



## "LAPESA CORREX-UP" PERMANENT CATHODIC PROTECTION SYSTEM.

MASTER VITRO tanks include a "lapesa correx-up" cathodic protection unit as a **standard feature**.

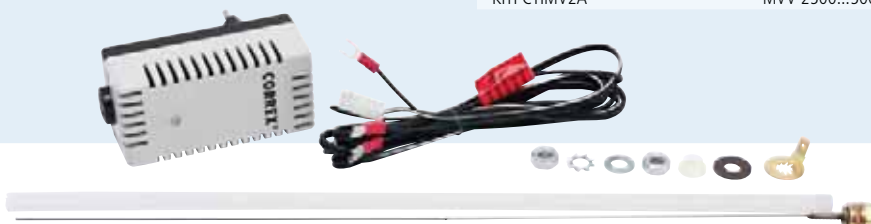
**Totally automatic!** "lapesa correx-up", cathodic protection system comprises special titanium anodes that emit the necessary current for the metal surface to be protected by means of an automatic potentiostat connect to the mains power supply.

**Maintenance free!** This cathodic protection system is permanent which means that, unlike sacrificial anodes, there is no wear and the anodes do not need to be replaced.

All DHW tanks made of carbon steel with an inner lining should be equipped with the cathodic protection system (DIN 4753)

### KIT C.P. lapesa correx-up    Applicable to MASTER VITRO tanks models

KITPCTIMV1A	MVV-1500/2000-RB/SB/SSB/EB
KITPCTIMV2A	MVV-2500...5000-RB/SB/SSB/EB



"lapesa correx-up" permanent cathodic protection system: Maintenance-free permanent cathodic protection unit. These anodes do not wear out and they emit the necessary electric current automatically providing the tank with cathodic protection via an individual potentiostat for each anode, connected to the mains electricity.

## STANDARD CATHODIC PROTECTION SYSTEM IN "MASTER VITRO" SERIES.

Optional in all "MASTER VITRO" models.



Cathodic protection units differ in terms of size and number of sacrificial Magnesium anodes depending on the model, the geometry and the capacity of the "MASTER VITRO" storage tank.



# ACCESSORIES - MASTER VITRO



### EXTERNAL LINING

External lining for "MASTER VITRO" tanks with top cover, ND400 side manhole cover and trims for hydraulic connections. Standard external lining: GREY / RAL 7042.

Capacity (l)	Standard (KIT reference)	Fireproof (KIT reference)	Weatherproof (KIT reference)
1500	FME1500	FME1500/MO	FME1500/EX
2000	FME2000	FME2000/MO	FME2000/EX
2500	FME2500	FME2500/MO	FME2500/EX
3000	FME3000	FME3000/MO	FME3000/EX
3500	FME3500	FME3500/MO	FME3500/EX
4000	FME4000	FME4000/MO	FME4000/EX
5000	FME5000	FME5000/MO	FME5000/EX
6000	FME6000	FME6000/MO	FME6000/EX

### ALUNOX EXTERNAL LINING

External aluminium sheet lining. ALUNOX external lining is supplied ready-mounted on the tank, over the PU insulation.

Capacity (l)	Aluminium lining ALUNOX - Ref.
1500	FME1500/ALUNOX-B
2000	FME2000/ALUNOX-B
2500	FME2500/ALUNOX-B
3000	FME3000/ALUNOX-B
3500	FME3500/ALUNOX-B
4000	FME4000/ALUNOX-B
5000	FME5000/ALUNOX-B





### 2" M THREADED ELECTRIC HEATING ELEMENT.

Low charge density, threaded, immersion electric element in Incoloy for "MASTER VITRO" STORAGE and COIL tanks.

Characteristics and powers: page: 108 -ELECTRIC HEATING-

Electric element model	KW	V	Thread	Integrated control
RA4/2-60	6,0	230/400	2" M	-
RA4/2-90	9,0	230/400	2" M	-
RA4/2-120D	12,0	230/400	2" M	-
RA4/2-120DT	12,0	230/401	2" M	Regulation and safety thermostat
RA4/2-125DT	12,5	230/400	2" M	Regulation and safety thermostat
RA4/2-150D	15,0	230/400	2" M	-
RA4/2-150DT	15,0	230/400	2" M	Regulation and safety thermostat
RA4/2-250D	25,0	230/400	2" M	-
RA4/2-250DT	25,0	230/400	2" M	Regulation and safety thermostat

