PRICELIST& SPECIFICATION







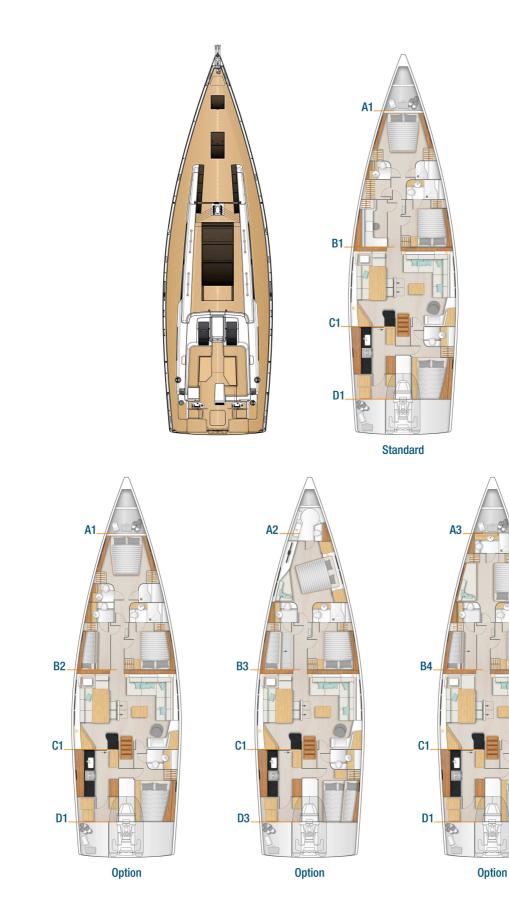


LOA Hull length		21.10 m 20.50 m	69' 3" 67' 3"
LWL		19.20 m	63' 0"
Beam		5.90 m	19' 4"
Draft			
shallow keel		2.70 m	8' 10"
L-keel, medium		3.10 m	10' 2"
2 Rooi, mourain			10 2
Displacement			
shallow keel	approx.	37.80 t	83,335 lbs
L-keel, medium	approx.	37.10 t	81,791 lbs
Engine Diesel			
standard	approx.	150 PS	150 hp
option	approx.	230 PS	230 hp
Fuel tank	approx.	1.100 l	291 gal
Fresh water	approx.	900 I	238 gal
CE Certifcate	A - 12		
Design	judel / vrolijk	(& CO	
Interior	HanseYachts	Design	
Mast length above WL	approx.	31.95 m	104' 10"
Total sail area	approx.	244.50 m ²	2,632 sq ft
Main sail			_,
standard	approx.	145.50 m ²	1,566 sq ft
furling	approx.	132.00 m ²	1,421 sq ft
Self-tacking jib	approx.	99.00 m ²	1,066 sq ft
Reacher	approx.	168.00 m ²	1,808 sq ft
Gennaker	approx.	370.00 m ²	3,983 sq ft

All measurements/figures are approximate. Errors and omissions excepted. Specification and material can be changed without notice. Valid from 2020.01.01.



DECK LAYOUT& CABIN CONCEPT







STANDARD EQUIPMENT

HULL

- -14 hull windows (7 each side)
- GRP hull, isophthalic gelcoat, colour: Signal White (RAL9003), 1st layer vinyl ester resin and balsa sandwich laminat
- Waterline and cove line, isophthalic gelcoat, colour: Dark Grey (RAL 7043)

KEEL

- L-keel, cast iron, draft: 3.10 m

LAYOUT & INTERIOR

- A1: Sail locker in bow and master cabin with island berth, storage space and a separate head on port and shower stall on stb
- B1: VIP cabin with double berth, storage space and separate head with shower stall on stb and office and walk-in locker on port
- C1: Saloon with lounge area with L-sofa and large navigation area on stb and bar and dinning table on port
- D1: Full functional galley with utility room on port and double cabin with separate head on stb
- 3-burner gas stove with oven, ventilation hood, waste bin, 12 V fridge approx. 140 I, double stainless steel sink with mixing tab
- Interior furniture in high quality marine plywood, satin varnished
- Hanse companionway closing system
- Saloon table, fixed
- Worktop in galley Corian Anthracite
- Courtesy lights in saloon
- Indirect lights in saloon and cabins, dimmable
- LED overhead lights in saloon and cabins, dimmable

