

1.5T - 4.0T Fluid Coupling Diesel Forklift

HIGHER RELIABILITY
HIGHER PERFORMANCE
HIGHER PRODUCTIVITY

Capacity : 1500/2000/2500/3000/4000 kg
3000 kg Dual at 500 mm LC
3000 kg at 900 mm LC
4000 kg at 500 mm LC



ENGINE

A four-cylinder diesel engine, conforming to IS:10000 (1980) is used. Bharat Stage III Compliant engines are available. Twin element dry type Air Filter with restriction indicator is provided. Engine is equipped with dual fuel filter and lubrication oil filter. Fuel tank capacity 40 litres.

A vertical exhaust system is standard. The exposed portions of the muffler are adequately guarded, with steel wire mesh enclosure. Water muffler, exhaust gas purifier or spark arrester can be provided as an optional accessory.

The engine cooling system with cross flow radiator and a pusher type fan is standard. A pressurized sealed cooling system with coolant recovery reservoir can be provided as an optional feature.

12 volts electrical system with starter motor, alternator and battery is standard.

FLUID COUPLING TRANSMISSION (FC)

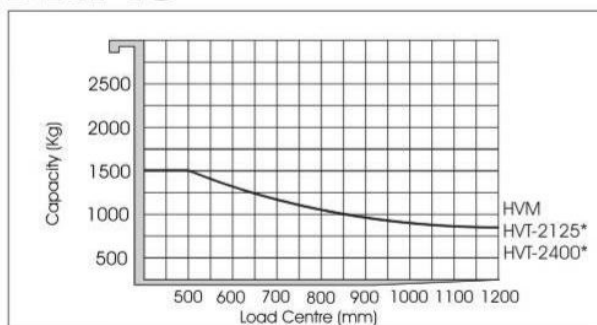
The fluid coupling drive between engine and clutch provides cushioned drive without metal to metal contact. Starting slip takes place in coupling, greatly prolonging clutch life. Two speeds forward and reverse provide the full range of torque requirements. The floor mounted gear shifter lever eliminates complicated linkages and wear points. The one piece axle housing employs hypoid ring gear and pinion. A 4-pinion differential transmits power smoothly through the involute splined, full floating drive shafts. The rugged pinion design withstands the stresses of repeated tight turns. All gears operate in a common oil bath.

