



# Product Code Descriptions

For QX and QL Crane Components and for Spacemaster® SX and LoadMate® Hoists





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# 1 WIRE ROPE HOIST PRODUCT CODE

## 1.1 Spacemaster® SX

|                  |               |                       |                            |                |                |                |                |                |                    |                |
|------------------|---------------|-----------------------|----------------------------|----------------|----------------|----------------|----------------|----------------|--------------------|----------------|
| <b>SX</b><br>1,2 | <b>2</b><br>3 | <b>041</b><br>4, 5, 6 | <b>0020</b><br>7, 8, 9, 10 | <b>P</b><br>11 | <b>1</b><br>12 | <b>5</b><br>13 | <b>F</b><br>14 | <b>A</b><br>15 | <b>L0</b><br>16,17 | <b>N</b><br>18 |
|------------------|---------------|-----------------------|----------------------------|----------------|----------------|----------------|----------------|----------------|--------------------|----------------|

| Pos.        | Code        | Feature            | Available properties  |   |
|-------------|-------------|--------------------|---|---|
| 1,2         | <b>SX</b>   | Brand              | SX  | SX Wire Rope Hoist  |
| 3           | <b>2</b>    | Frame size         | 1<br>2,3<br>4<br>5  | 243 mm rope drum diameter<br>303 mm rope drum diameter<br>355 mm rope drum diameter<br>406 mm rope drum diameter  |
| 4, 5, 6     | <b>041</b>  | Reeving type       | <u>Single Reeved</u><br>021<br>041<br>061<br>081  | <u>Double Reeved</u><br>2 part single<br>4 part single<br>6 part single<br>8 part single  |
| 7, 8, 9, 10 | <b>0050</b> | Capacity           | Capacity x 100 (unit: Kg) 0050 x 100 = 5000 Kg<br>Capacity x 0.1 (unit: Ton) 0050 x 0.1 = 5 Ton                 |   |
| 11          | <b>P</b>    | Hoist motor type   | P<br>T  | Two Speed motor<br>Inverter motor   |
| 12          | <b>1</b>    | Hoist Motor Power  | <u>Code</u><br>X<br>1<br>2<br>3<br>4<br>5   | <u>60 Hz kW / HP</u><br>1.8 kW / 2.4 HP<br>2.2 kW / 3 HP<br>4.3 kW / 5.8 HP<br>5.4 kW / 7.2 HP<br>9 kW / 12 HP<br>10.8 kW / 14.7 HP   |
|             |             |                    |   | <u>Code</u><br>6<br>7<br>8<br>9<br>A  |
|             |             |                    |   | <u>60 Hz kW / HP</u><br>18 kW / 24.1 HP<br>21 kW / 28.2 HP<br>25 kW / 33.3 HP<br>34 kW / 45 HP<br>42 kW / 56 HP   |
|             |             |                    | See Spacemaster® SX price pages and technical guide for additional hoist motor code & power rating information. |   |
| 13          | <b>5</b>    | Hoist duty group   | <u>Code</u><br>3<br>4<br>5<br>6   | <u>ASME Duty class</u><br>H2<br>H3<br>H4<br>H4+   |
|             |             |                    |   | <u>FEM / ISO Duty class</u><br>1Bm / M3<br>1Am / M4<br>2m / M5<br>3m / M6   |
| 14          | <b>F</b>    | Hoist gear code    | <u>Code</u><br>E<br>F<br>G<br>H<br>J  | <u>60 Hz Hoist speed fpm (reeving type)</u><br>32 fpm (2 PS), 16 fpm (4PS)<br>40 fpm (2 PS), 20 fpm (4PS)<br>50 fpm (2 PS), 25 fpm (4PS)<br>60 fpm (2 PS), 30 fpm (4PS)<br>80 fpm (2 PS), 40 fpm (4PS)                                |
|             |             |                    |   | <u>60 Hz Hoist speed m/min (reeving type)</u><br>9.5 m/min (2 PS), 4.75 m/min (4 PS)<br>12 m/min (2 PS), 6 m/min (4 PS)<br>15 m/min (2 PS), 7.5 m/min (4 PS)<br>19 m/min (2 PS), 9.5 m/min (4 PS)<br>24 m/min (2 PS), 12 m/min (4 PS) |
|             |             |                    | Hoist gear options listed are not available for all hoist frame sizes.  |   |
| 15          | <b>A</b>    | Drum length code   | <u>Code</u><br>A<br>B<br>C<br>D<br>E<br>F<br>G<br>H   | <u>Rope drum length</u><br>310 mm<br>340 mm (if SX1 frame size, 394 mm)<br>440 mm (if SX1 frame size, 504 mm)<br>540 mm (if SX1 frame size, 614 mm)<br>660 mm<br>810 mm<br>1000 mm<br>1250 mm   |
|             |             |                    |   | <u>Code</u><br>J<br>K<br>L<br>M<br>N<br>Z<br>X  |
|             |             |                    |   | <u>Rope drum length</u><br>1600 mm<br>1900 mm<br>2250 mm<br>2500 mm<br>2800 mm<br>1400 mm<br>Special drum length  |
| 16,17       | <b>L0</b>   | Trolley type       | <u>Code</u><br>J0<br>L0<br>N0<br>D0<br>DH<br>DL or DW<br>F0   | Special Low headroom hoist (SX1)<br>Low headroom hoist<br>Normal headroom hoist<br>Double girder (standard)<br>High profile double girder<br>Low profile double girder<br>Foot mounted  |
| 18          | <b>N</b>    | Special properties | <u>Code</u><br>N<br>F   | Standard hoist without any options<br>Options selected from option list   |
|             |             |                    |   | <u>Code</u><br>S  |
|             |             |                    |   | Special hoist   |



## 2 END TRUCK PRODUCT CODE

### 2.1 RS Top-running End Truck

|           |           |          |           |             |          |            |            |            |             |          |          |
|-----------|-----------|----------|-----------|-------------|----------|------------|------------|------------|-------------|----------|----------|
| <b>RS</b> | <b>11</b> | <b>-</b> | <b>18</b> | <b>65</b>   | <b>-</b> | <b>220</b> | <b>150</b> | <b>C</b>   | <b>0000</b> | <b>-</b> | <b>N</b> |
| 1,2       | 3,4       | 5        | 6,7       | BT08<br>8,9 | 10       | 11-13      | 14-16      | BT19<br>17 | 18-21       | 22       | 23       |

| Pos.  | Code        | Feature code | Feature  | Available properties |   |
|-------|-------------|--------------|--|----------------------|---|
| 1,2   | <b>RS</b>   |              | Short product name                             | RS                   | R&M   |
| 3,4   | <b>11</b>   |              | Wheel diameter                                 | 11                   | 110 mm  |
| 5     | <b>-</b>    |              | Description                                    | -                    | Standard  |
| 6,7   | <b>18</b>   |              | Wheelbase (100 mm)                             | RS11                 | 14, 18, 22, 27  |
|       |             |              |  | RS14                 | 14, 18, 22, 27, 31, 38  |
| 8,9   | <b>65</b>   | BT08         | Groove width                                   | RS11                 | 50-75 mm  |
|       |             |              |  | RS14                 | 50-75 mm  |
| 10    | <b>-</b>    |              | Number of driving wheels                       | -                    | One driving wheel/end carriage  |
|       |             |              |  | D                    | Two driving wheel/end carriage  |
| 11-13 | <b>220</b>  |              | Joint plate length<br>(distance between bolts) | RS11                 | 220   |
|       |             |              |  | RS14                 | 220, 300, 410   |
|       |             |              |  | <u>Length</u>        | <u>Description</u>  |
|       |             |              |  | 220                  | Profile girder, B = 300   |
|       |             |              |  | 300                  | Box girder, B = 300   |
|       |             |              |  | 410                  | Box girder, B = 410   |
| 14-16 | <b>150</b>  |              | Joint plate height                             | RS11                 | 150, 300, 480   |
|       |             |              |  | RS14                 | 240, 300, 480   |
| 17    | <b>C</b>    | BT19         | Buffer size/type                               | RS11                 | A, B, C, D, E, F, G, H, M   |
|       |             |              |  | RS14                 | A, B, C, D, E, F, G, H, M   |
|       |             |              |  | A...D                | Rubber buffer   |
|       |             |              |  | E...M                | Polyurethane buffer   |
|       |             |              |  | 0                    | No buffer   |
| 18-21 | <b>0000</b> |              | Bolt joint distance (mm)                       | ####                 | Joint plate distance from pin centers with double girder.                       |
|       |             |              |  | 0000                 | with single girder, dimension from driving wheel to pin with asymmetrical joint |
| 22    | <b>-</b>    |              | Color code                                     | -                    | Standard primary paint  |
|       |             |              |  | K                    | Standard finishing paint  |
| 23    | <b>N</b>    |              | Special properties                             | N                    | Standard  |
|       |             |              |  | E                    | Special   |



## 2.2 RSN Top-running End Truck

|            |           |          |           |              |          |            |            |            |             |          |          |
|------------|-----------|----------|-----------|--------------|----------|------------|------------|------------|-------------|----------|----------|
| <b>RSN</b> | <b>09</b> | <b>-</b> | <b>16</b> | <b>65</b>    | <b>-</b> | <b>400</b> | <b>200</b> | <b>C</b>   | <b>0000</b> | <b>-</b> | <b>N</b> |
| 1-3        | 4,5       | 6        | 7,8       | BT08<br>9,10 | 11       | 12-14      | 15-17      | BT19<br>18 | 19-22       | 23       | 24       |

| Pos.  | Code        | Feature code | Feature                | Available properties   |   |
|-------|-------------|--------------|------------------------|--|---|
| 1-3   | <b>RSN</b>  |              | Product name           | RSN  | R&M end truck series – new generation   |
| 4,5   | <b>09</b>   |              | Wheel diameter         | 09<br>11<br>16   | 90 mm<br>110 mm<br>160 mm   |
| 6     | <b>-</b>    |              | Description            | -  | Standard<br>C Asymmetrical joint with single girder   |
| 7,8   | <b>16</b>   |              | Wheelbase              | <u>Wheelbase dimension</u><br>13 1250 mm<br>16 1600 mm<br>20 2000 mm<br>25 2500 mm<br>32 3150 mm<br>40 4000 mm<br>45 4500 mm | <u>Applicable end truck</u><br>RSN09<br>RSN09, RSN11, RSN16<br>RSN09, RSN11, RSN16<br>RSN09, RSN11, RSN16<br>RSN11, RSN16<br>RSN16<br>RSN16   |
| 9,10  | <b>65</b>   | BT08         | Groove width           | <u>Applicable end truck</u><br>50-70 mm RSN09<br>52-87 mm RSN11<br>54-84 mm RSN16  |   |
| 11    | <b>-</b>    |              | Number of drive wheels | -<br>D   | One drive wheel / truck<br>Two drive wheels / truck   |
| 12,14 | <b>400</b>  |              | Joint type             | EBN09 400<br>EBN11 400<br>EBN16 350 mm<br>EBN16 450 mm   | Profile or box girder, max flange width 400 mm<br>Profile or box girder, max flange width 400 mm<br>Profile or box girder, max flange width 350 mm<br>Box girder, max flange width 450 mm |
| 15-17 | <b>200</b>  |              | Joint plate height     | EBN09 200, 215<br>EBN11 255<br>EBN16 255, 305  | 200 mm, 215 mm, 255, 305 mm   |
| 18    | <b>C</b>    | BT19         | Buffer size/type       | RSN09 A, B, C<br>RSN11 A, B, C, K, G, E<br>RSN16 B, C, D, K, G, E, M, F, H, P  | A...C Rubber buffers<br>K, G, E Polyurethane buffers<br>M,F,H,P Polyurethane buffers<br>0 No buffer   |
| 19-22 | <b>0000</b> |              | Bolt joint distance    | XXXX   | Joint plate distance from bolt centers – Double Girder<br>0000 Single girder  |
| 23    | <b>-</b>    |              | Color code             | -  | Standard primary paint<br>K Standard finishing paint  |
| 24    | <b>N</b>    |              | Special properties     | N  | Standard<br>E Special   |



### 2.3 RT Top-running End Truck

|           |           |   |           |             |    |           |             |            |             |    |          |
|-----------|-----------|---|-----------|-------------|----|-----------|-------------|------------|-------------|----|----------|
| <b>RT</b> | <b>50</b> | - | <b>27</b> | <b>80</b>   | -  | <b>K5</b> | <b>0500</b> | <b>C</b>   | <b>0000</b> | -  | <b>N</b> |
| 1,2       | 3,4       | 5 | 6,7       | BT08<br>8,9 | 10 | 11,12     | 13-16       | BT19<br>17 | 18-21       | 22 | 23       |

| Pos.  | Code        | Feature code | Feature                    | Available properties  |
|-------|-------------|--------------|----------------------------|---|
| 1,2   | <b>RT</b>   |              | Short product name         | RT R&M  |
| 3,4   | <b>50</b>   |              | Wheel diameter             | 09 90 mm<br>11 110 mm<br>14 140 mm<br>20 200 mm<br>25 250 mm<br>32 320 mm<br>50 500 mm  |
| 5     | -           |              | Description                | - Standard<br>B Bogie (with RT20, -25, -32, -50)<br>C Asymmetrical joint with single girder   |
| 6,7   | <b>27</b>   |              | Wheelbase                  | <u>Wheel base dimension</u><br>14 1400 mm<br>18 1800 mm<br>22 2200 mm<br>27 2700 mm<br>31 3100 mm<br>38 3800 mm<br>45 4500 mm<br>50 5000 mm<br>55 5500 mm<br><u>Applicable end carriage</u><br>RT09, RT11, RT14<br>RT09, RT11, RT14, RT20<br>RT09, RT11, RT14, RT20, RT25, RT32, RT50<br>RT11, RT14, RT20, RT25, RT32, RT50<br>RT14, RT20, RT25, RT32, RT50<br>RT14, RT20, RT25, RT32, RT50<br>RT25, RT32, RT50<br>RT25, RT32, RT50<br>RT25, RT32, RT50 |
| 8,9   | <b>80</b>   | BT08         | Groove width               | <u>Applicable end carriage</u><br>50-65 RT09<br>50-75 RT11, RT14<br>55-100 RT20, RT25, RT32, RT50<br>(100 is 99 in code)  |
| 10    | -           |              | Number of driving wheels   | - One driving wheel/end carriage<br>D Two driving wheels/end carriage<br>S One driving wheel/travel bogie pair<br>D Two driving wheels/travel bogie pair  |
| 11,12 | <b>K5</b>   |              | Joint type                 | <u>Top joints</u><br>P3 4-bolt connection (B<300mm)<br>P4 4-bolt connection (B<350mm)<br>P6 4-bolt connection (B<550mm)<br>L3 8-bolt connection (B<300mm)<br>L4 8-bolt connection (B<410mm)<br>L5 8-bolt connection (B<520mm)<br>K5 12-bolt connection (B<520mm)<br>K7 12-bolt connection (B<740mm)<br><u>Side joints</u><br>R3 RT20<br>R4 RT20<br>R5 RT20  |
| 13-16 | <b>0500</b> |              | Bolt joint distance        | #### Joint plates distance between alignment pin centers with double girder.<br>0000 With single girder, dimension from driving wheel to pin with asymmetrical joint.   |
| 17    | <b>C</b>    | BT19         | Buffer size/type           | RT09 A, B, C, D<br>RT11 A, B, C, D<br>RT14 A, B, C, D<br>RT20 A, B, C, D, E, F, G, H, I, M, K, P, S<br>RT25 B, C, D, E, F, G, H, I, M, K, P, S<br>RT32 B, C, D, E, F, G, H, I, M, K, P, S<br>RT50 B, C, D, E, F, G, H, I, M, K, P, S<br>A...D Rubber buffers<br>E...S Polyurethane buffers<br>0 No buffer   |
| 18-21 | <b>0000</b> |              | Bogie inner wheel distance | 0000 No bogie type end carriage   |
| 22    | -           |              | Colour code                | - Standard primary paint<br>K Standard finishing paint  |
| 23    | <b>N</b>    |              | Special properties         | N Standard<br>E Special   |



