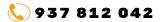
# KARBAR





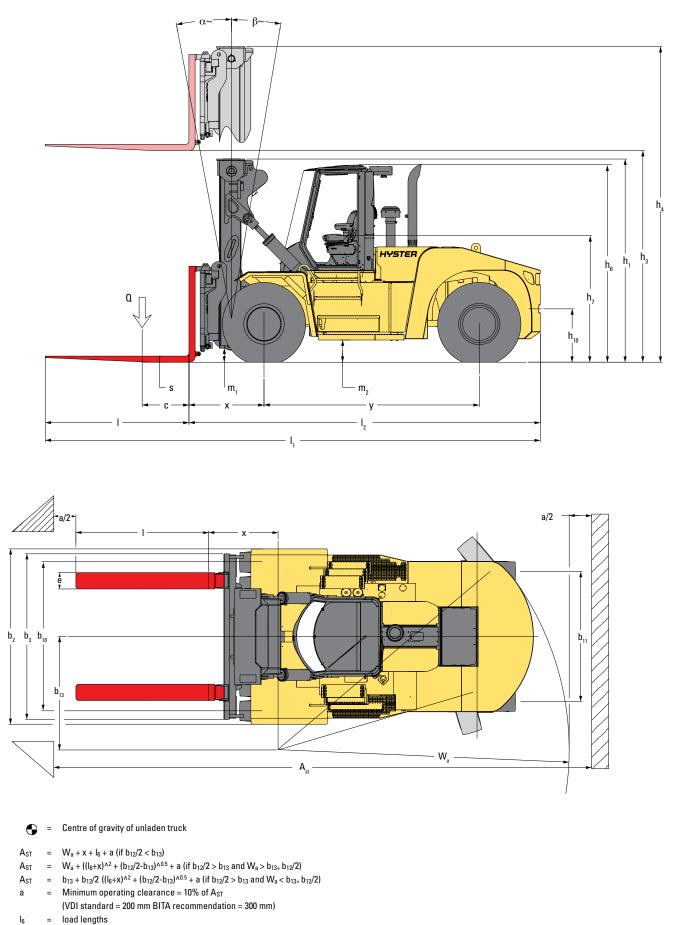


# H25-32XD SERIES TECHNICAL GUIDE

WWW.HYSTER.COM







 $b_{12} = load width$ 



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7	1-1	Manufacturer		HYSTER	HYSTER
GENER/	1-2	Model designation		H25XDS9; H25XD12	H28XD12; H30-32XD(S)12
8	1-3	Powertrain / drivetrain		Diesel	Diesel

	7-1	Engine manufacturer / model		Cummins / QSB 6.7	Cummins / QSB 6.7
	7-1A	EPA / CE compliance		Stage IIIA	Stage IIIA
	7-2	Engine power output according to ISO 1585	kW	184	184
	7-2-1	Engine power output - Peak	kW	201	201
ENGINE	7-3	Rated speed	min <sup>-1</sup>	2,200	2,200
ENG	7-3-1	Engine torque @rpm (1/min)	Nm/min <sup>-1</sup>	990 @ 1,500	990 @ 1,500
	7-4	Number of cylinders / displacement	# / cm <sup>3</sup>	6 / 6,690	6 / 6,690
	7-8	Alternator output	Amps	120	120
	7-9	Electrical system voltage	V	24	24
	7-10	Battery voltage, rated capacity	V / Ah	24 / 102	24 / 102

	8-1	Drive control / Transmission	Type / #	Torque Converter	Torque Converter
	8-2	Transmission manufacturer / type	Type / #	ZF - 5WG211	ZF - 5WG211
	8-4	Transmission speeds forward / backward	#	5/3	5/3
DRIVE	8-5	Coupling	Туре	Torque Converter	Torque Converter
	8-6	Wheel drive / drive axle manufacturer / type	Type / #	Axle Tech PRLC1794W4H	Axle Tech PRC3806W4H
	8-11	Service brake	Туре	Oil immersed disc	Oil immersed disc
	8-12	Parking brake	Type	Dry disc on drive axle	Dry disc on drive axle

	10-1	Operating pressure for attachments		bar	225
	10-2	Oil volume for attachments		l/m	100
	10-3	Hydraulic tank capacity		I	237
SC	10-4	Fuel tank capacity		I	364
Σ	10-5	Steering design			Hydraulic power steering
	10-5	Sound pressure level at the driver's seat EN12053	LpAZ	dB(A)	78.8
	10-5	Sound power level during the workcycle EN12053	LwAZ	db	107.3
	10-8	Towing coupling, model / type			Yes / Pin

#### NOTES:

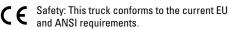
Specifications are affected by the condition of the vehicle and how it is equipped, as well as the nature and condition of the operating area. Inform your dealer of the nature and condition of the intended operating area when purchasing your Hyster<sup>®</sup> truck.

- (1) Unladen with new tyres
- (2) Bottom of forks
- (3) Full suspension seat in depressed position
- (4) Length without carriage
- (5) Forks in alternative position(6) Distance centre truck to centre of internal turning radius
- (7) Gradeability figures are provided for comparison of tractive performance, but are not interview of the state of the st
  - intended to endorse the operation of vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.

All capacities are according to EN1551.

