

## Technical data

# Compact manifold

Combined flow and return manifold consisting of rectangular tubing with chambers made of black sheet steel S235 arranged adjacent to one another and separated by sinusoidal parting wall. Pipes configured as threaded and/or flanged connections ANSI 150lbs. All pipes are aligned to the height of the shut-off valves, and can be at the top, side or underneath. Drainage coupling ½" for flow and return chambers are provided as standard. The compact manifold is factory pressure tested and primed.

Contact certification	
Type	Compact manifold
Operating pressure	max. 6 bar (87 psi)
Operating temperature	max. 0/+110°C or 230°F
Contact	Sinus North America 321 Shoemaker St Kitchener, ON, N2E 3B3 CANADA

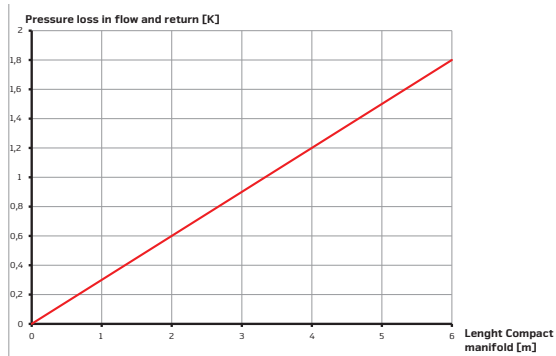
Compact manifold 6 bar (87 psi)

Type	Capacity at ΔT 20 K		Heating water flow rate		Water content		Heat transfer at 70°/50° C (158°/122°F)			Return increase	Weight basic body		Max. pipe/flange size (boiler connection)		Pipe distance (OC)		Wall thickness	
	[WxH]	[kW]	[MBH]	[m³/h]	[gpm]	[liter/rm]	[gal/rm]	[kW/rm]	[MBH]		[%]	[K/rm]	[kg/rm]	[lbs/rm]	[DN]	[in inch]	[mm]	[in inch]
160/80	250	853.0	10.8	47.5	10	2.6	2.6	8.9	1.0	0.3	16.4	36.2	65/80	2 ½" /3"	250/300/variable	9,8/11,8/variable	4	0.2
180/110	400	1,364.9	17.2	75.8	17.6	4.6	4.2	14.3	1.1	0.2	20.5	45.2	80/100	3"/4"	250/300/350/variable	9,8/11,8/13,8/variable	4	0.2
200/120	600	2,047.3	25.8	113.6	21.5	5.7	4.3	14.7	0.7	0.2	22.6	49.8	100/125	4"/5"	250/300/350/variable	9,8/11,8/13,8/variable	4	0.2
280/180	1,250	4,265.2	53.8	237	45.0	11.9	7.8	26.6	0.6	0.1	46.8	103.2	125/150	5"/6"	300/350/variable	11,8/13,8/variable	6	0.2
300/200	1,600	5,459.4	68.8	303	54.1	14.3	8.3	28.3	0.5	0.1	51.3	113.1	125/150	5"/6"	300/350/variable	variable	6	0.2
400/200	2,100	7,165.5	90.0	397	72.9	19.3	10.6	36.2	0.5	0.1	61.2	134.9	150	6"	variable	variable	6	0.2
450/250	3,500	11,942.5	150.0	661	101.5	26.8	11.5	39.2	0.3	<0.1	95.4	210.3	200	8"	variable	variable	8	0.3
500/300	4,500	15,354.6	194.0	855	137.3	36.3	13.6	46.4	0.3	<0.1	113.0	249.1	250	10"	variable	variable	8	0.3
600/400	6,200	21,155.3	267.0	1,176	216.5	57.2	13.1	44.7	0.2	<0.1	168.7	371.9	300	12"	variable	variable	12	0.5
700/500	9,100	31,050.5	391.0	1,722	321.0	84.8	14.6	49.8	0.2	<0.1	261.9	577.4	350	14"	variable	variable	12	0.5

