

CROWN

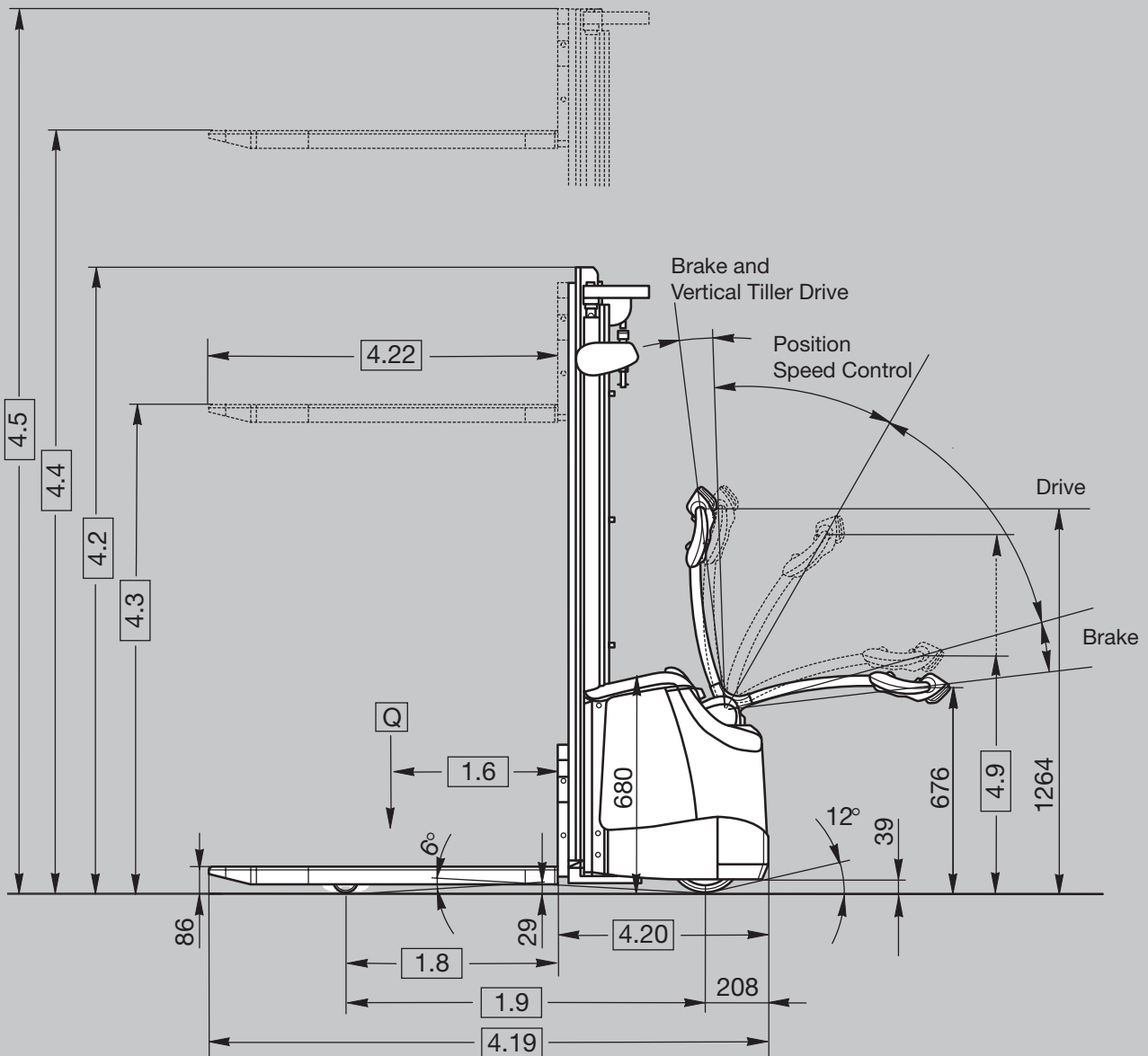
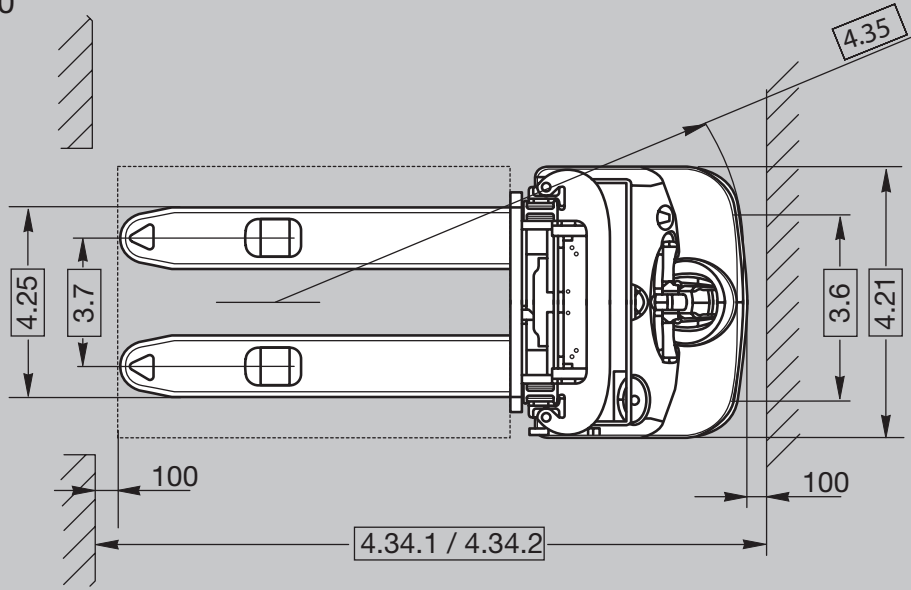
WF 3200
ST 3200
SX 3200
SERIES

