

IQ-Twin DS470-Alu (AlSi10Mg)

Technical data:

Footprint of cooling area:

15mm x 20mm

Thickness for single side use:

4mm

(Both side separate cooling 10mm)

Weight:

4gr

Connectors:

Tube, diameter 8mm

(others on request)

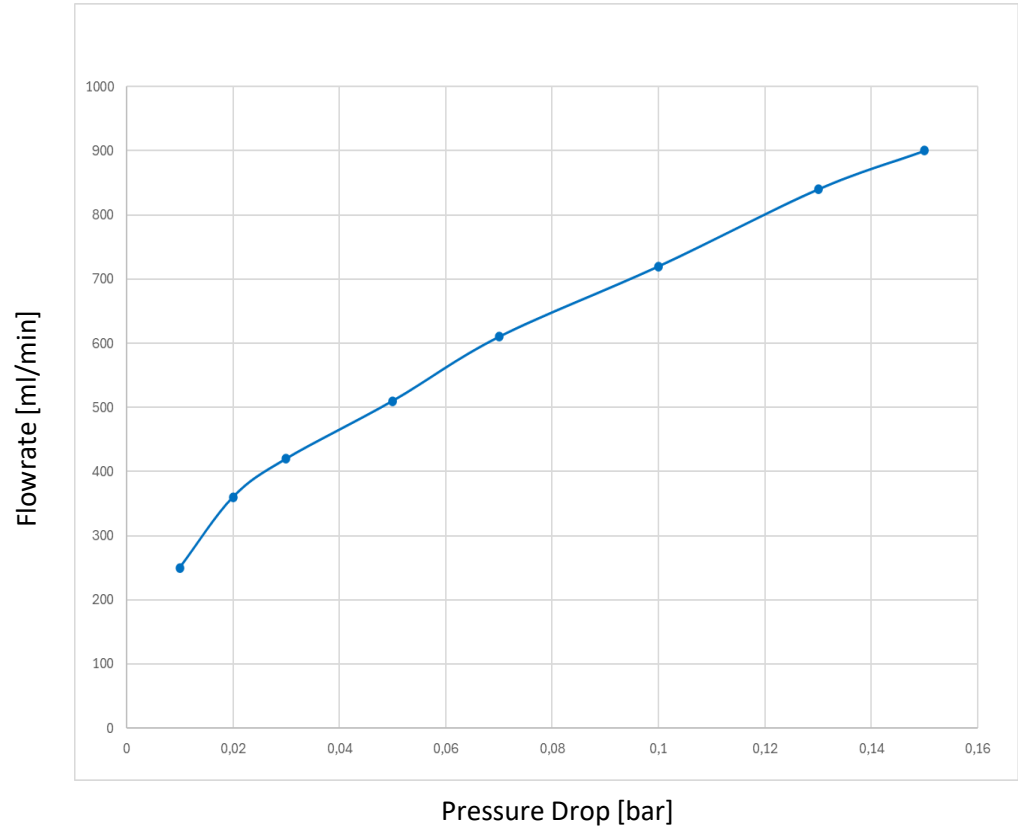


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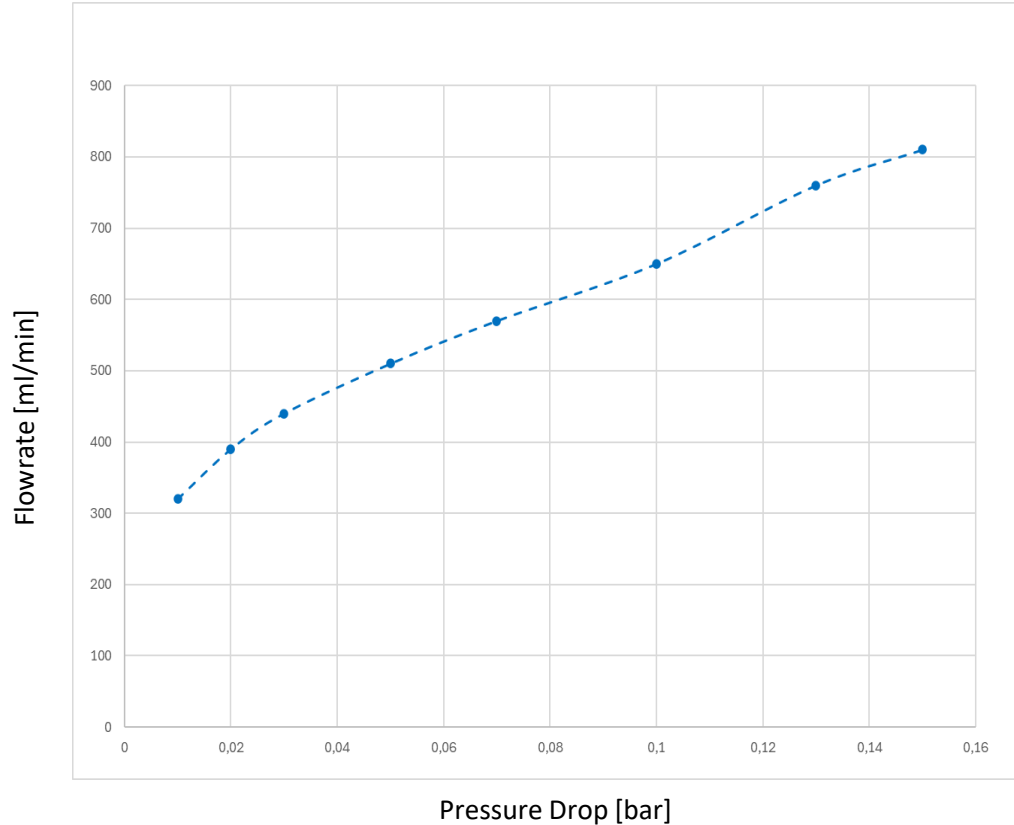
IQ-Twin DS470-Alu (AlSi10Mg)

