

Preliminary technical remarks

1. Basis for the design are:
 - 1.1 the garage regulations (GaVo) according to the building regulations in the latest version,
 - 1.2 the EC Machinery Directive 2006/42/EC, Appendix 1, and the DIN EN 14010
 - 1.3 the architect's workshop drawings
 2. The bidder confirms upon submission of the bid that the garage dimensions and the driveway widths comply with the GaVo, the relevant implementation guidelines to be specified by him and the system offered by him.
 3. Required surface loads according to DIN 1055, page 3, per parking space: 2.0 t
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Specification

General:

Multiparking system for independent parking of 2 cars (EB) or 2 x 2 cars (DB) on top of each other. Dimensions according to product data sheet MultiBase 2072i outdoor installation and the pit dimensions, widths and heights taken as basis. Accessing of the parking spaces horizontally (installation tolerance: +/- 1%). Operation via operating device with hold-to-run-device using master keys.

MultiBase 2072i outdoor installation EB - 2 platforms for 2 cars on top of each other

MultiBase 2072i outdoor installation DB - 2 double-width platforms for a total of 4 cars

Corrosion protection:

Corrosion protection according to DIN EN ISO12944-2, corrosive category C3 moderate

- Platform profiles, cover plates and optional platform extensions hot-dip galvanized according to DIN EN ISO 1461, layer thickness approx. 45 µm
- Side members and optional extensions hot-dip galvanized according to DIN EN ISO 1461, layer thickness approx. 55 µm
- Central side members (only DB) and cross members hot-dip galvanized according to DIN EN ISO 1461, layer thickness approx. 55 µm. Central side member, optionally grey powder coating (Epoxy / Polyester base)) RAL 7040, dry film thickness approx. 60 – 80 µm
- Access plates, hot-dip galvanized in accordance with DIN EN ISO 1461 film thickness approx. 55 µm, and additional orange powder-coating (Epoxy / Polyester base) RAL 2000, dry film thickness approx. 60-80 µm
- Fastening screws for platform profiles, stainless steel V4A
- Hydraulic tubes, screwed joints, bolts, screws, nuts and washers electrogalvanized
- Other steel components, shot-peened (particle cleanliness SA 2,5) and grey powder coating (Epoxy / Polyester base) RAL 7040, dry film thickness approx. 60-80 µm

Tender specification KLAUS Multiparking MultiBase 2072i outdoor installation EB MultiBase 2072i outdoor installation DB

Hydraulic unit:

The hydraulic unit is used to drive several Multiparkers if they are arranged next or opposite (separated by the driveway only) to each other. The system is controlled with the control unit on for each Multiparker. The hydraulic unit installed is supported rubber-bonded metal. However, we still recommend separating the garage body from the residential house.

Services to be provided by the customer:

1. **Electrical supply to the main switch / Foundation earth connector:**
Suitable electrical supply to the main switch must be provided by the customer during installation. The functionality can be monitored on site by our fitters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.
In accordance with DIN EN 60204 (Safety of Machinery. Electrical Equipment), grounding of the steel structure is necessary, provided by the customer (distance between grounding max. 10 m).
2. **Safety fences:**
Any constraints that may be necessary according to DIN EN ISO 13857 in order to provide protection for the park pits for pathways directly in front, next to or behind the unit. This is also valid during construction. Railings for the system are included in the series delivery when necessary.
3. **Numbering of parking spaces:**
Consecutive numbering of parking spaces.
4. **Building services:**
Any required lighting, ventilation, fire extinguishing and fire alarm systems as well as clarification and compliance with the relevant regulatory requirements.
5. **Drainage:**
For the front area of the pit we recommend a drainage channel, which you connect to a floor drain system or sump (50 x 50 x 20 cm). The drainage channel may be inclined to the side, however not the pit floor itself (longitudinal incline is available). For reasons of environmental protection we recommend to paint the pit floor, and to provide oil and petrol separators in the connections to the public sewage network.
6. **Strip footings:**
If due to structural conditions strip footings must be effected, the customer shall provide an accessible platform reaching to the top of the said strip footings to enable and facilitate the mounting work.
7. **Marking:**
According to DIN EN 14010, a warning that identifies this danger area must be placed in the entrance area that conforms to ISO 3864. This must be done according to EN 92/58/EWG for systems with a pit (platforms within the pit) 10 cm from the edge of the pit.
8. **Wall cuttings:**
Any necessary wall cuttings according to product data MultiBase 2072i outdoor installation.
9. **Concrete quality:**
Floor and walls below the drive-in level are to be made of concrete (quality minimum C20/25).

