

Designation

01 CT 3 05 H13 V1 - 2/1 M1 E N 20

traveling speed (value), m/min

- fixed
- N monorail trolley -normal headroom
- K monorail trolley -low headroom
- D double rail trolley

- fixed
- E electric trolley
- R geared trolley

- single hoisting speed
- M double hoisting speeds (M1;M2)

reeving

separation symbol

V hoisting speed (V1;V2)

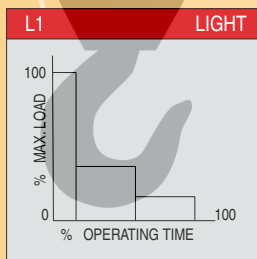
H hoisting height, m

drum hoisting force code, kN

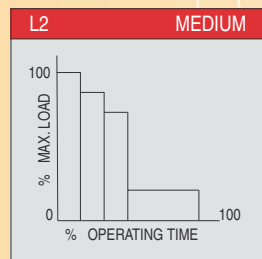
size code (3; 4; 5; 6; 7)

CT rope electric hoist type

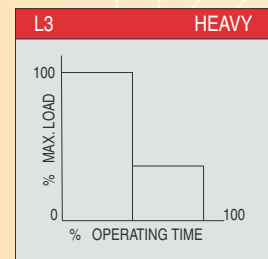
- stop button
- 01 stop button and lock key
- 02 stop button and start button
- 03 stop button, lock key and start button



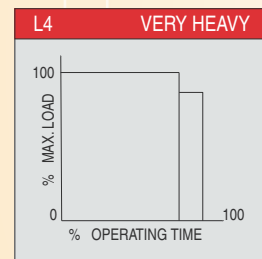
The mechanisms are usually submitted to very small loadings and only in extreme cases to maximum loadings



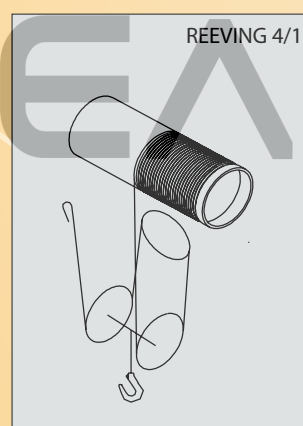
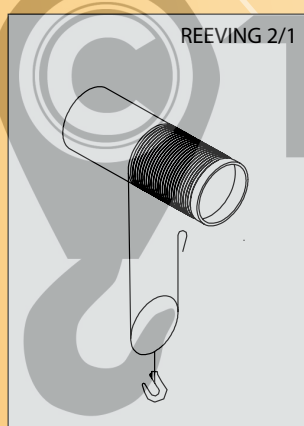
The mechanisms are usually submitted to small loadings, but more frequently to maximum loadings



The mechanisms are usually submitted to medium loadings, but frequently repeated maximum loadings



