

Application:

The “OKP” tube collectors with dry heat-pipe connection can be used for heating of potable water and swimming pools, solar support of the heating system and production of process heat. Oventrop offers two models, one with 10 and another with 20 vacuum tubes.

Installation:

The mounting rails are pre-assembled and just have to be fixed to the roof hooks or be mounted onto the flat roof mounting kit (sets of roof hooks and flat roof mounting kits to be ordered separately). This way, a time-consuming installation on site is avoided.

Due to their modular construction, the OKP tube collectors can be installed by one person without using a crane. The individual vacuum tubes are inserted into the collector housing and fixed at the end of the installation (see installation and operating instructions).

The collector is connected to the supply and return of the solar circuit with the help of 22 mm compression fittings supplied with the collector.

The collector is tested according to DIN EN 12975-1 and certified according to “Solarkeymark”.

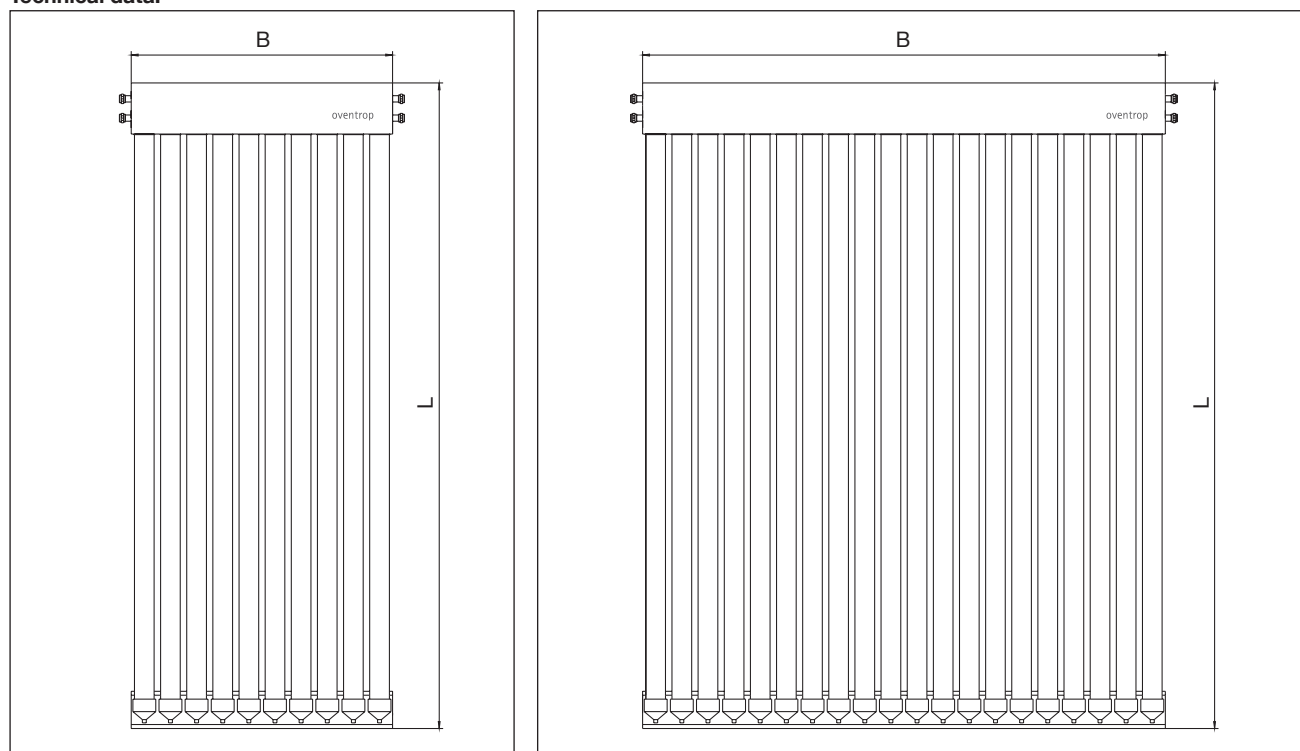
Advantages:

- high functional reliability due to metal sealing (compression connection 4 x 22 mm)
- high quality corrosion-resistant material
- high efficiency due to high quality thermal insulation (“vacuum flask” principle)
- modular construction, no crane required for installation
- replacement of individual vacuum tubes



