



COMFORT LINE SURFACE HEATING

01/2021



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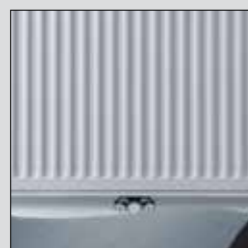
SURFACE HEATING IN COMBINATION WITH RADIATORS



CASUAL COLLECTION



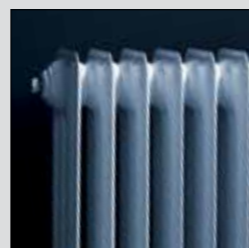
PLINTH COLLECTION



CENTRIC COLLECTION



MINI COLLECTION



CLASSIC COLLECTION










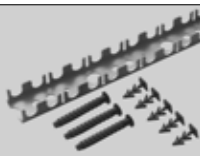
Underfloor heating systems. Various heating systems are available for creating a comfortable room climate. Underfloor heating, as a low-temperature surface heating system, is especially well-suited for this purpose. The heat rises evenly from the entire floor surface, which produces a sense of comfort and saves energy. An even room climate permits users to experience the temperature of the room as around 1-2 °C warmer than it actually is. If one therefore reduces the room temperature by this 1-2 °C, it saves around 6-12 % energy, without any decrease in the sense of thermal comfort.



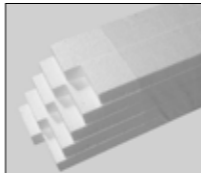
Brugman offers complete underfloor heating systems, from the thermal insulation to the temperature controls. The system rolls and sheets for the precise fastening of the heating tubes, the distribution system with built-in valves, self-sealing connection technology and intelligently-designed accessories make installation of Brugman underfloor heating systems easy, fast and safe.

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	Type/dimensions in mm	Article number	Packaging unit	
1 TACKER SYSTEM PRODUCT GROUP I				
	Quickroll EPS Heat and impact noise insulation roll, B2, with specially reinforced film, in accordance with DIN 4108 and DIN 4109, loadable in accordance with EN 13163. Building material class B2 under DIN 4102. With imprinted 5 cm laying grid to maintain the laying distances, CFC-free.	045 DES sm 25-2	13800012725	12 m ²
		045 DES sm 30-3	13800013230	12 m ²
		045 DES sm 35-3	13800013835	10 m ²
		040 DES sg 30-2	13800013035	12 m ²
		045 DES sm 20-2	13800013920	12 m ²
		035 DES sg 20-2	13800014020	12 m ²
	035 DES sm 30-2	13800014030	12 m ²	
	AEpro-Clip Special clip for fastening the heating tubes directly to the system insulation. Especially well-suited when anhydrite screeds are used.	13811000014	600 Pcs.	
	Special-Clip with tube lifting and lateral stoppers. Especially well-suited when cement screeds are used.	13811000017	600 Pcs.	
	Clip setter metal AEpro Stable metal design. With magazine rod to receive the pre-loaded AEpro clips. Clip setter metal for Brugman special clip on request.	13811000114	1 Pc.	

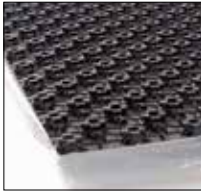
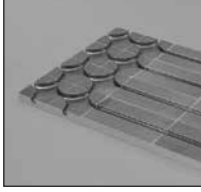
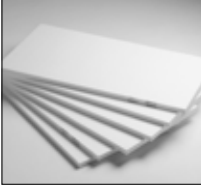



	Type/dimensions in mm	Article number	Packaging unit	
2 STUD SYSTEM PRODUCT GROUP I				
	Quicknopp made of PS deep-drawn element and EPS heat/impact noise insulation. For the rectangular and diagonal laying of the heating tubes. Suitable for heating tubes 14 mm x 2 mm up to 17 mm x 2 mm. With self-adhesive overlap for screed water-tight sheet connections. Fulfils the requirements of DIN 4108, DIN 4109, DIN EN 1264 and DIN 18560. Building material class B2 in accordance with DIN 4102. CFC-free.	040 30-2 VA60	13FH01202	9,6 m ²
		035 11 VA60	13FH01203	9,6 m ²
	Quicknopp connecting strips VA60 PS connecting strip. For connecting Brugman Quicknopp VA60 system sheet.	13FH55044	10 Pcs.	
	Quicknopp clamping rail with adhesive strips. For fastening the floor heating tubes. Grid 25 mm.	1000	13800060950	10 Pcs.