SPECIFICATIONS

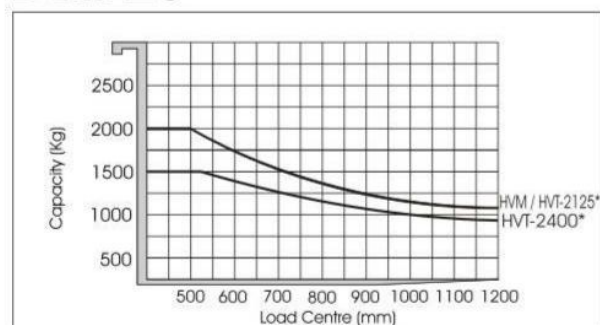
				DVX 15 FC	DVX 20 FC		
GENERAL	1	MODEL					
	2	CAPACITY	LIFTING LOAD	1500	2000		
	3	LOAD CENTER	DISTANCE	500	500		
	4	POWER UNIT	ENGINE TYPE	DIESEL	DIESEL		
	5	TYRES	PNEUMATIC (P), CUSHION (C)	PNEUMATIC - STD	PNEUMATIC - STD		
DIMENSIONS	6	LIFT HEIGHT STD MAST	MAX FORK HEIGHT	h3	MM	3620	3620
	7		FREELIFT WITH STD HVM MAST	h2	MM	100	100
	8	FORK CARRIAGE	ISO CLASS			2A	2A
	9	FORK DIMENSIONS	THICKNESS(thk) X WIDTH(W) X LENGTH(L)		MM	40 X 100 X 1070	40 X 100 X 1070
	10	FORK SPREAD	MINIMUM - MAXIMUM	D7	MM	240 - 965	240 - 965
	11	TILT ANGLE WITH HVM	FORWARD / BACKWARD		DEG	6 / 12	6 / 12
	12		LENGTH TO FACE OF FORKS	D3	MM	2650	2650
	13		OVERALL WIDTH	D6	MM	1260	1260
	14	OVERALL DIMENSIONS WITH STD HVM MAST	HEIGHT WITH COLLAPSED MAST	h1	MM	2360	2360
	15		HEIGHT WITH EXTENDED MAST & LBR	h4	MM	4840	4840
16		HEIGHT OF CANOPY GUARD	h5	MM	2160	2160	
17		SEAT HEIGHT	h6	MM	1200	1200	
18	TURNING RADIUS		D8	MM	2350	2350	
19	FRONT OVERHANG		D2	MM	465	460	
20		EQUAL AISLE	D4	MM	2200	2200	
21	AISLE WIDTH	AISLE RIGHT ANGLE	D5	MM	3960	3960	
PERFORMANCE	22		TRAVEL - LADEN / UNLADEN		KMPH	17 / 18	17 / 18
	23	SPEEDS WITH STD HVM	LIFTING - LADEN / UNLADEN		MM/S	550 / 600	550 / 600
	24		LOWERING - LADEN / UNLADEN		MM/S	600 / 400	600 / 400
	25	DRAWER PULL	LADEN / UNLADEN (5 MIN)		N	10000 / 9700	10000 / 9700
	26	GRADABILITY**	LADEN / UNLADEN		%	24 / 24	24 / 24
	27	STEERING TYRE	POWER STEERING			HYDROSTATIC	HYDROSTATIC
	28	WEIGHT	LADEN / UNLADEN		KG	5080 / 3580	5580 / 3580
FRAME & TYRES	29		NO - FRONT / REAR		NO	2 / 2	2 / 2
	30	TYRES	SIZE - FRONT		MM	7.00 X 12 - 12PR	7.00 X 12 - 12PR
	31		SIZE -REAR		MM	6.50 X 10 - 10PR	6.50 X 10 - 10PR
	32	WHEEL BASE		D1	MM	1600	1600
	33	TRACK	FRONT / REAR		MM	950 / 940	950 / 940
	34	GROUND CLEARANCE	UNDER MAST	m1	MM	160	160
	35		UNDER FRAME	m2	MM	205	205
	36	BRAKES	SERVICE			HYDRAULIC	HYDRAULIC
37	PARKING				MECHANICAL	MECHANICAL	
DRIVE	38		MANUFACTURER / MODEL			SUITABLE REPUTED	SUITABLE REPUTED
	39	ENGINE	RATED HP AS PER IS 10000		HP	APPX 48	APPX 48
	40		RATED RPM		RPM	APPX 2000	APPX 2000
	41		MAKE / MODEL			KION	KION
	42		TRANSMISSION			FLUID CPLG	FLUID CPLG
	43	GEAR BOX	NO OF SPEEDS (FWD /REV)			2 / 2	2 / 2
	44		GEAR SHIFT			MANUAL	MANUAL

** GRADABILITY WITH CUSHION TYRES IS LOWER BY 2% OVER THE ABOVE FIGURES. SAFETY:TRUCK CONFORMS TO STABILITY REQUIREMENT AS PER "BIS" & DUE TO CONTINUOUS DESIGN IMPROVEMENTS THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

