

Model no. 1814

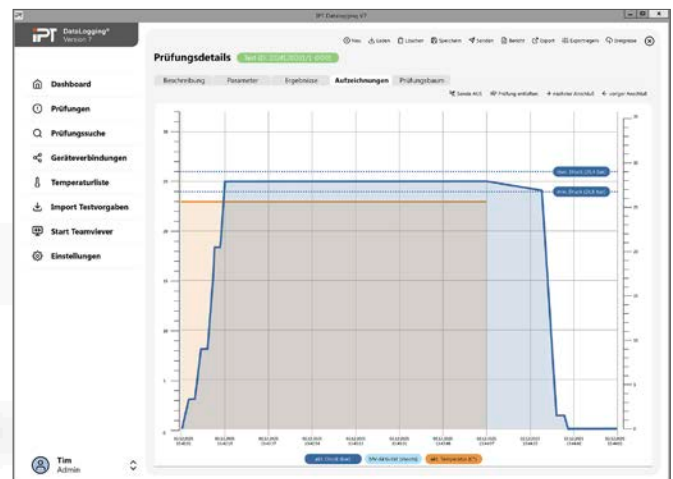
## AIRLESS ADVANCED

ISO 1167

ASTM D 1598

ASTM D 1599

Creep and  
burst tests



**The purpose of this tester is to apply and maintain the correct hydrostatic pressure for internal pressure creep tests. Bursting pressure tests can also be optionally performed.**

The internal pressure creep test is a test procedure for determining the strength of thermoplastic pipes when exposed to constant internal water pressure at a constant temperature. The samples are subjected to a defined and constant hydrostatic internal pressure for a specified period or until they fail.

The load on the specimen is defined by the stress (by means of internal pressure) and the temperature. The testing device (base unit) has a modular design and can be equipped with up to 45 test stations.

The test device is supplied with the required high-pressure water via the integrated pressurised water supply or a pressurised water supply from existing racks (base or expansion units).

**Professionally pressure tested**

- A maximum of nine airless modules can be installed in the 1814 installation frame. A maximum of 45 test stations for time-dependent pressure tests or 12 test stations for burst pressure tests can be installed.
- Up to four extension cabinets (without their own pressurised water supply) can be connected to the installation frame. The configuration varies depending on requirements, with a maximum of up to 60 test stations per extension rack for internal pressure tests or a maximum of 16 test stations for burst pressure tests.
- In addition to the modules, the rack contains the pressurised water supply for generating the pre-pressure, the power supply and a status display.

**Pressurised water supply**

The pipe tester is supplied with the required high-pressure water via the integrated pressurised water supply (6, 12 or 24 litres/min.) or a pressurised water supply from existing frames (base or expansion units).

The pressurised water supply consists of:

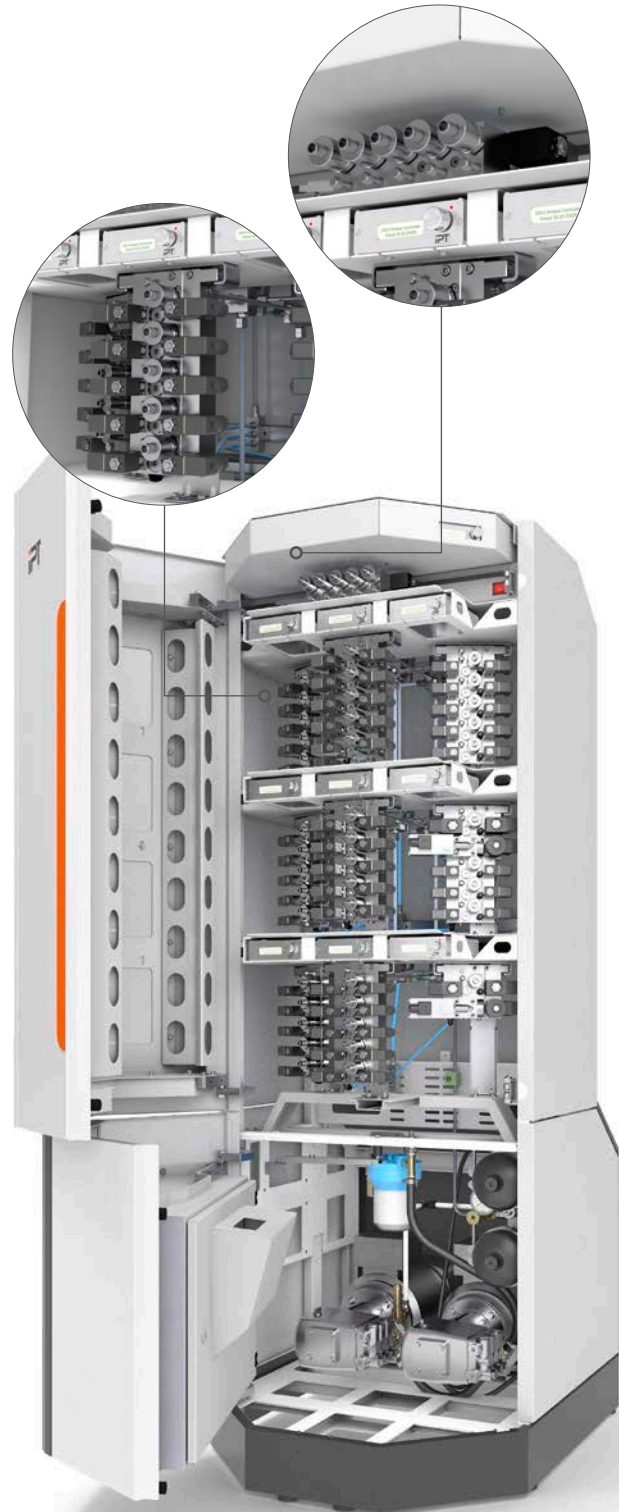
- Water inlet with water filter and pre-pressure monitoring
- Pressure vessel (buffer tank): Prevents pressure peaks and temporarily increases the water supply capacity.
- Controller: For controlling the high-pressure pump and monitoring the system pressure.