**Tender specification KLAUS Multiparking
MultiBase 2072i outdoor installation EB
MultiBase 2072i outdoor installation DB**

Multiparking system for 2 cars
MultiBase 2072i-165 outdoor installation EB

Multiparking system for 2 cars with platforms for horizontal accessing

Pit depth: front: 170 cm, back: 165 cm

Clearance: 320 cm

If a higher ceiling height is available higher cars can be parked on the upper parking space.

Vehicle height: top: 150 cm, bottom: 150 cm

Vehicle length: 500 cm

Usable platform width: 230 cm

Platform load: 2.0 t

incl. freight, unloading, installation

incl. electrical wiring from lockable main switch

incl. expert acceptance

Multiparking system for 4 cars
MultiBase 2072i-165 outdoor installation DB

Multiparking system for 4 cars

Usable platform width: 460 cm

Otherwise as described for Multiparking system for 2 cars

Hydraulic unit, low-noise

Tender specification KLAUS Multiparking
MultiBase 2072i outdoor installation EB
MultiBase 2072i outdoor installation DB

Option:

Extra costs for KLAUS MultiBase 2072i-170 outdoor installation EB
(car height at bottom up to 155 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-170 outdoor installation DB
(car height at bottom up to 155 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-180 outdoor installation EB
(car height at bottom up to 165 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-180 outdoor installation DB
(car height at bottom up to 165 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-185 outdoor installation EB
(car height at bottom up to 170 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-185 outdoor installation DB
(car height at bottom up to 170 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-195 outdoor installation EB
(car height at bottom up to 180 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-195 outdoor installation DB
(car height at bottom up to 180 cm)

– Dimensions acc. to manufacturer specifications –

Tender specification KLAUS Multiparking
MultiBase 2072i outdoor installation EB
MultiBase 2072i outdoor installation DB

Option:

Extra costs for KLAUS MultiBase 2072i-205 outdoor installation EB
(car height at bottom up to 190 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-205 outdoor installation DB
(car height at bottom up to 190 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-215 outdoor installation EB
(car height at bottom up to 200 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-215 outdoor installation DB
(car height at bottom up to 200 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-220 outdoor installation EB
(car height at bottom up to 205 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-220 outdoor installation DB
(car height at bottom up to 205 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-230 outdoor installation EB
(car height at bottom up to 215 cm)

– Dimensions acc. to manufacturer specifications –

Option:

Extra costs for KLAUS MultiBase 2072i-230 outdoor installation DB
(car height at bottom up to 215 cm)

– Dimensions acc. to manufacturer specifications –

Tender specification KLAUS Multiparking
MultiBase 2072i outdoor installation EB
MultiBase 2072i outdoor installation DB

Optional position

Extra costs for larger platform width _____ cm

Optional position

Extra costs for increase of platform load to 2.6 t per parking space, EB system

Optional position

Extra costs for increase of platform load to 2.6 t per parking space, DB system

Optional position

Extra costs for increase of platform load to 3.0 t per parking space, EB system

Optional position

Platform coating in AluLongLife

Optional position

Platform coating in EasyWalk

Optional position

Extra costs for additional noise protection measures to protect against structure-borne sound according to DIN 4109, EB system

Optional position

Extra costs for additional noise protection measures to protect against structure-borne sound according to DIN 4109, DB system

Optional position

Extra costs for additional increased noise protection measures to protect against structure-borne sound according to DIN 4109-10, EB system

Optional position

Extra costs for additional increased noise protection measures to protect against structure-borne sound according to DIN 4109-10, DB system

Optional position

Extra costs for fixing in waterproof concrete with glue dowel

Extra costs for conclusion of a system service contract SSV "PLUS" with cleaning and care, incl. maintenance 1 per year, all spare and wear parts, and cleaning and care of the platform surface.
