



Baumann sideloaders BHX 40 – 50 4 – 5 tons

Technical Information



BHX

Baumann sideloaders

BHX 40 – 50

Standard equipment



Baumann sideloaders
fulfill european safety regulations.

- Low emission VM Detroit Diesel
- Hydrostatic transmission: Variable displacement pump drives two variable displacement axial-piston motors
- Double cylinder steering axle with tight turning radius
- Corresponding hydraulic tilt cylinders on the cab side
- Pre-controlled hydraulic system with joystick operation
- Brakes
 - Hydrostatic service brake
 - Braked on drive wheels (BHX 40)
 - Braked on steering axle (BHX 50)
 - Electro-hydraulic parking brake
- Hydrostatic safety power steering system with no return-shocks
- Pneumatic tyres "27 x 10 - 12"
- Mast – standard duplex ST h3 = 4000 mm
- Fork spread range

| | |
|--------|----------------|
| BHX 40 | 300 - 1.420 mm |
| BHX 50 | 360 - 1.420 mm |
- Fork carriage
 - FEM 3B / FEM 4B (BHX 50)
- Drivers cabin
 - Comfort 800 mm wide cabin
 - Adjustable BE-GE comfort seat with textile covers and arm rest
 - Allround tinted safety glass
 - Sliding window at load-side
 - Protective grille according to EN-Standard
- Roof with armoured glass
- 2 speed front windscreen wiper and rear windscreen wiper
- Heater and defroster system with vents for front and side window
- Height and angle adjustable steering column with all operating functions
- Hour meter
- Analogue -instruments for
 - Fuel
 - Platform tilt
 - Water coolant temperature
- Foot-steps and handrail to front and rear platform
- Lighting system behind metal protectors
 - High- and low beam
 - Tail and brake lights
 - Indicators front and rear
 - Reverse lights
- Working light on cabin roof
- Platform covers made of water resistant glue lined wooden panels
- Rear towing hook with integrated step onto the platform
- CE Certificate, Operating manual, Parts manual
- Paint

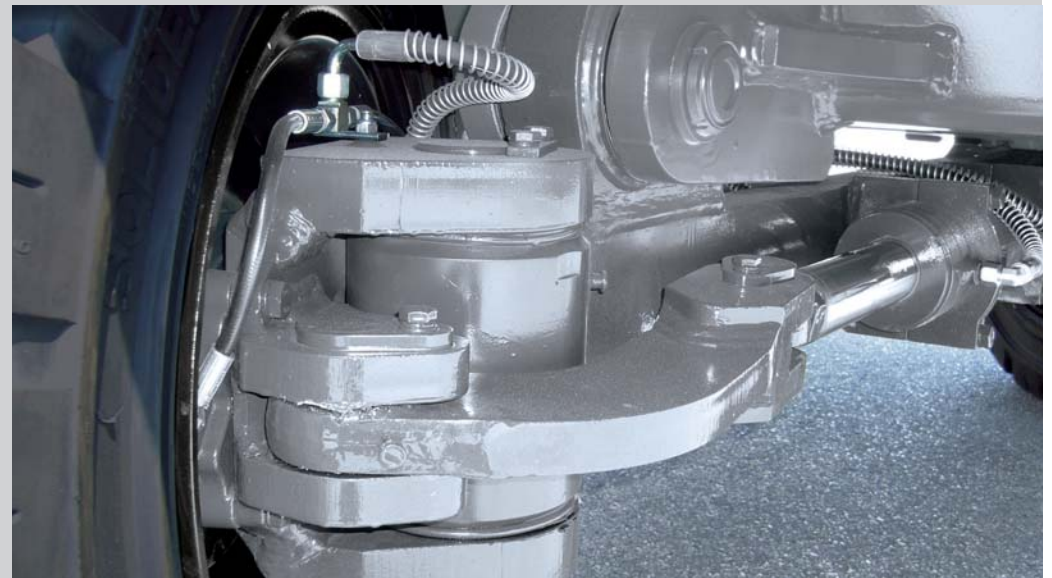
| | |
|---------|-------------------------|
| Chassis | RAL 7043 Traffic Grey B |
| Cab | RAL 1006 Maize Yellow |
| Mast | RAL 7043 Traffic Grey B |



Comfort cabin – All instruments can be adjusted to the operators comfort



Picture top: Under-deck design – All components are mounted below the rear platform.
The advantages are: easy access for maintenance and checkup as well as excellent rear vision.
Picture down: Robust steering axle with large steering angle for maximum agility



Baumann reserves the right to make modifications for product improvement. Illustrations may show optional equipment not included in standard versions.

