



## **DKK Aluminium Crane System**

Aluminium Product Catalogue



◀ Rail for simultaneously moving tool and material racks at assembly lines



Guide rail for Z lifting units



◀ Monorail with curves



▲  
Double rail



Telescopic rail system

## DKK Components

Rail system for components handling unit or manipulator



Guide rail installed in the floor or floor-guided lifting units



Rail system for screw handling systems with torque



Overhead crane systems X and Y with lifting unit in Z



Cranesystems with multiple runways



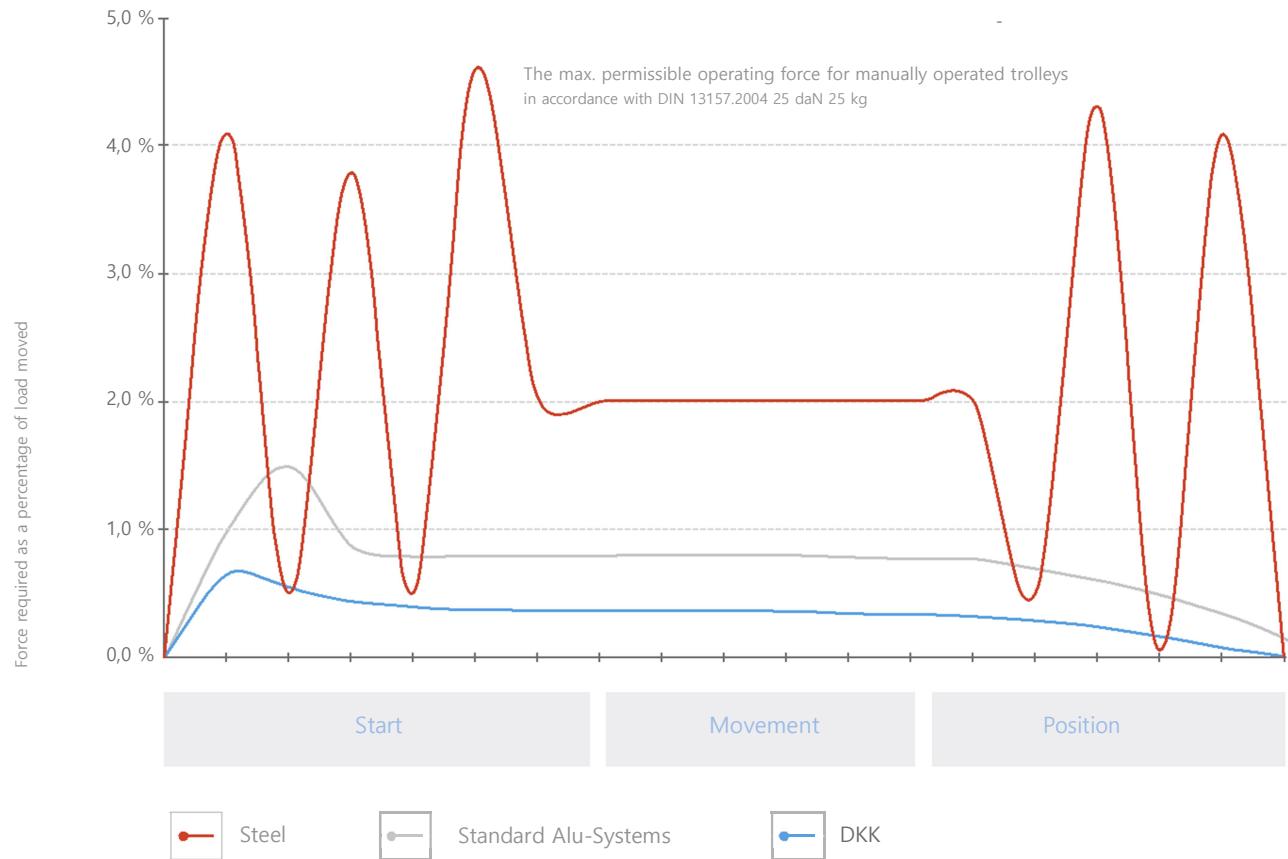
## Perfect Smooth-Running

The smoother a crane system runs, the more pleasant and health preserving it is to work with. This is why DKK places particular value on optimum crane system running behavior when developing any components.

The result: DKK systems are demonstrably one of the easiest crane systems to move of those that are available on the market at this point in time.

In comparison to customary suspended runway systems, the operator of an DKK system requires only one third of the tractive power to move a load. Trolleys in the aluminium profiles also run distinctly more quietly. These are measurable and noticeable ergonomics.

## Force required when working with crane systems



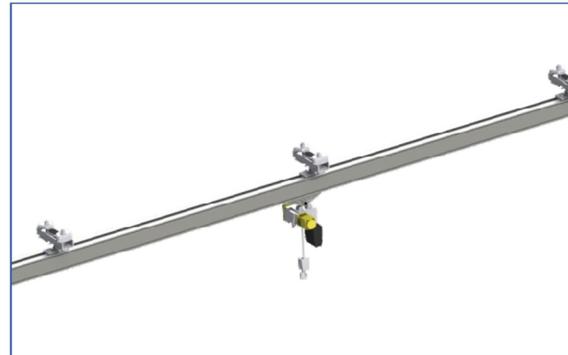
The values for DKK profiles were determined experimentally. Other values were taken from diagram publications.