WOOD (FURNITURE, FLOORBOARD)

- Furniture Mahogany Style , Satin Varnish
- Cupboards fronts in wood colour
- Floorboard Acacia
- Floorboard wooden grating in all heads and showers

UPHOLSTERY

- Comfort mattrasses for all berths
- Upholstery Monte Carlo, colour: Cream

DECK & OUTSIDE EQUIPMENT

- GRP deck with antislip surface, isophthalic gelcoat, coulour: Signal White (RAL 9003), 1st layer vinyl ester resin and balsa sandwich core. Cockpit locker on port and stb, stern locker, dinghy garage, stowage for running rigging at helm position, anchor locker at bow.
- Teak on cockpit bottom
- Teak on bathing platform
- 2 stainless steel steering wheels with leather cover
- 2 cockpit tables, stainless steel frame with teak top
- Pulpit and pushpit, stainless steel
- Railing, incl. stanchions and stainless steel wire with gateway stanchion
- Covered halyards and control lines lead to cockpit helmposition, organizers and jammers, 8 retractable mooring cleats, handrail on coachroof, bow anchor fitting with step
- 2 LEWMAR 65 EST EVO electrical halyard winches with automatic fuse
- 2 LEWMAR 65 ST EVO manual secondary winches
- Bathing platform, hydraulic fold-out, remote control and swimming ladder
- Courtesy lights in cockpit
- Helmsman footrests (extractable)
- Anchor windlass, electrical, 2000 W, with automatic fuse and remote control with chain counter
- Delta-anchor 45 kg, galvanized with 60 m galvanized chain
- Genoa tracks incl. cars with pin stop
- Self tacking jib system
- Mainsheet system
- 7 big and 6 small deck hatches openable, anchor locker hatch, stowage on cochroof with acrylic glass hatch
- 10 deck coach roof windows 4 openable on side, 1 openable as sliding roof, portlights in cockpit sides for aft cabins

RIG & SAILS

- Rig, anodized aluminium, keel stepped, with kicker, standing and running rigging and 2 reefs
- Backstay tensioner, hydraulic
- Vang, hydraulic
- Hydraulic jib furler





STANDARD EQUIPMENT

PROPULSION

- Fuel tank, approx. 1100 I
- Engine (Diesel, approx. 150 hp) shaft drive, 4-blade folding propeller
- Bowthruster, 24V, 145 kp, retractable incl. batteries, electric

EQUIPMENT

- 24 V and 230 V electric system with digital switchboards, bus system, 230 V shore power and sockets in cabins and heads
- AGM battery set, capacity: 1x 90 Ah + 4x 225 Ah (450 Ah at 24 V)
- Inverter/charger, 24 V / 7000 W 200 A
- Manual toilet with sea water flush cabin layout D1 and D3
- Electric toilet with sea water flush cabin layout A1 A3
- Manual toilet with sea water flush cabin layout B1
- Manual toilet with sea water flush cabin layout B2 B4
- Shower unit in cockpit, warm-/ coldwater
- LPG gas system, 2 bottles in stowage
- Blackwater system (appr. 185 I, appr. 85 I for aft head) with deck extraction and seacock for head, electric and manual bilge pump
- Freshwater system with electric pump and 75 I hotwater, heated also by main engine
- Fresh water tank, appr. 900 I

ACCESSORIES

- Blind set with flyscreens for hatches, portlights and deck windows
- Blinds for hull windows in saloon and master cabin
- Blind for sunroof in saloon, electric
- Blinds for side coach roof windows
- LED Navigation lights, bow & stern
- Wind indicator
- Flagpole
- -8 fenders
- 8 mooring lines
- HANSE maintenance kit

