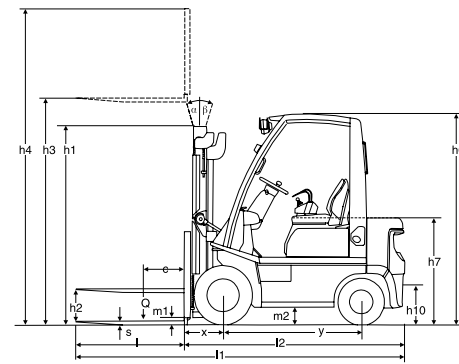
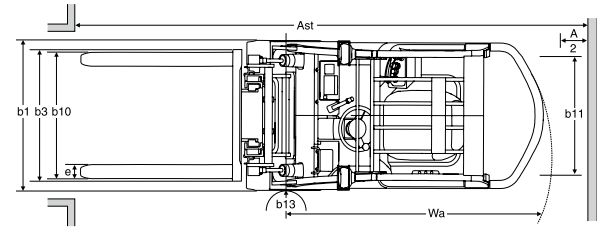


## DIMENSIONS



## MAST SPECIFICATIONS & RATED CAPACITIES: 1.5 TON

Mast Type	Mast name	Maximum fork height	Overall Height			Free Lift		Tilt angle	Load capacity <sup>2)</sup>		
			Fully lowered	Fully extended		Without backrest	With STD backrest		Forward/Backward	Load center 500 mm	FGE/FD15-E1
				Without backrest	With STD backrest						
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	degrees				
TWO STAGE WIDE VIEW	2W300	3000	1995	3640	3945	150	150	6/12	1500		
	2W330	3300	2145	3940	4245	150	150	6/12	1500		
	2W350	3500	2280	4140	4445	150	150	6/12	1500		
	2W370	3700	2405	4340	4645	150	150	6/12	1500		
	2W400	4000	2595	4640	4945	150	150	6/6	1450		
TWO STAGE FULL FREE	2F300	3000	1995	3675	3945	1355	1085	6/12	1500		
	2F330	3300	2145	3975	4245	1505	1235	6/12	1500		
	2F350	3500	2280	4175	4445	1640	1370	6/12	1500		
	2F370	3700	2405	4375	4645	1765	1495	6/12	1500		
	2F400	4000	2595	4675	4945	1955	1685	6/6	1500		
THREE STAGE FULL FREE	3F385	3850	1845	4525	4795	1205	935	6/6	1500		
	3F430	4300	1995	4975	5245	1355	1085	6/6	1400		
	3F475	4750	2145	5425	5695	1505	1235	6/6	1350		
	3F515	5150	2280	5825	6095	1640	1370	6/6	1300		
	3F550	5500	2405	6175	6445	1765	1495	6/6	1250 *		
	3F600	6000	2595	6675	6945	1955	1685	6/6	1100 #		
	3F650	6500	2845	7175	7445	2205	1935	6/6	850 #		
	3F700	7000	3095	7675	7945	2455	2185	6/6	700 #		
	THREE STAGE FULL FREE WIDE VIEW	3V360	3600	1845	4225	4545	1165	935	6/6	1450	
		3V405	4050	1995	4675	4995	1315	1085	6/6	1400	
3V450		4500	2145	5125	5445	1465	1235	6/6	1350		
3V490		4900	2280	5525	5845	1595	1370	6/6	1250		
3V525		5250	2405	5875	6195	1725	1495	6/6	1250 *		
3V575		5750	2595	6375	6695	1915	1685	6/6	1150 #		
3V633		6330	2845	6955	7275	2165	1935	6/6	850 #		
3V688		6880	3095	7505	7825	2415	2185	6/6	700 #		

NOTE: <sup>1)</sup> 1 inch = 25.4 mm 1 kg = 0.4536 lb <sup>2)</sup> With single pneumatic tires unless indicated \* Load capacity with single super elastic tires # Load capacity with double tires. Truck width: 1480 mm

