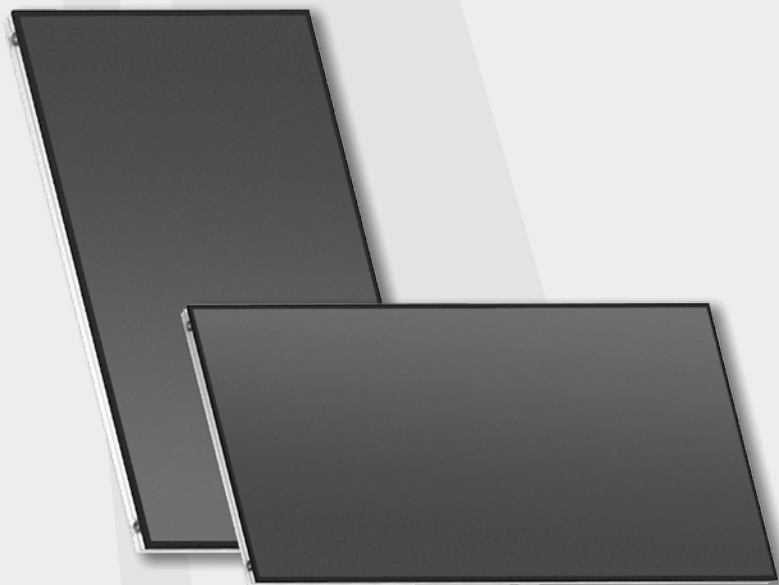


PFM SOLAR COLLECTORS

PRODUCT DESCRIPTION

Plug & Flow module collector (PFM):

Can be installed both horizontally and vertically. Suitable mounting systems are available for various types of roofing or with weather-resistant frames for freestanding units. Thanks to its low weight and optimum dimensions, the collector may be installed in a short time. The internal piping is easy to install and the collectors can quickly be connected to a collector array in a few simple actions.



Area of use

- In-roof mounting
- On-roof mounting
- Freestanding

Product benefits

- Keymark tested collector
- High-performance absorber – complete meander pipe is welded to the absorber metal (incl. elbows), higher efficiency through greater thermal length
- CMT welded collector pan
- Long service life, robust, temperature- and weather-resistant design
- Fast and easy installation using hydraulic connections
- Very low profile construction (62 mm)
- Silicone-sealed glass pane with cover strip
- Enlarged aperture area with the same gross area

SPECIFICATIONS

Type	PFMS2000	PFMS2500	PFMW2500	PFMS3300
Item no.	1430683	1430685	1430686	1430687
Gross area	2.012 m ²	2.555 m ²	2.555 m ²	3.312 m ²
Aperture area	1.892 m ²	2.417 m ²	2.417 m ²	3.146 m ²
Absorber area	1.865 m ²	2.384 m ²	2.384 m ²	3.108 m ²
External dimensions (H x W x D)	1.702 x 1.182 x 0.062 m	2.162 x 1.182 x 0.062 m	1.182 x 2.162 x 0.062 m	2.802 x 1.182 x 0.062 m
Weight approx.	33 kg	42 kg	42 kg	53 kg
Solar fluid volume, approximately	1.4 l	1.7 l	2.2 l	1.9 l
Efficiency acc. to ErP (dT 40K @ 1000 W/m ²)	62 %	63 %	61 %	64 %
Optical efficiency eta ₀	80 %	81 %	80 %	81 %

