

Electronic Welding Regulator REGULA® EWR



**Up to 60%
saving on
shielding gas!**

Weld more efficiently – optimize shielding gas consumption. Optimal use of all resources is essential for an economical and efficient welding process. However, options for optimization of shielding gas consumption are often given too little consideration. Primarily this is because of the difficulty of attributing and measuring effectiveness, as gases are not visible and tangible in the process.

In co-operation with REGULA-Systems, ABICOR BINZEL offers the REGULA® EWR (Electronic Welding Regulator) electronic shielding gas regulator. This system saves shielding gas at the same time as providing better gas cover! Reliable, defined and verifiable.

Arguments that speak for themselves:

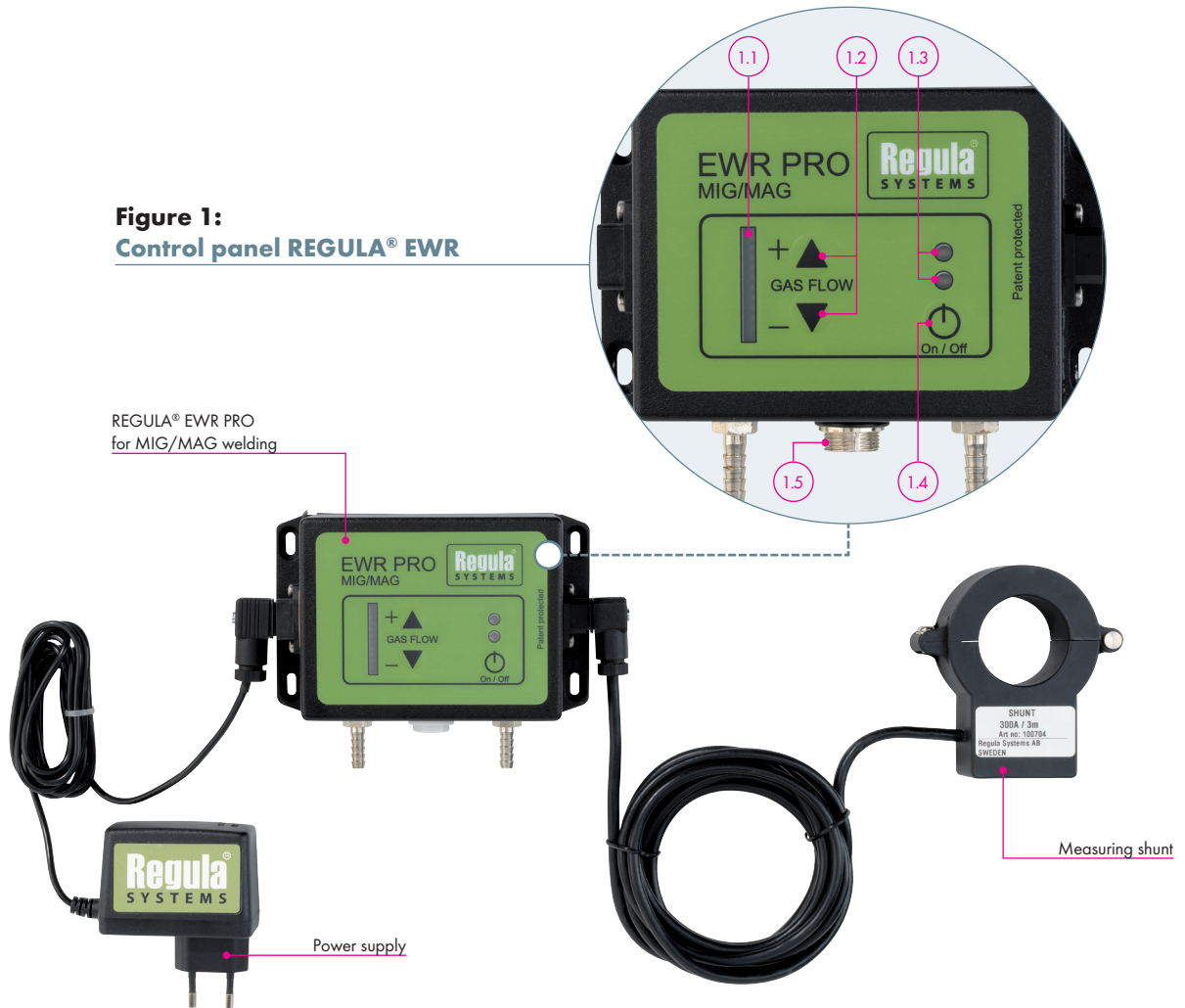
- High gas saving
- Increased process stability
- Longer lifetimes
- Reduction of the costs for handling
- Standardized processes
- Less reworking