## MAST SPECIFICATIONS & RATED CAPACITIES: 1.8 TON

Mast Type	Mast name	Maximum fork height	Overall Height			Free Lift		Tilt angle	Load capacity <sup>2)</sup>		
			Fully lowered	Fully extended		Without backrest	With STD backrest		Forward/Backward	Load center 500 mm	FGE/FD18-E1
				Without backrest	With STD backrest						
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	degrees				
TWO STAGE WIDE VIEW	2W300	3000	1995	3640	3945	155	155	6/12	1750		
	2W330	3300	2145	3940	4245	155	155	6/12	1750		
	2W350	3500	2280	4140	4445	155	155	6/12	1750		
	2W370	3700	2405	4340	4645	155	155	6/12	1750		
	2W400	4000	2595	4640	4945	155	155	6/6	1700		
TWO STAGE FULL FREE	2F300	3000	1995	3675	3945	1360	1090	6/12	1750		
	2F330	3300	2145	3975	4245	1510	1240	6/12	1750		
	2F350	3500	2280	4175	4445	1645	1375	6/12	1750		
	2F370	3700	2405	4375	4645	1770	1500	6/12	1750		
	2F400	4000	2595	4675	4945	1960	1690	6/6	1750 *		
THREE STAGE FULL FREE	3F385	3850	1845	4525	4795	1210	940	6/6	1700		
	3F430	4300	1995	4975	5245	1360	1090	6/6	1650		
	3F475	4750	2145	5425	5695	1510	1240	6/6	1550		
	3F515	5150	2280	5825	6095	1645	1375	6/6	1450 *		
	3F550	5500	2405	6175	6445	1770	1500	6/6	1350 *		
	3F600	6000	2595	6675	6945	1960	1690	6/6	1200 #		
	3F650	6500	2845	7175	7445	2210	1940	6/6	850 #		
	3F700	7000	3095	7675	7945	2460	2190	6/6	700 #		
	THREE STAGE FULL FREE WIDE VIEW	3V360	3600	1845	4225	4545	1170	940	6/6	1650	
		3V405	4050	1995	4675	4995	1320	1090	6/6	1600	
3V450		4500	2145	5125	5445	1470	1240	6/6	1500		
3V490		4900	2280	5525	5845	1600	1375	6/6	1400 *		
3V525		5250	2405	5875	6195	1730	1500	6/6	1300 *		
3V575		5750	2595	6375	6695	1920	1690	6/6	1250 #		
3V633		6330	2845	6955	7275	2170	1940	6/6	900 #		
3V688		6880	3095	7505	7825	2420	2190	6/6	700 #		

NOTE: <sup>1)</sup> 1 inch = 25.4 mm 1 kg = 0.4536 lb <sup>2)</sup> With single pneumatic tires unless indicated \* Load capacity with single super elastic tires # Load capacity with double tires. Truck width: 1480 mm

## STANDARD EQUIPMENT AND ACCESSORIES

### [Equipment]

- Adjustable suspension seat with safety belt
- Antiroll mechanism for assured safety while turning
- Brake fluid reservoir tank
- CAN bus Communication system
- Corrugated fin type aluminum radiator
- Cyclopac air cleaner
- Drawbar device
- Electronically controlled engine(LPG)
- Engine auto glow system(Diesel)
- F-shaped pitch cooling fan
- Floating cabin
- Fork length 1100mm
- Full hydraulic power steering
- Hood with two gas dampers
- Hydraulic oil dipstick
- Interlock system(loading ,traveling)
- Load backrest
- Low muffler
- Low noise air intake system/resonator(Diesel)
- Mechanical 3 spool valve
- Oil cooler(Radiator built-in type)
- Pneumatic industrial tires
- Pre-muffler(Diesel)
- Quick release fuel cap(Diesel)
- Radiator coolant reservoir
- Standard carriage (width :920mm for 1.5-1.75t , 1020mm for 2-3.2t)
- Toggle joint type parking brake with warning buzzer
- Transmission oil dipstick
- Upward open engine hood
- VCM(Vehicle Control Module)
- Wide view, two-stage mast(2W300)
- 3-way catalytic muffler(LPG)
- 50% density LLC(non-amine)

### [Controls]

- Electric shift control lever(direction change)
- Mechanical control lift and tilt levers
- Neutral safety mechanism
- Parking brake lever with inter-lock
- Single control lever
- Small diameter steering wheel
- Steering wheel height adjusting system
- Tilt adjustable steering post

### [Accessories]

- Access-assisted hand grip
  - Back-up buzzer
  - Cup holder
  - Electric horn
  - Hand brake warning buzzer
  - Head light
  - Seat belt buzzer
- ### [Instruments and Switch]
- A/T power cut-off warning
  - Air cleaner warning indicator
  - Charge warning indicator
  - Engine oil pressure warning indicator
  - Fuel filter warning indicator
  - Fuel gauge (Diesel)
  - Glow indicator(Diesel)
  - Hour meter
  - LCD multifunctional panel
  - LPG level warning indicator
  - Mast interlock warning indicator
  - Multipurpose warning indicator
  - Parking brake warning indicator
  - Password entry
  - Power/Eco mode(LPG)
  - Seat belt warning indicator
  - Self-diagnosis system
  - Service Reminder System
  - Turn signal switch(auto cancel type)
  - Water temperature gauge

