



# Splitflo RE general brochure



General information brochure



## General and Construction

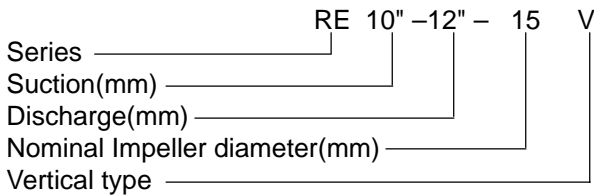
### 1. Applications

Waterworks, Irrigation, Drainage pumping stations, Power stations, Industrial water supply systems & fire fighting applications in refineries.

### 2. Operating data

Pump sizes	DN	80	to	900mm
Capacities	Q	up	to	5000l/s
Total heads	H	up	to	200m
Operating pressure	P	up	to	30bar
Operating temperature	t	up	to	+105°C

### 3. Model code



### 4. Pump Casing

The casing is axially split, which permits removal of the complete rotor without disturbing either piping or the motor.

Pumps generating high heads have double volutes to reduce radial forces, ensuring minimal shaft deflection and low bearing loads.

Replaceable wear rings protect the casing at the impeller running clearances. High head pumps are also fitted with replaceable impeller wear rings.

Flanges drilled to ISO, DIN, BS or ANSI.

### 5. Impeller

The closed impellers have double curved vanes. The double suction design gives practically zero axial forces. Each impeller is statically and dynamically balanced according to ISO 1940.

### 6. Bearings

Both sides are grease lubricated deep groove ball bearings, sealed for life. Oil lubrication are also available as optional.

### 7. Shaft seal

Uncooled soft - packed stuffing box or uncooled single acting. Unbalanced mechanical seal. According to DIN 24960, independent of direction of rotation.

For operating pressure  $\geq 16$  bar balanced mechanical seal is used.

### 8. Materials

Volute casing	
	DIN
Cast iron	GG-25
Ductile cast iron	GGG-40
Cast steel	GS-C25
Impeller	
Cast iron	GG-25
Bronze	G-CuSn10Zn
Stainless steel	1.4581 or 1.4028
Shaft	
C-steel	C45N
Cr-steel	1.4021
Casing wear rings	
Cast iron	GG-25
Bronze	G-CuSn5ZnPb
Brass	G-CuZn15Si4

Note: 304 or 316 stainless steel pump are also available.



## Advantages

### 1. Your technical advantage

#### Innovative casing

- in-line design
- short distance between bearings and correspondingly short shaft
- leak-tight due to compact joint flange with long, prestressed bolts
- counter-rotation possible with similar parts
- double volute version for appropriate total heads
- easy mounting-self-aligning upper casing

