

## ProfessionalLine › Model no. 1720

Integrated,  
frequency-  
controlled  
high-pressure  
pump

Data communica-  
tion via LAN

Network-  
compatible

Optional operation  
via tablet PC

### Standards

ISO 1167

ASTM D 1598

ASTM D 1599

## Description

The internal pressure creep test is a test procedure for determining the strength of thermoplastic pipes. The samples are subjected to a constant hydrostatic internal pressure at a constant ambient temperature either for a specified period or until they fail. The test duration is subject to the tension generated by the internal pressure and the temperature.

The 1720 ProfessionalLine model is the most innovative development in state-of-the-art internal pressure creep testers. Its compact design, flexibility and precision remain unparalleled.



### Simple and safe operation

- Convenient operation, evaluation of results and clear visualisation via complex PC operating software
- Operator and service-friendly access to all important components from the front of the unit
- For servicing purposes, each station can be individually isolated from the supply pressure via integrated needle valves

### Reliable test results

- Microprocessor-controlled, self-learning pressure regulation with automatic failure detection
- Optional precision pressure transducer incl. pressure gauge for checking the actual pressure before or during the test
- Simple calibration of the test pressure during the test



### Lasting efficiency

- Modular design for maximum flexibility with respect to configuration and retrofitting
- High-quality unit components guarantee high reliability, a long service life and low maintenance costs
- Easy to extend with minimal investment

### State-of-the-art technology

- Frequency-controlled pumps for infinite adjustment of the pump capacity to current demand
- Optional, selective system pressure controller for each module
- Optional version with all components that come into contact with the medium in stainless steel
- Interface to IptDataLogging®
- Connection to Pipeson Data Manager Software

## Basic cabinets

|  |       | <br>V1721-0031    V1721-0032    V1721-0033    V1721-0034 |      |      |      | <br>V1720-0004    V1720-0003 |      |
|--|-------|--|------|------|------|---|------|
| Pressure range up to   | bar   | 100  | 200  | 400  | 600  | -   | -    |
| Integrated, frequency-controlled high-pressure pump                |       | ●  | ●    | ●    | ●    | -   | -    |
| Pump capacity  | l/min | 6  | 6    | 4    | 2    | -   | -    |
| Increased capacity via second pump (with booster)                  | l/min | 12   | 12   | 8    | 4    | -   | -    |
| Second system pressure   |       | -  | ○    | ○    | ○    | -   | -    |
| Stainless steel pressure reservoir                                 |       | ●  | ●    | ●    | ●    | -   | -    |
| 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 cabinet                                  |       | 9  | 9    | 9    | 9    | 9   | 12   |
| Max. number of stations in cabinet                                 |       | 45   | 45   | 45   | 45   | 45  | 60   |
| Precision pressure gauge   |       | ○  | ○    | ○    | ○    | ○   | ○    |
| External control unit (PC)   |       | ○  | ○    | ○    | ○    | ○   | ○    |
| Operation via IptDataLogging®                                      |       | ○  | ○    | ○    | ○    | ○   | ○    |
| Compatible with IptDataLogging®                                    |       | From version 5.x   |      |      |      | From version 5.x  |      |
| Data interface to internal programs                                |       | Fast Ethernet (10/100 Mbit)  |      |      |      | Fast Ethernet (10/100 Mbit)   |      |
| WLAN control unit (tablet)   |       | ○  | ○    | ○    | ○    | ○   | ○    |
| CE conformity  |       | ●  | ●    | ●    | ●    | ●   | ●    |
| Width  | mm    | 720  | 720  | 720  | 720  | 720   | 720  |
| Depth  | mm    | 770  | 770  | 1310 | 1310 | 770   | 770  |
| Height with 1 rack   | mm    | 1250   | 1250 | 1250 | 1250 | 1250  | 900  |
| Height with 2 racks  | mm    | 1600   | 1600 | 1600 | 1600 | 1600  | 1250 |
| Height with 3 racks  | mm    | 1950   | 1950 | 1950 | 1950 | 1950  | 1600 |
| Height with 4 racks  | mm    | -  | -    | -    | -    | -   | 1950 |
| Voltage data   |       | 230/400 V, 50/60 Hz<br>(other voltages on request)   |      |      |      | 100-240 V, 50/60 Hz<br>(other voltages on request)  |      |

● included    ○ available/optional    □ eligible    - not available

## » Modules

### Internal pressure creep tests



### Burst tests



|   | V1720-0011                                  | V1720-0012 | V1720-0013 | V1720-0014 | V1720-0019 | V1722-0001 | V1722-0002 | V1722-0004 |
|---|---|------------|------------|------------|------------|------------|------------|------------|
| Pressure range up to                              | 100   | 200        | 400        | 600        | 100        | 100        | 200        | 600        |
| Number of stations                                | 5   | 5          | 5          | 5          | 5          | 1          | 1          | 1          |
| Extension station                                 | -   | -          | -          | -          | -          | ○          | ○          | ○          |
| Pressure regulation via microprocessor controller | ●   | ●          | ●          | ●          | ●          | ●          | ●          | ●          |
| Regulated pressure increase (linear)              | -   | -          | -          | -          | -          | ●          | ●          | ●          |
| Regulated pressure stages (linear)                | -   | -          | -          | -          | -          | ●          | ●          | ●          |
| SensLine connection                               | ●   | ●          | ●          | ●          | ●          | ●          | ●          | ●          |
| For increased pump capacity                       | -   | -          | -          | -          | ●          | -          | -          | -          |
| Selective system pressure controller              | ○   | ○          | ○          | ○          | ○          | -          | -          | -          |
| Stainless steel design                            | ○   | ○          | ●          | ●          | ○          | ○          | ○          | ●          |
| 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                       | -   | □          | □          | □          | □          | -          | □          | □          |
| 400-bar pressure transducer                       | -   | -          | □          | □          | □          | -          | -          | □          |
| 600-bar pressure transducer                       | -   | -          | -          | □          | -          | -          | -          | □          |
| Accuracy class for pressure transducer            | 0.25 % of full scale of pressure transducer |            |            |            |            |            |            |            |

● included    ○ available/optional    □ eligible    - not available






## » Precision pressure gauges



|  | V1723-0001                                  | V1723-0002               | V1723-0003               |
|--|---|--------------------------|--------------------------|
| 16-bar pressure transducer             | <input type="checkbox"/>                    | -                        | -                        |
| 40-bar pressure transducer             | <input type="checkbox"/>                    | -                        | -                        |
| 60-bar pressure transducer             | <input type="checkbox"/>                    | <input type="checkbox"/> | -                        |
| 100-bar pressure transducer            | <input type="checkbox"/>                    | <input type="checkbox"/> | <input type="checkbox"/> |
| 250-bar pressure transducer            | -   | -                        | <input type="checkbox"/> |
| 600-bar pressure transducer            | -   | -                        | <input type="checkbox"/> |
| Accuracy class for pressure transducer | 0.10 % of full scale of pressure transducer |                          |                          |

● included    ○ available/optional    □ eligible    - not available

## »»» Accessories

| Product   | Description  | Model no.   |
|---|--|---|
|    | Test bath<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                                     | 1751-1757<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                  |
|    | Test oven<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                                     | 1662<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                       |
|   | Endclosures<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                                   | 1732, 1733<br>1684<br>1685<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|  | Test and burst chambers<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                       | 1639<br>1618<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>               |
|  | lptDataLogging® test data management software<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | 1613<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>                       |