The mechanisms are usually submitted to the maximum or near the maximum loadings

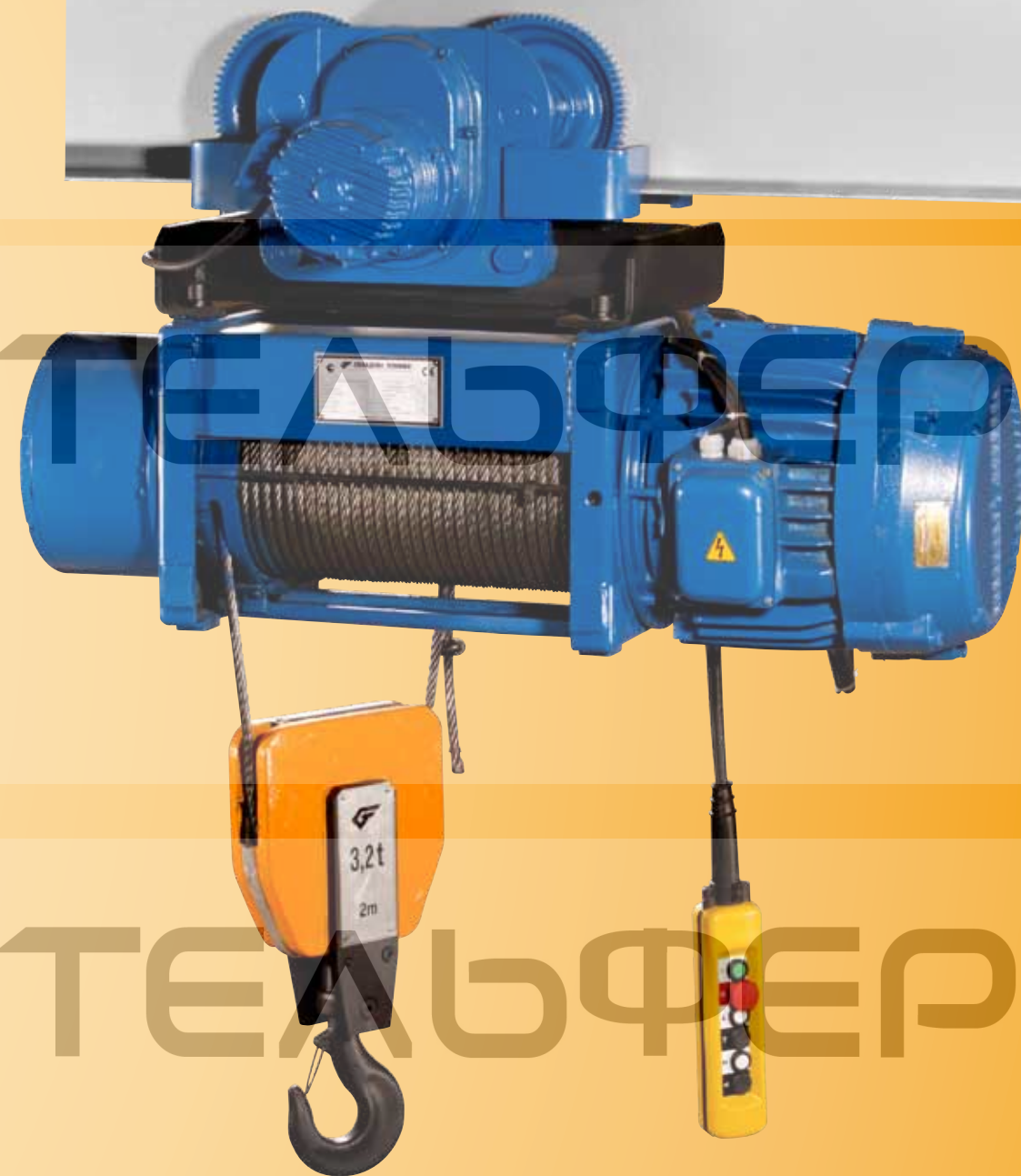


| LOAD SPECTRUM | | TOTAL OPERATING TIME (h) | | |
|---------------|-------------|--------------------------|-------|-------|
| L1 | LIGHT | 6300 | 12500 | 25000 |
| L2 | MEDIUM | 3200 | 6300 | 12500 |
| L3 | HEAVY | 1600 | 3200 | 6300 |
| L4 | VERY HEAVY | 800 | 1600 | 3200 |
| GROUP | FEM 9.511 | 1Am | 2m | 3m |
| | ISO 4301 | M4 | M5 | M6 |
| CAPACITY [kg] | | TYPE CT | | |
| REEVING 2/1 | REEVING 4/1 | | | |
| - | 1600 | - | - | 304 |
| 1000 | 2000 | - | 305 | - |
| 1600 | 3200 | - | - | 408 |
| 2000 | 4000 | - | 410 | - |
| 2500 | 5000 | - | - | 512 |
| 3200 | 6300 | - | 516 | - |
| 4000 | 8000 | - | - | 620 |
| 5000 | 10000 | - | 625 | - |
| 6300 | 12500 | - | 732 | - |
| 8000 | 16000 | 740 | - | - |

