Low-H_2O valves

Pre-settable valves

Why a balancing thermostatic radiator valve?

Due to the application of the specially designed Jaga and Jaga Danfoss pre-settable Trv's, the flowing water amount (Kv) in the heating elements can be exactly adjusted for an optimal performance of the Trv's.

A similar Trv with built in balancing possibility may be regarded as having two control possibilities. One cut off gives a variable delimitation, determined by the required room temperature. The second cut off, by balancing, control of the maximum water flow can be achieved.

Advantages:

due to the correct quantity control of the required amount of water to the different heating elements energy is being saved.

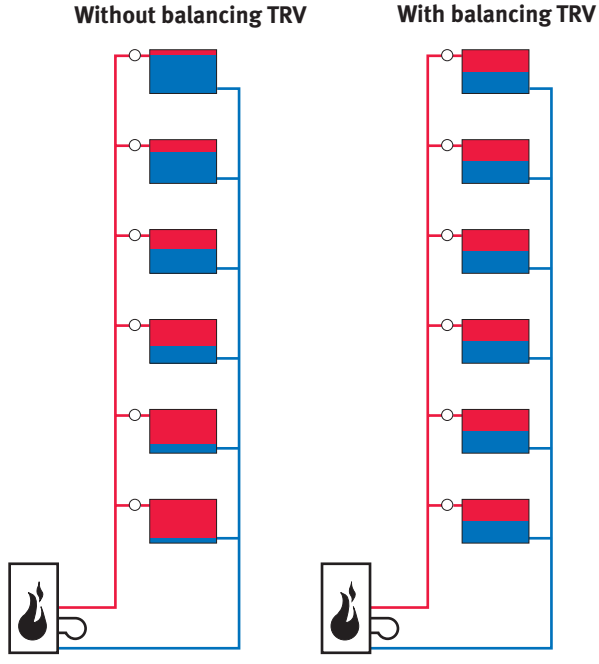
After the night period, when all Trv's are fully opened, the balancing control allows the furthest heating elements to get the required amount of hot water.

The water flow temperature can be reduced earlier because of the uniform heating up of all heating elements what will restrict the energy loss.

The noise of the flowing water will also be reduced thanks to the balancing flow control.

The optimal water distribution allows a smaller water circulation pump to be installed.

The water distribution to the different heating elements can easily be adapted when extending or changing the heating system.



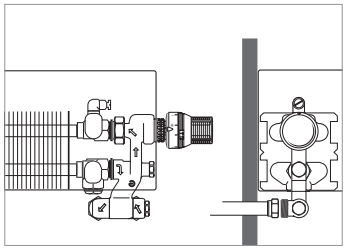
The water distribution to the heating elements after the night low demand period when all Trv's are fully open. The system at the right has balanced Trv fitted, the left does not.