#### MAST TABLE:

(#) Note: Carriage with ZERO IN-TO-IN forkpositioning not recommended in combination with liftheights above 6200 mm



#### NOTICE:

Care must be exercised when handling elevated loads. Operators must be trained and must read, understand and follow the instructions contained in the Operating Manual.

All values are nominal values and they are subject to tolerances. For further information, please contact the manufacturer.

Hyster products are subject to change without notice.

Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck. Performance specifications are for a truck equipped as described under Standard Equipment on this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature, condition of the operating area, proper service and maintenance of the vehicle. If these specifications are critical, the proposed application should be discussed with your dealer.

NOTE: Specifications, unless otherwise listed, are for a standard truck without optional equipment.

Specification data is based on VDI 2198.



## A R B A R H25XDS9 / H25XD12 / H28XD12 SPECIFICATIONS

	1.4	Manufacture			1000	TED	1000	тгр	111/0	TED
	1-1	Manufacturer			HYS		HYS		HYS	
	1-2	Model designation			H25>		H25>		H28>	
_	1-3	Powertrain / drivetrain			Die		Die		Die	
GENERAL	1-4	Operator type			Sea		Sea		Sea	
GEI	1-5	Load capacity at load center, nominal	Q	kg	25,		25,0		28,000	
	1-6	Load center distance	С	mm	90		1,2		1,200	
	1-8	Load distance	х	mm	1,1		1,189		1,274	
	1-9	Wheelbase	y	mm	3,6		4,315		4,3	
	2-1	Service weight		kg	37,	985	38,4		45,6	
MT.	2-2	Axle loading with load, front / rear		kg	58,534	4,451	58,205	5,250	67,530	6,086
	2-3	Axle loading without load, front / rear		kg	19,245	18,739	19,364	19,091	23,476	22,139
	3-1	Tyre type			Pneu	matic	Pneur	matic	Pneur	natic
	3-2	Tyre size, front			14.00 - 1	24 28PR	14.00 - 2	24 28PR	16.00 - 2	25 32PR
WHEELS	3-3	Tyre size, rear			14.00 - 2	24 28PR	14.00 - 2	24 28PR	16.00 - 2	25 32PR
F	3-5	Wheels, number front / rear (x = driven wheels)			x 4	/ 2	x 4	/ 2	x 4	/ 2
	3-6	Tread, front	b10	mm	2,2	:79	2,2	79	2,4	24
	3-7	Tread, rear	b <sub>11</sub>	mm	2,3	81	2,3	81	2,3	38
	4-1	Mast tilt, forward / backward	α/β	deg	6° /	10°	6° /	10°	6° /	
	4-2	Height, mast lowered (1)	h <sub>1</sub>	mm	4,0	99	4,0	99	4,2	
	4-3	Free lift	h <sub>2</sub>	mm	(	)	C	)	C	
	4-4	Lift <b>(2)</b>	h <sub>3</sub>	mm	4,2	65	4,2	65	4,2	65
	4-5	Height, mast extended	h4	mm	6,2	31	6,2	31	6,3	56
	4-7	Cab height (open cab)	h <sub>6</sub>	mm	3,3	99	3,3	99	3,4	95
	4-7-1	Height of overhead guard (closed cab)	h <sub>6</sub>	mm	3,4	26	3,426		3,522	
	4-7-2	Height of overhead guard (closed cab w/ airco)	h <sub>6</sub>	mm	3,4	26	3,426		3,522	
	4-7-3	Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub>	mm	3,5	3,523		3,523		19
	4-7-4	Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub>	mm	3,5	3,575		3,575		71
	4-7-5	Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>6</sub>	mm	3,5	3,553		3,553		49
	4-8	Seat height relating to SIP (3)	h <sub>7</sub>	mm	2,1	2,193		2,193		92
	4-12	Coupling height	h <sub>10</sub>	mm	93	35	935		1,0	31
	4-19	Overall length	l <sub>1</sub>	mm	8,3	21	8,321		9,066	
SI	4-20	Length to face of forks (4)	l <sub>2</sub>	mm	5,8	81	5,881		6,626	
DIMENSIONS	4-21	Overall width	b <sub>2</sub>	mm	3,2	20	3,2	20	3,430	
	4-22	Fork dimensions ISO 2331	s/e/l	mm	105 / 28	0 / 2,440	105 / 280 / 2,440		105 / 300 / 2,440	
	4-23	Fork carriage type			Dual Functio Fork Pos Hook	n - Sideshift sitioning type	Dual Function - Sideshift Fork Positioning Hook type		Dual Functio Fork Pos Hook	n - Sideshift itioning type
	4-24	Fork carriage width	b <sub>3</sub>	mm	3,0	40	3,0	40	3,2	
	4-25	Distance over fork arms, minimum / maximum	b <sub>5</sub>	mm	1,430	2,970	1,430	2,970	1,480	3,140
	4-25-1	Distance over fork arms, minimum / maximum (5)	b <sub>5</sub>	mm	880	2,420	880	2,420	930	2,590
	4-30	Sideshift @ width over forks	b <sub>8</sub>	mm	+/-385	2,200	+/-385	2,200	+/-415	2,310
	4-31	Ground clearance, laden, below mast	m1	mm	21	9	21	9	22	.7
	4-32	Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	4(	)6	40	)6	50	12
	4-33	Load dimension $b_{12} \times I_6$ crossways		mm	2,400	2,400	2,400	2,400	2,400	2,400
	4-34-1-2	Aisle width, without operating clearance	Ast	mm	8,9	115	9,7	74	9,8	59
	4-34-1-2	Aisle width, with 200 mm operating clearance	Ast	mm	9,1	15	9,9	74	10,0	)59
	4-34-1-3	Aisle width, with 10% operating clearance	Ast	mm	9,8	107	10,5	751	10,8	345
	4-35	Outside turning radius	Wa	mm	5,3	26	6,1	85	6,1	85
	4-36	Internal turning radius (6)	b <sub>13</sub>	mm	2,0	40	2,5	89	2,5	89
	5-1	Travel speed, with / without load		km/h	25	25	25	25	25	25
	5-2	Lifting speed, with / without load backwards		m/s	0.33	0.35	0.33	0.35	0.27	0.29
뜅	5-2-1	Lifting speed, with 70% load		m/s	0.3	34	0.3	34	0.2	28
MAN	5-3	Lowering speed with / without load		m/s	0.50	0.50	0.50	0.50	0.50	0.50
PERFORMANCE	5-5	Drawbar pull - 1.6 km/h   1 mph, with / without load		kN	196	201	196	201	198	203
E	5-5-1	Drawbar pull - stall, with / without load		kN	238	243	238	243	240	245
	5-7	Gradeability - 1.6 km/h   1 mph, with / without load (7)		%	34	34	33	35	28	35
	5-7-1	Gradeability - 1.6 km/n   1 mpn, with / without load (7) Gradeability - stall, with / without load (7)		%	42	34	41	35	35	35
1999	121 121 17		1200	The state		Concernance of the second second	PERCENT AND	And the second		