## 2.4 RTN and RTL Top-running End Truck

|            |           |          |           |              |          |           |             |            |             |          |          |
|------------|-----------|----------|-----------|--------------|----------|-----------|-------------|------------|-------------|----------|----------|
| <b>RTN</b> | <b>09</b> | <b>-</b> | <b>16</b> | <b>60</b>    | <b>-</b> | <b>A3</b> | <b>0000</b> | <b>C</b>   | <b>0000</b> | <b>-</b> | <b>N</b> |
| 1-3        | 4,5       | 6        | 7,8       | BT08<br>9,10 | 11       | 12,13     | 14-17       | BT19<br>18 | 19-22       | 23       | 24       |

| Pos.                            | Code   | Feature code                                | Feature  | Available properties  |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
|---------------------------------|--|---|--|---|---------------------|--|---|--|----------------|---------------------------------------|-------|--------------------------------|-----------|--|--------------------------------|---|-------|---|-------|--|--------------------------------|---|----|-------------------------------|-------|-----------------------------|--------------------------------|----------------------|----|-------------------------------|-------|----|--------------------------------|-------|----|-------------------------------|-------|----|--------------------------------|-------|----|-------------------------------|-------|----|--------------------------------|-------|----|-------------------------------|-------|----|--------------------------------|-------|----|-------------------------------|-------|----|--------------------------------|-------|----|-------------------------------|-------|--|--|--|------|------------|-----------|------|------------|-----------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|----|----------------------|-------|--|--|--|
| 1-3                             | <b>RTN</b>   |   | Product name   | RTN R&M end truck series – new generation<br>RTL R&M end truck series – new generation  |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 4,5                             | <b>09</b>  |   | Wheel diameter   | <table border="1"> <thead> <tr> <th>Code</th> <th>Wheel diameter</th> <th>End truck</th> <th>Code</th> <th>Wheel diameter</th> <th>End truck</th> </tr> </thead> <tbody> <tr> <td>09</td> <td>90 mm</td> <td>RTN, RCL</td> <td>20</td> <td>200 mm</td> <td>RTN</td> </tr> <tr> <td>11</td> <td>110 mm</td> <td>RTN</td> <td>25</td> <td>250 mm</td> <td>RTN</td> </tr> <tr> <td>16</td> <td>160 mm</td> <td>RTN</td> <td>32</td> <td>315 mm</td> <td>RTN</td> </tr> </tbody> </table>   | Code                | Wheel diameter   | End truck                                   | Code   | Wheel diameter | End truck                             | 09    | 90 mm                          | RTN, RCL  | 20   | 200 mm                         | RTN   | 11    | 110 mm  | RTN   | 25   | 250 mm                         | RTN                                       | 16 | 160 mm                        | RTN   | 32                          | 315 mm                         | RTN                  |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| Code                            | Wheel diameter   | End truck                                   | Code   | Wheel diameter  | End truck           |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 09                              | 90 mm  | RTN, RCL                                    | 20   | 200 mm  | RTN                 |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 11                              | 110 mm   | RTN   | 25   | 250 mm  | RTN                 |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 16                              | 160 mm   | RTN   | 32   | 315 mm  | RTN                 |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 6                               | <b>-</b>   |   | Description  | <table border="1"> <thead> <tr> <th></th> <th></th> <th>C</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>Standard</td> <td>Asymmetrical joint with single girder</td> </tr> <tr> <td>B</td> <td>Bogie (RTN20)</td> <td></td> </tr> </tbody> </table>   |                     |  | C   | -  | Standard       | Asymmetrical joint with single girder | B     | Bogie (RTN20)                  |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
|                                 |  | C   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| -                               | Standard   | Asymmetrical joint with single girder       |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| B                               | Bogie (RTN20)  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 7,8                             | <b>16</b>  |   | Wheelbase  | <table border="1"> <thead> <tr> <th>Wheelbase dimension</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr><td>12</td><td>1200 mm RTN20B, RTN25B</td></tr> <tr><td>13</td><td>1250 mm RTN09, RTL09</td></tr> <tr><td>14</td><td>1400 mm RTN20B, RTN25B, RTN32B</td></tr> <tr><td>16</td><td>1600 mm RTN/RTL09, RTN11, RTN16, RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B</td></tr> <tr><td>18</td><td>1800 mm RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B</td></tr> <tr><td>20</td><td>2000 mm RTN/RTL09, RTN11, RTN16, RTN20, RT20B, RTN25, RTN25B, RTN32, RTN32B</td></tr> <tr><td>25</td><td>2500 mm RTN09, RTN11, RTN16, RTN20, RTN25, RTN32</td></tr> <tr><td>32</td><td>3150 mm RTN11, RTN16, RTN20, RTN25, RTN32</td></tr> <tr><td>40</td><td>4000 mm RTN20, RTN25, RTN32</td></tr> <tr><td>45</td><td>4500 mm RTN20, RTN25, RTN32</td></tr> <tr><td>50</td><td>5000 mm RTN25, RTN32</td></tr> <tr><td>55</td><td>5500 mm RTN25, RTN32</td></tr> </tbody> </table>  | Wheelbase dimension | Applicable end truck   | 12  | 1200 mm RTN20B, RTN25B   | 13             | 1250 mm RTN09, RTL09                  | 14    | 1400 mm RTN20B, RTN25B, RTN32B | 16        | 1600 mm RTN/RTL09, RTN11, RTN16, RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B | 18                             | 1800 mm RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B | 20    | 2000 mm RTN/RTL09, RTN11, RTN16, RTN20, RT20B, RTN25, RTN25B, RTN32, RTN32B | 25    | 2500 mm RTN09, RTN11, RTN16, RTN20, RTN25, RTN32 | 32                             | 3150 mm RTN11, RTN16, RTN20, RTN25, RTN32 | 40 | 4000 mm RTN20, RTN25, RTN32   | 45    | 4500 mm RTN20, RTN25, RTN32 | 50                             | 5000 mm RTN25, RTN32 | 55 | 5500 mm RTN25, RTN32          |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| Wheelbase dimension             | Applicable end truck   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 12                              | 1200 mm RTN20B, RTN25B   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 13                              | 1250 mm RTN09, RTL09   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 14                              | 1400 mm RTN20B, RTN25B, RTN32B   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 16                              | 1600 mm RTN/RTL09, RTN11, RTN16, RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B                                 |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 18                              | 1800 mm RTN20, RTN20B, RTN25, RTN25B, RTN32, RTN32B  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 20                              | 2000 mm RTN/RTL09, RTN11, RTN16, RTN20, RT20B, RTN25, RTN25B, RTN32, RTN32B                                  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 25                              | 2500 mm RTN09, RTN11, RTN16, RTN20, RTN25, RTN32   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 32                              | 3150 mm RTN11, RTN16, RTN20, RTN25, RTN32  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 40                              | 4000 mm RTN20, RTN25, RTN32  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 45                              | 4500 mm RTN20, RTN25, RTN32  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 50                              | 5000 mm RTN25, RTN32   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 55                              | 5500 mm RTN25, RTN32   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 9,10                            | <b>60</b>  | BT08  | Actual groove width  | <table border="1"> <thead> <tr> <th>Min-max. mm</th> <th>Applicable end truck</th> <th>Min-max. mm</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>50-70</td> <td>RTN09, RTL09</td> <td>54-94</td> <td>RTN20</td> </tr> <tr> <td>52-87</td> <td>RTN11</td> <td>54-84</td> <td>RTN25</td> </tr> <tr> <td>54-84</td> <td>RTN16</td> <td>54-94</td> <td>RTN32</td> </tr> </tbody> </table>  | Min-max. mm         | Applicable end truck   | Min-max. mm                                 | Applicable end truck   | 50-70          | RTN09, RTL09                          | 54-94 | RTN20                          | 52-87     | RTN11  | 54-84                          | RTN25   | 54-84 | RTN16   | 54-94 | RTN32  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| Min-max. mm                     | Applicable end truck   | Min-max. mm                                 | Applicable end truck   |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 50-70                           | RTN09, RTL09   | 54-94                                       | RTN20  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 52-87                           | RTN11  | 54-84                                       | RTN25  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 54-84                           | RTN16  | 54-94                                       | RTN32  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 11                              | <b>-</b>   |   | Number of drive wheels   | <table border="1"> <tbody> <tr> <td>-</td> <td>One drive wheel / truck</td> </tr> <tr> <td>D</td> <td>Two drive wheels / truck</td> </tr> </tbody> </table>   | -                   | One drive wheel / truck  | D   | Two drive wheels / truck   |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| -                               | One drive wheel / truck  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| D                               | Two drive wheels / truck   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 12,13                           | <b>A3</b>  |   | Joint type   | <table border="1"> <thead> <tr> <th>Code</th> <th>Top joint</th> <th>End truck</th> <th>Code</th> <th>Top joint</th> <th>End truck</th> </tr> </thead> <tbody> <tr><td>A3</td><td>4-bolts (Fig. width &lt; 300 mm)</td><td>RTN/RTL09</td><td>H4</td><td>12-bolts (Fig. width &lt; 410 mm)</td><td>RTN25</td></tr> <tr><td>A4</td><td>4-bolts (Fig. width &lt; 400 mm)</td><td>RTN11</td><td>H5</td><td>12-bolts (Fig. width &lt; 520 mm)</td><td>RTN25</td></tr> <tr><td>A6</td><td>4-bolts (Fig. width &lt; 600 mm)</td><td>RTN11</td><td>H7</td><td>12-bolts (Fig. width &lt; 740 mm)</td><td>RTN25</td></tr> <tr><td>B4</td><td>8-bolts (Fig. width &lt; 350 mm)</td><td>RTN16</td><td>H9</td><td>12-bolts (Fig. width &lt; 990 mm)</td><td>RTN25</td></tr> <tr><td>B6</td><td>8-bolts (Fig. width &lt; 550 mm)</td><td>RTN16</td><td>K4</td><td>12-bolts (Fig. width &lt; 410 mm)</td><td>RTN32</td></tr> <tr><td>L3</td><td>8-bolts (Fig. width &lt; 300 mm)</td><td>RTN20</td><td>K5</td><td>12-bolts (Fig. width &lt; 520 mm)</td><td>RTN32</td></tr> <tr><td>L4</td><td>8-bolts (Fig. width &lt; 410 mm)</td><td>RTN20</td><td>K7</td><td>12-bolts (Fig. width &lt; 740 mm)</td><td>RTN32</td></tr> <tr><td>L5</td><td>8-bolts (Fig. width &lt; 520 mm)</td><td>RTN20</td><td>K9</td><td>12-bolts (Fig. width &lt; 990 mm)</td><td>RTN32</td></tr> <tr><td>L6</td><td>8-bolts (Fig. width &lt; 630 mm)</td><td>RTN20</td><td></td><td></td><td></td></tr> </tbody> </table><br><table border="1"> <thead> <tr> <th>Code</th> <th>Side joint</th> <th>End truck</th> <th>Code</th> <th>Side joint</th> <th>End truck</th> </tr> </thead> <tbody> <tr><td>R3</td><td>(Fig width &lt; 300 mm)</td><td>RTN20</td><td>Q4</td><td>(Fig width &lt; 410 mm)</td><td>RTN32</td></tr> <tr><td>R4</td><td>(Fig width &lt; 410 mm)</td><td>RTN20</td><td>Q5</td><td>(Fig width &lt; 520 mm)</td><td>RTN32</td></tr> <tr><td>R5</td><td>(Fig width &lt; 520 mm)</td><td>RTN20</td><td>Q6</td><td>(Fig width &lt; 520 mm)</td><td>RTN32</td></tr> <tr><td>R6</td><td>(Fig width &lt; 630 mm)</td><td>RTN20</td><td>Q7</td><td>(Fig width &lt; 740 mm)</td><td>RTN32</td></tr> <tr><td>F4</td><td>(Fig width &lt; 390 mm)</td><td>RTN25</td><td>Q8</td><td>(Fig width &lt; 740 mm)</td><td>RTN32</td></tr> <tr><td>F5</td><td>(Fig width &lt; 520 mm)</td><td>RTN25</td><td>Q9</td><td>(Fig width &lt; 990 mm)</td><td>RTN32</td></tr> <tr><td>F7</td><td>(Fig width &lt; 750 mm)</td><td>RTN25</td><td>Q0</td><td>(Fig width &lt; 990 mm)</td><td>RTN32</td></tr> <tr><td>F8</td><td>(Fig width &lt; 890 mm)</td><td>RTN25</td><td></td><td></td><td></td></tr> </tbody> </table> | Code                | Top joint  | End truck                                   | Code   | Top joint      | End truck                             | A3    | 4-bolts (Fig. width < 300 mm)  | RTN/RTL09 | H4   | 12-bolts (Fig. width < 410 mm) | RTN25   | A4    | 4-bolts (Fig. width < 400 mm)   | RTN11 | H5   | 12-bolts (Fig. width < 520 mm) | RTN25                                     | A6 | 4-bolts (Fig. width < 600 mm) | RTN11 | H7                          | 12-bolts (Fig. width < 740 mm) | RTN25                | B4 | 8-bolts (Fig. width < 350 mm) | RTN16 | H9 | 12-bolts (Fig. width < 990 mm) | RTN25 | B6 | 8-bolts (Fig. width < 550 mm) | RTN16 | K4 | 12-bolts (Fig. width < 410 mm) | RTN32 | L3 | 8-bolts (Fig. width < 300 mm) | RTN20 | K5 | 12-bolts (Fig. width < 520 mm) | RTN32 | L4 | 8-bolts (Fig. width < 410 mm) | RTN20 | K7 | 12-bolts (Fig. width < 740 mm) | RTN32 | L5 | 8-bolts (Fig. width < 520 mm) | RTN20 | K9 | 12-bolts (Fig. width < 990 mm) | RTN32 | L6 | 8-bolts (Fig. width < 630 mm) | RTN20 |  |  |  | Code | Side joint | End truck | Code | Side joint | End truck | R3 | (Fig width < 300 mm) | RTN20 | Q4 | (Fig width < 410 mm) | RTN32 | R4 | (Fig width < 410 mm) | RTN20 | Q5 | (Fig width < 520 mm) | RTN32 | R5 | (Fig width < 520 mm) | RTN20 | Q6 | (Fig width < 520 mm) | RTN32 | R6 | (Fig width < 630 mm) | RTN20 | Q7 | (Fig width < 740 mm) | RTN32 | F4 | (Fig width < 390 mm) | RTN25 | Q8 | (Fig width < 740 mm) | RTN32 | F5 | (Fig width < 520 mm) | RTN25 | Q9 | (Fig width < 990 mm) | RTN32 | F7 | (Fig width < 750 mm) | RTN25 | Q0 | (Fig width < 990 mm) | RTN32 | F8 | (Fig width < 890 mm) | RTN25 |  |  |  |
| Code                            | Top joint  | End truck                                   | Code   | Top joint   | End truck           |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| A3                              | 4-bolts (Fig. width < 300 mm)  | RTN/RTL09                                   | H4   | 12-bolts (Fig. width < 410 mm)  | RTN25               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| A4                              | 4-bolts (Fig. width < 400 mm)  | RTN11                                       | H5   | 12-bolts (Fig. width < 520 mm)  | RTN25               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| A6                              | 4-bolts (Fig. width < 600 mm)  | RTN11                                       | H7   | 12-bolts (Fig. width < 740 mm)  | RTN25               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| B4                              | 8-bolts (Fig. width < 350 mm)  | RTN16                                       | H9   | 12-bolts (Fig. width < 990 mm)  | RTN25               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| B6                              | 8-bolts (Fig. width < 550 mm)  | RTN16                                       | K4   | 12-bolts (Fig. width < 410 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| L3                              | 8-bolts (Fig. width < 300 mm)  | RTN20                                       | K5   | 12-bolts (Fig. width < 520 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| L4                              | 8-bolts (Fig. width < 410 mm)  | RTN20                                       | K7   | 12-bolts (Fig. width < 740 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| L5                              | 8-bolts (Fig. width < 520 mm)  | RTN20                                       | K9   | 12-bolts (Fig. width < 990 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| L6                              | 8-bolts (Fig. width < 630 mm)  | RTN20                                       |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| Code                            | Side joint   | End truck                                   | Code   | Side joint  | End truck           |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| R3                              | (Fig width < 300 mm)   | RTN20                                       | Q4   | (Fig width < 410 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| R4                              | (Fig width < 410 mm)   | RTN20                                       | Q5   | (Fig width < 520 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| R5                              | (Fig width < 520 mm)   | RTN20                                       | Q6   | (Fig width < 520 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| R6                              | (Fig width < 630 mm)   | RTN20                                       | Q7   | (Fig width < 740 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| F4                              | (Fig width < 390 mm)   | RTN25                                       | Q8   | (Fig width < 740 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| F5                              | (Fig width < 520 mm)   | RTN25                                       | Q9   | (Fig width < 990 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| F7                              | (Fig width < 750 mm)   | RTN25                                       | Q0   | (Fig width < 990 mm)  | RTN32               |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| F8                              | (Fig width < 890 mm)   | RTN25                                       |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 14-17                           | <b>0000</b>  |   | Bolt joint distance, mm  | <table border="1"> <tbody> <tr> <td>####</td> <td>The distance between for two joint plates for a double girder crane. It is the distance from alignment pins.</td> <td>0000</td> <td>Dimension from drive wheel to joint plate pin when the joint plate is positioned asymmetrically for a single girder crane.</td> </tr> </tbody> </table>   | ####                | The distance between for two joint plates for a double girder crane. It is the distance from alignment pins. | 0000  | Dimension from drive wheel to joint plate pin when the joint plate is positioned asymmetrically for a single girder crane. |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| ####                            | The distance between for two joint plates for a double girder crane. It is the distance from alignment pins. | 0000  | Dimension from drive wheel to joint plate pin when the joint plate is positioned asymmetrically for a single girder crane. |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 18                              | <b>C</b>   | BT19  | Buffer size/type   | <table border="1"> <tbody> <tr> <td>A, B, C, D</td> <td>Rubber buffers</td> </tr> <tr> <td>E, F, G, H, I, K, M, P, S, T, Y</td> <td>Polyurethane buffers</td> </tr> <tr> <td>0</td> <td>No buffer</td> </tr> </tbody> </table>  | A, B, C, D          | Rubber buffers   | E, F, G, H, I, K, M, P, S, T, Y             | Polyurethane buffers   | 0              | No buffer                             |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| A, B, C, D                      | Rubber buffers   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| E, F, G, H, I, K, M, P, S, T, Y | Polyurethane buffers   |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 0                               | No buffer  |   |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 19-22                           | <b>0000</b>  |   | Bogie inner wheel distance   | <table border="1"> <tbody> <tr> <td>0000</td> <td>0000 = No bogie type end carriage</td> <td>Value = inner wheel distance in millimeters</td> </tr> </tbody> </table>   | 0000                | 0000 = No bogie type end carriage  | Value = inner wheel distance in millimeters |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 0000                            | 0000 = No bogie type end carriage  | Value = inner wheel distance in millimeters |  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 23                              | <b>-</b>   |   | Color code   | <table border="1"> <tbody> <tr> <td>-</td> <td>Standard primary paint</td> <td>K</td> <td>Standard finishing paint</td> </tr> </tbody> </table>   | -                   | Standard primary paint   | K   | Standard finishing paint   |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| -                               | Standard primary paint   | K   | Standard finishing paint   |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| 24                              | <b>N</b>   |   | Special properties   | <table border="1"> <tbody> <tr> <td>N</td> <td>Standard</td> <td>E</td> <td>Special</td> </tr> </tbody> </table>  | N                   | Standard   | E   | Special  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |
| N                               | Standard   | E   | Special  |   |                     |  |   |  |                |                                       |       |                                |           |  |                                |   |       |   |       |  |                                |   |    |                               |       |                             |                                |                      |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |    |                                |       |    |                               |       |  |  |  |      |            |           |      |            |           |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |    |                      |       |  |  |  |



