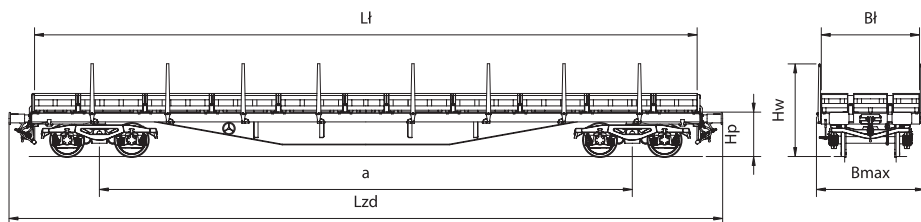


## WAGONY PLATFORMY NA WÓZKACH BUDOWY NORMALNEJ – RODZAJ R



**Res** - wagon platforma na wózkach budowy normalnej, z odchylnymi burtami czołowymi i z odchylnymi burtami bocznymi, przystosowany do kursowania z prędkością 100 km/h.

| Seria literowa  |       | <b>Res</b>        |  | <b>Res</b>        |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
|---|-------|-------------------|--|-------------------|--|-------|--------|---|----|------|------|------|---|---|----|----|----|----|----|------|------|------|--|--|-------|-------|--------|---|----|----|---|----|----|---|----|----|----|----|----|----|----|----|
| Typ konstrukcyjny   |       | 424Z              |  | CSD/R             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Zakres numerów  |       | 393 6070 394 7814 |  | 394 2036 394 7694 |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Szerokość toru  |       | mm                | 1 435  | 1 435             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Długość ze zderzakami   |       | $L_{zd}$ mm       | 19 900   | 19 900            |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Rozstaw osi czopów skrzętu  |       | a mm              | 14 860   | 14 860            |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Rozstaw osi w wózku   |       | mm                | 1800   | 1800              |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Masa konstrukcyjna  |       | kg                | 23 500   | 24 000            |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wysokość wagonu od główki szyny   |       | $H_w$ mm          | 2 535  | 2 535             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Max. szerokość wagonu   |       | $B_{max}$ mm      | 2 972  | 2 960             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Długość ładunkowa   |       | $L_1$ mm          | 18 504   | 18 528            |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Szerokość ładunkowa   |       | $B_1$ mm          | 2 646  | 2 660             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wysokość burt   |       | H mm              | 520  | 520               |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wysokość podłogi od główki szyny  |       | $H_p$ mm          | 1 238  | 1 235             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wysokość kłonic bocznych  |       | mm                | 1 300  | 1 300             |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wysokość kłonic czołowych   |       | mm                | -  | -                 |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Powierzchnia użytkowa   |       | $m^2$             | 49   | 49,2              |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Max. prędkość   |       | km/h              | 100  | 100               |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Min. promień łuku toru  |       | m                 | 35   | 35                |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Liczba osi  |       |                   | 4  | 4                 |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Przystosowanie do komunikacji   |       |                   | RIV, PGW   | RIV, PGW          |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Granica obciążenia w zależności od klasy linii kolejowej                            |       | t                 | <table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>40,5</td> <td>48,5</td> <td>56,5</td> </tr> </tbody> </table>  |                   |  | A     | B      | C | S  | 40,5 | 48,5 | 56,5 | <table border="1"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>40,0</td> <td>48,0</td> <td>56,0</td> </tr> </tbody> </table> |   |    | A  | B  | C  | S  | 40,0 | 48,0 | 56,0 |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
|   | A     | B                 | C  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| S   | 40,5  | 48,5              | 56,5   |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
|   | A     | B                 | C  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| S   | 40,0  | 48,0              | 56,0   |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Obciążenie podłogi ładunkiem skupionym ułożonym symetrycznie względem środka wagonu |       |                   | <table border="1"> <thead> <tr> <th>l [m]</th> <th>— [t]</th> <th>△△ [t]</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>32</td> <td>33</td> </tr> <tr> <td>5</td> <td>35</td> <td>38</td> </tr> <tr> <td>9</td> <td>36</td> <td>44</td> </tr> <tr> <td>15</td> <td>44</td> <td>56</td> </tr> <tr> <td>18</td> <td>56</td> <td>24</td> </tr> </tbody> </table> |                   | l [m]  | — [t] | △△ [t] | 2 | 32 | 33   | 5    | 35   | 38  | 9 | 36 | 44 | 15 | 44 | 56 | 18   | 56   | 24   | <table border="1"> <thead> <tr> <th>l [m]</th> <th>— [t]</th> <th>△△ [t]</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>32</td> <td>33</td> </tr> <tr> <td>5</td> <td>35</td> <td>38</td> </tr> <tr> <td>9</td> <td>36</td> <td>44</td> </tr> <tr> <td>15</td> <td>44</td> <td>56</td> </tr> <tr> <td>18</td> <td>56</td> <td>24</td> </tr> </tbody> </table> |  | l [m] | — [t] | △△ [t] | 2 | 32 | 33 | 5 | 35 | 38 | 9 | 36 | 44 | 15 | 44 | 56 | 18 | 56 | 24 |
| l [m]   | — [t] | △△ [t]            |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 2   | 32    | 33                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 5   | 35    | 38                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 9   | 36    | 44                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 15  | 44    | 56                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 18  | 56    | 24                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| l [m]   | — [t] | △△ [t]            |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 2   | 32    | 33                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 5   | 35    | 38                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 9   | 36    | 44                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 15  | 44    | 56                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| 18  | 56    | 24                |  |                   |  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Wyposażenie dodatkowe   |       |                   | burty czołowe i boczne opuszczane, 16 kłonic bocznych obrotowych, 18 urządzeń do mocowania lin w drewnianej podłodze   |                   | burty czołowe i boczne opuszczane, 16 kłonic bocznych obrotowych, 18 urządzeń do mocowania lin w drewnianej podłodze |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |
| Uwagi   |       |                   | Całkowity przesuw poprzeczny wagonu q+w = 11,5 mm  |                   | Całkowity przesuw poprzeczny wagonu q+w = 11,5 mm  |       |        |   |    |      |      |      |   |   |    |    |    |    |    |      |      |      |  |  |       |       |        |   |    |    |   |    |    |   |    |    |    |    |    |    |    |    |

**PRZEZNACZENIE:** Wagony przeznaczone są do przewozu ładunków skupionych, pojazdów i dłuźcy.

**ZALADUNEK:** Odbywa się przy pomocy urządzeń dźwigowych; możliwy jest załadunek za pomocą wózków widłowych i wjazd pojazdów z ramp załadunkowych od czoła i z boku wagonu.

**WYŁADUNEK:** Wyładunek odbywa się analogicznie.