

David F. "dj" Johnston

Sprint Stride Patterns.....40 meters Measured from the *Front Foot* in the blocks or stance.....

-----WPB	9.58sec	9.80sec-----	10.30sec-----	10.80sec-----	11.30sec
....40 M	102.2448%	100%	95%	90%	85%
0---front foot---	4.68 sec	4.88 sec	5.08 sec	5.28 sec	
1.	1.22m - 1.22m	1.19m - 1.19m	1.1305m	1.071m	1.0115m
2.	1.36m - 2.58m	1.33m - 2.52m	2.394m	2.268m	2.142m
3.	1.49m - 4.07m	1.46m - 3.98m	3.781m	3.582m	3.383m
4.	1.61m - 5.68m	1.58m - 5.56m	5.282m	5.004m	4.726m
5.	1.72m - 7.40m	1.69m - 7.25m	6.8875m	6.525m	6.1625m
6.	1.82m - 9.22m	1.79m - 9.04m	8.588m	8.136m	7.684m
7. (10M)	1.91m - 11.13m	1.88m - 10.92m (11yds)	10.374m	9.828m	9.282m
8.	1.99m - 13.12m	1.96m - 12.88m	12.236m	11.592m	10.948m
9.	2.06m - 15.18m	2.03m - 14.91m	14.1645m	13.419m	12.6735m
10.	2.12m - 17.30m	2.09m - 17.00m	16.15m	15.30m	14.45m
11.	2.17m - 19.47m	2.14m - 19.14m (20yds)	18.183m	17.226m	16.269m
12. (20M)	2.21m - 21.68m	2.18m - 21.32m	20.254m	19.188m	18.122m
13.	2.24m - 23.92m	2.21m - 23.53m	22.3535m	21.177m	20.0005m
14.	2.26m - 26.18m	2.23m - 25.76m	24.472m	23.184m	21.895m
15.	2.27m - 28.45m	2.24m - 28.00m (30yds)	26.60m	25.20m	23.80m
16. (30M)	2.28m - 30.73m	2.25m - 30.25m	28.7375m	27.225m	25.7125m
17.	2.29m - 33.02m	2.26m - 32.51m	30.8845m	29.259m	27.6335m
18.	2.30m - 35.32m	2.27m - 34.78m	33.041m	31.302m	29.563m
19.	2.31m - 37.63m	2.28m - 37.06m (40yds)	35.207m	33.354m	31.501m
20. (40M)	2.32m - 39.95m	2.29m - 39.35m	37.3825m (40yds)	35.415m	33.4475m
21.	2.33m - 42.28m	2.30m - 41.65m	39.5675m	37.485m (40yds)	35.4025m
22.	2.34m - 44.62m	2.31m - 43.96m	41.762m	39.564m	37.366m (40yds)
23.	2.35m - 46.97m	2.32m - 46.28m	43.966m	41.652m	39.338m

Notes: When matched with the time (below) from the male and female charts, a better understanding can be obtained about the correlation between the step length and step frequency and that relationship to the production of speed.

Male	Male	Male/Female	Male/Female
RT 0.134	RT	RT 0.160	RT
10m 1.71	1.884	10m 1.81	1.97
20m 1.04	2.884	20m 1.11	3.08
30m 0.92 16 steps	3.804	30m 1.02	4.10
40m 0.88	4.684	40m 0.97	5.07
50m 0.87	5.554	50m 0.95	6.02
60m 0.85	6.404	60m 0.94	6.96
70m 0.85	7.254	70m 0.95	7.91
80m 0.86	8.114	80m 0.95	8.86
90m 0.87	8.984	90m 0.97	9.83
100m 0.88-----	9.864	100m 0.99-----	10.82
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Total 9.86		Total 10.83	