## 2.5 UT Under-running End Truck

|           |           |          |           |             |           |            |          |
|-----------|-----------|----------|-----------|-------------|-----------|------------|----------|
| <b>UT</b> | <b>10</b> | <b>-</b> | <b>14</b> | <b>B180</b> | <b>C3</b> | <b>A</b>   | <b>E</b> |
| 1,2       | 3,4       | 5        | 6,7       | 8-11        | 12,13     | BT19<br>14 | 15       |

| Pos.  | Code        | Feature code | Feature                  | Available properties   |
|-------|-------------|--------------|--------------------------|--|
| 1,2   | <b>UT</b>   |              | Short product name       | UT R&M   |
| 3,4   | <b>10</b>   |              | Wheel diameter           | 10 100 mm<br>13 130 mm<br>16 160 mm  |
| 5     | <b>-</b>    |              |                          |  |
| 6,7   | <b>14</b>   |              | Wheelbase (100 mm)       | UT10 12, 14, 18, 22, 25, 28<br>UT13 12, 14, 18, 22, 25, 28<br>UT16 12, 14, 18, 22, 28  |
| 8-11  | <b>B180</b> |              | Runway beam flange width | UT10 82-300 mm<br>UT13 82-300 mm<br>UT16 90-410 mm<br>i.e. B180 = 180 mm etc.  |
| 12,13 | <b>C3</b>   |              | Joint type               | UT10 00, C3, C5, C6, CS, D1<br>UT13 00, C3, C5, C6, CS, D1<br>UT16 00 (D1, D2, D4, US16)<br><br>Code Description<br>00 End carriage without joint (zero)<br>C3 Modular 1, Low<br>C5 Modular 1, Under<br>C6 Welded connection<br>CS 4-bolt connection<br>(D1) (Welded connection)<br>(D2) (Welded connection)<br>(D4) (Welded connection)<br>(US16) (Welded connection) |
| 14    | <b>A</b>    | BT19         | Buffer type              | UT10 A, B<br>UT13 A, B<br>UT16 A, B, C<br>A...C Rubber buffer<br>0 No buffer   |
| 15    | <b>E</b>    |              | Special properties       | - Standard (Primary Paint)<br>K Modular (Finishing Paint)<br>E Special   |

## 2.6 UC Under-running End Truck

|           |           |          |           |             |          |            |            |          |
|-----------|-----------|----------|-----------|-------------|----------|------------|------------|----------|
| <b>UC</b> | <b>10</b> | <b>-</b> | <b>14</b> | <b>B180</b> | <b>-</b> | <b>C10</b> | <b>A</b>   | <b>K</b> |
| 1,2       | 3,4       | 5        | 6,7       | 8-11        | 12       | 13-15      | BT19<br>16 | 17       |

| Pos.  | Code        | Feature code | Feature                  | Available properties  |
|-------|-------------|--------------|--------------------------|---|
| 1,2   | <b>UC</b>   |              | Short product name       | UC R&M  |
| 3,4   | <b>10</b>   |              | Wheel diameter           | 10 100 mm<br>13 130 mm<br>16 160 mm   |
| 5     | <b>-</b>    |              |                          |   |
| 6,7   | <b>14</b>   |              | Wheelbase (100 mm)       | UC10 14, 17, 22, 25<br>UC13 14, 17, 22, 25<br>UC16 14, 17, 22, 25             |
| 8-11  | <b>B180</b> |              | Runway beam flange width | UC10 82-330 mm<br>UC13 82-330 mm<br>UC16 98-330 mm<br>i.e. B180 = 180 mm etc. |
| 12    | <b>-</b>    |              | Driving wheels           | - One driving wheel/end carriage<br>D Two driving wheels/end carriage         |
| 13-15 | <b>C10</b>  |              | Joint type               | UC10 C10<br>UC13 C10<br>UC16 C10  |
| 16    | <b>A</b>    | BT19         | Buffer type              | UC10 A<br>UC13 A<br>UC16 A<br>A Rubber buffer<br>0 No buffer                  |
| 17    | <b>K</b>    |              | Special properties       | - Primary Paint<br>K Standard, finishing paint<br>E Special                   |



## 2.7 RU and RH Under-running End Truck

|           |           |          |           |                |          |            |             |            |             |          |          |
|-----------|-----------|----------|-----------|----------------|----------|------------|-------------|------------|-------------|----------|----------|
| <b>RU</b> | <b>08</b> | <b>-</b> | <b>23</b> | <b>080</b>     | <b>-</b> | <b>SA3</b> | <b>0000</b> | <b>C</b>   | <b>0000</b> | <b>-</b> | <b>N</b> |
| 1,2       | 3,4       | 5        | 6,7       | BT08<br>8,9,10 | 11       | 12,13,14   | 15-18       | BT19<br>19 | 20-23       | 24       | 25       |

| Position | Code   | Feature code                               | Feature                    | Available properties   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
|----------|--|--|----------------------------|--|------------------------|---|----------------------|------|---|----------------------|-----|---|------------------------|-----|---|------------------------|-----|---|------------------------|-----|---|------------------------|-----|---|------------------------|------|--|----------------------|-----|---|------------------------|-----|---|------------|-----|---|------|-----|---|------|-----|---|------|-----|---|------|-----|---|------|-----|---|------|-----|---|------|-----|---|------|-----|-------------------|--|------|---|----------------------|-----|--------|------|-----|--------|------|-----|--------|------|------|---------------|----------------------|------|-------------------------------|------------------------|
| 1,2      | <b>RU</b>  |  | Product name               | RU R&M end truck series; Platform series (UU); I-beam frame<br>RH R&M end truck series; Platform series (UR); U-shape frame  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 3,4      | <b>08</b>  |  | Wheel diameter             | 08 80 mm<br>10 100 mm<br>13 130 mm   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 5        | <b>-</b>   |  | Description                | - Standard<br>B Bogie<br>C Asymmetrical joint location for single girder   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 6,7      | <b>23</b>  |  | Wheelbase                  | <table border="1"> <thead> <tr> <th>Code</th> <th>Wheelbase</th> <th>Applicable end truck</th> <th>Code</th> <th>Wheelbase</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>1200 mm</td> <td>RU08, RU10, RH10, RU13</td> <td>23</td> <td>2300 mm</td> <td>RU08, RU10, RH10, RU13</td> </tr> <tr> <td>14</td> <td>1400 mm</td> <td>RU08, RU10, RH10, RU13</td> <td>28</td> <td>2800 mm</td> <td>RU08, RU10, RH10, RU13</td> </tr> <tr> <td>18</td> <td>1800 mm</td> <td>RU08, RU10, RH10, RU13</td> <td>32</td> <td>3200 mm</td> <td>RU10, RU13</td> </tr> <tr> <td>23</td> <td>2300 mm</td> <td>RU08, RU10, RH10, RU13</td> <td>35</td> <td>3500 mm</td> <td>RU10, RU13</td> </tr> </tbody> </table>   | Code                   | Wheelbase                                       | Applicable end truck | Code | Wheelbase                                 | Applicable end truck | 12  | 1200 mm                                   | RU08, RU10, RH10, RU13 | 23  | 2300 mm                                   | RU08, RU10, RH10, RU13 | 14  | 1400 mm                                   | RU08, RU10, RH10, RU13 | 28  | 2800 mm                                   | RU08, RU10, RH10, RU13 | 18  | 1800 mm                                   | RU08, RU10, RH10, RU13 | 32   | 3200 mm  | RU10, RU13           | 23  | 2300 mm                                   | RU08, RU10, RH10, RU13 | 35  | 3500 mm                                   | RU10, RU13 |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| Code     | Wheelbase  | Applicable end truck                       | Code                       | Wheelbase  | Applicable end truck   |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 12       | 1200 mm  | RU08, RU10, RH10, RU13                     | 23                         | 2300 mm  | RU08, RU10, RH10, RU13 |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 14       | 1400 mm  | RU08, RU10, RH10, RU13                     | 28                         | 2800 mm  | RU08, RU10, RH10, RU13 |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 18       | 1800 mm  | RU08, RU10, RH10, RU13                     | 32                         | 3200 mm  | RU10, RU13             |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 23       | 2300 mm  | RU08, RU10, RH10, RU13                     | 35                         | 3500 mm  | RU10, RU13             |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 8-10     | <b>080</b>   |  | Runway flange width        | <u>Flange width range. Applicable end truck</u><br>073-313 73-313 mm, RU08 (63...158 mm special flange range with patented track wheels)<br>083-322 83-322 mm, RU10 (61...157 mm special flange range with patented track wheels)<br>083-322 83-322 mm, RH10 (61...157 mm special flange range with patented track wheels)<br>100-343 100-343 mm, RU13 (64-223 mm special flange range with patented track wheels)   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 11       | <b>-</b>   |  | Number of bridge drives    | - One drive / end truck<br>D Two drives / end truck<br>S One drive / bogie truck<br>D Two drives / bogie truck   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 12-14    | <b>SA3</b>   |  | Joint type                 | <table border="1"> <thead> <tr> <th>Code</th> <th>Bolted joint connection <b>with</b> joint plate</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>SA3</td> <td>4-bolt connection (Flange width &lt; 300 mm)</td> <td>RU08</td> </tr> <tr> <td>SB4</td> <td>4-bolt connection (Flange width &lt; 410 mm)</td> <td>RU10</td> </tr> <tr> <td>SC3</td> <td>8-bolt connection (Flange width &lt; 310 mm)</td> <td>RU13</td> </tr> <tr> <td>SC4</td> <td>8-bolt connection (Flange width &lt; 410 mm)</td> <td>RU13</td> </tr> <tr> <td>SC5</td> <td>8-bolt connection (Flange width &lt; 510 mm)</td> <td>RU13</td> </tr> <tr> <td>HB4</td> <td>4-bolt connection (Flange width &lt; 410 mm)</td> <td>RH10</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th>Code</th> <th>Bolted joint connection <b>without</b> joint plate</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>BA1</td> <td>4-bolt connection (Flange width &lt; 203 mm)</td> <td>RU08</td> </tr> <tr> <td>BA2</td> <td>4-bolt connection (Flange width &lt; 253 mm)</td> <td>RU08</td> </tr> <tr> <td>BA3</td> <td>4-bolt connection (Flange width &lt; 310 mm)</td> <td>RU08</td> </tr> <tr> <td>BB2</td> <td>4-bolt connection (Flange width &lt; 265 mm)</td> <td>RU10</td> </tr> <tr> <td>BB3</td> <td>4-bolt connection (Flange width &lt; 315 mm)</td> <td>RU10</td> </tr> <tr> <td>BB4</td> <td>4-bolt connection (Flange width &lt; 415 mm)</td> <td>RU10</td> </tr> <tr> <td>BB5</td> <td>4-bolt connection (Flange width &lt; 450 mm)</td> <td>RU10</td> </tr> <tr> <td>BC3</td> <td>8-bolt connection (Flange width &lt; 315 mm)</td> <td>RU13</td> </tr> <tr> <td>BC4</td> <td>8-bolt connection (Flange width &lt; 415 mm)</td> <td>RU13</td> </tr> <tr> <td>BC5</td> <td>8-bolt connection (Flange width &lt; 450 mm)</td> <td>RU13</td> </tr> <tr> <td>KBx</td> <td>4-bolt connection</td> <td>RH10, x=2, 3, 4, 5 defines the bolt layout</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th>Code</th> <th>Welded joint <b>without</b> joint plate</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>WA_</td> <td>Welded</td> <td>RU08</td> </tr> <tr> <td>WB_</td> <td>Welded</td> <td>RU10</td> </tr> <tr> <td>WC_</td> <td>Welded</td> <td>RU13</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th>Code</th> <th>Special joint</th> <th>Applicable end truck</th> </tr> </thead> <tbody> <tr> <td>0000</td> <td>Special joint design required</td> <td>RU08, RU10, RU13, RH10</td> </tr> </tbody> </table> | Code                   | Bolted joint connection <b>with</b> joint plate | Applicable end truck | SA3  | 4-bolt connection (Flange width < 300 mm) | RU08                 | SB4 | 4-bolt connection (Flange width < 410 mm) | RU10                   | SC3 | 8-bolt connection (Flange width < 310 mm) | RU13                   | SC4 | 8-bolt connection (Flange width < 410 mm) | RU13                   | SC5 | 8-bolt connection (Flange width < 510 mm) | RU13                   | HB4 | 4-bolt connection (Flange width < 410 mm) | RH10                   | Code | Bolted joint connection <b>without</b> joint plate | Applicable end truck | BA1 | 4-bolt connection (Flange width < 203 mm) | RU08                   | BA2 | 4-bolt connection (Flange width < 253 mm) | RU08       | BA3 | 4-bolt connection (Flange width < 310 mm) | RU08 | BB2 | 4-bolt connection (Flange width < 265 mm) | RU10 | BB3 | 4-bolt connection (Flange width < 315 mm) | RU10 | BB4 | 4-bolt connection (Flange width < 415 mm) | RU10 | BB5 | 4-bolt connection (Flange width < 450 mm) | RU10 | BC3 | 8-bolt connection (Flange width < 315 mm) | RU13 | BC4 | 8-bolt connection (Flange width < 415 mm) | RU13 | BC5 | 8-bolt connection (Flange width < 450 mm) | RU13 | KBx | 4-bolt connection | RH10, x=2, 3, 4, 5 defines the bolt layout | Code | Welded joint <b>without</b> joint plate | Applicable end truck | WA_ | Welded | RU08 | WB_ | Welded | RU10 | WC_ | Welded | RU13 | Code | Special joint | Applicable end truck | 0000 | Special joint design required | RU08, RU10, RU13, RH10 |
| Code     | Bolted joint connection <b>with</b> joint plate    | Applicable end truck                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| SA3      | 4-bolt connection (Flange width < 300 mm)          | RU08                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| SB4      | 4-bolt connection (Flange width < 410 mm)          | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| SC3      | 8-bolt connection (Flange width < 310 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| SC4      | 8-bolt connection (Flange width < 410 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| SC5      | 8-bolt connection (Flange width < 510 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| HB4      | 4-bolt connection (Flange width < 410 mm)          | RH10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| Code     | Bolted joint connection <b>without</b> joint plate | Applicable end truck                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BA1      | 4-bolt connection (Flange width < 203 mm)          | RU08                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BA2      | 4-bolt connection (Flange width < 253 mm)          | RU08                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BA3      | 4-bolt connection (Flange width < 310 mm)          | RU08                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BB2      | 4-bolt connection (Flange width < 265 mm)          | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BB3      | 4-bolt connection (Flange width < 315 mm)          | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BB4      | 4-bolt connection (Flange width < 415 mm)          | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BB5      | 4-bolt connection (Flange width < 450 mm)          | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BC3      | 8-bolt connection (Flange width < 315 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BC4      | 8-bolt connection (Flange width < 415 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| BC5      | 8-bolt connection (Flange width < 450 mm)          | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| KBx      | 4-bolt connection                                  | RH10, x=2, 3, 4, 5 defines the bolt layout |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| Code     | Welded joint <b>without</b> joint plate            | Applicable end truck                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| WA_      | Welded   | RU08                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| WB_      | Welded   | RU10                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| WC_      | Welded   | RU13                                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| Code     | Special joint                                      | Applicable end truck                       |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 0000     | Special joint design required                      | RU08, RU10, RU13, RH10                     |                            |  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 15-18    | <b>0000</b>  |  | Bolt joint distance        | ##### The distance between for two joint plates for a double girder crane. It is the distance from alignment pins. 0000 Dimension from drive wheel to joint plate pin when the joint plate is positioned asymmetrically for a single girder crane.   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 19       | <b>C</b>   | BT19                                       | Buffer type                | RU08 A, B, C, K, G<br>RU10, RH10 A, B, C, K, G<br>RU13 A, B, C, K, G<br>A...C Rubber buffers<br>K...G Polyurethane buffers<br>0 No buffer  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 20-23    | <b>0000</b>  |  | Bogie inner wheel distance | 0000 No standard bogie end truck   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 24       | <b>-</b>   |  | Color code                 | - Standard primary paint<br>K Standard finishing paint   |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |
| 25       | <b>N</b>   |  | Special properties         | N Standard<br>E Special  |                        |   |                      |      |   |                      |     |   |                        |     |   |                        |     |   |                        |     |   |                        |     |   |                        |      |  |                      |     |   |                        |     |   |            |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |   |      |     |                   |  |      |   |                      |     |        |      |     |        |      |     |        |      |      |               |                      |      |                               |                        |