Product description

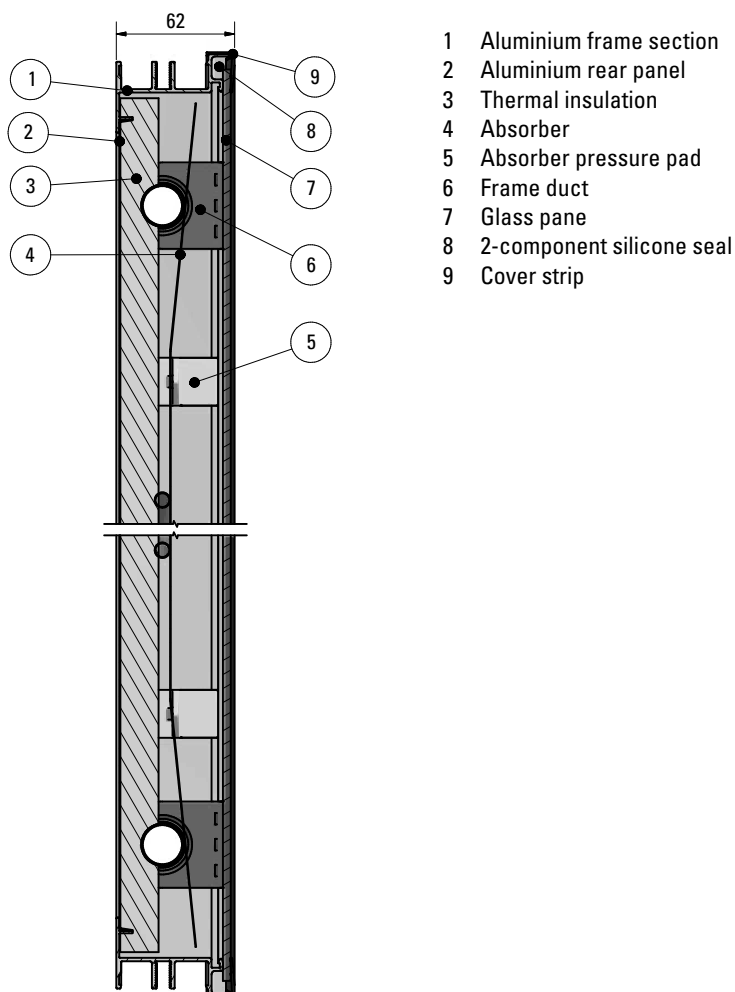
Design	Modular flat collector for simple in-roof, on-roof and freestanding installation for collector angles from 15°-70°.
Housing	Weather-resistant with aluminium rear panel guarantees long service life and high reliability (max. snow load pressure 300 kg/m ²)
Insulation	25 mm mineral wool, nominal bulk density approx. 25 kg/m ³ , emission-free, non-flammable - A1 (EN13501), SPF tested
Absorber	Full-area laser-welded meander absorber (incl. elbow welding) with high-selectivity PVD coating, meandering flow, best solar yield guaranteed
Collector sealing	Panel bonding with temperature and UV resistant 2-component silicone seal, emission-free Additional mechanical bonding of the glass by cover strip
Connections	4 connections copper 22 mm with expansion of pipe end
Permissible operating pressure	10 bar
Efficiency	See Test Reports

ON-ROOF AND FREESTANDING INSTALLATION DIMENSIONS

	Quantity	1 PFM	2 PFM	3 PFM	4 PFM	5 PFM	6 PFM	7 PFM	8 PFM	9 PFM	10 PFM
Height (m)	PFM-S 2,01	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71
	PFM-S 2,55	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17
	PFM-W 2,55	1.19	1.19	1.19	1.19	1.19	1.19	-	-	-	-
	PFM-S 3,30	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81	2.81

	Quantity	1 PFM	2 PFM	3 PFM	4 PFM	5 PFM	6 PFM	7 PFM	8 PFM	9 PFM	10 PFM
Width (m)	PFM-S 2,01	1.19	2.38	3.57	4.76	5.95	7.15	8.34	9.53	10.72	11.91
	PFM-S 2,55	1.19	2.38	3.57	4.76	5.95	7.15	8.34	9.53	10.72	11.91
	PFM-W 2,55	2.17	4.34	6.51	8.68	10.85	13.03	-	-	-	-
	PFM-S 3,30	1.19	2.38	3.57	4.76	5.95	7.15	8.34	9.53	10.72	11.91