Specifications

Pedestrian Powered Stacker



WF 3200





WF 3200 Series

Specifications

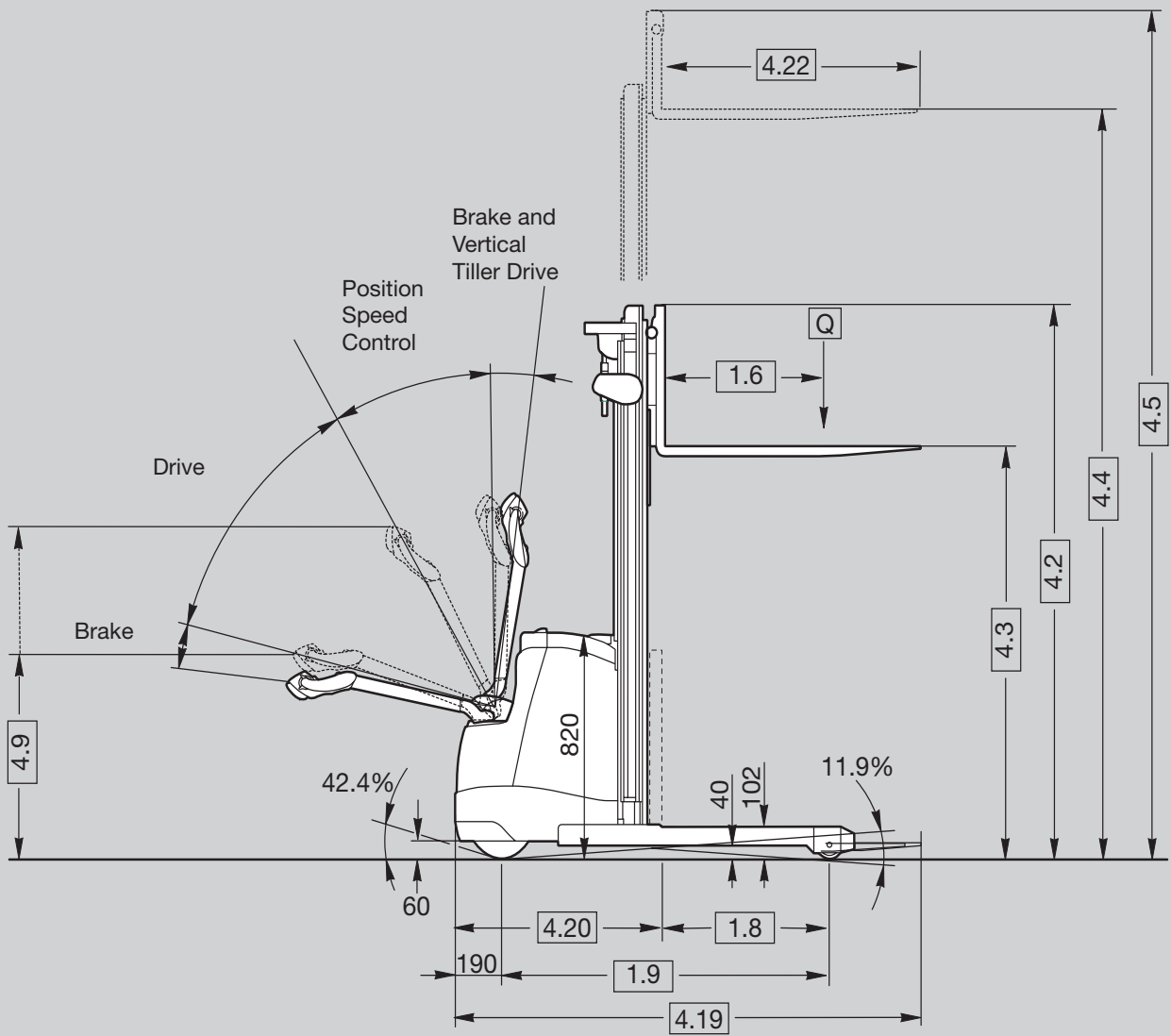
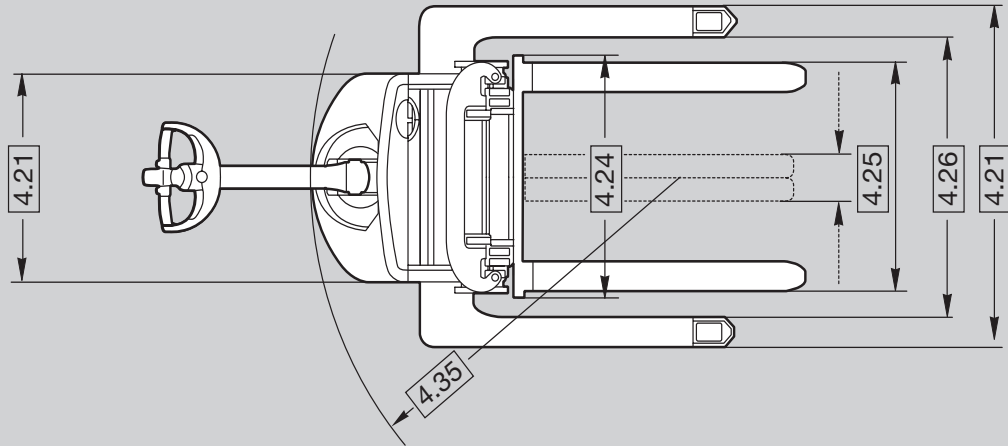
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|----------------------|-----------------------|---------------------------------|--------------------------------------|-----------------|------------|-----------------------|---------------|---------------|---------------|---------------|--|-------------|--|--|--|--|--|--|--|--|--|--|--|
| Distinguishing Mark | 1.1 | Manufacturer | Crown Equipment Corporation | | | | | | | | | | | | | | | | | | | | |
| | 1.2 | Model | | | | WF3200-1.0 NT | WF3200-1.0 TL | WF3200-1.0 TF | WF3200-1.2 TL | WF3200-1.2 TF | | | | | | | | | | | | | |
| | 1.3 | Power Source | electric | | | | | | | | | | | | | | | | | | | | |
| | 1.4 | Operator Type | pedestrian | | | | | | | | | | | | | | | | | | | | |
| | 1.5 | Rated Capacity | | Q | t | 1.0 | | | | | | 1.2 | | | | | | | | | | | |
| | 1.6 | Load Centre | | c | mm | 600 | | | | | | | | | | | | | | | | | |
| | 1.8 | Load Distance | | x | mm | 689 | | | | | | | | | | | | | | | | | |
| | 1.9 | Wheelbase | | y | mm | 1182 | | | | | | | | | | | | | | | | | |
| | Weight | 2.1 | Service Weight | less battery | | kg | see table 1 | | | | | | | | | | | | | | | | |
| 2.2 | | Axle Load | with Load front / rear | 80 Ah MF | kg | 564/1121 | 650/1198 | 659/1195 | - | - | | | | | | | | | | | | | |
| | | | | 160 Ah Ind. | kg | - | 712/1212 | 721/1209 | - | - | | | | | | | | | | | | | |
| | | | | 180 Ah Ind. | kg | - | 732/1216 | 741/1214 | 741/1407 | 751/1404 | | | | | | | | | | | | | |
| 2.3 | | | without Load front / rear | 80 Ah MF | kg | 494/191 | 602/246 | 610/244 | - | - | | | | | | | | | | | | | |
