The wheel loads listed are only a guideline. The max. dyn. wheel load listed is based on the structural integrity of the frame and load placement, and it does not take into account permissible wheel loading or bearing life. The load placement is at the center of each truck. The permissible dynamic wheel load listed is based on assumptions that the bridge speed is 32 m/min [100 fpm], end truck duty is ISO M5 (FEM 2m), and the runway rail is as listed. The actual wheel load should not exceed the permissible wheel load. If the permissible dynamic wheel load is greater than the maximum dyn. wheel load, than the actual wheel load cannot exceed the maximum dyn. wheel load.

\[ \text{Dyn wheel load} = 1.15 \times \text{static wheel load} \]

The wheelbase SS max is 1400 mm for wheel change

\[ S = 5.40 \text{ mm} \]

\[ S_{\text{min}} = 890 \text{ mm} \]

\[ S_{\text{max}} = 5000 \text{ mm} \]

Approx. Wgt (kg) = Weight/trk * 2 + 106 kg + 123 kg/m * (S - 0.9m)

Approx. Wgt (lbs) = Weight/trk * 2 + 234 lbs + 83 lbs/ft * (S - 3 ft)

Weight/trk is calculated with buffer type B.

Product Code example:

RTN50B1899SJ72207H1400-N

N=standard, E=Special

- primer paint, color code

Inner wheel distance (S) = 1400 mm min.

Buffer type

Joint plate distance (pin to pin, with double DG girder)

Joint plate code

S =1WD, D =2WD (Number of driving wheels)

Wheel groove =UU

Wheel base =SS

End truck model

Wheelbase | SS | Max dyn whl load, (kip) | Perm dyn whl load, (kip) | Approx. Wt.*Trk (lb)
---|---|---|---|---
16 | DG | 117 | 65 | 85.7 | 110 |
18 | 5'-10 7/8" | 117 | 65 | 85.7 | 110 |
20 | 6'-3 3/4" | 117 | 65 | 85.7 | 110 |
22 | 7'-2 5/8" | 117 | 65 | 85.7 | 110 |
25 | 8'-2 7/16" | 117 | 65 | 85.7 | 110 |

\[ \text{Approx. Wgt/trk} = \text{Weight/trk} + 106 \text{ kg} + 123 \text{ kg/m} \times (S - 0.9 \text{ m}) \]

\[ \text{Approx. Wgt/trk} = \text{Weight/trk} + 234 \text{ lbs} + 83 \text{ lbs/ft} \times (S - 3 \text{ ft}) \]

Weight/trk is calculated with buffer type B.

Buffer type  | L1  | Ø  | Wgt/pc, lbs |
---|---|---|---|
B | 2 11/16" | 3 3/16" | 1.9 |
C | 3 5/16" | 3 15/16" | 3.1 |
D | 4 1/8" | 4 15/16" | 5.5 |
E | 5 15/16" | 3 15/16" | 2.2 |
F | 7 1/2" | 4 15/16" | 3.6 |
G | 6 5/16" | 6 5/16" | 5.5 |
H | 7 7/8" | 7 7/8" | 9.7 |
I | 4 15/16" | 4 15/16" | 2 |
P | 9 7/16" | 6 5/16" | 6.9 |
S | 11 13/16" | 7 7/8" | 12.4 |
T | 13 3/4" | 9 7/8" | 16.8 |
Y | 18 3/4" | 9 7/8" | 23 |

B, C, D rubber

K, G, E, F, H, I, M, P, S polyurethane