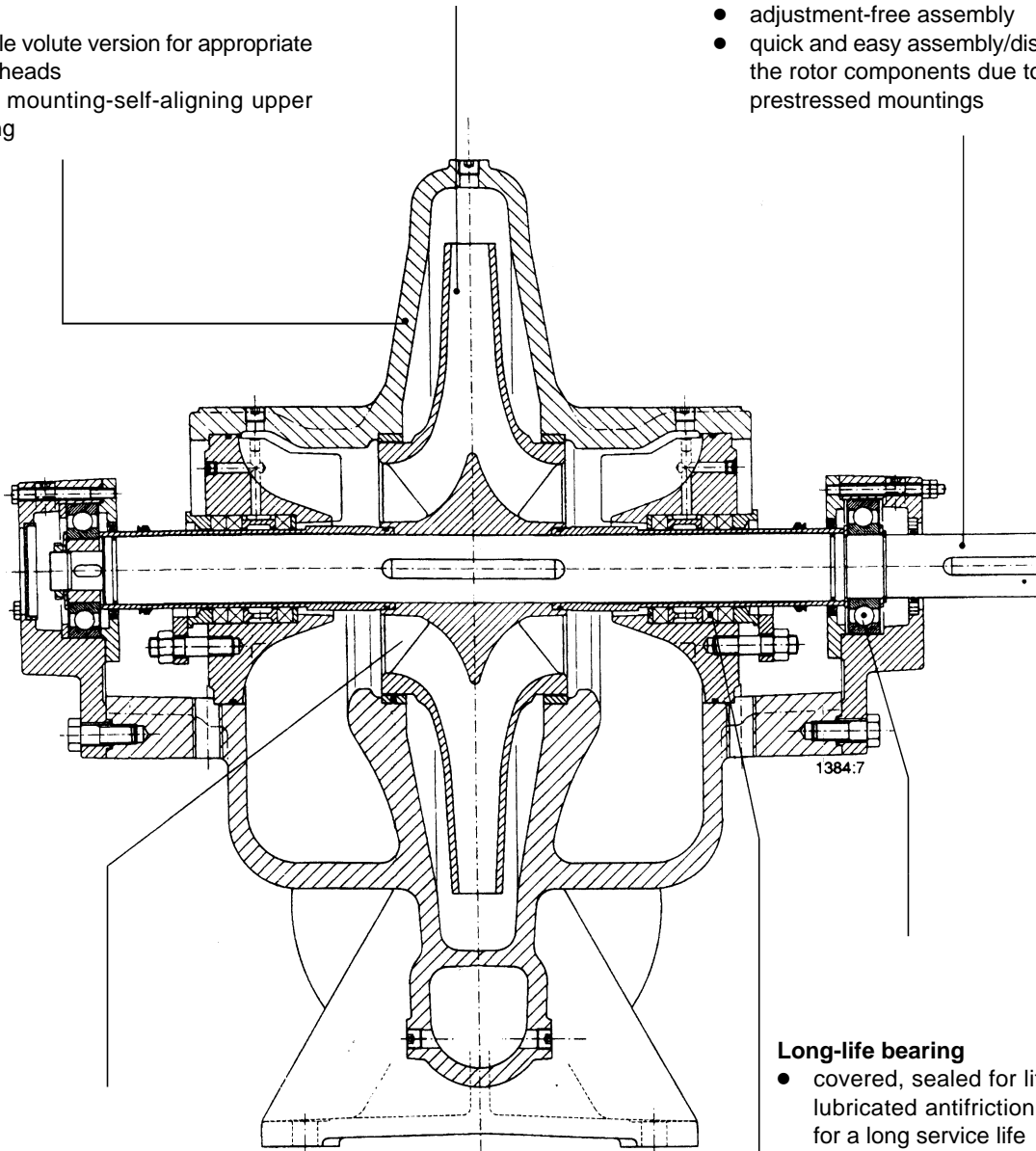
#### High-performance impeller

- minimal axial thrust due to double-entry impeller
- optional impeller wear rings
- new vane passage with excellent hydraulic characteristics

### 2. Your service advantage

#### Service – friendly shaft

- completely sealed and dry for zero corrosion
- short and rigid with negligible vibrations
- replaceable shaft protecting sleeves
- no threads exposed to pumped medium, long operating life and no corrosion
- adjustment-free assembly
- quick and easy assembly/dismantling of the rotor components due to elastically prestressed mountings



#### Excellent efficiencies

#### Outstanding NPSH

- computer-optimized double entry impellers
- smooth surfaces inside the casing and on the impeller
- smooth, quiet running also guaranteed by a large impeller eye area
- no drop in efficiency due to cost effective replaceable casing wear rings and impeller wear rings
- smooth, low loss running due to a swirl-free inlet

#### Long-life bearing

- covered, sealed for life grease lubricated antifriction bearings for a long service life
- open gland, i.e. enough space for service activities
- optional: oil lubrication with constant level oiler

