MOVE THE WORLD FORW▶RD MITSUBISHI HEAVY NDUSTRIES GROUP

# **OPB12-25N2(X)(F)(P) Series**



# **VELÍA** ES LOW LEVEL **ORDER PICKERS**

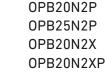
1.2 – 2.5 tonnes

# **EMPOWER YOUR OPERATOR... TRANSFORM YOUR OPERATIONS**

Despite its ultra-compact size, our VELiA ES range of low level order pickers is packed with smart features that will have your operations running more efficiently, productively and reliably. Oh, and safer, too.

#### SPEC SHEET

OPB12N2F	OPB20N
OPB12N2FP	OPB25N
OPB20N2	OPB20N
0PB25N2	OPB20N







# VELIAES OPB12-25N2(X)(F)(P) Series LOW LEVEL ORDER PICKERS

1.2 – 2.5 tonnes





Its energy efficiency is top of its class. It's 14% more efficient than its closest competitor meaning you can work as leanly as possible. And its marketleading ergonomics mean your operators will be as comfortable and productive as possible – even through the longest shifts.

But, if that weren't enough, at the heart of every VELIA ES model is hyper-intelligent software that moulds the truck's behaviour to your operator and your operations for performance that is consistently easier, steadier and safer.

With drive speeds of up to 13 km/h, VELiA ES is sure to pick up the pace of your operations... whichever model you choose (standard, rising platform [P], rising fork [F] and scissor lift [X]).

#### DRIVE

- Class-leading energy efficiency (14% lower than nearest competitor) ensures running costs are kept to a minimum.
- Powerful drive motor provides excellent traction and adjustable acceleration, deceleration and brake force, for smooth, quiet, controlled operation, extended shift length and lower maintenance requirements.
- Sensitive Drive System (SDS) senses faster or slower operator control movements and adjusts truck performance accordingly, contributing to safety and driver performance.
- Adaptive steering system ensures truck performance matches operator needs – whether travelling in reverse or at speed – for calm, smooth and precise operations.

#### OPERATOR ENVIRONMENT AND CONTROLS

- Flying start technology shortens acceleration time for ultimate picking productivity.
- Super-grip floor is non-slip ensuring operators are safe, for confident operations.
- Triple-suspension floating floor with sideways dampening and advanced cushioning, reduces microvibrations for exceptional operator comfort.
- Perfectly-angled footrest ensures optimal positioning of foot and ankle for drivers of all heights.
- Easy-access platform features low step height and chamfered edges – minimising trip hazards for easy on/ off access.
- Next generation Maxius steering wheel absorbs vibrations and shocks to ensure class-leading ergonomics.
- Optional clear colour display alerts operators and service engineers to potential problems: avoiding damage, while enhancing safety and encouraging good maintenance.
- Rising operator platform lifts to 1000 mm for picking heights of up to 2.5 m - minimising stretching and straining for operators [P models only].

#### FORKS

- Bevelled easy-entry forks offer effortless pallet entry: reducing time and risk of pallet damage for increased efficiency.
- Choice of long forks ensures scissor lift models can carry up to four rollcages at once for increased efficiency. [X models only].

#### **FRAME AND BODY**

- Robust design benefits from extensive testing – including safety certification – for lower service costs and enhanced safety.
- Class-leading lift height up to 220 mm – offers high ground clearance for easy and safe handling on loading docks and ramps [Standard models].

# ELECTRICAL AND CONTROL SYSTEMS

 Full electronic steering with no steering wheel kickback gives precise control for optimum productivity, efficiency and safety.

#### **STEERING SYSTEM**

- Small turning circle together with responsive steering and compact chassis allows exceptional manoeuvrability.
- Advanced electric steering allows precise control at speed, with automatic speed reduction in curves and automatic drive wheel centring.
- 100-degree steering angle ensures exceptional manoeuvrability – even in tight spaces.

#### BRAKES

- Regenerative braking with no drive wheel jamming or brake wear gives effective control and excellent energy efficiency.
- Anti-lock brakes ensure safe stopping

   even on slippery surfaces for
   ultimate safety.





#### There is more information on VELiA ES on mitforklift.com

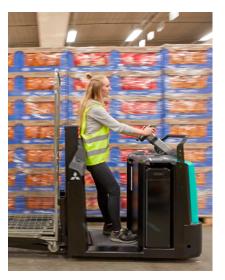
For more extensive information please visit our website mitforklift.com



mft2.eu/veliaes



# **VELIA ES** OPTIONAL LI-ION BATTERY SYSTEMS MAKE YOUR FORKLIFT (AND ITS FUEL) GO EVEN FURTHER



Tried, tested and proven in the field, lead-acid batteries have been the longstanding top choice for companies employing electric lift trucks. However, with long charging times, demanding maintenance requirements, the need for extra batteries and high risk of operator misuse, it can be a challenge. Fortunately, there's a new battery system on the block: Li-ion from Mitsubishi Forklift Trucks.

Designed to meet your business' demands - including multi-shift (24/7) operations - without the need for spare batteries, our high-performance Li-ion battery system is up to 40 per cent more efficient than lead-acid counterparts. Plus, it's virtually error-proof, thanks to its ultra-low-maintenance design which prevent cell damage.



