



POSICIONES DE TRABAJO / WORKING POSITIONS



■ Descripción:

El EV es un nuevo sistema compacto para el control de bombas a VELOCIDAD VARIABLE capaz de mantener la presión CONSTANTE en la instalación al cambiar el caudal de demanda (de hecho funciona de igual forma al equipo convencional con variador de frecuencia pero integrando una serie de ventajas muy interesantes).

Está compuesto por un Variador de velocidad, un sensor de presión y un sensor de flujo lo que hace de él un sistema extremadamente compacto y sencillo de instalar. A su vez el sistema al estar totalmente integrado es sencillo de programar y puede adaptarse a equipos de presión de una o varias bombas (máximo 6 bombas en paralelo), en este último caso, cada bomba deberá incorporar un EV activándose a través del cable de conexión el software de comunicación que hace que actúen en modo Principal-Auxiliar/es y alternando entre ellas en cada arranque.

■ Ventajas Principales:

- 1-Extremadamente SILENCIOSO.
 - 2-Sencilla Instalación.
 - 3-Ahorro de espacio. Evitamos la instalación de grandes acumuladores.
 - 4-Sencilla Programación.(Solo programamos Presión de trabajo y consumo bomba).
 - 5-Protección Amperométrica de la bomba (exceso de consumo).
 - 6-Protección contra trabajo en seco. (falta de agua).
 - 7-Ahorro energético muy importante.
 - 8-Trabajo a presión fija.
 - 9-Evitamos golpes de ariete y sobrepresiones en la Instalación.
- Ø Entrada (asp): 1 1/4" mach. Ø de Salida (imp): 1 1/2" hem.
 - IP-55, temperatura máxima 50° C

■ Description:

The EV is a new compact system for controlling VARIABLE SPEED pumps, capable of maintaining a CONSTANT pressure in the installation when the demand flow is changed (in fact it works in the same way as the conventional unit with a frequency inverter, but including a series of very useful advantages).

It comprises a speed inverter, a pressure sensor and a flow sensor, which make it an extremely compact system and easy to install. In turn, as the system is fully integrated, it is simple to programme and may be adapted to pressure units of one or several pumps (maximum 6 pumps in parallel); in this last case each pump must include a EV activating the communications software through a connection cable, making them work in Main-Auxiliary mode and alternating between them on each start-up.

■ Main advantages:

- 1-Extremely SILENT.
 - 2-Simple installation.
 - 3-Saves space. We avoid installing large accumulators.
 - 4-Simple programming (we only programme the working pressure and pump consumption).
 - 5-Amperometric protection of the pump (excessive consumption).
 - 6-Protection against dry working (lack of water).
 - 7-Very large energy savings.
 - 8-Work at a fixed pressure.
 - 9-We avoid ram knocks and over-pressure in the installation.
- Inlet Ø: 1 1/4" male. Outlet Ø: 1 1/2" female.
 - IP-55, maximum temperature 50° C

Modelo	Tensión Entrada (Alimentación)	Tensión Salida (Motor)	Amperaje máximo (A)	Regulación (bar)	Conectividad variadores
EVB MM-4,3 A	1 x 230 V monofásico	1 x 230 V monofásico	4,3 A	1 - 6 bar	NO
EVB MM-8,5 A	1 x 230 V monofásico	1 x 230 V monofásico	8,5 A	1 - 6 bar	NO
EVB MT2-4,5 A	1 x 230 V monofásico	3 x 230 V trifásico	4,5 A	1 - 9 bar	NO
EVD MT2-10,5 A	1 x 230 V monofásico	3 x 230 V trifásico	10,5 A	1 - 15 bar	SI
EVD TT3-7,5 A	3 x 400 V trifásico	3 x 400 V trifásico	7,5 A	1 - 15 bar	SI
EVD TT3-13,3 A	3 x 400 V trifásico	3 x 400 V trifásico	13,3 A	1 - 15 bar	SI





INVERTER
SOLUTIONS
FOR PUMPS

COMPANY PROFILE

- *Inverter for Pumps*
- *Electronics for Water systems*



What is a *EASY VARIO*?

