

XE 12 - 20

Technical data



designed to work



LIFT MAST SPECIFICATIONS

				Standard (Simplex)					Duplex				Triplex					
XE 12³-XE 15³ XE 15^H-XE 15^H XE 15H Rollers Fork Carriage (*)	Lift Height	h_3	mm	3330	3630	4030	4530	5030	2975	3275	3575	3975	4470	4770	5220	5770	6370	6970
	Minimum Overall Height	h_1	mm	2210	2360	2560	2810	3060	1960	2110	2260	2460	2010	2110	2260	2510	2710	2910
	Maximum Overall Height	h_4	mm	3905	4205	4605	5105	5605	3550	3850	4150	4550	5045	5345	5795	6345	6945	7545
	Free Lift	h_2	mm	150	150	150	150	150	1405	1555	1705	1905	1455	1555	1705	1955	2155	2355
XE 18³-XE 18 6 Rollers Fork Carriage	Lift Height	h_3	mm	3330	3630	4030	4530	5030	2975	3275	3575	3975	4470	4770	5220	5770	6370	6970
	Minimum Overall Height	h_1	mm	2210	2360	2560	2810	3060	2010	2160	2310	2510	2060	2160	2310	2560	2760	2960
	Maximum Overall Height	h_4	mm	3973	4273	4673	5173	5673	3643	3943	4243	4643	5138	5438	5888	6438	7038	7638
	Free Lift	h_2	mm	150	150	150	150	150	1362	1512	1662	1862	1412	1512	1662	1912	2112	2312
XE 20³-XE 20 6 Rollers Fork Carriage	Lift Height	h_3	mm	3350	3650	4050	4550	5050	2970	3270	3570	3970	4465	4765	5215	5665	6265	6865
	Minimum Overall Height	h_1	mm	2260	2410	2610	2860	3110	2010	2160	2310	2510	2060	2160	2310	2460	2660	2860
	Maximum Overall Height	h_4	mm	4046	4346	4746	5246	5746	3646	3946	4246	4646	5156	5456	5906	6356	6956	7556
	Free Lift	h_2	mm	150	150	150	150	150	1445	1595	1745	1945	1495	1595	1745	1895	2095	2295

(*) with optional fork carriage (6 rollers)

$h_4 = h_4 + 68 \text{ mm (SX)}$

$h_4 = h_4 + 43 \text{ mm (DX-TX)}$

$h_2 = h_2 - 43 \text{ mm (DX-TX)}$

WHEELS

Type	Superelastic		Pneumatic		Vulkolan / Superelastic	
	Front	Rear	Front	Rear	Front (Vulkolan)	Rear (SE)
XE 15 XE 15 H	18x7-8 (SX-DX-TX)	15x4.5-8	18x7-8/16 (SX-DX)	15x4.5-8/12	18x5x121/8" (SX-DX-TX)	15x4.5-8 (S.E white)
XE 18	18x7-8 (SX-DX)	15x4.5-8	18x7-8/16 (SX-DX)	15x4.5-8/12	18x5x121/8" (SX-DX-TX)	15x4.5-8 (S.E white)
	200/50-10 (TX)	15x4.5-8				
XE 20	200/50-10	140/55-9			18x5x12 1/8" (SX-DX-TX)	140/55-9 (S.E white)

RUOTE

Tipo	Superelastic		Pneumatic		Vulkolan / Superelastic	
	Front	Rear	Front	Rear	Front (Vulkolan)	Rear (SE)
XE 12³ XE 15³	18x7-8 (SX-DX-TX)	15x4.5-8	18x7-8/16 (SX-DX)	15x4.5-8/12	18x5x12 1/8" (SX-DX-TX)	15x4.5-8 (S.E white)
XE 18³	18x7-8 (SX-DX)	15x4.5-8	18x7-8/16 (SX-DX)	15x4.5-8/12	18x5x12 1/8"	15x4.5-8 (S.E white)
	200/50-10 (TX)	15x4.5-8				
XE 20³	200/50-10	140/55-9			18x5x12 1/8" (SX-DX-TX)	140/55-9 (S.E white)