Connection possibilities

Jaga Comap valve

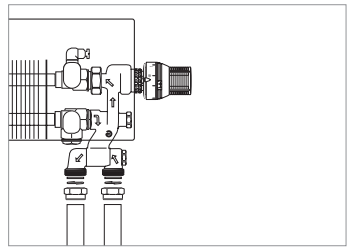
To the wall

Position 90°
One pipe/two pipe



To the floor

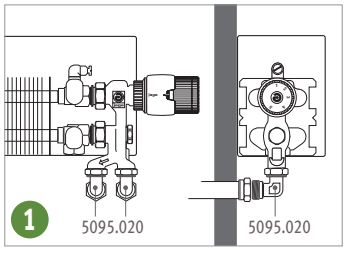
Position 180°
One pipe/two pipe



Jaga Pro valve

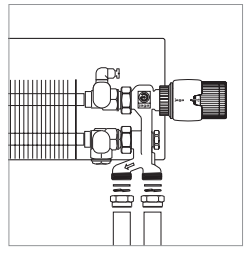
To the wall

With 2 curves
One pipe/two pipe



To the floor

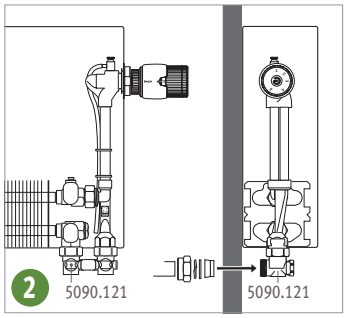
One pipe/two pipe



Top valve

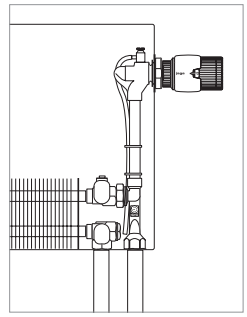
To the wall

With H-piece M24 90°
One pipe/two pipe

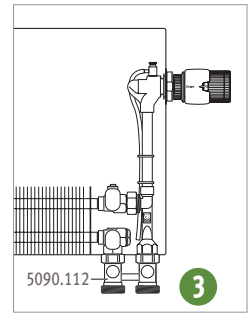


To the floor

Two pipe



With H-piece M24 180°
One pipe



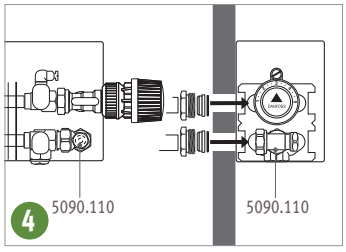
Connection possibilities

Jaga, Jaga type 6 & Jaga Danfoss

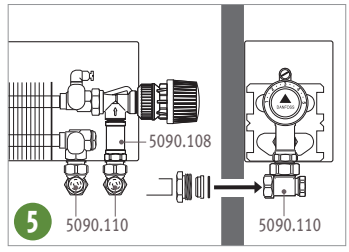
To the wall

With 1 lockshield 1/2" 90° and short sleeve couplings

Two pipe



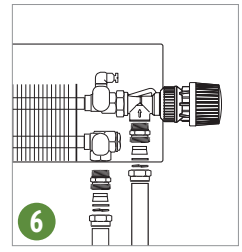
With 2 lockshields 1/2" 90°, extension pipe and short sleeve couplings
Two pipe



To the floor

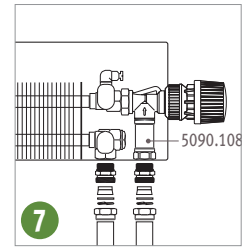
Standard

Two pipe



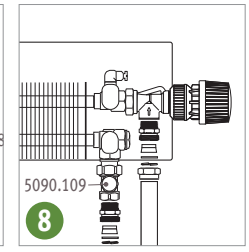
With extension pipe

Two pipe



With 1 lockshield 1/2" 180°

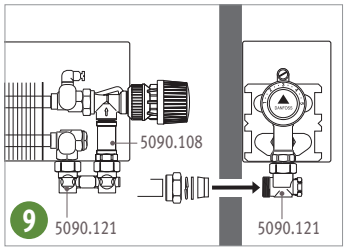
Two pipe



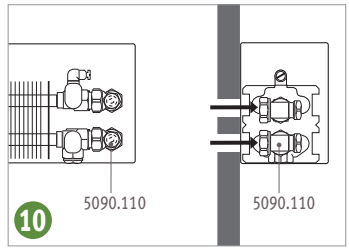
To the wall

With extension pipe and H-piece 90° M24

One pipe/two pipe



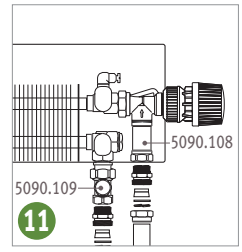
With 2 angled lockshields 1/2" 90° (without opening for the thermostatic head in the side panel)



To the floor

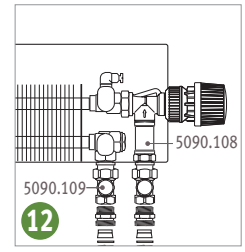
With extension pipe and lockshield 1/2" 180°

Two pipe



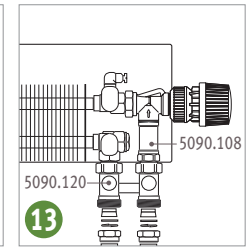
With extension pipe and 2 lockshields 1/2" 180°