REGULA® EWR

System overview and technical data

Figure 1:
Control panel REGULA® EWR



Power connection
110 V to 230 V

Connection shielding gas ↔ REGULA® EWR
(Gas supply min. 3 bar / max. 5 bar)

Connection REGULA® EWR ↔ Power source

Connection of the
measuring shunt on
positive- or negative
welding lead

„Plug & Play“

The installation of the REGULA® EWR is done within minutes.
Save gas. Quick and easy!

Installation of REGULA® EWR:

- Connection of the REGULA® EWR between the gas supply and the power source
- Connection of the measuring shunt on the negative lead cable (or positive pole of the cable assembly)
- Ensure power supply connection



Figure 2:
Welding Monitor

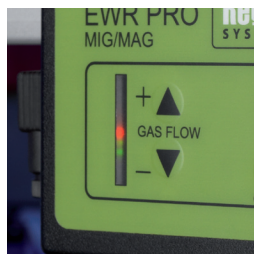
Figure 1:
REGULA® EWR Control panel

- 1.1 LED panel for visualization of the preset gas flow
- 1.2 Buttons for preset of the required gas flow
- 1.3 LEDs for visualization of the unit status
- 1.4 Button On/Off
- 1.5 Interface for additional options (only valid for EWR RRO)

Figure 2:
Welding Monitor*

- 2.1 Rugged housing
- 2.2 Interface for USB memory stick
- 2.3 Touchscreen
- 2.4 Connectors gas in / gas out

* Pen for touchscreen, USB memory stick, power supply unit and two measuring shunts (300 A & 500 A) are included in the scope of supply.



Technical data:

REGULA® EWR BASIC/PRO MIG/MAG

Weight:	approx. 1.3 kg
Measurements LxWxH:	118x148x58 mm
Electrical connection:	24 VDC, 450 mA - 750 mA
Outgoing idle flow:	0.2-2.0 bar: 5.0-23.0 l/min
Flow rate:	5.0-30.0 l/min 10.6-63.0 cfm

In-/Outgoing pressure:	Ingoing pressure ↔ Outgoing pressure
	2-6 bar ↔ to 0.6 bar
	3-6 bar ↔ to 1.2 bar
	4-6 bar ↔ to 2.0 bar
	(If pressure is below 1 bar the EWR shuts off)

Working range of measuring shunts:	Shunt ↔ Working range
	150 A ↔ 45-150 A
	300 A ↔ 90-300 A
	500 A ↔ 150-500 A

REGULA® EWR

Function principle

Gas savings
up to 60%

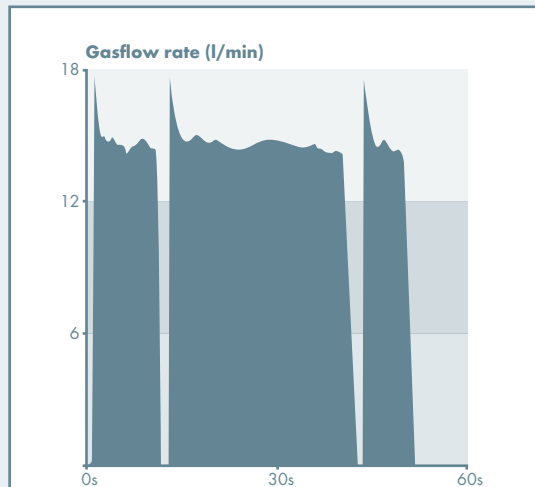
Four methods = four times the saving!