XE 12 - 20 Technical Data

VDI 2198

			OM PIMESPO	OM PIMESPO	OM PIMESPO		
Specification	1.1	Manufacturer					
	1.2	Model designation	XE 12 ³	XE 15 ³	XE 15		
	1.3	Type of drive: Electric - Diesel - Petrol - GPL - Network Power (Electric)	Electric	Electric	Electric		
	1.4	Operation Type: Hand - Stand on - Driver seated	Driver Seated	Driver Seated	Driver Seated		
Weight	1.5	Load Capacity	Q (t)	1.2	1.5		
	1.6	Load Baricenter Distance	c (mm)	500	500		
	1.8	Distance from axle centre to fork face	x (mm)	365 ^{3) 4)}	365 ^{3) 4)}	365 ^{3) 4)}	
Dimensions and overall Sizes	1.9	Wheel Base	y (mm)	1152	1260	1280	
	2.1	Service Weight	kg	2620	2875	2852	
	2.2	Axle Weight with rated load	front / rear	kg	3323 / 497	3842 / 533	3809 / 543
	2.3	Axle Weight without load	front / rear	kg	1222 / 1398	1313 / 1562	1295 / 1557
	3.1	Tyres SE = superelastic - PN = pneus		SE / SE ¹⁾	SE / SE ¹⁾	SE / SE ¹⁾	
	3.2	Front tyres size		18x7-8 ¹⁾	18x7-8 ¹⁾	18x7-8 ¹⁾	
	3.3	Rear tyres size		15x4.5-8 ¹⁾	15x4.5-8 ¹⁾	15x4.5-8 ¹⁾	
	3.5	Tyres number front / rear (x = drive)		2x / 2	2x / 2	2x / 2	
	3.6	Front track width	b10 (mm)	932 ⁸⁾	932 ⁸⁾	932 ⁸⁾	
	3.7	Rear track width	b11 (mm)	168	168	874	
Dimensions and overall Sizes	4.1	Lifting assembly tilting	forward/backward	Grad	3° / 9° ²⁾	3° / 9° ²⁾	
	4.2	Mast minimum overall height	h1 (mm)	2210 ⁵⁾	2210 ⁵⁾	2210 ⁵⁾	
	4.3	Free height	h2 (mm)	150	150	150	
	4.4	Lift height	h3 (mm)	3330	3330	3330	
	4.5	Mast maximum overall height	h4 (mm)	3905 ¹⁴⁾	3905 ¹⁴⁾	3905 ¹³⁾	
	4.7	Overheadguard height	h6 (mm)	2024	2024	2024	
	4.8	Seat Height	h7 (mm)	939	939	939	
	4.12	Drawbar height	h10 (mm)	523	523	523	
	4.19	Overall Length	l1 (mm)	2726 ^{3) 4)}	2834 ^{3) 4)}	2910 ^{3) 4)}	
	4.20	Overall Length including fork arms spessore forche	l2 (mm)	1726 ^{3) 4)}	1834 ^{3) 4)}	1910 ^{3) 4)}	
	4.21	Overall width	b1/b2 (mm)	1067 ⁹⁾	1067 ⁹⁾	1067 ⁹⁾	
	4.22	Fork arms dimension	s/e/l (mm)	40/80/1000	40/80/1000	40/80/1000	
	4.23	Fork carriage in compliance with DIN 15173 Classe / Form A, B		2A	2A	2A	
	4.24	Fork carriage width	b3 (mm)	1040 ¹⁰⁾	1040 ¹⁰⁾	1040 ¹⁰⁾	
	Performance	4.31	Mast ground clearance (with load)	m1 (mm)	95 ⁶⁾	95 ⁶⁾	95 ⁶⁾
4.32		Chassis ground clearance (with load) [middle of the chassis]	m2 (mm)	104	104	104	
4.33		Aisle width with pallet 1000x1200 and fork arm pitch 1200	Ast (mm)	3052 ^{3) 4)}	3160 ^{3) 4)}	3325 ^{3) 4)}	
4.34		Aisle width with pallet 800x1200 and fork arm pitch 800	Ast (mm)	3176 ^{3) 4)}	3284 ^{3) 4)}	3525 ^{3) 4)}	
4.35		Turning radius	Wa (mm)	1361	1469	1760	
4.36		Turning point minimum distance from the truck center line	b13 (mm)	-	-	596	
5.1		Drive speed	with / without load	km/h	14 / 14	14 / 14	
5.2		Lifting speed	with / without load	m/s	0.41 / 0.58	0.38 / 0.58	0.38 / 0.58
5.3		Lowering speed	with / without load	m/s	0.55 / 0.50	0.55 / 0.50	0.55 / 0.50
5.5		Drawbar pull tractive effort (S2 60 min)	with / without load	N	2390 / 2320	2320 / 2270	2330 / 2280
5.6	Drawbar pull tractive effort (S2 5 min)	with / without load	N	6060 / 5860	6020 / 5810	6030 / 5810	
5.7	Gradeability (S2 30 min)	with / without load	%	7.2 / 10.1	6.1 / 9.0	6.2 / 9.1	
5.8	Maximum gradeability (S2 5 min)	with / without load	%	16 / 22.5	13.8 / 20.3	13.9 / 20.	
5.9	Acceleration time (10 m)	with / without load	s	4.5 / 4.2	4.6 / 4.2	4.6 / 4.2	
Engine	5.10	Service brake		Electric/Mechanic	Electric/Mechanic	Electric/Mechanic	
	6.1	Drive motor, power S2 60 min	kW	4 x 2	4 x 2	4 x 2	
	6.2	Lifting motor, power S3 15%	kW	9	9	9	
	6.3	Battery in compliance with DIN 43531/35/36 A, B, C, NO		43531A	43531A	43531A	
	6.4	Voltage, Battery Capacity K5	V / Ah	48 / 360 ¹¹⁾	48 / 48012	48 / 480 ¹¹⁾	
	6.5	Battery weight	kg	590 ¹¹⁾	780 ¹²⁾	780 ¹¹⁾	
Others	6.6	Power consumption according to VDI cycle	kWh/h	-	-	-	
	8.1	Drive control type		Chopper	Chopper	Chopper	
	8.2	Service pressure for attachments	bar	154 ⁷⁾	180 ⁷⁾	180 ⁷⁾	
	8.3	Oil flow rate for attachment (max available)	l/min	25	25	25	
	8.4	Noise at operator's ear	dB (A)	69	69	69,8	
	8.5	Drawbar, Modell / Type DIN		-	-	-	