- Exceptional, zero-emissions efficiency 40% more efficient than lead-acid batteries and free from gases.
- Ultra-low maintenance design demands just a full charge each week to activate cell balancing, as well as an annual CSV export/update.
- No space required with no need for charging areas, there's no cost to set up and you can keep your profitable space just that: profitable.
- Quick charge capabilities mean that just 15 minutes is all your battery needs to keep your truck going a few more hours. (It only takes 1 to 2 hours to fully charge a completely discharged battery.)
- Higher sustained voltage ensures more consistent lifting and driving performance, which is particularly noticeable towards the end of a shift.
- TriCOM Technology delivers exceptionally high system efficiency (up to 97%).

Battery capacity, Ah	208	312
Charger capacity, Ah 1 hour	100	300

- Water-free design With no water in the battery and no need to top up, there's no risk of operators damaging cells.
- Active protection componentry This continuously monitors the system, highlighting potential issues, including misuse.
- Short circuit protection is offered by system safeguards including: deepdischarge and overcharge protection, individual cell temperature and voltage monitoring.
- On-the-go performance and monitoring is possible thanks to the system's integrated monitoring system with easy-to-read display unit, as well as an opportunity charger on board.





#### There is more information on Li-ion on mitforklift.com

For more extensive information please visit our website mitforklift.com



mft2.eu/lion

	CHARACTERISTICS				
1 1	Manufacturer			Mitsubishi	Mitsubishi
1.1 1.2	Manufacturer's model designation			OPB20N2	OPB25N2
	Power source			Battery	Battery
1.3				,	,
1.4	Operator type	0	L.v.	Stand-on	Stand-on
1.5	Load capacity	Q	kg	2000	2500
1.6	Load center distance	С	mm	600	600
1.8	Load wheel axle to fork face (forks lowered)	х	mm	960	960
1.9	Wheelbase	У	mm	2054 5)	2054 <sup>5)</sup>
	WEIGHT		1	10701)	10701)
2.1	Truck weight without load, with maximum battery weight		kg	1079 <sup>1)</sup>	1079 <sup>1)</sup>
2.2	Axle loadings with nominal load & maximum battery weight, drive/load side		kg	1082/1997	1178 / 2401
2.3	Axle loadings without load & with maximum battery weight, drive/load side		kg	829 / 250	829 / 250
	WHEELS, DRIVE TRAIN				
3.1	Tyres: PT=Power Thane, Vul=Vulkollan, P=Polyurethane, N=Nylon, R=Rubber drive/load side			Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	ø250	ø250
3.3	Tyre dimensions, load side		mm	ø85	ø85
3.4	Castor wheel dimensions (diameter × width)		mm	ø180 × 65	ø180 × 65
3.5	Number of wheels, load/drive side (x=driven)			4 / 1x1	4 / 1x1
3.6	Track width (center of tyres), drive side	b10	mm	494	494
3.7	Track width (center of tyres), load side	b11	mm	365	365
	DIMENSIONS				
4.2a	Height with mast lowered	h1	mm	1173	1173
4.4	Lift height	h3	mm	135	135
4.5	Height with mast extended	h4	mm	-	-
4.8	Seat- or stand height	h7	mm	123	123
4.14	Platform height, raised	h12	mm	-	-
4.15	Fork height, fully lowered	h13	mm	85	85
4.19	Overall length	l1	mm	2421 5)	2421 5)
4.20	Length to fork face	l2	mm	1271 5)	1271 <sup>5)</sup>
4.21	Overall width	b1/b2	mm	800	800
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	60 / 175 / 900-3600	60 / 175 / 900-3600
4.25	Outside width over forks (minimum / maximum)	b5	mm	480 / 660	480 / 660
4.32	Ground clearance at center of wheelbase. (forks lowered)	m2	mm	25	25
4.34a	Working aisle width (Ast) with 800 × 1200 mm pallets, load lengthwise	Ast	mm	2898 5)	2898 5)
4.35	Turning radius	Wa	mm	2231 5)	2231 5)
4.00	PERFORMANCE				
5.1	Travel speed, with / without load		km/h	9.0 / 9.0 (opt 9 / 13)	9.0 / 13.0
5.2	Lifting speed, with / without load		m/s	0.04 / 0.05	0.03 / 0.05
5.3	Lowering speed, with / without load		m/s	0.05 / 0.03	0.05 / 0.03
5.7	Gradeability, with / without load		%	7 / 15	7 / 15
5.10	Service brake		70	Electric	Electric
5.10	ELECTRIC MOTORS			Liectric	Liectric
6.1	Drive motor capacity (60 min. short duty)		kW	2.6	2.6
6.2	Lift motor output at 15% duty factor		kW	1.2	1.2
	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 465-620	24 / 465-620
6.4				355-493	355-493
6.5	Battery weight		kg		
6.6a	Energy consumption according to EN 16796		kWh/h	0.37	0.4
0.4	MISCELLANEOUS			Charless	Ctoplant
8.1	Type of drive control			Stepless	Stepless
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ		dB(A)	62 <sup>3)</sup>	62 <sup>3)</sup>
10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ		dB(A)	73 / 62 / - 3)	73 / 62 / - 3)
10.7.2	Whole-body vibration (EN 13 059:2002)			0.6	0.6
10.7.3	Hand-arm vibration ( EN 13 059:2002)			<2.5	<2.5
	1) Forks 540 × 1150, battery 620 Ah			Ast = Wa - x + l6 +	200
	2) Forks 540 × 1150/ lift 1200mm, battery 620 Ah			Ast = Working aisl	
	3) Inaccuracy of 4 dB(A)			Wa = Turning radiu	

a = Safety clearance =  $2 \times 100$  mm R =  $\sqrt{(16 + x)^2 + (b12/2)^2}$ 

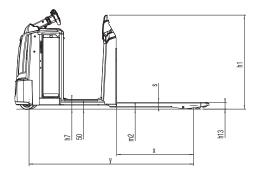
l6 = Pallet length (800 or 1000 mm) b12 = Pallet width (1200 mm)

