



## Solar stations DN 20 - 32

## Catalogue 01/2024

Solutions for solar thermal systems

Valid for the EU









### Overview product range SolarBloC<sup>®</sup> Solar stations







Performance data	SolarBloC <sup>®</sup> midi Premium	SolarBloC <sup>®</sup> maxi Premium	SolarBloC <sup>®</sup> mega
Nominal diameter	DN 20 (¾")	DN 25 (1")	DN 32 (1¼")
Max. flow rate [l/h]	1200	2500	3500
Max. collector surface [m²] High-Flow (30 l/m²h)	40	80	115
Max. collector surface [m <sup>2</sup> ] Low-Flow (15 l/m <sup>2</sup> h)	60	125	175

#### Selection table of available product versions: solar stations - SolarBloC®

	Controllor		Pump		Sensor technology	
	Controller	oller	Wilo	Grundfos	Basic	Premium
	without					$P_{FL} = digital sensor$
	(to be	5626		Lligh off sign of purper	$P_{FL} = pressure gauge$	∨̈́ = impulse
	by the	JCJ.0	nigh-enciency pump	nigh-enciency pump	$V_{RET} = flowmeter$	$T_{FL} = digital sensor$
	customer)				T = Thermometer	$T_{RET} = Pt1000$
1-line return DN 20	•	_	PWM / iPWM	PWM	•	—
2-line Basic DN 20	•	•	PWM / iPWM	PWM	•	_
2-line Premium DN 20	-	٠	PWM / iPWM	PWM	_	•
3-line Basic DN 20	•	—	PWM / iPWM	PWM	•	_
1-line return DN 25	•	—	PWM / iPWM	PWM	•	—
2-line Basic DN 25	•	٠	PWM / iPWM	PWM	•	—
2-line Premium DN 25	-	٠	PWM / iPWM	PWM	_	•
2-line Basic DN 32	•	—	0 - 10 V	PWM	•	_

• = available, \_ = not available

#### Application range / collector surface depending on the operation mode

#### Flow types in the collector field

**Low-flow** = 0.25 l/minute per m<sup>2</sup> of collector surface

**High-flow** = 0.5 l/minute per m<sup>2</sup> of collector surface

#### **Please note:**

In order to guarantee a trouble-free function it is essential to carry out a hydraulic dimensioning/check of the solar installation.



### Function overview controller - SC3.10 Solar thermal systems





### **Controller for solar stations**

- Premium version: SC3.5 / SGC36HV Basic version: SC2.3 / SGC26H
- completely mounted and configured
- graphically animated LCD display
- the controller comprises 17 preset systems
- the controller can be used in solar installations with up to two collector fields or up to two domestic hot water or buffer storage tanks
- use of a solar transfer station with an external heat exchanger and a tank for potable water or a buffer tank with two loading areas is possible

#### **Function overview controller**

#### Optional accessories SC3.5 and SC2.3:

data logger (can be connected via VBus interface, DL2 Plus)

**Optional accessories SGC36HV and SGC26H:** communication interface GWD

#### **Preset systems:**



Internal heat exchanger, pump logic



Internal heat exchanger, zone charging, valve logic (1 x E13170 additionally required)



2 collector fields, internal heat exchanger, pump logic (1 x E13170 additionally required)



External heat exchanger, pump logic (1 x E13170 additionally required)



2 storage tanks, internal heat exchanger, valve logic (1 x E13170 additionally required)



Internal heat exchanger, pump logic, return temperature maintenance (2 x E13170 additionally required)

Display	graphic LCD display
Operation	4 (5) push buttons
Relay outputs	3 x 230 V, semiconductor relay 1 x 230 V, switching relay 1 x SELV (max. 24 V), potential-free relay 2 x PWM signal for rotation speed control
Inputs	4 x Pt1000
Flow rate sensor	yes
Heat quantity measurement	yes
Post-heating	yes
Alarm output	yes
circulation (depending on time / temperature)	yes
Holiday (storage tank recooling)	yes
Solid fuel boiler	yes
Reduction of stagnation	yes
Active cooling	yes
Quick tank charging	yes
Thermostat function	yes
Interval / tube collector	yes



