

PC F 1.4



PC F Series

Shell and tube forced circulation evaporators. Wastewater treatment evaporators for maximum distillate quality with minimum capital and operating costs.

1. Technical characteristics

Nominal production of distillate with water	1,400 [l/24h] 0.256 [gpm]
Models available (selection dependent on material)	PC F 1.4 AA (austenitic stainless steel) PC F 1.4 FF (superduplex stainless steel) PC F 1.4 HH (nickel alloys) PC F 1.4 FA (austenitic and superduplex stainless steel)
Installation	indoor
Condensation heat exchanger	internal coil
Primary heat exchanger	external shell and tube with forced circulation
Evaporation type	conveyed vacuum flash
Evaporation conditions	absolute pressure 6-8 [kPa] 0.9-1.1 [psi] temperature 35-45 [°C] 86-104 [°F]
Drops separator	demister, grate type with packing elements
Technology of heating/cooling	heat pump
Circulation pump	centrifugal with fluxed mechanical seal
Heat pump compressor	hermetic reciprocating piston type"
Refrigeration fluid	R134a (no impact on the ozone layer)
Vacuum system	liquid ejector
Control	automatic, continuous 24/24h 7/7 days by PLC
Operator panel	touch screen
In compliance with standards: (CE marking)	Machinery Directive Electromagnetic compatibility Electrical safety PED Pressure Equipment Directive

2. Nominal performances

	50 [Hz]	60 [Hz]
Electrical power supply	400 [V]	460 [V]
Maximum production of distillate with water	1,440 [l/24h] 380 [gpd]	1,440 [l/24h] 380 [gpd]
Absorbed power	9 [kW]	9 [kW]
Specific electrical consumption per litre/gallon of distillate	150 [Wh/l] 568 [Wh/gal]	150 [Wh/l] 568 [Wh/gal]



Environmental Impact Reduction: CO₂ emissions

92.46 kg CO₂ eq/m³ liquid waste treated

-92.6%, the percentage of emissions avoided with respect to incineration of the liquid waste

3. Weight

Type	Empty without packaging / steady state with water
Weight [kg]	610 / 770
Weight [lb]	1,345 / 1,698

Dimensions & clearances

PC F 1.4	[mm]	[in]
A	1,000	39,4
B	1,620	63,8
C	2,190	86,2
D	2,600	102,4
E	3,620	142,5

4. Options

Options	Description
	min feed storage tanks 2,000 l 520 gal min distillate storage tanks 2,000 l 520 gal min concentrate storage tanks 1,000 l 260 gal
OC DN C	Concentrate density device
OM AD F	Additive dosing device
OC pH D	Distillate pH adjustment device
OT DP C	Concentrate transfer device
OC TP R	Auxiliary cooling device
OC CN D	Distillate conductivity control device
OW TW	Automatic washing of the level switch
OW CH	Automatic chemical washing system
OC PB	Profibus interface device
OC EN	Ethernet interface device
OI RC	Remote control via ADSL/UMTS
AM BT D	Bactericide dosing device
AT CP D	Distillate transfer device
AT SP D	Distillate pressurization device
AC pH F	Feed pH adjustment device

Standard

Standard	Description
OM AF F	Antifoam agent dosing device

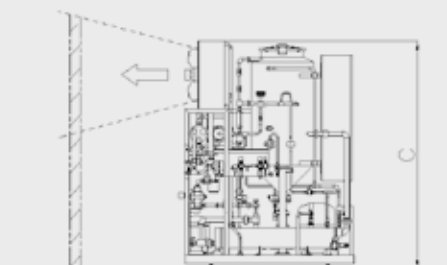
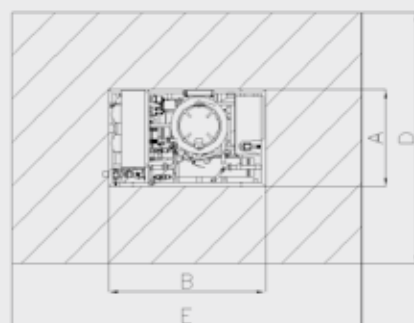


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In case of foaming effluent, EVALED® evaporators are designed to be operated with **Hydrex™** antifoams. For maintenance operations, use **Hydrex™** cleaners.

Hydrex