



# HIGH CAPACITY FORKLIFT TRUCKS

H36-48XM(S)-12







# BUILT ON EXPERIENCE



The H36-48XM(S)-12 series benefits from Hyster long experience of designing and building high capacity forklift trucks. This is the 6th generation machine, with Hyster having started manufacturing trucks with capacities over 36T in 1971. These trucks offer fast handling, reliable proven components and high productivity and represent an excellent return on investment.

The H36-48XM(S)-12 series of fork lift trucks shares many similarities with the highly successful ReachStacker and H40-50XM-16CH container handling machines, offering a modern, proven design concept, resulting in a fast and durable machine.

The key visible difference between the H40-50XM-16CH and H36-48XM(S)-12 trucks is that the cab of the forklift truck is mounted at the front, to provide the operator with excellent fork handling visibility.



# EXTRA VALUE FEATURES

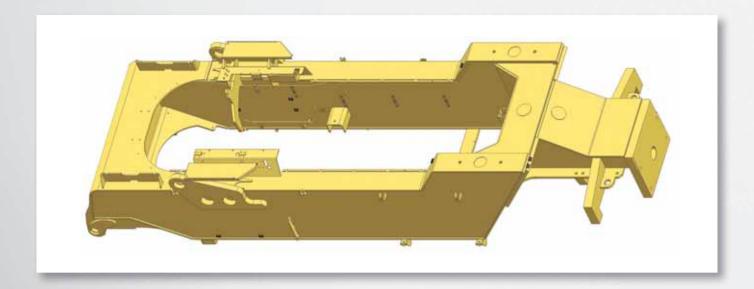
#### The H36-48XM(S)-12 models range represents impressive value, in a high-specification package:

- Compact machines with 5.900 mm wheelbase and a turning radius of only 7.720 mm. The short 'S' models are even more compact, with a wheelbase of only 5.380 mm and a turning radius of just 7.100 mm.
- Different engine configurations ensure that the exhaust emissions conform to the Stage IIIA or Stage IIIB emissions standard for NRMM (Non-Road Mobile Machinery).
- Durable 4.200 mm wide KESSLER drive axle, with oil-immersed (wet) disc brakes.
- 18.00 x 25 wheels on all models, offer long tyre life for lowest running costs.
- Protection systems for the engine and transmission are standard equipment.

- Visibility all-round and on the handling operation is optimized by the front 'mid-high' mounted Hyster 'Vista' cab.
- Comfortable Hyster 'Vista' cab featuring industry leading design, offers excellent driver comfort, ergonomics, low noise and visibility.
- Soft-shift auto-shift transmission (APC216 system), features a protective lock-out to prevent forward-reverse shifting at speed.
- Excellent maintenance access, with a powered sideways tilting cab and lightweight floor plates.



# STRENGTH & DURABILITY



- The H36-48XM(S)-12 features an immensely strong frame, with massive box section frame members and large front axle supports.
- The heavy duty drive axle, with reinforced spindles with double reduction, is wide and provides stability and durability; whilst the oil-immersed (wet) disc brakes reduce maintenance requirements.
- The engine and transmission protection system will initially decrease the engine power when a problem is detected and will de-rate the engine to creep mode if immediate action is not taken.
- KESSLER steer axle, with a single cylinder and nonadjustable tie rods is renowned for its long life and low maintenance requirements.
- A tropical cooling system makes the H36-48XM(S)-12 machines suitable for working in ambient temperatures of up to 50°C. The hydraulically driven cooling fan only operates on-demand, consuming less energy, improving fuel economy and reducing average noise.



# POWER & PERFORMANCE

#### STAGE IIIB ENGINE FOR REGULATED MARKETS:

For use mainly within EU (European Union) countries, trucks with Stage IIIB diesel engines have significantly reduced exhaust gas emissions. Also by applying Hyster Intelligent Design criteria, these trucks are not only cleaner running but also more economical, achieving up to a 20% fuel saving.

- The new Stage IIIB compliant Cummins QSL9 9-litre engine has a maximum performance of 276 kW (370 Hp) at 1.900 rpm and maximum torque of 1.491 Nm at 1.500 rpm.
- The transmission available as standard with the engine is the TE-27 series, with the TE-32 available as an option, featuring 4-speeds with APC216 automatic gear shifting, protective forward-reverse shifting lock-out and transmission protection system.

NOTE: A Stage IIIB engine must run on Ultra Low Sulphur Diesel (ULSD) fuel, with a maximum of 15 ppm sulphur content. Diesel fuel with a higher sulphur content than 15 ppm will compromise the emissions performance of the Stage IIIB engine and may result in damage to components.



# STAGE IIIA STANDARD POWER PACKAGE FOR UNREGULATED MARKETS

The existing diesel engine conforms to Stage IIIA emission standards and will continue to be supplied into markets where the NRMM (Non Road Mobile Machinery) Stage IIIB legislation does not apply.

- The Cummins 10.8 litre 6 cylinder QSM 11 engine has a performance is 224 kW (300 Hp) at only 2.100 rpm (250 kW at max. 2100 rpm). Maximum torque is 1.424 Nm at 1.400 rpm.
- This 224 kW engine is combined with the S.O.H. (Spicer Off-Highway) TE-27 power-shift transmission, with 4-speeds and APC216 soft-shift automatic gear shifting, protective forward-reverse shifting lock-out and transmission protection system.

