REGLOPLAS

every degree° counts.

REGLOCast

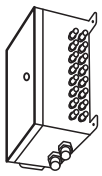
We get everthing in shape.

Advanced Temperature Control for die casting solutions.

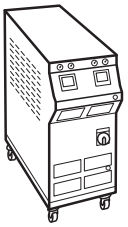
The original.
Since 1961.

2025
P200XL[calidra]

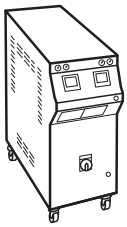
2021
jetPulse 100L



2018
multiFlow modular



2015
P160LD



2011
350LD

History

2025 Market launch of XL product family: a compact design, up to 500 l/min flow rate, with cyclone separator

2024 REGLOPLAS strengthens its Asian market presence with on-site field service and business development

2023 Move-in to the Smart Factory with cutting-edge production environment in the east of St. Gallen

2021 Market Launch of RT200 – Connectivity and unlimited interfaces

jetPulse 100L, precise hot-spot cooling in casting dies

2019 jetPulse 30L

2018 multiFlow modular die casting

2015 P160LD and P180LD

2011 Introduction high temperature oil units

2007 Founding of REGLOPLAS France

2006 Opening of REGLOPLAS China

2000 Establishment of REGLOPLAS USA

1998 Founding of AIC | REGLOPLAS Germany

1973 250KL oil units up to 250 °C/482 °F

1972 First participation at Hannover Exhibition

1961 Initial REGLOPLAS Temperature Control Unit (TCU) – UT100

Established as «Herzog, Stieger, Baur & Co HESBA Technik, St. Gallen», rebranded REGLOPLAS AG in 1966

Our knowledge for the die casting industry!

- We master Advanced Temperature Control
- We comprehend your needs – from small to MEGA and GIGA
- We recognize the importance of timing
- We operate across multiple markets
- We live to overcome challenges
- We support you globally

The full potential for Advanced Temperature Control

1 **Advanced Temperature Control Units**

Our temperature control units feature single or dual-circuit designs coupled with advanced control technology. These robust units cater to high-performance applications, delivering precise and consistent operation 24/7. Engineered for harsh die casting settings, they incorporate compensation tanks and effortlessly manage temperature and pressure variations. Utilizing water as a coolant, our systems support temperatures up to 200 °C/392 °F, while our oil-based units reach 350 °C/662 °F. These units withstand demanding industrial environments, ensuring reliable performance in challenging conditions.

P200XL[calidra]

