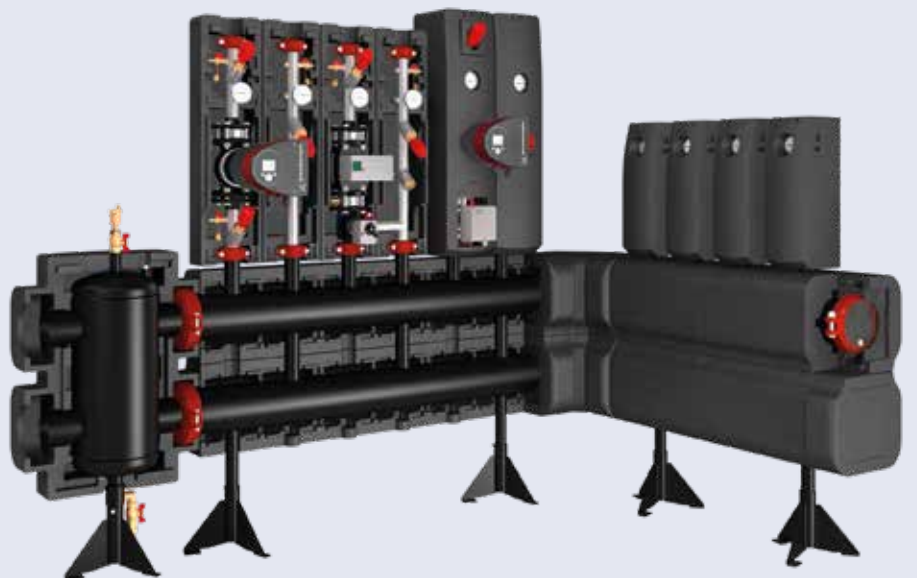


Edition 43

**Energy-efficient system solutions
for building technology**





Dear Partner,

For almost 60 years, Meibes has been increasing user convenience in building technology systems by means of its high-quality products for heating and domestic water systems. Our products not only meet the latest energy efficiency requirements, but can also be installed simply and in a modular format.

Our core competences lie in the area of pre-assembled fitting units and system solutions that are perfectly coordinated with each other - custom-made for original equipment manufacturers or commercial customers. The basic idea in this regard is the creation of added value through shorter installation times and lower staff requirement for the installers. With our 45 registered patents, we regard ourselves as pioneers in the area of quick mounting systems.

Market-ready solutions are developed in this way from the initial idea, up to series production, and they are used by installers all over the world.

Our products are not only of high quality, but also sustainable. In the manufacturing process, we set great store by responsible use of resources - both in our own company and in our certified suppliers. The finished products are durable, energy-efficient and easy to recycle.

Since 2001, Meibes has been part of Aalberts Industries N.V. of the Netherlands, a group of companies operating internationally with the focus on technical products in the area of installation, heating and chilled water (cooling) systems and solar applications. Along with our sister companies Flamco and Simplex, we cover a broad spectrum of technical building systems. The synergy effects from this strong team mean that we are competent partners when it comes to one-stop solutions - starting with the heat source, via heat emission up to heat distribution.

In order to live up to the high quality requirements of the customers, Meibes is certified under DIN EN ISO 9001: 2015 and DIN EN ISO 14001:2015.



Maarten van de Veen
CEO
Hydronic Flow Control



Dr. Patrick Mergel
Geschäftsführer
Meibes System -Technik GmbH



Customer Solutions



Energy Efficiency



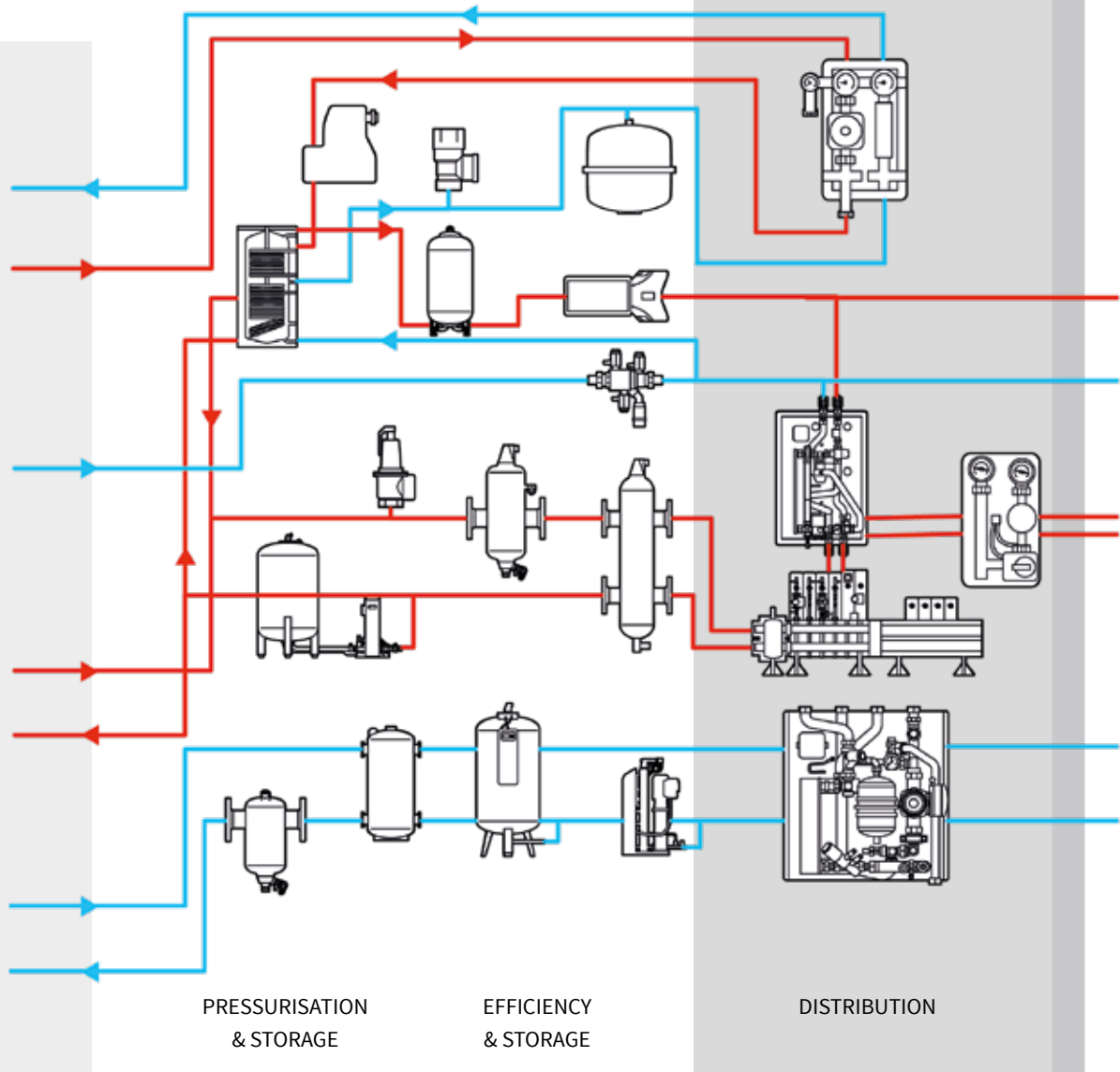
Customer Service

Hydronic Flow Control

From Source

BOILER ROOM

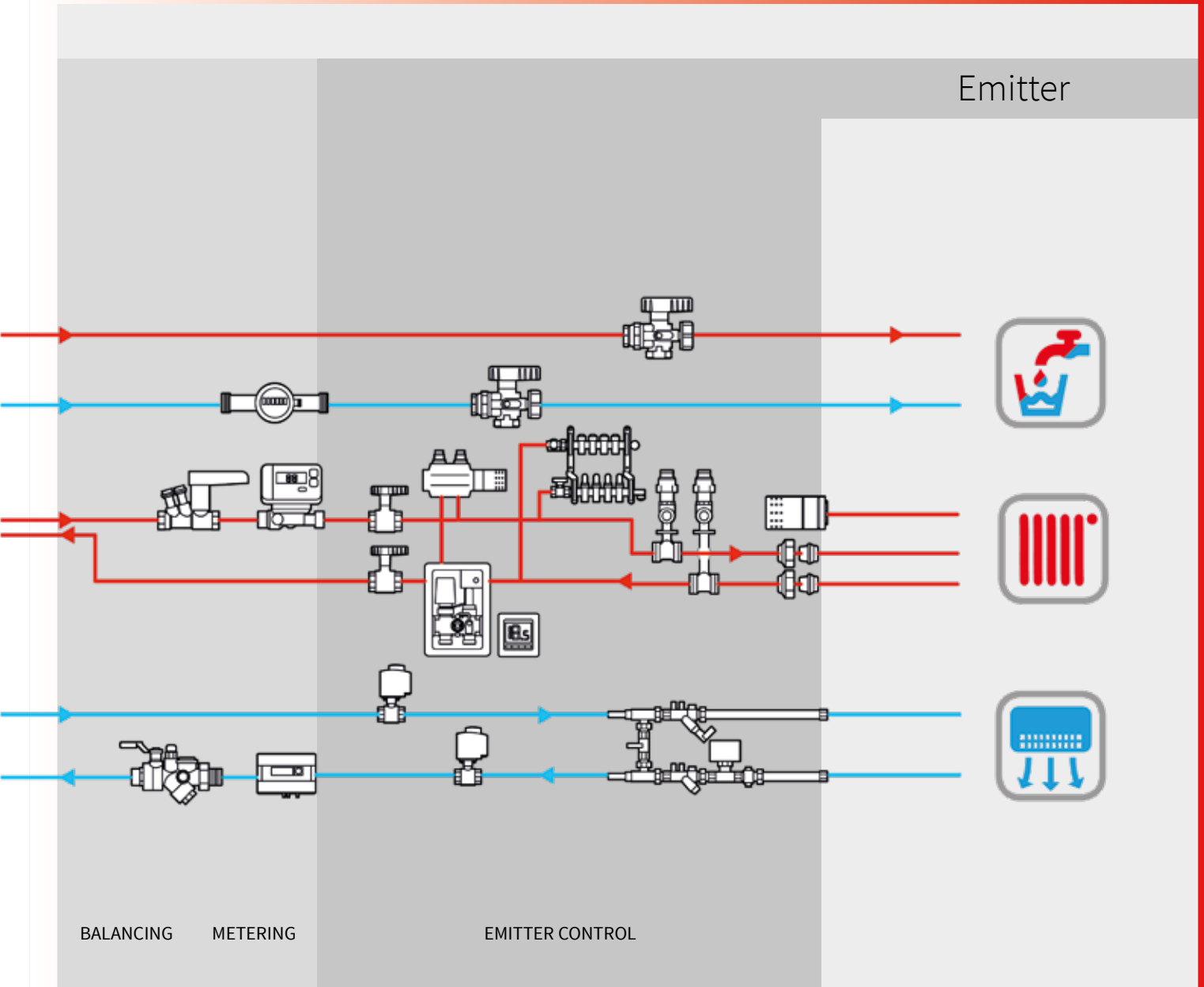
Source



to Emitter

HEAT & COOLING DISTRIBUTION

Emitter



BALANCING

METERING

EMITTER CONTROL

meibes

simplex

System components for Heating, Cooling & Potable Water Installations

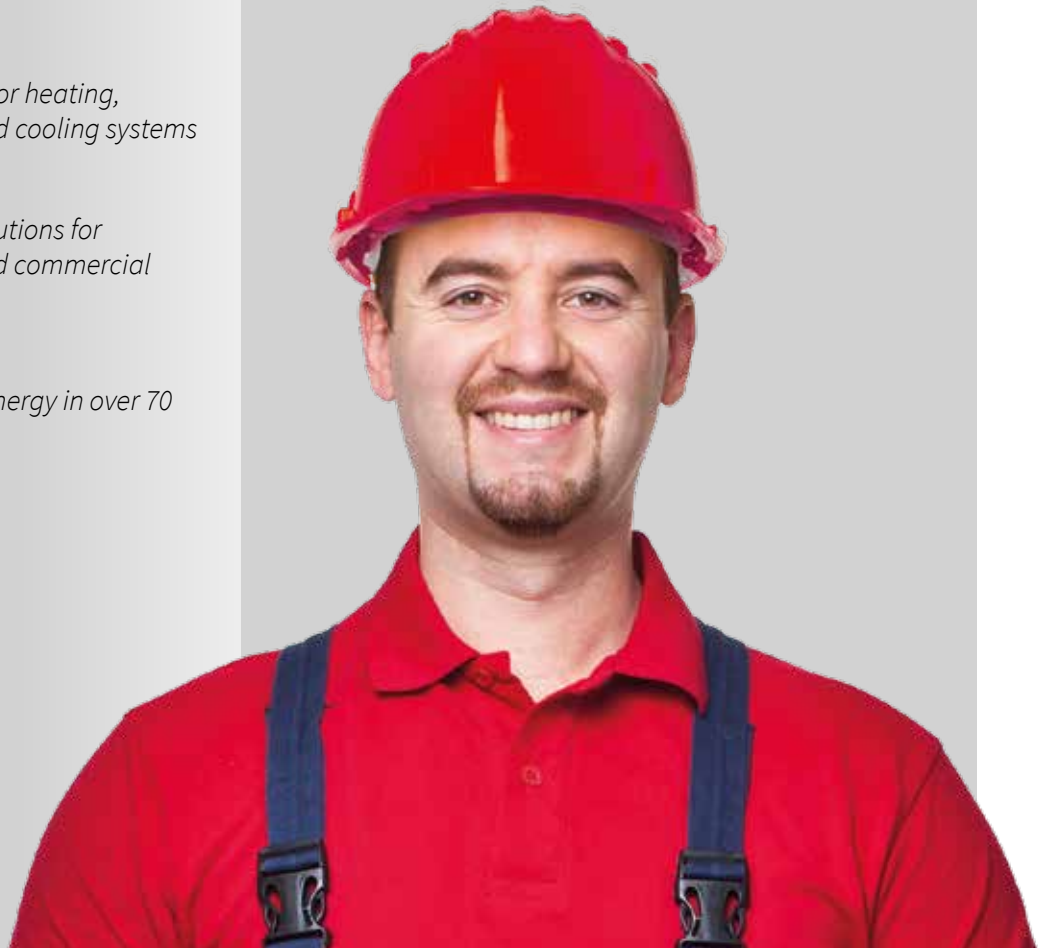
The Flamco Group specialises in the development, production and sale of high-quality components for heating, ventilation and cooling systems. Whether it be systems for pressure maintaining, fittings for solar systems, safety valves or pipe clamps and mounting rails – all products are engineered to meet the highest standards in user-friendliness, energy efficiency and sustainability.



*Components for heating,
ventilation and cooling systems*

*Innovative solutions for
residential and commercial
buildings*

*Sustainable energy in over 70
countries*



Solutions for heating components and systems

Simplex develops, produces and markets intelligent solutions and systems for the heating and sanitary sector, Made in Germany – but well beyond the confines of the German market. As a result of watching the market closely, we are constantly able to offer the latest product technologies, combined with a carefully selected choice of materials, and in this way to set new product and performance standards.



Solutions for heating components and systems

Innovative problem solvers

Quality "Made in Germany"

System components for Building Technology



Meibes' core competence is the development of quality products for heating systems that meet the latest energy and efficiency standards. The pioneer in the market for quick mounting units offers pre-assembled sets which bring more convenience to setting up these systems worldwide.



Innovative developments

Pre-assembled sets

*More convenience
in installing systems*



Highlights

Nexus Valve circuit control valves

- large selection of circuit control valves
- all models of manual circuit control valves up to differential pressure regulators and control valves independent of pressure
- for simplifying and speeding up installation, equalisation and operation
- manufactured in accordance with ISO quality standards
- optional service package including technical documentation and support
- user-friendliness and energy saving for the end user



Interface stations for heating (HIU) and cooling (CIU)

- compact, immediately operational stations, simple connection
- all functions of an independent heating circuit and water heating
- continuous flow principle for hygienically safe domestic hot water
- simple integration of metering devices
- thermally efficient, renewable energy sources can be optionally integrated
- can be supplied as visible, wall-mounted system or as virtually invisible flush-mounted assembly
- for refurbishments or new developments

Pump groups and distributors

- modular pump groups and distribution system for heating capacity up to 2300 kW and up to 100 m³/h flow-through
- simple and fast installation
- thermally separated distribution system
- 90° angle connectors for small spatial dimensions
- can be extended with boiler guard
- absolute planning and calculation security
- tested for 100% sealing and ready for immediate use



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Make use of the individual equipment options for your project...

e.g. the use of a domestic water circulation system, the integration of heat and/or water meters and living space control. A wide range of visually pleasing wall-mounted and (“invisible”) flush-mounted models are available. Logotherm interface stations are ideally suited for radiator heating systems and/or mixed heating circuits (FBH heating systems).

Cut your operating costs...

Bring your old heating system up to the latest technical standard simply and quickly with Logotherm interface stations.

Boost your customer/user satisfaction...

through greater efficiency and convenience with heat distribution and hot water preparation.

Find out more about the options for use and other advantages of Logotherm systems in this catalogue or visit us at www.meibes.de.

Interface stations

1



The **Logotherm interface station** is a compact, ready-connected unit that takes over all the functions of an independent heating system and hot water preparation. Depending on the system and application, hot water output is designed in such a way that several draw-off points can be supplied at the same time. The domestic water heating occurs dependent on use as required. Storing domestic hot water in tanks is no longer required. This means that only three circuits (3-pipe system) for heating flow, heating return and cold water supply are needed (WW circuit + circulation not required).

The Logotherm principle:

An individual heat source (boiler, BHKW, local/district heating transfer station, etc.) provides the interface stations with heating-circuit water via a heated circuit. They take over the decentralised distribution of the heat, control heating need and/or produce hot water directly at the user (residential or business unit) by means of a plate heat exchanger on the continuous flow principle, hygienically, faultlessly and safely.

Your advantages

- *Fast and simple installation*
- *High and hygienically safe domestic hot water convenience**
- *Individual control of living space heating to boost your network efficiency*
- *Depending on the station, also with weather-controlled heating circuit controller*
- *Depending on the station, also for problematic potable water*
- *Low maintenance*

Suitable products:

Design your consumption billing even more efficiently using the precise consumption metering per residential unit by means of integrated station heating (cooling) and/or cold water meter (option). Use by remote, M-bus and/or data-logging equipped devices (option) guarantees rapid datalogging at any time.

The complete programme of energy and water meters can be found from page 51.

We will also be happy to advise you on OMS-capable products.

*according to DVGW Worksheet W551

Interface station working method

Interface stations can function using 3 possible control techniques, where each model has its own specific advantages.

1



Hydraulic control technology

is activated by pressure differentials by means of the necessary proportional mix control (PF-controller), ensuring immediate hot water preparation on drawing off through proportional regulation of the primary flow rate.

Advantages:

- Works without additional energy (electricity)
- Priority switching for hot water preparation
- Fast and reliable (high control speed)
- Avoids standby losses at the heat exchanger
- Simple and proven technology (in use >20 years)



Electric control technology

is activated by a microprocessor controller, ensuring immediate hot water preparation on drawing off through temperature-dependent control of the primary flow rate.

Advantages:

- Only low primary pressures needed
- Priority switching for hot water preparation
- Controls to the hot water temperature set to one degree, independent of changes in the cold water or primary temperature (e.g. summer/winter operation).
- Option: Activation via mobile devices (smartphone etc.) or the GLT (product dependent).

Overview

Overview of complete stations CS (incl. housing, ball valve closing set etc.) for immediate installation and hydraulic integration as well as complete stations that can be configured to your specific requirements with respect to additional/complementary products. In addition, you will find information on the output ranges and primary kit characteristics of Logotherm interface stations. Precise or additional kits for Logotherm interface stations may be found on the stated pages.



Product line	Type	l/min. ¹	WW-Output up to KW ¹	Complete station (incl. housing, ball valve connection set)	Heating capacity kW ²	Installation type			Heating circuit		Construction depth from 110 mm	TW circulation ⁵	Remote read-out ⁴	Data logging	from page
						Wall-mounted	Flush-mounted	Line	unmixed	mixed					
Hydraulically controlled															
LogoComfort KS	600	20	50	✓	10	✓	✓		✓						16
LogoComfort+ KS	600+	20	50	✓	10	✓	✓		✓	✓					16
LogoComfort	500	15	37		10	✓	✓		✓				✓		18
	600	20	50		10	✓	✓		✓			✓	✓		18
LogoComfort+	600+	15	37		10	✓	✓		✓	✓		✓	✓		18
		20	50		10	✓	✓		✓	✓		✓	✓		18
LogoPack		15	37		10		✓	✓	✓				✓		20
LogoVital	35	15	37										✓		21
	45	20	50			✓						✓	✓		21
	65	24	65					✓				✓	✓		21



Electrically controlled															
LogoMatic KS	600	20	50	✓	10	✓	✓		✓		✓			✓	24
LogoMatic+ KS	600+	20	50	✓	10	✓	✓		✓	✓	✓			✓	24
LogoAktiv	Plus	12	35												22
		18	50		20	✓	✓		✓	✓	✓		✓	✓	22
		26.5	70												22
LogoMatic Comfort	600	15	37		10	✓	✓		✓		✓	✓	✓	✓	26
		20	50		10	✓	✓		✓		✓	✓	✓	✓	26
LogoMatic Comfort+	600+	15	37		10	✓	✓		✓	✓	✓	✓	✓	✓	26
		20	50		10	✓	✓		✓	✓	✓	✓	✓	✓	26
LogoEco E	H-HW	10	35		21 ³	✓		✓					✓		28
LogoEco Compact E	HW	10	35			✓							✓		28

- 1) The attainable outputs depend on the basic grid parameters
- 2) At 20 K spread
- 3) At 30 K spread
- 4) Possible with special housing
- 5) Optional

The following additional products can be found on the following pages:	from page
Underfloor manifolds for integration in stations	29
Wall-mounted and flush-mounted covers (also for remote read-out)	30
Control and activation accessories	34
Metering devices for consumption metering (Cold or hot water meter and heat flow meter)	51
Pump groups	93
Circuit control valves	143
Underfloor manifolds (external) via Simplex	

LogoCool decentralised cooling station to be found on pages 36 /37.

Complete stations LogoComfort KS 600 & 600+



1



Fig. 1

The complete stations LogoComfort 600 and 600+ are compact, ready-connected decentralised interface stations with proportional mix controlled hot water preparation and provision of heating to living areas as wall-mounted system incl. housing with ball valve connection set, in order to allow you a simple selection, quick delivery and also simple operation.

The LogoComfort 600 is available with static heating circuit, the LogoComfort 600+ with a direct mixed circuit plus 6 floor manifolds or with a direct mixed circuit and 9 floor manifolds and a second static heating circuit.

LogoComfort complete station is available as wall-mounted (AP) or flush-mounted version (UP), as well as with brazed heat exchanger (CU) or stainless steel soldered heat exchanger (ES).



Fig. 2

Complete stations LogoComfort KS		WT	Installation type	WW-Output 17·20 ² l/min. & 46 ¹ - 50 ² kW	Fig.	Art. No.
		CU / ES	AP / UP			
600 RH-AP	stat. Heating circuit	CU	AP		Fig. 1	AI-11104HKAP
600 RH-UP	(st. HK)	CU	UP			AI-11104HKUP
600+ FBH-AP	Mixed circuit (MK)	CU	AP		Fig. 2	AI-11104.6MKAP
600+ FBH-UP	with 6 manifolds	CU	UP			AI-11104.6MKUP
600 FBH/RH-AP	MK with 9 manifolds	CU	AP		Fig. 3	AI-11104.9MKAP
600 FBH/RH-UP	& st. HK	CU	UP			AI-11104.9MKUP
600 RH-AP	stat. Heating circuit	ES	AP			AI-11104HKAPES
600 RH-UP	(st. HK)	ES	UP			AI-11104HKUPES
600+ FBH-AP	Mixed circuit (MK)	ES	AP			AI-11104.6MKAPES
600+ FBH-UP	with 6 manifolds	ES	UP			AI-11104.6MKUPES
600 FBH/RH-AP	MK with 9 manifolds	ES	AP			AI-11104.9MKAPES
600 FBH/RH-UP	& st. HK	ES	UP			AI-11104.9MKUPES

1) Specifies at a flow line temperature of 65 °C and heating by 40 K

2) Specifies at a flow line temperature of 65 °C and heating by 35 K



Fig. 3

Complete stations LogoComfort KS 600 & 600+



Complete station LogoComfort KS 600 / 600+ Kit features		LogoComfort		
		600 RH	600+ FBH	600 FBH/RH
Dimensions in mm (AP version)	Width	600	600	850
	Height	800	1,000	1,210
	Depth	210	210	210
Dimensions in mm (UP version)	Width (front cover size, aperture size larger)	610	610	845
	Height (front cover size, without height-adjustable feet)	835	1,175	1,175
	Depth (adjustable)	175-220	180-220	195-220
Connections below		3/4"		
Max. pressure: Heating / Sanitary		6 bar / PN10		
Max. permissible temperatures: Heating / Sanitary		110°C / 110 °C		
Heating capacity (at 20 K)		10 kW		
static heating circuit (st. HK)		✓	-	✓
Mixer circuit with controlled servomotor, VL temp. sensor, HE pump UPM3 AUTO 15-70		-	✓	✓
Underfloor manifolds with 6 outlet pieces (3/4" AG Euro cone, 0.5-5 l/min, 6 bar)		-	✓	-
Underfloor manifolds with 9 outlet pieces (3/4" AG Euro cone, 0.5-5 l/min, 6 bar)		-	-	✓
Stainless steel plate heat exchanger, Vertical orientation for reduced risk of lime scale		✓		
Heating control valve (zone valve for connection to living space control)		✓		
Venting with hose connection on heating side		✓		
Adaptor for heat flow meter 3/4" × 110 mm		✓		
Pipework made from insulated stainless steel corrugated pipe		✓		
Assembled and tested on base plate completely free of mechanical stress		✓		
Dirt traps with stainless steel sieve insert (incl. drainage function)		✓		
second KW connection for residences		✓		
Cold water meter adaptor 3/4" × 110 mm		✓		
Heat retention function of the primary heating-circuit water intake via an adjustable circulation bridge (35-65 °C)		✓		
Differential pressure regulator/balancer (control range 10-40 kPa) for automatic hydraulic Station balance		✓		
Throttle plate		✓		
7 ball valves DN20 with sensor mounting for the WMZ, TW ball valves DVGW tested		✓		
Wall-mounted housing made of painted steel (RAL 9016)		see identification marking AP		
Flush-mounted housing made of painted steel (RAL 9016)		see identification marking UP		
Height-adjustable feet (100-170 mm)		see identification marking UP		

Logotherm interface stations with optional kits can be configured on request.

LogoComfort 500, 600 & 600+



LogoComfort 500, 600 and 600+ are compact, ready-connected decentralised interface stations with proportional mix controlled hot water preparation and provision of heating to living areas as wall-mounted system. The LogoComfort 500 and 600 are available with static heating circuit (or can be fitted with optional mixed circuit via additional module) and the LogoComfort 600+ with a direct mixed circuit.

The option of a project or building related individual configuration by means of the model management (element system) is shown in our separate product catalogue.

1



Fig. 1

LogoComfort 500 & 600	WW-Output				Fig.	Art. No.
	l/min ¹	kW ¹	l/min. ²	kW ²		
500 stat. Heating circuit (st. HK)	12	35	15	37	Fig. 1	AI-11204.8
600 stat. Heating circuit (st. HK)	17	46	20	50	Fig. 2	AI-11104.21
600+ mixed circuit (MK)	12	35	15	37	Fig. 3	AI-11104.31
600+ mixed circuit (MK)	17	46	20	50		AI-11104.33

1) specifies at a flow line temperature of 65 °C and a heating by 40 K

2) specifies at a flow line temperature of 65 °C and a heating by 35 K



Fig. 2

LogoComfort 500 & 600 Accessories			Fig.	Art. No.
600 500	Ball valves	Ball valves 7 x DN 20 straight with sensor mounting WMZ, TW ball valves DVGW tested.		AI-10252.32
500 600 600+	Wall- & flush-mounted Mounting rail	Ball valves 7 x DN 20 straight with sensor mounting WMZ, TW ball valves DVGW tested.	Fig. 4	AI-10203.160 AI-10203.158 AI-10203.186
Rinsing hose for flushing network – 3/4" x 500 mm				AI-4325.1227.50
Rinsing hose connections – MS flat-sealing 3/4"				AI-43.66124 D



Fig. 3

LogoComfort 600 - connection sets for manifolds as mixer circuit for flow line temperature control*		Fig.	Art. No.
Mixer circuit including thermostatic valve ((M) 13HE)	up to 10 heating circuits	Fig. 5	AI-10512.2
	11 up to 12 heating circuits		AI-10512.23
Mixer circuit with controlled servomotor (M 27HE)	up to 10 heating circuits		AI-10512.21
	11 up to 12 heating circuits		AI-10512.24
Mixer circuit with servomotor (M 12HE) **	up to 10 heating circuits	Fig. 6	AI-10512.22
	11 up to 12 heating circuits		AI-10512.25

*) with HE pump Alpha2 15-60 and additional connection for static heating circuit **) Activation of the mixed circuit requires an external controller. Options for this can be found under "control and activation accessories". **Information note:** Mixed circuit applications are possible here only for the LogoComfort 600!



Fig. 4



Fig. 5



Fig. 6

LogoComfort 500, 600 & 600+



NEW!
Also available as
complete station
and with stainless
steel-soldered
heat exchanger

LogoComfort 500 / 600 – Kit features		LogoComfort		
		500	600	600+
Dimensions (Dimensions of the housing must be taken into account)	Width in mm	500	600	
	Height in mm	800		
	Depth ¹ in mm	150 – 220		
Connections below		3/4"		
Max. pressure: Heating / Sanitary		PN10 / PN10		
Max. permissible temperatures: Heating / Sanitary		110 °C / 110 °C		
Heating capacity (at 20 K)		10 kW		
Stainless steel plate heat exchanger (copper soldered), Vertical orientation for reduced risk of lime scale		✓		
PF-controller with priority switch, anti-lime scale coating and DVGW approval		✓		
Control valve for heating water (zone valve for connection to living space control)		✓		
Venting with hose connection on heating side		✓		
Adaptor for heat flow meter 3/4" × 110 mm		✓		
Throttle plate		✓		
Pipework made from insulated stainless steel corrugated pipe		✓		
Assembled and tested on base plate completely free of mechanical stress		✓		
Dirt traps with stainless steel sieve insert and drainage function		2		1
second KW connection for residences		✓		
Cold water meter adaptor 3/4" × 110 mm		✓		
Heat retention function of the primary heating-circuit water intake via an adjustable circulation bridge (35-65 °C)		✓		
Differential pressure regulator – Balancer (control range 10 – 40 KPa) for autom. hydr. Station balance		✓		

Optional accessories for each station available from the Model management	500	600	600+
Stainless steel soldered heat exchanger for potable water with high conductivity	-	optional	
Scalding protection		optional	
Domestic water circulation (pre-installed ex-factory) with separate time control	-	optional	
Return line temperature limiter 45-65 °C		optional	
Mixer circuit with servomotor and HE pump UPM3 AUTO 15-70 ²	optional	optional	-
thermostatically controlled mixer circuit including HE pump UPM3 AUTO 15-70	optional	optional	-
in addition connection for stat. heating circuit only up to manifolds for 7 heating circuits, from 8 heating circuits only in connection with Basis 600		-	optional

1)

Depending on the kit
and housing type

2)

For activating the mixed circuit,
an external controller is needed.
Options for this can be found
under 'control and activation
accessories'.

Logotherm interface stations
with optional kits can be
configured for you on request.

LogoPack



1



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

LogoPack are compact, ready-connected decentralised interface stations with proportional mix controlled hot water preparation and provision of heating to living spaces as system for riser circuit assembly where space is limited (shaft assembly).

LogoPack Complete	WW-Output				Fig.	Art. No.
	l/min ¹	kW ¹	l/min. ²	kW ²		
Type C	12	35	15	37	Fig. 1	AI-10260.24LPFOR
Type C1	12	35	15	37	Fig. 2	AI-10260.26LPOR

LogoPack - Kit features		Type C	Complete	Type C1
Dimensions	Width in mm	430		365
	Height in mm		500	
	Depth in mm	200		245
Axial distance risers (VL & RL)		170		90
Connections for risers			1 1/2" AG	
Connections for sanitary (flat-sealing)			3/4" AG	
Connections for dwelling heating circuit			1/2" AG	
Max. pressure: Heating/ Sanitary			PN10/ PN10	
Max. permissible temperatures: Heating/ Sanitary			110 °C / 110 °C	
Heating capacity (at 20 K)			10 kW	
Stainless steel plate heat exchanger (copper soldered), vertically oriented for reduced risk of lime scale			✓	
PF-controller with priority switch, Anti-lime scale coating and DVGW approval			✓	
Control valve for heating water (Zone valve for connection to living space control)			✓	
Venting with hose connection on heating side			✓	
Adaptor for heat flow meter 3/4" x 110 mm			✓	
Throttle plate			✓	
Pipework made from insulated stainless steel corrugated pipe			✓	
Integrated flow line and return line risers made of insulated stainless steel corrugated pipe			✓	
completely assembled and tested			✓	
Dirt traps with stainless steel sieve insert			✓	

LogoPack Complete - Accessories				
Short end sections as circuit termination	with bleed valves above		Fig. 3	AI-10522.2
	with circulation bridge (35 – 65 °C)	with drainage below	Fig. 4	AI-10523.2
Union fittings	1 item of LogoPack [DN] 32 on corrugated pipe DN 32 (Fixlock)			AI-E-10200.1
	Half-shell pair on FixLock DN 32 for devices of 11/96			AI-90180.1
Differential pressure regulator (Balancer), 0.5 m pilot line, return ball valve with Pilot line connection	1 item of LogoPack [DN] 40 on corrugated pipe DN 40 (incl. half-shell)			AI-E-46119.7
	Set DN 20 for Single connection			AI-18120
		Set DN 32 for max. 5 stations	Fig. 5	AI-18140

All stations are available as required with nickel soldered heat exchanger. Prices and article numbers provided on request. Further complementary and additional products (e.g. cladding, metering devices for consumption metering, etc.) can be found on the following pages or in the Table of Contents on page 10 or the Chapter Overview on page 15.

LogoVital



Fig. 1



Fig. 2

LogoVital are compact, ready-connected decentralised interface stations with proportional mix controlled hot water preparation as wall-mounted system. These interface stations are also available with high outputs for hot water preparation, in order to ensure greater comfort and convenience.

LogoVital	WW-Output				Fig.	Art. No.
	l/min ¹	kW ¹	l/min. ²	kW ²		
Type 1	12	35	15	37	Fig. 1	AI-10231.35WWB
Type 2	17	46	20	50		AI-10231.41WWB
Type 3 excluding domestic water circulation	24	65				AI-10231.49
Type 4 including domestic water circulation*	24	65			Fig. 2	AI-10231.50

LogoVital – Kit features		Type 1 35	Type 2 46	€/item	Type 3 65	Type 4 65
Dimensions (Dimensions of the housing must be taken into account)	Width in mm	298	428		580	
	Height mm	391	528		925	
	Depth ³ in mm	170	190		150 – 220	
Connections – cold water/hot water and circulation (where provided) below		3/4"			3/4"	
Connections – flow and return line Building mains connection below		3/4"			1"	
Max. pressure: Heating / Sanitary		PN10 / PN10			PN10 / PN10	
Max. permissible temperatures: Heating / Sanitary		110 °C / 110 °C			110 °C / 110 °C	
Stainless steel plate heat exchanger (Copper soldered), vertically oriented for reduced risk of lime scale		1			2	
PF-controller with priority switch, Anti-lime scale coating and DVGW approval		1			2	
Venting with hose connection on heating side		✓			✓	
Adaptor for heat flow meter 1" × 130 mm		-			✓	
Throttle plate		✓			✓	
Pipework made from insulated stainless steel corrugated pipe		✓			✓	
Completely free of mechanical stress assembled and tested on base plate		✓			✓	
Dirt traps with stainless steel sieve insert		✓			✓	
Cold water meter adaptor 3/4" × 110 mm		AI-10252.51			✓	
Adjustable circulation bridge (35 – 65 °C)		AI-10252.22 AI-10252.23			available with/without	
Differential pressure regulator – Balancer (control range 10 – 40 KPa) for autom. hydr. Station balance					✓	
Domestic water circulation with separate time control, heat exchanger insulation and adjustable circulation bridge (35-65 °C) for heat retention in the primary heating circuit		AI- 10252.44	AI- 10252.45			
Domestic water circulation (pre-installed ex-factory with separate time control					✓	

LogoVital – Accessories				
Type 1 & Type 2	Ball valves	4 × DN 20 straight		AI-10252.3
Type 3 & Type 4	TW ball cocks DVGW tested.	3 × DN 20 & 2 × DN 25 straight		AI-10252.341
Type 1 & Type 2	Scalding protection (thermal Water mixer (adjustment range 35-60 °C) for WW limiting, max. 10 bar, 3/4" AG		Fig. 3	AI-69050.9



Fig. 3

- *)
Adjustment range of the
circulation bridge = 35 °C – 65 °C
- 1)
specifies at a flow line
temperature of 65 °C and
heating by 40K
- 2)
specifies at a flow line
temperature of 65 °C and
heating by 35K
- 3)
depending on the kit
and housing type

LogoAktiv

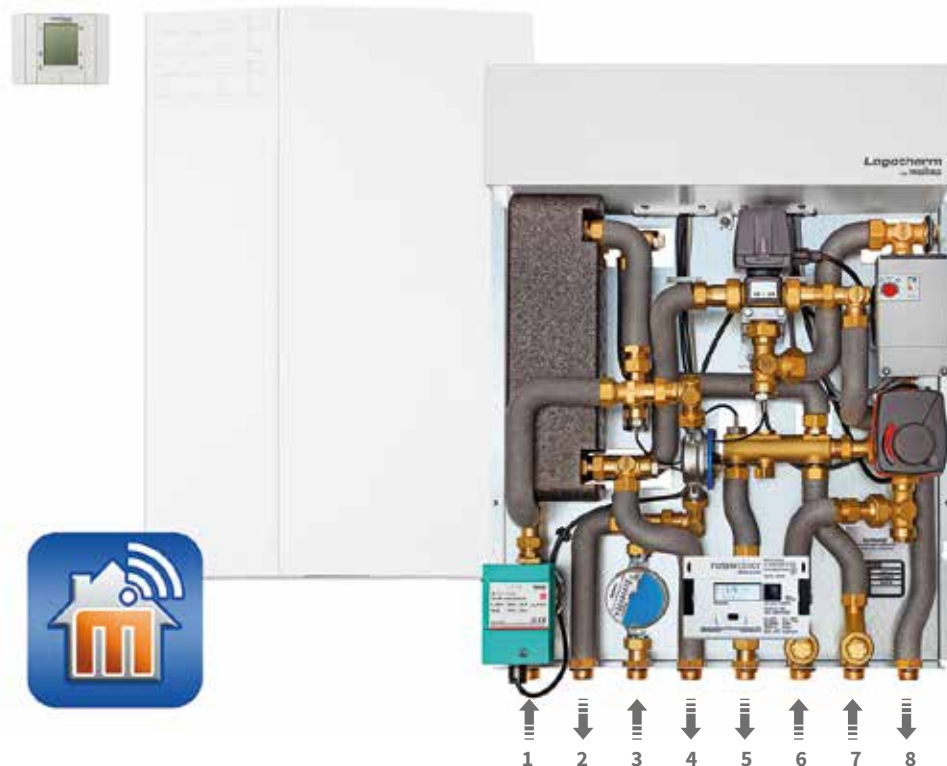


1

LogoAktiv are efficient, compact and ready-connected decentralised interface stations with electronically controlled hot water preparation precise to one degree for achieving the most modern hygienic standards as well as for the provision of heating to living areas as a wall-mounted system. In order to boost effectiveness, modern components such as high-efficiency pumps and processor controlled system controllers are used.

The use of a primary supply pump inside each LogoAktiv provides additional advantages apart from the hydraulic. For example, the supply pump and control valves for the hydraulic balance in the relevant line can be omitted, insofar as no other client has to be supplied from this circuit.

By means of the integrated system controllers with multiple communication options, LogoAktiv can be combined with standard building management systems and can optionally be controlled, depending on the equipment (with applications of other hardware components and communication modules), with various mobile end devices.



Legend:

- | | | |
|---|---------------------------------------|-----------------------------------|
| 1) domestic water circulation | 2) residential cold water | 3) cold water building connection |
| 4) residential hot water | 5) return line circuit | 6) flow line circuit |
| 7) return line dwelling heating circuit | 8) flow line dwelling heating circuit | |



The controls and activation technology of the LogoAktiv is not affected by potable water with a high hardness rating, as no sensitive mechanical components are included in the cold water.

Further advantages of LogoAktiv for greater efficiency and convenience:

- optimal heating of the individual spaces according to individually selectable time programme
- weather-controlled control of the flow line temperature (optional outside temperature sensor required)
- precise metering of energy consumption by means of optional integrated heat flow meter
- quick switch to hot water preparation on turning on tap
- precisely adjustable hot water temperature independent on draw-off volume
- hygienically safe hot water preparation in flow-through operation
- can be combined with regenerative energy systems
- product-dependent also available with integrated underfloor heating function

LogoAktiv



Fig. 1

1)
specifies at a flow line
temperature of 65 °C and
heating by 40 K

2)
depending on the kit
and housing type

Further complementary and
additional products
(e.g. cladding, underfloor
manifolds, metering devices for
consumption metering, control
accessories, etc.) can be found
on the following pages or are
shown in the Table of Contents
on page 10 or the Chapter
Overview on page 15.



Fig. 2

Aktiv Plus Complete	WW-Output		Fig.	Art. No.
	l/min ¹	kW ¹		
35 - including domestic water circulation	12	35		AI-14001.11 ZEH
50 - with domestic water circulation	18	50		AI-14002.11 ZEH
70 - including domestic water circulation	26.5	70	Fig. 1	AI-14003.11 ZEH

LogoAktiv – Kit features		Complete		
		35	50	70
Dimensions	Width in mm	600		
(Dimensions of the housing must be taken into account)	Height in mm	800		1,000
	Depth ² in mm	170 – 220		190 – 220
Connections below		3/4"		1"
Max. pressure: Heating / Sanitary		PN6 / PN6		
Max. permissible temperatures: Heating / Sanitary		95 °C / 95 °C		
Power supply		230 V / 50 Hz		
Heating capacity (at 20 K)		20 kW		
Stainless steel plate heat exchanger (copper soldered), vertically oriented for reduced risk of lime scale		✓		
Venting with hose connection on heating side		✓		
Adaptor for heat flow meter		3/4" × 110 mm	1" × 130 mm	
Pipework made from insulated stainless steel corrugated pipe		✓		
Completely free of mechanical stress assembled and tested on base plate		✓		
2 dirt traps with stainless steel sieve insert		✓		
Second kW connection for residences		✓		
Cold water meter adaptor		✓		
Domestic water circulation		available with/without		
Primary high-efficiency pump Wilo Stratos-Para 15 /1-7		✓		
Primary mixing valve		✓		
Primary switching valve		✓		
electronic control with control unit for hot water and heating circuit controller		✓		
RS-485 interface for communication (Protocol: Modbus RTU) for internal control		✓		
Ethernet interface (RJ45) for optional remote access		✓		
Flow rate sensor & temperature sensor		✓		
Actuation of an additional heating circuit via external pump group		✓		
Connection of additional communications module (e.g. M-bus) possible on request		✓		

LogoAktiv – Accessories		Fig.	Art. No.
35 & 50	Ball valves with sensor mounting WMZ. TW ball valves DVGW tested	8 × DN 20 straight	Fig. 2 AI-10252.33
35 & 50	Wall- & flush-mounted mounting rail incl. ball valves, TW-ball valves DVGW tested	8 × DN 20 straight	AI-10203.136
70	Ball valves with sensor mounting WMZ. TW ball valves DVGW tested	7 × DN 25 & 1 × DN 20 (circulation) straight	AI-10252.37
35; 50 & 70	M-bus module for extending the LogoAktiv Plus. The module provides a connection option for M-bus capable station heat flow meters and water meters. Using this, the metering and presentation of consumption data can be conducted via the LogoAktiv controller.		AI-10579.004

Complete stations LogoMatic KS 600 & 600+



1



Fig. 1

The complete stations LogoMatic KS 600 and 600+ are compact, ready-connected decentralised interface stations with electronically controlled hot water preparation. Provision of heating to living areas as wall-mounted system incl. housing as well as ball valve connection set, in order to allow you a simple selection, fast delivery and also simple operation.

The LogoMatic KS 600 is available with static heating circuit, the LogoMatic KS 600+ with a direct mixed circuit (MK) plus 6 underfloor manifolds or with a direct mixed circuit and 8 underfloor manifolds and a second static heating circuit.

The LogoMatic KS 600+ always includes the **integrated weather-controlled heating circuit controller and the underfloor heating function**, in order to ensure maximum comfort and convenience.

LogoMatic KS complete station is available as wall-mounted (AP) or flush-mounted version (UP) as well as with brazed heat exchanger (CU) or stainless steel soldered heat exchanger (ES).



Fig. 2

Complete stations LogoMatic KS		WT	Installation type	WW-Output	Fig.	Art. No.
		CU / ES	AP / UP			
600 RH-AP	stat. Heating circuit	CU	AP	17' - 20' l/min. & 46' - 50' kW	Fig. 1	AI-11114 HKAP
600 RH-UP	(st. HK)	CU	UP			AI-11114 HKUP
600+ FBH-AP	Mixed circuit (MK)	CU	AP		Fig. 2	AI-11114.6 MKAP
600+ FBH-UP	with 6 manifolds	CU	UP			AI-11114.6 MKUP
600 FBH/RH-AP	MK with 8 manifolds	CU	AP		Fig. 3	AI-11114.8 MKAP
600 FBH/RH-UP	& st. HK	CU	UP			AI-11114.8 MKUP
600 RH-AP	stat. Heating circuit	ES	AP		AI-11114 HKAPES	
600 RH-UP	(st. HK)	ES	UP		AI-11114 HKUPES	
600+ FBH-AP	Mixed circuit (MK)	ES	AP		AI-11114.6 MKAPES	
600+ FBH-UP	with 6 manifolds	ES	UP		AI-11114.6 MKUPES	
600 FBH/RH-AP	MK with 8 manifolds	ES	AP		AI-11114.8 MKAPES	
600 FBH/RH-UP	& st. HK	ES	UP		AI-11114.8 MKUPES	

- 1) Specifies at a flow line temperature of 65 °C and heating by 40 K
- 2) Specifies at a flow line temperature of 65 °C and heating by 35 K



Fig. 3

LogoMatic 600 & 600+ Accessories	Art. No.
Service display for configuration and monitoring of settings and parameters, incl. connection cable and 4-pin connection plug, 4.3" colour touchscreen with graphic operating surface, simple and intuitive menu, for implementing parameter backup and software updates via integrated SD cards-slot	AI-10576.701

Complete stations LogoMatic KS 600 & 600+



NEW!
Complete stations
also with stainless
steel soldered
heat exchanger!

1

LogoMatic KS complete station 600 / 600+ Kit features		600 RH	Complete 600+ FBH	600 FBH/RH
Dimensions in mm (AP version)	Width	600	600	600
	Height	900	1300	1300
	Depth	210	210	210
Dimensions in mm (UP version)	Width (front cover size, aperture size larger)	610	610	610
	Height (front cover size, without height-adjustable feet)	953	1327	1327
	Depth (adjustable)	110-160	160-210	160-210
	Connections below	3/4"		
Max. pressure: Heating / Sanitary		6 bar / PN10		
Max. permissible temperatures: Heating / Sanitary		95 °C / 95 °C		
Heating capacity (at 20 K)		10 kW		
Power supply		230 V / 50 Hz		
Min. Operating pressure for sanitary		1 bar		
Max. Differential pressure - Heating (primary)		4.5 bar		
Pre-set tap temperature for hot water (Recommendation DVGW W551) ¹⁾		50 °C ¹⁾		
static heating circuit (st. HK)		✓	-	✓
Mixer circuit with servomotor, HE pump UPM3 AUTO 15-70 GMBP3		-	✓	✓
Underfloor manifolds with 6 outlet pieces (3/4" AG Euro cone, 0.5-5 l/min, 6 bar)		-	✓	-
Underfloor manifolds with 8 outlet pieces (3/4" AG Euro cone, 0.5-5 l/min, 6 bar)		-	-	✓
electronic rapid & constantly regulating three-way control valve with control adaptive priority switch for hot water and function display (LEDs)		✓		
constant WW outflow temperatures, also for changing primary (e.g. summer/winter operation) or cold water temperatures		✓		
Low return line temperatures through electronic Regulation of the primary energy supply		✓		
Weather-controlled heating circuit controller (Optional: an active outside sensor for several stations can be used)		-	-	✓
Flow switch		✓		
Flow-through sensor for exact quantity-based hot water preparation		✓		
Stainless steel plate heat exchanger, Vertical orientation for reduced risk of lime scale		✓		
Control valve - Heating (zone valve for connection to living space control)		✓		
Venting with hose connection on heating side		✓		
Adaptor for heat flow meter 3/4" × 110 mm		✓		
Pipework made from insulated stainless steel corrugated pipe		✓		
Assembled and tested on base plate completely free of mechanical stress		✓		
Dirt traps with stainless steel sieve insert (incl. drainage function)		✓		
second KW connection for residences		✓		
Cold water meter adaptor 3/4" × 110 mm		✓		
Heat retention function of the primary heating-circuit water intake via an adjustable circulation bridge (35-65 °C)		✓		
Differential pressure regulator/balancer (control range 10-40 kPa) for automatic hydraulic Station balance		✓		
Throttle plate		✓		
7 ball valves DN20 with sensor mounting for WMZ. TW ball valves DVGW tested		✓		
Wall-mounted housing made of painted steel (RAL 9016)		see identification marking AP		
Flush-mounted housing made of painted steel (RAL 9016)		see identification marking UP		
Height-adjustable feet (100 – 170 mm)		see identification marking UP		

1)
Pre-set values changeable as required via customer service.

Logotherm interface stations with optional kit are configurable on request.



The controls and activation technology of the LogoMatic is not affected by potable water with high hardness rating, as no sensitive mechanical components are included in the cold water, and has an integrated weather-controlled heating circuit controller and underfloor heating function.

LogoMatic Comfort Series



LogoMatic are efficient, compact and ready-connected decentralised interface stations with electronically controlled hot water preparation for achieving the most modern hygienic standards as well as for the provision of heating to living spaces as a wall-mounted system.

The LogoMatic Comfort Series comes in 3 major models:

1. the LogoMatic Comfort 600 with static heating circuit and many functions and
2. the LogoMatic Comfort 600+ with integrated mixed circuit for underfloor heating and
3. the LogoMatic Comfort 600+ with an additional static heating circuit.

The LogoMatic Comfort 600+ always includes the **integrated weather-controlled heating circuit controller and the underfloor heating function**, in order to ensure maximum possible comfort and convenience.

1



Fig. 1



Fig. 2



Fig. 3

LogoMatic Comfort 600 & 600+		WW-Output				Fig.	Art. No.
		l/min ¹	kW ¹	l/min. ²	kW ²		
600	stat. Heating circuit (st. HK)	12	35	15	37		AI-11114.11
600	stat. Heating circuit (st. HK)	17	46	20	50	Fig. 1	AI-11114.1
600+	mixed circuit (MK)	12	35	15	37		AI-11114.21
600+	mixed circuit (MK)	17	46	20	50	Fig. 2	AI-11114.2
600+	MK + 2. stat. Heating circuit	12	35	15	37		AI-11114.31
600+	MK + 2. stat. Heating circuit	17	46	20	50		AI-11114.3

1) specifies at a flow line temperature of 65 °C and a heating by 40 K (ex-factory setting)

2) specifies at a flow line temperature of 65 °C and a heating by 35 K (indicate on ordering)

LogoMatic Comfort 600 & 600+ Accessories			Fig.	Art. No.
600 & 600+	Ball valves	Ball valves 7 x DN 20 straight with sensor mounting WMZ, TW ball valves DVGW tested.		AI-10252.32
600 600+	Wall- & flush-mounted Mounting rail	Ball valves 7 x DN 20 straight with sensor mounting WMZ, TW ball valves DVGW tested.	Fig. 3	AI-10203.181
Rinsing hose for flushing network – 3/4" x 500 mm				AI-4325.1227.50
Rinsing hose connections – MS flat-sealing 3/4"				AI-43.66124 D
Scalding protection (thermal Water mixer (Adjustment range 35 – 60 °C) for WW limiting, max. 10 bar, 3/4" AG				AI-69050.9

Service display for configuration and monitoring of settings and parameters, incl. connection cable and 4-pin connection plug, 4.3" colour touchscreen with graphic operating surface, simple and intuitive menu, for implementing parameter backup and software updates via integrated SD cards-slot

AI-10576.701

Optional accessories available via model management	600	600+
Stainless steel soldered heat exchanger for potable water with high conductivity		optional
Scalding protection		optional
Domestic water circulation (pre-installed ex-factory) with separate time control		optional
Return line temperature limiter 45-65 °C		optional

Information note: Logotherm interface stations with optional kits can be configured on request.

LogoMatic Comfort Series



NEW!
also as complete
station and with
stainless steel-
soldered heat
exchanger

LogoMatic – Kit features		Complete	
		Comfort 600	Comfort 600+
Dimensions	Width in mm	600	
(Dimensions of the housing must be taken into account)	Height in mm	750	
	Depth in mm	110 – 220	
Connections below		3/4"	
Max. pressure: Heating / DHW		6 bar / 10 bar	
Max. permissible temperatures: Heating / DHW		95 °C / 95 °C	
Power supply		230 V / 50 Hz	
Min. Operating pressure for DHW		1 bar	
Max. Differential pressure - Heating (primary)		4.5 bar	
Heating capacity (at 20 K)		10 kW	
Pre-set tap temperature for hot water (Recommendation of DVGW W551) ¹		50 °C ¹	
electronic rapid & constantly regulating three-way control valve with control adaptive priority switch for hot water and function display (LEDs)		✓	
constant WW outflow temperatures, also for changing primary (e.g. summer/winter operation) or Cold water temperatures		✓	
Low return line temperatures through electronic Regulation of the primary energy supply		✓	
Weather-controlled heating circuit controller (Optional: an active outside sensor for several stations can be used)		-	✓
Flow switch		✓	
Flow-through sensor for precise quantity-based hot water preparation		✓	
Stainless steel plate heat exchanger (copper soldered), vertically oriented for reduced risk of lime scale		✓	
Zone valve for dwelling heating circuit		✓	
Venting with hose connection on heating side		✓	
Adaptor for heat flow meter 3/4" × 110 mm		✓	
Pipework made from insulated stainless steel corrugated pipe		✓	
Assembled and tested on base plate completely free of mechanical stress		✓	
Dirt traps with stainless steel sieve insert (incl. drainage function with Comfort & Comfort+)		2	1
second KW connection for residences		✓	
Cold water meter adaptor 3/4" × 110 mm		✓	
Heat retention function of the primary heating-circuit water intake via an adjustable circulation bridge (35-65 °C)		✓	
Differential pressure regulator for autom. hydr. Station balance		✓	
Control range of the differential pressure regulator (Balancer)		10 – 40 KPa	
static heating circuit (st. HK)		✓	available with & without
Mixer circuit with servomotor and HE pump UPM3 AUTO 15-70 GMBP3 (MK)		-	✓

1)

Pre-set values as required changeable via customer service or ex-factory.

Further complementary and additional products (e.g. cladding, underfloor manifolds, metering devices for consumption metering, control accessories, etc.) can be found on the following pages or in the Table of Contents on page 10 or the Chapter Overview on page 15.



The controls and activation technology of the LogoMatic is not affected by potable water with high hardness rating, as no sensitive mechanical components are included in the cold water, and has an integrated weather-controlled heating circuit controller and underfloor heating function.

LogoEco Compact E



LogoEco Compact E HW and LogoEco E H-HW are efficient, compact and ready-connected decentralised interface stations with electronically controlled hot water preparation for achieving the most modern hygienic standards and as wall-mounted system. In addition, the LogoEco E H-HW offers provision of heating to living areas.

1



Fig. 1



Fig. 2

LogoEco Complete	WW-Output		Fig.	Art. No.
	l/min ¹	kW ¹		
LogoEco Compact E HW	10	35	Fig. 1	AI-11231.91
LogoEco E H-HW	10	35	Fig. 2	AI-11253.91
Eco HW:	Wall-mounted mounting rail incl. ball valves 2 × DN 20 straight			AI-11231.911
Eco H-HW:	Wall-mounted mounting rail incl. ball valves 4 × DN 20 straight			AI-11253.911

LogoEco – Kit features		LogoEco HW	LogoEco H-HW
Dimensions	Width in mm	255	570
	Height in mm	415	390
	Depth in mm	125	170
Connections below		3/4"	3/4"
Max. pressure: Heating / Sanitary		16 bar / 10 bar	10 bar / 10 bar
Max. permissible temperatures: Heating		90 °C	95 °C
Power supply		100 – 230 V	100 – 230 V
Min. Operating pressure for sanitary		1 bar	1 bar
Max. Differential pressure - Heating (primary)		2.5 bar	2.5 bar
Pre-set tap temperature for hot water ²		55 °C ¹	55 °C ¹
Heating capacity (at 30 K) hot water preparation		✓	✓
Heating			✓
electronically regulating two-way control valve for hot water preparation		✓	✓
electronically regulating two-way control valve for the dwelling heating circuit		-	✓
constant WW outflow temperatures also at changing primary temperatures (e.g. summer/ Winter operation) or cold water temperatures		✓	✓
Low return line temperatures through electronic regulation of the primary energy supply		✓	✓
Electric connection for living space control			✓
Heat retention function for the heat exchanger (40 °C – adjustable 25 – 60 °C)		✓	✓
Flow-through sensor for precise quantity-based hot water preparation		✓	✓
Stainless steel plate heat exchanger (copper soldered)		✓	✓
Adaptor for heat flow meter 3/4" × 110 mm		-	✓
Pipework made from Copper (fixed pipe)		-	✓
Stainless steel (fixed pipe)		✓	-
Completely free of mechanical stress assembled in housing and tested		✓	✓
Dirt traps with stainless steel sieve insert		-	✓
Differential pressure regulator for autom. hydr. Balance of the dwelling heating circuit		-	✓
Control range of the differential pressure regulator			5 – 25 KPa
Surface-mounted cover (EPP – black)		✓	✓

1)

specifies at a flow line temperature of 65 °C and a heating by 45K (ex-factory setting)

2)

Pre-set values as required changeable via customer service.

Further complementary and additional products (e.g. metering devices for consumption metering, control accessories, etc.) can be found on the following pages or are shown on the table of contents on page 10 or the Chapter Overview on page 15.

Floor distributors

All the underfloor manifolds listed here are pre-assembled on a base plate and equipped with the heating circuits indicated below. The price list shows interface stations for 4 types of underfloor manifold.

1



Fig. 1

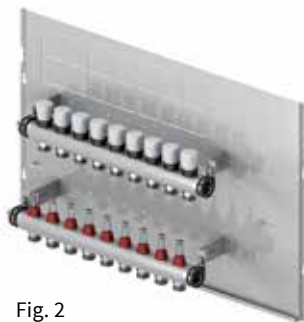


Fig. 2



Fig. 3

Number Heating circuits	LogoAktiv	LogoComfort	LogoMatic Comfort+	LogoComfort	Type	Fig.	Art. No.
	35 & 50	600+	600+	600			
3	✓				A		AI-10514.1
		✓	✓	✓	B		AI-M14
				✓	E		AI-10512.3
4	✓				A		AI-10514.2
		✓	✓	✓	B		AI-M15
				✓	E		AI-10512.4
5	✓				A		AI-10514.3
		✓	✓	✓	B		AI-M16
				✓	E		AI-10512.5
6	✓				A		AI-10514.4
		✓	✓	✓	B	Fig. 1	AI-M17
				✓	E		AI-10512.6
7	✓				A		AI-10514.5
		✓	✓	✓	B		AI-TS-11301.17
				✓	E		AI-10512.7
8		✓	✓		B		AI-TS-11301.18
				✓	E		AI-10512.8
9				✓	E	Fig. 2	AI-10512.9
10				✓	E		AI-10512.10
11				✓	E	Fig. 3	AI-10512.31
12				✓	E		AI-10512.32

Underfloor manifolds		Type A	Type B	Type E
Dimensions in mm (Dimensions of the housing must be taken into account)	Width	600		792
	Height	450		500
Connection to the heating circuits		3/4" AG - Euro cone		
Orientation of the supply connections depending on:		above		on the side
Material of heat distributor		Stainless steel		
Control range of flow rate limiter		0.5 – 5 l/min.		
Max. Pressure level		6 bar		
Zone valve integrated		✓		
Valve inserts M30 x 1.5 with manually adjustable flaps			✓	

Cladding

1

The claddings listed are available as wall-mounted or flush-mounted models and also for use as remote read-out for consumption metering with radio transmission. Cladding: Painted steel in white (RAL 9016) and plastic screen in white (RAL 9016) for remote applications¹.

Cladding, wall-mounted models

Type	with door	long ²	Remote ¹	Logo Aktiv			Logo Comfort			Logo Pack		Logo Matic		Logo Vital				
				35 & 50	70	500	600	600+	C	C1	600	600+	35	46	65			
Wall-mounted						✓										✓		
							✓										✓	
					✓													
		✓				✓		✓										✓
			✓						✓									
			✓							✓								
				✓			✓											
				✓														
				✓														
		✓											✓	✓				
for manifolds	✓		✓									✓	✓					
				✓				✓	✓					✓				

1) Housing with option for remote read-out of consumption metering through plastic insert
 2) Height ≥ 1,000 mm



Fig. 1



Fig. 2



Fig. 3

	Dimensions (mm)			Fig.	Art. No.
	Width	Height	Depth		
	310	500	170	Fig. 1	AI-10203.132
	440	637	190		AI-10203.133
	500	800	210	Fig. 2	AI-11200.1
	500	1,000	210		AI-11200.1L
	600	880	210		AI-11100.9
	600	1,000	210		AI-11200.2L
	600	870	195	Fig. 3	AI-10203.512
	600	800	210		AI-11100.1
	850	1,210	210	Fig. 4	AI-11100.73
	850	1,210	210		AI-11100.77
	500	800	210		AI-11200.1K
	500	1,000	210	Fig. 5	AI-11200.1KL
	600	880	210		AI-11100.9K
	600	1,000	210		AI-11200.2KL
	600	800	210		AI-11100.1K
	600	935	210		AI-10203.185
	600	935	210		AI-10203.185K
	600	400	210	Fig. 6	AI-11100.5
	600	410	210		AI-10203.186



Fig. 4



Fig. 5



Fig. 6

Cladding

The claddings listed are available as wall-mounted or flush-mounted models and also for use as remote read-out for consumption metering with radio transmission. Cladding: Painted steel in white (RAL 9016) and plastic screen in white (RAL 9016) for remote applications¹.

