

Technical specifications



Z4X
series

6.0-10.0 t



worldwide network

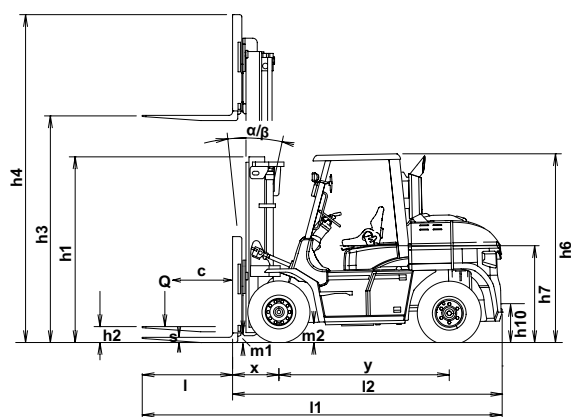
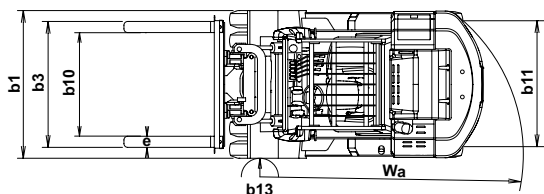
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support

STANDARD SPECIFICATIONS

September 2013		Counterbalance trucks Designation according VDI 3586	Data sheet for materials handling equipment				
		Manufacturers Data and Design Characteristics					
CHARACTERISTICS	1.1	Manufacturer		UNICARRIERS			
	1.2	Model name		ZX-60		ZX-70	
				ECO mode	Power mode	ECO mode	Power mode
		Model variation		FD60-3		FD70-3	
	1.3	Power unit: Electric, Diesel, Gasoline, LPG, others		Diesel			
	1.4	Operation: Sit, Hand, Pedestrian, Standing, Order picking		Sit Down Rider Type			
	1.5	Load capacity	Q (t)	6.0		7.0	
	1.6	Load centre	c (mm)	600		600	
	1.8	Front overhang	x (mm)	615		625	
1.9	Wheel base	y (mm)	2300		2300		
WEIGHTS	2.1	Service weight	kg	8755		9625	
	2.2	Axle load with load, front/rear	kg	13140/1615		14755/1870	
	2.3	Axle load without load, front/rear	kg	3970/4785		4025/5600	
WHEELS & TIRES	3.1	Tyres front/rear (C=Cushion, SE=superelastic, P=pneumatic)		P(SE)/P(SE)			
	3.2	Tyre size, front		8.25-15-14PR		8.25-15-14PR	
	3.3	Tyre size, rear		8.25-15-14PR		8.25-15-14PR	
	3.5	Wheels, number front/rear (x=powered)		4x/2		4x/2	
	3.6	Tread, front	b10 (mm)	1470		1470	
	3.7	Tread, rear	b11 (mm)	1700		1700	
	DIMENSIONS	4.1	Tilt Mast/carriage, forward/backward	α/β (°)	6/12		6/12
4.2		Height mast fully lowered	h ₁ (mm)	2500		2500	
4.3		Free lift	h ₂ (mm)	205		215	
4.4		Lift height	h ₃ (mm)	3000		3000	
4.5		Height mast fully extended	h ₄ (mm)	4420		4420	
4.7		Overhead guard height	h ₆ (mm)	2550		2550	
4.8		Seat height/Standing height	h ₇ (mm)	1420		1420	
4.12		Towing coupler height	h ₁₀ (mm)	520		520	
4.19		Overall length	l ₁ (mm)	4790		4860	
4.20		Length to fork face	l ₂ (mm)	3570		3640	
4.21		Overall width ¹	b ₁ (mm)	2005		2005	
4.22		Fork dimensions	s,e,l (mm)	60x150x1220		70x150x1220	
4.23		Carriage DIN 15173, Class / Form A,B		4A		4A	
4.24		Carriage width	b ₃ (mm)	1830		1830	
4.31		Mast underclearance loaded	m ₁ (mm)	200		200	
4.32		Underclearance centre wheelbase	m ₂ (mm)	225		225	
4.33		Right angle stacking aisle with pallet 1000x1200 across forks	Ast (mm)	5195		5265	
4.34		Right angle stacking aisle with pallet 800x1200 across forks	Ast (mm)	5395		5465	
4.35		Turning radius	Wa (mm)	3380		3440	
4.36	Turning radius, inner	b ₁₃ (mm)	250		250		
PERFORMANCE	5.1	Travelling speed with/without load	km/h	23/25	27/29	23/25	27/29
	5.2	Lifting speed with/without load	mm/s	440/460	530/550	440/460	530/550
	5.3	Lowering speed with/without load	mm/s	450/500		450/500	
	5.6	Drawbar pull, with/without load	kN	55.0/21.5	57.0/21.5	55.0/21.5	57.0/21.5
	5.8	Gradeability with/without load	%	33/20	34/20	33/21	34/21
	5.10	Service brake		Hypdraulic			
DRIVE	7.1	Engine manufacturer/type		ISUZU 4HKI-TC		ISUZU 4HKI-TC	
	7.2	Engine rated power according ISO 1585	kW	98		98	
	7.3	Rated engine revolutions	min ⁻¹	2200		2200	
	7.4	Number of cylinders/Displacement	cm ³	4/5193		4/5193	
OTHERS	8.1	Type of drive control	Torque converter/1				
	8.2	Working pressure attachments	bar	196			
	8.4	Noise level operator's ear accordina EN12053* ¹	dB(A)	89	91	89	91