P160LD

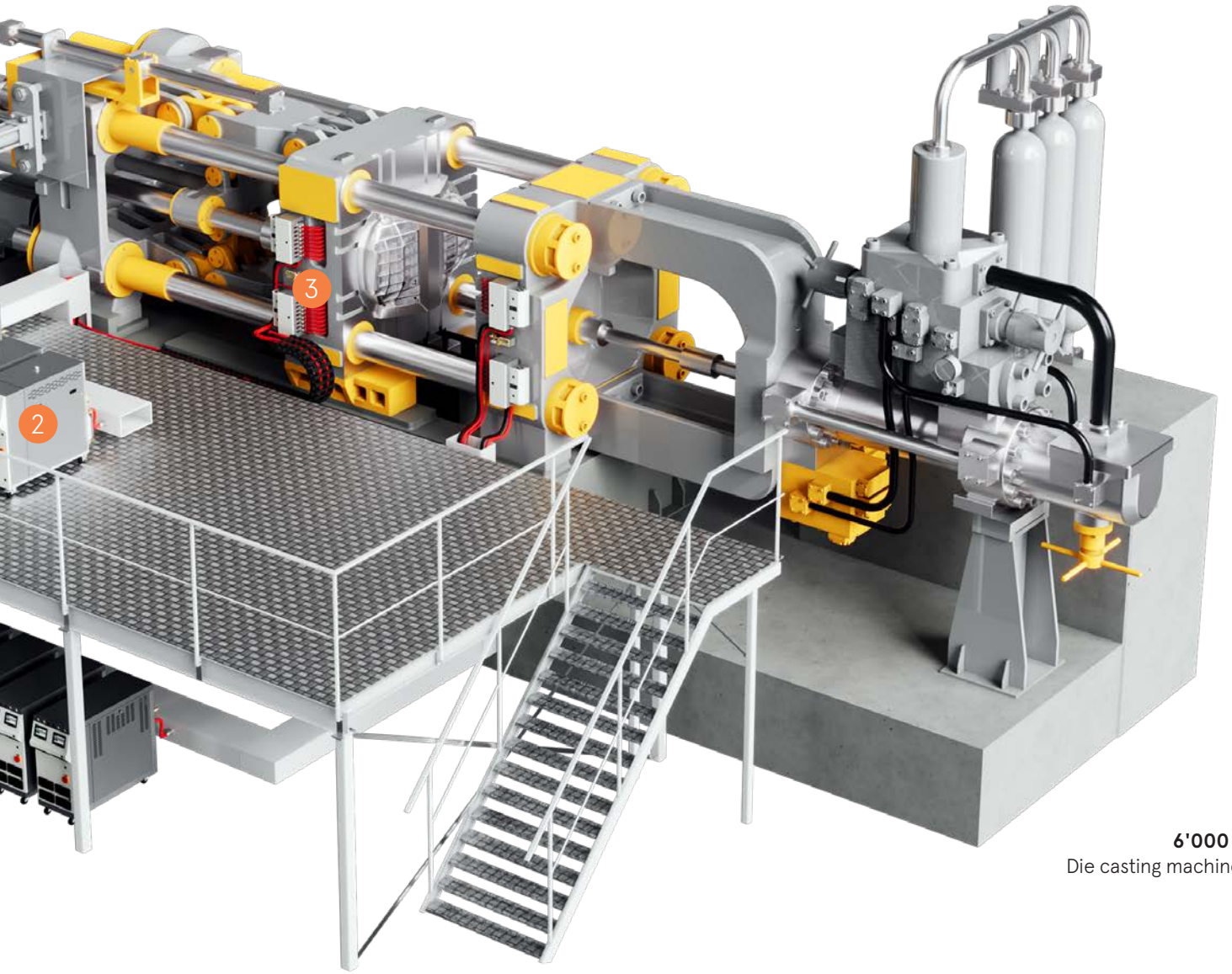
300LD

2 **Efficient cooling of hot-spots**

The jetPulse system offers a versatile approach to targeted cooling of critical hot-spots. It`s designed to effectively cool areas where conventional cooling techniques fall short. This system enables accelerated production cycles, enhanced process reliability, and adaptability. It can manage up to 6 distribution units, each supporting 8 channels with integrated flow rate monitoring capabilities. Moreover, the jetPulse incorporates an automatic core break detection feature that activates during each operational cycle, ensuring optimal performance and safety throughout the production process.

jetPulse

multiJet



6'000 t
Die casting machine

3 **multiFlow distributors for die casting**

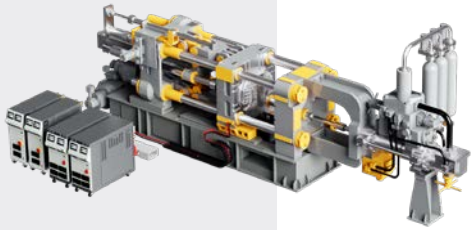
Our product line includes a comprehensive and adaptable multi-distributor system, designed to accommodate die casting operations of all scales, from compact to MEGA and GIGA applications. It features 4 to 16 channels, each outfitted with either manual or automatic valves for precise flow rate adjustment. The system independently monitors temperature and flow rate for every channel, allowing for tailored temperature management in each die circuit. Seamlessly integrated into the temperature control unit`s interface and controller, both hardware and software provide an efficient thermal management solution for diverse industrial needs.

multiFlow distributors

We meet the most demanding standards in die casting processes – and beyond.

1'000 t Die casting machine

Locking force		1000 t
Shot weight	kg	5
Die size	mm	640 × 480 × 200
Die weight	t	0.5
Application		Consumer products



Products
2 × 300MD
2 × P160LD

6'000 t Die casting machine

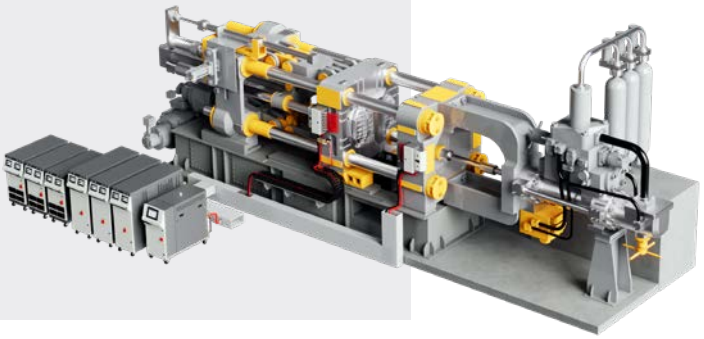
Locking force		6'000 t
Shot weight	kg	85
Die size	mm	2100 × 2100 × 1600
Die weight	t	55
Application		Automotive

Products
Bottom Row
6 × P160LD
4 × P200XL^{calidra}
Upper Row
5 × 300LD
2 × jetPulse 100L
4 × multiFlow 8-fold auto.

3'000t Die casting machine

Locking force		3'000 t
Shot weight	kg	50
Die size	mm	1000 × 900 × 350
Die weight	t	2.5
Application		Industrial housings

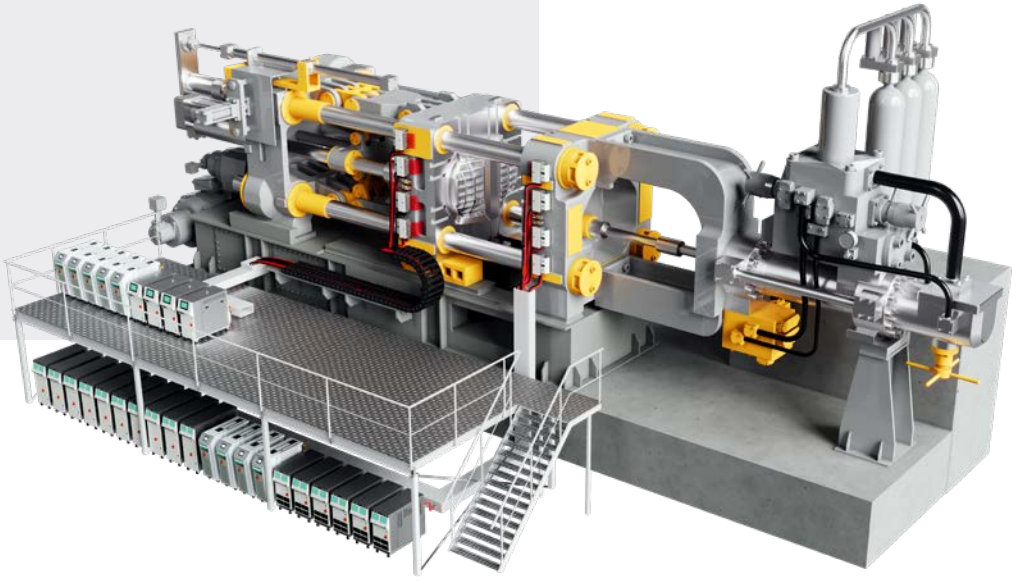
Products
3 × 300LD
3 × P160LD
1 × jetPulse 100L
2 × multiFlow 8-fold auto.



