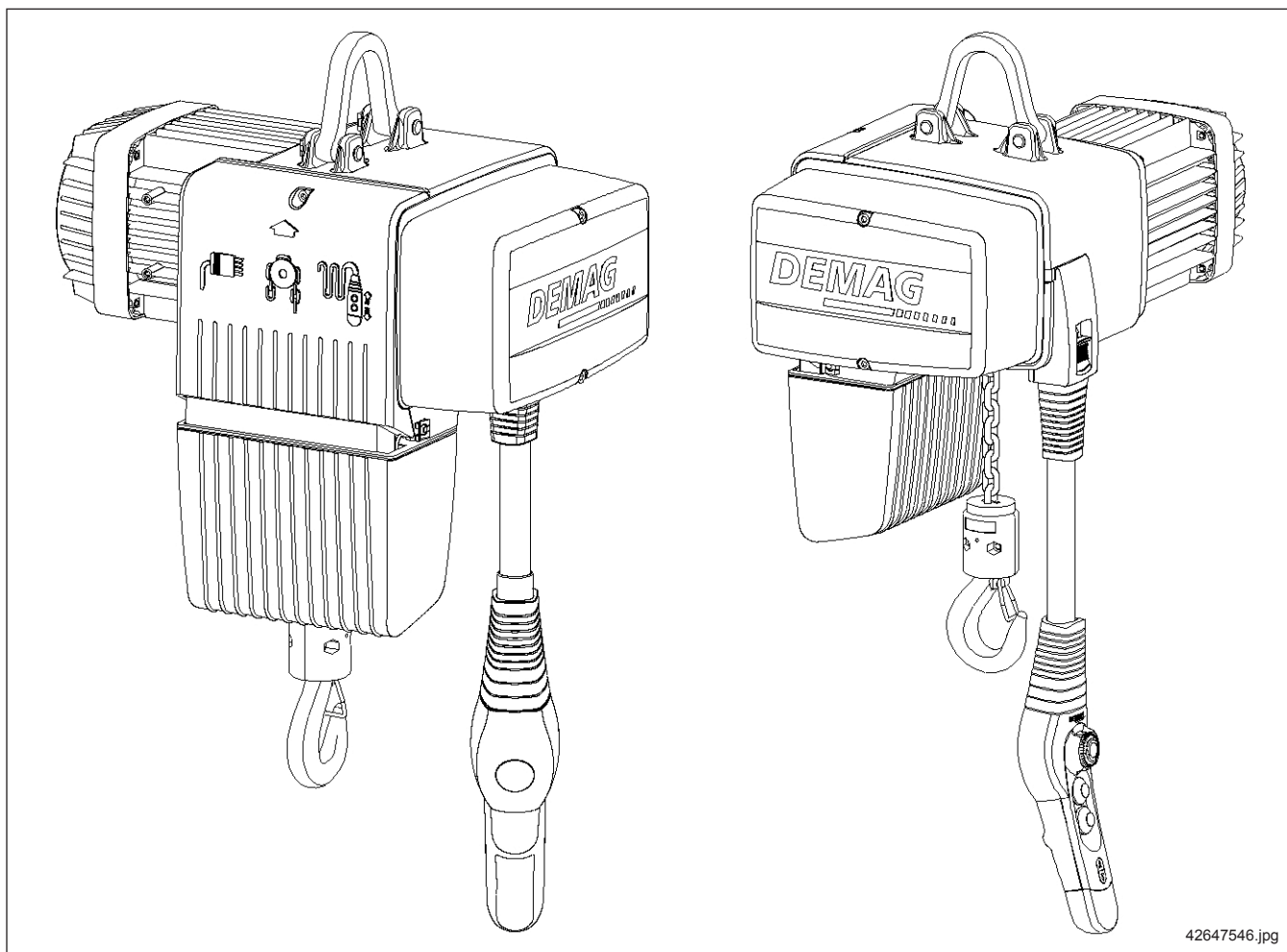


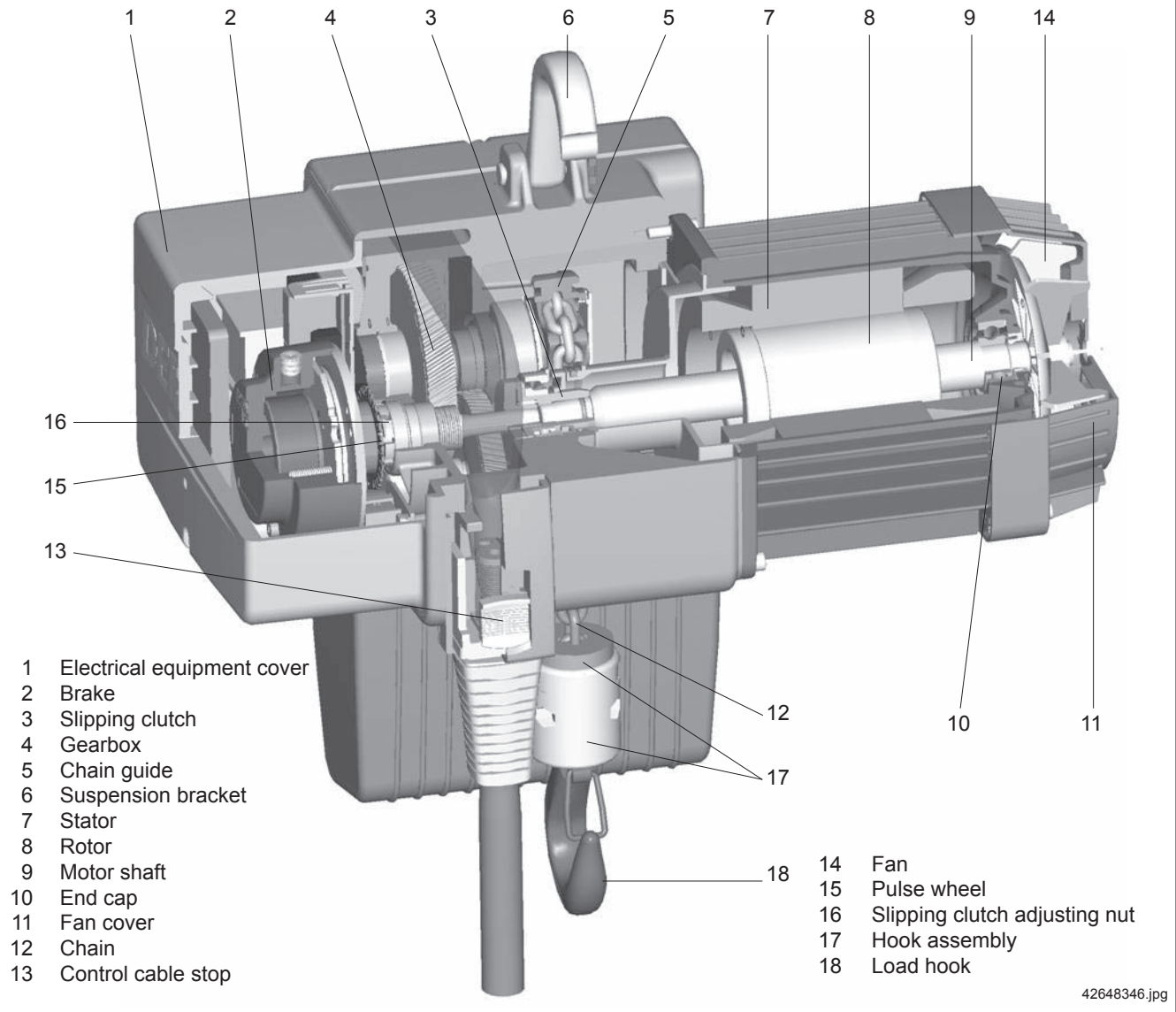
Technical data

Demag DC-Com 1 to DC-Com 10 chain hoists



Design overview

Single-fall design



For other designs of chain hoists, see DC-Pro technical data 203 525 44.

Model code

| E | U | D | DC-Pro | 10 - | 1000 | 2/1 | H5 | V6/1,5 | 380 - 415 / | 50 | 24/6 | 200 | 220 - 480 |
|---|----|---------------------------------------|---|------|------|-----|----|--------|----------------------------|----|--|----------|---|
| | | | | | | | | | | | | | Travel drive voltage range / voltage [V] |
| | | | | | | | | | | | | | Max. flange width of trolley [mm] |
| | | | | | | | | | | | | | Travel speed [m/min] |
| | | | | | | | | | | | | | Frequency [Hz] |
| | | | | | | | | | | | | | Chain hoist voltage range [V] |
| | | | | | | | | | | | | | Hoist speed [m/min] |
| | | | | | | | | V | 2-steps | = | Main/creep lifting | | |
| | | | | | | | | VS | Stepless | = | VS at nominal load up to VS _{max} in the partial load range | | |
| | | | | | | | | | Hook path [m] | | | | |
| | | | | | | | | | Reeving | | | | |
| | | | | | | | | | Load capacity [kg] | | | | |
| | | | | | | | | | Size | | | | |
| | | | DC-Pro | | | | | | Demag chain hoist, 2-steps | | | DC-ProDi | Chain hoist 2-steps for direct control |
| | | | DCM-Pro | | | | | | Manulift, 2-steps | | | DC-ProFi | Chain hoist stepless for control via an external frequency inverter |
| | | | DCS-Pro | | | | | | Chain hoist stepless | | | | |
| | | | DCMS-Pro | | | | | | Manulift stepless | | | | |
| | | | DCRS-Pro | | | | | | Rocker switch stepless | | | DC-Com | Chain hoist, 2-steps basic version |
| | | D | Articulated trolley (curve-negotiating) | | | | | | | | | | |
| | K | Low headroom trolley | | | | | | | | | | | |
| | U | Standard-headroom monorail hoist | | | | | | | | | | | |
| | 11 | Trolley size load capacity [kg • 100] | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | |
| | 56 | | | | | | | | | | | | |
| R | | Push-travel trolley | | | | | | | | | | | |
| E | | Travel drive | | | | | | | | | | | |
| C | F | 5 | Click-Fit (push-travel trolley) | | | | | | | | | | |



Not all features of the mounting code can be combined.

Selection criteria

The size of the hoist is determined by the load spectrum, average operating time per working day, SWL and reeving.

1. What are the operating conditions?
2. What is the specified safe working load?
3. To what height must the load be lifted?
4. What is the required lifting speed?
5. Do the loads need to be lifted and lowered with high precision?
6. Is horizontal load travel necessary?
7. How is the hoist to be controlled?

The load spectrum

(in most cases estimated) can be evaluated in accordance with the following definitions:

L1 Light

Hoist units which are usually subject to very small loads and in exceptional cases only to maximum loads.

L2 Medium

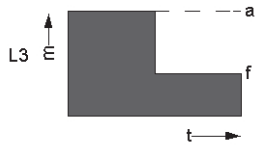
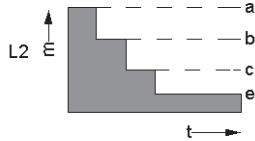
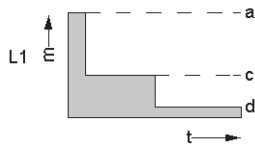
Hoist units which are usually subject to small loads but rather often to maximum loads.

L3 Heavy

Hoist units which are usually subject to medium loads but frequently to maximum loads.

L4 Very heavy

Hoist units which are usually subject to maximum or almost maximum loads.



42699344.eps

- m = SWL
- t = Operating time
- a = Full load
- b = Medium partial load
- c = Small to medium partial load
- d = Small dead load
- e = Small to medium dead load
- f = Heavy dead load
- g = Very heavy dead load

| The chain hoist group of mechanisms is determined by the load spectrum and operating time. | | | | |
|--|------------|---|-------|--------------|
| Load spectrum | | Average operating time per working day in hours | | |
| L1 | Light | 2-4 | 4-8 | 8-16 over 16 |
| L2 | Medium | 1-2 | 2-4 | 4-8 8-16 |
| L3 | Heavy | 0,5-1 | 1-2 | 2-4 4-8 |
| L4 | Very heavy | 0,25-0,5 | 0,5-1 | 1-2 2-4 |
| Group of mechanisms to FEM | | 1Am | 2m | 3m 4m |
| Reeving arrangement | Range | Size | | |
| 1/1 2/1 | | | | |
| SWL in kg | | Demag DC chain hoist | | |
| 80 | DC-Com 1 | 80 | | |
| 100 | DC-Com 1 | 100 | | |
| 125 | DC-Com 1 | 125 | | |
| 160 | DC-Com 2 | 160 | | |
| 200 | DC-Com 2 | 200 | | |
| 250 | DC-Com 2 | 250 | | |
| 315 | DC-Com 5 | 315 | | |
| 400 | DC-Com 5 | 400 | | |
| 500 | DC-Com 5 | 500 | | |
| 630 | DC-Com 10 | 630 | | |
| 800 | DC-Com 10 | 800 | | |
| 1000 | DC-Com 10 | 1000 | | |
| 1250 | DC-Com 10 | 1250 | | |
| 1600 | DC-Com 10 | 1600 | | |
| 2000 | DC-Com 10 | 2000 | | |

Example:

Load capacity 250 kg "Medium" load spectrum from table
 Hoist speed 4 m/min 1/1 reeving
 Average hook path 3 m No. of cycles/h 9 Working time/day 8 h

The average operating time per working day is estimated or calculated as follows:

$$\text{Operating time/day} = \frac{2 \times \text{average hook path} \times \text{no. of cycles/h.} \times \text{working time/day}}{60 \times \text{hoist speed}} = \frac{2 \times 3 \times 9 \times 8}{60 \times 4} = 1,8 \text{ hours}$$

For the medium load spectrum and an average daily operating time of 1,8 hours, the table shows group 1Am. For the load capacity of 250 kg, the diagram shows size DC-Com 2–250.