^{*1}) Noise level at operator's ear in ECO-mode

DIMENSIONS



MAST SPECIFICATIONS & RATED CAPACITIES: ZX-60:

Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
		mm ¹		mm ¹	mm ¹			mm ¹	mm ¹
TWO STAGE WIDE VIEW	VM300	3000	2500	3950	4420	205	205	6-12 (6-10)	6000
	VM330	3300	2650	4250	4720				
	VM350	3500	2750	4450	4920				
	VM400	4000	3050	4975	5420			6-6	5700
	VM450	4500	3300	5475	5920				
	VM500	5000	3550	5975	6420			3-6	5400
	VM550	5500	3850	6525	6920				
	VM600	6000	4100	7025	7420				
TWO STAGE FULL FREE	VFM300	3000	2625	4095	4420	1580	1255	6-12 (6-10)	6000
	VFM330	3300	2775	4395	4720	1730	1405		
	VFM350	3500	2875	4595	4920	1830	1505		
	VFM400	4000	3175	5095	5420	2130	1805		
	VFM450	4500	3425	5075	5920	2380	2055		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2500	5075	5400	1455	1130	6-10 (6-6)	5800
	VFHM435	4350	2625	5425	5750	1580	1255		
	VFHM480	4800	2775	5875	6200	1730	1405	6-10	5700
	VFHM500	5000	2875	6075	6400	1830	1505		
	VFHM550	5500	3130	6575	6900	2085	1760	3-6	5500
	VFHM600	6000	3300	7075	7400	2255	1930		5000
	VFHM700	7000	3675	8075	8400	2630	2305		4000
	VFHM800	8000	4100	9075	9400	3055	2730		2500

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with single pneumatic tyres unless indicated

MAST SPECIFICATIONS & RATED CAPACITIES: ZX-70:

Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
		Without backrest		With Std backrest	Without backrest			With Std backrest	
		mm ¹		mm ¹	mm ¹			mm ¹	mm ¹
TWO STAGE WIDE VIEW	VM300	3000	2500	4105	4420	215	215	6-12 (6-10)	7000
	VM330	3300	2650	4405	4720				
	VM350	3500	2750	4605	4920				
	VM400	4000	3050	5105	5420			6-6	6600
	VM450	4500	3300	5605	5920				
	VM500	5000	3550	6105	6420			3-6	6400
	VM550	5500	3850	6605	6920				
TWO STAGE FULL FREE	VM600	6000	4100	7105	7420				
TWO STAGE FULL FREE	VFM300	3000	2625	4095	4420	1590	1265	6-12 (6-10)	7000
	VFM330	3300	2775	4395	4720	1740	1415		
	VFM350	3500	2875	4595	4920	1840	1515		
	VFM400	4000	3175	5095	5420	2140	1815		
	VFM450	4500	3425	5595	5920	2390	2065		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2500	5075	5400	1465	1140	6-10 (6-6)	6800
	VFHM435	4350	2625	5425	5750	1590	1265		
	VFHM480	4800	2775	5875	6200	1740	1415		
	VFHM500	5000	2875	6075	6400	1840	1515	6-10	6700
	VFHM550	5500	3130	6575	6900	2095	1770		6400
	VFHM600	6000	3300	7075	7400	2265	1940	3-6	6000
	VFHM700	7000	3675	8075	8400	2640	2315		4500
	VFHM800	8000	4100	9075	9400	3065	2740		2700