#### STAGE IIIA OPTIONAL POWER PACKAGE

- The optional power package features a version of the QSM 11 engine with a performance of 250 kW (365 Hp) at only 2.100 rpm (272 kW at max. 1.800 rpm), with massive maximum torque of 1.674 Nm at 1.400 rpm.
- This engine is combined with the 4-speed S.O.H TE-32 power-shift transmission, with APC216 soft-shift auto-shift, a protective forward-reverse shifting lockout, and transmission protection system.
- Lifting speeds are class leading: The practical 4- mode average lifting speed is 0.37 m/sec, with the Stage IIIA 224 kW (300 Hp) engine. Average of four lifting modes:
  - Unladen lift speed = 0.30 m/sec
  - Fully laden lift speed = 0.24 m/sec
  - Unladen lowering speed = 0.45 m/sec
  - Laden lowering speed = 0.50 m/sec
- Clean engine power is provided by Cummins industrial diesel engines, featuring a turbocharger and charge air cooler.
- A two-stage heavy-duty air filter, plus a cyclonic pre-cleaner makes the truck suitable for dusty operating environments.

# ERGONOMIC DESIGN

The new H36-48XM(S)-12 features the now familiar Hyster 'Vista' cab, which offers the optimum ergonomic operator environment, and focuses on maximising driver comfort and visibility, for maximum productivity.

- Large windows, fitted with tinted safety glass, offer excellent all-round visibility. This is further enhanced in poor weather conditions by a fresh air inlet, sliding windows, an effective heater and defroster and wipers (with intermittent wipe function) and washers on front, top and rear screens.
- The optional available Air-conditioning is integrated into the heating and ventilation system, with manual temperature control or climate control. The condenser is mounted in a convenient position against the rear of the cab roof.
- The full-suspension fully adjustable driver's seat features a seat belt, "park brake off" warning buzzer, operator presence system.



- The cab also features an adjustable steering column, power-assisted steering and lever direction controls, pushbutton parking brake and conveniently positioned instruments.
- Responsive, fully hydraulic brakes and automotive type pedal layout further contribute to driver comfort. The comprehensively equipped operator's cab, mounted on isolators, has an insulated twin-layer floor to help achieve low noise levels. The noise level is just 72 dB (A) Leq BITA equivalent at driver's ear.





- Driver on-off access is comfortable, with wide steps and conveniently placed handrails.
- Choice of Hydraulic controls the standard joystick offers 'single-handle' intuitive control of mast lift & tilt, side shift and individual fork positioning control, plus the horn.
- As an alternative to the joystick, 3 levers and 2 switches are offered.
- With the Stage IIIB drive train HYSTER offers additionally Automatic 'throttle-up' function when using the hydraulic controls lift and tilt function either when not in gear or when the inching pedal is pushed, the engine automatically revs up to 1.800 rpm. When in gear, the 'auto-throttle-up' function is deactivated. This gives additional fuel savings as the optimum engine rpm is 'auto-matched' to the hydraulics performance requested by the operator.
- Optional drive speed on load limits vehicle speed between
   7 km/h and maximum speed, depending on load weight
   and height. It can be set to user preferences.

#### Improved controllability of functions:

- Optional pre-defined user modes (smooth, medium, or direct).
- Optional soft start/stop of hydraulic functions

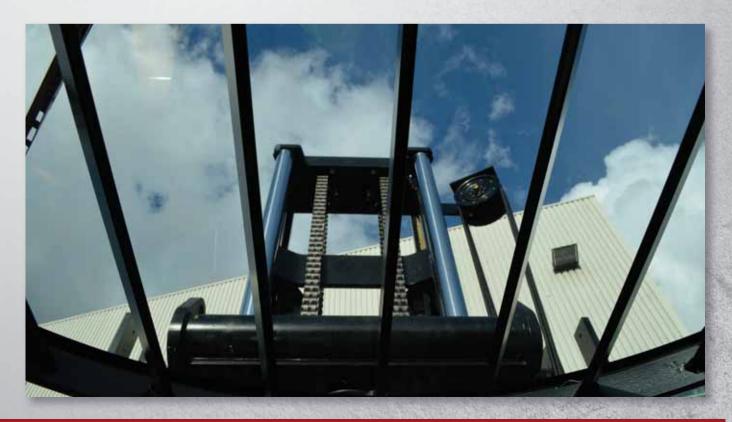
# OUTSTANDING ALL-ROUND VISIBILITY

- The state-of-the-art operator compartment is mounted in a mid-high forward position, with clear sight lines all-round for outstanding fork-tip visibility and excellent all-round visibility of the machine and operating environment.
- Operator visibility during stacking, is also enhanced by the curved front window, the strong yet slim-line cab construction, the 'wave pattern' overhead guard, plus wipers (with washers) on the front, top and rear screens.





- Rear view mirrors (wide-view type) inside the cab and extra rear view mirrors on the front fenders are standard equipment.
- Visibility forwards and over the forks is enhanced by the ultra-wide Hyster mast, 1.800 mm wide with 1.190 mm in between the inner mast channels. The extra width also enhances mast strength.
- Rearward visibility is greatly enhanced by the downward sloping design of the counterweight.