SHIPPING & TRANSPORT

- CE Certificate cat. A 12
- Owners manual
- EC Type Examination Certificate







AS PER STANDARD SPECIFICATION

\$ 1,465,000

PACK	AGES	
XW2010	B&G Navigation Package (only with XK5000 or XK5010 for TV)	\$ 43,357
XF2201	2 B&G H5000 multifunction displays on helmconsole, incl. transducer (wind/speed/depth/temperature)	
XF2223	2 B&G H5000 add. multifunction displays in cockpit	
XF3000	B&G VHF V90S at chart table, incl. wireless remote handset H50 (only with XK5000 or XK5010)	
XF4000	B&G Zeus ³ Touch 16" Glass Helm chart plotter at chart table	
XF4011	B&G Zeus ³ Touch 19" Glass Helm chart plotter in cockpit	
XF4550	Hanse safety cloud with 24 months subscription and device installed on board	
XF4600	B&G AIS Class B transponder	
XF5001	B&G Autopilot with 2 H5000 control units and Precision 9 compass	
XF5200	B&G CPU Hydra computer	
XF9001	NMEA engine information interface for chart plotter	
	Or Fare subschool field	
XF9100	GoFree wireless link	
XF9100 XW2011	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit	\$ 1,373
	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter	\$ 1,373
XW2011	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit	\$ 1,373 \$ 4,323
XW2011 XF4031	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station	
XW2011 XF4031 XW7000	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV)	
XW2011 XF4031 XW7000 XH2090	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging	
XW2011 XF4031 XW7000 XH2090 XK1000	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging FUSION MS-AV755 Multimedia radio with bluetooth and CD/DVD player - for saloon and cockpit	
XW2011 XF4031 XW7000 XH2090 XK1000 XK2040	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging FUSION MS-AV755 Multimedia radio with bluetooth and CD/DVD player - for saloon and cockpit 4 high-end 2-way speakers in saloon	
XW2011 XF4031 XW7000 XH2090 XK1000 XK2040 XK2070	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging FUSION MS-AV755 Multimedia radio with bluetooth and CD/DVD player - for saloon and cockpit 4 high-end 2-way speakers in saloon 2 high-end 2-way speakers in cockpit	
XW2011 XF4031 XW7000 XH2090 XK1000 XK2040 XK2040 XK2070 XK3070	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging FUSION MS-AV755 Multimedia radio with bluetooth and CD/DVD player - for saloon and cockpit 4 high-end 2-way speakers in saloon 2 high-end 2-way speakers in cockpit FUSION MS-NRX remote control in cockpit	
XW2011 XF4031 XW7000 XH2090 XK1000 XK2040 XK2070 XK3070 XK5030	Upgrade - 2 B&G 12" chart plotter at helm station, instead of B&G 19" chart plotter in cockpit 2 B&G Zeus ³ 12" chart plotter, 1 per helm station Entertainment Package - Saloon and cockpit (only with XK5000 or XK5010 for TV) Wireless charging FUSION MS-AV755 Multimedia radio with bluetooth and CD/DVD player - for saloon and cockpit 4 high-end 2-way speakers in saloon 2 high-end 2-way speakers in cockpit FUSION MS-NRX remote control in cockpit FUSION MS-NRX remote control in cockpit	\$ 4,323







XW7016	TV Preparation Package - Master cabin (only with XW7035 or XK5010)	\$ 4,034
XK1310	Blu-ray player in master cabin	
XK4071	TV preparation in master cabin - US version	
XK4310	APPLE TV in master cabin	
XW7035	TV Preparation Package - Saloon (only with XK5010)	\$ 5,768
XK1340	Blu-ray player in saloon	
XK4070	TV preparation in saloon - US version	
XK4340	APPLE TV in saloon	
OPTIC	ONS	
	HULL	
XA1001	GRP hull, gelcoat colour: Grey (RAL 7040)	\$ 12,867
XA1002	GRP hull, painted, non-metallic (colour selection)	\$ 50,455
XA1003	GRP hull, painted, metallic (colour selection)	\$ 64,913
XA3001	Waterline and cove line, coloured gelcoat (colour selection - not with XA1002 or XA1003)	\$ 1,287
XA3002	Waterline and cove line, painted, non metallic (colour selection - only with XA1002 or XA1003)	\$ 1,287
XA3003	Waterline and cove line, painted, metallic (colour selection - only with XA1002 or XA1003)	\$ 4,482
	KEEL	
XB1001	L-keel, cast iron/lead, draft: 2.70 m	\$ 46,118
	LAYOUT & INTERIOR	
XL1002	A2: Master cabin with transversal island berth, storage space and generous head with separate shower stall in	\$ 12,867
	bow	
XL1003	A3: Sail locker in bow and master cabin with double berth on stb, sofa on port and a separate head with shower	\$ 9,975
	stall	
XL2002	B2: VIP cabin with double berth, storage space and separate head with shower stall on stb and cabin with double	\$ 9,455
	bunk bed and separate head on port	
XL2003	B3: VIP cabin with double berth, storage space and separate head with shower stall on stb and cabin with	\$ 12,144
	retractable double berth and separate head on port	
XL2004	B4: VIP cabin with double berth, storage space and separate head with shower stall on stb and cabin with bunk	\$ 12,867