### 3 TRAVELING MACHINERIES PRODUCT CODE

#### 3.1 GE Drive

|           |          |          |           |          |           |           |          |          |              |                 |          |
|-----------|----------|----------|-----------|----------|-----------|-----------|----------|----------|--------------|-----------------|----------|
| <b>GE</b> | <b>K</b> | <b>1</b> | <b>06</b> | <b>P</b> | <b>T</b>  | <b>1</b>  | <b>B</b> | <b>O</b> | <b>F06MA</b> | <b>200-6400</b> | <b>N</b> |
| 1,2       | 3        | 4        | 5,6       | 7        | TG05<br>8 | TG06<br>9 | 10       | 11       | 12-16        | 17-24           | 25       |

| Pos.  | Code            | Feature code | Feature                       | Available properties  |
|-------|-----------------|--------------|-------------------------------|---|
| 1,2   | <b>GE</b>       |              | Gear                          | GE  |
| 3     | <b>K</b>        |              | Type                          | K Specific Trolley Drive (WRH)<br>L Specific Trolley Drive (ECH)<br>M Hollow shaft<br>S Solid shaft<br>T Reserved<br>N Reserved   |
| 4     | <b>1</b>        |              | Machinery size (Torque Range) | 1 0 Nm < T <sub>2</sub> < 50 Nm<br>2 16 Nm < T <sub>2</sub> < 125 Nm<br>3 40 Nm < T <sub>2</sub> < 320 Nm<br>4 100 Nm < T <sub>2</sub> < 800 Nm<br>5 250 Nm < T <sub>2</sub> < 2000 Nm<br>6 630 Nm < T <sub>2</sub> < 5000 Nm   |
| 5,6   | <b>06</b>       |              | Ratio code                    | 01... 1 <sup>st</sup> mark: 0, 1, 2 ... 9, A (=10), B(=11),...<br>...99... 2 <sup>nd</sup> mark: 0, 1, 2 ... 9<br>...H9 e.g. A0≅100, B0≅110, G5≅165, etc.   |
| 7     | <b>P</b>        |              | Options                       | P Standard, no options (plain)<br>F Flywheel<br>G Gantry type gear (RES4, RES5)<br>V Stronger version (RES320V, RES316V, RES313V with MF06LB motor)   |
| 8     | <b>T</b>        | TG05         | Secondary shaft type          | T Driving Pinion<br>K Keyway<br>S Spline<br>D Spline + Plain<br>E Reserved (Special)  |
| 9     | <b>1</b>        | TG06         | Version type                  | 1...9 Versioning of machinery e.g. spline size, shaft size  |
| 10    | <b>B</b>        |              | Color                         | B B-Black (Dark grey)   |
| 11    | <b>O</b>        |              | Future reservation            | O No feature  |
| 12-16 | <b>F06MA</b>    |              | Motor type and size           | F Motor type code (B, F, T, etc.)<br>06 Frame size (e.g. 06, 07...)<br>M Stator length (S, M, L, Z, E)<br>A Power code (A, B, C...)   |
| 17-24 | <b>200-6400</b> |              | Motor ID-code                 | ID of the motor, if special then Winding data and Power supply data: 200-6400 (fourth mark, pos 20 "dash")<br>200 Number of HS- and LS-polepairs<br>- Filling mark "dash"<br>5 Power Supply frequency: 5-50Hz, 6-60Hz<br>400 Power supply Voltage, e.g. 380, 400, ... |
| 25    | <b>N</b>        |              | Order type                    | E Special Order, details defined with P.O.<br>N Normal Order (e.g. Standard Motor)  |





### 3.3 DS/TM Bridge Drive

|                               |                            |               |                         |                |                          |                        |                           |                              |                |
|-------------------------------|----------------------------|---------------|-------------------------|----------------|--------------------------|------------------------|---------------------------|------------------------------|----------------|
| <b>DS2</b><br>(TG01)<br>1,2,3 | <b>25</b><br>(TG03)<br>4,5 | <b>R</b><br>6 | <b>F07LA104</b><br>7-14 | <b>P</b><br>15 | <b>C</b><br>(TG05)<br>16 | <b>A</b><br>TG07<br>17 | <b>5</b><br>(ELE03)<br>18 | <b>400</b><br>ELE01<br>19-21 | <b>-</b><br>16 |
|-------------------------------|----------------------------|---------------|-------------------------|----------------|--------------------------|------------------------|---------------------------|------------------------------|----------------|

| Pos.  | Code            | Feature code | Feature                                     | Available properties  |  |
|-------|-----------------|--------------|---|---|--|
| 1,2,3 | <b>DS2</b>      | (TG01)       | Machinery type                              | DS1 for UT10, UT13, UC10 and UC13 end carriages and hoist trolleys<br>DS2 for CT9 and CT11 end carriages and hoist trolleys<br>DS3 for CT14, UT10, UT13, UT16, UC10, UC13 and UC16 end carriages and hoist trolleys   | DS4 for CT14, UT10, UT13, UT16, UC10, UC13 and UC16 end carriages and hoist trolleys<br>TM4 for CT20 and CT25 end carriages and hoist trolleys<br>TM5 for CH25 and CH32 end carriages and hoist trolleys |
| 4,5   | <b>25</b>       | (TG03)       | Gear ratio                                  | DS1 09, 13, 15, 20<br>DS2 20, 25, 32, 40, 50<br>DS3 (07), (09), (13), (15), 20, 25, 32, 40, 50, 63, 80<br>DS4 (07), (09), (13), (15), 20, 25, 32, 40, 50<br>TM4 28, 36, 45, 56, 70, 90, 112 (NOTICE: here 112 is marked 12)<br>TM5 14, 18, 22, 28, 36, 45, 56, 70, 90   | e.g. TG03 value = 09   |
| 6     | <b>R</b>        |              | Gear box issue                              | R DS1, DS2, DS3, DS4<br>M TM4, TM5<br>G TM4xxG, TM5xxG (for Modular Gantry Crane (MGC))   |  |
| 7-14  | <b>F07LA104</b> |              | Motor type                                  | DS1 F07S-104<br>DS2 F07LA104 F07LA100<br>DS3 F07LA104 F07LA100 F07LB100 F07LB104 F07LA200<br>DS4 F07ZC104 F07ZB206 F07ZC100 F07LB200<br>TM4 F07ZC104 F07ZB206 F07ZC100 F07LB200<br>TM5 F09LA104 F09LB104 F10L-104 F11LB104 F11LA208<br>F09LA206 F09LB206 F10L-206 F11LB206 F11LB208<br>F09LA200 F09LB200 F10L-100 F11LB200 F11LC208<br>F09LA100 F09LB100 F10L-200 F11LB300<br>F09LA300 F09LB300 F10L-300 F11LB400 |  |
| 15    | <b>P</b>        |              | Flywheel (Travel gear primary shaft option) | F Flywheel included<br>P Without flywheel   |  |
| 16    | <b>C</b>        | (TG05)       | Secondary shaft type                        | B Spline shaft<br>B Hollow shaft w. Spline<br>U D30 + Keyway<br>C Plain<br>D Spline + Plain<br>K Hollow shaft w. Keyway<br>K D25 + Keyway<br>L D25 + Keyway + Thread  | <u>TG05 value</u><br>S DS2, DS3, DS4 (for CT e.c)<br>B TM4, TM5 (for CT, CH)<br>U DS3, DS4 (for UT16)<br>C DS1, DS3, DS4 (for UT10/13 and C10/13/16)<br>D DS2, DS4<br>K TM5<br>K DS3, DS4<br>L DS3, DS4  |
| 17    | <b>A</b>        | TG07         | Gearwheel on secondary shaft                | - No gearwheel, for UC10...16 end carriages<br>A for UT10...13 end carriages (UT10-OP6 Gearwheel)<br>B for UT16 end carriages (LS13M-OP2 Gearwheel)   |  |
| 18    | <b>5</b>        | (ELE03)      | Frequency                                   | <u>ELE03 value</u><br>5 50 Hz 50<br>6 60 Hz 60  |  |
| 19-21 | <b>400</b>      | ELE01        | Voltage                                     | 400 400 V etc.  |  |
| 22    | <b>-</b>        |              | Special features                            | - Standard<br>K with Modular Crane package<br>E including special properties  | Q With Q plug system<br>S Q plug system including special properties   |



## 4 POWER SUPPLY PACKAGE PRODUCT CODE

### 4.1 Electrification System

|           |          |          |          |          |          |          |          |          |                  |           |            |          |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|------------------|-----------|------------|----------|
| <b>QQ</b> | <b>S</b> | <b>M</b> | <b>S</b> | <b>1</b> | <b>2</b> | <b>L</b> | <b>4</b> | <b>A</b> | <b>P4</b>        | <b>20</b> | <b>105</b> | <b>-</b> |
| 1,2       | 3        | 4        | BT03     | 6        | (GE09)   | DES01    | (GE16)   | (DIM03)  | (HM01)<br>(HM02) | (ELE01)   | DIM18      | 18       |
|           |          |          |          |          |          |          |          |          | 11,12            | 13,14     | 15-17      |          |

| Pos.  | Code       | Feature code     | Feature                  | Available properties   |  |
|-------|------------|------------------|--------------------------|--|--|
| 1,2   | <b>QQ</b>  |                  | Crane layout             | QQ Wire rope hoist, crane with moveable pendant<br>QM Wire rope hoist, monorail system   | XQ Chain hoist crane<br>XM Chain hoist, monorail system  |
| 3     | <b>S</b>   |                  | Type of power supply     | S Flat cables<br>C Conductor rails   | E NRGmaster (Energy chain electrification system; requires radio controls, WRH)  |
| 4     | <b>M</b>   |                  | Power supply for         | C Crane<br>M Hoist and pendant P.B. control station  | H Hoist<br>P Pendant P.B. control station  |
| 5     | <b>S</b>   | BT03             | Crane type               | S Single girder, top running<br>U Single girder, under running<br>D Double girder  | C Compact crane<br>M Monorail hoist  |
| 6     | <b>1</b>   |                  | Number of hoists         | 1 1 hoist/bridge<br>2 2 hoist/bridge<br>3 3 hoist/bridge   |  |
| 7     | <b>2</b>   | (GE09)           | Hoist frame size         | 0 SX1: ø243 mm rope drum<br>1 SX2/SX3: ø303 mm rope drum<br>2 SX4: ø355 mm rope drum<br>3 SX5: ø406 mm rope drum   | <u>GE09 value</u><br>Z<br>4 SX6: ø608 mm rope drum<br>5 SX7: ø608 mm drum + 2 motors<br>7 Chain hoist frame size<br>D<br>E<br>01, 05, 10,<br>16, 20, 25  |
| 8     | <b>L</b>   | DES01            | Trolley type             | L Low headroom trolley<br>H Double girder trolley (high connection)<br>M Double girder trolley (medium connection)<br>W Double girder trolley (low connection)<br>N Normal headroom trolley  | F Fixed hoist<br>J Special low headroom trolley<br>V Machinery hoist<br>X Special trolley  |
| 9     | <b>4</b>   | (GE16)           | Main girder height       | 1...9 Height 100...900mm, e.g. 400 mm = 4<br>Note: Monorail = 9 -> Height > 900mm<br>X Height > 900mm  | e.g. GE16 value = 100...900  |
| 10    | <b>A</b>   | (DIM03)          | Flange width (B-measure) | 0 Double girder trolleys C 380...529 mm<br>A 80...229 mm D 530...690 mm<br>B 230...379 mm  | e.g. DIM03 value = 80 (mm)   |
| 11,12 | <b>P4</b>  | (HM01)<br>(HM02) | Hoisting motor type/size | <u>Hoisting motor type</u><br>P Pole change motor 6:1 (Q-hoist)<br>T Frequency converter motor (Q-hoist)<br>R Pole change motor 3:1 (Q-hoist)<br>C Cast iron pole change motor (Q-hoist)<br>E Ex-proof pole change motor (Q-hoist)<br>O Single speed motor (Q-hoist)<br>1 Two-speed motor (chain hoist)<br>2 Single speed motor (chain hoist)<br>3 Inverter-duty motor (chain hoist)<br>4 Two-speed motor (chain hoist)<br>- Undefined | <u>Hoisting motor size</u><br>X Nom. power 1.5 kW / 50 Hz<br>1 Nom. power 1.8 kW / 50 Hz<br>Z Nom. power 2.5 kW / 50 Hz<br>2 Nom. power 3.6 kW / 50 Hz<br>3 Nom. power 4.5 kW / 50 Hz<br>4 Nom. power 7.5 kW / 50 Hz<br>5 Nom. power 9 kW / 50 Hz<br>6 Nom. power 15 kW / 50 Hz<br>7 Nom. power 18 kW / 50 Hz<br>8 Nom. power 23 kW / 50 Hz<br>9 Nom. power 28 kW / 50 Hz<br>A Nom. power 35 kW / 50 Hz<br>B Chain hoist: Nom. Power 0.5 kW / 50Hz<br>A Chain hoist: Nom. Power 1.0 kW / 50Hz<br>F 2 x 15 kW = 30 kW (MF13)<br>H 2 x 18 kW = 36 kW (MF13)<br>J 2 x 23 kW = 44 kW (MF13)<br>K 2 x 28 kW = 56 kW (MF13)<br>- Undefined |
| 13,14 | <b>20</b>  | (ELE01)          | Main voltage range       | 20 50 Hz: (U/10) - 20, Example (400 V / 10) - 20 = 20<br>76 60 Hz: (U/10) + 30, Example (460 V / 10) + 30 = 76   | e.g. ELE01 value = 400 (V)   |
| 15-17 | <b>105</b> | DIM18            | Span/length of runway    | <u>DIM18 value</u><br>095 9.5 m<br>105 10.5 m  |  |
| 18    | <b>-</b>   |                  | Special properties       | - Standard<br>E Special  |  |



