DrainBloC®
Solar thermal systems

DrainBloC® – DN 20

Pressurised drain-back system with self-draining collector

DrainBloC® – DN 20

Application ranges

- **Drain-back system**
  for small and medium solar thermal installations

System advantages

- **Pressurised system, thus air molecules don't enter the solar circuit**
- **Simple adjusting of pressure by means of Schrader valve (automatic)**
- **Quick draining in case of pump stagnation**
- **Simple and optimal level adjustment**
- **Plug-&-Play, optimal drain-back values already preset**
- **Safe filling process without pressure surges**
- **Quiet operation**
- **Detailed and illustrated operation instructions,**
  available in the following languages:

Further languages are available on request.

Handwerkergarantie 5 Years Manufacturer's warranty

Qualität made in Germany 100% Quality Quality made in Germany

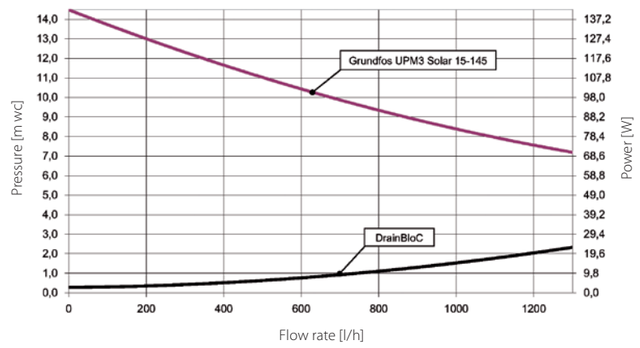
Technical data

Operating data	
Max. operating pressure	10 bar
Max. operating temp.	95 °C, short-term: 130 °C
Head of the pump	14.5 m wc
Container volume	20 litres (usable 15 litres)

Dimensions	
Connections	¾" ext. thread, flat sealing
Centre distance	variable, at least 400 mm
Width	747 mm
Height	622 mm
Depth	365 mm

Equipment	
PWM pump	2-60 W, PWM control
Flow meter	0.5-10 l/min
Safety valve	6 bar
Pressure gauge	0-6 bar, resistant to high temperatures
Controller	SC2.3

Materials	
Valves and fittings	Brass
Seals	Klingersil / EPDM



2025/05 • Printed in Germany • We reserve the right to make technical changes without notice
PAW GmbH & Co. KG • 31789 Hameln • Germany • Phone: +49-5151-9856-0 • Fax: +49-5151-9856-98 • info@paw.eu • www.paw.eu

Technical data and accessories

Design insulation with optimised function made of EPP
- elastic, front and back shell snap in accurately
- optimum thermal insulation

Controller SC2.3
- specially for operation in a drain-back system
- with monitoring and possible heat quantity measurement

Solar pressure gauge
with double scale for bar/psi

Schrader valve (automatic)
comfortable adjusting of operating pressure by mans of commercial Schrader valve (automatic)

High-efficiency pump with PWM control
- up to 14.5 m head
- fitted with controller
- with serial number

Flow meter
for precise flow rate measurement

Intermediate tank
- made of steel, for high pressure resistance
- high container volume of 20 litres

Wall bracket
- zinc-galvanised steel sheet
- specially formed, for a quick and easy wall assembly of the complete station

Connections ¾" ext. thread,
flat-sealing, brass,
for a safe connection of stainless steel corrugates pipes

Overview controller functions SC2.3

Display	Segment display with intuitive imagery and symbols
Operation	2 push buttons + wheel for scrolling
Relay outputs	2 x 230 V, semiconductor relay
Sensor inputs	5 x Pt1000
Flow rate sensor	yes
Balancing of operating hours	yes
Heat quantity balancing	yes
Emergency shut down	yes
Target temperature	yes
Antifreeze	yes

Data for the calculation of the installation volume
Usable volume of the DrainBloC® container: 15 l

	ø	Volume [l/m]
Copper pipe	12 mm	0.08
	15 mm	0.13
	18 mm	0.2
	22 mm	0.38
Stainless-steel corrugated hose	DN 15	0.2
	DN 20	0.35
Collector	according to the indications of the collector manufacturer	

DrainBloC® – DN 20		Item no.
	**DrainBloC® – DN 20,** Drain-back system incl. high-efficiency pump with PWM control and intermediate tank	**6104425**

2025/05 • Printed in Germany • We reserve the right to make technical changes without notice
PAW GmbH & Co. KG • 31789 Hameln • Germany • Phone: +49-5151-9856-0 • Fax: +49-5151-9856-98 • info@paw.eu • www.paw.eu

DrainBloC® – DN 20

Ideal solution of the DrainBloC®: draining of the collector field

- Vapour and over-pressure formation is avoided, as there is no solar fluid in the collector field
- No stagnation of the system
- Diaphragm expansion tank not necessary due to the air cushion in the system

In case of switching-on the pump:

- Back filling of the collector field out of the container
- Transfer of heat into the storage tank by means of the solar fluid

The intelligent system:

- Control via collector and storage tank temperature sensors
- Automatic reduction of pump performance after startup phase by means of the controller
- Speed control of the pump performance during operation: Optimum adaptation to the operating conditions of the system
- System with compressed air cushion: pressurised system → high system stability
- Innovative drain-back mechanism: draining of the collector is ensured

PAW GmbH & Co. KG
Böcklerstraße 11
31789 Hameln
Germany
+49-5151-9856-0
+49-5151-9856-98
info@paw.eu
www.paw.eu

996104425-fly-en • Version: V04 • Issued: 2025/05
Printed in Germany • We reserve the right to make technical changes without notice!