



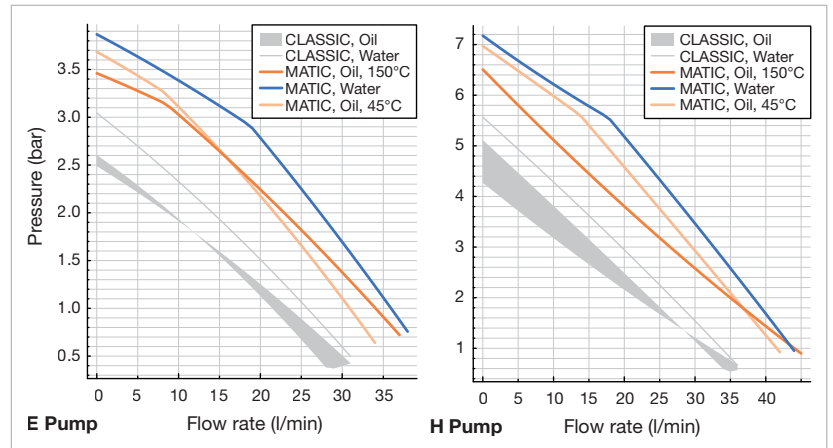
# MATIC Duo

## 90/150 18 E

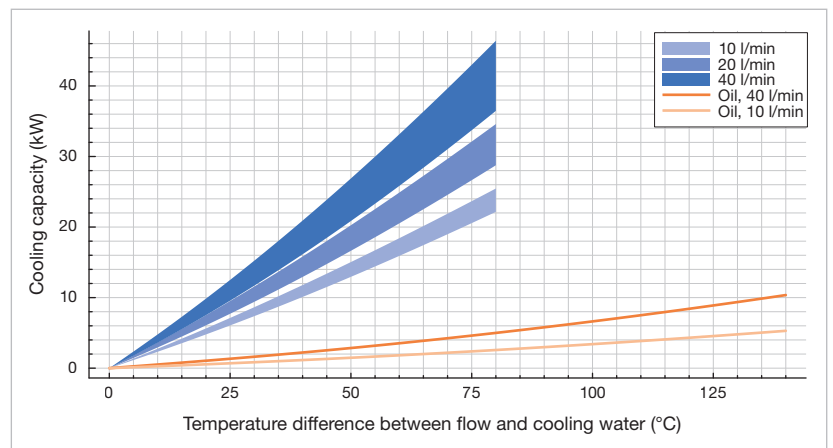
## 90/150 18 H

- Energy efficient and ecological
- Modular and easy to expand
- Predefined actions
- Configurable recipes
- Intelligent connectivity
- Predictive maintenance

### Pump characteristic



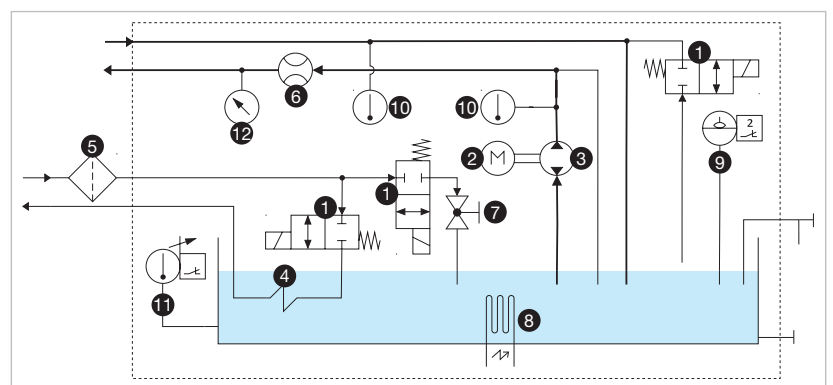
### Cooling capacity



Performance data min. at 16 l/min @ 1.5 bar; max. at 38 l/min @ 8 bar cooling water