Pressure [bar]	Flowrate [ml/min]
0,01	250
0,02	360
0,03	420
0,05	510
0,07	610
0,10	720
0,13	840
0,15	900



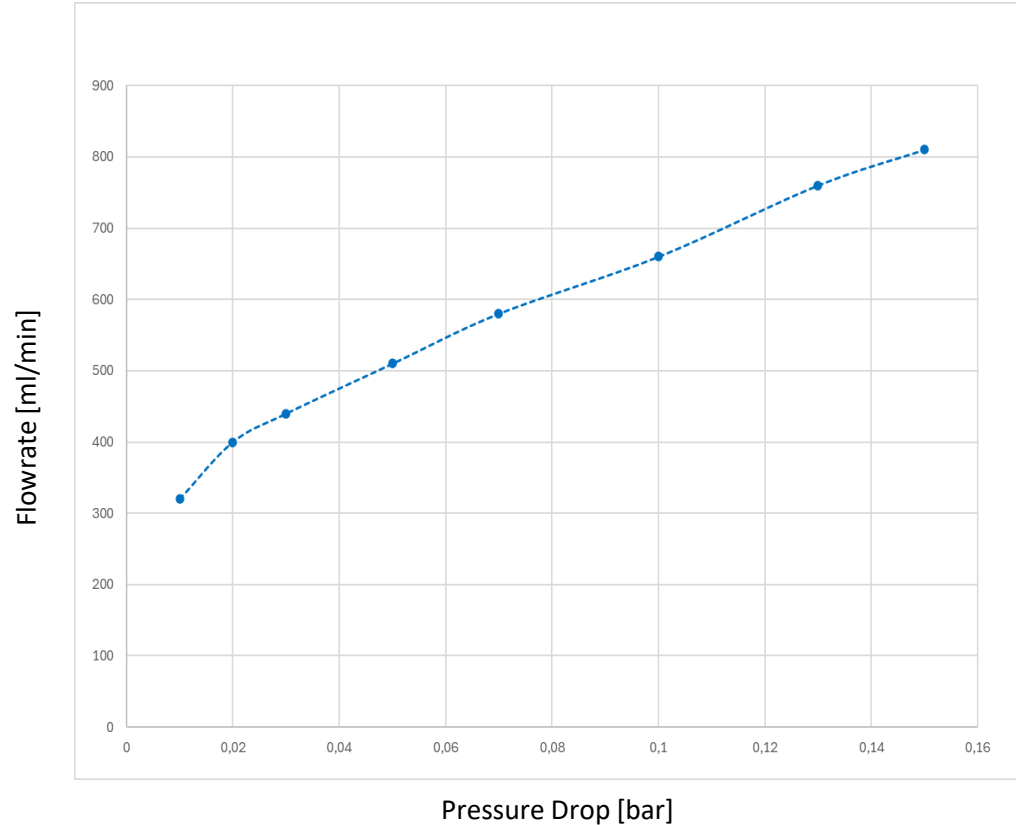
IQ-Twin DS470-Alu (AlSi10Mg)

Pressure [bar]	Flowrate [ml/min]
0,01	320
0,02	390
0,03	440
0,05	510
0,07	570
0,10	650
0,13	760
0,15	810