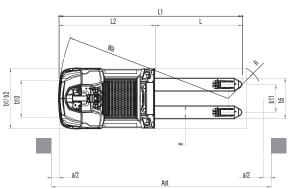
Wa = Turning radius

# **VELÍA ES** LOW LEVEL ORDER PICKERS

**OPB20N2 / 25N2 STANDARD MODEL** 2.0 – 2.5 tonnes







Continuing improvement may lead to changes in these specifications

3) Inaccuracy of 4 dB(A)

4) Fork carriage length 2375 mm

5) With 620Ah battery + 100mm

Mitsubishi Forklift Trucks | 4

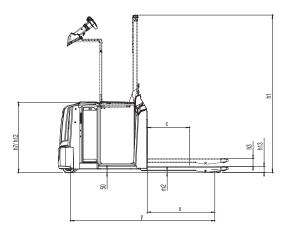
	CHARACTERISTICS				
1.1	Manufacturer			Mitsubishi	Mitsubishi
.2	Manufacturer's model designation			OPB20N2P	OPB25N2P
3	Power source			Battery	Battery
.4	Operator type			Stand-on	Stand-on
.5	Load capacity	Q	kg	2000	2500
.6	Load center distance	С	mm	600	600
.8	Load wheel axle to fork face (forks lowered)	x	mm	960	960
.9	Wheelbase	У	mm	2054 5)	2054 5)
	WEIGHT	,			
.1	Truck weight without load, with maximum battery weight		kg	1215 <sup>1)</sup>	1215 <sup>1)</sup>
.2	Axle loadings with nominal load & maximum battery weight, drive/load side		kg	1130 / 2085	1223 / 2492
.3	Axle loadings without load & with maximum battery weight, drive/load side		kg	913 / 302	913 / 302
	WHEELS, DRIVE TRAIN				
.1	Tyres: PT=Power Thane, Vul=Vulkollan, P=Polyurethane, N=Nylon, R=Rubber drive/load side			Vul/ Vul	Vul/ Vul
.2	Tyre dimensions, drive side		mm	ø250	ø250
.2	Tyre dimensions, load side		mm	ø85	ø85
.3	Castor wheel dimensions (diameter × width)		mm	ø180 × 65	ø180 × 65
.5	Number of wheels, load/drive side (x=driven)			4 / 1x1	4 / 1x1
8.6	Track width (center of tyres), drive side	b10	mm	494	494
3.0 3.7	Track width (center of tyres), load side	b10	mm	365	365
. /	DIMENSIONS	DTT		505	505
.2a	Height with mast lowered	h1	mm	1394 / 2244	1394 / 2244
.4	Lift height	h3	mm	135	135
	Height with mast extended	h4	mm	133	-
.5 .8	Seat- or stand height	h7	mm	150	150
	Platform height, raised	h12		1000	1000
.14	*	h13	mm	85	85
.15	Fork height, fully lowered Overall length	l1	mm	2421 <sup>5)</sup>	2421 <sup>5)</sup>
.19	5	12	mm		1271 5)
.20	Length to fork face		mm	1271 5)	
.21	Overall width	b1/b2	mm	800	800
.22	Fork dimensions (thickness, width, length)	s/e/l	mm	60 / 175 / 900-3600	60 / 175 / 900-360
.25	Outside width over forks (minimum / maximum)	b5	mm	480 / 660	480 / 660
.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	25	25
.34a	Working aisle width (Ast) with 800 × 1200 mm pallets, load lengthwise	Ast	mm	2898 <sup>5)</sup>	2898 <sup>5)</sup>
.35	Turning radius	Wa	mm	2231 5)	2231 5)
	PERFORMANCE				
i.1	Travel speed, with / without load		km/h	9.0 / 9.0 (opt 9 / 13) 6)	9.0 / 13.0 6)
.2	Lifting speed, with / without load		m/s	0.04 / 0.05	0.03 / 0.05
i.3	Lowering speed, with / without load		m/s	0.05 / 0.03	0.05 / 0.03
i.7	Gradeability, with / without load		%	7 / 15	7 / 15
.10	Service brake			Electric	Electric
	ELECTRIC MOTORS				
.1	Drive motor capacity (60 min. short duty)		kW	2.6	2.6
.2	Lift motor output at 15% duty factor		kW	2.2	2.2
.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 465-620	24 / 465-620
.5	Battery weight		kg	355-493	355-493
.6a	Energy consumption according to EN 16796		kWh/h	0.37	0.4
	MISCELLANEOUS				
.1	Type of drive control			Stepless	Stepless
0.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ		dB(A)	62 <sup>3)</sup>	62 <sup>3)</sup>
0.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ		dB(A)	73 / 62 / - 3)	73 / 62 / - <sup>3)</sup>
	Whole-body vibration (EN 13 059:2002)			0.6	0.6
0.7.2					

