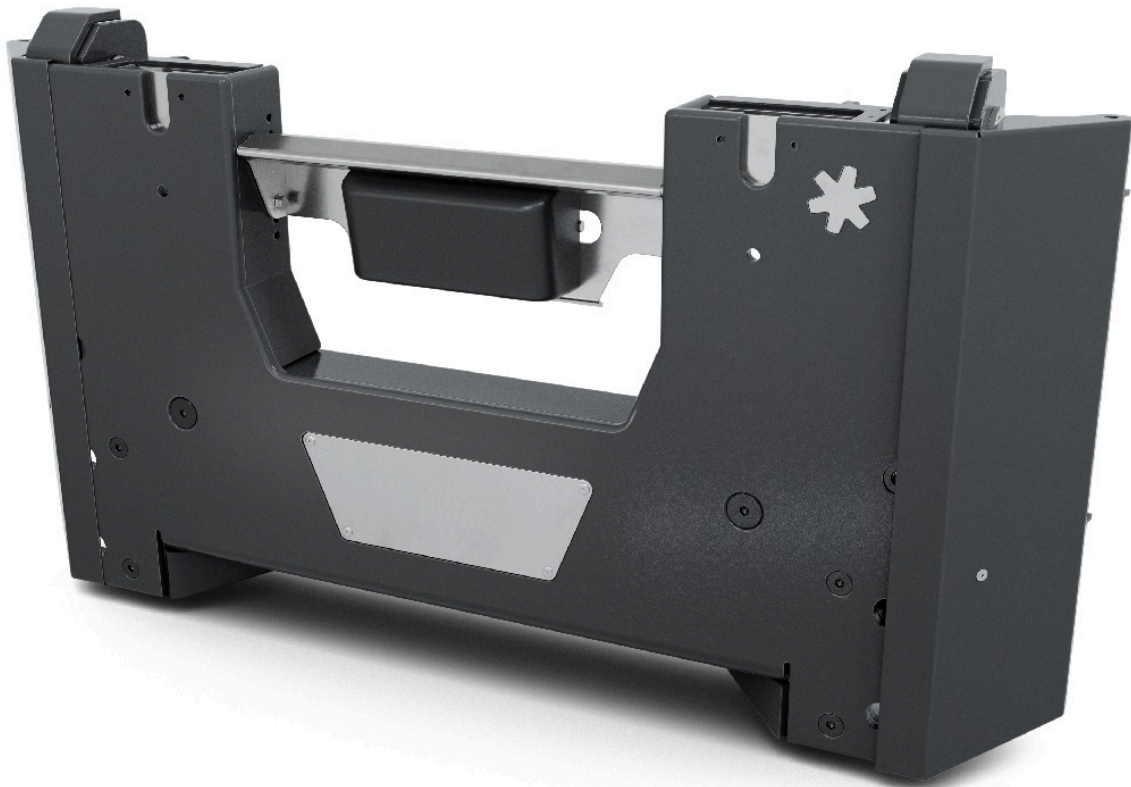


FAP

Front mounting plate



Art.Nr.: 10059120

11/19/2025 | Version 1.5 | EN

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Kugelmann Maschinenbau is a family-run Allgäu business with its main emphasis and tradition in municipal technology. With passion, we manufacture reliable and pioneering machines - we love what we do.

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We are constantly developing our products to offer our customers maximum convenience. Therefore, we ask for your understanding that the manual may deviate from the product in some regards.

2 Content

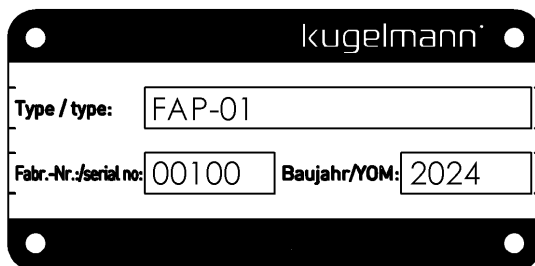
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3 General information

This chapter gives you information on the following:

- Chapter 3.1 "Identification of front mounting plate", page 4
- Chapter 3.2 "Service information", page 5

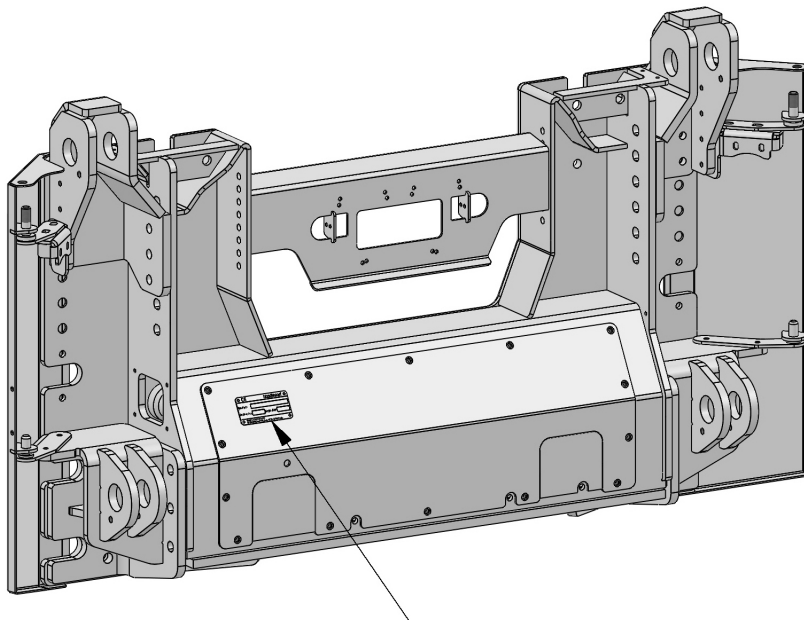
3.1 Identification of front mounting plate



Example:

- Type: FAP-01
- Serial number: 00100
- Year of construction: 2024

The type plate refers to device type, serial number, year of construction and manufacturer.



You find the type plate at the back of the front mounting plate at the designated place.

3.2 Service information

Customer service:

Tel.: +49 (0) 8860 / 9190-90

Mobile: +49 (0) 171 / 75 52 372

Fax: +49 (0) 8860 / 9190-49

E-Mail: service@kugelmann.com

4 Operating instructions

This chapter gives you information on the following:

- Chapter 4.1 *"Target group"*, page 7
- Chapter 4.2 *"Use"*, page 7
- Chapter 4.3 *"Conventions used"*, page 8
- Chapter 4.4 *"Change history"*, page 8

4.1 Target group

These operating instructions are intended for skilled persons who are responsible for the following work at the front mounting plate:

- Commissioning
- Control
- Operation
- Use
- Maintenance

At least once a year, all personnel must be trained in the operation of the front mounting plate in accordance with the guidelines of the business liability insurance. The use of the front mounting plate by untrained or unauthorized persons is prohibited.