Cladding, flush-mounted models

Type	with door	long ²	Remote ¹	Logo Aktiv		Logo Comfort			Logo Pack		Logo Matic		Logo Vital			
				35 & 50	70	500	600	600+	C	C1	600	600+	35	46	65	
Flush-mounted	✓			✓												
	✓			✓			✓	✓								
	✓				✓		✓	✓								
	✓						✓									✓
	✓		✓				✓									
	✓		✓					✓	✓							
Flush-mounted (wall-mounted completely closed)	✓						✓	✓								
	✓							✓								✓
	✓		✓					✓	✓							
	✓		✓					✓	✓							
	✓										✓	✓				
	✓										✓	✓				
Inspection frames	✓									✓						✓
	✓							✓			✓					
	✓								✓	✓						✓
	✓		✓					✓				✓				
	✓		✓						✓	✓			✓			
	✓		✓								✓	✓				
Height-adjustable Feet (100-170 mm) for UP covers					✓	✓		✓	✓		✓	✓				✓
																✓

1) Housing with option for remote read-out of consumption metering through plastic insert

2) Height ≥ 1,000 mm



Fig. 1



Fig. 2

	Dimensions (mm)			Fig.	Art. No.
	Width	Height	Depth		
	610	1,260	150-220	Fig. 1	AI-11100.8
	610	835	150-220	Fig. 3	AI-11100.2
	610	1,175	150-220		AI-11100.4
	825	1,175	150-220		AI-11100.72
	825	1,175	150-220	Fig. 2	AI-11100.76
	510	835	150-220		AI-11200.2K
	610	1,260	150-220		AI-11100.8K
	610	835	150-220		AI-11100.2K
	610	1,175	150-220		AI-11100.4K
	610	835	150-210	Fig. 4	AI-11100.23
	610	1,175	150-210		AI-11100.24
	845	1,175	150-210	Fig. 5	AI-11100.25
	460	720	190		AI-10203.548
	610	835	150-210		AI-11100.23K
	610	1,175	150-210		AI-11100.24K
	610	935	110-160		AI-11100.38
	610	935	110-160		AI-11100.38K
	610	1,230	110-160		AI-11100.39
	610	1,230	110-160		AI-11100.39K
	400	600			AI-66200.6
	500	800			AI-10203.317
	500	600			AI-66200.7
	600	800			AI-10203.309
	600	1,150			AI-10203.312
	500	800			AI-10203.317K
	600	800		Fig. 6	AI-10203.309K
	610	1,175			AI-10203.311K
	510				AI-11200.21
	610				AI-11100.21
	825				AI-11100.71
	460				AI-10203.549



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Control technology

The control technologies listed are possible room temperature controls for the most varied applications, such as single room control, temperature regulation for underfloor distribution etc. The combination options listed are mutually exclusive where applicable. For that reason, have the combination selected for your planned application confirmed by our specialist personnel.

Control technology for underfloor heating



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Description	Re- mote	LogoAktiv		LogoComfort			LogoPack		LogoMatic		Fig.	Art. No.
		35/50	70	500	600	600+	C	C1	600	600+		
Room temperature sensor NI1000					✓	✓						AI-10560.141
Outside temperature sensor (IP54) PT1000									✓			AI-10560.34
Outside temperature sensor NTC, IP54 incl. connection plug		✓	✓									AI-10560.36
Electronic room temperature control 230 V programmable, with 2 × 1.5 V backup batteries AA, Type Salus HTRP230 (ENEV conform for 2 sizes available)				✓	✓	✓	✓	✓	✓		1	AI-10561.31
Electronic room temperature control remotely programmable, with 2 × 1.5 V batteries AA Type Salus ERT 50 remote	✓				✓	✓						AI-10560.86
Terminal strip 230 V (6 channels, max. 24 actuators)		✓	✓		✓	✓			✓		3	AI-10560.97
Terminal strip 230 V with pump logic module (8 channels, max. 32 actuators)		✓	✓		✓	✓			✓			AI-10560.961
Bracket for terminal strip for device width from 600 mm		✓	✓		✓	✓			✓			AI-10203.021
Pump logic module		✓	✓		✓	✓			✓		2	AI-10560.99
Electrothermal actuator 230 V (2-point), no current (NC)		✓	✓	✓	✓	✓	✓	✓	✓	✓	6	AI-10560.98
Electronic room temperature control 230 V Type Salus RT 10		✓	✓	✓	✓	✓			✓	✓	4	AI-10560.95
STW as contact thermostat for temperature monitoring for surface heating circuit, concealed setting option (20-90 °C) incl. actuator 230 V and zone valve		✓	✓								5	AI-10560.941
STW as contact thermostat for temperature monitoring for underfloor heating circuit concealed setting option (20-90 °C), 230 V incl. electro thermal actuator 230 V				✓	✓	✓	✓	✓		✓		AI-10560.94

1) Application only for mixed circuit with external actuation (M12HE)!

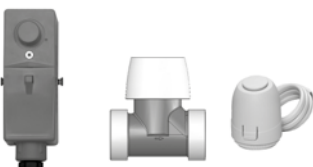


Fig. 5



Fig. 6

Control technology

Complete control sets, living area control device and actuator



Fig. 1



Fig. 2



Fig. 3

Description	Re- mote	LogoAktiv		LogoComfort			LogoPack		LogoMatic		Fig.	Art. No.
		35/50	70	500	600	600+	C	C1	600	600+		
Electronic room temperature control 230V programmable, with 2 × 1.5 V backup batteries AA Type Salus HTRP230 (ENEV conform for 2 sizes available) incl. electrothermal actuator 230V (2-point), closed currentless (NC)				✓	✓	✓	✓				1	AI-10561.3
Electronic remote room temperature regulation programmable, Type Honeywell CMS927 with battery operation (2 × 1.5 V AA) and suitable servomotor Honeywell HR92 (also 2 × 1.5 V AA)	✓			✓	✓	✓	✓				2	AI-10560.65
Electronic remote room temperature control programmable, Type Salus RT500RF (battery operated)	✓					✓						AI-10561.43
Electronic room temperature control 230V programmable, Type Heimeier Thermostat P incl. electrothermal actuator 230V (2-point) open currentless (NO)				✓	✓	✓	✓				3	AI-10560.7
Electronic room temperature control remotely programmable, with 2 × 1.5 V batteries AA, receiver, Type Salus ST 620 RF, actuator 230 V (2-point), closed currentless (NC)	✓			✓	✓	✓	✓				4	AI-10561.4
Internet thermostat, system IT500 with thermostat, wall-mounted installation kit, foot, receiver, gateway, ADSL cable and mains supply.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	5	AI-10561.5
Remote sensor IT300 incl. wall-mounted installation kit, for control of two heating areas and improving energy efficiency	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6	AI-10561.51



Fig. 4



Fig. 5



Fig. 6

LogoCool decentralised cooling station

NEW!
Up to 24 kW
Cooling
output

1

LogoCool is a new generation of compact, ready-connected residential transmission stations for the transmission of cooling energy in homes, apartments and commercial buildings and sheds. LogoCool meets the requirements with respect to efficient and simple application, determined by the continuous primary flow rate and thus the primary energy setting of the pressure-independent flow rate controller. The unique design of the hybrid housing results in effective protection at the application range from the environmental conditions (temperature and room humidity).



Fig. 1



Fig. 2

LogoCool – Kit features		LogoCool S Line	LogoCool M Line
Dimensions incl. housing	Width in mm	629	650
	Height in mm	675	879
	Depth in mm	263	334
Connections (VL & RL from primary & secondary circuit) / overpressure release pipe below		1"	1 1/4"
Max. pressure: Primary side / Secondary side		10 bar / 3 bar	
Insulated (30 mm) and powder-coated hybrid housing in multiple shell design with all-round hollow chamber sealing		✓	
Stainless steel plate heat exchanger (copper soldered)		✓	
Drainage and filling options for the secondary circuit		✓	
Circulation pump in the secondary circuit		✓	
Expansion vessel in the secondary circuit		✓	
Adaptor for compact heat/cold meter 1" × 130 mm		✓	
2 dirt traps with stainless steel sieve insert		✓	
Overpressure valve for secondary circuit		✓	
Adjustable flow rate controller (Nexus Valve Vivax)		✓	
Actuator (on/off)		✓	
Manometer secondary circuit		✓	
Pipework made from insulated stainless steel corrugated pipe		✓	
Assembled on base plate completely free of mechanical stress, placed in the hybrid housing and tested		✓	

Basic Complete	Cooling transmission output	Fig.	Art. No.
LogoCool S 1 – 5 kW	See output table		Al-10610.32
LogoCool S 2 – 12 kW	See output table		Al-10610.22
LogoCool S 5 – 16 kW	See output table	Fig. 1	Al-10610.12
LogoCool M 9 – 24 kW	See output table	Fig. 2	Al-10610.1

LogoCool decentralised cooling station

LogoCool S 1 – 5 kW

Sec.	Temp. VL	°C	8			10					10				
	Temp. RL	°C	14			14					16				
Pri.	Temp. VL	°C	5	6	7	5	6	7	8	9	5	6	7	8	9
	Temp. RL	°C	12.9	12.7	12.2	13.7	13.6	13.5	13.3	12.9	15.3	15.2	15.0	14.7	14.2
	Output	kW	4.2	3.7	2.8	3.9	3.9	3.5	2.9	2.1	5.5	4.9	4.3	3.6	2.8

LogoCool S 2 – 12 kW

Pri.	Temp. VL	°C	5	6	7	5	6	7	8	9	5	6	7	8	9
	Temp. RL	°C	12.4	12.1	11.5	13.5	13.3	13.2	12.9	12.6	14.9	14.7	14.5	14.2	13.6
	Output	kW	9.9	8.1	6.0	8.1	8.1	8.1	6.9	5.3	12.0	11.7	10.0	8.2	6.0

LogoCool S 5 – 16 kW

Pri.	Temp. VL	°C	5	6	7	5	6	7	8	9	5	6	7	8	9
	Temp. RL	°C	12.4	12.1	11.5	13.6	13.4	13.3	13.0	12.6	15.1	14.8	14.6	14.2	13.6
	Output	kW	16.0	14.5	10.5	10.7	10.7	10.7	10.7	8.5	16.0	16.0	16.0	14.5	11.0

LogoCool M 9 - 24 kW

Pri.	Temp. VL	°C	5	6	7	5	6	7	8	9	5	6	7	8	9
	Temp. RL	°C	12.5	12.1	11.5	-	13.5	13.3	13.0	12.5	15.2	14.8	14.5	14.2	13.6
	Output	kW	23.7	22.5	16.9	-	15.8	15.8	15.8	13.5	23.7	23.7	23.7	22.8	17.0

LogoCool Complete Accessories

Accessories for	Name	Model	Art. number
LogoCool S Line	Ball valves with Spindle extension	4 × DN 25 straight	AI-10610.121

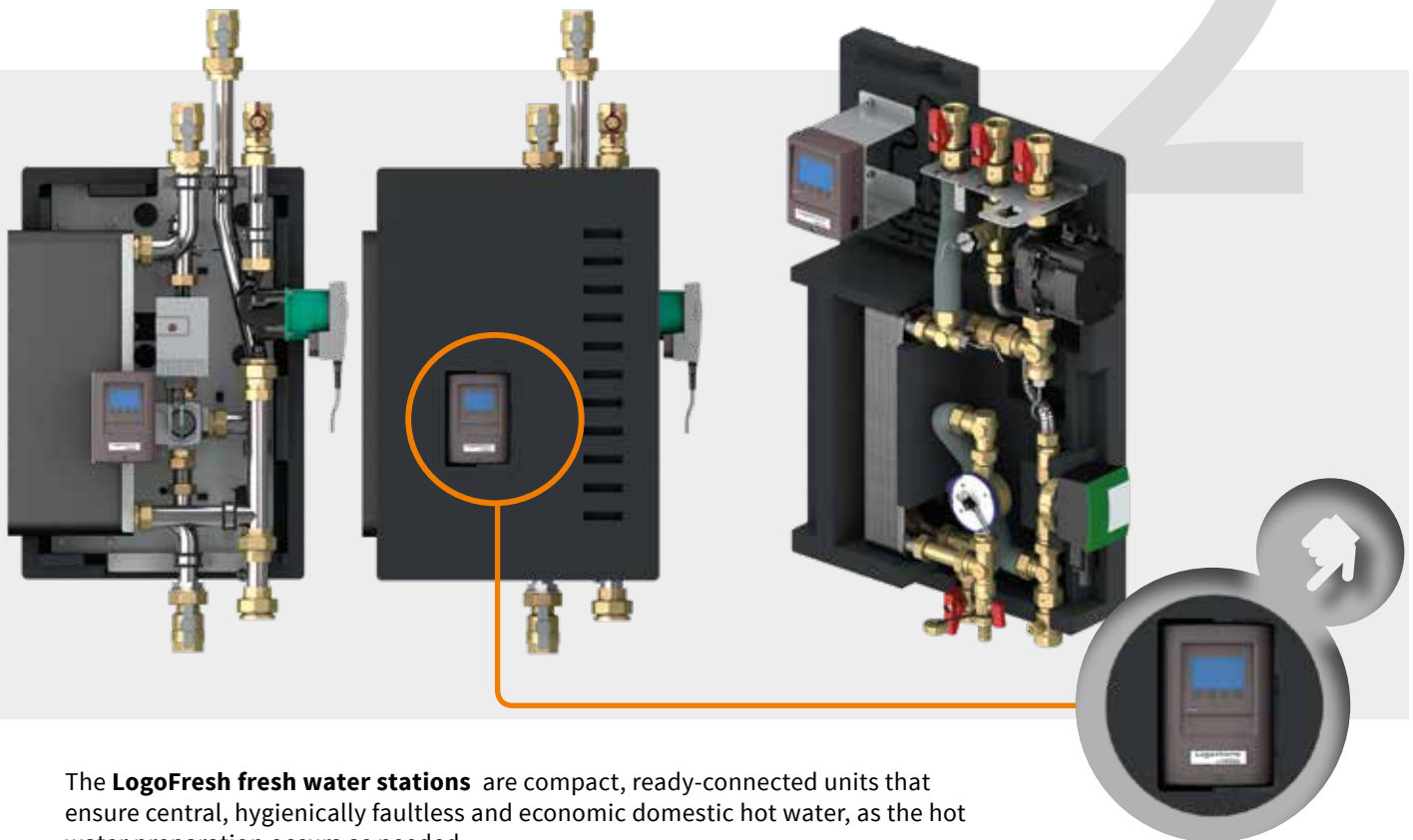
All data subject to a minimum residual delivery head on the secondary side of 3 mWS and a spread (primary to secondary) of 2 Kelvin.

Further complementary and additional products (e.g. metering devices for consumption metering, control accessories, etc.) can be found on the following pages or in the Table of Contents on page 10 or the Chapter Overview on page 15.

The following products are shown in Chapter 2 - Fresh water stations:	from page
NEW! LogoFresh XL-Line, electronic controlled	42
LogoFresh S-Line, electronic controlled	44
LogoFresh M-Line, electronic controlled	44
LogoFresh S-Line, thermostatically controlled	46
LogoFresh M-Line, thermostatically controlled	47

Fresh water stations

2



The **LogoFresh fresh water stations** are compact, ready-connected units that ensure central, hygienically faultless and economic domestic hot water, as the hot water preparation occurs as needed.

Fresh water stations may be used for the provision with fresh domestic hot water of single and multiple residential buildings and in public or commercial premises, such as schools, sports facilities, hospitals, etc. Particularly in buildings with discontinuous use, the principle of fresh water heating as required offers the option of avoiding stagnation and the formation of pathogens during times when not in use.

The energy source for this is a heating water buffer tank, which can be supplied with regenerative energy sources (such as solar systems, etc.).

Other advantages with electronically controlled models:

- Disinfection (Anti-Legionella Circuit)
- Data logging
- Fault monitoring
- Mixing protection of the heating water buffer tank

Your advantages

- No domestic water tank required
- Space-saving, fast and simple installation
- High hot water output at constant temperature up to 120 l/min.
- For even greater output can be easily connected in cascade or parallel
- Good economy through low RL temperature



Fresh water stations method of operation



Thermostatic control technology

operates guided by the temperature, using the required thermostatic valve and ensures thereby constant hot water preparation on drawing off through temperature-dependent control of the primary volume flow.

Advantages:

- extremely simple commissioning and operation
- simple maintenance and fault diagnosis
- controls always to the hot water temperature set, independent of changes in the cold water or primary temperature (e.g. summer/winter operation).

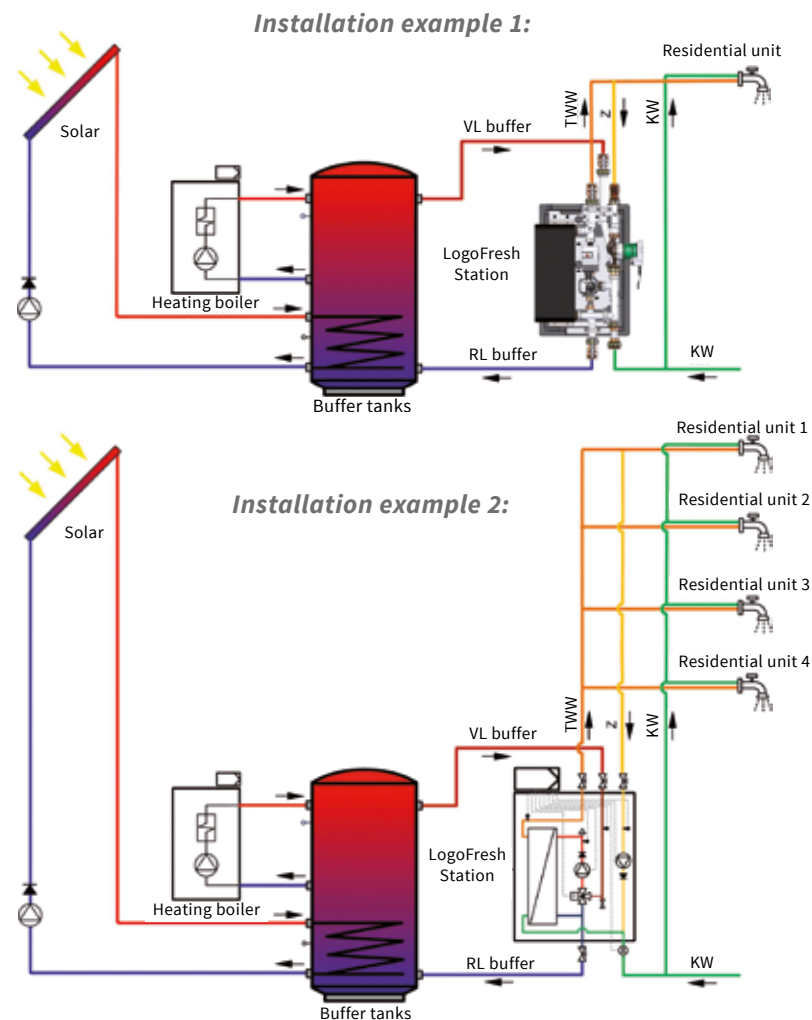


Electric control technology

is activated by a microprocessor controller, ensuring immediate hot water preparation on drawing off through temperature-dependent control of the primary flow rate.

Advantages:

- wide range of convenience functions (e.g. disinfection switchover) adjustable
- increasing output through simple electronic cascading from up to 5 fresh water stations
- Controls to the hot water temperature set to one degree, independent of changes in the cold water or primary temperature (e.g. summer/winter operation)
- option of fault monitoring and data logging.



Overview

Overview of the available output ranges and major kit features of Logotherm fresh water stations.

l/min. ¹	Max. WW single output (without cascade connection)	KW ²	Installation type		Housing	EPP	TW circulation	Autom. Disinfection ³	Tank re-heating function ³	protection	Fault monitoring ³	Data logging	Σ max cascades	Product line	Page
			Wall	Tank											
Thermostatic control															
35	86				✓	✓ ²							4	LogoFresh S Line	46
30	83		✓	✓	✓	✓ ²							4	LogoFresh M Line	47
Electric control															
44	107		✓	✓	✓	✓ ²	✓	✓	✓	✓	✓	✓	–	LogoFresh S Line	44
58	140		✓		✓	✓ ²	✓	✓	✓	✓	✓	✓	5 ³	LogoFresh M Line	44
100	346		✓		✓	✓	✓	✓	✓	✓	✓	✓	5 ³	LogoFresh XL Line	42
125	432		✓		✓	✓	✓	✓	✓	✓	✓	✓	5 ³	LogoFresh XL Line	42

1)
Performance specifications based on corresponding primary flow line temperatures and corresponding hot water temperatures. The basic data and the intervening possible output ranges are shown on the output tables of the relevant product pages.

2)
These products are available with and without the technical kit indicated. For more information please see the relevant product pages.

3)
Selection of the individual functions can be made as required, but each system selectable to limited extent. The combination options can be obtained from us.

The following additional products can be found on the following pages:	from page
Return line distribution module and single layer module	48
Overflow valves and flow line premix modules	48
Metering devices for consumption metering (cold or hot water meter and heat flow meter)	51
Pump groups	93
Circuit control valves	143

LogoFresh XL Line electronic



Compact, ready-connected central fresh water stations with electronically controlled hot water preparation. The fresh water stations Logo-Fresh XL Line are available as a compact fully insulated unit.

2



Fig. 1



Fig. 2

LogoFresh XL Line Kit features		XL Line 100	XL Line 120
Dimensions Station	Width in mm	500	600
	Height in mm	1.137 ¹	
	Depth in mm	340	
Max. pressure:	Heating/ Sanitary	6 bar/ 10 bar	
Max. permissible temperatures:	Heating/ Sanitary	90 °C/ 90 °C	
Power supply		230V/ 50 Hz	
Connections KW & WW and VL & RL buffer/ circulation		1 1/2" / 1 1/4"	
Wall-mounted installation		✓	
Electronic fresh water control with variable control unit can be installed for constant hot water temperature regulation depending on the hot water temperature set and draw-off capacity through adjusting the heating circuit pump		✓	
Stainless steel plate heat exchanger (copper soldered), vertically oriented for reduced risk of lime scale		✓	
Achieving low return line temperatures		✓	
Heating side HE recirculation pump		✓	
Venting on heating side		✓	
Backflow preventers		✓	
Shut-off valve (excepting KW inlet)		✓	
Pipework made from stainless steel fixed pipe (smooth)		✓	
Assembled, placed in housing and tested on base plate completely free of mechanical stress		✓	
Freely programmable domestic water circulation (TWZ) with HE pump, backflow preventers, pipework and threaded joint components assembled in the station and connected to the controller		✓	
Flow-through sensor		✓	
With integrated disinfection (Anti-Legionella Circuit) ²		✓	
With integrated heat retention function (heat exchanger)		✓	
Tank reheating function ²		✓	
Mixing protection for heating water buffer tanks ²		✓	
Fault monitoring ²		✓	
Housing: EPP fully insulated housing (black)		✓	
Number of possible electronically controlled cascades		5	
Data logging via data logger		optional	
Intuitive menu and multilingual control language		✓	
Monochrome multifunction graphics LCD display with background lighting		✓	
Animated presentation of the equipment systems and operational statuses		✓	
Statistics and graphic analysis from data memory		✓	
Commissioning assistant and function check plus fault memory with date and time		✓	
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian		✓	

1)

Including shut off ball valves

2)

Selection of the individual functions can be made as required, but each system selectable to limited extent. The combination options can be obtained from us.

LogoFresh 100 / 120	Fig.	Art. No.
LogoFresh XL line 100	Fig. 1	AI-10270.81
LogoFresh XL Line 120	Fig. 2	AI-10270.71
Electrically controlled shut-off DN40 for cascade		
Operational voltage:	230 V	AI-66400.39
Material:	Suitable for domestic water	

LogoFresh XL Line electronic



NEW!
as XL Line
cascadable
electronically
up to 5 items

Output data for LogoFresh XL Line 100

Heating cold water		40 K (10 → 50°C)					50 K (10 → 60°C)				
Primary flow line temperature	°C	55	60	65	70	75	65	70	75	80	85
Primary return line temperature	°C	29.9	26.5	23.6	21.0	19.0	35.2	31.0	28.4	25.1	22.6
Draw-off volume domestic hot water ¹	l/min	68.0	91.0	100.0	100.0	100.0	64.0	84.0	100.0	100.0	100.0
Output domestic hot water	kW	190.0	252.0	277.4	277.4	277.4	224.0	291.0	346.1	346.1	346.1
Flow rate primary	l/h	6,600	6,600	5,890	4,982	4,375	6,600	6,600	6,560	5,590	4,932
Pressure loss primary	bar	0.61	0.61	0.50	0.36	0.28	0.61	0.61	0.60	0.45	0.33
Residual delivery head primary	bar	0.30	0.30	0.51	0.75	0.86	0.30	0.30	0.30	0.60	0.78
Pressure loss secondary	bar	0.25	0.39	0.46	0.46	0.46	0.21	0.34	0.46	0.46	0.46
Max. Mixed water (10–38 °C) ¹	l/min	97	130	143	143	143	114	150	179	179	179
Parallel showers ²	Number	5	7	8	8	8	6	9	10	10	10
Max. Residential units ³	WE	75	120	145	145	145	100	145	200	200	200

1)

Max. draw-off volume (output limited)

2)

Bath/Showerhead with 0.3 l/s mixed water

3)

Residences with Standard Bathroom/Showers and simultaneity factors according to Dresden TU.

Output data for LogoFresh XL Line 120

Heating Cold water		40 K (10 → 50°C)					50 K (10 → 60°C)				
Primary flow line temperature	°C	55	60	65	70	75	65	70	75	80	85
Primary return line temperature	°C	27.5	24.0	21.8	19.3	17.4	32.3	27.9	25.5	22.9	20.5
Draw-off volume domestic hot water ¹	l/min	83.0	110.0	125.0	125.0	125.0	79.0	101.0	120.0	125.0	125.0
Output domestic hot water	kW	231.0	303.0	346.0	346.0	346.0	273.0	350.0	415.0	432.0	432.0
Flow rate primary	l/h	7,400	7,400	7,050	6,013	5,320	7,400	7,400	7,400	6,710	5,970
Pressure loss primary	bar	0.60	0.60	0.51	0.39	0.32	0.60	0.60	0.60	0.48	0.38
Residual delivery head primary	bar	0.21	0.21	0.30	0.62	0.76	0.21	0.21	0.21	0.44	0.64
Pressure loss secondary	bar	0.26	0.43	0.55	0.55	0.55	0.24	0.36	0.50	0.55	0.55
Max. Mixed water (10–38 °C) ¹	l/min	119	157	179	179	179	141	180	214	223	223
Parallel showers ²	Number	7	9	10	10	10	8	10	12	12	12
Max. Residential units ³	WE	95	145	200	200	200	145	200	300	300	300

LogoFresh S Line & M Line, electronic



2



Fig. 1



Fig. 2



Fig. 3

Compact, ready-connected central fresh water stations with electronically controlled hot water preparation, available depending on the system as wall or tank assembly. The M Line version is electronically cascadable and also permits higher outputs corresponding to application to be attained.

Kit features and technical Data LogoFresh electronic S Line & M Line		M Line		S Line	
		Type 1	Type 2	Type 3	Type 4
Dimensions incl. housing	Width in mm	500		455	
	Height in mm	890 ¹		660 ¹	
	Depth in mm	340		215	
Max. pressure:	Heating / Sanitary	3 bar / 6 bar			
Max. permissible temperatures:	Heating / Sanitary	110 °C / 110 °C			
Power supply		230 V / 50 Hz			
Connections below		1"		3/4"	
Wall-mounted installation			✓		
Tank assembly		-		✓	
electronic control for constant temperature regulation depending on the hot water temperature set and draw-off capacity through adjusting the heating circuit pump			✓		
Stainless steel plate heat exchanger (copper soldered), vertically oriented for reduced risk of lime scale			✓		
Achieving low return line temperatures			✓		
Heating side HE recirculation pump			✓		
Venting on heating side			✓		
Backflow preventers			✓		
Shut-off valve (excepting KW inlet)			✓		
Pipework made from insulated stainless steel corrugated pipe			✓		
Assembled, placed in housing and tested on base plate completely free of mechanical stress			✓		
Domestic water circulation (TWZ) with pump, backflow preventers, pipework and threaded joints assembled in the station and connected to the controller		-	✓	-	✓
Flow-through sensor			✓		
With integrated disinfection (Anti-Legionella Circuit)		-	✓	-	
With integrated heat retention function (heat exchanger)		✓		✓	
Tank reheating function ²		✓		-	
Mixing protection for heating water buffer tanks ²		✓		-	
Fault monitoring ²		✓		-	
EPP fully insulated housing (black)			✓		
Number of possible electronically controlled cascades²		5		-	
Data logging via data logger		Optional		-	
Intuitive menu and multilingual control language			✓		
Monochrome multifunction graphics LCD display with background lighting			✓		
Animated presentation of the equipment systems and operational statuses			✓		
Statistics and graphic analysis from data memory			✓		
Menu languages: German, English, Spanish, French, Dutch, Italian, Czech, Polish, Russian			✓		
Insulating wedge for tank assembly - pluggable wedge for pre-shaped insulation rear wall for immediate installation on a tank (tank $\varnothing \geq 600$ mm)		-		Optional	

Models	Fig.	Art. No.
Type 1 – LogoFresh M Line electronic		AI-10270.52
Type 2 – LogoFresh M Line electronic with TWZ	Fig. 1	AI-10270.53
Type 3 – LogoFresh S Line electronic		AI-10270.62
Type 4 – LogoFresh S Line electronic with TWZ	Fig. 2	AI-10270.63
Type 3 & Type 4 – Insulating wedge for tank assembly	Fig. 3	AI-66306.3673
Electrically controlled shut-off DN25 for cascade operating voltage 230 V; material: Suitable for domestic water		AI-66400.38

1)

Including shut off ball valves

2)

Selection of the individual functions can be made as required, but each system selectable to limited extent.

The combination options can be obtained from us.

LogoFresh S Line & M Line, electronic



NEW!
as M Line
cascadable
electronically
up to 5 items

LogoFresh S Line electronic – output table

Heating cold water										
35 K (10 → 45°C)	Primary flow line temperature	°C	50	55	60	65	70	75	80	85
	Primary return line temperature	°C	35	33	32	31	30	30	29	29
	Draw-off volume domestic hot water	l/ min	12	17	22	27	31	35	40	44
	Output domestic hot water	kW	29	42	54	65	76	86	96	107
	Flow rate primary	l/h	1,787	1,787	1,787	1,787	1,787	1,787	1,787	1,787
	Pressure loss secondary	bar	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
40 K (10 → 50 °C)	Primary flow line temperature	°C		55	60	65	70	75	80	85
	Primary return line temperature	°C		38	36	35	34	33	32	32
	Draw-off volume domestic hot water	l/ min		11	16	21	25	29	33	36
	Output domestic hot water	kW		32	46	58	69	80	91	101
	Flow rate primary	l/h		1,787	1,787	1,787	1,787	1,787	1,787	1,787
	Pressure loss secondary	bar		0.15	0.15	0.15	0.15	0.15	0.15	0.15
50 K (10 → 60 °C)	Primary flow line temperature	°C				65	70	75	80	85
	Primary return line temperature	°C				46	43	41	39	38
	Draw-off volume domestic hot water	l/ min				11	15	19	22	26
	Output domestic hot water	kW				37	52	65	78	89
	Flow rate primary	l/h				1,787	1,787	1,787	1,787	1,787
	Pressure loss secondary	bar				0.15	0.15	0.15	0.15	0.15

LogoFresh M Line electronic – output table

35 K (10 → 45°C)	Primary flow line temperature	°C	50	55	60	65	70	75	80	85
	Primary return line temperature	°C	27	24	22	21	20	19	18	18
	Draw-off volume domestic hot water	l/ min	20	27	33	38	43	48	53	58
	Output domestic hot water	kW	48	65	80	93	105	117	129	140
	Flow rate primary	l/h	1,862	1,862	1,862	1,862	1,862	1,862	1,862	1,862
	Pressure loss secondary	bar	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
40 K (10 → 50 °C)	Primary flow line temperature	°C		55	60	65	70	75	80	85
	Primary return line temperature	°C		30	27	24	23	22	21	20
	Draw-off volume domestic hot water	l/ min		19	25	31	36	40	45	49
	Output domestic hot water	kW		53	71	86	99	112	125	136
	Flow rate primary	l/h		1,862	1,862	1,862	1,862	1,862	1,862	1,862
	Pressure loss secondary	bar		0.15	0.15	0.15	0.15	0.15	0.15	0.15
50 K (10 → 60°C)	Primary flow line temperature	°C				65	70	75	80	85
	Primary return line temperature	°C				35	31	28	26	25
	Draw-off volume domestic hot water	l/ min				18	24	28	32	36
	Output domestic hot water	kW				63	82	98	112	126
	Flow rate primary	l/h				1,862	1,862	1,862	1,862	1,862
	Pressure loss secondary	bar				0.15	0.15	0.15	0.15	0.15

Further complementary and additional products (e.g. metering devices for consumption metering, heating water buffer tanks, pump groups etc.) can be found on the following pages or in the Table of Contents on page 10 or the Chapter Overview on page 41.

LogoFresh S Line & M Line, thermostatic



Compact, ready-connected central fresh water stations with thermostatically controlled hot water preparation, available depending on the system as wall or tank assembly.

2



Fig. 1



Fig. 2



Fig. 3

Kit features & technical data		M Line		S Line	
LogoFresh S Line & M Line thermostatic		Type 1	Type 2	Type 3	Type 4
Dimensions incl. housing in mm	Width	500		460	
	Height	890		660	
	Depth	340		250	
Max. pressure: Heating / Sanitary		3 bar / 6 bar			
Max. permissible temperatures: Heating / Sanitary		110 °C / 110 °C			
Power supply		230 V / 50 Hz			
Connections below KW & WW plus VL & RL buffer (circulation)		1"	1" (3/4")	3/4"	
Wall-mounted installation				✓	
Tank assembly		-			✓
Stainless steel plate heat exchanger (copper soldered), Vertical orientation for reduced risk of lime scale				✓	
Achieving low return line temperatures				✓	
Heating side HE recirculation pump				✓	
Venting on heating side				✓	
Backflow preventers		-			✓
Shut-off valve (excepting KW inlet)				✓	
Pipework made from insulated stainless steel corrugated pipe				✓	
Assembled and tested on base plate completely free of mechanical stress assembled, placed in housing and tested				✓	
Domestic water circulation (TWZ) with pump, backflow preventers, pipework and threaded joint components assembled in the station		-	✓	-	✓
Flow switch				✓	
Connection option for temperature sensor		✓			-
Addition of primary return line water to reduce VL temperature				✓	
Continuously adjustable heating medium volume flow via thermal service water control				✓	
Scalding protection		✓			-
Temperature range on heating side (Flow line temperature limiting measured in the heating medium)		50 – 75 °C			-
Temperature range for hot water (measured in the WW)		45 – 65 °C		20 – 65 °C	
Temperature read-out in the device (heating side)		✓			-
Housing: EPP fully insulated housing (black)				✓	
Terminal cabinets for electric connection				✓	
Number of possible cascades (overflow valves needed)				4	
Insulating wedge for tank assembly - pluggable wedge for pre-shaped insulation rear wall for immediate installation on a tank (tank ø ≥ 600 mm)		-			Optional

LogoFresh thermostatic	Fig.	Art. No.
Type 1 – LogoFresh M Line thermostatic		AI-10271.41
Type 2 – LogoFresh M Line thermostatic with TWZ	Fig. 1	AI-10271.4
Type 3 – LogoFresh S Line thermostatic		AI-10271.51
Type 4 – LogoFresh S Line thermostatic with TWZ	Fig. 2	AI-10271.5
Type 3 & Type 4 – Insulating wedge for tank assembly	Fig. 3	AI-66306.3673

LogoFresh S Line & M Line, thermostatic



LogoFresh S Line thermostatic – output table

Heating cold water									
35 K (10 → 45 °C)	Primary flow line temperature	°C	50	55	60	65	70	75	80
	Primary return line temperature	°C	29	26	24	23	22	21	20
	Draw-off volume domestic hot water	l/ min	10	14	18	21	24	26	29
	Output domestic hot water	kW	25	35	43	50	57	64	71
	Flow rate primary	l/h	1,050	1,050	1,050	1,050	1,050	1,050	1,050
	Pressure loss secondary	bar	0.15	0.15	0.15	0.15	0.15	0.15	0.15
40 K (10 → 50 °C)	Primary flow line temperature	°C		55	60	65	70	75	80
	Primary return line temperature	°C		29	26	23	21	20	19
	Draw-off volume domestic hot water	l/ min		9	12	15	17	19	21
	71 Output domestic hot water	kW		25	35	43	50	57	64
	Flow rate primary	l/h		1,050	1,050	1,050	1,050	1,050	1,050
	Pressure loss secondary	bar		0.15	0.15	0.15	0.15	0.15	0.15
50 K (10 → 60 °C)	Primary flow line temperature	°C				65	70	75	80
	Primary return line temperature	°C				34	29	27	25
	Draw-off volume domestic hot water	l/ min				9	11	13	25
	Output domestic hot water	kW				30	39	46	52
	Flow rate primary	l/h				1,050	1,050	1,050	1,050
	Pressure loss secondary	bar				0.15	0.15	0.15	0.15

LogoFresh M Line thermostatic – output table

35 K (10 → 45 °C)	Primary flow line temperature	°C	50	55	60	65	70	75
	Primary return line temperature	°C	26	22	20	19	18	17
	Draw-off volume domestic hot water	l/ min	15	20	24	28	32	35
	Output domestic hot water	kW	37	49	59	69	77	86
	Flow rate primary	l/h	1,310	1,310	1,310	1,310	1,310	1,310
	Pressure loss secondary	bar	0.15	0.15	0.15	0.15	0.15	0.15
40 K (10 → 50 °C)	Primary flow line temperature	°C		55	60	65	70	75
	Primary return line temperature	°C		24	24	22	21	19
	Draw-off volume domestic hot water	l/ min		15	19	23	26	30
	Output domestic hot water	kW		41	53	64	72	83
	Flow rate primary	l/h		1,310	1,310	1,310	1,310	1,310
	Pressure loss secondary	bar		0.15	0.15	0.15	0.15	0.15
50 K (10 → 60 °C)	Primary flow line temperature	°C				65	70	75
	Primary return line temperature	°C				33	28	26
	Draw-off volume domestic hot water	l/ min				14	18	21
	Output domestic hot water	kW				48	62	73
	Flow rate primary	l/h				1,310	1,310	1,310
	Pressure loss secondary	bar				0.15	0.15	0.15

Further complementary and additional products (e.g. metering devices for consumption metering, heating water buffer tanks, pump groups etc.) can be found on the following pages or in the Table of Contents on page 10 or the Chapter Overview on page 41.

LogoFresh Accessories

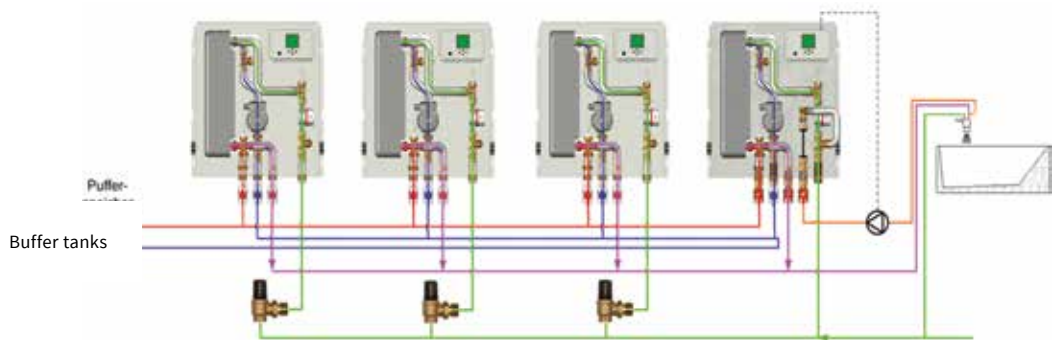
Cascade connection

If a larger draw-off volume is required, exceeding the output of an individual fresh water station, there is the option of a cascade connection.

Overflow valve

DN 25 for cascade connection, adjustment range 100 – 500 mbar.

Model:	Art. No.
	AI-69072.9



2

Flow line pre-mix module with thermostatic mixing valve

At very high buffer tank temperatures, reducing the flow line temperature is recommended, in order to ensure optimal control behaviour at very low hot water draw-off quantities. The module is completely pre-assembled and is installed between the buffer tank and the fresh water station. Connections 1" F/M

AI-10270.05

Return line single layer module with thermostatic distribution valve

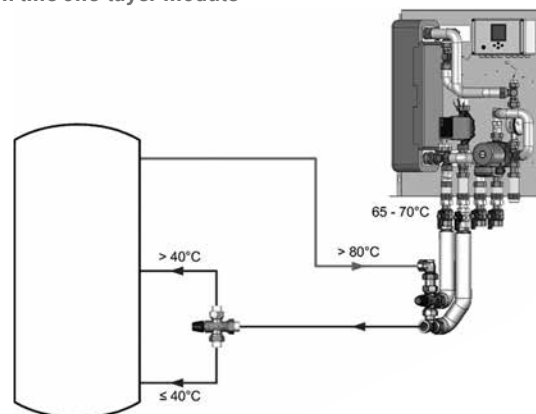
Use of the module means that a temperature-controlled return layer can be achieved and thus temperature mixing in the buffer tank can be avoided in the circulation. The module is installed in the return line between the fresh water station and the buffer tank. Connections 1" AG

AI-10270.06



Installation example

Flow line pre-mix module / return line one-layer module



The following products are shown in Chapter 3 Consumption Metering:		from page
Compact heat flow meter “heatplus”		52
Ultrasound compact heat flow meter “heatplus sonic”		53
Ultrasound compact heat flow meter “heatsonic”		54
Ultrasound split heat flow meter “heatsonic”		56
Installation kits for initial installation		56
Heat flow meter accessories		57
Domestic apartment water meter (Wall-mounted)		
MODULARIS ETK-EAX / ETW-EAX (single-jet dry rotor)		60
ETK-EAV/ETW-EAV (single-jet dry rotor)		64
ETK-EAK/ETW-EAK (single-jet dry rotor) with pulse output		65
Water meter wall-mounted accessories		66
Domestic apartment water meter (flush-mounted)		
MODULARIS MTK-OZX / MTW-OZX (multi-jet dry rotor)		61
Water meter flush-mounted accessories		62
Flush-mounted fittings combination (UPAK)		66
Domestic property water meter		69
Metering stations		71



Consumption metering

3



Meibes offers the complete range of MID approved **Rossweiner energy meters for heating, cooling, heating/cooling or solar** as mechanical or ultrasound meters and water meters. **Installation components** and **control technology** complete the comprehensive programme. The products are ideally suited for extending or completing the **Logotherm stations**.

For consumption metering, a selection of electronic heat cost allocators are available, as OMS solutions as well. Please ask for our OMS catalogue.

OMS (Open - Metering - Standard)

Open communications standard for all types of meter.

water, heating, gas and electricity meters can be integrated into the system.

The physical interface is defined in EN 13757.

Compatible for all components in building management systems according to the KNX Standard.

Meibes/Rossweiner is a member of the OMS Group.



Your advantages

- comprehensive range of heating/cooling and water meters between Q3 0.6 – 540 m³/h
- all meters approved and tested for conformity according to MID
- comprehensive options for remote communication PULSE | M-BUS | REMOTE
- Original equipment kits as well as connection screw fittings and accessories
- Customised equipment possible on request



Heat flow meter

heatPLUS Compact heat flow meter

incl. installation accessories

Display:	kWh
permitted Operating pressure:	16 bar
permitted Operating temperature:	+10 up to +90 °C
Medium:	Heating water (VDI guideline 2035),
Power supply:	Lithium battery (3.0 V) 10-year service life (not replaceable)
Approval:	according to MID, classe 3

heatPLUS Compact heat flow meter

Installation point: Return line

Model	Nominal width	Connection	Length	Art. No.
Qp 0.6 m ³ /h	DN 15	G 3/4	110 mm	AI-1285101.101
Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285102.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285103.101

heatPLUS extra Compact heat flow meter

Installation point: Return line, detachable calculator

Qp 0.6 m ³ /h	DN 15	G 3/4	110 mm	AI-1285121.101
Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285122.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285123.101

heatPLUS Compact heat flow meter (metering capsule EAS 2")

Installation point: Return line

Qp 0.6 m ³ /h	DN 15	G 3/4	110 mm	AI-1285141.101
Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285142.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285143.101

heatPLUS Compact heating/cooling meter

specialy for heat pump, incl. installation accessories

Display:	kWh
Areas of use:	
permitted Operating pressure:	PB 16 bar
Operating temperature:	5 – 90 °C
Medium:	Heating water (VDI guideline 2035)
Power supply:	Lithium battery (3.0 V) 10-year service life (not replaceable)

heatPLUS Compact heating/cooling meter

Installation point: Return line, approval: Heat according to MID, classe 3/ Cooling without approval

Qp 0.6 m ³ /h	DN 15	G 3/4	110 mm	AI-1285161.101
Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285162.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285163.101

heatPLUS Compact heating/cooling meter

Installation point: flow line, approval: Heat according to MID, classe 3 / Cooling without approval

Qp 0.6 m ³ /h	DN 15	G 3/4	110 mm	AI-1285171.101
Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285172.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285173.101

Please note: Prices for water meter without calibration fee / conformity assessment fee!

heatPLUS as cooling or solar meter on request

Other models: ■ communication ■ cable lengths ■ sensor models



Heat flow meter

heatPLUS Module for communication



Interface module

Model	Art. No.
M-bus module (without battery)	AI-1275040

Configuration of the M-bus modules may be done for a charge before delivery in the factory or be carried out by the customer using corresponding hardware and software (on request). Pulse output module (with integrated battery) on request.



heatPLUS Accessories

Wall bracket for heatplus extra	AI-1285230
---------------------------------	------------

3

Price group 2925

heatPLUS sonic Ultrasound compact heat flow meter incl. installation accessories

Display:	kWh
permitted Operating pressure:	16 bar
permitted Operating temperature:	+20 up to +90 °C
Medium:	Heating water (VDI guideline 2035), cable length: 1.5 m
power supply:	Lithium battery (3.0 V)
Approval:	Heating according to MID, classe 3



heatPLUS sonic Ultrasound compact heat flow meter

Installation point: Return line, detachable calculator, 10-year battery life (not replaceable)

Model	Nominal width	Connection	Length	Art. No.
Qp 1.5 m ³ /h	DN 15	G 3/4 "AG	110 mm	AI-1285302.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285303.101

heatPLUS sonic

Ultrasound compact heat flow meter with shortened metering cycle (4 sec)

Installation point: Return line, detachable calculator, 6-year battery life (not replaceable)

Qp 1.5 m ³ /h	DN 15	G 3/4	110 mm	AI-1285402.101
Qp 2.5 m ³ /h	DN 20	G 1	130 mm	AI-1285403.101

Please note: Prices for water meter without calibration fee / conformity assessment fee!



Heat flow meter

heatsonic Ultrasound compact heat flow meter

Basic specifications:	
Application:	Heat flow meter
Installation point:	Return line
Calibration:	Approval according to MID, classe 2. Cooling meter: PTB K 7.2
Cable:	1.5 m between RW and flow-through sensor
Power supply:	Battery 3.6 VDC (D cell) 11-year service life (replaceable)
Energy unit:	kWh (without decimal places) for Qp 0.6-6.0 m ³ /h MWh (with 2 decimal places) for Qp 10.0-60.0 m ³ /h
Temperature sensor type (pair):	Pt 500 / 2 m cable
Ø Temperature sensor:	5.2 mm
Temperature sensor installation:	1 sensor installed directly in flow-through sensor Qp 0.6-2.5 m ³ /h 2 accessible sensor for Qp ≥ 3.5 m ³ /h
Metering cycle:	4 sec.

heatsonic Ultrasound compact heat flow meter M-bus

Interface module: M-bus

Model	Nominal width	Length	Connection	Pressure rating	Art. No.
Qp 0.6 m ³ /h	DN 15	110 mm threaded joints	G 3/4 B	PN 16	AI-1282002
Qp 1.5 m ³ /h	DN 15	110 mm threaded joints	G 3/4 B	PN 16	AI-1282012
Qp 2.5 m ³ /h	DN 20	130 mm threaded joints	G 1 B	PN 16	AI-1282022
Qp 3.5 m ³ /h	DN 25	260 mm threaded joints	G 1 1/4 B	PN 16	AI-1282032
Qp 3.5 m ³ /h	DN 25	260 mm flange		PN 25	AI-1282042
Qp 6 m ³ /h	DN 25	260 mm threaded joints	G 1 1/4 B	PN 16	AI-1282052
Qp 6 m ³ /h	DN 25	260 mm flange		PN 25	AI-1282062
Qp 10 m ³ /h	DN 40	300 mm threaded joints	G 2 B	PN 16	AI-1282072
Qp 10 m ³ /h	DN 40	300 mm flange		PN 25	AI-1282082
Qp 15 m ³ /h	DN 50	270 mm flange		PN 25	AI-1282092
Qp 25 m ³ /h	DN 65	300 mm flange		PN 25	AI-1282102
Qp 40 m ³ /h	DN 80	300 mm flange		PN 25	AI-1282112
Qp 60 m ³ /h	DN 100	360 mm flange		PN 25	AI-1282122



heatsonic Ultrasound compact heat flow meter

Communications version: Remote 868 MHz **GMS**® interface module: no

Qp 0.6 m ³ /h	DN 15	110 mm threaded joints	G 3/4 B	PN 16	AI-1282001
Qp 1.5 m ³ /h	DN 15	110 mm threaded joints	G 3/4 B	PN 16	AI-1282011
Qp 2.5 m ³ /h	DN 20	130 mm threaded joints	G 1 B	PN 16	AI-1282021
Qp 3.5 m ³ /h	DN 25	260 mm threaded joints	G 1 1/4 B	PN 16	AI-1282031
Qp 3.5 m ³ /h	DN 25	260 mm flange		PN 25	AI-1282041
Qp 6 m ³ /h	DN 25	260 mm threaded joints	G 1 1/4 B	PN 16	AI-1282051
Qp 6 m ³ /h	DN 25	260 mm flange		PN 25	AI-1282061
Qp 10 m ³ /h	DN 40	300 mm threaded joints	G 2 B	PN 16	AI-1282071
Qp 10 m ³ /h	DN 40	300 mm flange		PN 25	AI-1282081
Qp 15 m ³ /h	DN 50	270 mm flange		PN 25	AI-1282091
Qp 25 m ³ /h	DN 65	300 mm flange		PN 25	AI-1282101
Qp 40 m ³ /h	DN 80	300 mm flange		PN 25	AI-1282111
Qp 60 m ³ /h	DN 100	360 mm flange		PN 25	AI-1282121



AES key on request as available as Excel file. **Other models** with reference to: Size; model cooling meter, heat flow meter with cooling tariff or solar; communication; sensor models on request; request specification sheet. **Please note:** Prices for heat flow meter without calibration fee / conformity assessment fee!

Heat flow meter

heatsonic Ultrasound compact heat flow meter accessories



Fig. 1



Fig. 2 & 3



Fig. 4 – 7 (Example)



Fig. 8



Fig. 9



Fig. 10 & 11



Power supply

Model	Fig.	Art. No.
Battery 3.6 VDC (D cell)	Fig. 1	AI-1282400
Mains supply 230 VAC	Fig. 2	AI-1282401
Mains supply 24 VAC	Fig. 3	AI-1282402

Interface module

M-bus module		Fig. 4	AI-1282403
Pulse output module (2 outputs)		Fig. 5	AI-1282404
Pulse output module (2 inputs)		Fig. 6	AI-1282405
Combi-module (2 pulse inputs, 1 pulse output port)		Fig. 7	AI-1282406
Analogue module (4 – 20 mA)		Fig. 8	AI-1282408
RS 232 module		Fig. 10	AI-1282410
RS 485 module		Fig. 11	AI-1282411

The energy meter “heatsonic” has two slots for expansion modules and thus supports two communication channels via the same or different interfaces.

The protocol is different for the two channels and pre-set ex-factory. This protocol can be configured specifically for the customer. This configuration can be done for a charge before delivery of the meter in the factory or by the customer using corresponding hardware and software (see order data below). Each channel has its own primary address. There is only one secondary address, that corresponds to the ex-factory serial number. The meter has automatic Baud rate recognition.

Overview of the possible combinations of the modules for slots 1 and 2

	Slot 2					
	none Module	M-bus	RS232	RS485	Pulse input port	L-bus*
no module	✓					
M-bus	✓	✓	✓	✓		✓
RS232	✓					
RS485	✓					
Pulse input port	✓	✓	✓	✓		✓
Pulse output port	✓	✓	✓	✓	✓	✓
Pulse input/output	✓	✓	✓	✓		✓
Analogue output 4 ... 20 mA	✓					
L-bus*	✓					

*) for external remote

Items required for configuration

Bluetooth opto head	AI-1279619
Activation dongle (incl. software)	AI-1279631

Heat flow meter

heatsonic Ultrasound split heat flow meter

Calculator (MID), for split heat flow meter, incl. installation accessories

Battery: 10a

Installation: Flow meter in the return line
for sensor PT1000, pulse value on request

Temperature range: 5 – 180 °C

Protection code: IP 65

Calculator configured for use of the flow rate meter in the return line



Model	Art. No.
M-bus ready	AI-1282430

Connection cable (M) – Bus cable

2-pin, with special plug	AI-1282440
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Configuration of the M-bus in the calculator may be done for a charge before delivery in the factory or be carried out by the customer using corresponding hardware and software (on request).

Temperature sensor (paired) MID tested, sensor diameter: 5.2 mm,
Cable length: 2.5 m, PT1000, temperature range: 5 – 150 °C

	AI-1282420
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Please note: Prices for water meter without calibration fee / conformity assessment fee!

Price group 2930

Ball valve installation kit (original equipment heatsonic For heat flow meter heatplus,

Temperature sensor in the medium, scope of supply: 1 X special ball valve (flow line), 1 X meter spacer (return line), 2 X shut off ball valves with integrated union nut including seals (return line)

	Nominal width	l (mm)	Art. No.
Qp 0.6/ 1.5	DN 15	110	AI-1278601
Qp 2.5	DN 20	130	AI-1278611
Qp 2.5	DN 25	130	AI-1278621

Ball valve installation kit (original equipment manufacturer kit) for heat flow meter heatsonic

Temperature sensor in the medium, scope of supply: 1 X special ball valve (flow line), 1 X meter spacer (return line), 1 X special ball valve with integrated Union nut incl. seal (return line), 1 X shut off ball valve with integrated union nut incl. seal (return line)

Qp 3.5/6.0	DN 25	260	AI-1278632
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Ball valve installation kit (original equipment manufacturer kit) for heat flow meter heatplus

Temperature sensor in the medium, scope of supply: 1 X special ball valve (flow line), 1 X mono-tube connector (return line), 2 X shut off ball valves with integrated Union nut including seals (return line)

Qp 0.6/ 1.5	DN 15	110	AI-1278781
Qp 2.5	DN 20	130	AI-1278791
Qp 2.5	DN 25	130	AI-1278801



Heat flow meter – accessories

Heat flow meter **heatsonic****Immersion sleeve set**for heat flow meter **heatsonic** Qp 3.5 – 60.0 m³/h

Comprising: 2 stainless steel immersion pockets, sensor diameter: 5.2 mm



Dimensions	Art. No.
G 1/2 85 mm	AI-1279501
G 1/2 120 mm	AI-1279502
G 1/2 155 mm	AI-1279503
G 1/2 210 mm	AI-1279504

Immersion sleeve setfor heat flow meter **heatsonic** Qp 3.5 – 60.0 m³/h

Comprising: 2 brass immersion sleeves



G 1/2 52 mm	AI-1279511
G 1/2 85 mm	AI-1279512
G 1/2 120 mm	AI-1279513

Welding sleevesQp 3.5 – 60.0 m³/h

Rp 1/2	(DIN-EN 10241 - DN 15)	AI-1279530
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T-piece with immersion sleeve for m 10 × 1 – indirectly immersed

DN 15	Rp 1/2	nickel-plated	AI-1278731
DN 20	Rp 3/4	nickel-plated	AI-1278741
DN 25	Rp 1	nickel-plated	AI-1278751

Immersion sleeve – indirectly immersed

Sensor diameter 5.2 mm



M 10×1/M 10×1	nickel-plated	AI-1278761
G 1/2/M 10×1	MS	AI-1278690

Sensor adaptor for immersion sleeve m 10 × 1 – indirectly immersed

G 3/8 M 10×1	nickel-plated	AI-1394001
G 1/4 m 10×1	nickel-plated	AI-1394021
G 1/2 m 10×1	nickel-plated	AI-1394011

Heat flow meter – accessories

Model: Brass



Mono-tube connector (incl. blind cover, seal)

Nominal width	Connection	Model	VPE	Art. No.
DN 15	G 3/4	110 mm (Ms) uncoated		AI-1276529
DN 20	G 1	130 mm (RG) uncoated		AI-1279041



Special ball valve with sensor connection m 10 × 1 – directly immersed Coupler – coupler

DN 15	G 1/2	nickel-plated	5	AI-1280912
DN 20	G 3/4	nickel-plated	5	AI-1280913
DN 25	G 1	nickel-plated	5	AI-1280914



Special ball valve with sensor connection m 10 × 1 – directly immersed Coupler – threaded joint

DN 25	G 3/4" F × G1" F	nickel-plated	5	AI-1280906
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Shut off ball valve

DN 15	G 1/2	× G 3/4	nickel-plated	10	AI-1610120
DN 20	G 3/4	× G 1	nickel-plated	10	AI-1610121
DN 25	G 1	× G 1 1/4	nickel-plated	10	AI-1278630



T-piece with sensor screw thread – directly immersed

DN 15	Rp 1/2	M 10 × 1	MS	10	AI-1279180
DN 20	Rp 3/4	M 10 × 1	MS	10	AI-1279190
DN 25	Rp 1	M 10 × 1	MS	15	AI-1279290



Sensor screw thread – directly immersed

M 10 × 1 / M 10 × 1	MS	AI-1394030
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Sensor adaptor M10 × 1 – directly immersed

G 1/2 m 10 × 1	MS	AI-1394040
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Heat flow meter – accessories

Set of threaded joints (2 each) incl. seal

Nominal width	Model	VPE	Art. No.
DN 15	MS	30	AI-1270090
DN 20	MS	20	AI-1270100
DN 25	MS		AI-1270110
DN 40	MS		AI-1270120

**Threaded connection piece** F 3/4 × M 1 incl. seal

DN 20	MS	20	AI-1270370
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**Spacer** Model steel galvanised*

DN 15	Length 110	G 3/4	5	AI-1270510
DN 20	Length 130	G 1	5	AI-1270530
DN 32	Length 260	G 1 1/4	5	AI-1270520
DN 40	Length 300	G 2	5	AI-1270525

*) Observe country-specific installation regulations.

**Accessories bag**

heattwo, heatone	AI-1279220
heatsonic	AI-1282407
heatplus	AI-1285220

**Sealing set**

heat	AI-1276310
heatplus	AI-1285210

**Mounting tool for capsule meter**

heatone k, heattwo k, heatwp k, heatplus	AI-1279040
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Domestic apartment water meter

Domestic apartment water meter MODULARIS ETK-EAX / ETW-EAX (Single-jet dry rotor) in wall-mounted model

Model:	Housing of hot-pressed brass nickel-plated
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	cold water +30 °C, hot water +90 °C
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R50V

Domestic apartment water meter MODULARIS Q₃ 2.5 m³ / h

Male thread G 3 / 4, nominal width DN 15

Model	Length	VPE	Art. No.
cold	80 mm	30	AI-1274501B3
hot	80 mm	30	AI-1274511B3

Domestic apartment water meter MODULARIS Q₃ 2.5 m³ / h

Male thread G 3 / 4, nominal width DN 15

cold	110 mm	30	AI-1274601B3
hot	110 mm	30	AI-1274611B3

Domestic apartment water meter MODULARIS Q₃ 4.0 m³ / h

Male thread G 1, nominal width DN 20

cold	130 mm	20	AI-1274701B3
hot	130 mm	20	AI-1274711B3

*To be used only in connection with Rossweiner MODULARIS modules.
When using another module, contact our technical service.*

MODULARIS SO pulse generator

To be used only in connection with MODULARIS meters! with flow-through direction recognition

1 l / Pulse	50 ms	AI-1275020
10 l / Pulse	50 ms	AI-1275021
100 l / Pulse	50 ms	AI-1275022
1000 l / Pulse	50 ms	AI-1275023

MODULARIS M-bus module

Only in connection with MODULARIS meters! Configurable, with flow-through direction recognition

M-bus module	AI-1275002
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To be used only in connection with Rossweiner M-bus masters. When using another M-bus master, contact our technical service. Configuration of the M-bus modules may be done for a charge before delivery in the factory or be carried out by the customer using corresponding hardware and software (on request).

Remote attachment module for Modularis water meters OMS remote 868 MHz

Remote module	AI-1275030
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Opto head with USB (for configuration of the EHCA and Modularis remote module)	AI-1260110
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Please note: Prices for water meter without calibration fee / conformity assessment fee!



Domestic apartment water meter

Domestic apartment water meter MODULARIS MTK-OZX / MTW-OZX (Multi-jet dry rotor) in flush-mounted model

Model:	Housing of hot-pressed brass nickel-plated
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	cold water + 30 °C, hot water + 90 °C
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R40V

Information note: All measurement cartridges can be fitted with the MODULARIS modules.

Scope of supply: Measurement cartridges, sealing, profile seal for housing, adaption ring and O-ring (Type mm), spacer for escutcheon



Domestic apartment water meter IST Q₃ 2.5 m³ / h (Coax 2")

Measurement cartridge suitable for housing: ROSSWEINER, ista, Siemens;
Connection thread: G2B; max. External diameter mm: 75; height mm: 60

Model	Art. No.
Cold water	AI-1274802B3
Hot water	AI-1274812B3



Domestic apartment water meter MOE/C Q₃ 2.5 m³ / h

Measurement cartridge suitable for housing: module meter ABB (MO-E and MO-C),
Connection thread: M65 × 2; Max. External diameter mm: 87; height mm: 60

Cold water	AI-1274820B3
Hot water	AI-1274830B3



Domestic apartment water meter MET Q₃ 2.5 m³ / h

Measurement cartridge suitable for housing: Metrona-Brunata HT3
Connection thread: M64 × 2; Max. External diameter mm: 75; height mm: 34.6

Cold water	AI-1274840B3
Hot water	AI-1274850B3



Domestic apartment water meter MUK Q₃ 2.5 m³ / h

Measurement cartridge suitable for housing: SPX PolluMuk,
Connection thread: G 21 / 4; max. External diameter mm: 75; height mm: 34.7

Cold water	AI-1274860B3
Hot water	AI-1274870B3



Domestic apartment water meter A34 Q₃ 2.5 m³ / h

Measurement cartridge suitable for housing: Allmess UP 6000,
Connection thread: M77 × 1.5; Max. External diameter mm: 75; height mm: 62

Cold water	AI-1274880B3
Hot water	AI-1274890B3

Please note: Prices for water meter without calibration fee / conformity assessment fee!

Domestic apartment water meter

Domestic apartment water meter MODULARIS MTK-OZX-WE1 Q3=2.5 cold (Multi-jet dry rotor) in flush-mounted model



Measurement cartridge suitable for housing: Rosswainer single-jet UP meter, Zenner Neptun, alternative to current item: 1780550 (cold) and 1780555 (hot), max. external diameter mm: 75

Model	Art. No.
Cold water	AI-1274910
Hot water	AI-1274920



Accessories for domestic apartment water meter in flush-mounted model

Escutcheon round (2-part)

Internal diameter 65 mm, external diameter 140 mm

Protective sleeve short	AI-1780570
Escutcheon round	AI-1780561



Push-on rosette (1-part)

Internal diameter 65 mm, external diameter 140 mm

	AI-1276652
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Adjustment rosette (3-part)

Internal diameter 65 mm, (if meter too far from the wall)

	AI-1278682
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Blind cap (1-part)

for flush-mounted rosette, external diameter 65 mm

one-part	AI-1780562
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Mounting tool

Metal for single-jet dry rotor	AI-1780544
Metal for multi-jet dry rotor	AI-1780546



Puller

for removing the measurement cartridge for single-jet dry rotor

	AI-1780548
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Please note: Prices for water meter without calibration fee / conformity assessment fee!