Two pipe



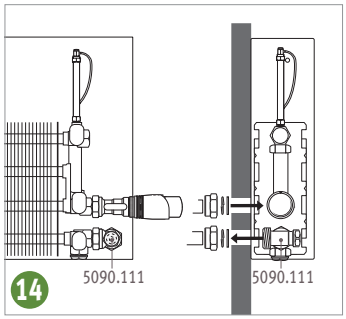
With extension pipe and H-piece M24 180°

One pipe/two pipe



To the wall

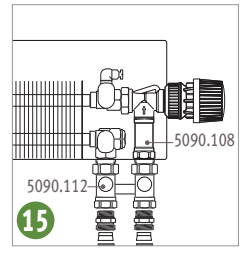
With type 6 valve and angled lockshield M 24, 90° (only for Knockonwood and Strada type 06)



To the floor

With extension pipe and H-piece 1/2" 180°

One pipe/two pipe



Jaga Comap valve

Thermostatic heads: see p. 179

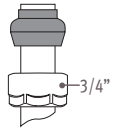
Knockonwood and Strada type 06, connection to the wall: see p. 175. Not suitable for Maxi and Cocoon.

CODE	
standard Kv	
5094.402	two pipe
5094.401	one pipe

- universal valve with revolving underblock for wall or floor connection
- replacement internal mechanism
- with screw thread M30 x 1.5 (Heimeier compatible)
- with synthetic spindle protection for setting on site
- for one or two pipe
- completely lockable (flow and return)

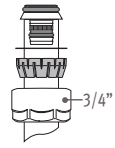
Kv-value:
- two pipe: continuous adjustable between 0.05 and 0.6 m³/h
- one pipe: 1.8 at position 10 (30% of the waterflow through the radiator)

Sleeve couplings for Jaga Comap valve



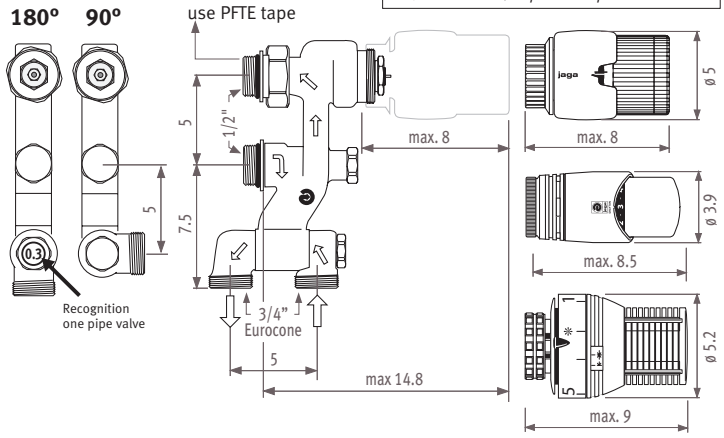
Flexible steel or copper tube

CODE	Description
5094.2112	ø 3/4" x 12/1
5094.2114	ø 3/4" x 14/1
5094.2115	ø 3/4" x 15/1
5094.2116	ø 3/4" x 16/1
5094.2118	ø 3/4" x 18/1



Synthetic or RPE/ALU tube

CODE	Description.
5094.2612	ø 3/4" x 12/2
5094.2614	ø 3/4" x 14/2
5094.2616	ø 3/4" x 16/2
5094.2617	ø 3/4" x 17/2
5094.2618	ø 3/4" x 18/2
5094.2615	ø 3/4" x 15/2.5
5094.2619	ø 3/4" x 16/1.5
5094.2620	ø 3/4" x 20/2



Jaga Pro valve

Thermostatic heads: see p. 179

Knockonwood and Strada type 06, connection to the wall: see p. 175. Not suitable for Maxi and Cocoon.

Sleeve couplings: see p.175.