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Pressure [bar]	Flowrate [ml/min]
0,01	320
0,02	400
0,03	440
0,05	510
0,07	580
0,10	660
0,13	760
0,15	810



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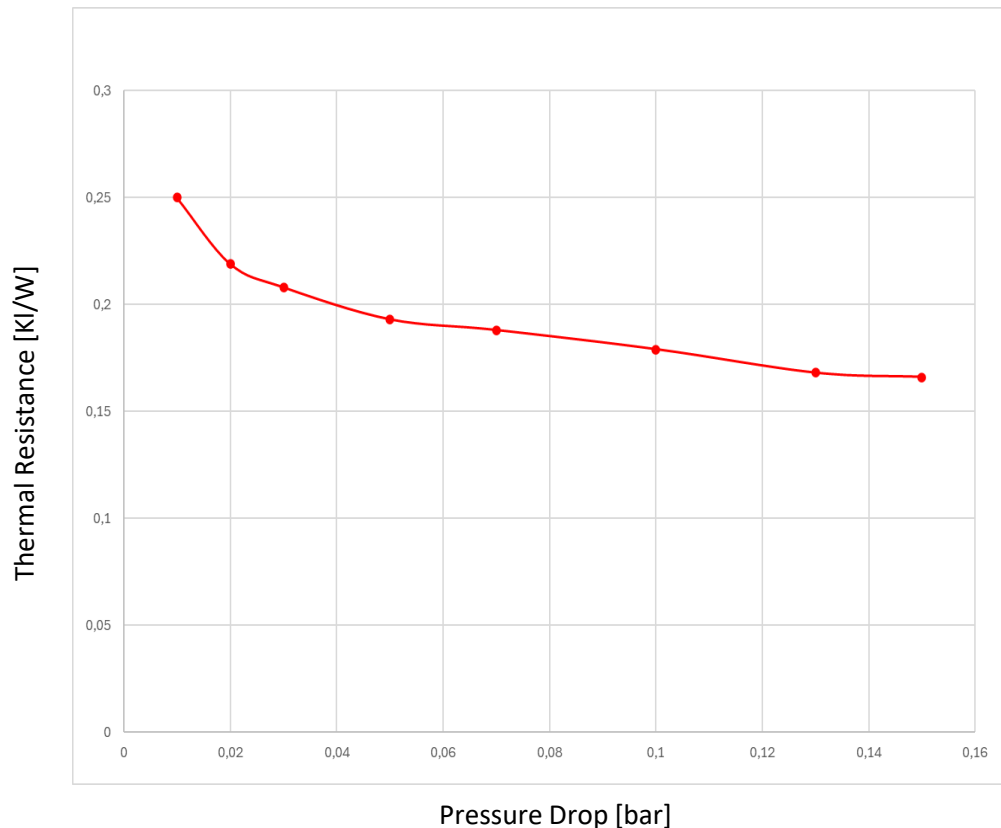
Pressure [bar]	Rth [K/W] @ 300 Watt
0,01	0,195
0,02	0,169
0,03	0,161
0,05	0,148
0,07	0,140
0,10	0,136
0,13	0,133
0,15	0,128

$T_{in} \text{ Fluid} = 22,88^{\circ}\text{C}$

$dT_{in;surface} = 38,41^{\circ}\text{C}$

$\rightarrow T_{surface} @ 0,15\text{bar} = 61,29^{\circ}\text{C}$

*with TIM, thermal paste



IQ-Twin DS470-Alu (AlSi10Mg)