Storage tank and pool, stand-alone operation of the external heat exchanger, pump logic (2 x E13170 additionally required)



Storage tank and pool, standalone operation of the external heat exchanger, valve logic (2 x E13170 additionally required)

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## SolarBloC<sup>®</sup> midi Premium up to a collector surface of 60 m<sup>2</sup>





#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

•	up to a collector surface of $60 \text{ m}^2$
-	

#### **Operating data**

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 60 m <sup>2</sup>
High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 40 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Insulation

Check valves

Equipment		Dimensions	
Airstop	yes	Nominal diameter	DN 20 (¾")
Check valves	2 x 200 mm wc	Connections	¾" int. thread
Safety valve	6 bar	Width	322 mm
Controller	SC3.5		
Sensors	2 x Pt1000 (integrated) / 3 x Pt1000 (enclosed)	Height	557 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	298 mm
FlowRotor	0.5-15 l/min	Depth	150 mm
		Centre distance	100 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		

EPP

Brass







SolarBloC <sup>®</sup> midi Premium - DN 20 (¾")		ltem no.
	Wilo Para ST 15/7, controller SC3.5	773313WP7
	Wilo Para ST 15/13, controller SC3.5	773313WP13
	Grundfos UPM3 Solar 15-75, controller SC3.5	773313GP7
	Grundfos UPM3 Solar 15-145, controller SC3.5	773313GP14



## SolarBloC<sup>®</sup> midi Basic up to a collector surface of 60 m<sup>2</sup>







EPP

Brass

#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

<ul> <li>up to a collector surface of 60 i</li> </ul>	m²
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#### **Operating data**

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow	up to a collector
= 0.25 l/min per m <sup>2</sup> of collector surface	surface of 60 m <sup>2</sup>
High-flow	up to a collector
= 0.5 l/min per m <sup>2</sup> of collector surface	surface of 40 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Insulation

Check valves

Equipment		Dimensions	
Airstop	yes	Nominal diameter	DN 20 (¾")
Check valves	2 x 200 mm wc	Connections	34" int. thread
Safety valve	6 bar	Width	322 mm
Controller	SC2.3		
Sensors	2 x Pt1000 (enclosed, only for modules with controller)	Height	557 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	296 mm
Flow meter (secondary)	3-22 l/min	Depth	150 mm
		Centre distance	100 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		





	SolarBloC® midi Basic - DN 20 (¾")		ltem no.
		Wilo Para ST 15/7, controller SC2.3	775212WP7
		Wilo Para ST 15/13, controller SC2.3	775212WP13
		Grundfos UPM3 Solar 15-75, controller SC2.3	775212GP7
		Grundfos UPM3 Solar 15-145, controller SC2.3	775212GP14
		Wilo Para ST 15/7, controller on site	7655210WP7
		Wilo Para ST 15/13, controller on site	7655210WP13
		Grundfos UPM3 Solar 15-75, controller on site	7655210GP7
		Grundfos UPM3 Solar 15-145, controller on site	7655210GP14



## SolarBloC<sup>®</sup> midi Basic, 3-line up to a collector surface of 60 m<sup>2</sup>





#### Application range

• SolarBloC<sup>®</sup> 3-line station for installations with 2 tanks and 2 roofs

#### **Application range**

•	up to a collector surface of 60 m <sup>2</sup>
Opera	ting data

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 60 m <sup>2</sup>
High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 40 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"



#### **Technical data**

Equipment		Dimensions	
Airstop	yes	Nominal diameter	DN 20 (¾")
Check valves	3 x 200 mm wc	Connections	¾" int. thread
Safety valve	6 bar	Width	572 mm
Controller	on site		
Sensors	no	Height	429 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	418 mm
Flow meter (secondary)	3-22 l/min	Depth	150 mm