## OPTIONAL EQUIPMENT AND ACCESSORIES

### [Option]

- Air conditioning
- Anti-corrosion package
- Auto fork leveling system
- Beacon light(flashing)
- Cloth ARA seat
- Diesel Particulate Filter
- Double front tires
- Dual element air cleaner
- Electrical forward & backward switch(arm-rest)
- Fingertip control levers
- Grammer cloth seat
- Grammer PVC seat
- Head light guards
- High backrest
- High muffler
- Hook-on side shift
- Instrument tray
- Integrated fork positioner
- Integrated side shift
- LED head light
- LED rear combination light
- LED rear working light
- Low noise high mounted muffler
- Non-marking super elastic tires
- Panoramic operator platform(2-3.2t)
- Piping to carriage with fixed couplers
- Piping to carriage with quick couplers
- Pneumatic radial tires
- Radiator level warning indicator
- Radiator screen
- Rain guard
- Rear combination light
- Rear working light
- Side view mirror
- Speed limiter
- Steel cabin with heater
- Super elastic tires
- Swing-down type LPG cylinder
- Tilt cylinder boots
- Wide carriage
- Wide pneumatic tires(2-2.5t)
- Wide super elastic tires(2-2.5t)
- Wide view cabin
- Wide view full free 2-stage mast
- Wide view full free 3-stage mast
- Wide view full free 3-stage 4cyl mast
- 4 spool hydraulic valves

NOTE: •CAN bus Communication system for both FD and FGE  
•Specifications are subject to change without notice and its may vary depending on markets. Please consult your TCM representative for details.



by

**UNICARRIERS**

UniCarriers Corporation

Bellport E  
6-22-7, Minami-Oi, Shinagawa-ku  
Tokyo 140-0013, Japan  
TEL: +81-3-6730-3370  
FAX: +81-3-6730-3371  
http://www.unicarriers.co.jp/en/

Distributed by

Diesel & LPG Counterbalanced Forklift Trucks

# 1.5-3.2 tons

(Class 5 sit-down type)

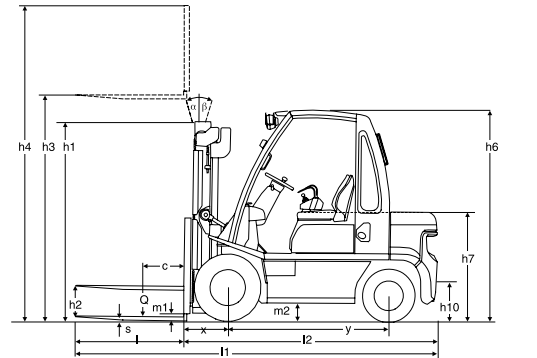
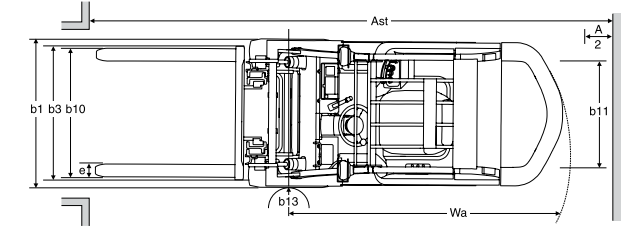
## SPECIFICATIONS