## 5 CONTROL PANEL PRODUCT CODE

### 5.1 Bridge Panel for QX Crane Package (Wire Rope Hoist)

|                  |                         |                         |               |                |                          |                          |                |                            |                |                               |                           |                |
|------------------|-------------------------|-------------------------|---------------|----------------|--------------------------|--------------------------|----------------|----------------------------|----------------|-------------------------------|---------------------------|----------------|
| <b>BP</b><br>1-6 | <b>P</b><br>(HM01)<br>7 | <b>2</b><br>(HM02)<br>8 | <b>-</b><br>9 | <b>2</b><br>10 | <b>2</b><br>(TR01)<br>11 | <b>2</b><br>(BT01)<br>12 | <b>4</b><br>13 | <b>V3</b><br>PE13<br>14,15 | <b>-</b><br>16 | <b>20</b><br>(ELE01)<br>17,18 | <b>H</b><br>(ELE02)<br>19 | <b>0</b><br>20 |
|------------------|-------------------------|-------------------------|---------------|----------------|--------------------------|--------------------------|----------------|----------------------------|----------------|-------------------------------|---------------------------|----------------|

| Pos.               | Code      | Feature code                              | Feature                 | Available properties   |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
|--------------------|-----------|---|-------------------------|--|---|-------------------|--------------------|-------------------|---|---|------------|---|--------------------------------------|----------------------------|---|---|--------------------|---|--------------------------------------|---|---|--------------------------|---|---|--------------------------|---|---|--------------------------|---|---|--------------------------|--|
| 1-6                | <b>BP</b> |   | Product name            | BP R&M   |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 7                  | <b>P</b>  | (HM01)                                    | Hoist motor type        | P Two-speed motor 6:1<br>T Frequency converter motor<br>R Two-speed motor 3:1<br>C Cast iron two-speed motor   | <table border="0"> <tr> <td><u>HM01 value</u></td> <td></td> <td><u>HM01 value</u></td> </tr> <tr> <td>P</td> <td>S</td> <td>Other type</td> </tr> <tr> <td>T</td> <td>E</td> <td>Ex-proof pole change motor</td> </tr> <tr> <td>R</td> <td>O</td> <td>Single speed motor</td> </tr> <tr> <td>C</td> <td></td> <td></td> </tr> </table> | <u>HM01 value</u> |                    | <u>HM01 value</u> | P | S   | Other type | T | E                                    | Ex-proof pole change motor | R | O   | Single speed motor | C |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| <u>HM01 value</u>  |           | <u>HM01 value</u>                         |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| P                  | S         | Other type                                |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| T                  | E         | Ex-proof pole change motor                |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| R                  | O         | Single speed motor                        |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| C                  |           |   |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 8                  | <b>2</b>  | (HM02)                                    | Motor power             | <table border="0"> <tr> <td><u>HM02 value</u></td> <td></td> <td><u>HM02 value</u></td> </tr> <tr> <td>X</td> <td>7</td> <td>18 kW / 50 Hz (MF13)</td> </tr> <tr> <td>1</td> <td>8</td> <td>23 kW / 50 Hz (MF13)</td> </tr> <tr> <td>Z</td> <td>9</td> <td>28 kW / 50 Hz (MF13)</td> </tr> <tr> <td>2</td> <td>A</td> <td>35 kW / 50 Hz (MF13)</td> </tr> <tr> <td>3</td> <td>F</td> <td>2 x 15 kW = 30 kW (MF13)</td> </tr> <tr> <td>4</td> <td>H</td> <td>2 x 18 kW = 36 kW (MF13)</td> </tr> <tr> <td>5</td> <td>J</td> <td>2 x 23 kW = 44 kW (MF13)</td> </tr> <tr> <td>6</td> <td>K</td> <td>2 x 28 kW = 56 kW (MF13)</td> </tr> </table> | <u>HM02 value</u>   |                   | <u>HM02 value</u>  | X                 | 7 | 18 kW / 50 Hz (MF13)                      | 1          | 8 | 23 kW / 50 Hz (MF13)                 | Z                          | 9 | 28 kW / 50 Hz (MF13)                      | 2                  | A | 35 kW / 50 Hz (MF13)                 | 3 | F | 2 x 15 kW = 30 kW (MF13) | 4 | H | 2 x 18 kW = 36 kW (MF13) | 5 | J | 2 x 23 kW = 44 kW (MF13) | 6 | K | 2 x 28 kW = 56 kW (MF13) |  |
| <u>HM02 value</u>  |           | <u>HM02 value</u>                         |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| X                  | 7         | 18 kW / 50 Hz (MF13)                      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 1                  | 8         | 23 kW / 50 Hz (MF13)                      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| Z                  | 9         | 28 kW / 50 Hz (MF13)                      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 2                  | A         | 35 kW / 50 Hz (MF13)                      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 3                  | F         | 2 x 15 kW = 30 kW (MF13)                  |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 4                  | H         | 2 x 18 kW = 36 kW (MF13)                  |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 5                  | J         | 2 x 23 kW = 44 kW (MF13)                  |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 6                  | K         | 2 x 28 kW = 56 kW (MF13)                  |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 9                  | <b>-</b>  |   |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 10                 | <b>2</b>  |   |                         | Nbr of hoists on the bridge  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 11                 | <b>2</b>  | (TR01)                                    | Trolley travel control  | <table border="0"> <tr> <td><u>TR01 value</u></td> <td></td> <td><u>TR01 value</u></td> </tr> <tr> <td>1</td> <td>M</td> <td>Freq. control D2M mounted in bridge panel</td> </tr> <tr> <td>2</td> <td>N</td> <td>Freq. control D2M mounted on trolley</td> </tr> <tr> <td>C</td> <td>Q</td> <td>Freq. control D2C mounted in bridge panel</td> </tr> <tr> <td>D</td> <td>D</td> <td>Freq. control D2C mounted on trolley</td> </tr> </table>   | <u>TR01 value</u>   |                   | <u>TR01 value</u>  | 1                 | M | Freq. control D2M mounted in bridge panel | 2          | N | Freq. control D2M mounted on trolley | C                          | Q | Freq. control D2C mounted in bridge panel | D                  | D | Freq. control D2C mounted on trolley |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| <u>TR01 value</u>  |           | <u>TR01 value</u>                         |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 1                  | M         | Freq. control D2M mounted in bridge panel |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 2                  | N         | Freq. control D2M mounted on trolley      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| C                  | Q         | Freq. control D2C mounted in bridge panel |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| D                  | D         | Freq. control D2C mounted on trolley      |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 12                 | <b>2</b>  | (BT01)                                    | Bridge travel control   | <table border="0"> <tr> <td><u>BT01 value</u></td> <td></td> <td><u>BT01 value</u></td> </tr> <tr> <td>1</td> <td>M</td> <td>Frequency control D2M</td> </tr> <tr> <td>2</td> <td>Q</td> <td>Frequency control DMCS</td> </tr> <tr> <td>C</td> <td></td> <td></td> </tr> </table>  | <u>BT01 value</u>   |                   | <u>BT01 value</u>  | 1                 | M | Frequency control D2M                     | 2          | Q | Frequency control DMCS               | C                          |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| <u>BT01 value</u>  |           | <u>BT01 value</u>                         |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 1                  | M         | Frequency control D2M                     |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 2                  | Q         | Frequency control DMCS                    |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| C                  |           |   |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 13                 | <b>4</b>  |   | Panel size              | 4 Height 400 mm, depth 250 mm (EEC) *<br>6 Height 600 mm, depth 250 mm (EEF) *   | A Height 1000 mm, depth 350 mm (KA220) *  |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 14,15              | <b>V3</b> | PE13                                      | Selection of the hoists | V2 Selection I or II, Two hoists controlled separately, one at time<br>V3 Selection I, I+II, II, Two hoists controlled one at time or common controls (I+II)   | 00 Without selection<br>VE Special selection  |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 16                 | <b>-</b>  |   |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 17,18              | <b>20</b> | (ELE01)                                   | Main voltage            | 20 50 Hz: (Main voltage / 10) – 20 e.g. (400 V / 10) – 20 = 20<br>76 60 Hz: (Main voltage / 10) + 30 e.g. (460 V / 10) + 30 = 76<br>etc.   | e.g. ELE01 value = 400 (V)  |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 19                 | <b>H</b>  | (ELE02)                                   | Control voltage         | <table border="0"> <tr> <td><u>ELE02 value</u></td> <td></td> <td><u>ELE02 value</u></td> </tr> <tr> <td>H</td> <td>N</td> <td>230 V</td> </tr> <tr> <td>J</td> <td></td> <td></td> </tr> </table>   | <u>ELE02 value</u>  |                   | <u>ELE02 value</u> | H                 | N | 230 V                                     | J          |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| <u>ELE02 value</u> |           | <u>ELE02 value</u>                        |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| H                  | N         | 230 V                                     |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| J                  |           |   |                         |  |   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |
| 20                 | <b>0</b>  |   | System features         | 0 Standard BP  | E Special application   |                   |                    |                   |   |   |            |   |                                      |                            |   |   |                    |   |                                      |   |   |                          |   |   |                          |   |   |                          |   |   |                          |  |



5.2 Bridge Panel for QL Crane Package (Chain Hoist)

|                  |                         |                         |               |                |                          |                          |                |                            |                |                               |                           |                |
|------------------|-------------------------|-------------------------|---------------|----------------|--------------------------|--------------------------|----------------|----------------------------|----------------|-------------------------------|---------------------------|----------------|
| <b>BP</b><br>1-6 | <b>1</b><br>(HM01)<br>7 | <b>1</b><br>(HM02)<br>8 | <b>-</b><br>9 | <b>1</b><br>10 | <b>T</b><br>(TR01)<br>11 | <b>Q</b><br>(BT01)<br>12 | <b>4</b><br>13 | <b>00</b><br>PE13<br>14,15 | <b>-</b><br>16 | <b>76</b><br>(ELE01)<br>17,18 | <b>J</b><br>(ELE02)<br>19 | <b>0</b><br>20 |
|------------------|-------------------------|-------------------------|---------------|----------------|--------------------------|--------------------------|----------------|----------------------------|----------------|-------------------------------|---------------------------|----------------|

| Pos.  | Code      | Feature code | Feature                 | Available properties   |   |
|-------|-----------|--------------|-------------------------|--|---|
| 1-6   | <b>BP</b> |              | Product name            | BP R&M   |   |
| 7     | <b>1</b>  | (HM01)       | Hoist motor type        | 1 Two-speed motor<br>2 Single-speed motor (not used)<br>3 Inverter-duty motor  | <u>HM01 value</u><br>1<br>2<br>3  |
| 8     | <b>2</b>  | (HM02)       | Motor power             | C 1.0 kW / 1.3 hp / 60 Hz, C1/V1 motor<br>1 2.1 kW / 2.8 hp / 60 Hz, C2/V2 motor<br>3 4.2 kW / 5.6 hp / 60 Hz, C3/V2 motor   | <u>HM02 value</u><br>C<br>1<br>3<br>Hoist Model – Motor type (two-speed/inverter)<br>LM05 – C1/V1 motor<br>LM10 – C2/V2 motor<br>LM16 – C3/V3 motor<br>LM20 – C3/V3 motor<br>LM25 – C3/V3 motor |
| 9     | <b>-</b>  |              |                         |  |   |
| 10    | <b>1</b>  |              |                         | Number of hoists on the bridge<br>1 – one hoist on bridge<br>2 – two hoist on bridge   |   |
| 11    | <b>T</b>  | (TR01)       | Trolley travel control  | <u>TR01 value</u><br>TMU TMU Trolley Drive Unit – inverter on motor T  |   |
| 12    | <b>Q</b>  | (BT01)       | Bridge travel control   | 1 1-speed<br>2 2-speed   | <u>BT01 value</u><br>1SP<br>2SP<br>M Frequency control CM Select D2M<br>Q Frequency control CMXC DYD  |
| 13    | <b>4</b>  |              | Panel size              | 4 Height 400 mm, depth 250 mm (EEC) *<br>6 Height 600 mm, depth 250 mm (EEF) *   | A Height 1000 mm, depth 350 mm (KA220) *  |
| 14,15 | <b>00</b> | PE13         | Selection of the hoists | V2 Selection I or II, Two hoists controlled separately, one at a time<br>V3 Selection I, I+II, II, Two hoists controlled, one at a time or common controls (I+II)  | 00 Without selection<br>VE Special selection  |
| 16    | <b>-</b>  |              |                         |  |   |
| 17,18 | <b>76</b> | (ELE01)      | Main voltage            | 20 50 Hz: (Main voltage / 10) – 20 e.g. (400 V / 10) – 20 = 20<br>76 60 Hz: (Main voltage / 10) + 30 e.g. (460 V / 10) + 30 = 76<br>53 60 Hz: (Main voltage / 10) + 30 e.g. (230 V / 10) + 30 = 53<br>etc. | e.g. ELE01 value = 400 (V)  |
| 19    | <b>J</b>  | (ELE02)      | Control voltage         | H 48 V<br>J 115 V  | <u>ELE02 value</u><br>48<br>115<br>N 230 V<br><u>ELE02 value</u><br>230   |
| 20    | <b>0</b>  |              | System features         | 0 Standard BP  | E Special application   |



## 6 CONTROL SYSTEM PRODUCT CODE

### 6.1 PBR Push Button Pendant

|                  |                       |                            |               |               |               |                       |                           |                            |                    |                     |                              |                |
|------------------|-----------------------|----------------------------|---------------|---------------|---------------|-----------------------|---------------------------|----------------------------|--------------------|---------------------|------------------------------|----------------|
| <b>PB</b><br>1,2 | <b>R</b><br>GE01<br>3 | <b>08</b><br>(PE11)<br>4,5 | <b>2</b><br>6 | <b>2</b><br>7 | <b>2</b><br>8 | <b>1</b><br>PE12<br>9 | <b>D</b><br>(ELE44)<br>10 | <b>V3</b><br>PE13<br>11,12 | <b>-N</b><br>13,14 | <b>092</b><br>15-17 | <b>PE3</b><br>ELE16<br>18-20 | <b>0</b><br>21 |
|------------------|-----------------------|----------------------------|---------------|---------------|---------------|-----------------------|---------------------------|----------------------------|--------------------|---------------------|------------------------------|----------------|

| Pos.  | Code                   | Feature code | Feature                         | Available properties  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
|-------|------------------------|--------------|---------------------------------|---|--|--------------------|--|--------------------|---|----------------------|-----|---------------------------|---|------------------------|-----|-------------------|---|------------------------|-----|-------------------|--|--|--|------|--|--|--|-----|--|--|--|------|
| 1,2   | <b>PB</b>              |              | Product name                    | PB  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 3     | <b>R</b>               | GE01         | Brand                           | R R&M   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 4,5   | <b>08</b>              | (PE11)       | Pendant housing type            | 04 Housing with 4 (+1) holes for buttons on front, without plug connector for rising cable <span style="float:right"><u>PE11 value</u><br/>PBQ04</span><br>08 Housing with 8 (+1) holes for buttons on front, with plug connector for rising cable <span style="float:right">PBQ08</span><br>12 Housing with 12 (+1) holes for buttons on front, with plug connector for rising cable <span style="float:right">PBQ12</span><br>• (+1) = all models have possibility to mount one aux. device<br>• all models have Emergency stop button as standard  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 6     | <b>2</b>               |              | Hoisting control type           | 2 2-step push button<br>1 1-step push button<br>0 Without hoisting buttons  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 7     | <b>2</b>               |              | Trolley travel control type     | 2 2-step push button<br>1 1-step push button<br>0 Without trolley travel buttons  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 8     | <b>2</b>               |              | Bridge travel control type      | 2 2-step push button<br>1 1-step push button<br>0 Without bridge travel buttons   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 9     | <b>1</b>               | PE12         | Main contactor button function  | 0 No main contactor button, pendant without main contactor push-button<br>1 Main contactor, push button energizing main contactor.<br>2 Main contactor + horn, push-button energizing the main contactor and horn at the same time  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 10    | <b>D</b>               | (ELE44)      | Direction symbols               | <table border="0" style="width:100%"> <tr> <td></td> <td style="text-align:center"><u>ELE44 value</u></td> <td></td> <td style="text-align:center"><u>ELE44 value</u></td> </tr> <tr> <td>D</td> <td>DIN and FEM standard</td> <td>DIN</td> <td>C ANSI standard (compass)</td> </tr> <tr> <td>F</td> <td>SFS standard (finnish)</td> <td>FIN</td> <td>L English letters</td> </tr> <tr> <td>S</td> <td>SIS standard (swedish)</td> <td>SEN</td> <td>E Special symbols</td> </tr> <tr> <td></td> <td></td> <td></td> <td>ANSI</td> </tr> <tr> <td></td> <td></td> <td></td> <td>ENG</td> </tr> <tr> <td></td> <td></td> <td></td> <td>SPEC</td> </tr> </table> |  | <u>ELE44 value</u> |  | <u>ELE44 value</u> | D | DIN and FEM standard | DIN | C ANSI standard (compass) | F | SFS standard (finnish) | FIN | L English letters | S | SIS standard (swedish) | SEN | E Special symbols |  |  |  | ANSI |  |  |  | ENG |  |  |  | SPEC |
|       | <u>ELE44 value</u>     |              | <u>ELE44 value</u>              |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| D     | DIN and FEM standard   | DIN          | C ANSI standard (compass)       |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| F     | SFS standard (finnish) | FIN          | L English letters               |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| S     | SIS standard (swedish) | SEN          | E Special symbols               |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
|       |                        |              | ANSI                            |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
|       |                        |              | ENG                             |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
|       |                        |              | SPEC                            |   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 11,12 | <b>V3</b>              | PE13         | Hoist selection switch function | V2 Selection I or II, Two hoists controlled separately, one at time<br>V3 Selection I, I+II, II, Two hoists controlled one at time or common controls (I+II)<br>00 Without selection<br>VE Special selection  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 13,14 | <b>-N</b>              |              | Aux device mounting             | -N No auxiliary device<br>-A Mounting plate for one extra button or switch<br>-C HoistMonitor PPlus DISPLAY   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 15-17 | <b>092</b>             |              | Rising cable length             | Length is given from the bottom of the P.B. housing to the festoon C-rail<br>092 9.2 m<br>135 13.5 m<br>000 Without cable etc.  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 18-20 | <b>PE3</b>             | ELE16        | Pendant cable top connector     | PE1 Connector connected to the bridge panel (for back-up use)<br>PE2 Connector connected to the hoist panel (monorail hoists)<br>PE3 Connector connected to the festoon (moveable pendant)<br>000 Without connector   |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |
| 21    | <b>0</b>               |              | System features                 | 0 Standard PBR<br>K Key switch for ON/OFF<br>E Special application  |  |                    |  |                    |   |                      |     |                           |   |                        |     |                   |   |                        |     |                   |  |  |  |      |  |  |  |     |  |  |  |      |



