

multiFlow multiple distributor systems for plastic processing

Flexible temperature control solutions for demanding applications



Customised temperature control solutions for demanding applications

REGLOPLAS multiFlow solutions enable you to achieve faster cycle times, more reliable process control and more flexible temperature control with your tools, with up to 48 channels that are individually controlled and monitored. In addition, it reduces the number of temperature control units and consequently the space required.

multiFlow features

- Individual parameter settings for up to 48 channels
- Flow rate or Delta T control
- Channels monitored individually (flow rate, temperature)
 - Automatic demand-driven control of pump output
 - Oil up to 350 °C and water up to 230 °C
 - Control via temperature control unit or stand-alone

Sustainable use with REGLOPLAS

Cost saving

You save thanks to lower investment and quality costs, as well as lower power consumption.



Space saving You need less space because the number of temperature control units is reduced.



Monitorina

The system monitors individual channels, checking their function, as well as blockages or contamination.



Flexibility







Individual control

It is possible to control the flow rate or Delta T individually for each temperature control channel.

Measurement and documentation

Process parameters such as flow rate

displayed for each temperature control

and temperature are measured and

Quality assurance

channel.

With process monitoring and alarm messages in the event of deviations, you ensure your product quality over the long term.

Lower unit costs

With optimised process parameters you increase the throughput and with process monitoring you avoid rejects.

Multiple distributor principle



Versions and features multiFlow

multiFlow modular

- Up to 160 °C with water
- Up to 48-fold distributor (4-fold modules)
- Automatic control with proportional valve
- Installation close to the tool
- Individual flow control per channel
- Delta T control per channel

Control

- via temperature control unit
- Stand-alone via REGLOPLAS RT200

multiFlow modular 4-fold automatic



multiFlow compact

- up to 230 °C with water
- up to 350°C with oil
- 4- or 8-fold distributor
- Automatic control with proportional valve
- Manually with ball valve or hand valve - Installation on the temperature control unit
- or close to the tool
- Individual flow control per channel 12.1
- Delta T control per channel

Control

- via temperature control unit
- Stand-alone via REGLOPLAS RT200

multiFlow compact 4-fold automatic



Advantages with multiFlow

- Monitoring of each channel individually
- Operation of the temperature control units and multiple distributors directly from the injection moulding machine
- short hose connections to the tool
- Less space required and reduced installation expenditure
- Detection and alarm in the event of obstruction or deviation
- Lower quality and unit costs
 Pressure control with frequency converter
 Delta T (°C) control

Application examples

Application example 1 1.4 T Tool Channels 2 x 4 Moulded part weight 0.5 kg Cvcle time 15 s 2 x P160M Temperature control unit multiple distributor 2 x multiFlow modular, 4-fold automatic



Application example 2

Tool	0.4 T
Channels	2 x 8
Moulded part weight	0.5 kg
Cycle time	12 s
Temperature control unit	1 x 90X
multiple distributor	2 x mul

	ĸ	JUXL				
2	Х	multiFlow	modular,	8-fold	automatic	

Advantages with multiFlow

- 1 instead of 2 temperature control units
- Monitoring of each channel individually
- Half the number of hoses, short hose connections to the tool
- Less space required
- Reduced installation expenditure
- Detection and alarm in the event of obstruction or deviation

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Product details

	Me	dium	Ma	ax. Te	mpera	ature '	°C		Num	iber o	f cha	nnels		Version						Assembly		Control				
	Water	Ō	120	160	180	230	350	4	œ	12	16		up to 48	Flow rate (I/m)	Delta T (°C)	Ball valve *3	Hand valve *4	IFM (0.3 - 25 I/min)	F181 (3 - 30 I/min)	F351 (8.5 - 85 I/min)	VFS (1-18 I/min)	VFS (2-40 I/min)	On TCU *5	Tool/ Machine	TCU *6	Stand-alone RT200 *7
multiFlow modular Sp	oritzgu	JSS	1																							
Automatic +2	-		-	•				•	-	*1	*1	*1	■ *1	•	•						•	•		•		-
Manual	•		-					•	-	*1	*1	*1	■ *1			•	•				•	•		•		■ *1
multiFlow compact		1																								
Automatic *2	•			•				•	•					•	•			•	•		•	•	•	•	•	-
Manual	•			•				•	-							•		•	•		•	•	•	•	•	-
Manual	•							•	•							•		•	•				•	•	•	
Manual	•					•		•	•							•			•				•	•	•	•
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Notes

1 Combination of multiple distributors in 4-fold and 8-fold size

2 Temperature control unit (TCU) with option «variable pump pressure» and «separate system and cooling water» required

3 Ball valve only for open or closed position

4 Hand valve with adjustable flow rate

5 Direct assembly on the temperature control unit possible

6 multiFlow multiple distributor is controlled by the temperature control unit (TCU)

7 multiFlow multiple distributor is controlled by a separate RT200 controller (stand-alone, without REGLOPLAS temperature control unit)

Accessories

- In the case of stand-alone, the RT200 controller plus accessories must be ordered - Hose material, T-pieces and other accessories must be ordered separately

Water conditioning with REGLOPLAS waterCare

For applications at higher water temperatures, above 140 °C, water conditioning is essential. In addition, the use of conditioned water with additives is absolutely necessary, depending on the existing water conditioning. Soiling and calcification of the tool and temperature control unit lead to poorer performance due to the reduction in the heat transfer between tool, heating and the temperature control medium. It also shortens the service life of the components and leads to more maintenance costs. The REGLOPLAS waterCare is a mobile water conditioning system which provides suitable conditioned system water in a space-saving manner. This prevents corrosion, soiling and calcification and reduces maintenance and cleaning costs for temperature control units.

- Energy efficiency thanks to pressure accumulation
- Minimum pump switch-on duration
- Controlled system water temperature
- Capacity 23 litres
- Siemens PLC control

REGLOPLAS cleaning agents

REM93	Descaling agent
SR80	System cleaner

-

TCU for multiple distributor systems

Thanks to the wide range of REGLOPLAS temperature control units, there is a suitable custom solution for every multiFlow application. Talk to our specialists!

Open bath water/ oil units	Pressurised wa
*all XL units	*all M-XL u

* With options: Variable pump pressure control, separate water connections and multiFlow interface.







REGLOPLAS additives

RK93 Corrosion inhibitor RK100 Corrosion inhibitor specific for aluminium - RK-HT Corrosion protection from 160 °C

ater units units

High temperature oil units *300MD, 300L(D), 350L(D)





Regloplas AG Flurhofstrasse 158 P.O. Box 9006 St.Gallen Switzerland Phone +41 71 282 58 00 E-mail info@regloplas.com

www.regloplas.com

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