| | | | 160 Ah Ind. | kg | - | 664/260 | 672/258 | - | - | | | | | | | | | | | | | | |
| | | | 180 Ah Ind. | kg | - | 683/265 | 693/262 | 683/265 | 693/262 | | | | | | | | | | | | | | |
| Tyres/Wheels/Chassis | 3.1 | Tyres | | | | Rubber | | | | | | Vulkollan | | | | | | | | | | | |
| | 3.2 | Tyre Size | front | | mm | Ø 254 x 70 | | | | | | Ø 254 x 85 | | | | | | | | | | | |
| | | | rear | | mm | Ø 82 x 104 | | | | | | | | | | | | | | | | | |
| | 3.4 | Additional Wheels | castor wheels | | mm | Ø 140 x 54 | | | | | | | | | | | | | | | | | |
| | 3.5 | Wheels | number (x=driven wheels) front/ rear | | | 1x + 1/2 | | | | | | | | | | | | | | | | | |
| | 3.6 | Tread | front | b ₁₀ | mm | 510 | | | | | | | | | | | | | | | | | |
| | | | rear | b ₁₁ | mm | 382 | | | | | | | | | | | | | | | | | |
| Dimensions | 4.2 | Mast | collapsed height | h ₁ | mm | see table 1 | | | | | | | | | | | | | | | | | |
| | 4.3 | Free-lift | | h ₂ | mm | see table 1 | | | | | | | | | | | | | | | | | |
| | 4.4 | Lift Height | | h ₃ | mm | see table 1 | | | | | | | | | | | | | | | | | |
| | 4.5 | Mast | extended height | h ₄ | mm | see table 1 | | | | | | | | | | | | | | | | | |
| | 4.9 | Height Control Handle | in driving position min./max. | h ₁₄ | mm | 799 / 1181 | | | | | | | | | | | | | | | | | |
| | 4.15 | Fork Height | lowered | h ₁₃ | mm | 86 | | | | | | | | | | | | | | | | | |
| | 4.19 | Overall Length | | l ₁ | mm | 1843 | | | | | | | | | | | | | | | | | |
| | 4.20 | Head Length | | l ₂ | mm | 692 | | | | | | | | | | | | | | | | | |
| | 4.21 | Overall Width | front | b ₁ | mm | 805 | | | | | | | | | | | | | | | | | |
| | 4.22 | Fork Dimension | DIN ISO 2331 | thxwxl | mm | 170x60x1150 | | | | | | 186x60x1150 | | | | | | | | | | | |