#### Application-orientated seals

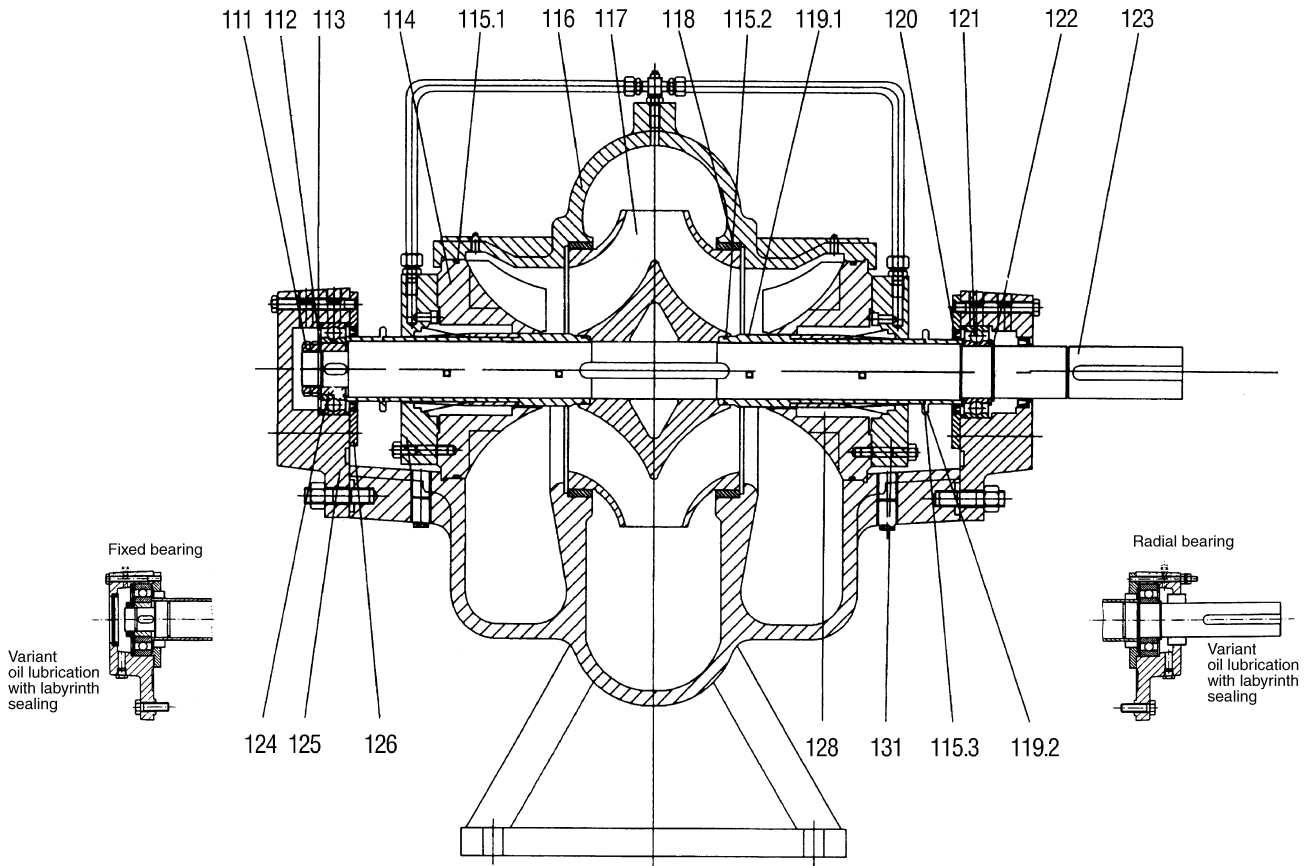
- asbestos-free, potable water quality soft-packed stuffing boxes
- optional: mechanical seals



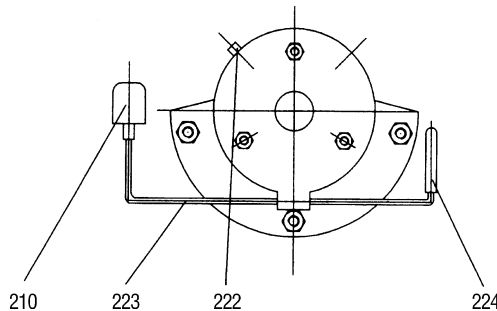
**General Arrangement Drawing**

**Small Splitflo RE models**

**Horizontal Installation**



**Oil supply fixed and radial bearing**



Part No.	Description
111	Nut
112	Spring
113	Washer
114	Shaft seal housing
115	O-Ring
116	Volute casing
117	Impeller
118	Casing wear ring

Part No.	Description
119	Shaft protecting sleeve
120	Radial shaft seal ring
121	Deep groove ball bearing
122	Circlip
123	Pump shaft
124	Sleeve
125	Bearing housing
126	Bearing cover