| Capacity kg | Type | Group | | Hoisting weight m | | | | | Hoisting speed m/min | | | | Rope diameter mm |
|----------------|-----------|-------|-----|----------------------|-----|-----|------|------|-------------------------|----|-----|-----|---------------------|
| | | FEM | ISO | H1 | H2 | H3 | H4 | H5 | V1 | V2 | M1 | M2 | |
| 1000 | CT305-2/1 | 2m | M5 | 6 | 10 | 13 | 20 | 27 | 8 | 12 | 2 | 1.4 | 7 |
| 1600 | CT304-4/1 | 3m | M6 | - | - | 6.5 | 10 | 13.5 | 4 | 6 | 1 | 0.7 | 7 |
| | CT408-2/1 | | | 9 | 12 | 20 | 26 | 8 | 12 | 2 | 1.4 | 10 | |
| 2000 | CT305-4/1 | 2m | M5 | - | - | 6.5 | 10 | 13.5 | 4 | 6 | 1 | 0.7 | 7 |
| CT410-2/1 | 5.5 | | | 9 | 12 | 20 | 26 | 8 | 12 | 2 | 1.4 | 10 | |
| 2500 | CT512-2/1 | 3m | M6 | 5.5 | 9 | 12 | 18 | 25 | 8 | 12 | 2 | 1.4 | 12 |
| CT408-4/1 | 3m | - | | - | 6 | 10 | 13 | 4 | 6 | 1 | 0.7 | 10 | |
| 3200 | CT516-2/1 | 2m | M5 | 5.5 | 9 | 12 | 18 | 25 | 8 | 12 | 2 | 1.4 | 12 |
| CT410-4/1 | 2m | - | | - | 6 | 10 | 13 | 4 | 6 | 1 | 0.7 | 10 | |
| 4000 | CT620-2/1 | 3m | M6 | 8 | 11 | 17 | 23 | 32 | 8 | 12 | 2 | 1.4 | 15 |
| CT512-4/1 | 3m | - | | - | 6 | 9 | 12.5 | 4 | 6 | 1 | 0.7 | 12 | |
| 5000 | CT625-2/1 | 2m | M5 | - | 8 | 11 | 17 | 23 | 8 | 12 | 2 | 1.4 | 15 |
| CT516-4/1 | 2m | - | | - | 6 | 9 | 12.5 | 4 | 6 | 1 | 0.7 | 12 | |
| 6300 | CT732-2/1 | 2m | M5 | - | 8 | 12 | 17 | 23 | 8 | - | 2 | - | 18 |
| CT620-4/1 | 3m | | | - | - | 5.5 | 8.5 | 11.5 | 4 | 6 | 1 | 0.7 | 15 |
| 8000 | CT740-2/1 | 1Am | M4 | - | 8 | 12 | 17 | 23 | 8 | - | 2 | - | 18 |
| CT625-4/1 | 2m | - | | - | 5.5 | 8.5 | 11.5 | 4 | 6 | 1 | 0.7 | 15 | |
| 12500 | CT732-4/1 | 2m | M5 | - | 6 | 8.5 | 11.5 | 4 | - | 1 | 0.7 | 18 | |
| 16000 | CT740-4/1 | 1Am | | - | - | 6 | 8.5 | 11.5 | 4 | - | 1 | 0.7 | 18 |

| Type | Basic speed | Electric motors for hoisting (voltage, current) | | | | | |
|-----------------------|-------------|---|------|----------------|----------|----------|---------|
| | | Single speed | | Double speeds | | | |
| | | kW | A | V.../M1 | | V.../M2 | |
| CT305 | V1 | 1.5 | 5.8 | 1.5/0.33 | 5.0/3.7 | 1.5/0.3 | 5.1/5.5 |