# OTHER FEATURES



- Electro-proportional Hydraulic controls improve controllability and durability.
- Pumps: Two gear pumps, connected to the transmission supplying the
   Hydraulic system with 430 l/min. A third pump supplies the steering
- Leak-free ORFS (O-ring) type fittings are used throughout the whole machine.
- When hydraulic temperature is too low for operating conditions, the engine will de-rate. To prevent overheating of the hydraulic oil, an option is available which will reduce truck speed, giving time for the oil to cool down to the correct operating temperature.
- Filtration: Extremely efficient filtration, with new breathers.
  Full-flow return line filter with 5 micron cartridge on the main system, plus in-line pressure filter with 5 micron on power assist and support systems.

- Large oil cooler for the hydraulic system, suitable for working in ambient temperatures of up to 50°C.
- 6.000 hours oil service interval means lower service cost.
- Hydraulic oil tank: 625 litre useable volume, with level and temperature gauge and magnetic drain plugs, providing additional cooling and reserve capacity.
- Hydraulic control program for easy status and diagnostics and custom settings. Hydraulic temperature protection means lower service costs and improved uptime.

#### **BRAKES**

Service Brake: Front, oil-immersed (wet) disc brakes, with large oil cooler and a separate 10 micron brake oil filter. The brake system is fully hydraulic and charged by a hydraulic accumulator.

■ Parking Brake: Spring actuated and hydraulically released, on the driveline, automatically applied when pressure falls below 50 bar. The transmission is disengaged when the parking brake is applied.

#### **WHEELS & TYRES**

■ 18.00 x 25 size tyres, front and rear, are fitted for improved tyre life and lower running costs. Bias pneumatic lug tread tyres are standard. Radial pneumatic lug tread tyres are optionally available.

Note: a hydraulic accumulator in hoist system, which acts to cushion the load, is available as an option with all tyre choices.







#### **ELECTRICAL SYSTEM**

- 24 V system, 70 A alternator, Battery 200 Ah (20 hrs.). Battery master switch. (Stage IIIA engine)
- 24 V system, 120 A alternator, Battery 200 Ah (20 hrs.). Battery master switch. (Stage IIIB engine)
- CANbus connection in the cab, for engine, transmission, and instruments cluster.

#### **LIGHTS**

- The standard light kit consists:
  - 4 Halogen work lights mounted on the cab
  - 2 Halogen drive lights, 2 front marker and direction indicator lights on the front fenders
  - 2 rear Halogen work lights on the cab
  - 2 rear cluster with tail, stop, rear and direction indicator lights
  - The 4 direction indicators acting also as hazard warning light via switch
  - 1 orange flashing beacon on the cab mounted
- Optional lights:
  - 4 Halogen drive lights on front fenders instead 2
  - 4 HID (high intensity discharge or XENON) instead of Halogen work lights mounted on the cab

#### **INSTRUMENTS & DISPLAYS**

- Warning lights: Engine oil pressure, transmission oil pressure, transmission oil temperature, battery discharge indicator, low brake oil pressure, parking brake on.
- **Gauges:** Engine coolant temperature, fuel, transmission oil pressure, transmission oil temperature, voltmeter, engine oil pressure.
- Other indicators: Hour meter, low brake pressure buzzer, combination key-type ignition/starter switch with starter lock out, reverse warning alarm.







# EASE OF SERVICING

- The right-hand side-tilting cab is electrically powered. A hand pump is also provided.
- In combination with the quickly removable lightweight aluminium floor plates, this provides truly excellent access for all maintenance work.







### STANDARD EQUIPMENT

- Bias (diagonal) 40 ply pneumatic lug tread tyres.
- Full-suspension seat, seat belt.
- 224 kW (300 Hp) QSM 11 10.8l Cummins stage IIIA diesel engine (unregulated countries)
- 261 kW (370 Hp) QSL9 9-litre Cummins stage IIIB diesel engine (regulated countries)
- S.O.H TE-27 transmission.
- Fuel tank with 830 litres capacity.
- Hydraulic tank with 625 litres capacity
- Joystick controls in the cab.
- Tropical cooling package, for working in ambient temperatures of up to 50°C. The hydraulically driven cooling fan only operates on-demand, consuming less energy, improving fuel economy and reducing average noise.
  - The unique 'side-by-side' 4-piece radiator cooler block for engine (coolant and intercooler), hydraulic system cooler and transmission cooler, is highly efficient and easy to clean.
  - The air flow is drawn in from the rear and is expelled at the top rear of the counterweight.

- The engine and transmission protection system, in order to minimise damage to the truck, will initially decrease the engine power when a problem is detected and will de-rate the engine to creep mode if immediate action is not taken.
- Heavy duty air filter with a cyclonic pre-cleaner plus a 2-stage filter housing.
- Auto-shift transmission with APC216 soft-shift system.
   The transmission also features a protective lock-out function on forward-reverse shifting.
- Audible alarm when in reverse gear.
- Complete light kit and flashing beacon.
- Side-tilting cab, with electrical power operation.
- Quickly removable lightweight floor plates.
- 2-stage mast without free lift
- Apron side shift frame with Individual fork positioning carriage
- Quick disconnect pin type forks 140 x 300 x 2.400 mm

# OPTIONAL EQUIPMENT

#### **EXTRA POWER PACKAGE:**

- Stage IIIA Engine with 250 kW (365 Hp) and TE-32 transmission, instead of 224 kW (300 Hp) engine and TE-27 transmission.
- Stage IIIA 224 kW (300 Hp) engine with TE-32 transmission instead TE-27
- Stage IIIB 261 kW (370 Hp) engine with TE-32 transmission instead TE-27
- Hydraulic accumulator in the hoist system, acting as a shock absorber, recommended for uneven ground conditions.
- Tyres 18.00 x 25 various makes, bias (diagonal) or radial type, with lug tread or as 'slicks'.
- Spare wheel (complete tyre and rim).
- Special colour(s) RAL paint.