(1) Unladen with new tyres

(2) Bottom of forks

(3) Full suspension seat in depressed position

(4) Length without carriage

(5) Forks in alternative position

(6) Distance centre truck to centre of internal turning radius

(7) Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.

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## KARBAR H30XD9 / H30XD12 / H32XD9 / H32XD12 SPECIFICATIONS

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							-						
	1-1	Manufacturer			HYS	TER	HYS	TER	HYS	TER	HYS	TER	
	1-2	Model designation			H30)	XD9	H30X	(D12	H32	2D9	H32>	(D12	
	1-3	Powertrain / drivetrain			Die	sel	Die	sel	Die	sel	Die	sel	
GENERAL	1-4	Operator type			Sea	ted	Sea	ted	Sea	ted	Sea	ted	
GEN	1-5	Load capacity at load center, nominal	Q	kg	29,7	700	30,0	000	31,9	950	32,000		
	1-6	Load center distance	С	mm	90	10	1,2	00	90	00	1,200		
	1-8	Load distance	х	mm	1,274		1,2	.74	1,274		1,274		
	1-9	Wheelbase	у	mm	3,9	35	4,3	15	3,9	35	4,8	25	
	2-1	Service weight		kg	45,3	325	46,2	262	45,9	935	45,8	368	
WT.	2-2	Axle loading with load, front / rear		kg	69,549	5,477	70,740	5,522	73,096	4,789	71,898	5,970	
	2-3	Axle loading without load, front / rear		kg	23,440	21,885	23,540	22,723	23,495	22,441	23,490	22,378	
	3-1	Tyre type			Pneur	natic	Pneur	matic	Pneur	matic	Pneur	matic	
	3-2	Tyre size, front			16.00 - 2	25 32PR	16.00 - 2	25 32PR	16.00 - 2	25 32PR	16.00 - 2	25 32PR	
WHEELS	3-3	Tyre size, rear			16.00 - 2	25 32PR	16.00 - 2	25 32PR	16.00 - 2	25 32PR	16.00 - 2	25 32PR	
H	3-5	Wheels, number front / rear (x = driven wheels)			x 4	/ 2	x 4	/ 2	x 4	/ 2	x 4	/ 2	
	3-6	Tread, front	b10	mm	2,4	24	2,4	24	2,4	24	2,4	24	
	3-7	Tread, rear	b <sub>11</sub>	mm			38	2,3	38	2,3	38		
	4-1	Mast tilt, forward / backward	α/β	deg	6° /	10°	6° /	10°	6° /	10°	6° /		
	4-2	Height, mast lowered <b>(1)</b>	h <sub>1</sub>	mm	4,224		4,2		4,2		4,2		
	4-3	Free lift	h <sub>2</sub>	mm	0		C		C		C		
	4-4	Lift <b>(2)</b>	h <sub>3</sub>	mm	4,2		4,2		4,2		4,2		
	4-5	Height, mast extended	h4	mm	6,3	56	6,3	56	6,3	56	6,3		
	4-7	Cab height (open cab)	h <sub>6</sub>	mm	3,4	95	3,4		3,4	95	3,4		
	4-7-1	Height of overhead guard (closed cab)	h <sub>6</sub>	mm		3,522		3,522		22	3,522		
	4-7-2	Height of overhead guard (closed cab w/ airco)	h <sub>6</sub>	mm		3,522		3,522		3,522		3,522	
	4-7-3	Height of overhead guard (closed cab w/ strobe light)	h <sub>6</sub>	mm	3,6	3,619		3,619		3,619		19	
	4-7-4	Height of overhead guard (closed cab w/ work lights)	h <sub>6</sub>	mm		3,671		3,671		3,671		71	
	4-7-5	Height of overhead guard (closed cab w/ airco & strobe light)	h <sub>6</sub>	mm	3,6		3,649		3,649		3,6		
	4-8	Seat height relating to SIP (3)	h <sub>7</sub>	mm	2,2	92	2,2		2,292		2,2		
	4-12	Coupling height	h <sub>10</sub>	mm	1,0	31	1,031		1,031		1,0		
	4-19	Overall length	l <sub>1</sub>	mm	8,6	86	9,066		8,686		9,5		
NOI	4-20	Length to face of forks (4)	l <sub>2</sub>	mm	6,2		6,626		6,246		7,1		
DIMENSIONS	4-21	Overall width	b <sub>2</sub>	mm	3,4		3,430		3,430		3,430 105 / 300 / 2,440		
	4-22	Fork dimensions ISO 2331	s/e/l	mm	105 / 300		105 / 300		105 / 300				