STANDARD SPECIFICATIONS

CHARACTERISTICS	UniCarriers				
	FGE15-E1	FD15-E1	FGE18-E1	FD18-E1	
1.1 Manufacturer					
1.2 Model name					
1.3 Power unit: Electric, Diesel, Gasoline, LPG, others	LPG	Diesel	LPG	Diesel	
1.4 Operation: Sit, Hand, Pedestrian, Standing, Order picking	Sit	Sit	Sit	Sit	
1.5 Load capacity	Q (t)	1.5	1.5	1.75	1.75
1.6 Load center	c (mm)	500	500	500	500
1.8 Front overhang	x (mm)	400	400	405	405
1.9 Wheel base	y (mm)	1415	1415	1415	1415
WEIGHTS					
2.1 Service weight	kg	2625 <sup>1</sup>	2765	2845 <sup>1</sup>	2985
2.2 Axle load with load, front/rear	kg	3665/460	3705/560	4065/530	4105/630
2.3 Axle load without load, front/rear	kg	1210/1415	1250/1515	1195/1650	1235/1750
WHEELS & TIRES					
3.1 Tires front/rear		Pneumatic	Pneumatic	Pneumatic	Pneumatic
3.2 Tire size, front		6.50-10-14PR	6.50-10-14PR	6.50-10-14PR	6.50-10-14PR
3.3 Tire size, rear		5.00-8-8PR	5.00-8-8PR	5.00-8-8PR	5.00-8-8PR
3.5 Wheels, number front/rear (x=powered)		2x/2	2x/2	2x/2	2x/2
3.6 Tread, front	b <sub>10</sub> (mm)	890	890	890	890
3.7 Tread, rear	b <sub>11</sub> (mm)	900	900	900	900
DIMENSIONS					
4.1 Tilt angle, forward/backward	α / β (°)	6/12	6/12	6/12	6/12
4.2 Height mast fully lowered	h <sub>1</sub> (mm)	1995	1995	1995	1995
4.3 Free lift	h <sub>2</sub> (mm)	150	150	155	155
4.4 Lift height	h <sub>3</sub> (mm)	3000	3000	3000	3000
4.5 Height mast fully extended	h <sub>4</sub> (mm)	3945	3945	3945	3945
4.7 Overhead guard height	h <sub>6</sub> (mm)	2115	2115	2115	2115
4.8 Seat height/standing height	h <sub>7</sub> (mm)	1025	1025	1025	1025
4.12 Towing coupler height	h <sub>10</sub> (mm)	245	245	245	245
4.19 Overall length	l <sub>1</sub> (mm)	3360	3360	3400	3400
4.20 Length to fork face	l <sub>2</sub> (mm)	2260	2260	2300	2300
4.21 Overall width	b <sub>1</sub> (mm)	1080	1080	1080	1080
4.22 Fork dimensions	s/e/l (mm)	35x100x1100	35x100x1100	40x100x1100	40x100x1100
4.23 Carriage DIN 15173, Class / Form A,B		2A	2A	2A	2A
4.24 Carriage width	b <sub>3</sub> (mm)	920	920	920	920
4.31 Mast underclearance loaded	m <sub>1</sub> (mm)	115	115	115	115
4.32 Underclearance center wheelbase	m <sub>2</sub> (mm)	145	145	145	145
4.33 Right angle stacking aisle with pallet 1000 x 1200 across forks	Ast (mm)	3570	3570	3600	3600
4.34 Right angle stacking aisle with pallet 800 x 1200 across forks	Ast (mm)	3380	3380	3400	3400
4.35 Turning radius	Wa (mm)	1970	1970	2000	2000
4.36 Turning radius, inner	b <sub>13</sub> (mm)	135	135	135	135
PERFORMANCE					
5.1 Travelling speed with/without load	km/h	18.5/18.5	18/18	18.5/18.5	18/18
5.2 Lifting speed with/without load	mm/s	580/630	590/650	580/630	590/650
5.3 Lowering speed with/without load	mm/s	520/520	520/520	520/520	520/520
5.5 Drawbar pull, with/without load	kN	15.3/9.1	16/9.9	15.3/9.1	16/9.9
5.7 Gradeability with/without load	%	39/23	38/23	35/20	36/20
5.9 Acceleration with/without load	s	4.4/3.8	4.3/3.8	4.5/3.9	4.5/3.9
5.10 Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
DRIVE					
7.1 Engine manufacturer/type		Nissan K21	UD QD32	Nissan K21	UD QD32
7.2 Engine rated power according ISO 1585	kW	41.5	36	41.5	36
7.3 Rated engine revolutions	min <sup>-1</sup>	2700	2150	2700	2150
7.4 Number of cylinders/Displacement	cm <sup>3</sup>	4/2065	4/3153	4/2065	4/3153
OTHERS					
8.1 Type of drive control		Torque convertor <sup>1</sup>	Torque convertor <sup>1</sup>	Torque convertor <sup>1</sup>	Torque convertor <sup>1</sup>
8.2 Working pressure attachments	bar	130	130	130	130
8.4 Noise level operator's ear according EN12053	dB(A)	77 <sup>2</sup>	79	77 <sup>2</sup>	79

NOTE : <sup>1</sup>: Excluding the weight for LPG bottle  
<sup>2</sup>: Noise level at operator's ear in Eco-mode