bed, retractable double berth and separate head on port





XL4003	D3: Full functional galley with utility room on port and cabin with bunk bed, double berth and retractable table	\$ 8,371
	and separate head on stb	
XL7001	Saloon table electrically lowerable with cushions, convertible into double berth	\$ 6,506
XL7601	Worktop in galley - Corian Vanilla	\$ 1,287
XL9030	Acrylic insert with indirect lights in saloon	\$ 4,193

WOOD (FURNITURE, FLOORBOARD)

XM1102	Furniture - Canadian Chestnut	\$ 12,997
XM1103	Furniture - Teak, satin varnish	\$ 14,443
XM1104	Furniture - French Oak	\$ 12,997
XM1150	Furniture - High gloss finish (only with XM1100 or XM1102)	\$ 27,324
XM1161	Cupboard fronts coloured (partial as per design - colour selection)	\$ 7,084
XM1202	Floorboard - Noce Nero	\$ 1,865
XM1203	Floorboard - Delight Oak	\$ 1,865

UPHOLSTERY

XN1100	Deluxe mattresses for all berths	\$ 4,988
XN2001	Upholstery - Sorrento (colour selection)	\$ 4,048
XN2002	Upholstery - Florence (colour selection)	\$ 5,638
XN2003	Upholstery - Monaco (colour selection)	\$ 8,082
XN2004	Upholstery - Portofino Leather (colour selection)	\$ 12,274
XN2080	2 foldable directors chairs for saloon or cockpit	\$ 2,819
XN2200	Sun bed cushion on foredeck (colour selection)	\$ 3,976
XN2201	Comfort sun bed cushions on foredeck (colour selection)	\$ 7,735
XN2500	Cockpit cushions (colour selection)	\$ 4,699
XN2501	Comfort cockpit cushions (colour selection)	\$ 9,036
XN3014	Carpets in cabins and passage to forward cabins (colour selection)	\$ 4,308
XN3020	Paillason in saloon (colour selection)	\$ 3,831

DECK & OUTSIDE EQUIPMENT

XC1300	Teak on side deck	\$ 36,128
XC1301	Synthetic teak on side deck (colour selection)	\$ 41,911
XC1310	Teak on coach roof	\$ 18,650
XC1311	Synthetic teak on coach roof (colour selection)	\$ 20,095
XC1321	Synthetic teak on cockpit bottom (colour selection)	\$ 5,768