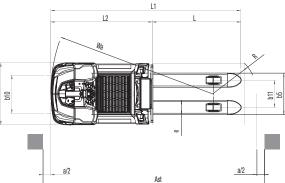
# **VELÍA ES** LOW LEVEL ORDER PICKERS

OPB20N2P / 25N2P **RISING PLATFORM** MODEL

2.0 – 2.5 tonnes







2) Forks 540 × 1150/ lift 1200mm, battery 620 Ah 3) Inaccuracy of 4 dB(A) 4) Fork carriage length 2375 mm

5) With 620Ah battery + 100mm

6) Travel speed when drivers platform >300mm 5,5km/h

Ast = Working aisle width Wa = Turning radius

a = Safety clearance =  $2 \times 100$  mm R =  $\sqrt{(16 + x)^2 + (b12/2)^2}$ 

l6 = Pallet length (800 or 1000 mm)

b12 = Pallet width (1200 mm)

Mitsubishi       Mitsubishi         Mitsubishi       Mitsubishi         OPB20N2X       OPB20N2X         Battery       Battery         Stand-on       Stand-on         stand-on       Stand-on <td< th=""></td<>
OPB20N2X         OPB20N2X         OPB20N2XP           Battery         Battery         Battery           Battery         Stand-on         Stand-on           c         mm         1200         1200           cwered)         x         mm         1480         1480           y         mm         1200         1200         1200           imum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         120 / 120 / 220         2201 / 220           aximum battery weight, drive/load side         kg         120 / 120         120           xwidth)         mm         e250         e250         e250           x=driven)         mm         e180 × 65         e180 × 65           x=driven)         mm         926 / 356         3
Battery         Battery         Battery           Stand-on         Stand-on         Stand-on           c         mm         1200         2000           cwered)         x         mm         1480         1480           owered)         x         mm         1480         1480           imum battery weight         y         mm         2640 %         2640 %           aximum battery weight, drive/load side         kg         1333 %         1469 %           aximum battery weight, drive/load side         kg         929 / 404         1024 / 445           am, P=Polyurethane, N=Nylon, R=Rubber drive/load side         mm         ø250         ø250           x=driven)         mm         ø256 / 356         ø180 × 65           x=driven)         mm         4 / 1x1         4 / 1x1           ide         b10         mm         494         494           de         b11         mm         1173         1394 / 2244           ide         b10         mm         326 / 356         326 / 356           x=driven)         mm         765         765         56           x=driven)         mm         1173         1394 / 2244         130
Q         kg         Stand-on         Stand-on           c         mm         1200         1200           bowered)         x         mm         1480         1480           y         mm         1480         1480         1480           y         mm         1480         1480         1480           y         mm         1480         1480         1480           y         mm         1460         19         2640         9         264         9         264         264         9         264         264         264         264         264         264         264         264         264         264         264
Q         kg         2000         2000           owered)         x         mm         1200         1200           owered)         x         mm         1480         1480         1480           y         mm         2640 % <t< td=""></t<>
c         mm         1200         1200           powered)         x         mm         1480         1480           y         mm         2640 %         2640 %           imum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         929 / 404         1024 / 445           aximum battery weight, drive/load side         kg         929 / 404         1024 / 445           aximum battery weight, drive/load side         kg         929 / 404         1024 / 445           aximum battery weight, drive/load side         kg         9250         ø250           aver driven)         mm         ø85         ø85           × width)         mm         6180 × 65         ø180 × 65           x=driven)         b10         mm         494         494           de         b10         mm         133 %         224/ 356           azer driven)         m         130 mm         765         765           ide         b10         mm         1305         1305           azer driven)         m         133 mm         765         765           h1         mm         1305         1305<
x         mm         1480         1480         1480           y         mm         2640 s <sup>-1</sup> 2640 s <sup>-1</sup> imum battery weight, drive/load side         kg         1133 1 <sup>-1</sup> 1469 1 <sup>-1</sup> aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           an, P=Polyurethane, N=Nylon, R=Rubber drive/load side         mm         ø250         ø250           mm         ø250         ø250         ø250           x width)         mm         ø80s         65         ø85           x-driven)         mm         ø2640 s <sup>-15</sup> ø85         ø85           x-driven)         mm         ø26 so 250         ø26 so 250         ø27 so 250           x-driven)         mm         ø280 so 65         ø180 × 65         ø85 so 26 so 250           x-driven)         mm         ø26 so 326 / 356         326 / 356         326 / 356           x-driven)         mm         1173         1394 / 2244         130 s           de         h1         mm
y         mm         2640 si         2640 si           imum battery weight, drive/load side         kg         1333 10         1469 10           aximum battery weight, drive/load side         kg         1135 /2220         1230 / 2261           aximum battery weight, drive/load side         kg         929 / 404         1024 / 445           aximum battery weight, drive/load side         mm         ø250         ø250           an, P=Polyurethane, N=Nylon, R=Rubber drive/load side         mm         ø85         ø85           *         mm         ø85         ø85         ø85           *         vidt/h         mm         ø180 × 65         ø180 × 65           *         vidth)         mm         ø26 / 356         326 / 356           *         b10         mm         4/1x1         4 / 1x1           de         b10         mm         326 / 356         326 / 356           *         mm         1305         1305         1305           for         h1         mm         123         150           h1         mm         123         150         1305           h12         mm         1353 4/si         1353 4/si         1353 4/si           h13
imum battery weight, drive/load side imum battery weight, drive/load side aximum battery weight, drive/load side aximum battery weight, drive/load side aximum battery weight, drive/load side an, P=Polyurethane, N=Nylon, R=Rubber drive/load side an, P=Polyurethane, N=Nylon, R=Rubber drive/load side x width) x=driven) ide b10 mm d925 ø85 x width) x=driven) ide b10 mm d94 4 494 de b11 mm 1173 1394 / 2244 h3 mm 765 765 h4 mm 1305 13005 h7 mm 123 150 h12 mm 90 90 11 mm 3728 4 <sup>15</sup> 3728 4 <sup>15</sup> 3728 4 <sup>15</sup> 3