Technical Description BHX 40 – 50

Operation

The 800 mm wide driver's cabin provides a wide well-organised working environment. The vibration dampened cab is placed on the front platform. A high level of operating comfort is achieved thanks to a soundproof interior and an in height and angle adjustable steering wheel. The operator further benefits from the standard joystick operation. All hydraulic functions pre-controlled allow for easy and noise free operation.

Drive

All components including the powerful water-cooled engine are mounted below the rear platform. This contributes to a better visibility to the rear, a lower noise level and an improved traction without load. The air intake is placed high above the platform to ensure clean air intake.

Transmission

Efficient handling is achieved with a fully automatic hydrostatic transmission. The infinitely variable transmission is perfectly suited to the engine performance.

The unit coupled directly to the engine offers high traction power as well as a good gradeability. The hydrostatic drive ensures gentle starts and wear-free braking.

Chassis

The front and rear axle are connected to a rigid torsion resistant frame through hydraulic cylinders. These tilt cylinders are located on the cab side. The advantages of this system are as follows:

- Safe and easy loading through the platform tilt
- Fast and precise handling
- Robust and problem free usage on uneven terrain through floating axles

Brakes

To ensure safe handling Baumann sideloaders are equipped with a three stage brake-system combining hydrostatic and hydraulic brakes.

- Hydrostatic service brake decelerates through shifting back of the variable displacement pump
- Once the brake pedal is pushed the hydrostatic brake steps-in further for wear free braking. The hydraulic brake supports the hydrostatic brake for precise stopping.
- The electro-hydraulic parking brake applies to both drive wheels. In case of a pressure loss the multiple disk brakes close automatically.

Hydraulic system

The state of the art system is driven by a powerful adjustable hydraulic pump. It is driven by the engine and offers high speed mast movements at low rpm. This allows for precise and stress free operations. The truck is equipped with 1 joystick (2 joysticks available as an option).

To ease maintenance and service the hydraulic tank and the pressure filter system are easily accessible below the rear platform.

Mast

The robust telescopic mast is specifically designed for sideloaders. It is made of slim geometric cold-drawn profiles.

The wide mast combined with large rolls compensate for axial and radial forces experienced whilst handling long loads. This design ensures high stability and long service life.

Besides standard masts Baumann can supply its trucks with full-free-lift and triplex masts. The mast traverse translation is achieved with diagonally cross mounted hydraulic cylinders with end-of-travel dampeners.

This proven design provides for an obstruction-free rear sight. Very long traverse runs and high specification

traverse rollers result in accurate handling and minimal wear - especially when handling long loads.

Furthermore traverse guides are easily replaceable to allow for wear and tear.