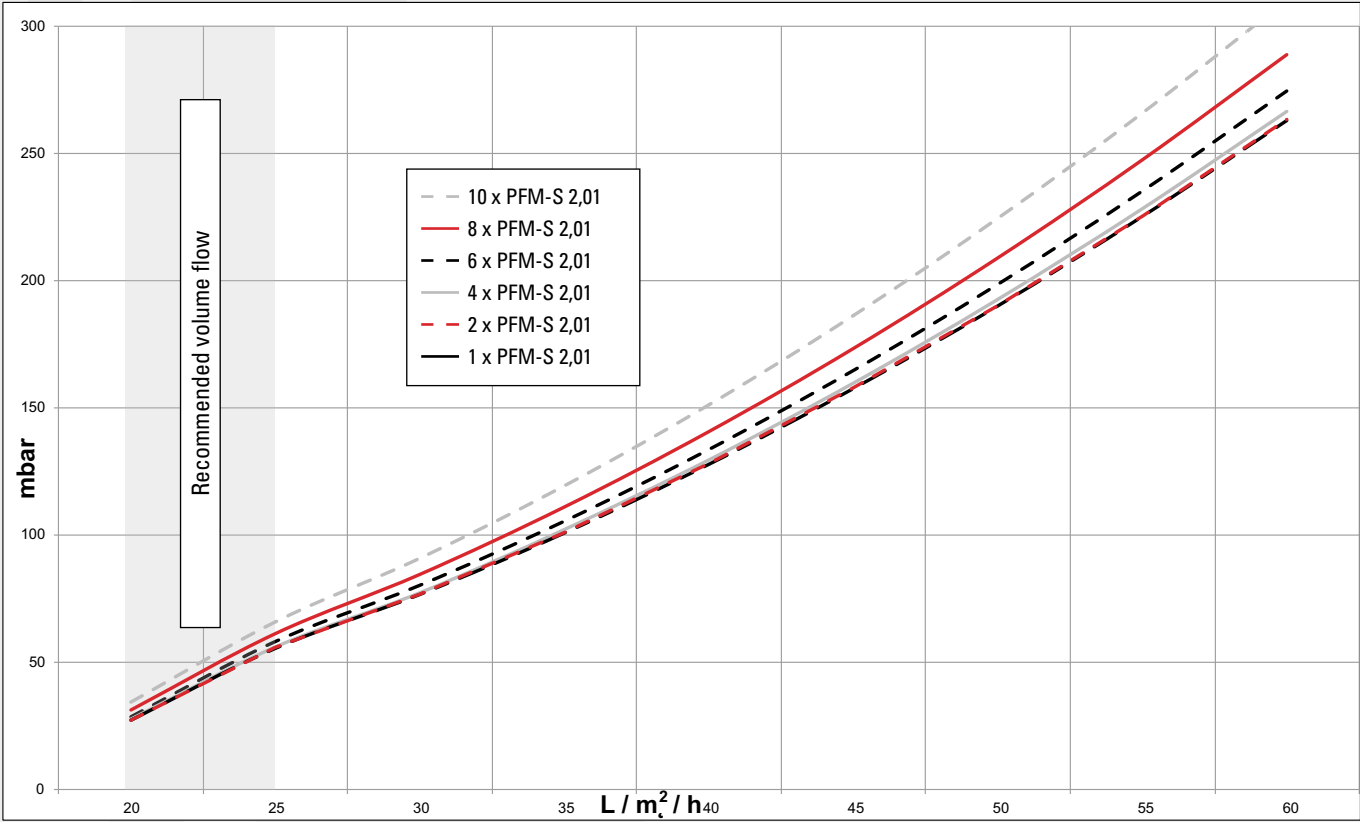
HORIZONTAL SECTION



PRESSURE LOSS

PFM-S 2,01 pressure loss

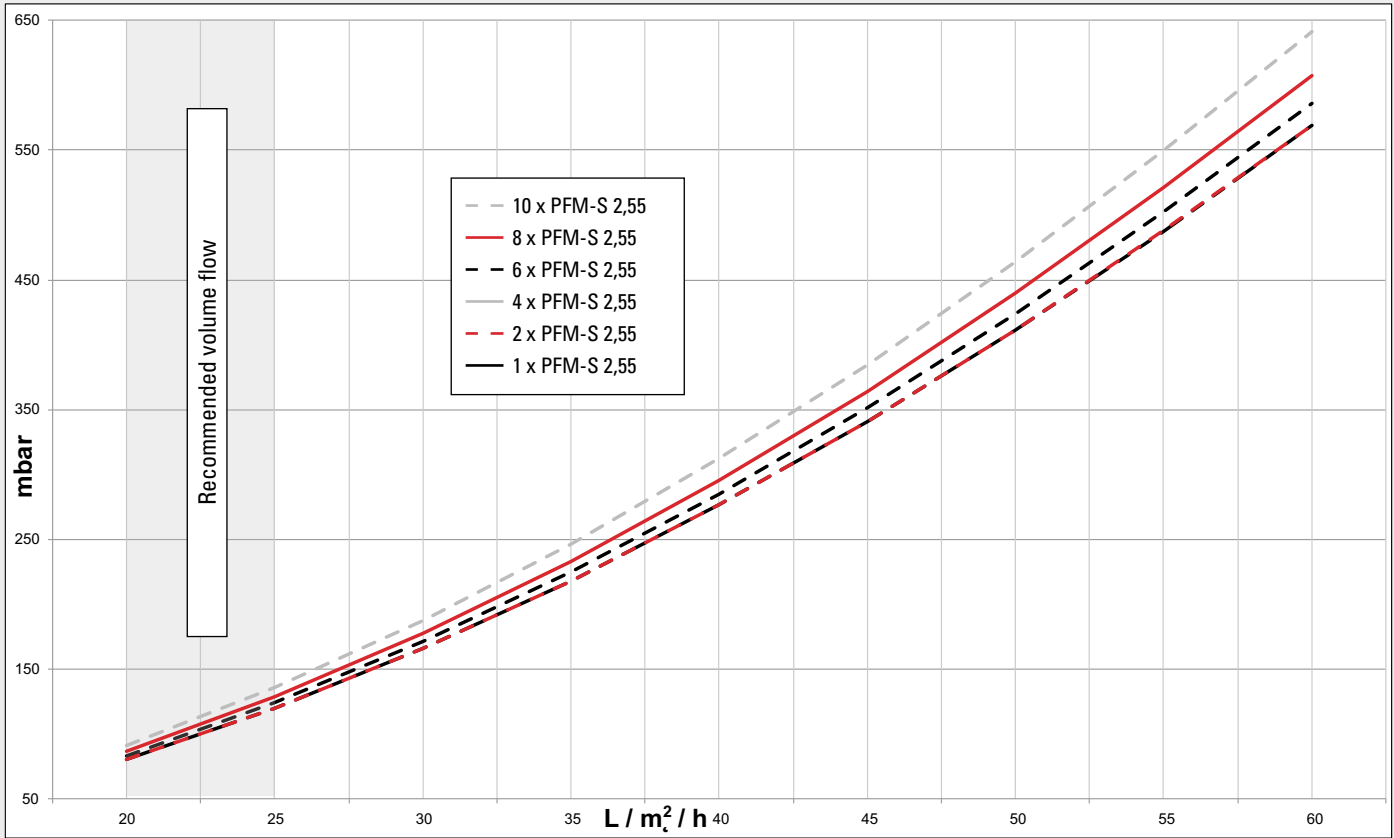
Original antifreeze mixture (40% polypropylene glycol), medium temperature 60 °C, gross area as legend