	Type/dimensions in mm	Article number	Packaging unit	
2 STUD SYSTEM PRODUCT GROUP I				
	Transitional element VA60 PS film strip for laying on the Quicknopp system elements to bridge over doorways, etc. Abutting edges should be sealed off with adhesive tape.	1000 x 135	13FH55047	10 Pcs.
	Quicknopp round profile made of PE foam for sealing the film strip of the edge insulation strip against screed water and installation under expansion joint profiles to separate screed fields.	Ø20	13800060920	50 m
	Quicknopp transitional insulation strip Insulating strip made of EPS for use in connection with the insulation strip. CFC-free.	1000 x 100 x 30	13800061130	10 Pcs.
		1000 x 100 x 11	13800061110	10 Pcs.

General characteristics of Brugman Quicknopp 11mm and 30mm








- Filled studs
- Suitable for heating tube dimension of 14x2 mm to 17x2 mm
- Quicknopp made of polystyrene foam
- EPS heat insulation properties and impact noise protection
- Laying distance 6 cm
- Overlap laying, which serves as moisture protection for the screed
- CFC-free




	Type/dimensions in mm	Article number	Packaging unit	
3 RENOVATION PRODUCT GROUP I				
	Renovation sheet for system tube 10 x 1.25 mm. System sheet made of PS deep-drawn element for the rectangular and diagonal laying of the heating tubes. System structure around 10 mm. Back of the system sheet is self-adhesive for attachment.	1050 x 650	13FH01401	9,6 m ²
4 DRY SYSTEM PRODUCT GROUP I				
	Dry construction sheet 30 mm Foam-moulded polystyrene sheet EPS 035 DEO dh in accordance with DIN EN 13163 and DIN 4108-10. With aluminium sheet 0.5 mm. The system is only suitable for MPC 16 x 2.0 system tube.	1000 x 500 x 30	13FH01304	5 m ²
	Filling element For use before the distributor composed of EPS 035 DEO dh in accordance with DIN EN 13163 and DIN 4108-10.	1000 x 500 x 30	13FH01305	5 m ²
	Covering film	400 x 2500	13FH02102	100 m ²
	Frame wood for laying in the edge area.	1190 x 45 x 30	13FH55045	
	Hot cutter for cutting individual laying grooves and in the distributor area.		13FH55046	





	Type/dimensions in mm	Article number	Packaging unit	
5 ACCESSORIES PRODUCT GROUP I				
	Edge insulation with film strip made of soft polyethylene foam to absorb screed expansion of more than 5 mm. With welded-on overlapping film against the penetration of screed water, slit on the back at 10 mm intervals in order to permit easy later removal of the overhangs.	10 x 150	13812000821	50 m
	Expansion joint profile Brugman expansion joint profile made of polyethylene foam covered on both sides with hard film for forming permanently elastic movement joints in accordance with DIN 18560-2 and for the sure delimitation of screed fields. Moisture-resistant, with self-adhesive foot, CFC-free. Content: 20 profiles of 1.8 m.	10 x 80	13812001080	36 m
	Dispenser for adhesive tape.		13812000475	
	Adhesive tape made of polypropylene, 75 mm wide. To tape the overlapped butt joints of Quickroll with the aid of a hand dispenser. Roll 66 m.		13812000075	6 Rolls
	Screed additive standard is a highly effective screed additive that was specially developed for cement-bound heated screeds. To meet the standard requirements for screeds in the installed state. A homogeneous, compressible screed is achieved that fully envelops the heating tubes. Thermal conductivity and heat storage capacity are increased. Application quantity around 0.17 kg/ m ² for 60 mm screed thickness.		13812000011	10 kg
	Measuring points set for the identification of the measuring point for measurement of the residual moisture in screeds.		13812000150	5 Pcs.