(\*) Regulation thermostat 0 -75 °C (adjusted to 60 °C) / Safety thermostat 90 °C

### CERAMIC ELECTRIC HEATING ELEMENT, STORAGE AND COIL MODELS.

Sheathed ceramic electric heating element for "MASTER VITRO" STORAGE and COIL tanks, models "RB"

Characteristics and powers: page: 106 -ELECTRIC HEATING-

Electric element model	KW	V
RCER-45	4,5	230/400
RCER-60	6,0	230/400



### ND 400 PLATES FOR INSTALLATION OF ELECTRIC HEATING ELEMENTS IN ND400 SIDE MANHOLE.

ND 400 plate and protective hood in stainless steel, with 2" threaded connections to install immersion electric heating elements in ND400 side manhole.

#### ND400 plate set

TBH2CONEX  
TBH4CONEX  
TBH5CONEX  
TBH6CONEX  
TBH7CONEX  
TBH8CONEX

(\*) Heating elements not included



### ND 400 PLATES FOR INSTALLATION OF ELECTRIC HEATING ELEMENTS IN ND400 SIDE MANHOLE.

ND 400 plate and protective hood in stainless steel, for installation of sheathed ceramic electrical heating elements ("dry" system) in ND400 side manhole.

#### ND400 plate set

TBH2VAINAS  
TBH4VAINAS  
TBH5VAINAS  
TBH6VAINAS  
TBH7VAINAS  
TBH8VAINAS

(\*) Heating elements not included

### DUAL CONTROL AND SAFETY THERMOSTAT

Kit comprising dual control 0-75°C (set at 60°C) and safety (95°C) thermostat, with 1/2" x 100 mm threaded sheath and 3/4"-1/2" reduction

#### KIT

KIT MASTER double thermostat



### 0-120°C THERMOMETER

KIT comprising 0-120°C thermometer with 1/2" x 100 mm threaded sheath and 3/4"-1/2" reduction

#### KIT

KIT pressure gauge

### 0-16 BAR PRESSURE GAUGE

KIT comprising 0-16 bar pressure gauge with 3/4"-1/2" reduction and 1/2"-1/4" reduction

#### KIT

KIT pressure gauge



### P & T PRESSURE AND TEMPERATURE SAFETY VALVE

P & T pressure and temperature safety valve, 8 bar, 92°C

#### KIT

3/4" P&T valve KIT  
1 1/4" P&T valve KIT

## PLATE EXCHANGERS

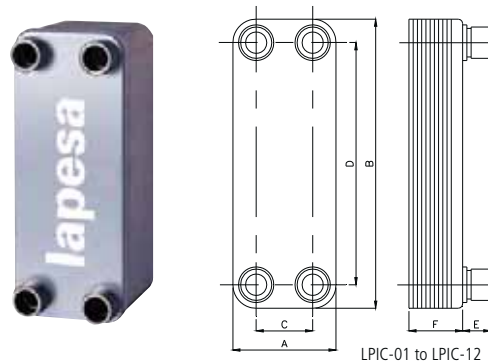
COMPACT PLATE EXCHANGERS		Ref.	Number of plates	Flow rate at 50°C (l/h)	Power (kW) <sup>(3)</sup>	Pressure drop (meters H <sub>2</sub> O)	A x B x F mm	E mm	C mm	D mm	Connections
Max. working temperature	135 / 155°C <sup>(1)</sup>	LPIC-01	20	1.000	45	< 3	73 x 192 x 42,32	20,1	40	154	3/4"
Max working pressure	16 / 25 bar <sup>(2)</sup>	LPIC-02	20	2.000	90	< 6	73 x 315 x 42,32	20,1	40	278	3/4"
Applications	Fluid/Fluid	LPIC-03	20	3.000	140	< 6	119 x 289 x 48,8	45	72	243	1"
Chassis	AISI 316	LPIC-04	30	4.000	185	< 6	119 x 289 x 71,2	45	72	243	1"
Plates	AISI 316	LPIC-05	40	5.000	235	< 6	119 x 289 x 93,6	45	72	243	1"
Connections	AISI 316	LPIC-07	40	7.000	325	< 8	119 x 376 x 93,6	45	63	320	1-1/4"
Additional features	Thermal Insulation	LPIC-10	60	10.000	465	< 8	119 x 376 x 136,4	45	63	320	1-1/4"
		LPIC-12	70	12.000	560	< 8	119 x 376 x 160,8	45	63	320	1-1/4"