4.2 Use

These operating instructions contain all necessary data and information for a secure control, operation and maintenance of the front mounting plate.





Make sure that all persons responsible for operation or maintenance of the front mounting plate or persons working in the immediate environment of the device are familiar with the operating and maintenance instructions as well as the safety information in this manual.

These operating instructions are part of the product and have to be kept in a safe place. In case of resale or transfer of the machine to third parties, these operating instructions have to be included.

All information, illustrations and technical data correspond to the technical state at the time of printing. Subject to technical modifications.

4.3 Conventions used

This manual uses the following typographic conventions:

Symbol	Signal word	Meaning
	Danger	Designates an imminent dangerous situation. Non-observance of safety instructions result in death or serious injury.
	Warning	Designates a possible dangerous situation. Non-observance of safety instructions can result in death or serious injury.
	Caution	Designates a possible dangerous situation. In case of non-observance of the safety instruction, minor injuries or damage to property can result.
	Notice	Contains useful information with respect to proper handling of the machine.

4.4 Change history

Date	Version	Modification
8/5/2024	1.1	First edition
1/29/2025	1.2	Vehicle-specific mounting
7/17/2025	1.3	Hydraulic connection
10/29/2025	1.4	Hydraulic wiring diagram updated
11/19/2025	1.5	Vehicle-specific mounting extracted (now 10058298)

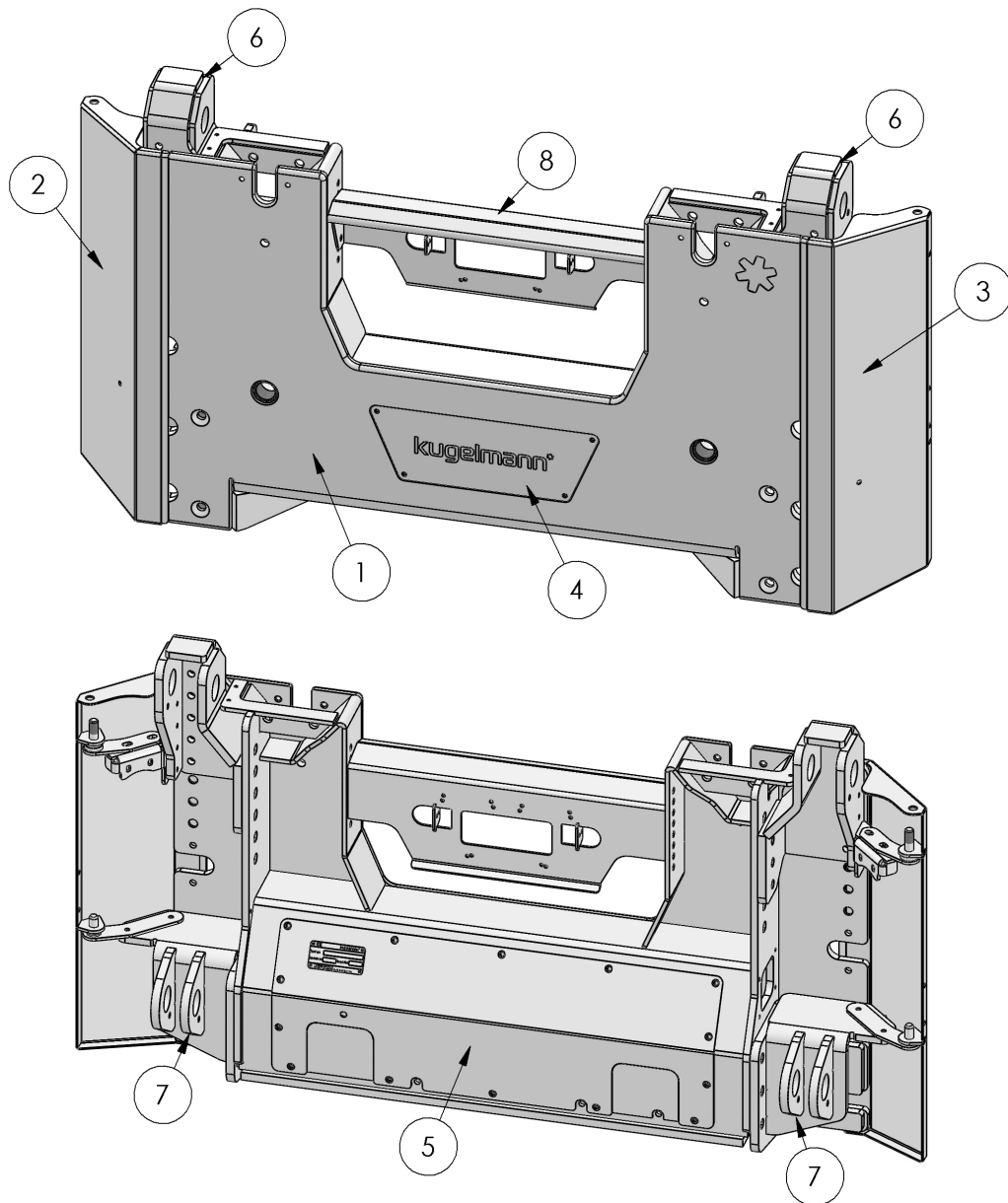
5 General description

This chapter gives you information on the following:

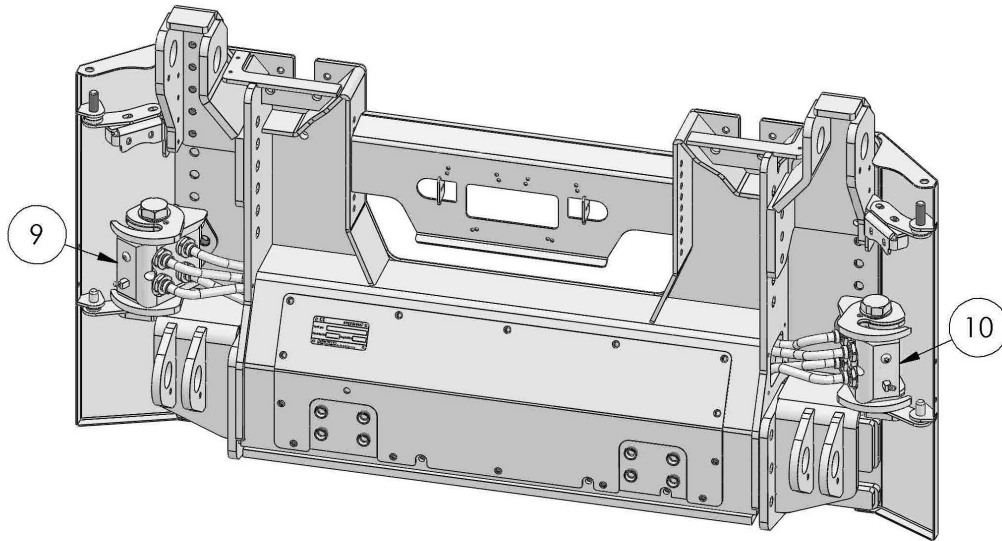
- Chapter 5.1 "Parts", page 9
- Chapter 5.2 "Designated use", page 11
- Chapter 5.3 "Obvious misuse", page 11

5.1 Parts

Please see the following illustrations for parts of the front mounting plate:



Integrated in the front mounting plate with bulkhead fitting or optional municipal hydraulics KHY and multi-coupler:



Pos. No.	Component
1	Front mounting plate
2	Right-side covers (foldable)
3	Left-side covers (foldable)
4	Front cover
5	Rear cover
6	Vehicle-specific upper link bracket
7	Vehicle-specific lower link bracket
8	Sensor sheet
9	Multi-coupler compatible with Faster P506 winter service for 1st and 2nd axis
10	Multi-coupler compatible with Faster P506 winter service for 3rd and 4th axis



Notice

See also "Hydraulic connection (option municipal hydraulics)", page 22!

5.2 Designated use

Use front mounting plate only for mounting of attachments according to DIN 76060-B, , DIN EN 15432-F1/C (DIN 76060-A) and DIN EN 15432-F1.

Mounting of the front mounting plate only at the attachment points provided for this purpose (see Chapter 5.1 "Parts", page 9).

Any kind of use that deviates from the procedure set forth herein is considered contrary to its designated use. The operator is liable for any damages arising from such action.

Use, maintenance and reconditioning of the front mounting plate may only be carried out by trained and competent personnel.

To operate the equipment within the limits of its designated use, please note the following:

- These operating instructions as well as all other enclosed documentation.
- Road traffic regulations.
- The relevant accident prevention regulations.
- The generally recognized rules relating to technical safety requirements and occupational health.
- The operating instructions of the carrier vehicle.

5.3 Obvious misuse

The front mounting plate may not be used to carry persons or goods.

The front mounting plate and its attached parts may not be used as climbing aid.

6 Safety instructions

This chapter gives you information on the following:

- Chapter 6.1 "General safety instructions", page 12
- Chapter 6.2 "Commissioning", page 13
- Chapter 6.3 "Use", page 15
- Chapter 6.4 "Maintenance", page 17

6.1 General safety instructions



Warning

Retightening of screw connections.

Risk of injury or property damage.

- After the first 20 operating hours, please retighten the screw connections.
 - After the first 100 operating hours, please retighten the screw connections.
 - When tightening screw connections, always use the prescribed tightening torque (see Chapter 10. "Tightening torques", page 29)!
-



Warning

Use or maintenance of the front mounting plate by untrained persons.

Risk of serious injury.

- Make sure that all persons responsible for operation or maintenance of the front mounting plate are trained in the operation of the front mounting plate and are familiar with the operating and maintenance instructions as well as the safety information in this manual!
 - Insist on compliance with the applicable safety regulations!
-



Warning

Loose-fitting garments.

Risk of serious injury.

- Always wear tight-fitting clothes during the operation of the front mounting plate!
-

**Warning**

Non-observance of guidelines.

Risk of injuries or death.

- Please observe the regulations relating to accident prevention!
 - Please observe the generally applicable safety regulations, industrial standards and medical guidelines!
 - Please observe the road transport guidelines!
 - Please pay attention to the general advice in these operating instructions!
-

**Caution**

Accidental ignition of residual dirt.

Risk of injury and property damage.

- Please make sure that the front mounting plate is always kept in a clean condition!
-

**Caution**

Changes at the front mounting plate.

Impairment of functionality and danger of property damage.

- Do not make any changes at the front mounting plate!
-

6.2 Commissioning

**Danger**

Carrier vehicle rolls away during attachment of the front mounting plate.

Risk of serious injury and death.

- Before attaching the front mounting plate to the carrier vehicle, apply the parking brake, stop the engine and remove the ignition key!
 - Apply all locking bolts and screws at the carrier vehicle and the front mounting plate and secure them!
-

**Warning**

Overload or possible tilting of the carrier vehicle.

Risk of injury, death or damage to property.

- Please respect the admissible axle loads of the carrier vehicle and the admissible weight of the front mounting plate!
-

**Warning**

Attachment of front mounting plate to a carrier vehicle.

- Please make sure that the carrier vehicle is in a safe and proper condition!
 - Please make sure that carrier vehicle has all the necessary codes for installing a front mounting plate!
 - Before every journey, make sure that the front mounting plate is securely attached to the carrier vehicle!
-

**Warning**

Starting movement of the front mounting plate when connecting the hydraulic lines.

Risk of serious injury.

- Connect hydraulic lines only if the hydraulic cycle of the carrier vehicle and the front mounting plate are depressurised!
 - Never stay in the working range of the front mounting plate!
-

**Warning**

Damaged hydraulic lines.

Risk of serious injury.

- Damaged hydraulic lines must be replaced immediately!
 - After six years at the latest, replace hydraulic lines even if they are not damaged!
-

**Caution**

Support legs in parking position.

Risk of injury and property damage.

- During operation, the support legs must be in working position and secured or removed!
-

**Caution**

First commissioning without instruction.

Risk of injury and property damage.

- First commissioning of the front mounting plate must be accomplished by employees of the dealer, the manufacturer or a representative of our works!
-

**Caution**

Commissioning without making sure that the machine is in perfect technical condition.

Risk of injury and property damage.

- Check all important parts before commissioning!
 - Check all safety-related protection devices before commissioning!
 - If applicable, replace damaged parts!
-

**Caution**

Tightening torque at screws too high.

Danger of property damage.

- Please use the table for tightening torques when tightening the screws (see Chapter 10. "Tightening torques ", page 29)!
-

6.3 Use

**Danger**

Carriage of persons on the front mounting plate.

Risk of serious injury and death.