#### Materials

Valves and fittings Gaskets Insulation Check valves

Brass EPDM / AFM34 EPP Brass

## SolarBloC<sup>®</sup> midi Basic, 3-line up to a collector surface of 60 m<sup>2</sup>







SolarBloC <sup>®</sup> midi Basic, 3-line - DN 20 (¾")		ltem no.
	2x Wilo Para ST 15/7, controller on site	775810WP7
	2x Wilo Para ST 15/13, controller on site	775810WP13
	2x Grundfos UPM3 Solar 15-75, controller on site	775810GP7
	2x Grundfos UPM3 Solar 15-145, controller on site	775810GP14

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# SolarBloC<sup>®</sup> midi Basic return station up to a collector surface of 60 m<sup>2</sup>





#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

	• up to a collector surface of 60 m <sup>2</sup>	
	Operating data	
1	Max. operating pressure	6 bar
	Max. operating temperature	120 °C
	Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 60 m <sup>2</sup>
	High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 40 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Equipment		Dimensions	
Airstop	no	Nominal diameter	DN 20 (¾")
Check valves	1 x 200 mm wc	Connections	¾" int. thread
Safety valve	6 bar	Width	244 mm
Controller	on site		
Sensors	no	Height	383 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	296 mm
Flow meter (secondary)	3-22 l/min	Depth	150 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		
Insulation	EPP		
Check valves	Brass		



# SolarBloC<sup>®</sup> midi Basic return station up to a collector surface of 60 m<sup>2</sup>





SolarBloC <sup>®</sup> midi Basic return station - DN 2	ltem no.	
	Wilo Para ST 15/7, controller on site	7650210WP7
	Wilo Para ST 15/13, controller on site	7650210WP13
	Grundfos UPM3 Solar 15-75, controller on site	7650210GP7
	Grundfos UPM3 Solar 15-145, controller on site	7650210GP14



### Mounting equipment solar DN 20



7	Connection set for diaphragm expansion tank - DN 20 (¾")	437509
	Connection set for diaphragm expansion tank DN 20 (34") with cap value 34" $$	437510
	for connection to the safety set $\frac{34}{}$ , for tank diameter up to 440 mm, max. 35 kg, with stainless steel corrugated hose $\frac{34}{}$ internal thread - internal thread x 500 mm, wall bracket with mounting equipment, solar tank connector $\frac{34}{}$	
	Connection piece for immersion sleeves	5660
	Connection piece for immersion sleeve with $\frac{1}{2}$ " external thread, for a length up to 45 mm 1" union nut with gasket, $\frac{3}{4}$ " internal thread, with sleeve	
	Immersion sleeve <sup>1</sup> /2" ext. thread x T = 30 mm self-sealing, with o-ring, polished brass, for sensor, T = 30 mm	566001
	Immersion sleeve ¼" ext. thread x T = 60 mm standard, chromed brass, for sensor, T = 60 mm	566002
	<b>Immersion sleeve </b> <sup>1</sup> / <sub>2</sub> " <b>ext. thread x T = 60 mm</b> standard, chromed brass, with valve extension (25 mm), for sensor, T = 60 mm	5660021
	Immersion sleeve <sup>1</sup> / <sub>2</sub> " ext. thread x T = 100 mm standard, chromed copper, for sensor, T = 100 mm	566003
r T	Immersion sleeve <sup>1</sup> /2" ext. thread x T = 150 mm standard, chromed copper, for sensor, T = 150 mm	566004
	For all immersion sleeves: for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and the hydraulic separator.	
	Attention: suitable for ball valves until 2016!	
	Accessory kit for storage tank installation DN 20 (¾") Flange bracket made of brass with fill and drain valve and insulation for direct assembly of the return station to the storage tank	172706201
	Solar check valve RSS - DN 20 (¾") can be opened, up to 150 °C	1211
DM	Solar check valve RSS - DN 20 (¾") without possibility for manual opening, up to 220 °C with brass valve plate, all installation positions possible, opening pressure 200 mm wc, ¾" internal thread, length = 50 mm	12111
	Hand filling pump	7061
	$\frac{1}{2}$ " external thread, 15 mm hose connection, attainable pressure up to approx. 4 bar, length 225 mm	
	Hand filling pump with fill and drain valve <sup>1</sup> / <sub>2</sub> " external thread, 15 mm hose connection, attainable pressure up to approx. 4 bar, length 225 mm	7062

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Mounting equipment solar DN 20