haximum battery weight, drive/load side       kg       1135 /2220       1230 / 2261         aximum battery weight, drive/load side       kg       929 / 404       1024 / 445         an, P=Polyurethane, N=Nylon, R=Rubber drive/load side       mm       ø250       ø250         x width)       mm       ø180 × 65       ø180 × 65       ø180 × 65         x width)       mm       ø180 × 65       ø180 × 65       ø180 × 65         x adriven)       mm       4/94       4/94         de       b10       mm       326 / 356       326 / 356         de       b11       mm       326 / 356       326 / 356         de       b11       mm       1105       1305         de       b11       mm       1305       1305         de       b11       mm       1305       1305         de       b11       mm       1305       1305         h4       mm       1305       1305       1305         h2       mm       -       1000       100         h2       mm       -       1000       100         h3       mm       90       90       90       90         11       mm       372
haximum battery weight, drive/load side       kg       1135 /2220       1230 / 2261         aximum battery weight, drive/load side       kg       929 / 404       1024 / 445         an, P=Polyurethane, N=Nylon, R=Rubber drive/load side       mm       ø250       ø250         x width)       mm       ø180 × 65       ø180 × 65       ø180 × 65         x width)       mm       ø180 × 65       ø180 × 65       ø180 × 65         x adriven)       mm       4/94       4/94         de       b10       mm       326 / 356       326 / 356         de       b11       mm       326 / 356       326 / 356         de       b11       mm       1105       1305         de       b11       mm       1305       1305         de       b11       mm       1305       1305         de       b11       mm       1305       1305         h4       mm       1305       1305       1305         h2       mm       -       1000       100         h2       mm       -       1000       100         h3       mm       90       90       90       90         11       mm       372
aximum battery weight, drive/load side       kg       929 / 404       1024 / 445         an, P=Polyurethane, N=Nylon, R=Rubber drive/load side       mm       ø250       ø250         x width)       mm       ø85       ø85         × width)       mm       ø85       ø85         x=driven)       4 / 1x1       4 / 1x1       4 / 1x1         ide       b10       mm       326 / 356       326 / 356         de       b11       mm       326 / 356       326 / 356         max       h1       mm       326 / 356       326 / 356         max       b10       mm       326 / 356       326 / 356         max       h1       mm       3105       1305         max       h1       mm       1305       1305         max
an, P=Polyurethane, N=Nylon, R=Rubber drive/load side       mm       ø250       ø250         mm       ø85       ø85       ø85         × width)       mm       ø180 × 65       ø180 × 65       ø180 × 65         x=driven)       a       4 / 1x1       4 / 1x1       4 / 1x1         ide       b10       mm       494       494         de       b11       mm       326 / 356       326 / 356         n       nm       1173       1394 / 2244         h3       mm       765       765         h4       mm       1305       1305         h7       mm       123       150         h7       mm       123       150         h12       mm       -       1000         h13       mm       90       90         11       mm       3728 4 <sup>(15)</sup> 3728 4 <sup>(15)</sup> 12       mm       3053 4 <sup>(15)</sup> 3728 4 <sup>(15)</sup> 12       mm       90       90         11       mm       3728 4 <sup>(15)</sup> 3728 4 <sup>(15)</sup> 12       mm       800       800         sength)       s / e / L       mm       520 / 550       520
mm         ø250         ø250           mm         ø85         ø85           width)         mm         ø80 × 65         ø180 × 65           x=driven)         4 / 1x1         4 / 1x1           ide         b10         mm         494         494           de         b11         mm         326 / 356         326 / 356           mm         326 / 356         326 / 356         326 / 356         326 / 356           mm         1173         1394 / 2244         13           mm         1305         1305         1305           mm         1305         1305         1305           h4         mm         1305         1305           h1         mm         90         90           1100         mm         3728 415         3728 415           12         mm         1353 415         1353 415           12         mm         800         800           masinum)         b1/b2         mm         <
mm         ø250         ø250           mm         ø85         ø85           width)         mm         ø80 × 65         ø180 × 65           x=driven)         4 / 1x1         4 / 1x1           ide         b10         mm         494         494           de         b11         mm         326 / 356         326 / 356           mm         326 / 356         326 / 356         326 / 356         326 / 356           mm         1173         1394 / 2244         13           mm         1305         1305         1305           mm         1305         1305         1305           h4         mm         1305         1305           h1         mm         90         90           1100         mm         3728 415         3728 415           12         mm         1353 415         1353 415           12         mm         800         800           masinum)         b1/b2         mm         <
mm         ø85         ø85           × width)         mm         ø180 × 65         ø180 × 65           ide         b10         mm         4 / 1x1         4 / 1x1           ide         b10         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         326 / 356         326 / 356           de         b11         mm         31305         1305           de         h1         mm         1305         1305           de         h12         mm         1000         90           de         h13         mm         90         90           de         l1         mm         3728 4//35         3728 4//35           de         b1/b2         mm         800         800           engt
x width) mm ø180 x 65 ø180 x 65 x=driven)
x=driven)       4 / 1x1       4 / 1x1         ide       b10       mm       494       494         de       b11       mm       326 / 356       326 / 356         Image: Second Sec
ide     b10     mm     494     494       de     b11     mm     326 / 356     326 / 356       Image: Second Se