With the EASY VARIO we can maintain:

1. *Pressure (p) = CONSTANT*

2. *Flow (Q) = VARIABLE*

3. *Speed (Rpm) = VARIABLE*



EASY VARIO FAMILY

PWM 1-basic

- Power supply: **1-phase** input 230 V
- Pump Motor **1-phase** 230V
- Max phase current: Up to 14 A rms
- Max motor power (approx.): Up to 1,8 Kw



Domestic

PWM 230

- Power supply: **1-phase** 230 V
- Pump Motor **3-phase** 230V
- Max phase current: Up to 9.3 A rms
- Max motor power (approx.): Up to 2,2 Kw



Semi
Professional

PWM 400

- Power supply: **3 phase** input 400 V
- Pump Motor **3-phase** 400V
- Max phase current: Up to 13.3 A rms
- Max motor power (approx.): Up to 5,5 Kw



Professional



PWM 1-BASIC

MODEL	MOTOR POWER	INPUT VOLTAGE	MOTOR VOLTAGE	MAX MOTOR AMPERAGE	SUCTION PORT (DNA)	DISCHARGE PORT (DNM)	CONNECTIVITY
PWM 230 1-BASIC 4.3	0.55 kW	1 x 230 V	1 x 230 V	4.3 A rms	1 1/4"	1 1/2"	No
PWM 230 1-BASIC 8.5	1.1 kW	1 x 230 V	1 x 230 V	8.5 A rms	1 1/4"	1 1/2"	No
PWM 230 1-BASIC/11 Dual Voltage	1.5Kw (230 V) 0.55 kW (115 V)	1 x 230 V 1 x115 V	1 x 230 V 1-x 115 V	11 A rms	1 1/4"	1 1/2"	No
PWM 230 1-BASIC/14 Dual Voltage	1.8 kW (230 V) 1 kw (115 V)	1 x 230 V 1 x115 V	1 x 230 V 1-x 115 V	14 A rms	1 1/4"	1 1/2"	RS 485



PWM 1-BASIC

MODEL	MOTOR POWER	INPUT VOLTAGE	MOTOR VOLTAGE	MAX MOTOR AMPERAGE	SUCTION PORT (DNA)	DISCHARGE PORT (DNM)	CONNECTIVITY	SET POINT
PWM 230 3-BASIC 4.7	1 kW	1 x 230 V	3 x 230 V	4.7 A rms	1 1/4"	1 1/2"	No	1
PWM 230 D/4.7	1 kW	1 x 230 V	3 x 230 V	4.7 A rms	1 1/4"	1 1/2"	RS 485	2
PWM 230 D/10.5	2.2 kW	1 x 230 V	3 x 230 V	10.5 A rms	1 1/4"	1 1/2"	RS 485	2



PWM 400

MODEL	MOTOR POWER	INPUT VOLTAGE	MOTOR VOLTAGE	MAX MOTOR AMPERAGE	SUCTION PORT (DNA)	DISCHARGE PORT (DNM)	CONNECTIVITY	SET POINT
PWM 400 D/7.5	3 kW	3 x 400 V	3 x 400 V	7.5 A rms	1 1/4"	1 1/2"	RS 485	1
PWM 400 D/13.3	5.5 kW	3 x 400 V	3 x 400 V	13.3 A rms	1 1/4"	1 1/2"	RS 485	2



- *The Maximum continuous pressure is 16 Bar*
- *Pressure transducer: 0 - 16 Bar calibrated*
- *Pressure set point range: 1 - 15 Bar*
- *Flow transducer*
- *Flow up to 15 mc/h (250 l/min)*
- *Water temperature up to 50 °C*



INVE
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Why variable speed drive from EASY VARIO?



Why variable speed drive?

- *The PWM is the water cooled inverter for pumps.*
- *The PWM is easy to install and to set up.*
- *It is the only one with built in: flow sensor and pressure sensor.*
- *The only “all in one box” solution: no need of additional components (EMC filters included).*
- *The PWM can work with every kind of pump.*
- *PWM can guarantee a longer life for the pump.*
- *The PWM means also less noise of the pump and more comfort for the end user.*