Options for special applications BHX 40 – 50

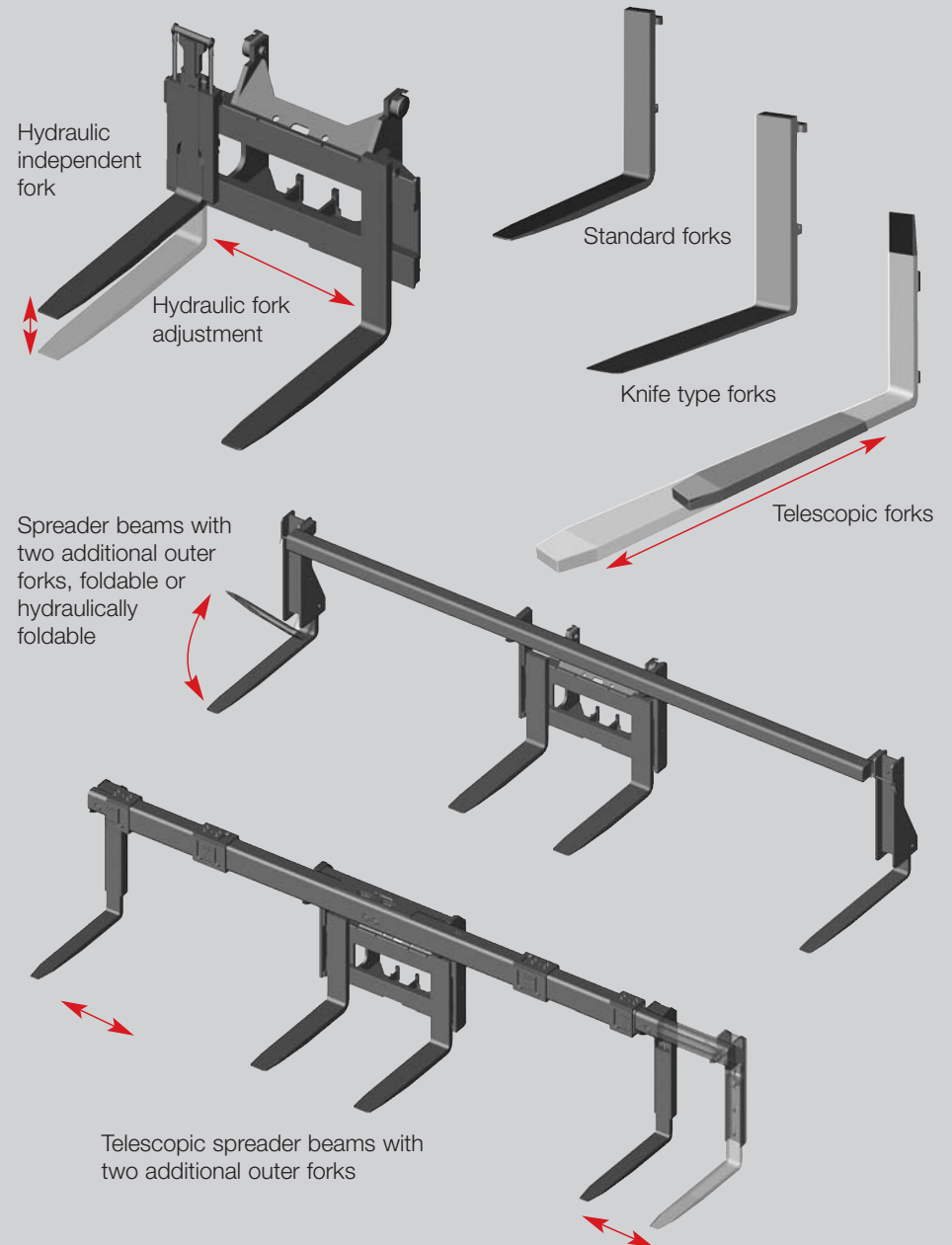
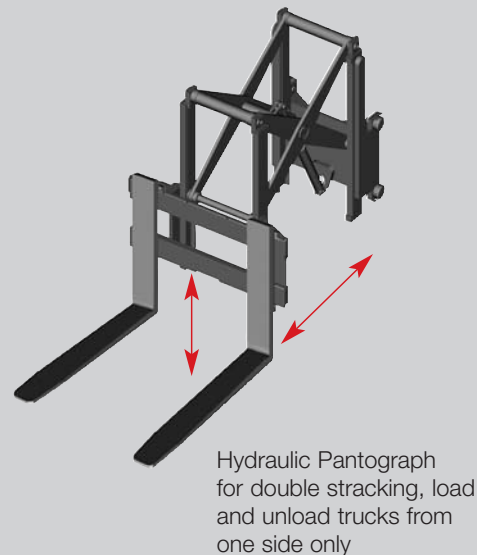
- **Comfort and Environment**
 - Cabin, 1.000 mm wide
 - Hydropneumatic suspension improves operator comfort
 - Additional soundproof package
 - Exhaust gas cleaning equipment

- **Integrated Fork adjustments - without loss of load centre**
 - Hydraulic fork tilt $\pm 3^\circ$
 - Hydraulic fork adjustment in well
 - Hydraulic side shift ± 100 mm
 - Hydraulic independent fork
 - Hydraulic swivelling forks $\pm 3^\circ$