Load	Start	Movement
100 kg	0,5 – 0,8 kg	0,2 – 0,4 kg
250 kg	1,3 – 1,9 kg	0,5 – 0,8 kg
500 kg	2,5 – 3,8 kg	1,0 – 1,9 kg
750 kg	3,8 – 5,6 kg	1,5 – 2,9 kg
1000 kg	5,0 – 7,5 kg	2,0 – 3,8 kg

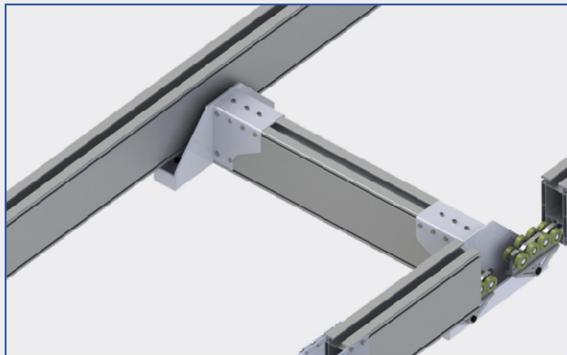
>> Combined Mode of DKK Alu-Line System



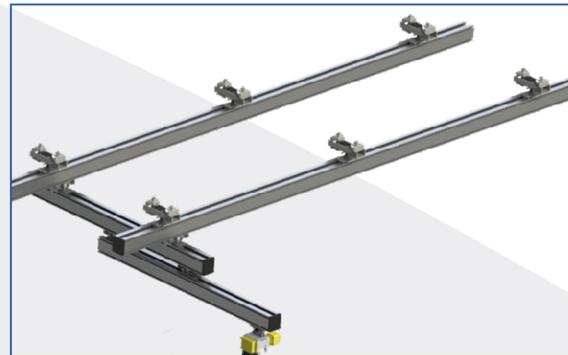
► DKK Single-girder Overhead Crane



► DKK Monorail Crane



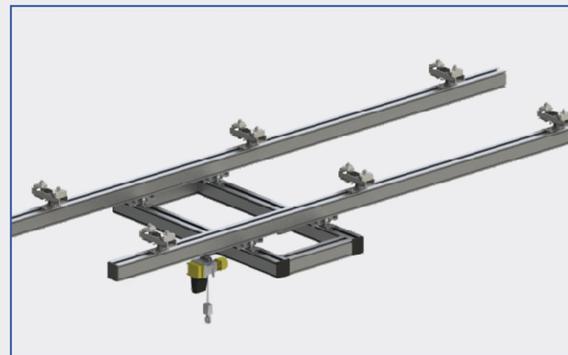
► DKK Single-girder Elevated Crane



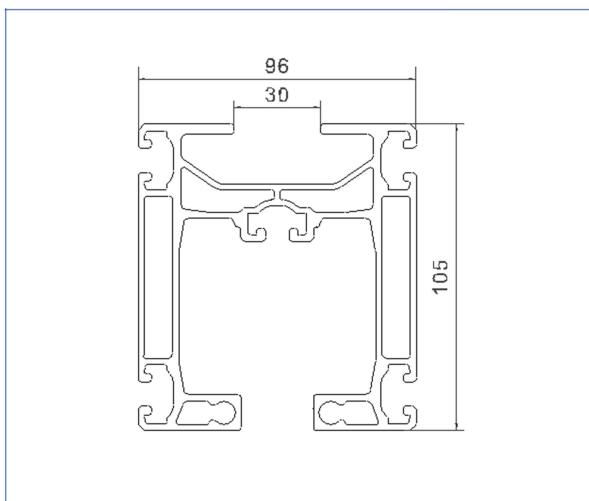
► DKK Single-girder Elevated Telescope Crane