| | 4.25 | Fork Spread | | b ₅ | mm | 560 | | | | | | | | | | | | | | | | | |
| | 4.32 | Ground Clearance | Centre Wheelbase | m ₂ | mm | 29 | | | | | | | | | | | | | | | | | |
| | 4.34.1 | Aisle Width | for Pallets 1000x1200 crossways | A _{st} | mm | 2310 | | | | | | | | | | | | | | | | | |
| 4.34.2 | Aisle Width | for Pallets 800x1200 lengthways | A _{st} | mm | 2243 | | | | | | | | | | | | | | | | | | |
| 4.35 | Turning Radius | | W _a | mm | 1401 | | | | | | | | | | | | | | | | | | |
| Performance Data | 5.1 | Travel Speed | with / without Load | | km/h | 5.9 / 5.9 | | | | | | 5.9 / 5.9 | | | | | | | | | | | |
| | 5.2 | Lift Speed | with / without Load | | m/s | 0.12 / 0.22 | | | | | | 0.11 / 0.22 | | | | | | | | | | | |
| | 5.3 | Lowering Speed | with / without Load | | m/s | 0.42 / 0.23 | | | | | | 0.40 / 0.23 | | | | | | | | | | | |
| | 5.7 | Gradeability | w. / w.o. 30 min. rating | | % | 4.9 / 9.1 | | | | | | 4.4 / 8.7 | | | | | | | | | | | |
| | 5.8 | Max. Gradeability | w. / w.o. 5 min. rating | | % | 8.4 / 15.7 | | | | | | 9.5 / 19.4 | | | | | | | | | | | |
| | 5.10 | Service Brake | | | | electric | | | | | | | | | | | | | | | | | |
| Electric Motor | 6.1 | Traction Motor | rating at S2 60 min. | | kW | 1.5 | | | | | | 1.5 | | | | | | | | | | | |
| | 6.2 | Pump Motor | rating at S3 10% | | kW | 2.2 | | | | | | | | | | | | | | | | | |
| | 6.3 | Max. Battery Box Size | DIN 43535 L-shape | lxwxh | mm | 111 / 210 x 784 x 537 | | | | | | | | | | | | | | | | | |
| | 6.4 | Battery Voltage | Nominal Capacity 5h rating | | V/Ah | 2x12 / 80 | | | | | | 24 / 180 | | | | | | | | | | | |
| | 6.5 | Battery Weight | Nominal + 5% | | kg | 72 | | | | | | 172 | | | | | | | | | | | |
| 8.1 | Drive Unit | | | | transistor | | | | | | | | | | | | | | | | | | |