9'000t Die casting machine

Locking force		9'000 t
Shot weight	kg	190
Die size	mm	3300 × 3000 × 1500
Die weight	t	117
Application		Automotive

Products
Bottom Row
10 × 300LD
6 × P160LD
4 × P200XL^{calidra}
Upper Row
5 × P200XL^{calidra}
4 × jetPulse 100L
8 x multiFlow 8-fold auto.



Temperature control units
Product overview

Medium	Product class	Outlet temp. max.	Main parameters	Product type		
				MD	L/LD	XL[calidra]
Water	Pressurized water	160 °C 320 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min		**P160LD** 17 66/78 80	**P160XL**[calidra] 40/60/100 230/400 NEW 300/500
		180 °C 356 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min		**P180LD** 17 76/90 80	
		200 °C 392 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min		**P200LD** 17 86/103 80	**P200XL**[calidra] 40/100 285/500 NEW 300/500
Oil	High temperature oil	300 °C 572 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min	**300 MD** 12 130 80/85	**300L(D)** 10/17.5/20/30/40 160 90	
		350 °C 662 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min		**350L(D)** 20 30/85 90	

Notes: Large variety of options available: various interfaces, pumps, filters etc.

Temperature control solutions
Product overview

Medium	Product class	Outlet temp. max.	Main parameters	Product type
Water/Air	Hot-spot coolers	80 °C 176 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min	**jetPulse 30L** – 20 50
Water/Air	Hot-spot coolers	80 °C 176 °F	Heating capacity kW at 400V Cooling capacity kW Pump flow rate max. l/min	**jetPulse 100L** – 60 100

Pressurized water units
up to 160 °C / 320 °F

Pressurized water		160 °C				
Temperature control unit/Type		P160LD		P160XL calidra		
Outlet temperature max.*	°C/°F	160/320		160/320		
Heat transfer medium Filling quantity Expansion volume	 l l	Water 3.0 2.0		Water 23.0-25.0 10.0		
Heating capacity at 400 V	kW	17[11]		40	60	100
Cooling capacity Cooler at outlet temperature at cooling water temperature Diagram Fig. 1	kW °C °C 	66[11] SK 150 20 1	78[11] 2SK 150 20 2	230 2SK 150 20 3	400 3SK 150 20 4	
Pump capacity/Type Flow rate max. Power consumption Pressure max. Diagram Fig. 2	 l/min. kW bar 	SM82 80[11] 2.8[11] 9.0[11] 1		PM300 300 2.8 5.0 2	PM500 500 5.3 8.0 3	
Control system Measuring mode (Standard)		RT100/RT200 Pt100		RT200 Pt100		
Operating voltage	V; Hz	400; 50, 3PE		3 x 400, 50/60		
Connections Outlet/Inlet Cooling water mains		 G3/4" G1/2"		 DN 50 G3/4"		
Degree of protection	IP	IP54		IP54		
Dimensions W/H/D	mm	507/1167/1492		430/1300/1356		
Weight	kg	280		250-300		
Color	RAL	9006/7016		7035/7042/7043		
Ambient temperature max.	°C	40		40		
Noise level	dB(A)	<70		<70		

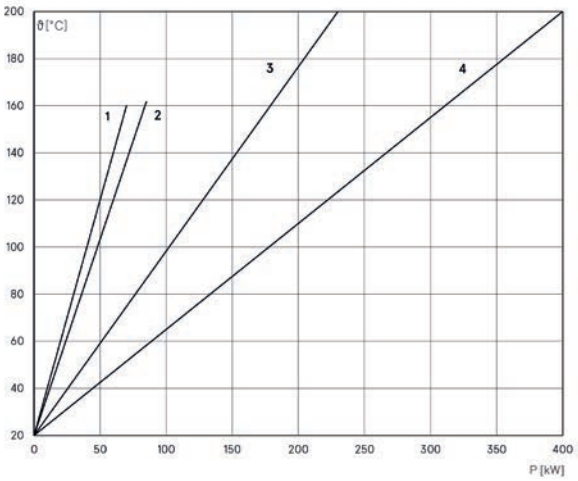
* Water treatment recommended from 140 °C/284 °F and required from 180 °C/356 °F

Note

G	Parallel thread	D	Dual zone unit
IG	Female thread	11	Dual zone unit: Data per zone
SK	Low-scale cooler	12	With frequency converter only

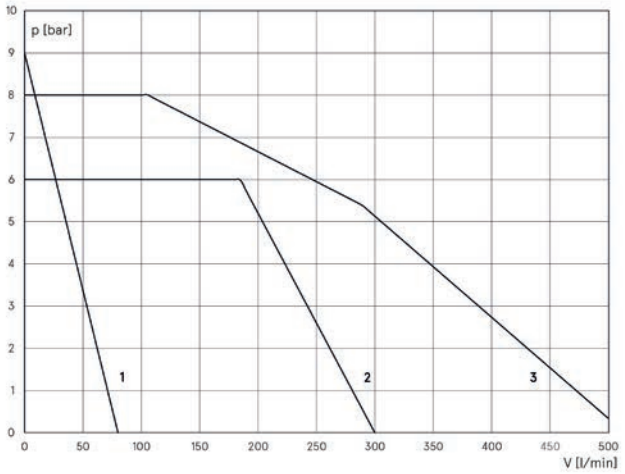
Cooling and pump capacity

Cooling capacity P depending on the outlet temperature ϑ
Cooling water data at inlet temperature +20 °C
Curve 1/2: Flow-rate per circuit 20l/min
Curve 3: Flow-rate per circuit 45l/min
Curve 4: Flow-rate per circuit >80 l/min