Selection table

DC-Com (2 hoist speeds)

| SWL [kg] | Chain hoist Type DC-Com | Reeving | Group of mechanisms DIN EN 14492 FEM / ISO | Hoist speed | | Standard hook path ²⁾ H [m] | Motor size ¹⁾ | Max. weight for hook path | | | |
|-------------|-------------------------------|---------|---|---------------------|---------------------|---|--------------------------|------------------------------|-------------|-------------|---------|
| | | | | at 50 Hz [m/min] | at 60 Hz [m/min] | | | 4 m [kg] | 5 m [kg] | 8 m [kg] | |
| 80 | 1 | 1/1 | 3m/M6 | 8,0/2,0 | 9,6/2,4 | 4, 5 and 8 | ZNK 71 B 8/2 | 21 | 22 | 24 | |
| 100 | | | 2m/M5 | | | | | | | | |
| 125 | | | 2 | 1Am / M4 | 6,0/1,5 | | | | | | 7,2/1,8 |
| 160 | 2m / M5 | | | | | | | | | | |
| 200 | 1Am / M4 | | | 4,5/1,1 | 5,4/1,3 | | ZNK 80 A 8/2 | | | | |
| 250 | 2m / M5 | | | | | | | | | | |
| 315 | 5 | 1/1 | 1Am / M4 | 4,0/1,0 | 4,8/1,2 | 4, 5 and 8 | | ZNK 100 A 8/2 | 47 | 48 | 52 |
| 400 | | | 2m / M5 | | | | | | | | |
| 500 | 10 | | 2/1 | 1Am / M4 | 4,0/1,0 | | 4,8/1,2 | ZNK 100 B 8/2 | 63 | 65 | 73 |
| 630 | | | | 2m / M5 | | | | | | | |
| 800 | | | 1Am / M4 | | | | | | | | |
| 1000 | | | 1Am / M4 | | | | | | | | |
| 1250 | 10 | 2/1 | 2m / M5 | 4,0/1,0 | 4,8/1,2 | ZNK 100 B 8/2 | 63 | 65 | 73 | | |
| 1600 | | | 1Am / M4 | | | | | | | | |
| 2000 | | | | | | | | | | | |

Hoist speeds until 09/2008 (no longer available)

| SWL [kg] | Chain hoist Type DC-Com | Reeving | Group of mechanisms DIN EN 14492 FEM / ISO | Hoist speed | | Standard hook path ²⁾ H [m] | Motor size ¹⁾ | Max. weight for hook path | | | |
|-------------|-------------------------------|---------|---|---------------------|---------------------|---|--------------------------|------------------------------|-------------|-------------|---------|
| | | | | at 50 Hz [m/min] | at 60 Hz [m/min] | | | 4 m [kg] | 5 m [kg] | 8 m [kg] | |
| 160 | 2 | 1/1 | 2m/M5 | 4,0/2,0 | 4,8/2,4 | 4, 5 and 8 | ZNK 71 B 8/4 | 21 | 22 | 24 | |
| 200 | | | 1Am / M4 | | | | | | | | |
| 250 | | | 5 | 2m / M5 | 4,0/2,0 | | | | | | 4,8/2,4 |
| 315 | 1Am / M4 | | | | | | | | | | |
| 400 | | | | | | | | | | | |
| 500 | | | | | | | | | | | |

Hoist motor data (The tolerance of the voltage range must not exceed $\pm 10\%$.)

The motors are designed in compliance with insulation class F.

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | | |
|------|---------------|--------------|---|-----|----------------|----------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|
| | | | | | | | 220-240 V, 50 Hz, 3 ~ (CE) | | | | | 380-415 V, 50 Hz, 3 ~ (CE) | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _{N 220} | I _{N 240} | I _{max} ¹⁾ | I _A /I _{N 240} | cos φ _N | I _{N 380} | I _{N 415} | I _{max} ¹⁾ | I _A /I _{N 415} | cos φ _N |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | [A] | | | | | |
| 1 | ZNK 71 B 8/2 | 8 | 0,05 | 20 | 720 | 240 | 1,75 | 2,10 | 2,10 | 1,45 | 0,48 | 1,00 | 1,20 | 1,20 | 1,45 | 0,48 |
| | | 2 | 0,18 | 40 | 2950 | 120 | 2,10 | 2,80 | 2,80 | 2,75 | 0,46 | 1,20 | 1,60 | 1,60 | 2,75 | 0,46 |
| 2 | ZNK 71 B 8/2 | 8 | 0,07 | 15 | 695 | 240 | 1,80 | 2,10 | 2,35 | 1,45 | 0,52 | 1,00 | 1,20 | 1,35 | 1,45 | 0,52 |
| | | 2 | 0,30 | 25 | 2880 | 120 | 2,30 | 2,80 | 3,20 | 2,75 | 0,55 | 1,30 | 1,60 | 1,85 | 2,75 | 0,55 |
| 5 | ZNK 80 A 8/2 | 8 | 0,10 | 15 | 720 | 240 | 1,90 | 1,90 | 2,15 | 2,50 | 0,46 | 1,10 | 1,10 | 1,25 | 2,50 | 0,46 |
| | | 2 | 0,41 | 25 | 2910 | 120 | 3,60 | 4,70 | 5,50 | 4,70 | 0,49 | 2,10 | 2,70 | 3,20 | 4,70 | 0,49 |
| 10 | ZNK 100 A 8/2 | 8 | 0,19 | 15 | 705 | 240 | 2,80 | 3,10 | 3,65 | 1,90 | 0,48 | 1,60 | 1,80 | 2,10 | 1,90 | 0,48 |
| | | 2 | 0,75 | 25 | 2850 | 120 | 3,50 | 4,00 | 4,50 | 4,85 | 0,65 | 2,00 | 2,30 | 2,60 | 4,85 | 0,65 |
| | ZNK 100 B 8/2 | 8 | 0,37 | 15 | 735 | 240 | - | | | | | 3,90 | 4,60 | 5,40 | 2,30 | 0,42 |
| | | 2 | 1,50 | 25 | 2955 | 120 | - | | | | | 5,40 | 6,30 | 7,70 | 5,10 | 0,49 |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | |
|------|---------------|--------------|---|-----|----------------|----------|--------------------------------|--------------------|--------------------------------|------------------------------------|--------------------|--|
| | | | | | | | 500-525 V, 50 Hz, 3 ~ (CE/CSA) | | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _{N 500} | I _{N 525} | I _{max} ¹⁾ | I _A /I _{N 525} | cos φ _N | |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | | | | |
| 1 | ZNK 71 B 8/2 | 8 | 0,05 | 20 | 720 | 240 | 0,75 | 0,95 | 0,95 | 1,45 | 0,48 | |
| | | 2 | 0,18 | 40 | 2925 | 120 | 0,90 | 1,25 | 1,25 | 2,75 | 0,46 | |
| 2 | ZNK 71 B 8/2 | 8 | 0,07 | 15 | 695 | 240 | 0,80 | 0,95 | 1,10 | 1,45 | 0,52 | |
| | | 2 | 0,30 | 25 | 2880 | 120 | 1,10 | 1,25 | 1,45 | 2,75 | 0,55 | |
| 5 | ZNK 80 A 8/2 | 8 | 0,10 | 15 | 720 | 240 | 0,90 | 0,90 | 1,00 | 2,50 | 0,46 | |
| | | 2 | 0,41 | 25 | 2910 | 120 | 1,70 | 2,15 | 2,55 | 4,70 | 0,49 | |
| 10 | ZNK 100 A 8/2 | 8 | 0,19 | 15 | 705 | 240 | 1,30 | 1,40 | 1,70 | 1,90 | 0,48 | |
| | | 2 | 0,75 | 25 | 2850 | 120 | 1,70 | 1,80 | 2,00 | 4,85 | 0,65 | |
| | ZNK 100 B 8/2 | 8 | 0,37 | 15 | 735 | 240 | 3,30 | 3,70 | 4,30 | 2,27 | 0,42 | |
| | | 2 | 1,50 | 25 | 2955 | 120 | 4,15 | 5,00 | 6,10 | 5,13 | 0,49 | |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | | |
|------|---------------|--------------|---|-----|----------------|----------|-----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|
| | | | | | | | 220-240 V, 60 Hz, 3 ~ (CSA) | | | | | 380-400 V, 60 Hz, 3 ~ (CE) | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _{N 220} | I _{N 240} | I _{max} ¹⁾ | I _A /I _{N 240} | cos φ _N | I _{N 380} | I _{N 400} | I _{max} ¹⁾ | I _A /I _{N 400} | cos φ _N |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | [A] | | | | | |
| 1 | ZNK 71 B 8/2 | 8 | 0,06 | 20 | 870 | 240 | 2,10 | 2,50 | 2,50 | 1,45 | 0,47 | 1,35 | 1,60 | 1,60 | 1,45 | 0,47 |
| | | 2 | 0,22 | 40 | 3525 | 120 | 2,50 | 3,35 | 3,35 | 2,75 | 0,45 | 1,70 | 2,00 | 2,00 | 2,75 | 0,45 |
| 2 | ZNK 71 B 8/2 | 8 | 0,09 | 15 | 845 | 240 | 2,10 | 2,50 | 2,80 | 1,45 | 0,51 | 1,40 | 1,60 | 1,70 | 1,45 | 0,51 |
| | | 2 | 0,36 | 25 | 3480 | 120 | 2,70 | 3,30 | 3,85 | 2,75 | 0,54 | 1,80 | 2,00 | 2,20 | 2,75 | 0,54 |
| 5 | ZNK 80 A 8/2 | 8 | 0,12 | 15 | 870 | 240 | 2,30 | 2,30 | 2,60 | 2,50 | 0,45 | 1,55 | 1,55 | 1,75 | 2,50 | 0,45 |
| | | 2 | 0,49 | 25 | 3510 | 120 | 4,40 | 5,60 | 6,60 | 4,70 | 0,48 | 3,00 | 3,50 | 4,10 | 4,70 | 0,48 |
| 10 | ZNK 100 A 8/2 | 8 | 0,23 | 15 | 855 | 240 | 3,35 | 3,75 | 4,40 | 1,90 | 0,47 | 2,30 | 2,50 | 2,80 | 1,90 | 0,47 |
| | | 2 | 0,90 | 25 | 3450 | 120 | 4,20 | 4,80 | 5,40 | 4,85 | 0,67 | 2,70 | 2,90 | 3,30 | 4,85 | 0,64 |
| | ZNK 100 B 8/2 | 8 | 0,44 | 15 | 885 | 240 | - | | | | | 5,75 | 6,40 | 7,10 | 2,30 | 0,41 |
| | | 2 | 1,80 | 25 | 3555 | 120 | - | | | | | 7,30 | 8,90 | 10,00 | 5,10 | 0,48 |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | |
|------|---------------|--------------|---|-----|----------------|----------|-----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|-------------------------|--------------------------------|------------------------------------|--------------------|
| | | | | | | | 440-480 V, 60 Hz, 3 ~ (CSA) | | | | | 575 V, 60 Hz, 3 ~ (CSA) | | | |
| | | | P _N | CDF | n _N | Starts/h | I _{N 440} | I _{N 480} | I _{max} ¹⁾ | I _A /I _{N 480} | cos φ _N | I _{N 575} | I _{max} ¹⁾ | I _A /I _{N 575} | cos φ _N |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | | | | | |
| 1 | ZNK 71 B 8/2 | 8 | 0,06 | 20 | 870 | 240 | 0,96 | 1,15 | 1,15 | 1,45 | 0,47 | 1,10 | 1,10 | 1,22 | 0,49 |
| | | 2 | 0,22 | 40 | 3525 | 120 | 1,15 | 1,55 | 1,55 | 2,75 | 0,45 | 1,20 | 1,20 | 3,50 | 0,41 |
| 2 | ZNK 71 B 8/2 | 8 | 0,09 | 15 | 845 | 240 | 1,05 | 1,25 | 1,40 | 1,45 | 0,51 | 0,80 | 0,90 | 1,65 | 0,60 |
| | | 2 | 0,36 | 25 | 3480 | 120 | 1,35 | 1,70 | 1,95 | 2,75 | 0,54 | 1,00 | 1,15 | 2,75 | 0,55 |
| 5 | ZNK 80 A 8/2 | 8 | 0,12 | 15 | 870 | 240 | 1,15 | 1,15 | 1,30 | 2,50 | 0,45 | 0,95 | 1,10 | 2,50 | 0,45 |
| | | 2 | 0,49 | 25 | 3510 | 120 | 2,20 | 2,80 | 3,30 | 4,70 | 0,48 | 1,80 | 2,10 | 4,70 | 0,48 |
| 10 | ZNK 100 A 8/2 | 8 | 0,23 | 15 | 855 | 240 | 1,65 | 1,85 | 2,20 | 1,90 | 0,47 | 1,30 | 1,50 | 2,20 | 0,46 |
| | | 2 | 0,90 | 25 | 3450 | 120 | 2,10 | 2,40 | 2,70 | 4,85 | 0,64 | 1,60 | 1,80 | 5,70 | 0,73 |
| | ZNK 100 B 8/2 | 8 | 0,44 | 15 | 885 | 240 | 4,10 | 4,80 | 5,60 | 2,30 | 0,41 | 3,00 | 3,50 | 2,33 | 0,43 |
| | | 2 | 1,80 | 25 | 3555 | 120 | 5,60 | 6,60 | 8,00 | 5,10 | 0,48 | 3,90 | 4,70 | 5,60 | 0,60 |

6 1) I_{max} = maximum rated current for lowering operation.

