

Model no. 1720

AIRLESS PROFESSIONAL LINE

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 tester (base unit) has a modular design and can be equipped with one to three racks.

The tester is supplied with the necessary high pressure water via the integrated pressurised water supply or a pressurised water supply from existing frames (base or extension units).

Professionally pressure-tested

- A maximum of nine airless modules can be installed in the 1720 installation frame. A maximum of 45 test stations for internal pressure creep tests or 18 test stations for bursting pressure tests can be installed.
- Up to four extension frames (without their own pressurised water supply) can be connected to the installation frame. The configuration varies depending on the requirements, i.e. a maximum of 60 test stations per extension frame for internal pressure creep tests or a maximum of 24 test stations per extension frame for bursting pressure tests.
- In addition to the modules, the frame 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 necessary 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 extension units).

The pressurised water supply consists of:

- Water inlet with water filter and pre-pressure monitoring
- Pressure vessel (buffer accumulator): Prevents pressure peaks and increases the capacity of the water supply in the short term.
- Controller: To control the high pressure pump and monitor the system pressure.

Options

Precision pressure measurement instrument 1723 (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. There are two solenoid valves and a pressure transducer in each station for pressure regulation. The solenoid valve MV1 regulates the pressure build-up. The solenoid valve MV2 is used to regulate the pressure down and reduce it 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 accumulator
● Modules in brass design	● Needle valves for monitoring the test pressure before and during the test (with master gauge), as well as for calibrating the test stations.
● SensLine connection: High pump capacity and thus improved pressure regulation, more accurate pressure measurement by eliminating pipe resistance	● Accuracy class for pressure transducer: 0.25% of full scale of pressure transducer
● CE conformity	

Options

● Data input, evaluation and documenting of testing data via IPTDataLogging software (PC)	● Pressure range up to 100 bar or 200 bar
● Installation of a booster or backup pump possible. (12 or 24 litres/min.)	● Splitting of the pre-pressure for optimum supply of the high and low pressure modules
● Precision pressure indicator (master gauge) for monitoring the test pressure and calibrating the test stations	● Modules in stainless steel design (copper ion-free)

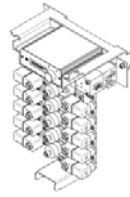
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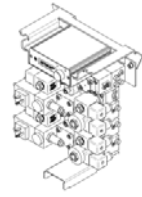
	V1721-0061	V1721-0062	V1721-0063	V1721-0064	V1720-0004	V1720-0003
Pressure range up to bar	100	100	200	200		
Pump capacity l/min	6	12	6	12		
For connection to an external pressurised water supply unit (1721)	-	-	-	-	✓	✓
Max. number of racks	3	3	3	3	3	4
Number of modules per rack	3	3	3	3	3	3
Max. number of modules in frame	9	9	9	9	9	12
Max. number of stations in frame	45	45	45	45	45	60
Width mm	720	720	720	720	720	720
Depth mm	770	1130	1130	1130	770	770
Height with 1 rack mm	1,250	1,250	1,250	1,250	1,250	900
Height with 2 racks mm	1,600	1,600	1,600	1,600	1,600	1,250
Height with 3 racks mm	1,950	1,950	1,950	1,950	1,950	1,600
Height with 4 racks mm	-	-	-	-	-	1,950
Voltage data	230/400 V, 50/60 Hz, special voltages on request					

Modules

Internal pressure creep test



Burst test


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	V1720-0031	V1720-0032	V1720-0039	V1720-0040	V1722-0041	V1722-0042	V1722-0043
Pressure range up to bar	100	200	100	100	100	200	200
Number of stations	5	5	5	1	1	1	1
Extension station	-	-	-	-	✓	✓	-
Pressure regulation via microprocessor controller	✓	✓	✓	✓	✓	✓	✓
Regulated pressure increase (linear)	-	-	-	-	✓	✓	✓
Regulated pressure stages (linear)	-	-	-	-	✓	✓	✓
For increased pump capacity	-	-	✓	✓	-	-	✓
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 pressure transducer	-	✓	-	-	-	✓	✓

Accessories AIRLESS PROFESSIONAL LINE

Product	Description	Model no.
	Test bath	1751-1760 1830
	Test furnace	1662 1674 1776
	Test and burst chambers	1639 1618
	Pipe saw	1625
	End closures	1732 1810 1685
	Testing data management software IptDataLogging®	1780