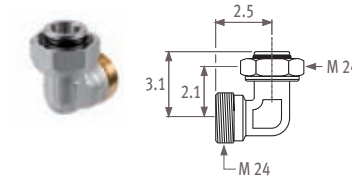
- specially shortened thermostatic valve in order to be fully concealed within the casing
- for one or two pipe
- with pre-setting at the flow (two pipe) or on the return (one pipe)
- completely lockable (flow and return)
- for connection to the floor or to the wall
- with screw thread M30 x 1.5 (Heimeier compatible)
- with synthetic spindle protection for setting on site

Standard Kv-value:
- two pipe: 0.10 up to 0.60 m³/h.
- one pipe: 50% up to 0%

Reduced Kv-value:
0.045 up to 0.32 m³/h.
(recognition: red coloured spindle protection).

CODE		
standard Kv	reduced Kv	
5094.414	5094.413	two pipe
5094.409	-	one pipe

Curve 90° M24 x M24



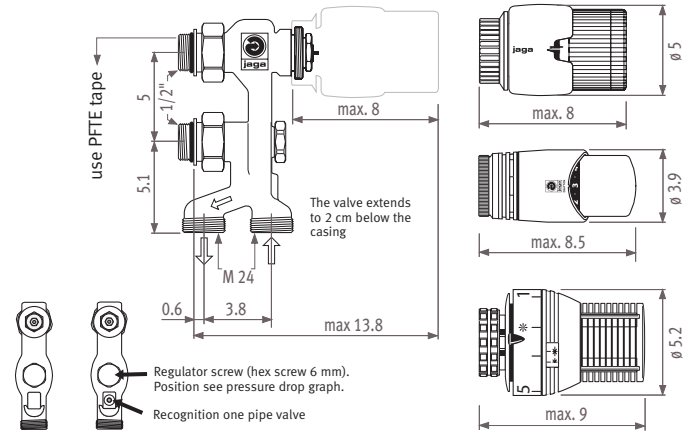
CODE
5095.020

See 1 *p. 172.*

Pro Key

CODE
5090.1120

Tool for easy mounting of the Jaga Pro valve



Jaga valve type 6

Thermostatic heads: see p. 179

M24 male thread, suited for shortened connection distance to the wall (up to 1.7 cm). See illustration p. 12/20.

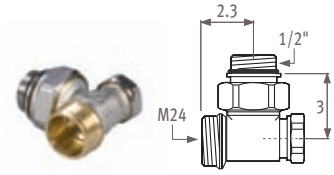
CODE	
5090.407	standard Kv
5090.406	reduced Kv

- specially shortened thermostatic valve in order to be fully concealed within the casing
- with pre-setting in 6 steps
- with screw thread M30 x 1.5 (Heimeier compatible)
- with synthetic spindle protection for setting on site.
- for connection to the floor or to the wall

Standard kv-value:
- 0.10 tot 0.60 m³/h.

Reduced kv-value:
- 0.045 tot 0.32 m³/h. (recognition: red coloured spindle protection)

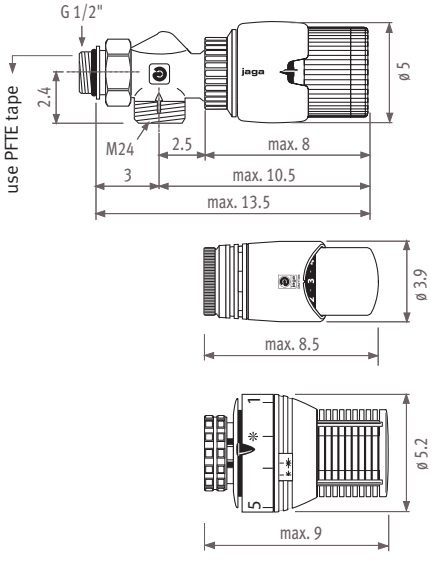
Lockshield M24 90°, connection to the wall



CODE	
5090.111	nickle-plated

See 14 p. 173.

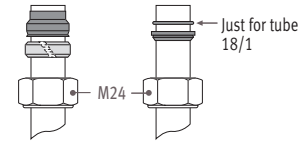
Application: only suitable for connection to the wall for Knockonwood and Strada type 06.