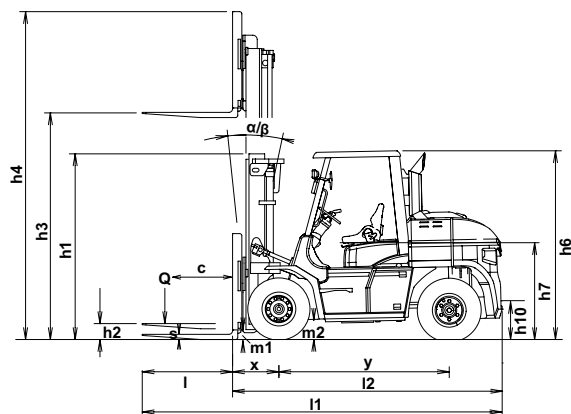
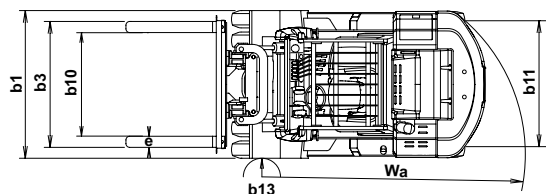
¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with single pneumatic tyres unless indicated

STANDARD SPECIFICATIONS

September 2013		Counterbalance trucks Designation according VDI 3586	Data sheet for materials handling equipment				
		Manufacturers Data and Design Characteristics					
CHARACTERISTICS	1.1	Manufacturer		UNICARRIERS			
	1.2	Model name		ZX-80		ZX-100	
				ECO mode	Power mode	ECO mode	Power mode
		Model variation		FD80-3		FD100-3	
	1.3	Power unit: Electric, Diesel, Gasoline, LPG, others		Diesel			
	1.4	Operation: Sit, Hand, Pedestrian, Standing, Order picking		Sit Down Rider Type			
	1.5	Load capacity	Q (t)	8.0		10.0	
	1.6	Load centre	c (mm)	600		600	
	1.8	Front overhang	x (mm)	720		715	
1.9	Wheel base	y (mm)	2500		2800		
WEIGHTS	2.1	Service weight	kg	11610		12975	
	2.2	Axle load with load, front/rear	kg	17495/2115		20750/2225	
	2.3	Axle load without load, front/rear	kg	5270/6340		6070/6905	
WHEELS & TIRES	3.1	Tyres front/rear (C=Cushion, SE=superelastic, P=pneumatic)		P(SE)/P(SE)			
	3.2	Tyre size, front		9.00-20-14PR		9.00-20-14PR	
	3.3	Tyre size, rear		9.00-20-14PR		9.00-20-14PR	
	3.5	Wheels, number front/rear (x=powered)		4x/2		4x/2	
	3.6	Tread, front	b10 (mm)	1600		1600	
	3.7	Tread, rear	b11 (mm)	1700		1700	
	DIMENSIONS	4.1	Tilt Mast/carriage, forward/backward	α/β (°)	6/12		6/12
4.2		Height mast fully lowered	h ₁ (mm)	2800		2850	
4.3		Free lift	h ₂ (mm)	205		215	
4.4		Lift height	h ₃ (mm)	3000		3000	
4.5		Height mast fully extended	h ₄ (mm)	4420		4330	
4.7		Overhead guard height	h ₆ (mm)	2660		2660	
4.8		Seat height/Standing height	h ₇ (mm)	1570		1570	
4.12		Towing coupler height	h ₁₀ (mm)	600		590	
4.19		Overall length	l ₁ (mm)	5230		5460	
4.20		Length to fork face	l ₂ (mm)	4010		4250	
4.21		Overall width ¹	b ₁ (mm)	2175		2245	
4.22		Fork dimensions	s,e,l (mm)	75x180x1220		50x180x1220	
4.23		Carriage DIN 15173, Class / Form A,B		4A		-	
4.24		Carriage width	b ₃ (mm)	2000		2145	
4.31		Mast underclearance loaded	m ₁ (mm)	240		240	
4.32		Underclearance centre wheelbase	m ₂ (mm)	290		290	
4.33		Right angle stacking aisle with pallet 1000x1200 across forks	Ast (mm)	5610		5845	
4.34		Right angle stacking aisle with pallet 800x1200 across forks	Ast (mm)	5810		6045	
4.35	Turning radius	Wa (mm)	3690		3930		
4.36	Turning radius, inner	b ₁₃ (mm)	200		300		
PERFORMANCE	5.1	Travelling speed with/without load	km/h	22/24	26/28	21/24	26/28
	5.2	Lifting speed with/without load	mm/s	400/420	480/500	310/340	380/400
	5.3	Lowering speed with/without load	mm/s	450/450		450/350	
	5.6	Drawbar pull, with/without load	kN	58.0/27.5	60.0/27.5	61.0/31.5	63.5/31.5
	5.8	Gradeability with/without load	%	27/20	28/20	21/20	23/20
	5.10	Service brake		Hypdraulic			
DRIVE	7.1	Engine manufacturer/type		ISUZU 4HKI-TC		ISUZU 4HKI-TC	
	7.2	Engine rated power according ISO 1585	kW	98		98	
	7.3	Rated engine revolutions	min ⁻¹	2200		2200	
	7.4	Number of cylinders/Displacement	cm ³	4/5193		4/5193	
OTHERS	8.1	Type of drive control		Torque converter/1			
	8.2	Working pressure attachments	bar	196			
	8.4	Noise level operator's ear according EN12053 ^{*1}	dB(A)	89	91	89	91

