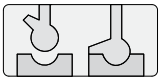
Identification

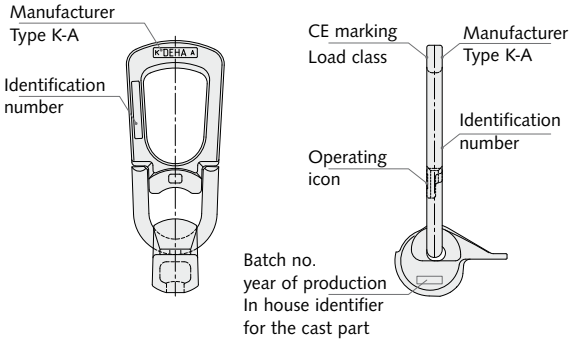
Each universal head lifting link is identified as shown: the name of the manufacturer (DEHA) is stamped into the handle together with the application identifier K-A and the unique anchor number. The load group, the CE marking and an operating symbol can be found on the rear of the handle.



The application identifier K-A denotes that the universal head lifting link can be used for the following two DEHA Lifting anchor systems:

- for the DEHA Lifting anchor system type K with the spherical head anchor
- for the DEHA Lifting anchor system type A with an appropriate cast-in socket and adaptor.

Before each use visually check all lifting equipment for correct application and damage-free condition.
It is prohibited to use damaged lifting equipment.

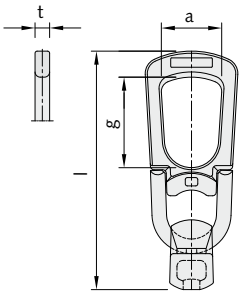


Allocation of the Universal-head lifting link to the load classes of the anchors. (each lifting link is marked with the load class).

Load classes of the anchors and allocated lifting links										
Anchor	1,3	2,5	4,0	5,0	7,5	10,0	15,0	20,0	32,0	45,0
Lifting link	1,3	2,5	5,0		10,0		20,0		32,0	45,0

Technical description

These user instructions apply to the DEHA Universal-head lifting link in connection with the instructions for the DEHA Spherical-head lifting anchor system.
The system consists of the DEHA Universal-head lifting link and the cast-in DEHA Spherical-head lifting anchors. The DEHA Universal-head lifting link is manually operated. The load groups and dimensions are listed in the following table.
The lifting link and the lifting anchor must both be of the same load group. If these (including the recess former) are used to specifications, the geometric properties ensure incorrect combinations are not possible. All work-safety regulations must be observed, particularly the European machine guideline (MD) 2006/42/EC and the German VDI/BV-BS 6205. „Transportanker und Transportankersysteme für Betonfertigteile“ (“Lifting anchor and lifting anchor systems for precast concrete elements“).



Load capacities of the Universal-head lifting link, subject to varying load directions and dimensions

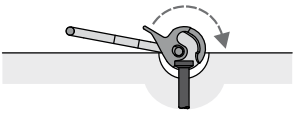
For load class	Article name	Order no. 0738.010-	Weight [kg]	Centric load [kN]	Diagonal load ≥ 45° [kN]	Shear load [kN]	a [mm]	g [mm]	l [mm]	t [mm]
1,3	6102-1,3	00001	0.9	13.0	13.0	13.0	47	71	188	12
2,5	6102-2,5	00002	1.4	25.0	25.0	25.0	59	86	230	14
5,0	6102-5,0	00003	3.4	50.0	50.0	50.0	70	88	283	16
10,0	6102-10,0	00004	9.1	100.0	100.0	100.0	88	115	401	25
20,0	6102-20,0	00005	21.0	200.0	200.0	200.0	106	135	506	30
32,0	6102-32,0	00006	47.0	320.0	320.0	320.0	172	189	680	40
45,0	6102-45,0	00007	59.0	450.0	450.0	450.0	179	192	676	40

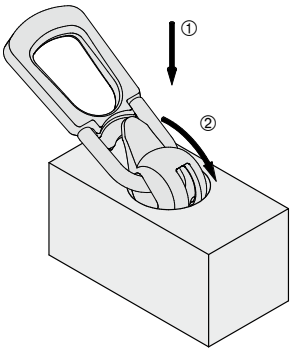
Using the universal head lifting link

Check the load capacity of the anchor against the lifting link.

① To engage; the ball is pushed with the opening facing downward over the anchor.

② Then rotate the tongue on the ball away from the lifting link towards the surface of the concrete. The universal head lifting link is now secured and is ready for use.



