

PRECISE TEMPERATURE

FlexControl

SONI

FlowWatch





REFERENCES

For more information use the QR-Code RHYTEMPER[®] Temperature control units – injection molding

Innovative technology that pays off in a very short time – to the delight of both technical and commercial company executives.

More than 1 300 satisfied customers worldwide trust our products and benefit from our technology every day. The great savings potential of our technology allows **amortisation**

time usually of less than 1 year.

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Do you have any questions? Contact us: +49 35952 41100



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INJECTION MOLDING

FlowWatch // FlowControl // FlexControl HotPulse // Temperature contol units



PRECISE TEMPERATURE MANAGEMENT



TEMPERING FOR INJECTION MOLDING

MADE IN GERMANY

TEMPERATURE CONTROL UNITS Tool emptying and pre-heating

Temperature control units 6 - 72 KW

Serial and special temperature control units with the circulating media water and oil in the temperature range from 20–160 °C.

TECHNICAL FEATURES

- high conveyor volume up to 35 m³/h
- high pump pressure up to 12 bar
- large connection widths up to 2 inch
- stainless steel tubing
- option: pneumatic water evacuation
- pump according to latest energy standards



Individual tool preheating station





Tool emptying via compressed air

Flow rate and temperature monitoring

The RHYTEMPER[®] FlowWatch is a water distributor made of corrosion-free material for flow rate and temperature monitoring of several individual circuits.

TECHNICAL FEATURES

- compact components in brass
- space-saving machine integration
- installation close to the tool
- individual circuit labelling
- flow rate calibration of each tool circuit
- option: flow rate control of the circuits by hand valve

Specifications

FlowWatch BASIC 2.0

low-cost system for self-assembly

- rugged build, contained in metal housing
- visualization Basic or Midi available
- 4-, 6-, 8-, 10- or 12-way components aviallable
- flow rate measurement without mechanically rotating parts (vortex)
- temperature and flow-rate monitoring of every
- cooling circuit by limit determination
- maximum media temperature up to 125 °C
- measuring range between 1.8 and 32 l/min or 1.0 and 15 l/min
- tool data record management
- option: forerun pressure and forerun temperature recording
- option: hand regulation valve per circuit



FlowWatch STANDARD

Expansion of the BASIC Version

- modular build
- visualization Basic, Midi or Profi available
- measuring principle turbine , vortex or ultrasonic
- maximum media temperature up to 160 °C (turbine)
- measured range depending on measuring principle between 0.3 and 75 l/min
- expandable to the multi-circuit temperature adjustment systems FlowControl, FlexControlor HotPulse

FlowWatch PROFESSIONAL

Expansion of the STANDARD Version

- incl. SPS control unit
- incl. handvalve per circulation



Visualization

Basic

- incl. 4.3 inch touchscreen
- suitable for FlowWatch

Midi

- incl. 5.7 inch touchscreen
- suitable for FlowWatch

Profi

- incl. 10.4 inch touchscreen
- suitable for FlowWatch, FlowControl, FlexControl and HotPulse

Multi-circuit temperature adjustment

The self-optimizing systems of the RHYTEMPER® multi-circuit temperature adjustment regulate the heat content of each individual tempering zone of the injection-moulding tool. The aim is to distribute continuously the same amount of heat per cycle. This guarantees a consistently quality of the injection-moulding products as well as the shortest cycle times.

TECHNICAL FEATURES

- compact components in brass
- incl. 10.4 inch TFT visualization Profi
- · space-saving machine integration
- installation close to the tool
- · individual circuit labelling
- heat level and flow rate monitoring of an unlimited number of temperature circuits
- automatic adjustment of the cooling impulses to the current injection moulding process (selfoptimizing control)
- interruption of heat withdrawal during injection and the tool movement, reducing of weld line formation
- largest possible flow rate through 1 ½ inch water collection
- combination with a temperature adjustment devices, cooling network or other sytems possible flow-rate calibration of each tool circuit
- balancing contact situation as well as compressive strength within all stages of expansion



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FlexControl // magnetic valve







SPECIFICATIONS | TECHNICAL FEATURES

| FlowControl – continious flow rate control | | | | |
|--|--------------------|----------------------------------|--------------|--|
| circulation control | proportional valve | | | |
| measuring principle | turbine | vortex | ultrasonic | |
| measuring range flow rate | 0.3-40 l/min | 1.8 – 32 l/min 1.0 – 15 l/min | 0.3–75 l/min | |
| max. medium temperature | 85/140°C | 125°C | 100°C | |
| measuring medium | water | | | |
| connection main media low | 1 ½ inch IG | | | |
| connection consumer group | ½ inch IG | | | |
| rated pressure | PN 10 | | | |

FlexControl – impulse temperature adjustment

| circulation control | magnetic valve | | |
|---------------------------|----------------|--------------|----------------|
| measuring principle | turbine | vortex | ultrasonic |
| measuring range flow rate | 0.3–40 l/min | 1.8–32 l/min | 0.3 – 75 l/min |
| | | 1.0–15 l/min | |
| max. medium temperature | 85°C/130°C | 125°C | 100°C |
| measuring medium | water | | |
| connection consumer group | ½ inch IG | | |
| rated pressure | PN 10 | | |

HotPulse - impulse temperature adjustment

| circulation control | pneumatic valve |
|---------------------------|-----------------|
| measuring principle | turbine |
| measuring range flow rate | 0.3–40 l/min |
| max. medium temperature | 160°C |
| measuring medium | water |
| connection consumer group | ½ inch IG |
| rated pressure | PN 16 |

HotPulse // peumatic valve