- Do not carry any persons on the front mounting plate!
-

**Danger**

Danger of contusions due to moving components.

Risk of serious injury and death.

- Never stay between carrier vehicle and front mounting plate!
-

**Warning**

Careless start-up.

Risk of serious injury and death.

- Check the immediate surroundings before driving!
 - Ensure sufficient visibility!
 - Start the vehicle only with no person or good in the surroundings of the vehicle!
 - Before starting the vehicle, make sure that the front mounting plate is correctly attached and secured!
-

**Warning**

Changed handling and braking behavior.

Risk of serious injury and death.

- Please adjust your driving behavior to the dimensions and the additional weight of the front mounting plate!
 - Adjust the driving speed to the snow conditions as well as to road and traffic environment!
-

**Caution**

The hydraulic system is under high pressure.

Risk of injury and property damage.

- If any hydraulic fluid that leaks out passes through the skin, seek medical advice immediately!
-

**Caution**

Heat from oil-filled components.

Risk of injury and property damage.

- After operation, never touch any parts which use circulating oil!
-

**Caution**

Non-observance of regulations for operating attachments on public roads.

Risk of injury and property damage.

- Follow the pertinent rules and regulations of the information sheet for attachments (Gazette of the Federal Ministry of Transport 1990, page 562)!
 - Take measures to compensate limitations of the field of vision!
-

**Caution**

Operating the front mounting plate in the event of malfunctions.

Risk of injury and property damage.

- Resolve the error immediately or ask a workshop!
-

6.4 Maintenance

**Warning**

Non-observance of safety regulations.

Risk of serious injury and death.

- Comply with the safety regulations during all maintenance work!
-

**Warning**

Electric shocks during maintenance work.

Risk of serious injury and death.

- Interrupt power supply before executing work at an electrical device!
-

**Warning**

Draining oil during maintenance work.

Risk of serious injury and death.

- Interrupt the hydraulic supply to carrier vehicle and make sure that the hydraulic cycle is depressurised before working at a hydraulic device!
-

**Caution**

Non-observance of maintenance intervals.

Risk of injury and property damage.

- Please pay attention to the prescribed maintenance intervals!
-

**Caution**

Use of wrong spare parts.

Risk of injury and property damage.

- Do only use original parts for repair work!
-

**Caution**

Maintenance work without necessary technical knowledge or appropriate tooling.

Risk of injury and property damage.

- Only carry out maintenance work if you have the necessary expertise as well as suitable tools!
-

**Caution**

Mixing of oils.

Danger of property damage!

- Never mix oils with different specifications!
-

**Caution**

Carelessness when handling oil or lubricants.

Risk of injury.

- Avoid skin contact with oil and lubricants!
 - Protect your skin with skin-protection lotion or oil-resistant gloves!
 - Never use oil or lubricants to clean your hands!
 - Change dirty or oily clothes as soon as possible!
-

**Caution**

Oil leakage at hydraulic system.

Risk of injury and property damage.

- Periodically check all tubes, lines, couplings and connecting elements concerning leaks and external damage!
 - Only use appropriate tooling during the check!
 - Occurring damages have to be removed immediately!
 - Replace hydraulic hoses after 6 years at the latest!
-

**Caution**

Cleaning with high-pressure cleaner.

Danger of property damage.

- Cleaning of bearings, plastic parts, electronic parts and hydraulic lines only with low pressure!
-

**Caution**

Cleaning of metallic surfaces.

Risk of material damage due to detergents.

- Do not use aggressive detergents!
-

**Caution**

Welding operations at the electric cable system.

Danger of property damage.

- Separate the battery connection to the carrier vehicle before carrying out welding operations!
-

**Caution**

Loose bolted/screw connections.

Danger of property damage.

- Retighten loose bolted connections after repair and maintenance work!
-

**Caution**

Tightening of screw connections.

Danger of property damage.

- When tightening screw connections, always use the prescribed tightening torque (see Chapter 10. "*Tightening torques*", page 29)!
-

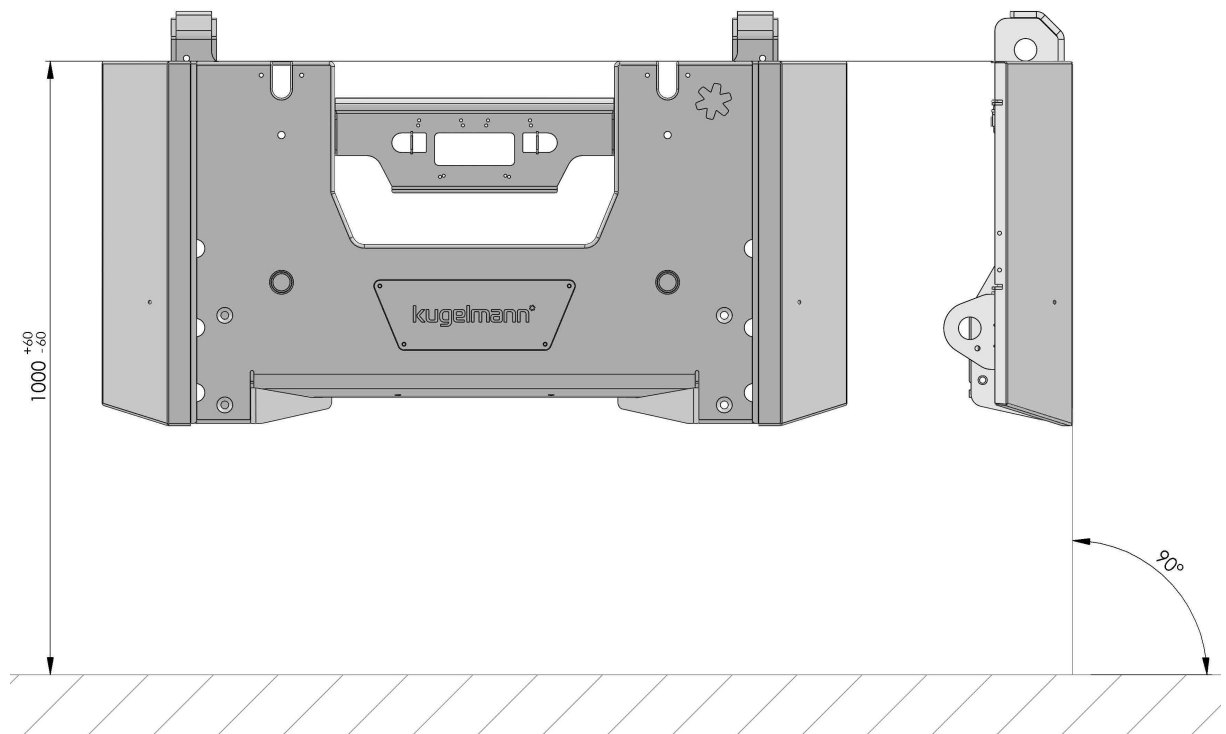
7 Commissioning

This chapter gives you information on the following:

- Chapter 7.1 "Mounting the front mounting plate", page 21
- Chapter 7.2 "Hydraulic connection (option municipal hydraulics)", page 22
- Chapter 7.3 "Calibration of sensors", page 27

7.1 Mounting the front mounting plate

Mounting of the front mounting plate at the carrier vehicle via vehicle-specific upper and lower link brackets.