PRESSURE LOSS

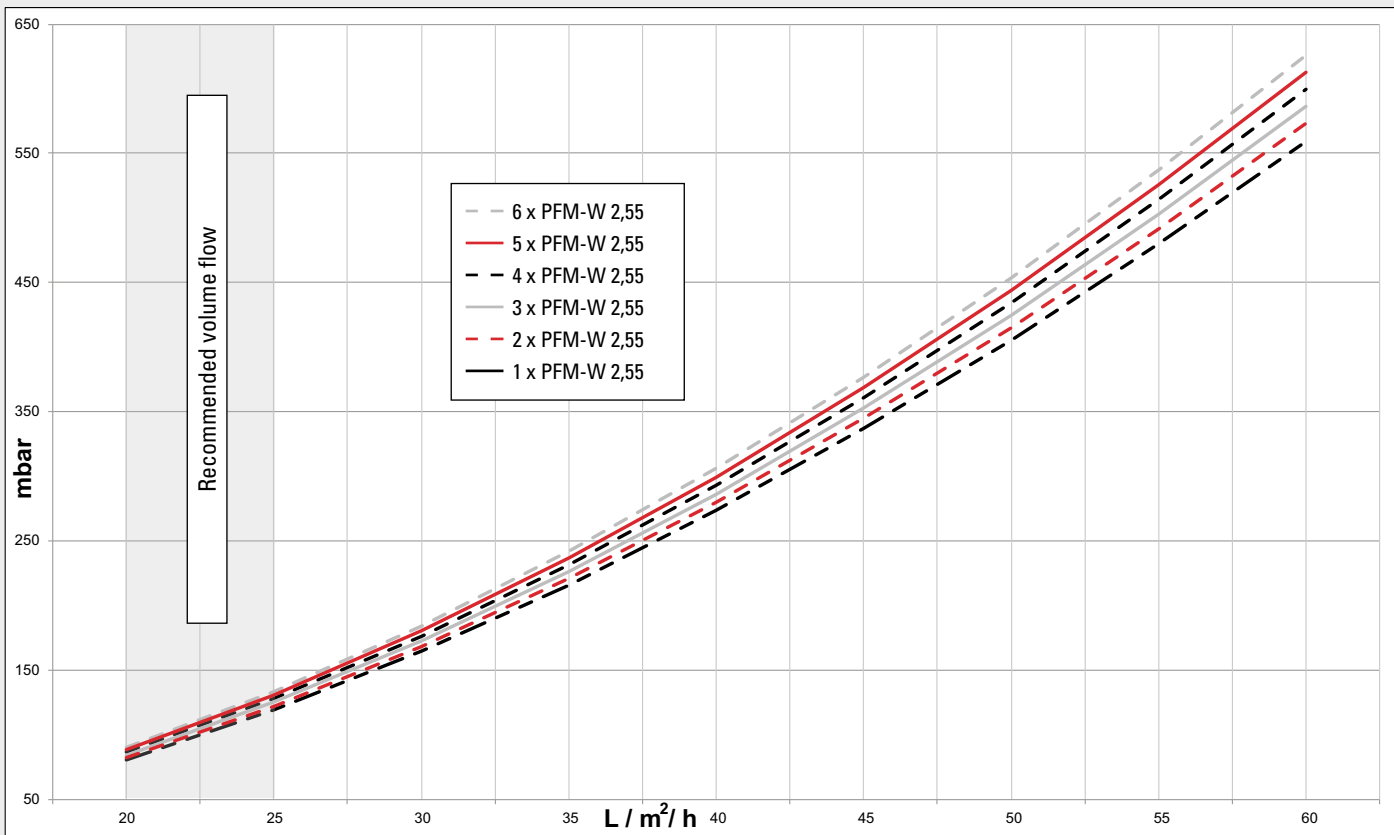
PFM-S 2.55 pressure loss

Original antifreeze mixture (40% polypropylene glycol), medium temperature 60 °C, gross area as legend



