

# SKIMMERS

## ACTIVE AND PASSIVE

The skimmers have the function of separating the floating phase in the aquifer and recovering it by gravity.

There are two kinds of skimmers: active and passive.

### ACTIVE SKIMMERS

The active system includes a floating part, coupled to a TF automatic pump, permitting the recovery of the product directly on the surface, via the delivery pipe.

### PASSIVE SKIMMERS

The Passive system is based on a tank of accumulation, The emptying is done manually, by an operator, through a drain valve.

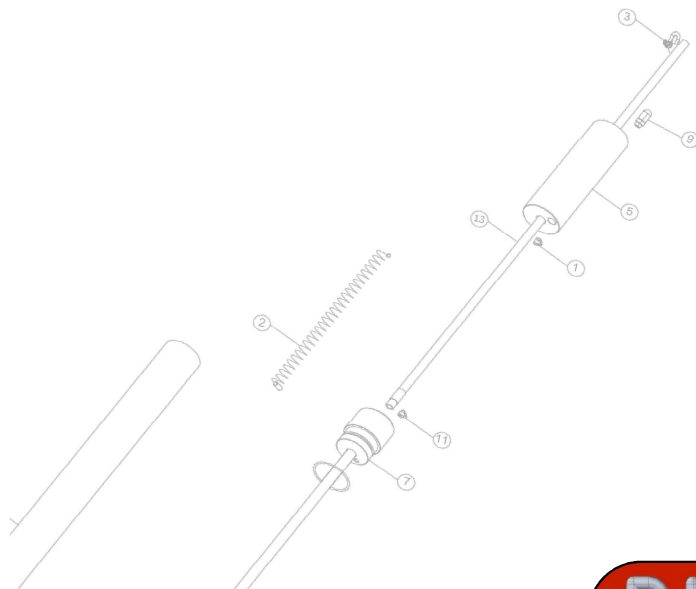


This system is used for the recovery of only the supernatant product, being able to follow the movements of the aquifer and thanks to the presence of a float with calibrated specific weight.

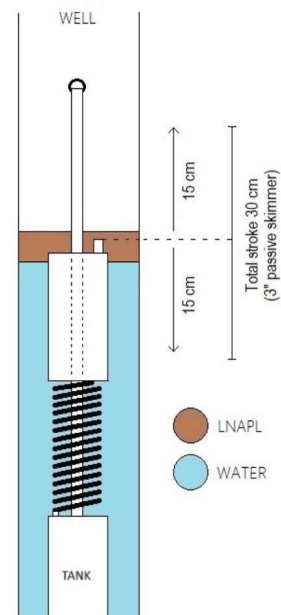
**Hydrocarbons allowed:**  
specific weight 0,70 to 0,90

**Solvents allowed:** the majority  
(ask DIMACO technical department for compatibility).

Operating temperature: 0 - 90°C



## Working principle



## TF SERIES ACTIVE SKIMMER



The active skimmers consist of a TF series pneumatic pump and a skimmer kit. The latter allows the supernatant to be separated from the water, thanks to its float which follows the movements of the aquifer. The product is collected in the pump body and pushed outwards when it reaches the maximum level.

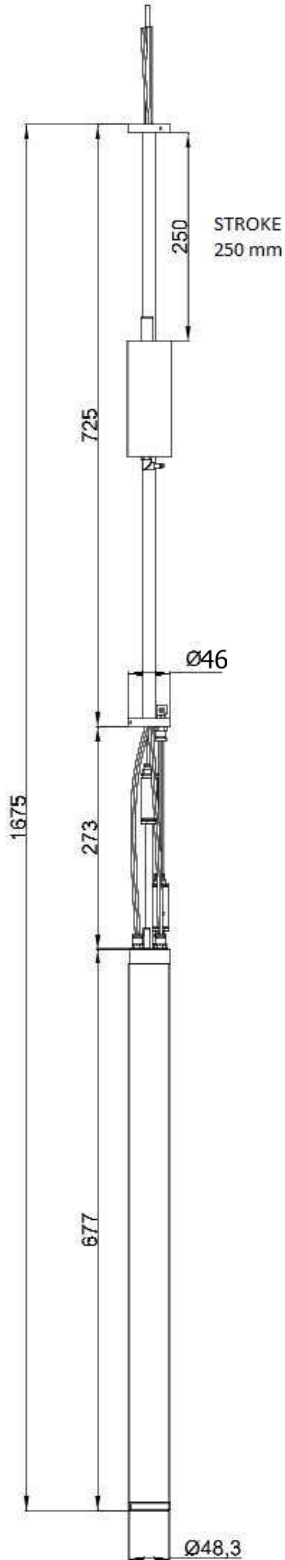
It is possible to increase the effectiveness of supernatant separation by adding a hydrophobic filter. Furthermore, with the SEPA kit you can drain the water from the bottom.