| | V2 | 2.3 | 6 | 2.2/0.33 | 6.2/3.7 | 2.2/0.3 | 7/5.5 |
| CT410 | V1 | 3 | 11 | 3/0.7 | 7.5/6 | 3/0.5 | 8.5/10 |
| | V2 | 4.5 | 12 | 4.5/0.7 | 9.5/6 | 4.5/0.5 | 11/10 |
| CT516 | V1 | 4.5 | 12.3 | 4.8/1 | 12/11 | 4.8/0.8 | 12/15 |
| | V2 | 7.5 | 17 | 7.5/1 | 15/11 | 7.5/0.8 | 15/15 |
| CT625 | V1 | 8 | 24.5 | 8/1.7 | 18/15 | 8/1.5 | 19/30 |
| | V2 | 12 | 28 | 12.5/1.7 | 23/15 | 12.5/1.5 | 28/30 |
| CT740 | V1 | 12.5 | 36 | (13/3)* | (30/40)* | - | - |
| CD [%] | | 40 | | 50/25;*(40/10) | | 40/10 | |
| SF [h ⁻¹] | | 240 | | 300;*(240) | | 240 | |

| Type | Speed m/min | Electric motors for travelling (voltage, current) | | | |
|-----------|---------------------------|---|---------|-------------------------------------|-------------|
| | | Hoisting heights: H1, H2, H3 | | Hoisting heights: H4, H5 | |
| | | kW | A | kW | A |
| CT305-2/1 | 8; 10; 12; 15; 20 | 0.12 | 0.84 | 2 x 0.12 | 2 x 0.84 |
| | 32 | 0.18 | 1.2 | 2 x 0.18 | 2 x 1.2 |
| CT305-4/1 | 12/4; 15/5; 20/6.5; 32/10 | 0.18/0.06 | 1.2/1.4 | 2 x 0.18/0.06 | 2 x 1.2/1.4 |
| | 8; 10; 12; 15; 20 | 0.25 | 1.2 | 2 x 0.12 | 2 x 0.84 |
| CT410-2/1 | 32 | 0.37 | 1.5 | 2 x 0.18 | 2 x 1.2 |
| | 12/4; 15/5; 20/6.5; 32/10 | 0.37/0.11 | 1.4/1.7 | 2 x 0.18/0.06 | 2 x 1.2/1.4 |
| CT410-4/1 | 8; 10; 12; 15; 20 | 0.25 | 1.2 | 2 x 0.25 | 2 x 1.2 |
| | 32 | 0.37 | 1.5 | 2 x 0.37 | 2 x 1.5 |
| CT516-2/1 | 12/4; 15/5; 20/6.5; 32/10 | 0.37/0.11 | 1.4/1.7 | 2 x 0.37/0.11 | 2 x 1.4/1.7 |
| | 8; 10; 12 | 0.25 | 1.2 | 2 x 0.25 | 2 x 1.2 |
| CT516-4/1 | 15 | 0.37 | 1.5 | 2 x 0.25 | 2 x 1.2 |
| | 20 | 0.37 | 1.8 | 2 x 0.25 | 2 x 1.2 |
| CT625-2/1 | 32 | 0.55 | 2.1 | 2 x 0.37 | 2 x 1.5 |
| | 12/4; 15/5; 20/6.5 | 0.37/0.11 | 1.4/1.7 | 2 x 0.37/0.11 | 2 x 1.4/1.7 |
| CT740-2/1 | 32/10 | 0.55/0.18 | 2.1/2.5 | 2 x 0.37/0.11 | 2 x 1.4/1.7 |
| | 8; 10; 12 | | | 2 x 0.25 [kW]; 2 x 1.2 [A] | |
| CT625-4/1 | 15 | | | 2 x 0.37 [kW]; 2 x 1.5 [A] | |
| | 20 | | | 2 x 0.37 [kW]; 2 x 1.7 [A] | |
| CT732-4/1 | 32 | | | 2 x 0.55 [kW]; 2 x 2.1 [A] | |
| | 12/4; 15/5; 20/6.5 | | | 2 x 0.37/0.11 [kW]; 2 x 1.4/1.7 [A] | |
| | 32/10 | | | 2 x 0.55/0.18 [kW]; 2 x 2.1/2.5 [A] | |