Domestic apartment water meter

EAS housing set for domestic apartment water meter in flush-mounted model (for multi-jet dry rotor, system COAX 2")

permitted Operating pressure: PB 16 bar
 permitted Operating temperature: TB 90 °C
 Medium: Domestic water

Housing set – hot-pressed brass

Mono-tube connector for UP meter MODULARIS IST (Coax 2"),
 incl. blind cover, seal, mounting aid



Length	Nominal width	F	AG	Soldered connection	Art. No.
110	DN 15	R 3/4			AI-1276530
110	DN 15		G1/2	15 mm	AI-1276540
110	DN 15		G3/4	18 mm	AI-1276520
110	DN 15			22 mm	AI-1276550

Housing set – red brass

Mono-tube connector for UP meter MODULARIS IST (Coax 2"),
 incl. blind cover, seal, mounting aid



110	DN 15	R 3/4			AI-1276730
110	DN 15		G 1/2	15 mm	AI-1276740
110	DN 15		G 3/4	18 mm	AI-1276720
110	DN 15			22 mm	AI-1276750

Extension for UP Meter MODULARIS IST (Coax 2")



20 mm	AI-1276560
40 mm	AI-1276570

Flow direction changer for UP Meter MODULARIS IST (Coax 2")



AI-1276580

Domestic apartment water meter

Domestic apartment water meter type ETK-EAV/ETW-EAV (single-jet dry rotor) “Made in Germany” for horizontal or vertical installation

Model:	Housing made of hot-pressed brass
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	Cold water + 30 °C, hot water + 90 °C
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R50V

Domestic apartment water meter Q₃ 2.5 m³ / h

Model	Length	Inlet	Outlet	VPE	Art. No.
uncoated / cold	80 mm	M G 3/4	M G 3/4	30	AI-1270600B3
uncoated / hot	80 mm	M G 3/4	M G 3/4	30	AI-1270610B3
nickel-plated / cold	80 mm	M G 3/4	M G 3/4	30	AI-1270601B3
nickel-plated / hot	80 mm	M G 3/4	M G 3/4	30	AI-1270611B3

Domestic apartment water meter Q₃ 2.5 m³ / h

uncoated / cold	110 mm	M G 3/4	M G 3/4	30	AI-1270060B3
uncoated / hot	110 mm	M G 3/4	M G 3/4	30	AI-1270050B3
nickel-plated / cold	110 mm	M G 3/4	M G 3/4	30	AI-1270061B3
nickel-plated / hot	110 mm	M G 3/4	M G 3/4	30	AI-1270051B3

Domestic apartment water meter Q₃ 4.0 m³ / h

uncoated / cold	130 mm	M G 1	M G 1	20	AI-1270910B3
uncoated / hot	130 mm	M G 1	M G 1	20	AI-1270920B3
nickel-plated / cold	130 mm	M G 1	M G 1	20	AI-1270911B3
nickel-plated / hot	130 mm	M G 1	M G 1	20	AI-1270921B3

Water meter connector set Q₃ 2.5 m³ / h

comprising: AP water meter Q₃ 2.5 m³/h; 110 mm, cold, connection screw thread for tap G 3/4 × G 3/4, protective cap for water meter, hose coupling G 1/2 × G 3/4, sealing set, seals

WZ cold	30	AI-1271260
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Washstand meter connector set Q₃ 2.5 m³ / h

DN 15 for angle valve

WZ cold	20	AI-1271280
WZ hot	20	AI-1271290

Washstand meter connector set DN 15 with Meiflex reinforced hose with silicon inner lining

for angle valve, incl. reinforced hose (DIN-DVGW) and water meter 80 mm

WZ cold	10	AI-1271380
WZ hot	10	AI-1271390

Please note: Prices for water meter excluding calibration fee / conformity assessment fee!



Domestic apartment water meter

Domestic apartment water meter type ETK-EAK / ETW-EAK (single-jet dry rotor) for horizontal or vertical installation with pulse output

Model:	Housing made of hot-pressed brass,
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	Cold water + 30 °C, hot water + 90 °C,
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R50V

Domestic apartment water meter Q₃ 2.5 m³ / h

Male thread G 3 / 4, nominal width DN 15



Model	Length	Pulse sequence l / pulse	VPE	Art. No.
MS/cold	80 mm	10	30	AI-1275660B3
MS/cold	80 mm	100	30	AI-1275620B3
nickel-plated / cold	80 mm	10	30	AI-1275661B3
nickel-plated / cold	80 mm	100	30	AI-1275621B3
MS/hot	80 mm	10	30	AI-1275670B3
MS/hot	80 mm	100	30	AI-1275630B3
nickel-plated / hot	80 mm	10	30	AI-1275671B3
nickel-plated / hot	80 mm	100	30	AI-1275631B3

Domestic apartment water meter Q₃ 2.5 m³ / h

Male thread G 3 / 4, nominal width DN 15



MS/cold	110 mm	10	30	AI-1275080B3
MS/cold	110 mm	100	30	AI-1275100B3
nickel-plated / cold	110 mm	10	30	AI-1275081B3
nickel-plated / cold	110 mm	100	30	AI-1275101B3
MS/hot	110 mm	10	30	AI-1275070B3
MS/hot	110 mm	100	30	AI-1275110B3
nickel-plated / hot	110 mm	10	30	AI-1275071B3
nickel-plated / hot	110 mm	100	30	AI-1275111B3

Domestic apartment water meter Q₃ 4.0 m³ / h

External thread G 1, nominal width DN 20



MS/cold	130 mm	10	20	AI-1275830B3
MS/cold	130 mm	100	20	AI-1275810B3
nickel-plated / cold	130 mm	10	20	AI-1275831B3
nickel-plated / cold	130 mm	100	20	AI-1275811B3
MS/hot	130 mm	10	20	AI-1275820B3
MS/hot	130 mm	100	20	AI-1275800B3
nickel-plated / hot	130 mm	10	20	AI-1275821B3
nickel-plated / hot	130 mm	100	20	AI-1275801B3

Pulse generator (reed relay) optionally with 10 litres or 100 litres per pulse! With models with 10 litre/pulse, a protective hood is needed. **Please note:** Prices for water meter excluding calibration fee / conformity assessment fee!

Domestic apartment water meter

Flush-mounted fittings combination, water meter shut-off valve

Model: Red brass or brass
 permitted Operating pressure PB: 16 bar
 permitted Operating temperature TB: +90 °C

Flush-mounted fittings combination single

with insulation and integrated mounting aid, comprising: flush-mounted valve DN 20; UPmono-tube connector for MTK / MTW-NG (Coax 2"); 2 X sound-insulated brackets; two-part insulation with integrated mounting aid

Model	Art. No.
Red brass	AI-1276770
Brass	AI-1276775

Flush-mounted fittings combination single

with insulation and integrated mounting aid, pre-assembled with mounting rail, comprising : flush-mounted valve DN 20; UP mono-tube connector for MTK / MTW-NG (Coax 2"); 2 X sound-insulated brackets; two-part insulation with integrated mounting aid; 2 mounting rails

Red brass	AI-1276800
Brass	AI-1276805

Flush-mounted fittings combination – double

with insulation for cold and hot water, pre-assembled with mounting rail, comprising: 2 flush-mounted valves DN 20; 2 UPmono-tube connector for MTK / MTW-NG (Coax 2"); 4 sound-insulated brackets; 2 two-part insulation with integrated mounting aid; 2 mounting rails

Red brass	AI-1276780
Brass	AI-1276785

Insulation for flush-mounted fittings combination

1276790

Flush-mounted fittings combination with extension for angle valve – single

with insulation for cold and hot water, comprising: Flush-mounted valve DN 20; UP mono-tube connector for MTK / MTW-NG (Coax 2"); 2 X sound-insulated brackets; two-part insulation with integrated mounting aid

Red brass	AI-1276810
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Connection and Accessories

Price group 2955

Garden water meter connector set

comprising: Connection screw thread for tap G 3/4 × G 3/4, protective cap for water meter, hose nozzle G 1/2 × G 3/4, sealing set, seals

Nominal width	Model	VPE	Art. No.
DN 15	MS	20	AI-1271060

Washstand meter connector set

DN 15 for angle valve, comprising: 1 socket G 3/8 F + 1 socket G 3/8 M, seals

DN 15	MS	20	AI-1270660
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Washstand meter connector set with Meiflex silicon reinforced hose sanitary

DN 15 for angle valve, comprising: Meiflex reinforced hose with silicon inner lining (DIN-DVGW), length 400 mm, connection socket G 3/8 F with union nut G 3/4, seal

DN 15	MS	10	AI-1270705
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Domestic apartment water meter

Connection and Accessories

Model: Hot-pressed brass
 permitted Operating pressure PB: 16 bar
 permitted Operating temperature TB: +90 °C

Socket threaded union, 681.2

with union nut, seal and sealing option

Model	DN	Length	Union nut	Connection d2	VPE	Art. No.
MS	15	39.5 mm	G 3/4	1/2	30	AI-1270070
MS	20	50.0 mm	G 1	3/4	20	AI-1270670
MS	25	58.5 mm	G 1 1/4	1	25	AI-1270680
MS	32	60.0 mm	G 1 1/2	1 1/4		AI-1270190
MS	40	70.0 mm	G 2	1 1/2		AI-1270200
MS	50	60.0 mm	G 2 1/2	2		AI-1270210

Set of threaded joints

with union nut, seal and sealing option (2 each)

MS	15		G 3/4	1/2		AI-9020032
MS	20		G 1	3/4		AI-9020033

Connection, 681.3

with 2 union nuts, seals and sealing option

MS	15	30 mm	Union nut	G 3/4	30	AI-1270080
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Threaded connection piece, 681.4

with internal and external thread and seal

MS	15	15 mm	G 3/4 F	G 1 M	20	AI-1270370
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Hose coupling, 681.5

with knurled union nut and seal

Model	DN	Length	Union nut	Hose nozzle	VPE	Art. No.
MS	15	32 mm	G 3/4	Ø 14.5	20	AI-1270130

Cu pipe screw thread, 681.6

with union nut according to DIN 3292 and sealing option

MS	15×3/4	16.5 mm	G 3/4	Ø 15	20	AI-1270140
MS	18×3/4	18.5 mm	G 3/4	Ø 18	20	AI-1270150
MS	22×1	22.0 mm	G 1	Ø 22	20	AI-1270160

Manifolds double

with union nut according to DIN 3292 and sealing option,
 Connection for socket threaded union or screw fitting flat-sealing G 3/4

MS	20	51.5 mm	G 3/4	G 3/4	20	AI-1394115
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Screw fitting 3/4×3/4

Union nut screw thread size 32 movable with sealing option G 3/4

MS	20	39.5 mm	G 3/4	R 3/4	10	AI-1394100
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Domestic apartment water meter

Connection and Accessories

Model: Hot-pressed brass
 permitted Operating pressure PB: 16 bar
 permitted Operating temperature TB: +90 °C



Connection elbow, 682.1

with 2 union nuts, seals and sealing option

Model	Length	Connection d1	Connection d2	VPE	Art. No.
MS	35.5 mm	G 1	G 3/4	30	AI-1270290



Connection piece, 682.3

with union nuts and sealing option

MS	35.5 mm	G 1	G 3/4	30	AI-1270300
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For combination with domestic apartment water meter for manifold Art. No. 682



Protective cover

suitable for all water meters from articles 68 – 683 with 13 mm wide lock ring

Plastic "blue"				30	AI-1785030
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Sealing clamp

Nominal width	VPE	Art. No.
1/2 / DN 15 for union nut G 3/4	10	AI-1276313
3/4 / DN 20 for union nut G 1	10	AI-1276314



Water meter test kit

to test the proper operation of domestic apartment water meters (AP / UP) in installed or removed state, incl. threaded joint plugs and 20 test neutral protocols, carbonless

AI-1270000

Valve water meter sets

The valve water meter set is primarily suited to retrofitting in the supply shaft ("manifold installation"), or for installation in existing pipework.

The position or orientation of the water meter can be altered by using Cu pipe screw fittings according to positioning and can be mounted in confined spaces. The water meter can easily be replaced by closing the valve (e.g. for recalibration).

3/4" valve water meter set (excluding water meter) for water meter 681

Length: 110 mm, connection thread: G 3/4 installation space: 100×120×260

Model	Nominal width	Art. No.
MS	DN 15	AI-1270870



for water meter 683

Length: 80 mm, connection thread: G 3/4, installation space: 100×120×230

MS	DN 15	AI-1270880
----	-------	------------

Domestic property water meter

Domestic property water meter MODULARIS Type MTK-HWX / MTW-HWX (Multi-jet dry rotor)

Model:	Housing coated brass
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	Cold water +30 °C, hot water +90 °C
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R50V

Type MTK-HWX (cold water) for horizontal and vertical installation

Nominal size MID	Connection nominal width	Meter screw thread	Length l	Height H	Width B	Art. No.
4.0	DN 20/3/4"	G 1 B	190	108	96	AI-1283014
6.3	DN 25 1"	G 1 1/4 B	260	120	100	AI-1283024
10.0	DN 25 1"	G 1 1/4 B	260	120	100	AI-1283034
10.0	DN 32/1 1/4"	G 1 1/2 B	260	120	100	AI-1283044
16.0	DN 40/1 1/2"	G 2 B	300	143	131	AI-1283054

Type MTW-HWX (hot water) for horizontal and vertical installation

4.0	DN 20/3/4"	G 1 B	190	108	96	AI-1283010
6.3	DN 25 1"	G 1 1/4 B	260	120	100	AI-1283020
10.0	DN 25 1"	G 1 1/4 B	260	120	100	AI-1283030
16.0	DN 40/1 1/2"	G 2 B	300	143	131	AI-1283050

Domestic property water meter MODULARIS Type MTK-SWX / MTW-SWX (Multi-jet dry rotor) - riser

Model:	Housing coated brass
permitted Operating pressure PB:	16 bar
permitted Operating temperature TB:	Cold water +30 °C, hot water +90 °C
Medium:	Domestic water
Approval:	according to MID
Metrological class:	R80H / R50V

Type MTK-SWX (cold water) for vertical installation

Nominal size MID	Connection nominal width	Meter screw thread	Length l	Height H	Width B	Size A	Art. No.
4.0	DN 20/3/4"	G 1 B	105	150	96	82	AI-1272654
6.3	DN 25 1"	G 1 1/4 B	150	170	100	95	AI-1272664
10.0	DN 25 1"	G 1 1/4 B	150	170	100	120	AI-1272674
16.0	DN 40/1 1/2"	G 2 B	150	215	131	120	AI-1272684

Type MTW-SWX (hot water) for vertical installation

4.0	DN 20/3/4"	G 1 B	105	150	96	82	AI-1272650
6.3	DN 25 1"	G 1 1/4 B	150	170	100	95	AI-1272660
10.0	DN 25 1"	G 1 1/4 B	150	170	100	120	AI-1272670
16.0	DN 40/1 1/2"	G 2 B	150	215	131	120	AI-1272680

MODULARIS modules see page 60. Please note: Prices for water meter excluding calibration fee/conformity assessment fee!



Domestic property water meter

Domestic property water meter Type MNK-IV with pulse preparation (multi-jet wet rotor)

Model: Housing coated brass; permitted Operating pressure PB: 16 bar; permitted Operating temperature TB: Cold water + 30 °C; medium: Potable water; options: with pulse output (cable upgrade); approval: according to MID; metrological class: Q₃ 2.5 – 6.3: R80H / R50V and Q₃ 10 – 25: R80H

MNK-IV with pulse preparation for horizontal installation

Nominal size MID	Connection nominal width	Meter screw thread	Length	Pulse l/pulse	Art. No.
2.5	DN 15 / 1/2"	G 3/4 B	165	10	AI-1284150.001
4.0	DN 20 / 3/4"	G 1 B	190	10	AI-1284158.001
6.3	DN 25 1"	G 1 1/4 B	260	10	AI-1284161.001
10.0	DN 32 / 1 1/4"	G 1 1/2 B	260	10	AI-1284166.001
16.0	DN 40 / 1 1/2"	G 2 B	300	100	AI-1284170.001
25.0	DN 50 / 2**	G 2 1/2 B	300	100	AI-1284173.001

Pulse cable

Cable length 1.4 m 1284951

Domestic property water meter Type MTK-IV with pulse preparation (multi-jet dry rotor) for technical data see MNK-IV

MTK (cold water) with pulse preparation for horizontal installation

Nominal size MID	Connection nominal width	Meter screw thread	Length	Pulse l/pulse	Art. No.
2.5	DN 15 / 1/2"	G 3/4 B	165	10	AI-1284280.001
4.0	DN 20 / 3/4"	G 1 B	190	10	AI-1284288.001
6.3	DN 25 1"	G 1 1/4 B	260	10	AI-1284291.001
10.0	DN 32 / 1 1/4"	G 1 1/2 B	260	10	AI-1284296.001
16.0	DN 40 / 1 1/2"	G 2 B	300	100	AI-1284300.001
25.0	DN 50 / 2**	G 2 1/2 B	300	100	AI-1284303.001

Pulse cable

Cable length 1.4 m 1284952

Domestic property water meter type MTK-HWV/MTW-HWV (multi-jet dry rotor)

permitted Operating pressure PB: 16 bar; permitted Operating temperature TB: Cold water + 30 °C, hot water + 90 °C; medium: Potable water; approval according to MID, metrological class: R80H / R50V

MTK-HWV (cold water) for horizontal installation, housing brass coated blue

Nominal size MID	Connection nominal width	Meter screw thread	Length	Art. No.
2.5	DN 15 / 1/2"	G 3/4 B	165	AI-1276425
4.0	DN 20 / 3/4"	G 1 B	190	AI-1276455
6.3	DN 25 1"	G 1 1/4 B	260	AI-1276465
10.0	DN 25 1"	G 1 1/4 B	260	AI-1276445
10.0	DN 32 / 1 1/4"	G 1 1/2 B	260	AI-1276475
16.0	DN 40 / 1 1/2"	G 2 B	300	AI-1276485
25.0	DN 50 / 2"	G 2 1/2 B	300	AI-1276495

MTW-HWV (hot water) for horizontal installation, housing brass uncoated

2.5	DN 15 / 1/2"	G 3/4 B	165	AI-1276825
4.0	DN 20 / 3/4"	G 1 B	190	AI-1276835
6.3	DN 25 1"	G 1 1/4 B	260	AI-1276845
10.0	DN 32 / 1 1/4"	G 1 1/2 B	260	AI-1276895
16.0	DN 40 / 1 1/2"	G 2 B	300	AI-1276865

Please note: Prices for water meter excluding calibration fee / conformity assessment fee!



Metering stations



Metering station "Uni 200"

Flush-mounted distribution box excluding plaster cover plate and foot

Model	Size	Art. No.
UP 32-32 / 11	352 × 336 × 1101	AI-1338800.211020



Metering station "Uni 210"

Flush-mounted distribution box excluding plaster cover plate and foot

UP 32-32 / 11	352 × 336 × 1101	AI-1338810.211101
---------------	------------------	-------------------



Metering station "Uni 220"

Flush-mounted distribution box including plaster cover plate and foot

UP-ESF 40 / 11	435 × 7101 × 1101	AI-1338820.111121
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Metering station

Picture: Design example,
other designs on request

Can be ordered as option:

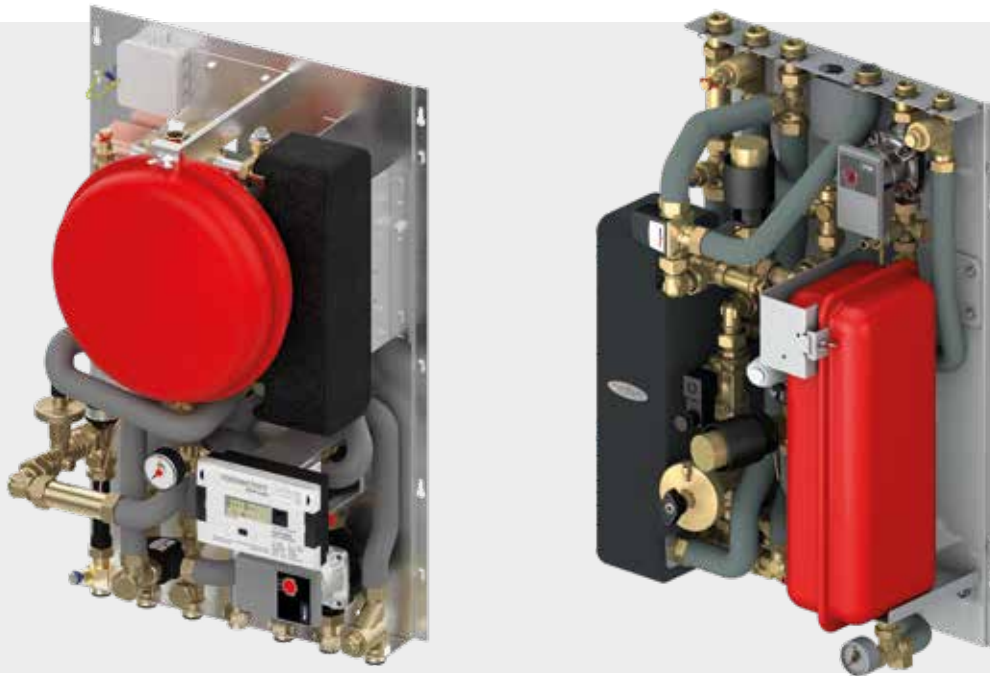
- Plastic door for remote metering devices
- Cylinder lock
- Pipework 180° mirrored
- Customised models



The following products are shown in Chapter 4 - District heating stations:	From page
District heating stations up to 20 kW / indirect connection	74
District heating stations up to 20 kW / direct connection	77
District heating station up to 40 KW / indirect connection / modular construction	78
District heating stations for local heating grids up to 60 kW indirect connection / modular construction	80
Modules for district heating station 40 kW and max. 4 heating circuits & district heating stations 20, 40 and 60 kW	82
NEW! Complete stations LogoTwin H (hydraulically controlled) and LogoTwin T (thermostatically controlled)	83

District heating stations

4



Meibes offers a selection of **Logotherm district heating stations** for **direct** and **indirect connection to local/district heating networks** with weather-controlled heating circuit controller for one or more heating circuits on the secondary side plus hot water preparation on the primary or secondary side. The stations are also available with direct connection.

The local/district heating stations are particularly suited to the connection of local/district heating networks with media temperatures of up to 150 °C (PN 25). The compact stations are available with an output up to 20 kW and from 20 - 60 kW.

On the following pages you will find pre-configured stations that are flexible in their kit (modular system).

For your individual planning and design of stations up to 10 MW, please use our questionnaire in the annex on page 224.

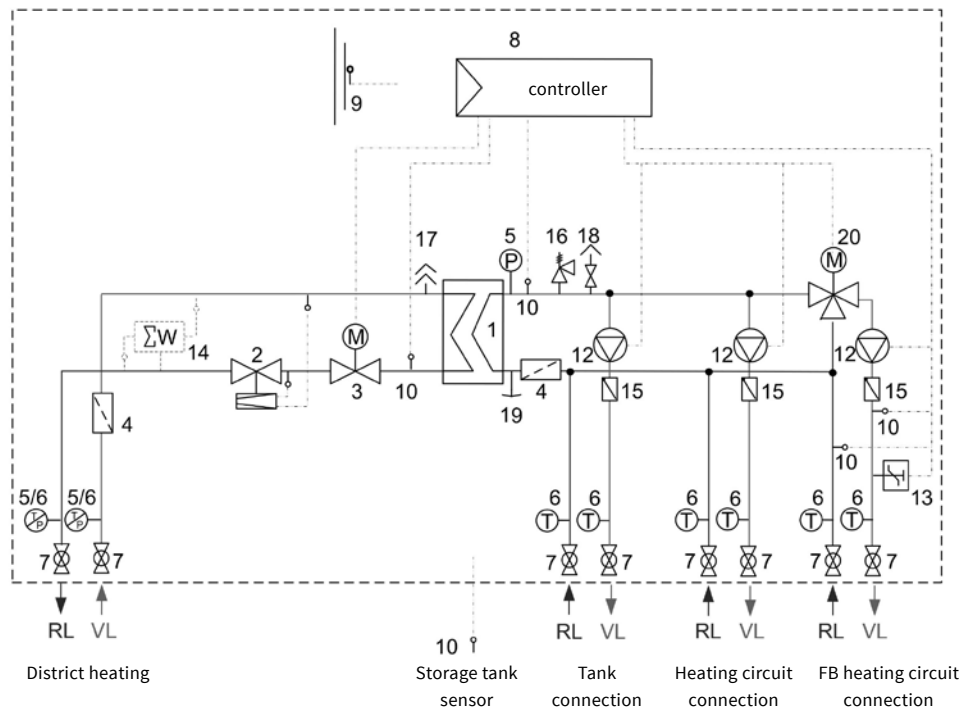


Your advantages

- *brief installation times and quick exchange of old systems*
- *also available as welded station for primary grid temperatures up to 130 °C (at PN 16) and up to 150 °C (at PN 25)*
- *ex-factory pre-assembled, 100% tested for sealing, for immediate use.*
- *Modular system, also available up to 10 MW*

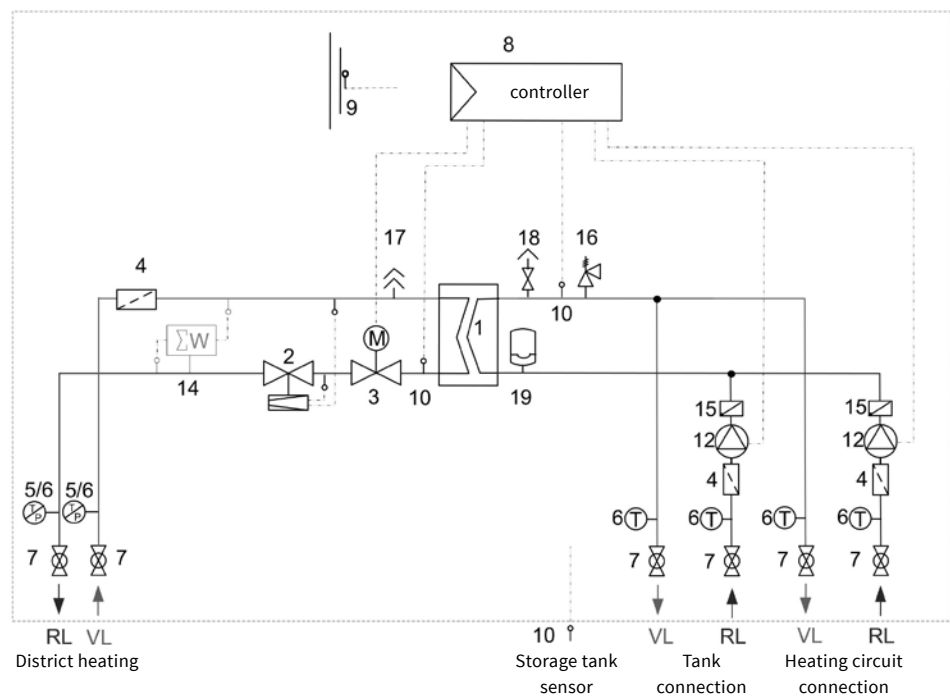


District heating stations up to 20 kW



Indirect station with secondary side connections for hot water preparation, static heating circuit and underfloor heating circuit with an HE heating circuit pump in each case.

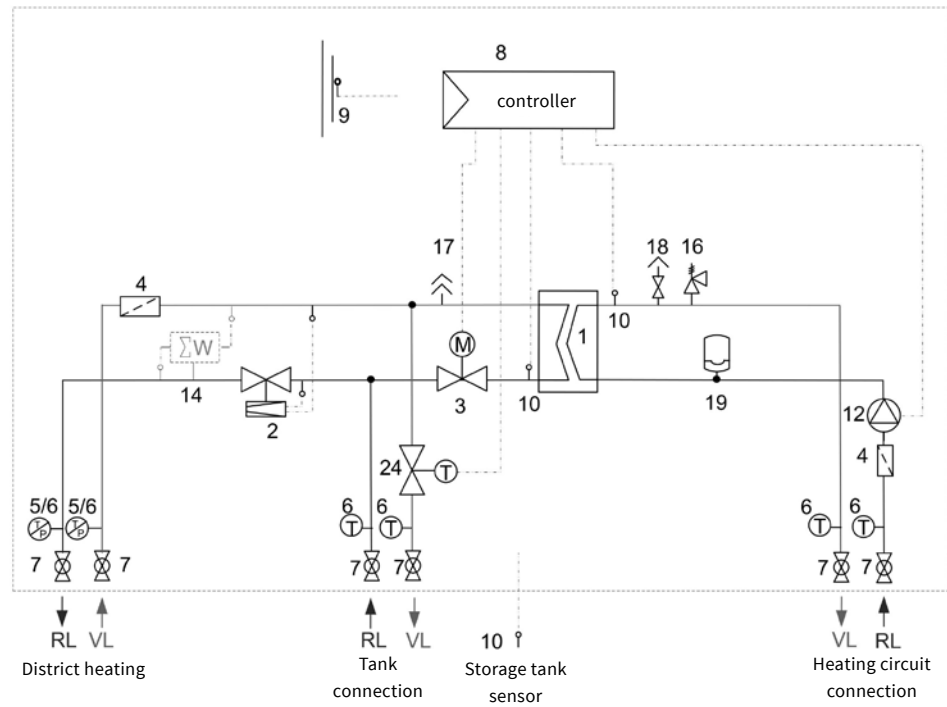
Type	Output	Art. No.
H 26 AF - SHF - SAMSON controller	up to 20 kW	AI-10810.26SHF7A
H 26 AF - SHF - Siemens controller	up to 20 kW	AI-10810.26SHF7A1



Indirect station with secondary side connections for hot water preparation in priority switch and static heating circuit with an HE heating circuit pump in each case.

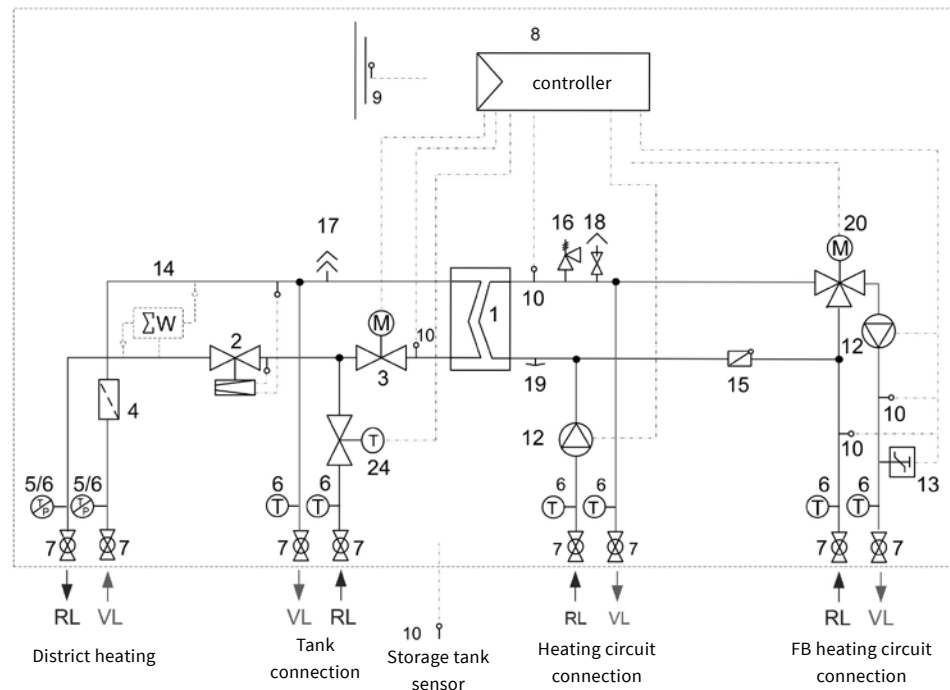
Type	Output	Art. No.
H 26 AF - SH - SAMSON controller	up to 20 kW	AI-10810.26SH22
H 26 AF - SH - Siemens controller	up to 20 kW	AI-10810.26SH23

District heating stations up to 20 kW



Indirect station with primary connections for hot water preparation in priority switch via thermoelectric actuator and a static heating circuit with an HE heating circuit pump.

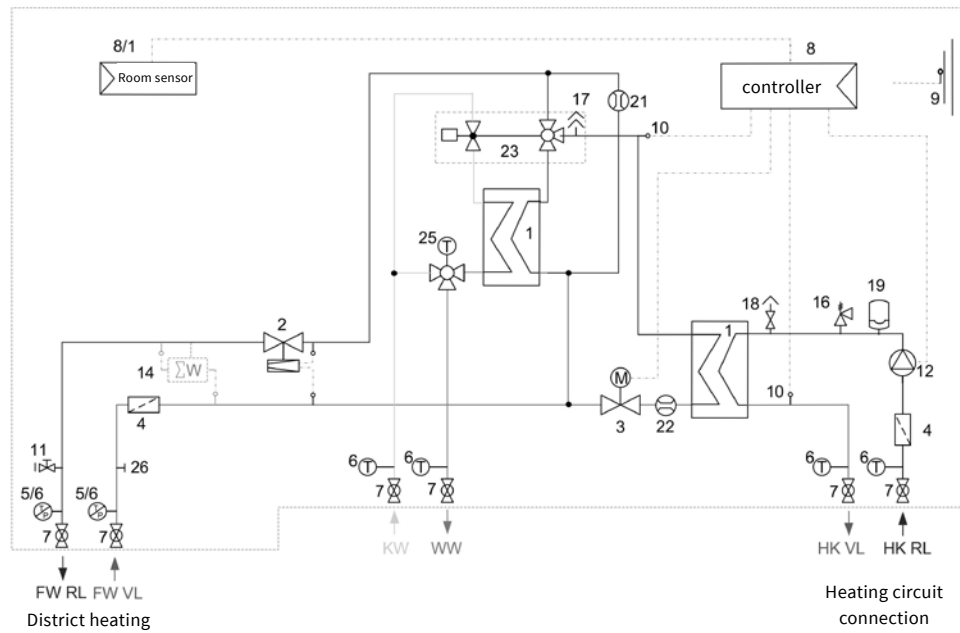
Type	Output	Art. No.
H 26 AF - PH - SAMSON controller	up to 20 kW	AI-10810.26PH25
H 26 AF - PH - Siemens controller	up to 20 kW	AI-10810.26PH26



Indirect station with primary connections for hot water preparation in priority switch via thermoelectric actuator and a static and an underfloor heating circuit connection with an HE heating circuit pump.

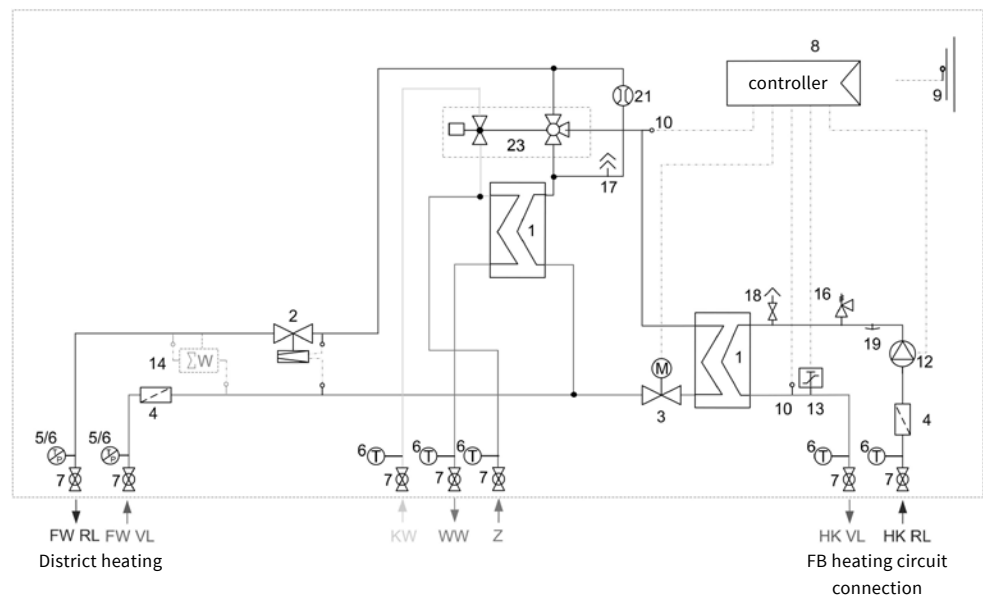
Type	Output	Art. No.
H 26 AF - PHF - SAMSON controller	up to 20 kW	AI-10810.26PHF3.2

District heating stations up to 20 kW



Indirect station (PN 10) with hot water preparation on continuous flow principle (12 l/min), thermostatic scalding protection, a secondary side static heating circuit with HE-heating circuit pump.

Type	Output	Art. No.
HW 2 AF - OH2 - SAMSON controller	up to 20 kW	AI-10910.26OH2/7A
HW 2 AF - OH2 - Siemens controller	up to 20 kW	AI-10910.26OH2/8A

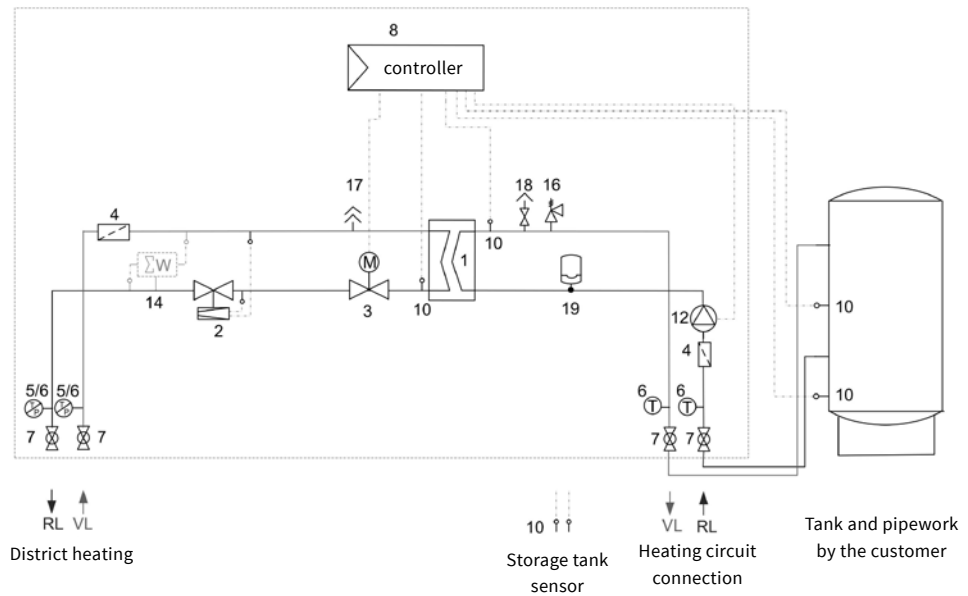


Indirect station (PN 10) with hot water preparation on continuous flow principle (15 l/min), Domestic water circulation connection and a secondary side underfloor heating circuit with HE heating circuit pump.

Type	Output	Art. No.
HW 2 AF - OH8 - SAMSON controller	up to 20 kW	AI-10910.26OH8/8

4

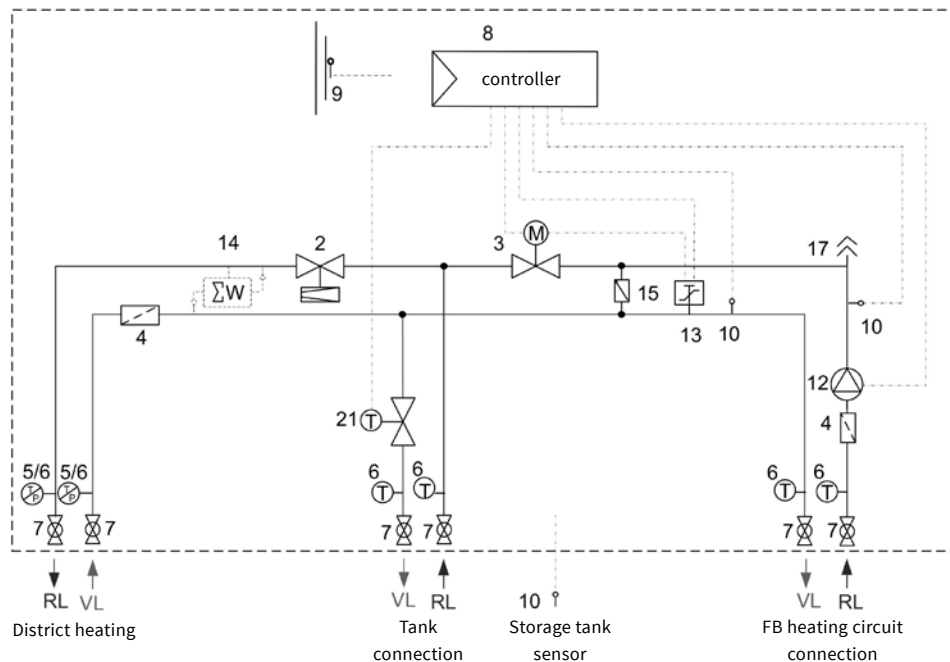
District heating stations up to 20 kW



Indirect station for constant temperature regulation for buffer charging with HE heating circuit pump.

Type	Output	Art. No.
H 26 AF - PH - SAMSON controller	up to 20 kW	AI-10810.26PH4/10

4



Direct station with hot water preparation via thermoelectric actuator and an underfloor heating circuit with HE heating circuit pump.

Type	Output	Art. No.
H AF - PH 14 - SAMSON controller	up to 20 kW	AI-10810.00PH14/1
H AF - PH 14 - Siemens controller	up to 20 kW	AI-10810.00PH14/2

District heating stations up to 40 kW

District heating stations up to 40 kW for indirect connection to the primary grid Modular construction for at most 4 heating circuits

Wall-assembled station, mounted on swing arm with the primary side connections on the top left, the secondary side on the right or below, station with insulation (plate heat exchanger, manifolds, heating circuits, housing and pipework) and with cladding

Strength design:

primary: Nominal pressure PN 10
(PN 16 on request)

secondary: PN 6

Output design:

primary: 100 °C / 60 °C

secondary: 70 °C / 50 °C

Basic module comprising:

Art. No.

Primary section

- Pipe DN 20
- Sleeve ball cock, sleeve dirt trap
- Relay valve including actuator excluding emergency function
- Differential pressure and volumetric flow limiter
- Plate heat exchanger with insulation
- Adaptor for heat flow meter G 3/4" M, 110 mm
- Immersion temperature sensor
- Thermo-/Manometer 20-160 °C, 0-16 bar, NG 63
- Fill and drain ball valve

AI-TAB840-VD-11-010

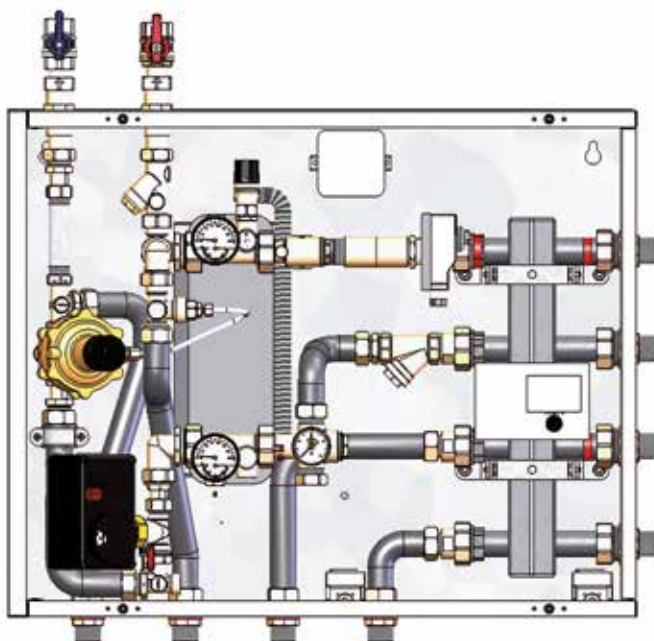
Secondary section

- Sleeve dirt trap
- Safety valve 3 bar
- Connection for MAG
- Immersion temperature sensor
- Manometer 0-4 bar, NG 63
- Fill and drain ball valve

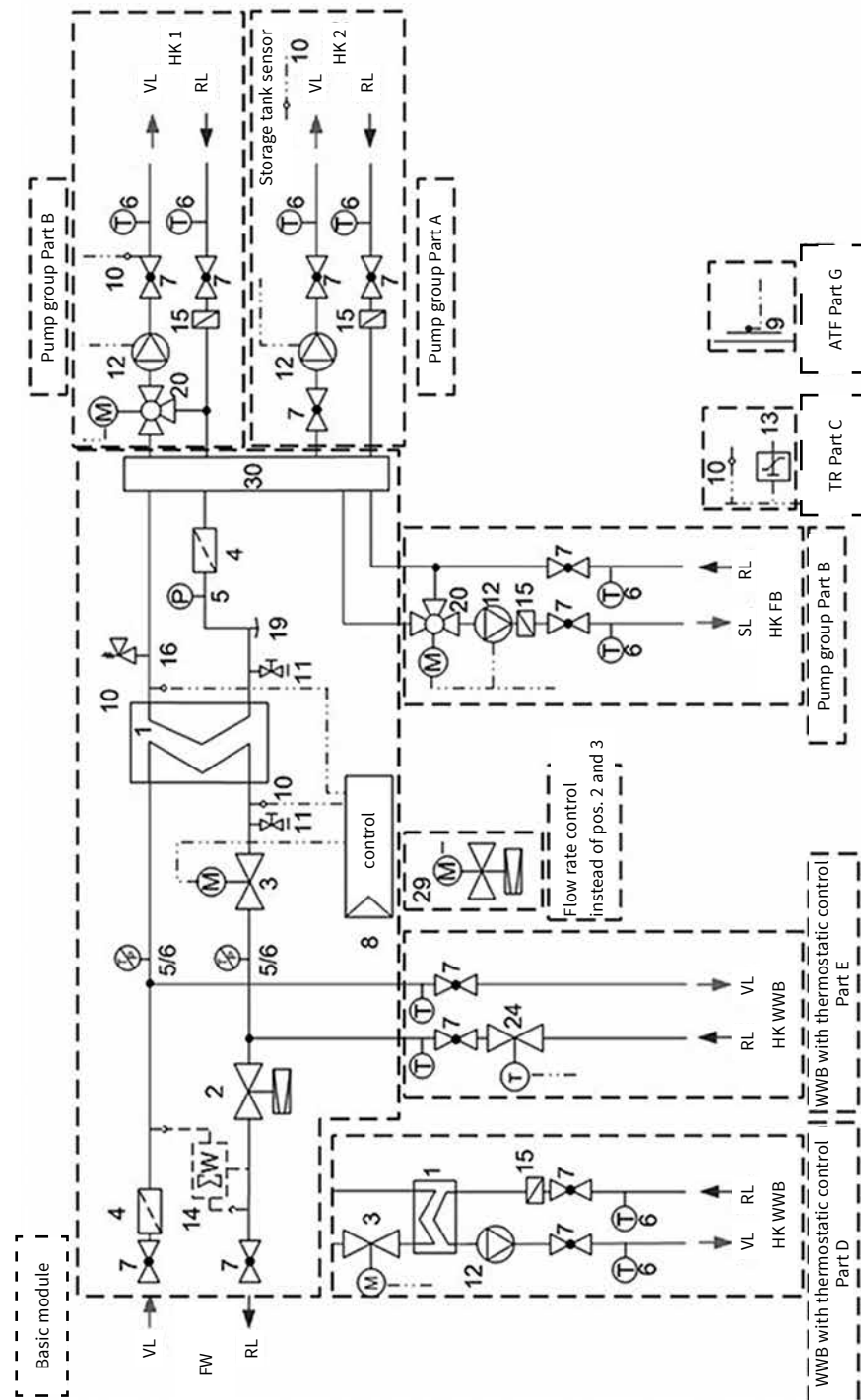
Controller SAMSON TROVIS 5573

for max. 1 mixed heating circuit, 1 unmixed heating circuit,
1 heating circuit for hot water preparation (register tank)

Size incl. connections
(H × W × D) 800 × 835 × 300 mm



District heating stations up to 40 kW



- | | | |
|---|---------------------------------------|---|
| 1 Heat exchanger | 12 Heating circuit pump HE | 25 Three-way switch valve or mixing valve |
| 2 Differential pressure regulator / Flow rate limiter | 13 Temperature controller or TR / STW | 29 Flow rate controller with actuator |
| 3 Motorised control valve | 14 Adaptor WMZ | 30 Manifolds |
| 4 Dirt trap | 15 Check valve / Backflow preventers | VL Flow line |
| 5 Manometer | 16 Safety valve | RL Return line |
| 6 Thermometer | 17 Venting | FW District heating |
| 7 Ball valve | 18 Bleed valve | HK Heating circuit |
| 8 Controller | 19 Connecting pieces MAG | kW Cold water |
| 9 Outside temperature sensor | 20 Mixer with actuator | WW Hot water |
| 10 Temperature sensor | 24 Valve with actuator | Z Circulation |
| 11 Fill and drain ball valve | | • Piping link |

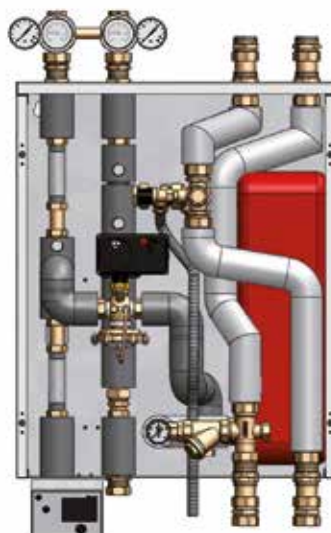
District heating stations up to 60 kW

District heating stations for local heating grids up to 60 kW for indirect connection to the primary grid, modular construction

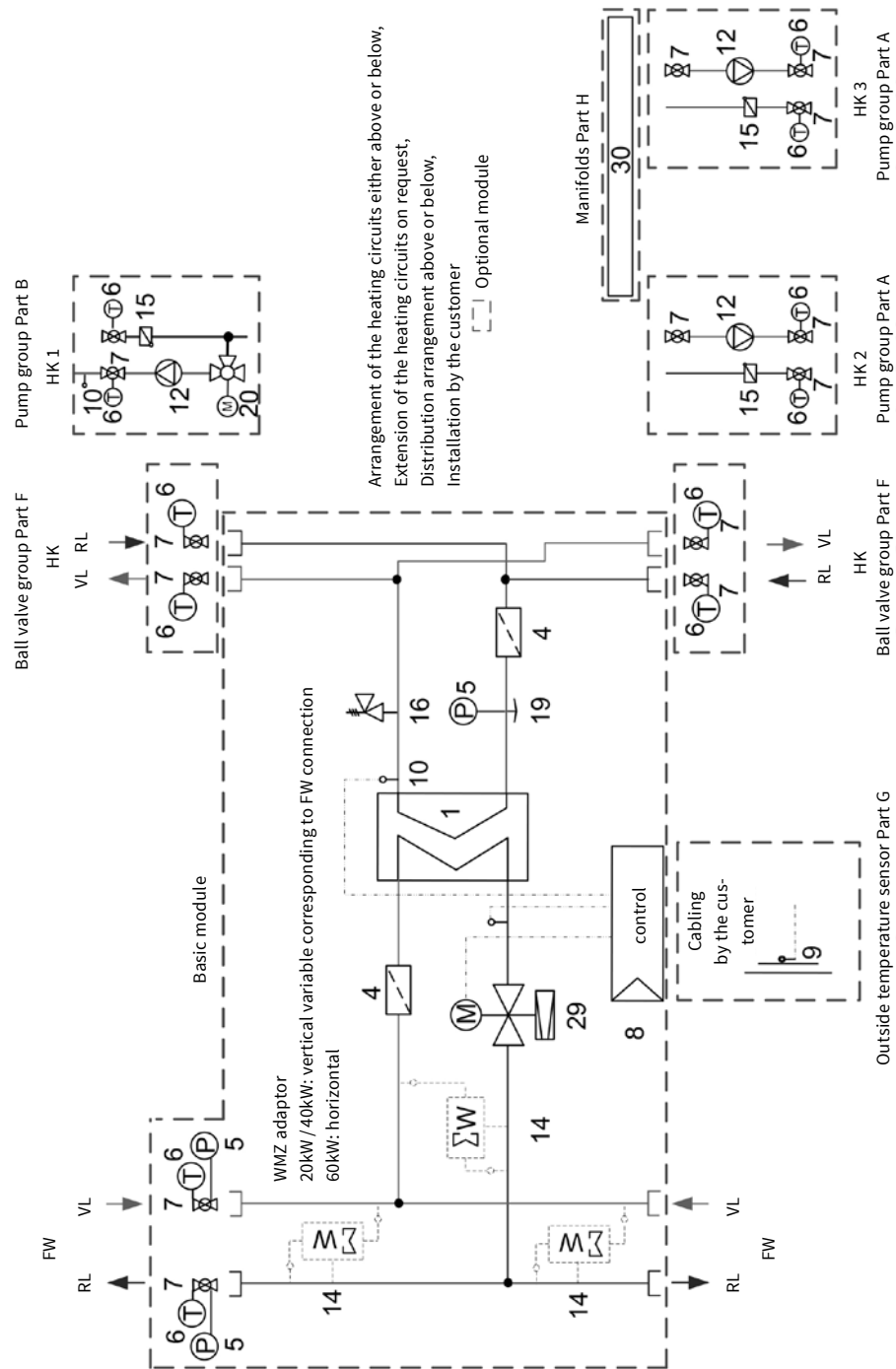
District heating stations, specially suited to local heating grids up to 60 kW for indirect connection to the primary grid. Wall-assembled station, mounted on swing arm with the primary connections either above or below, secondary either above or below. Station with insulation (plate heat exchanger, manifold, housing, heating circuits and secondary pipework) and with cladding.

Strength design:	
primary:	Nominal pressure PN 16
secondary:	Nominal pressure PN 6
Output design:	
primary:	80 °C / 60 °C
secondary:	70 °C / 55 °C

Basic module comprising:	Art. No.
Primary section	
- Sleeve ball valve with thermometer and manometer	
- Dirt trap	
- Flow rate controller with actuator excluding emergency function	
- Plate heat exchanger with insulation	
- Adaptor for heat flow meter:	
20 kW G 3/4" M, 110 mm	
40 kW G 1" M, 130 mm	
60 kW G 1 1/4" M, 260 mm	
- Immersion temperature sensor	
Secondary section	
- Sleeve dirt trap	
- Safety valve 3 bar	
- Connection MAG	
- Immersion temperature sensor	
Controller SAMSON TROVIS 5573	
for max. 1 mixed heating circuit, 1 unmixed heating circuit, 1 heating circuit for hot water preparation (register tank)	
Basic module 20 kW (WxHxD) 650 × 1080 × 335 mm	AI-TAB2520-KV-11-001
Basic module 40 kW (WxHxD) 650 × 1080 × 335 mm	AI-TAB2540-KV-11-001
Basic module 60 kW (WxHxD) 1110 × 1005 × 450 mm	AI-TAB2560-KV-11-001



District heating stations up to 60 kW



- | | | |
|--|--|--|
| 1 Heat exchanger | 12 Heating circuit pump HE | 25 Three-way switch valve or mixing valve |
| 2 Differential pressure regulator / Flow rate limiter | 13 Temperature controller or TR / STW | 29 Flow rate controller with actuator |
| 3 Motorised control valve | 14 Adaptor WMZ | 30 Manifolds |
| 4 Dirt trap | 15 Check valve / Backflow preventers | VL Flow line |
| 5 Manometer | 16 Safety valve | RL Return line |
| 6 Thermometer | 17 Venting | FW District heating |
| 7 Ball valve | 18 Bleed valve | HK Heating circuit |
| 8 Controller | 19 Connecting pieces MAG | kW Cold water |
| 9 Outside temperature sensor | 20 Mixer with actuator | WW Hot water |
| 10 Temperature sensor | 24 Valve with actuator | Z Circulation |
| 11 Fill and drain ball valve | | • Piping link |

District heating stations, modules

Modules for:

District heating station 40 kW and max. 4 heating circuits & district heating stations 20, 40 and 60 kW

For requests including details, please use the request form on page 240.

	Name	Art. No.	
Part A	Unmixed heating circuit pump group UK (also for WWB secondary)		
	1" with ALPHA 2 25-60	AI-B-66811.30TAB	
	1 1/4" with ALPHA 2 32-60	AI-B-66812.30TAB	
	1" with ALPHA 2 25-60 and meter adaptor	AI-B-66811.30ZTAB	
Part B	Mixed heating circuit pump group MK comprising: Pump group including 3-way T-mixer, actuator, sensor		
	1" with ALPHA 2 25-60	AI-B-L66831.30TAB	
	1 1/4" with ALPHA 2 32-60	AI-B-L66832.30TAB	
	1 1/4" excluding pump	AI-B-L66832.EATAB	
	1 1/4" with MAGNA 32-100	AI-B-L66832.66TAB	
Part C	Temperature control thermostat for underfloor heating incl. immersion sleeve and installation parts		
	1"	AI-B-10211.01TAB1	
	1 1/4"	AI-B-10211.01TAB2	
Part D	Hot water preparation with tank charging system primary / secondary Separation system and relay valve		on request
Part E	Hot water preparation with thermal control for register tank		on request
Part F	Ball valve group only for TAB2520 / 40 / 60-KV-11-001 comprising: 2 x Ball valve, 2 x thermometer 0 – 120 °C		
	1"	AI-B-61887.41TAB	
	1 1/4"	AI-B-61887.91TAB	
Part G	Outside temperature sensor for outside temperature controlled systems	AI-10211.038	
Part H	Manifolds for TAB2520 / 40 / 60-KV-11-001 3 heating circuits	AI-66301.2	
	Controller for additional heating circuits		on request
	Storage tank sensor	AI-80590.26	

**NEW
in the
Range!**

Indirect complete stations LogoTwin H and LogoTwin T

The complete stations LogoTwin H (hydraulically controlled) and LogoTwin T (thermostatically controlled) are indirect, compact, ready-connected decentralised transfer stations with controlled hot water preparation and provision of heating to living areas as wall-mounted installation incl. housing. Indirect interface stations provide complete hydraulic separation between primary and secondary sides via 2 plate heat exchangers made of stainless steel.



Fig. 1



Fig. 2

1 = specifies at a flow line temperature of 65 °C and heating by 40 K
2 = specifies at a flow line temperature of 65 °C and heating by 35 K

Accessories for LogoTwin H Wall-mounted assembly rail

	Art. No.
Connection above incl. ball valves 6xDN20 straight	Al-10920.26 OH183
Connection below incl. ball valves 6xDN20 straight	Al-10920.26 OH184

*Viewing window in the housing for reading out the heat flow meter as well as the pressure display of the secondary circuit

LogoTwin H		WW-Output				Fig.	Art. No.
		l/min ¹	kW ¹	l/min ²	kW ²		
35	Connection above	12	35	15	37		Al-10920.26OHT80
46	Connection above	17	46	20	50		Al-10920.40OHT80
35	Connection below	12	35	15	37	Fig. 1	Al-10920.26OHB80
46	Connection below	17	46	20	50		Al-10920.40OHB80

LogoTwin T		WW-Output		Fig.	Art. No.
		l/min ¹	kW ¹		
95	Connection above	30	95	Fig. 2	Al-10920.24OHT10
95	Connection below	30	95		Al-10920.24OHB10

LogoTwin - Kit features		LogoTwin H 35 / 46	LogoTwin T
Dimensions	Width in mm	500	500
(AP version)	Height in mm (total length)	800	800
	Depth in mm	350	350
	Connections	3/4"	1"
Max. pressure: Heating primary / Heating secondary / Sanitary		PN10 / 3 bar / 6 bar	
Max. permissible temperatures: Heating primary / Heating secondary / Sanitary		95 °C	
Power supply		230V / 50 Hz	
Min. Operating pressure for sanitary		1.5 bar	
Max. Differential pressure - Heating (primary)		2.5 bar	
Heating capacity (65 °C flow line and 20 K spread)		10 kW	15 kW
WW preparation - stainless steel plate heat exchanger (copper soldered), Vertical orientation for reduced risk of lime scale			✓
Heating - stainless steel plate heat exchanger (copper soldered), Vertically oriented			✓
PF-controller with priority switch, anti-lime scale coating and DVGW approval		✓	-
Control valve for heating circuit water (zone valve with actuating drive) in the primary circuit			✓
Venting with hose connection on heating side			✓
Adaptor for heat meter in the primary circuit		¾" x 110 mm	1" x 130 mm
Thermostatic hot water control adjustable			✓
Pipework made from insulated stainless steel corrugated pipe			✓
Assembled and tested on base plate completely free of mechanical stress			✓
Dirt traps with stainless steel sieve insert in the primary & secondary circuit			✓
Heat retention function of the primary heating-circuit water intake via an adjustable circulation bridge (35-65 °C)			✓
Differential pressure regulator for autom. hydr. Station balance in the primary circuit			✓
Return temperature limiting adjustable (pre-set to ca. 40 °C) in the primary circuit			✓
Membrane expansion tank in the secondary circuit			✓
Overpressure valve pre-set to 3 bar in the secondary circuit			✓
Manometer as pressure gauge in the secondary circuit			✓
Heating circulation pump (HE pump) in the secondary circuit			✓
Service water mixer in the hot water outlet incl. scalding protection function (adjustable)			✓
Wall-mounted housing in white (RAL 9016)*			✓
Adaptor for a valve to close the primary circuit			✓

District heating stations

Basic design:				
Connection primary	TAB2520-KV-11-001	TAB2540-KV-11-001		
Connection secondary	G 1" F (DN25)	G 1" F (DN 25)		
Design primary	G 1 1/2" M	G 1 1/2" M		
Design secondary	flat-sealing (DN 32)	flat-sealing (DN 32)		
Nominal pressure prim./sec.	80 / 60 °C	80 / 60 °C		
Flow rate controller / actuator	70 / 55 °C	70 / 55 °C		
Relay valve / actuator	PN 16 / PN 6	PN 16 / PN 6		
Differential pressure and	SAMSON 2488 / 5824	SAMSON 2488 / 5824		
Flow rate limiter				
Plate heat exchanger	SWEP IC25	SWEP IC25		
Output examples:				
Temperature spreads:				
primary; secondary *	Output	Pressure loss primary	Output	Pressure loss primary
	*	**	*	**
90 / 70 °C; 20 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
90 / 70 °C; 15 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
90 / 70 °C; 10 K	19 kW	ca. 0.17 bar	37 kW	ca. 0.25 bar
90 / 70 °C; 7 K	13 kW	ca. 0.08 bar	26 kW	ca. 0.12 bar
90 / 60 °C; 70 / 50 °C				
80 / 60 °C; 20 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
80 / 60 °C; 15 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
80 / 60 °C; 10 K	19 kW	ca. 0.17 bar	37 kW	ca. 0.25 bar
80 / 60 °C; 7 K	13 kW	ca. 0.08 bar	26 kW	ca. 0.12 bar
80 / 55 °C; 20 K	20 kW	ca. 0.13 bar	40 kW	ca. 0.18 bar
80 / 55 °C; 15 K	20 kW	ca. 0.13 bar	40 kW	ca. 0.18 bar
80 / 55 °C; 10 K	19 kW	ca. 0.12 bar	37 kW	ca. 0.17 bar
80 / 55 °C; 7 K	13 kW	ca. 0.06 bar	26 kW	ca. 0.08 bar
75 / 55 °C; 20 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
75 / 55 °C; 15 K	20 kW	ca. 0.20 bar	40 kW	ca. 0.27 bar
75 / 55 °C; 10 K	19 kW	ca. 0.17 bar	37 kW	ca. 0.25 bar
75 / 55 °C; 7 K	13 kW	ca. 0.08 bar	26 kW	ca. 0.12 bar

*) Design of the heat transfer unit between building return temperature and return temperature of the heating grid is at least 5 K degrees, flow temperatures at least 10 K.