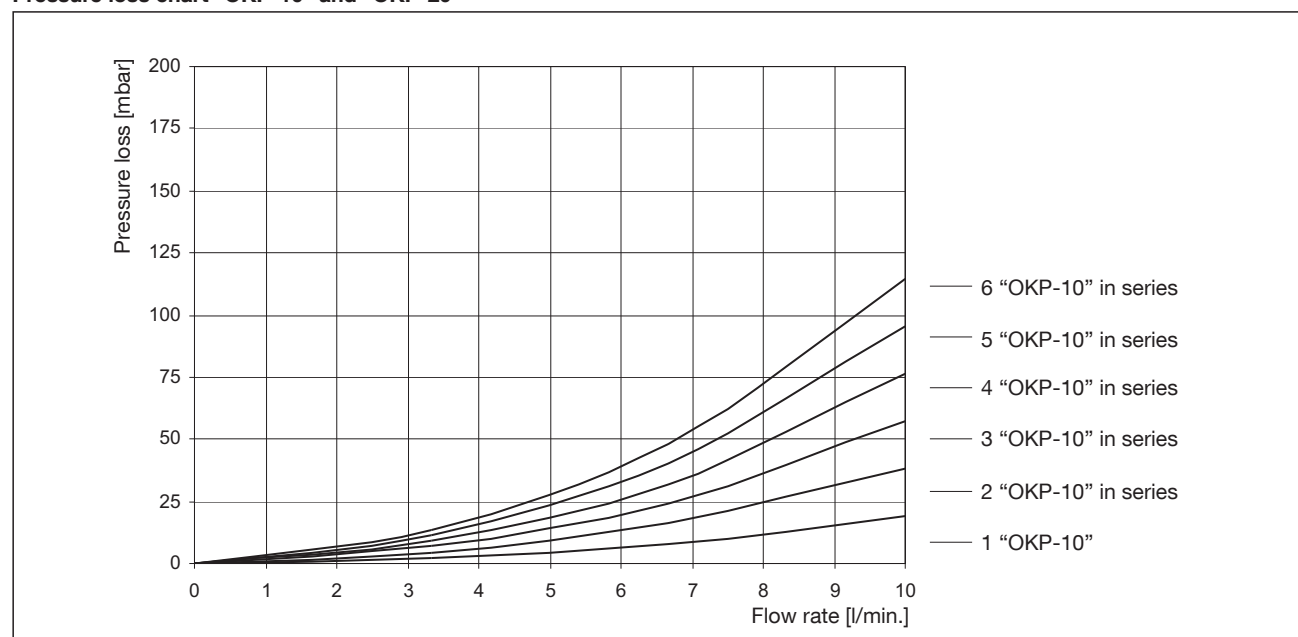
“OKP-10” Tube collector

Technical data:



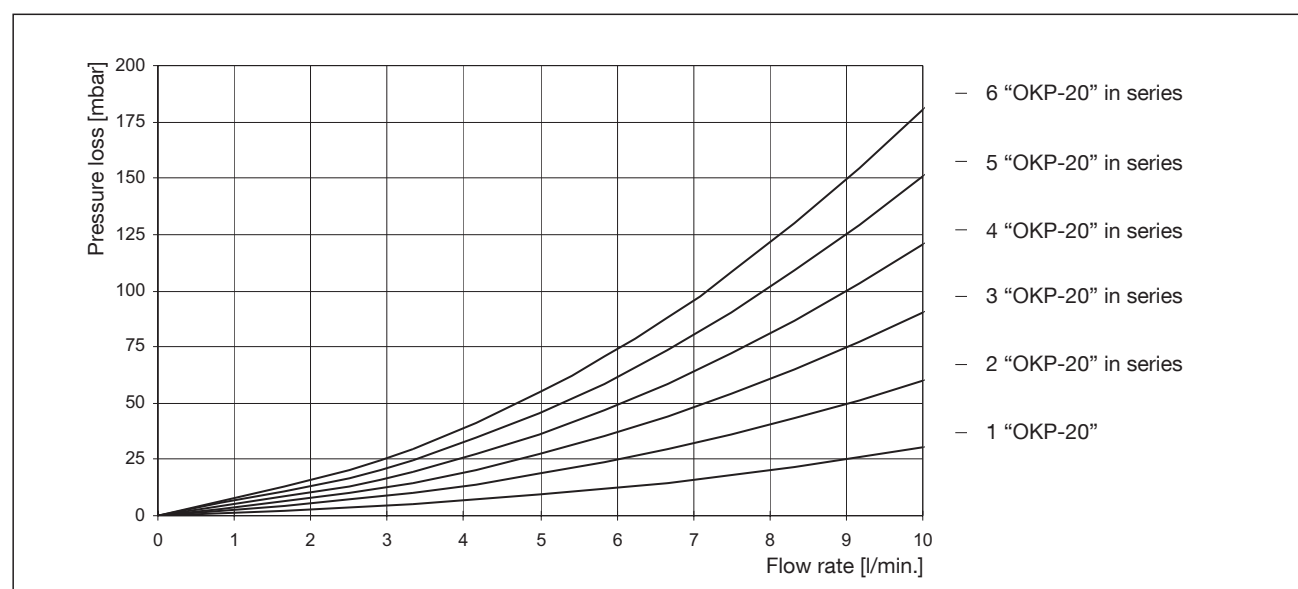
Vacuum tube collector	Unit	“OKP-10”	“OKP-20”
Item no.:		1361230	1361231
Number of tubes	Pieces	10	20
Gross surface area	m ²	1.7	3.25
Outer dimensions (L x W)	m	1.995 x 0.852	1.995 x 1.632
Aperture surface area	m ²	0.94	1.88
Absorber surface area	m ²	0.81	1.62
Weight	kg	46	84
Absorption coefficient	α	≥ 0.94	≥ 0.94
Emission coefficient	ε	≤ 0.07	≤ 0.07
Collector tilt gradient	Degree	15 up to 75	15 up to 75
Stagnation temperature at 1000 W/m ² and 30°C	°C	207	207
Max. permissible operating pressure	bar	10	10
Collector heat return	kWh/m ²	> 525	> 525
Heat transfer liquid content	l	1.2	2.1

Pressure loss chart “OKP-10” and “OKP-20”



Heat transfer liquid at 40 °C

Pressure loss indications without coupling and connection hoses



Heat transfer liquid at 40 °C

Pressure loss indications without coupling and connection hoses

Recommended flow rate (except for low flow installations):
30-40 litres/m² collector surface and hour

k_v values

(Heat transfer liquid at 40 °C)

Tubes	“OKP-10”	“OKP-20”	k _v total
10	1	0	3.79
20	0	1	2.89
30	1	1	2.30
40	0	2	2.04
50	1	2	1.80
60	0	3	1.67
70	1	3	1.53
80	0	4	1.45
90	1	4	1.35
100	0	5	1.29
110	1	5	1.22
120	0	6	1.18

Subject to technical modifications without notice.

Product range 9
ti 228-EN/10/MW
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