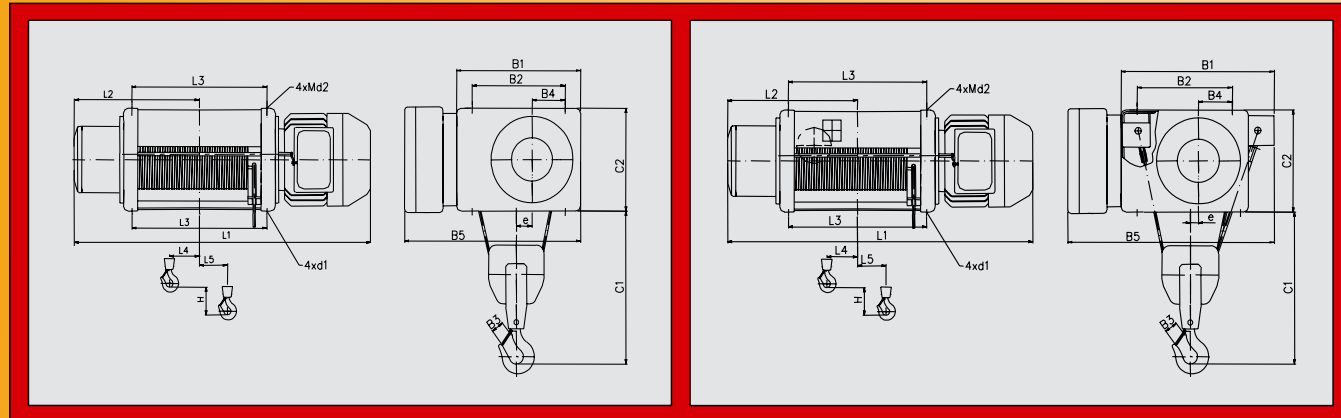


ROPE ELECTRIC HOISTS

STATIONARY ROPE ELECTRIC HOISTS

REEVING 2/1

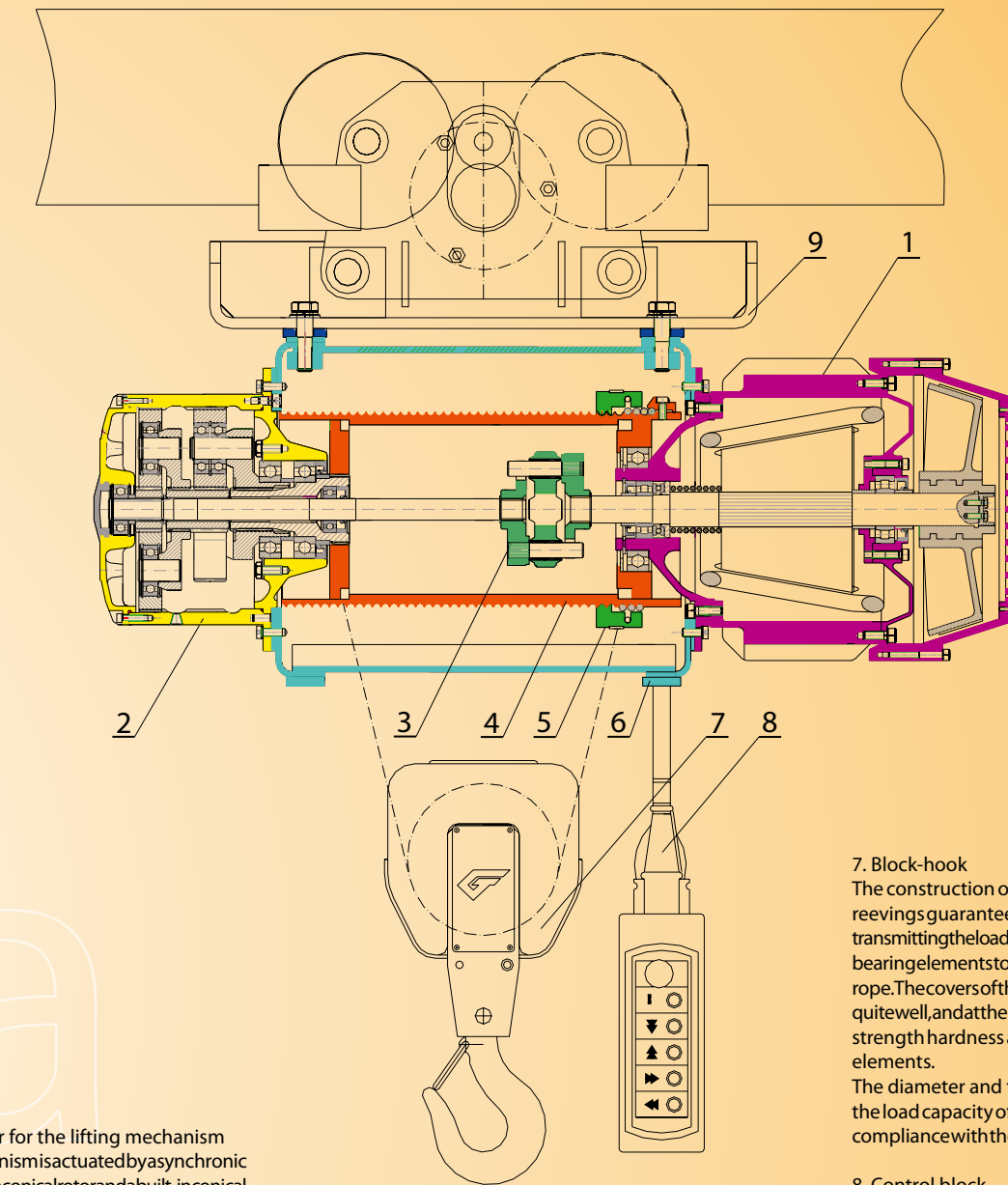
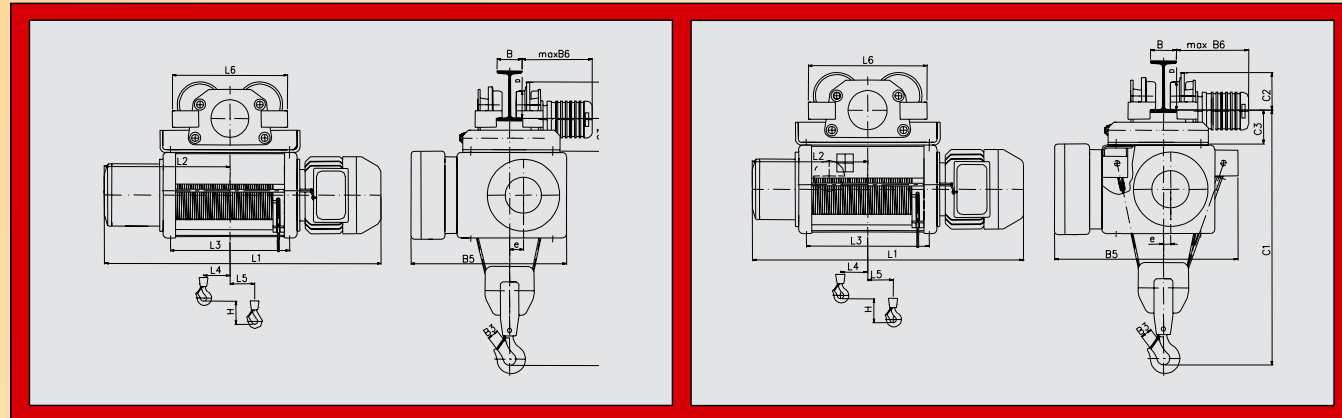
REEVING 4/1