1 P160LD SK
2 P160LD 2SK
3 P160XLc 2SK
4 P160XLc 3SK

Pump capacity. Flow rate V depending on the pressure p
Bypass is not taken into consideration. Density 1000 kg/m3



1 SM82
2 PM300
3 PM500

Pressurized water units
up to 200 °C / 392 °F

Pressurized water		180 °C		200 °C			
Temperature control unit/Type		P180LD		P200LD		P200XL[calidra]	
Outlet temperature max.*	°C/°F	180/356		200/392		200/392	
Heat transfer medium Filling quantity Expansion volume	 l l	Water 3.0 2.0		Water 3.0 2.0		Water 23.0-25.0 10.0	
Heating capacity at 400 V	kW	17[11]		17[11]		40/60/100	
Cooling capacity Cooler at outlet temperature at cooling water temperature Diagram Fig. 1	kW °C °C 	76[11] SK 170 20 1	90[11] 2SK 170 20 2	86[11] SK 190 20 1	103[11] 2SK 190 20 2	285 2SK 190 20 3	500 3SK 190 20 4
Pump capacity/Type Flow rate max. Power consumption Pressure max. Diagram Fig. 2	 l/min. kW bar 	SM82H 80[11] 2.8[11] 9.0[11] 1		SM82H 80[11] 2.8[11] 9.0[11] 1		PM300H 300 2.8 5.0 2	PM500H 500 5.3 8.0 3
Control system Measuring mode (Standard)		RT100/RT200 Pt100		RT100/RT200 Pt100		RT200 Pt100	
Operating voltage	V; Hz	400; 50, 3PE		400: 50, 3PE		3 x 400; 50/60	
Connections Outlet/Inlet Cooling water mains		 G3/4" G1/2"		 G3/4" G1/2"		 DN 50 G3/4"	
Degree of protection	IP	IP54		P54		IP54	
Dimensions W/H/D	mm	507/1167/1492		507/1167/1492		430/1300/1356	
Weight	kg	280		280		250-300	
Color	RAL	9006/7016		9006/7016		7035/7042/7043	
Ambient temperature max.	°C	40		40		40	
Noise level	dB(A)	<70		<70		<70	

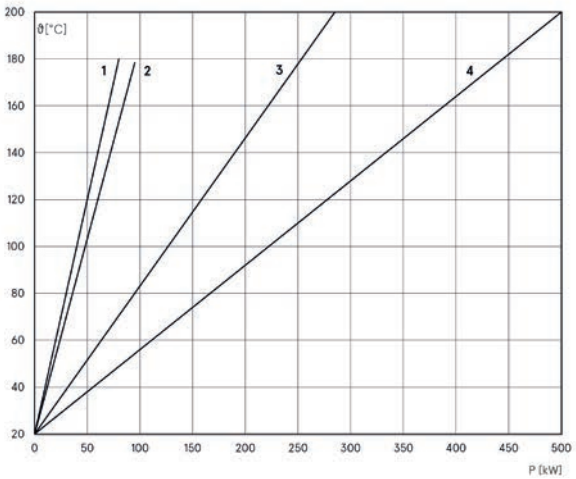
* Water treatment recommended from 140 °C/284 °F and required from 180 °C/356 °F

Note

G	Parallel thread	D	Dual zone unit
IG	Female thread	11	Dual zone unit: Data per zone
SK	Low-scale cooler	12	With frequency converter only

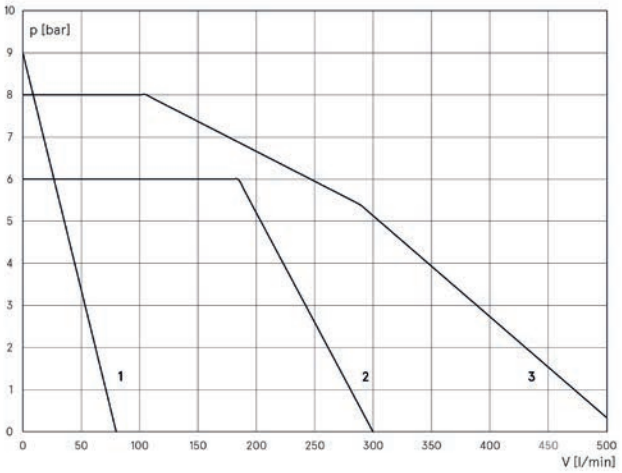
Cooling and pump capacity

Cooling capacity P depending on the outlet temperature ϑ
Cooling water data at inlet temperature +20 °C
Curve 1/2: Flow-rate per circuit 20l/min
Curve 3: Flow-rate per circuit >55l/min
Curve 4: Flow-rate per circuit >90l/min



1 P180LD SK, P200LD SK
2 P180LD 2SK, P200LD 2SK
3 P200XLc 2SK
4 P200XLc 3SK

Pump capacity. Flow rate V depending on the pressure p
Bypass is not taken into consideration. Density 1000 kg/m3