(1) Maximum working temperature for LPIC-01 and LPIC-02 models 135°C, for rest of models 155°C

(2) Maximum working pressure for LPIC-01 and LPIC-02 models 16 bar, for rest of models 25 bar

(3) Power defined according to: Primary 90/60°C and secondary 10/50°C

Optional: Other pressures, temperatures or fluids



LPIC-01 to LPIC-12

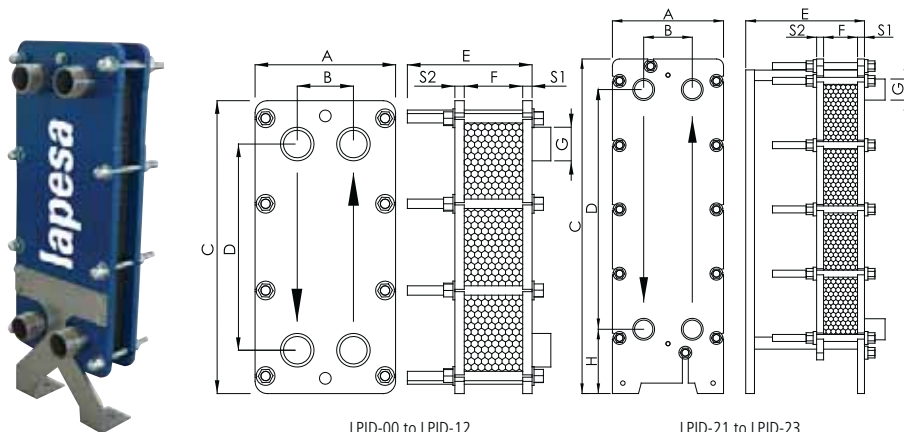
DETTACHABLE PLATE EXCHANGERS		Ref.	Number of plates	Flow rate at 50°C (l/h)	Power (kW) <sup>(3)</sup>	Pressure drop (meters H <sub>2</sub> O)	A x C x F mm	E(max) mm	B mm	D mm	H mm	G mm
Max. working temperature	110°C	LPID-00	5	1.000	48	< 3	204 x 490 x 13,25	290	86	381	-	1-1/4"
Max. working pressure	10 bar	LPID-01	7	1.300	60	< 3	204 x 490 x 18,55	290	86	381	-	1-1/4"
Applications	Fluid/Fluid	LPID-02	11	2.600	120	< 3	204 x 490 x 29,15	290	86	381	-	1-1/4"
Chassis	Carbon steel	LPID-03	13	3.200	148	< 3	204 x 490 x 34,45	290	86	381	-	1-1/4"
Plates	AISI 316	LPID-04	17	4.200	195	< 3	204 x 490 x 45,05	290	86	381	-	1-1/4"
Connections	AISI 316	LPID-05	21	5.200	240	< 3	204 x 490 x 55,65	290	86	381	-	1-1/4"
Gaskets	EPDM	LPID-07	27	6.600	305	< 3	204 x 490 x 71,55	290	86	381	-	1-1/4"
Additional features	Thermal Insulation Support leg <sup>(4)</sup>	LPID-10	37	8.600	400	< 3	204 x 490 x 98,05	290	86	381	-	1-1/4"
		LPID-12	45	10.000	465	< 3	204 x 490 x 119,25	290	86	381	-	1-1/4"
		LPID-21	23	15.700	725	< 3	312 x 963 x 80,5	960	140	690	185	2"
		LPID-22	29	20.500	950	< 3	312 x 963 x 101,5	960	140	690	185	2"
		LPID-23	35	25.000	1155	< 3	312 x 963 x 122,5	960	140	690	185	2"

(3) Power defined according to: Primary 90/60°C and secondary 10/50°C

(4) For models LPID-00 to LPID-12

Optional: Other pressures, temperatures or fluids

Chassis and plates in AISI-304, AISI-316 or Titanium



LPID-00 to LPID-12

LPID-21 to LPID-23

### DATA REQUIRED TO PROVIDE A QUOTE FOR A CUSTOM PLATE EXCHANGER

To provide a specific offer of the most suitable plate heat exchanger for each particular case, the following details on the primary and secondary circuits are required:

- Primary and secondary circuit flows
- Input/output temperatures of the primary and secondary circuits
- Physical properties of the liquids (if they are neither water nor steam), density and specific heat.
- Required working pressure
- Pressure drop