CE

Compliance with Machinery Directive 2006/42/EC. during the design and construction phase, compliance with the Essential Health and Safety Requirements was considered and obtained. In particular, it is highlighted that during operation the moving parts are not accessible and that during adjustment and maintenance operations, carried out according to established procedures, they do not expose the operators to risks.

# TF2 - SKM

active automatic skimmer for  
minumum  $\varnothing$  2" LNAPL  
pumping wells



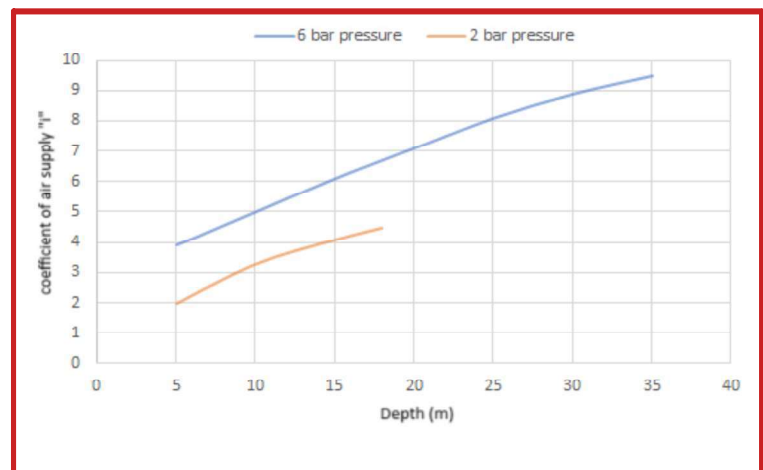
## Technical features

pump model	TF2-Top
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### kit skimmer

total diameter	46 mm
float stroke	250 mm
float material	PP
pipe and rods material	inox AISI 304
filter material	PP (hydrophobic on req)

Air consumption (Normal liters) for each liter  
of product pumped, according to depth (m)

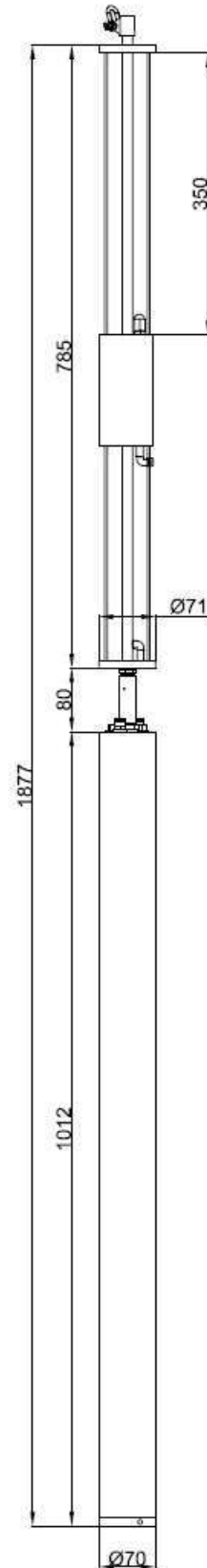


# TF70 - SKM

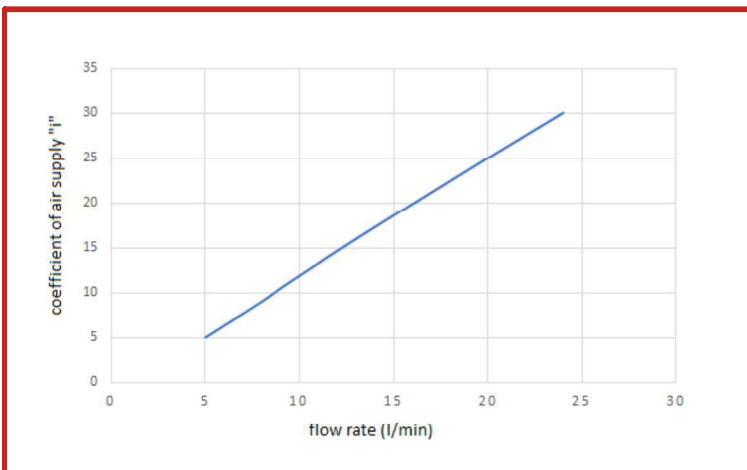
active automatic skimmer  
for minimum  $\phi$  3" LNAPL  
pumping wells

## Technical features

pump model	TF70-Top
<b>kit skimmer</b>	
total diameter	71 mm
float stroke	350 mm
float material	PP
pipe and rods material	stainless steel AISI 304
filter material	PP (hydrophobic on req)