The REGULA® EWR electronic shielding gas regulator combines four innovative methods of gas regulation. By combining all four methods, your gas consumption during the welding process can be regulated and reduced by an average of 40% – ideally even up to 60%. In addition to gas saving, there are other positive effects, like the reduction of spatter formation and safer gas coverage at the start of the welding process.

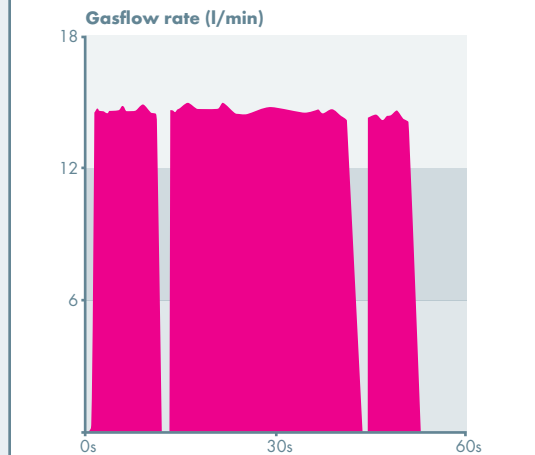
1st method:

Avoiding demand peaks on start-up

The REGULA® EWR constantly regulates the gas flow, so no demand peaks occur even at the start of the welding process.



Gas consumption after conventional welding method with demand peaks on start-up

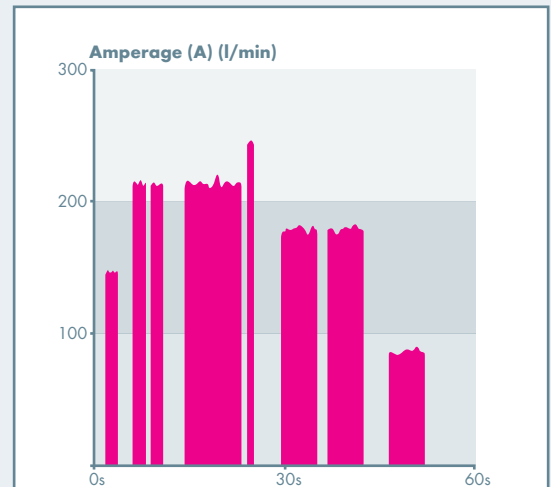


Gas consumption with pressure reduction equipment and no demand peaks on start-up

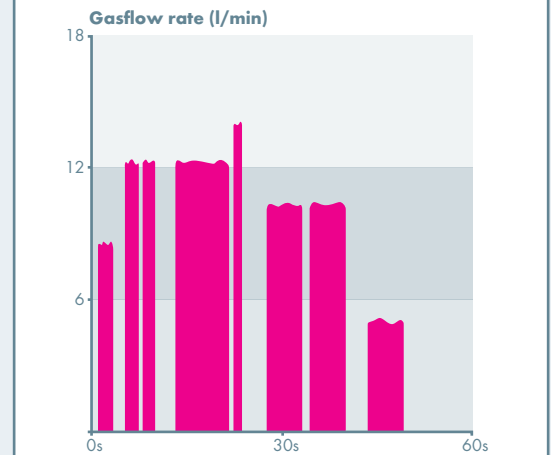
2nd method:

Adjustment of the shielding gas quantity to the power consumption

With the aid of a measuring shunt, the REGULA® EWR records the current welding current and regulates the gas supply accordingly.