**) Data excluding pressure loss of the heat flow meter and standard connection above.

District heating stations

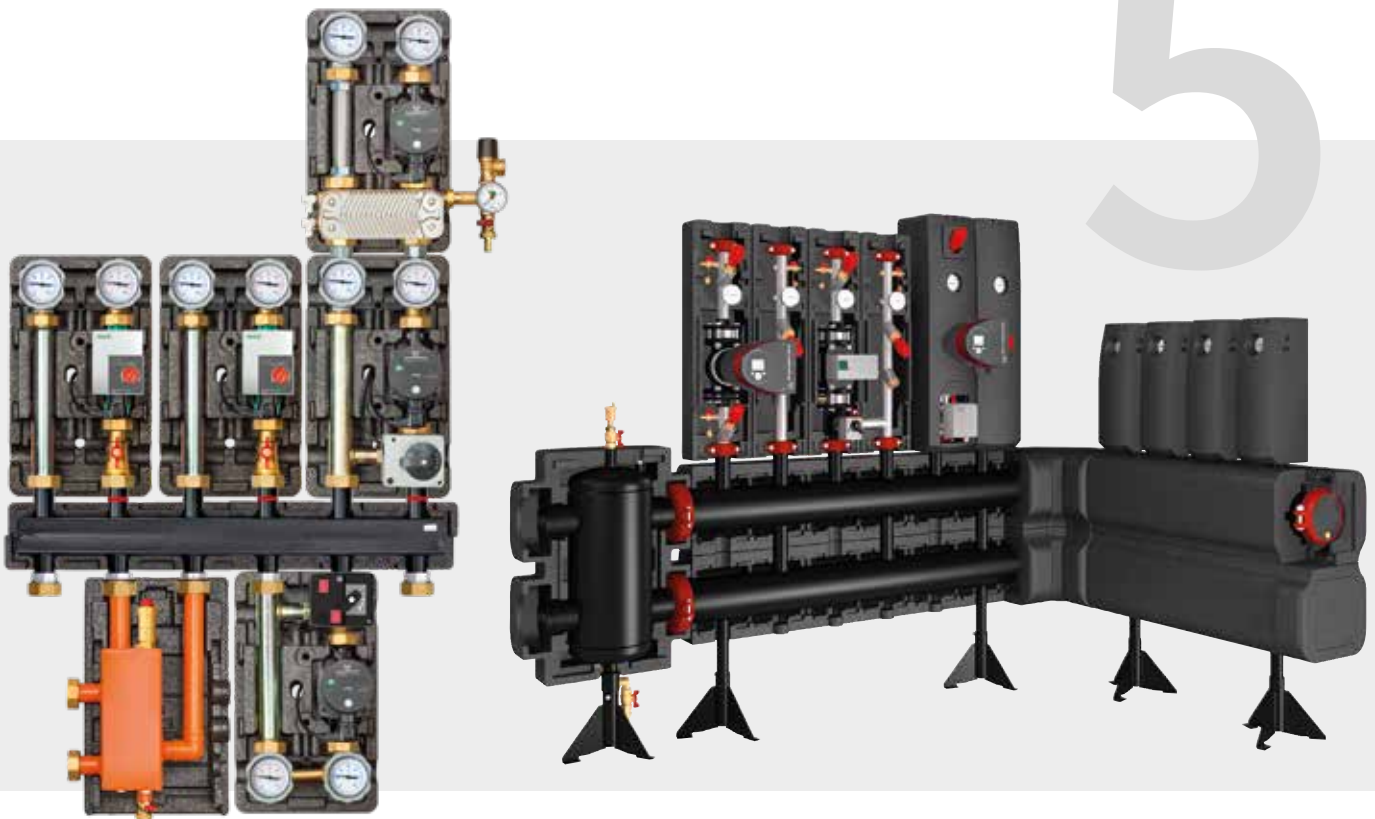
	TAB2560-KV-11-001 G 1 1/4" F (DN 32) G 1 1/2" M flat-sealing (DN 32) 80 / 60 °C 70 / 55 °C PN 16 / PN 6 SAMSON 2488 / 5824		TAB840-VD-11-010 G 1" F (DN 25) G 1" F (DN 25) 100 / 60 °C 70 / 50 °C PN 10 / PN 6 SAMSON 3222 / 5857 SAMSON 46-5N SWEP IC8		10810.26..., 10910.26... G 1/2" F (DN 15) G 1/2" F (DN 15) 100 / 60 °C 70 / 50 °C PN 10 / PN 6 corresponding to Art. No. Flow coefficient = 1.6 corresponding to Art. No. Flow coefficient = 2.5 SWEP IC8	
	Output	Pressure loss primary	Output	Output		
	*	**	*	*		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	45 kW	ca. 0.20 bar	20 kW	10 kW		
	30 kW	ca. 0.08 bar	13 kW	7 kW		
			40 kW	20 kW		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	45 kW	ca. 0.20 bar	20 kW	10 kW		
	30 kW	ca. 0.08 bar	13 kW	7 kW		
	60 kW	ca. 0.21 bar	23 kW	12 kW		
	60 kW	ca. 0.21 bar	32 kW	20 kW		
	45 kW	ca. 0.13 bar	20 kW	10 kW		
	30 kW	ca. 0.05 bar	13 kW	7 kW		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	60 kW	ca. 0.34 bar	25 kW	15 kW		
	45 kW	ca. 0.20 bar	20 kW	10 kW		
	30 kW	ca. 0.08 bar	13 kW	7 kW		

District heating stations up to 10 MW on request.

The following products are shown in Chapter 5 - Heat distribution:		From page
Universal cascade		88
5.1 Systems up to 2,300 kW (large manifolds):		
Boiler guard (G), manifold modules (double, triple, angle) Union fittings FL pump groups plus accessories LFCH PG (LogoFlow Control) plus accessories MeiTronic controller		91
5.2 Systems up to 100 kW:		
V pump groups plus accessories Manifold module Hydraulic diverter Accessories		101
5.3 Systems up to 70 kW:		
Kombimix Pump groups Ed. 8 (UK, MK) Pump groups with meter installation fitting (UK, MK) Constant value control set, return line temperature boost Separation system Manifold module, boiler guard Heating boiler separation system Accessories		109
Components for boiler connection:		
Expansion set, pipe connection group Safety set, shut-off set		119
Systems for condensing boilers:		
TKM for wall-mounted boiler plus accessories		125

Heat distribution

5



Meibes offers **complete systems for standard and wall-mounted boiler connection** in the ranges **up to 70 kW**, **up to 100 kW** and **up to 2300 kW** according to system requirements (2 and/or 3 circuit), pump groups plus hydraulic diverter (boiler guard). The modular construction kit system means that access and installation are extremely efficient. All components are pre-assembled ex-factory, tested and sealed. Optional accessories such as meter installation fittings, control technology etc. can be supplied or immediately integrated.

Specially developed for wall-mounted boilers, the **TKM compact mixed circuit** is characterised by high user-friendliness. Installation occurs under or alongside the Therme with individual flexible connections suitable for all makes/types. The groups are fitted with an integrated primary bypass, servomotor or thermostat injection valve.

Your advantages

- Brief installation times, quick exchange
- Planning and calculation security through complete modular system
- 100% tested for sealing, for immediate use
- Suitable for all boiler types and makes
- Comprehensive accessories

Other products:

Kombimix - compact assembly group incl. 2 pump groups (UK/UK or UK/MK) and twin manifolds
• Page 110

Heating boiler separation system as pre-assembled compact heat exchanger group
• Page 122

Universal cascade for efficient heat distribution up to 280 kW total capacity for connection to wall-mounted boiler
• Page 88

Components for boiler connection
• Page 120

Plus control technology
• Page 106

Universal cascade

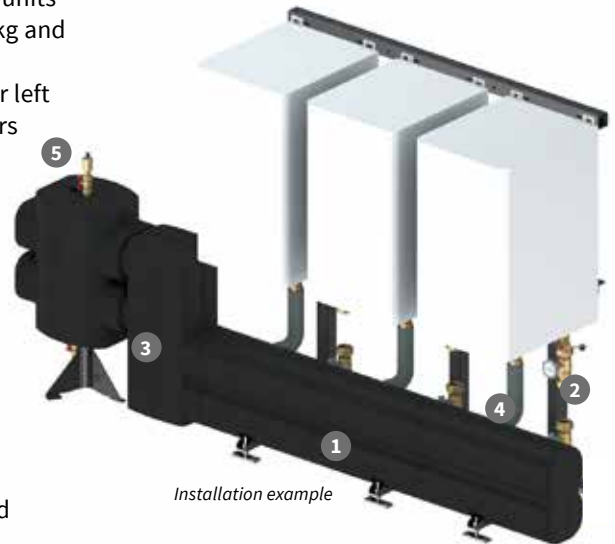
Universal cascade for wall-mounted boiler systems up to 280 kW total capacity

The product

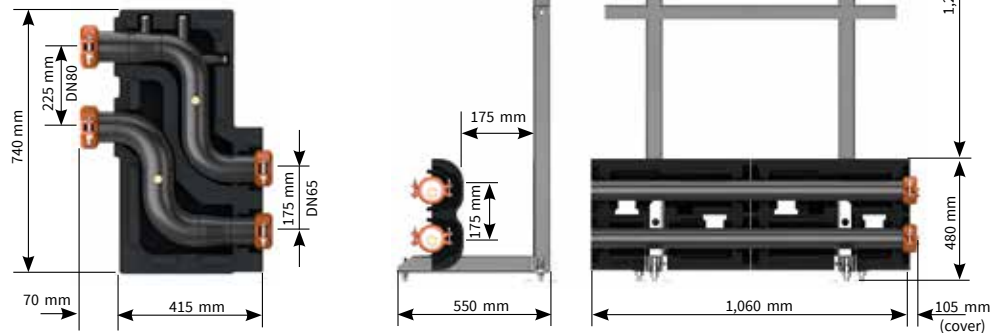
- Modules for 1 or 2 heating equipment units of width up to 580 mm and up to 100 kg and connections up to 2" (DN 50)
- Heating circuit connectable on right or left
- End cap with 1/2" coupler and stoppers
- Free-standing, stable Attachment frame
- Systems up to 110 °C and PN 10
- incl. height-adjustable feet

Your advantages

- Pre-assembled, insulated unit incl. assembly frame
- Quick planning and installation through modular construction
- Flexible connector sets for all standard wall-mounted boilers
- Can be combined with boiler guard (as transition to heat distribution)



Installation example



Output [kW]	Flow rate [m ³ /h]	Construction component	Fig.	Art. No.
480	21	Manifold module double	1	AI-66451.37
		Manifold module single		AI-66451.38
280	12	Connection set DN65 to DN80	3	AI-66421.50
		HZW DN 80 (see page 92)		5
Connection sets for wall-mounted boilers (ball valves etc.)			2	AI-66362.35
				AI-66362.36
				AI-66362.37
Connection set from collector (flexible stainless steel corrugated pipe)			4	AI-66362.33

Information note: The boiler guard DN 80 with its installation is larger than the DN 65 modules, that contain no installations, so that the total pressure loss of the system remains within acceptable limits. The higher total pressure loss reduces output.

Universal cascade



Manifolds with assembly frame for attaching heating equipment

Installation onto a frame permits erection anywhere in the room. No stable wall is required, the walls are then available for the installation of other components.

The frames are for 1 or 2 heating equipment units each designed with up to 580 mm width and 100 kg.

	Art. No.
double basic module with end cap (1.1)	AI-66451.37
single extension (1.2)	AI-66451.38



Connection sets for wall-mounted boilers

excluding shut-off valves, excluding safety devices (for devices excluding internal pump)
Included in the set: Ball valves DN 32, SV 3 bar, fill and drain ball valve. Reducers for 2" union nuts for pump to 1 1/2" are included, so that both DN 25 and DN 35 pumps can be added. Reducers for 1 1/2" union nuts to the heating equipment to 1 1/4" are included.

excluding internal pump, excluding safety devices (2.1)	AI-66362.35
---	-------------



excluding shut-off valves excluding safety devices (for devices with internal pump)
Included in the set: Ball valves DN 32, SV 3 bar, fill and drain ball valve. Reducers for 1 1/2" union nuts to the heating equipment to 1 1/4" are included.

including internal pump, excluding safety devices (2.2)	AI-66362.36
---	-------------



including shut-off valves including safety devices (for devices excluding internal pump)
Included in the set: Ball valves DN 32. Reducers for 2" union nuts for pump to 1 1/2" are included, so that both DN 25 and DN 35 pumps can be added. The pump screw thread to the heating unit is 1 1/4" M (flat-sealing)

excluding internal pump, including safety devices (2.3)	AI-66362.37
---	-------------



Connection sets

For each connector set we recommend a linking set between the collector and the heating unit or pump. The pipework is made of 2 insulated stainless steel-corrugated pipes DN 32 of length 0.7 m and 1 m. The corrugated pipes are bolted to the collector with the union nuts 2" supplied, bent in accordance with the local conditions and shortened to a suitable length. Fixlock screw fittings with 1 1/4" M make the transition to the ball valves or to the direct connection to the heating unit.

Connection set with VA corrugated pipe (4)	AI-66362.33
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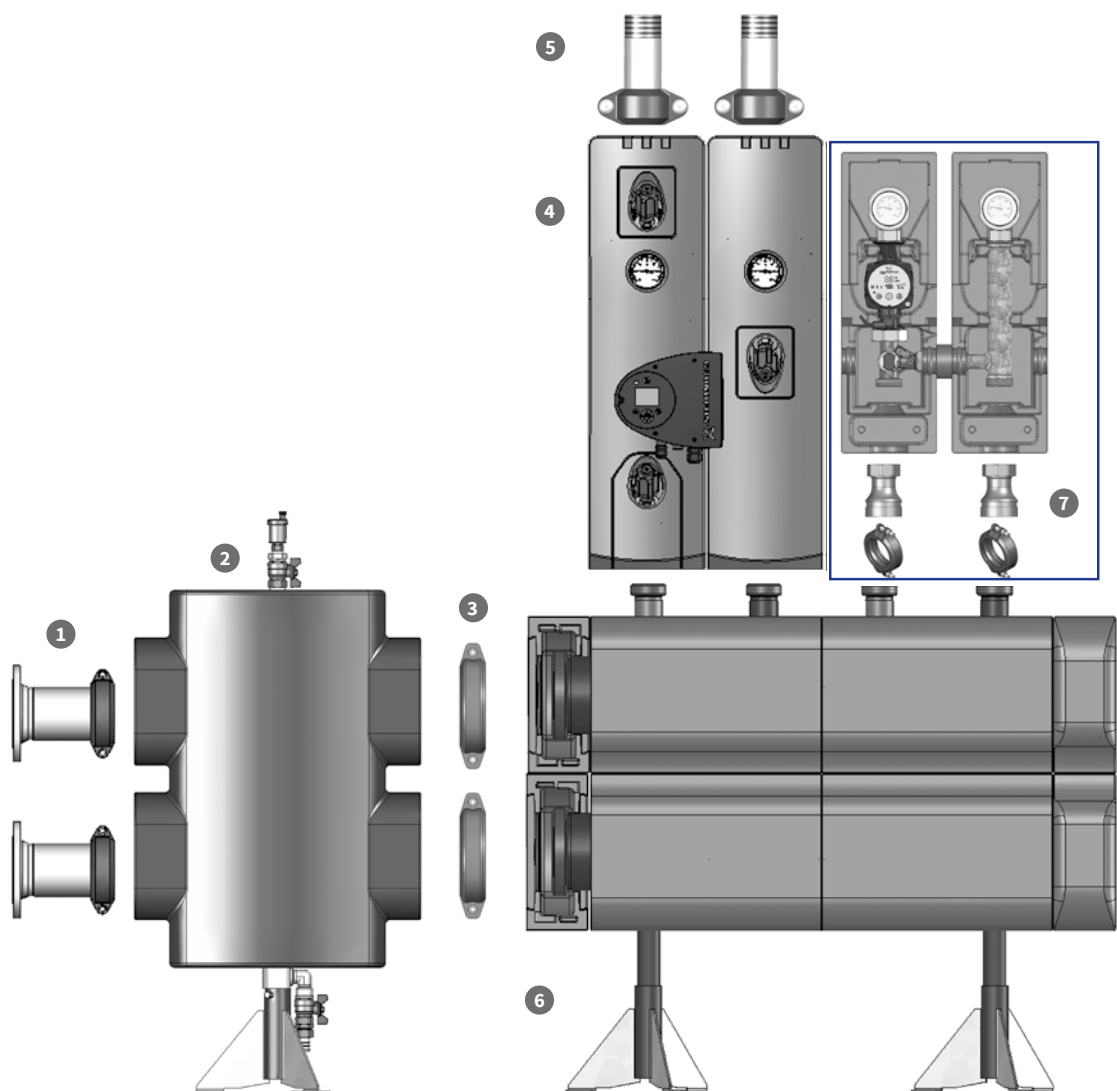


The most essential hydraulic diverter is contained in the "boiler guard" (5) (further information on page 98), to which the heating manifolds can then be connected. When using the boiler guard, we recommend the use of the S-shaped connection sets. This is made for flow line sensors. It contains 2 pairs of Victaulik clips. Alternatively, the connection can be made to the heating circuits excluding boiler guard. For this application, transitions from the collector DN 65 and DN 80 are shown on page 98.

Accessories

Connection set for hydraulic diverter (3)	AI-66421.50
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Pos.	The following products are shown in Chapter 5.1 - Complete system for heating systems up to 2300 kW	Page
1	Boiler guard	92
2	Transitions from boiler guard to manifold	92
3	Manifolds (2 - circuit / 3 - circuit) plus angle connector for manifolds	93
4	(F) - pump groups UK / MK DN40 to DN60	94
5	Transitions from large manifold system to the heat generator	98
6	Transitions from FL pump groups to heating circuits	99
7	Transition screw thread only when using the manifold Pump groups V-UK (-Z) and V-MK (-Z). V pump groups and accessories are shown in Chapter 5.2 from page 101	105



Complete system for Heating systems up to 2300 kW

5.1



The **meibes large manifold system** comprises manifolds with 2 and/or 3 circuit modules (thermal separation between flow and return), pump groups and hydraulic diverter. The modular system can be combined as required.

The unit is also available as corner version. Via a 90° angle piece (optional where there is a lack of space) the modules can be linked correspondingly, with the ends of both manifold module designs each closed with a blind cover.

The pump groups can be supplied in different models from DN 25 up to DN 65 and are ready assembled – including dirt traps, shut-off valves, integral back flow limiter and insulation. They merely have to be linked up to the manifold. A meter installation fitting can be supplied as an option or integrated beforehand. There is a wide selection of high-efficiency pumps on offer.

Quick Connection System 'BigFixLock' is characterised by fast and simple installation. On installation the pipes are laid connected with a specially shaped sealing ring and grey-cast half-shells laid around the pipes, so that they lie in the pipe beadings. The half-shells fix both the pipe ends and the seal. Transitions to the mains supply are supplied as welded, pressed, or flange connection.

Your advantages

- Brief installation times, quick exchange
- Fast and simple installation with 'BigFixLock' connections
- Planning and calculation security through complete modular system from the hydraulic diverter up to the pump group
- 100% tested for sealing, for immediate use

Boiler guard, hydraulic diverter

Boiler guard

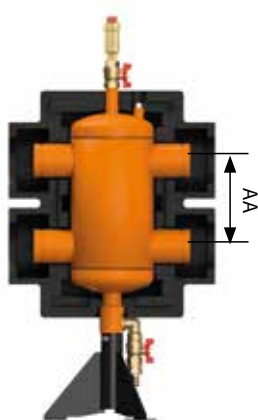
(including or excluding hydraulic diverter, incl. two magnetite separators)

Welded round tanks with connecting pieces made of seamless steel pipe with BigFixlock nut. There is a cleaning opening in the base with a 1" drain ball valve. An automatic air vent capable of being shut off and an immersion sleeve for installing a temperature sensor are located in the upper area, incl. 2 magnetite separators, height-adjustable foot, EPP insulation.

max. permissible pressure rating: PN 6 (PN 10 on request),

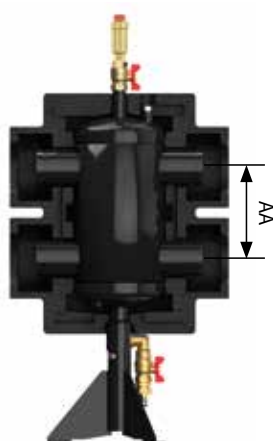
max. permissible temperature: 110 °C

The outputs and pump capacities shown refer to a 20 K temperature difference between VL and RL and to a max flow speed of 1.5 m/s.



Boiler guard including hydraulic diverter (orange)

Output	Flow rate	External ø pipe	Axial distance	Art. No.
135 kW	6 m ³ /h	60.3 mm (DN 50)	225 mm	AI-66374.50M
280 kW	12 m ³ /h	88.9 mm (DN 80)	225 mm	AI-66374.80M
700 kW	30 m ³ /h	114.3 mm (DN 100)	340 mm	AI-66374.100M
1150 kW	50 m ³ /h	168.3 mm (DN 150)	450 mm	AI-66374.152M
2300 kW	100 m ³ /h	219.1 mm (DN 200)	450 mm	AI-66374.201M



Boiler guard excluding hydraulic diverter (black)

Output	Flow rate	External ø pipe	Axial distance	Art. No.
135 kW	6 m ³ /h	60.3 mm (DN 50)	225 mm	AI-66374.52M
280 kW	12 m ³ /h	88.9 mm (DN 80)	225 mm	AI-66374.81M
700 kW	30 m ³ /h	114.3 mm (DN 100)	340 mm	AI-66374.101M
1150 kW	50 m ³ /h	168.3 mm (DN 150)	450 mm	AI-66374.154M
2300 kW	100 m ³ /h	219.1 mm (DN 200)	450 mm	AI-66374.202M

BigFixlock transitions from the boiler guard to the manifold, 1 pair

Boiler guard (HZW); manifold (V), angle (W), heat source (WEZ)



HZW External ø pipe	V, W, WEZ External ø pipe	Axial distance	Art. No.
60.3 mm (DN 50)	114.3 mm (DN 100)	225 mm	AI-66258.632
88.9 mm (DN 80)	114.3 mm (DN 100)	225 mm	AI-66258.634
114.3 mm (DN 100)	168.3 mm (DN 150)	340 mm	AI-66258.831
168.3 mm (DN 150)	168.3 mm (DN 150)	450 mm	AI-66259.81
219.1 mm (DN 200)	219.1 mm (DN 200)	450 mm	AI-66259.91

Large manifolds

Manifolds, thermally separated

(for 2 or 3 heating circuits)



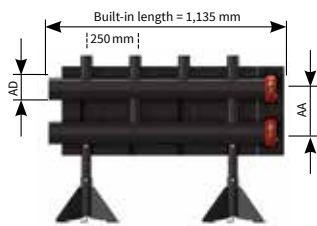
The manifolds for 2 or 3 heating circuits comprise two chambers (welded pipes) arranged one above the other with thermal separation of flow and return line.

The elements can be combined with one another as required. The boiler circuit can be connected both on the left and on the right. The junctions from the return line below are passed through the flow line pipe, so that the connections for the pump groups have identical distances from the wall. All connections are made for the use of BigFixlock clips. The upper outlet pieces to the connection of the heating circuits are made in nominal width DN 50 (Ø 60.3 mm) with BigFixlock nut. All manifolds are painted, pressure-tested, completely insulated and supplied with two height-adjustable feet. In addition, 2 BigFixlock clips and 2 end caps with plugged 1/2" sleeve sockets are included. Alternatively, KFE taps can be screwed in for drainage.

max. permissible pressure rating: PN 10

max. permissible temperature: 110 °C

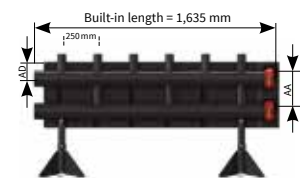
The outputs and pump capacities shown refer to a 20 K temperature difference between VL and RL and to a max flow speed of 1.5 m/s.



Manifolds for 2 heating circuits

incl. 2 BigFixlock clips with blind cover and insulation

Output	Flow rate	External ø pipe	Axial distance	Art. No.
280 kW	12 m ³ /h	114.3 mm (DN 100)	225 mm	AI-66457.0
700 kW	30 m ³ /h	168.3 mm (DN 150)	340 mm	AI-66457.2
1150 kW	50 m ³ /h	168.3 mm (DN 150)	450 mm	AI-66457.4
2300 kW	100 m ³ /h	219.1 mm (DN 200)	450 mm	AI-66457.6



Manifolds for 3 heating circuits

incl. 2 BigFixlock clips with blind cover and insulation

Output	Flow rate	External ø pipe	Axial distance	Art. No.
280 kW	12 m ³ /h	114.3 mm (DN 100)	225 mm	AI-66457.1
700 kW	30 m ³ /h	168.3 mm (DN 150)	340 mm	AI-66457.3
1150 kW	50 m ³ /h	168.3 mm (DN 150)	450 mm	AI-66457.5
2300 kW	100 m ³ /h	219.1 mm (DN 200)	450 mm	AI-66457.7

Angle connector 1 pair

incl. 2 BigFixlock clips and insulation



Output	Flow rate	External ø pipe	Axial distance	Art. No.
280 kW	12 m ³ /h	114.3 mm (DN 100)	225 mm	AI-66457.130
700/1150 kW	30/50 m ³ /h	168.3 mm (DN 150)	340/450 mm	AI-66457.330
2300 kW	100 m ³ /h	219.1 mm (DN 200)	450 mm	AI-66457.730



Signboards for manifold insulation

one pair (1 × red, 1 × blue), incl. rawl plugs and labelling strips

AI-66170

Pump groups (F)-UK DN 40 – 65 for heat distribution up to 2300 kW



Flange pump group FL-UK

(unmixed heating circuit for large manifolds up to 2,300 kW)

For completion of the large manifold system. The assembly groups are pre-assembled ex-factory, tested and completely sealed, including or excluding recirculation pump; axial distance from 250 mm as required, 3 shut-off valves, integrated backflow preventers, 3 KFE ball valves, 2 thermometers, additional connection options 1/2" in the flow and return line, dirt traps, pipework and connection parts, incl. BigFixlock transitions to the manifolds (connection DN 50 on all models), connecting pieces for the heating circuits made of seamless steel pipe corresponding to pump dimension with pipe nut; incl. EPP insulation.

Model:	Art. No.
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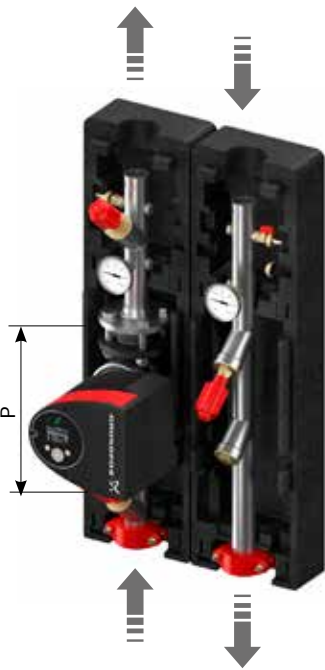
DN 40 (1 1/2")		P (see Fig. left) = 250 mm
excluding pump, with pump cut-out*/**	AI-66537EAS	
excluding pump, with pump cut-out for MAGNA3 40 -100 F**	AI-66537.21EAS	
excluding pump, with pump cut-out for Stratos 40 / 1 - 8**	AI-66537.16 WIEAS	
Grundfos pump MAGNA3 40 – 100 F (Fig. 1)	AI-66537.21	
Wilo pump Stratos 40 / 1 – 4	AI-66537.14WI	
Wilo pump Stratos 40 / 1 – 8	AI-66537.16WI	

DN 50 (2")		P (see Fig. left) = 280 mm
excluding pump, with pump cut-out*/**	AI-66538EAS	
excluding pump, with pump cut-out for MAGNA3 50 - 100 F	AI-66538.21EAS	
excluding pump, with pump cut-out for Stratos 50 / 1 - 10**	AI-66538.13WIEAS	
Grundfos pump MAGNA3 50 – 100 F	AI-66538.21	
Wilo pump Stratos 50 / 1 – 8	AI-66538.12WI	
Wilo pump Stratos 50 / 1 – 10	AI-66538.13WI	

DN 65 (2 1/2")		P (see Fig. left) = 340 mm
excluding pump, with pump cut-out*/**	AI-66539EAS	
excluding pump, with pump cut-out for MAGNA3 65 - 120 F	AI-66539.22EAS	
excluding pump, with pump cut-out for Stratos 65 / 1 - 12	AI-66539.12WIEAS	
Grundfos pump MAGNA3 65 – 120 F	AI-66539.22	
Wilo pump Stratos 65 / 1 – 12	AI-66539.12WI	

Technical specifications

FL-UK	DN40 (1 1/2")		DN50 (2")		DN65 (2 1/2")	
Dimensions ca. (per line, excluding pump)	H 920 × W 245 × D 280 mm		H 1000 × W 245 × D 280 mm		H 1000 × W 245 × D 280 mm	
Connections heating circuit (Pipe ø, incl. nut for BigFixLock)	Ø 48.3 mm		Ø 60.3 mm		Ø 76.1 mm	
Connection distributor/boiler (BigFixLock clip)	DN40 × DN50		DN50		DN65 × DN50	
Axial distance	from 250 cm		from 250 cm		from 250 cm	
Max. operating temperature	110 °C		110 °C		110 °C	
Permitted Operating overpressure	PN 10		PN 10		PN 10	
Thermometer	2 × 0 – 120 °C		2 × 0 – 120 °C		2 × 0 – 120 °C	
Backflow preventers	1 × (in the flow line)		1 × (in the flow line)		1 × (in the flow line)	
Dirt trap	1 × (in the return line)		1 × (in the return line)		1 × (in the return line)	
Built-in length of the pump	250 mm		280 mm		340 mm	
Flow coefficient value	9.75 m ³ /h		18.7 m ³ /h		31.7 m ³ /h	
Output P ¹⁾ /flow rate V	P	V	P	V	P	V
Magna3 xx-100 F or 120F	147/220 kW	6.3 m ³ /h	184/276 kW	7.9 m ³ /h	582/872 kW	25 m ³ /h
Stratos xx / 1 – 4	49/73 kW	2.1 m ³ /h	167/251 kW	7.2 m ³ /h		
Stratos xx / 1 – 8	126/188 kW	5.4 m ³ /h	184/276 kW	7.9 m ³ /h		
Stratos xx / 1 – 10 or 12					570/855 kW	24.5 m ³ /h



5

*) For selected pumps of the makes Grundfos and Wilo.

**) Suitable flange spacers for length compensation for Grundfos Magna3 or Wilo Stratos are shown on page 105.

1) Output P in [kW] at 20 K / 30 K temperature differential and 2 mWS residual delivery head

Information note: Switching sides for flow line and return line possible.

Pump groups FL-MK DN 40 – 65 for heat distribution up to 2300 kW

NEW!
with pump
cut-out for
MAGNA3 and
Wilco Stratos

Flange pump group FL-MK

(Mixer circuit for large manifolds up to 2300 kW)

For completion of the large manifold system. The assembly groups are pre-assembled ex-factory, tested and completely sealed, including or excluding recirculation pump; axial distance 250 mm, 2 shut-off valves, integrated backflow preventers, 3-way flange mixer, 3 KFE ball cocks, 2 thermometers, additional connection options 1/2" in the flow and return line, dirt traps, pipework and connection pieces, incl. BigFixlock transitions to the manifolds (connection DN 50 for all models), connecting pieces for the heating circuits made of seamless steel pipe corresponding to pump dimension with pipe nut; incl. EPP insulation.

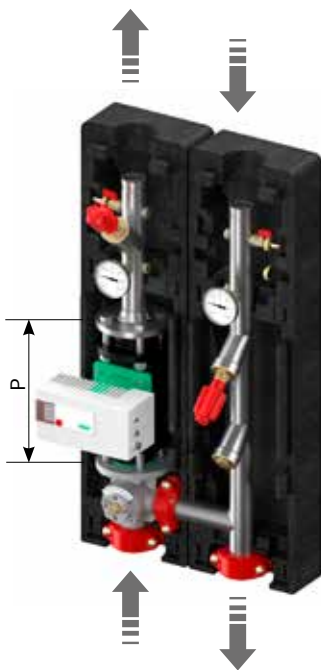


Fig. 2

*) For selected pumps of the makes Grundfos and Wilco.

**) Suitable flange spacers for length compensation for Grundfos Magna3 or Wilco Stratos are shown on page 105.

1)
Output P in [kW] at 10 K / 15 K temperature differential and 2 mWS residual delivery head

Model:	Art. No.
--------	----------

DN 40 (1 1/2")

P (see Fig. left) = 250 mm

excluding pump, with pump cut-out*/**	AI-66547EAS
excluding pump, with pump cut-out for MAGNA3 40 - 100 F**	AI-66547.21EAS
excluding pump, with pump cut-out for Stratos 40 / 1 - 8**	AI-66547.16WIEAS
Grundfos pump MAGNA3 40 - 100 F	AI-66547.21
Wilco pump Stratos 40 / 1 - 4 (Fig. 2)	AI-66547.14WI
Wilco pump Stratos 40 / 1 - 8	AI-66547.16WI

DN 50 (2")

P (see Fig. left) = 280 mm

excluding pump, with pump cut-out*/**	AI-66548EAS
excluding pump, with pump cut-out for MAGNA3 50 - 100 F	AI-66548.21EAS
excluding pump, with pump cut-out for Stratos 50 / 1 - 10**	AI-66548.13WIEAS
Grundfos pump MAGNA3 50 - 100 F	AI-66548.21
Wilco pump Stratos 50 / 1 - 8	AI-66548.12WI
Wilco pump Stratos 50 / 1 - 10	AI-66548.13WI

DN 65 (2 1/2")

P (see Fig. left) = 340 mm

excluding pump, with pump cut-out*/**	AI-66549EAS
excluding pump, with pump cut-out for MAGNA3 65 - 120 F	AI-66549.22EAS
excluding pump, with pump cut-out for Stratos 65 / 1 - 12	AI-66549.12WIEAS
Grundfos pump MAGNA3 65 - 120 F	AI-66549.22
Wilco pump Stratos 65 / 1 - 12	AI-66549.12WI

Technical specifications

FL-MK	DN40 (1 1/2")		DN50 (2")		DN65 (2 1/2")	
Dimensions ca. per line, excluding pump)	H 920 × W 245 × D 280 mm				H 1000 × W 245 × D 280 mm	
Connections heating circuit (pipe Ø, incl. nut for BigFixLock)	Ø 48.3 mm		Ø 60.3 mm		Ø 76.1 mm	
Connection manifold/boiler (BigFixLock clip)	DN40 × DN50		DN50		DN65 × DN50	
Axial distance			250 mm			
Max. operating temperature			110 °C			
Permitted Positive operating pressure			PN 10			
Thermometer			2 × 0 - 120 °C			
Backflow preventers			1 × (in the flow line)			
Dirt trap			1 × (in the return line)			
Built-in length of the pump	250 mm		280 mm		340 mm	
Flow coefficient value	8.8 m ³ /h		17.8 m ³ /h		30.0 m ³ /h	
Output P ¹⁾ /flow rate V	P	V	P	V	P	V
Magna3 xx-100 F or 120F	69/103 kW	5.9 m ³ /h	91/136 kW	7.8 m ³ /h	281/422 kW	24.2 m ³ /h
Stratos xx / 1 - 4	23/35 kW	2.0 m ³ /h	81/122 kW	7.0 m ³ /h		
Stratos xx / 1 - 8	58/87 kW	5.0 m ³ /h	91/136 kW	7.8 m ³ /h		
Stratos xx / 1 - 10 or 12					274/412 kW	23.6 m ³ /h

Pump groups LFCH / controllers



Fig. 1

Pump group LFCH, unmixed heating circuit

Pre-assembled and insulated pump group LFCH for heating circuit controller. Including flow and return line sensor and differential pressure sensor. Up to LFCH2 (DN 32) with screw thread connections. Lower outlet piece 1 1/2" M, upper outlet piece female thread 1 1/4" (DN 32). From LFCH3 (DN 40) with connecting pieces made of seamless steel pipe corresponding to pump dimension including BigFixlock nut. The pump control system plus corresponding union fittings for upper and lower connection should be ordered for it.

Type	Art. No.
LFCH2 including Magna3 32-100 (Fig. 1)	AI-66814.2H
LFCH3 including Magna3 40-120F	AI-66537.1H
LFCH4 including Magna3 50-120F	AI-66538.1H
LFCH5 including Magna3 65-120F	AI-66539.1H

Pump group LFCH-M, mixed heating circuit

Pre-assembled and insulated pump group LFCH-M for heating circuit controller with three-way mixer. Including flow and return line temperature sensor and differential pressure sensor.

Up to LFCH-M2 (DN 32) with screw thread connections. Lower outlet piece 1 1/2" M, upper outlet piece female thread corresponding to pump dimension. From LFCH-M3 (DN 40) with connecting pieces made of seamless steel pipe corresponding to pump dimension including BigFixlock nut. The pump control system plus corresponding union fittings for upper and lower connection should be ordered for it.

Type	Art. No.
LFCH-M2 including Magna3 32-100 (Fig. 2)	AI-66834.1H
LFCH-M3 including Magna3 40-120F	AI-66547.1H
LFCH-M4 including Magna3 50-120F	AI-66548.1H
LFCH-M5 including Magna3 65-120F	AI-66549.1H



Fig. 2

LogoFlowControl H / H-M

Individual controller for controlling a heating circuit pump / mixer / double pump.

LFCH / LFCH-M (Fig. 3)	AI-10575.303
------------------------	--------------

LogoFlowControl N

Microprocessor activated regulating device for filling a buffer tank.

Actuation of a 230 VAC three-point actuator and a 230 VAC wet rotor pump. Mode of operation guided by outside temperature for regulating the buffer charging temperature. Return temperature for district heating. Four-key programming. 1 x 16 place LCD display for target/actual values of metering and status values. Bus-capable on request.

LFCN	AI-10575.400
------	--------------

Control set with differential pressure sensor and temperature sensor

Control set	AI-10575.304
-------------	--------------



Fig. 3

Pump groups LFCH / controllers

LFCH-M Pump group including fast mixer & Magna 32 – 60 for small Logotherm systems up to max. 10 interface stations

Pre-assembled and insulated pump group with LFCH-M controller; for improved switching off of the network dynamics in small systems at high tank temperatures (for example with solar charging); direct immersed temperature sensor in the VL ball valve for quick reaction; fast, more constant 3-way mixer with 15 sec. Running time; outlet piece above: 1 1/2" (F) flat-sealing, below: 1 1/2" M flat-sealing; including controller, 24 V mains supply and sensor

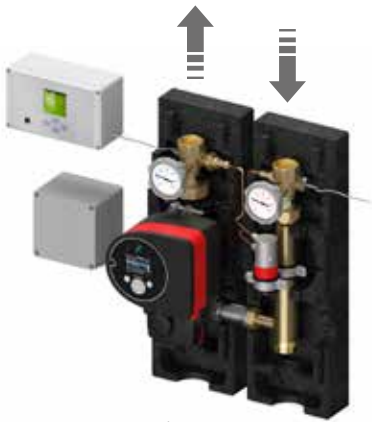
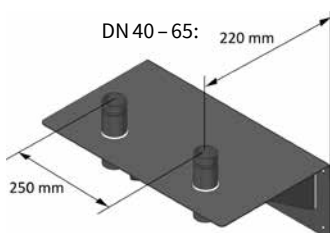


Fig. 4

Type	Art. No.
LFCH-M including Magna 32-60 (Fig. 4)	AI-66834H1S

Wall bracket for the pump groups



Type	Art. No.
BigFixlock DN 40 incl. 2 BigFixlock clips DN 40 / DN 40	AI-16335.71
BigFixlock DN 50 incl. 2 BigFixlock clips DN 50 / DN 50	AI-16335.72
BigFixlock DN 65 incl. 2 BigFixlock clips DN 65 / DN 65	AI-16335.73

Information note: Wall bracket for V pump groups are shown on page 104

Union fittings for heat distribution up to 2300 kW

Union fittings to the heat generator (WEZ) BigFixlock, 1 pair

Manifolds /HZW External ø Pipe	WEZ External ø Pipe	Art. No.
60.3 mm (DN 50)	48.3 mm (DN 40)	AI-66259.23
60.3 mm (DN 50)	60.3 mm (DN 50)	AI-66259.31
88.9 mm (DN 80)	76.1 mm (DN 65)	AI-66259.532
88.9 mm (DN 80)	88.9 mm (DN 80)	AI-66259.51
114.3 mm (DN 100)	114.3 mm (DN 100)	AI-66259.61
168.3 mm (DN 150)	141.3 mm (DN 125)	AI-66259.832
168.3 mm (DN 150)	168.3 mm (DN 150)	AI-66259.81
219.1 mm (DN 200)	219.1 mm (DN 200)	AI-66259.91



BigFixlock Welding end, 1 pair

60.3 mm (DN 50)	48.3 mm (DN 40)	AI-66259.371
60.3 mm (DN 50)	60.3 mm (DN 50)	AI-66259.372
88.9 mm (DN 80)	76.1 mm (DN 65)	AI-66259.572
88.9 mm (DN 80)	88.9 mm (DN 80)	AI-66259.573
114.3 mm (DN 100)	114.3 mm (DN 100)	AI-66259.675
168.3 mm (DN 150)	139.7 mm (DN 125)	AI-66259.872
168.3 mm (DN 150)	168.3 mm (DN 150)	AI-66259.873
219.1 mm (DN 200)	219.1 mm (DN 200)	AI-66259.972



BigFixlock Flange PN 6, 1 pair

60.3 mm (DN 50)	Flange DN 40	AI-66259.391
60.3 mm (DN 50)	Flange DN 50	AI-66259.392
88.9 mm (DN 80)	Flange DN 65	AI-66259.592
88.9 mm (DN 80)	Flange DN 80	AI-66259.593
114.3 mm (DN 100)	Flange DN 100	AI-66259.695
168.3 mm (DN 150)	Flange DN 125	AI-66259.892
168.3 mm (DN 150)	Flange DN 150	AI-66259.893
219.1 mm (DN 200)	Flange DN 200	AI-66259.992



BigFixlock Welding end with insulation, 1 pair, when using without boiler guard

Manifolds /HZW External ø Pipe	WEZ External ø Pipe	Axial distance	Art. No.
114.3 mm (DN 100)	48.3 mm (DN 40)	225 mm	AI-66258.671
114.3 mm (DN 100)	60.3 mm (DN 50)	225 mm	AI-66258.672
114.3 mm (DN 100)	76.1 mm (DN 65)	225 mm	AI-66258.673
114.3 mm (DN 100)	88.9 mm (DN 80)	225 mm	AI-66258.674
168.3 mm (DN 150)	114.3 mm (DN 100)	340 / 450 mm	AI-66258.871
168.3 mm (DN 150)	139.7 mm (DN 125)	340 / 450 mm	AI-66258.872
168.3 mm (DN 150)	168.3 mm (DN 150)	340 / 450 mm	AI-66258.873
219.1 mm (DN 200)	219.1 mm (DN 200)	450 mm	AI-66258.972



BigFixlock Flange PN 6 with insulation, 1 pair, when using without boiler guard

114.3 mm (DN 100)	Flange DN 40	225 mm	AI-66258.691
114.3 mm (DN 100)	Flange DN 50	225 mm	AI-66258.692
114.3 mm (DN 100)	Flange DN 65	225 mm	AI-66258.693
114.3 mm (DN 100)	Flange DN 80	225 mm	AI-66258.694
168.3 mm (DN 150)	Flange DN 100	340/450 mm	AI-66258.891
168.3 mm (DN 150)	Flange DN 125	340/450 mm	AI-66258.892
168.3 mm (DN 150)	Flange DN 150	340/450 mm	AI-66258.893
219.1 mm (DN 200)	Flange DN 200	450 mm	AI-66258.992



Other transitions on request! When using the boiler guard, transitions without insulation must be selected. Connections directly from the manifold to the heat generator (without boiler guard) can be selected in insulated model.

Accessories for heat distribution up to 2300 kW



Shut-off set for FL-UK with insulation and **BigFixlock** coupling to the additional shut-off valve between pump groups and large manifolds, construction height 370 mm, with one shut-off valve

Pump group	Connection to the heating circuit	Art. No.
DN 40	AD 48.3 mm	AI-66537EWI
DN 50	AD 60.3 mm	AI-66538EWI
DN 65	AD 76.1 mm	AI-66539EWI



Shut-off set for FL-MK with insulation and **BigFixlock** coupling to the additional shut-off valve between pump groups and large manifolds, construction height 370 mm, with two shut-off valves

DN 40	AD 48.3 mm	AI-66547EWI
DN 50	AD 60.3 mm	AI-66548EWI
DN 65	AD 76.1 mm	AI-66549EWI



Meter installation fitting for large manifold pump groups

as extension to the assembly outside the flange pump group FL-UK / FL-MK

DN 40	AI-61825.40Z
DN 50	AI-61825.50Z
DN 65	AI-61825.65Z



Flange spacer for large manifold pump groups

for length compensation for Grundfos Magna3 or Wilo Stratos

Model for length		Art. No.
220 mm for UK & MK DN40 X 30	1 item	AI-45102.015
240 mm for UK DN50 X 40	1 pair	AI-45102.016
240 mm for MK DN50 X 40	1 pair	AI-45102.017
280 mm for UK DN65 X 60	1 pair	AI-45102.018
280 mm for MK DN65 X 60	1 pair	AI-45102.019

Union fittings to the heating circuit

BigFixlock - Bends, 1 pair



DN 40	48.3 mm	AI-66259.245
DN 50	60.3 mm	AI-66259.345
DN 65	76.1 mm	AI-66259.445

BigFixlock - Connection clip, 1 pair



DN 40	48.3 mm	AI-66259.21
DN 50	60.3 mm	AI-66259.31
DN 65	76.1 mm	AI-66259.41

BigFixlock - Male thread, 1 pair



DN 40	R 1 1/2" M	AI-66259.26
DN 50	R 2" M	AI-66259.36
DN 65	R 2 1/2" M	AI-66259.46

BigFixlock - Welding end, 1 pair



DN 40	48.3 mm	AI-66259.27
DN 50	60.3 mm	AI-66259.372
DN 65	76.1 mm	AI-66259.47

BigFixlock - Press connection C-steel with M contour, 1 pair



DN 40	42 mm	AI-66259.28
DN 50	54 mm	AI-66259.38

Servomotor

[1] for FL-MK group DN40/50, 230 V/50 Hz, 15 Nm	AI-66341.6
[2] for FL-MK group DN65, 230 V/50 Hz, 20 Nm running time 130 sec. for 90°*	AI-66345.7
[3] for FL-MK groups DN 40 / 50 / 65, 24 V, 0 – 10V actuation	AI-66345.8



**The following products are shown in Chapter 5.2 -
Complete system for heating systems up to 100 kW**

	Page
Pump groups V-UK DN 25 - 32	102
Pump groups V-MK DN 25 - 32	103
Pump groups with meter installation fitting V-UK-Z / V-MK-Z DN 25 - 32	104
Accessories for large manifold or in system up to 100 kW	105
NEW! MeiTronic - weather-controlled system control	106

Complete system for Heating systems up to 100 kW

5.2



The **meibes system for heating systems up to 100 kW** comprises a manifold, pump groups, quick screw fittings and hydraulic diverter. The modular system can be combined as required. The pump groups can be supplied in various models from DN25 / DN32 ready assembled and insulated.

They merely have to be linked up to the manifold. A meter installation fitting can be supplied as an option or integrated beforehand. There is a wide selection of high-efficiency pumps on offer.



Your advantages

- *Brief installation times and quick exchange*
- *Planning and calculation security through complete construction kit system from the hydraulic diverter up to the pump group*
- *100% tested for sealing, for immediate use*

Pump groups V-UK DN 25 – 32

Manifold pump group V-UK

(suitable for unmixed heating circuit for large manifolds or in system up to 100 kW)

Complete including or excluding recirculation pump (EL 180 mm) with connection cable; two ball valves (return side with integral back flow limiter (with DN25 and DN32 manual set); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); one pump ball valve with Meibes flange; EPP insulation; axial distance from 175 mm as required; lower outlet 1 1/2" M flat-sealing, upper outlet piece with female thread corresponding to pump dimension.



Model:	Art. No.
--------	----------

DN 25 (1")

excluding pump	AI-66813EA
including Grundfos UPM3 Hybrid 25-70**	AI-66813.36
including Grundfos Alpha2.1 25-60	AI-66813.30
including Grundfos MAGNA 3 25-60	AI-66813.64
including Wilo Yonos PICO 25/1-6	AI-66813.10WI
including Wilo Stratos PARA 25 / 1-7*	AI-66813.31WI

DN 32 (1 1/4")

excluding pump	AI-66814 EA
including Grundfos UPM3 Hybrid 32-70**	AI-66814.36
including Grundfos Alpha2.1 32-60	AI-66814.30
including Grundfos MAGNA 3 32-60	AI-66814.64
including Wilo Yonos PICO 30/1-6	AI-66814.10WI
including Wilo Stratos PARA 32 / 1-7*	AI-66814.31WI

DN 32+ (1 1/4") for large flow rates

excluding pump	AI-66814.05EA
including Grundfos UPM3 Hybrid 32-70**	AI-66814.55
including Grundfos Alpha2.1 32-60	AI-66814.35
including Grundfos MAGNA 3 32-60	AI-66814.65
including Wilo Yonos PICO 30/1-6	AI-66814.15WI
including Wilo Stratos PARA 32 / 1-7*	AI-66814.35WI

*) Including additional option: Control signal 0 – 10V **) optional PWM signal cable: Page 119

Technical specifications							
V-UK / V-UK-Z	DN25 (1")		DN32 (1 1/4")		DN32 (1 1/4")		
Dimensions (per line, excluding pump)	ca. H 550 × W 175 × D 240 mm						
Connections heating circuit	1" IG		1 1/4" IG		1 1/4" IG		
Connection distributor/	1 1/2" AD (flat-sealing)						
Axial distance	from 200 mm						
Max. Operating temperature	110 °C						
Permitted Positive operating pressure	PN 10						
Thermometer	2 × 0 – 120 °C						
Backflow preventers	1 × (in the return line), 200 mm WS, adjustable					non-adjustable	
Built-in length of the pump	180 mm						
Flow coefficient value	7.2 m ³ /h		7.6 m ³ /h		11.7 m ³ /h		
Output P ¹ / flow rate V	P	V	P	V	P	V	
UPM3 Hybrid xx-70	60/91 kW	2.6 m ³ /h	63/94 kW	2.7 m ³ /h	67/101 kW	2.9 m ³ /h	
Alpha2.1 xx-60	51/77 kW	2.2 m ³ /h	53/80 kW	2.3 m ³ /h	58/87 kW	2.5 m ³ /h	
Magna3 xx-60	84/126 kW	3.6 m ³ /h	86/129 kW	3.7 m ³ /h	107/160 kW	4.6 m ³ /h	
Yonos Pico xx / 1-6	49/73 kW	2.1 m ³ /h	51/77 kW	2.2 m ³ /h	56/84 kW	2.4 m ³ /h	
Stratos Para xx / 1-7	74/112 kW	3.2 m ³ /h	77/115 kW	3.3 m ³ /h	86/129 kW	3.7 m ³ /h	

1) Output P in [kW] at 20 K / 30 K temperature differential and 2 mWS residual delivery head
 Note: Switching sides for flow line and return line possible.

Pump groups V-MK DN 25 – 32

Manifold pump group V-MK

(Suitable for mixer circuit for large manifolds or in system up to 100 kW)

Complete including or excluding recirculation pump (EL 180 mm) with connection cable; two ball valves (return side with integral back flow limiter DN25 and DN32 manual set); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); 3-way T-mixer incl. continuously adjustable bypass; EPP insulation; axial distance from 200 - 250 mm; (corrugated pipe at mixer bypass can expand by 50 mm) lower outlet piece 1 1/2" M flat-sealing, upper outlet piece with female thread corresponding to pump dimension.



Model:	Art. No.
--------	----------

DN 25 (1")

excluding pump	AI-66833EA
including Grundfos UPM3 Hybrid 25-70**	AI-66833.36
including Grundfos Alpha2.1 25-60	AI-66833.30
including Grundfos MAGNA 3 25-60	AI-66833.64
including Wilo Yonos PICO 25/1-6	AI-66833.10WI
including Wilo Stratos PARA 25/1-7*	AI-66833.31WI

DN 32 (1 1/4")

excluding pump	AI-66834EA
including Grundfos UPM3 Hybrid 32-70	AI-66834.36
including Grundfos Alpha2.1 32-60	AI-66834.30
including Grundfos MAGNA 3 32-60	AI-66834.64
including Wilo Yonos PICO 30/1-6	AI-66834.10WI
including Wilo Stratos PARA 30/1-7*	AI-66834.31WI

DN 32 + (1 1/4") for large flow rates

excluding pump	AI-66834.05EA
including Grundfos UPM3 Hybrid 32-70**	AI-66834.55
including Grundfos Alpha2.1 32-60	AI-66834.35
including Grundfos MAGNA 3 32-60	AI-66834.65
including Wilo Yonos PICO 30/1-6	AI-66834.15WI
including Wilo Stratos PARA 30/1-7*	AI-66834.35WI

*) Including additional option: Control signal 0 – 10V

***) optional PWM signal cable page 119

Technical specifications

V-MK / V-MK-Z	DN25 (1")	DN32 (1 1/4")	DN32 (1 1/4")			
Dimensions (per line, excluding pump)	ca. H 550 × W 175 × D 240 mm					
Connections heating circuit	1" IG	1 1/4" IG	1 1/4" IG			
Connection distributor/boiler	1 1/2" AD (flat-sealing)					
Axial distance	200-250 mm					
Max. Operating temperature	110 °C					
Permitted Positive operating pressure	PN 10					
Thermometer	2 × 0 – 120 °C					
Backflow preventers	1 × (in the return line), 200 mm WS, adjustable		non-adjustable			
Built-in length of the pump	180 mm					
Flow coefficient value	5.8 m ³ /h	6.1 m ³ /h	9.8 m ³ /h			
Output P ¹ / flow rate V	P	V	P	V		
UPM3 Hybrid xx-70	28/42	2.4 m ³ /h	29/44	2.5 m ³ /h	33/49	2.8 m ³ /h
Alpha2.1 xx-60	23/35	2.0 m ³ /h	24/37	2.1 m ³ /h	28/42	2.4 m ³ /h
Magna3 xx-60	37/56	3.2 m ³ /h	38/58	3.3 m ³ /h	48/72	4.1 m ³ /h
Yonos Pico xx/ 1-6	22/33	1.9 m ³ /h	23/35	2.0 m ³ /h	27/40	2.3 m ³ /h
Stratos Para xx / 1-7	34/51	2.9 m ³ /h	35/52	3.0 m ³ /h	41/61	3.5 m ³ /h

1) Output P in [kW] at 10 K / 15 K temperature differential and 2 mWS residual delivery head

Large manifold pump groups V-UK-Z / V-MK-Z DN 25

Manifold pump group V-UK-Z

(suitable for unmixed heating circuit for large manifolds or in system up to 100 kW)

Complete including or excluding recirculation pump (EL 180 mm) including connection cable; two ball valves (return side with manual set integral back flow limiter; two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); one pump ball valve with Meibes flange; EPP insulation; axial distance from 175 mm as required; lower outlet piece 1 1/2" M flat-sealing, upper outlet 1" female thread meter installation fitting with telescopic piece and reducers for WMZ 3/4" (110 installed length) and 1" (130 mm installed length, sensor sleeve 1/2"



Model:	Art. No.
--------	----------

DN 25 (1")

excluding pump	AI-66813ZEA
including Grundfos UPM3 Hybrid 25-70**	AI-66813.36Z
including Grundfos Alpha2.1 25-60	AI-66813.30Z
including Grundfos MAGNA 3 25-60	AI-66813.64Z
including Wilo Yonos PICO 25/1-6	AI-66813.10ZWI
including Wilo Stratos PARA 25/1-7*	AI-66813.31ZWI

Manifold pump group V-MK-Z

(Suitable for mixer circuit for large manifolds or in system up to 100 kW)

Complete including or excluding recirculation pump (EL 180 mm) with connection cable; two ball cocks (return side with manual set integral back flow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); a 3-way T-mixer incl. continuously adjustable bypass; EPP insulation; axial distance from 200 (up to 250 mm (corrugated pipe at mixer bypass can expand by 50 mm)); lower outlet piece 1 1/2" M flat-sealing, upper outlet 1" female thread.



DN 25 (1")

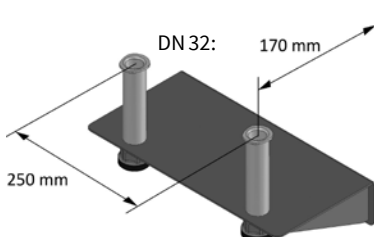
excluding pump	AI-66833ZEA
including Grundfos UPM3 Hybrid 25-70**	AI-66833.36Z
including Grundfos Alpha2.1 25-60	AI-66833.30Z
including Grundfos MAGNA 3 25-60	AI-66833.64Z
including Wilo Yonos PICO 25/1-6	AI-66833.10ZWI
including Wilo Stratos PARA 25/1-7*	AI-66833.31ZWI

*) Incl. additional option: Control signal 0 – 10V **) optional PWM signal cable: Page 119.

Wall bracket for the pump groups

Type	Art. No.
up to DN 32	AI-16335.61

Information note: Wall bracket for V pump groups is shown on page 97.



Accessories for large manifolds or in the system up to 100 kW



Transition screw thread for Meibes large manifolds

2 complete screw fittings 1 1/2" F "BigFixlock" DN 50 (60.3 mm)

AI-66305.50

Union fittings for other manifold makes

2 complete threaded joints 1 1/2" M × 1 1/2" F

AI-66305.5

Distance set with insulation and screw fittings

Installation height 90 mm, typical use with shut-off set 66833 EWI for same assembly height of the pump groups

V UK

AI-66813EWI

Shut-off set with insulation and threaded joints for additional shut-off valve between pump groups and large manifold. Installation height 90 mm, typical use as temporary blind stop or for additional shut-off valve of the V-MK

V MK

AI-66833EWI

Servomotor incl. assembly kit with 2 m cable wired for direct installation on the mixer of the V-MK, 230 V / 50 Hz, running time 140 sec., 90°, 6 Nm with emergency manual mode and visible position indicator

AI-66341

Manifolds for direct assembly of the V groups 100 kW

(axial distance 200 mm, for wall-mounted installation) EPP insulation, with 2 or 3 connection pairs upwards (1 1/2" union nut flat-sealing), 1 connection pair downwards (2" union nut flat-sealing with screw-in part 2" M × 1 1/2" F), for assembling the pump groups V-UK, V-MK; complete with the necessary threaded joints and connection parts, two 1/2" sleeve sockets on the side for e.g. KFE taps, for outputs up to 100 kW (at ΔT=20 K or max. 4.5 m³/h at acceptable pressure loss)

max. permissible pressure rating: PN6 | max. permissible temperature: 110 °C

2 heating circuits

AI-66301.80

3 heating circuits

AI-66301.81

Wall bracket for manifolds up to 100 kW

1 pair, with bolts and rawl plugs

AI-66337.10

Hydraulic diverter 100 kW, incl. air, sludge and magnetite separator axial distance 200 mm, for horizontal or vertical installation, with manual air bleed device and fill and drain ball valve incl. hose nozzle and cap, immersion sleeve 3/8" F (internal diameter 10 mm) for flow line temperature sensor, screw fittings: 1 connection pair 1 1/2" M (above) / 1 1/2" F (at boiler), complete with insulation. max. permissible pressure rating: PN6, max. permissible temperature: 110 °C

Type	Output (at ΔT = 20 K)	Connection	Art. No.
for V pump groups	100 kW	1 1/2"	AI-66394.1M

Information note: Magnetite separators are shown on our spare parts list.

Meter installation fitting for [DN] 32 (1 1/4")

as extension to the installation outside the manifold pump group V-UK / V-MK DN 32

AI-61825.32Z

MeiTronic - weather-controlled system control



Fig. 1

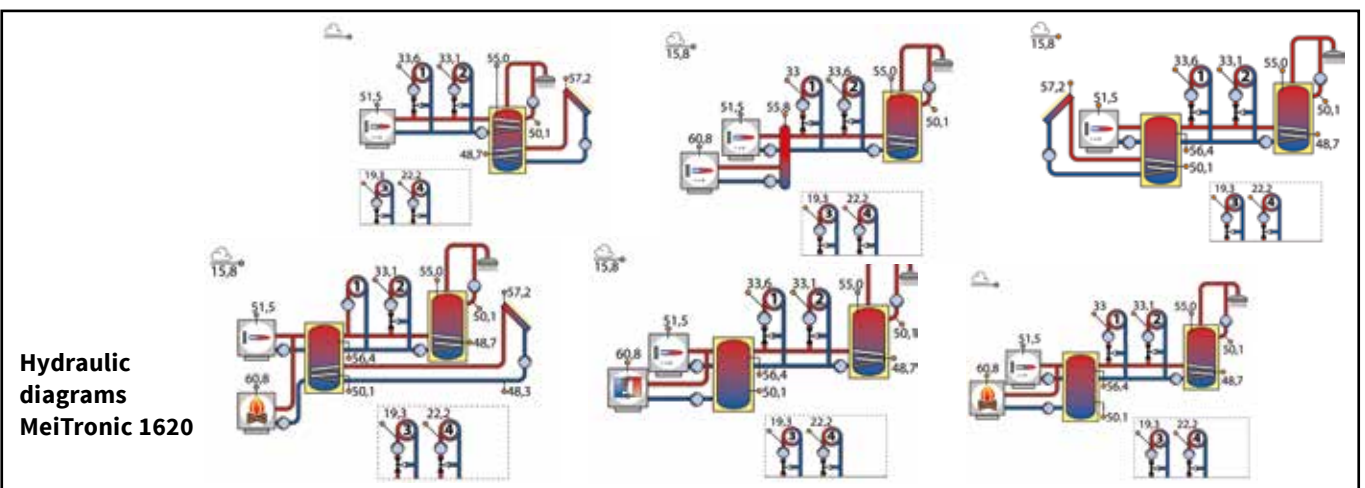
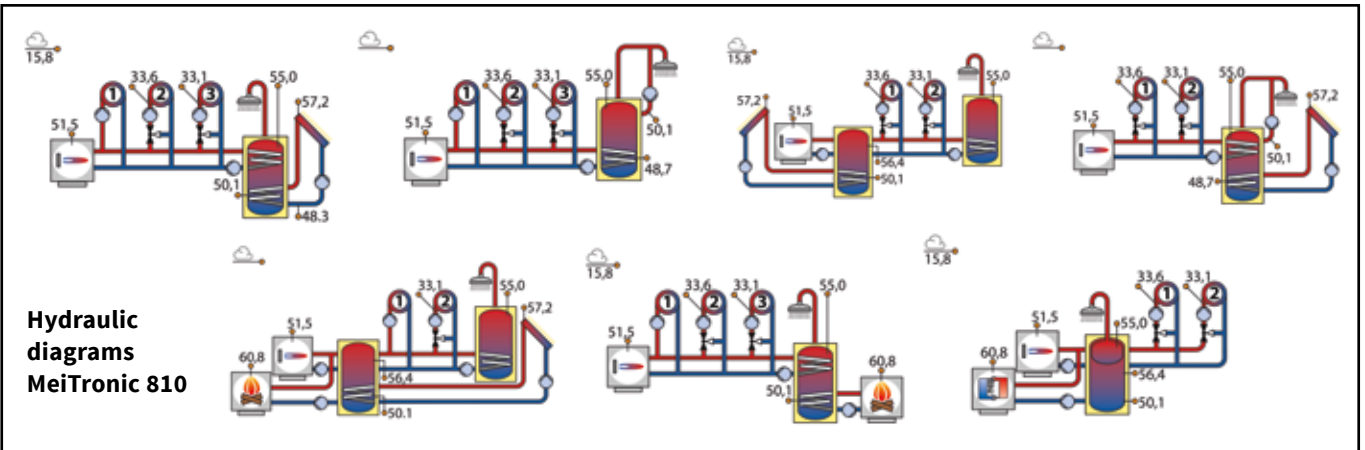
MeiTronic 810 (Fig.1) / 1620 are efficient, compact and easily operated system controllers for heating and domestic applications. MeiTronic is at the core of a modern home management system. Its attractive and elegant design means that MeiTronic can be used in the most varied building areas (e.g. hallway or living spaces) as wall-mounted assembly.