XC1333	Teak on helmsman seats	\$ 708
XC1334	Synthetic teak on helmsman seats (colour selection)	\$ 853
XC1351	Synthetic teak on bathing platform (colour selection)	\$ 853
XC2201	2 GRP steering wheels, Y-spoke (black or white)	\$ 2,299
XC2202	2 GRP steering wheels, Y-spoke, carbon clear coated	\$ 7,807
XC3004	2 cockpit tables, stainless steel with teak tops and handrail, electrically lowerable into sunbed incl. upholstery	\$ 7,084
XC5105	2 LEWMAR 80 EST EVO electrical halyard winches with automatic fuse (only with XH1001 or XH1005)	\$ 29,623
XC5202	2 LEWMAR 65 EST EVO electrical secondary winches with automatic fuse (only with XH1001 or XH1005)	\$ 11,551
XC5205	2 LEWMAR 80 EST EVO electrical secondary winches with automatic fuse (only with XH1001 or XH1005)	\$ 29,623
XC6501	Gangway, carbon, foldable with bag, 220 cm	\$ 4,034
XC6502	Gangway, retractable, electric/hydraulic with remote control	\$ 31,661
XC6601	Stainless steel ladder for gateway exit, foldable	\$ 1,431
XC7001	Easy Tender System with windlass and launching system	\$ 14,313
XC7100	Air compressor for tender	\$ 983
XC9020	Rub rail, teak	\$ 7,084
XC9021	Additional stainless steel rail (only with XC9020)	\$ 4,193
XC9040	LED lights for side decks, integrated in toerail, white	\$ 5,277
XC9041	6 underwater lights below transom	\$ 5,046
XC9051	Electrical deck wash pump, mounted in bow area with outlet on deck	\$ 1,431
XC9060	2 helmsman seats, foldable on stb (only with XC1333 or XC1334)	\$ 2,819
XC9081	4 enlarged cleats - bow and stern and 4 standard size cleats - midship (2 each side)	\$ 11,537
XC9088	Combined mooring/anchor windlass, 2000W, electrical, with automatic fuse, incl. chain counter and remote	\$ 3,744
	control (only with XH1001 or XH1005)	
XC9089	Combined mooring/anchor windlass, 3000W, electrical, with automatic fuse, incl. chain counter and remote	\$ 5,768
	control (only with XH1001 or XH1005)	
XC9101	Ultra-anchor 45 kg, stainless steel, with Ultra Flip swivel and 100 m stainless steel chain, dia. 13 mm	\$ 9,903
	RIG & SAILS	
XE1001	Rig, anodized aluminium with hydraulic inmast furling system	\$ 38,022
XE1002	Rig, carbon, painted (only with XE9002)	\$ 173,124
XE1004	Rig, anodized aluminium, painted (only with XE9002)	\$ 26,746

XE1065Furling boom, carbon, electric (only with XE1000 and XE1111)\$ 119,705XE1071Park Avenue boom, carbon, painted (colour selection - only with XE1002 - not with XE1001)\$ 50,455XE1111RECKMANN Furl finder - automatically adjusting vang (only for XE1065 or XE1066)\$ 37,227XE1221Second forestay with second furler, hydraulic\$ 24,433





Lazy	/ bag with lazy jacks (colour selection - not with XE1001, XE1065, XE1066, XE1070, XE1071)	\$ 3,325
Can	vas windscreen with stainless steel stake (colour selection - not with XE2010)	\$ 5,494
Fixe	d windscreen with stainless steel frame (not with XE2012)	\$ 10,091
Spra	ayhood with stainless steel stake, 3 windows (1 openable - colour selection - not with XE2009, XE2010,	\$ 5,421
XE2	051, XE2052 and XE2053)	
Cocl	kpit canvas cover for GRP hardtop - side and front (colour selection - only with XE2051/XE2052/XE2053 and	\$ 5,711
XE2	009 or XE2010)	
Bimi	ini top with stainless steel stake (colour selection - not with XE2049, XE2051, XE2052 or XE2053)	\$ 11,421
GRP	arch for cockpit - white	\$ 14,457
GRP	hard top for cockpit with canvas sliding roof - white	\$ 35,998
GRP	hard top for cockpit with canvas sliding roof - outside surface painted, non metallic (colour selection)	\$ 43,227
GRP	hard top for cockpit with canvas sliding roof - outside surface painted, metallic (colour selection)	\$ 47,564
ELVS	STRÖM HPM high - performance sails, full battened, UV protected membrane, main and jib	\$ 86,598
ELVS	STRÖM HPM high - performance sail - for second forestay, UV - protected membrane, Reacher 140% (only	\$ 50,586
with	XE1221)	
QUA	NTUM Gennaker (colour selection)	\$ 17,204
Squ	eezer for gennaker	\$ 3,253
HAR	KEN Y-track for main sail (not with XE1001, XE1065, XE1066)	\$ 18,577
Geni	naker package incl. halyard, 2 sheets, 2 blocks and 2 padeyes	\$ 4,482
Spre	eader lights, LED, 6 up and 6 down	\$ 5,566
NA	VIGATION & INSTRUMENTS	
B&G	4G Broadband Radar (only with XW2010)	\$ 4,323
B&G	forward looking sonar (only with XW2010)	\$ 2,096
B&G	WR10 autopilot remote controller, wireless (only with XW2010 and XF5001)	\$ 795
NME	EA engine information interface for chart plotter	\$ 983
PR	OPULSION	
	ine (Diesel, approx. 230 hp) - shaft drive, 4-blade folding propeller	\$ 25,878
Ster	nthruster, 24V, 145 kp, retractable incl. batteries, electric	\$ 21,541
hhΔ	electronic throttle at helm position on port	\$ 4,120