ROPE ELECTRIC HOISTS WITH A MONORAIL TROLLEY

REEVING 2/1

REEVING 4/1



| Type | | CT305 | CT410 | CT516 | CT625 | CT740 | |
|-------------------------|----|-----------|-------|-------|-------|-------|------|
| Overall dimensions | mm | B1 | 398 | 434 | 512 | 640 | |
| | | B2 | 295 | 325 | 390 | 475 | |
| | | B3 | 34 | 40 | 45 | 50 | 56 |
| | | B4 | 105 | 128 | 157 | 187 | |
| | | B5 | 580 | 650 | 800 | 930 | |
| | | C1 | 450 | 550 | 620 | 710 | 840 |
| | | C2 | 321 | 366 | 432 | 530 | |
| | | e | 50 | 35 | 38 | 55 | |
| | | d1 | φ15 | φ17 | φ21 | φ25 | |
| | | Md2 | M14 | M20 | M24 | M27 | |
| For hoisting height: H1 | mm | L1 | 710 | 815 | 856 | | |
| | | L1* | 750 | 885 | 940 | | |
| | | L2 | 310 | 365 | 377 | | |
| | | L3 | 224 | 231 | 261 | | |
| | | L4 | 45 | 52 | 60 | | |
| | | L5 | 40 | 27 | 29 | | |
| | kg | Netweight | 115 | 174 | 213 | | |
| | | | | | | | |
| For hoisting height: H2 | mm | L1 | 815 | 925 | 976 | 1015 | 1125 |
| | | L1* | 855 | 995 | 1060 | 1105 | 1160 |
| | | L2 | 362 | 420 | 437 | 445 | 500 |
| | | L3 | 329 | 341 | 381 | 348 | 393 |
| | | L4 | 95 | 107 | 120 | 104 | 82 |
| | | L5 | 40 | 27 | 29 | 23 | 54 |
| | kg | Netweight | 120 | 190 | 257 | 410 | 600 |
| | | | | | | | |
| For hoisting height: H3 | mm | L1 | 915 | 1025 | 1086 | 1120 | 1285 |
| | | L1* | 955 | 1095 | 1170 | 1210 | 1320 |
| | | L2 | 412 | 470 | 492 | 505 | 580 |
| | | L3 | 429 | 441 | 491 | 453 | 553 |
| | | L4 | 95 | 107 | 125 | 106 | 162 |
| | | L5 | 90 | 77 | 79 | 73 | 54 |
| | kg | Netweight | 129 | 203 | 279 | 420 | 676 |
| | | | | | | | |
| For hoisting height: H4 | mm | L1 | 1115 | 1225 | 1306 | 1330 | 1445 |
| | | L1* | 1155 | 1295 | 1390 | 1420 | 1480 |
| | | L2 | 512 | 570 | 602 | 610 | 660 |
| | | L3 | 629 | 641 | 711 | 663 | 713 |
| | | L4 | 195 | 207 | 235 | 211 | 192 |
| | | L5 | 90 | 77 | 79 | 73 | 104 |
| | kg | Netweight | 142 | 236 | 300 | 435 | 723 |
| | | | | | | | |
| For hoisting height: H5 | mm | L1 | 1315 | 1425 | 1526 | 1540 | 1660 |
| | | L1* | 1355 | 1495 | 1610 | 1630 | 1695 |
| | | L2 | 612 | 670 | 712 | 715 | 770 |
| | | L3 | 829 | 841 | 931 | 873 | 928 |
| | | L4 | 295 | 307 | 345 | 316 | 300 |
| | | L5 | 90 | 77 | 79 | 73 | 104 |
| | kg | Netweight | 150 | 260 | 320 | 485 | 786 |
| | | | | | | | |

| Type | | CT305 | CT410 | CT516 | CT625 | CT740 | |
|-------------------------|----|-----------|-------|-------|-------|-------|------|
| Overall dimensions | mm | B1 | 469 | 504 | 601 | 738 | |
| | | B2 | 295 | 325 | 390 | 475 | |
| | | B3 | 40 | 50 | 56 | 71 | 90 |
| | | B4 | 105 | 128 | 157 | 187 | |
| | | B5 | 650 | 720 | 890 | 1030 | |
| | | C1 | 415 | 525 | 565 | 695 | 825 |
| | | C2 | 321 | 366 | 432 | 530 | |
| | | e | 25 | 15 | | 23 | |
| | | d1 | φ15 | φ17 | φ21 | φ25 | |
| | | Md2 | M14 | M20 | M24 | M27 | |
| For hoisting height: H3 | mm | L1 | 915 | 1025 | 1086 | 1120 | 1285 |
| | | L1* | 955 | 1095 | 1170 | 1210 | 1320 |
| | | L2 | 412 | 470 | 492 | 505 | 580 |
| | | L3 | 429 | 441 | 491 | 453 | 553 |
| | | L4 | 90 | 65 | 67 | 29 | 42 |
| | | L5 | 45 | 25 | 35 | 61 | 0 |
| | kg | Netweight | 139 | 216 | 300 | 454 | 735 |
| | | | | | | | |
| For hoisting height: H4 | mm | L1 | 1115 | 1225 | 1306 | 1330 | 1445 |
| | | L1* | 1155 | 1295 | 1390 | 1420 | 1480 |
| | | L2 | 512 | 570 | 602 | 610 | 660 |
| | | L3 | 629 | 641 | 711 | 663 | 713 |
| | | L4 | 190 | 165 | 177 | 134 | 102 |
| | | L5 | -45 | -25 | -20 | 8 | 46 |
| | kg | Netweight | 152 | 249 | 322 | 472 | 782 |
| | | | | | | | |
| For hoisting height: H5 | mm | L1 | 1315 | 1425 | 1526 | 1540 | 1660 |
| | | L1* | 1355 | 1495 | 1610 | 1630 | 1695 |
| | | L2 | 612 | 670 | 712 | 715 | 770 |
| | | L3 | 829 | 841 | 931 | 873 | 928 |
| | | L4 | 290 | 265 | 287 | 239 | 210 |
| | | L5 | -95 | -75 | -70 | -44 | -8 |
| | kg | Netweight | 160 | 273 | 342 | 520 | 845 |
| | | | | | | | |

