

SINGLE All-purpose and high-temperature water-operated temperature control systems up to 225 °C

 **Water Advanced**



All-purpose water-operated temperature control system N1

The temperature control systems up to 180 °C are at the heart of the SINGLE product portfolio. Be it injection moulding, extrusion or other areas of application – the N-G product line is suitable for all purposes.

The high-temperature water-operated temperature control systems of the H product line meet the most exacting safety requirements, provide a wide performance range up to 225 °C and virtually unlimited application options.

As part of Water Advanced product family, the all-purpose, high-temperature water-operated temperature control systems of the N-G and H product lines are equipped for operation far above the atmospheric boiling point with temperatures of up to 225 °C. With their wide temperature and dimensional range which covers medium to very large capacities, they provide the basis for numerous special projects. Thanks to their high reliability and precision and virtually unlimited application options they meet a variety of requirements.

Compared to heat transfer oil, the use of water as a circulating medium provides several physical and economic benefits – particularly when operating with higher temperatures. In addition to the benefits mentioned above, superior pump technology enhances the economic advantages of the Water Advanced product family. The systems are mainly equipped with high-quality, multi-stage centrifugal pumps with a high level of efficiency, which can directly affect the system's energy consumption.



High-temperature water-operated temperature control system H4

single
first choice
in temperature control



STANDARD EQUIPMENT

General

- ▶ Rugged, powder-coated sheet steel housing
- ▶ Automatic filling and replenishing
- ▶ Roller mounted

Hydraulics

- ▶ Hydraulic equipment stainless steel / non-ferrous metals for type N and NS
- ▶ Hydraulic equipment stainless steel for type H0, H1, H2, HK
- ▶ Incolloy heater
- ▶ High-quality pump materials
- ▶ Dirt traps in return and cooling water supply line
- ▶ Flow metering by means of differential pressure

Electric and control equipment

- ▶ SCT standard controller with 7" touch screen (optional SCT professional)
- ▶ Heating control by solid state relay with fail-safe pilot contractor
- ▶ Electronic safety temperature limiter
- ▶ Switch box to IP54
- ▶ Cable connector without plug

OPTIONS

- ▶ SBC controller
- ▶ Booster pump for backfeed
- ▶ Direct cooling without heat exchanger up to 120 °C
- ▶ Hot-water heating
- ▶ Vapour heating
- ▶ Plate heat-exchanger for highly efficient cooling capacity up to 150 °C
- ▶ Continuous-circulation heat exchanger
- ▶ Pneumatic mould drainage
- ▶ Control by pneumatic or motor-driven continuous control valves
- ▶ Connection for various analogue and digital electric interfaces
- ▶ EcoTemp system for cyclic temperature control
- ▶ Virtually unlimited hydraulic and electric options



Product family of water-operated temperature control systems



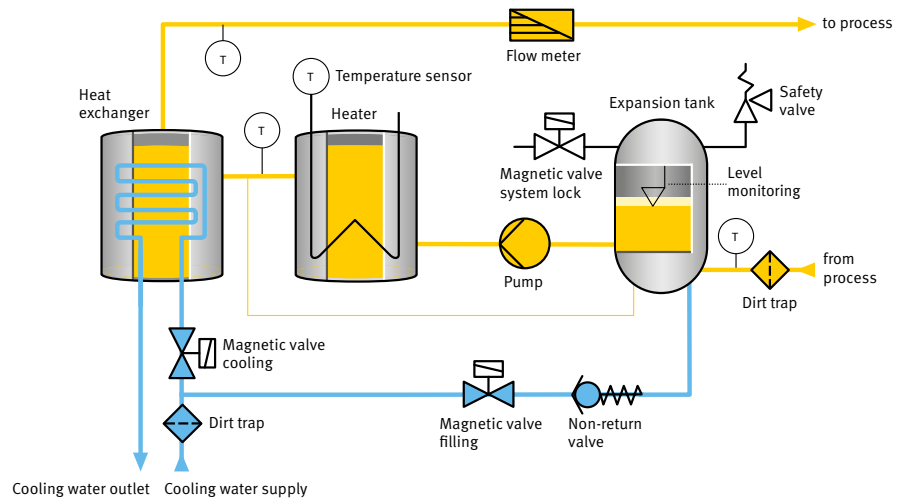
Multi-stage centrifugal pumps offer a high level of efficiency