EQUIPMENT

XH1001	Battery set, capacity: 1x 90 Ah + 8x 225 Ah (900 Ah at 24 V)	\$ 5,624
XH1005	Battery set, capacity: 1x 90 Ah + 4x 180 Ah Li-lo (720 Ah at 24 V)	\$ 34,148





XH2101	Generator 15000i, 12,0 kW / 15,0kVA, incl. maintenance kit	\$ 35,998
XH2151	2nd shore power connection with charger, 100 A (only with XH1001 or XH1005)	\$ 7,518
XH3001	Electric toilet with sea water flush - cabin layout D1 and D3	\$ 2,385
XH3021	Electric toilet with sea water flush - cabin layout B1	\$ 2,154
XH3031	Electric toilet with sea water flush - cabin layout B2 - B4	\$ 4,308
XH3200	Freshwater dockside connection in cockpit	\$ 651
XH4100	Heating, hot water ring with blowers in each cabin and head	\$ 21,541
XH4511	Air conditioning, 60.000 BTU, 7 units: 2 saloon, fwd cabin, 2 guest cabin, pantry, aft cabin, incl. 2nd shore power	\$ 57,684
XH4512	Air conditioning, 72.000 BTU, 7 units: 2 saloon, fwd cabin, 2 guest cabin, pantry, aft cabin, incl. 2nd shore power	\$ 64,913
XH5020	Water maker, 230 V, 200 I / h (only with XH2101)	\$ 31,661
XH5101	Additional fridge in cockpit wetbar	\$ 2,675
XH5110	Additional fridge in saloon (only with XH1001 or XH1005)	\$ 2,602
XH5111	Additional freezer in galley (only with XH1001 or XH1005)	\$ 2,747
XH5112	Wine cooler in saloon	\$ 3,181
XH5120	Additional freezer in utility room (only with XH1001 or XH1005)	\$ 2,747
XH5130	Ice maker in saloon	\$ 2,877
XH5140	BBQ in wetbar	\$ 2,096
XH5155	Microwave preparation - US version	\$ 1,287
XH5160	Coffeemachine in saloon	\$ 998
XH5161	BOSCH coffeemachine in saloon	\$ 3,542
XH5210	Dishwasher in galley (only with XH2101)	\$ 3,600
XH5320	Washing machine with dryer function - preparation US version	\$ 2,154
XH5409	Gas leak detector	\$ 1,070
XH5412	Steam cooker in galley	\$ 3,542
XH6001	Grey-water system for bathrooms and galley, 2 tanks: 370 l	\$ 7,229

RADIO & ENTERTAINMENT

XK5000	VHF preparation with antenna and splitter for FM and AIS	\$ 419
XK5010	All-In-One antenna at mast top (VHF, FM radio, TV- analog and DVBT)	\$ 2,747
XK5011	Antenna for 3/4G internet and wi-fi onboard	\$ 1,706

ACCESSORIES

XV9090	Ventian blinds for hull windows in saloon and master cabin (colour selection)	\$ 6,000
XV9120	Cockpit table cover (colour selection)	\$ 998
XV9130	Covers for steering wheels (colour selection)	\$ 564







XV9380	Shrink wrap foil (for storage purpose only / not for transport) (not with XA1002, XA1003, XE2051, XE2052,	\$ 4,048
	XE2053)	

SHIPPING & TRANSPORT

XZ3001 Rigging and delivery in Greifswald

\$ 27,324

All mentioned prices in US-Dollars. Delivery ex works shipyard Greifswald/Germany (no freight or duty included). Prices are subject to change without notice. All weights and measures are calculated numbers based on the construction data. Changes in construction and equipment reserved. Boat according to US specifications. Company reserves additional 15 working days when painted hull is ordered. All measurements/figures are approximate. Errors and omissions excepted. Specification and material can be changed without notice. Valid from 2020.01.01.