Welding current used

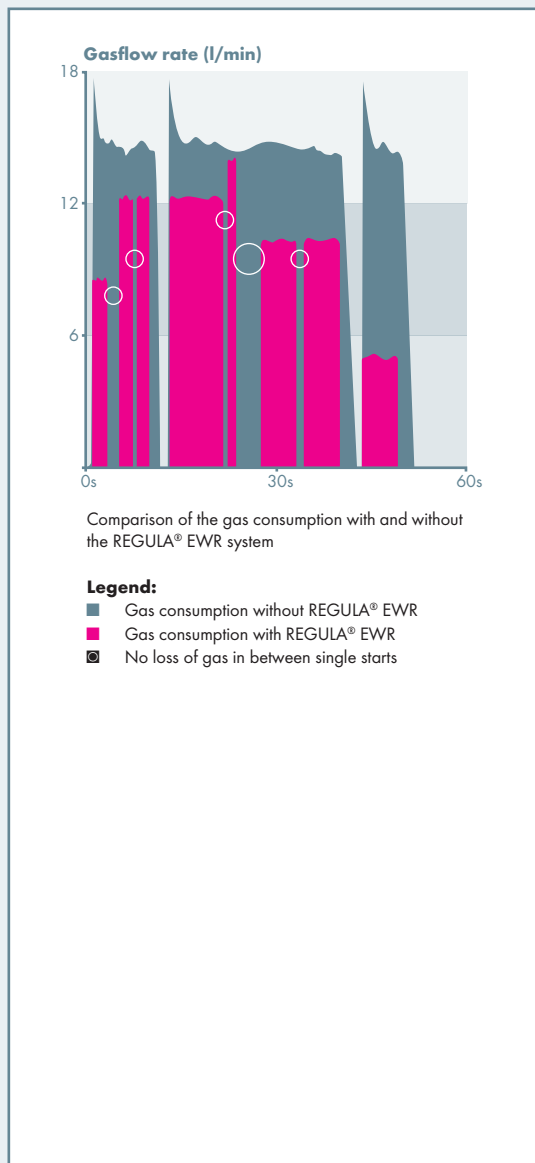


Gas consumption adjusted by the REGULA® EWR system to suit the welding current used

3rd method:

Extremely quick frequency valves

Due to frequency valves, which react extremely quick, there is no loss of gas between the individual starts.



4th method:

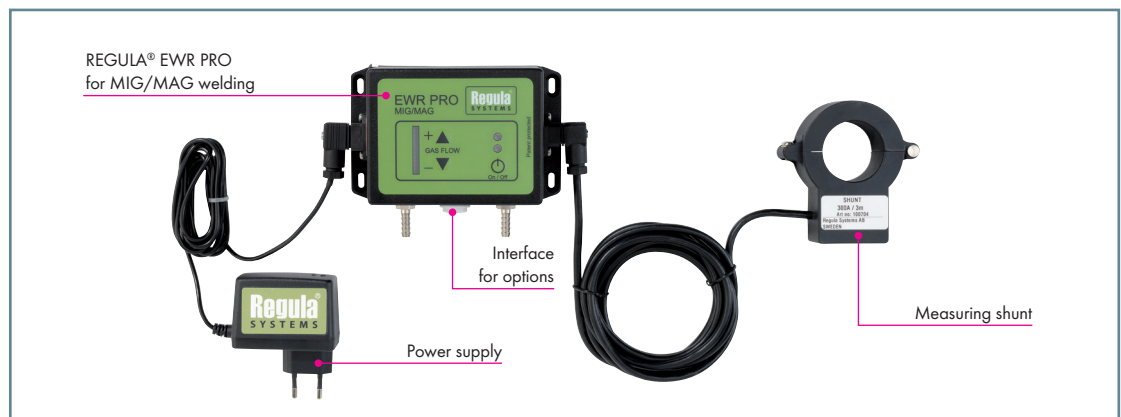
Pulsing of the shielding gas at 60 Hz

The 60 Hz pulsing provides better gas coverage with less shielding gas and a more stable arc.



REGULA® EWR Electronic Welding Regulator

Scope of supply
REGULA® EWR
BASIC and PRO



Complete package

Type	Part-No.
REGULA® EWR BASIC complete package incl. power supply, measuring shunt (300 A/3 m)	514.1002
REGULA® EWR PRO complete package incl. power supply, measuring shunt (300 A/3 m)	514.1003
REGULA® EWR BASIC complete package incl. power supply, measuring shunt (500 A/5 m)	514.1019
REGULA® EWR PRO complete package incl. power supply, measuring shunt (500 A/5 m)	514.1020
REGULA® EWR TIG complete package incl. power supply, measuring shunt (150 A/3 m)	514.1021