Save up to 60% of energy



EASY VARIO

Easy to install

Connect hydraulically the PWM to the pump

Connect electrically the PWM to the pump



Connect the power supply



The only "one box" solution

*Reduce the
capacity of
the VESSEL*

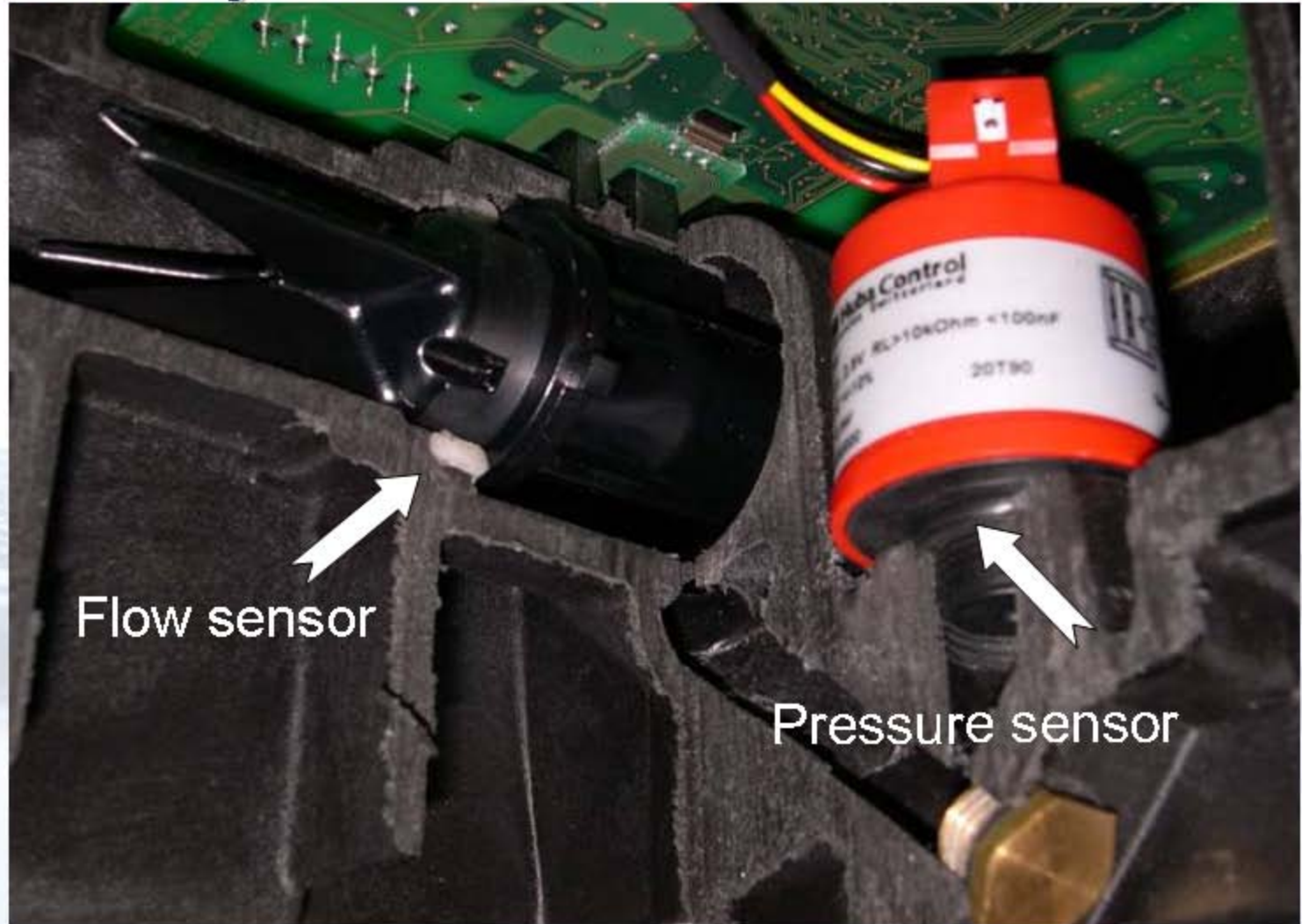


**AVOID
LEGIONELLA**

*Replace the
OLD
ON/OFF
SYSTEMS*

EASY VARIO

The only one with built in flow sensor



Our devices can drive every type of pumps



Submersible Pump



Vertical Pump



Horizontal Pump



Quick Start-Up



Press **MODE** **SET**  for 5 seconds

Adjust the amperage with the  and  buttons

Press **MODE** and the buttons   to set the NOMINAL FREQUENCY

Press **MODE** and with the buttons   select the direction of rotation

Press **MODE** **SET** for 2 seconds and adjust the pressure with  

Dry Running

Phase failure

Lighting up to
700 Volt

Daily Unlock



Low Voltage - 20%

High Voltage + 10%

Over load

Anti Frost

Malfunctioning Pressure sensor

- Intelligent over heating

The PWM automatically reduces the output current in case of extraordinary high temperature of the electronics without stopping the service

OLD STYLE



The PWM is ideal for Booster Set

- For duplex, only a connection cable is required to obtain a change over of the pumps
- No control panel is required
- No float switch is required
- No external device is required
- Easy to install
- Easy to set up