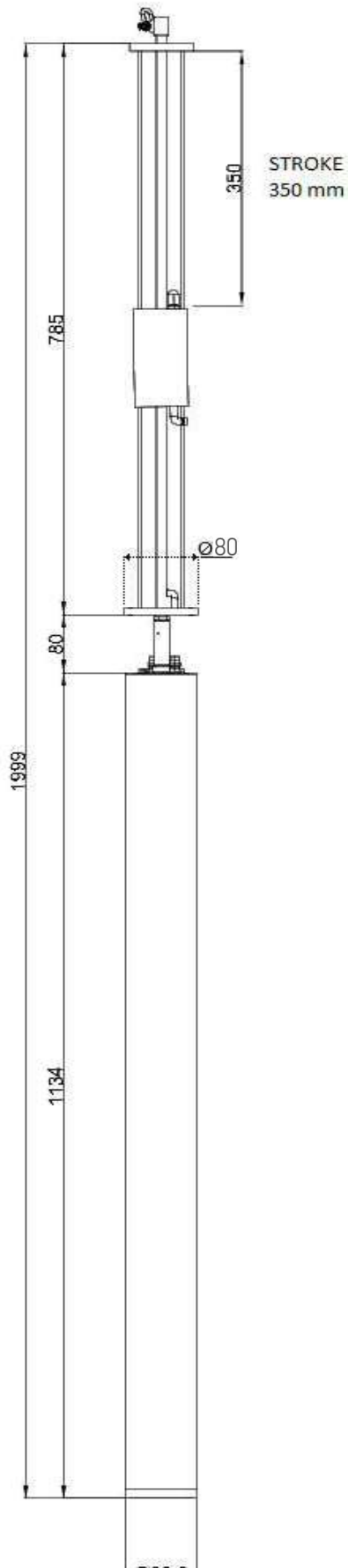


Variation of "i" multiplying coefficient of air supply according to the flow rate of LNAPL



air flow rate (NL/min) =  $i$  \* inlet working pressure (bar)

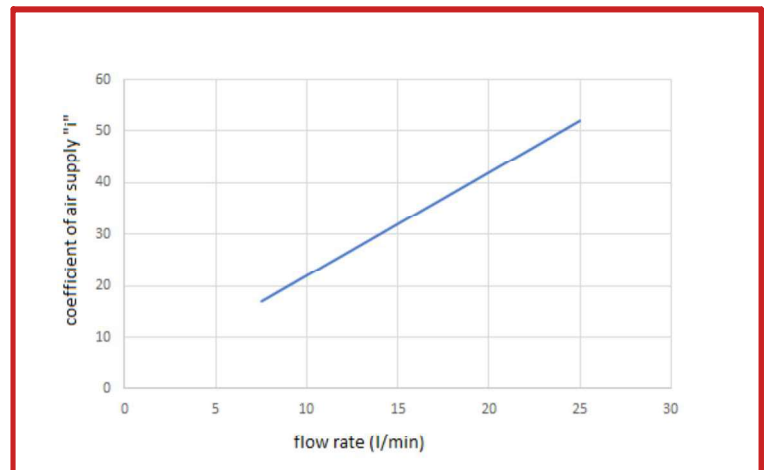
# TF4 - SKM



## Technical features

pump model	TF2-Top
<b>kit skimmer</b>	
total diameter	80 mm
float stroke	350 mm
float material	PP
pipe and rods material	stainless steel AISI 304
filter material	PP (hydrophobic on req)

Variation of "i" multiplying coefficient of air supply according to the flow rate of LNAPL



Variation of "i" multiplying coefficient of air supply according to the flow rate of LNAPL

## PASSIVE SKIMMERS



The float with calibrated weight always remains at the highest point of the aquifer and only recovers the product of the upper phase which flows into the tank.

For emptying, the skimmer is equipped with an easy-to-use slide valve on the bottom.

By replacing the standard filter with a hydrophobic filter, it is possible to completely exclude the entry of water.

### Standard materials

Rod and eyebolt	SS AISI 304
tank head	SS AISI 304
tank body	PVDF
tank bottom	AISI 303
float	plastic
filter	plastic
valve	brass/plastic

# PASSIVE SKIMMER FOR THE RECOVERY BY GRAVITY OF LNAPL

Two sizes of passive skimmers are available.

They are commonly positioned into wells to recover hydrocarbons and mineral oils.

The capacity of the tank can be customized, extending its length.



Example of SKP2 with 1,5 L tank

Standard capacity of tank

SKP2	0,5 L
SKP3	3 L