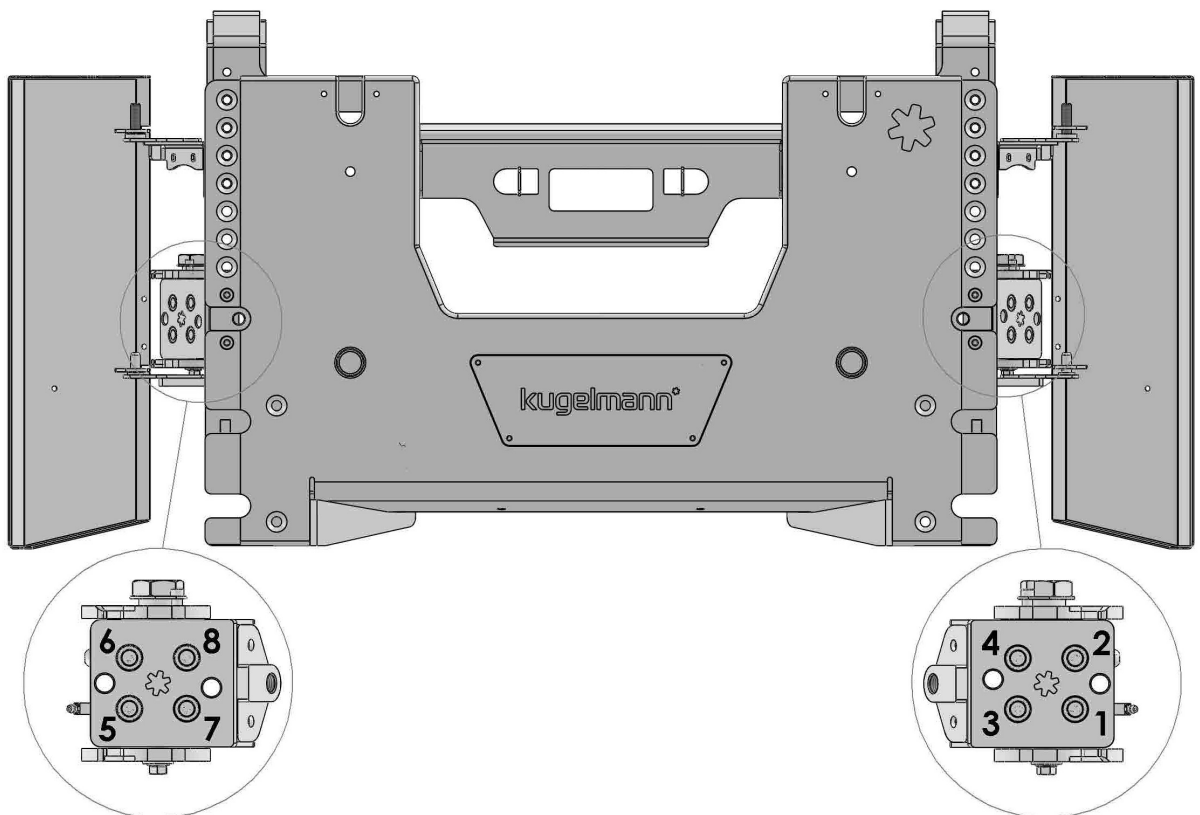
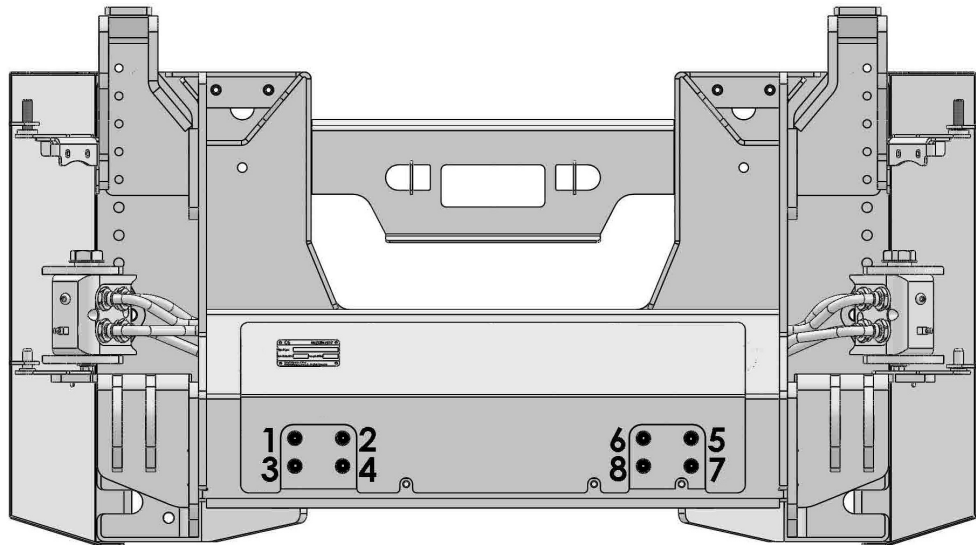


Dimension from top edge front mounting plate to the ground is 1000 ± 60 mm.

