

NXV

## NXV Technical Data Very Narrow Aisle Truck with Turret Head or Telescopic Fork





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NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork For narrow aisles, high shelves and the highest expectations This specification sheet, which conforms to VDI guideline 2198, provides the technical values for the standard equipment only. Different tyres, other masts, the use of accessories, etc., may result in other values.



	1 1	Manufacturer					CTU I	CTU I
	1.1	Manufacturer				STILL	STILL	STILL
Features	1.2	Manufacturer's model designation				NXV with turret head and triplex mast, without additional lift	NXV with turret head, triplex mast and additional lift	NXV with telescopic fork and telescopic mast, without additional lift
Feat	1.3	Drive				Electric	Electric	Electric
	1.4	Operation				Seated	Seated	Seated
	1.5	Load capacity/load		Q	kg	1500	1000	1250
	1.6	Load centre		С	mm	600	600	600
	1.9	Wheel base		у	mm	1916	1916	1971
Its	2.1	Service weight (incl. battery)			kg	6869	8689	5518
Weights	2.2	Axle weight with load	drive end/load end		kg	1956/6413	2413/7276	1280/5488
8	2.3	Axle load, unladen	drive end/load end		kg	2488/4381	2768/5921	1866/3652
	3.1	Tyres				Polyurethane	Polyurethane	Polyurethane
<u>s</u>	3.2	Tyre diameter/width	drive end		mm	360/130	360/130	360/130
Wheels	3.3	Tyre diameter/width	load end		mm	370/160	370/160	370/160
3	3.5	Number of wheels (x = driven)	drive end/load end			1x/2	1x/2	1x/2
	3.6	Track width	drive end/load end	b10/b11	mm	0/1290	0/1290	0/990
	4.2	Height of mast when lowered		hı	mm	3400	5900	3400
	4.3	Free lift		h <sub>2</sub>	mm	2150	4650	-
	4.4	Lift		h₃	mm	6350	12850	4200
	4.5	Height of mast when raised		h <sub>4</sub>	mm	7800	15041	5500
	4.6	Vertical dimensions of accessory equipment, empty		h∟	mm	1220	1050	896
	4.7	Height above protective roof (cab)		h <sub>6</sub>	mm	2200	2200	2200
	4.8	Seat height		h <sub>7</sub>	mm	1050	1050	1050
	4.15	Height when lowered		h13	mm	60	60	180
	4.19	Total length (incl. fork)		l1	mm	3208	3208	3690
s	4.21	Total width of load wheel axle		b1/b2	mm	1250/1500	1250/1500	1120/1200
Basic dimensions	4.22	Fork dimensions		s/e/l	mm	50/120/1200	50/120/1200	65/174/1200
nen	4.24	Fork carriage width		b3	mm	710	710	1165
c dir	4.25	Overall fork width	min./max.	b₅	mm	470/640	470/640	545/545
Basi	4.27	Width across guide rollers		b <sub>6</sub>	mm	1657	1670	1375
	4.29	Shift, sideways		b7	mm	1294	1298	1290
	4.31	Ground clearance below mast, laden		m1	mm	40	40	40
	4.32	Ground clearance, centre of wheel base		m <sub>2</sub>	mm	80	80	80
	4.34	Working aisle width		A <sub>st</sub>	mm	1662	1675	1380
	4.35	Turning radius		Wa	mm	2147	2147	2202
	4.38	Distance to turret head centre of rotation		l <sub>8</sub>	mm	706	706	773
	4.39	Length of shifting carriage		A	mm	480	480	-
	4.40	Width of shifting frame		В	mm	1465	1495	-
	4.41	Width of shifting carriage		F	mm	277	287	-
	4.42	Min. transfer aisle width		Au	mm	3677	3680	4006
	5.1	Driving speed	laden/unladen		km/h	10.5/10.5	10.5/10.5	10.5/10.5
nce	5.2	Lifting speed	laden/unladen		m/s	0.56/0.57	0.43/0.43	0.57/0.57
rmance	5.3	Lowering speed	laden/unladen		m/s	0.45/0.45	0.45/0.45	0.45/0.45
Perfo	5.4	Reaching speed	laden/unladen		m/s	0.29/0.29	0.33/0.33	0.40/0.40
ď	5.9	Acceleration speed (to 10 m)	laden/unladen		S	6/6	6/6	5/5
	5.10	Service brake				Regenerative	Regenerative	Regenerative
tor	6.1	Drive motor, rating at $S2 = 60$ mins			kW	6.5	6.5	6.5
Electric motor	6.2	Lift motor, rating at S3 = 15%			kW	24	24	24
tric	6.3	Battery according to DIN 43531/35/36 A, B, C, no				DIN 43531 C (B)	DIN 43531 C (B)	DIN 43531 C (B)
Elec	6.4	Battery type/voltage/nominal capacity C₅			V/Ah	48V 8PzS 1120	48V 8PzS 1120	48V 8PzS 1120
	6.5	Battery weight ±5% (depending on manufacturer)			kg	1688	1688	1688
Misc.	8.1	Transmission control				Microprocessor	Microprocessor	Microprocessor
2	8.4	Sound level at operator's ear			dB(A)	68	68	68

## NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork Technical Drawings





Side view NXV with turret head and without auxiliary lift

Top view NXV with turret head

Top view NXV with turret head



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Side view NXV with turret head and auxiliary lift



Top view NXV with telescopic fork

Side view NXV with telescopic fork



### Telescopic mast 'L' Q = 1,000 kg with turret head (all heights in mm)

Height	Overall lift from floor	Total lift	Main lift	Height when lowered	Auxiliary lift <sup>1</sup>	Height, mast raised <sup>2</sup>
hı	h <sub>25</sub> (h <sub>3</sub> + h <sub>9</sub> + h <sub>13</sub> )	h <sub>24</sub> (h <sub>3</sub> + h <sub>9</sub> )	h₃	h13	h <sub>9</sub>	h4 (h3 + Bh H <sub>lif</sub> 2191 mm)
2200	3365	3305	2200	60	1105	4391
2400	3765	3705	2600	60	1105	4791
2900	4765	4705	3600	60	1105	5791
3400	5765	5705	4600	60	1105	6791
3900	6765	6705	5600	60	1105	7791
4400	7765	7705	6600	60	1105	8791
4900	8765	8705	7600	60	1105	9791

### Telescopic mast 'H' Q = 1,500 kg with turret head (all heights in mm)

Height	Overall lift from floor	Total lift	Main lift	Height when lowered	Auxiliary lift <sup>1</sup>	Height, mast raised <sup>2</sup>
hı	$h_{25} (h_3 + h_9 + h_{13})$	h <sub>24</sub> (h <sub>3</sub> + h <sub>9</sub> )	h <sub>3</sub>	h <sub>13</sub>	h <sub>9</sub>	h <sub>4</sub> (h <sub>3</sub> + Bh H <sub>lif</sub> 2191 mm)
2200	2900	2840	1800	60	1040	3991
2400	3300	3240	2200	60	1040	4391
2900	4300	4240	3200	60	1040	5391
3400	5300	5240	4200	60	1040	6391
3900	6300	6240	5200	60	1040	7391
4400	7300	7240	6200	60	1040	8391
4900	8300	8240	7200	60	1040	9391

#### Triplex mast 'H' Q = 1,500 kg with turret head (all heights in mm)

Height	Overall lift from floor	Total lift	Main lift	Height when lowered	Auxiliary lift <sup>1</sup>	Height, mast raised <sup>2</sup>
hı	$h_{25} (h_3 + h_9 + h_{13})$	h <sub>24</sub> (h <sub>3</sub> + h <sub>9</sub> )	h₃	h <sub>13</sub>	h₀	h4 (h3 + Bh H117 2191 mm)
2200	4050	3990	2950	60	1040	5141
2400	4650	4590	3550	60	1040	5741
2900	6150	6090	5050	60	1040	7241
3400	7450	7390	6350	60	1040	8541
3900	8550	8490	7450	60	1040	9641
4400	9850	9790	8750	60	1040	10941
4900	11150	11090	10050	60	1040	12241
5400	12650	12590	11550	60	1040	13741
5900	13950	13890	12850	60	1040	15041