	Hose connector for hand filling and injection pump Hose connector for hand filling and injection pump ½" x 15 mm	70611
ヨ	Stainless-steel corrugated hose Solarflex, L=18-800 mm	840180
	Stainless-steel corrugated hose Solarflex, L=22-800 mmIdeal for the roof part leading to the collector.Two soldered connections for clamping-ring compression fittings, for diameters of18 mm or 22 mm.Temperature: -30 °C 260 °C; max. admissible pressure: 12 bar; bursting pressure:120 bar; bending radius: 45 mm; wall width: 0,2 mm; inside diameter: 12 mm or 16 mm;length: 500 mm or 800 mm	840280
	Flush and drain unit DN 20 (¾") Counter T-piece, self-sealing with fill and drain valve for extending the solar station with a flush and drain connection, installation at the lowest point (drain unit).	31611
	Flush and fill unit DN 20 (¾")	56500
	Flush and fill unit DN 20 (¾") for 22 mm copper pipe         consisting of: Brass ball valve internal thread ¾", with red butterfly handle, with 2 fill and drain valves with hose connector 15 mm         565221: additionally with 2 cutting-ring compression fittings with support sleeve, premounted	565221
	Double ninnle <sup>3</sup> /" x <sup>3</sup> /"	548310
	Double nipple 1 x 1         for assembly of corrugated stainless steel hoses         548310: ¾" ext. thread, self-sealing with o-ring x outlet ¾" ext. thread, flat-sealing         548340: ¾" ext. thread, self-sealing with o-ring x outlet 1" ext. thread, flat-sealing	548340
	Double nipple 1 x 1         for assembly of corrugated stainless steel hoses         548310: ¾" ext. thread, self-sealing with o-ring x outlet ¾" ext. thread, flat-sealing         548340: ¾" ext. thread, self-sealing with o-ring x outlet 1" ext. thread, flat-sealing         Cutting-ring compression fitting DN 20 (¾"), d = 15 mm	548340
	Double nipple 1 x 1         for assembly of corrugated stainless steel hoses         548310: ¾" ext. thread, self-sealing with o-ring x outlet ¾" ext. thread, flat-sealing         548340: ¾" ext. thread, self-sealing with o-ring x outlet 1" ext. thread, flat-sealing         Cutting-ring compression fitting DN 20 (¾"), d = 15 mm         Cutting-ring compression fitting DN 20 (¾"), d = 18 mm	548340 561215 561218
	Double nipple 1 x 1         for assembly of corrugated stainless steel hoses         548310: ¾" ext. thread, self-sealing with o-ring x outlet ¾" ext. thread, flat-sealing         548340: ¾" ext. thread, self-sealing with o-ring x outlet 1" ext. thread, flat-sealing         Cutting-ring compression fitting DN 20 (¾"), d = 15 mm         Cutting-ring compression fitting DN 20 (¾"), d = 18 mm         Cutting-ring compression fitting DN 20 (¾"), d = 22 mm         ¾" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	548340 561215 561218 561222
	Double nipple 1 x 1         for assembly of corrugated stainless steel hoses         548310: ¾" ext. thread, self-sealing with o-ring x outlet ¾" ext. thread, flat-sealing         548340: ¾" ext. thread, self-sealing with o-ring x outlet 1" ext. thread, flat-sealing         Cutting-ring compression fitting DN 20 (¾"), d = 15 mm         Cutting-ring compression fitting DN 20 (¾"), d = 18 mm         Cutting-ring compression fitting DN 20 (¾"), d = 22 mm         ¾" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.         2-way zone valve - DN 20 (¾")         for connecting and disconnecting single storage tanks, DN 20, ¾" int. thread, setting time for 90°: 30 sec., Kvs value = 41	548340       561215       561218       561222       563532



## SolarBloC<sup>®</sup> maxi Premium up to a collector surface of 125 m<sup>2</sup>







EPP

Brass

#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

٠	up to a collector surface of 125 m <sup>2</sup>
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#### **Operating data**

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 125 m <sup>2</sup>
High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 80 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Insulation