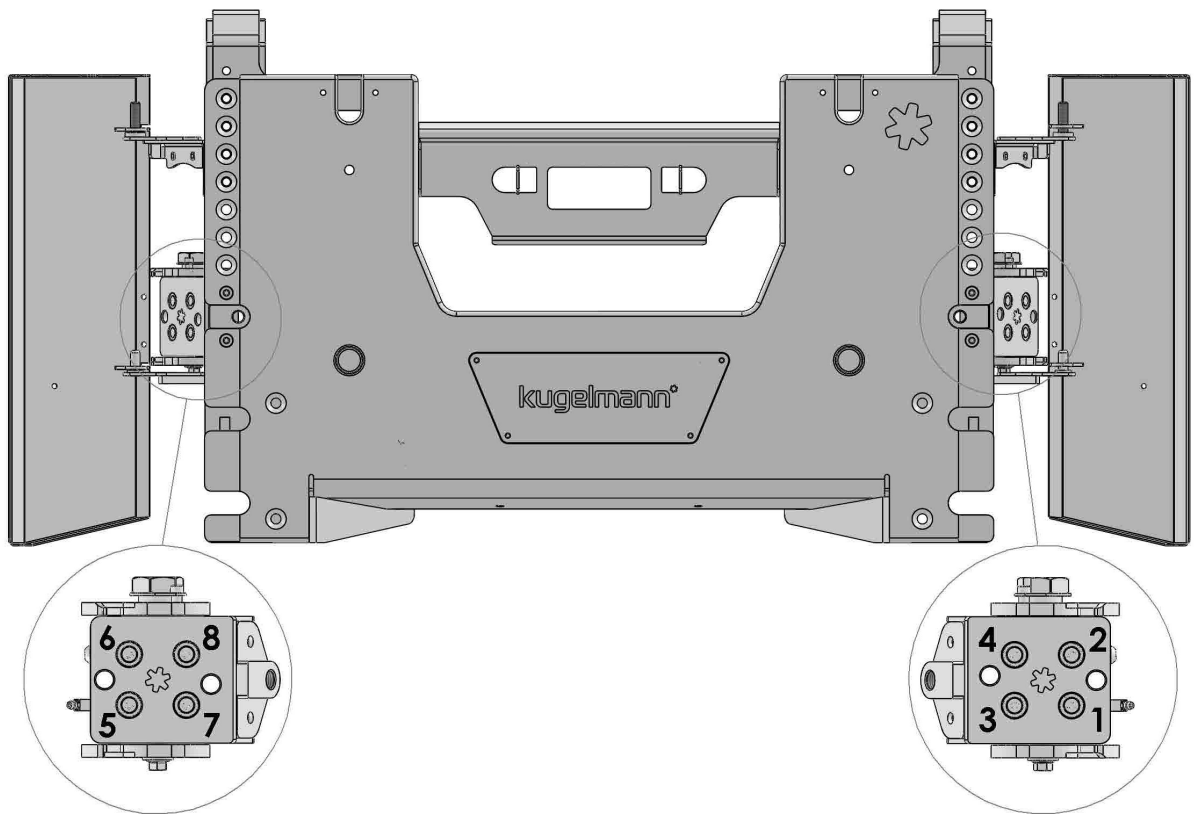
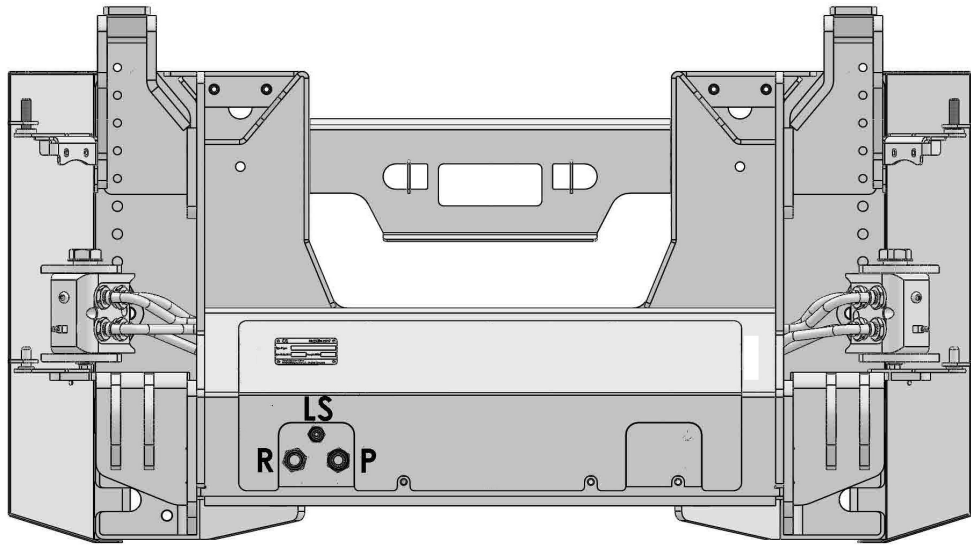
The front mounting plate has to be orientated in right angles.

7.2 Hydraulic connection (option municipal hydraulics)

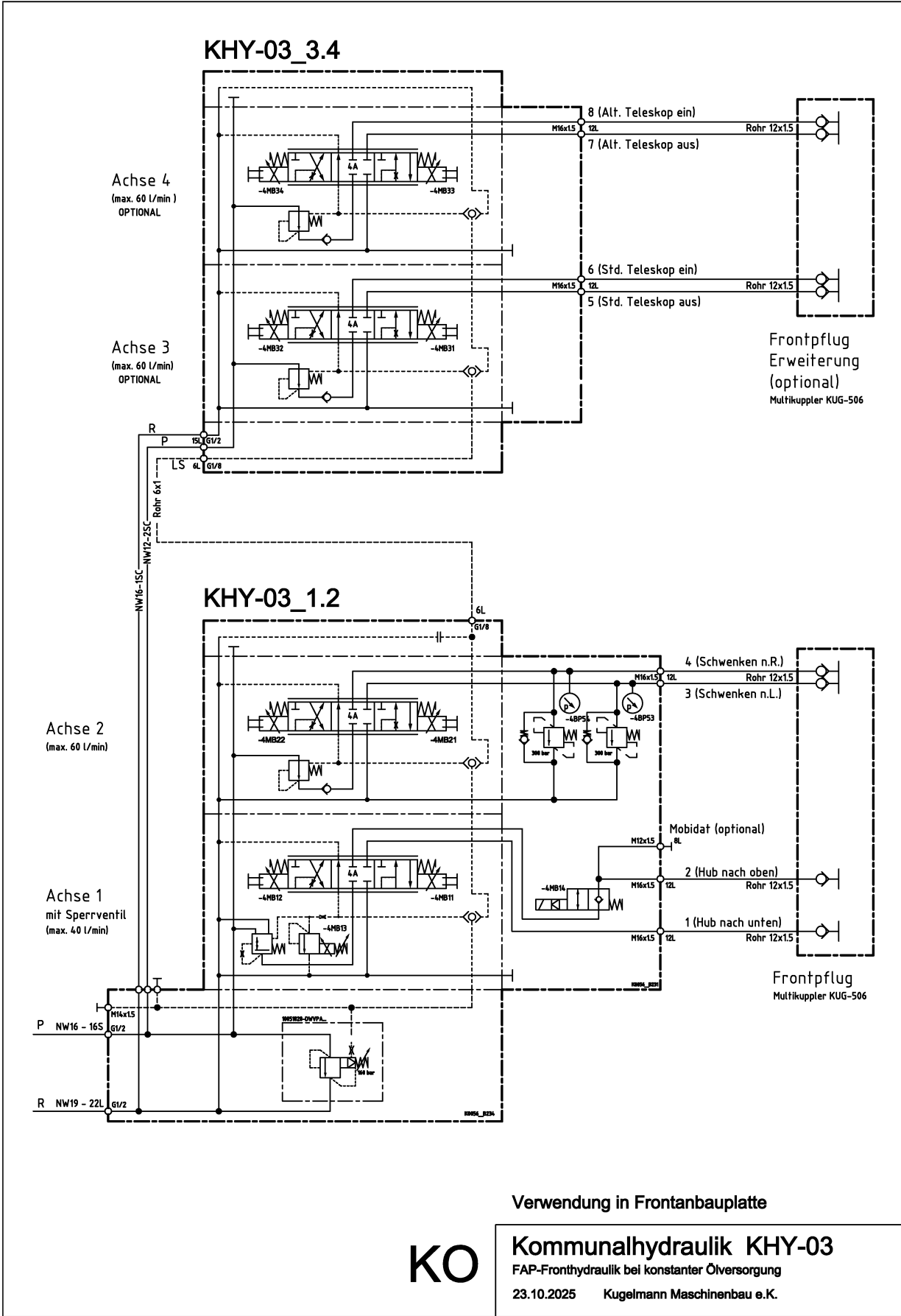
Model with bulkhead fittings on the rear side:

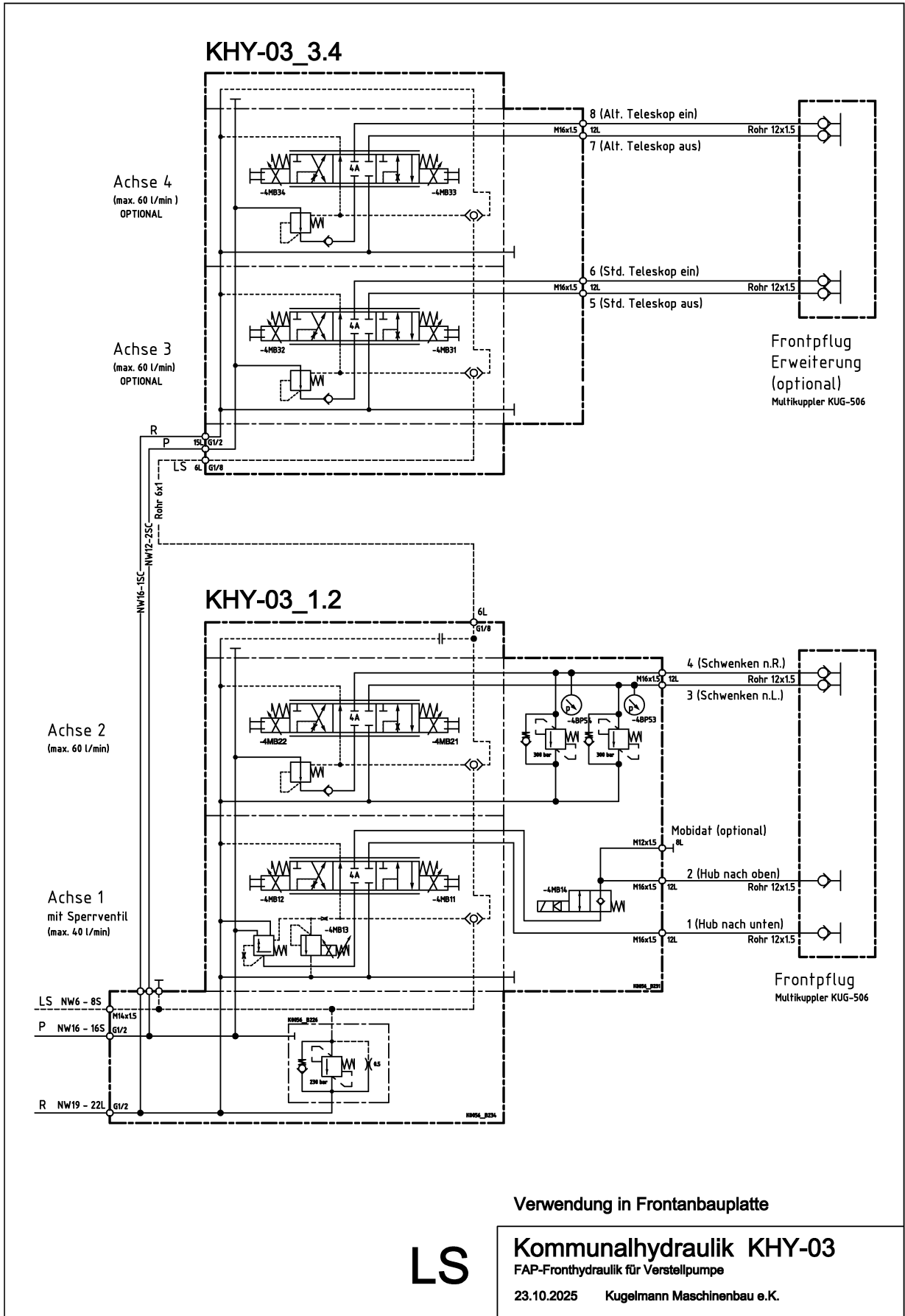


Model with integrated municipal hydraulic system:



Pos:	Connection:	Axis:	Screw joint:
1	Lowering	1. Axis	12L
2	Lifting	1. Axis	12L
3	Pivoting to the left	2. Axis	12L
4	Pivoting to the right	2. Axis	12L
5	Stand. extend telescope	3. Axis (opt.)	12L
6	Stand. retract telescope	3. Axis (opt.)	12L
7	Altern. extend telescope	4. Axis (opt.)	12L
8	Altern. retract telescope	4. Axis (opt.)	12L
P	Pressure line P		16S
R	Return line R		18L
LS	Load-Sense line ⇒ Only with variable displacement pumps ⇒ Closed at constant current pumps		8S