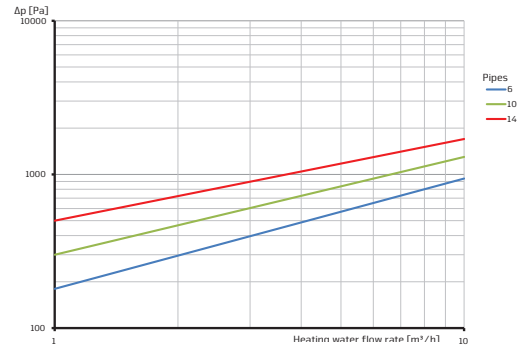
## Heat transfer and pressure drop between flow and return chamber

Heat transfer diagrams illustrating the return temperature increase in Kelvin [K] per meter Manifold length and pressure loss diagrams illustrating the respective pressure drop depending on the water flow rate at given numbers of pipes.

### Type 120/80

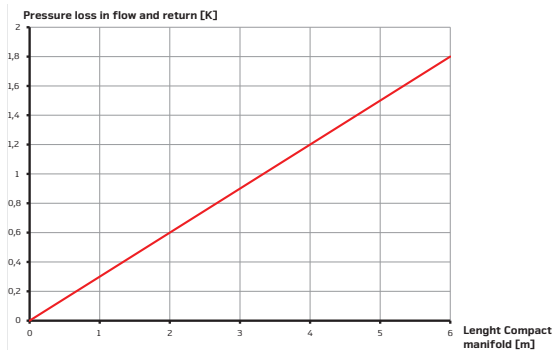


Heat transfer between flow and return

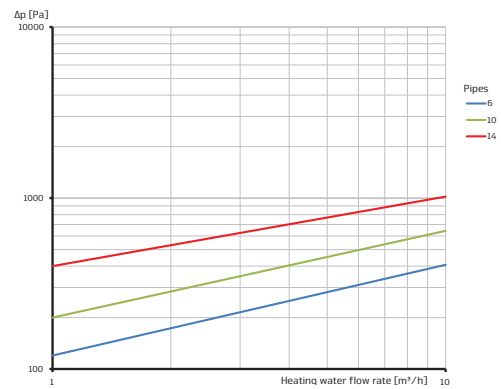


Pressure loss in flow and return