#### FRONT-END EQUIPMENT:

- 2-Stage or 3-stage Full Free Lift masts.
- Coil ram pole for H36-44XM(S)-12 only: 2.000 mm long ram pole, and 457 mm in diameter. Longer poles are available on request.
- Thinline forks for H36XMS-12 only: 2.440 mm long, for handling general cargo and 20' containers with ISO fork pockets.

Fork section: 110 x 300 mm Maximum fork capacity: 36.000 kg @ 1.200 mm. Thinline forks for H40-44XM(S)-12 only: 2 440mm long, for handling general cargo and 20' containers with ISO fork pockets.

Fork section: 110 x 300 mm Maximum fork capacity: 44.700 kg @ 1.200 mm.

 20'-40' telescopic ISO container spreader in low-fork mounted position.

# IN-CAB / OPERATOR CONVENIENCE ITEMS:

- Mechanically acting mast tilt angle indicator.
- Air-conditioning system integrated into the heating and ventilation system. It is available with either manual temperature control or climate control. Sunshade screens are fitted on the top and rear windows.

- Air circulating fan
- Reading light
- Trainer seat
- Mounting post for IT-equipment
- Rear locking console
- Radio preparation with 2 speaker and antenna
- DC / DC converter 24 /12 Volt
- Heated top window
- H-style wiper instead I-type wiper on front screen
- Choice of Hand controls: Joystick or levers and switches.
- Variations of available seats covering all requirements as cloth or vinyl cover, air suspension or mechanically suspension, higher back rest, head rest up to Deluxe air suspension seats with or without seat heating.