| Table 1 Lift Height | | WF3200-1.0 | | | | | | | | | | | | WF3200-1.2 | | | | | | | | | |
|---------------------|--------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|------------|------|------|------|------|------|------|------|------|------|
| | | NT | | TL | | | | TF | | | | | | TL | | | | | TF | | | | |
| 4.2 | Mast | 1970 | 2400 | 1750 | 1970 | 2170 | 2400 | 2650 | 1750 | 1970 | 2170 | 2400 | 2650 | 1750 | 1970 | 2170 | 2400 | 2650 | 1750 | 1970 | 2170 | 2400 | 2650 |
| 4.3 | Free-lift | 1480 | 1970 | 180 | 180 | 180 | 180 | 180 | 1250 | 1470 | 1670 | 1910 | 2160 | 180 | 180 | 180 | 180 | 180 | 1250 | 1470 | 1670 | 1910 | 2160 |
| 4.4 | Lift Height | 1550 | 2000 | 2500 | 2930 | 3330 | 3800 | 4300 | 2600 | 3030 | 3430 | 3900 | 4400 | 2500 | 2930 | 3330 | 3800 | 4300 | 2600 | 3030 | 3430 | 3900 | 4400 |
| 4.5 | Mast extended | 1970 | 2400 | 2896 | 3326 | 3726 | 4196 | 4696 | 2996 | 3426 | 3826 | 4296 | 4796 | 2896 | 3326 | 3726 | 4196 | 4696 | 2996 | 3426 | 3826 | 4296 | 4796 |
| 2.1 | Weight less batt. | 598 | 619 | 696 | 717 | 736 | 759 | 785 | 702 | 723 | 742 | 765 | 790 | 697 | 718 | 737 | 760 | 784 | 703 | 724 | 743 | 766 | 789 |

