Automatic Forklifts Parameter ● Standard ○ Optional − None			1						
Product model		SFL-CDD14	SFL-CDD14-CE	SFL-CDD20	SFL-CPD15-T	SFL-CDD20-L	SFL-CQD14	SFL-L16	SFL-L14
	B. d. d. a.	Laser SLAM small stacker	Laser SLAM small stacker	Laser SLAM stacker	Laser SLAM counterbalanced	Laser SLAM stacker	Laser SLAM reach	Laser SLAM stacker	Laser SLAM stacker
	Product name	automatic forklift	automatic forklift	automatic forklift	automatic forklift	automatic forklift	automatic forklift	automatic forklift	automatic forklift
	Driving mode	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,
		handheld driving	handheld driving	walking driving	car driving	walking driving	handheld driving	walking driving	walking driving
	Navigation type	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM
	Tray type	3-stringer pallet	3-stringer pallet	3-stringer pallet	3-stringer pallet / Field pallet	3-stringer pallet	3-stringer pallet / Field pallet	3-stringer pallet	3-stringer pallet
Technical parameters	Rated load capacity (kg)	1400	1400	2000	1500	1600	1400	1600	1400
	Dead weight (with battery) (kg)	680	740	1230	2325	1950	1890	1325	1325
	Navigation position accuracy*(mm)	±10	±10	±10	±10	±10	±10	±10	±10
	Navigation angle accuracy*(°)	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
	Fork in-position accuracy (mm)	±10	±10	±10	±10	±10	±10	±10	±10
	Standard lifting height (mm)	1600/3000	3000	3000	3300	3580	1600	2844	2924
	Vehicle size: length * width * height (mm)	1640*990*2043	1650*990*2240	2190*1064*2200	2555*1150*2326	3445*1065*2218	2054*1321*2130	2100*970*2270	2075*996*2127
	Fork size: length * width * height (mm)	1150*180*55	1150*180*55	1150*180*55	950*110*40	2400*150*70	1220*120*40	1150*182*55	1113*180*55
	Fork outer width (mm)	570/680	570/680	570/680	460-750	570/680	650	570/680	560/680
	Right-angle stacking channel width, pallet	1000	1000	2000	2500	4200	0105/0055	2552	2722
	1000×1200 (1200 placed across forks) (mm)	1888	1888	2900	3600	4300	2195/2255	2659	2723
	Right-angle stacking channel width, pallet								
	800×1200 (1200 placed along the fork) (mm)	1880	1880	2800	3500	4200	2125/2185	2619	2719
	Minimum turning radius (mm)	1182	1206	1737	1710	3260	1480	1720	1726
	Driving speed: full load/no load (m/s)	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5
Performance parameters	Lifting speed: full load/no load (mm/s)	115/170	115/170	90/120	95/120	90/120	115/170	160/250	160/250
	Descent speed: full load/no load (mm/s)	160/125	160/125	120/110	120/85	120/110	114/114	450/450	450/450
Wheel parameters	Wheel number: driving wheel (×= driving wheel)/ bearing wheel	1X-2/4	1X-2/4	1X-2/4	1X-2/2	1X-2/4	1X-2/2	(1x+1)/4	(1x+1)/4
	Battery specifications (V/Ah)	24/180 (Lithium Iron Phosphate)	24/180 (Lithium Iron Phosphate)	24/180 (Lithium Iron Phosphate)	24/270 (Lithium Iron Phosphate)	24/180 (Lithium Iron Phosphate)	24/180 (Lithium Iron Phosphate)	24/240 (Lithium Iron Phosphate)	24/240 (Lithium Iron Phosphate)
	Battery weight (kg)	58	58	90	230	90	58	65	65
Battery parameters	Comprehensive battery life (h)	10	10	10	10	10	10	10	10
	Charging time (10%-80%) (h)	2	2	2	2.5	2	2	2	2
	Charging method	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic
Certifications	ISO 3691-4	-	•	-	-	-	-	-	-
	EMC/ESD	•	•	•	•	•	•	•	•
	UN38.3	•	•	•	•	•	•	•	•
	RoHS	•	•	•	•	•	•	•	•
	REACH	•	•	•	•	•	•	•	•
Function configurations	Wi-Fi roaming function	•	•	•	•	•	•	•	•
	3D obstacle avoidance	0	0	0	0	0	0	0	0
	Pallet recognition	0	0	0	0	0	0	0	0
	Cage stack	0	0	0	0	0	0	0	0
	High shelf pallet recognition	0	0	0	0	0	0	0	0
	Pallet damage detection	0	0	0	0	0	0	0	0
	Pallet stacking and unstacking	0	0	0	0	0	0	0	0
Safety configurations	E-stop button	•	•	•	•	•	•	•	•
	Sound and light indicator	•	•	•	•	•	•	•	•
	360° laser protection	•	•	•	•	•	•	•	•
	Bumper strip	•	•	•	•	•	•	•	•
	High safety protection of fork teeth	•	•	•	•	•	•	•	•
* Navigation accuracy	usually refers to the repeatability accuracy that a ro	bot navigates to the station.							