bit     mm     326 / 356     326 / 356       h1     mm     1173     1394 / 2244       h3     mm     765     765       h4     mm     1305     1305       h7     mm     123     150       h1     mm     -     1000       h7     mm     90     90       11     mm     3728 4151     3728 4151       12     mm     1353 4151     1353 4151       12     mm     1353 4151     1353 4151       12     mm     800     800       ength)     s / e / L     mm     520 / 550       /maximum)     b5     mm     520 / 550       base, (forks lowered)     m2     mm     20       1200 mm pallets, load lengthwise     Ast     mm     4074 4151
h1 mm 1173 1394 / 2244 h1 mm 765 765 h3 mm 765 765 h7 mm 1305 1305 h7 mm 123 150 h12 mm - 1000 h13 mm 90 90 l1 mm 3728 <sup>4151</sup> 3728 <sup>4151</sup> l2 mm 1353 <sup>4151</sup> 3728 <sup>4151</sup> l2 mm 800 800 magth) s / e / l mm 70 / 194 / 2375, 2850 70 / 194 / 2375, 2850 m 520 / 550 520 / 550 base, (forks lowered) m2 mm 20 20
h3       mm       765       765         h4       mm       1305       1305         h7       mm       123       150         h7       mm       123       150         h12       mm       -       1000         h13       mm       90       90         11       mm       3728       3728       3728         12       mm       1353       4151       1353       4151         12       mm       800       800       800         ength)       s / e / L       mm       70 / 194 / 2375, 2850       70 / 194 / 2375, 2850       70 / 194 / 2375, 2850       70 / 500       520 / 550         /maximum)       b5       mm       520 / 550       520 / 550       520 / 550         base, (forks lowered)       m2       mm       20       20         1200 mm pallets, load lengthwise       Ast       mm       4074 4/5)       4074 4/5)
h3       mm       765       765         h4       mm       1305       1305         h7       mm       123       150         h7       mm       123       150         h12       mm       -       1000         h13       mm       90       90         11       mm       3728       3728       3728         12       mm       1353       4151       1353       4151         12       mm       800       800       800         ength)       s / e / L       mm       70 / 194 / 2375, 2850       70 / 194 / 2375, 2850       70 / 194 / 2375, 2850       70 / 500       520 / 550         /maximum)       b5       mm       520 / 550       520 / 550       520 / 550         base, (forks lowered)       m2       mm       20       20         1200 mm pallets, load lengthwise       Ast       mm       4074 4/5)       4074 4/5)
h4     mm     1305     1305       h7     mm     123     150       h7     mm     123     150       h12     mm     -     1000       h13     mm     90     90       11     mm     3728     3728       12     mm     1353     3728       13     1353     1353     3151       12     mm     800     800       ength)     s/e/l     mm     70 / 194 / 2375, 2850       (maxinum)     b5     mm     520 / 550       base, (forks lowered)     m2     mm     20       1200 mm pallets, load lengthwise     Ast     mm     4074
h7     mm     123     150       h12     mm     -     1000       h12     mm     90     90       l1     mm     3728     415)       l2     mm     1353     3728       l2     mm     1353     415)       l2     mm     800     800       ength)     s / e / L     mm     70 / 194 / 2375, 2850       / maximum)     b5     mm     520 / 550       base, (forks lowered)     m2     mm     20       1200 mm pallets, load lengthwise     Ast     mm     4074
h12     mm     -     1000       h13     mm     90     90       l1     mm     3728     3728     3728       l2     mm     3728     3728     315       l2     mm     3728     3153     1353       b1/b2     mm     800     800       ength)     s / e / l     mm     520 / 550     70 / 194 / 2375, 285       / maximum)     b5     mm     520 / 550     520 / 550       base, (forks lowered)     m2     mm     20     20       1200 mm pallets, load lengthwise     Ast     mm     4074     4074
h13         mm         90         90           l1         mm         3728         3728         4151           l2         mm         1353         4151         1353         4151           l2         mm         1353         4151         1353         4151           b1/b2         mm         800         800         800           rmaximum)         b1/b2         mm         70 / 194 / 2375, 2850         70 / 194 / 2375, 2850           base, (forks lowered)         m2         mm         20         20           1200 mm pallets, load lengthwise         Ast         mm         4074         4074         4075
I1         mm         3728 4 <sup>15</sup> 3728 4 <sup>15</sup> I2         mm         1353 4 <sup>15</sup> 1353 4 <sup>15</sup> b1/b2         mm         800         800           ength)         s / e / L         mm         800         800           / maximum)         b5         mm         550         520 / 550         520 / 550           base, (forks lowered)         m2         mm         20         20           1200 mm pallets, load lengthwise         Ast         mm         4074 4 <sup>15</sup> 4074 4 <sup>15</sup>
I2         mm         1353         135
b1/b2         mm         800         800           ength)         s / e / l         mm         70 / 194 / 2375, 2850         70 / 200         70 / 194 / 2375, 2850
ength)     s / e / l     mm     70 / 194 / 2375, 2850     70 / 194 / 2375, 2850       / maximum)     b5     mm     520 / 550     520 / 550       base, (forks lowered)     m2     mm     20     20       1200 mm pallets, load lengthwise     Ast     mm     4074 4151     4074 4151
/ maximum)         b5         mm         520 / 550         520 / 550           base, (forks lowered)         m2         mm         20         20           1200 mm pallets, load lengthwise         Ast         mm         4074 4151         4074 4151
/ maximum)         b5         mm         520 / 550         520 / 550           base, (forks lowered)         m2         mm         20         20           1200 mm pallets, load lengthwise         Ast         mm         4074 4151         4074 4151
base, (forks lowered)         m2         mm         20         20           1200 mm pallets, load lengthwise         Ast         mm         4074 4151         4074 4151
1200 mm pallets, load lengthwise Ast mm 4074 <sup>415)</sup> 4074 <sup>415)</sup>
Wa IUU (855°) (855°)
km/h 9.0 / 13.0 9.0 / 13.0 <sup>6)</sup>
m/s 0.10 / 0.23 0.10 / 0.23
m/s 0.17/0.23 0.17/0.23
% 7/15 7/15
Electric Electric
Electric Electric
duty) kW 2.6 2.6
duty) kW 2.6 2.6 kW 2.2 2.2
ischarge V/Ah 24/465-620 24/465-620
kg 355-493 355-493
16796 kWh/h 0.44 0.44
Stepless Stepless
er according to EN 12 053:2001 and EN ISO 4871 in work LpAZ dB(A) 62 <sup>3)</sup> 62 <sup>3)</sup> 62 <sup>3)</sup>
rr according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ dB(A) 73 / 62 / - 3 73 / 62 / - 3 73 / 62 / - 3
02) 0.7 0.7
2)
2) Ast = Wa - x + l6 + 20 Ast = Working aisle w