► DKK Double-girder Elevated Crane



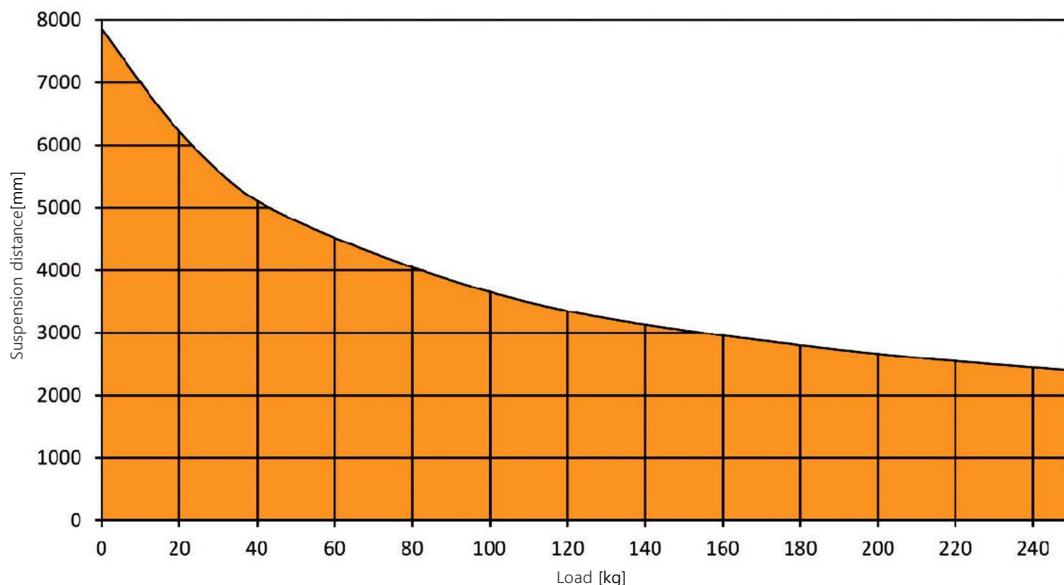
► DKK Double-girder Overhead Crane



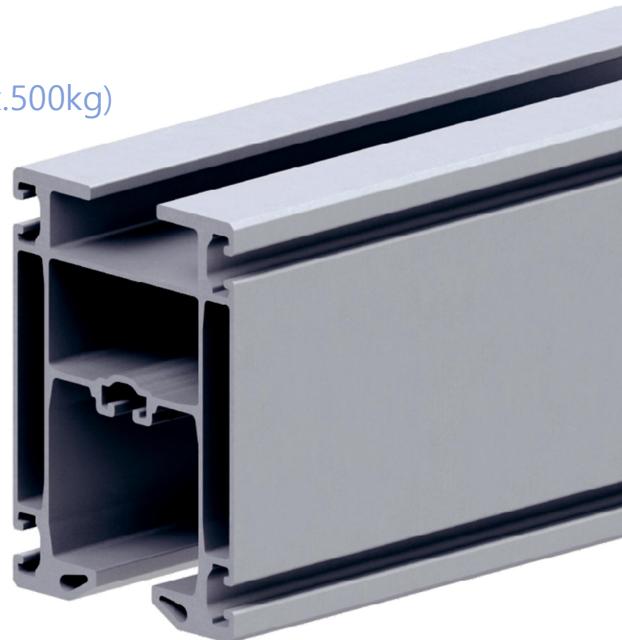
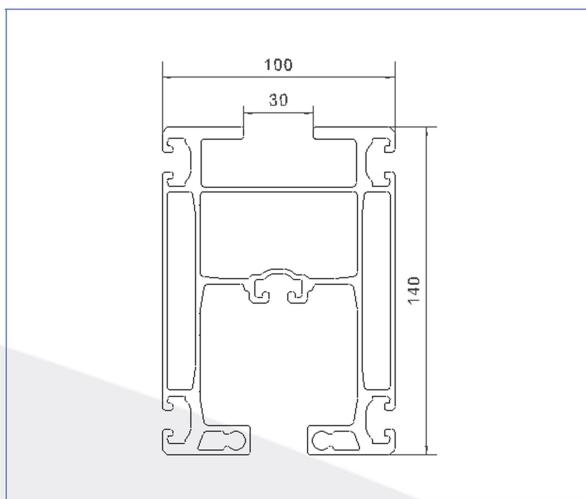
Feature	Description
Material data	Natural aluminium, anodised
Weight	ca. 5,5 kg/m
Moment of plane area [ly/lz]	235 cm <sup>4</sup> / 214 cm <sup>4</sup>
Moment of resistance [Wy/Wz]	42 cm / 44 cm 3 3

Crane profile S	Item no.	Weight
L = 1000 mm	01401401	5,50 kg
L = 2000 mm	01401402	11,00 kg
L = 3000 mm	01401403	16,50 kg
L = 4000 mm	01401404	22,00 kg
L = 5000 mm	01401405	27,50 kg
L = 6000 mm	01401406	33,00 kg
L = 7000 mm	01401407	38,50 kg
L = 8000 mm	01401408	44,00 kg

Load chart DKK profile S



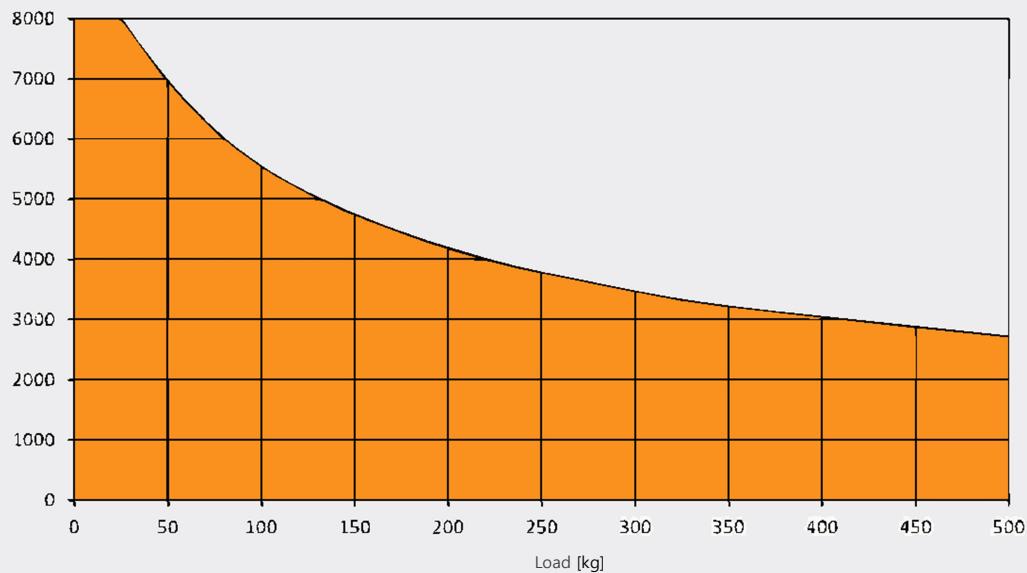
## Aluminum Rail Profile M (Max.500kg)

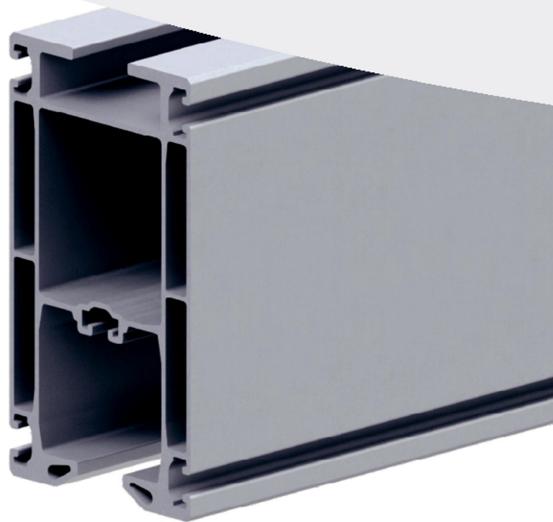
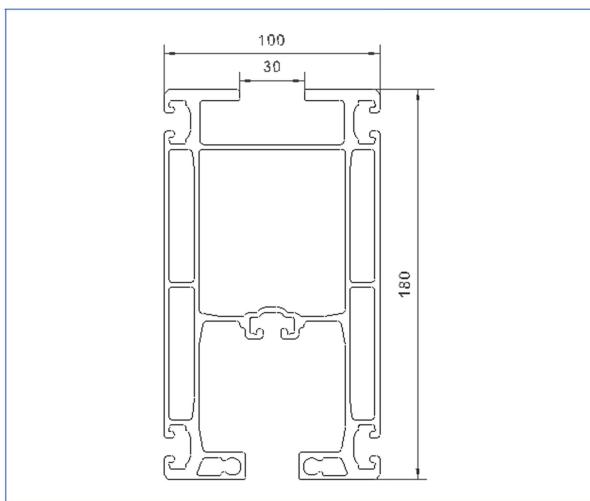