Automatic Forklifts Parameter • Standard Optional - None										
Product model		SFL-R16S	SFL-MR15	SFL-T20AP	SFL-P30C	SFL-ME25	SFL-CBD20-S	SFL-CBD20-L	SFL-AE20	SFL-MP10S
	Product name	Laser SLAM reach	Laser SLAM reach	Laser SLAM handling	Laser SLAM	Laser SLAM handling	Laser SLAM handling	Laser SLAM handling	Laser SLAM counterbalanced	Laser SLAM ground
		automatic forklift	automatic forklift	automatic forklift	automatic tractor	automatic forklift	automatic forklift	automatic forklift	automatic forklift	automatic forklift
		Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic navigation,	Automatic
	Driving mode	car driving	walking driving	walking driving	car driving	walking driving	walking driving	walking driving	walking driving	navigation
	Navigation type	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM	Laser SLAM
	Tray type	3-stringer pallet / Field pallet	3-stringer pallet / Field pallet	3-stringer pallet	/	3-stringer pallet	3-stringer pallet	3-stringer pallet	3-stringer pallet / Field pallet	3-stringer pallet
	Rated load capacity (kg)	1600	1500	2000	3000	2500	2000	2000	2000	800
	Dead weight (with battery) (kg)	2940	1880	744	940	676	850	947	2525	210
	Navigation position accuracy*(mm)	±10	±10	±10	±10	±10	±10	±10	±10	±10
Technical	Navigation angle accuracy*(°)	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5	±0.5
parameters	Fork in-position accuracy (mm)	±10	±10	/	1	/	1	1	/	/
	Standard lifting height (mm)	5755	3000	150	/	120	120	120	300	70
	Vehicle size: length * width * height (mm)	2600*1600*2600	2600*1200*2280	2200*900*2270	1650*800*2043	2100*730*2100	2075*1063*2200	2824*1063*2200	3145*1000*1450	1515*885*1885
	Fork size: length * width * height (mm)	1150*100*45	1070*100*40	1150*170*55	/	1150*170*56	1150*180*55	1900*180*55	1200*125*40	1154*186*60
	Fork outer width (mm)	316/710	200/650	570/680	1	570/680	570/680	570/680	260-550	570/680
	Right-angle stacking channel width, pallet	2200	3200	2000	,	2700	2760	3600	4200	1990
	1000×1200 (1200 placed across forks) (mm)	3200	3200	3000	/	2700	2760	3600	4200	1990
	Right-angle stacking channel width, pallet	2100	2100		,	2660		2500		1000
	800×1200 (1200 placed along the fork) (mm)	3100	3100	3000	/	2660	2660	3500	4100	1900
	Minimum turning radius (mm)	1840	1800	2236	1230	2200	1850	2166	1690	1035
Performance parameters	Driving speed: full load/no load (m/s)	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.2/1.5	1.0/1.2	0.6/0.8
	Lifting speed: full load/no load (mm/s)	160/250	110/160	/	1	40/55	30/35	30/35	/	/
	Descent speed: full load/no load (mm/s)	450/450	170/150	/	1	42/30	42/30	42/30	/	/
Wheel	Wheel number: driving wheel	1x/2	1x2/2	1x+2/4	1X+2/2	4/1X-2	1X-2/4	1X-2/4	1X-1/2	,
parameters	(×= driving wheel)/ bearing wheel	17/2	1,72,72	1812/4	17/2/2	4/1/-2	17-2/4	18-2/4	11/2	1
	Battery specifications (V/Ah)	48/420 ((Lithium Iron Phosphate)	24/280(Lithium Iron Phosphate)	24/280(Lithium Iron Phosphate)	24/280(Lithium Iron Phosphate)	24/180(Lithium Iron Phosphate)	24/180(Lithium Iron Phosphate)	24/270(Lithium Iron Phosphate)	24/280(Lithium Iron Phosphate)	48/35 (Temary lithium)
	Battery weight (kg)	1200	200	200	200	70	70	97	255	15
Battery parameters	Comprehensive battery life (h)	10	10	10	10	10	10	10	10	8
	Charging time (10%-80%) (h)	3.5	2.5	2.5	2.5	2	2	2.5	2.5	2
	Charging method	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic	Manual/Automatic
Certifications	ISO 3691-4	-	-	-	-	-	-	-	-	-
	EMC/ESD	•	•	•	•	•	•	•	•	•
	UN38.3	•	•	•	•	•	•	•	•	•
	RoHS	•	•	•	•	•	•	•	•	•
	REACH	•	•	•	•	•	•	•	•	•
Function configurations	Wi-Fi roaming function	•	•	•	•	•	•	•	•	•
	3D obstacle avoidance	0	0	0	0	0	0	0	0	0
	Pallet recognition	0	0	0	0	0	0	0	0	0
	Cage stack	0	0	0	0	0	0	0	0	0
	High shelf pallet recognition	0	0	0	0	0	0	0	0	0
	Pallet damage detection	0	0	0	0	0	0	0	0	0
	Pallet stacking and unstacking	0	0	0	0	0	0	0	0	0
Safety configurations	E-stop button	•	•	•	•	•	•	•	•	•
	Sound and light indicator	•	•	•	•	•	•	•	•	•
	360° laser protection	•	•	•	•	•	•	•	•	•
	Bumper strip	•	•	•	•	•	•	•	•	•
	High safety protection of fork teeth		•	•	•	•	•	•	•	•

^{*} Navigation accuracy usually refers to the repeatability accuracy that a robot navigates to the station.