1 SM82H
2 PM300H
3 PM500H

High temperature oil units
up to 350 °C / 662 °F



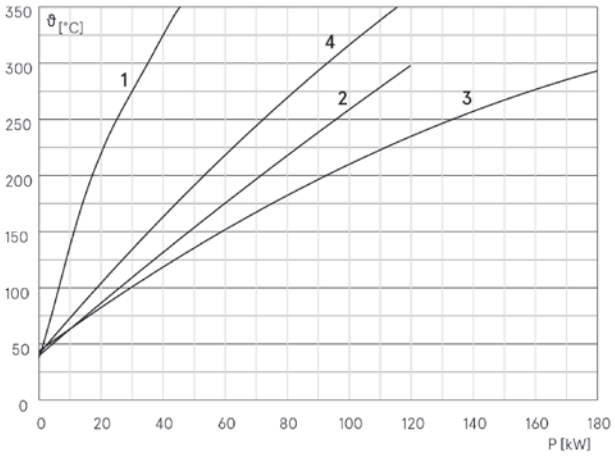
High temperature oil		300 °C				350 °C	
Temperature control unit/Type		300MD		300L(D)		350L(D)	
Outlet temperature max.	°C/°F	300/572		300/572		350/662	
Heat transfer medium Filling quantity Expansion volume	 l l	Oil 22.0 14.0		Oil 15.0 20.0	Oil 24.0 20.0	Oil 15.0 20.0	Oil 24.0 20.0
Heating capacity at 400 V	kW	12[11]		10/17.5/20/30/40[11]		20[11]	
Cooling capacity Cooler at outlet temperature at cooling water temperature Diagram Fig. 1	kW °C °C	130[11] 1K 280 20 2		160[11] 1K[12] 280 20 3		30[11] 1K[12] 280 20 1	85[11] 2K[12] 280 20 4
Pump capacity/Type Flow rate max. Power consumption Pressure max. Diagram Fig. 2	 l/min. kW bar	FM32 80[11] 1.5[11] 7.5[11] 1	FM35 85[11] 2.2[11] 8.0[11] 2	FM65 90[11] 2.8[11] 9.5[11] 3		FM65 90[11] 2.8[11] 9.5[11] 3	
Control system Measuring mode (Standard)		RT100/RT200 Pt100		RT100/RT200 Pt100		RT100/RT200 Pt100	
Operating voltage	V; Hz	400-480; 50/60		200-600; 50/60		200-600; 50/60	
Connections Outlet/Inlet Cooling water mains		 G3/4" IG G3/4"		 G3/4" IG G3/4"		 G3/4" IG G3/4"	
Degree of protection	IP	IP54		IP54		IP54	
Dimensions W/H/D	mm	400/1150/1350		432/1350/1475	542/1350/1475	546/1621/1465	
Weight	kg	235		246	365	323	373
Color	RAL	9006/7016		9006/7016		9006/7016	
Ambient temperature max.	°C	40		40		40	
Noise level	dB(A)	<70		<70		<70	

Note

G	Parallel thread	D	Dual zone unit
IG	Female thread	11	Dual zone unit: Data per zone
SK	Low-scale cooler	12	With cooler bypass switch

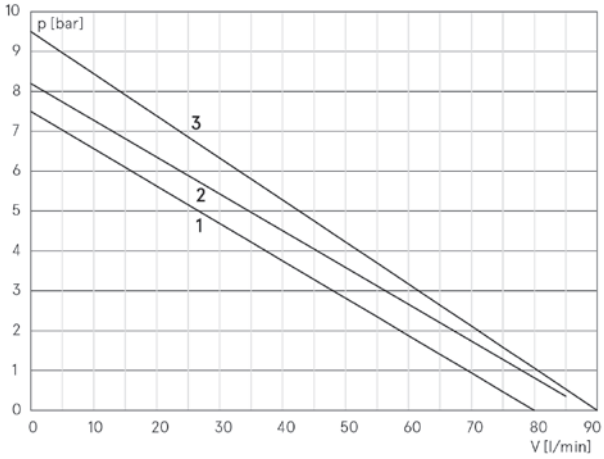
Cooling and pump capacity

Cooling capacity P depending on the outlet temperature ϑ
Cooling water data at inlet temperature +20 °C
Curve 1/2/3/4: Flow-rate per circuit 20l/min



1 350L, 350LD 1K
2 300MD
3 300L, 300LD 1K
4 350L, 350LD 2K

Pump capacity. Flow rate V depending on the pressure p
Bypass is not taken into consideration. Density 1000kg/m3



1 FM32
2 FM35
3 FM65

Temperature control solutions

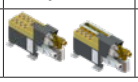
multiFlow distributors

	Medium		Max. temperature °C/°F			Number of channels			
	Water	Oil	120/248	160/320	180/356	4	8	10	12
multiFlow modular									
Automatic 	●		●	●		●	●	●	●
Manual 	●		●	●		●	●	●	●
multiFlow XL									
Automatic 	●				●			●	
multiPulse 	●			●		●	●	●	●

Notes

*1 Ball valve only for open or closed position
*2 Hand valve with adjustable flow rate
*3 multiFlow multiple distributor is controlled by TCU
*4 multiFlow multiple distributor is controlled by a separate RT200 controller (stand-alone, without REGLOPLAS TCU)

jetPulse system components

		Outlet temperature max.	Heat transfer medium	Cooling channels	Control system	Operating voltage	External control voltage	Outlet compressed air	Inlet/Outlet TCU	Inlet/Ou core
		°C/°F		pcs		V; Hz	V	Connections		
jetFlow										
		95/203	Water/Air	8			24VDC			
flowControl										
				4/6	SPS	100-230; 50/60	24VDC			
multiJet										
basic		80/176	Water/Air	8			24VDC	G1/4"	G1/2"/BSP 60°	G1/8"
standard / expert		80/176	Water/Air	8			24VDC	G1/4"	G1/2"/BSP 60°	G1/8"

Notes

*1 Check valves in brass; Diaphragm valve for leakage test
*2 Compact design; Sensors integrated in the housing; Check valves in stainless steel; Piston valve for leakage test; Additional multiJet expert: Optical flow indicator in inlet

