

Competence creates Confidence.



● Model no. 1769

## TEMPERATURE CYCLING TEST UNIT

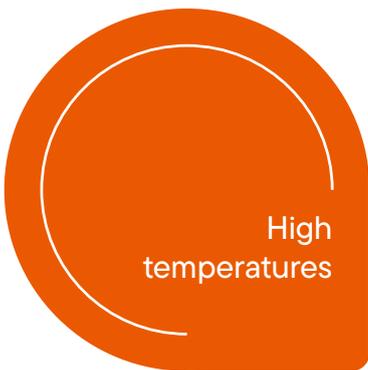
The temperature change tester allows you to determine the resistance of connections for pipe systems with rigid or flexible thermoplastic pipes to temperature induced stress. This applies to pipe systems intended for use in pressurised water applications with hot and cold water. Using a pressure vessel, temperatures of up to 114 °C can be achieved, allowing you to perform your tests under realistic operating conditions and ensuring the safety and reliability of your connections.

ISO 10508

DVWG W 542

DVWG W 543

DVWG W 534



### Standard features

- |   |   |
|---|---|
| ● Convenient operation and clear visualisation via touch control  | ● Automatic tests with programmable cycle numbers and times, temperatures, etc.               |
| ● Max. 6 test lines   | ● 4-part, transparent sliding doors made of polycarbonate (on both sides)                     |
| ● Safety switch for door locking during the hot cycle   | ● Specimen rack in diagonal arrangement for improved accessibility                            |
| ● Option to adjust the volume flow in individual test lines (optionally also regulated)                       | ● Microprocessor-controlled, self-learning pressure regulation with automatic break detection |
| ● Constant test temperature thanks to large storage capacity. High pressure accuracy and precise flow control | ● Plate heat exchanger for connection to an external cooling water supply                     |
| ● Tensioner with load cell and instruments to apply the initial tensile stress                                | ● Energy-efficient circulation and pressure pumps   |
| ● Cold and hot water storage tanks, each with their own circulation and pressure pumps                        | ● Simultaneous testing of different piping systems  |
| ● Warning light   | ● CE conformity   |

### Options

- |  |   |
|--|---|
| ● External cooling unit  | ● Data input, evaluation and documenting of testing data via IPTDataLogging software (PC) |
| ● Flow measurement and recording                                 | ● Connection for external steam extraction  |
| ● Load cell 500 N, 2,000 N, 5,000 N, 10,000 N for tensile device | ● Multifunction measuring device for force measuring cell                                 |
| ● Diagonal specimen rack   | ● Fastening clamps for specimen rack  |

Version TEMPERATURE CYCLING TEST UNIT

V1769-0050

SUPPLY UNIT

Pressure range	bar	max. 16
Temperature range for cooling cycle	°C	15 - 30
Temperature range hot cycle	°C	70 - 110
Temperature accuracy in specimen	°C	at 110 ± 2 at 20 ± 5, at 95 ± 2
Regulating accuracy of temperature controller	°C	± 0,2
Pressure easurement accuracy	%	0,25 of the final value of the pressure sensor
Pressure accuracy in specimen	bar	+0,2/-0,1 at 10 bar +0,3/-0,15 at 15 bar
Cycle time	min	3 - 9.999
Maximum number of cycles per test		99.999
Hot water tank capacity	ll	500
Cold water tank capacity	ll	500
Storage type		Hot pressure accumulator
Delivery quantity of the pumps at 10 bar	m³/h	17
Delivery quantity of the pump at 16 bar	m³/h	12
Max. total cross-section at 16 bar / 0.5 m/s	mm²	6400
Max. total crosssection at 10 bar / 0.5 m/s	mm²	9500
Permissible ambient temperature	°C	+5 to +25
Max. relative humidity	%	70 Non-condensing
Noise emission	dB(A)	< 70
Power supply		230/400 V, 50 Hz Special voltage

V1769-0051

HIGH-PRESSURE COMPRESSOR

Drive power	kW	1,5
Max. pressure	bar	15
Flow rate on base frame with sound enclosure	l/min	180

**Version TEMPERATURE CYCLING TEST UNIT**

**TEST LINES**

	M1769-0060	M1769-0061
Size of specimen connection flow / return	G1¼"	G1½"
Flow control	√	√
Pressure regulation	-	-

**FLOWMETER**

	V1770-0092
Measurement tolerance	± (0,50 l/min ± 0,2 % of the measurement)
Inner diameter specimen	10 - 110 mm

**Installation variants TEMPERATURE CYCLING TEST UNIT**



Installation variant A  
(corner installation)



Installation variant B  
(straight installation)