Check valves

Equipment		Dimensions	
Airstop	yes	Nominal diameter	DN 25 (1")
Check valves	2 x 200 mm wc	Connections	1" int. thread
Safety valve	6 bar	Width	324 mm
Controller	SC3.5		
Sensors	2 x Pt1000 (integrated) / 3 x Pt1000 (enclosed)	Height	653 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	394 mm
FlowRotor	1-35 l/min	Depth	158 mm
		Centre distance	100 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		

### SolarBloC<sup>®</sup> maxi Premium up to a collector surface of 125 m<sup>2</sup>





SolarBloC <sup>®</sup> maxi Premium - DN 25 (1")		ltem no.
	Wilo Para ST 25/8, controller SC3.5	783313WP8
	Wilo Para MAXO 25-180-11-F02, controller SC3.5	783313WM11
	Grundfos UPM3 Solar 25-75, controller SC3.5	783313GP7
	Grundfos UPM3 Solar 25-145, controller SC3.5	783313GP14
	Grundfos Solar PML 25-145, controller SC3.5	783313GH14



## SolarBloC<sup>®</sup> maxi Basic up to a collector surface of 125 m<sup>2</sup>







EPP

Brass

#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

•	up to a collecto	or surface of 125 m <sup>2</sup>
•	up to a collecto	or surface of 125 m

#### **Operating data**

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 125 m <sup>2</sup>
High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 80 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Insulation

Check valves

Equipment		Dimensions	
Airstop	yes	Nominal diameter	DN 25 (1")
Check valves	2 x 200 mm wc	Connections	1" int. thread
Safety valve	6 bar	Width	324 mm
Controller	SC2.3		
Sensors	2 x Pt1000 (enclosed, only for modules with controller)	Height	653 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	394 mm
Flow meter (secondary)	5-40 l/min	Depth	160 mm
		Centre distance	100 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		





SolarBloC <sup>®</sup> maxi Basic - DN 25 (1")		ltem no.
	Wilo Para ST 25/8, controller SC2.3	782212WP8
	Wilo Para MAXO 25-180-11-F02, controller SC2.3	782212WM11
	Grundfos UPM3 Solar 25-75, controller SC2.3	782212GP7
	Grundfos UPM3 Solar 25-145, controller SC2.3	782212GP14
	Grundfos Solar PML 25-145, controller SC2.3	782212GH14
A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR A CONTRAC	Wilo Para ST 25/8, controller on site	607052WP8
	Wilo Para MAXO 25-180-11-F02, controller on site	782210WM11
	Grundfos UPM3 Solar 25-75, controller on site	607052GP8
	Grundfos UPM3 Solar 25-145, controller on site	607052GP14
	Grundfos Solar PML 25-145, controller on site	607052GH14



# SolarBloC<sup>®</sup> maxi Basic return station up to a collector surface of 125 m<sup>2</sup>







#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

٠	up to a collector surface of 125 m <sup>2</sup>
Opera	ting data
Max. o	perating pressure

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow	up to a collector
= 0.25 l/min per m <sup>2</sup> of collector surface	surface of 125 m <sup>2</sup>
High-flow	up to a collector
= 0.5 l/min per m <sup>2</sup> of collector surface	surface of 80 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Equipment		Dimensions	
Airstop	no	Nominal diameter	DN 25
Check valves	1 x 200 mm wc	Connections	1" int. thread
Safety valve	6 bar	Width	244 mm
Controller	on site		
Sensors	no	Height	474 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	394 mm
Flow meter (secondary)	5-40 l/min	Depth	150 mm
Materials			
Valves and fittings	Brass		
Gaskets	EPDM / AFM34		
Insulation	EPP		
Check valves	Brass		

## SolarBloC<sup>®</sup> maxi Basic return station up to a collector surface of 125 m<sup>2</sup>





25	ltem no.
Wilo Para ST 25/8, controller on site	7680210WP8
Wilo Para MAXO 25-180-11-F02, controller on site	780210WM11
Grundfos UPM3 Solar 25-75, controller on site	7680210GP8
Grundfos UPM3 Solar 25-145, controller on site	7680210GP14
Grundfos Solar PML 25-145, controller on site	7680210GH14
	25 Wilo Para ST 25/8, controller on site Wilo Para MAXO 25-180-11-F02, controller on site Grundfos UPM3 Solar 25-75, controller on site Grundfos UPM3 Solar 25-145, controller on site Grundfos Solar PML 25-145, controller on site