Feature	Description
Material data	Natural aluminium, anodised
Weight	ca. 7,2 kg/m
Moment of plane area [ly/lz]	605 cm <sup>4</sup> / 335 cm <sup>4</sup>
Moment of resistance [Wy/Wz]	85 cm / 67 cm 3 3

Crane profile M	Item no.	Weight
L = 1000 mm	01402201	7,20 kg
L = 2000 mm	01402202	14,40 kg
L = 3000 mm	01402203	21,60 kg
L = 4000 mm	01402204	28,80 kg
L = 5000 mm	01402205	36,00 kg
L = 6000 mm	01402206	43,20 kg
L = 7000 mm	01402207	50,40 kg
L = 8000 mm	01402208	59,60 kg

Load chart DKK profile M

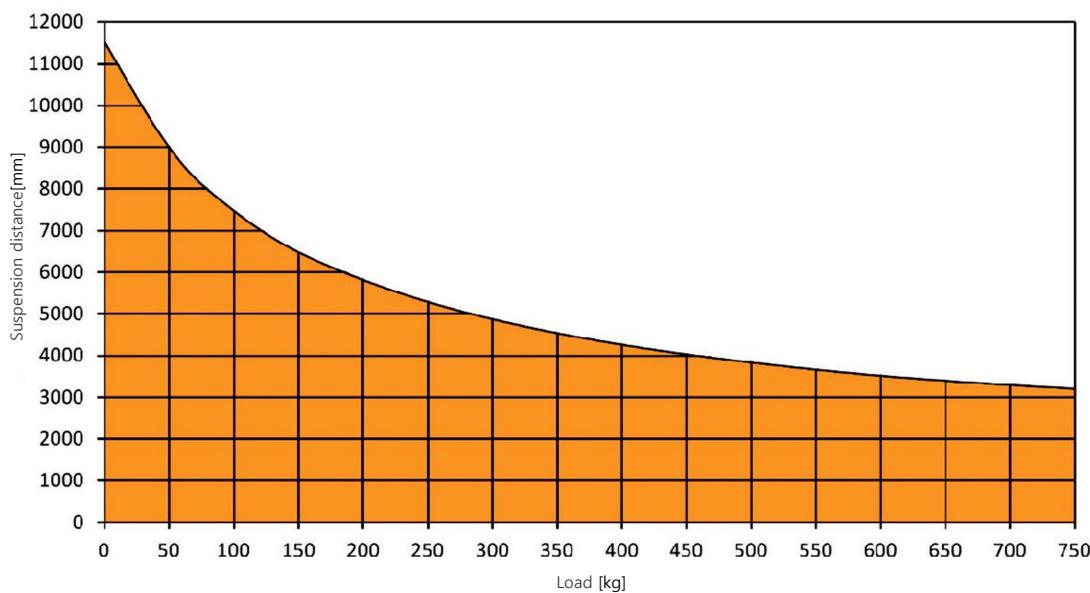




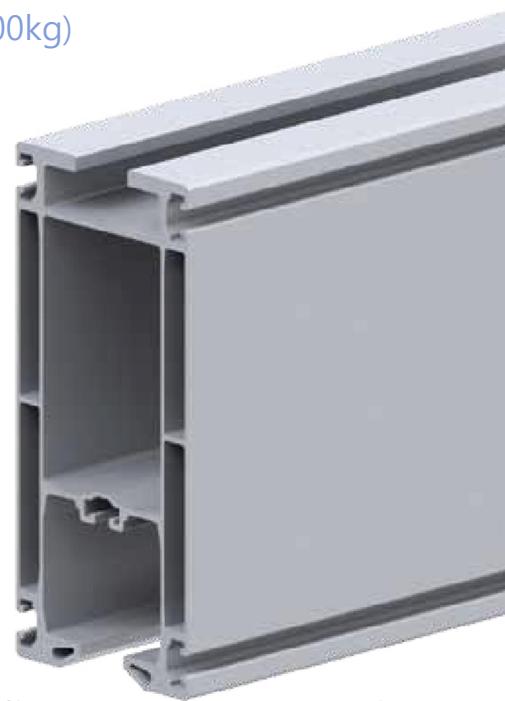
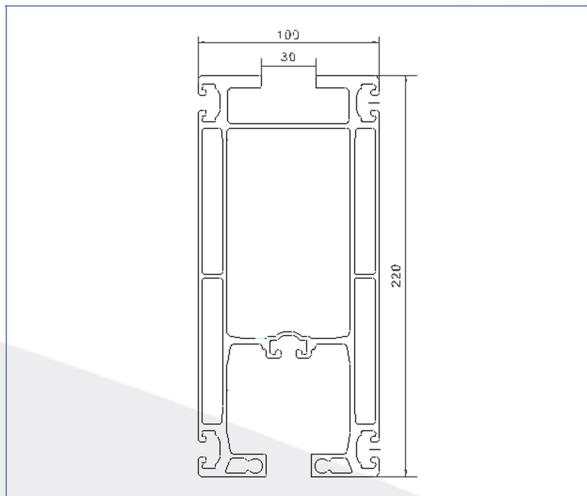
Feature	Description
Material data	Natural aluminium, anodised
Weight	ca. 8,8 kg/m
Moment of plane area [Iy/Iz]	1211 cm <sup>4</sup> / 437 cm <sup>4</sup>
Moment of resistance [Wy/Wz]	133 cm <sup>3</sup> / 86 cm <sup>3</sup>