- **Spreader beams - without loss of load centre**
up to loadheight 950 mm
 - with two additional outer forks – fix
 - with two additional outer forks – foldable
 - with two additional outer forks – hydraulically foldable

- **Hydraulic Pantograph - loss of load centre 200 mm**
 - with manual fork adjustment
 - with hydraulic fork adjustment

- **Knife type forks**
- **Hydraulic telescopic forks**
- **Hydraulic load fastener**
- Additional attachments on request
- Platform covers made of steel or aluminum

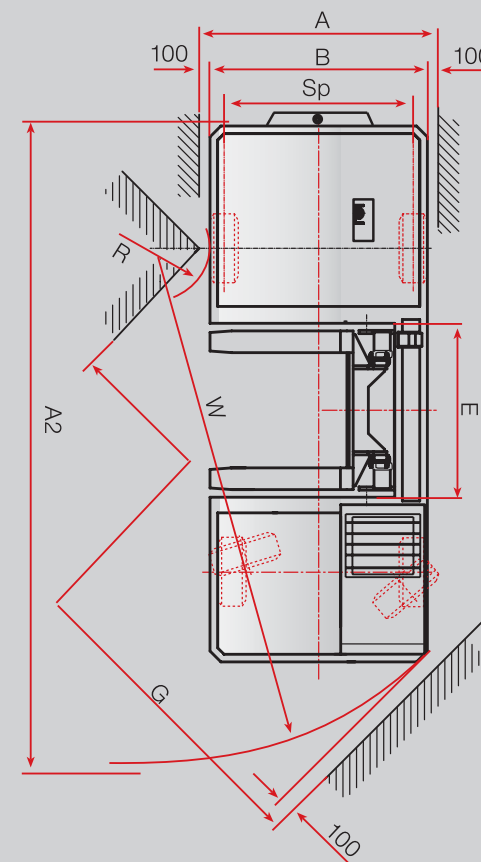
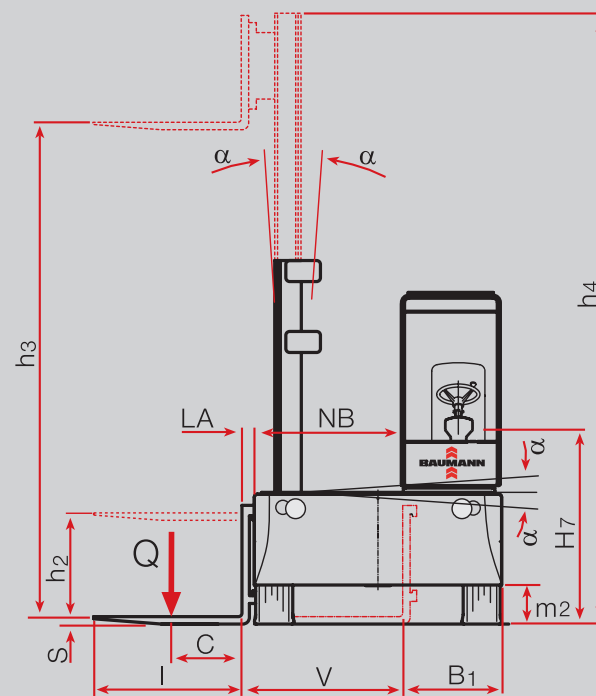
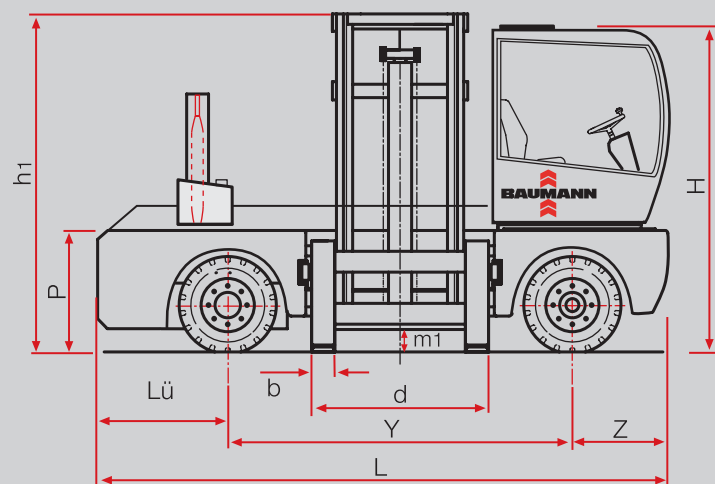


