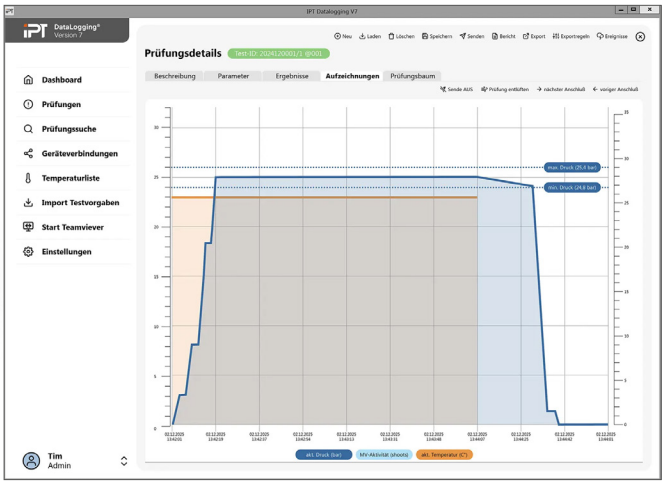
Competence creates Confidence.

Model Nr. 1790

AIRLESS LIGHT LINE

ISO 1167

Creep and burst tests



This testing device is used to apply and maintain the specified hydrostatic pressure for the time-dependent internal pressure test.

The time-dependent internal pressure test is a test method for determining the strength of thermoplastic pipes against constant internal water pressure at a constant temperature. The test specimens are subjected to a specified constant hydrostatic internal pressure for a specified period of time or until failure.

The stress on the test piece is defined by the pressure (internal pressure) and the temperature.The Airless Light Line with 5 stations is suitable for beginners and customers with low testing volumes.

The complete 1790 Airless Light Line set offers a simple, comprehensive solution with its five pressure stations and test container. Operation, result evaluation and clear visualisation are carried out via a laptop.

Professionally pressure tested

- A maximum of one airless module can be installed in the 1790 installation rack. A maximum of up to 5 test stations for time-dependent internal pressure tests can be installed.
- In addition to the module, the frame contains the pressurised water supply for generating the pre-pressure, the power supply and a status display.

Pressurised water supply

The pipe testing device is supplied with the necessary high-pressure water via the integrated pressurised water supply (3 l/min).

The pressurised water supply consists of:

- Water inlet with water filter and pre-pressure monitoring
- Pressure vessel (buffer tank): Prevents pressure peaks and temporarily increases the water supply capacity.
- Controller: For controlling the high-pressure pump and monitoring the system pressure.

Module and Controller

For each module, a controller (microprocessor control) individually controls and regulates the pressure of the individual stations. For pressure control, each station has two solenoid valves and a pressure transducer. The solenoid valve MV1 regulates the pressure build-up. The solenoid valve MV2 is used for pressure reduction and pressure relief at the end of the test.

Standard features

- Data input and evaluation via user interface (PC)
- 5 stations in one module
- Integrated, frequency-controlled high-pressure pump. (3 l/min)
- Stainless steel pressure tank
- Module made out of brass
- Maximum test pressure 100 bar
- SensLine connection: High flow rate and improved pressure control, more accurate pressure measurement by eliminating pipeline resistance
- Accuracy class of pressure transducer: 0.5% of the final value of the pressure transducer
- Selectable pressure transducer values: 10, 16, 25, 40, 60, 100 bar
- CE conformity

Options

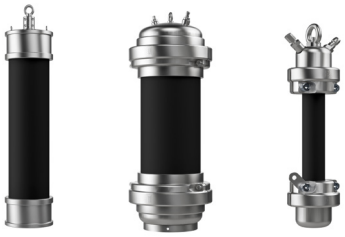
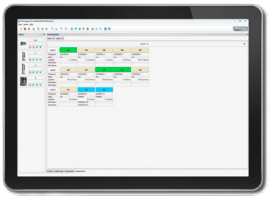
- Data input, evaluation and archiving of test data via IPTDatalogging software (PC)
- Connection to cooling unit

Key Data of the AIRLESS LIGHT LINE

		V1790-0001
Pressure range up to	bar	100
Pump capacity	l/min	3
Maximum number of modules in the rack		1
width	mm	580
depth	mm	595
hight	mm	985
voltage		230/400 V 50/60 Hz special voltage on request

Ausführung **AIRLESS LIGHT LINE – BEHÄLTER**		V1790-0001
watertemperature	°C	+20 bis +95
Temperaturkonstanz räumlich	°C	±1,0
Temperaturkonstanz zeitlich	°C	±1,0
Regelgenauigkeit	°C	±0,1
Übertemperaturabschaltung		✓
Überwachung des Wasserstands		✓
Automatische Nachfüllung		✓
Heizung integriert		✓
Umwälzung		✓
Überwachung der Umwälzung		✓
Kühlung durch Frischwasser		✓
Anschluss und Schnittstelle für Kühler/Wärmetauscher		✓
Material Innenbehälter		1.4571 / AISI 316 Ti / UNS S 31635
Breite (innen)	mm	1.000
Länge (innen)	mm	1.000
Wassertiefe	mm	1.000
Breite (außen)	mm	1.250
Länge (außen)	mm	1.344
Höhe geschlossen/offen (außen)	mm	1.350/2.500
Gewicht (leer)	kg	ca. 550
Spannungsangaben		230/400 V 50/60 Hz (special voltage on request)

Zubehör AIRLESS LIGHT LINE

Produkt	Beschreibung	Modell-Nr.
	Pipe Saw	1625
	End closures	1732 1810 1685
	Testing-software IPTDataLogging®	1780