Key hoist motor data until 09/2008 (no longer available)

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | | |
|--------|--------------|--------------|---|-----|----------------|----------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|
| | | | | | | | 220-240 V, 50 Hz, 3 ~ (CE) | | | | | 380-415 V, 50 Hz, 3 ~ (CE) | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _N 220 | I _N 240 | I _{max} ¹⁾ | I _A /I _N 240 | cos φ _N | I _N 380 | I _N 415 | I _{max} ¹⁾ | I _A /I _N 415 | cos φ _N |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | [A] | | | | | |
| DC-Com | ZNK 71 B 8/4 | 8 | 0,09 | 15 | 665 | 240 | 2,10 | 2,20 | 2,50 | 1,25 | 0,52 | 1,20 | 1,30 | 1,45 | 1,25 | 0,52 |
| | | 4 | 0,18 | 25 | 1405 | 120 | 2,10 | 2,10 | 2,40 | 2,30 | 0,56 | 1,20 | 1,20 | 1,40 | 2,30 | 0,56 |
| 5 | ZNK 80 A 8/4 | 8 | 0,18 | 15 | 710 | 240 | 2,60 | 2,90 | 3,30 | 1,70 | 0,49 | 1,50 | 1,70 | 1,90 | 1,70 | 0,49 |
| | | 4 | 0,36 | 25 | 1455 | 120 | 3,10 | 3,80 | 4,50 | 2,70 | 0,52 | 1,80 | 2,20 | 2,60 | 2,70 | 0,52 |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | |
|--------|--------------|--------------|---|-----|----------------|----------|--------------------|--------------------|--------------------------------|------------------------------------|--------------------|--|
| | | | | | | | | | | 500-525 V, 50 Hz, 3 ~ (CE/CSA) | | |
| | | | P _N | CDF | n _N | Starts/h | I _N 500 | I _N 525 | I _{max} ¹⁾ | I _A /I _N 525 | cos φ _N | |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | | | | |
| DC-Com | ZNK 71 B 8/4 | 8 | 0,09 | 15 | 665 | 240 | 1,00 | 1,05 | 1,15 | 1,25 | 0,52 | |
| | | 4 | 0,18 | 25 | 1405 | 120 | 0,85 | 0,95 | 1,10 | 2,30 | 0,56 | |
| 5 | ZNK 80 A 8/4 | 8 | 0,18 | 15 | 710 | 240 | 1,20 | 1,35 | 1,50 | 1,70 | 0,49 | |
| | | 4 | 0,36 | 25 | 1455 | 120 | 1,45 | 1,75 | 2,05 | 2,70 | 0,52 | |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | | |
|--------|--------------|--------------|---|-----|----------------|----------|-----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|
| | | | | | | | 220-240 V, 60 Hz, 3 ~ (CSA) | | | | | 380-400 V, 60 Hz, 3 ~ (CE) | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _N 220 | I _N 240 | I _{max} ¹⁾ | I _A /I _N 240 | cos φ _N | I _N 380 | I _N 400 | I _{max} ¹⁾ | I _A /I _N 400 | cos φ _N |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | [A] | | | | | |
| DC-Com | ZNK 71 B 8/4 | 8 | 0,11 | 15 | 815 | 240 | 2,50 | 2,70 | 3,00 | 1,25 | 0,51 | 1,70 | 1,70 | 2,00 | 1,25 | 0,51 |
| | | 4 | 0,22 | 25 | 1705 | 120 | 2,50 | 2,50 | 2,90 | 2,30 | 0,55 | 1,45 | 1,60 | 1,80 | 2,30 | 0,55 |
| 5 | ZNK 80 A 8/4 | 8 | 0,22 | 15 | 860 | 240 | 3,10 | 3,50 | 4,00 | 1,70 | 0,48 | 2,00 | 2,25 | 2,40 | 1,70 | 0,48 |
| | | 4 | 0,43 | 25 | 1755 | 120 | 3,80 | 4,60 | 5,45 | 2,70 | 0,51 | 2,60 | 2,75 | 3,30 | 2,70 | 0,51 |

| Size | Motor size | No. of poles | Min. / max. currents and starting current | | | | | | | | | | | | | |
|--------|--------------|--------------|---|-----|----------------|----------|-----------------------------|--------------------|--------------------------------|------------------------------------|--------------------|-------------------------|--------------------------------|------------------------------------|--------------------|--|
| | | | | | | | 440-480 V, 60 Hz, 3 ~ (CSA) | | | | | 575 V, 60 Hz, 3 ~ (CSA) | | | | |
| | | | P _N | CDF | n _N | Starts/h | I _N 440 | I _N 480 | I _{max} ¹⁾ | I _A /I _N 480 | cos φ _N | I _N 575 | I _{max} ¹⁾ | I _A /I _N 575 | cos φ _N | |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | | | [A] | [A] | | | | | | |
| DC-Com | ZNK 71 B 8/4 | 8 | 0,11 | 15 | 815 | 240 | 1,25 | 1,35 | 1,50 | 1,25 | 0,51 | 0,95 | 1,10 | 1,25 | 0,47 | |
| | | 4 | 0,22 | 25 | 1705 | 120 | 1,25 | 1,25 | 1,45 | 2,30 | 0,55 | 0,95 | 1,10 | 2,30 | 0,57 | |
| 5 | ZNK 80 A 8/4 | 8 | 0,22 | 15 | 860 | 240 | 1,55 | 1,75 | 2,00 | 1,70 | 0,48 | 1,20 | 1,35 | 1,70 | 0,44 | |
| | | 4 | 0,43 | 25 | 1755 | 120 | 1,90 | 2,30 | 2,70 | 2,70 | 0,51 | 1,45 | 1,70 | 2,70 | 0,49 | |

Mains connection delay fuse links

| Motor size | 220-240 V | 380-415 V | 500-525 V | 220-240 V | 380-400 V | 440-480 V | 575 V |
|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| | 50 Hz | | | 60 Hz | | | |
| | [A] | [A] | [A] | [A] | [A] | [A] | [A] |
| ZNK 71 B 8/2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| ZNK 71 B 8/4 | | | | | | | |
| ZNK 80 A 8/2 | | | | | | | |
| ZNK 80 A 8/4 | | | | | | | |
| ZNK 100 A 8/2 | 10 | | | 10 | 10 | | |
| ZNK 100 B 8/2 | 25 | 16 | 10 | 25 | 20 | 16 | 16 |

Supply cables ²⁾ for 5% voltage drop Δ_U and starting current I_A

| Motor size | 220-240 V | 380-415 V | 500-525 V | 220-240 V | 380-400 V | 440-480 V | 575 V | | |
|---------------|--------------------|-----------|--------------------|-----------|--------------------|-----------|--------------------|-----|-----|
| | 50 Hz | | | 60 Hz | | | | | |
| | [mm ²] | [m] | [mm ²] | [m] | [mm ²] | [m] | [mm ²] | [m] | |
| ZNK 71 B 8/2 | 1,5 | 1,5 | 100 | 1,5 | 100 | 1,5 | 100 | | |
| ZNK 71 B 8/4 | | | | | | | | 89 | 76 |
| ZNK 80 A 8/2 | | | | | | | | 100 | 100 |
| ZNK 80 A 8/4 | | | | | | | | 67 | 56 |
| ZNK 100 A 8/2 | | | | | | | | 34 | 29 |
| ZNK 100 B 8/2 | | | | | | | | 21 | 18 |
| | | 38 | 61 | 2,5 | 18 | 26 | 43 | | |
| | | | | | | | 59 | | |

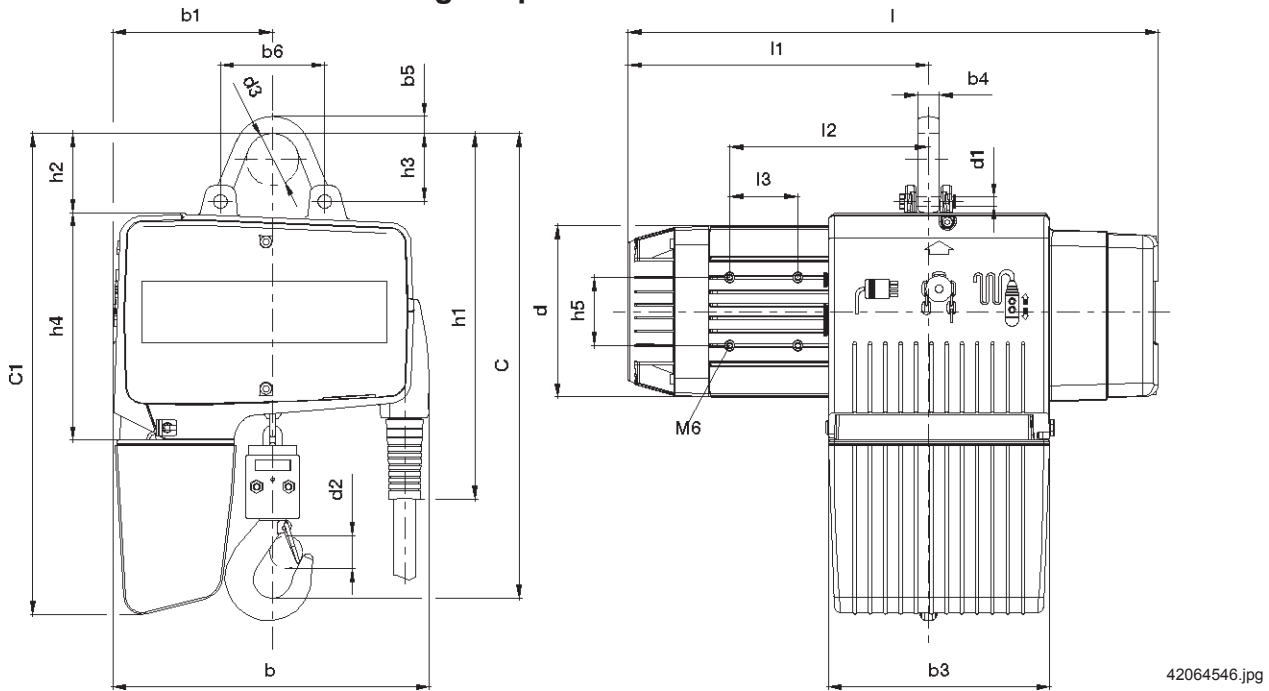
1) I_{max} = maximum rated current for lowering operation.
 2) The lengths of the supply lines are calculated on the basis of an earth-loop impedance of 200 mΩ.