BHX

Baumann Sideloading lift trucks

BHX 40 – 50

Dimensions



| Type | | | | | Baumann | | | Baumann | | |
|---------------------------------------|--------------------------------------|---------|----------|--|--------------------------------|----------------------|-----------|--------------------------------|-------------------------|-----------|
| Brand | Type | | | | BHX 40/12 | BHX 40/14 | BHX 40/16 | BHX 50/12 | BHX 50/14 | BHX 50/16 |
| Lifting capacity | at standard lifting height | Q | kg | | | 4000 | | | 5 000 | |
| Load center | | c | mm | | 600 | 700 | 800 | 600 | 700 | 800 |
| Platform width ¹⁾ | | NB | mm | | 1200 | 1400 | 1600 | 1200 | 1400 | 1600 |
| Drive ²⁾ | Electro, Diesel, LPG | | | | Diesel or LPG | | | Diesel or LPG | | |
| Type of steering | hand-, walk-, wand-, seat-steering | | | | Seat - steering | | | Seat - steering | | |
| Type of tyres | solid / pneumatic tyres front / rear | | | | pneumatic tyres front and rear | | | pneumatic tyres front and rear | | |
| Wheels (x=driving) | number front / rear | | | | 2 / 2x | | | 2 / 2x | | |
| Dimensions | | | | | | | | | | |
| Fork length | | l | mm | | 1200 | 1400 | 1600 | 1200 | 1400 | 1600 |
| Fork width | | b | mm | | 150 | | 180 | | 180 | |
| Fork thickness | | s | mm | | | 50 | | 50 | | 60 |
| Mast traverse | | V | mm | | 1300 | 1500 | 1700 | 1300 | 1500 | 1700 |
| Load spacing | | LA | mm | | | 100 | | | 100 | |
| Platform tilt | | α | ° | | 4 / 4 | 3,5 / 3,5 | 3 / 3 | 4 / 4 | 3,5 / 3,5 | 3 / 3 |
| Total length | | L | mm | | | 4450 | | | 4450 | |
| Total width | | B | mm | | 2000 | 2200 | 2400 | 2030 | 2230 | 2430 |
| Width of truck to front face of forks | | B 1 | mm | | | 800 | | | 800 | |
| Well width | | E | mm | | | 1500 | | | 1500 | |
| Lift height ST | height (see table) | h 3 | mm | | | 4000 | | | 4000 | |
| Overall height | mast lowered | h 1 | mm | | | 2700 | | | 2815 | |
| Overall height | mast extended | h 4 | mm | | | 4780 | | | 4970 | |
| Free lift | | h 2 | mm | | | 0 | | | 0 | |
| Cabin height | max. over grille | H | mm | | | 2610 | | | 2610 | |
| Height of seat | | H 7 | mm | | | 1550 | | | 1550 | |
| Platform height | | P | mm | | | 850 | | | 850 | |
| Fork spacing | outer edge - outer edge | d | mm | | | 300 - 1420 | | | 360 - 1420 | |
| Turning radius | inner | R | mm | | | 910 | | | 580 | |
| Turning radius | outer | W | mm | | 4420 | 4540 | 4680 | 4230 | 4350 | 4480 |
| Aisle width | for straight on travel | A | mm | | 2200 | 2400 | 2600 | 2230 | 2430 | 2630 |
| Aisle width | for 90° - Turning | G | mm | | 3980 | 4110 | 4240 | 4030 | 4150 | 4280 |
| Aisle width | for 90° - Turning within aisle | A 2 | mm | | 5690 | 5810 | 5950 | 5500 | 5620 | 5750 |
| Weights | | | | | | | | | | |
| Weight of truck | | | kg | | 7220 | 7380 | 7540 | 7820 | 7980 | 8140 |
| Axle load | with lifting capacity front / rear | | kg | | 5260/5960 | 5340/6040 | 5420/6120 | 6060/6760 | 6140/6840 | 6220/6920 |
| Performance | | | | | | | | | | |
| Stability | EN 1726-1, EN 1551 | | yes / no | | | yes | | | yes | |
| Travel speed | without / with load | | km/h | | | 22 / 20 | | | 22 / 20 | |
| Lifting speed | without / with load | | m/s | | | 0.40 / 0.35 | | | 0.35 / 0.30 | |
| Lowering speed | without / with load | | m/s | | | 0.30 / 0.50 | | | 0.30 / 0.50 | |
| Traverse speed | without / with load | | m/s | | | 0.30 / 0.30 | | | 0.30 / 0.30 | |
| Gradeability | without / with load | | % | | | 22 / 13 | | 20 / 12 | | 20 / 11 |
| Tractive power | max. | | daN | | | 1750 | | | 1750 | |
| Chassis | | | | | | | | | | |
| Tyres ³⁾ | front / rear | | | | | 2 / 2 | | | 2 / 2 | |
| Tyre size | front / rear | | | | | 27 x 10 - 12" | | | 27 x 10 - 12" | |
| Tyres outside diameter | | mm | | | 704 | | | 704 | | |
| Track | front / rear | Sp1/Sp2 | mm | | 1690/1740 | 1890/1940 | 2090/2140 | 1690/1740 | 1890/1940 | 2090/2140 |
| Wheel base | | Y | mm | | | 2620 | | | 2620 | |
| Tail section | | Lü | mm | | | 1070 | | | 1070 | |
| Ground clearance | below upright | m 1 | mm | | | 160 | | | 160 | |
| Ground clearance | center wheelbase | m 2 | mm | | | 135 | | | 135 | |
| Service brake | front / rear | | | | - / hydraulic, hydrostatic | | | | hydraulic / hydrostatic | |
| Parking brake | | | | | | electric - hydraulic | | | | |