	Type/dimensions in mm	Article number	Packaging unit
6 FLOOR HEATING TUBES PRODUCT GROUP I			
	PE-Xc tube	14x2	13811420012
	Floor heating tube made of cross-linked polyethylene in accordance with DIN 4729, with diffusion barrier under	14x2	13811420024
	DIN 4726, oxygen diffusion-tight, max. operating pressure 6 bar, max. operating temperature 95°C.	14x2	13811420060
		17x2	13811720012
		17x2	13811720024
	17x2	13811720060	600 m
	PE-RT tube	14x2	13821420012
	Floor heating tube made of polyethylene in accordance with DIN 16833, with diffusion barrier, oxygen diffusion-tight in accordance with DIN 4726, max. operating pressure 6 bar, max. operating temperature 70°C.	14x2	13821420024
		14x2	13821420060
		17x2	13821720012
		17x2	13821720024
		17x2	13821720060
	10x1,25	13FH11662	100 m
	MPC tube	16x2	11FH14221
	Metal-plastic composite tube, inner tube PE-RT, aluminium inner tube, outer tube PE-HD, oxygen diffusion-tight. Max. operating pressure 6 bar, max. operating temperature 60°C.	16x2	11FH14252
	Connection fittings	3/4" x 14x2	13817003414
	With clamping rings for connecting the heating tubes (PE-Xc, PE-RT, MPC) to the distributor.	3/4" x 17x2	13817003417
		3/4" x 10x1,25	13FH51021
	Tube coupling	14x14x2	13815343414
	with clamping ring fitting on both sides.	17x17x2	13815343417
		10 x 1,25	13FH510022
	Guide bend		13812000190
	made of impact-resistant plastic for easily and cleanly guiding the tube to the distributor. Bend 90°.		50 Pcs.
	Expansion joints tube protection	400	13FH52005
	slit, length 28.5 cm. Suitable for heating tube PE-RT, PE-XC and MPC tube.		50 Pcs.
	Calibration tool	14-20 mm	13819269920
	for MPC floor heating tube. Tubes must be calibrated before the mounting of the connection fittings.		



	Type/dimensions in mm	Article number	Packaging unit
6 FLOOR HEATING TUBES PRODUCT GROUP I			
	Dispenser	13FH53001	120 m
	for easy taping of all Brugman heating tubes (120 - 600 m), with adjustable reel.		
7 DISTRIBUTORS PRODUCT GROUP I			
	Stainless steel distributors for underfloor heating with integrated control valve in the flow block	2 Circuits	13FH28020
	made of stainless steel special profile V2A. Integrated thermostat valves with handwheel caps (convertible to electr. actuators) in the backflow blocks. Including 2 combined air vents and drain cocks 1/2" nickel-plated pre-assembled, 2 wall brackets with sound insulation liner, 4 screws with screw anchors and 1 room identification plate. Primary side: 2 x union nut 1" IG, nickel-plated, flat sealing. Secondary side: nickel-plated connecting nipple 3/4" AG with cone.	3 Circuits	13FH28030
		4 Circuits	13FH28040
		5 Circuits	13FH28050
		6 Circuits	13FH28060
		7 Circuits	13FH28070
		8 Circuits	13FH28080
		9 Circuits	13FH28090
		10 Circuits	13FH28100
		11 Circuits	13FH28110
		12 Circuits	13FH28120
		Stainless steel distributor for underfloor heating with integrated controllable flow rate indicator 0-5 l/min in the flow block	2 Circuits
made of stainless steel special profile V2A. Integrated thermostat valves with handwheel caps (convertible to electr. actuators) in the return flow blocks. Including 2 combined air vents and drain cocks 1/2" nickel-plated pre-assembled, 2 wall brackets with sound insulation liner, 4 screws with screw anchors and 1 room identification plate. Primary side: 2 x union nut 1" IG, nickel-plated, flat sealing. Secondary side: nickel-plated connecting nipple 3/4" AG with cone.		3 Circuits	13FH29030
		4 Circuits	13FH29040
		5 Circuits	13FH29050
		6 Circuits	13FH29060
		7 Circuits	13FH29070
		8 Circuits	13FH29080
		9 Circuits	13FH29090
		10 Circuits	13FH29100
		11 Circuits	13FH29110
		12 Circuits	13FH29120
		Distributor connection fittings	1" x 3/4"
	Set composed of 2 ball valves with T-handle, external screw thread on the one side and internal screw thread on the other, incl. flat seals to connect to the heating circuit distributor.		1 Set
	Heat meter installation kit	1" x 3/4"	13811210013
	for heating circuit distributor, composed of: Counter fitting piece 110 mm in corner execution with 2 screw fittings with seals and 2 ball valves, as well as 1 special ball valve. Sensor connection M10x1 for integrating the sensor directly into the medium. For the flat-sealing connection to the heating circuit distributor.		1 Set