Crane profile L	Item no.	Weight
L = 1000 mm	01403001	8,80 kg
L = 2000 mm	01403002	17,60 kg
L = 3000 mm	01403003	26,40 kg
L = 4000 mm	01403004	35,20 kg
L = 5000 mm	01403005	44,00 kg
L = 6000 mm	01403006	52,80 kg
L = 7000 mm	01403007	61,60 kg
L = 8000 mm	01403008	70,40 kg

Load chart DKK profile L

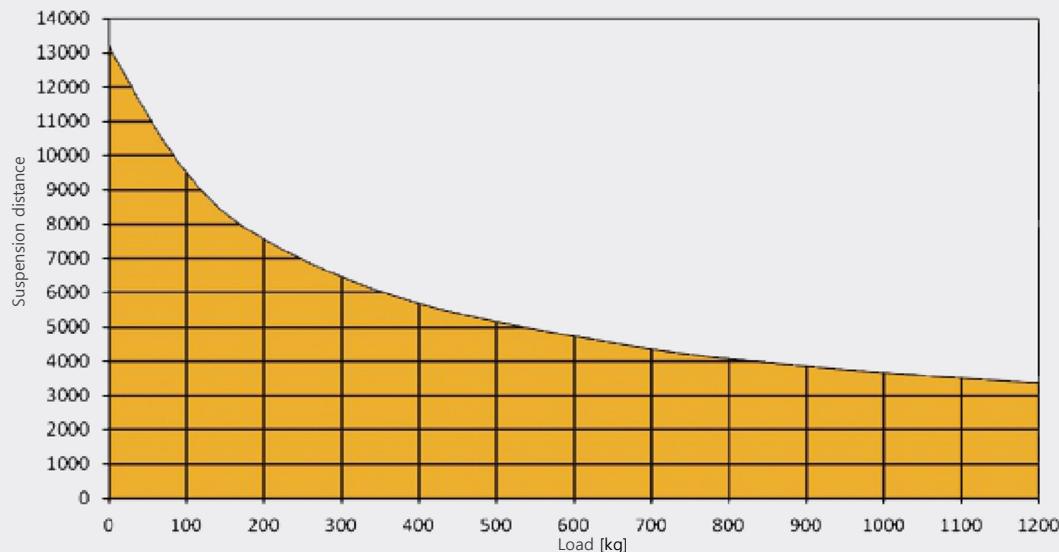


## Aluminum Rail Profile XL (Max.1200kg)



Feature	Description	Crane profile XL	Item no.	Weight
Material data	Natural aluminium, anodised	L = 1000 mm	01403701	10,20 kg
		L = 2000 mm	01403702	20,40 kg
Weight	ca. 10,2 kg/m	L = 3000 mm	01403703	30,60 kg
Moment of plane area [ly/lz]	2200 cm <sup>4</sup> / 523 cm <sup>4</sup>	L = 4000 mm	01403704	40,80 kg
Moment of resistance [Wy/Wz]	197 cm <sup>3</sup> / 104cm <sup>3</sup>	L = 5000 mm	01403705	51,00 kg
		L = 6000 mm	01403706	61,20 kg
		L = 7000 mm	01403707	71,40 kg
		L = 8000 mm	01403708	81,60 kg

Load chart DKK profile XL



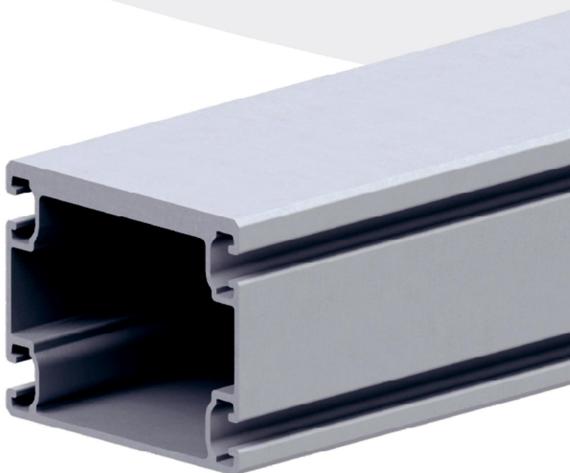
## Reinforcement profile

The reinforcement profile is primarily designed ...

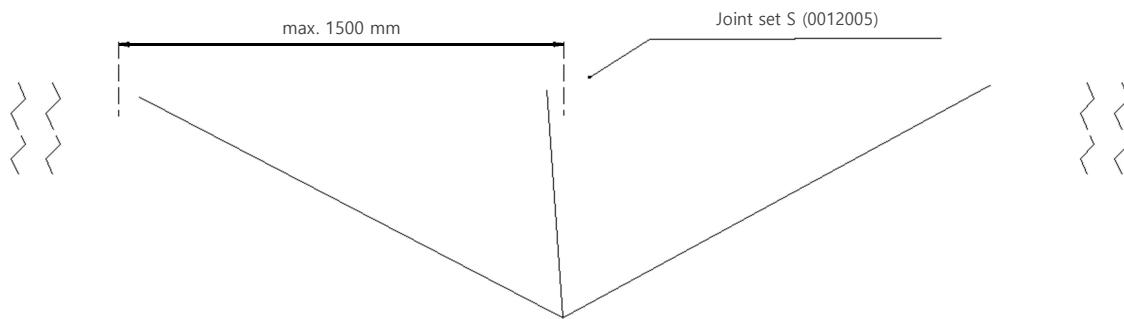
- ... to reduce deflection
- ... to increase span widths and suspension spacing

An increase in load is also possible, it cannot be greater than that of the underlying crane profile. (Load data on next page)

Connection of the reinforcement profile to the profile crane is carried out by means of joint connector plates for profile S (014075).



The reinforcement profile can be used in conjunction with the crane profiles M, L and XL. The profiles S is not compatible for this purpose.



The absolute necessary positions of the joint sets are ...