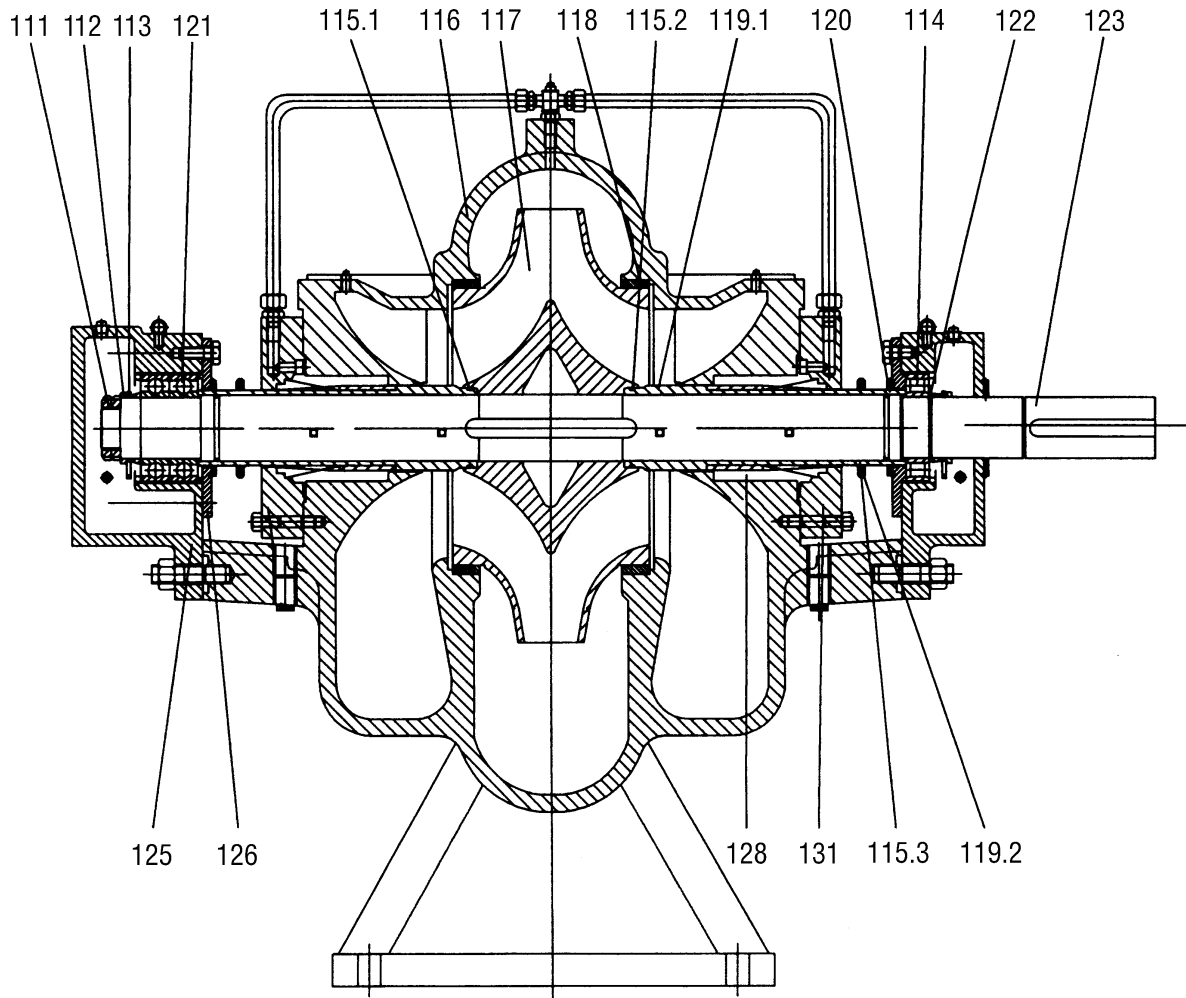
Part No.	Description
128	Seal
131	Cover



**General Arrangement Drawing**

**Large Splitflo RE models**

**Horizontal Installation**



<b>Part No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Description</b>
111	Nut	119	Shaft protecting sleeve	128	Seal
112	Oil thrower sleeve	120	Labyrinth sleeve	131	Cover
113	Oil thrower ring	121	Deep groove ball bearing		
114	Radia roller bearing	122	Circlip		
115	O-Ring	123	Pump shaft		
116	Volute casing	124	Sleeve		
117	Impeller	125	Bearing housing		
118	Casing wear ring	126	Bearing cover		