	4-23	Fork carriage type			Dual Function Fork Pos Hook	n - Sideshift itioning type	Dual Function - Sideshift Fork Positioning Hook type		t Dual Function - Sideshift Fork Positioning Hook type		Dual Functio Fork Pos Hook	n - Sideshift itioning type	
	4-24	Fork carriage width	b <sub>3</sub>	mm	3,2	00	3,2	00	3,2	00	3,2	00	
	4-25	Distance over fork arms, minimum / maximum	b <sub>5</sub>	mm	1,480	3,140	1,480	3,140	1,480	3,140	1,480	3,140	
	4-25-1	Distance over fork arms, minimum / maximum <b>(5)</b>	b <sub>5</sub>	mm	930	2,590	930	2,590	930	2,590	930	2,590	
	4-30	Sideshift @ width over forks	b <sub>8</sub>	mm	+/-415	2,310	+/-415	2,310	+/-415	2,310	+/-415	2,310	
		Ground clearance, laden, below mast	m <sub>1</sub>	mm	22		22		22		22		
	4-32	Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	50		50		50		50		
	4-33	Load dimension $b_{12} \times l_6$ crossways		mm	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	
		Aisle width, without operating clearance	Ast	mm	9,3		9,8		9,3		10,5		
		Aisle width, with 200 mm operating clearance	Ast	mm	9,5		10,0		9,5		10,		
		Aisle width, with 10% operating clearance	Ast	mm	10,3		10,8		10,3		11,		
	4-35	Outside turning radius	Wa	mm	5,6		6,1		5,6		6,8		
	4-36	Internal turning radius (6)	b <sub>13</sub>	mm	2,2		2,5		2,2		3,0		
	5-1	Travel speed, with / without load		km/h	25	25	25	25	25	25	25	25	
	5-2	Lifting speed, with / without load backwards		m/s	0.27	0.29	0.27	0.29	0.27	0.29	0.27	0.29	
PERFORMANCE	5-2-1	Lifting speed, with 70% load		m/s	0.2		0.2		0.2		0.2		
<b>NMM</b>	5-3	Lowering speed with / without load		m/s	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
ERFO	5-5	Drawbar pull - 1.6 km/h   1 mph, with / without load		kN	198	203	198	203	197	203	197	203	
	5-5-1	Drawbar pull - stall, with / without load		kN o/	240	245	240	245	240	245	240	245	
	5-7 5-7-1	Gradeability - 1.6 km/h   1 mph, with / without load (7)		%	28 35	35 35	27 34	35 35	27 33	34 34	27 33	36 36	
	J J T	Gradeability - stall, with / without load (7)		/0	30	55	54	55	33	54	33	30	

(1) Unladen with new tyres

(2) Bottom of forks

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(3) Full suspension seat in depressed position

(4) Length without carriage

(5) Forks in alternative position

(6) Distance centre truck to centre of internal turning radius

(7) Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.



## **S**, **KARBAR** MAST AND CAPACITY INFORMATION

	Lift	Lowered	Free lift	Extended	Integrated coil ram wit	h +/-250 mm side shift	Pin type side shift carrige mounted coil ram		
	height h₃ (mm)	height h₁ (mm)	height h <sub>2</sub> (m)	height h₄ (mm)	Capacity @ 1.200 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre	Mast tilt (forward/ backward)	
H25XDS9	2,745	5,169	2,745	5,169	30,000	6 / 10	25,000	6 / 10	
H25XD12	2,745	5,169	2,745	5,169	30,000	6 / 10	25,000	6 / 10	
H28XD12	2,745	5,265	2,745	5,265	36,000	6 / 10	32,000	6 / 10	
H30XDS9	2,745	5,265	2,745	5,265	36,000	6 / 10	32,000	6 / 10	
H30XD12	2,745	5,265	2,745	5,265	36,000	6 / 10	32,000	6 / 10	
H32XDS9	2,745	5,265	2,745	5,265	36,000	6 / 10	32,000	6 / 10	
H32XD12	2,745	5,265	2,745	5,265	36,000	6 / 10	32,000	6 / 10	