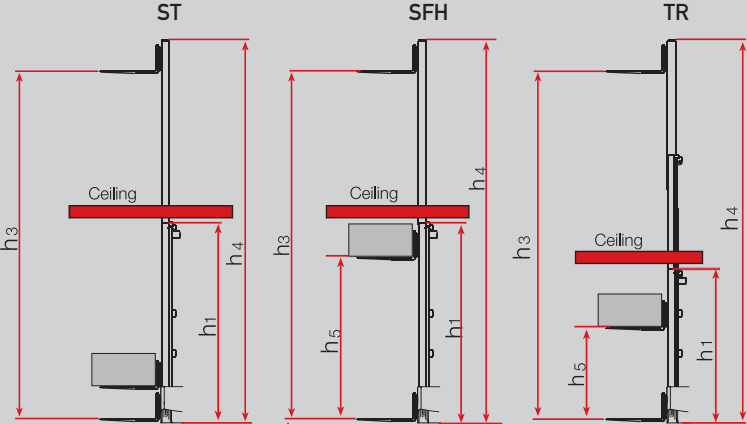
| Drive | | | Standard | Option |
|-------------------------|---------------------|--|-----------------|---------------------|
| Diesel engine | Manufacturer / Type | | VM D 754 E2 TE3 | GM 3.0 LL 4 |
| Fuel | | | Diesel | LPG |
| Power DIN 70020 | kW / hp | | 51,5 / 70 | 50 / 67 |
| Speed | U / min | | 2600 | 3000 |
| Cylinder / displacement | - / cm³ | | 4 / 2970 | 4 / 2966 |
| Transmission | | | | hydrostatic |
| Gearshift | | | | infinitely variable |
| Battery | Voltage / Capacity | | 12 / 120 | 12 / 120 |