### Telescopic mast 'L' Q = 1,000 kg with telescopic fork (all heights in mm)

Height	Overall lift from floor	Main lift	Height when lowered	Height, mast raised
hı	h <sub>25</sub> (h <sub>3</sub> + h <sub>13</sub> )	h₃	h13	h4
2200	2380	2200	180	4391
2400	2780	2600	180	4791
2900	3780	3600	180	5791
3400	4780	4600	180	6791
3900	5780	5600	180	7791
4400	6780	6600	180	8791
4900	7780	7600	180	9791

#### Telescopic mast 'H' Q = 1,250 kg with telescopic fork (all heights given in mm)

Height	Overall lift from floor	Main lift	Height when lowered	Height, mast raised
hı	h <sub>25</sub> (h <sub>3</sub> + h <sub>13</sub> )	h₃	h <sub>13</sub>	h <sub>4</sub>
2200	1980	1800	180	3100
2400	2380	2200	180	3500
2900	3380	3200	180	4500
3400	4380	4200	180	5500
3900	5380	5200	180	6500
4400	6380	6200	180	7500
4900	7380	7200	180	8500

### Triplex mast 'H' Q = 1,250 kg with telescopic fork (all heights given in mm)

Height	Overall lift from floor	Main lift	Height when lowered	Height, mast raised
h1	h <sub>25</sub> (h <sub>3</sub> + h <sub>13</sub> )	h₃	h13	h <sub>4</sub>
2200	3130	2950	180	4200
2400	3730	3550	180	4800
2900	5230	5050	180	6300
3400	6530	6350	180	7600
3900	7630	7450	180	8700
4400	8930	8750	180	10000
4900	10230	10050	180	11300
5400	11730	11550	180	12800
5900	13030	12850	180	14100

<sup>1</sup> If no auxiliary lift is used:  $h_9 = 0 \text{ mm}$ 

<sup>2</sup> For masts without auxiliary lift, h<sub>4</sub> decreases by 741 mm

## NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork Detailed Photos



Ergonomic and easy load handling thanks to Joystick 4Plus



Optional cross line laser for safely aligning the centre of the pallet



Optional camera system for optimum visibility when loading and unloading



 $\ensuremath{\mathsf{STILL}}$  Easy Control colour display with driver instructions and user-definable favourite keys



Optional opportunity charging access for lithium-ion batteries



Optimum horizontal positioning of the truck with optional positioning laser





Whatever the application, we offer the right overhead guard, visibility-optimised, with or without metal or polycarbonate cover

## NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork iGo pilot

The right system for any customer requirement: STILL iGo pilot can read RFID tags and barcode labels

Custom configuration: the system can be individually adapted to any conceivable very narrow-aisle warehouse

Optimal working conditions: doing away with search processes and wasted trips relieves the burden on the operator and enables quick incorporation of new employees

### STILL iGo pilot - Performance profile at a glance

The iGo pilot navigation and iGo pilot safety functions link the specific warehouse topography to the trucks operating within.

The iGo pilot navigation interface communicates with the warehouse management system and combines the warehouse processes into an intelligent whole. As a result, the truck knows which high shelving location to drive to next, thus unburdening the operator. When the operator accepts the next order, the truck finds its own way through the warehouse aisles. Thanks to iGo pilot safety assistance and warning systems, which can be individually preconfigured to any warehouse, the truck proactively adapts to its route as well as to local conditions and potential hazards. Once the truck has arrived at its destination, iGo pilot navigation stops the fork at exactly the right shelf position according to the task at hand. Once the task has been completed, the data is sent back to the warehouse management system in order to prevent order-picking errors and incorrect storage or retrieval of pallets. The result is a significant increase in handling capacity as well as increased safety thanks to networked agility.

iGo pilot



## NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork iGo pilot

Easy to use: destinations can be entered via scanner, terminal or online from the warehouse management system, and the process is started with just one movement of the drive lever