### H25XDS9 RATED CAPACITY KG @ 900 MM AND @ 1200 LOAD CENTRE

	Lift	Lowered	eight height	Extended	Dual Function without 2	Side Shift & Fork Pos ZERO IN-TO-IN forkpo	sitiong carriage ositioning	Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning		
	height h₃ (mm)	height h1 (mm)		height h <sub>4</sub> (mm)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)
	3,155	3,491	0	5,016	25,000	6 / 10	22,700	25,000	6 / 10	22,700
	3,760	3,794	0	5,621	25,000	6 / 10	22,640	25,000	6 / 10	22,640
JE NFL	4,370	4,099	0	6,231	25,000	6 / 10	22,600	25,000	6 / 10	22,600
STAGE	4,980	4,404	0	6,841	25,000	6 / 10	22,540	25,000	6 / 10	22,540
2	6,200	5,014	0	8,061	25,000	6 / 10	22,400	25,000	6 / 10	22,400
	9,250	6,539	0	11,111	23,720	6 / 6	21,000	20,520 ( <b>#</b> )	6/6	21,000 ( <b>#</b> )

### H25XD12 RATED CAPACITY KG @1200 LOAD CENTRE

	Lift	Lowered	Free lift	Extended	Dual Function Side Shift without ZERO IN-TO		Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning		
	height h₃ (mm)	height h1 (mm)	height h <sub>2</sub> (m)	height h₄ (mm)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	
	3,155	3,491	0	5,016	6 / 10	22,700	6 / 10	22,700	
	3,760	3,794	0	5,621	6 / 10	22,640	6 / 10	22,640	
je nfl	4,370	4,099	0	6,231	6 / 10	22,600	6 / 10	22,600	
2 STAGE	4,980	4,404	0	6,841	6 / 10	22,540	6 / 10	22,540	
2	6,200	5,014	0	8,061	6 / 10	22,400	6 / 10	22,400	
	9,250	6,539	0	11,111	6 / 6	21,000	6 / 6	21,000 ( <b>#</b> )	

#### H28XD12 RATED CAPACITY KG @ 900 MM AND @ 1200 LOAD CENTRE

	Lift	Lowered	Free lift	Extended	Dual Function without Z	Side Shift & Fork Pos ERO IN-TO-IN forkpo	sitiong carriage ositioning	Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning			
	height h₃ (mm)	height h1 (mm)	height h <sub>2</sub> (m)	height h4 (mm)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	
	2,850	3,464	0	4,836	31,860	6 / 10	28,000	31,860	6 / 10	28,000	
	3,155	3,616	0	5,141	31,860	6 / 10	28,000	31,860	6 / 10	28,000	
	3,760	3,919	0	5,746	31,860	6 / 10	28,000	31,860	6 / 10	28,000	
je nfl	4,370	4,224	0	6,356	31,860	6 / 10	28,000	31,860	6 / 10	28,000	
2 STAGE	6,200	5,139	0	8,186	31,860	6 / 10	28,000	31,860	6 / 10	28,000	
2	6,810	5,444	0	8,716	31,700	6 / 10	27,860	31,700	6 / 10	27,860	
	9,250	7,174	0	11,746	30,920	6 / 6	27,180	30.920 ( <b>#</b> )	6 / 6	27,180 ( <b>#</b> )	
	9,860	7,479	0	12,356	30,600	6 / 6	26,900	29.660 ( <b>#</b> )	6 / 6	26,900 ( <b>#</b> )	





MAST AND CAPACITY INFORMATION <

#### H30XD9 RATED CAPACITY KG @ 900 MM AND @1200 LOAD CENTRE

	Lift	Lowered	Free lift	Extended	Dual Function without 2	Side Shift & Fork Pos ZERO IN-TO-IN forkpo	sitiong carriage ositioning	Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning		
	height h₃ (mm)	height h1 (mm)	height h <sub>2</sub> (m)	height h4 (mm)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)
	2,850	3,464	0	4,836	30,000	6 / 10	27,000	30,000	6 / 10	27,000
	3,155	3,616	0	5,141	30,000	6 / 10	27,000	30,000	6 / 10	27,000
NFL	3,760	3,919	0	5,746	30,000	6 / 10	26,940	30,000	6 / 10	26,940
E N	4,370	4,224	0	6,356	30,000	6 / 10	26,880	30,000	6 / 10	26,880
STAGE	6,200	5,139	0	8,186	30,000	6 / 10	26,620	30,000	6 / 10	26,620
2	6,810	5,444	0	8,716	29,840	6 / 10	26,420	29,840 ( <b>#</b> )	6 / 10	26,420 ( <b>#</b> )
	9,250	7,174	0	11,746	28,880	6 / 6	25,360	28,880 ( <b>#</b> )	6 / 6	25,360 ( <b>#</b> )
	9,860	7,479	0	12,356	28,580	6/6	25,120	28,580 ( <b>#</b> )	6/6	25,120 ( <b>#</b> )