6.2 PD Push Button Pendant

|           |           |          |          |          |          |           |            |               |               |          |                  |               |          |
|-----------|-----------|----------|----------|----------|----------|-----------|------------|---------------|---------------|----------|------------------|---------------|----------|
| <b>PD</b> | <b>12</b> | <b>-</b> | <b>2</b> | <b>2</b> | <b>2</b> | <b>2</b>  | <b>N</b>   | <b>D</b>      | <b>V3</b>     | <b>-</b> | <b>092</b>       | <b>P</b>      | <b>0</b> |
| 1,2       | 3,4       | 5        | 6        | 7        | 8        | PE12<br>9 | PE15<br>10 | (ELE44)<br>11 | PE13<br>12,13 | 14       | (PEN02)<br>15-17 | (ELE16)<br>18 | 19       |

| Pos.  | Code       | Feature code | Feature                                  | Available properties   |  |
|-------|------------|--------------|--|--|--|
| 1,2   | <b>PD</b>  |              | Product name                             | PD   |  |
| 3,4   | <b>12</b>  |              | Type of housing                          | 04 Housing with 4 holes for buttons on front<br>06 Housing with 6 holes for buttons on front         | 08 Housing with 8 holes for buttons on front<br>12 Housing with 12 holes for buttons on front  |
| 5     | <b>-</b>   |              |  |  |  |
| 6     | <b>2</b>   |              | Hoisting control type                    | 1 1-step push-button<br>2 2-step push-button   | 0 Without hoisting buttons   |
| 7     | <b>2</b>   |              | Trolley travel control type              | 1 1-step push-button<br>2 2-step push-button   | 0 Without trolley travel buttons   |
| 8     | <b>2</b>   |              | Bridge travel control type               | 1 1-step push-button<br>2 2-step push-button   | 0 Without bridge travel buttons  |
| 9     | <b>2</b>   | PE12         | Main contactor on button                 | 1 Push-button for main contactor energizing<br>2 Push-button both main contactor energizing and horn | 0 Without push-button for main contactor energizing and horn   |
| 10    | <b>N</b>   | PE15         | Emergency stop                           | N Normal mushroom button   | K Mushroom button with key for releasing   |
| 11    | <b>D</b>   | (ELE44)      | Symbols                                  | D DIN standard<br>F Finnish standard<br>S Swedish standard   | C ANSI standard<br>L English letters<br>E Special symbols  |
| 12,13 | <b>V3</b>  | PE13         | Selection of the hoists                  | V2 Selection I or II<br>V3 Selection I, I+II, II   | 00 Without selection<br>VE Special selection   |
| 14    | <b>-</b>   |              |  |  |  |
| 15-17 | <b>092</b> | (PEN02)      | Rising cable length                      | 092 9.2 meters<br>135 13.5 meters etc.<br>000 Without cable  | Length is given from the bottom of the P.B. housing EITHER to the festoon C-rail (in case of moveable pendant) OR to the bottom of the hoist panel (in case of monorail hoist) PEN02 value = 9.2 m / 13.5 m etc. |
| 18    | <b>P</b>   | (ELE16)      | Connector on the top of the rising cable | P Plug connector for the festoon (Moveable pendant)<br>0 Without connector                           | H Connected to the hoist panel (monorail hoist)<br>B Connected to bridge panel (for back-up use)   |
| 19    | <b>0</b>   |              | System features                          | 0 Standard PD  | E Special application  |



### 6.3 RaCon Radio Control

|              |              |               |          |          |          |                  |                  |                |                |           |
|--------------|--------------|---------------|----------|----------|----------|------------------|------------------|----------------|----------------|-----------|
| <b>RaCon</b> | <b>516</b>   | <b>MI</b>     | <b>0</b> | <b>S</b> | <b>0</b> | <b>TD</b>        | <b>RP</b>        | <b>CE</b>      | <b>00</b>      | <b>ST</b> |
| 1-5          | REM10<br>6-8 | REM11<br>9,10 | 11       | 12       | 13       | (ELE44)<br>14,15 | (ELE02)<br>16,17 | REM12<br>18,19 | REM13<br>20,21 | 22,23     |

| Pos.  | Code   | Feature code        | Feature               | Available properties  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
|-------|--|---------------------|-----------------------|---|--|--|---------------------|--|---------------------|----|---|-----|----|------------------------------|----|--|-----|----|---------------------|----|------------------------|-----|----|----------------------|
| 1-5   | <b>RaCon</b>                                     |                     | Product name          | RaCon R&M   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 6-8   | <b>516</b>                                       | REM10               | Receiver              | 508 Monorail hoist<br>516 16 relay outputs - Crane<br>524 24 relay outputs - Crane<br>735 35 relay outputs (> 16 relays) - Crane  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 9,10  | <b>MI</b>  | REM11               | Transmitter           | MI Transmitter with max. 10 pcs. 2-step pushbuttons for 3 motions, light, horn<br>M2 Transmitter with max. 8 pcs. 2-step pushbuttons for 3 motions, light, horn, display for HoistMonitor<br>EC Transmitter with 2 pcs. 2-step joysticks for 3 motions, light, horn (Standard joystick)<br>SP Transmitter with 2 pcs. 2-step joysticks for 3 motions, light, horn (Standard joystick)<br>SA Transmitter with 2 pcs. analog joysticks for 3 motions, light, horn ( NOTE: only with 735 receiver)                                     |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 11    | <b>0</b>   |                     | Infra-key system      | I Included<br>0 Not included  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 12    | <b>S</b>   |                     | Hoist selector switch | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>REM19 Value</u></td> <td></td> <td style="text-align: right;"><u>REM19 Value</u></td> </tr> <tr> <td>A</td> <td>3 positions (I, I+II, II) + Main Aux switch</td> <td></td> <td></td> <td>VM</td> </tr> <tr> <td>K</td> <td>7 positions (I, II, III, I+II, II+III, I+II+III)</td> <td></td> <td></td> <td>V7</td> </tr> <tr> <td>0</td> <td>Not included</td> <td></td> <td></td> <td>-</td> </tr> </table>  |  |  | <u>REM19 Value</u>  |  | <u>REM19 Value</u>  | A  | 3 positions (I, I+II, II) + Main Aux switch |     |    | VM                           | K  | 7 positions (I, II, III, I+II, II+III, I+II+III) |     |    | V7                  | 0  | Not included           |     |    | -                    |
|       |  | <u>REM19 Value</u>  |                       | <u>REM19 Value</u>  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| A     | 3 positions (I, I+II, II) + Main Aux switch      |                     |                       | VM  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| K     | 7 positions (I, II, III, I+II, II+III, I+II+III) |                     |                       | V7  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 0     | Not included                                     |                     |                       | -   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 13    | <b>0</b>   |                     | Auxiliary device      | A Included (1 x ON, 2 x OFF)<br>0 Not included  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 14,15 | <b>TD</b>  | (ELE44)             | Direction symbols     | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>ELE 44 value</u></td> <td></td> <td style="text-align: right;"><u>ELE 44 value</u></td> </tr> <tr> <td>TD</td> <td>DIN and FEM standard</td> <td>DIN</td> <td>TC</td> <td>ANSI standard (compass) ANSI</td> </tr> <tr> <td>TF</td> <td>SFS standard (finnish)</td> <td>FIN</td> <td>TL</td> <td>English letters ENG</td> </tr> <tr> <td>TS</td> <td>SIS standard (swedish)</td> <td>SEN</td> <td>SS</td> <td>Special symbols SPEC</td> </tr> </table> |  |  | <u>ELE 44 value</u> |  | <u>ELE 44 value</u> | TD | DIN and FEM standard                        | DIN | TC | ANSI standard (compass) ANSI | TF | SFS standard (finnish)                           | FIN | TL | English letters ENG | TS | SIS standard (swedish) | SEN | SS | Special symbols SPEC |
|       |  | <u>ELE 44 value</u> |                       | <u>ELE 44 value</u>   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| TD    | DIN and FEM standard                             | DIN                 | TC                    | ANSI standard (compass) ANSI  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| TF    | SFS standard (finnish)                           | FIN                 | TL                    | English letters ENG   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| TS    | SIS standard (swedish)                           | SEN                 | SS                    | Special symbols SPEC  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 16,17 | <b>RP</b>  | (ELE02)             | Receiver power supply | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>ELE02 value</u></td> <td></td> <td style="text-align: right;"><u>ELE02 value</u></td> </tr> <tr> <td>RP</td> <td>48 V, 50/60 Hz</td> <td>48</td> <td>RV</td> <td>230 V, 50/60 Hz 230</td> </tr> <tr> <td>RT</td> <td>115 V, 50/60 Hz</td> <td>115</td> <td>RX</td> <td>48-230 V, 50/60 Hz</td> </tr> </table>   |  |  | <u>ELE02 value</u>  |  | <u>ELE02 value</u>  | RP | 48 V, 50/60 Hz                              | 48  | RV | 230 V, 50/60 Hz 230          | RT | 115 V, 50/60 Hz                                  | 115 | RX | 48-230 V, 50/60 Hz  |    |                        |     |    |                      |
|       |  | <u>ELE02 value</u>  |                       | <u>ELE02 value</u>  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| RP    | 48 V, 50/60 Hz                                   | 48                  | RV                    | 230 V, 50/60 Hz 230   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| RT    | 115 V, 50/60 Hz                                  | 115                 | RX                    | 48-230 V, 50/60 Hz  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 18,19 | <b>CE</b>  | REM12               | Charger type          | CE 230 V, 50/60 Hz euro plug<br>CB 230 V, 50/60 Hz wires for local plug<br>CU 115 V, 50/60 Hz USA plug  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 20,21 | <b>00</b>  | REM13               | Tandem operation      | 00 No tandem operation<br>T1 Single transmitter **)<br>T2 Dual transmitter **)<br>TM Master transmitter **)<br>TS Slave transmitter<br>CR Catch / Release   |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |
| 22,23 | <b>ST</b>  |                     | System features       | ST Standard REMOX system<br>S2 Standard REMOX system with spare transmitter included<br>SP Special application<br>P2 Special application with spare transmitter included  |  |  |                     |  |                     |    |   |     |    |                              |    |  |     |    |                     |    |                        |     |    |                      |

\*\* ) Crane selector switch is included.



6.4 RaCon Series II Radio Control

|                     |                        |                    |                |                               |                               |                             |
|---------------------|------------------------|--------------------|----------------|-------------------------------|-------------------------------|-----------------------------|
| <b>RaCon</b><br>1-7 | <b>II</b><br>GE01<br>8 | <b>S11</b><br>9-11 | <b>0</b><br>12 | <b>TD</b><br>(ELE44)<br>13,14 | <b>RP</b><br>(ELE02)<br>15,16 | <b>CE</b><br>REM12<br>17,18 |
|---------------------|------------------------|--------------------|----------------|-------------------------------|-------------------------------|-----------------------------|

| Pos.  | Code                          | Feature code       | Feature                           | Available properties  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
|-------|-------------------------------|--------------------|-----------------------------------|---|----|-------------------------------|--------------------|--------------------------|--------------------|----------------------------|----------------------|-----|----|------------------------------|----|------------------------|-----|----|---------------------|----|------------------------|-----|----|----------------------|
| 1-7   | <b>RaCon</b>                  |                    | Product name                      |   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 8     | <b>II</b>                     | GE01               | Brand                             |   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 9-11  | <b>S11</b>                    |                    | Type of housing                   | S11 For standard 1 hoist per crane<br>F13 Like S11 + place for selector, and display to read the HoistMonitor unit  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 12    | <b>0</b>                      |                    | Selector switch for hoist trolley | 0 Without selector<br>S Selector I, I+II, II  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 13,14 | <b>TD</b>                     | (ELE44)            | Direction symbols                 | <table border="0"> <tr> <td></td> <td></td> <td><u>ELE44 value</u></td> <td></td> <td><u>ELE44 value</u></td> </tr> <tr> <td>TD</td> <td>DIN and FEM standard</td> <td>DIN</td> <td>TC</td> <td>ANSI standard (compass) ANSI</td> </tr> <tr> <td>TF</td> <td>SFS standard (finnish)</td> <td>FIN</td> <td>TL</td> <td>English letters ENG</td> </tr> <tr> <td>TS</td> <td>SIS standard (swedish)</td> <td>SEN</td> <td>SS</td> <td>Special symbols SPEC</td> </tr> </table> |    |                               | <u>ELE44 value</u> |                          | <u>ELE44 value</u> | TD                         | DIN and FEM standard | DIN | TC | ANSI standard (compass) ANSI | TF | SFS standard (finnish) | FIN | TL | English letters ENG | TS | SIS standard (swedish) | SEN | SS | Special symbols SPEC |
|       |                               | <u>ELE44 value</u> |                                   | <u>ELE44 value</u>  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| TD    | DIN and FEM standard          | DIN                | TC                                | ANSI standard (compass) ANSI  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| TF    | SFS standard (finnish)        | FIN                | TL                                | English letters ENG   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| TS    | SIS standard (swedish)        | SEN                | SS                                | Special symbols SPEC  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 15,16 | <b>RP</b>                     | (ELE02)            | Receiver power supply             | <table border="0"> <tr> <td></td> <td></td> <td><u>ELE02 value</u></td> <td></td> <td><u>ELE02 value</u></td> </tr> <tr> <td>RP</td> <td>48 V 50/60 Hz</td> <td>48</td> <td>RV</td> <td>230 V 50/60 Hz 230</td> </tr> <tr> <td>RT</td> <td>115 V 50/60 Hz</td> <td>115</td> <td></td> <td></td> </tr> </table>  |    |                               | <u>ELE02 value</u> |                          | <u>ELE02 value</u> | RP                         | 48 V 50/60 Hz        | 48  | RV | 230 V 50/60 Hz 230           | RT | 115 V 50/60 Hz         | 115 |    |                     |    |                        |     |    |                      |
|       |                               | <u>ELE02 value</u> |                                   | <u>ELE02 value</u>  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| RP    | 48 V 50/60 Hz                 | 48                 | RV                                | 230 V 50/60 Hz 230  |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| RT    | 115 V 50/60 Hz                | 115                |                                   |   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| 17,18 | <b>CE</b>                     | REM12              | Charger type                      | <table border="0"> <tr> <td>CE</td> <td>230 V, 50/60 Hz European plug</td> <td>CU</td> <td>115 V, 50/60 Hz USA plug</td> </tr> <tr> <td>CB</td> <td>230 V, 50/60 Hz local plug</td> <td></td> <td></td> </tr> </table>  | CE | 230 V, 50/60 Hz European plug | CU                 | 115 V, 50/60 Hz USA plug | CB                 | 230 V, 50/60 Hz local plug |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| CE    | 230 V, 50/60 Hz European plug | CU                 | 115 V, 50/60 Hz USA plug          |   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |
| CB    | 230 V, 50/60 Hz local plug    |                    |                                   |   |    |                               |                    |                          |                    |                            |                      |     |    |                              |    |                        |     |    |                     |    |                        |     |    |                      |