DIMENSIONS



MAST SPECIFICATIONS & RATED CAPACITIES: 2.0, 2.5 TON

Mast Type	Mast name	Maximum fork height (mm) <sup>1</sup>	Overall Height		Free Lift		Tilt angle Forward/Backward degrees	Load capacity <sup>2)</sup>		
			Fully lowered (mm) <sup>1</sup>	Fully extended Without backrest (mm) <sup>1</sup>	With STD backrest (mm) <sup>1</sup>	Without backrest (mm) <sup>1</sup>		With STD backrest (mm) <sup>1</sup>	Load center 500 mm FGE/FD20-E1 (kg) <sup>1</sup>	FGE/FD25-E1 (kg) <sup>1</sup>
TWO STAGE WIDE VIEW	2W300	3000	1995	3640	4045	155	155	6/12	2000	2500
	2W330	3300	2145	3940	4345	155	155	6/12	2000	2500
	2W350	3500	2280	4140	4545	155	155	6/12	2000	2500
	2W400	4000	2405	4340	4745	155	155	6/12	2000	2500
	2W450	4500	2595	4640	5045	155	155	6/6	1950	2400
TWO STAGE FULL FREE	2F300	3000	1995	3675	4045	1360	990	6/12	2000	2500
	2F330	3300	2145	3975	4345	1510	1140	6/12	2000	2500
	2F350	3500	2280	4175	4545	1645	1275	6/12	2000	2500
	2F370	3700	2405	4375	4745	1770	1400	6/12	2000	2500
	2F400	4000	2595	4675	5045	1960	1590	6/6	2000	2500
THREE STAGE FULL FREE	3F385	3850	1845	4525	4895	1210	840	6/6	2000	2500
	3F430	4300	1995	4975	5345	1360	990	6/6	1950	2450 <sup>3)</sup>
	3F475	4750	2145	5425	5795	1510	1140	6/6	1800	2400 <sup>3)</sup>
	3F515	5150	2280	5825	6195	1645	1275	6/6	1800 <sup>3)</sup>	2350 <sup>3)</sup>
	3F550	5500	2405	6175	6545	1770	1400	6/6	1750 <sup>3)</sup>	2250 <sup>3)</sup>
	3F600	6000	2595	6675	7045	1960	1590	6/6	1650 <sup>3)</sup>	2100 <sup>3)</sup>
	3F650	6500	2845	7175	7545	2210	1840	6/6	1400 <sup>3)</sup>	1450 <sup>3)</sup>
THREE STAGE FULL FREE WIDE VIEW	3F700	7000	3095	7675	8045	2460	2090	6/6	1000 <sup>3)</sup>	1100 <sup>3)</sup>
	3V360	3600	1845	4225	4645	1170	840	6/6	1950	2450
	3V405	4050	1995	4675	5095	1320	990	6/6	1900	2400 <sup>3)</sup>
	3V450	4500	2145	5125	5545	1470	1140	6/6	1800	2350 <sup>3)</sup>
	3V490	4900	2280	5525	5945	1600	1275	6/6	1750 <sup>3)</sup>	2300 <sup>3)</sup>
THREE STAGE FULL FREE WIDE VIEW	3V525	5250	2405	5875	6295	1730	1400	6/6	1700 <sup>3)</sup>	2250 <sup>3)</sup>
	3V575	5750	2595	6375	6795	1920	1590	6/6	1650 <sup>3)</sup>	2100 <sup>3)</sup>
	3V633	6330	2845	6955	7375	2170	1840	6/6	1500 <sup>3)</sup>	1700 <sup>3)</sup>
	3V688	6880	3095	7505	7925	2420	2090	6/6	1100 <sup>3)</sup>	1200 <sup>3)</sup>

NOTE : <sup>1</sup> 1 inch = 25.4 mm 1 kg = 0.4536 lb <sup>2)</sup> Capacity with single pneumatic tires unless indicated <sup>3)</sup> With wide, single elastic tires. Truck width: 1285 mm

