

Competence creates Confidence.



- Model no. 1770

TEMPERATURE CYCLING TEST UNIT

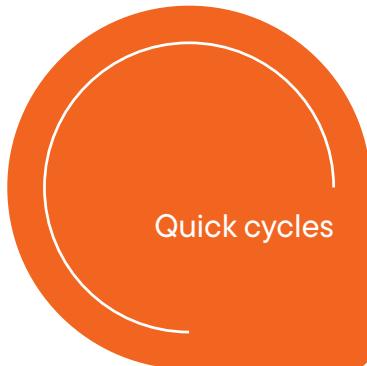
The temperature change tester allows you to determine the resistance of connections for pipe systems with rigid or flexible thermoplastic pipes to temperature changing stress. This applies to pipe systems intended for use in pressurised water applications with hot and cold water.

ISO 19893

DVGW W 534

DVGW W 542

DVGW W 543



Standard features

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

Options

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

Version TEMPERATURE CYCLING TEST UNIT
SUPPLY UNIT (1)
V1770-0001
V1770-0004

Pressure range	bar	4 - 16	4 - 10
Temperature range cooling cycle	°C	20 - 30	
Temperature range hot cycle	°C	50 - 95	
Temperature accuracy in specimen	°C	at 95 ± 1.5 at 20 ± 4	
Regulating accuracy of temperature controller	°C	± 0.2	
Measurement accuracy pressure	%	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	000
Cycle time	min	3 - 9,999	
Maximum number of cycles per test		99,999	
Hot water tank capacity	l	700	
Cold water tank capacity	l	700	
Storage type		unpressurised	
Delivery quantity of the pumps at 10 bar	m³/h	17	6
Delivery quantity of the pump at 16 bar	m³/h	12	-
Max. total cross-section at 16 bar / 0.5 m/s	mm²	6,400	-
Max. total cross-section at 10 bar / 0.5 m/s	mm²	9,500	3,300
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	
CE conformity		✓	

INTERMEDIATE FRAME (2)
V1770-0101
V1770-0100

Max. number of test lines		6	6
Delivery quantity of the pump at 16 bar	m³/h	A	8

Version TEMPERATURE CYCLING TEST UNIT

	V1770-0080	V1770-0081	V1770-0082	V1770-0085	V1770-0086	V1770-0087
TEST LINES						
Size of specimen connection flow / return	G1"	G1¼"	G1½"	G1"	G1¼"	G1½"
Flow control	√	√	√	√	√	√
Pressure regulation	-	-	-	√	√	√
FLOWMETER						
	V1770-0090	V1770-0091	V1770-0092			
Measurement tolerance	± (1.0 l/min + 4 % of the measurement)	± (2.0 l/min + 4 % of the measurement)	± (0.50 l/min ± 0.2 % of the measurement)			
Inner diameter specimen	10 – 55 mm	22 – 74 mm	10 – 110 mm			

Installation variants TEMPERATURE CYCLING TEST UNIT


Installation variant A
(corner installation)



Installation variant B
(straight installation)