### Type 160/80

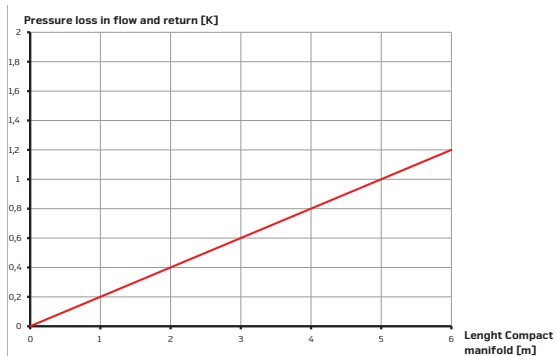


Heat transfer between flow and return

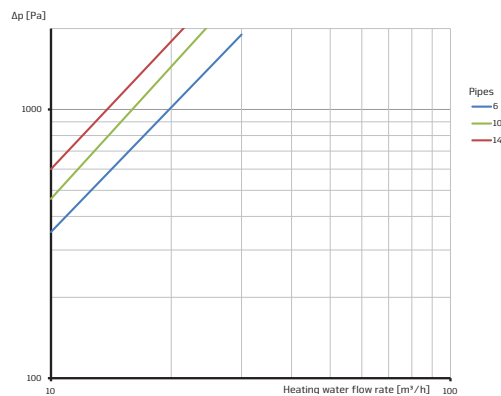


Pressure loss in flow and return

### Type 180/110

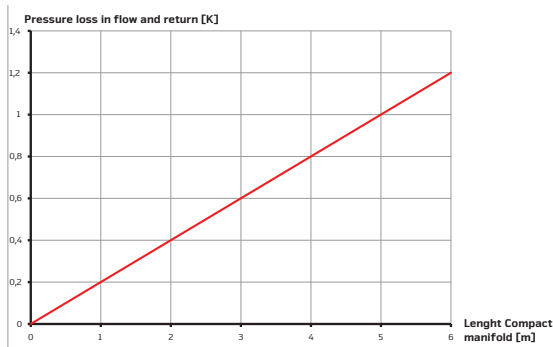


Heat transfer between flow and return

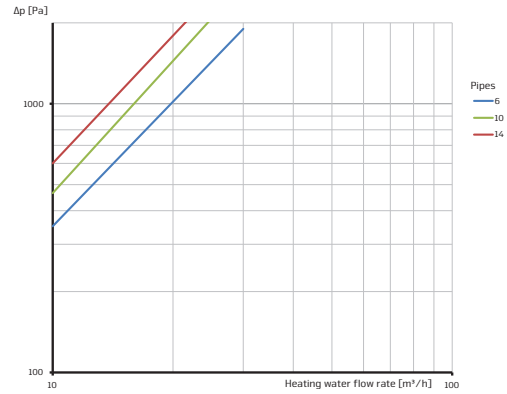


Pressure loss in flow and return

### Type 200/120

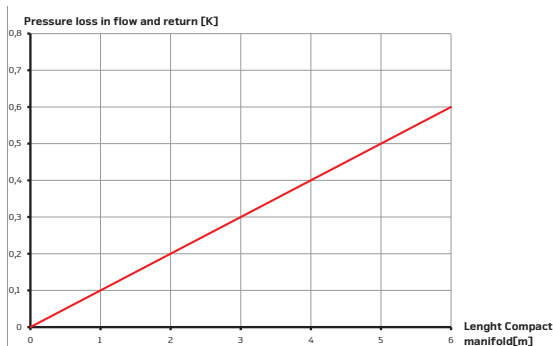


Heat transfer between flow and return

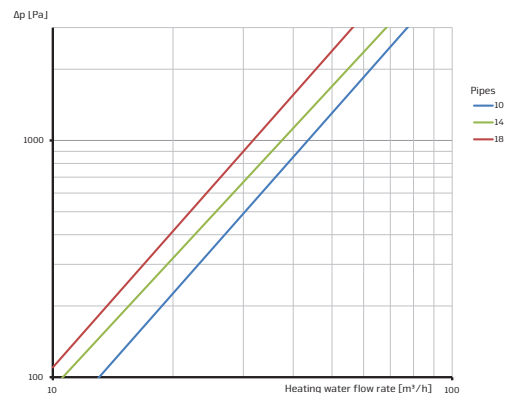


Pressure loss in flow and return

### Type 280/180

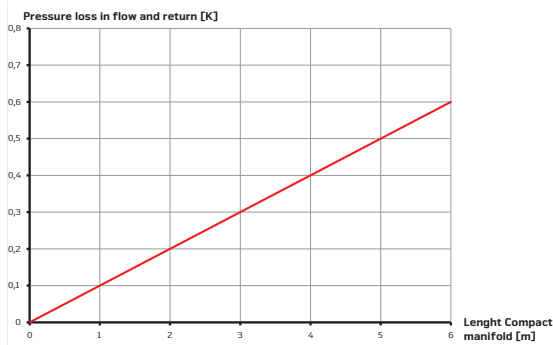