### Mounting equipment solar DN 25



	Hand filling pump ½" external thread, 15 mm hose connection, attainable pressure up to approx. 4 bar, length 225 mm	7061
	Hand filling pump with fill and drain valve ½" external thread, 15 mm hose connection, attainable pressure up to approx. 4 bar, length 225 mm	7062
	Hose connector for hand filling and injection pump Hose connector for hand filling and injection pump ½" x 15 mm	70611
	Flush and fill unit DN 25 (1")	5640
	Flush and fill unit DN 25 (1") for 15 mm copper pipe	56431
	<ul> <li>Flush and fill unit DN 25 (1") for 22 mm copper pipe</li> <li>consisting of: Brass ball valve internal thread 1", with red butterfly handle, with 2 outlets 1/2" before and after the ball, 2 self-sealing fill and drain valves with hose connector 15 mm</li> <li>56431 and 56451: additionally with 2 cutting-ring compression fittings with support sleeve, premounted</li> </ul>	56451
	Flush and drain unit DN 25 (1") Counter T-piece with self-sealing fill and drain valve.For extending the solar station with a flush and drain connection or for installation at the lowest point (drain unit).	34611
	Cutting-ring compression fitting DN 25 (1"), d = 15 mm	562915
	Cutting-ring compression fitting DN 25 (1"), d = 18 mm	562918
	Cutting-ring compression fitting DN 25 (1"), d = 22 mm 1" external thread, self-sealing with o-ring, with support sleeve, suitable for soft copper pipes. For temperatures up to 150 °C.	562922
	Immersion sleeve <sup>1</sup> / <sub>2</sub> " ext. thread x T = 30 mm self-sealing, with o-ring, polished brass, for sensor, T = 30 mm	566001
	Immersion sleeve ¼" ext. thread x T = 60 mm standard, chromed brass, for sensor, T = 60 mm	566002
	<b>Immersion sleeve <sup>1</sup>/2" ext. thread x T = 60 mm</b> standard, chromed brass, with valve extension (25 mm), for sensor, T = 60 mm	5660021
	Immersion sleeve ½" ext. thread x T = 100 mm standard, chromed copper, for sensor, T = 100 mm	566003
	Immersion sleeve 1/2" ext. thread x T = 150 mm standard, chromed copper, for sensor, T = 150 mm	566004
	For all immersion sleeves: for the installation of the temperature sensors (d = 6 mm) in the storage tank, in the collector and the hydraulic separator.	
	Attention: suitable for ball valves until 2016!	





