

The WeldSaver™ 6 with eVac™ from Proteus Industries is designed for water control, offering advanced leak detection and prevention of coolant dumps during robotic automotive welding. This device is recognized for its rapid identification of flow velocity changes, distinguishing actual leaks from variations caused by pressure, temperature, and motion, ensuring a leak condition is identified within 0.3 seconds. It provides constant monitoring of coolant flow rate and temperature, features a browser-based interface, and supports EtherNet/IP™ and PROFINET® control interfaces.

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WeldSaver™ 6 with eVac™

The Proteus WeldSaver™ 6 with eVac™ Coolant Retraction Module is for water control in order to control flow, leak detection and to prevent catastrophic coolant dumps at the time of robotic automotive welding operations.

It has been over 25 years, the Proteus WeldSaver is known as the industry's leading water control device to control flow and provides the fastest leak detection in automotive welding. By integrating a new with eVac™ Coolant Retraction Module, Proteus adds intense protection against coolant dumps while doing welding operations by retracting water from the cooling gun circuit.

Intelligent Leak Detection

The proprietary detection algorithm of the WeldSaver rapidly identifies flow velocity changes, which differentiate true leaks from pressure-, temperature-, and motion-induced effects, identifying a leak condition within 0.3 seconds. In the event of a cap loss or other leak, the WeldSaver signals a state change to immediately in order to stop the welding process, simultaneously closes an attached shutoff valve, and retracts water from the cooling gun.

No matter monitoring coolant flows to weld guns or to the entire weld cell cooling circuit, the WeldSaver with eVac rapidly and reliably observe changes in flow continuity created by slow leaks, cap loss, or other catastrophic events and significantly reduces or prevents coolant dumps on expensive cap-changers and weld cell floors.



WeldSaver 6 with eVac Key Features

- Constant indication of coolant flow rate and temperature on browser-based interface - including teach pendants
- Proprietary leak-detection algorithm sends alarm to weld controller in less than 0.4 seconds

- When cap gets loss, flow shuts off in less than 1 second or other loss of flow continuity to reduce coolant dumps on floor or equipment by retracting water from the cooling gun circuit
- EtherNet/IP™ and PROFINET® control interface options
- User-selectable operating parameters and alarm settings
- Remote control of valve and system states to support weld guns and cap changers
- Flow ranges from 6-50 LPM / 1.5-13 GPM
- Liquid temperatures from 4.0-110 °C / 39-230 °F

VALVE

BYPASS

SETUP

WeldSaver[™]
Vortex Ethernet/IPFLOW
OK

10.0 LPM

VALVE
OPEN

OK TO WELD

Flow conditions are within the established limits
for welding.

- Select **VALVE** to turn coolant flow OFF
- Select **BYPASS** to disable leak detection
- Select **SETUP** to change operational settings