			Version					Flow Meter			Control	
			autom.		manual							
	16	Time control on/off	Flow rate (l/m)	Delta-T (°C/°F)	Ball valve *1	Hand valve *2	VFS 1–18 l/min	VFS 2 – 40 l/min	FD-H 0.2 – 40 l/min	TCU *3	Stand-alone RT200 *4
	●		●	●			●	●		●	●
	●				●	●	●	●		●	●
			●	●					●	●	
	●	●					●	●		●	

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

tlet	Flow measurement per channel	Interface to jetPulse	Interface to jetFlow	Interface to flowControl	Degree of protection	Dimensions W/H/D	Weight	Color	Ambient temperature max.	Features
	l/min				IP	mm	kg	RAL	°C/°F	
	0.7-30			Han 12Q	IP54	130/230/96	5	7016	60/140	
		Profinet M12	Han 12Q		IP54	300/200/130	5	7035	40/104	
IG		Han 4A			IP54	303/188/149	4		60/140	*1
IG		Han 4A			IP54	280/150/122	4		60/140	*2

jetPulse

Efficient cooling of hot-spots

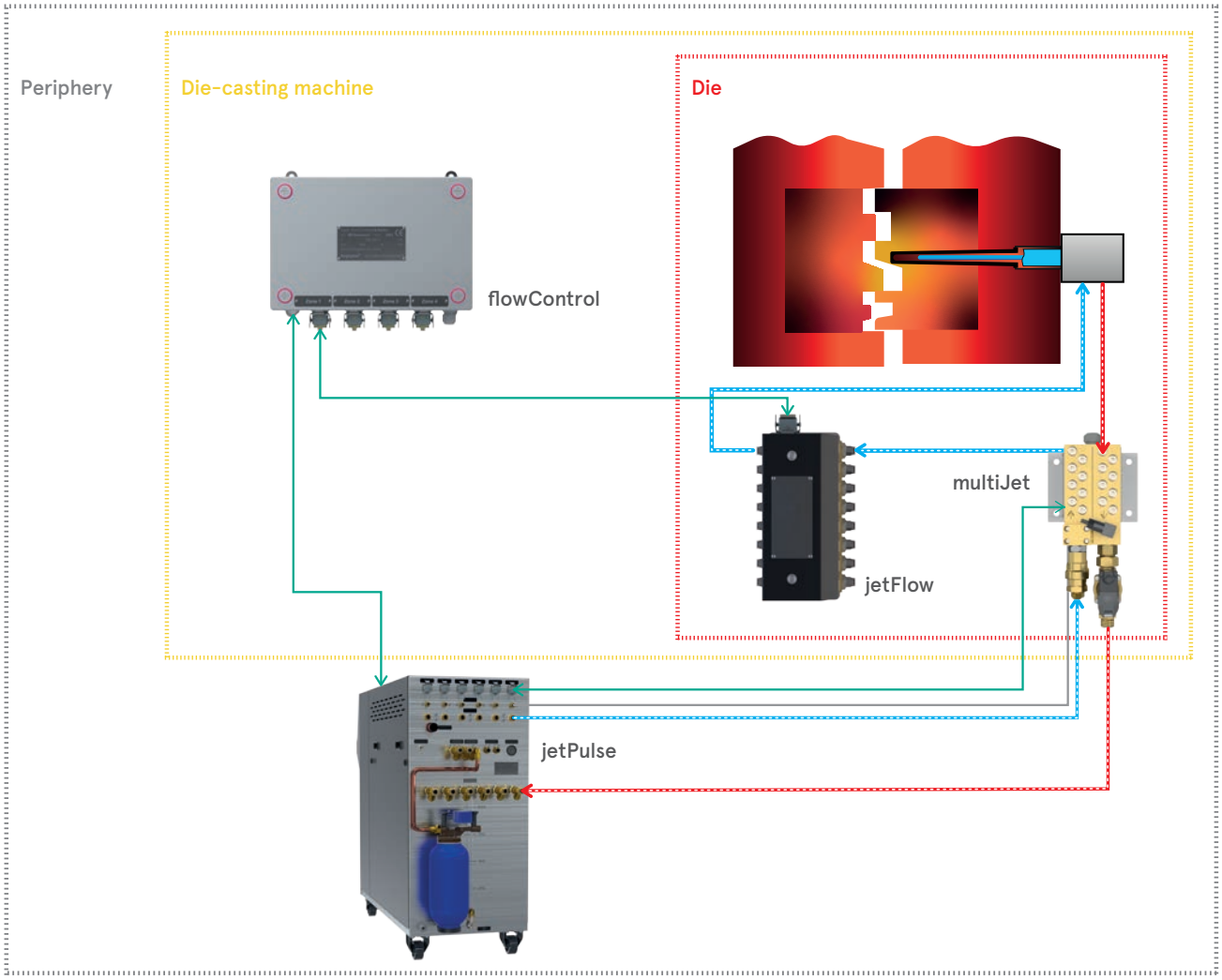
Larger and more complex parts require precisely tempered hot-spots. With Regloplas jetPulse faster cycle times, more reliable process control, and flexibility can be achieved.

jetPulse features – AT A GLANCE

- Water distribution system with up to 6 zones and 8 channels per zone
- Up to 100 l/min flow rate (jetPulse 100L) at a max. pressure of 30 bar
- Siemens PLC-based control system with touch screen
- Integrated temperature measurement
- Adjustable air/water cooling time, leakage monitoring time
- Adjustable blowing out time, waiting times between actions
- Energy-saving pump, only active when cooling is on