DVX 15



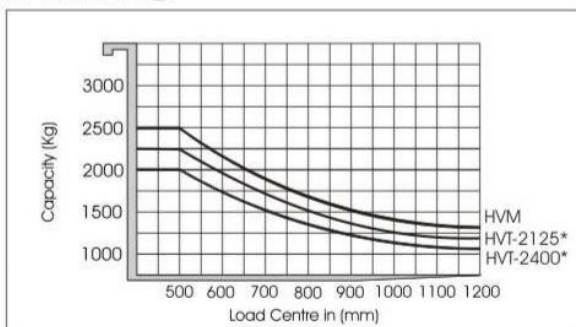
DVX 20



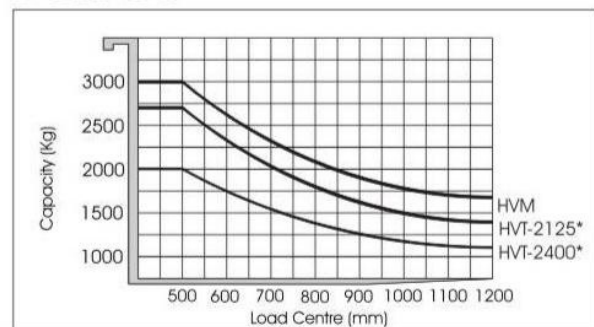
DVX 25 FC	DVX 30 FC	DVX 30 FC DUAL	DVX 309 FC	DVX 405 FC
2500	3000	3000	3000	4000
500	500	500	900	500
DIESEL	DIESEL	DIESEL	DIESEL	DIESEL
PNEUMATIC - STD	PNEUMATIC - STD	PNEUMATIC - STD	PNEUMATIC - STD	PNEUMATIC - STD
3620	3620	3620	3620	3620
100	100	100	100	100
2A	3A	3A	3A	3A
40 X 100 X 1070	45 X 125 X 1070	45 X 125 X 1070	45 X 125 X 1800	45 X 125 X 1070
240 - 965	290 x 990	290 x 1390	290 x 1390	290 x 1390
6 / 12	6 / 12	6 / 12	6 / 12	6 / 12
2650	2650	2650	3100	3100
1260	1260	1575	1580	1580
2360	2360	2360	2360	2360
4840	4840	4840	4840	4840
2160	2160	2160	2160	2160
1200	1200	1200	1200	1200
2350	2350	2500	2900	2900
460	460	460	460	460
2200	2200	2260	2500	2500
3960	3960	3960	5360	4400
17 / 18	17 / 18	17 / 18	17 / 17.5	17 / 17.5
550 / 600	550 / 600	550 / 600	380 / 400	380 / 400
600 / 400	600 / 400	600 / 400	380 / 350	380 / 350
10000 / 9700	10000 / 9700	10000 / 9700	10000 / 9700	10000 / 9700
20 / 24	20 / 24	20 / 24	13 / 15	13 / 15
HYDROSTATIC	HYDROSTATIC	HYDROSTATIC	HYDROSTATIC	HYDROSTATIC
6280 / 3780	7180 / 4180	7280 / 4280	9050 / 5050	9050 / 5050
2 / 2	2 / 2	4 / 2	4 / 2	4 / 2
7.00 X 12 - 12PR	7.00 X 12 - 12PR	7.00 X 12 - 12PR	7.00 X 12 - 16PR	7.00 X 12 - 16PR
6.50 X 10 - 10PR	6.50 X 10 - 10PR	6.50 X 10 - 10PR	6.50 X 10 - 10PR	6.50 X 10 - 10PR
1600	1600	1600	2000	2000
950 / 940	950 / 940	950 / 940	1385 / 940	1385 / 940
160	160	160	160	160
205	205	205	205	205
HYDRAULIC	HYDRAULIC	HYDRAULIC	HYDRAULIC	HYDRAULIC
MECHANICAL	MECHANICAL	MECHANICAL	MECHANICAL	MECHANICAL
SUITABLE REPUTED	SUITABLE REPUTED	SUITABLE REPUTED	SIMPSON / S - 433	SIMPSON / S - 433
APPX 48	APPX 48	APPX 48	48	48
APPX 2000	APPX 2000	APPX 2000	APPX 2000	APPX 2000
KION	KION	KION	KION	KION
FLUID CPLG	FLUID CPLG	FLUID CPLG	FLUID CPLG	FLUID CPLG
2 / 2	2 / 2	2 / 2	2 / 2	2 / 2
MANUAL	MANUAL	MANUAL	MANUAL	MANUAL

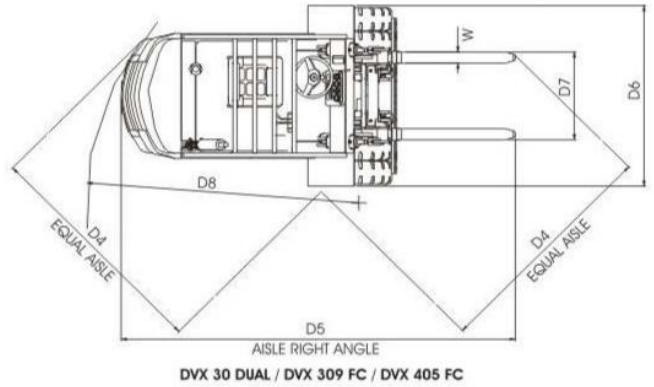
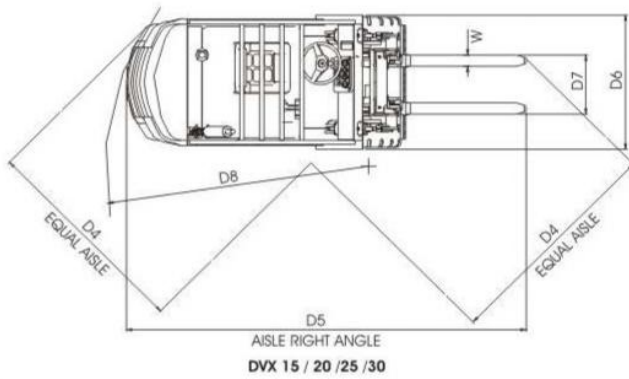
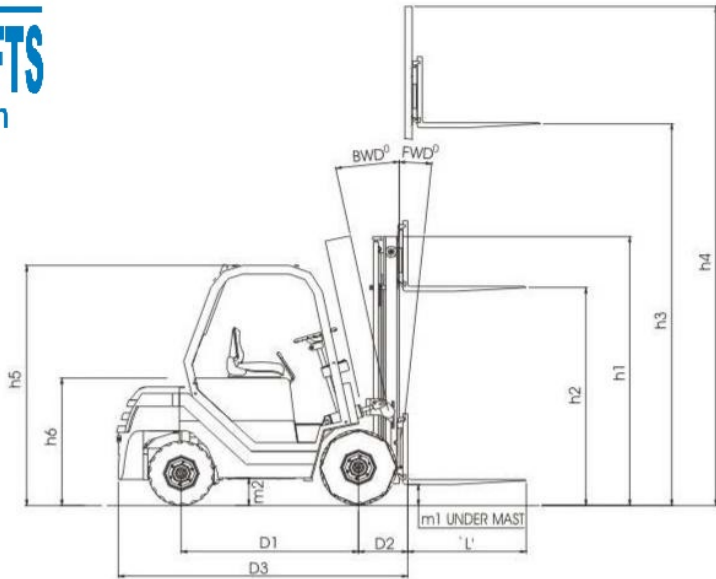
ISO STANDARDS. ALL SPECIFICATIONS ARE SUBJECT TO +/- 12% TOLERANCE APART FROM THOSE GOVERNED BY BIS