PFM-W 2.55 pressure loss

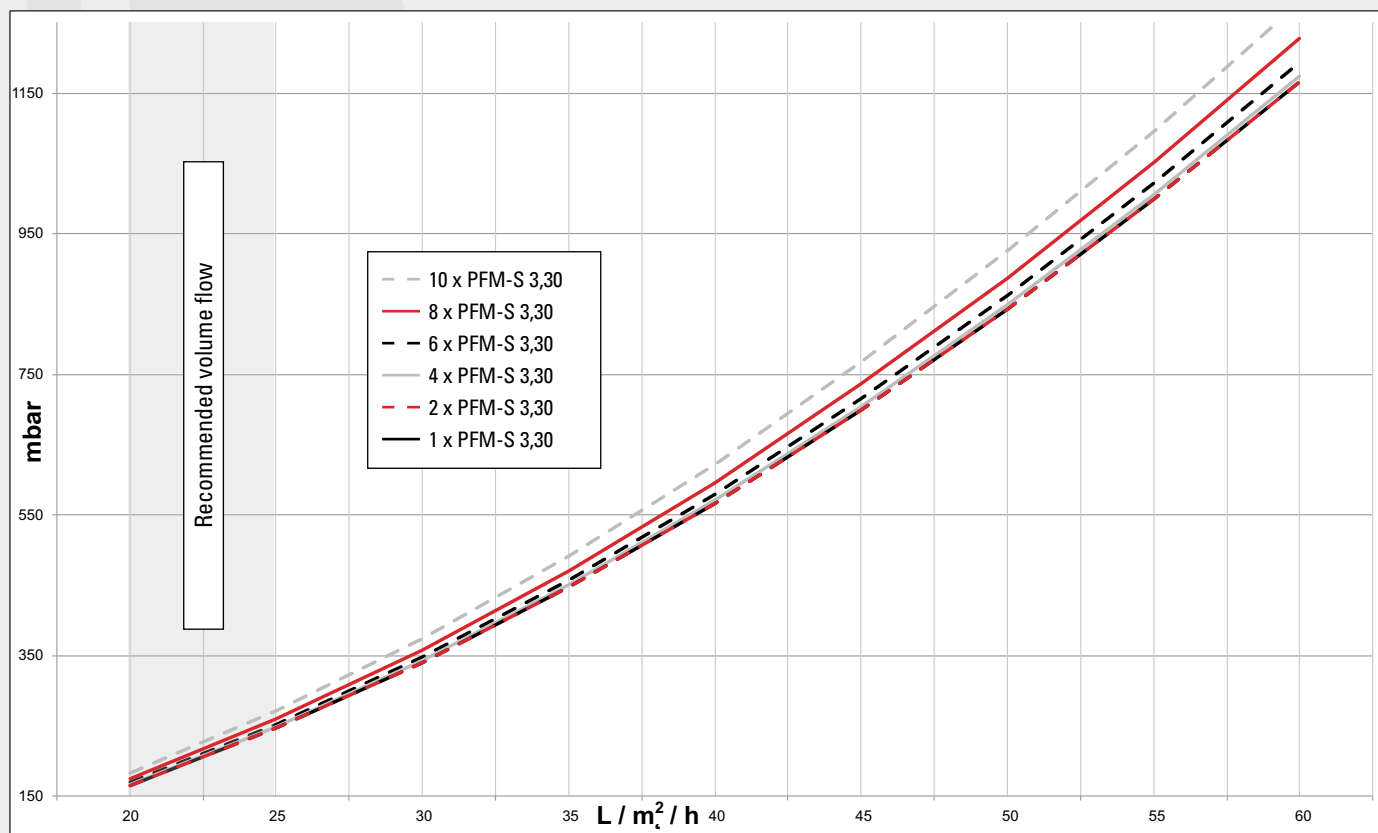
Original antifreeze mixture (40% polypropylene glycol), medium temperature 60 °C, gross area as legend