¹⁾ Platform width 1800 mm, 2000 mm possible

²⁾ With LPG engine

³⁾ Pneumatic tyres standard, optional superelastic tyres

Masts BHX 40 – 50



Mast model
BHX 40

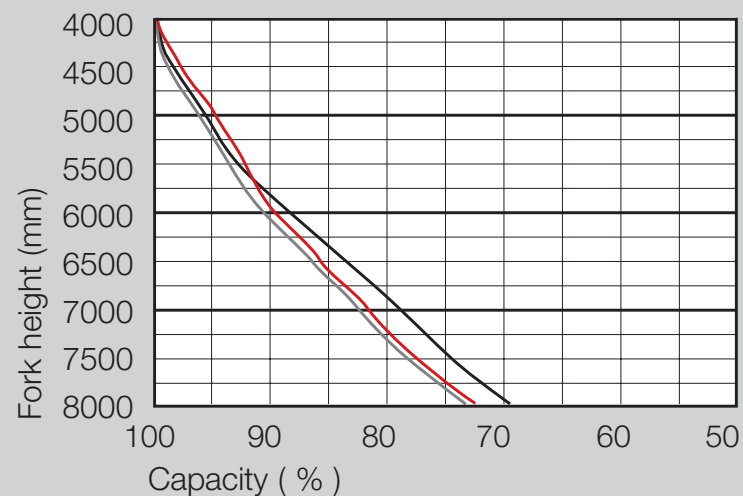
| | Lifting heights | Overall heights | | Freelift |
|---------------------------------|-----------------|-----------------|----------|----------|
| | | Lowered | Extended | |
| | mm | mm | mm | mm |
| Duplex ST without free lift | 4000 | 2700 | 4780 | 0 |
| | 4500 | 2950 | 5280 | 0 |
| | 5000 | 3200 | 5780 | 0 |
| | 5500 | 3450 | 6280 | 0 |
| | 6000 | 3700 | 6780 | 0 |
| Duplex SFH Special free lift | 4000 | 2700 | 4780 | 1920 |
| | 4500 | 2950 | 5465 | 1985 |
| | 5000 | 3200 | 5965 | 2235 |
| | 5500 | 3450 | 6465 | 2485 |
| | 6000 | 3700 | 6965 | 2735 |
| Triplex TR | 4000 | 2080 | 4780 | 1300 |
| | 4500 | 2240 | 5280 | 1460 |
| | 5000 | 2410 | 5780 | 1630 |
| | 5500 | 2580 | 6280 | 1800 |
| | 6000 | 2740 | 6780 | 1960 |
| | 6500 | 2910 | 7280 | 2130 |
| | 7000 | 3080 | 7780 | 2300 |
| | 7500 | 3240 | 8280 | 2460 |
| | 8000 | 3410 | 8780 | 2630 |

Mast model
BHX 50

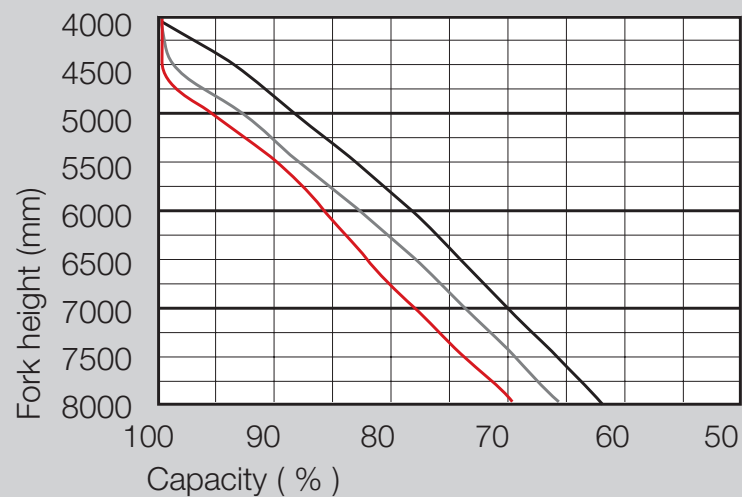
| | Lifting heights | Overall heights | | Freelift |
|---------------------------------|-----------------|-----------------|----------|----------|
| | | Lowered | Extended | |
| | mm | mm | mm | mm |
| Duplex ST without free lift | 4000 | 2815 | 4970 | 0 |
| | 4500 | 3065 | 5470 | 0 |
| | 5000 | 3315 | 5970 | 0 |
| | 5500 | 3565 | 6470 | 0 |
| | 6000 | 3815 | 6970 | 0 |
| Duplex SFH Special free lift | 4000 | 2770 | 4970 | 1800 |
| | 4500 | 3020 | 5500 | 2020 |
| | 5000 | 3270 | 6000 | 2270 |
| | 5500 | 3520 | 6500 | 2520 |
| | 6000 | 3770 | 7000 | 2770 |
| Triplex TR | 4000 | 2160 | 4970 | 1190 |
| | 4500 | 2320 | 5570 | 1350 |
| | 5000 | 2490 | 5970 | 1520 |
| | 5500 | 2660 | 6470 | 1890 |
| | 6000 | 2820 | 6970 | 1850 |
| | 6500 | 2990 | 7470 | 2020 |
| | 7000 | 3160 | 7970 | 2190 |
| | 7500 | 3320 | 8470 | 2350 |
| | 8000 | 3490 | 8970 | 2520 |