Demag chain hoist

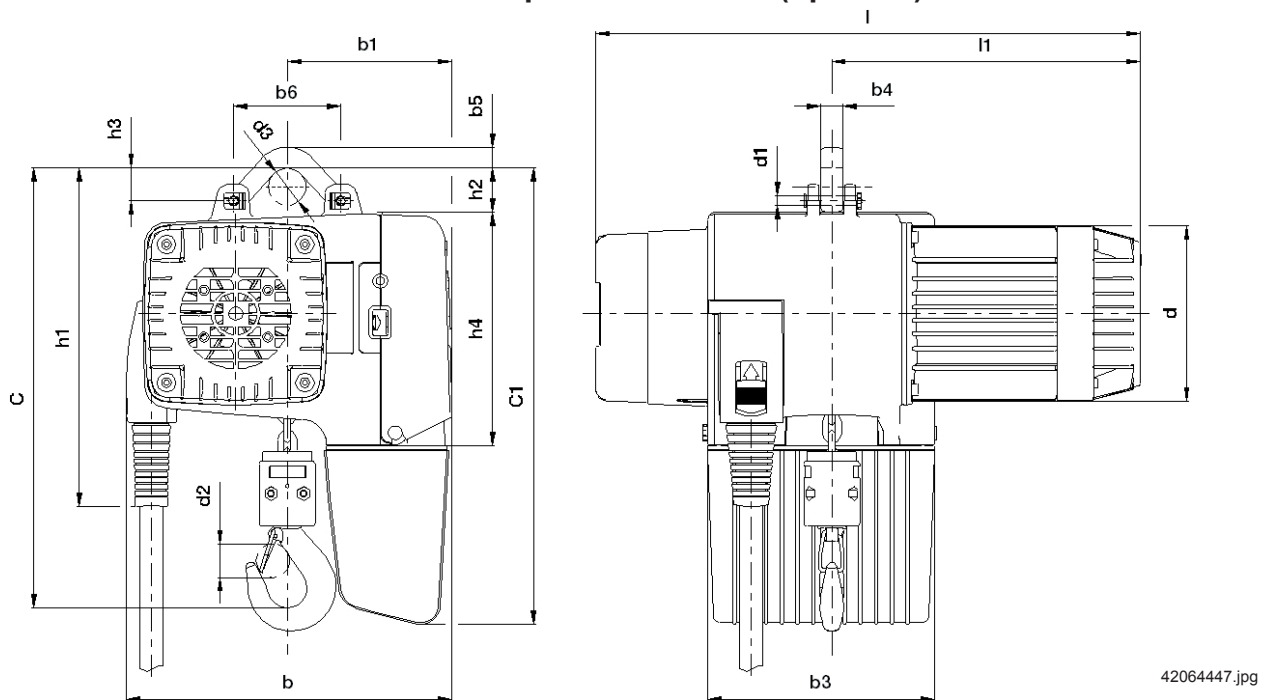
DC-Com 1 to DC-Com 10 < 1000 kg

1/1 reeving

DC-Com 1-10 chain hoist with long suspension bracket



DC-Com 1-10 chain hoist with short suspension bracket (optional)



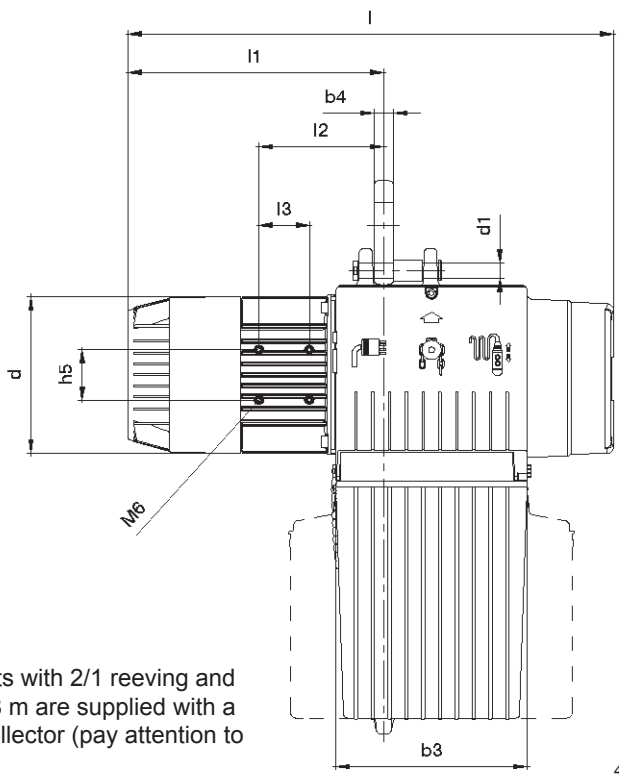
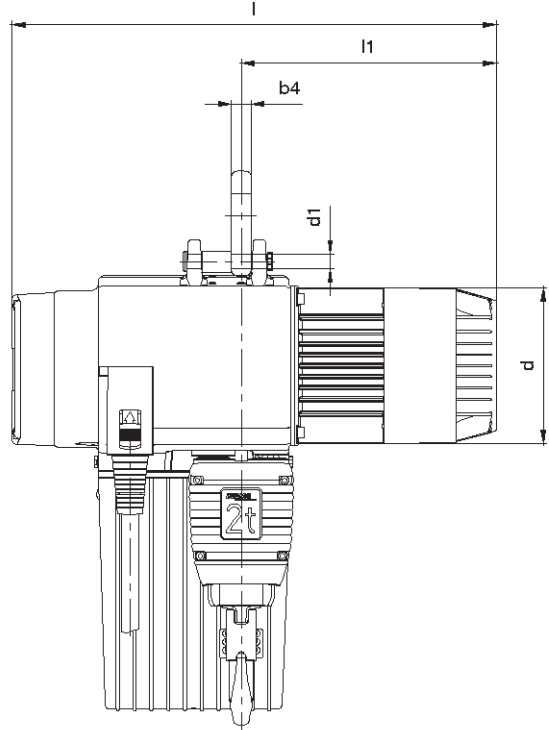
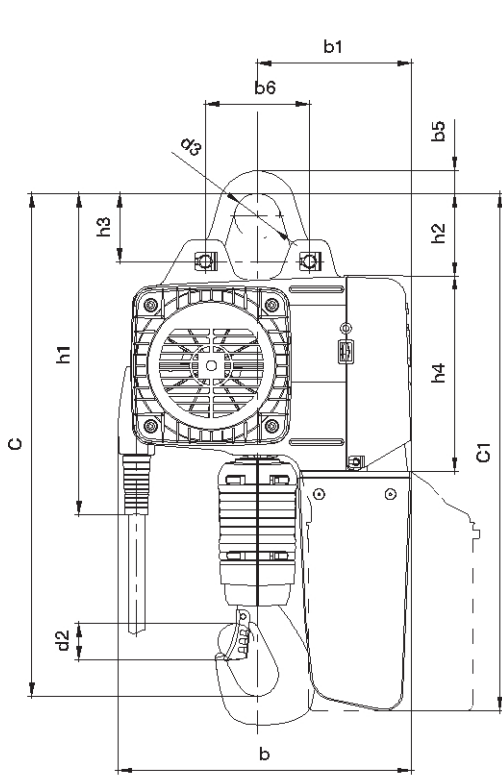
| Size | Motor | Suspension bracket | | | | | | | | | | | | | | | | | | | | | | | | Suspension bracket | | | | | | | |
|--------|---------------|--------------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|----|-----|----|-----|-----|----|----|----|----|-----|----|----|----|--------------------|-----|----|----|------|----|--|--|
| | | short | | | | long | | | | | | | | | | | | | | | | | | | | short | | | | long | | | |
| | | Chain collector box size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | H4 | H5 | H8 | H8 | H4 | H5 | H8 | H8 | | | | | | | | | | | | | | | | | | | | | | | | |
| DC-Com | | C | | C1 | | | | b | b1 | l | l1 | l2 | l3 | b3 | b4 | b6 | d | d1 | d2 | b5 | d3 | h1 | h2 | h3 | b5 | d3 | h1 | h2 | h3 | h4 | h5 | | |
| 1 / 2 | ZNK 71 B | 326 | 364 | 335 | 365 | 373 | 403 | 268 | 138 | 422 | 237 | 170 | 60 | 183 | 19 | 92 | 124 | 8 | 22 | 17 | 30 | 263 | 40 | 30 | 16 | 45 | 300 | 78 | 68 | 163 | 50 | | |
| 5 | ZNK 80 A | 378 | 416 | 395 | 425 | 435 | 465 | 280 | 141 | 468 | 265 | 175 | 60 | 195 | 19 | 92 | 151 | 8 | 24 | 17 | 30 | 293 | 40 | 30 | 16 | 45 | 323 | 78 | 68 | 201 | 60 | | |
| 10 | ZNK 100 A 8/2 | 472 | 505 | 493 | 582 | 526 | 615 | 349 | 184 | 528 | 289 | 183 | 60 | 227 | 23 | 124 | 187 | 18 | 33 | 28 | 52 | 350 | 65 | 48 | 27 | 52 | 383 | 98 | 81 | 233 | 60 | | |

Demag chain hoist

DC-Com 10 > 1000 kg

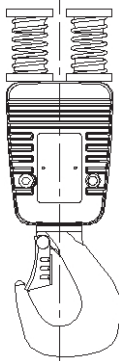
2/1 reeving

DC-Com 10 chain hoist with long suspension bracket



Bottom block with external cut-off springs, 2/1 reeving

When this bottom block is used, dimension C is increased by 60 mm.



42666144.jpg

DC-Com 10 units with 2/1 reeving and a hook path of 8 m are supplied with a flexible chain collector (pay attention to dimensions).

42666045.jpg

| Size | Motor | Suspension bracket | | | | | | | | | | | | Suspension bracket | | | | | | | | | | | | | | | | | | | | |
|-----------|---------------|--------------------|-----|------|-----|-------|-----|------|-----|-------|-----|-----|-----|--------------------|-----|-----|----|-------|-----|------|----|----|----|----|-----|----|----|----|----|-----|----|----|-----|----|
| | | short | | long | | short | | long | | short | | | | long | | | | short | | long | | | | | | | | | | | | | | |
| | | C | C1 | b | b1 | b3 | l | l1 | l2 | l3 | b4 | b6 | d | d1 | d2 | b5 | d3 | h1 | h2 | h3 | b5 | d3 | h1 | h2 | h3 | h4 | h5 | | | | | | | |
| DC-Com 10 | ZNK 100 B 8/2 | 564 | 597 | 582 | 582 | 615 | 615 | 349 | 409 | 184 | 244 | 227 | 330 | 578 | 304 | 149 | 60 | 23 | 124 | 187 | 18 | 42 | 28 | 52 | 350 | 65 | 48 | 27 | 52 | 383 | 98 | 81 | 233 | 60 |

Suspension



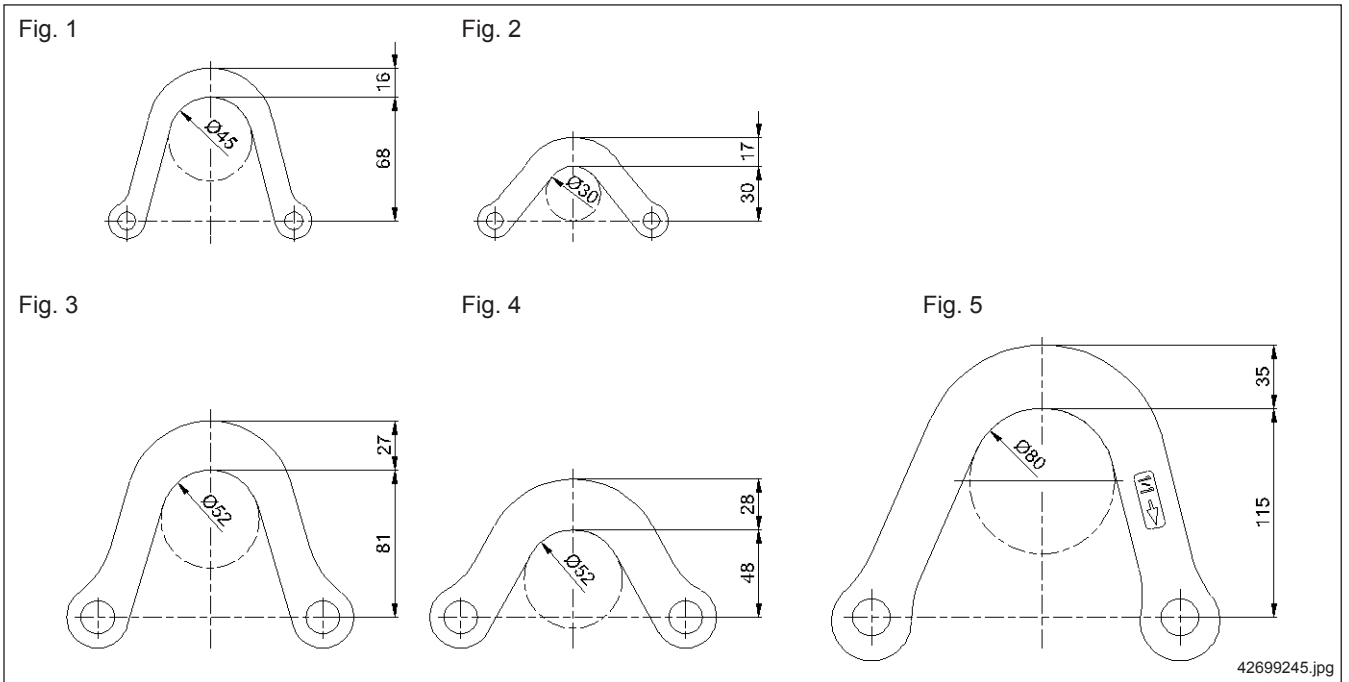
DC-Com chain hoists are supplied with a long suspension bracket as standard. The short suspension bracket is available as an option.

The suspension bracket facilitates installation, since the chain hoist can be directly suspended from the trolley. It is not necessary to dismantle existing trolleys.