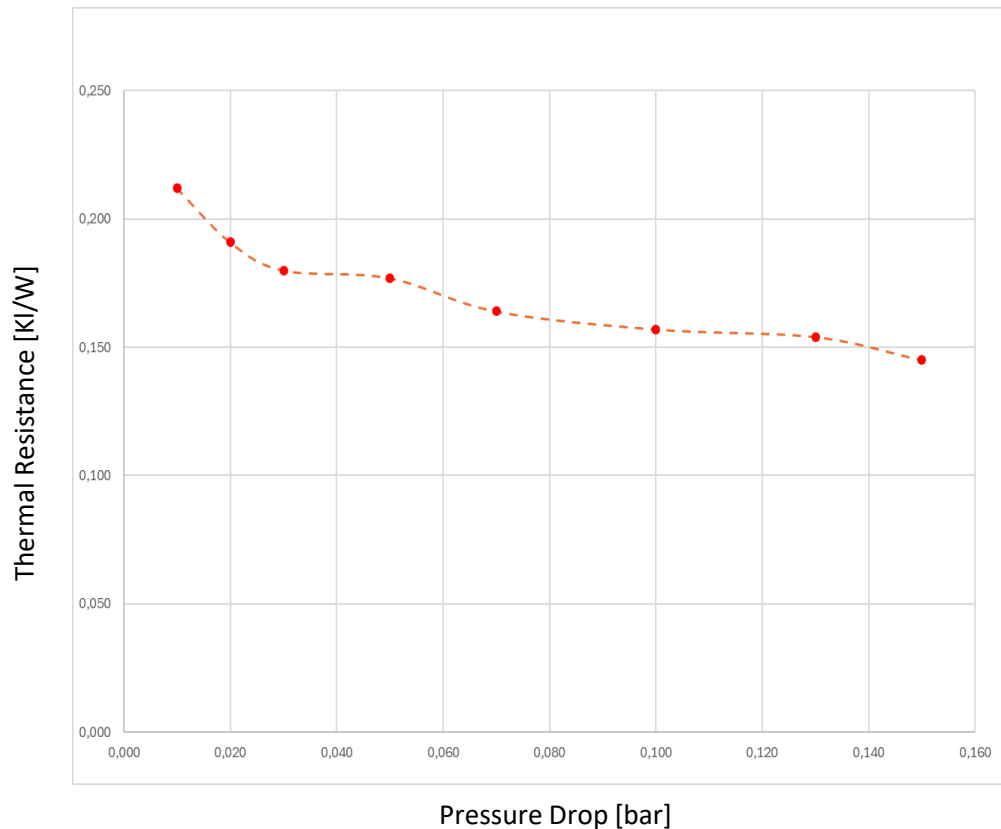
Pressure [bar]	Rth [K/W] @ 300 Watt
0,01	0,250
0,02	0,219
0,03	0,208
0,05	0,193
0,07	0,188
0,10	0,179
0,13	0,168
0,15	0,166

$T_{in} \text{ Fluid} = 24,43^{\circ}\text{C}$

$dT_{in;surface} = 43,60^{\circ}\text{C}$

$\rightarrow T_{surface} @ 0,15\text{bar} = 68,06^{\circ}\text{C}$

*with TIM, thermal paste



IQ-Twin DS470-Alu (AlSi10Mg)

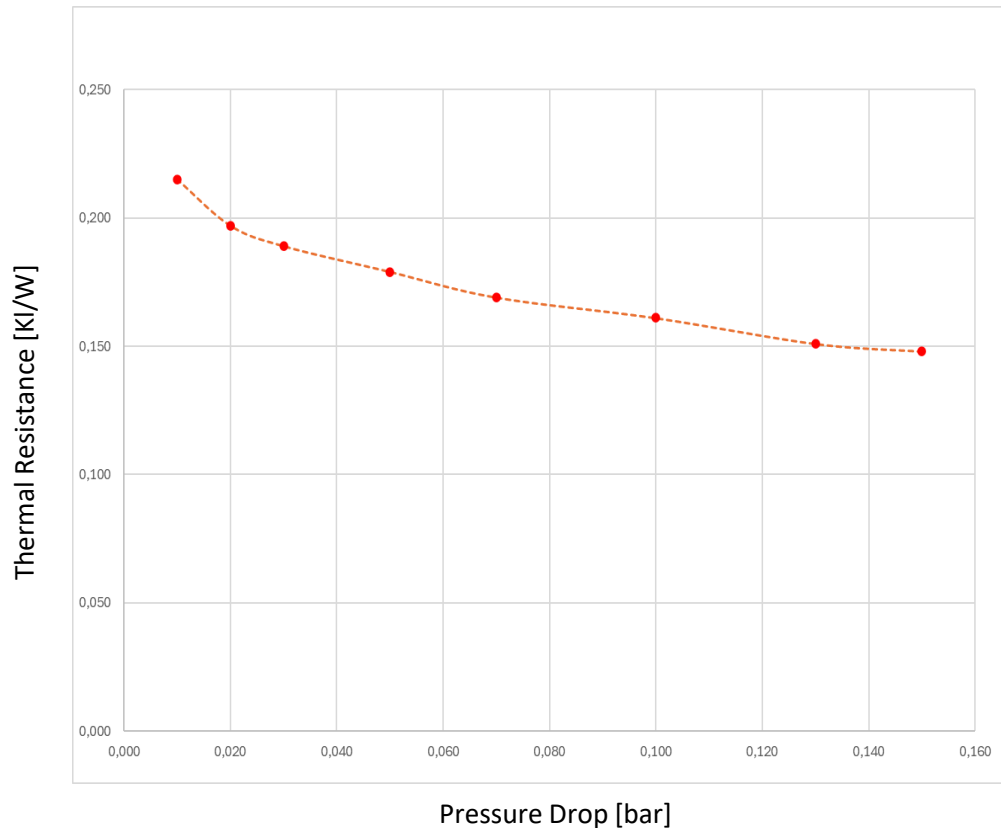
Pressure [bar]	Rth [K/W] @ 300 Watt
0,01	0,250
0,02	0,219
0,03	0,208
0,05	0,193
0,07	0,188
0,10	0,179
0,13	0,168
0,15	0,166