Heat transfer between flow and return

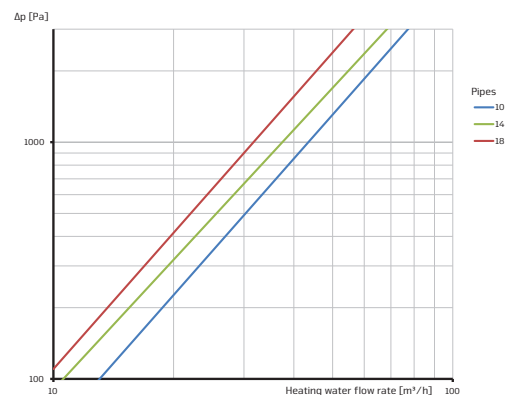


Pressure loss in flow and return

### Type 300/200

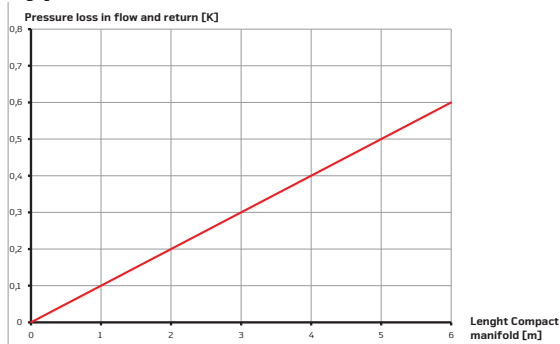


Heat transfer between flow and return

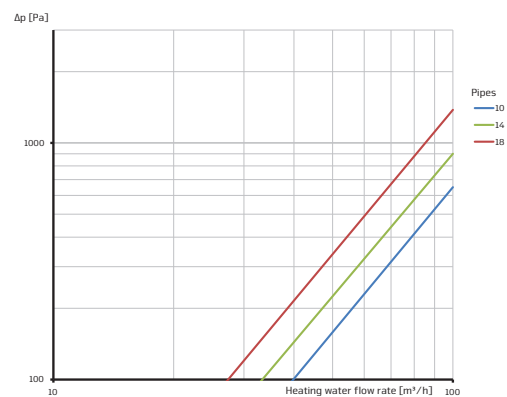


Pressure loss in flow and return

### Type 400/200

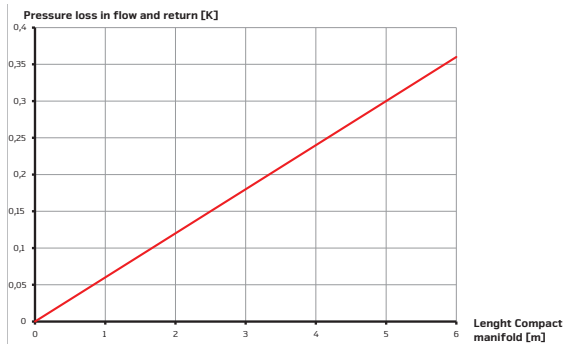


Heat transfer between flow and return

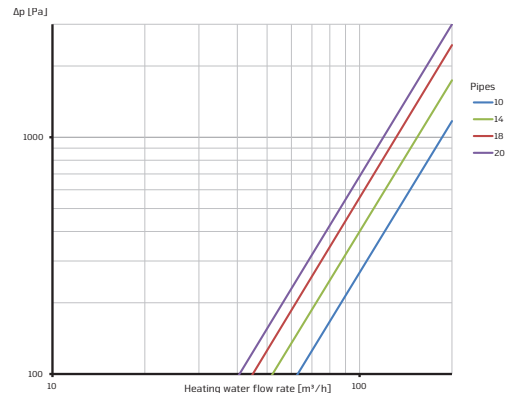


Pressure loss in flow and return

### Type 450/250

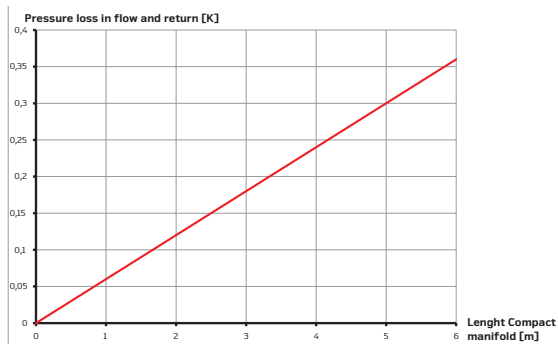