Chain hoists with short or long suspension brackets can be combined with the following trolleys:

| | Trolley load capacity [kg] | Flange width [mm] | Flange thickness [mm] | Crossbar diameter [mm] | DC 1 | DC 2 | DC 5 | DC 10 | DC 16 | DC 25 | | | | | | | | | |
|--|----------------------------|-------------------|-----------------------|------------------------|--------|--------|-------------------|-------------------|-----------------|-------------------|-------------------|-----------|-----------|-----|-----|-----------------|---|---|---|
| SWL chain hoist | [kg] | | | | 80-125 | 80-250 | 160-500 | 315-1250 | 1250-2500 | 1250-1600 | 2500-3200 | 2000-2500 | 4000-5000 | | | | | | |
| Reeving | | | | | 1/1 | | | 2/1 | 1/1 | 2/1 | 1/1 | 2/1 | | | | | | | |
| See next page for diagram | | | | | | | | | | | | | | | | | | | |
| RU 3 | 450 | 60-90 | 12 | 21 | 1+2 | 1+2 | 1+2 ¹⁾ | | | | | | | | | | | | |
| RU 6 | 450 | 58-143 | 20 | 30 | | | | | | | | | | | | | | | |
| | | 144-300 | 18 | 35 | 1 | 1 | 1 ¹⁾ | | | | | | | | | | | | |
| | 700 | 58-143 | 20 | 30 | 1+2 | 1+2 | 1+2 | | | | | | | | | | | | |
| | | 144-300 | 18 | 38 | | | | | | | | | | | | | | | |
| RU / EU 11 DK | 850 | 58-300 | 16 | 34 | 1 | 1 | 1 | | | | | | | | | | | | |
| | 1350 | 58-143 | | 45 | | | | | | | | | | | | | | | |
| | | 144-300 | | | | | | | | | | | | | | | | | |
| RU / EU 22 DK | 2600 | 82-300 | 22 | 51 | | | | | | | | | | 3+4 | 3+4 | 5 ⁴⁾ | | | |
| RU / EU 36 DK | 3600 | 106-300 | | 56 | | | | | | | | | | | | 5 | 5 | 5 | 5 |
| RU / EU 55 DK | 5500 | 106-186 | 30 | 70 | | | | | | | | | | | | | | | |
| | | 187-300 | | 82,5 | | | | | | | | | | | | | | | |
| CF 5 | 550 | 50-91 | 15 | 16 | | | | | | | | | | | | | | | |
| U / EU 11 DC | 1100 | 58-200 | 22 | 30 | 1+2 | 1+2 | 1+2 | | | | | | | | | | | | |
| | | 201-310 | | | | | | | | | | | | | | | | | |
| U / EU 22 DC | 2200 | 82-200 | | 40 | | | | 3+4 ⁵⁾ | | | | | | | | | | | |
| U / EU 34 DC | 2200 | 201-310 | 30 ²⁾ | 40 | 1 | 1 | 1 | | | | 3+4 ⁶⁾ | | | | | | | | |
| | 3400 | 82-310 | | | | | | 5 | 5 | 5 | 5 | | | | | | | | |
| RU / EU 56 DC | 5600 | 98-200 | 30 | 55 | | | | 3 ⁷⁾ | 3 ⁷⁾ | 5 | 5 | 5 | 5 | | | | | | |
| | | 201-310 | | | | | | | | | | | | | | | | | |
| KBK trolley | 100 | 100 | | | | | | | | | | | | | | | | | |
| | I | 300 | | | | | 2 | 2 | 2 | | | | | | | | | | |
| | II | 600 | | | | | | | | 3+4 ³⁾ | | | | | | | | | |
| III | 1300 | | | | | | 3 | | | | | | | | | | | | |
| KBK articulated frame (double trolley) | I | 400 | | | | | 1 | 1 | 1 | | | | | | | | | | |
| | II | 1200 | | | | | | | | 3 | 3 | | | | | | | | |
| | III | 2600 | | | | | | | | | | | | | | | | | |
| KBK crane traverse | 100 | 200 | | | | | | | | | | | | | | | | | |
| | I | 600 | | | | | | | | | | | | | | | | | |
| | II | 1400-2200 | | | | | | | | | | | | 3 | 3 | | | | |
| III | 2600 | | | | | | | | | | | | | | | | | | |
| KBK crab frame | 100 | 200 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| | I | 600 | | | | | | | | | | | | | | | | | |
| | II | 1200/2400 | | | | 3 | | | | | 3 | | | | | | | | |
| III | 3300 | | | | | | | | | | | | | | | | | | |

- 1) up to 400 kg
- 2) max. 28 mm for DC16/25
- 3) up to 500 kg
- 4) Flange thickness max. 20 mm
- 5) DC 10 - 1250 1/1 with U / EU 22 DC
- 6) DC 10 - 2500 2/1 with U / EU 34 DC
- 7) DC 10 with RU / EU 56 on request



Optional suspensions

DC-Pro 1-5 suspension ring
Part no.: 718 278 45
for suspension parallel to track girder

DC-Pro 10 suspension ring
Part no.: 715 278 45
for suspension parallel to track girder

DC-Pro 16-25 suspension ring
Part no.: 721 278 45
including 2 adjusting rings
for suspension parallel to track girder

Suspension hook, folding

| Size | Part no. | Dimensions [mm] | | | |
|--------|------------|-----------------|----|-----|----|
| | | L | b | h | d |
| DC 1-5 | 718 910 45 | 92 | 22 | 104 | 25 |
| DC 10 | 715 910 45 | 124 | 36 | 152 | 36 |

42699844.jpg

Limit switch

Operating limit switches for the upper and lower hook positions are available as an option (DC-Com 1 to DC-Com 10, 1/1 reeving). DC-Com 10 chain hoists, 2/1 reeving, are fitted with limit switches as standard.



The upper end position must not be approached during normal operation, if the chain hoist is not provided with an operating limit switch (optional).

Trolleys

Properties

The trolleys have the following product features:

- Infinitely variable adjustment of the flange width by means of adjusting rings,
- U 11 travel rollers made of plastic (optional steel rollers),
- U 22 / U 34 travel rollers made of steel,
- Universal travel rollers for parallel and sloping running surfaces,
- Travel rollers without flanges, additional lateral steel guide rollers,
- Integrated drop stops in the individual die-cast aluminium halves,
- The side cheek surfaces are powder-coated.

U 11 - U 34 travel on curved tracks

The minimum permissible curve radius for push-travel trolleys is 1000 mm for U 11 and 2000 mm for U 22 / U 34 trolleys. However, to ensure good travel characteristics and a longer trolley service life, we recommend that much larger curve radii be used, e.g. 1500 mm or 3000 mm, respectively.

The minimum permissible curve radius for electric-travel trolleys is 2000 mm (U 11) and 3000 mm (U 22 / U 34).

Wear on the travel wheels strongly depends on the curve radius. The forces required to move the load may strongly increase in the case of small curve radii in connection with high loads.

Trolleys with steel and spheroidal graphite cast iron travel rollers

We recommend that steel travel rollers be used for:

- frequent travel on curved tracks,
- extreme ambient conditions (dirt accumulation, hot atmospheres, etc.),
- heavily worn girders,
- very heavy dead loads.

U11-S 200 58-200 Part no. 716 535 45 I=290

U11-S 310 On request

EUDDC double-wheel articulated trolleys

The travel wheels and guide rollers of four-wheel trolleys may display increased wear in installations featuring intensive operation, we recommend the use of EUDDC units for:

- frequent travel on curved tracks with small curve radii (1000 mm) and high load capacities,
- automatic operation in connection with travel on curved tracks, small curve radii (1000 mm) and high load capacities.

Curve radii of trolleys

The specified curve radii apply for normal applications.

Contact the manufacturer or his representative for frequent curve travel operation (e.g. automatic installations).

Curve radii in mm

| Trolley size | SWL [kg] | Runway girder | | | | Travel wheel material |
|------------------|-------------|----------------------------|------|----------------------------|------|-------------------------------|
| | | Push travel | | Electric travel | | |
| | | Flange width ²⁾ | Rmin | Flange width ²⁾ | Rmin | |
| CF 5 | 550 | 50-91 | 800 | - | - | Plastic |
| U 11 DC EU 11 DC | 1100 | 58-310 | 1000 | 58-310 | 2000 | Plastic ¹⁾ |
| U 22 DC EU 22 DC | 2200 | 82-200 | 2000 | 82-200 | 3000 | Spheroidal graphite cast iron |
| U 34 DC EU 34 DC | 2200 | 201-310 | | 201-310 | | |
| | 3400 | 82-310 | | 82-310 | | Spheroidal graphite cast iron |

1) Steel travel rollers optional

2) Max. flange width 500 mm (except CF 5)

Travel speeds

| SWL [kg] | Chain hoist Type | Reeving | Possible cross-travel speeds in approx. ... m/min | | | | | | | |
|--------------|-----------------------|---------|---|--------------|---------|--------------|--------------------|--------------|---------|--------------|
| | | | V14/3,5 | | V12/4 | | V24/6 | | V40/10 | |
| | | | Trolley | Travel drive | Trolley | Travel drive | Trolley | Travel drive | Trolley | Travel drive |
| 80 to 1000 | DC-Com 1 to DC-Com 10 | 1/1 | - | - | - | - | U 11 DC | E 11 DC | - | - |
| 1250 to 2000 | DC-Com 10 | 2/1 | - | - | - | - | U 22 DC U 34 DC | E 22 DC | - | - |

U 11 trolley (design until 08/2008)

Max. SWL 1100 kg

Suitable for

Demag chain hoist:

DC-Com 1 - 80 to 125,

DC-Com 2 - 160 to 250,

DC-Com 5 - 315 to 500,

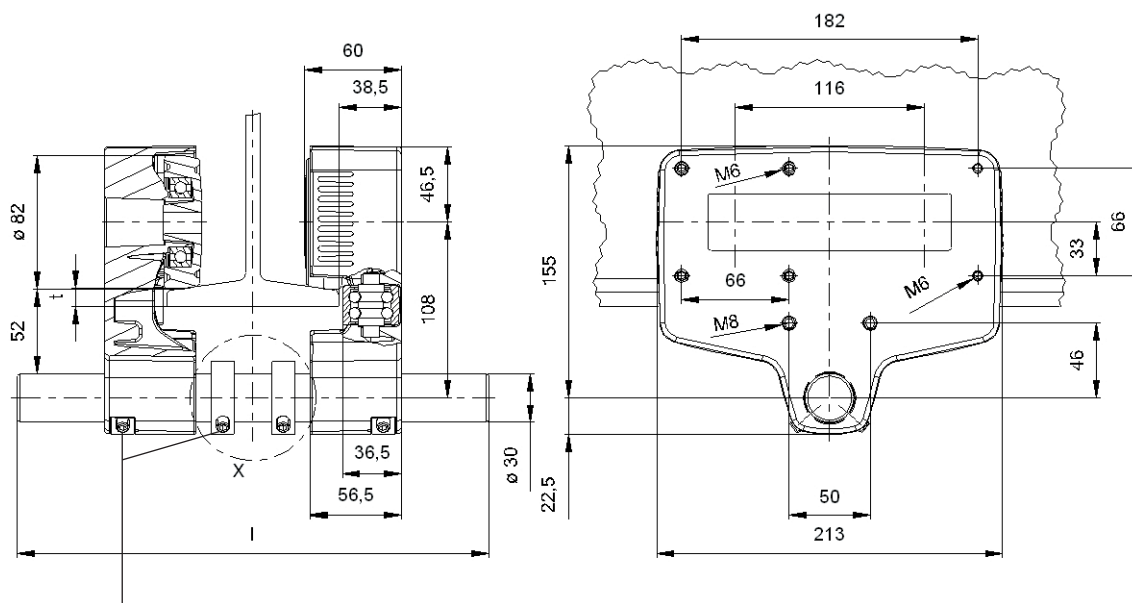
DC-Com 10 - 630 to 1000

U 11 trolley

for girders to DIN 1025, part 1 + 5



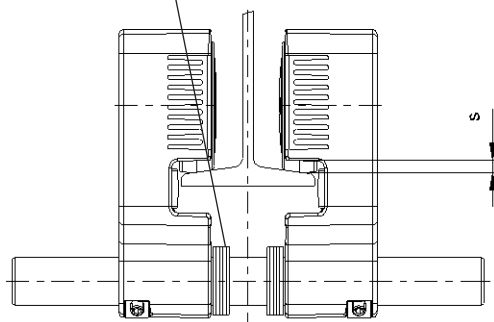
For further information, see publication 203 569 44.



Adjusting ring with grub screw

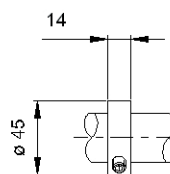
Tightening torque 18 Nm

Supporting washers



| Screws for fittings | Tightening torque [Nm] | Thread depth | |
|---------------------|------------------------|--------------|-----------|
| | | min. [mm] | max. [mm] |
| M6 | 9 | 12 | 17 |
| M8 | 18 | 16 | 21 |

Detail "X"
Retaining arrangement complete



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Pay attention to clearance dimension for girder connection by means of fish plates.