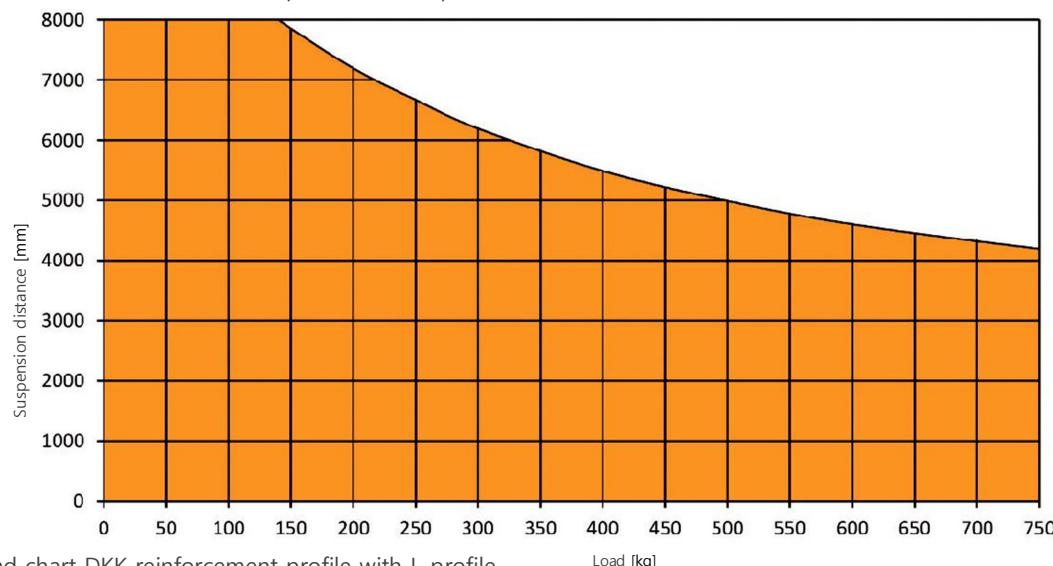
- ... at the end of the reinforcement profile
- ... in the center of the reinforcement profile

The remaining joints must be divided so that the distance is not greater than 1,500 mm.

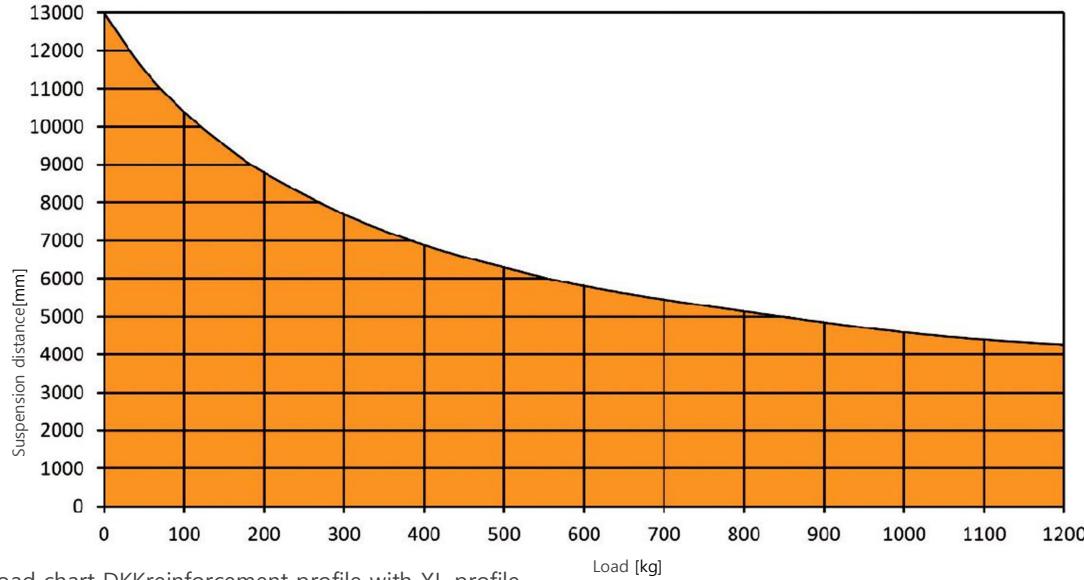
Feature	Description	Reinforcement profile	Item no.	Weight
Material data	Natural aluminium, anodised	L = 1000 mm	01404501	4,00 kg
Weight	ca. 4 kg/m	L = 2000 mm	01404502	8,00 kg
Moment of plane area with M profile [Iy/Iz]	2141 cm <sup>4</sup> / 511 cm <sup>4</sup>	L = 3000 mm	01404503	12,00 kg
Moment of plane area with L profile [Iy/Iz]	3515 cm <sup>4</sup> / 619 cm <sup>4</sup>	L = 4000 mm	01404504	16,00 kg
Moment of plane area with XL profile [Iy/Iz]	5211 cm <sup>4</sup> / 695 cm <sup>4</sup>	L = 5000 mm	01404505	20,00 kg
		L = 6000 mm	01404506	24,00 kg
		L = 7000 mm	01404507	28,00 kg
		L = 8000 mm	01404508	32,00 kg