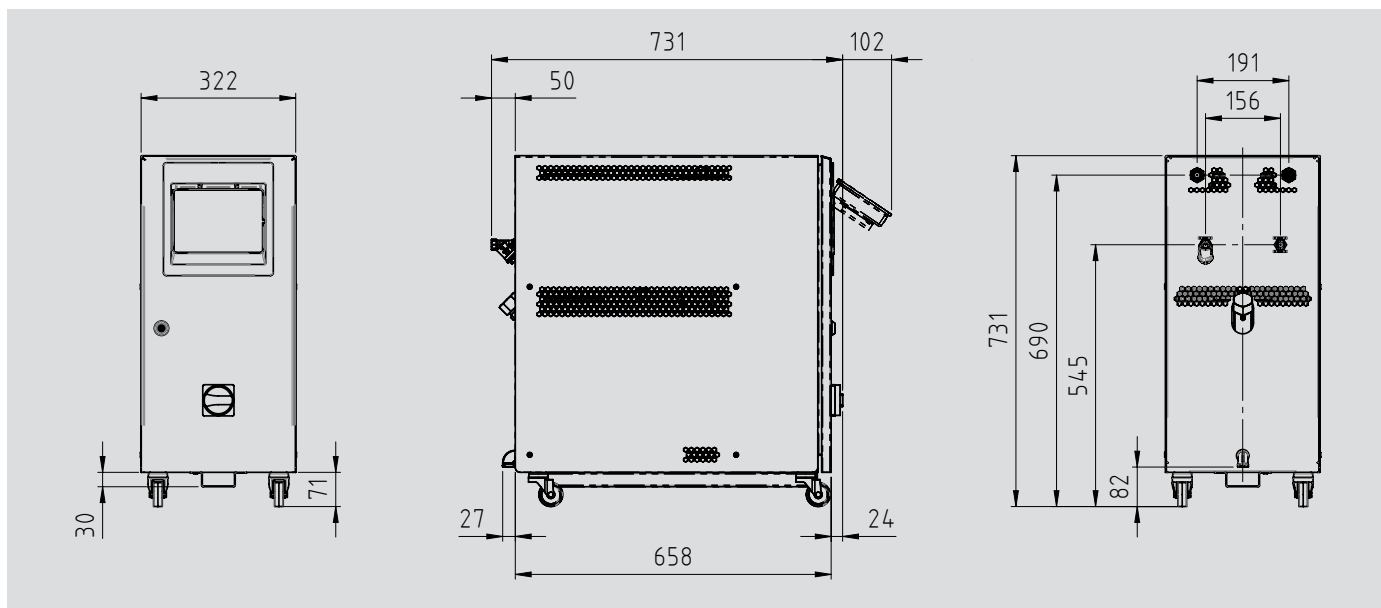


### Fluidic diagram



1 2-2 way valve (normally closed), 2 pump motor, 3 pump with reversible pumping direction, 4 Cooling coil, 5 Filter, 6 Flow sensor, 7 Ball valve, 8 Heating element, 9 Level sensor, 10 Temperature sensor, 11 Safety temperature limiter, 12 Pressure sensor

# Technical specifications



	Water	Oil
<b>Maximum temperature</b>	90 °C	150 °C
<b>Heating capacity</b>	18 kW	6 kW
<b>Cooling capacity</b>	See diagram	
<b>Filling volume (heat-transfer fluid)</b>	Minimum 16 liters, maximum 20 liters	
<b>Pump</b>	<b>Type E or H</b>	
Pressure and flow rate	See diagram	
Motor rated power	<b>Typ E:</b> 0,75 kW, <b>Typ H:</b> 1,5 kW	
<b>Control system</b>	IRIS	
Temperature measurement	3-wire Pt100 (F0.15 acc. IEC 60751), feed and return	
Pump-pressure measurement	Piezoresistive pressure transmitter	
Flow measurement (heat-transfer fluid)	Paddle-wheel sensor with inductive pickup	
Languages	DE, EN, ES, FR, IT, NL (expandable)	
<b>Interfaces</b>	Module IO1: Profibus, Profinet (Accessories)	
OPC-UA (Standard)	Module IO2: RS232, RS485, CL (Accessories)	
	Module IO3: 0-10 V, 0/4-20 mA, external measurement (Accessories)	
<b>Connections</b>		
Heat-transfer fluid (feed and return)	½" BS female thread	
Cooling water inlet	¾" BS female thread, with water filter	
Cooling water outlet	¾" BS external thread	
<b>Empty weight</b>	67 kg	
<b>Colour</b>	RAL 7035 light gray	
<b>Environment</b>		
Temperature range	5-40 °C	
Relative humidity	40-80 % RH (non-condensing, no icing)	
<b>Installation</b>	Inside, keep at least a distance of 10 cm around the ventilation openings	
<b>Continuous noise level</b>	< 70 dB (A)	
<b>Power supply</b>	380-480 V, 50/60 Hz or alternatively 200-240 V, 50/60 Hz	
<b>Connected load</b>	E Pump: 32 A (380-480 V), H Pump: 40 A (380-480 V) E & H Pump 63 A (200-240 V)	
<b>Ingress protection code</b>	IP44, IP54 optional	
<b>Marking</b>	CE, UL-ready	