Supreme productivity: the truck automatically navigates to its destination along the ideal route, regardless of the experience and knowledge of the operator

Smart precision: the truck moves to exactly the right pallet position, with the possibility of preventing fork movements when not required in order to prevent storage and retrieval errors

iGo pilot navigation leads the operator in their very narrow aisle truck along the ideal route to the desired pallet position. This is possible thanks to a three-dimensional shelving plan that maps the specific topography of the warehouse. By comparing against this map stored in the system, the truck detects its current location in the aisle as well as its position. iGo pilot navigation adjusts to the activities of storage, retrieval and order-picking. As soon as an order comes in, the system determines the optimal horizontal and vertical route to the desired shelf location. By means of an optical display, the operator can see his current position in relation to the destination. He can only move his truck in the direction indicated. If he is in the wrong aisle, the display will flag this up to them.

iGo pilot

navigation

Thanks to the variety of safety functions, the driver assistant protects goods, shelves, building equipment and the truck from damage

Always ready for action: reduced downtime by avoiding impact damage and the resulting repairs

Through a simplified workflow, the driver can fully concentrate on his core activity storage and retrieval or order-picking

If iGo pilot safety is installed, the operational safety and handling capacity of STILL very narrow aisle trucks are both significantly improved. Moreover, areas in the very narrow aisle warehouse where special safety regulations apply are defined in advance. A threedimensional map of these areas is stored in the truck. This mapping is provided by STILL. This allows to masterfully handle obstacles in

# iGo pilot safety

the shelving aisle, required braking distances at the end of aisles and height restrictions during everyday operations. In addition, the truck constantly identifies its current position using the map. During its journey, the truck detects every warehouse aisle and its specific conditions and adapts to these without the operator having to intervene. The system always follows the predefined safety rules. STILL has been dedicated to innovative electromobility for 100 years. Emissions-free, low-noise, high-performance and safe – those are the promises we make. With lithium-ion technology, we are expanding these benefits with the added advantages of electromobility: maximum availability, the utmost flexibility and low operating costs. One crucial difference compared to lead-acid batteries is that lithium-ion batteries can be charged – fully or partially – any time and anywhere. And that without having to remove the battery and no special (ventilation) requirements for the charging location. The truck is connected to the charger according to the incredibly easy 'plug & play' principle for flexible, uncomplicated, on-demand charging at any time. Alongside the short charging times, there is no longer any need to change the battery during multi-shift operation. That means maximum availability.

The lithium-ion technology not only increases the efficiency of the forklift truck, but also reduces its operating costs. Replacing the battery is no longer necessary. Furthermore, lithium-ion batteries are maintenance-free, have a long service life, are very robust, and perform equally as well in even the most extreme temperature conditions. The NXV is available with a lithium-ion battery of up to 39.2 kWh. To make it possible for lithium-ion technology to be retrofitted at a later date, the truck can be delivered lithium-ion ready.



Cross line laser



The NXV can optionally be fitted with a cross line laser. This is located between the fork tips and, in combination with the camera system, offers the operator effective support in approaching the load carriers with precision and in positioning the load in the centre of the forks.



As the projection surface of the laser is significantly larger than that of point lasers, it is also more visible, regardless of the lighting conditions. Thanks to the WiFibased camera transmission, the operator receives clear images of the load and its position, displayed directly on the large colour screen.



The load pick-up, assisted by our innovative positioning aids, increases both the handling performance and safety of the operator and load. The combination with the camera system on the forks is what makes the difference here. The operators are able to see everything from the cockpit and always keep everything in view when loading and unloading.



The innovative technology enables precise alignment of the forks with the load carrier, as well as making it easier to identify the fork height when picking up a load.