## 7 TRAVELING INVERTER PRODUCT CODE

### 7.1 CMXC

|  |   |                                     |                   |                           |                                  |                         |
|--|---|-------------------------------------|-------------------|---------------------------|----------------------------------|-------------------------|
| <b>CMXC</b><br>(TR01)<br>(BT01)<br>1-4 | <b>007</b><br>(ELE84)<br>(ELE85)<br>5-7 | <b>F</b><br>(ELE84)<br>(ELE85)<br>8 | <b>10</b><br>9,10 | <b>P</b><br>(ELE02)<br>11 | <b>0</b><br>ELE87<br>ELE88<br>12 | <b>0</b><br>ELE97<br>13 |
|--|---|-------------------------------------|-------------------|---------------------------|----------------------------------|-------------------------|

| Pos.           | Code  | Feature code  | Feature               | Available properties   |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
|----------------|---|---|-----------------------|--|-----|---|---|---|----------------------------|---|------------------------|-----------------|----|---|------------------|-----|---|-----------------------------|-----|
| 1-4            | <b>CMXC</b>   | (TR01)<br>(BT01)  | Device name           | <table border="0"> <tr> <td></td> <td><u>TR01/BT01 value</u></td> <td></td> </tr> <tr> <td>CMXC</td> <td>DYD</td> <td>TR01 Type of trolley travel control<br/>BT01 Type of bridge travel control</td> </tr> </table>   |     | <u>TR01/BT01 value</u>                                      |   | CMXC  | DYD                        | TR01 Type of trolley travel control<br>BT01 Type of bridge travel control |                        |                 |    |   |                  |     |   |                             |     |
|                | <u>TR01/BT01 value</u>                                      |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| CMXC           | DYD   | TR01 Type of trolley travel control<br>BT01 Type of bridge travel control                                       |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 5-7            | <b>007</b>  | (ELE84)<br>(ELE85)  | Power rating class    | <table border="0"> <tr> <td>007</td> <td>ELE84 Trolley travel inverter power rating</td> </tr> <tr> <td>022</td> <td>ELE85 Bridge travel inverter power rating</td> </tr> <tr> <td>040 (obsolete)</td> <td></td> </tr> </table>  | 007 | ELE84 Trolley travel inverter power rating                  | 022   | ELE85 Bridge travel inverter power rating             | 040 (obsolete)             |   |                        |                 |    |   |                  |     |   |                             |     |
| 007            | ELE84 Trolley travel inverter power rating                  |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 022            | ELE85 Bridge travel inverter power rating                   |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 040 (obsolete) |   |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 8              | <b>F</b>  | (ELE84)<br>(ELE85)  | Supply voltage        | <table border="0"> <tr> <td>F</td> <td>380 – 500 VAC, 50/60 Hz</td> <td>Values are composed of two features,<br/>Power rating class and Supply voltage.<br/>e.g. 007F = ELE84/ELE85 value</td> </tr> </table>  | F   | 380 – 500 VAC, 50/60 Hz                                     | Values are composed of two features,<br>Power rating class and Supply voltage.<br>e.g. 007F = ELE84/ELE85 value |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| F              | 380 – 500 VAC, 50/60 Hz                                     | Values are composed of two features,<br>Power rating class and Supply voltage.<br>e.g. 007F = ELE84/ELE85 value |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 9,10           | <b>10</b>   |   | Revision code         | The latest revision may differ.  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 11             | <b>P</b>  | (ELE02)   | Control voltage       | <table border="0"> <tr> <td></td> <td><u>ELE02 value</u></td> <td></td> </tr> <tr> <td>Y</td> <td>42VAC, 50/60 Hz, only 040F</td> <td></td> </tr> <tr> <td>P</td> <td>48VAC, 50/60 Hz</td> <td>48</td> </tr> <tr> <td>T</td> <td>115VAC, 50/60 Hz</td> <td>115</td> </tr> <tr> <td>V</td> <td>230VAC, 50/60 Hz, only 040F</td> <td>230</td> </tr> </table> |     | <u>ELE02 value</u>  |   | Y   | 42VAC, 50/60 Hz, only 040F |   | P                      | 48VAC, 50/60 Hz | 48 | T | 115VAC, 50/60 Hz | 115 | V | 230VAC, 50/60 Hz, only 040F | 230 |
|                | <u>ELE02 value</u>  |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| Y              | 42VAC, 50/60 Hz, only 040F                                  |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| P              | 48VAC, 50/60 Hz   | 48  |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| T              | 115VAC, 50/60 Hz  | 115   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| V              | 230VAC, 50/60 Hz, only 040F                                 | 230   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 12             | <b>0</b>  | ELE87<br>ELE88  | Braking resistor type | <table border="0"> <tr> <td>N</td> <td>Standard, only 022 and 040F</td> <td rowspan="3">ELE87 Trolley travel inverter braking resistor type<br/>ELE88 Bridge travel inverter braking resistor type</td> </tr> <tr> <td>A</td> <td>Heavy duty, only 022F</td> </tr> <tr> <td>0</td> <td>No resistor, only 007F</td> </tr> </table>                          | N   | Standard, only 022 and 040F                                 | ELE87 Trolley travel inverter braking resistor type<br>ELE88 Bridge travel inverter braking resistor type       | A   | Heavy duty, only 022F      | 0   | No resistor, only 007F |                 |    |   |                  |     |   |                             |     |
| N              | Standard, only 022 and 040F                                 | ELE87 Trolley travel inverter braking resistor type<br>ELE88 Bridge travel inverter braking resistor type       |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| A              | Heavy duty, only 022F                                       |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 0              | No resistor, only 007F                                      |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 13             | <b>0</b>  | ELE97   | EMC level             | <table border="0"> <tr> <td>S</td> <td>Standard, without EMC filters (grounded network), only 040F</td> </tr> <tr> <td>N</td> <td>EMC, Second environment (grounded network), only 040F</td> </tr> <tr> <td>0</td> <td>IT network (non-grounded network)</td> </tr> </table>   | S   | Standard, without EMC filters (grounded network), only 040F | N   | EMC, Second environment (grounded network), only 040F | 0                          | IT network (non-grounded network)   |                        |                 |    |   |                  |     |   |                             |     |
| S              | Standard, without EMC filters (grounded network), only 040F |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| N              | EMC, Second environment (grounded network), only 040F       |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |
| 0              | IT network (non-grounded network)                           |   |                       |  |     |   |   |   |                            |   |                        |                 |    |   |                  |     |   |                             |     |



7.2 ControlMaster Select

|  |   |                                     |                          |                    |                |                |                         |
|--|---|-------------------------------------|--------------------------|--------------------|----------------|----------------|-------------------------|
| <b>CMST</b><br>(TR01)<br>(BT01)<br>1-4 | <b>007</b><br>(ELE84)<br>(ELE85)<br>5-7 | <b>F</b><br>(ELE84)<br>(ELE85)<br>8 | <b>V</b><br>(ELE02)<br>9 | <b>10</b><br>10,11 | <b>B</b><br>12 | <b>0</b><br>13 | <b>N</b><br>ELE97<br>14 |
|--|---|-------------------------------------|--------------------------|--------------------|----------------|----------------|-------------------------|

| Pos.      | Code  | Feature code       | Feature               | Available properties   |           |   |   |   |                       |                                   |   |                           |   |                           |
|-----------|---|--------------------|-----------------------|--|-----------|---|---|---|-----------------------|-----------------------------------|---|---------------------------|---|---------------------------|
| 1-4       | <b>CMST</b>   | (TR01)<br>(BT01)   | Device name           | <table border="0"> <tr> <td></td> <td style="text-align: right;"><u>TR01/BT01 value</u></td> <td></td> </tr> <tr> <td>CMST</td> <td>Control Master Select</td> <td>D2M</td> </tr> </table>   |           | <u>TR01/BT01 value</u>                                |   | CMST  | Control Master Select | D2M                               |   |                           |   |                           |
|           | <u>TR01/BT01 value</u>                                |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| CMST      | Control Master Select                                 | D2M                |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 5-7       | <b>007</b>  | (ELE84)<br>(ELE85) | Power rating class    | <table border="0"> <tr> <td>002 – 022</td> <td></td> </tr> </table>  | 002 – 022 |   |   |   |                       |                                   |   |                           |   |                           |
| 002 – 022 |   |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 8         | <b>F</b>  | (ELE84)<br>(ELE85) | Supply voltage        | <table border="0"> <tr> <td>F</td> <td>380 – 500 VAC, 50/60 Hz</td> </tr> </table>   | F         | 380 – 500 VAC, 50/60 Hz                               |   |   |                       |                                   |   |                           |   |                           |
| F         | 380 – 500 VAC, 50/60 Hz                               |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 9         | <b>V</b>  | (ELE02)            | Control voltage       | <table border="0"> <tr> <td></td> <td style="text-align: center;"><u>ELE02 value</u></td> </tr> <tr> <td>Y</td> <td>42VAC, 50/60 Hz</td> </tr> <tr> <td>P</td> <td>48VAC, 50/60 Hz      48</td> </tr> <tr> <td>T</td> <td>115VAC, 50/60 Hz      115</td> </tr> <tr> <td>V</td> <td>230VAC, 50/60 Hz      230</td> </tr> </table> |           | <u>ELE02 value</u>                                    | Y | 42VAC, 50/60 Hz                             | P                     | 48VAC, 50/60 Hz      48           | T | 115VAC, 50/60 Hz      115 | V | 230VAC, 50/60 Hz      230 |
|           | <u>ELE02 value</u>                                    |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| Y         | 42VAC, 50/60 Hz                                       |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| P         | 48VAC, 50/60 Hz      48                               |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| T         | 115VAC, 50/60 Hz      115                             |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| V         | 230VAC, 50/60 Hz      230                             |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 10,11     | <b>10</b>   |                    | Revision code         | The latest revision may differ.  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 12        | <b>B</b>  |                    | Braking resistor type | <table border="0"> <tr> <td>A</td> <td>External resistor, CMST 018 – 022 (002-004 as option)</td> </tr> <tr> <td>B</td> <td>Internal resistor, CMST 002 – 015</td> </tr> </table>  | A         | External resistor, CMST 018 – 022 (002-004 as option) | B | Internal resistor, CMST 002 – 015           |                       |                                   |   |                           |   |                           |
| A         | External resistor, CMST 018 – 022 (002-004 as option) |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| B         | Internal resistor, CMST 002 – 015                     |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 13        | <b>0</b>  |                    | Mounting              | <table border="0"> <tr> <td>0</td> <td>Standard panel</td> </tr> <tr> <td>W</td> <td>Wall mounting, CMST 002 (003-004 as option)</td> </tr> </table>   | 0         | Standard panel  | W | Wall mounting, CMST 002 (003-004 as option) |                       |                                   |   |                           |   |                           |
| 0         | Standard panel  |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| W         | Wall mounting, CMST 002 (003-004 as option)           |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 14        | <b>N</b>  | ELE97              | EMC level             | <table border="0"> <tr> <td>S</td> <td>Standard, without EMC filters (grounded network)</td> </tr> <tr> <td>N</td> <td>EMC, Second environment (grounded network)</td> </tr> <tr> <td>0</td> <td>IT network (non-grounded network)</td> </tr> </table>   | S         | Standard, without EMC filters (grounded network)      | N | EMC, Second environment (grounded network)  | 0                     | IT network (non-grounded network) |   |                           |   |                           |
| S         | Standard, without EMC filters (grounded network)      |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| N         | EMC, Second environment (grounded network)            |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |
| 0         | IT network (non-grounded network)                     |                    |                       |  |           |   |   |   |                       |                                   |   |                           |   |                           |



## 8 HOISTING INVERTER PRODUCT CODE

### 8.1 ControlMaster Plus

|                              |                              |                          |                          |                    |                |                |                         |
|------------------------------|------------------------------|--------------------------|--------------------------|--------------------|----------------|----------------|-------------------------|
| <b>CMPH</b><br>(HS01)<br>1-4 | <b>007</b><br>(ELE83)<br>5-7 | <b>F</b><br>(ELE83)<br>8 | <b>V</b><br>(ELE02)<br>9 | <b>51</b><br>10,11 | <b>A</b><br>12 | <b>0</b><br>13 | <b>N</b><br>ELE97<br>14 |
|------------------------------|------------------------------|--------------------------|--------------------------|--------------------|----------------|----------------|-------------------------|

| Pos.   | Code               | Feature code | Feature               | Available properties  |  |  |                                     |     |                   |    |                    |     |                    |     |
|--|--------------------|--------------|-----------------------|---|--|--|-------------------------------------|-----|-------------------|----|--------------------|-----|--------------------|-----|
| 1-4  | <b>CMPH</b>        | (HS01)       | Device name           | <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"></td> <td style="text-align: right;"><u>HS01 value</u></td> </tr> <tr> <td>CMPH Control Master Plus – Hoisting</td> <td>D2L</td> </tr> </table>  |  | <u>HS01 value</u>                            | CMPH Control Master Plus – Hoisting | D2L |                   |    |                    |     |                    |     |
|  | <u>HS01 value</u>  |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| CMPH Control Master Plus – Hoisting                | D2L                |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 5-7  | <b>007</b>         | (ELE83)      | Power rating class    | 002 - 055   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 8  | <b>F</b>           | (ELE83)      | Supply voltage        | F 380 – 500 VAC, 50/60 Hz   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 9  | <b>V</b>           | (ELE02)      | Control voltage       | <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;"></td> <td style="text-align: right;"><u>ELE02 value</u></td> </tr> <tr> <td>Y 42VAC, 50/60 Hz</td> <td></td> </tr> <tr> <td>P 48VAC, 50/60 Hz</td> <td style="text-align: right;">48</td> </tr> <tr> <td>T 115VAC, 50/60 Hz</td> <td style="text-align: right;">115</td> </tr> <tr> <td>V 230VAC, 50/60 Hz</td> <td style="text-align: right;">230</td> </tr> </table> |  | <u>ELE02 value</u>                           | Y 42VAC, 50/60 Hz                   |     | P 48VAC, 50/60 Hz | 48 | T 115VAC, 50/60 Hz | 115 | V 230VAC, 50/60 Hz | 230 |
|  | <u>ELE02 value</u> |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| Y 42VAC, 50/60 Hz                                  |                    |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| P 48VAC, 50/60 Hz                                  | 48                 |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| T 115VAC, 50/60 Hz                                 | 115                |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| V 230VAC, 50/60 Hz                                 | 230                |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 10,11  | <b>51</b>          |              | Revision code         | The latest revision may differ.   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 12   | <b>A</b>           |              | Braking resistor type | A External resistor   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 13   | <b>0</b>           |              | Mounting              | 0 Standard panel  |  |  |                                     |     |                   |    |                    |     |                    |     |
| 14   | <b>N</b>           | ELE97        | EMC level             | <table border="0" style="width: 100%;"> <tr> <td>S Standard, without EMC filters (grounded network)</td> </tr> <tr> <td>N EMC, Second environment (grounded network)</td> </tr> <tr> <td>0 IT network (non-grounded network)</td> </tr> </table>  | S Standard, without EMC filters (grounded network) | N EMC, Second environment (grounded network) | 0 IT network (non-grounded network) |     |                   |    |                    |     |                    |     |
| S Standard, without EMC filters (grounded network) |                    |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| N EMC, Second environment (grounded network)       |                    |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |
| 0 IT network (non-grounded network)                |                    |              |                       |   |  |  |                                     |     |                   |    |                    |     |                    |     |