MeiTronic is a weather-controlled system controller for controlling up to 2 heat generators (including biomass and solar heat). For heat distribution, MeiTronic provides the option of actuating several mixed and unmixed heating circuits plus filling hot water / buffer tanks incl. controlling a domestic water circulation system. MeiTronic provides a clear and logical overview of the home management system through a fully graphical 3.2" colour display (240 × 320 Pixel). In addition, the current temperatures and switching states, plus animated symbols for heat generators, pumps, mixers and other consumers, are visualised. The text display and operation via the turn and press encoder with 4 keys make for simple and intuitive use. The integrated micro USB interface offers the option of system adjustments, in order to keep functions and efficiency always up to date.



Fig. 2

MeiTronic RC (Fig. 2) is a room thermostat communicating via CAN-bus for precise room temperature control of a reference room and thus for controlling the pump circuit connected. MeiTronic RC offers the option of controlling each heating circuit individually to the desired room temperature (incl. party and lowering function). Setting the desired basic temperature is done by MeiTronic 810 or MeiTronic 1620 and can be adjusted via the MeiTronic RC upwards or downwards according to need within a range of +/-3 °C. The pre-configured hydraulic schemas plus pre-set parameters of the MeiTronic permit fast and simple installation and commissioning.



MeiTronic - weather-controlled system controller

**NEW
in the
Range!**

Kit features	810	1620	
Dimensions in mm (dimensions of the housing must be taken into account)	Width	220	440
	Height		220
	Depth		60
Cable entries		below	
power supply		230 V / 50 Hz	
Protection code		IP	
Power supply		230 V / 50 Hz	
Temperature sensors to be used		PT 1000	
Weather-controlled heating system controller		✓	
Ethernet connection for LAN network ¹		✓	
CAN system bus for coupling with MeiTronic RC		✓	
Micro-USB connection for PC access (use e.g. for configuration updates)		✓	
Full graphic TFT colour display 3.2" (240 × 320 pixel)		✓	
Operation via turn and press encoder plus 4 keys		✓	
Opentherm as optional additional module		on request	

1) There are device and supply costs for the use of the external access.

Model	Fig.	Art. No.
MeiTronic 810	Fig. 1	AI-10143.20
MeiTronic 1620		AI-10143.21
MeiTronic RC (H × W × D = 82 × 82 × 23mm)	Fig. 3	AI-10143.22
Temperature sensor PT 1000 (sensor Ø=6 mm × l= 50 mm incl. 2.5 m silicon cable)		AI-45111.52
Outside temperature sensor (IP54) PT 1000		AI-10560.34

Operation and efficiency functions

Energy generator	
adjustable minimum/maximum temperature	✓
adjustable charging temperature for producing hot water	✓
adjustable minimum pause time	✓
Meter for energy generator starts	✓
Graduated switching via fixed integrated switch	✓

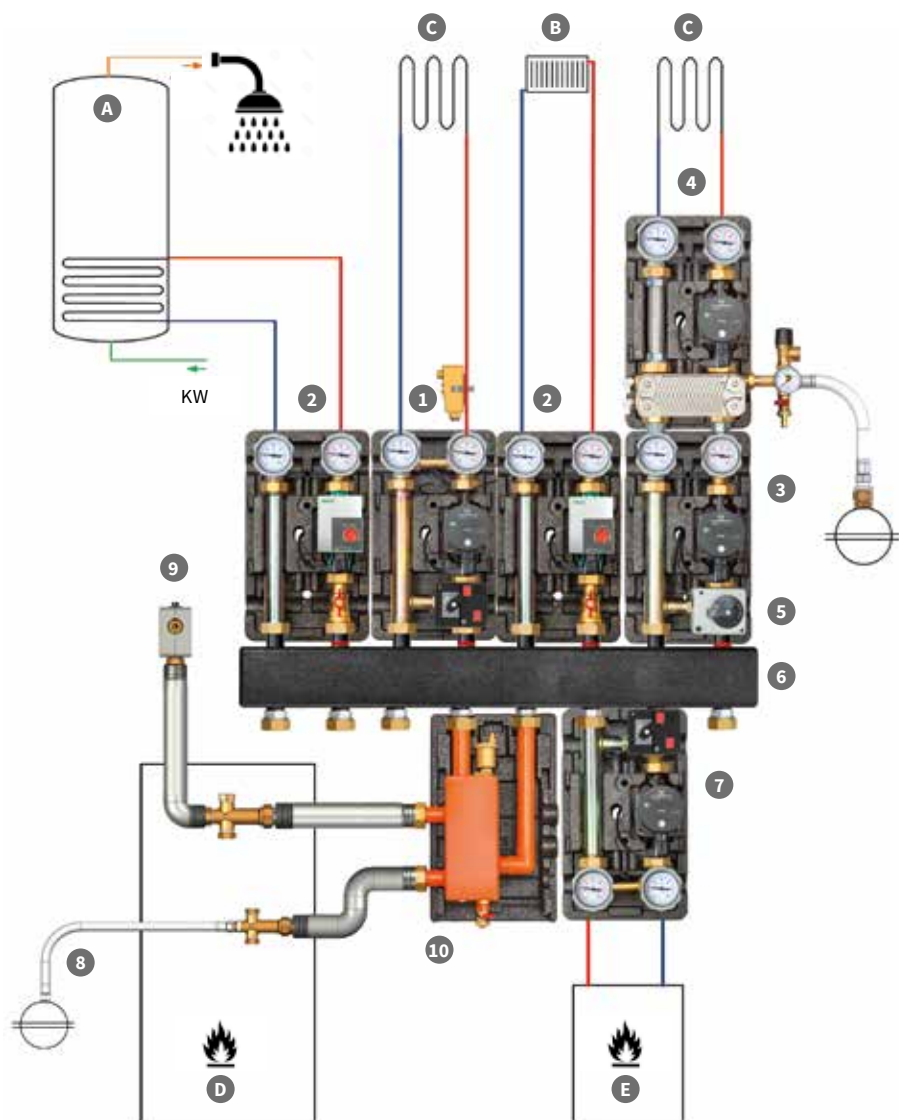
Heating circuits and other functions	
8 operation modes adjustable (OFF, Automatic, Day, Night, Frost, Summer, Underfloor, Emissions)	✓
Separate operating hours metering for each output	✓
Adjustment (+/-10 K) for each sensor can be set	✓
for each heating circuit separately adjustable heating curve (4-point definition)	✓
Anti-Legionella Circuit	✓
simple solar functionality	✓
Recording holiday ranges and holidays	✓

Protection functions	
Room frost protection (linked to at least 1 × room control)	✓
AT frost protection	✓

Control and service functions	
Sensor monitoring	✓
Sensor balance (+10 / -10 K)	✓
Operating hours meter for outputs	✓
Fault list	✓

For simple implementation we naturally offer you many other products from our company such as e.g. pump groups, temperature sensors, etc.

Pos.	The following products are shown in Chapter 5.3 - Complete system for heating systems up to 70 kW	Page
1	Pump group UK	112
2	Pump group MK	113
3	Constant value control set	115
4	Return line boost	116
5	Separation system	118
6	Servomotor	119
7	Manifold	120
8	Connection set for expansion vessel	120
9	Safety group	120
10	Boiler guard	120



Schematic diagram

A Domestic water tank B Radiator C Underfloor heating D Heat generator E Solid fuel boiler

Complete system for Heating systems up to 70 kW

5.3



Meibes boiler connection components can be used for all boiler types and makes with pump groups and components up to 70 kW. The system comprises manifolds, pump groups of Edition 8 and boiler guard (optionally including or excluding hydraulic diverter).

The pump groups for unmixed heating circuits (UK); mixed heating circuits (MK); separation system; fixed set-point controller set and return boost are part of the product family of Edition 8.

The pump groups are compatible with the meibes boiler connection programme with 125 mm axial distance such as manifolds, boiler guard, etc. The 3-part EPP insulation in the high-quality design improves the insulation just as the induction of air in high-efficiency pumps.

All meibes pump groups of Edition 8 are available in the same external appearance (insulation shells), despite the varying functions.

Your advantages

- *Fast and simple installation*
- *100% tested for sealing, for immediate use*
- *Can be combined without additional components*
- *All models in quick mounting system, flat-sealing*
- *Complete range up to 1 1/4", same dimensions + look*
- *Fully equipped with wall bracket*

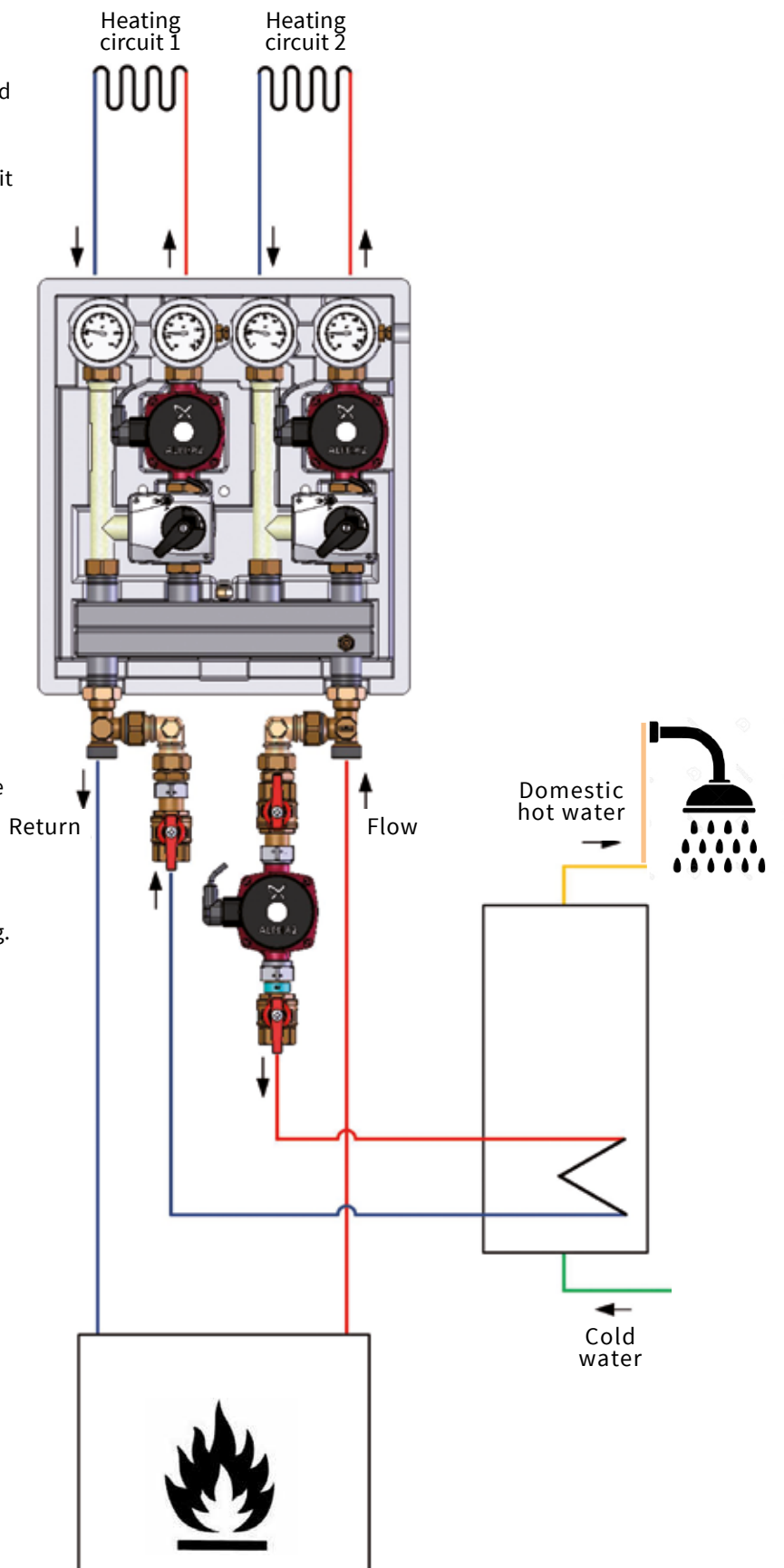
Kombimix - Compact pump groups

The product:

- Heating capacity:
up to 51 KW in the unmixed heating circuit
up to 24 KW in the mixed heating circuit
- hydraulically adjustable joint manifolds
- Fully assembled, tested and heat insulated
- Sensor immersion pocket in the manifold and flow line ball valve
- Mixer circuit with servomotor

Your advantage:

- Different kit options
- Switchable manifolders between standard and lower differential pressure Model
- Compact EPP insulation
- Possible connection to another heating circuit e.g. to tank charging



Kombimix - Compact pump groups

Compact pump groups – Kombimix

Heat insulated, compact pump group for two different or similar heating circuits (UK / MK), with joint manifolds, connection options for temperature sensors, backflow preventers in the respective flow line, contact thermometer integrated in the handles of flow line and return line, third heating circuit e.g. for storage tank charging in the optional accessories, e.g. for heating domestic water



Fig. 1

Model	Art. No.
-------	----------

Model with 2 UK

Including Grundfos UPM3 Hybrid 15-70**	AI-26103.3
Including Wilo Yonos PARA RS 15/6	AI-26103.2

Model with UK / MK, with 1 servomotor

Including Grundfos UPM3 Hybrid 15-70**	Fig. 1	AI-26102.3
Including Wilo Yonos PARA RS 15/6		AI-26102.2

Model with 2 MK, with 2 servomotors

Including Grundfos UPM3 Hybrid 15-70**	AI-26101.3
Including Wilo Yonos PARA RS 15/6	AI-26101.2

Optional accessories

Tank charging set* 1" excluding pump	AI-66356.84
Tank charging set* 1" including UPM3 Hybrid 15-70**	Fig. 2 AI-66356.85
Tank charging set* 1" including Yonos PARA RS 15/6	AI-66356.86

*) Additional unmixed heating circuit, only with heat generators without internal pump

**) Optional PWM signal cable: Page 119



Fig. 2

Technical specifications

	UK / UK		UK / MK		MK / MK	
Dimensions	ca. H 460 × W 410 × D 260 mm					
Connections heating circuit	3/4" F					
Axial distance heating circuit	90 mm					
Boiler connection	1" M					
Axial distance boiler	270 mm					
Max. Operating temperature	110 °C					
Permitted Positive operating pressure	PN 6					
Thermometer	4 × 0 – 120 °C					
Backflow preventers	2 × (in each return line), 200 mm WS, adjustable					
Heat exchanger	Cu-soldered stainless steel plate heat exchanger					
Flow coefficient MK	2.9 m ³ /h					
Flow coefficient UK/ tank charging set	5.1 m ³ /h					
Built-in length of the pump	130 mm					
	UK		MK		Tank charging set	
Output P/flow rate V ¹⁾	P	V	P	V	P	V
UPM3 Hybrid 15-70	51/77 kW	2.20 m ³ /h	24/37 kW	2.10 m ³ /h	23/45 kW	2.60 m ³ /h
Yonos Para RS 15/6	43/65 kW	1.85 m ³ /h	20/31 kW	1.75 m ³ /h	26/38 kW	2.20 m ³ /h

UK: Output P at 20/30 K temperature differential and 2 mWS residual delivery head. MK: Output P at 10/15 K temperature differential and 2 mWS residual delivery head. 1) Tank charging set: Output P at 10/15 K temperature differential and 0.5 mWS residual delivery head.

Pump groups UK

Meibes pump group Edition 8 UK

(unmixed heating circuit and tank charging suitable for manifolds up to 70 kW or wall-mounted installation)

Complete including or excluding recirculation pump (EL 180 mm) with connection cable; two ball valves (return line side with manual set integral back flow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); a pump ball valve with Meibes flange; EPP insulation; axial distance 125 mm; lower outlet piece 1 1/2" M flat sealing, upper outlet piece with female thread corresponding to pump dimension; wall bracket



Model:	Art. No.
DN 25 (1")	
1" excluding pump	AI-66811EA
1" including Grundfos UPM3 Hybrid 25-70*	AI-66811.36
1" including Grundfos Alpha 2.1 25-60	AI-66811.30
1" including Wilo Yonos PICO 25 / 1-6	AI-66811.10WI
1" including Wilo Stratos PICO 25/6	AI-66811.32WI
DN 32 (1 1/4")	
1 1/4" excluding pump	AI-66812EA
1 1/4" including Grundfos UPM3 Hybrid 32-70*	AI-66812.36
1 1/4" including Grundfos Alpha 2.1 32-60	AI-66812.30
1 1/4" including Wilo Yonos PICO 30 / 1-6	AI-66812.10WI
1 1/4" including Wilo Stratos PICO 30/6	AI-66812.32WI

*) Optional PWM signal cable: Page 119.

Technical specifications		
DN	25	32
upper connection	G 1" F	G 1 1/4" F
lower connection	G 1 1/2" M (flat-sealing)	
Axial distance	125 mm	
Components made of	steel, brass, EPP insulation	
Dimensions	ca. H 420 × W 250 × D 255 mm	
Sealing materials	PTFE, EPDM	
Temperature read-out	0 up to 120 °C	
Operating temperature	up to 110 °C	
Operating pressure	PN 6	
Flow coefficient value	7.2 m³/h	7.6 m³/h

Information note: Switching sides for flow line and return line possible.

Pump groups MK

Meibes pump group Edition 8 MK

(mixed heating circuit suitable for manifolds up to 70 kW or wall-mounted installation)

Complete including or excluding recirculation pump (EL 180 mm) with connection cable; two ball valves (return line side with manual set integral back flow limiter); two contact thermometers integrated in the ball valve handle (indicated range 0 – 120 °C); 3-way T-mixer with continuously adjustable bypass; EPP insulation; axial distance 125 mm; lower outlet piece 1 1/2" M flat sealing, upper outlet piece with female thread corresponding to pump dimension; wall bracket



Model:	Art. No. (VL left)	Art. No. (VL right)
--------	--------------------	---------------------

DN 25 (1")

1"	excluding pump	AI-L66831EA	AI-66831EA
1"	including Grundfos UPM3 Hybrid 25-70*	AI-L66831.36	AI-66831.36
1"	including Grundfos Alpha 2.1 25-60	AI-L66831.30	AI-66831.30
1"	including Wilo Yonos PICO 25/1-6	AI-L66831.10WI	AI-66831.10WI
1"	including Wilo Stratos PICO 25/6	AI-L66831.32WI	AI-66831.32WI

DN 32 (1 1/4")

1 1/4"	excluding pump	AI-L66832EA	AI-66832EA
1 1/4"	including Grundfos UPM3 Hybrid 32-70*	AI-L66832.36	AI-66832.36
1 1/4"	including Grundfos Alpha 2.1 32-60	AI-L66832.30	AI-66832.30
1 1/4"	including Wilo Yonos PICO 30/1-6	AI-L66832.10WI	AI-66832.10WI
1 1/4"	including Wilo Stratos PICO 30/6	AI-L66832.32WI	AI-66832.32WI

*) Optional PWM signal cable: Page 119.

Changeover for changing the flow coefficient value

For optimal control behaviour of the mixer in systems with heat generators that experience severe pressure loss (e.g. wall-mounted boiler). The flow coefficient of the changeover should correspond approximately to the flow coefficient of the heat generator.



Model:	Art. No.
Flow coefficient 2.9	AI-58041.047
Flow coefficient 5.5	AI-58041.048

Technical specifications

DN	25	32
upper connection	G 1" F	G 1 1/4" F
lower connection	G 1 1/2" M (flat-sealing)	
Axial distance	125 mm	
Components made of	steel, brass, EPP insulation	
Dimensions	ca. H 420 × W 250 × D 255 mm	
Sealing materials	PTFE, EPDM	
Temperature read-out	0 up to 120 °C	
Operating temperature	up to 110 °C	
Operating pressure	PN 6	
Flow coefficient value	5.8 m ³ /h	6.1 m ³ /h

Information note: In 2 designs (flow line left or flow line right) other accessories on page 119.

Pump groups with weather-controlled heating system controller / meter installation fitting

Meibes pump group Edition 8 MK with weather-controlled heating system controller of the mixer heating circuit

Servomotor with integrated temperature regulation incl. assembly kit. With cable wired for direct attachment to the mixer pre-assembled, 230 V~, 50 Hz, running time 150 sec., 90°, 10 Nm; adjustment range 20 – 80 °C with emergency manual mode and visible position indicator; temperature sensor D = 6 mm incl. cable wired with actuator.

A contact thermostat permits safety temperature limiting. On exceeding the specified flow line temperature, the pump is switched off.



Model:	Art. No.
1" excluding pump	AI-45890.8EA
1" including Grundfos UPM3 Hybrid 25-70*	AI-45890.86
1" including Grundfos Alpha 2.1 25-60	AI-45890.80
1" including Wilo Yonos PICO 25 / 1-6	AI-45890.8WI
1" including Wilo Stratos PICO 25/6	AI-45890.82WI

Optional room unit is shown on page 119.

5

Meibes pump group Edition 8 UK-Z (unmixed heating circuit with meter installation fitting)

Meter installation fitting with telescopic piece, sensor sleeve 1/2", pipework and threaded joint parts, all completely assembled.



1" excluding pump	AI-66811.ZEA
1" including Grundfos UPM3 Hybrid 25-70*	AI-66811.36Z
1" including Grundfos Alpha 2.1 25-60	AI-66811.30Z
1" including Wilo Yonos PICO 25 / 1-6	AI-66811.10ZWI
1" including Wilo Stratos PICO 25/6	AI-66811.32ZWI

Meibes pump group Edition 8 MK-Z (mixed heating circuit with meter installation fitting)



1" excluding pump	AI-66831.ZEA
1" including Grundfos UPM3 Hybrid 25-70*	AI-66831.36Z
1" including Grundfos Alpha 2.1 25-60	AI-66831.30Z
1" including Wilo Yonos PICO 25 / 1-6	AI-66831.10ZWI
1" including Wilo Stratos PICO 25/6	AI-66831.32ZWI

*) Optional PWM signal cable: Page 119 | Suitable heat flow meters are shown from page 52.

Constant value control set

Meibes constant value control set Edition 8 with electronically controlled actuator

The constant value control set has been designed for a mixed heating circuit with constant flow line temperature, with a mixer for the underfloor heating. The flow line temperature can be set on the 3-way T-mixer. The adjustable bypass allows water from the return line to be added to the flow line. The contact thermostat supplied serves as safety temperature monitor (STW).

Recirculation pump (EL 180 mm) with connection cable, two ball valves (with manual set integral back flow limiter in the return line), two contact thermometers, 3-way T-mixer with adjustable bypass, contact thermostat, wall bracket, return pipe, with servomotor (230 V~, 50 Hz) with integrated temperature regulation (adjustment range 0 °C – 95 °C); flow line temperature sensor in the flow line ball valve, EPP insulation, all fully assembled.



Model:	Art. No.
1" excluding pump	AI-45890.5EA
1" including Grundfos UPM3 Hybrid 25-70*	AI-45890.56
1" including Grundfos Alpha 2.1 25-60	AI-45890.50
1" including Wilo Yonos PICO 25 / 1-6	AI-45890.5WI
1" including Wilo Stratos PICO 25/6	AI-45890.52WI

*) Optional PWM signal cable: Page 119.

Technical specifications				
MK / MK-Z / Constant value control set	DN25 (1")		DN32 (1 ¼")	
Dimensions (per line, excluding pump)	ca. H 420 × W 250 × D 255 mm			
Connections heating circuit	1" IG		1 ¼" IG	
Connection distributor/boiler	1 ½" AD (flat-sealing)			
Axial distance	125 mm			
Max. Operating temperature	110 °C			
Permitted Positive operating pressure	PN 10			
Thermometer	2 × 0 – 120 °C			
Backflow preventers	1 × (in the Return line), 200 mm WS, adjustable			
Built-in length of the pump	180 mm			
Flow coefficient value	5.8 m ³ /h		6.1 m ³ /h	
Output P ¹⁾ / flow rate V	P	V	P	V
UPM3 Hybrid xx-70	28/42 kW	2.4 m ³ /h	29/44 kW	2.5 m ³ /h
Alpha2.1 xx-60	23/35 kW	2.0 m ³ /h	24/37 kW	2.1 m ³ /h
Yonos Pico xx/ 1-6	22/33 kW	1.9 m ³ /h	23/35 kW	2.0 m ³ /h
Stratos Pico xx / 6	24/37 kW	2.1 m ³ /h	26/38 kW	2.2 m ³ /h

1) Output P at 10 K / 15 K temperature differential and 2 mWS residual delivery head actuator with constant value control set: 230 V, Integrated fixed value control (Details: see Art. No. AI-66341.33)

Return line boost

Meibes pump group Edition 8 with return line boost

The pump group with return line boost is used with wood boilers to avoid tarring (hard soot). This heat insulating and combustible layer occurs at temperatures $55\text{ }^{\circ}\text{C} - 65\text{ }^{\circ}\text{C}$ on components in contact with smoke emissions as a result of going below the dew point. If the return line to the boiler is too cold, hot flow line water is added through a bypass. When firing up, wood burners soon reach non-critical temperatures. Cold heating water, e.g. from a buffer accumulator, is pre-heated to $55\text{ }^{\circ}\text{C} - 65\text{ }^{\circ}\text{C}$. A thermometer in the boiler return line facilitates a fast function check. With pipe connections in DN 25 or DN 32 for up to 57 kW output (20 K, 2 mWS residual delivery head)

Meibes pump group Edition 8 with return line boost, electronically controlled, 2-line model



The return line boost is installed below the manifold. Depending on the temperature of the return line at the boiler inlet, flow line water is added to the boiler return line. This means that the boiler reaches operating temperature faster and during operation the return line temperature does not fall below a pre-adjustable value.

The aim is to avoid condensation in the combustion chamber (raise service life) and to limit emissions. The level of the minimum return line temperature depends on the type of boiler. Recirculation pump (EL 180 mm) with connection cable, two ball valves (with manual set integral back flow limiter in the return line), two contact thermometers, wall bracket, return pipe, with 3-way T-mixer and servomotor (230 V~, 50 Hz) with integrated temperature regulation (adjustment range $0\text{ }^{\circ}\text{C} - 95\text{ }^{\circ}\text{C}$); EPP insulation, all fully assembled.

Model:	Art. No.
1" excluding pump	AI-45841.5EA
1" including Grundfos UPM3 Hybrid 25 – 70*	AI-45841.56
1" including Wilo Yonos PICO 25 / 1 – 6	AI-45841.51WI
1" including Grundfos Alpha2.1 25 – 60	AI-45841.50
1" including Wilo Stratos Pico 25/6	AI-45841.52WI

*) Optional PWM signal cable: Page 119.

Meibes pump group Edition 8 with return line boost, electronically controlled, 1-line model



As above, but: The return line boost is installed between wood boiler and buffer accumulator. Recirculation pump (EL 180 mm) with connection cable, three ball valves, one contact thermometer, with 3-way T-mixer and 3-point actuator, EPP insulation, all fully assembled.

Model:	Art. No.
1" excluding pump	AI-45541.5EA
1" including Grundfos UPM3 Hybrid 25 – 70*	AI-45541.56
1" including Wilo Yonos PARA RS 25 / 7	AI-45541.53WI
1 1/4" excluding pump	AI-45542.5EA
1 1/4" including Grundfos UPM3 Hybrid 32 – 70*	AI-45542.56
1 1/4" including Wilo Yonos PARA RS 32 / 7	AI-45542.53WI

Return line boost

Actuators	2-line	1-line
Electrical Connection	~50 Hz / 230 V 2-core, 2 m	~50 Hz / 230 V 3-core, 2 m
Output	3.5 W	2.5 W
Torque	10 Nm	6 Nm
Running time	150 (135) s / 90°	140 s / 90°
Emergency manual mode	Yes	Yes
Control range	20-80 °C	(external)
Sensor	excluding	1 m, ø 6*43 mm
Protection code	IP40	IP40
Environment	5 – 50 °C	5 – 50 °C

Technical specifications	Edition 8 (2-line)		Return line boost DN25 (1-line)		Return line boost DN32 (1-line)	
	Dimensions ca.	H 420 × W 250 × D 255 mm		H 265 × W 550 × D 210 mm		
Connections heating circuit	1 1/2" M		1" F		1 1/4" F	
Boiler connection	1" F		1" F		1 1/4" F	
Axial distance boiler	125 mm		-		-	
Max. Operating temperature			110 °C			
Permitted Positive operating pressure			6 bar			
Thermometer	2 × 0 – 120 °C		1 × 0 – 120 °C			
Backflow preventers	1x (wood boiler VL), 200 mm WS		excluding			
Actuator	230 V, integrated fixed value control (details: see Art. No. 66341.33)					
Flow coefficient value	5.8		6.3		12	
Built-in length of the pump	180 mm					
Output P ¹ / flow rate V	P	V	P	V	P	V
UPM3 Hybrid xx-70	29/44 kW	2.50 [m ³ /h]	30/44 kW	2.55 [m ³ /h]	34/51 kW	2.95 m ³ /h
Yonos Para RS xx/6	24/36 kW	2.05 m ³ /h	24/37 kW	2.10 m ³ /h	27/41 kW	2.35 m ³ /h

1) Output P in [kW] at 10 K / 15 K temperature differential and 2 mWS residual delivery head.

Separation system

Meibes separation system Edition 8

For connection to one heating circuit, which is to be separated from the rest of the heating system (oxygen permeable FB heating pipe, antifreeze etc.)

Complete with recirculation pump (EL 180 mm stainless steel), with connection cable, two ball valves, (including manual set integral back flow limiter in the return line) two contact thermometers, Compact heat exchanger with 20, 30 or 36 plates, 2 venting plugs, safety group with safety valve 3 bar and manometer 4 bar, 1 fill and drain ball valve, return pipe, wall bracket, EPP insulation, connection threaded joints for the primary circuit optionally 1" internal or Male thread; including connection set for an expansion vessel including MAG Service coupling



Pump group
not in the scope of supply



Connection set for on
expansion vessel including
MAG service coupling
(included in the scope of
supply)

Model:	Art. No.
1" including Grundfos Alpha2 25-60 ES 20 plates	AI-45811.21
1" including Grundfos Alpha2 25-60 ES 30 plates	AI-45811.31
1" including Grundfos Alpha2 25-60 ES 36 plates	AI-45811.37

Technical specifications						
Separation system type	AI-45811.21	AI-45811.31	AI-45811.37			
Heat exchanger Number of plates	20	30	36			
upper connection	1" IG	1" IG	1" IG			
lower connection	1" F or 1" M	1" F or 1" M	1" F or 1" M			
max. output / (primary 65/40 °C / secondary 35/50 °C)	27 kW	30 kW	31 kW			
Axial distance	125 mm	125 mm	125 mm			
maximum temperature	110 °C	110 °C	100 °C			
Operating pressure	PN6	PN6	PN6			
Pump	Alpha 2 25-60 ES (stainless steel housing)					
Heat exchanger	Plate material W-No. 1.4401 soldering material copper (99.9 %)					
Components made of	Stainless steel, brass, EPP insulation					
Dimensions	ca. H 420 × W 250 × D 255 mm					
Sealing materials	PTFE, EPDM					
Temperature read-out	0 up to 120 °C					
Flow coefficient primary	4.0 m ³ /h	5.6 m ³ /h	6.4 m ³ /h			
Flow coefficient secondary	3.4 m ³ /h	4.3 m ³ /h	4.7 m ³ /h			
Output P ¹ / flow rate V	P	V	P	V	P	V
at primary 65/40 °C, secondary 35/50 °C	28.7 kW	1.24 / 1.65 m ³ /h	32.2 kW	1.39 / 1.85 m ³ /h	33.1 kW	1.43 / 1.90 m ³ /h

Components for the boiler connection system



Clamping ring screw union [1] Transition threaded joint

Model:	Art. No.
28 mm × 1" M	AI-G29611.14
35 mm × 1 1/4" M	AI-G29611.15

Set of threaded joints [2]

For installation of the pump groups excluding manifolds

1 1/2" F × 1" F	AI-66305.1
1 1/2" F × 1 1/4" F	AI-66305.2

Servomotor incl. assembly kit

wired with cable for direct attachment to MK groups with brass mixer (Edition 8, V-MK), running time 140 sec. 90°, 6 Nm with emergency manual mode and visible position indicator.

230 V	AI-66341
24 V	AI-66341.3
24 V, 0-10V controller	AI-66341.7
Assembly kit for mixer for year of manufacture 07/03	AI-66341.02



Servomotor as above, but

for operation on heating system controllers with relay output e.g. Viessmann Vitotronic, Type 200 kW2 or corresponding connection accessories

AI-66341.4



Servomotor with integrated temperature regulation incl. assembly kit

for direct attachment to the mixer. With mains grid plug 230 V~, 50 Hz running time 140 s / 90°, direction of rotation reversible; 6 Nm. 4 Adjustment ranges 0... 95 °C, digital target setting and temperature read-out, emergency manual mode, position indicator; temperature sensor ø 6 × 25 mm with 1 m cable, permanently wired.

AI-66341.33



Servomotor with weather-controlled controller, incl. assembly kit

Weather-controlled heating system controller for mixer heating circuits, can be remote-controlled via the room unit.

Servomotor Promatic CMP 25-2 AI-66341.11



Room unit for extension to the servomotor Promatic CMP

With LCD display. For optional remote reading out and operation of the servomotor via a BUS wiring e.g. party, eco or holiday operation.

Room unit DD2+ AI-66341.111

Signal cable for UPM3 length: 1 m

AI-45101.762



Contact thermostat (STW)

AI-45160.01

Components for the boiler connection system

Manifolds up to 70 kW

Flow line / return line optionally hydraulically separate (black) or disconnected (orange)



with EPP-insulation, with 2, 3 or 4 connection pairs each upwards and downwards (lower connections can be used in addition), for assembly of the pump groups (universal can be combined with Pump groups with 125 mm axial distance), fitting to pipe connection groups, complete with the necessary threaded joints and connection parts.

Model: Heating circuits	Art. No.* (Standard)	Art. No.* hydraulically disconnected
For up to 3 heating circuits	AI-66301.2	AI-66301.22
For up to 5 heating circuits	AI-66301.3	AI-66301.31
For up to 7 heating circuits	AI-66301.4	AI-66301.43

* Limits of use: 70 kW at $\Delta T=20\text{ K}$ or $3\text{ m}^3/\text{h}$ and 0.04 bar (primary)

Information notes:

For 'Standard' model, flow line and return line chambers are separated from each other.

'Hydraulically disconnected' by large gap in the separating sheet.



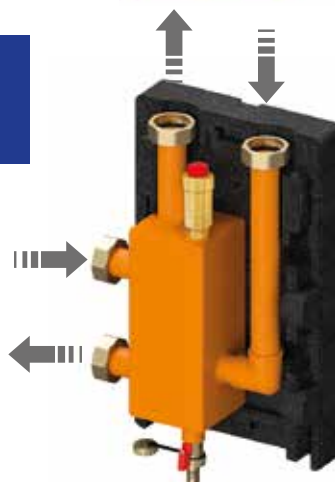
Wall bracket for manifolds up to 70 kW

1 pair, with bolts and rawl plugs for manifolds	AI-66337.3
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Boiler guard K up to 70 kW

optionally including hydraulic diverter (orange) or excluding hydraulic diverter (black) incl. air/gas separator, dirt/sludge separator and a magnetite separator.

Axial distance horizontal and vertical 125 mm. Including immersion sleeve for flow line sensor with diameter up to 10 mm and insulation.



Including / excluding hydraulic diverter	Output (at $\Delta T = 20\text{ K}$)	on the side Connections	Art. No.
with	kW = 50	1 1/2" (DN 25)	AI-66393.21
with	kW = 70	2" (DN 32)	AI-66393.31
excluding	kW = 50	1 1/2" (DN 25)	AI-66392.21
excluding	kW = 70	2" (DN 32)	AI-66392.31

Connector set for direct installation

for pump groups to boiler guard excluding manifold

1 1/2" M x 1 1/2" F	AI-66356.9
---------------------	------------



Safety group K

Fully sealed and insulated. Comprising: Manifold piece including connection 1/2" F incl. safety valve 1/2" x 3/4"; 3 bar, including manometer 4 bar and bleed valve.

AI-66065



Connection set for expansion vessel

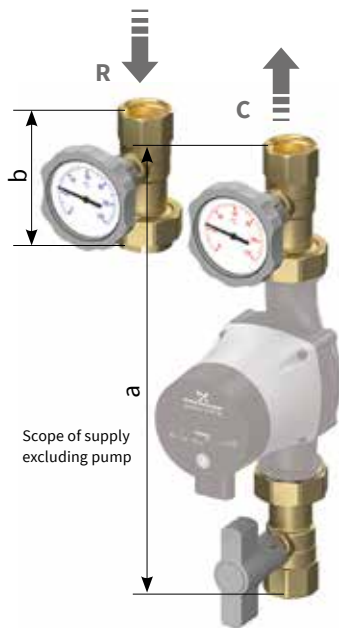
for direct, flexible connection to the return line. Comprising: Meiflex reinforced hose 3/4", F flat sealing on both sides, 700 mm long, 2 seals 3/4", MAG service coupling 3/4" (for separation of the expansion vessels, without emptying the system), angle wall bracket with two bolts each, discs and rawl plugs for wall-mounted installation.

For expansion vessel of max. diameter 440 mm.

AI-66326.11



Shut-off sets

**Pumpshut-off set C excluding backflow preventers**

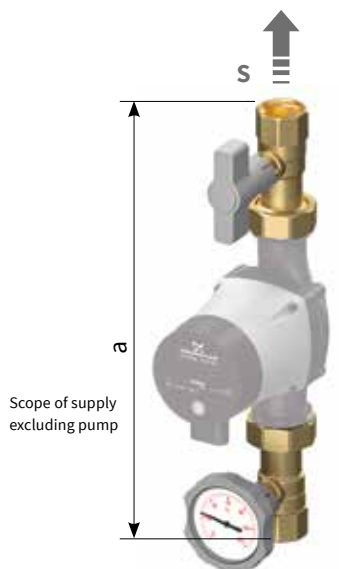
Insulatable ball valves with Meibes flange; 1 x with thermometer in the handle, two union nuts and seals.

Model:		Art. No.
1"	(a = ca. 359 mm)	AI-61122.1
1 1/4"	(a = ca. 370 mm)	AI-61124.1

Return line set R with backflow preventers

Insulatable ball valve with integrated backflow preventers with manual setting and thermometer in the handle; threaded joint.

1"	(b = 117 mm)	AI-61126
1 1/4"	(b = 118 mm)	AI-61128

**Pumps shut-off and return line set C + R**

Complete pump shut-off set Type C and return line set Type R, Backflow preventers in the return line.

1"	(a = ca. 359 mm; b = 117 mm)	AI-61127.1
1 1/4"	(a = ca. 370 mm; b = 118 mm)	AI-61129.1

Pump shut-off set S with backflow preventers for linking tanks

Insulatable ball valve with Meibes flange; suction side with thermometer in the handle and integrated backflow preventers with manual setting; two union nuts and seals.

1"	(a = ca. 359 mm)	AI-61130.1
1 1/4"	(a = ca. 370 mm)	AI-61132.1

**Pumps shut-off set B**

Pump ball valves (pressure side with integrated backflow preventers) and air lock, complete with two union nuts and seals.

1"	(a = ca. 353 mm)	AI-61821.0
1 1/4"	(a = ca. 369 mm)	AI-61825

Information note:

Hot-pressed transitions 80597.0006 and .0007 see page 151.

Suitable RV shown on page 201.

Heating boiler separation system

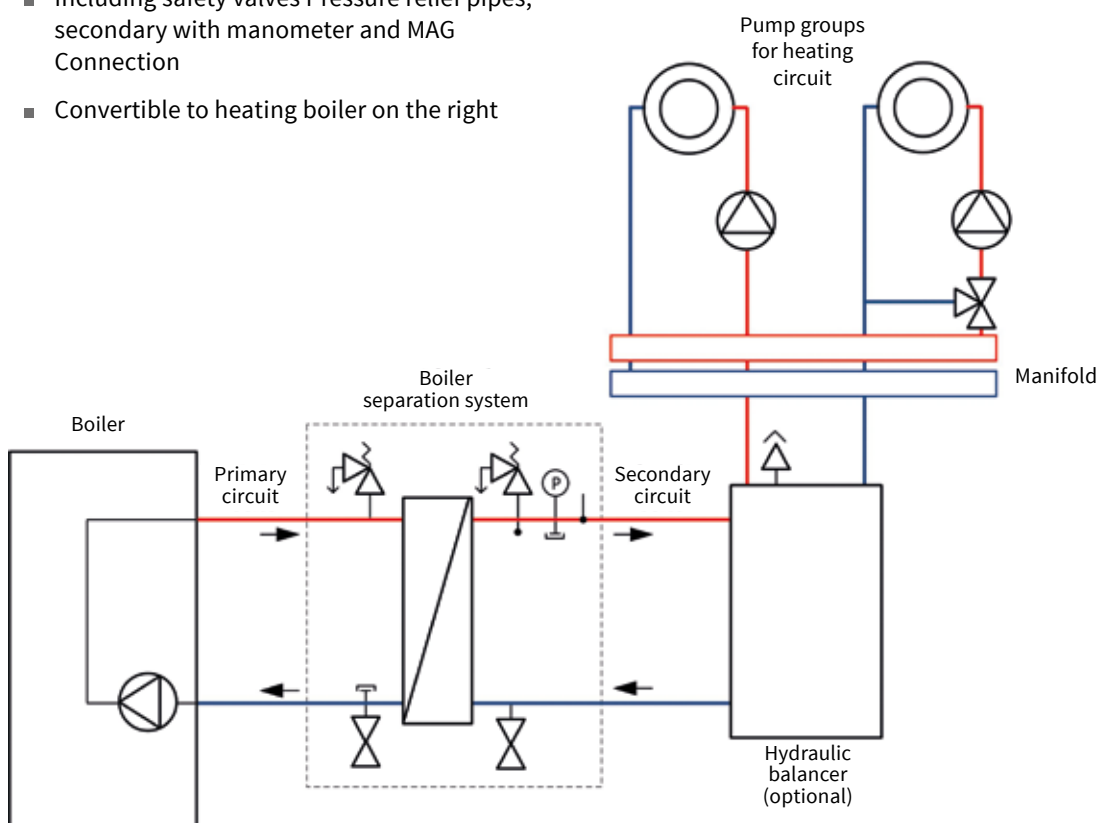
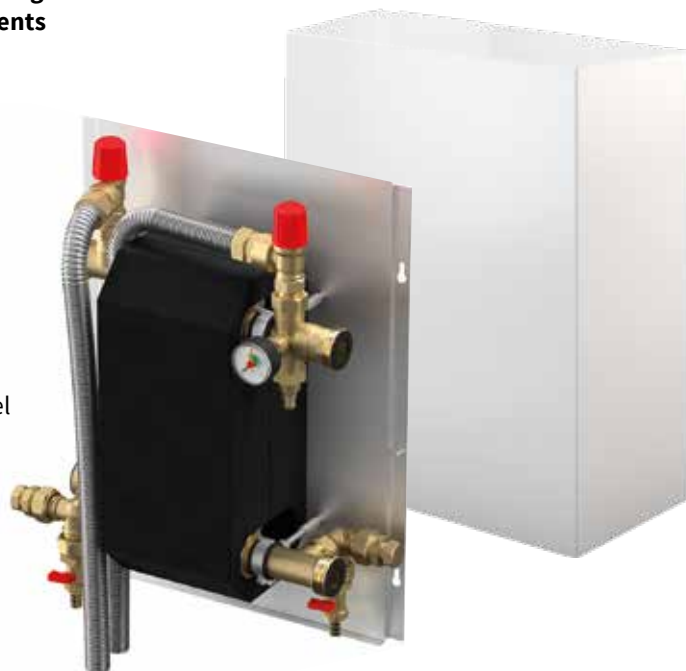
Connection set including heat exchanger for protection of sensitive components

The product:

- Pre-assembled compact Heat exchanger group including integrated fill and drain ball valves and Safety valve
- Connection options in the Primary and secondary circuit for expansion vessel
- For wall-mounted installation including white hood of sheet steel

Your advantages:

- Separation from heating boiler and heating circuit for different pressures, media or water quality
- Pre-assembled, insulated unit
- Simple filling and draining of the separate circuits
- Large heat exchanger with Thermal insulation
- Including safety valves Pressure relief pipes, secondary with manometer and MAG Connection
- Convertible to heating boiler on the right



*) only as variant excluding hydraulic diverter

Heating boiler separation system



Boiler separation system

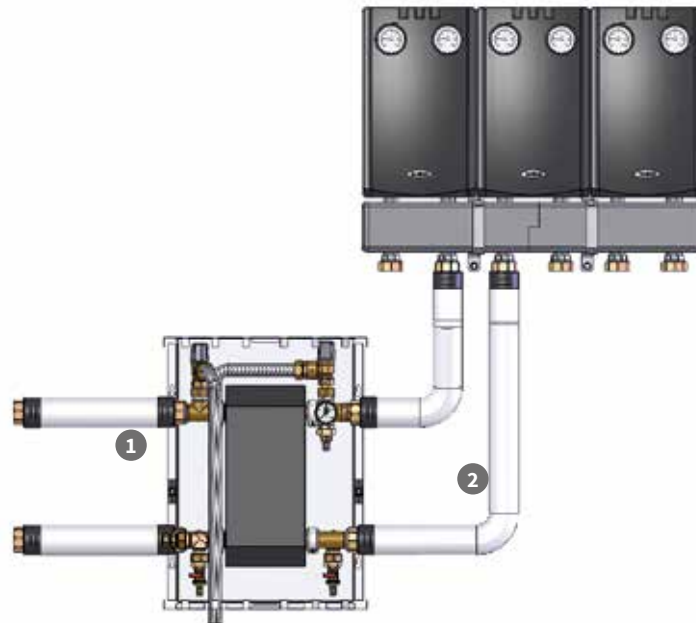
Base plate (galvanised) including or excluding cover hood (sheet steel, painted white). Cu soldered VA plate heat exchanger, insulated (PU foam with PS coat). Safety valve 3 bar, 3/4"×1" angle, with pressure relief pipe made of VA corrugated pipe. Manometer 4 bar. Immersion sleeve for temperature sensor \varnothing 6 mm with PG threaded joint. Connection option MAG 3/4" M, reduced, with locking cap, two fill and drain ball valves 1/2", with hose nozzle

Model:	Art. No.
Boiler separation system including covering hood	AI-45391.1
Boiler separation system excluding covering hood	AI-45391.11

Extension set for installation alongside the heat generator

two-sided connection (flow line and return line on the boiler exterior) comprising: 2 flexible corrugated pipes, insulated, with union nuts 1 1/2" for flat sealing connection.

Model:	Art. No.
Length 350 mm and 350 mm [1]	AI-66362.22
Length 500 mm and 900 mm [2]	AI-66362.23



Technical specifications

Dimensions (H×W×D)	600×450×248 mm
Connections flow line / return line	1 1/2" M (flat-sealing)
Distance flow line / return line	280 mm
MAG connections	3/4" M (flat sealing)
Max. Positive operating pressure	3 bar
Max. Operating temperature	95 °C

Application	Output	Heating circuit RL / VL	Boiler VL / RL
Radiators	75 kW	50 °C / 70 °C	80 °C / 60 °C
	55 kW	55 °C / 70 °C	77 °C / 63 °C
	38 kW	60 °C / 70 °C	75 °C / 65 °C
FB heating	38 kW	35 °C / 45 °C	50 °C / 40 °C
	19 kW	35 °C / 40 °C	43 °C / 38 °C

5

TKM compact – mixed circuit for wall-mounted boiler



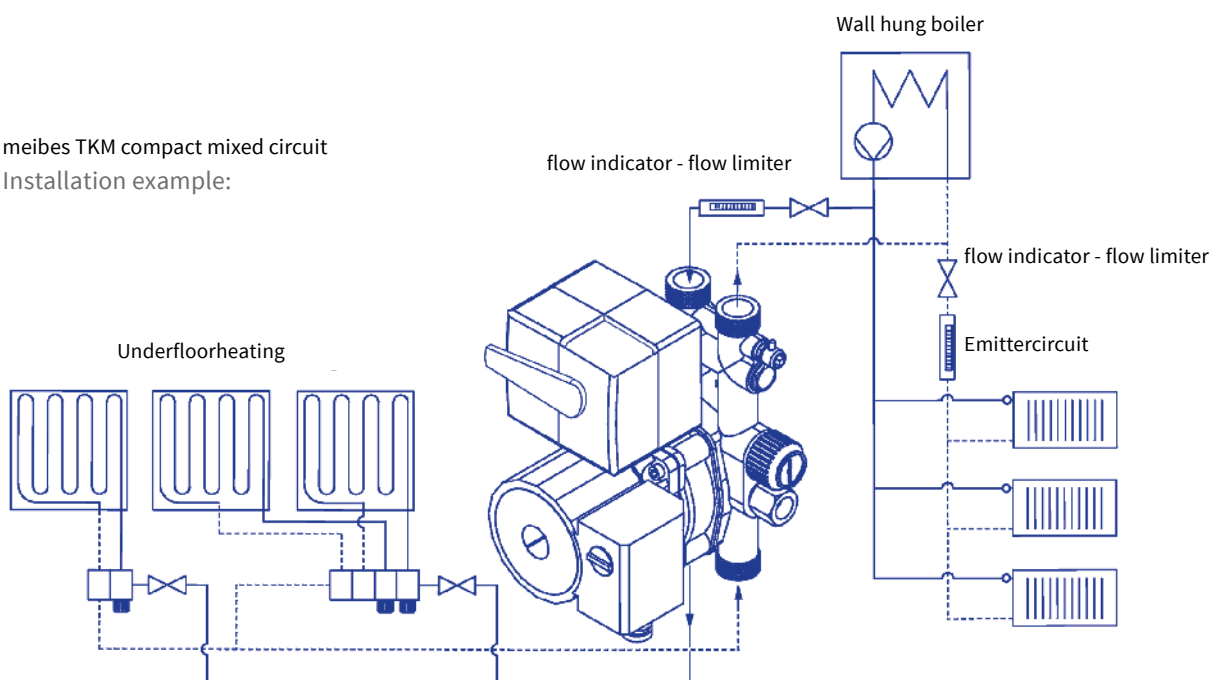
The product:

- special for wall-mounted boiler up to 17 kW heating capacity ($\Delta T = 10\text{ K}$, $\Delta p = 0.2\text{ bar}$)
- Installation below or alongside the boiler
- with individual flexible connections for all makes / types
- with integrated primary bypass
- Design product with great User-friendliness
- with servomotor for 3-point controller or thermostatic injection valve

Your advantages:

- Small and manageable, with latest technology
- Simple to assemble using Fast installation system
- Attractive appearance even in living rooms

meibes TKM compact mixed circuit
Installation example:



Connection example of an unmixed and a mixed heating circuit with TKM.
Two balancing valves serve to regulate the required volume flows for both heating circuits.

TKM compact – mixed circuit for wall-mounted boiler

Compact mixed circuit including mixer motor



TKM compact block made of brass with integrated primary bypass, mixer with adjustable bypass and attached servomotor, pump with connection cable, immersion sleeve for flow line sensor, venting plugs, connection set for assembly under the wall-mounted boiler comprising two T-pieces plus two flexible connections made of stainless steel, seal set, EPP insulation, fully pre-assembled and tested for leak tightness.

Model:	Art. No.
including Grundfos Alpha2 15-60	AI-27400.3

Compact mixed circuit including thermostatic valve

As above, but with thermostatic injection valve for wall-mounted boiler excluding mixed circuit controller. The flow line temperature required is set at the thermostatic valve (control range 25 °C – 50 °C).



Model:	Art. No.
including Grundfos Alpha2 15-60	AI-27409.3

Technical specifications

upper connection	3/4" M (boiler side)
lower connection	3/4" M Euro cone (lower temperature circuit)
Axial distance	42 mm
Components made of	steel, brass, EPP insulation
Dimensions (basic model)	ca. H 280 × W 225 × D 165 mm
Sealing materials	O-Ring EPDM
max. temperature	110 °C
Operating pressure	up to 6 bar

Caution! When using the TKM in basic form, the safety module Art. No. 27410.6 is required at operating temperatures (primary side) above 55 °C.

Compact mixed circuit safety module

The safety module prevents an impermissible temperature rise in the low temperature circuit in the event of a fault. If the temperature set on the temperature monitor is exceeded, the valve linked in the flow line shuts off the Heating-circuit water entering from the heating circuit.



Model	Art. No.
Safety module TKM	AI-27410.6

Technical specifications

Temperature monitor: Model	Contact thermostat on bimetallic basis for attachment to the pipe (up to 2") switching function adjustable by means of straps
Adjustment range	30 – 90 °C
Switching load	16 (3) A, 250 V
Protection code	IP30
Valve: Model	Straight-way valve with thermally operated setting attachment, closed currentless
Voltage	230 V AC / DC
Protection code	IP43
Protection class	protection insulated



TKM compact – mixed circuit for wall-mounted boiler

Compact mixed circuit separation system

Compact block made of brass, mixer with adjustable bypass and attached servomotor, pump with cable, compact heat exchanger, immersion sleeve for flow line sensor, venting plugs, wall bracket, EPP insulation, fill and drain ball valve for venting, 3/4" M connection option for expansion vessel, connection set for assembly under the wall-mounted boiler comprising two T-pieces plus two flexible connections made of stainless steel.



Number of plates	Pumps	Art. No.
20	Grundfos Alpha2 15-60	AI-27408.21
30	Grundfos Alpha2 15-60	AI-27408.31

Technical specifications

TKM separation system type	AI-27408.21	AI-27408.31
max. output primary 65 / 45 °C secondary 35 / 45 °C Residual delivery head 0.15 bar	11 kW	13 kW
max. output primary 50 / 35 °C secondary 30 / 35 °C Residual delivery head 0.15 bar	5 kW	6.5 kW
Number of heat exchanger plates	20	30

5

Compact mixed circuit accessories

Flow rate limiter with display

Installation set comprising: 2 flow rate limiters complete with threaded joints, seals and flexible connection.

2-8 l/min, 3/4" F/M	AI-27410.1
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Pos.	The following products are shown in Chapter 6 - Systems for solar systems	Page
1	Solar stations	130
2	Stainless steel-corrugated pipe, insulated for solar	139
3	Expansion set	140
4	Solar controller	141
5	Threaded joints*	206



2



1

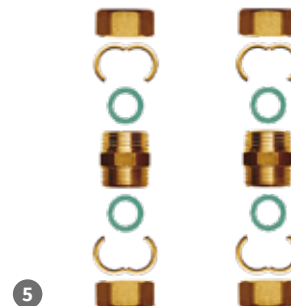


3



4

ErP ready

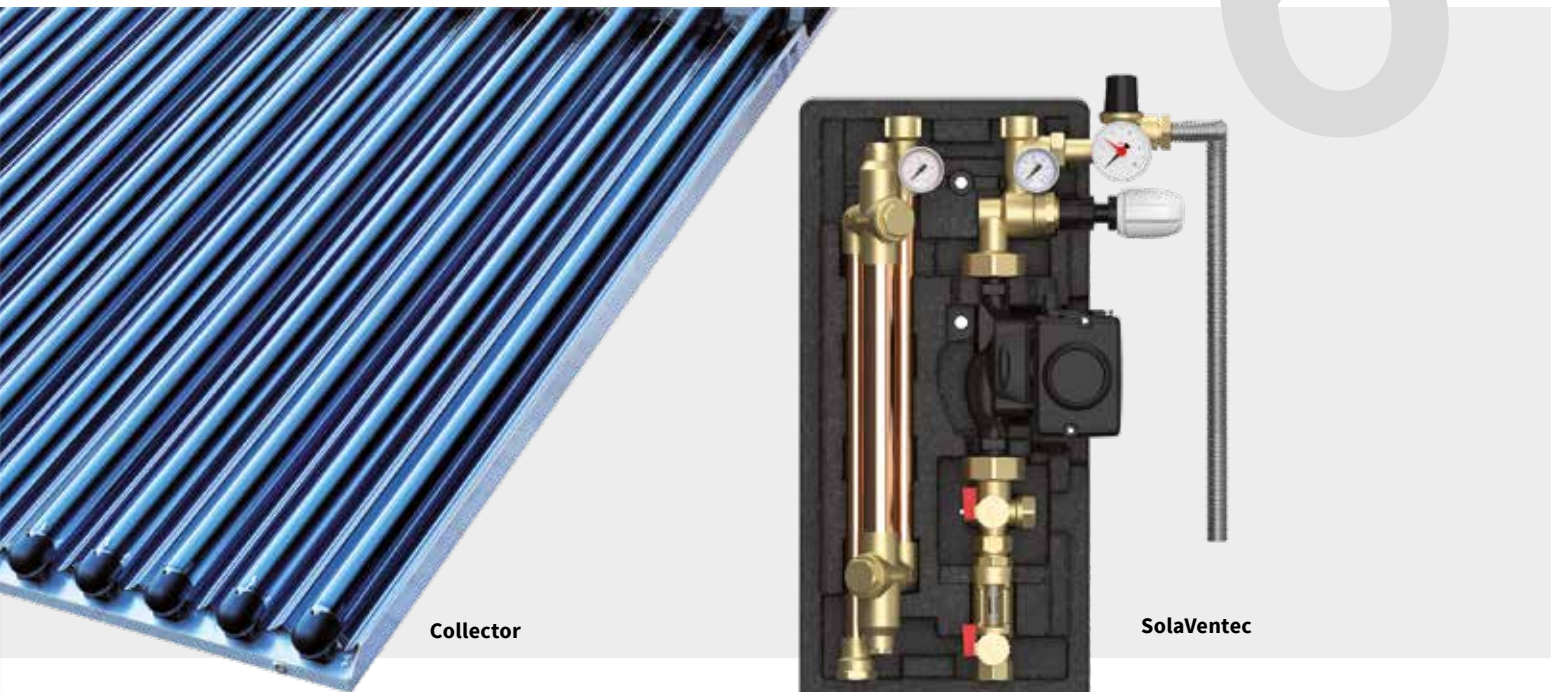


5

*Other system components, such as Inoflex stainless steel corrugated pipe plus flat sealing threaded joints are shown in Chapter 11 from page 214.

Systems for solar systems: All between collector and tank

6



Meibes offers a complete programme of solar stations for collector surfaces from 5 - 150 square metres. All solar stations plus solar controllers are ErP ready. High-efficiency pumps for Solar / Hybrid pumps, e.g. Grundfos UPM3 Hybrid or Wilo Yonos PARA ST as well as other HE pumps are available.

With SolaVentec Meibes offers a new generation of solar stations that operate with valve technology (without integral back flow limiter). Comprehensive accessories for individual kit (permanent bleed valve, electronics etc.) and other system components, such as the Inoflex double corrugated pipe made of stainless steel along with the FixLock fast screw system (no tools required), complete the product programme.



Your advantages

- *Fast and simple installation*
- *All models pre-assembled ex-factory, tested and sealed*
- *Stations optionally with controller, with permanent bleed valve*
- *Complete series for collector surfaces up to 155 m²*

Single circuit solar station

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Single circuit solar station S 3 / 4" for collector surfaces up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1 – 13 l/min

Solar pump assembly group as 1-line model complete with or without recirculation pump (DN 15, EL 130 mm) shut off ball valve incl. thermometer and metallic integral back flow limiter (manual set) integrated in the ball, solar-ready recirculation pump, Safety module incl. manometer and two fill and drain ball valves and integrated Safety valve, multifunction fittings with volume flow line control or shut-off device, Fill and drain ball valve, plus connection for an expansion vessel on suction side of the pump, with flow rate display (combi display for propylene glycol mixture 40% and water (1 – 13 l/min)



Model:	Art. No.
excluding pump	AI-45719.2EA
including Grundfos UPM3 Hybrid 15 – 70 PWM	AI-45719.9
including Wilo Yonos Para ST 15 / 7 PWM	AI-45719.9WI

As above, but with integrated solar controller BASIC PRO

(Thermometer in the ball valve omitted with this variant)

Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank); full graphic, backlit black/white display, operation by turn and press controller and ESCkey; 3 inputs for PT 1000 Sensor, analogue or PWMoutput for high-efficiency pump, speed controller, a pre-configured hydraulic diagram, Triac outlet piece, fault monitoring, manual mode option, collector protection function, heat exchanger function; commissioning/service assistant, fixed T and Delta T controller, pipe collector function, shut-off delay for outputs, frost protection, Sensor monitoring, monitoring of output parameters, operating hours meter 1 for Outputs, solar yield metering for pump control incl. data output, Yield metering excluding volume flow meter possible, scope of supply including 2 universal temperature sensors PT 1000



Model:	Art. No.
excluding pump	AI-45719.24EA
including Grundfos UPM3 Hybrid 15 – 70 PWM	AI-45719.94
including Wilo Yonos Para ST 15 / 7 PWM	AI-45719.94WI

Technical specifications

Collector surface	up to 14 m ² (Highflow) or 31 m ² (Lowflow)
Operating temperature	+120 °C, short periods + 140 °C (pay attention to max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 – 150 °C
Manometer indicated range	0 – 10 bar
Flow rate display	Water 1.0 – 13.0 l/min, glycol 0.8 – 10.3 l/min
Sealant	asbestos-free fibre seal, EPDM
Components made of	Steel, brass, glass, EPP insulation
upper connection	3 / 4" F
lower connection	3 / 4" F
Connection for expansion vessel	3 / 4" M
Dimensions excluding solar controller *	ca. H 385 × W 200 × D 185 mm
Dimensions including solar controller*	ca. H 430 × W 200 × D 185 mm

(*with insulation and safety group)

Accessories for connecting an auxiliary vessel or two solar stations e.g. for East-West switching are shown on page 140.