At STILL, the right solution is the tailor-made solution. With the aid of our configuration software VNAP 10, we ensure that our trucks meet our customers' exact requirements and precisely suit their framework conditions. To achieve this, we analyse the dimensions of the warehouse and the goods to be transported, as well as the goods



The swivel traverse fork is extremely versatile. With its sensitive, precise and quiet operation, it allows for loading from three sides and unloading onto conveyor technology. To achieve this, customers can choose from a selection of standard forks, tapered forks, and manually adjustable or hydraulic fork adjustment.

turnover that the customer is aiming towards and any potential plans for growth. Whether it is the load pick-up method, cab type, residual load capacity or lifting height – we configure the perfect truck for any requirement.



The compact telescopic fork guarantees a high turnover of goods in particularly narrow working aisles. It offers fast lateral reach in both directions, so that both sides of the racking can be worked on.

### Joystick



The sensitive Joystick 4Plus opens up a whole new level of precision and ergonomic vehicle control. It fits the operator's hand perfectly and adapts smoothly and as if by itself to the natural posture of the hand and arm by following the natural line of the operator's arm, when held in a relaxed pose. It is particularly smooth and responsive to operate. This not only makes it really easy to control with



maximum accuracy, but also provides fatigue-free operation while improving the operator's posture. Another highlight: operators have all functions of the lifting equipment and controlling attachments in one hand and can control the lift, shift, pivot and drive functions without having to reach too far.

Powerful and robust: load capacity of up to 1.5 t with a lifting height of up to 13.8 metres

Efficient warehouse utilisation thanks to safe load handling at great heights and excellent handling capacity thanks to intelligent assistance systems

Ergonomic workstation with innovative Joystick 4Plus, STILL Easy Control and numerous safety features.

Narrow aisles, high shelves, heavy goods, not much space? If these reflect your requirements, then the answer has exactly three letters: NXV. The Very Narrow Aisle Truck is the ideal partner for efficient space utilisation in small warehouses. Thanks to its compact dimensions and rotating turret head or telescopic fork, it only needs a small amount of space, making it the natural solution for narrow aisles. When it comes to working at height, on the other hand, the more space the better. The NXV provides fast and reliable loading and unloading at heights of up to 13.8 metres. Its robust design, the intelligent operator assistance system OptiSpeed, as well as Active Load Stabilisation (ALS) facilitate the safe and fast handling of goods weighing up to 1,500 kilos at great height. With ALS, it is also possible to increase the handling capacity by up to 5 percent and the system automatically ensures

even storage depths. Optional positioning aids, such as the cross line laser between the forks or the camera systems, assist the operator in precisely positioning the load. The NXV offers operators the best in comfort and ergonomics. It is fitted as standard with the sensitive Joystick 4Plus, which guarantees easy, fatigue-free and user-friendly operation of the truck. The lifting, shifting and turret functions, as well as the direction of travel, can all be operated single-handedly without having to reach around. With numerous individually configurable 'favourite' keys, operators can also adjust the workstation to suit their own requirements and personal preferences. Thanks to the large colour display on the STILL Easy Control panel, all the relevant vehicle information is also available in compact form in the operator's field of vision.

### The 'Simply Efficient' factors: Performance attributes as a measure of economic efficiency

### Simply easy

- Easy load handling with one hand: ergonomic, precise and userfriendly control with the innovative Joystick 4Plus
- All relevant vehicle information at a glance with STILL Easy Control
- Easy to adjust: user-based operating settings with individually configurable favourite keys
- Fast and easy battery charging, and opportunity charging for the lithium-ion version

### Simply powerful

- High storage density and safe handling, even with heavy loads (up to 1.5 t) and when working at great heights
- Maximum space utilisation thanks to storage heights of up to 13.8 metres with main and auxiliary lift
- Best performance and handling capacity thanks to OptiSpeed the intelligent assistance system
- Maximum handling performance at great heights with Active Load Stabilisation (ALS)

### Simply safe

- Maximum safety for operator and surroundings thanks to the intelligent operator assistance system iGo pilot safety with automatic speed adjustment, lifting override, aisle departure assistant, and many more
- Optimum visibility: Safety Light ensures that the vehicle is already visible before exiting the aisle

Safe, fast operation and maximum handling capacity thanks to camera systems and positioning aids such as the cross line laser