### **TECHNICAL DATA**

IE	СПІ	NICAL DATA										
	1.1	Manufacturer		HYS	STER	HYS	TER	HYS	TER	HYS	TER	
DISTINGUISHING MARKS	1.2	Manufacturer's type designation		H36XN	ЛS-12	H40XI	VIS-12	H44XI	VIS-12	H48XN	VIS-12	
Z ⊠	1.3	Drive: electric (battery or mains), diesel, petrol, LPG		Die	sel	Diesel		Diesel		Diesel		
Ī	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Sea			ited	Sea		Sea		
II Sign	1.5	Rated capacity/rated load ■	Q (kg)	36,280	34,340	40,820	39,000	44,000	41,980	48,070	46,560	
IIĕ	1.6	Load centre distance	c (mm)	1,2		1,2		1,2		1,2		
DIS	1.8			1,255		1,255	1,331	1,255		1,255	1,331	
	_	Load distance, centre of drive axle to fork	x (mm)		1,331				1,331			
ь.	1.9	Wheelbase	y (mm)	5,3	85	5,3	885	5,3	185	5,3	85	
10	2.1	Service weight	kg	52,3	205	55,	F2F	57,	754	60,9	062	
WEIGHTS	2.2	Axle loading, laden front/rear	kg	83,965	4,702	90,707	5,634	95,398	6,347	101,653	7,382	
NE	2.3	Axle loading, index riont/rear	kg	31,083	21,302	31,215	24,310	31,279	26,475	31,585	29,378	
Ŀ	2.0	PAGE TOUGHTS, ATTROUGHTS OF	ng .	31,003	21,002	31,213	24,510	31,273	20,413	31,303	23,370	
_	3.1	Tyres: L=pneumatic, V=solid, SE=pneumatic-shaped solid		ı			L			L		
Sis	3.2	Tyre size, front		18.00-2	5 40PR	18.00-2	5 40PR	18.00-2	5 40PR	18.00-2	5 40PR	
TYRES/CHASSIS	3.3	Tyre size, rear		18.00-2			5 40PR	18.00-2		18.00-2		
)C	3.5	Wheels, number front/rear (x = driven wheels)		4X			/2	ļ	/2	4X		
KE,	3.6	Tread, front	b,, (mm)	3,0		3,0		3,0		3,0		
I F	3.7	Tread, rear	b,, (mm)	3,0		3,0		3,0		3,0		
<b>L</b>	3.7	11000,1001	D <sub>11</sub> (IIIIII)	3,0	73	3,0	113	3,0		3,0	10	
	4.1	Tilt of mast/fork carriage forward/backward	α/β (°)	6°	10°	6°	10°	6°	10°	6°	10°	
	4.1	Height, mast lowered		5,2		5,2		5,2		5,2		
		5 -	h <sub>1</sub> (mm)									
	4.3	Free lift ¶	h <sub>2</sub> (mm)	(			)	(		(		
	4.4	Lift ¶	h <sub>3</sub> (mm)	4,2		4,2		4,2		4,2		
	4.5	Height, mast extended	h <sub>4</sub> (mm)	7,3		7,3		7,3		7,3		
	4.7	Height of overhead guard (cabin) ●	h <sub>6</sub> (mm)	3,8		3,8		3,8		3,8		
	4.8	Seat height/stand height ●	h <sub>7</sub> (mm)	2,7		2,7		2,7		2,7		
	4.12	Coupling height	h <sub>10</sub> (mm)	73	35	7:	35	73	35	73	35	
	4.17	Overhang	I <sub>s</sub> (mm)	1,0	43	1,0	)43	1,0	143	1,0	43	
∞	4.19	Overall length	I <sub>1</sub> (mm)	5,5	14	5,5	514	5,5	i48	5,748		
NO.	4.20	Length to face of forks	I <sub>2</sub> (mm)	4,294		4,294		4,328		4,528		
DIMENSIONS	4.21	Overall width	b <sub>2</sub> (mm)	2,425		2,425		2,448		2,4	48	
	4.22	Fork dimensions	s/e/I (mm)		300 / 140 / 2.440		300 / 140 / 2.440		0 / 2.440	300 / 140 / 2.440		
	4.23	Side shift carriage	5/ 5/1 (111111)		114 mm pin type		114 mm pin type		114 mm pin type		114 mm pin type	
	4.24	Fork carriage width	b <sub>2</sub> (mm)		3,150		3,150		3,150		3,150	
8	4.25	Distance between fork-arms	3			1.660 - 3.005		1.660 - 3.005		1.660 - 3.005		
	4.30		b <sub>5</sub> (mm)		1.660 - 3.005 305		305		305			
	_	Side shift, lateral from vehicle centreline	b <sub>8</sub> (mm)		-					30		
	4.31	Ground clearance, laden, below mast	m, (mm)	370		370 470		370 470		37		
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	47						47		
	4.33	Aisle width for pallets 2.400 long x 2.400 mm	Ast (mm)		11,020 7,100		11,020		11,020		020	
	4.35	Turning radius	Wa (mm)			7,100		7,100		7,1		
L.,	4.36	Internal turning radius	b <sub>13</sub> (mm)	2,7	OU .	2,760		2,760		2,7	DU	
~	5.1	Travel speed, laden/unladen 224kW Stage IIIA engine	km/h	20	22	20	22	20	22	20	22	
4	5.1	Travel speed, laden/unladen 250kW Stage IIIA engine	km/h	20	22	20	22	20	22	20	22	
8	5.1	Travel speed, laden/unladen Stage IIIB engine	km/h	20	22	20	22	20	22	20	22	
8	5.2	Lift speed, laden/unladen 224kW Stage IIIA engine	m/sec	0.24	0.28	0.24	0.28	0.24	0.28	0.24	0.28	
ı	5.2	Lift speed, laden/unladen 250kW Stage IIIA engine		0.24	0.30	0.24	0.30	0.24	0.30	0.24	0.20	
1		Lift speed, laden/unladen 250kW Stage ITIA engine Lift speed, laden/unladen Stage IIIB engine	m/sec		0.30				0.30			
ATA A	5.2	Lift speed, laden/unladen Stage IIIB engine Lowering speed, laden/unladen 224kW Stage IIIA engine	m/sec	0.25		0.25	0.27	0.25 0.50		0.25	0.27	
PERFORMANCE DATA	5.3 5.3	Lowering speed, laden/unladen 224kW Stage IIIA engine  Lowering speed, laden/unladen 250kW Stage IIIA engine	m/sec	0.50	0.43	0.50 0.50	0.43	0.50	0.43	0.50	0.43	
AAN	5.3		m/sec	0.50	0.43	0.50	0.43	0.50	0.43	0.50	0.43	
OR		Lowering speed, laden/unladen Stage IIIB engine	m/sec									
PER	5.5	Drawbar pull, laden/unladen 224kW Stage IIIA engine	kN	367	373	366	373	365	372	363	372	
3	5.5	Drawbar pull, laden/unladen 250kW Stage IIIA engine	kN	413	419	412	419	411	419	410	418	
i i	5.5	Drawbar pull, laden/unladen Stage IIIB engine	kN	424	430	423	430	422	430	421	429	
	5.7	Gradeability, laden/unladen 224kW Stage IIIA engine	%	47	43	42	41	40	39	36	37	
8	5.7	Gradeability, laden/unladen 250kW Stage IIIA engine	%	53	43	48	41	46	39	41	37	
	5.7	Gradeability, laden/unladen Stage IIIB engine	%	56	43	50	41	47	39	43	37	
1	5.10	Service brake		Oil immers	ed / wet disc	Oil immerse	d / wet disc	Oil immerse	d / wet disc	Oil immerse	ed / wet disc	
No.	10.1	Operating proceurs for attachments	har har	00	25	0	OE .	00	) F	00	25	
		Operating pressure for attachments	bar //min	23		2:			35	23		
4	10.2	Oil volume for attachments	I/min	10			03	10		10		
2	10.3	Hydraulic tank capacity	1	62		6:			25	62		
H H	10.4	Fuel tank, capacity		83			30	83		83		
A D	10.5	Steering design		Hydro		Hydro		Hydro		Hydro		
ADDITIONAL DATA	10.6	Number of steering rotation		4			1		1		4	
	10.7	Sound pressure level at the driver's seat 224kW Stage IIIA engine	dB(A)	7:			3	7		7:		
A S	10.7	Sound pressure level at the driver's seat 250kW Stage IIIA engine	dB(A)	7:	3	7	3	7	3	7:	3	
8	10.7	Sound pressure level at the driver's seat Stage IIIB engine	dB(A)	7	2	7	2	7	2	7:	2	
	10.7.1	Sound power level during the workcycle	dB(A)	10	18	11	08	10	)7	10	)7	
	10.8	Towing coupling, type DIN		yes /	/ Pin	yes	/ Pin	yes	/ Pin	yes /	Pin	
1500	-19/4		State of the State	2	200	A 1997	فتناسب	A COLON				