PRESSURE LOSS

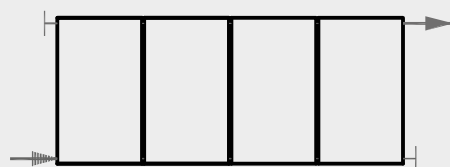
PFM-S 3,30 pressure loss

Original antifreeze mixture (40% polypropylene glycol), medium temperature 60 °C, gross area as legend



CONNECTIVITY

The selection of the diagrams must be made taking the overall system into account (type, dimensions and length of the connecting lines, solar station, heat exchanger, ...). In the event of further connections, the pressure loss must be calculated and the pump output be tested separately.



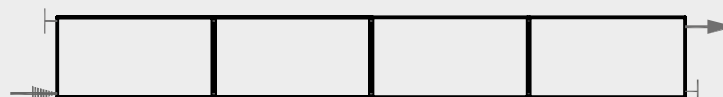
max. 10 PFM-S



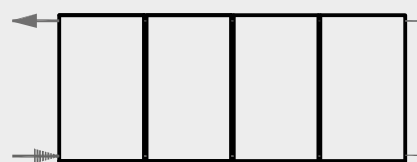
max. 6 PFM-W 2,55



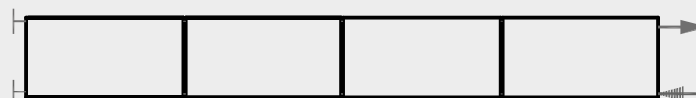
max. 10 PFM-S



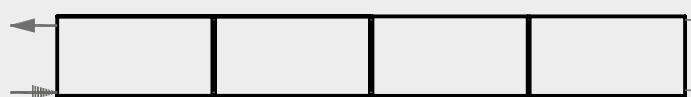
max. 6 PFM-W 2,55



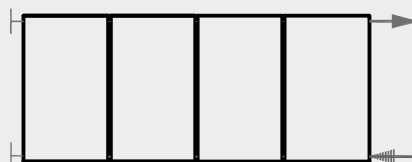
max. 5 PFM-S



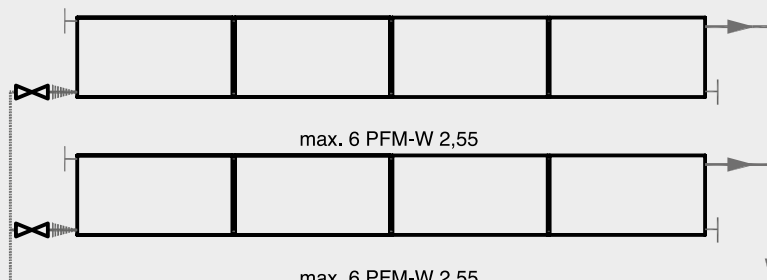
max. 4 PFM-W 2,01/2,55



max. 4 PFM-W 2,01/2,55

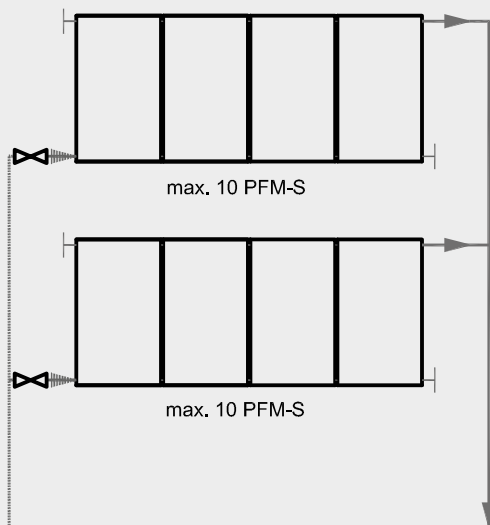


max. 5 PFM-S



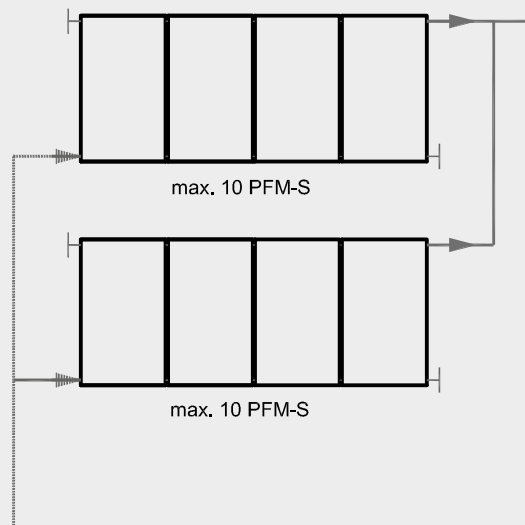
max. 6 PFM-W 2,55

max. 6 PFM-W 2,55



max. 10 PFM-S

max. 10 PFM-S



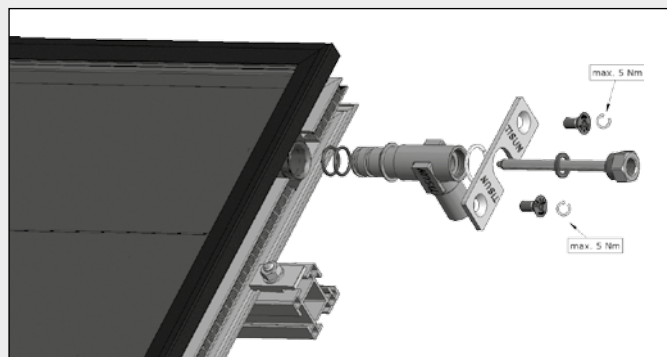
max. 10 PFM-S

max. 10 PFM-S

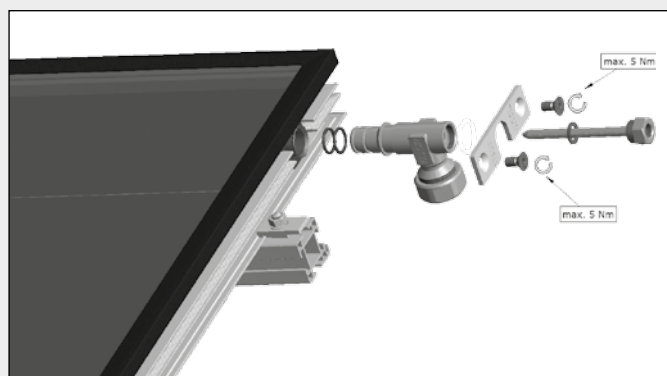
HYDRAULIC CONNECTIONS

Hydraulic connection with sensor pocket

PFM fitting - sensor pocket, CU 22 mm



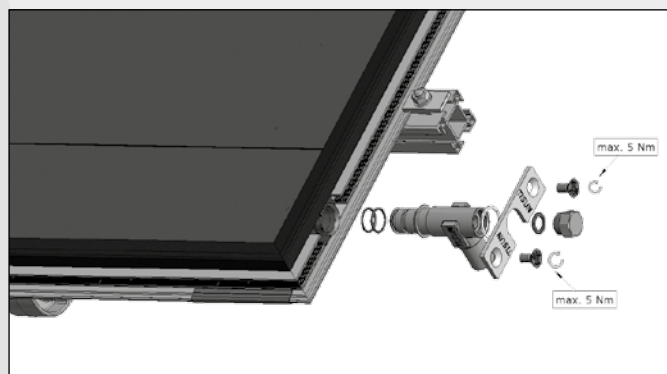
PFM fitting - sensor pocket, corrugated pipe