DVX 25

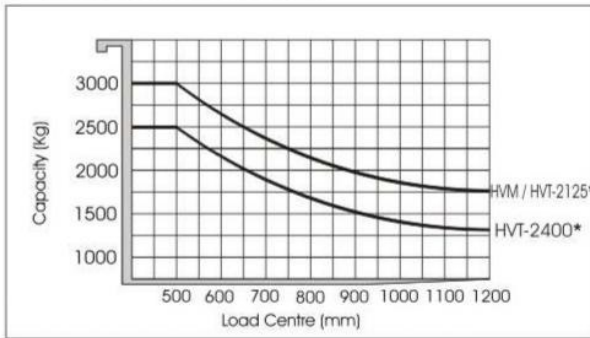


DVX 30





DVX 30 DUAL



FORKLIFTS ATTACHMENTS

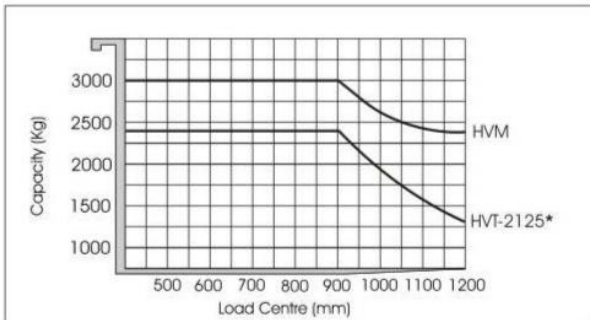
MECHANICAL

- Goose Neck Crane
- Parrot Beak drum handlers
- 3-Drum Prongs
- Ram for steel coils
- Strokers for foundry
- Two pallet forks
- Fork Extensions and many more

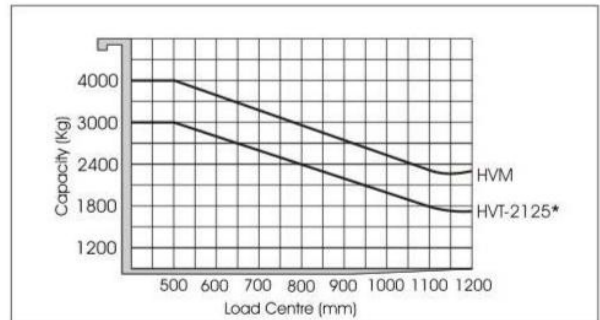
HYDRAULIC

- Side Shifters
- Bale Clamps
- 360 degree Rotators
- Drum Clamps
- Scoop Attachments
- Paper Roll Clamps
- Push-Pull Attachment and any more

DVX 309



DVX 405



LOAD CAPACITY INDICATED ON ALL LOAD CHARTS ARE WITH MAST IN VERTICAL POSITION ON LEVEL GROUND

AUTOMATIC TORQUE TRANSMISSION OPTIONAL

The truck is equipped with a world class making the drive unit compact. The is a fully automatic transmission and uses a torque converter, which has been matched to the engine characteristics using a computer programme. The provides stepless variable torque multiplication for meeting all specified load and road conditions. The truck performance is achieved using only a single speed forward and reverse operation. Gear shifting is done electrically, using an effortless shift lever mounted on the steering column. The hydraulic inching and soft plugging are standard features provided on the truck for easy maneuverability. A neutral gear start is a standard safety feature, which prevents accidental truck movement at the time of starting.