## 8.2 ControlMaster Elite

|   |   |   |                          |                    |                |                |                         |                |                |
|---|---|---|--------------------------|--------------------|----------------|----------------|-------------------------|----------------|----------------|
| <b>CMEH</b><br>(HS01)<br>(TR01/BT01)<br>1-4 | <b>007</b><br>(ELE83)<br>(ELE84/ELE85)<br>5-7 | <b>F</b><br>(ELE83)<br>(ELE84/ELE85)<br>8 | <b>V</b><br>(ELE02)<br>9 | <b>55</b><br>10,11 | <b>A</b><br>12 | <b>0</b><br>13 | <b>0</b><br>ELE97<br>14 | <b>1</b><br>15 | <b>0</b><br>16 |
|---|---|---|--------------------------|--------------------|----------------|----------------|-------------------------|----------------|----------------|

| Pos.  | Code  | Feature code                | Feature               | Available properties   |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
|-------|---|-----------------------------|-----------------------|--|---|---|-----------------------------|---|----------|-----------------|------------------------|---------------------------------|------------|-------------------|----------|------------|------|---------------------------------|---------------|-----|-------|------------------|---|------------------------------|---------------|
| 1-4   | <b>CMEH</b>                                       | (HS01)<br>(TR01/BT01)       | Device name           | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>HS01</u></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>TR01/BT01 value</u></td> <td></td> </tr> <tr> <td>CMEH</td> <td>Hoisting inverter</td> <td></td> <td>D2H</td> </tr> <tr> <td>CMET</td> <td>Travelling inverter</td> <td></td> <td>D2C</td> </tr> </table>   |   |   | <u>HS01</u>                 |   |          |                 | <u>TR01/BT01 value</u> |                                 | CMEH       | Hoisting inverter |          | D2H        | CMET | Travelling inverter             |               | D2C |       |                  |   |                              |               |
|       |   | <u>HS01</u>                 |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
|       |   | <u>TR01/BT01 value</u>      |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| CMEH  | Hoisting inverter                                 |                             | D2H                   |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| CMET  | Travelling inverter                               |                             | D2C                   |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 5-7   | <b>007</b>  | (ELE83)<br>(ELE84/ELE85)    | Power rating class    | 002 - 132  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 8     | <b>F</b>  | (ELE83)<br>(ELE84/ELE85)    | Supply voltage        | F 380 – 500 VAC, 50/60 Hz  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 9     | <b>V</b>  | (ELE02)                     | Control voltage       | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>ELE02 value</u></td> <td></td> </tr> <tr> <td>Y</td> <td>42VAC, 50/60 Hz</td> <td></td> <td></td> </tr> <tr> <td>P</td> <td>48VAC, 50/60 Hz</td> <td></td> <td>48</td> </tr> <tr> <td>T</td> <td>115VAC, 50/60 Hz</td> <td></td> <td>115</td> </tr> <tr> <td>V</td> <td>230VAC, 50/60 Hz</td> <td></td> <td>230</td> </tr> </table>  |   |   | <u>ELE02 value</u>          |   | Y        | 42VAC, 50/60 Hz |                        |                                 | P          | 48VAC, 50/60 Hz   |          | 48         | T    | 115VAC, 50/60 Hz                |               | 115 | V     | 230VAC, 50/60 Hz |   | 230                          |               |
|       |   | <u>ELE02 value</u>          |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| Y     | 42VAC, 50/60 Hz                                   |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| P     | 48VAC, 50/60 Hz                                   |                             | 48                    |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| T     | 115VAC, 50/60 Hz                                  |                             | 115                   |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| V     | 230VAC, 50/60 Hz                                  |                             | 230                   |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 10,11 | <b>55</b>   |                             | Revision code         | The latest revision may differ.  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 12    | <b>A</b>  |                             | Braking resistor type | <table border="0"> <tr> <td>A</td> <td>External resistor</td> </tr> <tr> <td>B</td> <td>Internal resistor (included only CMET up to 015F)</td> </tr> </table>  | A | External resistor                               | B                           | Internal resistor (included only CMET up to 015F) |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| A     | External resistor                                 |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| B     | Internal resistor (included only CMET up to 015F) |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 13    | <b>0</b>  |                             | Mounting              | 0 Standard panel   |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 14    | <b>0</b>  | ELE97                       | EMC level             | <table border="0"> <tr> <td>0</td> <td>Unlimited (non EU-area or non-grounded network)</td> </tr> <tr> <td>N</td> <td>Limited (EU-area, grounded network)</td> </tr> </table>  | 0 | Unlimited (non EU-area or non-grounded network) | N                           | Limited (EU-area, grounded network)               |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 0     | Unlimited (non EU-area or non-grounded network)   |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| N     | Limited (EU-area, grounded network)               |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 15    | <b>1</b>  |                             | Boards                | <table border="0"> <tr> <td></td> <td></td> <td style="text-align: right;"><u>Reserved board slots</u></td> </tr> <tr> <td>0</td> <td>Standard</td> <td>A, B, D</td> </tr> <tr> <td>1</td> <td>Standard with speed supervision</td> <td>A, B, C, D</td> </tr> <tr> <td>2</td> <td>Profibus</td> <td>A, B, D, E</td> </tr> <tr> <td>3</td> <td>Profibus with speed supervision</td> <td>A, B, C, D, E</td> </tr> <tr> <td>8</td> <td>Relay</td> <td>A, B, D, E</td> </tr> <tr> <td>9</td> <td>Relay with speed supervision</td> <td>A, B, C, D, E</td> </tr> </table> |   |   | <u>Reserved board slots</u> | 0   | Standard | A, B, D         | 1                      | Standard with speed supervision | A, B, C, D | 2                 | Profibus | A, B, D, E | 3    | Profibus with speed supervision | A, B, C, D, E | 8   | Relay | A, B, D, E       | 9 | Relay with speed supervision | A, B, C, D, E |
|       |   | <u>Reserved board slots</u> |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 0     | Standard  | A, B, D                     |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 1     | Standard with speed supervision                   | A, B, C, D                  |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 2     | Profibus  | A, B, D, E                  |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 3     | Profibus with speed supervision                   | A, B, C, D, E               |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 8     | Relay   | A, B, D, E                  |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 9     | Relay with speed supervision                      | A, B, C, D, E               |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 16    | <b>0</b>  |                             | Special               | <table border="0"> <tr> <td>0</td> <td>None</td> </tr> <tr> <td>L</td> <td>Varnished boards</td> </tr> </table>  | 0 | None  | L                           | Varnished boards                                  |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| 0     | None  |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |
| L     | Varnished boards                                  |                             |                       |  |   |   |                             |   |          |                 |                        |                                 |            |                   |          |            |      |                                 |               |     |       |                  |   |                              |               |



## 9 ELECTRIC CHAIN HOIST PRODUCT CODE

### 9.1 LoadMate® Electric Chain Hoist / Stagemaker® Concert Hoist

|           |             |            |            |          |           |          |          |                          |          |          |          |            |          |            |          |
|-----------|-------------|------------|------------|----------|-----------|----------|----------|--------------------------|----------|----------|----------|------------|----------|------------|----------|
| <b>LM</b> | <b>05</b>   | <b>050</b> | <b>010</b> | <b>M</b> | <b>16</b> | <b>T</b> | <b>2</b> | <b>C</b>                 | <b>I</b> | <b>4</b> | <b>D</b> | <b>075</b> | <b>S</b> | <b>G</b>   | <b>T</b> |
| 1,2       | GE09<br>3,4 | 5-7        | 8-10       | 11       | 12,13     | 14       | 15       | (ELE01)<br>(ELE03)<br>16 | 17       | 18       | 19       | 20-22      | 23       | RR11<br>24 | 25       |

|          |          |          |          |          |          |            |          |          |          |          |          |              |          |          |
|----------|----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|--------------|----------|----------|
| <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>000</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>#...#</b> | <b>0</b> | <b>0</b> |
| 26       | 27       | 28       | 29       | 30       | 31       | 32-34      | 35       | 36       | 37       | 38       | 39       | 40-48        | 49       | 50       |

| Pos.   | Code       | Feature code       | Feature                       | Available properties   |   |
|--|------------|--------------------|-------------------------------|--|---|
| 1,2  | <b>LM</b>  |                    | Brand                         | LM R&M LoadMate®   | SM Stagemaker®  |
| 3,4  | <b>05</b>  | GE09               | Frame                         | 01<br>05   | 10<br>16<br>20<br>25  |
| 5-7  | <b>050</b> |                    | Capacity                      | <u>Code</u><br>012 125 kg, 1/8 ton<br>025 250 kg, 1/4 ton<br>050 500 kg, 1/2 ton<br>075 750 kg, 3/4 ton  | <u>Code</u><br>100 1000 kg, 1 ton<br>150 1500 kg, 1 1/2 ton<br>200 2000 kg, 2 ton<br>250 2500 kg, 2 1/2 ton   |
| 8-10   | <b>010</b> |                    | Lift                          | 010 Foot increments  | 01 1 fall – 010 to 096<br>05/10/16/20/25 1 fall – 010 to 150<br>2 fall – 010 to 046<br>2 fall – 010 to 075  |
| 11   | <b>M</b>   |                    | Suspension                    | T Top Hook<br>L Lug Mount  | P Push Trolley<br>H Hand Geared Trolley<br>M Motorized Trolley  |
| 12,13  | <b>16</b>  | (SPD03)            | Lift speed                    | 08<br>12   | 16<br>24<br>32<br>64  |
| High speed to low speed = 4:1  |            |                    |                               |  |   |
| 14   | <b>T</b>   | (HS01)             | Hoist speed control           | S Single speed<br>T Two speed  | I Stepless Inverter (VFD)<br>C Programmable Control<br>D Direct Control (SM Config. A only)<br>M Single speed (SM Config. B only)   |
| 15   | <b>2</b>   |                    | Number of falls               | 1 1 fall   | 2 2 falls   |
| 16   | <b>C</b>   | (ELE01)<br>(ELE03) | Voltage                       | A 208/3/60<br>B 230/3/60   | C 460/3/60<br>D 575/3/60<br>E 115/1/60<br>F 380/3/50  |
| For example: ELE01 value = 208 / 230 / 460 (V), ELE03 value = 50 / 60 (Hz) |            |                    |                               |  |   |
| 17   | <b>I</b>   |                    | Trolley control code          | T Two speed<br>I Inverter controlled trolley   | 80/20 FPM (Two speed)<br>65/16 FPM Multi-step<br>0 No motorized trolley   |
| 18   | <b>4</b>   |                    | Beam Flange code              | <u>Code</u><br>1 2.28 - 3.94<br>2 4.17 - 5.90<br>3 6.10 - 7.87<br>4 8.11 - 9.76<br>5 10.23 - 12.09<br><br><u>Code</u> RPT Trolley<br>6 1.97 - 7.87"<br>7 7.88 - 12.20"<br>0 No trolley   | <u>C-1 Trolley</u><br>2.52 - 4.96<br>5.16 - 7.48<br>7.79 - 9.76<br>10.23 - 12.20<br>N/A<br><br><u>C-2 Trolley</u><br>3.23 - 5.39<br>5.39 - 7.48<br>7.79 - 9.76<br>10.23 - 12.20<br>N/A<br><br><u>C-3 Trolley</u><br>3.23 - 4.33<br>4.45 - 5.90<br>6.10 - 7.87<br>8.11 - 9.76<br>10.23 - 12.20<br><br><u>C-5 Trolley</u> |
| 19   | <b>D</b>   |                    | Pendant code                  | A 1 speed hoist only<br>B 2 speed hoist only<br>C 1 speed hoist + 2 speed trolley<br>D 2 speed hoist + 2 speed trolley<br>E 1 speed hoist + 2 speed trolley + 1 speed bridge<br>F 2 speed hoist + 2 speed trolley + 1 speed bridge<br>G 1 speed hoist + 2 speed trolley + 2 speed bridge<br>H 2 speed hoist + 2 speed trolley + 2 speed bridge<br>I 1 speed hoist + 1 speed bridge<br>J 2 speed hoist + 1 speed bridge | K 1 speed hoist + 1 speed trolley<br>L 2 speed hoist + 1 speed trolley<br>M 1 speed hoist + 2 speed bridge<br>N 2 speed hoist + 2 speed bridge<br>O P/B Drop (6'0") less P/B<br>P Pickle – no connector<br>Q Pickle – with Hubble connector<br>Z Digichain<br>0 Omit Push Button totally                                |
| 20-22  | <b>075</b> | (PEN02)            | Pendant height of lift (feet) | 001 - foot increments - equals HOL - actual pendant length = 2.5' < HOL  |   |
| 23   | <b>S</b>   |                    | Suspension                    | A Articulating<br>I Inverted   | L Low headroom<br>S Standard<br>X Cross mount   |
| 24   | <b>G</b>   | RR11               | Chain type                    | B Black<br>G Electro-zinc plated   | S Stainless steel   |



|       |              |         |   |  |   |                    |  |
|-------|--------------|---------|---|--|---|--------------------|--|
| 25    | <b>T</b>     |         | Units                                     | T  | Short tons                                      | K                  | Kilograms  |
| 26    | <b>0</b>     |         | Pigtails                                  | A  | QL Crane Kit                                    | J                  | Power / Control and Control Pigtails (7 pin and Twist lock plugs)  |
|       |              |         |   | B  | Power Pigtail (no plug)                         | K                  | Power Pigtail (Edison plug)  |
|       |              |         |   | C  | Power / Control Pigtail (no plug)               | L                  | Power and Control Pigtails (Edison plug and Twist lock plug)       |
|       |              |         |   | D  | Power and Control Pigtails (no plugs)           | M                  | Power / Control Pigtail (14 pin plug)                              |
|       |              |         |   | E  | Power / Control and Control Pigtails (no plugs) | N                  | Power / Control and Control Pigtails (14 pin and Twist lock plugs) |
|       |              |         |   | F  | Power Pigtail (CE plug)                         | 0                  | No pigtails  |
|       |              |         |   | G  | Power Pigtail (Twist lock plug)                 |                    |  |
|       |              |         |   | H  | Power / Control Pigtail (7 pin plug)            |                    |  |
|       |              |         |   | I  | Power and Control Pigtails (Twist lock plugs)   |                    |  |
| 27    | <b>0</b>     |         | Safety hooks                              | B  | Bullard hook                                    | 0                  | Standard hook  |
|       |              |         |   | P  | Positive action hook                            |                    |  |
| 28    | <b>0</b>     |         | Second brake                              | B  | Second brake                                    | 0                  | Standard hoist brake   |
| 29    | <b>0</b>     |         | Electrical options                        | C  | Hour counter                                    | N                  | Hour counter + Horn  |
|       |              |         |   | F  | Flat cable connector                            | O                  | Flat cable connector + Horn  |
|       |              |         |   | H  | Horn  | P                  | Hour counter + Flat cable connector + Horn                         |
|       |              |         |   | M  | Hour counter + Flat cable connector             | 0                  | No electrical options  |
| 30    | <b>0</b>     |         | Hoist limits                              | G  | Geared limit switch                             | 0                  | No geared limit switch   |
| 31    | <b>0</b>     |         | Radio control                             | R  | Radio control                                   | 0                  | No radio control   |
| 32-34 | <b>000</b>   |         | Hand geared trolley height of lift (feet) | 001 - foot increments - equals HOL - actual hand chain length = 4' < HOL |   |                    |  |
| 35    | <b>0</b>     |         | Trolley options                           | 0  | No trolley options                              | U                  | Trolley travel limits + Patented track wheels                      |
|       |              |         |   | L  | Trolley travel limits                           | V                  | Trolley travel limits + Thermal protection                         |
|       |              |         |   | P  | Patented track wheels                           | W                  | Patented track wheels + Thermal protection                         |
|       |              |         |   | T  | Thermal protection                              | X                  | Trolley travel limits + Patented track wheels + Thermal protection |
| 36    | <b>0</b>     |         | Rain covers                               | 0  | No rain covers                                  | D                  | Polymer hoist rain cover + Metallic trolley cover                  |
|       |              |         |   | A  | Polymer hoist rain cover                        | E                  | Metallic hoist and trolley cover                                   |
|       |              |         |   | B  | Metallic hoist rain cover                       | F                  | Polymer hoist cover and metallic hoist and trolley cover           |
|       |              |         |   | C  | Metallic trolley cover                          |                    |  |
| 37    | <b>0</b>     |         | Outdoor additional                        | 0  | No outdoor options                              | A                  | Seal electrical enclosure + power pigtail + mating connector       |
| 38    | <b>0</b>     |         | Food grade additional                     | 0  | No Food grade additional                        | A                  | Food grade lubricant in gearcase                                   |
|       |              |         |   | B  | Food grade lubricant on chain                   | C                  | Food grade lubricant in gearcase + Food grade lubricant on chain   |
| 39    | <b>0</b>     |         | Stainless steel adders                    | A  | Stainless steel bottom hook                     | C                  | Stainless steel bottom hook + Stainless steel bottom block         |
|       |              |         |   | B  | Stainless steel bottom block                    |                    |  |
| 40-48 | <b>#...#</b> |         | Future options                            |  |   |                    |  |
| 49    | <b>#</b>     | (DOC01) | Language                                  | <u>DOC01 value</u>   |   | <u>DOC01 value</u> |  |
|       |              |         |   | E  | English   | EN                 | P Portuguese   |
|       |              |         |   | F  | French  | FR                 | S Spanish  |
|       |              |         |   |  |   |                    | PO   |
|       |              |         |   |  |   |                    | SP   |
| 50    | <b>#</b>     |         | Normal/Special                            | N  | Normal order                                    | E                  | Special order  |