Specification data is based on VDI 2198

#### HYSTER **HYSTER HYSTER** H40XM-12 H44XM-12 H48XM-12 Diesel Diesel Diesel Seated Seated Seated 42,500 46,200 40,000 38,350 44,000 48,000 1,200 1,200 1,200 1,255 1,331 1,331 1,255 1,331 1,255 5.900 5.900 5.900

50,	50,120 52,350				55,150		
85,070	85,070 5,050		5,050 90,730 5,620		96,740	6,410	WEIGHTS
28,730	21,390	28,755 23,595		29,135	26,015	SI	

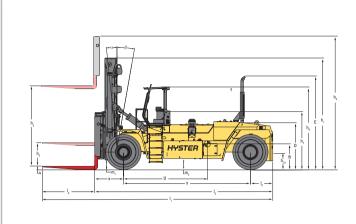
L	L	L	
18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	TYR
18.00-25 40PR	18.00-25 40PR	18.00-25 40PR	TYRES/CHASSIS
4X / 2	4X / 2	4X / 2	XH.S
3,020	3,020	3,020	SIS
3,075	3,075	3,075	

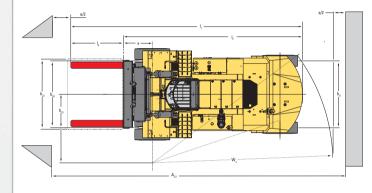
6°         10°         6°         10°         6°         10°           5,258         5,258         5,258         5,258           0         0         0         0           4,267         4,267         4,267           7,316         7,316         7,316           3,880         3,880         3,880           2,700         2,700         2,700           735         735         735           1,043         1,043         1,043           5,748         6,225         6,225           4,528         5,005         5,005           2,448         2,607         2,607           300 / 140 / 2,440         300 / 140 / 2,440         300 / 140 / 2,440           114 mm pin type         114 mm pin type         114 mm pin type           3,150         3,150         3,150           1,660 - 3,005         1,660 - 3,005         1,660 - 3,005           305         305         305           370         370         370								
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6°	10°	6°	10°	6°	10°		
4,267     4,267     4,267       7,316     7,316     7,316       3,880     3,880     3,880       2,700     2,700     2,700       735     735     735       1,043     1,043     1,043       5,748     6,225     6,225       4,528     5,005     5,005       2,448     2,607     2,607       300 / 140 / 2,440     300 / 140 / 2,440     300 / 140 / 2,440       114 mm pin type     114 mm pin type     114 mm pin type       3,150     3,150     3,150       1,660 - 3,005     1,660 - 3,005     1,660 - 3,005       305     305     305       370     370     370	5,2	258	5,2	58	5,258			
7,316 7,316 7,316 7,316  3,880 3,880 3,880  2,700 2,700 2,700  735 735 735  1,043 1,043 1,043  5,748 6,225 6,225  4,528 5,005 5,005  2,448 2,607 2,607  300/140/2,440 300/140/2,440  114 mm pin type 114 mm pin type  3,150 3,150 3,150  1,660 - 3,005 1,660 - 3,005  305 305 305  370 370 370	(	)	0		(	0		
3,880 3,880 3,880 3,880  2,700 2,700 2,700  735 735 735  1,043 1,043 1,043  5,748 6,225 6,225  4,528 5,005 5,005  2,448 2,607 2,607  300 / 140 / 2,440 300 / 140 / 2,440  114 mm pin type 114 mm pin type 3,150 3,150  1,660 - 3,005 1,660 - 3,005  305 305 305  370 370 370	4,2	267	4,2	67	4,2	4,267		
2,700         2,700         2,700           735         735         735           1,043         1,043         1,043           5,748         6,225         6,225           4,528         5,005         5,005           2,448         2,607         2,607           300 / 140 / 2,440         300 / 140 / 2,440         300 / 140 / 2,440           114 mm pin type         114 mm pin type         114 mm pin type           3,150         3,150         3,150           1,660 - 3,005         1,660 - 3,005         1,660 - 3,005           305         305         305           370         370         370	7,3	316	7,3	16	7,3	316		
735 735 735 735  1,043 1,043 1,043 1,043  5,748 6,225 6,225  4,528 5,005 5,005  2,448 2,607 2,607  300 / 140 / 2,440 300 / 140 / 2,440  114 mm pin type 114 mm pin type 3,150 3,150  1,660 - 3,005 1,660 - 3,005  305 305 305 305  370 370 370 370	3,8	380	3,8	80	3,8	380		
1,043 1,043 1,043 1,043 1,043 5,748 6,225 6,225 6,225 4,528 5,005 5,005 2,448 2,607 2,607 2,607 300 / 140 / 2,440 300 / 140 / 2,440 300 / 140 / 2,440 114 mm pin type 114 mm pin type 114 mm pin type 3,150 3,150 3,150 3,150 1,660 - 3,005 1,660 - 3,005 305 305 305 305 370 370 370 370	2,7	'00	2,7	00	2,7	'00		
5,748     6,225     6,225       4,528     5,005     5,005       2,448     2,607     2,607       300 / 140 / 2,440     300 / 140 / 2,440     300 / 140 / 2,440       114 mm pin type     114 mm pin type     114 mm pin type       3,150     3,150     3,150       1,660 - 3,005     1,660 - 3,005     1,660 - 3,005       305     305     305       370     370     370	73	35	73	5	73	35		
4,528     5,005     5,005       2,448     2,607     2,607       300 / 140 / 2,440     300 / 140 / 2,440     300 / 140 / 2,440       114 mm pin type     114 mm pin type     114 mm pin type       3,150     3,150     3,150       1,660 - 3,005     1,660 - 3,005     1,660 - 3,005       305     305     305       370     370     370	1,0	)43	1,0	43	1,0	)43		
114 mm pin type	5,7	48	6,225		6,225		₽	
114 mm pin type	4,5	528	5,005		5,005		MEN	
114 mm pin type	2,4	148	2,607		2,607		ISIOI	
3,150 3,150 3,150 1,660 - 3,005 1,660 - 3,005 1,660 - 3,005 305 305 305 305 370 370 370	300 / 14	40 / 2.440	300 / 140 / 2.440		300 / 140 / 2.440		S	
1.660 - 3.005     1.660 - 3.005     1.660 - 3.005       305     305     305       370     370     370	114 mn	n pin type	114 mm	pin type	114 mm			
305 305 305 370 370 370	3,1	50	3,1	50	3,1	50		
370 370 370	1.660 -	- 3.005	1.660 -	3.005	1.660 -	- 3.005		
	30	05	30	5	30	05		
	37	370		0	37	70	1	
470 470 470	47	470		470		70		
11,706 11,706 11,706	11,	706	11,7	706	11,			
7,790 7,790 7,790	7,7	90	7,790		7,7	790		
2,963 2,963 2,963	2,9	063	2,9	63	2,9	063		