XE 12³ XE 15³ XE 15^H XE 18³ XE 20³
 1) For alternative tyres see table
 2) Standard mast with h₃ ≥ 4530 mm 3° / 5°
 All Duplex e Triplex 3° / 5°
 3) With side shift + 17 mm
 4) With Triplex masts + 20 mm (+22mm per XE 20)

5) With free lift 150 mm
 6) For all configuration
 7) XE 12: 183 bar (DX) - 174 bar (TX); XE 15: 210 bar (DX) - 200 bar (TX);
 XE 18: 235 bar (DX) - 230 bar (TX); XE 20: 220 bar (DX) - 225 bar (TX)
 8) 945 mm with wheels 200/50-10 and 875mm with wheels 18x5x12 1/8" (vulkolan)
 9) 1150.5 mm with wheels 200/50-10 and 1002mm with wheels 18x5x12 1/8" (vulkolan)

10) with integrated sideshift = 980 mm
 11) battery optional (capacity/weight): 300Ah / 549±5%Kg; 345Ah / 580±5%Kg; 375Ah / 590±5%Kg,
 12) battery optional (capacity/weight): 400Ah / 709±5%Kg; 460Ah / 765±5%Kg; 500Ah / 780±5%Kg,
 13) battery optional (capacity/weight): 575Ah / 915±5%Kg; 625Ah / 930±5%Kg.
 14) 4 rollers fork plate: 3905mm - 6 rollers fork plate: 3973mm
 15) 6 rollers fork plate:

OM PIMESPO	OM PIMESPO	OM PIMESPO	OM PIMESPO	OM PIMESPO	OM PIMESPO
XE 15 [°] H	XE 15 H	XE 18 [°]	XE 18	XE 20 [°]	XE 20
Electric	Electric	Electric	Electric	Electric	Electric
Driver Seated	Driver Seated	Driver Seated	Driver Seated	Driver Seated	Driver Seated
1.5	1.5	1.8	1.8	2.0	2.0
500	500	500	500	500	500
365 ^{3) 4)}	365 ^{3) 4)}	370 ^{3) 4)}	370 ^{3) 4)}	380 ^{3) 4)}	380 ^{3) 4)}
1260	1280	1368	1388	1513	1498
3047	3065	3067	3045	3240	3250
3935 / 612	3903 / 662	4369 / 498	4337 / 508	4746 / 494	4727 / 523
1406 / 1641	1389 / 1676	1431 / 1636	1416 / 1629	1582 / 1658	1552 / 1698
SE / SE ¹⁾	SE / SE ¹⁾	SE / SE ¹⁾	SE / SE ¹⁾	SE / SE ¹⁾	SE / SE ¹⁾
18x7-8 ¹⁾	18x7-8 ¹⁾	18x7-8 ¹⁾	18x7-8 ¹⁾	200/50-10	200/50-10
15x4.5-8 ¹⁾	15x4.5-8 ¹⁾	15x4.5-8 ¹⁾	15x4.5-8 ¹⁾	140/55-9	140/55-9
2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2
932 ⁸⁾	932 ⁸⁾	932 ⁸⁾	932 ⁸⁾	945	945
168	874	168	874	176	873
3° / 9° ²⁾	3° / 9° ²⁾	3° / 9° ²⁾	3° / 9° ²⁾	3° / 9° ²⁾	3° / 9° ²⁾
2210 ⁹⁾	2210 ⁹⁾	2210 ⁹⁾	2210 ⁹⁾	2260 ⁹⁾	2260 ⁹⁾
150	150	150	150	150	150
3330	3330	3330	3330	3350	3350
3905 ¹⁴⁾	3905 ¹³⁾	3973	3973	4046 ¹⁵⁾	4046 ¹⁴⁾
2139	2139	2024	2024	2024	2024
1054	1054	939	939	939	939
523	523	523	523	523	523
2834 ^{3) 4)}	2910 ^{3) 4)}	2947 ^{3) 4)}	3018 ^{3) 4)}	3102 ^{3) 4)}	3143 ^{3) 4)}
1834 ^{3) 4)}	1910 ^{3) 4)}	1947 ^{3) 4)}	2018 ^{3) 4)}	2102 ^{3) 4)}	2143 ^{3) 4)}
1067 ⁹⁾	1067 ⁹⁾	1067 ⁹⁾	1067 ⁹⁾	1150	1150
40/80/1000	40/80/1000	45/100/1000	45/100/1000	45/100/1000	45/100/1000
2A	2A	2A	2A	2A	2A
1040 ¹⁰⁾	1040 ¹⁰⁾	1040 ¹⁰⁾	1040 ¹⁰⁾	1040 ¹⁰⁾	1040 ¹⁰⁾
95 ⁶⁾	95 ⁶⁾	95 ⁶⁾	95 ⁶⁾	95 ⁶⁾	95 ⁶⁾
104	104	104	104	104	104
3160 ^{3) 4)}	3325 ^{3) 4)}	3268 ^{3) 4)}	3443 ^{3) 4)}	3427 ^{3) 4)}	3578 ^{3) 4)}
3284 ^{3) 4)}	3525 ^{3) 4)}	3392 ^{3) 4)}	3643 ^{3) 4)}	3552 ^{3) 4)}	3778 ^{3) 4)}
1469	1760	1577	1878	1722	1998
-	596	-	646	-	696
14 / 14	14 / 14	14 / 14	14 / 14	14 / 14	14 / 14
0.38 / 0.58	0.38 / 0.58	0.35 / 0.58	0.35 / 0.58	0,34 / 0,48	0,34 / 0,48
0.55 / 0.50	0.55 / 0.50	0.55 / 0.50	0.55 / 0.50	0,45/ 0,39	0,45/ 0,39
2300 / 2240	2300 / 2240	2280 / 2240	2290 / 2240	2240 / 2215	2240 / 2215
6000 / 5790	600 / 5780	6020 / 5780	6020 / 5790	5990 / 5776	5990 / 5776
5.9 / 8.4	5.8 / 8.4	5.4 / 8.3	5.5 / 8.4	5,0 / 7,8	5,0 / 7,8
13.3 / 19.1	13.2 / 19.0	12.4 / 18.9	12.5 / 19.0	11,5 / 17,8	11,5 / 17,8
4.6 / 4.2	4.6 / 4.2	4.6 / 4.2	4.6 / 4.2	4.8 / 4.4	4.8 / 4.4
Electric/Mechanic	Electric/Mechanic	Electric/Mechanic	Electric/Mechanic	Electric/Mechanic	Electric/Mechanic
4 x 2	4 x 2	4 x 2	4 x 2	4 x 2	4 x 2
9	9	9	9	9	9
43531A	43531A	43531A	43531A	43531A	43531A
48 / 640	48 / 640	48 / 600 ¹³⁾	48 / 600 ¹²⁾	48 / 750	48 / 750
970	970	930 ¹³⁾	930 ¹²⁾	1055	1055
-	-	-	-	-	4,7
Chopper	Chopper	Chopper	Chopper	Chopper	Chopper
180 ⁷⁾	180 ⁷⁾	213 ⁷⁾	213 ⁷⁾	207 ⁷⁾	207 ⁷⁾
25	25	25	25	25	25
69	69,8	69	69,8	69	69
-	-	-	-	-	-