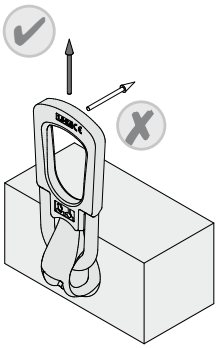


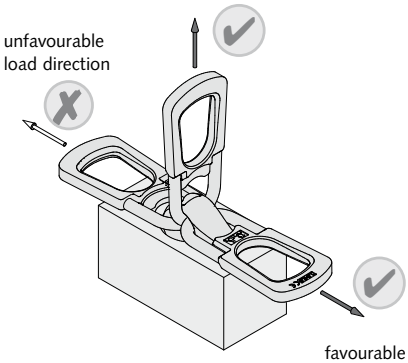
Before each use visually check all lifting equipment for correct application and damage-free condition. It is prohibited to use damaged lifting equipment.

Turning the lifting link when under load is limited.

Lifting

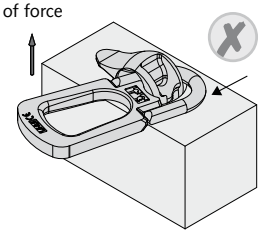
All rotation, tilt and swivel movements shown are allowed with the universal head lifting link. If subjected to diagonal load the position of the tongue is not critical.
If the universal head lifting link is used for rotating and pitching precast concrete elements, the position of the shackle must be as in the illustration on the left.
The ball is always kept in the correct position and counterweighted by the tongue, even in a non loaded state.





favourable
load direction at the beginning
of rotation or pitching

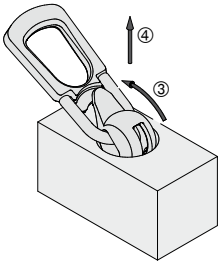
If the shackle is beneath the clutch head when subjected to load, it may lock in the position illustrated. The round shackle will bend when under load.



Shackle will lock
in this position

Disengaging

To disengage the lifting link, lower the lifting head③ and swivel the ball④ upward.



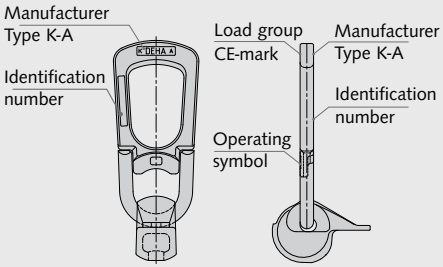
Use of the DEHA Turning and lifting link

Precast elements, especially pipes, which have previously been lifted with the universal lifting head, may not be subsequently lifted with the DEHA Turning and lifting link.

Safety monitoring and maintenance

Annual inspection
Each HALFEN Lifting link ordered has a unique identification number. The unique number correctly identifies the lifting link and helps to ensure each unit is checked for operational safety at regular intervals.
The following options are available when ordering:

- A certificate that confirms that all guidelines and quality controlled manufacture are observed; also includes type of lifting link, the identification number and an inspection table.
- In addition to the certificate a written report confirming the lifting link was tested to twice its nominal load capacity.



As with all lifting links the universal head lifting links must be checked by a suitably trained person at least once a year to ensure they are in usable condition. There is no pre-defined life expectancy for universal head lifting links.
When checking the universal head lifting links for damage the criteria in the table below should be observed.

Special attention should be paid to any deformation and to general wear and tear. The identification on the link must always be legible.

If the wear limits stated in the table are not met, then further use of the universal head is not permitted.

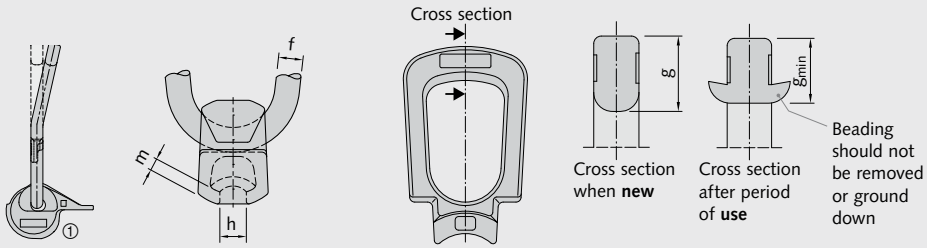
The inspection must be properly documented.

Alterations and repairs to the universal-head links, especially welding, are strictly forbidden.

We strongly advise against using HALFEN products with non-HALFEN products.

Tolerances for the universal head lifting link

Wear limits for the lip thickness “m” and hole size for “h” [mm]							
Load class	1,3	2,5	5,0	10,0	20,0	32,0	45,0
m_{min}	5.5	6.0	8.0	12.0	18.0	24.0	24.0
h_{max}	13.0	18.0	24.5	32.5	47.5	58.0	58.0
Wear limits for minimum link diameter “g” and chain link elongation “f” [mm]							
g_{min}	14.0	17.5	28.0	36.0	56.0	80.0	85.0
f_{min}	10.5	12.5	18.5	26.0	36.0	40.0	46.0



① It is prohibited to re-bend any element damaged by mis-use. De-commission the universal head lifting link if there is any significant bending.