20	22	20	22	20	22	
20	22	20	22	20	22	
20	22	20	22	20	22	
0.24	0.28	0.24	0.28	0.24	0.28	
0.26	0.30	0.26	0.30	0.26	0.30	
0.25	0.27	0.25	0.27	0.25	0.27	P
0.50	0.43	0.50	0.43	0.50	0.43	PERFORMANCE DATA
0.50	0.43	0.50	0.43	0.50	0.43	)RM
0.50	0.43	0.50	0.43	0.50	0.43	NCE
366	373	365	373	364	372	: DAI
413	420	411	419	411	419	A
424	430	422	430	421	430	
45	44	41	41	38	40	
52	44	47	41	44	40	
53	44	48	41	45	40	
Oil immersed / wet disc		Oil immerse	d / wet disc	Oil immerse	d / wet disc	

235	235	235	
103	103	103	
625	625	625	
830	830	830	AE
hydrostatic	hydrostatic	hydrostatic	ADDITIONAL DATA
4	4	4	ONA
73	73	73	L DA
73	73	73	TA
72	72	72	
107	107	107	
yes / Pin	yes / Pin	yes / Pin	
		The same of the same	

#### TRUCK DIMENSIONS





Ast = Wa + x + b + a (see line 4.33) a = Minimum operating clearance

(VDI standard = 200 mm BITA recommendation = 300 mm)

b = Load Length

#### NOTE:

Specifications are affected by the conditions of the vehicle and how it is equipped, as well as the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your dealer.

- with side shift carriage
- ¶ Bottom of forks
- Full suspension seat in depressed position
- $\bullet\,\,$  +/- 3% tolerance depend on tyre inflated pressure / or tyre brand

Drawbar pull performance figures are only indicative for comparison purpose. These performances are only possible for a short period of time. should be discussed with your dealer.

Hyster products are subject to change without notice. Lift trucks illustrated may feature optional equipment. The capacities quoted are in conformance with ISO 1074 standard.

#### **POWERTRAINS**

	1.3 Drive: electric (battery or mains), diesel, petrol, LPG										
	7.1	Engine manufacturer/type									
	7.2	Engine power according ISO1585 (nominal)	kW @rpm								
불	7.2.1	Engine power according ISO1585 (maximum)	kW @rpm								
POWER UNIT	7.3	Rated speed	min -1								
POM	7.3.1	Torque at 1/min	Nm@rpm								
	7.4	Number of cylinders/displacement	cm <sup>3</sup>								
	7.5	Fuel consumption according VDI cycle	l/h								
	8.1	Type of drive unit									
AIN	8.2	Transmission manufacturer/type									
DRIVE TRAIN	8.6	Wheel drive/drive axle manufacturer/type									
PRIV	8.11	Service brake									
	8 12	Parking brake									

Diesel	Diesel	Diesel	
Cummins QSM 11 Stage IIIA	Cummins QSM 11 Stage IIIA	Cummins QSL 9 Stage IIIB	
224 @ 2.100	250 @ 2.100	261 @ 2.100	
250 @ 1.800	272 @ 1.800	276 @ 1.900	
2,100	2,100	2,100	
1.424 @ 1.400	1.674 @ 1400	1.491 @1.500	
6 / 10.800	6 / 10.800	6 / 8.900	
2	2	2	

hydrodynamic 4 speed	hydrodynamic 4 speed	hydrodynamic 4 speed
S.O.H TE27 / TE32	S.O.H TE27 / TE32	S.O.H TE27 / TE32
KESSLER D102 PL 341	KESSLER D102 PL 341	KESSLER D102 PL 341
oil-immersed / wet disc	oil-immersed / wet disc	oil-immersed / wet disc
dry disc on drive axle	dry disc on drive axle	dry disc on drive axle

#### FRONT-END EQUIPMENT

#### **MASTS**

- Ultra-wide 2-Stage masts, for improved visibility and excellent strength. Available in lift heights from 4.410 mm up to 12650 mm TOF.
- Carriage with individual acting fork positioner for quick disconnect fork

Width (b3): 3.005 mm

Fork spread (b5): 1.060 - 3.005 mm (out to out)

 Carriage with Apron side shift frame and individual acting fork positioner for quick disconnect fork

Width (b3): 3.005 mm

Fork spread (b5): 1.060 – 3.005 mm (out to out)

Side shift (b8): + / - 305 mm (from centre of carriage)

#### QUICK DISCONNECT FORKS

Fork section: 140 x 300 x 2.400 mm.