	Type/dimensions in mm	Article number	Packaging unit	
7 DISTRIBUTORS PRODUCT GROUP I				
	Universal distribution box	size 0,5 490 x 705	13813012005	1 Pc.
	made of hot-dip galvanised sheet steel with pre-cutting	size 1,0 575 x 705	13813012010	1 Pc.
	left and right for distributor connection, stable height-	size 1,5 725 x 705	13813012015	1 Pc.
	adjustable foot, for surface and flush mounting, screed	size 2,0 875 x 705	13813012020	1 Pc.
	impact plate and tube slides can be disassembled without	size 2,5 1025 x 705	13813012025	1 Pc.
tools, built-in depth 110 mm.				
	Frames and door	size 2,5 490 x 705	13813022005	1 Pc.
	for universal distribution box with flush mounting, zinc-	size 2,5 575 x 705	13813022010	1 Pc.
	plated, powder-coated, RAL 9010.	size 2,5 725 x 705	13813022015	1 Pc.
		size 2,5 875 x 705	13813022020	1 Pc.
		size 2,5 1025 x 705	13813022025	1 Pc.
	Hood	size 0,5 490 x 705	13813032005	1 Pc.
	for universal distribution box with use as surface-mounted	size 1,0 575 x 705	13813032010	1 Pc.
	box, zinc-plated, powder-coated RAL 9010. Attachment	size 1,5 725 x 705	13813032015	1 Pc.
	with 4 magnetic holders, included in the delivery.	size 2,0 875 x 705	13813032020	1 Pc.
		size 2,5 1025 x 705	13813032025	1 Pc.

	Type/dimensions in mm	Article number	Packaging unit	
8 CONTROL TECHNOLOGY PRODUCT GROUP I				
	Analogue room thermostat	230V	13FH55056	1 Pc.
	for detecting and controlling the desired room tempera-	24V	13FH55050	1 Pc.
	ture. Functions: heating, fixed setback temperature, set-			
	back input, setpoint calibration			
	LCD room thermostat	230V	13FH55057	1 Pc.
	for detecting and controlling the desired room tempera-	24V	13FH55058	1 Pc.
	ture. Functions: heating, direction of control action NC,			
	fixed setback temperature, setback input, switching output			
	display, setpoint calibration and limitation, valve protec-			
	tion function, switching output can be deactivated, frost			
	protection function, child safety lock			
	Switching strip 6K	230V	13FH55059	1 Pc.
	for max. 6 room thermostats and 18 actuators. Only	24V	13FH55048	1 Pc.
	heating. It is suitable for systems that work with normally			
	open (NO) or normally closed (NC) components.			
	Switching strip 10K	230V	13FH55060	1 Pc.
	for max. 10 room thermostats and 18 actuators. Only	24V	13FH55061	1 Pc.
	heating. It is suitable for systems that work with normally			
	open (NO) or normally closed (NC) components.			

	Type/dimensions in mm	Article number	Packaging unit	
8 CONTROL TECHNOLOGY PRODUCT GROUP I				
	Analogue room thermostat		13FH55051	1 Pc.
	for detecting and controlling the desired room tempera-			
	ture. Via tabs beneath the rotary knob the possible			
	setting range is limited and a setpoint adjustment is			
	performed.			
	LCD room thermostat		13FH55052	
	for detecting and controlling the desired room tempera-			
	ture. Functions: Permanent display of room temperature,			
	system time and operating status, 3 menu levels, limi-			
	tation of the setting range for the room temperature,			
	operating lock.			
	Switching strip 8K	230V	13FH55062	1 Pc.
	for max. 8 heating zones and 12 actuators. Types of ope-	24V + Transformer	13FH55053	1 Pc.
	ration: frost protection, heating, cooling, ECO, automatic,			
	emergency operation. Pilot function for heating and			
	cooling. Boiler outlet.			
	Switching strip 12K	230V	13FH55063	1 Pc.
	for max. 12 heating zones and 18 actuators. Types of	24V + Transformer	13FH55054	1 Pc.
	operation: frost protection, heating, cooling, ECO, auto-			
	matic, emergency operation. Pilot function for heating			
	and cooling. Boiler outlet.			
	Actuator 1 Watt	230V	13FH55049	1 Pc.
	electrothermal actuator for equipping the heating circuit	24V	13FH55055	1 Pc.
	distributor with individual room control. With first-open			
	function in the delivery state. Valve adapter for Brugman			
	heating circuit distributor, function display. Normally			
	closed.			