Accessories

Single components

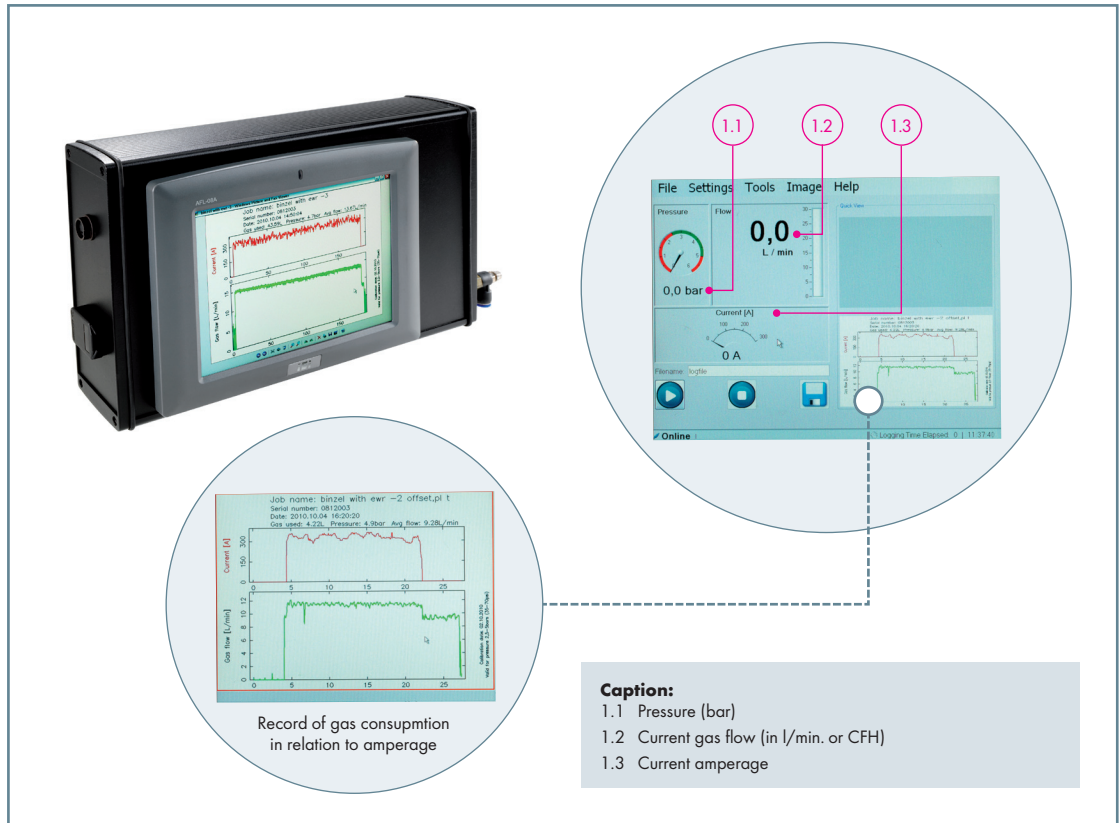
Type	for REGULA® version	Part-No.
Measuring shunt 150 A/1.5 m	BASIC, PRO	514.1005
Measuring shunt 300 A/3 m	BASIC, PRO	514.1006
Measuring shunt 500 A/5 m	BASIC, PRO	514.1007
Power supply with key lock	BASIC, PRO	514.1014
Gas flow control unit (EWR Gas Controller)	PRO	514.1004
EWR holder	BASIC, PRO	514.1008
EWR display	PRO	514.1013

REGULA® EWR Welding Monitor

REGULA® Welding Monitor

The REGULA® welding monitor serves to measure the gas flow and current strength. The industrial computer based on Windows® XP works as a stand-alone, i.e. completely independently of the REGULA® EWR. It is installed between the gas supply and the power source.

The measuring results transmitted by the measuring shunt are displayed in the form of diagrams and can be saved for the purposes of documentation. The data can be easily transferred via the integrated USB interface.



Scope of supply:

- 1x Welding Monitor incl. touch-stick
- 2 x measuring shunt (300 A/3 m and 500 A/5 m)
- 1x Power supply
- 1x USB memory stick

Complete package

Type	Part-No.
REGULA® Welding Monitor incl. touch-stick, measuring shunt 300 A/3 m and 500 A/5 m, power supply, USB-stick	514.1001

Accessories



Accessories

Type	Part-No.
Transport case For protection and safe transportation of the Welding Monitor	514.1009

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