All-purpose water-operated temperature control systems of the N-G product lines



All-purpose water-operated temperature control system N1



Water Advanced		N1	NS	S	SG	G	G2
Structural units							
Max. temperature range	°C	90/150/180**	90/150/180	90/150/180	90/150/180	90/150/180	90/150/180
Max. external volume	l	66/20/22	103/28/14	98/23/9	160/44/22	472/154/106	1200/280/185
Heating capacity	kW	6/9/12/18	12/18/24/36	24/30/36	24/36/48	12/24/48/60/72	72/96/120/144
Cooling capacity (80 °C outlet/15 °C cooling water)	kW	35/80	50/80/116	116/232	116/174/232	174/232/400	450/600
Max. flow rate	l/min	75	100	150	240	400	650/950
Max. pressure (max. values of the characteristic)	bar	3,9/5,9*/9,8*	4/6,1*/7,5*	4/7,5*	4,1/6,2*/8,3*	4,4/7,1*/8,5*	4,2/6,8*
Pump motor capacity	kW	0,55/0,75*/1,1*	1,1/1,5*/2,2*	1,1/2,2*	1,5/2,2*/3*	3/4*/5,5*	5,5/11*
Connections circulating media	FPT	G 3/4"	G 1"	G 1_1/4"	G 1_1/2"	G 2"	DN 65/80 PN 16/40
Connections cooling water	mm	14	14	14/21/28	14/21	28	G1" IG
	FPT 180 °C	G 1/2"	G 1/2"	G 1/2" - G 3/4" - G1"	G 1/2" - G 3/4"	G 3/4"	
Dimensions (without connections)	L	mm	770	790	1105	1320	1765
	W	mm	315	345	355	395	635
	H	mm	765	945	1045	1190	1350
Approximate weight	kg	100	140	180	250	370	650

* Special pump, ** for type N1 to 180 ° C the dimensions of column NS are valid

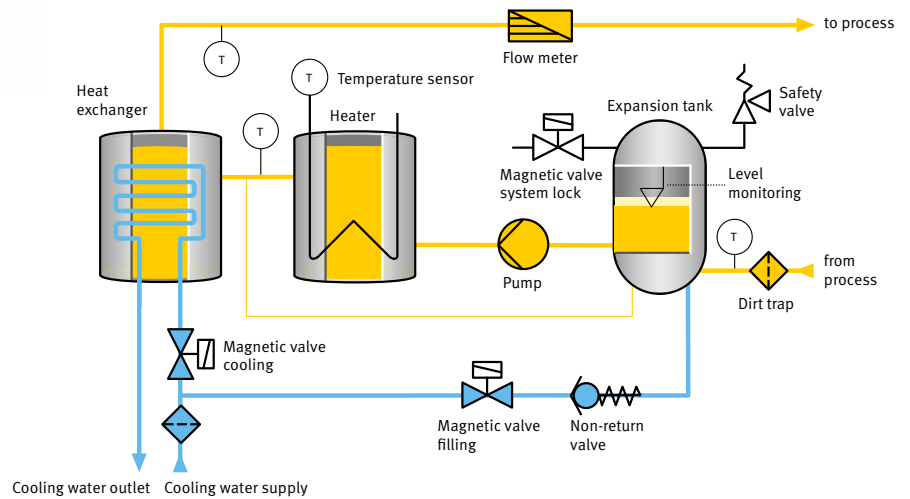
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High-temperature water-operated temperature control system of the H product line



High-temperature water-operated temperature control system H4



Water Advanced								
Structural units		H0	H1	H2	H3	H4	HK	
Max. temperature range	°C	200	200	200	200	200	225	
Max. external volume	l	9	11	35	179	316	3.5	
Heating capacity	kW	6/9/12	6/9/12/18	24/36	48/60/72	36/72/108	6	
Cooling capacity (80 °C outlet/15 °C cooling water)	kW	42	42	116	232	232	5	
Max. flow rate	l/min	60	100	200	280/315*/330*	870/930*	25	
Max. pressure (max. values of the characteristic)	bar	6	8	8	4.2/5.4*	4.2/5.4*	4.5	
Pump motor capacity	kW	1	3	5.5	4/5.5*	7.5/11*	0.6	
Connections circulating media		G 1/2" AG	DN 20 PN 40	DN 25 PN 40	DN 40 PN 40	DN 65 PN 40	G 1/2"	
Connections cooling water	FPT	G 3/8"	G 3/8"	G 1/2"	G 1/2" - G 1"	G 1/2" - G 1"	G 3/8"	
Dimensions (without connections)	L	mm	755	995	1365	1770	1940	645
	W	mm	315	345	505	550	830	265
	H	mm	765	945	1350	1665	2110	525
Approximate weight	kg	95	130	260	410	800	84	

* Special pump