**1) Noise level at operator's ear in ECO-mode

DIMENSIONS



MAST SPECIFICATIONS & RATED CAPACITIES: ZX-80:

Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
		mm¹		mm¹	mm¹			mm¹	mm¹
TWO STAGE WIDE VIEW	VM300	3000	2800	4230	4420	205	205	6-12	8000
	VM330	3300	2950	4445	4720				
	VM350	3500	3050	4645	4920				
	VM400	4000	3350	5145	5420			6-6	7750
	VM450	4500	3600	5645	5920				7400
	VM500	5000	3850	6145	6420			3-6	7000
	VM550	5500	4150	6645	6920				
VM600	6000	4400	7145	7420					
TWO STAGE FULL FREE	VFM300	3000	2700	4210	4420	1580	1345	6-12	8000
	VFM330	3300	2850	4510	4720	1730	1495		
	VFM350	3500	2950	4710	4920	1830	1595		
	VFM400	4000	3250	5210	5420	2130	1895		
	VFM450	4500	3500	5710	5920	2380	2145		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2575	5165	5400	1455	1220	6-10	7700
	VFHM435	4350	2700	5515	5750	1580	1345		
	VFHM480	4800	2850	5965	6200	1730	1495		
	VFHM500	5000	2950	6165	6400	1830	1595		
	VFHM550	5500	3205	6665	6900	2085	1850	3-6	7300
	VFHM600	6000	3375	7165	7400	2255	2020		6700
	VFHM700	7000	3750	8165	8400	2630	2395		5400
	VFHM800	8000	4175	9165	9400	3055	2820		3500

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with single pneumatic tyres unless indicated

MAST SPECIFICATIONS & RATED CAPACITIES: ZX-100:

Mast type	Mast name	Maximum fork height	Overall height		Free lift	Tilt angle Forward/backward	Load capacity² Load center 600 mm
			Fully lowered	Fully extended with Std backrest³			
		mm¹	mm¹	mm¹	mm¹	degrees	kg¹
TWO STAGE WIDE VIEW	VM300	3000	2850	4330	205	6-12	10000
	VM330	3300	3000	4630			
	VM350	3500	3100	4830			
	VM400	4000	3400	5330		6-6	9000
	VM450	4500	3650	5830			
	VM500	5000	3900	6330			
	VM550	5500	4200	6830		3-6	8000
	VM600	6000	4450	7330			

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with single pneumatic tyres unless indicated ³ Backrest is not adopted.

It's all about
the price.
But what
price?

Reduce your Total Cost of Operation with UniCarriers

We agree. Price is everything. Or to be more specific: your Total Cost of Operation (TCO). That's why we're so focused on cutting costs and improving your material handling. The truck and its performance play an important role, but this is even more about how we can support you in optimising your warehouse operations to give you the best value for your money. Which – in the long run – is what creates a winner.

UNICARRIERS CORPORATION
U-ZX.S.EN/UCE-2015-10

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Some equipment shown on photos are optional.