XE 15 XE 15H XE 18 XE 20

1) For alternative tyres see table

2) Standard mast with h₃ ≥ 4530 mm 3° / 5°

All Duplex e Triplex 3° / 5°

3) With side shift + 17 mm

4) With Triplex masts + 20 mm (+22mm per XE 20)

5) With free lift 150 mm

6) For all configuration

7) XE 15: 210 bar (DX) - 200 bar (TX); XE 18: 235 bar (DX) - 230 bar (TX);

XE 20: 220 bar (DX) - 225 bar (TX)

8) 945 mm with wheels 200/50-10

9) 1150.5 mm with wheels 200/50-10

and 875mm with wheels 18x5x12 1/8" (vulkan)

and 1002mm with wheels 18x5x12 1/8" (vulkan)

10) with integrated sideshift = 980 mm

11) battery optional (capacity/weight): 400Ah / 709±5%Kg; 460Ah / 765±5%Kg; 500Ah / 780±5%Kg.

12) battery optional (capacity/weight): 575Ah / 915±5%Kg; 625Ah / 930±5%Kg

13) 4 rollers fork plate: 3905mm - 6 rollers fork plate: 3973mm

14) 6 rollers fork plate



XE 12 - 20 Counterbalanced fork lift truck

A new **chassis** developed using the latest F.E.M. (Finite Elements Method) calculation methods provides greater rigidity and stability, resulting in a compact truck which improves on the performance of previous trucks but still maintains the residual load capacities.

Traction is obtained with two 48V-4 kW separately excited motors (SEM) that provide excellent torque driving on the front axle. The regenerative braking system is activated when the accelerator pedal is released, and together with the front axle brakes, provides a greater level of performance and driving comfort.

A completely updated electronic system using **MOSFET and CANBUS technology transmits** data more quickly and responds more precisely to the controls, rendering the truck more responsive during all functions. In addition, the "check control" system will immediately diagnose any malfunction.

Our customer service department can program all the customizable parameters of the machine in accordance with the customer's requirements.

The new three- and four-wheel **steering axles** have improved the stability and precision of the truck. A potentiometer located on the steering axle recognizes the turning radius, and, if this curve is tight, the electronic system automatically prevents an increase of traction speed providing a greater measure of safety for the operator.

The operator cab has been designed to enable all operator movements, as have the MSG12 seat, power-assisted steering, and hydraulic levers to the side of the operator. The optional Joystick single lever control enables the operator to control the traction and lift functions easily, resulting in a greater level of comfort. All these features lead to an improved cost/benefits ratio and greater productivity.

A powerful 48V, 9 kW **lift motor** provides high rates of lift speed. The electronic system optimizes energy consumption, thus improving productivity.

The 48V DIN **batteries** have capacities from 300 to 750 Ah. The XE153H and XE15H truck types are not only compact, but also have a high level of autonomy.

The new, optimized profiles of the **masts** and new fork carriage assembly provide improved visibility and torsional rigidity, together with a high residual load capacity and lower maintenance costs. Simplex, Duplex, Triplex with heights up to 6900 mm are available.

Options: manual reversing control, integral side shift, joystick single lever control, MSG20 seat, fabric, heated and anti static seats, work lights, rotating beacon, headlights, non-marking tyres, solid tyres. Various operator cab safety devices and many other options are available for a wide range of customizations.

OM PIMESPO's philosophy for all its products is to place safety first when a truck is in operation.