Two circuit solar station

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Two circuit solar station S 3/4"
for collector surfaces up to 14 m² (Highflow) or 31 m² (Lowflow)
with flow rate display 1 – 13 l / min

Solar pumps assembly group as 2-line model complete with or without recirculation pump (DN 15, EL 130 mm), shut off ball valves incl. thermometer and metallic integral back flow limiter (manual set) integrated in the ball, solar ready recirculation pump, Safety module incl. manometer and fill and drain ball valve and integrated safety valve, multifunction fittings with volume flow control or shut-off device, two fill and drain ball valves plus connection for an expansion vessel on the suction side of the pump. With flow rate display (combi display for propylene glycol mixture 40% and water). Optionally with permanent bleed valve installed in the flow line for constant separation of air.

with integrated solar controller BASIC PRO

Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank); other details on the solar controls are shown on page 139.



Model:

Art. No.

excluding controller, excluding permanent bleed valve

excluding pump	AI-45705.2EA
including Grundfos UPM3 Hybrid 15-70 PWM	AI-45705.9
including Wilo Yonos Para ST 15/7 PWM	AI-45705.9WI

excluding controller, including permanent bleed valve

excluding pump	AI-45705.6EA
including Grundfos UPM3 Hybrid 15-70 PWM	AI-45705.10
including Wilo Yonos Para ST 15/7 PWM	AI-45705.10WI

including controller, excluding permanent bleed valve

excluding pump	AI-45705.24EA
including Grundfos UPM3 Hybrid 15-70 PWM	AI-45705.94
including Wilo Yonos Para ST 15/7 PWM	AI-45705.94WI

including controller, including permanent bleed valve

excluding pump	AI-45705.64EA
including Grundfos UPM3 Hybrid 15-70 PWM	AI-45705.14
including Wilo Yonos Para ST 15/7 PWM	AI-45705.14WI

Technical specifications

Collector surface	up to 14 m ² (Highflow) or 31 m ² (Lowflow)
Operating temperature	+120 °C, short periods +140 °C (pay attention to max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 – 150 °C
Manometer indicated range	0 – 10 bar
Flow rate display	Water 1.0 – 13.0 l / min, glycol 0.8 – 10.3 l / min
Sealant	asbestos-free fibre seal, EPDM
Components made of	Steel, brass, glass, EPP insulation
upper connection	3/4" F
lower connection	3/4" F
Connection for expansion vessel	3/4" M
Axial distance	100 mm
Dimensions (with insulation and safety group)	ca. H 385 × W 300 × D 185 mm

Accessories for connecting an auxiliary vessel or two solar stations e.g. for East-West switching are shown on page 140.



Two circuit solar station

S **M** L XL XXL

Two circuit solar station M 3 / 4” for collector surfaces up to 14 m² (Highflow) or 31 m² (Lowflow) with flow rate display 1-13 l/min

Complete with or without recirculation pump ([DN] 25, EL 180 mm) including connection cable; two Ball valves with manual set, metallic gintegral back flow limiter; two contact thermometers (indicated range 20 – 150 °C) integrated in the ball valve handle; safety group with TÜV tested safety valve (response pressure 6 bar), manometer (indicated range 0 – 10 bar), two flushing, filling and draining ball valves incl. hose nozzle and cap, Attachment material for wall-mounted installation; 2-part EPPinsulation. Multifunctional fittings with volume flow controller or shut-off device, fill and drain ballvalve plus connections for an expansion vessel on the suction or pressure side of the pump, with flow rate display (combi display for propylene glycol mixture 40% and water). Optionally with permanent bleed valve installed in the flow line for constant separation of air.



Figure with
Permanent bleed valve

Model:	Art. No.
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excluding permanent bleed valve

excluding pump	AI-45804EA
including Grundfos UPM3 Hybrid 25-70 PWM	AI-45804.9
including Grundfos UPM3 SOLAR 25-145 PWM	AI-45804.186
including Wilo Yonos Para ST 25/1-7 PWM	AI-45804.9WI

including permanent bleed valve

excluding pump	AI-45804.5EA
including Grundfos UPM3 Hybrid 25-70 PWM	AI-45804.10
including Grundfos UPM3 SOLAR 25-145 PWM	AI-45804.586
including Wilo Yonos Para ST 25/1-7 PWM	AI-45804.10WI

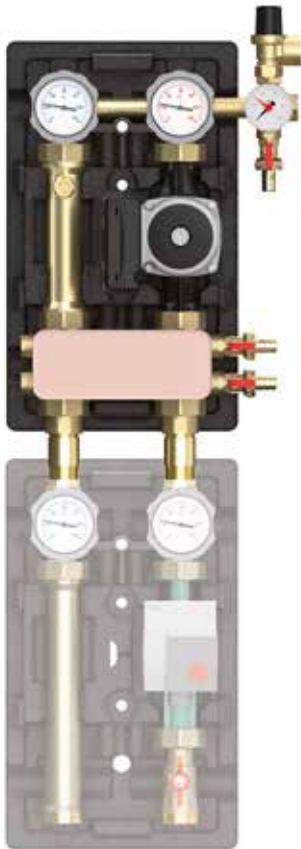
We recommend solar controller BASIC PRO, ENERGY PRO or MAXIMAL PRO on page 145. Accessories for connecting an auxiliary vessel or two solar stations e.g. for East-West switching are shown on page 140.

Technical specifications	
Collector surface	up to 14 m ² (Highflow) or 31 m ² (Lowflow)
Operating temperature	up to 110 °C, short periods 130 °C (pay attention to max. permissible temp. of the pump)
Safety valve	6 bar
Thermometer indicated range	20 – 150 °C
Manometer indicated range	0 – 10 bar
Volumetric flow limiter	Water 1.0 – 13.0 l / min, glycol 0.8 – 10.3 l / min
Sealant	PTFE (Teflon), asbestos-free fibre seal, EPDM, silicon
Components made of	Steel, brass, glass, EPP insulation
upper connection	3 / 4" F
lower connection	3 / 4" F
Connection for expansion vessel	3 / 4" M
Axial distance	125 mm
Dimensions (with insulation and safety group)	ca. H 500 × W 320 × D 250 mm

Solar separation system

S **M** L XL XXL
**Solar separation system M
for collector surfaces up to 12 m²
for connection to the tank charging circuit**

Complete with or without recirculation pump (DN 25, EL 180 mm) with connection cable; compact heat exchanger; two ball valves with manual set, metallic integral back flow limiter; two contact thermometers integrated in the ball valve handle (indicated range 20 – 150 °C); Safety group with TÜV tested safety valve (response pressure 6 bar), manometer (indicated range 0-10 bar), connection set for an expansion vessel with MAG service coupling, two flushing, filling and draining ball valves incl. hose nozzle and cap; automatic air vent; attachment material for wall-mounted installation; 2-part EPP insulation connection threaded joint for the secondary circuit (optionally 1" M or 1" F).



Pump group
not in the scope of supply.

Model:**Art. No.****with 16 plates**

excluding pump	AI-45841.16EA
including Grundfos UPM3 HYBRID 25-70 PWM	AI-45841.16GF9
including Grundfos UPM3 SOLAR 25-145 PWM	AI-45841.16GF86
including Wilo Yonos PARA ST 25/7 PWM	AI-45841.16WI9

with 20 plates

excluding pump	AI-45841.20EA
including Grundfos UPM3 HYBRID 25-70 PWM	AI-45841.20GF9
including Grundfos UPM3 SOLAR 25-145 PWM	AI-45841.20GF86
including Wilo Yonos PARA ST 25/7 PWM	AI-45841.20WI9

with 26 plates

excluding pump	AI-45841.26EA
including Grundfos UPM3 HYBRID 25-70 PWM	AI-45841.26GF9
including Grundfos UPM3 SOLAR 25-145 PWM	AI-45841.26GF86
including Wilo Yonos PARA ST 25/7 PWM	AI-45841.26WI9

We recommend solar controller BASIC PRO, ENERGY PRO or MAXIMAL PRO on page 145. Accessories for connecting an auxiliary vessel or two solar stations e.g. for East-West switching are shown on page 140.

Technical specifications

Separation system type	45841.16	45841.20	45841.26
max. output: primary 60/40 °C, secondary 20/50 °C min. residual delivery head prim. 0.2 bar	3 kW	5 kW	7 kW
Number of heat exchanger plates	16	20	26
Output above corresponds to ca. collector surface	5 m ²	8 m ²	12 m ²
Operating temperature	up to 110 °C, short periods 130 °C (pay attention to max. permissible temp. of the pump)		
Safety valve	6 bar		
Thermometer indicated range	20... 150 °C		
Manometer indicated range	0... 10 bar		
Sealant	PTFE (Teflon), asbestos-free fibre seal, EPDM, silicon		
Components made of	Steel, brass, glass, EPP insulation		
upper connection	3/4" F		
lower connection	1" IG		
Connection for expansion vessel	3/4" M		
Axial distance	125 mm		
Dimensions	ca. H 465 × W 320 × D 250 mm		

Two circuit solar station

S **M** L XL XXL

SolaVentec II solar station with valve technology and integrated thermal insulating loop for collector surfaces up to 71 m²

Gravity circulation excluded 100%. Highly efficient use of energy through lack of integral back flow limiter, various connection options for a MAG and auxiliary

Complete with recirculation pump (DN 25, EL 180 mm) with connection cable; thermally separated valve unit in the return line as shut-off and control device and thermostatic control valve with position indicator; insulating loop with integrated permanent bleed valve in the flow line and connection option for an auxiliary vessel; two contact thermometers, safety group with safety valve and manometer, two flushing, filling and draining ball valves; Volume flow controller and shut-off device; flow rate display with combi scale for propylene glycol mixture and water

Information note: When using the SolaVentec II in connection with pipe collectors, the time setting on the solar controller for the pipe collector function must be set to 4 min.



Model:	Art. No.
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for collector surfaces up to 14 m² (Highflow) or 31 m² (Lowflow), with flow rate display 1 – 13 l / min

including Grundfos UPM3 HYBRID 25 – 70 PWM	AI-45751.184
including Grundfos UPM3 Hybrid 25-145 PWM	AI-45751.186
including Wilo Yonos PARA ST 25 / 1-7 PWM	AI-45751.135WI

for collector surfaces up to 32 m² (Highflow) or 71 m² (Lowflow), with flow rate display 8 – 30/min

including Grundfos UPM3 Hybrid 25-145 PWM	AI-45751.286
Wilo Stratos PARA 25 / 1-11 0-10 V Signal	AI-45751.233WI
including Wilo Stratos PARA 25 / 1-11 – PWM Signal	AI-45751.234WI

We recommend solar controller BASIC PRO, ENERGY PRO or MAXIMAL PRO on page 139.

6



Two circuit solar station

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Technical specifications

Collector surface	up to 31 m ² with flow rate display 1-13 l/min up to 71 m ² with flow rate display 8-30 l/min
Operating temperature	up to 160 °C (pay attention to max. permissible temperature of the pump)
Safety valve	6 bar
Thermometer indicated range	20 – 150 °C
Manometer indicated range	0 – 10 bar
Volumetric flow limiter	Water: 1.0 – 13.0 l/min Water: 8.0 – 30.0 l/min
Sealant	PTFE (Teflon), asbestos-free fibre seal, EPDM, silicon
Components made of	Steel, brass, glass, EPP insulation
upper connection	3/4" F
lower connection	3/4" F
Connection for expansion vessel	3/4" M
Axial distance	above: 100 mm below: 118 mm
Dimensions	ca: H 520 × W 250 × D 180 mm

System examples



Connection for MAG

Component protection by:

- Guided steam escape
(return line through valve closed)
- Longer cooling zone
(tank coil)



Connection with auxiliary vessel and MAG

Component protection by:

- Guided steam escape
(return line through valve closed)
- Connection of an auxiliary vessel
at extremely high standstill temperatures

Solar separation system

S M L **XL** XXL

Solar XL – heat exchanger solar station for collector surfaces up to 71 m²

with two recirculation pumps (DN 15, EL 130 mm) with connection cable; two flow rate limiters; stainless steel plate heat exchanger; two bleeding devices; a primary sensor seat; four shut off ball valves; four flushing, filling and drainage ball valves incl. hose nozzles and incl. safety groups for primary and secondary side; everything assembled and tested on base plate; stainless steel pipe connections with insulation. In EPP thermal insulation housing



Model:	Art. No.
--------	----------

For collector surfaces up to 14 m² (Highflow) or 31 m² (Lowflow), with flow rate limiter 1 – 13 l/min.

primary including Grundfos UPM3 Hybrid 15 – 70 secondary including Grundfos UPM3 Hybrid 5 – 70	AI-45140.16
primary including Wilo Yonos Para ST 15 / 7 PWM secondary including Wilo Yonos Para ST 15 / 7 PWM	AI-45140.18

For collector surfaces up to 32 m² (Highflow) or 71 m² (Lowflow), with flow rate limiter 8 – 30 l/min.

primary including Grundfos UPM3 15 – 145 secondary including Grundfos UPM3 Hybrid 15 – 70	AI-45140.19
primary including WILO Yonos PARA ST 15 / 13 PWM2 secondary including Yonos PARA ST 15 / 7-PWM	AI-45140.29

We recommend solar controller ENERGY PRO or MAXIMAL PRO on page 145.

As above, but with integrated controller energy Pro (Other details on solar controller are shown on page 139)

with flow rate limiter 1 – 13 l/min.

primary including Grundfos UPM3 Hybrid 15 – 70 secondary including Grundfos UPM3 Hybrid 15 – 70	AI-45140.56
primary including Wilo Yonos Para ST 15 / 7 PWM secondary including Wilo Yonos Para ST 15 / 7 PWM	AI-45140.58

with flow rate limiter 8 – 30 l/min.

primary including Grundfos UPM3 15 – 145 secondary including Grundfos UPM3 Hybrid 15 – 70	AI-45140.59
primary including WILO Yonos PARA ST 15 / 13 PWM2 secondary including Wilo Yonos PARA ST 15 / 7-PWM	AI-45140.69



Solar separation system

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Technical specifications		
Separation system type	AI-45140.16/18/56/58	AI-45140.19/29/59/69
Collector surface	up to 31 m ²	up to 71 m ²
Operating temperature	up to 110 °C, short periods 120 °C (pay attention to max. permissible temperature of the pump)	
Manometer indicated range	primary: 0 – 10 bar (accessories) secondary: 0 – 4 bar (accessories)	
Number of heat exchanger plates	30	30
max. output (primary 60/30 °C secondary 20/50 °C)	18 kW (Output with 31 m ² surface at 65% efficiency)	46 kW (Output with 71 m ² surface at 65% efficiency)
min. residual delivery head primary 0.2 bar/sec 0.1 bar		
Safety valve	primary: 6 bar, secondary: 3 bar	
Volumetric flow limiter	1 – 13 l/min Art. No. 45140.16/18/56/58 8 – 30 l/min: Art. No. 45140.19/29/59/69	
Sealant	PTFE (Teflon), asbestos-free fibre seal, EPDM	
Components made of	Steel, brass, glass, EPP insulation	
lower connection	1" IG	
Connection for expansion vessel	3/4" M (accessories)	
Axial distance	65 mm	
Dimensions (with cladding)	ca. H 730 (1135) × W 500 (570) × D 350 mm	

Solar stations in similar model as above, but with switching valves for 2 collector fields and/or 2 heat consumers are available on request.

Solar separation system

S M L XL **XXL**

NEW!
including
pumps Wilo
Stratos 30 /1- 12
and safety
valve 10 bar

Solar XXL – heat exchanger solar station for collector surfaces up to 165 m²

Heat exchanger solar station, complete with two recirculation pumps, a stainless steel plate heat exchanger incl. block insulation, two volumetric flow limiters, two safety valves and manometers, four flushing, filling and drainage ball valves, an air separator (secondary), a dirt traps (secondary), shut-off valves with thermometer handles (flow line side, secondary with backflow preventers), installation frame made of aluminium profiles with height-adjustable feet.

Volumetric flow limiters 10 – 40 l / min. / heat exchanger 30 plates

Model:	Art. No.
primary and secondary including Wilo Stratos 30 /1- 12	AI-45142.14

Volumetric flow limiters 20 – 70 l / min. / heat exchanger 60 plates

primary and secondary including Wilo Stratos Para 30 /1 – 12	AI-45142.22
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Technical specifications

Separation system type	AI-45142.14	AI-45142.22
Collector surface	up to 43 m ² (Highflow) or 95 m ² (Lowflow)	up to 74 m ² (Highflow) or 155 m ² (Lowflow)
max. output primary 60 / 30 °C secondary 20 / 50 °C	62 kW (Output with 95 m ² surface at 65% efficiency)	100 kW (Output with 155 m ² surface at 65% efficiency)
min. residual delivery head primary 0.2 bar/sec 0.1 bar		
Volumetric flow limiter	10 – 40 l/min	20 – 70 l/min
Operating temperature	up to 110 °C (pay attention to max. permissible temperature of the pump)	
Safety valve	primary: 10 bar, secondary: 3 bar	
Manometer indicated range	primary: 0 – 10 bar, secondary: 0 – 4 bar	
Sealant	PTFE (Teflon), asbestos-free fibre seal, EPDM, FPM, silicon	
Components made of	Steel, brass, glass, PUR insulation WT	
upper connection	1 1 / 4" F	
connection on the side	1 1 / 4" F	
Axial distance	above: 129 mm, on the side: 103 mm	
Dimensions (with cladding)	ca: H 840 × W 950 × D 290 mm	

Other models on request.
We recommend solar controller MAXIMAL PRO on page 139.

Please pay attention to start-up current!



Components for solar systems

Solar controller

BASIC PRO

Digital temperature differential controller for thermal solar systems (1 collector field, 1 tank) full graphic, backlit black/white display, operation by turn and press controller and ESCkey, 3 inputs for PT 1000 Sensor, analogue or PWM output for high-efficiency pump, speed controller, a pre-configured hydraulic diagram, 1 Triac output, fault monitoring, manual mode option, collector protection function; Commissioning/service assistant, fixed T and Delta T controller, pipe collector function, shut-off delay for outputs, frost protection, sensor monitoring, monitoring output parameters, operating hours meter, solar yield metering for pump control also possible without volume flow meter, scope of supply including 2 universal temperature sensors PT 1000



Model:	Art. No.
Pump activation via block modulation, PWM or 0 – 10 V signal	AI-45111.56

ENERGY PRO

As with Solar controller Basic Pro, but with full graphic, dimmable, backlit colour display, 2 Triac outputs, 1 potential-free output, 6 inputs for PT 1000 sensors, of which one convertible as control output and an additional 2 fixed control outputs (0 - 10V or PWM) for at most three high-efficiency pump, volume flow metering function, SD card reader and USB connection (for software update, control settings for loading and saving, data logging), 24 pre-configured hydraulic diagrams, 2 collector fielder and 2 tanks, solar heating support, remote access, refilling suppression, thermostat and temperature comparison function, solar priority charging, holiday function, anti-legionella function, bypass and charging zone activation, scope of supply including 2 universal temperature sensors PT 1000 and analyser software, activation of secondary pump at separation systems, swimming pool heating



Pump activation via block modulation, PWM or 0 – 10 V signal	AI-45111.76
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MAXIMAL PRO

As with Solar controller Energy Pro, but with 4 Triac outputs, 1 potential-free output, 10 inputs for PT 1000 sensors, of which 4 convertible for at most 4 high-efficiency pumps (0-10 V and PWM), irradiation sensor, 30 preconfigured hydraulic diagrams, 2 collector fields and 2 tanks, circulation function, scope of supply including 4 universal temperature sensors PT 1000 and analyser software



Pump activation via block modulation, PWM or 0 – 10 V signal	AI-45111.96
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Smart Box V2 (for monitoring and remote access via internet/intranet)

The Smartbox serves as interface between the solar controller (Energy Pro or Maxima Pro) and the router. The data of the solar system can be viewed, analysed and parameters changed via LAN or WLAN from anywhere. Ideal for showing the temperatures and energy yields on a tablet in the living room or as tool for an external service company or the building management technology. Using the Smartbox, the solar controller can be operated with ease and in comfort. A range of connections such as USB, WLAN/Bluetooth, Ethernet, SD are available for data transfer. This V2 (Version 2) also stands out by its minimal power consumption <1W.



	AI-45111.002
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Components for solar systems

6



Solar manual charging pump

Piston pump for manual charging and refilling or increasing the pressure of the solar system, 1 m charging hose, pressure build-up max. 6 bar

Model:	Art. No.
	AI-45100.2



Solar expansion set

With angle bracket for direct, flexible connection to the safety group of the solar station or to an additional threaded joint in the solar return line. Comprising: Stainless steel corrugated hose 2 x 3/4" F union nut x 500 mm; two seals 3/4"; a service coupling "Solar" 3/4" M/F for separation of the expansion vessel without system drainage device; angle wall bracket incl. attachment materials.

AI-66326.13



MAG service coupling solar

Safety fast coupling lt. DIN 4751 Bl. 2/93 facilitates fast changing of the MAG, 3/4" M x 3/4" F (both open ends are automatically closed on separation of the threaded joint.)

AI-69080.3



Extension set for solar separation system M

With volume flow meter 1-13 l/min, fill and drain ball valve with 1/2" hose nozzle, G 3/4" M with end cap (e.g. for MAG connection) connection below: 3/4" F, connection above: 1" union nut

AI-45110SET17



Connector set for auxiliary vessel

Pre-insulated copper pipe 22x1; brass T-piece (connections: KLV 22 mm x 3/4" M x KLV 22 mm); union nipple 3/4" M with closed cap for linking the expansion pipe to the auxiliary and diaphragm expansion vessel

AI-66326.18



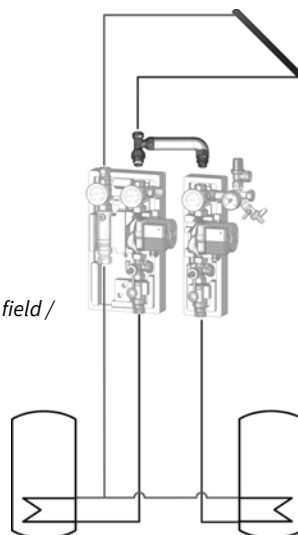
Connection set for two solar stations

Pre-insulated and pre-bent corrugated pipe with 2 x 3/4" union nuts; brass T-piece incl. transitions to the solar stations 3/4" M for on-site linking up of the connecting pipes; one cap 3/4"

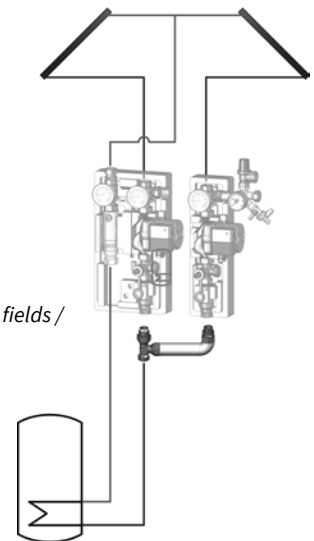
AI-66356.10

Connection examples

1 collector field /
2 tanks



2 collector fields /
1 tank



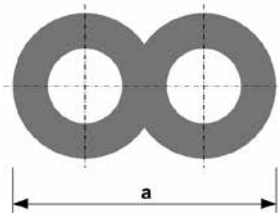
Components for solar systems

inflex stainless steel corrugated pipe in double circuit insulation with cable



in fixed lengths or adjustable in a length of up to max. 40 m, with high temperature resistant EPDM rubber insulation up to 150 °C, short periods up to 175 °C, insulation thickness 14 mm.

Dimension	a in mm	Art. No.
DN 16	92	AI-46123TSK
DN 20	98	AI-46122 TSK



Dimension	Length	a in mm	Art. No.
DN 16	10 m	92	AI-46123TSK10
DN 16	15 m	92	AI-46123TSK15
DN 16	20 m	92	AI-46123TSK20
DN 16	25 m	92	AI-46123TSK25
DN 20	10 m	98	AI-46122TSK10
DN 20	15 m	98	AI-46122TSK15
DN 20	20 m	98	AI-46122TSK20
DN 20	25 m	98	AI-46122TSK25

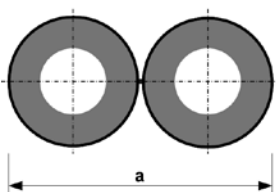
inflex stainless steel corrugated pipe in double circuit insulation with cable and protective foil

as above, but with foil covering as protection against mechanical harm. Separable into 2 single circuits.

6



Dimension	a in mm	Art. No.
DN 16	108	AI-46123CSK
DN 20	120	AI-46122CSK



Dimension	Length	a in mm	Art. No.
DN 16	10 m	108	AI-46123CSK10
DN 16	15 m	108	AI-46123CSK15
DN 16	20 m	108	AI-46123CSK20
DN 16	25 m	108	AI-46123CSK25
DN 20	10 m	120	AI-46122CSK10
DN 20	15 m	120	AI-46122CSK15
DN 20	20 m	120	AI-46122CSK20
DN 20	25 m	120	AI-46122CSK25



Oval clip set

comprising an oval clip for attaching the inflex stainless steel corrugated pipe in double circuit insulation DN 16 and DN 20 incl. hanger bolt M8 × 80 and rawl plugs.

AI-69410.7

Note: Suitable fast threaded joints 'FixLock' plus flat sealing Threaded joints + other products e.g. 'inflex stainless steel corrugated pipe' as piece goods are shown from page 206 (Chapter 11 'Flexible Connections').

The following products are shown in Chapter 7 - Circuit control valves:	From page
Static circuit control valves Nexus Valve Fluctus	144
Static circuit control valves Nexus Valve Vertex	146
Shut-off ball valve with pre-set Nexus Valve Initus	146
Shut off ball valve Nexus Valve Relax	147
Dynamic circuit control valves Nexus Valve Vivax	148
Automatic volumetric flow rate - and temperature limiter Nexus Valve Vivax T	149
Differential pressure regulator Nexus Valve Passim	150
Accessories / metering computer Flowmeter	151

Circuit control valves

7



Nexus Valve is a complete range, which takes in all variants from static and dynamic circuit control valves through differential pressure regulators up to pre-adjustable shut off ball valves.

The innovative Nexus Valve technology is constantly being developed, with a view to making installation, hydraulic balancing and operation for greater end-user convenience and energy savings even simpler and faster. An optimised valve structure and coordinated partner valves guarantee perfect balancing plus simple maintenance and service.

All Nexus Valve valves are manufactured according to ISO quality standards to ensure a high standard. A comprehensive service package with technical documentation and technical support is available.



Your advantages

- *Fast and simple hydraulic balancing*
- *Least measuring tolerances (through Venturi nozzle)*
- *Flexible installation, in each position / can be installed without calming sections**
- *Simplest measurement by delinking measurement strip + pre-adjustment***
- *No change to the setting values on shutting off*

The Nexus Valve balancing computer BC2 is a compact hand-held device for measuring differential pressure and for efficient system commissioning. The system connection of the balancing computer is simply carried out to the measurement point of a circuit control valve using the hoses and metering needles supplied. The built-in pressure sensors measure the differential pressure, which is immediately converted together with the flow coefficient of the valves in a flow-through display.

*only Venturi up to DN50, Dynamic and Delta
**only Venturi

Static circuit control valves

Nexus Valve Fluctus FODRV

Combined static circuit control and shut-off valve for cooling and heating circuit flows. Measurement in Venturi jet with fixed flow coefficient. Installation without calming sections. Flow rate measurement without entering the valve setting. Housing of dezincification resistant brass CW602N; Venturi spindle of dezincification resistant brass CW602N; Ball/control screw of dezincification resistant brass CW602N, chromium-plated. Shut-off valve with ball valve, measuring connections of dezincification resistant brass CW602N.

Operating temperature	-20 up to 120 °C
Measuring accuracy	+/- 3%
Pressure rating	PN 25
Connection	Female thread
Nominal width	DN 15 – DN 50

Connection F

Nominal width	Flow coefficient	Control range l/h	Art. No.
DN 15 U 1/2"	0.23	27-126	N80597.400
DN 15 L 1/2"	0.63	62-266	N80597.401
DN 15 S 1/2"	1.62	130-530	N80597.402
DN 15 H 1/2"	2.49	267-1170	N80597.403
DN 20 L 3/4"	1.43	130-530	N80597.404
DN 20 S 3/4"	2.82	267-1170	N80597.405
DN 20 H 3/4"	5.72	511-2170	N80597.406
DN 25 S 1"	7.54	511-2170	N80597.407
DN 25 H 1"	12.1	1044-4500	N80597.408
DN 32 H 1 1/4"	13.2	1044-4500	N80597.409
DN 40 H 1 1/2"	22.0	1580-6760	N80597.410
DN 50 H 2"	36.0	2950-12630	N80597.411



Connection F and fill and drain ball valve / connection for Nexus Valve Passim

Nominal width	Flow coefficient	Control range l/h	Art. No.
DN 15 U 1/2"	0.23	27-126	N80597.530
DN 15 L 1/2"	0.63	62-266	N80597.531
DN 15 S 1/2"	1.62	130-530	N80597.532
DN 15 H 1/2"	2.49	267-1170	N80597.533
DN 20 L 3/4"	1.43	130-530	N80597.534
DN 20 S 3/4"	2.82	267-1170	N80597.535
DN 20 H 3/4"	5.72	511-2170	N80597.536
DN 25 S 1"	7.54	511-2170	N80597.537
DN 25 H 1"	12.1	1044-4500	N80597.538
DN 32 H 1 1/4"	13.2	1044-4500	N80597.539
DN 40 H 1 1/2"	22.0	1580-6760	N80597.540
DN 50 H 2"	36.0	2950-12630	N80597.541



Static circuit control valves

Nexus Valve Fluctus FODRV

Combined static circuit control and shut-off valve for cooling and heating circuit flows. Measurement in Venturi jet with fixed flow coefficient. Installation without calming sections. Flow rate measurement without entering the valve setting. Housing of dezincification resistant brass CW602N; Venturi spindle of dezincification resistant brass CW602N; ball/control screw of dezincification resistant brass CW602N, chromium-plated. Shut-off valve with ball valve, measuring connections of dezincification resistant brass CW602N.

Measuring accuracy	+/- 3%
Operating temperature	-20 °C up to 135 °C
Operation	Handle
Pressure rating	PN 16
Connection	Flange EN 1092-1 PN16
Nominal width	DN 15 – DN 50

with flange connection



Nominal width	Flow coefficient	Control range l/h	Art. No.
DN 15 U 1/2"	0.23	27 – 126	N80597.450
DN 15 L 1/2"	0.63	62 – 266	N80597.451
DN 15 S 1/2"	1.62	130 – 530	N80597.452
DN 15 H 1/2"	2.49	267 – 1170	N80597.453
DN 20 L 3/4"	1.43	130 – 530	N80597.454
DN 20 S 3/4"	2.82	267 – 1170	N80597.455
DN 20 H 3/4"	5.72	511 – 2170	N80597.456
DN 25 S 1"	7.54	511 – 2170	N80597.457
DN 25 H 1"	12.1	1044 – 4500	N80597.458
DN 32 H 1 1/4"	13.2	1044 – 4500	N80597.459
DN 40 H 1 1/2"	22.0	1580 – 6760	N80597.460
DN 50 H 2"	36.0	2950 – 12630	N80597.461

Combined circuit control and shut-off valve for cooling and heating circuit flows. Measurement in Venturi jet with fixed flow coefficient. Flow rate measurement without entering the pre-adjustment. Venturi measuring pipe ST 37.0, surface treated. Control flange shut-off valve with manual gearbox and MemoryStop. Brass measurement support of dezincification resistant brass.

Measuring accuracy	+/- 3%
Operating temperature	max. 120 °C
Operation	Hand wheel
Pressure rating	PN 16
Connection	Flange PN16 DIN2501
Nominal width	DN 65 – 300

with flange connection and manual gearbox



Nominal width	Flow coefficient	Control range m³/h	Art. No.
DN 65 2 1/2"	78.2	6.48-25.2	N80597.471
DN 80 3"	169	12.6-54.0	N80597.472
DN 100 4"	360	22.3-93.6	N80597.473
DN 125 5"	502	32.4-144	N80597.474
DN 150 6"	1010	60.5-205	N80597.475
DN 200 8"	1910	101-360	N80597.476
DN 250 10"	2540	148-565	N80597.477
DN 300 12"	4850	259-814	N80597.478

Other sizes and models on request.

Static circuit control valves / Service valve

Nexus Valve Vertex

Combined circuit control and shut-off valve for cooling and heating circuit flows. Measurement in continuously adjustable changeover with variable flow coefficient. No prescribed through-flow direction, measurement / setting / shutting-off possible in both directions. Housing of dezincification resistant brass CW602N. Ball/control screw of dezincification resistant brass CW602N chromium-plated, shut-off valve with ball valve, measurement connections of dezincification resistant brass CW602N, O-Ring EPDM.

Operating temperature	-20 °C up to 120 °C
Pressure rating	PN 25
Connection	Coupler thread
Nominal width	DN 15 – DN 50

Connection F

Nominal width	Flow coefficient	Control range l/h	Art. No.
DN 10 3/8"	0.67	11-270	N80597.699
DN 15 1/2"	1.71	19-530	N80597.700
DN 20 3/4"	4.40	55-1170	N80597.701
DN 25 1"	7.46	84-2170	N80597.702
DN 32 1 1/4"	13.5	310-4500	N80597.703
DN 40 1 1/2"	23.7	450-6770	N80597.704
DN 50 2"	34.5	960-12640	N80597.705

Connection F and fill and drain ball valve / connection for Nexus Valve Passim

DN 10 3/8"	0.67	11-270	N80597.712
DN 15 1/2"	1.71	19-530	N80597.706
DN 20 3/4"	4.40	55-1170	N80597.707
DN 25 1"	7.46	84-2170	N80597.708
DN 32 1 1/4"	13.5	310-4500	N80597.709
DN 40 1 1/2"	23.7	450-6770	N80597.710
DN 50 2"	34.5	960-12640	N80597.711

Nexus Valve Initus

Pre-adjustable ball valve with drainage device for cooling and heating circuit flows. No prescribed direction of flow. Setting / shutting-off possible in both directions. Housing of brass CW617N. Ball/control screw of dezincification resistant brass CW602N chromium-plated, shut-off valve with ball valve, O-ring EPDM.

Operating temperature	-20 °C up to 120 °C
Pressure rating	PN 25
Connection	Coupler thread
Nominal width	DN 15 – DN 32

Model	Art. No.
DN 15	N80597.740
DN 20	N80597.741
DN 25	N80597.742
DN 32	N80597.743

In accordance with DIN EN 12828, the Nexus Valve Initus is suitable for use at temperatures between -20 °C and +105 °C and at pressures from a maximum 25 bar (in closed state of the drainage device). The maximum media temperature at the plastic nozzle of the drainage device should not exceed 90 °C over a longer period.



Static circuit control valves

Nexus Valve Relax shut off ball valve

Shut off ball valve for cooling and heating circuit flows. Suitable as shut-off valve for Nexus Valve circuit controls, partner for Nexus Valve Passim (DP) with drainage tap / connection for capillary tube. No prescribed through-flow direction, shutting-off possible in both directions. Housing of dezincification resistant brass CW602N, spindle of dezincification resistant brass CW602N.

Operating temperature	-20 °C up to +120 °C
Pressure rating	PN 25
Connection	Coupler thread
Nominal width	DN 15 – DN 300



Connection F

Nominal width	Flow coefficient	Art. No.
DN 15 1/2"	1.80	N80597.720
DN 20 3/4"	4.65	N80597.721
DN 25 1"	7.40	N80597.722
DN 32 1 1/4"	15.5	N80597.723
DN 40 1 1/2"	25.7	N80597.724
DN 50 2"	44.0	N80597.725

Connection F including fill and drain ball valve / Connection for Nexus Valve Passim

DN 15 1/2"	1.80	N80597.726
DN 20 3/4"	4.65	N80597.727
DN 25 1"	7.40	N80597.728
DN 32 1 1/4"	15.5	N80597.729
DN 40 1 1/2"	25.7	N80597.730
DN 50 2"	44.0	N80597.731



Nexus Valve Relax shut-off valve

Flange shut-off valve for cooling and heating circuit flows. Suitable as shut-off for Nexus valve circuit control. No prescribed through-flow direction, shutting-off possible in both directions. Corrugation and disc made of stainless steel, seal EPDM.

Operation	Manual gear box
Operating temperature	-20 °C up to +120 °C
Pressure rating	PN 16
Connection	Flange
Nominal width	DN 65 – DN 300 (larger DN on request)



DN 65	Shut-off valve, flange housing	148	N80597.4710
DN 80	Shut-off valve, flange housing	237	N80597.4720
DN 100	Shut-off valve, flange housing	603	N80597.4730
DN 125	Shut-off valve, flange housing	888	N80597.4740
DN 150	Shut-off valve, flange housing	2340	N80597.4750
DN 200	Shut-off valve, flange housing	2850	N80597.4760
DN 250	Shut-off valve, flange housing	4550	N80597.4770
DN 300	Shut-off valve, flange housing	7760	N80597.4780

Dynamic circuit control valves

Nexus Valve Vivax automatic flow rate controller

Automatic volumetric flow limiters for cooling and heating circuit flows. Measurement in Venturi jet with fixed flow coefficient without calming sections. Direct flow rate measurement without entering the valve setting. Housing of dezincification resistant brass CW602N. Meter connections dezincification resistant. Brass CW602N.

Measuring accuracy:	+/- 3%	Operating pressure:	max. 400 kPa
Pressure rating:	PN 25	Connection:	Coupler thread
Operating temperature:	-20 °C up to 120 °C	Nominal width:	DN 15 – DN 50

Connection F DN 15 - 32

Nominal width	Control range l/h	colour Recognition	Art. No.
DN 15 L 1/2"	36 – 118	white	N80597.001
DN 15 S 1/2"	90 – 450	red	N80597.002
DN 15 H 1/2"	300 – 1400	black	N80597.003
DN 20 S 3/4"	320 – 882	white	N80597.004
DN 20 H 3/4"	835 – 2221	black	N80597.005
DN 25 S 1"	865 – 2340	white	N80597.006
DN 25 H 1"	1750 – 3330	black	N80597.007
DN 32 H 1 1/4"	1910 – 4400	black	N80597.008

Other sizes on request.

Thermoelectric actuator for Nexus Valve Vivax DN 15 – 25

Model	Art. No.
Control drive 24 V AC, 0-10 V control voltage	N80597.0023
230 V/50 Hz OPEN/CLOSED	N80597.0021
24 V AC/DC OPEN/CLOSED	N80597.0022

Electrical motor actuator for Nexus Valve Vivax DN 15 – 32

Control drive 24 V AC, 0 – 10 VV control voltage	N80597.0027
230 V/50 Hz DC OPEN/CLOSED	N80597.0029
24 V AC OPEN/CLOSED	N80597.0028

Connection F DN 40 / DN 50

Nominal width	Control range l/h	colour Recognition	Art. No.
DN 40 1 1/2"	3670 – 7560	white	N80597.010
DN 50 2"	5180 – 12600	black	N80597.013

Actuator for Nexus Valve Vivax DN 40 – 50

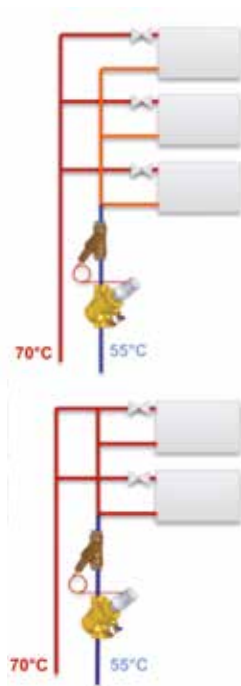
Model	Art. No.
Actuator 24 V AC, 0 – 10 V control voltage	N80597.0113
3-point actuator 24 V AC	N80597.0114
3-point actuator 230 V AC	N80597.0115

Connection flange DN 65 - 200, PN 16 incl. actuator

Nominal width	Control range m ³ /h	kPa	Art. No.
DN 65 – 80	5.3 – 15	30 – 600	N80597.030
DN 65 – 80	9.24 – 25.7	30 – 600	N80597.031
DN 65 – 80	12.8 – 35.6	35 – 600	N80597.032
DN 80 / 100	12.6 – 33.8	30 – 600	N80597.033
DN 80 / 100	17 – 51	35 – 600	N80597.034
DN 80 / 100	13.3 – 72.7	50 – 600	N80597.035
DN 125 / 150	23.3 – 83.8	30 – 600	N80597.036
DN 125 / 150	25.6 – 106	35 – 600	N80597.037
DN 200 / 250	33.1 – 277	35 – 600	N80597.038



Dynamic circuit control valves



Nexus Valve Vivax T - Automatic flow rate and Temperature limiter for cooling and heating circuit flows.

Automatic hydraulic balancing of the circuits or users in 1 and 2 pipe heating systems and optimisation of the heat efficiency by limiting the return line temperature. As with the Nexus Valve Vivax, the maximum volume flow is set via the pre-adjustment to ensure correct provision in all circuits or users.

In addition, the Nexus Valve Vivax T is fitted with a thermostatic actuator incl. immersion sensor. This means that as well as the volume flow the temperature can also be limited. The return line temperature is limited to the value set. The valve is only opened by the thermostatic head if the prescribed temperature is underrun. In this way, the heat efficiency is raised considerably.

Measuring accuracy for flow rate	+/- 3%
Control range temperature	20 – 65 °C
Operating pressure	max. 400 kPa
Pressure rating	PN 25
Connection	Coupler thread
Operating temperature	-20 °C up to +120 °C
Nominal width	DN 15 – DN 25

Nexus Valve Vivax T with immersion sensor



Nominal width	Control range l/h	colour Recognition	Art. No.
DN 15 L 1/2"	36 – 118	white	N80597.121
DN 15 S 1/2"	90 – 450	red	N80597.122
DN 15 H 1/2"	300 – 1400	black	N80597.123
DN 20 S 3/4"	320 – 882	white	N80597.124
DN 20 H 3/4"	835 – 2221	black	N80597.125
DN 25 S 1"	865 – 2340	white	N80597.126
DN 25 H 1"	1750 – 3330	black	N80597.127

Nexus Valve Vivax T with contact sensor



Nominal width	Control range l/h	colour Recognition	Art. No.
DN 15 L 1/2"	36 – 118	white	N80597.1210
DN 15 S 1/2"	90 – 450	red	N80597.1220
DN 15 H 1/2"	300 – 1400	black	N80597.1230
DN 20 S 3/4"	320 – 882	white	N80597.1240
DN 20 H 3/4"	835 – 2221	black	N80597.1250
DN 25 S 1"	865 – 2340	white	N80597.1260
DN 25 H 1"	1750 – 3330	black	N80597.1270

Ball valve sets for DN 15 and DN 20



Model	Art. No.
G 3/4	for DN 15 and DN 20 N80597.129

Ball valve sets for DN 25

G 1	N80597.130
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Differential pressure regulator

Nexus Valve Passim (DP) differential pressure regulator

Automatic differential pressure regulator with adjustable differential pressure for heating and chilled water (cooling) systems. Shut-off valve without changing the pre-adjustment. Differential pressure via pre-adjustment or with adjustable measuring computer (with optional partner valve). Installation in the return line, without calming sections. Including 1 m capillary pipe with 1/16" M to the flow line. Housing, seat, cone, mechanical parts of dezincification resistant brass CW602N, spring stainless steel, seal and diaphragm EPDM, shut-off PPS.

Pressure rating	PN 25
Operating temperature	-20 °C up to +120 °C short periods 135 °C
Nominal width	DN 15 – DN 50
Differential pressure	*max. 2.5 bar

Connection M without fill and drain ball valve (differential pressure max. 4 bar)



Nominal width	Flow coefficient	Control range kPa	Art. No.
DN 15	1.6	5-25	N80597.550
DN 15	1.6	20-40	N80597.551
DN 20	2.5	5-25	N80597.591
DN 20	2.5	20-40	N80597.592
DN 20	2.5	20-65	N80597.593

Connection F without fill and drain ball valve*



DN 15	1/2"	1.6	5-25	N80597.560
DN 15	1/2"	1.6	20-40	N80597.561
DN 20	3/4"	2.5	5-25	N80597.562
DN 20	3/4"	2.5	20-40	N80597.563
DN 25	1"	4.0	5-25	N80597.564
DN 25	1"	4.0	20-40	N80597.565
DN 32	1 1/4"	6.3	5-25	N80597.566
DN 32	1 1/4"	6.3	20-40	N80597.567

Connection F including fill and drain ball valve*



DN 15	1/2"	1.6	5-25	N80597.521
DN 15	1/2"	1.6	20-40	N80597.522
DN 15	1/2"		20-65	N80597.5222
DN 20	3/4"	2.5	5-25	N80597.523
DN 20	3/4"	2.5	20-40	N80597.524
DN 20	3/4"		20-65	N80597.5242
DN 25	1"	4.0	5-25	N80597.525
DN 25	1"	4.0	20-40	N80597.526
DN 25	1"		20-65	N80597.5262
DN 32	1 1/4"	6.3	5-25	N80597.527
DN 32	1 1/4"	6.3	20-40	N80597.528
DN 32	1 1/4"		20-65	N80597.5282
DN 40	1 1/2"	10	5-25	N80597.570
DN 40	1 1/2"	10	20-40	N80597.571
DN 40	1 1/2"	10	35-75	N80597.572
DN 50	2"	20	5-25	N80597.580
DN 50	2"	20	20-40	N80597.581
DN 50	2"	20	35-75	N80597.582
DN 50	2"	20	60-100	N80597.583

Other sizes and models on request

Connection flange PN 16 incl. actuator



DN 65	58	20-80	N80597.602
DN 65	58	70-130	N80597.604
DN 80	80	20-80	N80597.605
DN 80	80	70-130	N80597.603

Measuring computer / Accessories



Nexus Valve Flowmeter BC2 measuring computer

Measuring device for hydraulic balancing. Suitable for Nexus Valve. Supplied in the Heavy Duty Case. Contents: 2 Pressure measuring probes DN 15 DN 600 with hoses and Rectus coupling, flowmeter with digital display and keyboard, long-term memory with freely selectable interval. USB connection, visualisation software, USB connection, charger, other accessories.

Model	Art. No.
Nexus Valve Flowmeter BC2	N80597.1



Nexus Valve settings tool

For pre-adjustment of Nexus Valve Fluctus, Vario and Delta DN 15-50

N80597.1009



Hot-pressed transition brass, 2 items

G 1/2" M / 15 mm	N80597.0001
G 1/2" M / 18 mm	N80597.0002
G 3/4" M / 15 mm	N80597.0003
G 3/4" M / 18 mm	N80597.0004
G 3/4" M / 22 mm	N80597.0005
G 1" M / 28 mm	N80597.0006
G 1 1/4" M / 35 mm	N80597.0007
G 1 1/2" M / 42 mm	N80597.0008
G 2" M / 54 mm	N80597.0009



Thermal insulation for Nexus Valve

Nominal width	Art. No.	Art. No.
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Insulated box for Nexus Valve Fluctus

DN 15	N80597.4007
DN 20	N80597.4008
DN 25	N80597.4009
DN 32	N80597.4010
DN 40	N80597.4017
DN 50	N80597.4018



Insulated box for Nexus Valve Vertex / Relax

DN 15	80597.7000	Nexus Valve Vivax	N80597.0010
DN 20	80597.7010	N80597.0040	
DN 25	80597.7020	N80597.0060	
DN 32	80597.7030	N80597.0080	
DN 40	80597.7040	N80597.0100	
DN 50	80597.7050	N80597.0130	



Insulated box for Nexus Valve Passim

DN 15	N80597.5210
DN 20	N80597.5230
DN 25	N80597.5250
DN 32	N80597.5270
DN 40	N80597.5680
DN 50	N80597.5710



The following products are shown in Chapter 8 - Domestic water fittings:		From page
Thermal control valve (ZIV) for domestic water circulation		154
8.1 Red brass piston valves		157
<ul style="list-style-type: none"> Red brass piston valves with female thread and Red brass backflow preventers and accessories Red brass flush-mounted valves – circular system flow accessories Sampling valve / and set for last draw-off point 		
8.2 Hot-pressed brass fittings		163
<ul style="list-style-type: none"> Taps Fittings combination DIN-DVGW (taps with tube aerator and backflow preventers) Freeflow valves DIN-DVGW Backflow preventers DIN-DVGW capable of being shut off 		
8.3 Refurbishment systems for domestic water distribution ('water manifold')		169
<ul style="list-style-type: none"> Angle valves for hot and cold water for manhole refurbishment Components for manhole refurbishment (manifolds) Wall ducts for hot and cold water for manhole refurbishment Wall panels with tap extension Connecting links Manhole refurbishment with multi-layer composite piping 		

Domestic water fittings

8



Meibes, with the brand Rossweiner, offers a comprehensive product range of fittings for installing domestic water. Piston valves made of red brass, thermal control valve (ZIV) for domestic water disinfection, hot-pressed brass fittings plus refurbishment systems for domestic water distribution are shown on the following pages.

All fittings subject to test certification, are DIN-DVGW tested. Sealants comply with the KTW recommendations for domestic water systems.



Your advantages

- *Comprehensive product range*
- *Parts in contact with the medium made of corrosion resistant material*
- *Favourable price-performance relationship*
- *Low-noise operation*

Thermal control valve (ZIV) for domestic water

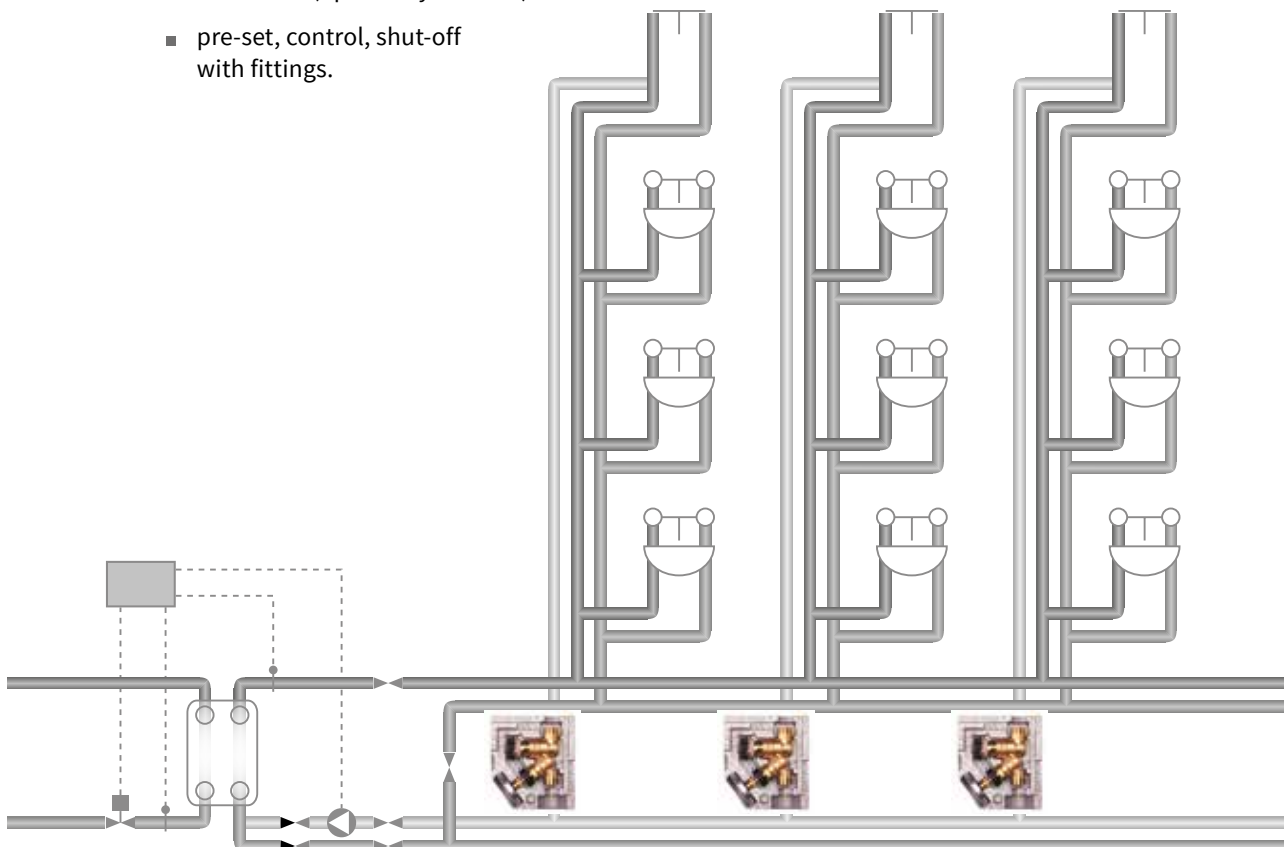
for use in circulation piping in accordance with DVGW Worksheet W551 and W553

The product

- Thermal controller in the range 50 – 60 °C with a control accuracy of +/- 2 K
- Automatic thermal disinfection in the temperature range $T > 65$ °C
- Flow rate manually adjustable corresponding to diagram
- Fittings DIN-DVGW tested.

The advantages

- Parts in contact with the medium made of corrosion resistant red brass
- Only two operating levels: Drainage device and thermometer mounting combined
- Including thermometer and insulation (optionally without)
- pre-set, control, shut-off with fittings.



Thermal control valve (ZIV) for domestic water

Circulation valves with insulation

Model: Red brass
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 90 °C
 Flow medium: Domestic water



Circulation valves with female thread

50 °C – 60 °C according to DIN-DVGW

Connection	Nominal width	Valve length	VPE	Art. No.
Rp 1/2"	DN 15	98 mm	10	AI-1206320
Rp 3/4"	DN 20	125 mm	10	AI-1206360
Rp 1"	DN 25	136 mm	5	AI-1206400

Circulation valves with male thread

for metal pipe threaded joints

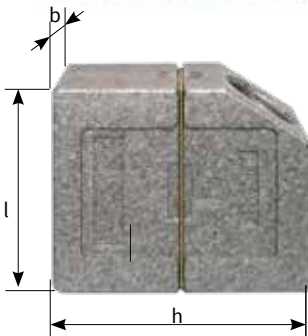
50 °C – 60 °C according to DIN-DVGW

Connection	Nominal width	Valve length	VPE	Art. No.
G 3/4	DN 15	98 mm	10	AI-1206340
G 1"	DN 20	103 mm	10	AI-1206380
G 1 1/2"	DN 25	113 mm	5	AI-1206420

Insulation and thermometer are included in the scope of supply.

Dimensions with ISO:

Connection	Nominal width	h	l	b
Rp 1/2" G 3/4"	DN 15	143 mm	162 mm	82 mm
Rp 3/4" G 1"	DN 20	143 mm	162 mm	90 mm
Rp 1" G 1 1/2"	DN 25	157 mm	162 mm	110 mm



Circulation valves without insulation

Model: Red brass
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 90 °C
 Flow medium: Domestic water

Circulation valves with female thread

50 °C – 60 °C according to DIN-DVGW

Connection	Nominal width	Valve length	VPE	Art. No.
Rp 1/2	DN 15	98 mm	10	AI-1206325
Rp 3/4	DN 20	125 mm	10	AI-1206365
Rp 1	DN 25	136 mm	5	AI-1206405



Circulation valves with male thread for metal pipe threaded joints

50 °C – 60 °C according to DIN-DVGW

Connection	Nominal width	Valve length	VPE	Art. No.
G 3/4	DN 15	98 mm	10	AI-1206345
G 1	DN 20	103 mm	10	AI-1206385
G 1 1/4	DN 25	113 mm	5	AI-1206425



**The following products are shown in Chapter 8.1 -
Red brass piston valves**

**From
page**

Red brass piston valves with female thread	158
Red brass backflow preventers	159
Accessories	160
Red brass flush-mounted valves - circular system flow and accessories	161
Sampling valve / and set for last draw-off point	161

Red brass piston valves

8.1



Meibes, with the brand Rossweiner, offers a comprehensive product range of fittings for installing domestic water. Piston valves made of red brass with female thread and male thread connection plus backflow preventer made of red brass as individual components are shown on the following pages. All fittings are DIN-DVGW tested. Sealants comply with the KTW recommendations for domestic water systems. The spindle thread is out of the flow of the medium, with the result that contact is slight and no wear through corrosion or deposits occurs.



Your advantages

- *Zero dead leg upper section – no standing water that could promote Legionella growth*
- *Parts in contact with the medium made of corrosion resistant material*
- *Optimised use of material for a favourable price-performance relationship*
- *Free flow-through ensures low noise operation*
- *Full, round, smooth aperture for double the flow-through performance of freeflow valves*
- *No water hammer caused on opening and closing*
- *Backflow preventers with low opening pressure ≥ 10 mbar*

Red brass piston valves

Red brass piston valves with female thread

permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C, upper section with non-rising spindle, DIN-DVGW, sound insulation according to DIN 52218: Fittings group 1



Piston valve, Type 180

Connection	Nominal width	Length mm	VPE	Art. No.
Rp 1/2	DN 15	65	30	Al-1204010
Rp 3/4	DN 20	75	20	Al-1204020
Rp 1	DN 25	90	10	Al-1204030
Rp 1 1/4	DN 32	110	5	Al-1204040
Rp 1 1/2	DN 40	120	5	Al-1204050
Rp 2	DN 50	150		Al-1204060



Piston valve with drainage device, Type 181

Rp 1/2	DN 15	65	30	Al-1204070
Rp 3/4	DN 20	75	20	Al-1204080
Rp 1	DN 25	90	10	Al-1204090
Rp 1 1/4	DN 32	110	5	Al-1204100
Rp 1 1/2	DN 40	120	5	Al-1204110
Rp 2	DN 50	150		Al-1204120

Red brass piston valves with male thread for metal pipe threaded joints

permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C, with male thread, simple threaded joint size for use of soldered threaded joints, male threaded joints, hot-pressed threaded joints for upper section with non-rising spindle, DIN-DVGW, sound insulation according to DIN 52218: Fittings group 1



Piston valve, Type 180.1

G 3/4	DN 15	60	30	Al-1204130
G 1	DN 20	65	20	Al-1204140
G 1 1/4	DN 25	70	10	Al-1204150
G 1 1/2	DN 32	90	5	Al-1204160
G 1 3/4	DN 40	100	5	Al-1204170
G 2 3/8	DN 50	120		Al-1204180



Piston valve with drainage device, Type 181.1

G 3/4	DN 15	60	30	Al-1204190
G 1	DN 20	65	20	Al-1204200
G 1 1/4	DN 25	70	10	Al-1204210
G 1 1/2	DN 32	90	5	Al-1204220
G 1 3/4	DN 40	100	5	Al-1204230
G 2 3/8	DN 50	120		Al-1204240

Red brass piston valves

Red brass backflow preventers

permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C

Backflow preventers without drainage device, Type 190

Union nut – female thread



Connection Inlet	Outlet	Nominal width	Length mm	VPE	Art. No.
G 3/4	Rp 1/2	DN 15	50	10	AI-1204430
G 1	Rp 3/4	DN 20	53	10	AI-1204440
G 1 1/4	Rp 1	DN 25	55	10	AI-1204450
G 1 1/2	Rp 1 1/4	DN 32	65	5	AI-1204460
G 1 3/4	Rp 1 1/2	DN 40	75	5	AI-1204470
G 2 3/8	Rp 2	DN 50	75	5	AI-1204480

Backflow preventers with drainage device, Type 191

Union nut – female thread



G 3/4	Rp 1/2	DN 15	50	10	AI-1204370
G 1	Rp 3/4	DN 20	53	10	AI-1204380
G 1 1/4	Rp 1	DN 25	55	10	AI-1204390
G 1 1/2	Rp 1 1/4	DN 32	65	5	AI-1204400
G 1 3/4	Rp 1 1/2	DN 40	75	5	AI-1204410
G 2 3/8	Rp 2	DN 50	75	5	AI-1204420

Backflow preventers without drainage device, Type 190.1

Union nut - male thread for metal pipe threaded joints



G 3/4	G 3/4	DN 15	50	10	AI-1204620
G 1	G 1	DN 20	53	10	AI-1204630
G 1 1/4	G 1 1/4	DN 25	55	10	AI-1204640
G 1 1/2	G 1 1/2	DN 32	65	5	AI-1204650
G 1 3/4	G 1 3/4	DN 40	75	5	AI-1204660
G 2 3/8	G 2 3/8	DN 50	75	5	AI-1204670

Backflow preventers with drainage device, Type 191.1

Union nut - male thread for metal pipe threaded joints



G 3/4	G 3/4	DN 15	50	10	AI-1204560
G 1	G 1	DN 20	53	10	AI-1204570
G 1 1/4	G 1 1/4	DN 25	55	10	AI-1204580
G 1 1/2	G 1 1/2	DN 32	65	5	AI-1204590
G 1 3/4	G 1 3/4	DN 40	75	5	AI-1204600
G 2 3/8	G 2 3/8	DN 50	75	5	AI-1204610

Backflow preventer, Type 340.1

with insertion backflow preventers, model: male thread on both sides, DVGW approved



G 3/4	G 3/4	DN 15	55	30	AI-1206210
G 1	G 1	DN 20	65	30	AI-1206220
G 1 1/4	G 1 1/4	DN 25	75	10	AI-1206230

Red brass piston valves

Accessories

permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C,
model: Red brass – uncoated



Screw fitting 3 / 4 × 3 / 4

Union nut SW 32 movable with sealing option

Connection d1	d2	Nominal width	Length mm	VPE	Art. No.
G 3/4	R 3/4	DN 20	39.5	10	AI-1206140



Connection

with 2 union nuts, seals and sealing option

G 1	G 3/4	DN 15	35.5	30	AI-1206130
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Connection

with 2 union nuts, seals and sealing option

G 3/4	G 3/4	DN 15	33	30	AI-1206120
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Extension for bleed valve for threaded joints

Dimensions	Nominal width	VPE	Art. No.
G 1/4 × 30 mm	DN 08	10	AI-1308780
G 1/4 × 42 mm	DN 08	10	AI-1308790

8

Insulation shell

for piston valves with and without backflow preventers

Length	Diameter	Nominal width	Art. No.
145	82	DN 15	AI-1300700
158	91	DN 20	AI-1300710
170	116	DN 25	AI-1300720
206	129	DN 32	AI-1300730
228	161	DN 40	AI-1300740
260	195	DN 50	AI-1300750



Punch

for drilling drainage device hole in the insulation shell

AI-1300760

Red brass piston valves

Red brass flush-mounted valves – circular system flow

Model: Red brass, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C, DIN-DVGW, sound insulation according to DIN 52218,



Flush-mounted valve, Type 170

Circular system flow, with female thread, coupler-coupler

scope of supply for each item: 1× flush-mounted valve, 1× insulation shell, 1× mounting aid

Connection	Nominal width	Length valve mm	VPE	Art. No.
Rp 1/2	DN 15	65	9	AI-1206000
Rp 3/4	DN 20	75	6	AI-1206010
Rp 1	DN 25	90	4	AI-1206020

Accessories for red brass flush-mounted valves

Sampling valve

permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C

Sampling valve complete

Connection	Nominal width	Art. No.
G 1/4	DN 08	AI-1204000

Sampling valve

G 1/4	DN 08	AI-1204001
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Flame-off pipe

G 1/4	DN 08	AI-1204002
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Adapter

G 1/4 × G 3/8	DN 08	AI-1204003
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Sampling set – Last draw-off point

for flaming off standard sanitary fittings scope of supply, per item:

- Service spanner – professional quality; pinch threaded joint 1/2" × 10 mm
- Connection pipe 10 mm chromium-plated, length 11 cm
- Connection reducers:

• 1" F × 1/2" M	• m 22 × 1 F × 3/4" M	• m 22 × 1 M × 1/2" M	• m 24 × 1 M × 3/4" M
• 3/4" F × 1/2" M	• m 22 × 1 M × 3/4" M	• m 22 × 1 F × 1/2" M	• m 28 × 1 M × 3/4" M

Set	AI-1204005
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**The following products are shown in Chapter 8.2 -
Hot-pressed brass fittings**From
page

Freeflow valves DIN-DVGW

164

Backflow preventer DIN-DVGW

166

Hot-pressed brass fittings

8.2



Meibes, with the brand Rossweiner, offers a comprehensive product range of fittings for installing domestic water. Freeflow valves, taps, fittings combinations, freeflow valves, backflow preventers capable of being shut off and backflow preventers, etc.

