		
SWA 33 hydraulic	● <sup>1)</sup>	+ <sup>1)</sup>	+ <sup>1)2)</sup>	
SWA 33 LIKUFIX			● <sup>1)2)</sup>	
SWA 48 mechanical	+	●		
SWA 48 hydraulic		● <sup>1)</sup>		+ <sup>1)2)</sup>
SWA 48 LIKUFIX				● <sup>1)2)</sup>
Universal mounting	+	+		

## Equipment / Options

Protection guard LIKUFIX				+
Sensor machine control system (Leica)	+	+		

<sup>1)</sup> on the machine side, a 14-pin signal contact strip and the control unit for a second quick coupler adapter are required

<sup>2)</sup> switching takes place between tilting the LiTiU and the grab rotation circle for the attachment

● = Standard, + = Option