# **VELÍA ES** LOW LEVEL ORDER PICKERS

### **OPB20N2X**

#### SCISSOR LIFT FORKS MODEL

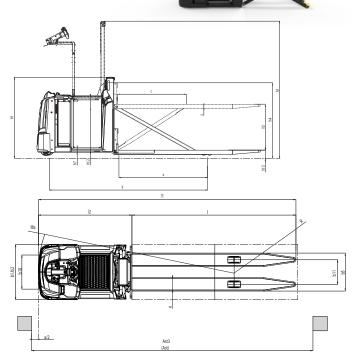
2.0 tonnes



**OPB20N2XP** 

**SCISSOR LIFT FORKS** AND RISING PLATFORM MODEL

2.0 tonnes



Continuing improvement may lead to changes in these specifications

6) Travel speed when drivers platform >300mm 5,5km/h

3) Inaccuracy of 4 dB(A)

4) Fork carriage length 2375 mm

5) With 620Ah battery + 100mm

- Wa = Turning radius
- a = Safety clearance = 2 ×100 mm R =  $\sqrt{(16 + x)^2 + (b12/2)^2}$
- l6 = Pallet length (800 or 1000 mm)

b12 = Pallet width (1200 mm)

	CHARACTERISTICS				
1.1	Manufacturer			Mitsubishi	Mitsubishi
1.2	Manufacturer's model designation			0PB12N2F	0PB12N2FP
1.3	Power source			Battery	Battery
1.4	Operator type			Stand-on	Stand-on
1.5	Load capacity	Q	kg	1200	1200
1.6	Load center distance	c	mm	600	600
1.8	Load wheel axle to fork face (forks lowered)	x	mm	785	785
1.9	Wheelbase	y	mm	1929 5)	1929 5)
,	WEIGHT	,			
2.1	Truck weight without load, with maximum battery weight		kg	1220 <sup>2)</sup>	1356 <sup>2)</sup>
2.2	Axle loadings with nominal load & maximum battery weight, drive/load side		kg	972 / 1448	1059 / 1497
2.3	Axle loadings without load & with maximum battery weight, drive/load side		kg	853 / 367	940 / 416
2.0	WHEELS, DRIVE TRAIN				
3.1	Tyres: PT=Power Thane, Vul=Vulkollan, P=Polyurethane, N=Nylon, R=Rubber drive/load side			Vul / Vul	Vul / Vul
3.2	Tyre dimensions, drive side		mm	ø250	ø250
3.3	Tyre dimensions, load side		mm	ø85	ø85
3.4	Castor wheel dimensions (diameter x width)		mm	ø180 × 65	ø180 × 65
3.5	Number of wheels, load/drive side (x=driven)			4 / 1x1	4 / 1x1
3.6	Track width (center of tyres), drive side	b10	mm	494	494
3.7	Track width (center of tyres), load side	b11	mm	355	355
5.7	DIMENSIONS	511		000	000
4.2a	Height with mast lowered	h1	mm	1173	1394 / 2244
4.2a	Lift height	h3	mm	765 / 1115	765 / 1115
4.4	Height with mast extended	h4	mm	1275 / 1625	1275 / 1625
4.5	Seat- or stand height	h7	mm	123	150
	Platform height, raised	h12	mm	-	1000
4.14	Fork height, fully lowered	h13	mm	85	85
4.15	Overall length	l1		2471 <sup>5)</sup>	2471 <sup>5)</sup>
4.19	5	l2	mm	1321 5)	1321 5)
4.20	Length to fork face Overall width	tz b1/b2	mm	800	800
4.21			mm		
4.22	Fork dimensions (thickness, width, length)	s/e/l	mm	56 / 186 / 950-1450	56 / 186 / 950-1450
4.25	Outside width over forks (minimum / maximum)	b5	mm	540 / 570	540 / 570
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	mm	25	25
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast	mm	2881 <sup>5)</sup>	2881 <sup>5)</sup>
4.35	Turning radius	Wa	mm	2106 5)	2106 5)
	PERFORMANCE		1 //	0.0.1.0.0.1.10.1.10.17	0.0 ( 0.0 (
5.1	Travel speed, with / without load		km/h		9.0 / 9.0 (opt 9 / 13)
5.2	Lifting speed, with / without load		m/s	0.20 / 0.41	0.20 / 0.41
5.3	Lowering speed, with / without load		m/s	0.30 / 0.36	0.30 / 0.36
5.7	Gradeability, with / without load		%	7 / 15	7 / 15
5.10	Service brake			Electric	Electric
	ELECTRIC MOTORS				
6.1	Drive motor capacity (60 min. short duty)		kW	2.6	2.6
6.2	Lift motor output at 15% duty factor		kW	2.2	2.2
6.4	Battery voltage/capacity at 5-hour discharge		V/Ah	24 / 465-620	24 / 465-620
6.5	Battery weight		kg	355-493	355-493
6.6a	Energy consumption according to EN 16796		kWh/h	0.37	0.37