Cast-in hexagon holes without a thread are available for all fitting possibilities on the trolley side cheeks. Screws are directly bolted in for fitting current collectors or limit switches, for example.

| Number of supporting washers | Flange width [mm] | | | | | |
|------------------------------|-------------------|----|----|----|-----------------|----------|
| | 58 | 66 | 74 | 82 | 90 | 98 - 310 |
| DC 1-5, DCM 1-5 | - | 2 | 4 | 8 | Adjusting rings | |
| DKUN 1-2 | | 4 | 5 | 10 | | |
| DKUN 5 | | 2 | 4 | 8 | | |
| DC 10 1/1 | | - | 4 | 8 | 10 | |
| DKUN 10 | - | - | 4 | 6 | 10 | |

| Designation | Max. flange thickness t [mm] | Flange width [mm] | Part no. | l [mm] | Weight [kg] |
|--------------|------------------------------|-------------------|------------|--------|-------------|
| U 11 - 200 | 22 | 58 - 200 | 716 521 45 | 290 | 7,0 |
| U 11 S - 200 | | | 716 535 45 | | 8,7 |
| U 11 - 310 | | 201 - 310 | 716 532 45 | 400 | 7,4 |
| U 11 - 500 | | 311 - 500 | On request | 590 | 9,6 |

| s [mm] | Sloping flange | Parallel flange |
|--------|----------------|-----------------|
| | 6 | 7 |

U 11 trolley (design from 09/2008)

Max. SWL 1100 kg

Suitable for

Demag chain hoist:

DC-Com 1 - 80 to 125,

DC-Com 2 - 160 to 250,

DC-Com 5 - 315 to 500,

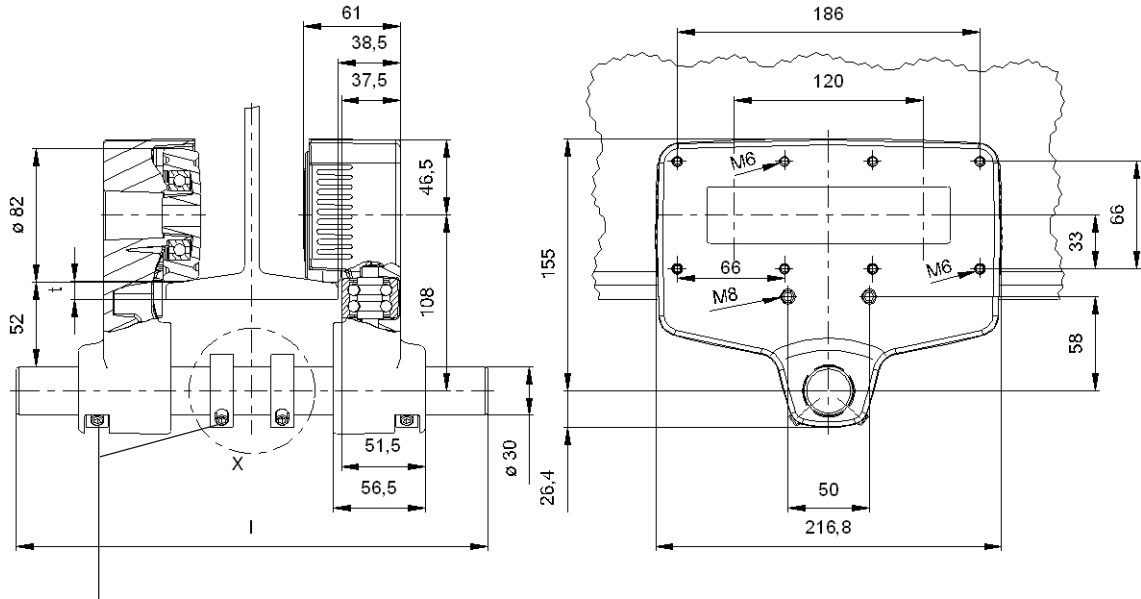
DC-Com 10 - 630 to 1000

U 11 trolley

for girders to DIN 1025, part 1 + 3



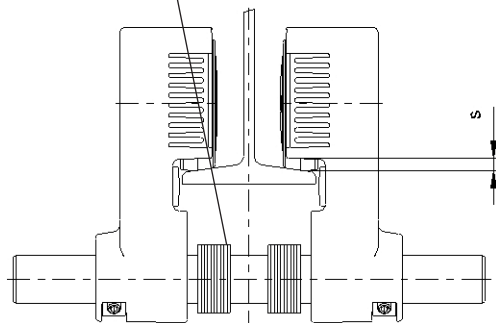
For further information, see publication 203 569 44.



Adjusting ring with grub screw

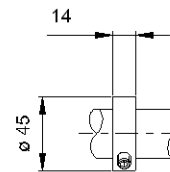
Tightening torque 18 Nm

Supporting washers



| Screws for fittings | Tightening torque [Nm] | Thread depth | |
|---------------------|------------------------|--------------|-----------|
| | | min. [mm] | max. [mm] |
| M6 | 9 | 12 | 17 |
| M8 | 18 | 16 | 21 |

Detail "X"
Retaining arrangement complete



42652150.jpg



Pay attention to clearance dimension for girder connection by means of fish plates.

Cast-in hexagon holes without a thread are available for all fitting possibilities on the trolley side cheeks. Screws are directly bolted in for fitting current collectors or limit switches, for example.

| Number of supporting washers | Flange width [mm] | | | | | |
|------------------------------|-------------------|-----------------|----|----|----|----------|
| | 58 | 66 | 74 | 82 | 90 | 98 - 310 |
| DC 1-5, DCM 1-5 | 10 | Adjusting rings | | | | |
| DKUN 1-2 | | | | | | |
| DKUN 5 | 10 | | | | | |
| DC 10 1/1 | 8 | | | | | |
| DKUN 10 | 8 | | | | | |

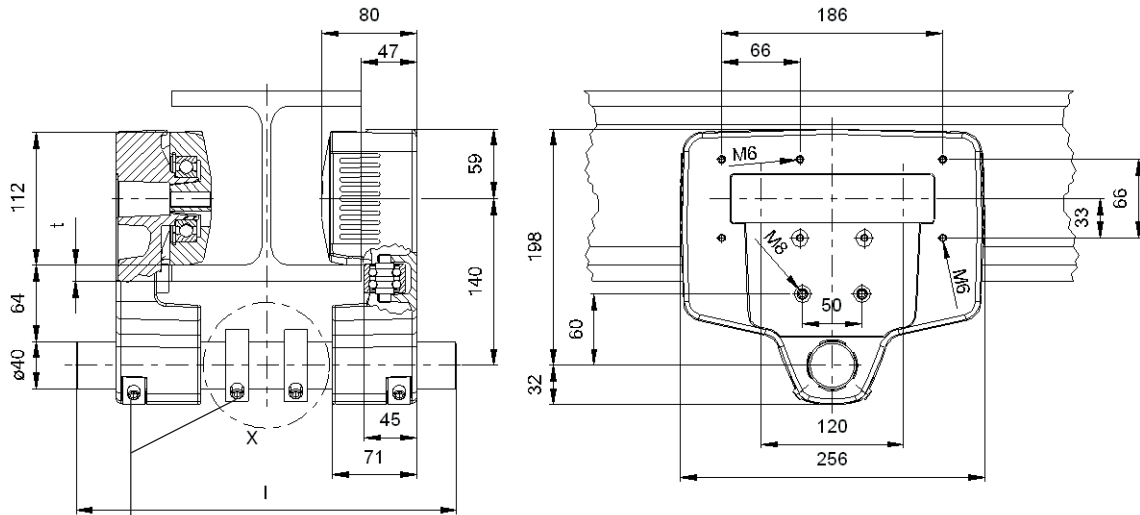
| Designation | Max. flange thickness t [mm] | Flange width [mm] | Part no. | l [mm] | Weight [kg] |
|--------------|------------------------------|-------------------|------------|--------|-------------|
| U 11 - 200 | 22 | 58 - 200 | 716 502 45 | 320 | 7,3 |
| U 11 S - 200 | | | 716 507 45 | | 9,0 |
| U 11 - 310 | | 201 - 310 | 716 503 45 | 430 | 7,7 |
| U 11 - 500 | | 311 - 500 | On request | 620 | 9,9 |

| s [mm] | Sloping flange | Parallel flange |
|--------|----------------|-----------------|
| | 6 | 7 |

U 22 / U 34 trolley
 for girders to DIN 1025, part 1 + 5

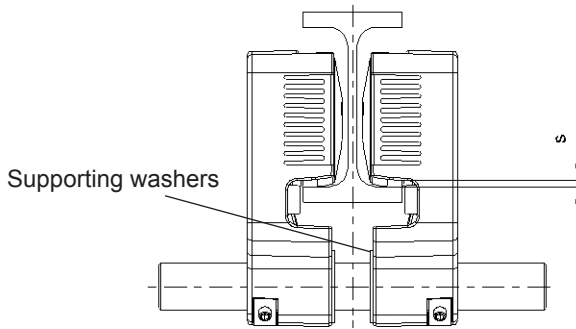


For further information, see
 publication 203 569 44.

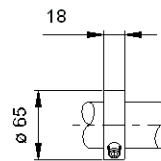


Adjusting ring with grub screw
 Tightening torque 36 Nm

| Screws for fittings | Tightening torque [Nm] | Thread depth | |
|---------------------|------------------------|--------------|-----------|
| | | min. [mm] | max. [mm] |
| M6 | 9 | 12 | 17 |
| M8 | 18 | 16 | 21 |



Detail "X"
 Retaining arrangement complete



42665948.jpg

1) max. 28 mm for DC16/25



Pay attention to clearance dimension for girder connection by means of fish plates.

Cast-in hexagon holes without a thread are available for all fitting possibilities on the trolley side cheeks. Screws are directly bolted in for fitting current collectors or limit switches, for example.

| Number of supporting washers | Flange width [mm] | | | | |
|------------------------------|-------------------|----|-----|-----|-----------------|
| | 82 | 90 | 100 | 112 | 120 - 310 |
| DC 1-5, DCM 1-5, DKUN 5 | 4 | 8 | 12 | 10 | Adjusting rings |
| DC 10 | 2 | 6 | 10 | | |
| DC 16 / 25 | X | | 4 | | |
| DKUN 10 | 2 | 6 | 10 | | |
| DKUN 20 | - | 4 | 8 | | |

| Designation | Max. flange thickness t [mm] ¹⁾ | Flange width [mm] | Part no. | l [mm] | Weight [kg] |
|-------------|--|-------------------|------------|--------|-------------|
| U 22 - 200 | 30 | 82 - 200 | 716 620 45 | 325 | 13,6 |
| U 22 - 310 | | 201 - 310 | 716 631 45 | 435 | 14,6 |
| U 22 - 500 | 35 | 311 - 500 | On request | 600 | 18,9 |
| U 34 - 310 | 30 | 82 - 310 | 716 731 45 | 435 | 14,6 |

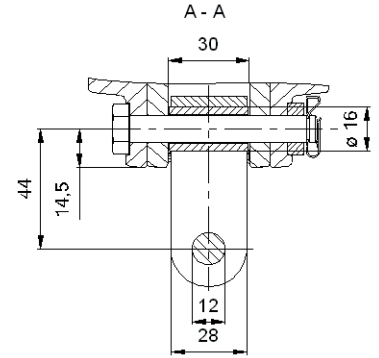
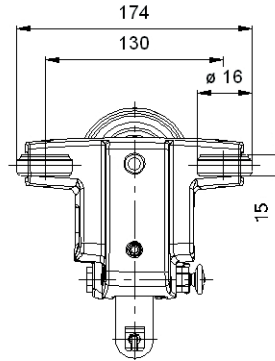
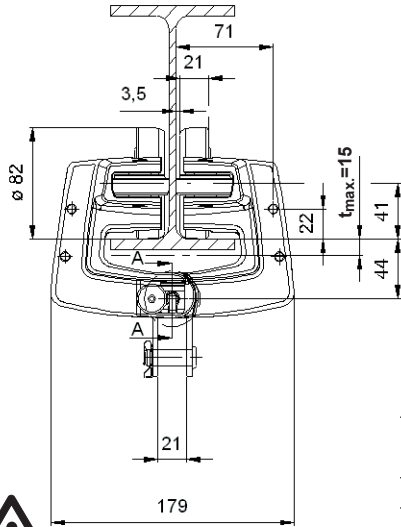
| s [mm] | Sloping flange | Parallel flange |
|--------|----------------|-----------------|
| 6 | | 5 |

CF 5 trolley
Max. SWL 550 kg

Suitable for
Demag chain hoist:
DC-Com 1 - 80 to 125,
DC-Com 2 - 160 to 250,
DC-Com 5 - 315 to 500

CF 5 trolley
for girders to DIN 1025, part 1 + 5

 For further information, see publication 203 568 44.