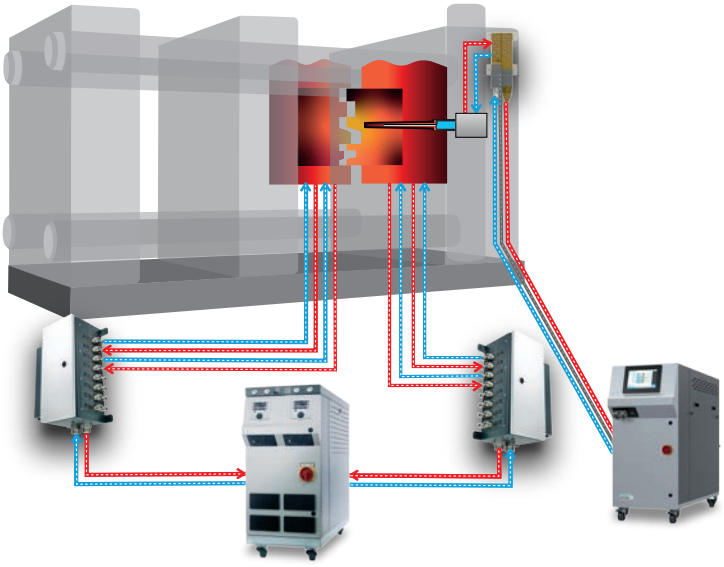
Advantages with jetPulse

- Smaller scrap
- Longer lifetime of the die
- Lower cycle time
- Constant high quality



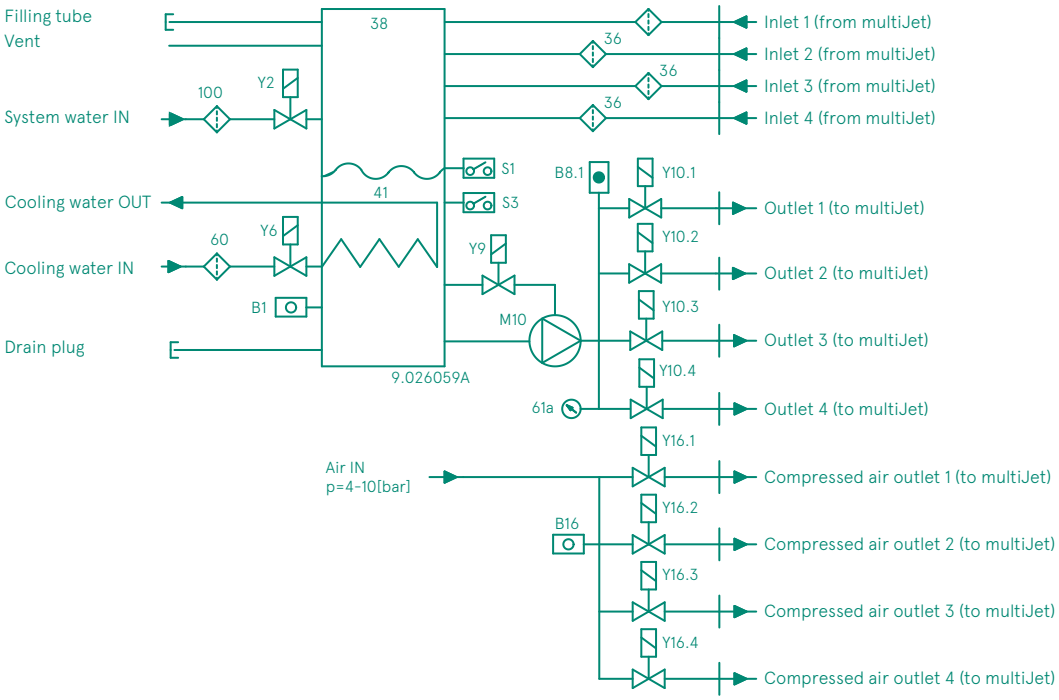
Application example

Die	2 t
Channels	2 × 6
Molded part weight	4.7 kg
Cycle time	56 s
Temperature control unit	1 × P160LD
Multi distributor	2 × multiFlow modular, 8-fold automatic
Temp. control solution	jetPulse 100L, multiJet



Principle of jetPulse 100L

36	Circuit filter
38	Tank
41	Refrigerator
60	Cooling water filter ON
61a	Outlet manometer
100	System water filter
B1	Internal probe
B8.1	Outlet pressure sensor
B16	Distributor pressure sensor, internal
M10	Pump motor
S1	Float switch (top level)
S3	Float switch (bottom level)
Y2	Solenoid valve autom. water top-up
Y6	Solenoid valve cooling
Y9	Solenoid valve bypass
Y10	Solenoid valve outlet
Y16	Solenoid valve compressed air



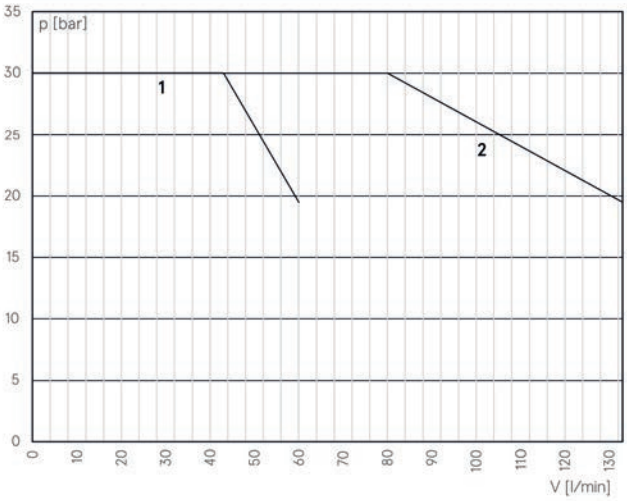
Temperature control solutions
Cooling of hot-spots