#### H30XD12 RATED CAPACITY KG @ 900 MM AND @ 1200 LOAD CENTRE

	Lift	Lowered	Free lift height h <sub>2</sub> (m)	Extended height h4 (mm)	Dual Function Side Shift & Fork Positiong carriage without ZERO IN-TO-IN forkpositioning			Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning		
	height h₃ (mm)	height h1 (mm)			Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)
	2,850	3,464	0	4,836	32,000	6 / 10	30,000	32,000	6 / 10	30,000
	3,155	3,616	0	5,141	32,000	6 / 10	30,000	32,000	6 / 10	30,000
ب.	3,760	3,919	0	5,746	32,000	6 / 10	30,000	32,000	6 / 10	30,000
2 STAGE NFL	4,370	4,224	0	6,356	32,000	6 / 10	30,000	32,000	6 / 10	30,000
STAC	6,200	5,139	0	8,186	32,000	6 / 10	30,000	32,000	6 / 10	30,000
2	6,810	5,444	0	8,716	31,840	6 / 10	29,840	31,840	6 / 10	29,840
	9,250	7,174	0	11,746	31,100	6/6	29,000	31,100 ( <b>#</b> )	6/6	29,000 ( <b>#</b> )
	9,860	7,479	0	12,356	30,880	6/6	29,680	29,840 ( <b>#</b> )	6/6	28,720 ( <b>#</b> )

#### H32XD9 RATED CAPACITY KG @ 900 MM AND @1200 LOAD CENTRE

	Lift Lowered Free lift		Extended	Dual Function Side Shift & Fork Positiong carriage without ZERO IN-TO-IN forkpositioning			Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning			
	height height height h <sub>3</sub> (mm) h <sub>1</sub> (mm) h <sub>2</sub> (m)	height h <sub>4</sub> (mm)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Capacity @ 900 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)		
	2,850	3,464	0	4,836	32,000	6 / 10	28,680	32,000	6 / 10	28,680
	3,155	3,616	0	5,141	32,000	6 / 10	28,640	32,000	6 / 10	28,640
<u>ب</u>	3,760	3,919	0	5,746	32,000	6 / 10	28,560	32,000	6 / 10	28,560
STAGE NFL	4,370	4,224	0	6,356	32,000	6 / 10	28,500	32,000	6 / 10	28,500
STAC	6,200	5,139	0	8,186	32,000	6 / 10	28,240	32,000	6 / 10	28,240
2	6,810	5,444	0	8,716	31,840	6 / 10	28,040	31,840	6 / 10	28,040
	9,250	7,174	0	11,746	30,020	6/6	26,360	30,020 (#)	6/6	26,360 ( <b>#</b> )
	9,860	7,479	0	12,356	29,420	6/6	26,160	29,420 ( <b>#</b> )	6/6	26,120 ( <b>#</b> )

#### H32XD12 RATED CAPACITY KG @1200 LOAD CENTRE

	Lift	Lowered	Free lift	Extended		& Fork Positiong carriage D-IN forkpositioning	Dual Function Side Shift & Fork Positiong carriage with ZERO IN-TO-IN forkpositioning		
	height height height h <sub>3</sub> (mm) h <sub>1</sub> (mm) h <sub>2</sub> (m)		height h <sub>4</sub> (mm)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)	Mast tilt (forward/ backward) (°)	Capacity @ 1.200 mm load centre (kg)		
	2,850	3,464	0	4,836	6 / 10	32,000	6 / 10	32,000	
	3,155	3,616	0	5,141	6 / 10	32,000	6 / 10	32,000	
료	3,760	3,919	0	5,746	6 / 10	32,000	6 / 10	32,000	
2 STAGE NFL	4,370	4,224	0	6,356	6 / 10	32,000	6 / 10	32,000	
STA	6,200	5,139	0	8,186	6 / 10	32,000	6 / 10	32,000	
2	6,810	5,444	0	8,716	6 / 10	32,000	6 / 10	32,000	
	9,250	7,174	0	11,746	6 / 6	31,020	6 / 6	31,020	
	9,860	7,479	0	12,356	6 / 6	30,720	6 / 6	29,820	