* with optional load backrest: NT/TF mast - 804 mm

**with optional load backrest: NT/TL/TF mast + 804 mm

ST / SX 3200





| | | | | | | | | | | |
|---------------------|--------------------------|---|-------------------------------|--------------|----------------|-----------------------------|-----------------------------|-----------------|----------|--|
| Distinguishing Mark | 1.1 | Manufacturer | Crown Equipment Corporation | | | | | | | |
| | 1.2 | Model | | | ST3200N 1.0 | ST3200 1.0 | SX3200 1.35 | SX3200 1.35 | | |
| | 1.3 | Power Source | electric | | | | | | | |
| | 1.4 | Operator Type | pedestrian | | | | | | | |
| | 1.5 | Rated Capacity | Q | kg | 1000 | | | 1350 | | |
| | 1.6 | Load Centre | c | mm | 600 | | | | | |
| | 1.8 | Load Distance | x | mm | 621/603 | | | 686/666 | | |
| | 1.9 | Wheelbase | y | mm | 1255 | | | 1362 | | |
| | Tyres/Wheels/ Chassis | 2.1 | Service Weight | less battery | | kg | see table 1 | | | |
| 3.1 | | Tyres | | | mm | Rubber+Poly/Vulkollan | | Vulkollan | | |
| 3.2 | | Tyre Size | front | | mm | Ø 254 x 100 | | Ø 254 x 85 | | |
| 3.3 | | | rear | | mm | Ø 4" x 102 | | | | |
| 3.4 | | Additional Wheels | castor wheels | | mm | Ø 90 x 50 | | | | |
| 3.5 | Wheels | number (x=driven wheels) front/ rear | | | | 1x +2 / 2 | | | | |
| Dimensions | 4.2 | Mast | collapsed height | h_1 | mm | see table 1 | | | | |
| | 4.3 | Free-lift | | h_2 | mm | see table 1 | | | | |
| | 4.4 | Lift Height | | h_3 | mm | see table 1 | | | | |
| | 4.5 | Mast | extended height | h_4 | mm | see table 1 | | | | |
| | 4.9 | Height Control Handle | in driving position min./max. | h_{14} | mm | 790 / 1206 | | | | |
| | 4.15 | Fork Height | lowered | h_{13} | mm | 51 | | 50 | | |
| | 4.19 | Overall Length | | l_1 | mm | see table 2 | | | | |
| | 4.20 | Head Length | | l_2 | mm | see table 2 | | | | |
| | 4.21 | Overall Width | front | b_1 | mm | 712 | | | | |
| | 4.22 | | rear | b_2 | mm | inside straddle width + 152 | inside straddle width + 204 | | | |
| | 4.22 | Fork Dimension | DIN ISO 2331 | thxwxl | mm | 38 x 76 x 1145 | | 38 x 102 x 1150 | | |
| | 4.25 | Fork Spread | adjustable min./max. | b_5 | mm | 232 - 765 | | 252 - 785 | | |
| | 4.26 | Inside Straddle Dimension | infinite adjustment | b_4 | mm | 865-1165 | 965-1270 | 865-1165 | 965-1270 | |
| 4.32 | Ground Clearance | Centre Wheelbase | m_2 | mm | 40 | | | | | |
| 4.34.1 | Aisle Width | for Pallets 1000x1200 crossways | A_{st} | mm | see table 2 | | | | | |
| 4.34.2 | Aisle Width | for Pallets 800x1200 lengthways | A_{st} | mm | see table 2 | | | | | |
| 4.35 | Turning Radius | | W_a | mm | 1446 | | 1553 | | | |
| Performance Data | 5.1 | Travel Speed | with / without Load | | km/h | 5.9 / 5.9 | | 5.9 / 5.7 | | |
| | 5.2 | Lift Speed | with / without Load | | m/s | 0.12 / 0.20 | | 0.14 / 0.24 | | |
| | 5.3 | Lowering Speed | with / without Load | | m/s | 0.22 / 0.22 | | 0.30 / 0.26 | | |
| | 5.7 | Gradeability | w. / w.o. 30 min. rating | | % | 4.9 / 9.1 | | 4.4 / 8.7 | | |
| | 5.8 | Max. Gradeability | w. / w.o. 5 min. rating | | % | 8.4 / 15.7 | | 9.5 / 19.4 | | |
| | 5.10 | Service Brake | | | | electric | | | | |
| Electric Motor | 6.1 | Traction Motor | 60 min. rating | | kW | 1.5 | | | | |
| | 6.2 | Pump Motor | | | kW | 2.2 | | 3.0 | | |
| | 6.3 | Max. Battery Box Size | DIN 43535 / A | lxwxh | mm | 185 x 649 x 613 | | 230 x 670 x 600 | | |
| | 6.4 | Battery Voltage | Nominal Capacity 5h rating | | V/Ah | 2x12 / 80 | | 4x6 / 200 | | |
| | 6.5 | Battery Weight | Nominal + 5% | | kg | 60 | | 121 | | |
| 8.1 | Drive Unit | | | | transistor | | | | | |

