

	name	symbol	value	unit	source	explanation
0	size					Number of agents
1	shape					Shape for arrays
2	three_circles_flag					Boolean indicating if agent is modeled with three circle model
3	orientable_flag					Boolean indicating if agent is orientable
4	active					Boolean indicating if agent is active
5	goal_reached					Boolean indicating if goal is reached
6	mass	m		kg	fds+evac	Mass
7	radius	r		m	fds+evac	Radius
8	r_t	r_t		m	fds+evac	Radius of torso
9	r_s	r_s		m	fds+evac	Radius of shoulder
10	r_ts	r_{ts}		m	fds+evac	Distance from torso to shoulder
11	position	x		m		Position
12	velocity	v		$\frac{m}{s}$		Velocity
13	target_velocity	v_0	5	$\frac{m}{s}$		Target velocity
14	target_direction	e				Target direction
15	force	f		N		Force
16	force_adjust	f_{adj}		N		Adjusting force
17	force_agent	f_{agent}		N		Agent to agent force
18	force_wall	f_{wall}		N		Agent to wall force
19	inertia_rot	I_{rot}	4	$m^2 kg$	fds+evac	Rotational moment
20	angle	φ	$[-\pi, \pi]$	rad		Angle
21	angular_velocity	ω		$\frac{rad}{s}$		Angular velocity
22	target_angle	φ_0	$[-\pi, \pi]$	rad		Target angle
23	target_angular_velocity	ω_0	4π	$\frac{rad}{s}$	fds+evac	Target angular velocity
24	torque	M		N m		Torque
25	position_ls	x_{ls}		m		Position of the left shoulder
26	position_rs	x_{rs}		m		Position of the right shoulder
27	front	x_{front}		m		Position of the front
28	tau_adj	τ_{adj}	0.5	s	fds+evac	Characteristic time for agent adjusting its movement
29	tau_adj_rot	τ_{adjrot}	0.2	s	fds+evac	Characteristic time for agent adjusting its rotational movement
30	k	k	1.5	N	power law	Social force scaling constant
31	tau_0	τ_0	3	s	power law	Interaction time horizon
32	mu	μ	12000	$\frac{kg}{s^2}$	fds+evac	Compression counteraction constant
33	kappa	κ	40000	$\frac{kg}{m s}$	fds+evac	Sliding friction constant
34	damping	c_d	500	N	fds+evac	Damping coefficient for contact force
35	a	A	2000	N	helbing	Scaling coefficient for social force
36	b	B	0.08	m	helbing	Coefficient for social force
37	std_rand_force	ξ/m	0.1		fds+evac	Standard deviation for random force from truncated normal distribution
38	std_rand_torque	η/I_{rot}	0.1		fds+evac	Standard deviation for random torque from truncated normal distribution
39	f_soc_ij_max		2000	N		Truncation for social force with agent to agent interaction
40	f_soc_iw_max		2000	N		Truncation for social force with agent to wall interaction
41	sight_soc		7	m		Maximum distance for social force to effect
42	sight_wall		7	m		Maximum distance for social force to effect

	name	adult	male	female	child	elderly	symbol	explanation
0	radius	0.255	0.27	0.24	0.21	0.25	r	Total radius of the agent
1	dr	0.035	0.02	0.02	0.015	0.02	dr	Difference bound for total radius
2	k_t	0.5882	0.5926	0.5833	0.5714	0.6	k_t	Ratio of total radius and radius torso
3	k_s	0.3725	0.3704	0.375	0.3333	0.36	k_s	Ratio of total radius and radius shoulder
4	k_ts	0.6275	0.6296	0.625	0.6667	0.64	k_{ts}	Ratio of total radius and distance from torso to shoulder
5	v	1.25	1.35	1.15	0.9	0.8	v	Walking speed of agent
6	dv	0.3	0.2	0.2	0.3	0.3	dv	Difference bound for walking speed
7	mass	73.5	80.0	67.0	57.0	70.0	m	Mass of an agent
8	mass_scale	8.0	8.0	6.7	5.7	7.0	dm	Standard deviation of mass of the agent