

### **VIKING Offshore**

Offshore Evacuation Systems





## VIKING SES-2A 2006 with movable frame

#### **SPECIAL FEATURES**

Robust high capacity transfer system for fixed and floating installations with a maximum evacuation height of 50 meters, and operating temperatures from -20°C to +65°C. The system is delivered ready for cantilevered installation; and the integrated liferafts are protected inside the blast proof container, making this system suitable for installation in production areas of the platform. With a

maximum evacuation capacity of 140 persons within 10 minutes, the system is designed to stay stable and provide evacuation under conditions of heavy seas, currents, and very strong winds. The movable frame enables the system to be in "flush with rig side" when stowed and cantilevered when deployed, making it especially adequate for FPSOs. SES-2A 2006 with sliding frame has a type approval and consists of the following components:



#### **Blast proof container**

The container protects the evacuation chute and liferafts against all types of weather. It consists of a load bearing welded frame which is attached to the movable frame structure.

#### **Movable frame**

This hydraulic arrangement enables the system to be in "flush with rig side" when stowed, and cantilevered when deployed.



The evacuation chute provides a simple, safe and reliable method for transferring evacuees from deck levels down to sea level. It is divided into cells with speed retarding slides running at opposing angles in a zigzag arrangement. Openings in the chute located behind each slide provide easy entry and exit at any level.

The speed retarding slides also permit evacuees wearing lifejackets, survival suits and breathing apparatus to pass safely through the chute. The length of the chute is calculated to allow for side motion under heavy sea and current conditions.

#### Release system

SES-2A 2006 offers controlled launching using gravity. The speed of the fall is controlled by a constant speed winch. An electrical motor enables recovery of the system.

#### **Boarding platform**

The boarding platform inflates automatically and acts as sea reference point where evacuees can await dry transfer to the integrated liferafts or fast rescue crafts.

#### Liferafts

The system comes with integrated liferafts that are stored inside the blast proof container and accessed via the boarding platform when in use. All VIKING liferafts comply with SOLAS requirements and are equipped with either A-, or B-Pack.

#### Stabilising weight

The stabilising weight is attached to 3 winch wires at the base of the chute and hangs below waterline when deployed. It keeps the escape passage/chute taut and reduces side motion from wind and sea current.

#### Service

Liferafts and boarding platform must be recertified every year. Annual inspection and system function test (performed during the service of the liferaft and the boarding platform). Winch wires shall be inspected regularly and renewed at intervals not exceeding 4 years. Periodical lubrication of winch. NDT test for service rails every 5 years.













# VIKING SES-2A 2006 with movable frame Specifications

	CONTAINER DATA SHEET		
	Description	Value	
1	Manufacturer	VIKING Life-Saving Equipment	
2	Approved by	Lloyd's	
3	Model	SES-2A 2006	
4	Frame materials	EN 10025 S355J2G3, only load bearing parts. Material certificates according to EN 1024, 3.1.b	
5	Dimensions whole system with liferafts (mm)	L: 8170 W: 5000 H: 5035	
6	Surface protection	NORSOK standard M-501, system no. 1	
7	Weight (Whole system with rafts and movable frame)	Approx. 14 Ton (**)	
8	Walls and roof	Carbon Steel NV E36	
9	Door	GRP sandwich element	
10	Cover plate, material	Aluminium	
11	Cover plate, weight	188 kg	
12	Stabilizing weight, material	Carbon steel (DIN 50049 3.1.b/2.2)	
13	Stabilizing weight, surface protection	NORSOK standard M-501, system no. 2B	

	CHUTE DATA SHEET		
	Description	Value	
1	Manufacturer	VIKING Life-Saving Equipment	
2	Vertical distance to sea level	According to costumer's installation height requirements (max. 50 meters)	
3	Chute length, extended	Approx: Installation height x 1.15 (depending on costumers environmental data)	
4	Cell dimensions (mm)	D: 1550 x 1050 H: 1000/1250	
5	Material, rings	Steel – AISI 316	
6	Material, net wall	DuPont™ Kevlar®	
7	Material, angle slides	DuPont™ Kevlar®	
8	Openings	Openings behind angle slide on every cell except top and bottom cells. Side openings optional	

BOARDING PLATFORM DATA SHEET		
Г	Description	Value
1	Manufacturer	VIKING Life-Saving Equipment
2	Model	35 MEP
3	Design standard	VIKING Life-Saving Equipment
4	Equipment	Delivered with 4 connection lines, 4 knives, and 4 connection rings
5	Number of life boarding platforms pr SES unit	1
6	Material	Rubber
7	Capacity	35 persons
8	Diameter inflated (mm)	4950 x 4428
9	Dry weight	110 kg

(*) Information based on VIKING's standard delivery
(**) Varies depending on number and type of liferafts

WINCH DATA SHEET		
	Description	Value
1	Manufacturer	ZOLLERN
2	Design standard	SOLAS
3	Lifting capacity	39,2 KN (4000 kg)
4	Driven equipment	Electrical motor
5	Deployment speed	65 m/min
6	Hoisting speed	10 m/min
7	Weight (without motor)	575 kg
8	No. of sections on drum	3
9	Maximum number of layers pr section	5
10	Storage capacity pr section	72.5 m
11	Brake system	Centrifugal
12	Wire diameter (mm)	10
13	Wire length	65 m
14	Wire breaking strength	Minimum 6430 kg
15	Wire SWL	0,2 x 6430 = 1286 kg
16	Wire design	6 x 36 + IWRC RH RL
17	Wire material	1770 MPa galvanized

	LIFERAFT DATA SHEET		
	Description	Value	
1	Manufacturer	VIKING Life-Saving Equipment	
2	Approved by	EU Marine Directive MED	
3	Model	12, 16, 20, 25, or 35 DK-RS (**)	
4	Design standard	The latest amendments of the SOLAS regulations	
5	Equipment	A or B Pack (SOLAS)	
6	Number of life rafts per SES unit	2 or 4	
7	Capacity per SES unit	Min. 24 persons. Max. 140 persons	
8	Packing of liferafts	GRP container	
9	Stowage height	According to costumer requirements (max. 50 meters)	
10	Length of painter line	Stowage height + 10 meters	

MOVABLE FRAME DATA SHEET			
	Description	Value	
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1	Manufacturer	VIKING Life-Saving Equipment	
2	Dimensions of movable frame assembly (with stairs and walk ways - mm)	L: 7547 W: 4851 H: 1320	
3	Weight movable frame assembly	4475 kg	
4	Movable Frame Material	EN 10025 S355J2G3, certificates according to EN10204, 3.1.b	
5	Surface protection	NORSOK standard M-501	