# **KARBAR** FEATURES AND OPTIONS

PERFORMANCE	STD	0PT
Cummins QSB 6.7L 194 Stage IIIA diesel engine with max. 201 kW @ 2.000 rpm and max. 990 Nm at 1.500 rpm	х	
Heavy duty air intake	Х	
Raised air intake - pre-filter		Х
Hydrodynamic 5-speed ZF WG211 transmission	Х	
Axle Tech PRLC1794W4H drive axle with oil-immersed brakes (H25XD/S)	х	
Axle Tech PRC3806W4H drive axle with oil-immersed brakes (H28-32XD/S)	х	
DRIVE	STD	<b>OPT</b>
Travel speed limiter - unconditional and customer adjustable - pre-set to 16km/h		Х
14.00 - 24 28 Pneumatic bias drive and steer tyres (H25XD/S)	Х	
14.00 - R24 Michelin XZM radial drive and steer tyres (H25XD/S)		х
14.00 - R24 Trelleborg radial drive and steer tyres (H25XD/S)		Х
16.00 - 25 32PR Pneumatic bias ply drive and steer tires (H28- 32XD/S)	Х	
16.00 - 25 32PR Continental straddlemaster bias ply drive and steer tires (H28-32XD/S)		х
16.00 - R25 Michelin XZM radial drive and steer tyres (H28- 32XD/S)		х
Spare wheels and tyres		Х
LIFT	STD	0PT
Single stage MONO mast		Х
2 stage non-free lift mast	Х	
2 stage full free lift mast		Х
3 stage full free lift mast		Х
Mast tilt 6° forward / 10° back	Х	
Mast tilt 6° forward / 6° back		Х
Mast tilt 15° forward / 10° back		Х
Tilt indicator, mechanically acting		Х
Hydraulic accumulator		Х
Pressure compensated lowering	Х	
HANDLING	STD	<b>OPT</b>
Pin type carriage		Х
Pin type sideshift carriage with fork positioner		Х
Pin type carriage with independent fork positioner		Х
Pin type side shift frame carriage with independent fork positioning		Х
Pin type side shift frame carriage with independent fork postitioning		Х
Hook type dual function sideshift individual fork positioner with 1 auxiliary function		Х
Hook type dual function sideshift individual fork positioner with 1 auxiliary function - 300mm in-to-in Hook type dual function sideshift fork positioner carriage	Х	Х
Hook type dual function sideshift fork positioner carriage - Omm in-to-in	^	Х
Pin type carriage with integrated ram with +/- 250 mm sideshift; ram length 1500mm.		Х
280 x 105 x 2440 mm Hook type forks (H25XD/S)	Х	
280 x 105 x 2440 mm Pin type forks (H25XD/S)		Х
300 x 105 x 2440 mm Hook type forks (H28-32XD/S)	Х	
300 x 105 x 2440 mm Pin type forks (H28-32XD/S) 300 x 110 x 2440 mm Hook type forks (H28-32XD/S)		X
300 x 110 x 2440 mm Pin type forks (H28-32XD/S) 1500mm integrated coil ram		X X
Hook type coil ram 356 x 1500 mm		X
		X
Hook type coil ram 356 x 1800 mm		
Pin type coil ram 356 x 1500 mm Pin type coil ram 356 x 1800 mm		X
		· ^
Tyre handler - TH25K164L integral		Х

ERGONOMICS	STD	OPT
Open operating module as overhead guard	Х	
Enclosed operator cabin with heating		Х
Enclosed operator cabin with automatic climate control		Х
Manual cab tilt	Х	
Electrically powered cab tilt		Х
Diesel fueled cab heater		Х
H-type double blade wiper on front windscreen		Х
I-type single blade wiper on front windscreen	Х	
Heated rear window		Х
Heated top and rear window		Х
Heated top window		Х
Top window with armoured glass	Х	
Top window with armoured glass and additional steel bars		Х
50% Dark tinted top cabin window		Х
50% Dark tinted cabin windows - applied to doors, rear and top windows		Х
Wire mesh operator guard		Х
Vertical steel bar front screen guard		Х
Plexiglass shield in front of front window		Х
Armoured glass rain top		Х
Wire mesh installed on top of operator compartment		Х
2 sun visors for front window		Х
Top and rear screen roller sunshade		Х
Mechanical suspension cloth seat		Х
Mechanical suspension vinyl seat	Х	
Air suspension cloth seat		Х
Air suspension vinyl seat		Х
Deluxe air suspension cloth seat		Х
Deluxe air suspension heated cloth seat		Х
Deluxe air ride full suspension vinyl with high backrest seat		Х
Deluxe air suspension seat with cloth cover, heating and ventilation		Х
High and adjustable seat backrest		Х
Leftside armrest on operator seat	Х	
Lateral sliding mechanism for operator seat		Х
Hi-vis red 2 point seat belt	Х	
Trainer seat with cloth cover and 2-point high-visibility seatbelt		Х
Steering wheel with spinner knob		Х
7" integrated performance display	Х	
Accessory mounting bracket on A-pillars		Х
Document holder		Х
Radio preparation with 2 speakers and antenna		Х
Bluetooth radio with 2 speaker and antenna		Х
Interior dome light	X	
Reading light		Х
Recirculation fan		Х
Steer axle with wheel nut protection	Х	
VISIBILITY	STD	OPT
2 external mirrors on cab handrail mounted exterior wide		Х
angle mirrors		
2 halogen drive lights, position and direction lights on front fender / 2 halogen work lights mast mounted / 2 halogen cab mounted rear / rear ward cluster with stop, tail, indicator & reverse lights inclusive hazard function	x	
2 Halogen drive lights, position and direction lights on front fender / 4 halogen work lights front cab mounted / 2 halogen rear cab mounted / rear ward cluster with stop, tail, indicator & reverse lights inclusive hazard function		х
-		х
Halogen four front cab / two rear / two front fenders / brake / tail / back-up lights		~
Halogen four front cab / two rear / two front fenders / brake /		X