jetPulse		80 °C	
Temperature control unit/Type		jetPulse 30L	jetPulse 100L
Outlet temperature max.	°C/°F	80/176	80/176
Heat transfer medium Filling quantity	 l	Water/Air 30	Water/Air 100
Cooling channels	pcs	4	6
Cooling capacity at outlet temperature	kW °C	20 70	60 70
Pump capacity/Type Flow rate max. Power consumption Pressure max.	 l/min. kW bar	CRNE1-15 50 4.0 30	CRNE3-15 100 7.5 30
Control system		SPS	SPS
Operating voltage External control voltage	V; Hz V	380-500; 50/60 24 VDC	380-500; 50/60 24 VDC
Connections Connection compressed air Outlet TCU compressed air Cooling water Inlet/Outlet TCU Inlet Systemwater		 G1/4" (IG) G1/4"/BSP 60° G1/2" G1/2"/BSP 60° G3/8"	 G1/4" (IG) G1/4"/BSP 60° G1/2" G1/2"/BSP 60° G3/8"
Degree of protection	IP	IP54	IP54
Dimensions W/H/D	mm	350/966/1314	512/1140/1425
Weight	kg	150	250
Color	RAL	9006/7016	9006/7016
Ambient temperature max.	°C	40	40

Note
IG Female thread

Pump capacity

Pump capacity jetPulse
Pump capacity. Flow rate V depending on the pressure p
Bypass is not taken into consideration. Density 1000kg /m3

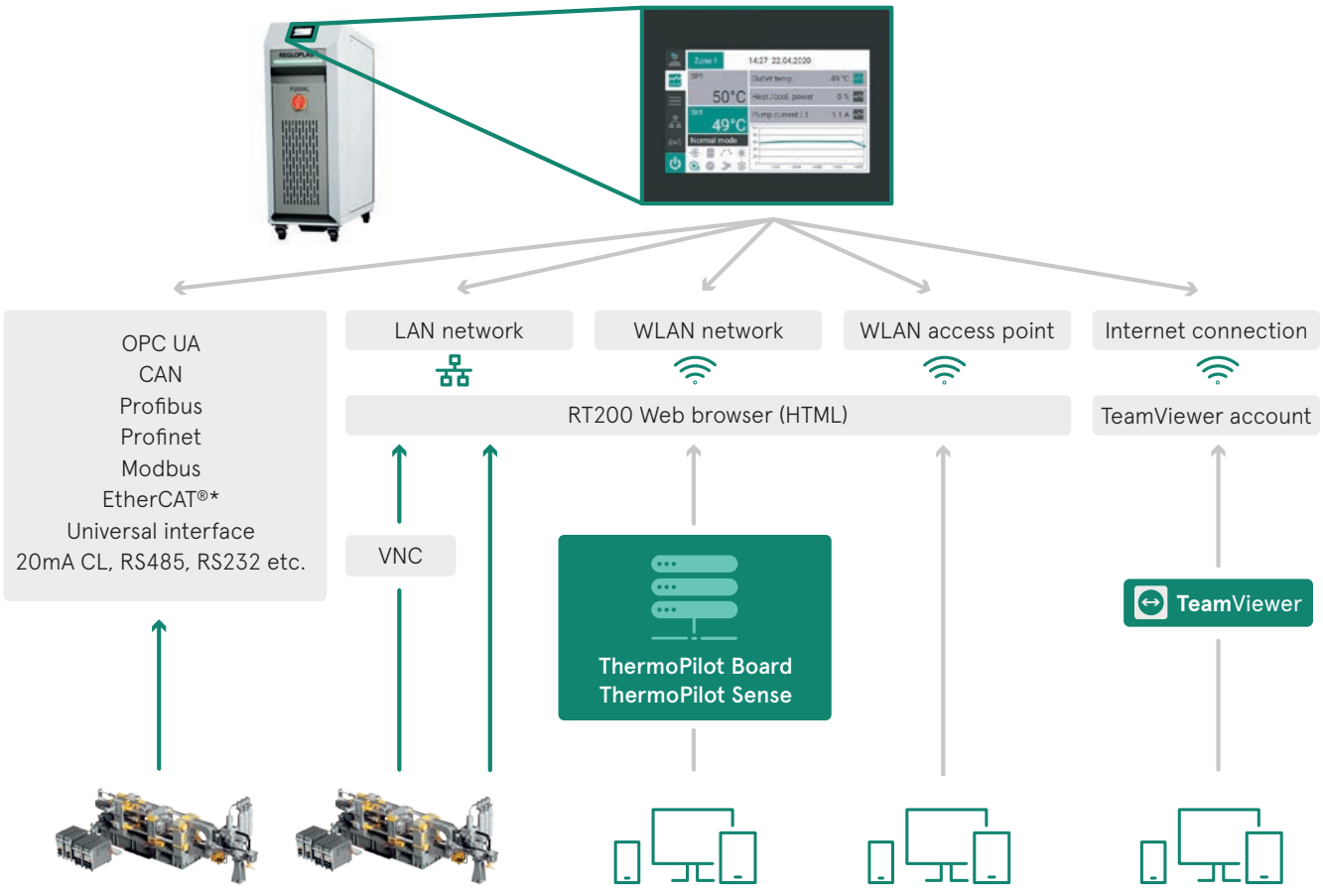


1 CRNE1-15
2 CRNE3-15

Temperature control systems

ThermoPilot Board

- Central data logging of all relevant process parameters
- Visualization and data logging of TCUs and distributors via browser
- Integration of devices via LAN or WLAN
- Customizable dashboards with data and graphical displays
- Simple user administration



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Innovative temperature control management for over 60 years.

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every degree° counts.

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