Other products for domestic water installation are shown from page 169 as well as for water payments (water meter) are shown from page 60

Your advantages

- *Comprehensive product range, various models*
- *Housing and upper sections made of high-quality hot-pressed brass*
- *Sealants comply with the KTW recommendations for domestic water installation*



Hot-pressed brass fittings

Freeflow valves with female thread DIN-DVGW

Model: Hot-pressed brass, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C; all according to DIN 3502, upper section with double O-ring seal, DIN-DVGW, sound insulation according to DIN 52 218: Fittings group 1

Freeflow valve, Type 450, with rising spindle

Coupler – coupler



Nominal width	Length mm	VPE	Art. No.
DN 15	65	30	Al-1447500
DN 20	75	20	Al-1447510
DN 25	90	10	Al-1447520
DN 32	110	5	Al-1446280
DN 40	120	5	Al-1446290
DN 50	150		Al-1446300

Freeflow valve, Type 250, with non-rising spindle

Coupler – coupler



DN 15	65	30	Al-1243760
DN 20	75	20	Al-1243770
DN 25	90	10	Al-1243780
DN 32	110	5	Al-1446100
DN 40	120	5	Al-1446110
DN 50	150		Al-1446120
DN 65	180		Al-1243360
DN 80	210		Al-1243370

Freeflow valve, Type 451, with rising spindle

Coupler – coupler with drainage device



DN 15	65	30	Al-1447560
DN 20	75	20	Al-1447570
DN 25	90	10	Al-1447580
DN 32	110	5	Al-1446310
DN 40	120	5	Al-1446320
DN 50	150		Al-1446330

Freeflow valve, Type 25, with non-rising spindle

Coupler – coupler with drainage device



DN 15	65	30	Al-1243820
DN 20	75	20	Al-1243830
DN 25	90	10	Al-1243840
DN 32	110	5	Al-1446130
DN 40	120	5	Al-1446140
DN 50	150		Al-1446150
DN 65	180		Al-1243380
DN 80	210		Al-1243390

Hot-pressed brass fittings

Freeflow valves for metal pipe threaded joints DIN-DVGW

Model: Hot-pressed brass, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C; all: simple threaded joint size for the use of soldered threaded joints, male thread threaded joints, hot-pressed threaded joints; upper section with double O-ring seal, DIN-DVGW, sound insulation according to DIN 52 218: Fittings group 1

Freeflow valve, Type 450.1, with rising spindle with male thread



Nominal width	Connection	Length mm	VPE	Art. No.
DN 15	G 3/4	75	25	AI-1447880
DN 20	G 1	85	15	AI-1447890
DN 25	G 1 1/4	100	10	AI-1447900
DN 32	G 1 1/2	120	5	AI-1447910
DN 40	G 1 3/4	130	5	AI-1447920
DN 50	G 2 3/8	160		AI-1447930

Freeflow valve, Type 451.1, with rising spindle with male thread and drainage device



DN 15	G 3/4	75	25	AI-1448000
DN 20	G 1	85	15	AI-1448010
DN 25	G 1 1/4	100	10	AI-1448020
DN 32	G 1 1/2	120	5	AI-1448030
DN 40	G 1 3/4	130	5	AI-1448040
DN 50	G 2 3/8	160		AI-1448050

Hot-pressed brass fittings

Backflow preventer capable of being shut off with female thread DIN-DVGW

Model: Hot-pressed brass, permitted Operating pressure: PB 10 bar; permitted Operating temperature: TB 90 °C, sound insulation according to DIN 52 218: Fittings group 1, upper section with double O-ring seal

Backflow preventer (KFR) capable of being shut off, Type 452, with rising spindle

Coupler – coupler, upper section with double O-ring seal



Nominal width	Length mm	VPE	Art. No.
DN 15	65	30	Al-1447760
DN 20	75	20	Al-1447770
DN 25	90	10	Al-1447780
DN 32	110	5	Al-1446340
DN 40	120	5	Al-1446350
DN 50	150		Al-1446360

Backflow preventer (KFR) capable of being shut off, Type 252, with non-rising spindle

Coupler – coupler



DN 15	65	30	Al-1243880
DN 20	75	20	Al-1243890
DN 25	90	10	Al-1243900
DN 32	110	5	Al-1446160
DN 40	120	5	Al-1446170
DN 50	150		Al-1446180
DN 65	180		Al-1244000
DN 80	210		Al-1244010

Backflow preventer (KFR) capable of being shut off, Type 453, with rising spindle

Coupler – coupler with drainage device



DN 15	65	30	Al-1447820
DN 20	75	20	Al-1447830
DN 25	90	10	Al-1447840
DN 32	110	5	Al-1446370
DN 40	120	5	Al-1446380
DN 50	150		Al-1446390

Backflow preventer (KFR) capable of being shut off, Type 253, with non-rising spindle

Coupler – coupler with drainage device



DN 15	65	30	Al-1243940
DN 20	75	20	Al-1243950
DN 25	90	10	Al-1243960
DN 32	110	5	Al-1446190
DN 40	120	5	Al-1446200
DN 50	150		Al-1446210
DN 65	180		Al-1244020
DN 80	210		Al-1244030

Hot-pressed brass fittings

Backflow preventer capable of being shut off for metal pipe threaded joints DIN-DVGW

Model: Hot-pressed brass, permitted Operating pressure: PB 10 bar; permitted Operating temperature: TB 90 °C, sound insulation according to DIN 52 218: Fittings group 1; with male thread and drainage device, simple threaded joint size four the use of soldered fittings, male thread threaded joint, hot-pressed threaded joints, upper section with double O-ring seal

Backflow preventer (KFR) capable of being shut off, Type 452.1, with rising spindle



Nominal width	Connection	Length mm	VPE	Art. No.
DN 15	G 3/4	75	25	AI-1448120
DN 20	G 1	85	15	AI-1448130
DN 25	G 1 1/4	100	10	AI-1448140
DN 32	G 1 1/2	120	5	AI-1448150
DN 40	G 1 3/4	130	5	AI-1448160
DN 50	G 2 3/8	160		AI-1448170

Backflow preventer (KFR) capable of being shut off, Type 453.1, with rising spindle



DN 15	G 3/4	75	25	AI-1448240
DN 20	G 1	85	15	AI-1448250
DN 25	G 1 1/4	100	10	AI-1448260
DN 32	G 1 1/2	120	5	AI-1448270
DN 40	G 1 3/4	130	5	AI-1448280
DN 50	G 2 3/8	160		AI-1448290

Backflow preventers with female thread DIN-DVGW

Model: Hot-pressed brass, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 90 °C, sound insulation according to DIN 52 218: Fittings group 1

Backflow preventer, Type 354

Coupler – coupler



Nominal width	Length mm	VPE	Art. No.
DN 15	65	30	AI-1243640
DN 20	75	30	AI-1243650
DN 25	90	20	AI-1243660
DN 32	110	10	AI-1243670
DN 40	120	5	AI-1243680
DN 50	150		AI-1243690

Backflow preventer, Type 355

Coupler – coupler with drainage device



DN 15	65	30	AI-1243700
DN 20	75	30	AI-1243710
DN 25	90	20	AI-1243720
DN 32	110	10	AI-1243730
DN 40	120	5	AI-1243740
DN 50	150		AI-1243750

Refurbishment systems for domestic water distribution

8.3



Meibes offers a complete system for domestic water distribution for refurbishment projects. The comprehensive programme comprises products and accessories for renewing the water line, e.g. with the multi-layer composite piping of the brand Henco, domestic water-fittings, wall ducts for hot and cold water for manhole refurbishment up to mixer tap. Other products for extension, such as e.g. water meters are shown from page 60



Your advantages

- *Up to 50% less installation time*
- *Space-saving - specially for retrofitting / manhole refurbishment*
- *Exact water billing through integrated water meter*
- *Flexible with connections such as:*
 - *meiflex reinforced hose (with silicon - inner lining) for domestic water*
 - *or inflex stainless steel corrugated pipe*
 - *or multi-layer composite piping*



Manhole refurbishment with multi-layer composite piping

The solution for refurbishment of the domestic water distribution in multiple residential buildings is to use multi-layer composite piping which meets the highest hygienic requirements.

Refurbishment systems for domestic water distribution

Angle valves for hot and cold water for manhole refurbishment

Model: Hot-pressed brass, *red brass
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 90 °C



Globe valve - angle model

DIN-DVGW, male thread R 3/4, union nut G 3/4, with sealing option for water meter, upper section with double O-ring seal, sound insulation according to DIN 52 218: Fittings group 1

Name	Nominal width	Length	VPE	Art. No.
204.4	DN 15	53.5 mm	25	AI-1241830



Globe valve - angle model*

DIN-DVGW, male thread R 3/4, union nut G 3/4, with sealing option for water meter, model: Housing red brass, upper section made of dezincification resistant material and with double O-ring seal, sound insulation according to DIN 52 218: Fittings group 1

104.4	DN 15	53.5 mm	25	AI-1203000
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Globe valve - angle model

DIN-DVGW, coupler - socket threaded union for steel pipe connection, Rp 3/4 female thread, R 3/4 male thread, upper section with double O-ring seal, sound insulation according to DIN 52 218: Fittings group 1

204.3	DN 20	64.5 mm	25	AI-1246080
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Globe valve - angle model

DIN-DVGW, excluding socket, excluding union nut, G 1 male thread, Rp 3/4 female thread, Sound insulation according to DIN 52 218: Fittings group 1

S204.3	DN 20	30.5 mm	40	AI-1246070
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Suitable reinforced hose are shown from page 174.

Refurbishment systems for domestic water distribution

Components for manhole refurbishment

Model: Hot-pressed brass
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 90 °C

Scope of supply: Manifolds as required with union nut, as connection to the water meter or to the angle or globe valve (flat gaskets included); 1 × 1/2 end cap (flat sealing) for blind closing an outlet piece



DN 15 5 fold manifold 5 × F 1/2 male thread, 1 × G 3/4 union nut

Nominal width	VPE	Art. No.
DN 15	20	AI-1390440

DN 15 5 fold manifold 5 × G 1/2 male thread, 1 × G 1 union nut

DN 15	20	AI-1390400
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DN 15 3 fold manifold 3 × G 1/2 male thread, 1 × G 3/4 union nut

DN 15	30	AI-1390450
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DN 15 3 fold manifold 3 × G 1/2 male thread, 1 × G 1 union nut

DN 15	30	AI-1390410
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Wall ducts for hot and cold water for manhole refurbishment

Model: Hot-pressed brass
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 90 °C

Wall discs with 1/2 male thread R 1/2 M wall disc with anti-rotation protection

Model	Length mm	SW	VPE	Art. No.
Wall thickness 5 – 30 mm *	75	17	40	AI-1393110
Wall thickness 30 – 55 mm	100	17	40	AI-1393120
Wall thickness 55 – 85 mm	130	17	30	AI-1393130

*) with continuous threaded joints



Wall discs with 1/2 female thread G 1/2 F wall disc with anti-rotation protection

Wall thickness 30 – 55 mm	90	17	40	AI-1393080
Wall thickness 55 – 85 mm	120	17	30	AI-1393090
Wall thickness 85 – 140 mm	175	17	20	AI-1393100



Wall discs with 3/4 male thread and 1/2 female thread

G 3/4 M / G 1/2 F wall disc with washers Ø 50 with anti-rotation protection

Wall thickness 5 – 30 mm	65	24	40	AI-1391950
Wall thickness 5 – 75 mm	110	24	30	AI-1391958
Wall thickness 5 – 95 mm	130	24	20	AI-1391959



Refurbishment systems for domestic water distribution

Wall ducts for hot and cold water for manhole refurbishment

Model:	Hot-pressed brass
permitted Operating pressure:	PB 10 bar
permitted Operating temperature:	TB 90 °C

Backflow preventer

Threaded piece, installation between angle valve and water meter



Model	Length mm	VPE	Art. No.
DN 20 3/4" F / M	22	20	AI-1393220

M connection

with flat gaskets on G 1/2 M wall disc can be screwed on,
On-site installation (see section 1.1)



DN 15 1/2" F x 3/4" M	22	50	AI-1390640
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Cap

MS, supplied without flat gaskets



1/2"	20	AI-1390840
3/4"	20	AI-1390850

Seals - flat

for union nuts and caps, vulcanised fibre seal



1/2" **	100	AI-1780028
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***) Seals tested and approved for use with Meibes reinforced hose, wall discs and manifolds.

Fibre seal



3/4"	100	AI-1780029
1"	100	AI-1780033

Accessories for hot and cold water for manhole refurbishment - wall plate

For anti-rotation protection SW 17 or SW 24; and with 2 crimped angles

Zinc sheet



Model	VPE	Art. No.
1-hole 60 x 60 x D21.5 x SW17	50	AI-1393010
1-hole 60 x 60 x D26.5 x SW24	50	AI-1391940

Zinc sheet LA 45 mm



2-hole 118 x 60 x D21.5 x SW17	50	AI-1393020
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Zinc sheet LA 150 mm and 45 mm



3-hole 218 x 60 x D21.5 x SW17	30	AI-1393040
4-hole 218 x 60 x D26.5 x SW24	30	AI-1393050



Refurbishment systems for domestic water distribution

Wall panels with tap extension

self-locking, rotation-safe.

Coated with rubber or as claw plate for plasterboard walls.



Single plate 100 × 44 × 3 mm – rubber-coated

Threaded joints	Length	Art. No.
1/2" F	8/35 mm	AI-66335.20GKI
1/2" F (Figure)	8 – 70 mm	AI-66335.20GMI
1/2" F	70 – 130 mm	AI-66335.20GLI
3/4" M	0 – 60 mm	AI-66335.20GMA
3/4" M	40 – 120 mm	AI-66335.20GLA



Single plate 100 × 44 × 3 mm – as claw plate

1/2" F	10 – 40 mm	AI-66335.20KKI
1/2" F	10 – 75 mm	AI-66335.20KMI
1/2" F	70 – 135 mm	AI-66335.20KLI



Double plate 250 × 44 × 3 mm, AA = 150 mm – rubber-coated

1/2" F	8/35 mm	AI-66335.22GKI
1/2" F	8 – 70 mm	AI-66335.22GMI
1/2" F	70 – 130 mm	AI-66335.22GLI
3/4" M	40 – 120 mm	AI-66335.22GLA



Double plate 100 × 100 × 3 mm, AA = 45 mm

1/2" F	20 mm	AI-66335.16K
1/2" F	45 mm	AI-66335.16L



Single plate 100 × 44 × 3 mm

1/2" F	20 mm	AI-66335.17K
1/2" F	45 mm	AI-66335.17L

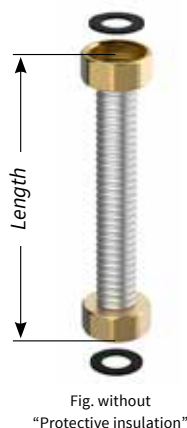
Article number explanation:

1. Letter stands for: **G** = wall plate rubber-coated **K** = wall plate claw **S** = wall plate
2. Letter stands for: **K** = short (60 mm) **m** = medium (100 mm) **L** = long (160)
3. Letter stands for: **I** = F 1/2"; **A** = M 3/4"

Refurbishment systems for domestic water distribution



Connections



meiflex - Stainless steel corrugated pipe with protective insulation

in fixed lengths. Connection on both sides with 1/2" union nut, incl. seals, bendable at several levels. Technical specifications and installation guidelines in accordance with technical information brochure.

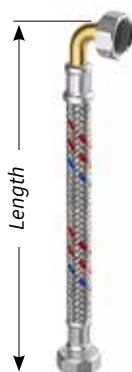
F/F	Length mm	Internal ø [mm]	Art. No.
1/2" / 1/2"	500	12	AI-46154.50W
	850	12	AI-46154.85W
	1000	12	AI-46154.100W
	1500	12	AI-46154.150W



meiflex - Reinforced hose, stainless steel braid and silicon inner lining

with red/red/blue identification marking, DVGW (Test W 543 with W 270, KTW-A), incl. seals

1/2" / 1/2"	500	8	AI-5715.0204.50
	850	8	AI-5715.0204.85
	1000	8	AI-5715.0204.100
	1350	8	AI-5715.0204.135



1/2" / 1/2"	500	13	AI-5715.1204.50
	850	13	AI-5715.1204.85
	1000	13	AI-5715.1204.100
	1500	13	AI-5715.1204.150

1/2" / 1/2"	500	8	AI-5715.0801.50
	850	8	AI-5715.0801.85
	1000	8	AI-5715.0801.100
	1350	8	AI-5715.0801.135

1/2" / 1/2"	500	13	AI-5715.1704.50
	850	13	AI-5715.1704.85
	1000	13	AI-5715.1704.100
	1500	13	AI-5715.1704.150

Other lengths on request.

The total product range "flexible connections" is shown from page 206 (Chapter 11).

Adapter complete with seal

for line valve present 1" M 3/4" F × 1" F	AI-45280.6A
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Plugs self-sealing for cube manifold (up to 2007)

1/2"	AI-G15105
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Cap for water manifold

1/2" incl. seal	AI-66158
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Adapter with O-ring self-sealing for Meibes cube manifold (up to 2007)

1/2"	AI-43.66123A
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The following products are shown in Chapter 9 - Radiator accessories

From page

9.1 Thermostatic control elements

178

Thermostatic head **startec 4**
 Thermostatic head **startec 2**
 Thermostatic head **rotherm 2**

9.2 Thermostatic valve bodies

184

Thermostatic valve bodies for bi-tube heating systems
 Bi-tube connection set, mono-tube connection set, accessories
 Design valve fittings
 Design thermostat sets
 Lance valves as four-way valves
 Accessories
 Removal equipment

9.3 Refurbishment systems for mono-tube heating systems

190

Bypass - assembly for conversion and new installation of vertical mono-tube heating systems
 - metal sealing
 - flat sealing
 Bypass - assembly for conversion of Forst single-storey heating systems
 Thermostatic valve bodies for conversion of vertical mono-tube heating systems, flat sealing
 Thermostatic valve bodies for conversion of Forst single-storey heating systems
 Accessories
 Disassembly device



Thermostatic valve bodies for bi-tube heating systems from page 190.

Radiator accessories



Meibes offers products and solutions of the trademarks Rosswainer and Comap for efficient heat emission and controller. The wide selection of thermostatic control elements in different designs and variants is complemented by suitable thermostatic valve bodies for bi-tube heating systems plus thermostatic circulation valves for line and single-storey areas. The thermostatic valve bodies with continuous pre-adjustment without hub limiting facilitate exact hydraulic balancing.

A special refurbishment system, specially developed by Rosswainer for mono-tube heating systems, such as Forst heating systems, allows owners and housing associations to cut their heating costs noticeably with little effort and in the shortest time.



Your advantages

- *Thermostatic heads with high operating convenience and timeless appearance*
- *Thermostatic valve bodies including or excluding pre-adjustment, with normal or high flow coefficient or with fine pre-adjustment.*
- *CEN tested and certified according to DIN EN 215 and TELL*
- *THK+THV also available in set*



The following products are shown in Chapter 9.1 -
Thermostatic control elements

From
page

Thermostatic head startec 4	180
Thermostatic head startec 2	182
Thermostatic head rotherm 2	183

Thermostatic control elements

9.1

Rossweiner *High Line*



startec 4

Advanced Line



startec 2

Basic Line



rotherm 2

Meibes offers a wide selection of thermostatic control elements in different designs and connection variants. All thermostatic heads are fitted with liquid sensors. Suitable thermostatic valve bodies complement the product range.



Your advantages

- *Functional design and high operating convenience*
- *Different connections:*
Clamping connection, threaded connection M28×1.5, M30×1.5, M33×2.0
- *Thermostats CEN/TELL certified (M28×1.5 and M30×1.5)*
- *Variants from design to basic*
- *Different thermostatic heads as partner head with customer's logo*

Thermostatic control elements

High Line

Thermostatic head **startec 4** with threaded connection M30 × 1.5 with liquid sensor

These thermostats fit without adapter to integrated valve sets with M30 × 1.5; setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C



Thermostatic head **startec 4** Type 75.41-B, 75.415-B

Model	VPE	Art. No.
with zero position TELL	10	AI-1356420
without zero position TELL	10	AI-1356430

Thermostatic head **startec 4** - with remote sensor with zero position

Sensor length	0.6 m	AI-1356470
Sensor length	2.0 m	AI-1356472
Sensor length	5.0 m	AI-1356475

Anti-theft system for thermostatic head

for thermostatic head **startec 4** with threaded connection M30 × 1.5 plus clamping connection incl. optional angle-of-rotation limiter at fixed value

	10	AI-1356490
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Thermostatic head **startec 4** with clamping connection and liquid sensor

These thermostats fit without adapter to integrated valve sets with clamping connection. Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C



Thermostatic head **startec 4** Type 75.51-B, 75.515-B

with zero position	10	AI-1356440
without zero position	10	AI-1356450

Thermostatic head **startec 4** - with remote sensor with zero position

Sensor length	0.6 m	AI-1356480
Sensor length	2.0 m	AI-1356482
Sensor length	5.0 m	AI-1356485

Thermostatic control elements

High Line

Thermostatic head **startec 4** with threaded connection M33 × 2.0 with liquid sensor

Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C



Thermostatic head **startec 4** Type 75.1, 75.15-B

Model	VPE	Art. No.
with zero position	10	AI-1356400
without zero position	10	AI-1356410



Thermostatic head **startec 4** - with remote sensor with zero position

Sensor length	0.6 m	AI-1356460
Sensor length	2.0 m	AI-1356462
Sensor length	5.0 m	AI-1356465



Individual logo design - “Partner head offer”

The thermostatic head can be used as long-term advertisement with the individual logo design on the end cap of the thermostatic head. Imprint in iron-grey. The clip can be changed on site.

Imprinting your logo in one colour	100	AI-1356252
Imprinting your logo in one colour	300	AI-1356253

Multi-colour imprinting on request; delivery period: 3 weeks for first order

Thermostatic control elements

Advanced Line

Thermostatic head **startec** \approx with threaded connection M30 x 1.5

These thermostats fit without adapter to integrated valve sets with M30 x 1.5.
Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C



Thermostatic head **startec** \approx with liquid sensor, Art. No. 74.41, 74.415

Model	VPE	Art. No.
with zero position $\frac{1}{2}$ TELL	10	AI-1352392
without zero position $\frac{1}{2}$ TELL	10	AI-1353002

Thermostatic head **startec** \approx with liquid sensor - with remote sensor with zero position

Sensor length 0.6 m	AI-1353012
Sensor length 2.0 m	AI-1352402
Sensor length 5.0 m	AI-1353022

Thermostatic head **startec** \approx with clamping connection

These thermostats fit without adapter to integrated valve sets with clamping connection.
Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C



Thermostatic head **startec** \approx - with liquid sensor

with zero position	10	AI-1353042
without zero position	10	AI-1353052

Thermostatic head **startec** \approx with liquid sensor - with remote sensor with zero position

Sensor length 0.6 m	AI-1353062
Sensor length 2.0 m	AI-1353072
Sensor length 5.0 m	AI-1353082

Anti-theft system for thermostatic head

for thermostatic head **startec** \approx including angle-of-rotation limiter at fixed value
not suitable for compact valve radiators with valve insert M30 x 1.5

Model	VPE	Art. No.
	10	AI-1355280

Thermostatic head **startec** \approx with limited adjustment range

with liquid sensor, setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C

Model	Art. No. / extension*
Threaded connection M30 x 1.5	1355290 <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/>
Clamping connection	1355310 <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/>
Threaded connection M33 x 2	1355300 <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/>

Please note: Thermostatic heads with limited adjustment range can no longer be altered on site!

Order example: The nominal temperature range is entered in the column "extension"
e.g. 135 530 0 / - (adjustment range between 17 °C and 23 °C)

Imprinting your logo in one colour*

free of charge

*) Multi-colour imprinting on request.
Minimum order quantity of
thermostatic heads with
individual logo design: 300.

Additional cost on request
for orders < 300 items.

Delivery period: 3 weeks
for first order.

Thermostatic control elements

Basic Line

Thermostatic head **rotherm** \approx with threaded connection M30 \times 1.5 - with liquid sensor

These thermostats fit without adapter to integrated valve sets with threaded connection M30 \times 1.5. Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C

Thermostatic head **rotherm** \approx Type 73.41, 73.415 with zero position



Model	VPE	Art. No.
white RAL 9016 \approx TELL	10	AI-1355400

without zero position

white RAL 9016 \approx TELL	10	AI-1355410
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Thermostatic head **rotherm** \approx with remote sensor, with zero position



Sensor length 2.0 m		AI-1353950
Sensor length 5.0 m		AI-1353960

Anti-theft system for thermostatic head for RoTherm m 30 \times 1.5



RAL 9016	10	AI-1354060
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Thermostatic head **rotherm** \approx with clamping connection

These thermostats fit without adapter to integrated valve sets. with clamping connection. Setpoint value: 7 – 28 °C; setting 3: ca. 20 °C; frost protection: ca. 7 °C

Thermostatic head **rotherm** \approx Type 73.51, 73.515 with zero position



white RAL 9016	10	AI-1355420
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without zero position

white RAL 9016	10	AI-1355430
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Thermostatic head **rotherm** \approx with contact sensor with threaded connection m 30 \times 1.5 Setpoint value: 20 – 65 °C, cable length: 2.0 m

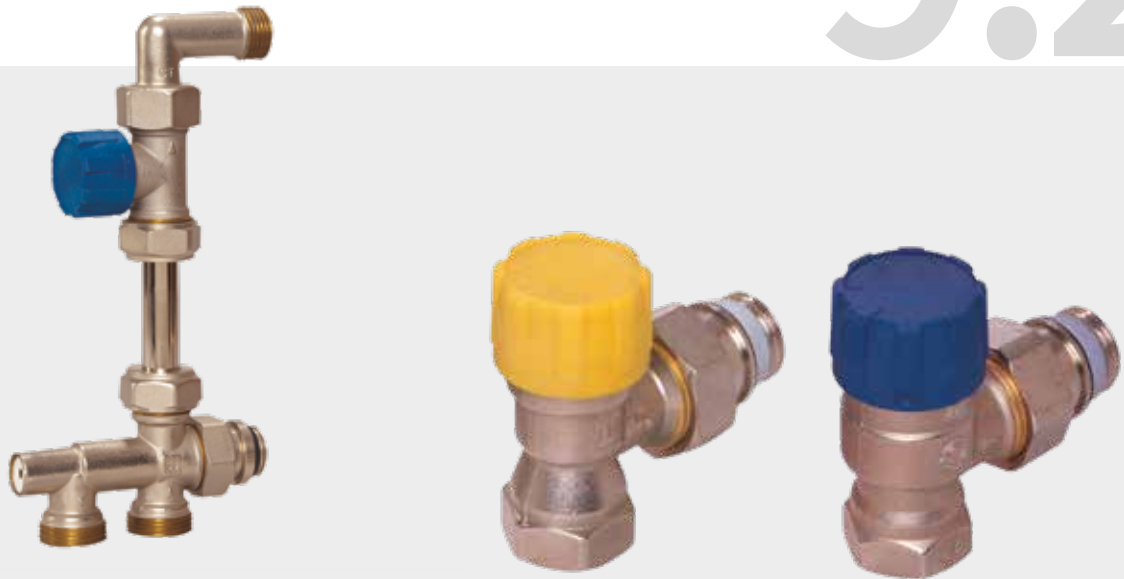


white RAL 9016	10	AI-1354100
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The following products are shown in Chapter 9.2 - Thermostatic valve bodies		From page
Thermostatic valve bodies for bi-tube heating systems		186
Short design		186
with fine pre-adjustment		187
with extended flow coefficient		187
Bi-tube connection sets		188
Mono-tube connection sets		188
Manual regulator valve for bi-tube heating systems		188
Accessories and removal equipment		189

Thermostatic valve bodies

9.2



Meibes offers a wide selection of thermostatic valve bodies for bi-tube heating systems as well as mono-tube heating systems.

The valves are available including or excluding pre-adjustment as well as with normal or high flow coefficient or with fine pre-adjustment. The thermostatic valve bodies with continuous pre-adjustment without hub limiting facilitate exact hydraulic balancing.



Your advantages

- *CEN tested and certified according to DIN EN 215*
- *Valve insert when operating the system using disassembly device replaceable*
- *Socket threaded union in the housing soft-sealing and to the radiators using threaded joints cut-in seal, self-sealing*
- *Different housing geometries*

Thermostatic valve bodies

Thermostatic valve bodies for bi-tube heating systems

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C, with continuous pre-adjustment, EN 215-D, Connection thread to the thermostatic head M30 × 1.5, protection cap white



Thermostatic valve body, Type S721.11 straight pattern

Nominal width	Flow coefficient (m³/h)	Length	VPE	Art. No.
DN 10 *	1.0	88 mm TELL	20	AI-1238031
DN 15	1.0	95 mm TELL	20	AI-1238041
DN 20	1.27	105 mm	20	AI-1238051

Thermostatic valve body, Type S722.11 angle pattern

DN 10 *	1.0	55 mm TELL	20	AI-1238091	13.20
DN 15	1.0	58 mm TELL	20	AI-1238101	13.20
DN 20	1.27	65 mm	20	AI-1238111	19.60

Thermostatic valve body, Type S726.11 axial pattern

DN 15	0.64	58 mm	20	AI-1238184	17.50
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Thermostatic valve body, Type S724.11 double-angle pattern left

DN 15	1.0	57.5 mm	20	AI-1238841	19.10
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Thermostatic valve body, Type S725.11 double-angle pattern right

DN 15	1.0	57.5 mm	20	AI-1238851	19.10
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Thermostatic valve body, Type S721.12 straight pattern, G 3/4" Euro cone

DN 15	1.0	93 mm TELL	20	AI-1238121	13.30
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Thermostatic valve body, Type S722.12 angle pattern, G 3/4" Euro cone

DN 15	1.0	58 mm TELL	20	AI-1238131	13.30
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*) with DN 10 socket entry Rp 3/8" - socket to the radiator Rp 1/2

Thermostatic valve bodies for bi-tube heating systems short design

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C, with continuous pre-adjustment, EN 215-F (French standard), connection thread to the thermostatic head M30 × 1.5, protection cap white

Thermostatic valve body, Type Fr721.11 straight pattern

DN 10**	75 mm TELL	20	AI-1238501
DN 15	83 mm TELL	20	AI-1238521
DN 20	97 mm	20	AI-1238591

Thermostatic valve body, Art. No. Fr722.11 angle pattern

DN 10**	49 mm TELL	20	AI-1238511
DN 15	54 mm TELL	20	AI-1238531
DN 20	61.5 mm	20	AI-1238601

**) DN 10 - with metal sealing male-threaded socket Rp 3/8



Thermostatic valve bodies

Thermostatic valve bodies for bi-tube heating systems

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C, without pre-adjustment, threaded joint metal sealing dimensions according to EN 215-D, connection to the thermostatic head M30 × 1.5, Protection cap black

Thermostatic valve body, Type B721.31 straight pattern



Nominal width	Length	VPE	Art. No.
DN 10	55 mm	20	AI-1238761
DN 15	95 mm	20	AI-1238771
DN 20	105 mm	20	AI-1238741

Thermostatic valve body, Type B722.31 angle pattern



DN 10	55 mm	20	AI-1238791
DN 15	58 mm	20	AI-1238801
DN 20	65 mm	20	AI-1238751

Thermostatic valve bodies for bi-tube heating systems, with fine pre-adjustment

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C, with continuous fine pre-adjustment, EN 215-D, Connection thread to the thermostatic head M30 × 1.5, protection cap yellow



Thermostatic valve body, Type S721.41 straight pattern

DN 10 *	88 mm	20	AI-1239001
DN 15	95 mm	20	AI-1239011



Thermostatic valve body, Type S722.41 angle pattern

DN 10 *	55 mm	20	AI-1239021
DN 15	58 mm	20	AI-1239031

*) with DN 10 socket entry R 3 / 8 - socket to the radiator R 1 / 2

Thermostatic valve bodies for bi-tube heating systems with extended flow coefficient

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C, without pre-adjustment with extended flow coefficient, EN 215-D, connection thread to the thermostatic head M30 × 1.5, protection cap blue



Thermostatic valve body, Type S721.51 straight pattern

DN 15	95 mm	20	AI-1239041
DN 20	105 mm	20	AI-1239051



Thermostatic valve body, Type S722.51 angle pattern

DN 15	58 mm	20	AI-1239061
DN 20	65 mm	20	AI-1239071

Thermostatic valve bodies

Bi-tube connection set



Bi-tube connection set with straight-way valve

comprising: 90 ° elbows, thermostatic valve straight pattern M30 x 1.5 DN 15 M / M, without pre-adjustment, clamping ring screw union 15 mm, bi-tube connector

Nominal width	VPE	Art. No.
DN 15		AI-1238861



Bi-tube connection set with axial valve

comprising: Thermostatic valve axial pattern M30 x 1.5 DN 15 M / M, without pre-adjustment, clamping ring screw union 15 mm, bi-tube connector

DN 15		AI-1238871
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Mono-tube connection set



Mono-tube connection set with straight-way valve

comprising: 90 ° elbows, thermostatic valve straight pattern M30 x 1.5 DN 15 M / M, without pre-adjustment, with boosted flow coefficient, clamping ring screw union 15 mm, Mono-tube connector

DN 15		AI-1238881
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Accessories for radiator connection sets

Precision steel pipe

Ø 15 x 600 mm nickel-plated	30	AI-1351241
Ø 15 x 1100 mm nickel-plated	30	AI-1351261

Manual regulator valve for bi-tube heating systems

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C



Manual regulator valve straight pattern

DN 15	82 mm	20	AI-1699297
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Manual regulator valve angle pattern

DN 15	52.5 mm	20	AI-1699298
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Thermostatic valve bodies

Thermostatic valve adapter

Model: Hot-pressed brass nickel-plated, permitted Operating pressure: PB 10 bar, permitted Operating temperature: TB 120 °C

Thermostatic valve adapter, Type 72.1

for conversion of manual regulator valves according to TGL 25 877 to thermostatic controller (thermostatic head connection m 33 × 2)



Nominal width	VPE	Art. No.
DN 15	30	Al-1350040
DN 20	25	Al-1350050
DN 25	15	Al-1350060

Threaded joint

with venting (ball-calotte seal) with union nut for radiator without venting



Nominal width	d	l (mm)	VPE	Art. No.
DN 15	G 3/4/R 1/2	51.1	5	Al-1391301

R 173 compensation socket

ball-calotte seal with union nut, socket: Ms 58, seal: O-ring, cone seal: PTFE, max. Operating pressure: 7 bar, max. Operating temperature: 110 °C for length compensation



	d	l min mm	l max mm	VPE	Art. No.
DN 15	G 3/4/R 1/2	34	50	15	Al-1394121
DN 20	G 1/R 3/4	36	54	15	Al-1394131
DN 25	G 1 1/4/R 1/2	42	63	15	Al-1394141

Clamping threaded joint

for copper and soft steel pipes, comprising: Pressure screw and clamping ring, suitable for thermostatic valves with female thread. Support sleeves are required for copper and soft steel pipes



Dimensions	VPE	Art. No.	
ø 12 mm	3/8 F conical/conical	20	Al-1610351
ø 12 mm	1/2 F conical/conical	20	Al-1610353
ø 15 mm	1/2 F conical/conical	20	Al-1610352

Eccentric connection

for radiator connections for compensating boss spacing differences up to 5 mm per Radiator



DN 15	20	Al-1351601
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Disassembly device, Type 769

for changing the internal parts of thermostatic valve bodies with connection thread m 30 × 1.5 at operating pressure in the system



Al-1351695

**The following products are shown in Chapter 9.3 -
Refurbishment systems for mono-tube heating systems**

From
page

Bypass - assembly for conversion and new installation of vertical mono-tube heating systems, metal sealing	192
Bypass - assembly for conversion and new installation of vertical mono-tube heating systems, flat sealing	194
Bypass - assembly for conversion of Forst single-storey heating systems	196
Thermostatic valve bodies for conversion of vertical mono-tube heating systems, flat sealing	197
Thermostatic valve bodies for conversion of Forst single-storey heating systems	197
Adjustable spanner, disassembly device	197

Refurbishment systems for mono-tube heating systems

9.3



Meibes offers tailor-made solutions of the brand Rossweiner for the conversion of vertical mono-tube heating systems in municipal housing and for Forst single-storey heating systems, suitable for the use of new radiators, and for retrofitting old heating surfaces. Through the use of heat-stop elbows and socket threaded unions with spiral, a reduction in the system-linked heating of the heating surfaces and thus a reduction in heating costs is achieved.

The range contains pre-assembled short end sections, i.e. bypass T-piece, heat-stop elbow and bypass pipe are permanently composite unit, metal or flat sealing and thermostatic valve bodies for vertical mono-tube heating with pre-adjustment (white protection cap) or without pre-adjustment (black protection cap). Optional pre-adjustment via the valve or the heat-stop elbow (capable of being shut off and drainable). Use of thermostatic heads with connection M 33 x 2.



Your advantages

- *Dimensions in line with TGL*
- *Valves with pre-adjustment for hydraulic balancing*
- *Less construction space*
- *Simple and fast installation*
- *Great technical security*

Other advantages:

Valve inserts can be changed using disassembly device without draining the heating system.

Metal sealing connection means no tightening of the threaded joints is necessary.

Minimum number of Seals.

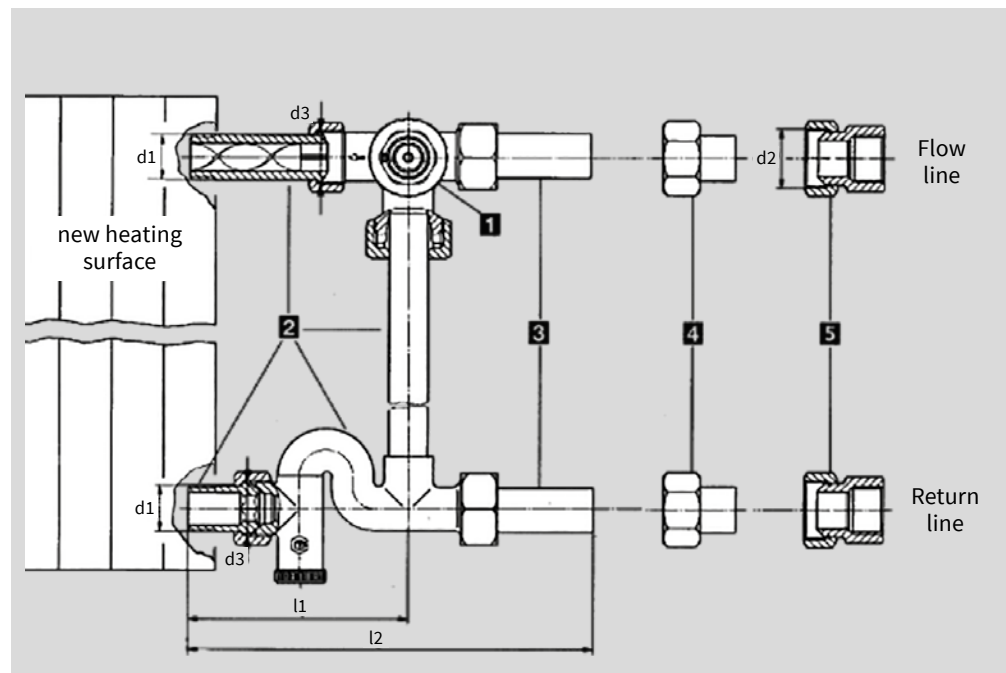
Bypass radiator threaded joint with ball linking socket for compensating minor angle faults.

Refurbishment systems for mono-tube heating systems

Bypass – assembly for conversion and new installation of vertical mono-tube heating systems, metal sealing

Model: Hot-pressed brass nickel-plated
 permitted Operating pressure: PB 10 bar
 permitted Operating temperature: TB 120 °C
 Flow medium: Heating water

Nominal width	L1	L2	d1 DIN 2999	d2	d3
DN 15	96.5	178	R 1/2	G 3/4	G 3/4
DN 20	99	186.5	R 1/2	G 1	G 3/4



Please note! When using old radiators, the old sockets must be removed from the heating surface!

Refurbishment systems for mono-tube heating systems

Bypass – assembly for conversion and new installation of vertical mono-tube heating systems, metal sealing

Three-way thermostatic valve bodies, Type 753.1M (right) / 753.2M (left) [1]
for ball-calotte seal connection without threaded joints with clamped link to the bypass with pre-adjustment



Fig. shows a right valve

Nominal width	Model	VPE	Art. No.
DN 15	right	30	AI-1237421
DN 20	right	20	AI-1237461
DN 15	left	30	AI-1237431
DN 20	left	20	AI-1237471

Bypass – assembly, Type 743 m [2]

without valve, max. boss spacing of the radiator 600 mm

DN 15	5	AI-1237401
DN 20	5	AI-1237411

without valve, max. boss spacing of the radiator 900 mm

DN 15	5	AI-1237601
DN 20	5	AI-1237621

without valve, max. boss spacing of the radiator 2000 mm

DN 15	5	AI-1237611
DN 20	5	AI-1237631

Threaded joint with welded socket [3]

DN 10 *	10	AI-1391461
DN 15	10	AI-1391391
DN 20	10	AI-1391401

Threaded joint with soldered socket [4]

15 mm	10	AI-1391571
18 mm	10	AI-1391521
22 mm	10	AI-1391681

Threaded joint with female-threaded socket [5]

DN 10 *	10	AI-1391471
DN 15	10	AI-1391411
DN 20	10	AI-1391421

Socket connection set

as compensation fitting with spiral to be used for complete short end section (ball-calotte seal) to reduce re-heating of radiators despite shut off fitting

DN 15 one-part	10	AI-1391351
DN 20 two-part	5	AI-1391361

*) suitable for three-way thermostatic valve DN 15.

Please order components individually!

Order example for a complete short end section, DN 15 with threaded joints with welded socket and three-way thermostatic valve body with pre-adjustment with left connection:

Thermostatic head m 33 × 2 with 0 setting	1	AI-1356400
Three-way thermostatic valve body, No. 753.2M	1	AI-1237431
Bypass assembly, No. 743 m	1	AI-1237401
Threaded joints with welded sockets	2	AI-1391391

Please note: Two threaded joints are necessary for each short end section!

Refurbishment systems for mono-tube heating systems

Bypass – assembly for conversion and new installation of vertical mono-tube heating systems, flat sealing

Model: Hot-pressed brass nickel-plated,
 permitted Operating pressure: PB 10 bar,
 permitted Operating temperature: TB 120 °C
 Flow medium: Heating water

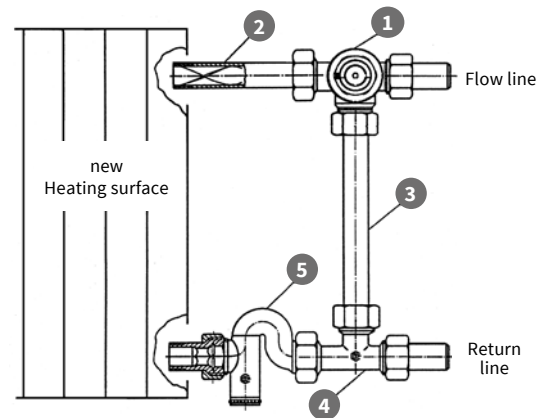
Product no.: see page on right

Variant 1 – short end section with Compensation fitting with spiral in the flow line and heat-stop elbow in the return line

Application instance: Use of new heating surfaces

Advantage: Good appearance, fewer sealing points

Please note! When using old radiators, the upper old socket must be removed from the heating surface. Moving the radiator at DN 15: 62 mm, at DN 20: 67 mm

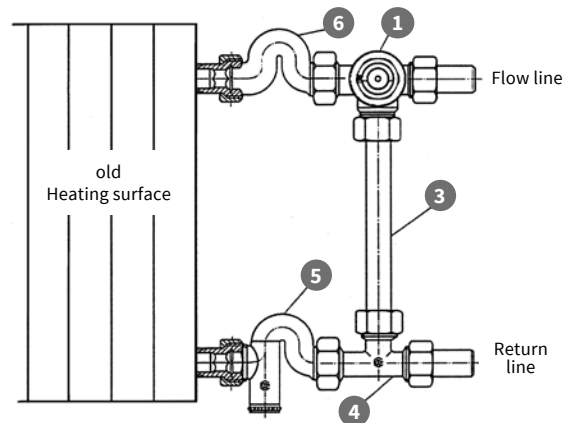


Variant 2 – short end section with Connection socket complete in the flow line and heat-stop elbow in the return line

Application instance: Use of old heating surfaces

Advantage: Old sockets can remain in the radiators, solution with the best technical result

Please note! Moving the radiator, with DN 15: 62 mm, at DN 20: 67 mm

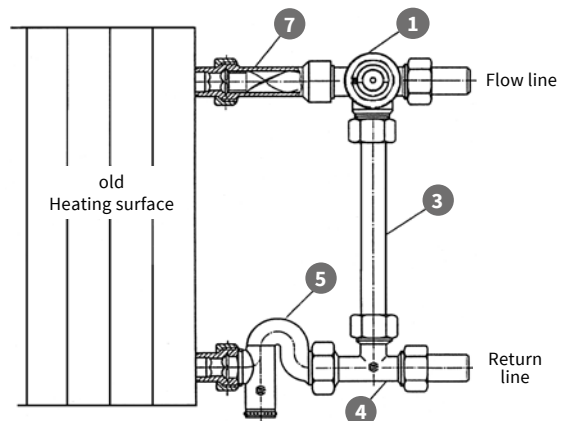


Variant 3 – short end section with connector with spiral in the flow line and heat-stop elbow in the return line

Application instance: Use of old heating surfaces

Advantage: Old sockets can remain in the radiator

Please note! Moving the radiator at DN 15: 62 mm, variant 3 only for DN 15



Refurbishment systems for mono-tube heating systems

Bypass – assembly for conversion and new installation of vertical mono-tube heating systems, flat sealing

Three-way thermostatic valve bodies, Type 753.1 K (right) / 753.2 K (left) [1]

for flat sealing connection, with threaded joints (male-threaded socket, welded socket, cutting ring), with pre-adjustment



Fig. shows a right valve

Nominal width	Model	VPE	Art. No.
DN 15	right	20	Al-1234601
DN 20	right	15	Al-1234661
DN 15	left	20	Al-1234611
DN 20	left	15	Al-1234671

Compensation fitting with spiral [2]

for the use of new heating surfaces, to reduce re-heating of radiators despite shut off fitting



DN 15	20	Al-1391331
DN 20	15	Al-1391341

Connection socket, Type 740 [6]

as heat-stop elbow in mono-tube heating systems, to reduce re-heating of radiators despite shut off fitting



DN 15	20	Al-1390351
DN 20	15	Al-1390361

Spacer with spiral [7]

for conversion – old sockets may remain in the radiator, to reduce re-heating of radiators despite shut off fitting



DN 15	20	Al-1351931
-------	----	------------

Precision pipe [3]

DIN 2391, 570 mm lg use as bypass pipe for three-way thermostatic valves



DN 15	ø 18 mm	20	Al-1351231
DN 20	ø 22 mm	15	Al-1351251

Bypass T-piece, Type 781 [4]

with threaded joints (male-threaded socket, welded socket, cutting ring)



DN 15	Bypass ø 18 mm	20	Al-1232211
DN 20	Bypass ø 22 mm	20	Al-1232231

Heat-stop elbow, Type 741 [5]

capable of being shut off, drainable, pre-adjustable in mono-tube heating systems, to reduce re-heating of radiators despite shut off fitting



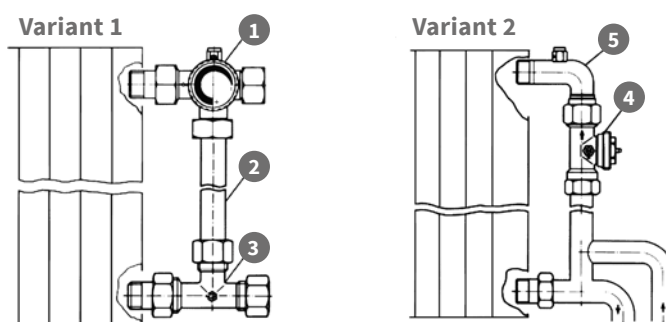
DN 15	20	Al-1234181
DN 20	15	Al-1234191

Refurbishment systems for mono-tube heating systems

Bypass – assembly for conversion of Forst single-storey heating systems

Model: Hot-pressed brass nickel-plated
 permitted Operating pressure: PB 10 bar,
 permitted Operating temperature: TB 120 °C
 Flow medium: Heating water

When converting heating systems (manufacturer TGA Forst) from manual control to thermostatic controller, three-way thermostatic valves with venting or Straight-way thermostatic valves with venting-capable connection elbows are used, as not all radiators have a venting option.



Variant 1

Three-way thermostatic valve body*, Type 752.6 K (right) / 752.7 K (left) [1]

for flat-sealing Connection with threaded joint (male-threaded socket, cutting ring), with venting, for Forst single-storey heating, without pre-adjustment

Nominal width	Model	VPE	Art. No.
DN 15	right	20	Al-1237141
DN 15	left	20	Al-1237151

*) suitable thermostatic heads with connecting thread M33 x 2 see page 181.

Precision pipe Ø 15 mm [2]

DN 15	600 mm	30	Al-1351241
DN 15	1100 mm	30	Al-1351261

Bypass T-piece with threaded joints, Type 780 [3]

DN 15	20	Al-1232201
-------	----	------------

Variant 2

Thermostatic valve body without threaded joints** [4]

Straight pattern with pre-adjustment EN 215-D

DN 15	20	Al-1238541
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Connection elbows complete with venting [5]

DN 15	20	Al-1352141
-------	----	------------

***) suitable thermostatic heads with connecting thread M30 x 1.5 see page 180.

Fig. shows a right valve



Refurbishment systems for mono-tube heating systems

Thermostatic valve bodies for conversion of vertical mono-tube heating systems, flat sealing

Model: Hot-pressed brass polished nickel-plated
 permitted Operating pressure: PB 10 bar,
 permitted Operating temperature: TB 120 °C,
 Flow medium: Heating water

Three-way thermostatic valve body, Type 751.1 (right) / 751.2 (left) without threaded joints, flat sealing with pre-adjustment



Fig. shows a right valve

Nominal width	Model	Inlet	Outlet piece *	Bypass	VPE	Art. No.
DN 10	right	G 1/2	G 3/4	G 3/4	30	AI-1235001
DN 15	right	G 3/4	G 3/4	G 7/8	30	AI-1234301
DN 20	right	G 1	G 1	G 11/8	20	AI-1234381
DN 10	left	G 1/2	G 3/4	G 3/4	30	AI-1235011
DN 15	left	G 3/4	G 3/4	G 7/8	30	AI-1234311
DN 20	left	G 1	G 1	G 11/8	20	AI-1234391

*) for the radiator **note:** Accompanying series connection threaded joints see spare parts list. Suitable thermostatic heads with connecting thread M33×2 see page 181.

Thermostatic valve bodies for conversion of Forst single-storey heating systems

Model: Hot-pressed brass polished nickel-plated
 permitted Operating pressure: PB 10 bar,
 permitted Operating temperature: TB 120 °C
 Flow medium: Heating water

Three-way thermostatic valve body*, Type 752.6 (right) / (752.7 (left) without threaded joints (with venting, for Forst heating system)



Nominal width	Model	Outlet	Inlet / Bypass	VPE	Art. No.
DN 15	right	G 3/4	M 22×1.5	30	AI-1236121
DN 15	left	G 3/4	M 22×1.5	30	AI-1236131



Pre-set spanner for three-way thermostatic valves, No. 751, 752, 753

AI-1351711

Installation and conversion tools

Disassembly device, Type 767

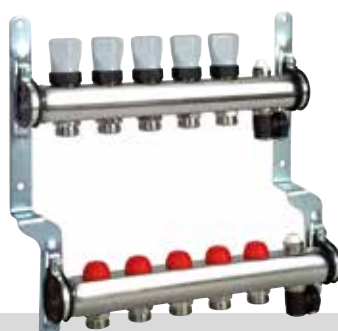
for changing the internal parts of thermostatic valve bodies (Type 711, 712, 713) with Connection M33×2 and three-way thermostatic valve bodies (Type 751, 752, 753), at operating pressure in the system



AI-1351450

**) suitable thermostatic heads with connecting thread M33×2 see page 181.

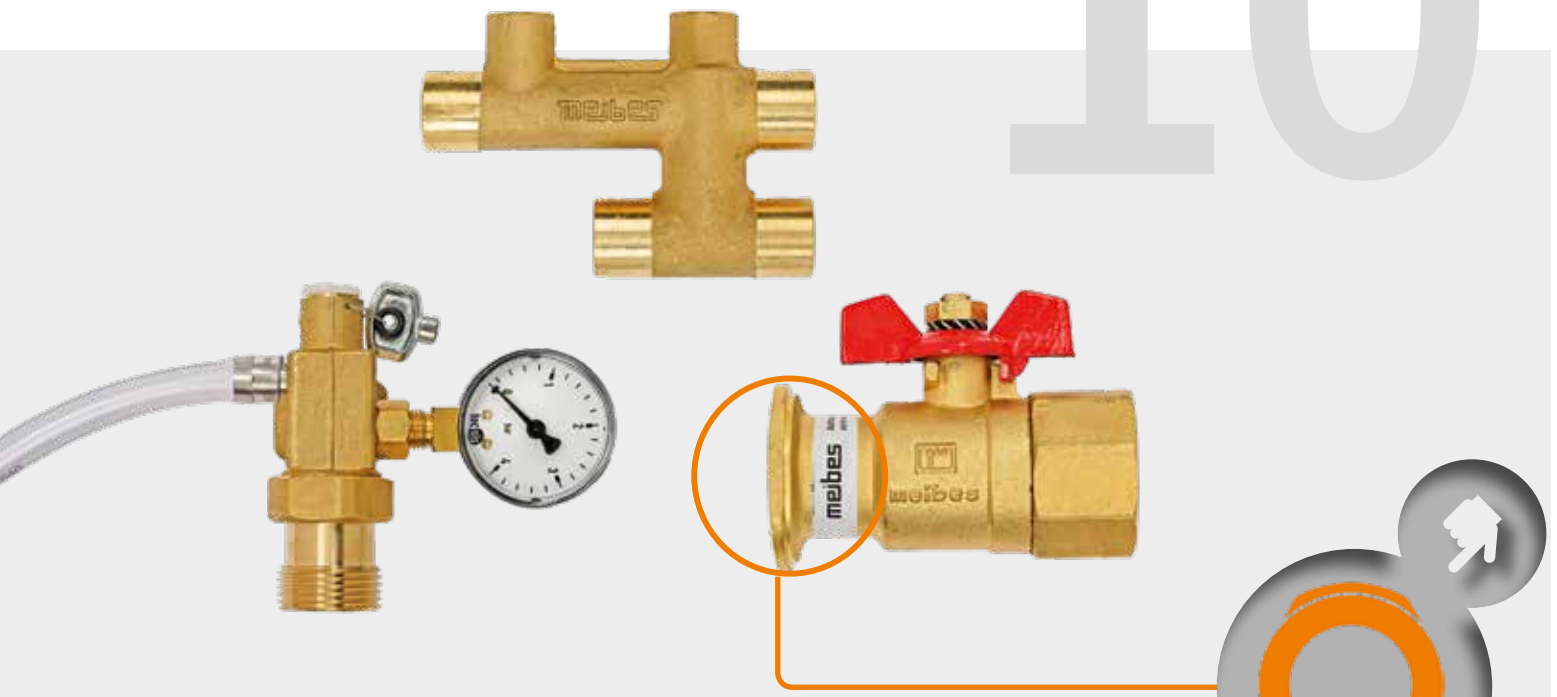
The following products are shown in Chapter 10 - Heating system fittings:	From page
Expansion compensator	200
Backflow preventer, 'In pipe stainless', thermal block	201
Shut-off valve, threaded joints / flange ball valves	202/203
Pipe crossing fittings, meipass - double cross pieces	203
Mixing valve, safety valves for heating systems	204
Dirt trap with fill and drain ball valve for draining	204
Bleed valve	205
MAG - ball valve and coupling	205
KFE / KFR taps	205
'Filly' automatic charging assistant for heating systems	205



Heating circuit manifolds and accessories are shown at www.simplex.de

Heating system fittings

10



Meibes offers a comprehensive range of components for fast installation and single fittings for heating, air conditioning, solar. The Meipass pipe crossing fittings, integral back flow limiter, expansion compensations, ball valves that have proved themselves a million times over and much more are particularly long-lasting and low-maintenance fittings.

Bank on tested quality!



Meibes - flange as brand name for high-quality quick mounting system.

The Meibes flange flattened on the side, which can be screwed to a threaded joint pipe by means of this oval trimming using a union nut, is as before the latest state of the technology.

The flange was for a long time the stylised symbol in the Meibes company logo.

Your advantages

- Proven Meibes - products for fast and simple installation
- Long-lasting and low-maintenance fittings
- 100% quality tested
- Patented solutions



Expansion compensator



Expansion compensator H 6

Length expansion compensator with protection and housing with Pipes soldered on the work side each 10 cm in length. Material: Expansion bellows made of bronze, housing made of copper.

Operating pressure: max. 3 bar, operating temperature: max 110 °C.

Observe installation instructions contained in current technical information brochure!

Model	Expansion compensation	Art. No.
DN 15	up to 7 mm	AI-62220
DN 18	up to 7 mm	AI-62230
DN 22	up to 7 mm	AI-62240
DN 28	up to 7 mm	AI-62250
DN 35	up to 7 mm	AI-62260

Expansion compensator SI 10

Soldered or bolted length expansion compensator with protection and housing Material: Expansion bellows made of stainless steel, housing and connections made of brass, operating pressure: max 10 bar, operating temperature: max. 130 °C. Available with soldered or threaded joints with female thread. Observe installation instructions contained in current technical information brochure!



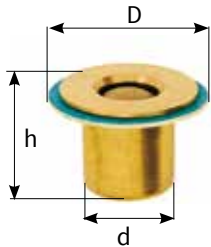
Model	Expansion compensation		including F	with soldered
DN 15	up to 5 mm	F = 1 / 2"	AI-62416*	AI-62415*
DN 18	up to 5 mm			AI-62418*
DN 22	up to 5.5 mm	F = 3 / 4"	AI-62423*	AI-62422*
DN 28	up to 6 mm	F = 1"	AI-62429*	AI-62428*
DN 35	up to 6 mm	F = 1 1 / 4"	AI-62440*	AI-62435*
DN 42	up to 11 mm	F = 1 1 / 2"	AI-62444	AI-62442

*) up to DN 35 with lift and pull limiting

Backflow preventers

TYPE SB IR (In the pipe RV)

Backflow preventer made of brass, with seal, without need for space for installation in Threaded joints and fittings, dimensions in mm



Model	h	d	D	Art. No.
FL = 3/4"	23.5	20	30.5	AI-58120
FL = 1"	30	25	38.5	AI-58100
FL = 1 1/4"	30	31.5	50	AI-58110

as above, but with air lock

FL = 3/4"	AI-58121
FL = 1"	AI-58101
FL = 1 1/4"	AI-58111

TYPE SB TS (thermal block)

Backflow preventer made of brass for bolting directly to the pump body, with manual set-up



F and M = 1 1/2"	AI-58130
F and M = 2"	AI-58140

as above, but with air lock

F and M = 1 1/2"	AI-58131
F and M = 2"	AI-58141

TYPE SB F

Backflow preventer with female thread/flange, with manual set-up



FL and F = 1"	(for union nut 1 1/2")	AI-58051
FL and F = 1 1/4"	(for union nut 2")	AI-58058

as above, but with air lock

FL and F = 1"	(for union nut 1 1/2")	AI-58052
FL and F = 1 1/4"	(for union nut 2")	AI-58059

TYPE SB M

Backflow preventer with male thread / flange, with manual set-up



FL and M = 1"	(for union nut 1 1/2")	AI-58080
FL and M = 1 1/4"	(for union nut 2")	AI-58081

as above, but with air lock

FL and M = 1"	(for union nut 1 1/2")	AI-58079
FL and M = 1 1/4"	(for union nut 2")	AI-58078

TYPE SB M

Backflow preventer with male thread / flange, with union nut and seal, with manual set-up



FL 1"; M 1 1/2"	(with union nut 1 1/2")	AI-58041
FL 1 1/4"; M 2"	(with union nut 2")	AI-58046

as above, but with air lock

FL 1"; M 1 1/2"	(with union nut 1 1/2")	AI-58043
FL 1 1/4"; M 2"	(with union nut 2")	AI-58054

TYPE SB RV (Euro RV) made of MS, coupler on both sides



F = 1/2"	AI-58210
F = 3/4"	AI-58220
F = 1"	AI-58230
F = 1 1/4"	AI-58240

Shut-off valve, Threaded joints / flange ball valves

Pump valve

coupler on one side, Meibes special flange on the other.
Steam 6.5 bar up to 160 °C; water, oil, air: 9 bar up to 110 °C



Model	Art. No.
FL and F = 1" (for union nut 1 1/2")	AI-61340

as above, but with integral back flow limiter controller

FL and F = 1" (for union nut 1 1/2")	AI-68202
--------------------------------------	----------

Ball valve F / F

Brass, standard model, with red wing handle, 10 bar up to 130 °C



F = 3/8"	AI-61920.1
F = 1/2"	AI-61930.1
F = 3/4"	AI-61940.1
F = 1"	AI-61950.1

Ball valve F / M

Brass, with red wing handle, 10 bar up to 130 °C



1/2"	AI-61972.3
3/4"	AI-61971.3
1"	AI-61970.3

Ball valve with Meibes flange

Brass, for pumps and pipework, with red toggle, 10 bar up to 110 °C



FL and F = 1" (for union nut 1 1/2")	AI-61810
FL and F = 1 1/4" (for union nut 2")	AI-61840

Ball valve with Meibes flange

Brass, with integrated backflow preventer, with red toggle,
for pumps and pipework, 10 bar up to 110 °C



FL and F = 1" (for union nut 1 1/2")	AI-61850
--------------------------------------	----------

FL flange M male thread F female thread

Flange ball valves, pipe crossing fittings

Ball valve with Meibes flange

Brass, with integrated backflow preventer, with red toggle, for pumps and pipework, with air lock, 10 bar up to 110 °C



Model	Art. No.
FL and F = 1" (for union nut 1 1/2")	AI-61851
FL and F = 1 1/4" (for union nut 2")	AI-61861

Ball valve light

Ball valve 1" F with short flange for union nut 1 1/2"; Shut-off option with internal hexagonal and screwdriver slot, 10 bar up to 110 °C



FL and F = 1" (for union nut 1 1/2")	AI-61804
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FL flange M male thread F female thread

Union nut and seal

Union nut 1 1/2" or 2" incl. seal



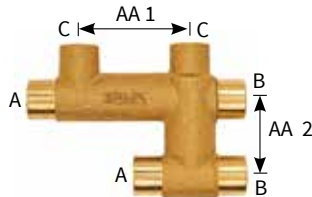
Union nut/seal 1 1/2" for (flange 1")	AI-43.550D
Union nut/seal 2" for (flange 1 1/4")	AI-42602.01D

meipass - Double crossing pieces

Type RA 4 HZ

suitable for compact radiators and standard pipe clips

free access 15 mm, connections: A = 15 mm, B = 15 mm, C = 15 mm, Axial distance (AA) 1 = 50 mm, axial distance 2 = 35 mm



AI-70633

Type RA 5 HZ

suitable for compact radiators and standard pipe clips

free access 18 mm, connections: A = 18 mm, B = 18 mm, C = 15 mm, Axial distance 1 = 50 mm, axial distance 2 = 35 mm

AI-70641

Type RA 5 (suitable for compact radiators)

free access 18 mm, connections: A = 18 mm, B = 18 mm, C = 15 mm, Axial distance 1 = 50 mm, axial distance 2 = 30 mm

AI-70611

meipass - Connection element

between Meipass pipe crossing fittings and radiator valve – specially suited to connection to valve radiators. Elbows made of copper pipe for soldered or plug connections



15 × 1, leg length 65 × 100 mm

AI-10540.02

Fittings

Connection 1" F/M

with female thread on the side 1/2" for connection of immersion thermometers, Meter sensor, manometer or fill and drain ball valve.