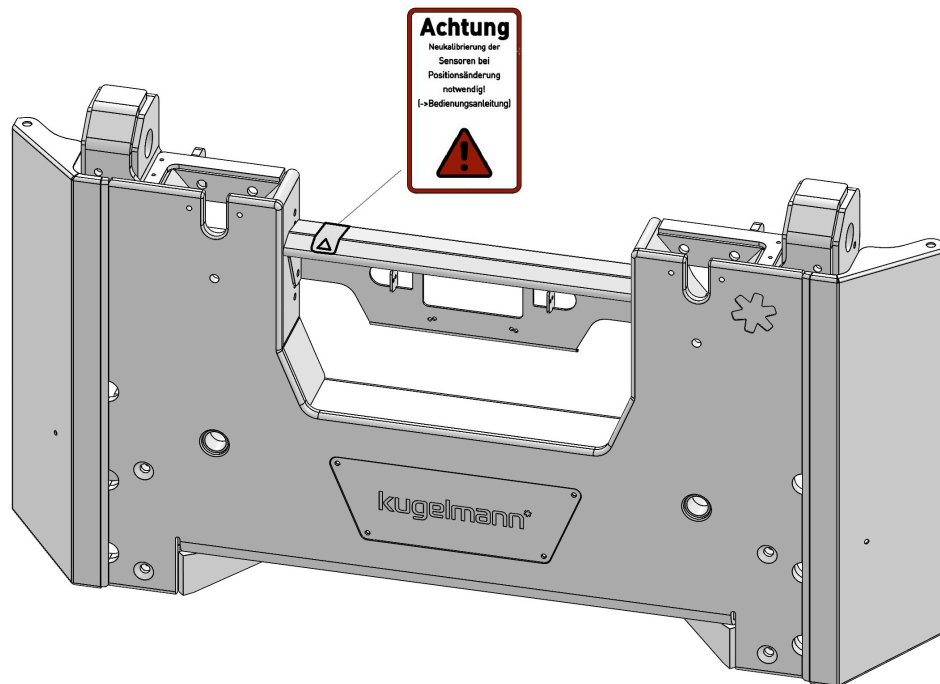


7.3 Calibration of sensors

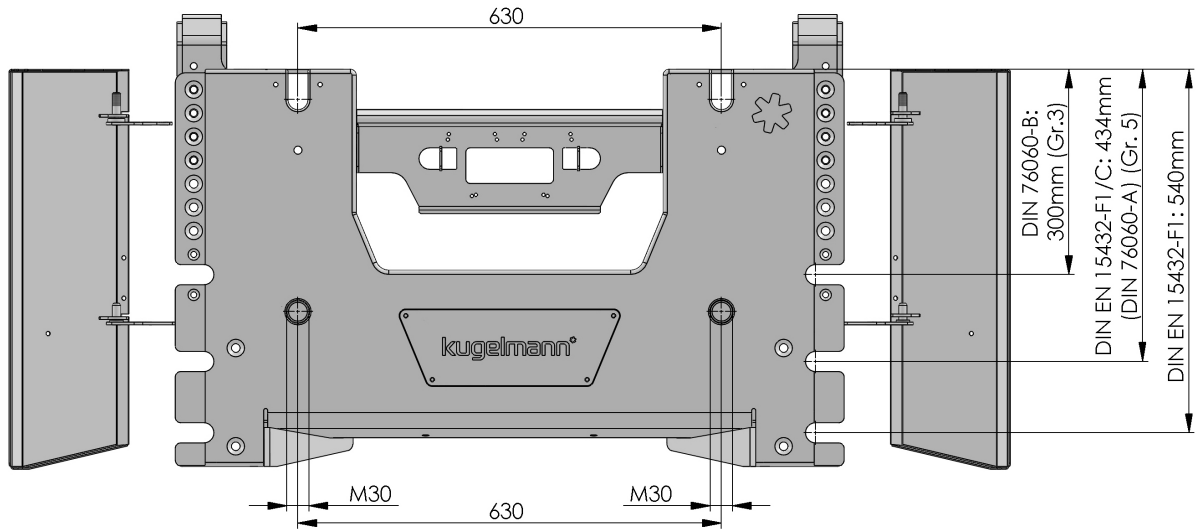


Danger

New calibration necessary after position change, new installation or after displacement of the sensor!



8 Technical Data



Net weight of front mounting plate: 65 kg (net, without hydraulics)

Admissible weight of the front mounting plate: 2200 kg

10 Tightening torques

Shaft screws stainless steel

- metric standard thread
- property class 70
- $\mu = 0.12$ (Anti-seize paste)

Thread	M5	M6	M8	M10	M12	M14	M16
Tightening torque [Nm]	4	7	16	33	56	93	136

Shaft screws steel

- metric standard thread
- zinc-plated
- property class 8.8 and 10.9
- $\mu = 0.14$ (unlubricated)

Thread	M5	M6	M8	M10	M12	M14	M16
Tightening torque [Nm] 8.8	6	10	25	50	85	140	210
Tightening torque [Nm] 10.9	9	15	35	75	130	200	310

Shaft screws steel

- metric standard thread
- zinc-flake coated
- property class 8.8 and 10.9
- $\mu = 0.12$ (unlubricated)

Thread	M5	M6	M8	M10	M12	M14	M16
Tightening torque [Nm] 8.8	6	9	24	48	84	133	205
Tightening torque [Nm] 10.9	8	14	34	70	120	180	280

Warranty

Kugelmann Maschinenbau e.K., 87675 Rettenbach a.A., warrants its machines to be free from defects in material and workmanship and undertakes to replace free of charge all parts ex works which have been purchased from relevant Kugelmann dealers and have been acknowledged as defective after having been checked by Kugelmann. The warranty expressly given shall be limited to a period of 12 months from the date of delivery of the machine to purchaser. All further claims by the customer shall be excluded.

All wear parts are excluded from warranty.

The manufacturer takes no responsibility for third-party products not produced at the works of Kugelmann. However, we assign our claims against the supplier to the customer. No warranty will be given for machines purchased second-hand or used and modified or converted machines.



Notice

Please make sure that you fill in your warranty card and send it back to the manufacturer immediately. Claims have to be notified with a warranty claim in writing after their occurrence without undue delay (after 30 days at the latest).



Company
Kugelmann Maschinenbau e.K.
Gewerbepark 1-5

87675 Rettenbach a.A.
Germany

Device type:
Serial number:
Vehicle identification
number:
Year of construction:
Address of dealer:
.....
.....
.....
Address of user/owner:
.....
.....
.....

I have read the operating instructions.

Signature of user:

The warranty card has to be sent directly to the manufacturer.

ATTENTION: Warranty claims are only accepted with the warranty card of Kugelmann Maschinenbau e.K.