| Table 1 Lift Height | | | | ST 3200 / SX 3200 | | | | | | |
|---------------------|-------------|------------------|----|-------------------|------|------|------|------|------|------|
| | | | | TL | | | | TT | | |
| 4.2 | Mast | collapsed height | mm | 1700 | 1910 | 2110 | 2350 | 2600 | 1858 | 1858 |
| 4.3 | Free-lift | | mm | 150 | | | | | 1422 | 1422 |
| 4.4 | Lift Height | | mm | 2400 | 2820 | 3220 | 3700 | 4200 | 3900 | 4250 |
| 4.5 | Mast | extended height | mm | 2910 | 3330 | 3730 | 4210 | 4710 | 4410 | 4760 |
| 2.1 | Weight | ST less battery | kg | 792 | 810 | 828 | 849 | 871 | 847 | 847 |
| 2.1 | Weight | SX less battery | kg | 955 | 973 | 991 | 1012 | 1034 | 1071 | 1071 |

| Table 2 Aisle width with dimension (VDI 2198) | | | | ST 3200 | | SX 3200 | |
|---|----------------|-------------------|----|---------|------|---------|------|
| | | | | TL | TT | TL | TT |
| 4.19 | Overall Length | | mm | 1975 | 1993 | 2017 | 2037 |
| 4.20 | Headlength | | mm | 825 | 843 | 867 | 887 |
| 4.34.1 | Aisle Width | traverse 800x1200 | mm | 2360 | 2360 | 2489 | 2489 |
| | | 1000x1200 | mm | 2356 | 2364 | 2489 | 2489 |
| 4.34.2 | Aisle Width | traverse 1200x800 | mm | 2350 | 2364 | 2404 | 2420 |
| | | 1200x1000 | mm | 2411 | 2425 | 2470 | 2485 |

Electric System / Batteries

24-volt electrical system with nominal battery capacities up to 222 Ah.