**Options**

Precision pressure measurement instrument 1817 (master gauge): An external precision pressure measurement instrument can be connected via a needle valve bar in order to check the test pressure before or during a test. The test pressures of the individual stations can be easily checked with the master gauge. They can then be readjusted if necessary if a pressure measurement accuracy of 0.3% of the final value of the pressure transducer does not appear to be sufficient.

**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)   | ● Flexible installation of creep and burst modules possible  |
| ● Integrated, frequency-controlled high-pressure pump. (6 or 12 litres/min.)  | ● Stainless steel pressure accumulator   |
| ● Modules in brass design   | ● Needle valves for monitoring the test pressure before and during the test (with master gauge) and for calibrating the test stations. |
| ● SensLine connection: High flow rate and thus improved pressure control, more accurate pressure measurement by eliminating pipeline resistance | ● Accuracy class of pressure transmitter: 0.25% of the final value of the pressure transmitter   |
| ● CE conformity   |  |

### Options

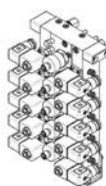
- |   |  |
|---|--|
| ● Data input, evaluation and archiving of test data via IPTData logging software (PC)     | ● Expansion rack max. number of modules in the cabinet: 60   |
| ● Pressure range up to 100 bar or 200 bar   | ● Booster or backup pump can be installed. (12 or 24 litres/min.)  |
| ● Splitting of the inlet pressure for optimum supply to the high and low pressure modules | ● Precision pressure gauge (master gauge) for monitoring the test pressure and for calibrating the test stations |
| ● Modules in stainless steel design (copper ion-free)                                     |  |

### Design AIRLESS ADVANCED

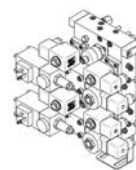
		V1815-0001	V1815-0002	V1815-0003	V1815-0004	V1815-0005	V1818-0002 (Centipressure)
Pressure range up to	bar	100	100	200	200		
Pump delivery rate	l/min	6	12	6	12		
For connection to an external pressurised water supply 1815		-	-	-	-	✓	✓
Max. number of modules in the rack		9	9	9	9	9	12
Max. number of stations in the rack		45	45	45	45	45	60
Width	mm	720	720	720	720	720	720
Depth	mm	985	985	985	1135	985	710
Total height		1.950	1.950	1.950	1.950	1.950	1.950
Total height Max. number of modules in the rack: 60	mm	-	-	-	-	-	2250
Voltage specifications		230/400 V, 50/60 Hz, special voltage on request					

**Modules**

## Creep internal pressure test



## Burst test



<b>AIRLESS ADVANCED</b>		<b>V1814-0001</b>	<b>V1814-0002</b>	<b>V1814-0003</b>	<b>V1814-0004</b>	<b>V1816-0001</b>	<b>V1816-0002</b>	<b>V1816-0003</b>
Pressure range up to	bar	100	200	100	100	100	200	200
Number of stations		5	5	5	1	1	1	1
Expansion station		-	-	-	-	✓	✓	-
Pressure control via microprocessor controller		✓	✓	✓	✓	✓	✓	✓
Controlled pressure increase (linear)		-	-	-	-	✓	✓	✓
Controlled pressure stages (linear)		-	-	-	-	✓	✓	✓
For increased litre output		-	-	✓	✓	-	-	✓
Pressure transducer	10 bar	✓	-	✓	✓	-	-	-
Pressure transducer	16 bar	✓	-	✓	✓	-	-	-
Pressure transducer	25 bar	✓	-	✓	✓	✓	-	-
Pressure transducer	40 bar	✓	-	✓	✓	✓	-	-
Pressure transducer	60 bar	✓	✓	✓	✓	✓	✓	✓
Pressure transducer	100 bar	✓	✓	✓	✓	✓	✓	✓
Pressure transducer	160 bar	-	✓	-	-	-	✓	✓
Pressure transducer	250 bar	-	✓	-	-	-	✓	✓

### Accessories AIRLESS ADVANCED

Product	Description	Model
	Test tank	1751-1760 1830-1840
	Test oven	1662 1674 1776
	Burst chamber	1639 1618
	Pipe saw	1625
	End closures	1732 1784 1810 1685
	Test data management software IPTDataLogging®	1780