QUICKROLL

Surface	Tube distance (mm)	Quickroll/m ²	Clips unit	Edge insulation strip (m)	Adhesive tape (m)	Screed additive standard (kg)	Heating tube (m)	Max. home heating surface with 120 m (m ²)
1	300	1	8	1	1	0,2	3,33	36
1	250	1	10	1	1	0,2	4	30
1	200	1	12	1	1	0,2	5	24
1	150	1	16	1	1	0,2	6,7	18
1	100	1	24	1	1	0,2	10	12
1	50	1	48	1	1	0,2	20	6

QUICKNOPP

Surface	Tube distance (mm)	Quicknopp 30-2/11 (m ²)	PE round profile (m)	Edge insulation strip (m)	Transitional element (m)	Compensating insulation strip unit	Heating tube PE-Xc 14 x 2.0 (m)	Screed additive standard (kg)
1	360	1	1	1,2	0,1	0,5	2,78	0,2
1	300	1	1	1,2	0,1	0,5	3,33	0,2
1	240	1	1	1,2	0,1	0,5	4,16	0,2
1	180	1	1	1,2	0,1	0,5	5,55	0,2
1	120	1	1	1,2	0,1	0,5	8,33	0,2
1	60	1	1	1,2	0,1	0,5	16,67	0,2

DRY CONSTRUCTION SHEET

Surface	Tube distance (mm)	Dry construction sheet	Covering film	Edge insulation strip (m)	Heating tube PE-Xc 16 x 2.0 (m)
1	250	1	1	1,2	4
1	125	1	1	1,2	8

QUICKROL	Quickroll 20-2	Quickroll 20-2	Quickroll 25-2	Quickroll 30-2	Quickroll 30-2	Quickroll 30-3	Quickroll 35-3
Type	DES	DES	DES	DES	DES	DES	DES
	sg	sm	sm	sg	sg	sm	sm
Thickness	mm	20-2	20-2	25-2	30-2	30-2	35-3
WLG		035	045	045	035	040	045
Size	mm	12000 x 1000	12000 x 1000	12000 x 1000	12000 x 1000	12000 x 1000	10000 x 1000
R	m ² K/W	0,57	0,44	0,56	0,86	0,75	0,67
Dyn.rigidity s'<		50	20	20	50	20	15
Impact noise improvement	Db	22	28	28	22	28	29
Max. load	kN/m ²	10	4	4	10	5	4

QUICKNOPP		Stud sheet 30-2mm VA60	Stud sheet 200-11 mm VA60
Heating tube dimension	mm	14 - 17	14 - 17
Typ according to EN13163		PST-TK 5000	EPS 200
Impact sound improvement measurement	dB	28	-
Thermal conductivity	W/mk	0,04	0,035
Ra value	m ² K/W	0,75	0,314
Compressive stress CS (10)	kPa	-	200
Max. traffic load	kPa	5	60
Usable area per sheet	m ²	1,2	1,2
Compressibility		CP 2	NPD
Laying distance straight	mm	60	60
Laying distance diagonal	mm	84	84
Dimensions of EPS sheet	mm	1440 x 840 x 30	1440 x 840 x 11
Dimensions of TZ film incl. overlap	mm	1470 x 870	1470 x 870
Stud height	mm	18	18
Sheet height total	mm	48	29
Usable area	m ²	57,6	115,2