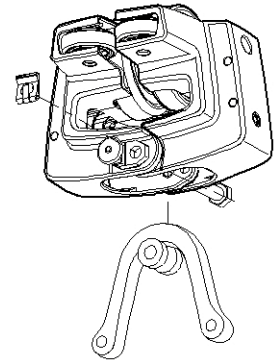
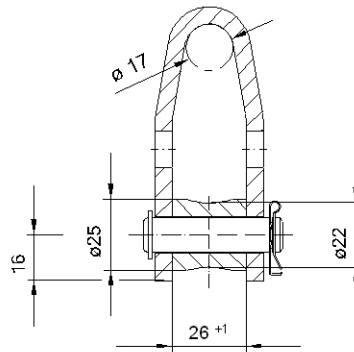
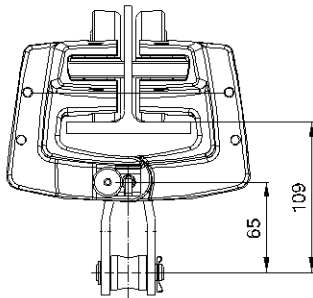


| Designation | Max. flange thickness t [mm] | Flange width [mm] | Part no. | Weight [kg] |
|-------------|---------------------------------|----------------------|------------|----------------|
| CF 5 | 15 | 50 - 91 | 840 007 44 | 2,6 |

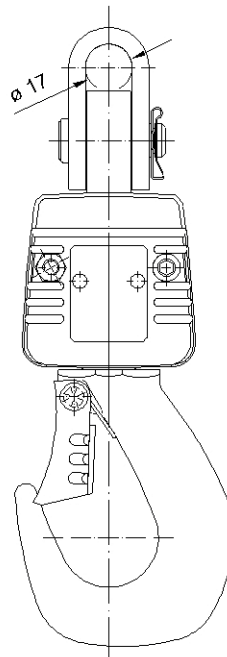
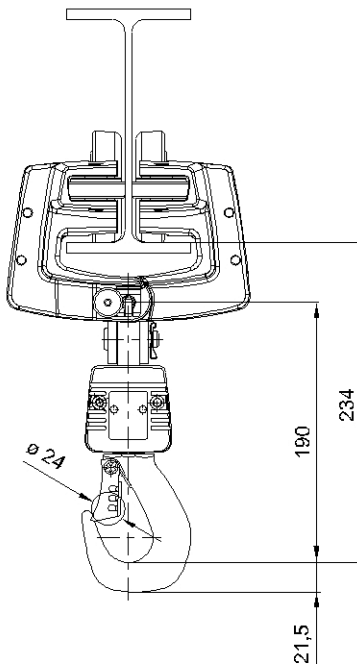


Girder connections by means of fish plates not permitted in the area of the guide rollers

CF 5 universal stirrup
Part no. 840 045 44



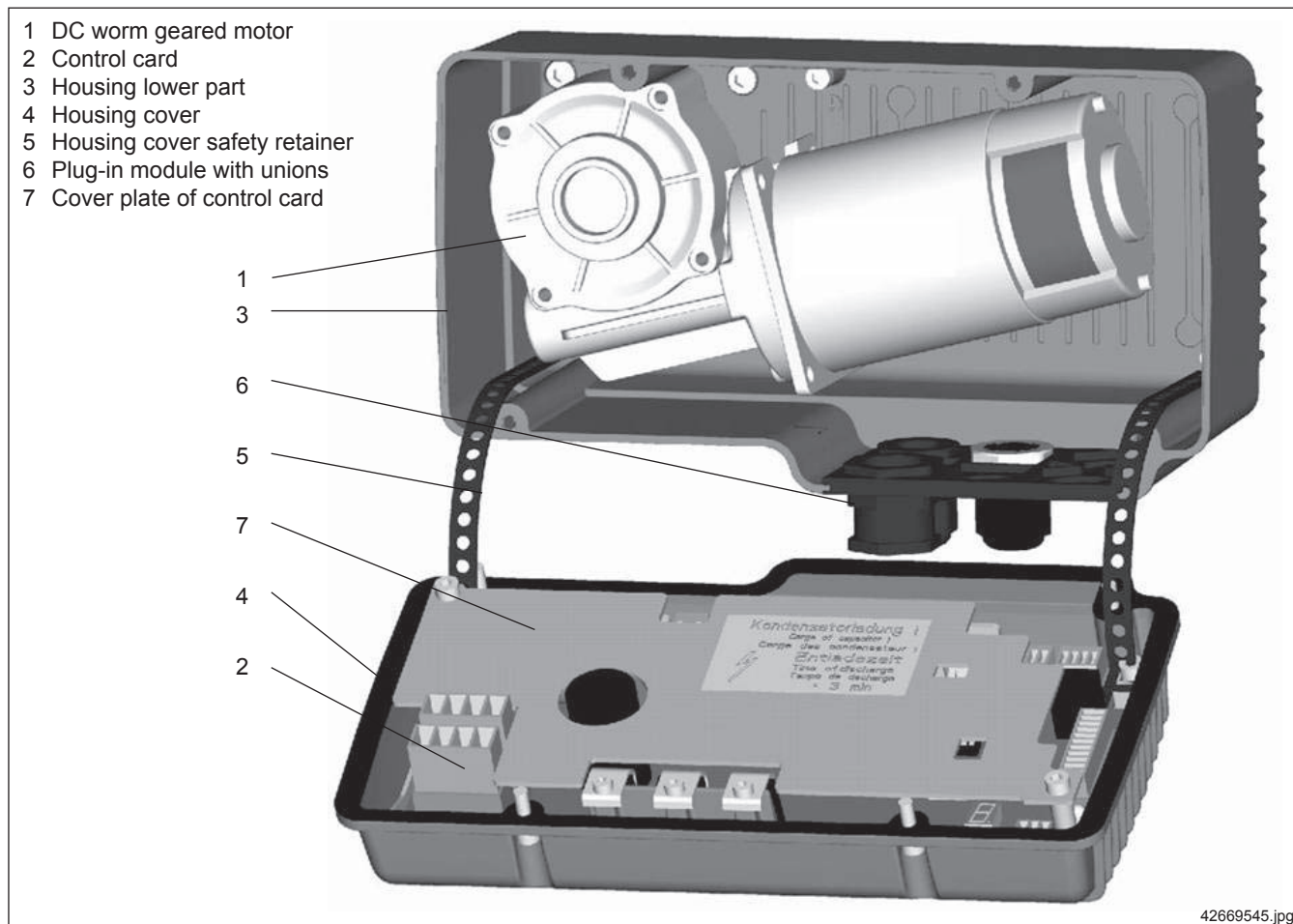
CF 5 load hook
Part no. 840 070 44



Chain hoist parallel to the track girder

The long suspension bracket of the DC chain hoist must be used.

Design overview



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Selection table

| Max. weight for travel incl. dead load ²⁾ | Travel drive | Speed ³⁾ | | Possible trolleys | Part no. | Max. weight |
|--|--------------|----------------------|-------------------------------|-------------------|------------|-------------|
| | | at full load | at partial load ¹⁾ | | | |
| [kg] | Type | v_{nom} [m/min] | v_{max} [m/min] | | | [kg] |
| 1100 | E 11 | 24/6 | 30/7,5 | U 11 | 716 570 45 | 4 |
| 2200 | E 22 | 27/7 | 33/8 | U 22 | 716 590 45 | 5 |
| | | 14/3,5 | - | RF 125 | | |
| 3400 | E 34 | | | U 34 | 716 740 45 | 5 |

- 1) Possible with different parameter setting
- 2) Max. gradient 1%, > 1% on request
- 3) In connection with DCS (stepless) from 0,5 m/min to v_{max}

Electrical key values

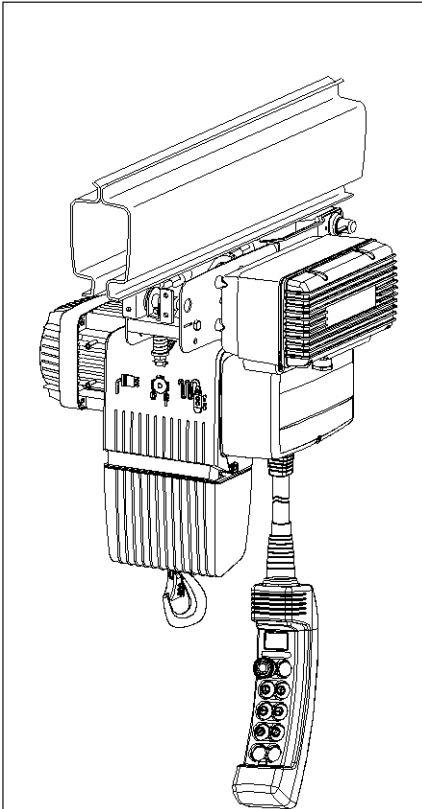
| Size | Motor size | Min. / max. currents and starting current | | | | | | | |
|------|------------|---|-----|-------|----------|-------------------------------------|-----------|---------------|---------------|
| | | | | | | 220-480 V, 50 / 60 Hz, 3 ~ (CE/CSA) | | | |
| | | P_N | CDF | n_N | Starts/h | $I_N 220$ | $I_N 480$ | $I_{max 220}$ | $I_{max 480}$ |
| [kW] | [%] | [rpm] | | [A] | [A] | [A] | [A] | | |
| E 11 | MP 56 M | 0,025 | 20 | 862 | 240 | 0,3 | 0,15 | 1,3 | 0,65 |
| | | 0,1 | 40 | 3450 | 120 | 1,1 | 0,55 | 2,6 | 1,3 |
| E 22 | MP 56 L | 0,05 | 20 | 630 | 240 | 0,5 | 0,24 | 1,16 | 0,58 |
| | | 0,2 | 40 | 2525 | 120 | 1,8 | 0,9 | 4,3 | 2,15 |
| E 34 | MP 56 XL | 0,04 | 20 | 478 | 240 | 0,5 | 0,24 | 1,16 | 0,58 |
| | | 0,15 | 40 | 1914 | 120 | 1,6 | 0,8 | 3,8 | 1,9 |

The tolerance of the voltage range must not exceed +5% and -10%.
The motors are designed in compliance with insulation class F.

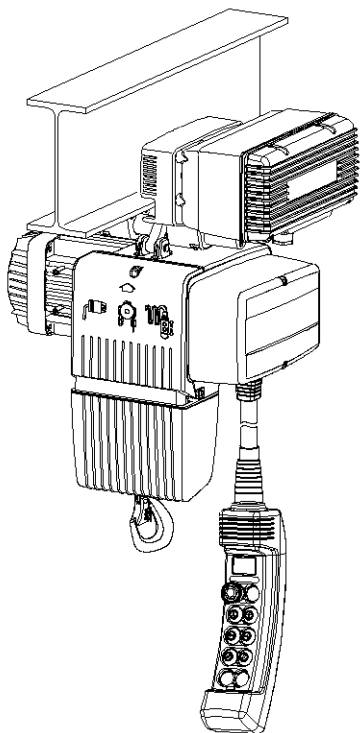


For further information, see publication 214 810 44.

Properties



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42670746.jpg

- IP 55 enclosure,
- Ambient temperature -20 °C to +40 °C,
- Temperature monitoring,
- 7-segment display for operating status, error messages, parameter programming;
- All electrical connections are of plug-in design,
- Inputs for limit switches and fast-to-slow limit switches are integrated into the control card,
- Smooth starting via ramps,
- For voltages from 480 V - 575 V, a single-phase isolating transformer with the following technical data be integrated into the line power supply:

| | |
|---------------------|----------|
| Type: | TTT 0,25 |
| Voltage, primary: | 575 V |
| Voltage, secondary: | 230 V |
| Output: | 250 VA |
- E 11 / E 22 / E 34 is fitted to the relevant U11 / U22 / U 34 trolley,
- E 22 can also be fitted to the new RF 125 friction wheel travel drive,
- The travel drive is designed to match the electrical concept of the DC chain hoist,
- Line voltage relayed to the chain hoist;
- Signal transmission in steps with 24 V tri-state signals for controlled DC chain hoists (half-wave evaluation),
- Stepless signal transmission with 0 — 24 V PWM (pulse width modulation) signals in connection with stepless DCS chain hoists.

E 11 / E 22 / E 34 units are shipped ready for operation.

The following settings are also possible:

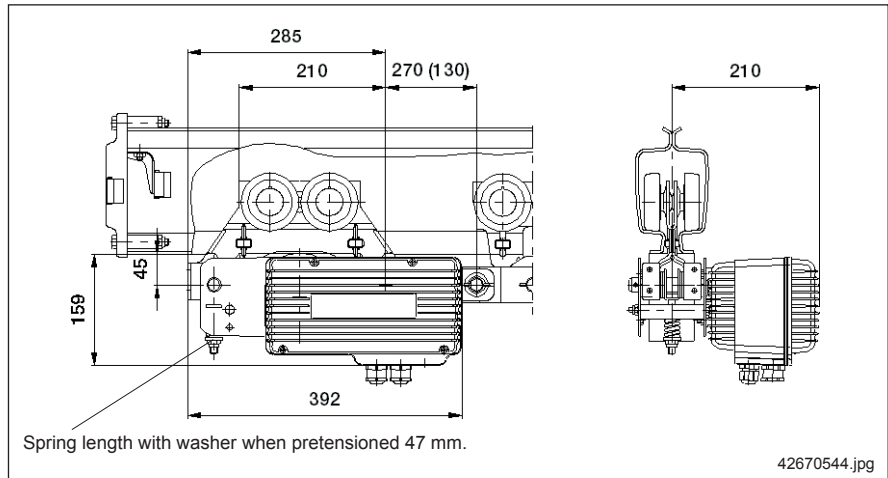
- Travel speed, acceleration and braking parameters can be programmed via DSE-10C/CS control pendant,
- Load-sway damping can be activated for the cross travel motion,
- Infinitely variable cross-travel speed only in connection with DCS-Pro and DSE-10CS.