Note: L1* for electric hoist with double-speed electric motor

| Type | | CT 305 | CT 410 | CT 516 | CT 625 | CT 740 | |
|-------------------------|----|-----------|--------|---------|--------|--------|------|
| Overall dimensions | mm | B | 90-130 | 130+150 | | | |
| | | B3 | 34 | 40 | 45 | 50 | 56 |
| | | B5 | 580 | 650 | 800 | 930 | |
| | | B6 | 336 | 405 | 410 | | |
| | | C2 | 142 | 200 | 232 | | |
| | | e | 50 | 35 | 38 | 55 | |
| | | D | φ120 | φ175 | φ210 | | |
| | | R | 1500 | 2500 | 3500 | | |
| | | C1 | 889 | 1069 | 1139 | | |
| | | C3 | 118 | 158 | | | |
| For hoisting height: H1 | mm | L1 | 710 | 815 | 856 | | |
| | | L1* | 750 | 885 | 940 | | |
| | | L2 | 310 | 365 | 377 | | |
| | | L4 | 45 | 52 | 60 | | |
| | | L5 | 40 | 27 | 29 | | |
| | | L6 | 386 | 530 | | | |
| | kg | Netweight | 155 | 306 | 343 | | |
| | | | | | | | |
| For hoisting height: H2 | mm | C1 | 889 | 1074 | 1144 | 1312 | 1648 |
| | | C3 | 118 | 158 | 170 | 278 | |
| | | L1 | 815 | 925 | 976 | 1015 | 1125 |
| | | L1* | 855 | 995 | 1060 | 1105 | 1160 |
| | | L2 | 362 | 420 | 437 | 445 | 500 |
| | | L4 | 95 | 107 | 120 | 104 | 82 |
| | kg | Netweight | 160 | 320 | 383 | 566 | 948 |
| | | | | | | | |
| For hoisting height: H3 | mm | C1 | 889 | 1074 | 1144 | 1312 | 1648 |
| | | C3 | 118 | 158 | 170 | 278 | |
| | | L1 | 915 | 1025 | 1086 | 1120 | 1285 |
| | | L1* | 955 | 1095 | 1170 | 1210 | 1320 |
| | | L2 | 412 | 470 | 492 | 505 | 580 |
| | | L4 | 95 | 107 | 125 | 106 | 162 |
| | kg | Netweight | 169 | 329 | 405 | 594 | 1024 |
| | | | | | | | |
| For hoisting height: H4 | mm | C1 | 927 | 1102 | 1172 | 1328 | 1608 |
| | | C3 | 156 | 186 | 238 | | |
| | | L1 | 1115 | 1225 | 1306 | 1330 | 1445 |
| | | L1* | 1155 | 1295 | 1390 | 1420 | 1480 |
| | | L2 | 512 | 570 | 602 | 610 | 660 |
| | | L4 | 195 | 207 | 235 | 211 | 192 |
| | kg | Netweight | 171 | 331 | 405 | 594 | 1024 |
| | | | | | | | |
| For hoisting height: H5 | mm | C1 | 927 | 1102 | 1172 | 1328 | 1608 |
| | | C3 | 156 | 186 | 238 | | |
| | | L1 | 1315 | 1425 | 1526 | 1540 | 1660 |
| | | L1* | 1355 | 1495 | 1610 | 1630 | 1695 |
| | | L2 | 612 | 670 | 712 | 715 | 770 |
| | | L4 | 295 | 307 | 345 | 316 | 300 |
| | kg | Netweight | 245 | 490 | 550 | 706 | 1156 |
| | | | | | | | |