Mounting equipment solar DN 25

	Stainless-steel corrugated hose Solarflex, L=18-800 mm	840180
1	Stainless-steel corrugated hose Solarflex, L=22-800 mm	840280
	Ideal for the roof part leading to the collector. Two soldered connections for clamping-ring compression fittings, for diameters of 18 mm or 22 mm. Temperature: -30 °C 260 °C; max. admissible pressure: 12 bar; bursting pressure: 120 bar; bending radius: 45 mm; wall width: 0,2 mm; inside diameter: 12 mm or 16 mm; length: 500 mm or 800 mm	
	Hand refractometer	58055
	The hand refractometer measures the anti-freeze safety of water-propylene glycol and water-ethylene glycol mixtures in solar thermal installations. It can also be used to determine the density of water-battery acid mixtures. Only one or two drops of the fluid are sufficient.	
	Measuring ranges: propylene glycol: 0 - 50 °C ethylene glycol: 0 - 50 °C battery acid: 1.10 - 1.40 g/cm <sup>3</sup>	
	Solar pressure gauge 0-6 bar	523206
	Solar pressure gauge 0-10 bar	523210
(2)	with automatic isolation, solar version up to 130 °C, measuring range: 0-6 bar / 0-10 bar diameter: d = 50 mm	
	2-way zone valve - DN 25 (1") for tank heat transfer module Midi	563542
The MA	for connecting and disconnecting single storage tanks, DN 25, 1" int. thread, setting time for 90°: 30 sec., Kvs value = 68	
	<b>2-way zone valve - DN 32 (1¼") for tank heat transfer module Maxi</b> for connecting and disconnecting single storage tanks, DN 32, 1¼" internal thread, setting time for 90°: 30 sec., Kvs value = 123	563552
	3-way zone valve - DN 25 (1")	563543
	for switching between single storage tanks, DN 25, 1" int. thread, setting time for 90°: 18 sec., Kvs value =11	
	3-way zone valve - DN 32 (1¼")	563553
E.,	for switching between single storage tanks, DN 32, 1 <sup>1</sup> / <sub>4</sub> " int. thread, setting time for 90°: 18 sec., Kvs value =15	
	can be used in solar and heating installations, to switch between different zones or to connect and disconnect different parts of the system. The actuator is equipped with a relay which is actuated by a 2-point signal, if need be it can also be manually operated. The 3-way zone valves can be operated in both directions.	
	Electric supply: 230 V / 50 Hz Casing protection type: IP 44; protection class II Input power: 3 VA (standby), 7.5 VA (operation) Ambient temperature: -10 °C+60 °C Medium temperature: 0 °C100 °C, short-term 115 °C Equipment: with 1.8 m cable 4 x 0.5 mm <sup>2</sup>	







#### Application range

• Efficient circulation of the solar fluid in the solar circuit

#### **Application range**

•	up to a collector surface of 175 m <sup>2</sup>
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#### **Operating data**

Max. operating pressure	6 bar
Max. operating temperature	120 °C
Low-flow = 0.25 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 175 m <sup>2</sup>
High-flow = 0.5 l/min per m <sup>2</sup> of collector surface	up to a collector surface of 115 m <sup>2</sup>

For information on design data, see chapter "Product range SolarBloC®"

#### **Technical data**

Equipment		Dimensions	
Airstop	no	Nominal diameter	DN 32
Check valves	2 x 200 mm wc	Connections	1¼" int. thread
Safety valve	6 bar	Width	366 mm
Controller	on site		
Sensors	no	Height	671 mm
Pressure gauge	0-6 bar, resistant to high temperatures	Installation length	603 mm
		Depth	240 mm

#### Materials

Valves and fittings	Br
Gaskets	EF
Insulation	EF
Check valves	Br

rass PDM / AFM34 PP rass

Nominal diameter	DN 32
Connections	1¼" int. threa
Width	366 mm
Height	671 mm
Installation length	603 mm
Depth	240 mm
Centre distance	125 mm

SolarBloC<sup>®</sup> mega up to a collector surface of 175 m<sup>2</sup>





SolarBloC <sup>®</sup> mega - DN 32		ltem no.
<u>6</u>	Wilo Stratos PARA-C 30/1-12 T2, controller on site	791010WH12
	Grundfos Solar PML 32-145, controller on site	791010GH14





**DrainBloC** Solar thermal systems



## DrainBloC DN 20

## Catalogue 01/2024

Drainback systems for solar thermal installations

Valid for the EU







### DrainBloC<sup>®</sup> DN 20 (3/4") Drain-back system





#### **Application range**

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

#### **Recommended application range**

Vapour and over-pressure formation as well as stagnation is avoided, • as there is no solar fluid in the collector field

#### **Operating data**

Max. operating pressure 10 bar Operating temperature 130 °C 14.5 m Head of the pump

Container volume

95 °C, short-term 20 I (usable up to 15 litres)



### **Technical data**

Equipment PWM pump Flow meter Safety valve Pressure gauge

Controller

Materials Valves and fittings DGaskets Insulation

2-60 W, PWM control 0.5-10 l/min 6 bar 0-6 bar, resistant to high temperatures SC2.3

Brass Klingersil / EPDM EPP

#### Dimensions Height container Ø container Total width Width DrainBloC

Height DrainBloC Centre distance Total depth

603 mm 280 mm at least 721 mm 334 mm

577 mm var., min.400 mm 365 mm