The following are provided for the electrical connection between the chain hoist and the trolley travel drive:

DC 1-10

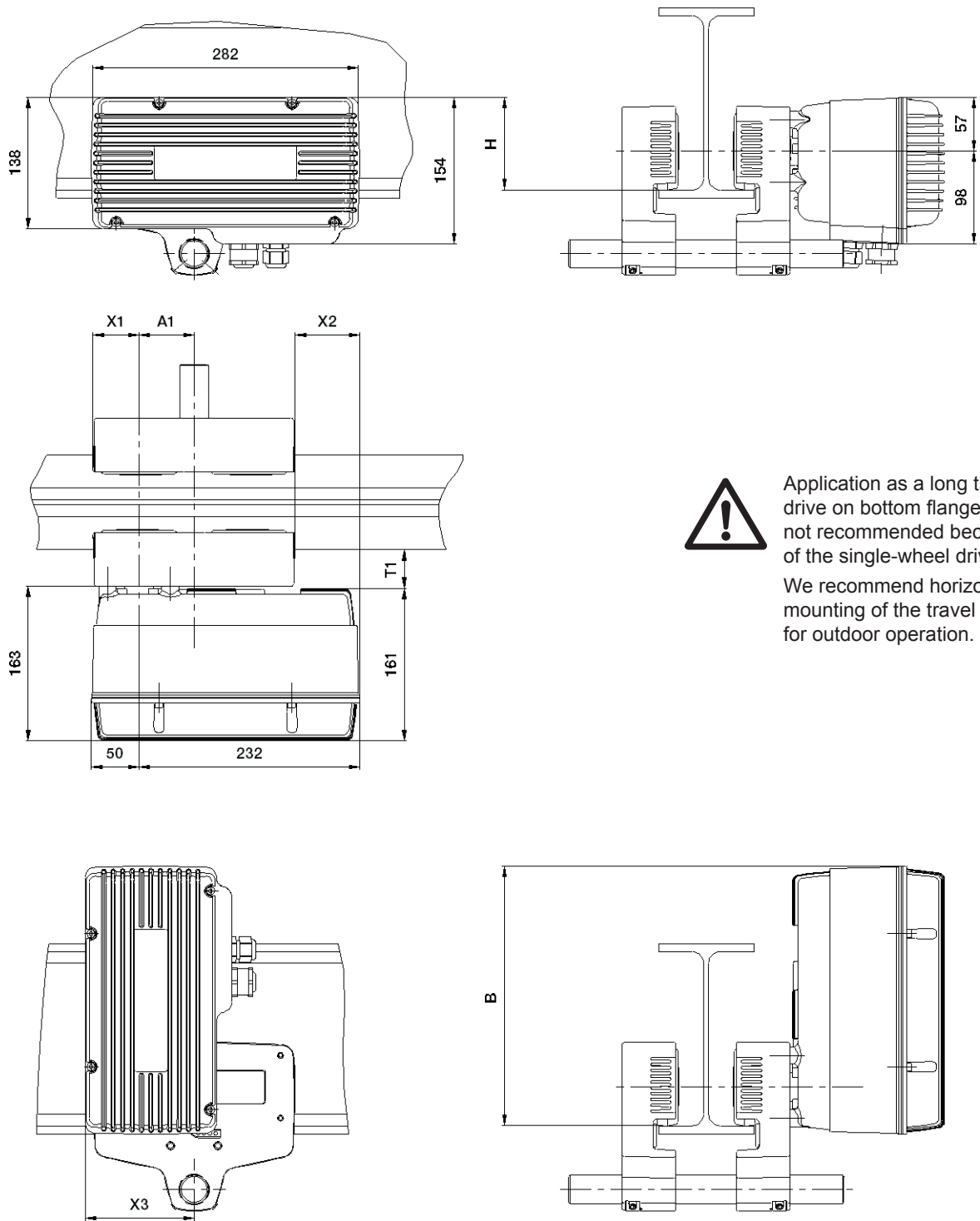
Control cable set (part no. 720 070 45) and
Power supply cable (part no. 720 072 45).

E 22 travel drive on KBK RF 125



For further information on RF 125 trolleys, see publication 202 976 44.

E 11 / E 22 / E 34 travel drive on U 11 / U 22 / U 34 trolley



Application as a long travel drive on bottom flanges is not recommended because of the single-wheel drive. We recommend horizontal mounting of the travel drive for outdoor operation.

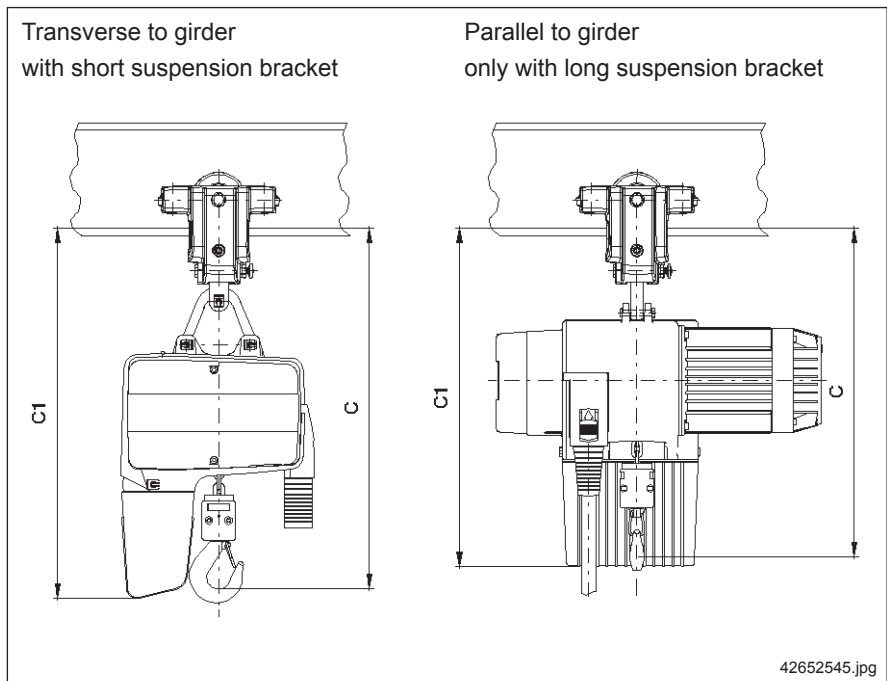
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| Trolley | A1 | B | H | X1 | X2 | X3 | T1 |
|---------------|------|------|------|------|------|------|------|
| | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| EU 11 | 58 | 273 | 98 | 50 | 68 | 115 | 41 |
| EU 22 / EU 34 | 60 | 288 | 112 | 68 | 44 | 117 | 49 |

Hook dimension C

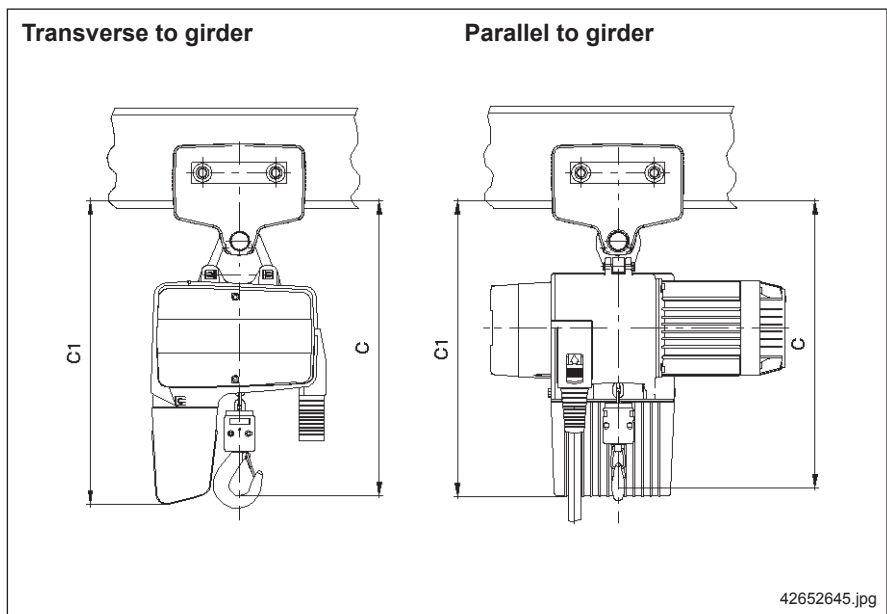
DC-Com chain hoist with CF 5 trolley

| Size | Transverse to girder | | | Parallel to girder | | |
|------------|----------------------|-----------------|-----|--------------------|-----------------|-----|
| | C | C1 | | C | C1 | |
| | | Chain collector | | | Chain collector | |
| | | H5 | H8 | | H5 | H8 |
| DC-Com 1/2 | 406 | 415 | 445 | 401 | 410 | 440 |
| DC-Com 5 | 458 | 477 | 507 | 453 | 472 | 502 |



DC-Com chain hoist with U 11, U 22, U 34 trolley

| Size ¹⁾ | Reeving | Travel unit | Transverse to girder | | | Parallel to girder | | |
|--------------------|---------|-------------|----------------------|-----------------|-----|--------------------|-----------------|-----|
| | | | C | C1 | | C | C1 | |
| | | | | Chain collector | | | Chain collector | |
| | | | H4/H5 | H8 | | H4/H5 | H8 | |
| DC-Com 1/2 | 1/1 | U 11 | 416 | 425 | 455 | 411 | 420 | 450 |
| DC-Com 5 | | U 11 | 468 | 487 | 517 | 463 | 482 | 512 |
| DC-Com 10 | | U 11 | 557 | 578 | 667 | 581 | 602 | 672 |
| | | U 22 | 569 | 590 | 679 | 593 | 614 | 703 |
| | 2/1 | U 22 / U 34 | 661 | 679 | 679 | 685 | 703 | 803 |

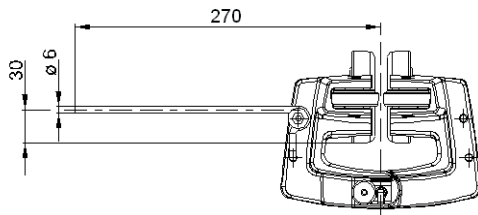


1) Dimensions C and C1 decrease when the short suspension bracket is used:
 for DC-Pro 1-5 units by 38 mm,
 for DC-Pro 10 units by 33 mm.

Power supply system

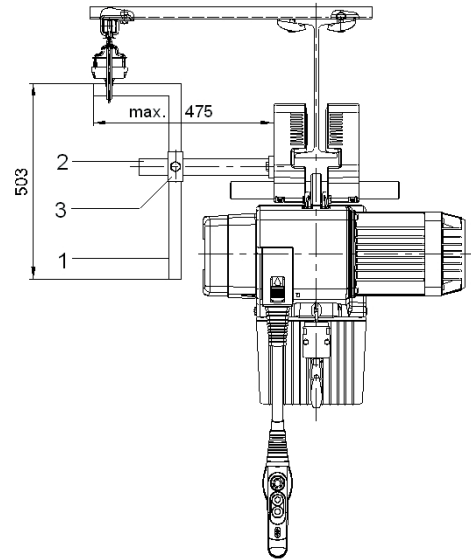
Current collectors for trolleys

CF 5 click-fit trolley



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U 11 / U 22 trolley

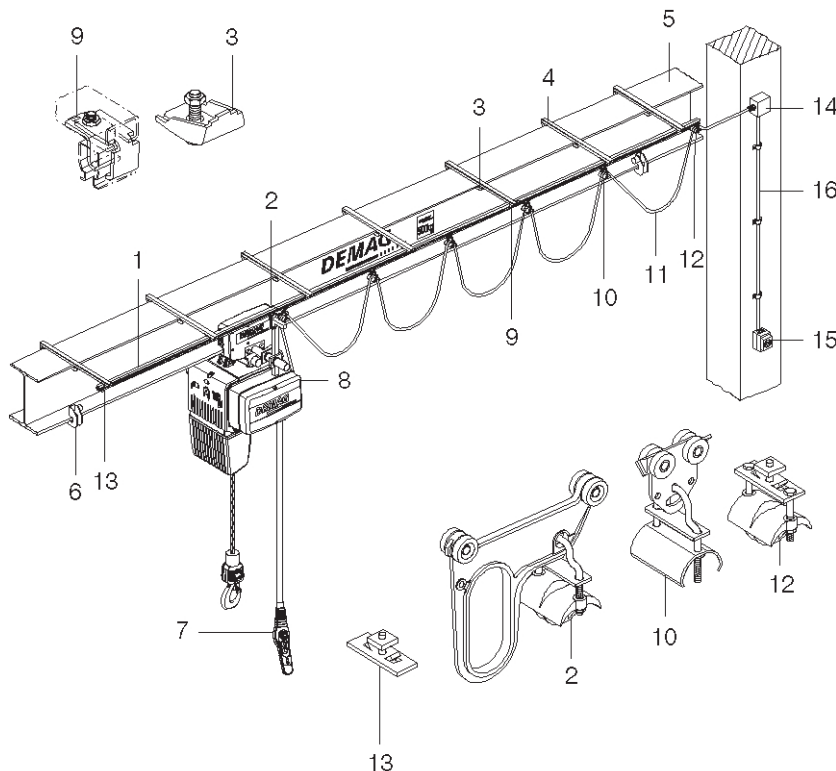


| Trolley | Current collector Part no. |
|----------------|-------------------------------|
| CF 5 click-fit | 840 085 44 |
| U 11 / U 22 | 716 560 45 |

- 1 Towing arm tube
- 2 Current collector tube
- 3 Tube clip

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Example: KBK 25



KBK 25 trailing cable power supply line for straight track sections up to 30 m in length, comprising:

- 1 KBK 25 rail section (galvanized)
- 2 Towing trolley
- 3 Retaining plate
- 4 C-rail 800 mm
- 5 Steel girder (by the customer)
- 6 Clamp-fitted buffers
- 7 Control pendant
- 8 Chain hoist
- 9 C-rail bracket
- 10 Cable trolley
- 11 Trailing cable
- 12 Rail end cable clamp
- 13 Adjustable limit stop
- 14 Terminal box
- 15 Mains connection switch
- 16 Rising line (by the customer)

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