### 🕪 Simply flexible

- Custom-made forklift trucks, manufactured in a modular design according to the customer's specific requirements
- Flexible range of applications for different loads and warehouse conditions thanks to optional push over function

### Simply connected

- Safe and efficient: automated bay approach with the aid of iGo pilot navigation
- Concisely informed: all the relevant vehicle information is contained in the powerful and innovative web application STILL neXXt fleet
- Optimum work safety and reliable operator assignment with the STILL FleetManager 4.x
- Optimisation of the goods flow thanks to easy integration into the warehouse management system (WMS) with the iGo pilot navigation interface

## NXV Very Narrow Aisle Truck with Turret Head or Telescopic Fork Equipment Variants



		NXV with swivel traverse fork	NXV with telescopic fork
	Ergonomic, shock-absorbing operator's workstation with horizontal adjustment	•	•
	Operator's seat variants with seat heating and fabric or leatherette cover	0	0
	Ergonomic, shock-absorbing operator's workstation with tilt adjustment	0	0
	Safety belt on operator's seat	0	0
	Colour display to show active operating status	•	•
ą	DIN A4 clipboard	0	0
Operator's cab	Camera system comprising one or two cameras	0	0
ator	Overhead guard with mesh cover or plastic screen	0	0
per	Overhead guard with head cushion	•	•
0	Electrical and mechanical operation of data terminal	0	0
	Storage compartment with USB connection	•	•
	Fitted mirrors pointing towards the turret head and/or in the travel direction of the drive end	0	-
	Fitted mirrors pointing towards the telescopic fork and/or in the travel direction of the drive end	-	0
	Entry and exit aid on the overhead guard support	0	0
	Positioning aid with laser pointer in the direction of travel and/or cross line laser	0	0/-
	OptiSpeed 3.0: basic equipment with reach control	•	•
ges	OptiSpeed 3.1: load detection for speed optimisation	0	-
acka	OptiSpeed 3.3: weight and load detection for speed optimisation	0	-
e p	OptiSpeed 3.4: Active Load Stabilisation as well as weight and load detection for speed optimisation	0	-
Service packages	STILL iGo pilot navigation: semi-automatic bay approach	0	0
Se	Service package for lifting	0	0
	Service package for driving	0	0
	STILL iGo pilot safety: tailor-made safety and flexibility in narrow aisles	0	0
	Automatic braking at the aisle end with PSA, RFID tags or magnetic switch	0	0
	PIN code access	0	0
~	FleetManager: access authorisation, shock detection, reports	0	0
Safety	Adjustable lifting override and lowering stop	0	0
S	Automatic fork cycle for fast and safe load changing, integrated into the control panel	0	0
	Lift height pre-selection for faster approach to storage position and stacking	0	0
	Acoustic warning signal when driving in the direction of the load and/or drive	0	0
	Mobile personal protection system	0	0
	STILL Safety Light projects blue light onto the travel path	0	0
	Turret head with push over function	0	-
	Symmetrical, hydraulic fork adjustment	0	-
S	Hydraulic parallel fork shift	0	-
Hydraulics	Hydraulic individual fork adjustment	-	-
ydra	Simultaneous turret movement	•	-
Í	Auxiliary lift	0	-
	Automatic fork cycle	0	-
	Noise-optimised hydraulic pump		•
	Energy recovery when lowering		•
	Smooth, continuous acceleration to maximum speed		•
/es	Maintenance-free drives for driving, steering and lifting Fully enclosed components which are impervious to dirt and dust		•
Drives		•	•
	Regenerative braking system for energy recovery during braking process	0	
	Hydraulic impeller brake as additional brake	0	0
	48 V battery compartment for 360 Ah to 1085 Ah batteries Li-ion-ready for later installation of lithium-ion battery	0	0
ery		0	0
Battery	Lithium-ion battery	•	
	Roller track for lateral battery change Fast charging access	0	0
	r doc ondrying dooodd	0	<u> </u>

• Standard O Option — Not available



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STILL is certified in the following areas: Quality management, occupational safety, environmental protection and energy management.



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