$T_{in \text{ Fluid}} = 24,43^{\circ}\text{C}$

$dT_{in;surface} = 43,60^{\circ}\text{C}$

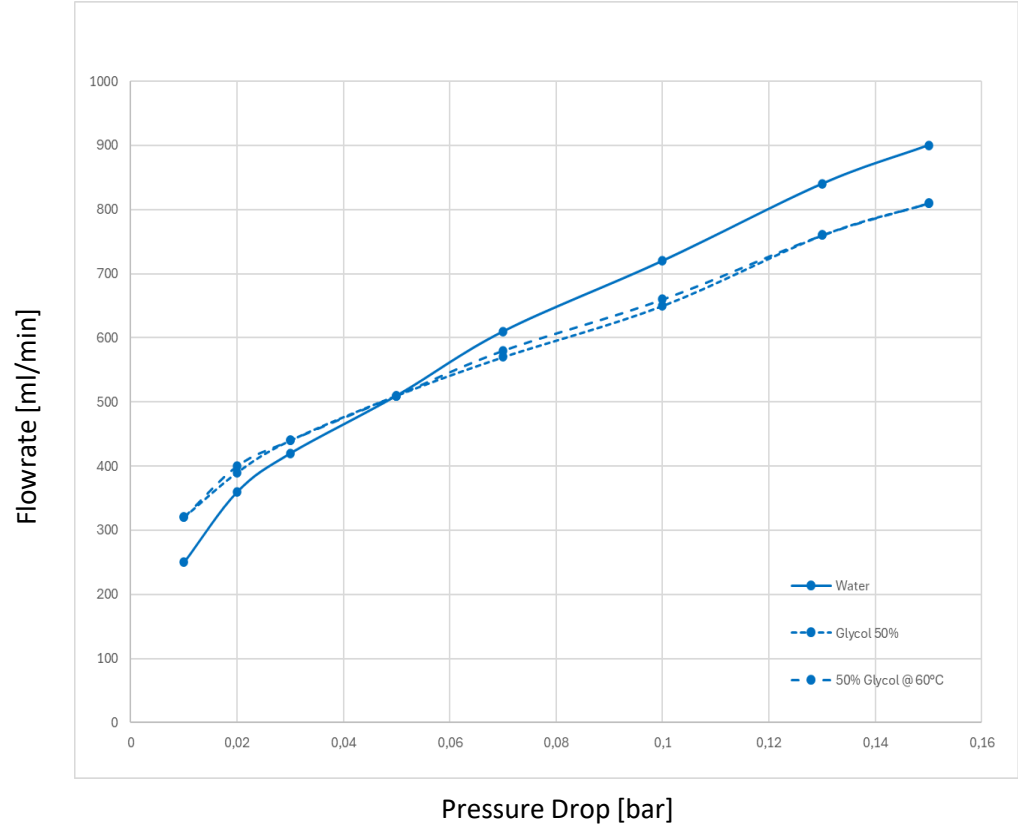
$\rightarrow T_{surface} @ 0,15\text{bar} = 68,06^{\circ}\text{C}$

*with TIM, thermal paste



IQ-Twin DS470-Alu (AlSi10Mg)

Pressure [bar]	Water Flowrate [ml/min]	Glycol 50% Flowrate [ml/min]	Glycol 50% @ 60°C Flowrate [ml/min]
0,01	250	320	320
0,02	360	390	400
0,03	420	440	440
0,05	510	510	510
0,07	610	570	580
0,10	720	650	660
0,13	840	760	760
0,15	900	810	810



IQ-Twin DS470-Alu (AlSi10Mg)

Pressure [bar]	Water Rth cooler [K/W]	Glycol 50% Rth cooler [K/W]	Glycol 50% @ 60°C Rth cooler [K/W]
0,01	0,195	0,212	0,215
0,02	0,169	0,191	0,197
0,03	0,161	0,180	0,189
0,05	0,148	0,177	0,179
0,07	0,140	0,164	0,169
0,10	0,136	0,157	0,161
0,13	0,133	0,154	0,151
0,15	0,128	0,145	0,148