## Reinforcement profile

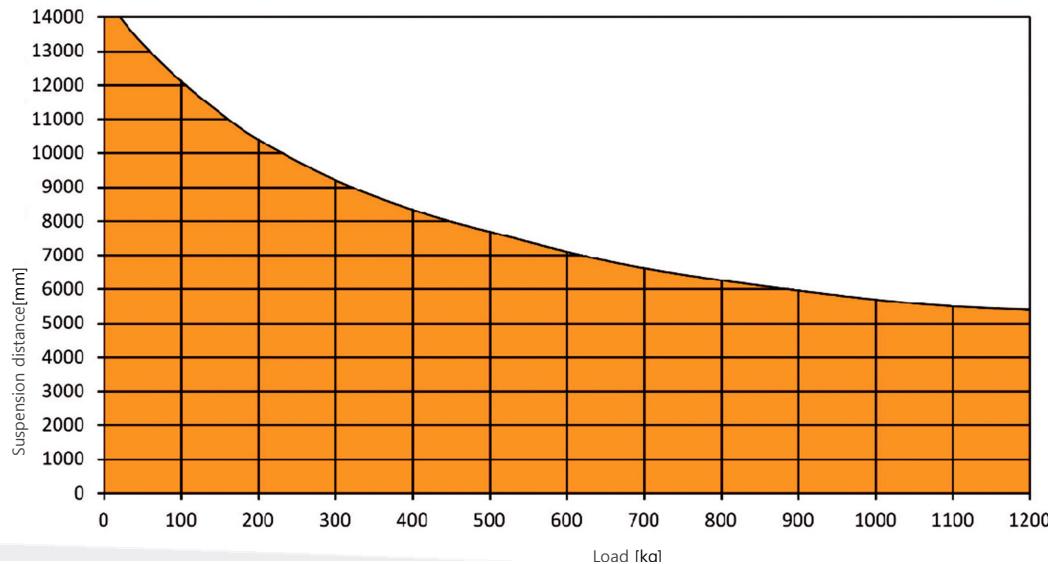
Load chart DKK reinforcement profile with M-profile



Load chart DKK reinforcement profile with L-profile



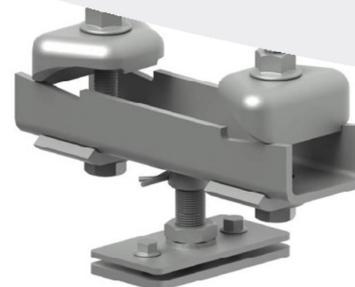
Load chart DKK reinforcement profile with XL-profile



Most DKK crane systems that rely on precise load position or crane systems that are subject to upward forces, e.g. by manipulators, escalating devices or excessive overhang of the crane beams, are mounted using height adjustable, rigid mounting.

The 20 mm range of height adjustment gives this type of mounting the ability to compensate for height differences in the steel construction, despite the rigid crane system mounting

With three different sizes available, the securing of flange widths of between 50mm-310mm is covered



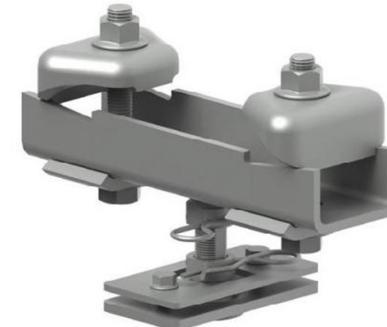
Feature	Rigid Mounting 50-150	Rigid Mounting 150-250	Rigid Mounting 250-310
Load Capacity	2000 kg	2000 kg	2000 kg
Flange Width	50mm-150mm	150mm-250mm	250mm-310mm
Height Adjustment	92mm-112mm	92mm-112mm	92mm-112mm
Weight	3.8 kg	4.3 kg	4.8 kg
Item Code	01405900	01406000	01406100

## Pendular Mountings

Around 90% of all DKK crane systems are attached to the ceiling construction by pendular mounting

The type of mounting should always be your number one choice. Rigid variations should only be employed if the crane system is subject to upward forces, e.g. by manipulators, escalating devices or excessive overhang of the crane beams.

With three different sizes available, the securing of flange widths of between 50mm-310mm is covered



Feature	Pendular Mounting 50-150	Pendular Mounting 150-250	Pendular Mounting 250-310
Load Capacity	2000 kg	2000 kg	2000 kg
Flange Width	50mm-150mm	150mm-250mm	250mm-310mm
Height Adjustment	92mm-132mm	92mm-132mm	92mm-132mm
Weight	4,0 kg	4,5 kg	5,0 kg
Max. Ceiling Incline	10°	10°	10°
Item Code	01405600	01405700	01405800

## Crane Girder Suspension

Crane girder can be secured to crane runways using the DKK crane girder suspension.

This special type of support is flexible but without play and offers the crane and the user sufficient freedom necessary to complete the task as easily as possible. At the same time, the

014079  
precise integration of all components ensures that the system runs quietly and smoothly, independent of the direction of forces applied to the crane system.

Downward or upward loads of up to 600kg can be transferred with the crane girder suspension.

Normal crane girders are fitted using the 90° variant, Telescopic girders can be created using the 0° variant.



014080

Designation	Item Code	Weight
Crane Girder Suspension 0°	01407900	0,6 kg
Crane Girder Suspension 90°	01408000	0,6 kg

## Manual Trolleys



Grab Trolley 01406400



Hinge Trolley 01406400



Tandem Grab Trolley 01406600

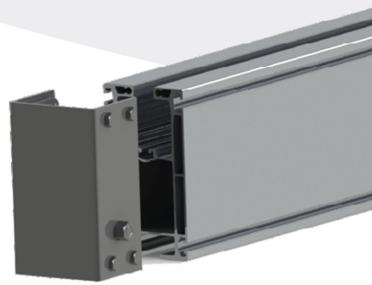


Tandem Hinge Trolley 01406500

Designation	Item Code	Max. Load	Weight
Grab Trolley	01406200	600 kg	1,60 kg
Hinge Trolley (Runway)	01406400	600 kg	1,25 kg
Tandem Grab Trolley	01406600	1200 kg	4,20 kg
Tandem Hinge Trolley (Runway)	01406500	1200 kg	3,50 kg

## End Cap

All DKK crane profiles must be fitted with an end cover to protect against the ingress of contamination.