Note: Not suitable for 20' ISO container pockets.

#### Or:

- Fork section: 140 x 300 x 2.100 mm, to suit a low-fork-mounted Hyster container spreader or for use with general cargo.
- Fork section: 140 x 300 mm.

Note: Not suitable for 20' ISO container pockets or for use with "S" models



#### **CAPACITY RATINGS**

#### MASTS H36-48XM(S)-12 - Rated Capacity kg at 1.200mm load centre

Mast lift height	Mast lift height Mast lowered (top of forks)		Without S	ideshift (kg)		With Sideshift (kg)			
(mm)	(mm)	H36XMS-12	H40XMS-12	H44XMS-12	H48XMS-12	H36XMS-12	H40XMS-12	H44XMS-12	H48XMS-12
4 410	5 160	36 280	40 820	44 000	48 070	34 340	39 000	41 980	46 560
7 150	6 530	36 100	40 820	44 000	48 070	33 890	38 550	41 530	46 110
8 675	7 295	35 120	40 620	43 700	48 070	32 970	38 280	41 260	45 840
9 285	7 600	34 720	40 200	43 600	48 070	32 590	37 870	41 160	45 740
9 890	7 905	34 310	39 750	43 150	47 710	32 180	37 460	40 730	45 310

#### MASTS H40-48XM-12 - Rated Capacity kg at 1.200mm load centre

Mast lift height (top of forks)	Mast lowered height		Without Sideshift (kg)		With Sideshift (kg			
(mm)	(mm)	H40XM-12	H44XM-12	H48XM-12	H40XM-12	H44XM-12	H48XM-12	
4 410	5 160	40 000	44 000	48 000	38 350	42 500	46 200	
7 150	6 530	40 000	44 000	48 000	37 900	42 000	45 750	
8 675	7 295	40 000	44 000	48 000	37 600	41 750	45 450	
9 285	7 600	39 600	44 000	48 000	37 200	41 650	45 350	
9 890	7 905	39 250	43 600	47 650	36 750	41 200	44 900	

#### **HIGH CAPACITY**

At load centres shorter than 1.200 mm, capacities higher than nominal are possible, e.g.:

- H40XM(S)-12 handles 46.000 kg at 900 mm l.c., with a non-sideshift carriage
- H44XM(S)-12 handles 48.000 kg at 900 mm l.c., with a non-sideshift carriage

Please refer to the tables below for the relevant capacities, according to model, load centre, mast lift height and carriage type

#### MASTS H40XM(S)-12 - Multi-rating kg at 1.200 - 1.000 - 900 mm load centre

Mast lift height (top of forks)	Mast lowered Mast		١	Vithout Sideshift (kg	1)	With Sideshift (kg)		
(mm)	(mm)		1 200 mm	1 000 mm	900 mm	1 200 mm	1 000 mm	900 mm
4 410	5 160	10°	40 000	44 450	46 600	38 350	41 650	43 520
7 150	6 530	10°	40 000	44 040	46 090	37 900	41 160	43 010
8 675	7 295	10°	40 000	43 730	45 760	37 600	40 860	42 700
9 285	7 600	10°	39 600	43 240	45 260	37 200	40 140	42 220
9 890	7 905	10°	39 250	42 740	44 720	36 750	39 930	41 720

#### MASTS H44XM(S)-12 - Multi-rating kg at 1.200 - 1.000 - 900 mm load centre

Mast lift height (top of forks) (mm)	Mast lowered height (mm)	Mast back tilt	Without Sideshift (kg)			With Sideshift (kg)		
			1 200 mm	1 000 mm	900 mm	1 200 mm	1 000 mm	900 mm
4 410	5 160	10°	44 000	48 000	48 000	42 500	46 150	48 000
7 150	6 530	10°	44 000	48 000	48 000	42 000	45 670	47 720
8 675	7 295	10°	44 000	48 000	48 000	41 750	45 370	47 410
9 285	7 600	10°	44 000	48 000	48 000	41 650	45 260	47 300
9 890	7 905	10°	43 600	47 660	47 660	41 200	44 760	46 640

# STRONG PARTNERS. TOUGH TRUCKS.

FOR DEMANDING OPERATIONS, EVERYWHERE.

Hyster supplies a complete range of warehouse equipment, IC and electric counterbalanced trucks, container handlers and reach stackers. Hyster is committed to being much more than a lift truck supplier.

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Our network of highly trained dealers provides expert, responsive local support. They can offer cost-effective finance packages and introduce effectively managed maintenance programmes to ensure that you get the best possible value. Our business is dealing with your material handling needs so you can focus on the success of your business today and in the future.





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