Lifting capacity at high lifting heights

BHX 40
12 14 16

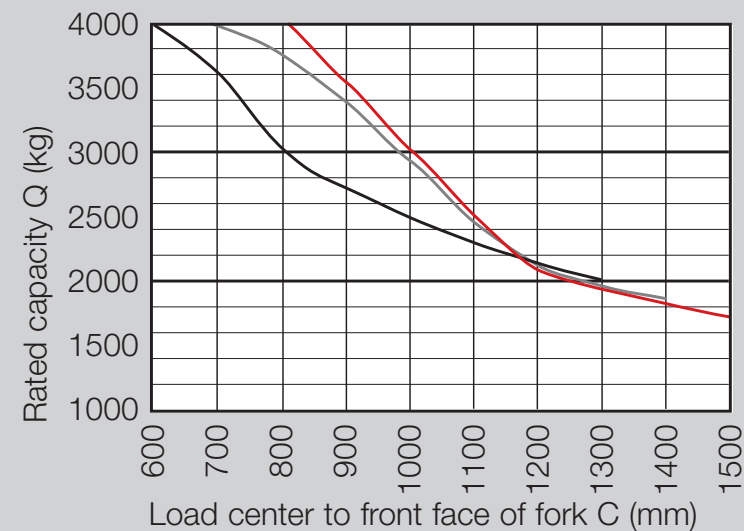


BHX 50
12 14 16

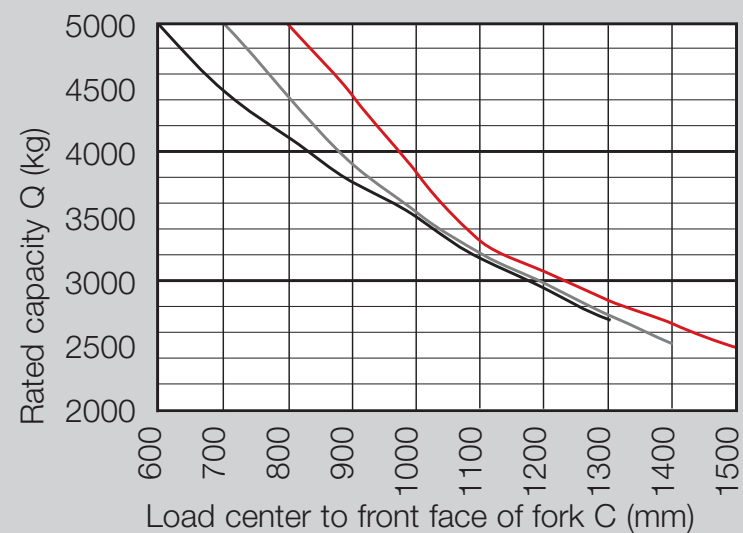


Load diagram

BHX 40
12 14 16



BHX 50
12 14 16





IC Fourway-sideloader

The Multilift simply does it all - it works as a conventional forklift, a sideloader and a multi-way forklift. In order to customize the Multilift for a special application Baumann offers a wide variety of attachments designed for a more efficient, safe and comfortable work.



Rough terrain truck

Handy, tough and excellent agility at high performance parameters - make the Rough terrain truck an ideal choice for all classical rough terrain applications but also for other industrial environments. Different options and special equipment optimize the Rough terrain truck for any sort of use.



Electric fourway sideloaders

Baumann fourway-sideloaders solve all material handling tasks. With four individual modal ranges and a full range of optional equipment the sideloader can fit to any application.

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