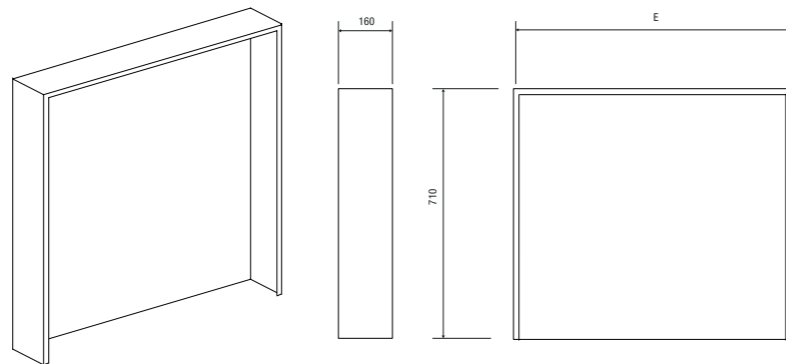
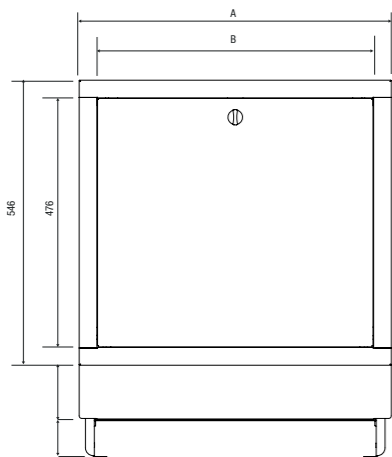
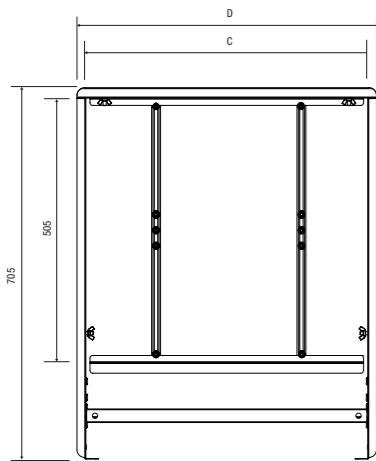
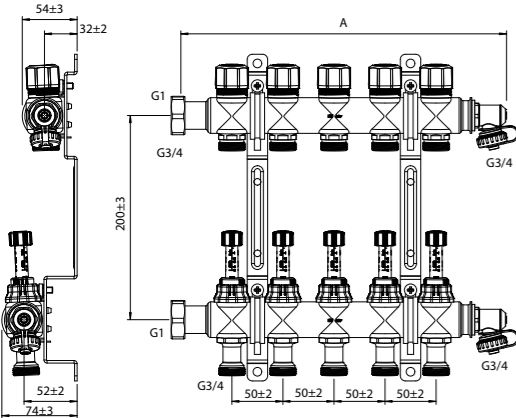
STUD SHEET		Stud sheet 30-2mm VA60	RENOVATION SHEET		
Sheet dimensions	mm	1000 x 500 x 30	Heating tube dimension	mm	10 - 12
Surface description		Aluminium sheet 0,5 mm	Usable area per sheet	m ²	0,6
Heating tube dimension	mm	16	Laying distance straight	mm	50
Type of tube		Metal-plastic composite tube	Laying distance diagonal	mm	60
Tube laying in the deflection range		With flexible spring	Dimensions of EPS system sheet	mm	1050 x 650
Laying distance	mm	125	Stud height	mm	13
Thermal conductivity	W/m . k	0,035	Sheet height total	mm	16
Thermal resistance	m ² . k/W	R = 0,75			
Useful load	kPa/m ²	Max. 70			
Compressive stress	kPa/m ²	≥ 240 (at 10% compression)			
Compressive stress	kPa/m ²	≥ 70 (at 2 % compression)			
Building material class basic material		Euro class E according to EN 13501			
Dimensions of TZ film incl. overlap	mm	1470 x 870			
Stud height	mm	18			
Sheet height total	mm	48			
Usable area	m ²	57,6			

DIMENSIONS OF HEATING CIRCUIT DISTRIBUTOR

Number of heating circuits	Length of distributor A (mm)	Length of distributor (mm) with:		
		Connection passageway	*WMZ corner	*WMZ passageway
2	169	235	279	429
3	219	285	329	479
4	269	335	379	529
5	319	385	429	579
6	369	435	479	629
7	419	485	529	679
8	469	535	579	729
9	519	585	629	779
10	569	635	679	829
11	619	685	729	879
12	669	735	779	929

DISTRIBUTION BOXES, FRAME & DOOR, HOOD

Distribution box	Dimensions of distribution box: height 705-775, depth 110, inner dimensions: (mm)	Dimensions of hood: height 710, depth 160, width: (mm)	Dimensions of frame: A height H = 546 width: (mm)	Dimensions of door: B height H = 478 width: (mm)
Size 0,5	455	530	A = 515	B = 445
Size 1,0	540	615	A = 600	B = 530
Size 1,5	690	765	A = 750	B = 680
Size 2,0	840	915	A = 890	B = 830
Size 2,5	990	1065	A = 1050	B = 980



SELECTED TABLE FOR BRUGMAN HEATING CIRCUIT DISTRIBUTOR

Size	Internal dimensions (mm)	Max. number of circuits			
		with connection fittings passageway	with heat meter*** passageway*	with heat meter*** corner**	with fixed value control station****
0,5	455	5	/	4	/
1	540	6	3	6	/
1,5	690	9	6	8	2
2	840	11	8	11	5
2,5	990	12	11	12	7

- * The connection variants with passageway relate to a tube guide outside of the distribution box, this is only possible with flush mounting
- ** Connection variant corner: tube guide inside the distribution box.
- *** WMZ = heat meter - installation kit
- **** Tube guide within the distribution box with connection fittings passageway, connecting a fixed value control station increases the required construction depth! It is imperative to take this into consideration in the planning and selection of the distribution box.





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