Heat transfer between flow and return

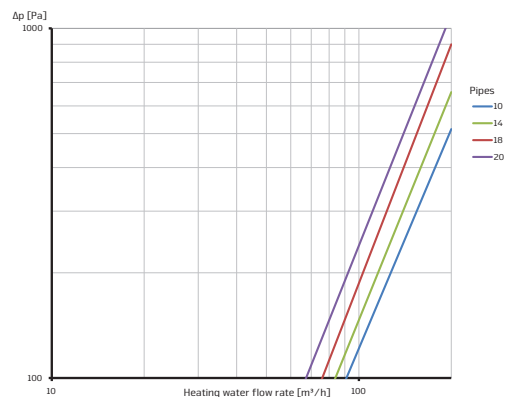


Pressure loss in flow and return

### Type 500/300

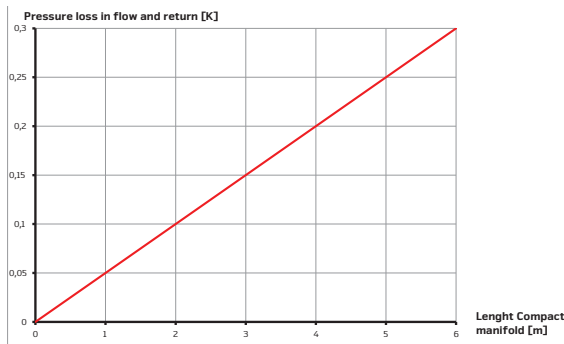


Heat transfer between flow and return

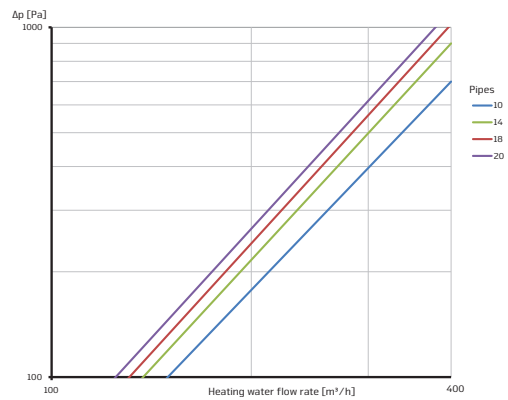


Pressure loss in flow and return

### Type 600/400

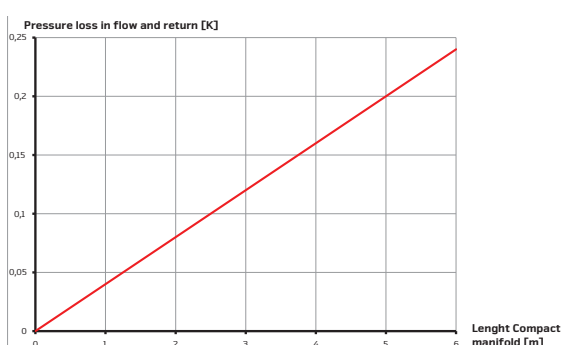


Heat transfer between flow and return

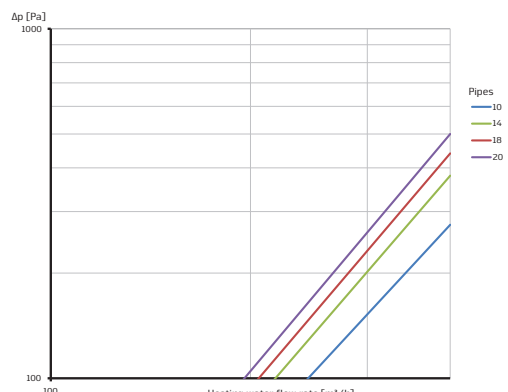


Pressure loss in flow and return

### Type 700/500



Heat transfer between flow and return



Pressure loss in flow and return