DETECTION
ENABLED

Current Setup Values

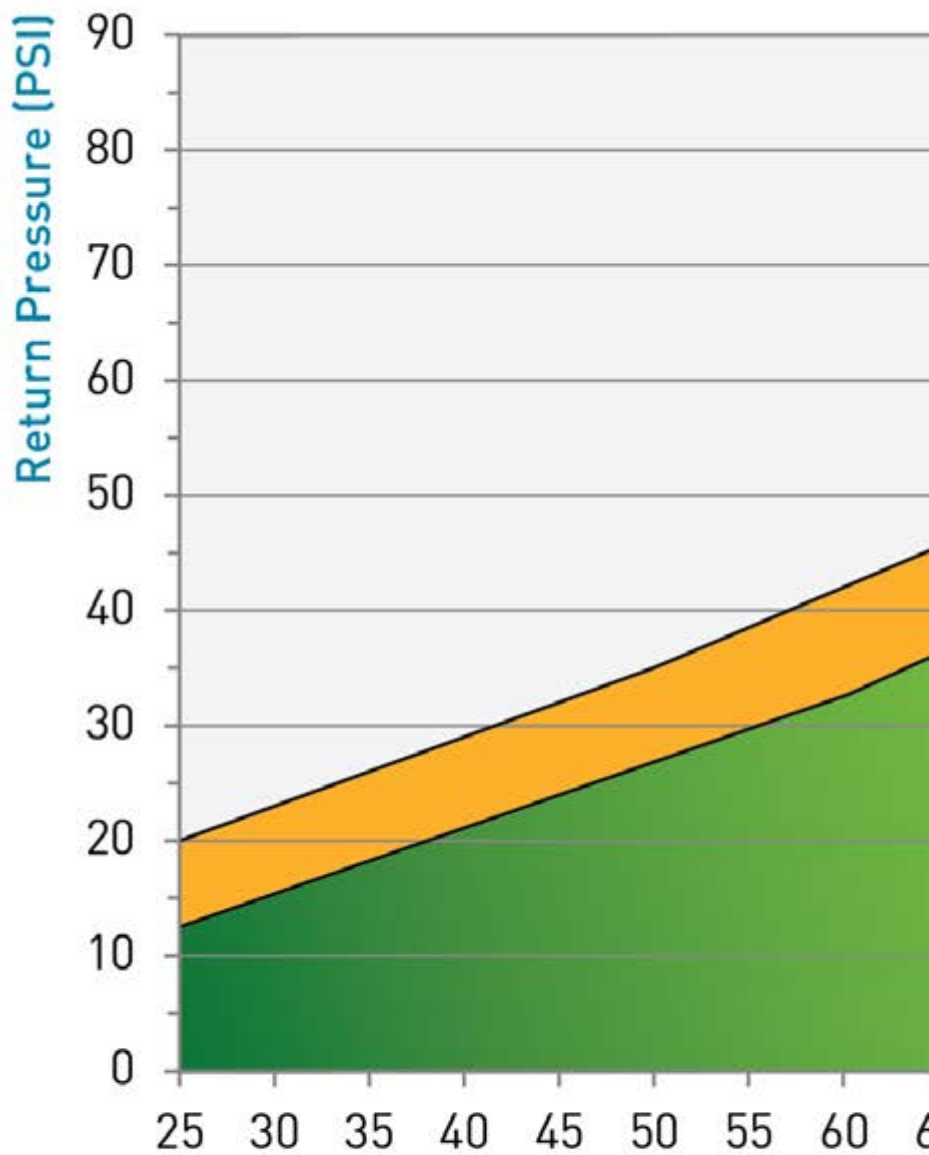
Flow Warning	0.0 LPM
Flow Fault	0.0 LPM
Leak Response	Normal



The WeldSaver graphical user interface provides information on device status in real time, with clear visual indicators and descriptions. The interface can be accessed over a network using most JavaScript™-enabled web browsers by entering the working IP address of the device.

eVac Module Operating Pressures

Operating Pressure



■ Optimal Suction Performance

■ Good Suction Performance

WeldSaver6 eVac

Control Interface Options	EtherNet/IP™ • PROFINET®
User Interface	Browser-based UI • Local display with keypad
Flow Range	6.0 - 50 LPM / 1.5 - 13 GPM
Temperature Range	4.0 - 110 °C / 39 - 230 °F
Connection Options	G 3/4" (BSPP) • 3/4" NPT
Coolant Supply Pressure	83 - 689 kPa / 12 - 100 psig
Coolant Return Pressure	52 - 689 kPa / 7.5 - 100 psig
Differential Pressure	14 - 620 kPa / 2.0 - 90 psig
Compressed Air Pressure	300 - 800 kPa / 43.5-116 psig
Low Flow Response	0.2 sec.
Reset / Override Response	1.0 sec.
Leak Detection Response	0.3 - 1.0 sec. depending on response time selection and back pressure
Leak Sensitivity	Able to detect a loss of flow continuity from 1-20 balanced parallel flow paths
Accuracy	± 3% of full scale
Repeatability	± 1% of full scale from 0.1 to 1.0 x full scale
Operating Environment	Indoor use only
Ambient Temperature	4.0 - 50 °C / 39 - 122 °F
Max. Relative Humidity	80%
Enclosure Protection	IP66 / NEMA 4X