	MISCELLANEOUS				
8.1	Type of drive control			Stepless	Stepless
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ		dB(A)	62 <sup>3)</sup>	62 <sup>3)</sup>
10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ		dB(A)	73 / 62 / - 3)	73 / 62 / - <sup>3)</sup>
10.7.2	Whole-body vibration (EN 13 059:2002)			0.6	0.6
10.7.3	Hand-arm vibration ( EN 13 059:2002)			<2.5	<2.5
	1) Forks 540 × 1150, battery 620 Ah 2) Forks 540 × 1150/ lift 1200mm, battery 620 Ah 3) Inaccuracy of 4 dB(A) 4) Fork carriage length 2375 mm 5) With 620Ah battery + 100mm 7) Travel speed when drivers platform >300mm 5,5km/h 850mm lift: Travel speed >300mm lift 5,5km/h,			$R = \sqrt{(l6 + x)^2 + (l6 + x)^2}$	e width us ance = 2 ×100 mm b12 / 2) <sup>2</sup> (800 or 1000 mm)

# **VELÍA ES** LOW LEVEL ORDER PICKERS

**OPB12N2F** 

**OPB12N2FP** 

**RISING FORKS AND** 

**RISING PLATFORM MODEL** 

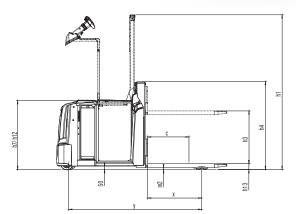
**RISING FORKS MODEL** 

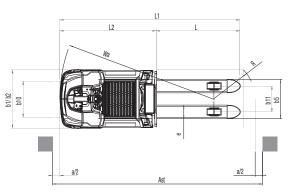
1.2 tonnes

1.2 tonnes









Continuing improvement may lead to changes in these specifications

1200mm lift: Travel speed >300 – 900mm lift 5,5km/h, >900mm lift 3km/h

# WHEN RELIABILITY IS EVERYTHING...



**VELÍA** THE FRONT RUNNER With a name that reflects the speed of its work, VELiA is always ahead of the pack — thanks to award-winning productivity and ergonomics.

Swift, versatile and manoeuvrable, there is a VELiA order picker to meet every need.

Like any product bearing the "MITSUBISHI" name our materials handling equipment benefits from the tremendous heritage, huge resources and cutting-edge technology of one of the world's largest corporations – Mitsubishi Heavy Industries Group.

Engineering spacecraft, jet planes, power plants and more, MHI specialises in those technologies where performance, dependability and superiority decide your success or failure...

So when we promise you quality, reliability and value for money,

you know it's a guarantee we have the power to deliver.

That's why every model in our awardwinning and comprehensive range of lift trucks and warehouse equipment is built to a high specification – to ensure it keeps working for you. Day after day. Year after year. Whatever the job. Whatever the conditions.

#### YOU'LL NEVER WORK ALONE

As your local authorised dealer, we are here to keep your trucks working – through our extensive experience, our technical excellence and our commitment to customer care.

We are your local experts, backed by efficient channels to the entire organisation of Mitsubishi Forklift Trucks.

No matter where you are, we are close by – with the capability to meet your needs.

Discover how Mitsubishi Forklift Trucks give you more from your local authorised dealer or when you visit our website www.mitforklift.com

Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with nonstandard options. Specific performance requirements and locally available configurations should be discussed with your distributor of Mitsubishi forklift trucks. We follow a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.

mitforklift@mcfe.nl WESM1978 (06/20) © 2020 MLE











Mitsubishi Logisnext Europe B.V. Hefbrugweg 77, 1332 AM Almere The Netherlands Tel: +31 (0)36 5494 411













mft2.eu/youtube