Designation	Item Code	Weight	Material
End Cap for S Profile	01406900	0.5 kg	Steel
End Cap for M Profile	01407000	0.65 kg	Steel
End Cap for L Profile	01407100	0.85 kg	Steel
End Cap for XL Profile	01407200	1.03 kg	Steel

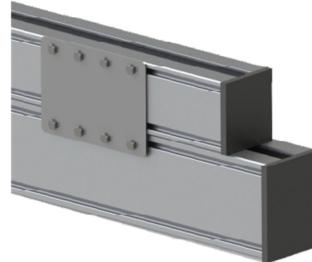
## Joint Set (for crane profile & reinforcement profile)

The DKK joint set for profile sizes S, M and large secured in the grooves in the side of the profile ad thus allow crane runways of any length to be constructed.

The joint set for the XS crane profile is realized by way of the upper opening in the profile.

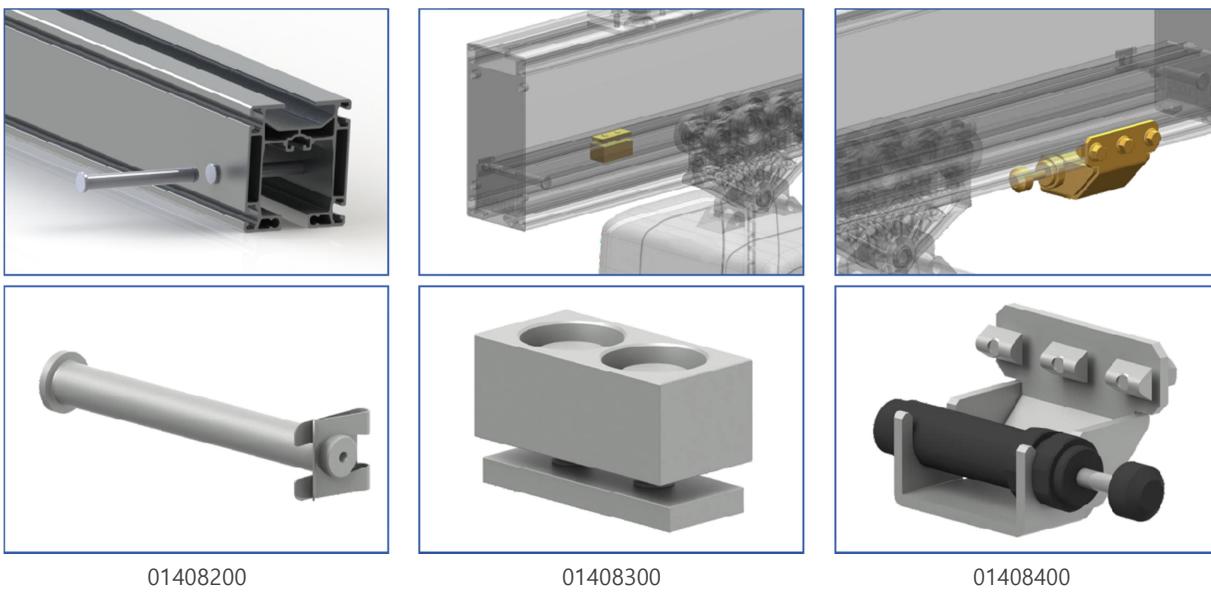


Crane bridges can also extended using joint sets. Please ask our consultant for a layout.



Designation	Item Code	Weight
Joint Set for Profile S	01407500	2.15 kg
Joint Set for Profile M	01407600	2.60 kg
Joint Set for Profile L	01407700	3.10 kg
Joint Set for Profile XL	01407800	3.65 kg

## End Stop



Designation	Item Code	Weight
End Stop fixed to Profile S to XL	01408200	0,10 kg
End Stop Adjustable	01408300	0,19 kg
End Stop Buffered	01408400	0,80 kg

## Cable Trolley

For Flat Cable



For Round Cable (Dia. 26-36mm)





   **Freestanding Type**

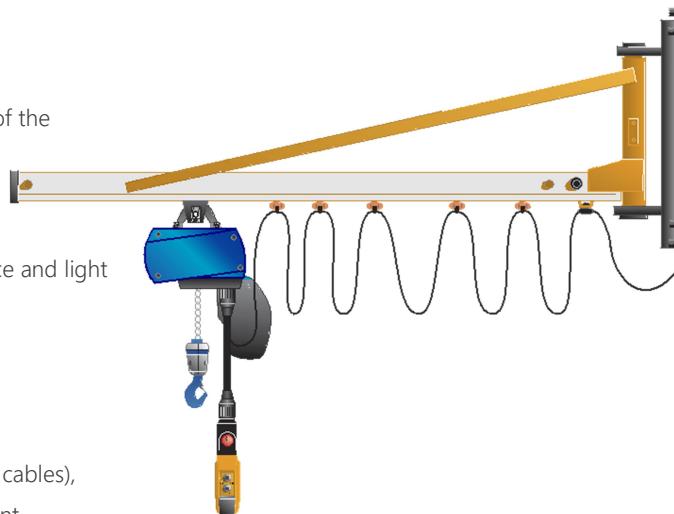
### Features

- In DKK acceptance of profile for optimal force of the profiles and low deflection
- Absolutely smooth rotating
- 4 different profiles for an optimal price performance and light turning
- Standard DKK chain hoists or requested brand
- Easy and quick installation
- Main switch integrated in column
- Including electrical equipment (cable trolleys and cables), main switches, gab trolley for lifting equipment and installation material for columns

S.W.L.	3m	4m	5m	6m
80 kg	✓	✓	✓	✓
125 kg	✓	✓	✓	✓
250 kg	✓	✓	✓	✓
500 kg	✓	✓	✓	
750 kg	✓	✓		
1,000 kg				

### Features

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- Standard DKK chain hoist or requested brand
- Easy and quick installation
- Including electrical equipment (cable trolleys and cables), main switches and gab trolley for lifting equipment



**Wall mounted Type**

S.W.L.	3m	4m	5m	6m
80 kg	✓	✓	✓	✓
125 kg	✓	✓	✓	✓
250 kg	✓	✓	✓	✓