Standard Equipment

1. Maintenance free 3-phase (AC) traction
2. e-GEN® Braking System offers regenerative and frictionless electric braking. Mechanical braking applies only as parking brake
3. The X10® Control Handle places all truck functions at the operator's fingertips
4. Batteries
 - WF 1.0 and ST: 80 Ah maintenance free
 - WF 1.2 and SX: 180 Ah wet industrial
 - SX: 200 Ah maintenance free
5. DIN 80A Rema battery connector
6. Onboard 30A solid state charger
7. Drive tyre
 - WF 1.0 and ST: Rubber
 - WF 1.2 and SX: Vulkollan
8. Vulkollan Load Wheels
9. Castor Wheels
10. Ramp hold
11. Adjustable outriggers (ST and SX)
12. Polycarbonate mast guard
13. Storage tray above battery
14. Battery discharge indicator with lift lockout and integrated hour meter and fault code readout
15. Fork tip indicators
16. Key Switch
17. Rabbit/turtle switch incorporates two levels of programmable travel performance
18. Proportional lifting/lowering
19. Position Speed Control
20. Vertical Tiller Drive

Optional Equipment

1. Drive tyre
 - WF 1.0 and ST: Vulkollan and Supertrac
 - WF 1.2 and SX: Rubber and Supertrac
2. Tandem load wheels
3. Load backrest
 - WF: 750 x 1200 mm
 - ST / SX: 832 x 1200 mm
4. Battery options: Maintenance free, wet industrial or lithium-ion
5. Battery connector SBE 160 red
6. Freezer conditioning
7. Side shifter (SX)
8. Flashing light
9. Travel alarm
10. Work Assist options
11. Fork length and fork spread options
12. Special paint
13. InfoLink® Ready
14. Keypad
15. Lithium-Ion Battery Ready

Electrical System

24-volt fused electrical system with built in 30-amp charger. This premium fan-cooled, solid-state charger is durable and efficient. It has an advanced memory feature to allow for opportunity charging and can be set for either maintenance free or industrial batteries. A retractable power cord is standard.

Operator Area and Controls

The X10® Control Handle, designed for simultaneous operation of all functions with one hand, improves side-stance operation for maximum visibility in both driving directions. An ergonomic forward/reverse thumb wheel allows for precise manoeuvring. The hand grips are urethane covered for insulation from cold and vibration with integrated horn buttons for easy activation.

A rabbit/turtle switch incorporates two levels of programmable travel performance so operators

can select the setting that matches their experience level or application requirements. Proportional lift and lowering allows easy and precise positioning of loads. The fast responsiveness and speeds of the lifting and lowering functions are designed to ensure high efficiency in all applications and all this together at a low noise level.

Position Speed Control

When operating in tight spaces such as retail stores with narrow aisles or inside lorries and elevators, the operator can move the tiller from the Travel zone to the Position Speed Control zone. The travel speed in fork direction will then be automatically reduced to 1.5 km/h without the need to come to a halt and a further command from the operator. This ensures a smooth and productive workflow while avoiding unintentional interruptions.

Vertical Tiller Drive

The Vertical Tiller Drive function goes one step beyond. When activated, the truck can be moved at up to 1.5 km/h even in the upper braking zone by simply keeping the travel switch pressed in the desired direction. Reducing the turning radius of the truck, the system enables operators to easily move pallets while reducing goods damage cost.

e-GEN® Braking System

The power of the high-torque AC traction motor is used to stop the truck and keep it static until a travel input is requested, even when operating on a gradient.

This system eliminates adjustments and wear points for a lifetime of maintenance free use. An automatic parking brake activates if the truck is stopped and the operator leaves the platform or power is disconnected.

Chassis

All models feature a heavy gauge one-piece welded steel frame backed by a lifetime warranty. Removable steel covers protect all critical system components. The low-profile power unit has been optimised to provide the best fork tip visibility available.

Safety Regulations

Conforms to European safety standards. Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.