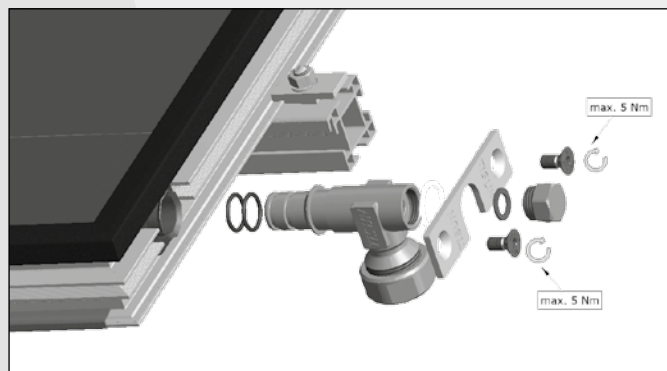
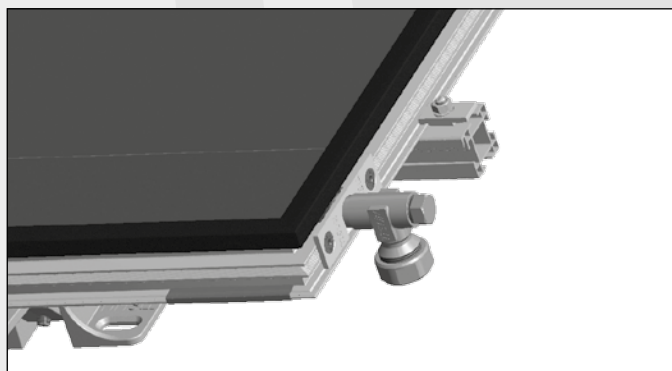
The sensor pocket is directly installed in the solar forward flow. The connector fitting can be ordered in two types. One with a Cu (copper Ø22 mm) connection or with a corrugated pipe (corrugated pipe DN 16 or DN 20) connection. The connector fitting should be on the side of the type plate (on the collector rear panel) .

Hydraulic connection with dummy threaded connection

PFM fitting - dummy threaded connection Cu



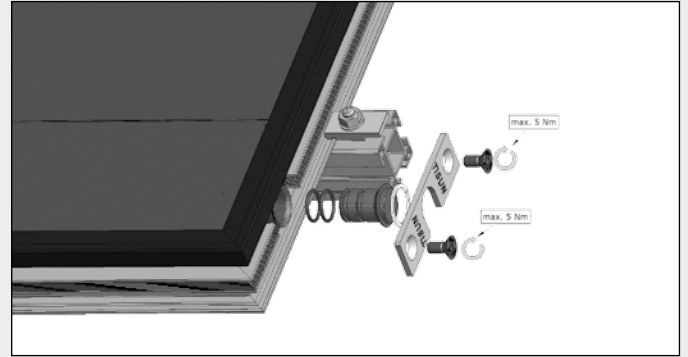
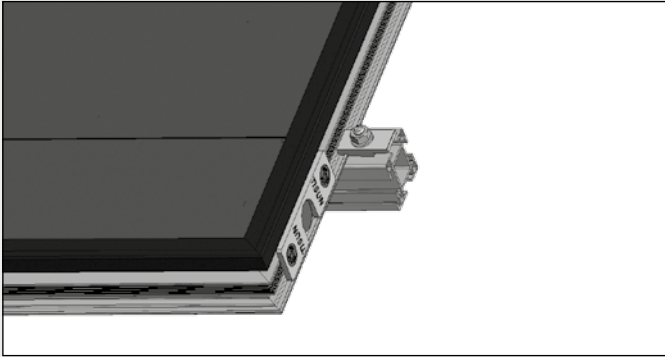
PFM fitting - dummy threaded connection corrugated pipe



HYDRAULIC CONNECTIONS

Dummy plug

PFM dummy plug



PFM collector connector