Model	Art. No.
1" F×1/2" F×1" M	AI-90256.10

Mixing valve

Thermostatic water mixer with adjustment range 35 °C – 60 °C, for hot water or temperature limiter in the heating, operating pressure max. 10 bar, connection size G 3/4" M



AI-69050.9

Mixing valve

continuously adjustable 35 °C – 65 °C for hot water, 10 bar, with 3 clamping ring screw unions



22 mm	AI-69050
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Safety valves for heating systems

according to DIN 4751, Part 2, TÜV tested, Type KD



1/2"×3/4", MS	3 bar	AI-69010.01
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Safety valves for hot water systems

TÜV tested, Type KBD (other pressures on request)

1/2"×3/4", MS	6 bar	AI-69030
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Safety valves with manometer for heating systems

according to DIN 4751, Part 2, TÜV tested



1/2"×3/4", MS	3 bar	AI-69020.12
---------------	-------	-------------

Air vent for radiators 1 1/4" connection

complete with seal, rotatable outlet head



Steel plugs white, left screw thread 1 1/4"	AI-67041.1
Steel plugs white, right screw thread 1 1/4"	AI-67051.1

Dirt trap with fill and drain ball valve - tap for draining

suited to vertical installation, filter can be flushed without changing



AI-58326.2

Fittings



Bleed valve

Brass, with brass shut-off valve 10 bar, 110 °C, functionally secure even with repeat venting; additional, upper expanding seal

Model		Art. No.
with vertical outlet piece	3/8"	AI-67500.1
with vertical outlet piece	1/2"	AI-67502.1



MAG* ball valve

facilitates fast maintenance or exchange of the MAG* without drainage device of the system. Complete with manometer for testing the system and vessel pressures without disassembly of the vessel, with drainage option, incl. sealable cap

can be used for 3/4" and 1"	AI-69088
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MAG*-service coupling heating

Safety fast coupling lt. DIN 4751 Bl. 2/93 facilitates fast changing of the MAG*, without draining the heating water, 3/4" M x 3/4" F

MS for heating and solar	AI-69080.3
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*) MAG = Diaphragm Expansion Vessel



Fill and drain ball valve

with cap, hose nozzle and lever, 1/2"

MS	AI-65051 MS
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KFR safety filling tap

Combined unit of fill and drain ball valve with socket and check valve, 1/2"

MS	AI-65053 MS
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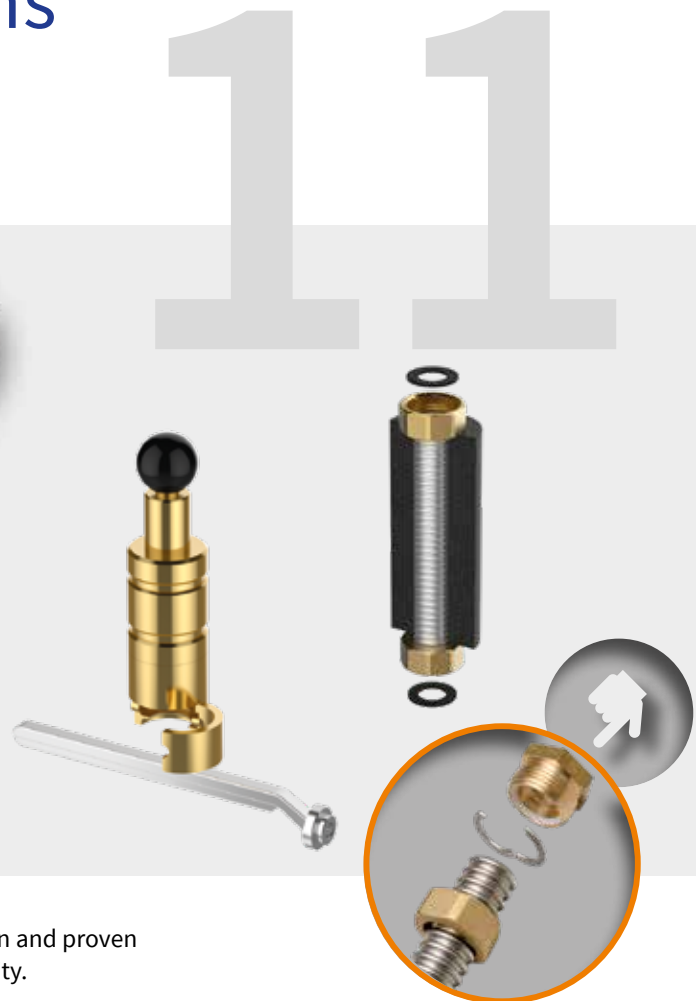
Filly

Automatic charging assistant for heating systems, keeps pressure constant. Suitable for pre-charge up to 10 bar. Adjusts between 0.4 – 3 bar (pre-adjustment 1.5 bar), inlet: 1/2" hose nozzle, outlet piece: 1/2" F, Type RM 8: (8 l/min) with filter, check valve, manometer

AI-59092

The following products are shown in Chapter 11 - Flexible connections:		From page
inoflex stainless steel corrugated pipe, fixed lengths (with or without insulation)		208
inoflexi - stretch connection pipes made of stainless steel		208
inoflex stainless steel corrugated pipe, rolled goods		209
Stainless steel corrugated pipe - screw fittings (flat-sealing)		209
FixLock - tool-free quick-screw fitting for inoflex stainless steel corrugated pipe, for heating, solar and sanitary		210
Flat-sealing screw fittings for inoflex stainless steel corrugated pipe		211
meiflex - reinforced hose for heating with galvanised braid and EPDM inner lining		212
meiflex - reinforced hose for heating/air conditioning with stainless steel braid and EPDM inner lining		214
meiflex - reinforced hose for sanitary/heating/air conditioning with stainless steel braid and silicon inner lining		216
meiflex - reinforced sanitary hose specially for domestic water with stainless steel braid and silicon inner lining		218
Accessories for meiflex - reinforced hose		219
Reinforced hose for gas with stainless steel braid and stainless steel corrugated pipe as inner lining		220

Flexible connections



Meibes, with **inoflex**, **FixLock** and **meiflex**, offers well-known and proven connection systems of the highest quality, safety and durability.

The **inoflex stainless steel corrugated pipe** has been patented with the **FixLock threaded joint system** for use in the areas heating, solar, sanitary. The tested quality product is available in different models from DN 12 up to DN 40, with or without insulation, in fixed lengths or as measured goods.

The **meiflex reinforced hose** are made with inner linings of EPDM or high-quality silicon. Silicon meets all microbiological limits and offers a high level of safety. **meiflex-reinforced hose** are heat and pressure resistant and do not change in consistency even after years. They meet all relevant hygienic and sanitary standards.

Patented system:

The **FixLock - Threaded joints system** is a **tool-free fast threaded joint system for corrugated pipe** (heating, solar and sanitary) for operating temperatures up to 200 °C. **FixLock** is shaft-sealed, i.e. no flange necessary.

Flat sealing threaded joints are shown on page 211.

Your advantages

- *Fast and simple installation*
- *Patented systems: **FixLock inoflex meiflex***
- *Quality tested products*

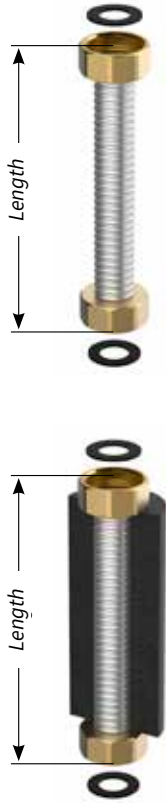


Information note: As a result of the manufacturing tolerances required, FixLock can only be used in connection with Inoflex stainless steel corrugated pipe. Technical data and installation guidelines may be found in the technical specifications for Inoflex corrugated pipe.

inoflex Stainless steel corrugated pipe-fixed lengths

inoflex - fixed lengths*

Stainless steel corrugated pipe materials No. 1.4404 in fixed lengths, with and without insulation (insulation thickness 13 mm), bendable at several levels. Corrugated pipe ends processed flat sealing ex-factory, scope of supply with 2 captured MS nuts (F=d) and 2 seals. Insulated corrugated pipes for use up to max. 105 °C (constant).

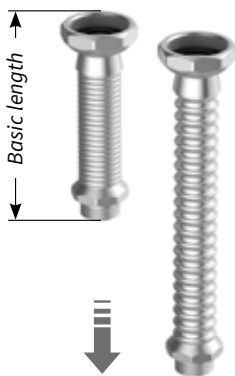


Dimension	Length	Art. No. without insulation	Art. No. with insulation
DN 12 / d=1/2"	300	AI-46154.30	AI-46154.30S
	500	AI-46154.50	AI-46154.50S
	700	AI-46154.70	AI-46154.70S
	1000	AI-46154.100	AI-46154.100S
DN 16 / d=3/4"	300	AI-46153.30	AI-46153.30S
	500	AI-46153.50	AI-46153.50S
	700	AI-46153.70	AI-46153.70S
	1000	AI-46153.100	AI-46153.100S
DN 20 / d=1"	300	AI-46152.30	AI-46152.30S
	500	AI-46152.50	AI-46152.50S
	700	AI-46152.70	AI-46152.70S
	1000	AI-46152.100	AI-46152.100S
DN 25 / d=1 1/4"	300	AI-46151.30	AI-46151.30S
	500	AI-46151.50	AI-46151.50S
	700	AI-46151.70	AI-46151.70S
	1000	AI-46151.100	AI-46151.100S
DN 32 / d=1 1/2"	300	AI-46150.30	AI-46150.30S
	500	AI-46150.50	AI-46150.50S
	700	AI-46150.70	AI-46150.70S
	1000	AI-46150.100	AI-46150.100S

inoflexi - stretch connection pipes made of stainless steel **

Price group 3510

Stainless steel corrugated pipe materials No. 1.4404/1.4305 in basic length (butted) - ductile up to 100%, bendable at several levels. Welded in connections, M conical on one side, movable union nut flat sealing on the other, 1x seal.



F x M	Dimension	Basic length	Art. No.
3/8" x 3/8"	DN 10	80	AI-46001
		105	AI-46002
1/2" x 1/2"	DN 15	80	AI-46003
		105	AI-46004
		180	AI-46005
		105	AI-46010
3/4" x 3/4"	DN 20	80	AI-46009
		105	AI-46011
		175	AI-46012
1" x 1"	DN 25	80	AI-46013
		105	AI-46014
		180	AI-46015
		105	AI-46016
1 1/4" x 1 1/4"	DN 32	85	AI-46017
		105	AI-46018
		175	AI-46019
1 1/2" x 1 1/2"	DN 40	130	AI-46020
		205	AI-46021
		120	AI-46022
2" x 2"	DN 50	120	AI-46023
		185	AI-46024

*) All lengths in mm.
Other lengths on request.
**) All lengths and internal-ø in mm.

reduced 1/2" M x 3/4" F

3/4" x 1/2"	DN 16	80	AI-46006
		105	AI-46007
		180	AI-46008

inaflex Stainless steel corrugated pipe-rolled goods



Stainless steel corrugated pipe, length from 6 m to 80 m

Dimension	Length	Art. No.	Length	Art. No.
DN 12	6 m	46125.1 S	80 m	AI-46125SW80
DN 16	6 m	46123.1 S	50 m	AI-46123SW50
DN 20	6 m	46122.1 S	30 m	AI-46122SW30
DN 25	6 m	46121.1 S	20 m	AI-46121SW20
DN 32	6 m	46120.1 S	20 m	AI-46120SW20
DN 40	6 m	46119.1 S	20 m	AI-46119SW20

Note: Pre-insulated double circuit corrugated pipe for solar systems plus attachment clips are shown on page 141.

Stainless steel corrugated pipe-threaded joints

Connection fittings

Price group 3590

Locking screw part F (flat sealing) in MS 58

Model	VPE	Art. No.
DN 12 1/2" M×3/8" F	10	AI-67550
DN 16 3/4" M×1/2" F	10	AI-90652.1
DN 20 1" M×3/4" F	10	AI-90652.2
DN 25 1 1/4" M×1" F	5	AI-90652.3
DN 32 1 1/2" M×1 1/4" F	3	AI-90652.4
DN 40 2" M×1 1/2" F	2	AI-90652.6



Nuts in MS 58

DN 12 1/2" F	10	AI-46154.01
DN 16 3/4" F	10	AI-43.520MS
DN 20 1" F	10	AI-43.530MS
DN 25 1 1/4" F	5	AI-43.540MS
DN 32 1 1/2" F	3	AI-43.550MS
DN 40 2" F	2	AI-43.560MS



Soldered union (flat sealing) in MS 58

DN 16 3/4" x 18 mm	5	AI-62418.02
DN 20 1" x 22 mm	5	AI-62422.02
DN 32 1 1/2" x 28 mm	5	AI-62428.02
DN 32 1 1/2" x 35 mm	5	AI-62435.02



Locking screw part M (flat sealing) in MS 58

DN 12 1/2" M×3/8" F	10	AI-90251.8
DN 16 3/4" M×1/2" F	10	AI-90651.1
DN 20 1" M×3/4" F	10	AI-90651.2
DN 25 1 1/4" M×1" F	5	AI-90651.3
DN 32 1 1/2" M×1 1/4" M	3	AI-90651.4
DN 40 2" M×1 1/2" M	2	AI-90651.6



Double nipple (flat sealing) in MS 58

DN 12 1/2" M	10	AI-43.66123.1
DN 16 3/4" M	10	AI-43.66124D
DN 20 1" M	10	AI-43.66125D
DN 25 1 1/4" M	5	AI-43.66126D
DN 32 1 1/2" M	3	AI-43.66133D



M male thread F female thread VPE packaging unit

Components for solar systems

FixLock - tool-free quick-screw fitting for Inflex steel pipe for heating, solar and sanitary

Operating temperature: up to 200 °C
 Operating pressure: depending on the corrugated pipe size
 (up to DN 25: 16 bar, DN 32: 10 bar)
 DVGW certified in the sizes DN 12 up to DN 20
 Shaft-sealed (no flange required)



FixLock threaded joint set

for connection of Inflex stainless steel corrugated pipe comprising:
 Union nut, insert, locking screw part with form seal F or M

Model:		Female thread	Male thread
DN 12	3/8"	AI-46115FL	AI-46105FL
DN 16	1/2"	AI-46114FL	AI-46104FL
DN 20	3/4"	AI-46113FL	AI-46103FL
DN 25	1"	AI-46112FL	AI-46102FL
DN 32	1 1/4"	AI-46111FL	AI-46101FL

FixLock threaded joint set

for connection of Inflex stainless steel corrugated pipe comprising:
 4 union nuts, 4 inserts, 2 double nipples with form seal.



Model:	Art. No.
DN 12	AI-46105.1FL
DN 16	AI-46104.1FL
DN 20	AI-46103.1FL
DN 25	AI-46102.1FL

FixLock threaded joint set with union to clamping ring screw union (KLV)

for connection of Inflex stainless steel corrugated pipe comprising:
 Union nut, insert, locking screw part with form seal



DN 16	22 KLV	AI-G29611.11FL
DN 20	22 KLV	AI-G29611.12FL

FixLock threaded joint set with union to self-sealing M connection

for connection of Inflex stainless steel corrugated pipe comprising:
 Union nut, insert, locking screw part with form seal, M with PTFE ring



DN 16	3/4" M	AI-43.66124FLP
DN 20	1" M	AI-43.66125FLP

FixLock connection set with junction

T-piece for tool-free corrugated pipe connection with female thread union (B) to any pipe system, scope of supply incl. 2 union nuts and 2 inserts.

Model:	A	B	C	Art. No.
DN 12	1/2" FL	3/8" F	1/2" FL	AI-90250.042FL
DN 16	3/4" FL	1/2" F	3/4" FL	AI-90250.043FL
DN 20	1" FL	3/4" F	1" FL	AI-90250.931FL

As above, but with female thread union (C).

DN 12	1/2" FL	1/2" FL	3/8" F	AI-90250.045FL
DN 16	3/4" FL	3/4" FL	1/2" F	AI-90250.044FL
DN 20	1" FL	1" FL	3/4" F	AI-90250.932FL

Information note: As a result of the manufacturing tolerances required, FixLock can only be used in connection with Inflex stainless steel corrugated pipe. (Otherwise warranty is void.)



Components for solar systems

Flat sealing threaded joints for inoflex stainless steel corrugated pipe

Flange beating set

Toolset for connecting flanges to flexible Inoflex stainless steel corrugated pipes easily. Each set contains 1 striking tool, 1 crimping rod and 1 set clamping jaws. Available as single items on request.



Model:	Art. No.
DN 12	AI-46312
DN 16	AI-46316
DN 20	AI-46320
DN 25	AI-46325
DN 32	AI-46332
DN 40	AI-46340

Threaded joint set

1 union nut, 1 insert, locking screw part F or M, seal



Heating and solar	F	AG	Heating	F	AG
DN 12	AI-46115	AI-46105	DN 25	AI-46112	AI-46102
DN 16	AI-46114	AI-46104	DN 32	AI-46111	AI-46101
DN 20	AI-46113	AI-46103	DN 40	AI-46110	AI-46100



Extension set 10 inserts and 10 seals for corrugated pipe connections

DN 12	AI-46205	DN 25	AI-46202
DN 16	AI-46204	DN 32	AI-46201
DN 20	AI-46203	DN 40	AI-46200

Threaded joint set

for connection of inoflex stainless steel corrugated pipe comprising: 4 union nuts, 2 double nipples; 4 seals and 4 insert washers.



Model:	Art. No.
DN 12	AI-46105.1
DN 16	AI-46104.1
DN 20	AI-46103.1

Available as single items on request.

meiflex - Reinforced hose

for heating system with galvanised braid and EPDM inner lining

The product:

- Reinforced hose with galvanised steel wire braiding for heating systems
- Internal hose made of ageing resistant EPDM (not diffusion tight), resistant to water and Glycol-based antifreeze (max. 50%)
- for temperatures from -5 to +110 °C
- Operating pressures:
 - 16 bar (up to 100 °C, up to DN 32)
 - 10 bar (up to 110 °C, up to DN 32)
 - 6 bar (up to 110 °C, from DN 40)
- Connections: Brass, bends made of copper, with union nut and flat sealing

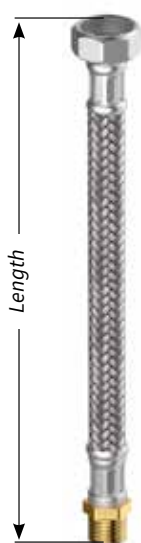
Your advantage:

- quality tested flexible connections
- avoid stresses and structure-borne sound propagation
- varied connection variants



Female thread/male thread

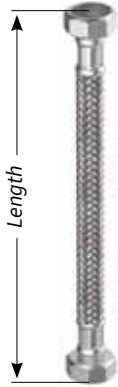
F × M	Length in mm	Internal ø in mm	Art. No.
1/2" × 1/2"	300	15	Al-4325.0121.30
	500	15	Al-4325.0121.50
	700	15	Al-4325.0121.70
	1000	15	Al-4325.0121.100
3/4" × 3/4"	300	18	Al-4325.0127.30
	500	18	Al-4325.0127.50
	700	18	Al-4325.0127.70
	1000	18	Al-4325.0127.100
1" × 1"	300	25	Al-4325.0134.30
	500	25	Al-4325.0134.50
	700	25	Al-4325.0134.70
	1000	25	Al-4325.0134.100
1 1/4" × 1 1/4"	300	32	Al-4325.0142.30
	500	32	Al-4325.0142.50
	700	32	Al-4325.0142.70
	1000	32	Al-4325.0142.100
1 1/2" × 1 1/2"	300	40	Al-4325.0148.30
	500	40	Al-4325.0148.50
	700	40	Al-4325.0148.70
	1000	40	Al-4325.0148.100
2" × 2"	500	50	Al-4325.0160.50
	700	50	Al-4325.0160.70
	1000	50	Al-4325.0160.100



Other lengths on request. **Caution!** In the event of formation of condensation (corrosion hazard!), use reinforced hose protected with stainless steel (see page 220 / 221)!

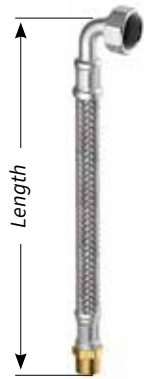
meiflex - Reinforced hose

for heating system with galvanised braid and EPDM inner lining



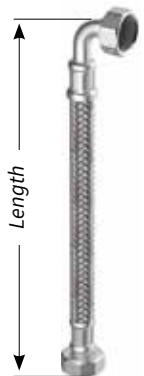
Female thread / female thread

F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	15	AI-4325.0221.30
	500	15	AI-4325.0221.50
	700	15	AI-4325.0221.70
	1000	15	AI-4325.0221.100
3/4" x 3/4"	300	18	AI-4325.0227.30
	500	18	AI-4325.0227.50
	700	18	AI-4325.0227.70
	1000	18	AI-4325.0227.100
1" x 1"	300	25	AI-4325.0234.30
	500	25	AI-4325.0234.50
	700	25	AI-4325.0234.70
	1000	25	AI-4325.0234.100
1 1/4" x 1 1/4"	300	32	AI-4325.0242.30
	500	32	AI-4325.0242.50
	700	32	AI-4325.0242.70
	1000	32	AI-4325.0242.100
1 1/2" x 1 1/2"	300	40	AI-4325.0248.30
	500	40	AI-4325.0248.50
	700	40	AI-4325.0248.70
	1000	40	AI-4325.0248.100
2" x 2"	500	50	AI-4325.0260.50
	700	50	AI-4325.0260.70
	1000	50	AI-4325.0260.100



Male thread / elbow

M x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	15	AI-4327.0121.30
	500	15	AI-4327.0121.50
	700	15	AI-4327.0121.70
	1000	15	AI-4327.0121.100
3/4" x 3/4"	300	18	AI-4327.0127.30
	500	18	AI-4327.0127.50
	700	18	AI-4327.0127.70
	1000	18	AI-4327.0127.100
1" x 1"	300	25	AI-4327.0134.30
	500	25	AI-4327.0134.50
	700	25	AI-4327.0134.70
	1000	25	AI-4327.0134.100



Female thread / elbow

F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	15	AI-4327.0221.30
	500	15	AI-4327.0221.50
	700	15	AI-4327.0221.70
	1000	15	AI-4327.0221.100
3/4" x 3/4"	300	18	AI-4327.0227.30
	500	18	AI-4327.0227.50
	700	18	AI-4327.0227.70
	1000	18	AI-4327.0227.100
1" x 1"	300	25	AI-4327.0234.30
	500	25	AI-4327.0234.50
	700	25	AI-4327.0234.70
	1000	25	AI-4327.0234.100

Other lengths on request.

meiflex - Reinforced hose

for heating / air conditioning with stainless steel braid and EPDM inner lining

The product:

- Reinforced hose with stainless steel braid for heating and air-conditioning systems **with red identification marking**
- Internal hose made of EPDM (not diffusion tight), resistant to water and glycol-based antifreeze (max. 50%)
- for temperatures from -5 to +110 °C
- Operating pressures:
16 bar (up to 100 °C, up to DN 32, 10 bar (up to 110 °C, up to DN 32), 6 bar (up to 110 °C, from DN 40)
- Connections: Brass, bends made of copper, with union nut and flat sealing

Your advantage:

- quality tested flexible connections
- avoid stresses and structure-borne sound propagation
- varied connection variants



Female thread / male thread

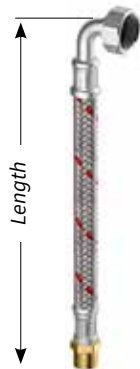
F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 3/8"	300	10	AI-4315.0102.30
	500	10	AI-4315.0102.50
1/2" x 1/2"	300	10	AI-4315.0104.30
	500	10	AI-4315.0104.50
1/2" x 1/2"	300	13	AI-4315.1104.30
	500	13	AI-4315.1104.50
	700	13	AI-4315.1104.70
	1000	13	AI-4315.1104.100
3/4" x 1/2"	300	13	AI-4315.1105.30
	500	13	AI-4315.1105.50
1/2" x 3/4"	300	13	AI-4315.1106.30
	500	13	AI-4315.1106.50
3/4" x 3/4"	300	13	AI-4315.1107.30
	500	13	AI-4315.1107.50
	700	13	AI-4315.1107.70
	1000	13	AI-4315.1107.100
1/2" x 1/2"	300	15	AI-4325.1121.30
	500	15	AI-4325.1121.50
	700	15	AI-4325.1121.70
	1000	15	AI-4325.1121.100
3/4" x 3/4"	300	18	AI-4325.1127.30
	500	18	AI-4325.1127.50
	700	18	AI-4325.1127.70
	1000	18	AI-4325.1127.100
1" x 1"	300	25	AI-4325.1134.30
	500	25	AI-4325.1134.50
	700	25	AI-4325.1134.70
	1000	25	AI-4325.1134.100
1 1/4" x 1 1/4"	300	32	AI-4325.1142.30
	500	32	AI-4325.1142.50
	700	32	AI-4325.1142.70
	1000	32	AI-4325.1142.100
1 1/2" x 1 1/2"	300	40	AI-4325.1148.30
	500	40	AI-4325.1148.50
	700	40	AI-4325.1148.70
	1000	40	AI-4325.1148.100
2" x 2"	500	50	AI-4325.1160.50
	700	50	AI-4325.1160.70
	1000	50	AI-4325.1160.100

meiflex - Reinforced hose

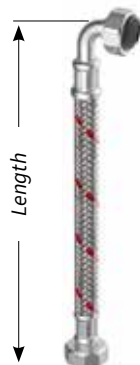
for heating / air conditioning with stainless steel braid and EPDM inner lining

**Female thread / female thread**

F x F	Length in mm	Internal ø in mm	Art. No.
3/8" x 3/8"	300	10	Al-4315.0201.30
	500	10	Al-4315.0201.50
1/2" x 1/2"	300	10	Al-4315.0204.30
	500	10	Al-4315.0204.50
1/2" x 1/2"	300	13	Al-4315.1204.30
	500	13	Al-4315.1204.50
3/4" x 3/4"	300	13	Al-4315.1207.30
	500	13	Al-4315.1207.50
1/2" x 1/2"	300	15	Al-4325.1221.30
	500	15	Al-4325.1221.50
	700	15	Al-4325.1221.70
	1000	15	Al-4325.1221.100
3/4" x 3/4"	300	18	Al-4325.1227.30
	500	18	Al-4325.1227.50
	700	18	Al-4325.1227.70
	1000	18	Al-4325.1227.100
1" x 1"	300	25	Al-4325.1234.30
	500	25	Al-4325.1234.50
	700	25	Al-4325.1234.70
	1000	25	Al-4325.1234.100
1 1/4" x 1 1/4"	300	32	Al-4325.1242.30
	500	32	Al-4325.1242.50
	700	32	Al-4325.1242.70
	1000	32	Al-4325.1242.100

**Male thread / elbow**

M x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	15	Al-4327.1121.30
	500	15	Al-4327.1121.50
	700	15	Al-4327.1121.70
	1000	15	Al-4327.1121.100
3/4" x 3/4"	300	18	Al-4327.1127.30
	500	18	Al-4327.1127.50
	700	18	Al-4327.1127.70
	1000	18	Al-4327.1127.100
1" x 1"	300	25	Al-4327.1134.30
	500	25	Al-4327.1134.50
	700	25	Al-4327.1134.70
	1000	25	Al-4327.1134.100

**Female thread / elbow**

F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	15	Al-4327.1221.30
	500	15	Al-4327.1221.50
	700	15	Al-4327.1221.70
	1000	15	Al-4327.1221.100
3/4" x 3/4"	300	18	Al-4327.1227.30
	500	18	Al-4327.1227.50
	700	18	Al-4327.1227.70
	1000	18	Al-4327.1227.100
1" x 1"	300	25	Al-4327.1234.30
	500	25	Al-4327.1234.50
	700	25	Al-4327.1234.70
	1000	25	Al-4327.1234.100

Other lengths on request.

meiflex - Reinforced hose

for sanitary, heating / air conditioning with stainless steel braid and silicon inner lining

The product:

- Reinforced hose with stainless steel braid for sanitary, heating, air conditioning **with red/red/blue identification marking**
- Internal hose made of bacterially neutral silicon, (odourless, antiallergenic, tasteless, not diffusion tight with respect to oxygen in the air)
- Resistant to water and antifreeze based on glycol (max. 50%)
- for temperatures up to +110 °C (domestic water up to +90 °C)
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C)
- conditional manufacturing tolerances max. +/- 2.5 %

Your advantage:

- can be used for all sanitary, heating, air conditioning purposes
- quality-tested flexible connection

Article number, technical specifications and area of use on label incl. seals

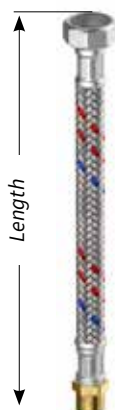
- Other details may be found in the current technical information



W 543
W 270
KTW-A



DVGW testing for sanitary,
TÜV testing for heating / air conditioning



Female thread / male thread

F × M	Length in mm	Internal ø in mm	Art. No.
1/2" × 1/2"	300	13	Al-5715.1104.30
	500	13	Al-5715.1104.50
	700	13	Al-5715.1104.70
	1000	13	Al-5715.1104.100
3/4" × 1/2"	300	13	Al-5715.1105.30
	500	13	Al-5715.1105.50
1/2" × 3/4"	300	13	Al-5715.1106.30
	500	13	Al-5715.1106.50
3/4" × 3/4"	300	13	Al-5715.1107.30
	500	13	Al-5715.1107.50
	700	13	Al-5715.1107.70
	1000	13	Al-5715.1107.100
3/4" × 3/4"	300	18	Al-5725.1127.30
	500	18	Al-5725.1127.50
	700	18	Al-5725.1127.70
	1000	18	Al-5725.1127.100
1" × 1"	300	25	Al-5725.1134.30
	500	25	Al-5725.1134.50
	700	25	Al-5725.1134.70
	1000	25	Al-5725.1134.100
1 1/4" × 1 1/4"	300	32	Al-5725.1142.30
	500	32	Al-5725.1142.50
	700	32	Al-5725.1142.70
	1000	32	Al-5725.1142.100

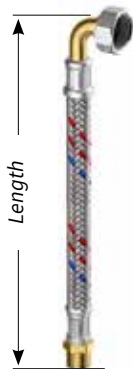
Other lengths on request.

meiflex - Reinforced hose

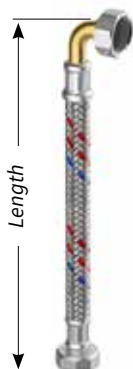
for sanitary, heating / air conditioning with stainless steel braid and silicon inner lining

**Female thread / female thread**

F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	13	Al-5715.1204.30
	500	13	Al-5715.1204.50
	700	13	Al-5715.1204.70
	1000	13	Al-5715.1204.100
3/4" x 3/4"	300	13	Al-5715.1207.30
	500	13	Al-5715.1207.50
3/4" x 3/4"	300	18	Al-5725.1227.30
	500	18	Al-5725.1227.50
	700	18	Al-5725.1227.70
	1000	18	Al-5725.1227.100
1" x 1"	300	25	Al-5725.1234.30
	500	25	Al-5725.1234.50
	700	25	Al-5725.1234.70
	1000	25	Al-5725.1234.100
1 1/4" x 1 1/4"	300	32	Al-5725.1242.30
	500	32	Al-5725.1242.50
	700	32	Al-5725.1242.70
	1000	32	Al-5725.1242.100

**Male thread / elbow**

M x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	13	Al-5715.1604.30
	500	13	Al-5715.1604.50
	700	13	Al-5715.1604.70
	1000	13	Al-5715.1604.100
3/4" x 3/4"	300	18	Al-5727.1127.30
	500	18	Al-5727.1127.50
	700	18	Al-5727.1127.70
	1000	18	Al-5727.1127.100
1" x 1"	300	25	Al-5727.1134.30
	500	25	Al-5727.1134.50
	700	25	Al-5727.1134.70
	1000	25	Al-5727.1134.100

**Female thread / elbow**

F x F	Length in mm	Internal ø in mm	Art. No.
1/2" x 1/2"	300	13	Al-5715.1704.30
	500	13	Al-5715.1704.50
	700	13	Al-5715.1704.70
	1000	13	Al-5715.1704.100
3/4" x 3/4"	300	18	Al-5727.1227.30
	500	18	Al-5727.1227.50
	700	18	Al-5727.1227.70
	1000	18	Al-5727.1227.100
1" x 1"	300	25	Al-5727.1234.30
	500	25	Al-5727.1234.50
	700	25	Al-5727.1234.70
	1000	25	Al-5727.1234.100

meiflex - Reinforced hose with silicon inner lining for dishwashers and washing machines**Female thread / elbow**

F x F	Length in mm	Internal ø in mm	Art. No.
3/4" x 3/4"	1000	13	Al-5715.1707.100
	2000	13	Al-5715.1707.200

Other lengths on request.

meiflex - Reinforced hose sanitary

specialy for domestic water systems with stainless steel braid and silicon inner lining

The product:

- Fittings hoses for domestic water use complying with DVGW, Group I
- stainless steel braid **with red/ red/blue identification marking**
- Internal hose made of bacterially neutral silicon
- Models from 3/8" and 8 mm internal diameter
- for temperatures up to +110 °C for heating and up to + 90 °C for water (complying with domestic water regulations)
- Operating pressures: 16 bar (up to 100 °C), 10 bar (up to 110 °C)
- Conditional manufacturing tolerances max. +/- 2.5%



W 543
W 270
KTW-A



DVGW testing for sanitary,
TÜV testing for heating / air conditioning

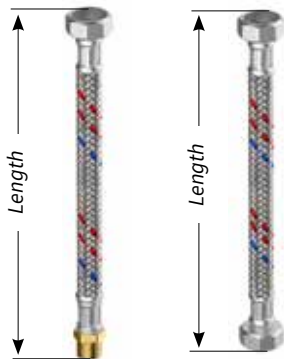


Fig. 1

Fig. 2

Female thread / male thread (Fig. 1)

F x M	Length in mm	Internal ø in mm	Art. No.
1/2" x 3/8"	300	8	AI-5715.0102.30
	500	8	AI-5715.0102.50
1/2" x 1/2"	300	8	AI-5715.0104.30
	500	8	AI-5715.0104.50

Female thread / female thread (Fig. 2)

F x F	Length in mm	Internal ø in mm	Art. No.
3/8" x 3/8"	300	8	AI-5715.0201.30
	500	8	AI-5715.0201.50
1/2" x 3/8"	300	8	AI-5715.0202.30
	500	8	AI-5715.0202.50
1/2" x 1/2"	300	8	AI-5715.0204.30
	500	8	AI-5715.0204.50



Fig. 3

Fig. 4

Female thread / elbow (Fig. 3)

F x elbow	Length in mm	Internal ø in mm	Art. No.
3/8" x 3/8"	300	8	AI-5717.0201.30
	500	8	AI-5717.0201.50

Pinch threaded joint / Pipe end (Fig. 4)

KVL x pipe	Length in mm	Internal ø in mm	Art. No.
10 mm x 10 mm	300	8	AI-5715.5310.30
	500	8	AI-5715.5310.50

Female thread / pinch threaded joint (Fig. 5)

F x KVL	Length in mm	Internal ø in mm	Art. No.
3/8" x 10 mm	300	8	AI-5715.2210.30
	500	8	AI-5715.2210.50
1/2" x 10 mm	300	8	AI-5715.2212.30
	500	8	AI-5715.2212.50

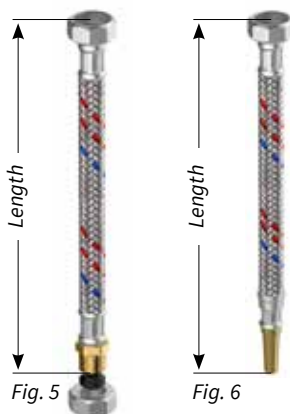


Fig. 5

Fig. 6

Female thread / pipe end (Fig. 6)

F x pipe	Length in mm	Internal ø in mm	Art. No.
3/8" x 10 mm	300	8	AI-5715.5210.30
	500	8	AI-5715.5210.50
1/2" x 10 mm	300	8	AI-5715.5212.30
	500	8	AI-5715.5212.50

Other lengths on request.

meiflex Accessories



Model		Packaging unit	Art. No.
Nipple MS	3/8"	10	AI-43.66122MS
Flat-sealing	1/2"	10	AI-43.66123MS
	3/4"	10	AI-43.66124D
	1"	5	AI-43.66125MS
	1 1/4"		AI-43.66126MS
	1 1/2"		AI-43.66133D



F / M - Nipple MS	3/8"	10	AI-43.66132MS
Flat-sealing	1/2"	10	AI-43.66131MS
	3/4"	10	AI-43.66127MS
	1"	5	AI-43.66128MS
	1 1/4"	3	AI-43.66129MS
	1 1/2"	2	AI-43.66135MS
	2"		AI-43.66136MS



F / M - Angle MS	3/8"	5	AI-43.66141MS
M flat sealing	1/2"	5	AI-43.66142MS
	3/4"	5	AI-43.66143MS
	1"	5	AI-43.66144MS
	1 1/4"	3	AI-43.66145MS
	1 1/2"	2	AI-43.66137MS
	2"		AI-43.66138MS



Seal	3/8"	100	AI-43.66151
asbestos-free	1/2"	100	AI-43.66152
	3/4"	100	AI-43.66153
	1"	100	AI-43.66154
	1 1/4"	100	AI-43.66155
	1 1/2"	100	AI-43.66156
	2"	100	AI-43.66157

Reinforced hose for gas

with stainless steel braid and stainless steel corrugated pipe as inner lining

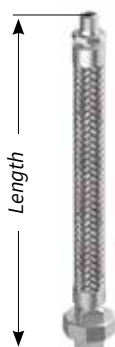
The product:

- Gas pressure hoses for use specially for gas pipes and heating systems with an operating pressure of max. 4 bar.
- Braid made of stainless steel (Material No. 1.4301) (DVGW tested)
Internal hose made of stainless steel corrugated pipe (Material No. 1.4404)
- on one side malleable cast threaded joint with female thread and conical seal, on the other made of a malleable cast hexagonal nipple with male thread.
- Operating pressure for gas: 4 bar
- Operating specifications for heating:
 - 25 bar at +20 °C
 - 20 bar at +100 °C
 - 17 bar at +200 °C
 - 15 bar at +300 °C

Your advantage:

- quality tested flexible connections
- avoid stresses and structure-borne sound propagation

Female thread / male thread



Model		Length in mm	Art. No.
Connection size = 1/2"	DN 12	300	AI-46163.30
		500	AI-46163.50
		800	AI-46163.80
		1000	AI-46163.100
Connection size = 3/4"	DN 20	300	AI-46162.30
		500	AI-46162.50
		800	AI-46162.80
		1000	AI-46162.100
Connection size = 1"	DN 25	300	AI-46161.30
		500	AI-46161.50
		800	AI-46161.80
		1000	AI-46161.100

Other sizes and connections on request.

Annex



The annex contains our

- *Service price list*
- *Check lists / Request forms*
- *Article number register*
- *Glossary*
- *AGBs*
- *miscellaneous notes*

Service price list (on request)

1. Delivery

1.1. Express delivery within Germany

1.1.1 Parcel service

	before 12 noon	before 10 am	before 9 am
up to 5 kg			
up to 10 kg			
up to 20 kg			
up to 30 kg			

1.1.2 Forwarders

	over the course of the next day	before 12 noon	before 10 am
up to 20 kg			
Half palette <80 kg			
Euro and one-way palette up to 150 kg			

1.2. Express delivery abroad

on request

2. Services for metering devices (not older than 1 year)

2.1. Water meter

Recalibration up to Qn 6
Testing findings up to Qn 10

2.1. Heat flow meter

Recalibration up to Qp 2.5
Testing findings up to Qp 2.5

3. Test outputs

3.1. Pressure testing per test

Reinforced hose, stainless steel corrugated pipe,
Fittings, valves, stations, assemblies

3.2. Leak-tightness test per test

Reinforced hose, stainless steel corrugated pipe,
Fittings, stations, assemblies

3.3. Function testing per test

Stations, assemblies
(electrical testing only)

We require a written order from the client to request customer service. Please ask for the request form by phone at the Meibes customer service (Internal Service) or by e-mail at service@meibes.com.

In the event of questions or suggestions, you may contact us by e-mail at service@meibes.com or visit our website www.meibes.de.

Service price list (on request)

4. Services

Flat fee per order*

Rate per work unit (AE) for service technician
(1 AE corresponds to 10 min.) ¹

Rate for ancillary costs per day ²

Special supplement ³

Rate for commissioning ⁴

Flat fee for maintenance, inspection and overhaul ⁵

Commissioning Interface stations

Commissioning district heating and controllers

Commissioning Nexus Valve	up to 60 Fittings	61 – 100 Fittings	101 – 400 Fittings	from 401 Fittings	Industrial systems
---------------------------	-------------------	-------------------	--------------------	-------------------	--------------------

Commissioning Nexus Valve Type 1 setting the pre-set values and sample measurement set by the AG.

Commissioning Nexus Valve Type 2 setting the pre-set values and setpoint volume flows, with Nexus Valve Passim the prescribed differential pressures are also set.
(The settings of the volume flows occur through measurements on all Nexus Valve valves).

The necessary preconditions for commissioning Nexus Valve must be fulfilled in line with the request form.

*) Costs relate to one journey. Additional journeys are billed separately.

5. Complaints processing

Trouble-shooting with incomplete complaints details

Additional documentation (photo)

Additional documentation (video)

Test outputs see 3. External reports are billed according to work.

6. Design

Piping network calculation including design of the interface stations, of the buffer accumulators and of the pump as planner output.

1) Charge for each work unit commenced. For monitoring, trouble-shooting or fault-finding, repairs, visits or inspections, overhauls, standby times, training, instruction, consultancy, wiring work, venting work and other work for the products offered by Meibes System-Technik GmbH. The general Terms and Conditions of Business as well as conditions for services and commissioning of Meibes System-Technik GmbH must be observed!

2) Contains the order fee for processing and organisation, rest time, overnight costs where applicable, travelling to and from. Is calculated for each working day for services, maintenance, inspections, overhauls and commissioning. The flat fee is calculated at the start of the journey to the destination.

3) One-off surcharge for ancillary costs fee for cross-border travel to and from countries adjacent to Germany, as well as islands with ferry or rail connections and special trips.

4) Flat fees apply to a position and for products offered by Meibes System-Technik GmbH. The general Terms and Conditions of Business as well as conditions for services and commissioning of Meibes System-Technik GmbH must be observed!

5) Flat fees apply to a position and for products offered by Meibes System-Technik GmbH. Prices for spare parts and repair work are not included in the payment. The general Terms and Conditions of Business as well as for maintenance, inspection and overhaul and the Conditions of Business of Meibes System-Technik GmbH must be observed!

Request form for local/district heating stations

Download form from www.meibes.de



Company/Contact: _____

Object: _____ Date: _____ Signature: _____

Area of supply / Municipal utilities (technical connection conditions):

Feed in: _____	<input type="checkbox"/> Indirect	<input type="checkbox"/> Direct
_____	<input type="checkbox"/> Return temperature limiting	<input type="checkbox"/> Output limiting
Nominal pressure: _____	PN primary: _____	PN secondary: _____
Station model: _____	<input type="checkbox"/> wall-mounted	<input type="checkbox"/> standing
Erection dimensions (mm):	Height: _____	Width: _____
		Depth: _____




Primary side

Output _____	Winter / summer _____	/ kW
Network temperatures _____	Winter VL / RL _____	/ °C
_____	Summer VL / RL _____	/ °C
max. operating temperature (strength) _____		°C
max. differential pressure _____	ΔPmax _____	bar
min. differential pressure _____	ΔPmin _____	bar
<input type="checkbox"/> Shut-off valves	<input type="checkbox"/> Controller	Primary connections: (above / below / right / left)
<input type="checkbox"/> Differential pressure regulator	<input type="checkbox"/> Manufacturer's directions	
<input type="checkbox"/> Flow rate controller		
<input type="checkbox"/> Straight-way valve	<input type="checkbox"/> Electric actuator 0 - 10 Volt	
<input type="checkbox"/> Combi fittings (flow rate control with actuator)	<input type="checkbox"/> 230 V	
<input type="checkbox"/> Heat flow meter	<input type="checkbox"/> Emergency function	
<input type="checkbox"/> Only fitting piece for WMZ	<input type="checkbox"/> Make / Type	
	<input type="checkbox"/> Length (mm) / DN	

Secondary side

Safety valve Response pressure _____ bar

Heating circuits	Output KW	Temperature			Heating circuit pump			WMZ fitting piece	Connections secondary (above / below / right / left)
		VL °C	RL °C	Max. °C	Flow rate m³/h	Residual delivery head bar	Mixing valve		
Heating circuits 1							<input type="checkbox"/>		
Heating circuits 2							<input type="checkbox"/>		
Heating circuits 3							<input type="checkbox"/>		
Buffer summer									
Buffer Winter									

TW heating (Standard PN 10)	KW	WE	NL	Feed in primary / secondary	Circulation assembly	Tank Model		Item	Vol. l	with integr. MAG
						Stainless steel	Steel enamelled			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>

Accessories System

<input type="checkbox"/> Automatic filling line	<input type="checkbox"/> Block diagram
<input type="checkbox"/> Control cabinet, with or without manual operation level	<input type="checkbox"/> Technical connection conditions
<input type="checkbox"/> Manual filling line	<input type="checkbox"/> Insulation by the customer

Request form for Meibes large manifolds



Download form from www.meibes.de

Company/Contact: _____

Object: _____

Date: _____

Signature: _____

Output of heating boiler in kW: kW Connections in DN: VL RL

Pump groups Information notes

Heating circuit(s)		1	2	3	4	5	6	7	8	Information notes
Pump capacity	m³/m									
Output at ΔT=20 K	kW									
Pump	Information note: DN 25, 32 = threaded joint* DN 40, 50, 65 = flange									Enter Name / Type
with shut-off set										Please tick
with meter installation fitting										
with mixer	DN mixer = DN pump									Please tick
with servomotor	230 V / 50 Hz 24 V actuation 0-10 V									
Unions for the heating circuit (1 pair)										Please tick
	Victaulic - Elbows									
	Victaulic - Victaulic									
(only DN 40, 50, 65)	Victaulic - Male thread									
	Victaulic - Welded end									
	Victaulic - Hot-pressed C-steel									

Signs (flow line red / return line blue) 1 pair Please state quantity.

***Caution: When using V groups on large manifold Unions, order (reducer set)** Art. No. 66305.50 Please state quantity

Large manifolds

Pump capacity	m³/h	12	30	50	100	Please state quantity
Output at ΔT=20 K	kW	280	700	1150	2300	
Connections on the side (Victaulic Nut)	Pipe ø mm	114.3	168.3	168.3	219.1	
2 Circuit module						
3 Circuit module						
Angle module						

Boiler guard (option) incl. magnetite separator

Pump capacity	m³/h	12	30	50	100	Boiler guard unions to the Manifold (incl. insulation block) are included in the scope of supply! Please tick
Output at ΔT=20 K	kW	280	450	700	1150	
Connections on the side (Victaulic Nut)	Pipe ø mm	88.9	114.3	168.3	219.1	

Hydraulic diverter function

yes	no
<input type="checkbox"/>	<input type="checkbox"/>

Please tick

Unions to the heat generator (1 pair)

Victaulic - Victaulic				
Victaulic - Flange (PN6)				
Victaulic - Welded end				

Remarks

Request form for interface stations



Download form from www.meibes.de

Company/Contact: _____

Object: _____ Date: _____ Signature: _____

Primary side

Object usage category: _____ e.g. residential building, hotel, sports facility

Heat generator: _____ a heat generator (e.g. boiler, district heating)
 _____ multiple heat generators (e.g. boiler, solar)

Grid mode of operation: _____ constant flow line temperature (standard 65 °C) _____ °C
 _____ variable flow line temperature min / max _____ / _____ °C

Heat requirement: _____ total _____ kW

Pipe material: _____ steel copper other

Assemblies: _____ PG & controller for heating circuits miscellaneous
 _____ Line differential pressure regulator (Balancer) _____ Item

Interface station

Space heating circuit: _____ without heating circuit
 _____ radiator heating circuit design temperatures VL / RL _____ / _____ °C
 _____ surface heating circuit design temperatures VL / RL _____ / _____ °C

Heat meter: _____ ultrasonic mechanical flow coefficient _____ m³/h

Type & kit

LogoPack	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoVital	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 65 kW (24 l/min) ¹	Item
LC Therm switch	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 46 kW (12 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoComfort	<input type="checkbox"/> 42 kW (15 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 65 kW (24 l/min) ¹	Item
LogoComfort 4 conductor	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
LogoBasic	<input type="checkbox"/> 30 kW (10 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 42 kW (15 l/min, 50 °C) ¹	Item
LogoComfort Slim	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoAktiv	<input type="checkbox"/> 50 kW (18 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 70 kW (26.5 l/min, 50 °C) ¹	Item
LogoMatic Basic	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoMatic Comfort	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoMatic Comfort +	<input type="checkbox"/> 46 kW (17 l/min, 50 °C) ¹	Item
	<input type="checkbox"/> 35 kW (12 l/min, 50 °C) ¹	Item
LogoEco H-HW	<input type="checkbox"/> 35 kW (10 l/min, 55 °C) ²	Item
LogoEco HW	<input type="checkbox"/> 35 kW (10 l/min, 55 °C) ²	Item

LogoComfort accessories: _____ Mixer circuit with servomotor Cooling module (without controller)
 _____ Thermostatic mixer circuit Return line temperature limiter 45-65 °C
 _____ Mixer circuit with controlled servomotor Straight-way ball valve set DN 20
 _____ kW connection Corner ball valve set DN 20
 _____ Adjustable circulation bridge 45 – 65 °C Dirt trap with drainage device

(Note combination options according to selection matrix in price list) _____ Differential pressure regulator (Balancer)
 _____ Domestic water circulation with separate Time control
 _____ Scalding protection
 _____ Additional connection for radiator heating

Manifolds for 2 3 4
 _____ 5 6 7
 _____ 8 9 10 heating circuits

Cover for wall-mounted flush-mounted
 _____ Remote read-out

1) stipulates at a flow line temperature of 65 °C and heating by 40 K
 2) stipulates at a flow line temperature of 65 °C and heating by 45 K

Controller according to
 living space Outside temperature

Request form for interface stations

Download form
from www.meibes.de

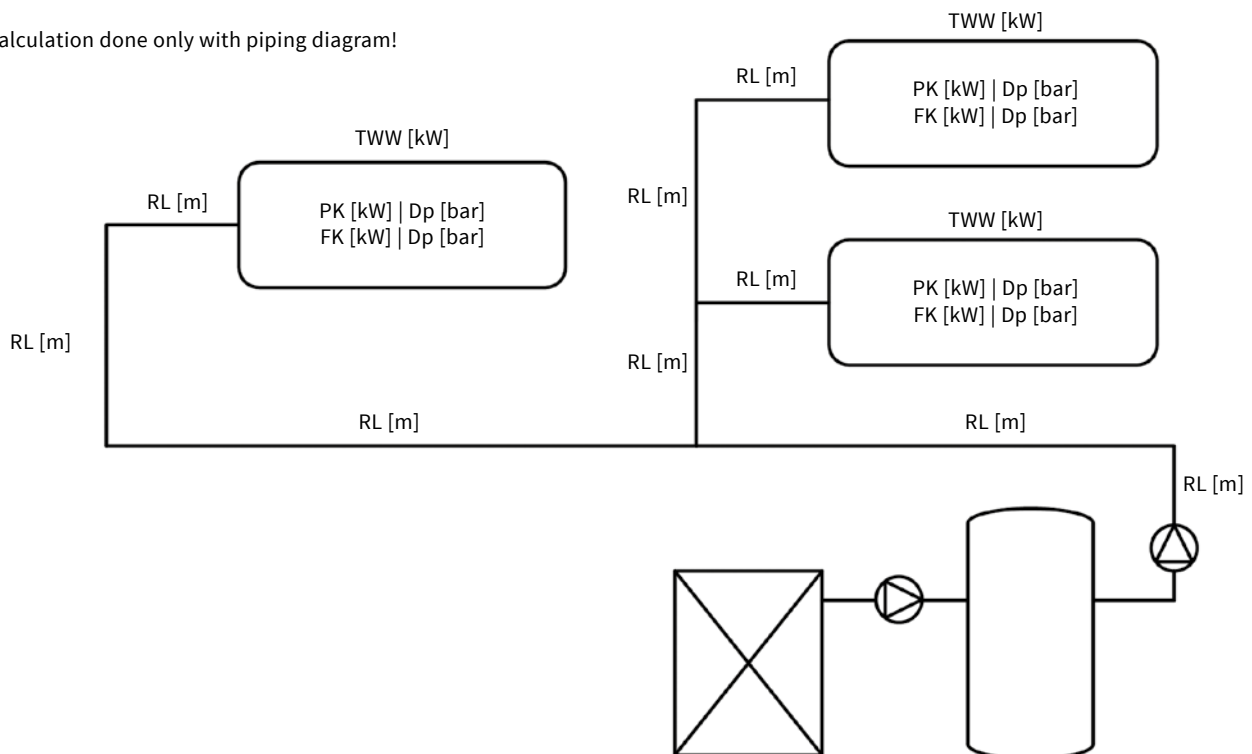


System

Please add piping diagram, as in the example,
with the following information:

- Heat requirement of the heating circuits (in kW)
(RK = radiator heating circuit, FK = surface heating circuit)
- Differential pressures for the space heating circuits (Δp in bar)
- Simple pipework lengths (RL in m)
- Domestic hot water output (TWW in kW)

Calculation done only with piping diagram!



Request form for fresh water stations



Download form
from www.meibes.de

Company/Contact:

Object:

Date:

Signature:

Heating system

Object usage category

e.g.: Residential building with WE number, hotel, sports facility, school etc.:

.....

Minimum flow line temperature of the heating system (Standard 65 °C):

°C

.....

Any heat generator output / buffer accumulator volumes available:

kW /

l

Fresh water station

Number and type of the draw-off points

(Bathtub, shower, washbasin, sink etc.)

plus allocation to room (bathroom, kitchen)

or total domestic hot water draw-off volume:

.....

.....

.....

.....

.....

Requirement for domestic hot water draw-off volume per draw-off point
(Standard DIN):

l/min

.....

Domestic hot water outlet temperature (standard 50 °C)

°C

.....

Requirement for simultaneity (standard DIN):

.....

Circulation pump:

Yes

No

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Meibes Digital

The current data standard 4.0 and other tendering formats are shown under **www.ausschreiben.de**. Documents, article data, product illustrations are available for download from the **shk sector portal** and **OXOMI**. Data sets for expert planning of modern heating, cooling and domestic water systems (VDI 3805 Sheet 2 and Sheet 17) are shown at **www.linear.eu**. Data sets for interface and fresh water stations, pump groups, large manifolds, solar stations are shown at **www.VDI3805.org**.



**) in accordance with sales, delivery and payment conditions. Maintenance of the system in accordance with the inspection guidelines must be carried out by an authorised specialist company or the Meibes customer service and in the event of making use of the warranty must be proved with the protocol contained in the service logbook.*

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Sales, delivery and payment conditions

Programme and technical changes reserved

I. Scope of application

- (1) All deliveries and performances take place according to the following printed conditions. Different conditions are binding on the supplier only if the supplier has expressly acknowledged them in writing. The Ordering Party accepts the general supply conditions of the supplier at the latest through acceptance of the products.
- (2) Different Terms and Conditions of Business of the Ordering Party are hereby expressly excluded.

II. Offer

An offer remains non-binding up to written order confirmation by the supplier. Verbal and telephonic agreements only become part of the contract if they are confirmed in writing.

III. Prices and payment terms

- (1) The prices are understood as net ex-factory and do not include packaging, freight, postage, customs duties or value-added tax.
- (2) Payments must be made in euros free of charge to the payment authority of the supplier.
- (3) Payments must be made within eight days from date of billing, with two percent discount or within 30 days from invoice date.
- (4) From a net order value above 1,000 euros, delivery is free of charge. For small orders under 100 euros, the supplier charges a dispatch fee of 20 euros. For orders between 100 and 1,000 euros, a dispatch fee of 15 euros is charged. In the case of deliveries abroad, the prices free to the German border apply up to 1,500 euros.
- (5) The prices are based on the production costs at the time of order closing. If prices change after order closing, the confirmed prices will also change. Insofar as fixed prices are not expressly agreed for orders, the relevant applicable price lists at order closing shall apply. The supplier is bound to these for four months. With longer delivery periods, the supplier is authorised, in the event of an increase in material or wage costs, to impose appropriate surcharges on the basis of the original price calculation for the increases in cost that have occurred. The same applies to fixed price agreements, if the agreed delivery periods are delayed as a result of reasons that are the responsibility of the Ordering Party.
- (6) The Ordering Party can only charge those claims that are uncontested or legally imposed.

IV. Retention of title

- (1) The items in the deliveries remain the property of the supplier up to fulfilment of all claims by the supplier on the Ordering Party resulting from the business contact.
- (2) While the retention of title is in force, the Ordering Party is prevented from entering into a mortgaging or security agreement and permitted resale only to retailers in the normal course of business, and only under the condition that the retailer receives payment from the retailer's customers, or imposes the reservation that ownership is transferred to the customer only once the customer has met the customer's payment obligations.
- (3) In the event of attachment, confiscation or other court orders or injunctions by third parties, the Ordering Party must inform the supplier immediately.
- (4) In the event of culpable breach on the part of

the Ordering Party of significant contractual obligations, in particular default in payment, the supplier is authorised to demand return of the goods following a warning, and the Ordering Party is obliged to surrender them. The return or enforcing of the retention of title or mortgaging of the reserved goods by the supplier does not imply withdrawal from contract, unless the supplier has stated so explicitly.

V. Delivery periods and default

- (1) Delivery deadlines are always approximate and non-binding up to order confirmation in writing by the supplier according to Clause II. The delivery period starts on the day of dispatch of the order confirmation and has been met if the goods have left the factory or sales office by its expiry, or the fact that they are ready for despatch has been communicated.
- (2) If failure to meet the deadlines is caused by force majeure (e.g. climate disaster, war, unrest) or other similar event (e.g. strike, lock-out), the deadlines will be extended appropriately.
- (3) If the supplier is in default by more than 10 working days, the Ordering Party may at this point demand compensation, to the extent that it can prove damage. For each complete week, compensation amounts to 0.5%, but with a total of at most 5% of the value of the delivery.
- (4) Claims for compensation on the part of the Ordering Party that exceed the limits stated in (3) are excluded in all cases of delayed delivery, even after expiry of a postponed deadline set by the supplier. This does not apply if mandatory liability applies in cases of deliberate intent or gross negligence.
- (5) If despatch or delivery is delayed for more than 10 working days at the request of the Ordering Party, after indication that despatch is ready, storage fees amounting to two percent of the price of the articles to be delivered can be billed to the Ordering Party for each week or part of a week. Proof of higher or lower storage fees is up to the supplier.

VI. Acceptance and return

- (1) Returns may take place in principle only with our agreement in writing.
- (2) Deliveries must be accepted by the Ordering Party even if they show minor defects.
- (3) Returns for which the supplier is not responsible are charged at a rate of 20 percent of the value of the goods, with a minimum of 50 euros. Freight costs, packaging, testing and processing costs incurred are also billed.
- (4) Returns for special manufactures are in principle ruled out, unless there is a case of defect in terms of the Terms and Conditions of Business.

VII. Liability for defects and Claims for damages

- (1) The customer's rights on defects are subject to the precondition that the customer has properly met the customer's inspection and obligation to notify defects in terms of § 377 HGB.
- (2) The assurance of particular properties must be stated in writing in the individual case.
- (3) No claims can be enforced for devices where faults, damage or defects occur as a result of lime scale, chemical or electrochemical effects, faulty erection or installation or incorrect initial setting, operation or improper utilisation or use. Claims on the grounds of defective or neglected maintenance, weathering effects or other

natural phenomena are also ruled out.

- (4) The supplier is to be permitted an appropriate period and opportunity to repair defects. If this is denied, the supplier is released from liability for the defect. In the case of justified complaints about defects, the supplier is obliged to repair or provide a replacement at the supplier's choice.
- (5) If the rectification does not work, the customer is authorised to demand withdrawal or a reduction at the customer's choice.
- (6) The supplier explicitly reserves the right to make alterations to the design and/or model that do not affect either the functionality or the value of the item supplied. These do not provide justification for complaint.
- (7) The working materials will be selected by the supplier in accordance with the supplier's experience, to the extent that they are not stipulated by the Ordering Party. Recommendation does not release the Ordering Party from checking suitability for the application.
- (8) The supplier is liable according to the legal provisions, insofar as the customer asserts claims for damage based on deliberate intent or gross negligence, including deliberate intent and gross negligence on the part of our representatives or agents. To the extent that no deliberate intent can be attributed to us, liability for compensation for damages is limited to the predictable typical damage.
- (9) Liability on account of culpable harm to life, limb or health is unaffected. This also applies to mandatory liability in terms of product liability law.
- (10) Unless stipulated to the contrary in the foregoing, liability is ruled out.
- (11) The limitation period for defect claims is five years, calculated from risk transfer. For electrical, electronic, thermostatic and moving components, as well as for reinforced hose with galvanised braid, the limitation period for defect claims is two years, calculated from risk transfer.
- (12) The limitation period in the event of delivery recourse in terms of §§ 478 and 479 BGB remains unaffected. This is five years calculated from delivery of the defective item.

VIII. Risk transfer

Insofar as nothing to the contrary arises from the order confirmation, delivery is agreed 'ex-factory'.

IX. Place of jurisdiction

- (1) If the customer is a business, our registered office is the place of jurisdiction; nevertheless, we are empowered to sue the customer at its place of residence.
- (2) The laws of the Federal Republic of Germany shall apply, UN sales law is precluded.
- (3) Insofar as nothing to the contrary arises from the order confirmation, our registered office is the place of performance.

X. Final provision

If one of the provisions is partially or completely void, the other provisions are unaffected thereby.

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