An independent air cooled heat exchanger, mounted behind the radiator enables effective cooling of transmission oil.

BRAKES

Service brakes are heavy duty truck type drum brakes that are self-energizing and self-adjusting, conforming to IS:9701 (2001). Hand Operated parking brake is provided for additional safety.

MAST, CARRIAGE & FORKS

An excellent design supported by superior welding process, ensure highly durable and dependable high visibility masts. High Visibility simplex mast is standard. Optional high free lift, Duplex and Triplex mast variants are available for a variety of applications including container stuffing/ de-stuffing. High visibility carriage with improved visibility is standard. Forks are of world-class quality.

STEER AXLE

The axle is fabricated from steel plates for durability and strength. The axle is supported in the frame by using hardened steel bushings for providing the required articulation. The integrated balanced power cylinder is well protected inside the axle body. The axle assembly is made by using plain pin joints for ease of maintenance.

HYDROSTATIC POWER STEERING

Adjustable steer column is available as an option. The hydrostatic power steering provides a finger touch effortless, smooth steering, enhancing operator comfort. The load sensing system saves power by using a priority valve that directs hydraulic flow for steering action only on demand.

FRAME AND CANOPY

The frame is designed using computer aided modeling and optimized by finite element analysis techniques. It is fabricated from heavy steel plates using a flux cored arc welding process, ensuring excellent rigidity and strength.

An elegant canopy integrated with the frame body provides a safe enclosure for operator conforming to IS:7621 (2000).

HYDRAULIC SYSTEM

Hydraulic system consists of reservoir, pump, directional control valves, cylinders and full flow filtration system with bypass protection, suction strainer and 25 micron replaceable return line filter. Pressure relief, tilt lock and flow control valves are provided for safety. Tank capacity 40 liters.

INSTRUMENTATION AND CONTROLS

Instrument panel consisting of fuel, oil pressure, water temperature, ammeter and engine hour meter gauges is ergonomically located for operator's view. All the gauges are illuminated for night driving. All control levers, switches and pedals are located ergonomically enhancing operator comfort.

AFTER SALES SERVICE AND TECHNICAL SUPPORT

Prompt After Sales Service and technical support is ensured through a nation wide network of more than 100 Voltas Touch Points with strong dealer network. Factory trained engineers at locations support speedy resolution of field problems. Training programs are offered all around the year at our Technical Training Centre at Pune.

PARTS SUPPORT

Our Central Parts Warehouse located at Pune caters to timely supply of parts with additional stock maintained at more than 100 Voltas Touch Points. Emergency requirements are processed through special channel to ensure supply latest within 48 hrs to restore breakdown machines with least downtime.

DVX 15/20/25/30/30 Dual @ 500 mm LC

MAST CONFIGURATIONS

TYPE OF MAST	MAST MODEL	OAH h1 mm	FFH h2 mm	MFH h3 mm	OAH@MFH with LBR h4mm	TILT ANGLE DEGREE FWD / BWD	SPEEDS LADEN		CAPACITY at MFH @ 500MM LC				
							LIFTING mm/s	LOWERING mm/s	DVX15	DVX20	DVX25	DVX30	DVX30 DUAL
2-Stage	HVM	2360	100	3620	4840	6 / 12 ^	550	600	1500*	2000*	2500*	3000*	3000*
2-Stage	HVD	2125	1500	3000	4220	6 / 12	550	600	1500*	2000*	2500*	3000*	3000*
3-Stage	HVT 2125	2125	1465	4500	5720	6 / 8	550	600	1500*	2000*	2300*	2750*	3000*
3-Stage	HVT 2600	2600	2085	6030	7240	6 / 6	550	600	850*	1000*	1250*	1500*	1800*

DVX 309/405

TYPE OF MAST	MAST MODEL	OAH h1 mm	FFH h2 mm	MFH h3 mm	OAH@MFH with LBR h4mm	TILT ANGLE DEGREE FWD / BWD	SPEEDS LADEN		CAPACITY at MFH	
							LIFTING mm/s	LOWERING mm/s	DVX309	DVX405
2-Stage	HVM	2360	100	3620	4840	6 / 12 ^	380	400	3000*	4000*
3-Stage	HVT 2125	2125	1465	4500	5720	6 / 8	550	600	2750*	3000*

OAH : Overall Mast Height

FFH: Free Fork Height

MFH: Max Fork Height

FWD : Forward BWD : Backward

* Capacity shall derate by 200kg with sideshifter.