Note: L1* - for electric hoist with double-speed electric motor
 R - curve radius, minimum
 ~ - for electric hoist with two trolleys

| Type | | CT 305 | CT 410 | CT 516 | CT 625 | CT 740 | |
|-------------------------|----|-----------|--------|---------|--------|--------|------|
| Overall dimensions | mm | B | 90-130 | 130+150 | | | |
| | | B3 | 34 | 40 | 45 | 50 | 56 |
| | | B5 | 580 | 650 | 800 | 930 | |
| | | B6 | 336 | 405 | 410 | | |
| | | C2 | 142 | 200 | 232 | | |
| | | e | 50 | 35 | 38 | 55 | |
| | | D | φ120 | φ175 | φ210 | | |
| | | R | 1500 | 2500 | 3500 | | |
| | | C1 | 889 | 1069 | 1139 | | |
| | | C3 | 118 | 158 | | | |
| For hoisting height: H3 | mm | L1 | 710 | 815 | 856 | | |
| | | L1* | 750 | 885 | 940 | | |
| | | L2 | 310 | 365 | 377 | | |
| | | L4 | 45 | 52 | 60 | | |
| | | L5 | 40 | 27 | 29 | | |
| | | L6 | 386 | 530 | | | |
| | kg | Netweight | 155 | 306 | 343 | | |
| | | | | | | | |
| For hoisting height: H4 | mm | C1 | 889 | 1074 | 1144 | 1312 | 1648 |
| | | C3 | 118 | 158 | 170 | 278 | |
| | | L1 | 815 | 925 | 976 | 1015 | 1125 |
| | | L1* | 855 | 995 | 1060 | 1105 | 1160 |
| | | L2 | 362 | 420 | 437 | 445 | 500 |
| | | L4 | 95 | 107 | 120 | 104 | 82 |
| | kg | Netweight | 160 | 320 | 383 | 566 | 948 |
| | | | | | | | |
| For hoisting height: H5 | mm | C1 | 889 | 1074 | 1144 | 1312 | 1648 |
| | | C3 | 118 | 158 | 170 | 278 | |
| | | L1 | 915 | 1025 | 1086 | 1120 | 1285 |
| | | L1* | 955 | 1095 | 1170 | 1210 | 1320 |
| | | L2 | 412 | 470 | 492 | 505 | 580 |
| | | L4 | 95 | 107 | 125 | 106 | 162 |
| | kg | Netweight | 169 | 329 | 405 | 594 | 1024 |
| | | | | | | | |
| For hoisting height: H6 | mm | C1 | 927 | 1102 | 1172 | 1328 | 1608 |
| | | C3 | 156 | 186 | 238 | | |
| | | L1 | 1115 | 1225 | 1306 | 1330 | 1445 |
| | | L1* | 1155 | 1295 | 1390 | 1420 | 1480 |
| | | L2 | 512 | 570 | 602 | 610 | 660 |
| | | L4 | 195 | 207 | 235 | 211 | 192 |
| | kg | Netweight | 171 | 331 | 405 | 594 | 1024 |
| | | | | | | | |
| For hoisting height: H7 | mm | C1 | 927 | 1102 | 1172 | 1328 | 1608 |
| | | C3 | 156 | 186 | 238 | | |
| | | L1 | 1315 | 1425 | 1526 | 1540 | 1660 |
| | | L1* | 1355 | 1495 | 1610 | 1630 | 1695 |
| | | L2 | 612 | 670 | 712 | 715 | 770 |
| | | L4 | 295 | 307 | 345 | 316 | 300 |
| | kg | Netweight | 250 | 503 | 575 | 860 | 1215 |
| | | | | | | | |

1. Electric motor for the lifting mechanism
 The lifting mechanism is actuated by a synchronous electric motor with conical rotor and built-in conical brake, which is operating under the impact of spiral spring under pressure. The release of the brake is made through the axial movement of the rotor at starting the electric motor, at which the power of the screws springs is overwhelmed. This constructive decision ensures a positive breaking in the event of voltage drop or power loss, and a special magnet-operated brake is not necessary. By using double speed electric motor or the basic and micro speed for lifting are being realized.

2. Planetary reducer
 The planetary reducer is designed to bring the motor speed down to speed suitable for the drum. Being externally mounted on the drum, enables easy assembling and disassembling to the body of the electric hoist, and convenience at servicing as well. The gear wheels of the couplings in the reducer are made of high quality steels, appropriately heat treated. They are located on ball bearings and run in oil bath.

3. Clutch
 The transmission of the torque from the electric motor to the shaft of the reducer is enabled through the axial compensating elastic clutch, which ensures the axial movement of the rotor at minimum resistance. The metal components guarantee the necessary of the transmitted torque.

4. Drum
 A hollow shaft coming from the reducer drives the drum centrally through an involute spline coupling. The hollow shaft and the second stage gear of the reducer run on antifriction bearings, which support the drum by means of the splined coupling on its reducer side. On the other side end the drum is bearing-born by the front electric motor