## FEATURES AND OPTIONS <

VISIBILITY (continued)	STD	0PT
Rear mounted color camera with front mounted LCD display		Х
2 HP LED work lights on front mast with 2 on rear and front fenders / brake / tail / back-up lights with turn signals		х
4 HP LED work lights on cab with 2 on rear and front fenders (LED) / brake / tail / back-up lights with turn signals		x
4 LED work lights cab mounted, 2 LED drive lights with position and direction front fender mounted, 2 LED work lights on rear of operator compartment / LED rear ward cluster with stop, tail, indicator & reverse lights		x
2 LED Work lights mast mounted, 2 LED drive lights with position and direction front fender mounted, 2 LED work lights on rear of operator compartment / LED rearward cluster with stop, tail, indicator & reverse lights		x
LED headlights, 2 front (mast mounted)		Х
OPERATION	STD	OPT
Air horn		Х
Electrical horn	Х	
Audible reverse alarm	Х	
Audible white noise reverse alarm		Х
Audible alarm - forward / reverse		Х
Amber strobe light - ignition activated	Х	
Blue LED spotlight - rear - reverse direction activation		Х
Forward camera mounted on outer mast		Х
Forward camera mounted on carriage		Х
Park brake - manual	Х	
Truck start – key switch with start button – without seatbelt interlock	Х	
Truck start – key switch with start button and seatbelt interlock		х
Operator password in display - required for truck start		Х
Directional lever		Х
MONOTROL™		Х
Directional control on mini-levers	Х	
Directional control on joystick		Х
Automatic truck shutdown with timer		Х
Delayed engine shutdown for turbo cooldown		Х
Air-conditioning shut-off with open door		Х
Tyre pressure monitoring system		Х
Load weight indicator		Х
Power distribution panel with fuses partially replaced by electric circuit breakers		х
Rear axle load indicator		Х
Hydraulic load weighing system		Х
Rear radar object detection system		Х
Automatic fire suppression system		Х
2 front / 2 rear lifting eyes		X
Greasing base truck		Х
Greasing hose towards top end mast		X
Centralized greasing system top endmast		Х
Mud guards front and rear		X
Lockable fuel cap		X
Non-kockable fuel cap	Х	
Stainless steel strainer in fuel neck		Х
Hyster Tracker wireless monitoring	Х	
Hyster Tracker wireless access		Х
Hyster Tracker wireless verification		Х
DC/DC 24/12V converter with 1 power sockets and 2 USB outlets		х
DC/DC 24/12V converter with 2 power sockets and 2 USB outlets		х
Jump start connector to battery with NATO connector		Х
Engine block heater 230V		Х
Hydraulic temperature protection	1	X

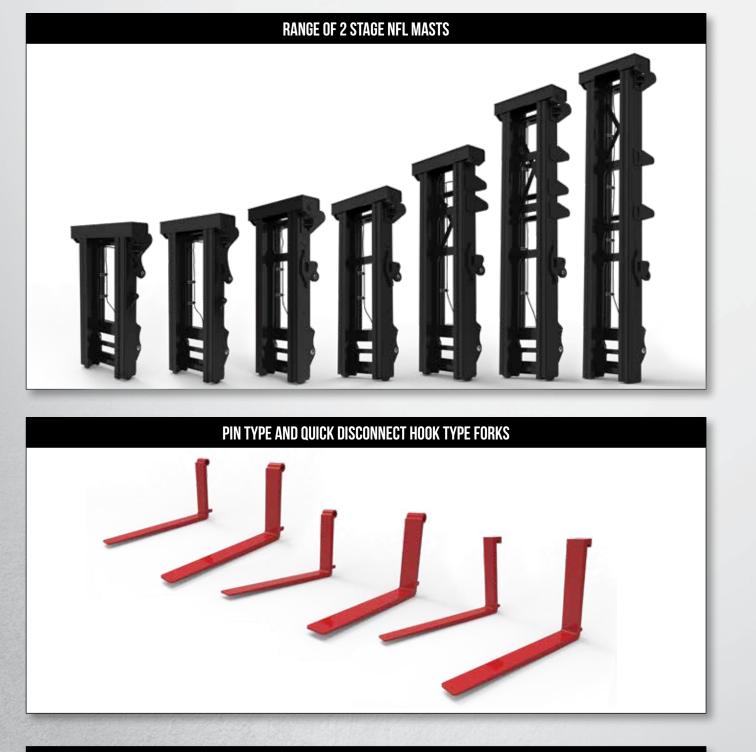
KARBAR

APPEARANCE	STD	OPT
Hyster yellow paint base truck	Х	
Replace yellow with 1 colour		Х
Replace yellow with 2 colours (mast, cabin and wheels not included)		Х
Outside of cab painted special color		Х
Complete cab painted special colour		Х
Wheel rim side view painted same colour as base truck		Х
Counterweight hazard warning stripes		Х
SUPPLEMENTAL	STD	OPT
Literature pack		Х
CE certification		Х
24 months / 4000 hours extended warranty	Х	
12 months / 2,000 hours manufacturers warranty		Х

\*Standard or optional in selected markets or models. Other options available through Special Products Engineering Department (SPED). Contact Hyster for details.







3.100 MM WIDE STANDARD CARRIAGE - PIN TYPE FORKS





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## FRONT END EQUIPMENT <



3.100 MM WIDE SIDE SHIFT FRAME CARRIAGE WITH FORK Positioning — Individual Fork Control — Pin Type Forks

3.200 MM WIDE MULTI PURPOSE DUAL FUNCTION CARRIAGE WITH SIDE SHIFT AND

FORK POSITIONING - INDIVIDUAL FORK CONTROL - HOOK TYPE FORKS

3.100 MM WIDE SIDE SHIFT FRAME CARRIAGE - PIN TYPE FORKS



3.040 MM WIDE HOOK TYPE MOUNT DUAL FUNCTION CARRIAGE WITH SIDE SHIFT And Fork Positioning — Individual Fork Control — Hook type Forks

