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| **Parameter** | **Speed range** | **WT** | ***Hcn1GD/+*** | ***P* value** |
| Running speed (cm/s) | all | 21.40 ± 0.91 (n = 30) | 34.48 ± 1.59 (n = 21) | < 0.001# |
| BOS front (cm) | 20-30 cm/s | 1.17 ± 0.03 (n = 22) | 1.37 ± 0.06 (n = 9) | 0.005# |
| BOS hind (cm) | 20-30 cm/s | 2.05 ± 0.05 (n = 22) | 1.95 ± 0.04 (n = 9) | 0.272# |
| Stride length (cm) | 20-30 cm/s | 5.97 ± 0.18 (n = 22) | 5.90 ± 0.19 (n = 9) | 0.685\* |
| Max. contact area (cm2) | 20-30 cm/s | 0.19 ± 0.02 (n = 22) | 0.22 ± 0.03 (n = 9) | 0.414\* |
| Stand (s) | 20-30 cm/s | 0.11 ± 0.004 (n = 22) | 0.13 ± 0.003 (n = 9) | 0.160\* |
| Step cycle (s) | 20-30 cm/s | 0.23 ± 0.007 (n = 22) | 0.23 ± 0.004 (n = 9) | 0.535\* |
| Regularity index (%) | 20-30 cm/s | 97.33 ± 1.33 (n = 22) | 96.33 ± 2.37 (n = 9) | 0.786\* |
| BOS front (cm) | 30-40 cm/s | 1.15 ± 0.04 (n = 8) | 1.41 ± 0.04 (n = 13) | 0.0004# |
| BOS hind (cm) | 30-40 cm/s | 2.03 ± 0.03 (n = 8) | 1.88 ± 0.03 (n = 13) | 0.006# |
| Stride length (cm) | 30-40 cm/s | 6.90 ± 0.17 (n = 8) | 6.51 ± 0.18 (n = 13) | 0.231\* |
| Max. contact area (cm2) | 30-40 cm/s | 0.24 ± 0.01 (n = 8) | 0.22 ± 0.03 (n = 13) | 0.546# |
| Stand (s) | 30-40 cm/s | 0.09 ± 0.003 (n = 8) | 0.10 ± 0.004 (n = 13) | 0.210\* |
| Step cycle (s) | 30-40 cm/s | 0.19 ± 0.003 (n = 8) | 0.18 ± 0.005 (n = 13) | 0.514# |
| Regularity index (%) | 30-40 cm/s | 96.84 ± 1.45 (n = 8) | 97.73 ± 1.56 (n = 13) | 0.262\* |
| **Parameter** | **Speed range** | **WT** | ***Hcn1MI/+*** | ***P* value** |
| Running speed (cm/s) | all | 19.99 ± 0.92 (n = 22) | 29.62 ± 1.67 (n = 21) | < 0.001# |
| BOS front (cm) | 20-30 cm/s | 1.14 ± 0.03 (n = 20) | 1.08 ± 0.04 (n = 15) | 0.240# |
| BOS hind (cm) | 20-30 cm/s | 2.02 ± 0.05 (n = 20) | 1.88 ± 0.05 (n = 15) | 0.076# |
| Stride length (cm) | 20-30 cm/s | 6.12 ± 0.09 (n = 20) | 6.47 ± 0.14 (n = 15) | 0.085# |
| Max. contact area (cm2) | 20-30 cm/s | 0.20 ± 0.02 (n = 20) | 0.20 ± 0.02 (n = 15) | 0.856\* |
| Stand (s) | 20-30 cm/s | 0.12 ± 0.003 (n = 20) | 0.13 ± 0.004 (n = 15) | 0.347\* |
| Step cycle (s) | 20-30 cm/s | 0.24 ± 0.004 (n = 20) | 0.24 ± 0.007 (n = 15) | 0.410# |
| Regularity index (%) | 20-30 cm/s | 96.40 ± 0.97 (n = 20) | 96.63 ± 1.40(n = 15) | 0.674\* |
| BOS front (cm) | 30-40 cm/s | 1.17 ± 0.03 (n = 6) | 1.14 ± 0.04 (n = 12) | 0.719# |
| BOS hind (cm) | 30-40 cm/s | 1.92 ± 0.14 (n = 6) | 1.73 ± 0.09 (n = 12) | 0.246# |
| Stride length (cm) | 30-40 cm/s | 6.86 ± 0.17 (n = 12) | 6.93 ± 0.15 (n = 6) | 0.782# |
| Max. contact area (cm2) | 30-40 cm/s | 0.23 ± 0.04 (n = 12) | 0.22 ± 0.02 (n = 6) | 0.783# |
| Stand (s) | 30-40 cm/s | 0.10 ± 0.006 (n = 12) | 0.09 ± 0.001 (n = 6) | 0.084# |
| Step cycle (s) | 30-40 cm/s | 0.19 ± 0.005 (n = 12) | 0.19 ± 0.004 (n = 6) | 0.148# |
| Regularity index (%) | 30-40 cm/s | 97.78 ± 1.81 (n = 12) | 99.54 ± 0.31(n = 6) | 0.461\* |