MAST SPECIFICATIONS & RATED CAPACITIES: 3.0, 3.2 TON

Mast Type	Mast name	Maximum fork height (mm) <sup>1</sup>	Overall Height		Free Lift		Tilt angle Forward/Backward degrees	Load capacity <sup>2)</sup>		
			Fully lowered (mm) <sup>1</sup>	Fully extended Without backrest (mm) <sup>1</sup>	With STD backrest (mm) <sup>1</sup>	Without backrest (mm) <sup>1</sup>		With STD backrest (mm) <sup>1</sup>	Load center 500 mm FGE/FD30-E1 (kg) <sup>1</sup>	FGE/FD32-E1 (kg) <sup>1</sup>
TWO STAGE WIDE VIEW	2W300	3000	2025	3675	4140	160	160	6/12	3000	3200
	2W330	3300	2175	3975	4440	160	160	6/12	3000	3200
	2W350	3500	2310	4175	4640	160	160	6/12	3000	3200
	2W370	3700	2435	4375	4840	160	160	6/12	3000	3200
	2W400	4000	2625	4675	5140	160	160	6/6	3000	3200
TWO STAGE FULL FREE	2F300	3000	2025	3700	4140	1370	930	6/12	3000	3100
	2F330	3300	2175	4000	4440	1520	1080	6/12	3000	3100
	2F350	3500	2310	4200	4640	1655	1215	6/12	3000	3100
	2F370	3700	2435	4400	4840	1780	1340	6/12	3000	3100
	2F400	4000	2625	4700	5140	1970	1530	6/6	3000	3100
THREE STAGE FULL FREE	3F385	3850	2025	4515	4990	1405	930	6/6	3000	3100
	3F430	4300	2175	4965	5440	1555	1080	6/6	3000	3100
	3F475	4750	2310	5415	5890	1690	1215	6/6	2900	3100
	3F515	5150	2435	5815	6290	1815	1340	6/6	2850 <sup>3)</sup>	3050 <sup>3)</sup>
	3F550	5500	2625	6165	6640	2005	1530	6/6	2800 <sup>3)</sup>	3000 <sup>3)</sup>
	3F600	6000	2875	6665	7140	2255	1780	6/6	2700 <sup>3)</sup>	2900 <sup>3)</sup>
	3F650	6500	3125	7165	7640	2505	2030	6/6	2400 <sup>3)</sup>	2600 <sup>3)</sup>
THREE STAGE FULL FREE WIDE VIEW	3F700	7000	3375	7665	8140	2755	2280	6/6	2100 <sup>3)</sup>	2300 <sup>3)</sup>
	3V385	3850	2025	4505	4990	1325	930	6/6	3000	3100
	3V430	4300	2175	4955	5440	1475	1080	6/6	2950	3100
	3V470	4700	2310	5355	5840	1605	1215	6/6	2850	3050
	3V505	5050	2435	5705	6190	1735	1340	6/6	2750 <sup>3)</sup>	2950 <sup>3)</sup>
	3V555	5550	2625	6205	6690	1925	1530	6/6	2700 <sup>3)</sup>	2900 <sup>3)</sup>
	3V600	6000	2875	6655	7140	2175	1780	6/6	2650 <sup>3)</sup>	2850 <sup>3)</sup>
3V650	6500	3125	7155	7640	2425	2030	6/6	2400 <sup>3)</sup>	2600 <sup>3)</sup>	
3V700	7000	3375	7655	8140	2545	2280	6/6	2100 <sup>3)</sup>	2300 <sup>3)</sup>	

NOTE : <sup>1</sup> 1 inch = 25.4 mm 1 kg = 0.4536 lb <sup>2)</sup> Capacity with single pneumatic tires unless indicated <sup>3)</sup> special containers mast available: 2175 mm # Load capacity with double tires. Truck width: 1720 mm  
<sup>4)</sup> Load capacity with single superelastic tire

CHARACTERISTICS	UniCarriers											
	FGE20-E1	FD20-E1	FGE25-E1	FD25-E1	FGE30-E1	FD30-E1	FGE32-E1	FD32-E1				
1.1 Manufacturer												
1.2 Model name												
1.3 Power unit: Electric, Diesel, Gasoline, LPG, others	LPG	Diesel	LPG	Diesel	LPG	Diesel	LPG	Diesel				
1.4 Operation: Sit, Hand, Pedestrian, Standing, Order picking	Sit	Sit	Sit	Sit	Sit	Sit	Sit	Sit				
1.5 Load capacity	Q (t)	2.0	2.0	2.5	2.5	3.0	3.0	3.2	3.2			
1.6 Load center	c (mm)	500	500	500	500	500	500	500	500			
1.8 Front overhang	x (mm)	455	455	455	455	485	485	485	485			
1.9 Wheel base	y (mm)	1650	1650	1650	1650	1760	1760	1760	1760			