Sleeve couplings M24 - Jaga Pro and Jaga Type 6

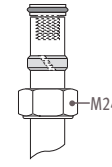
For flexible steel or copper tube

CODE	Description
5094.110	ø M24 x 10/1
5094.112	ø M24 x 12/1
5094.114	ø M24 x 14/1
5094.115	ø M24 x 15/1
5094.116	ø M24 x 16/1
5094.118	ø M24 x 18/1



For synthetic tube

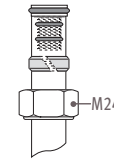
CODE	Description
5094.212	ø M24 x 12/2
5094.214	ø M24 x 14/2
5094.219	ø M24 x 16/1,5
5094.216	ø M24 x 16/2
5094.217	ø M24 x 17/2
5094.218	ø M24 x 18/2



For RPE/ALU tube

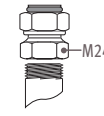
CODE	Description
5094.314	ø M24 x 14/2
5094.316	ø M24 x 16/2
5094.326	ø M24 x 16/2.2
5094.318	ø M24 x 18/2

RPE tube = reticulated polyethylene tube with an intermediate aluminium layer.



Steel tube for C.H.

CODE	Description
5094.501	ø M24 x 1/2"
5094.503	ø M24 x 3/8"



Jaga valve

Thermostatic heads: see p. 179

EN 215.1

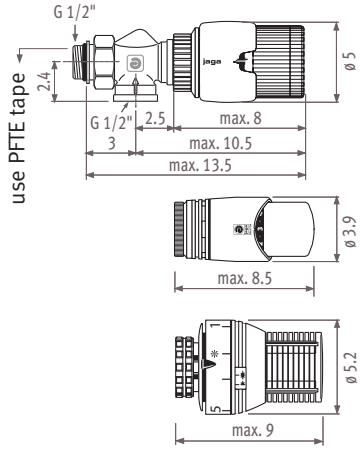
Knockonwood and Strada type 06, connection to the wall: see p. 175.

- specially shortened thermostatic valve in order to be fully concealed within the casing
- with pre-setting in 6 steps
- with screw thread M30 x 1.5 (Heimeier compatible)
- with synthetic spindle protection for setting on site.
- for connection to the floor or to the wall

CODE	
5090.405	standard Kv
5090.404	reduced Kv

Standard kv-value:
- 0.10 tot 0.60 m³/h.

Reduced kv-value:
- 0.045 tot 0.32 m³/h. (recognition: red coloured spindle protection)



Jaga Danfoss valve

Thermostatic heads: see p. 179

EN 215.1

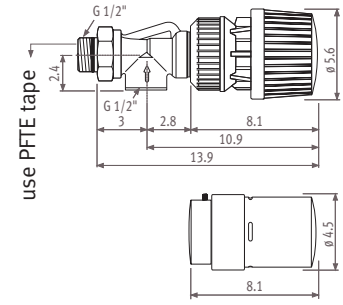
Knockonwood and Strada type 06, connection to the wall: see p. 175.

- specially shortened thermostatic valve in order to be fully concealed within the casing
- integrated pre-setable water flow delimitation to control max amount of flowing water.
- with synthetic spindle protection for setting on site.
- for connection to the floor or to the wall

CODE
5090.402

Standard kv-value:
- 0.06 up to 0.71 m³/h.

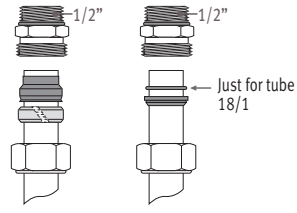
Reduced Kv:
- on request.



Sleeve couplings for Jaga & Jaga Danfoss valve

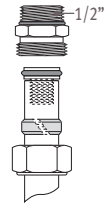
For flexible steel or copper tube

CODE	Description
5098.110	ø 1/2" x 10/1
5098.112	ø 1/2" x 12/1
5098.114	ø 1/2" x 14/1
5094.115	ø 1/2" x 15/1
5098.116	ø 1/2" x 16/1
5098.118	ø 1/2" x 18/1



For synthetic tube

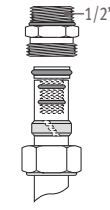
CODE	Description
5098.212	ø 1/2" x 12/2
5098.214	ø 1/2" x 14/2
5098.219	ø 1/2" x 16/1.5
5098.216	ø 1/2" x 16/2
5098.217	ø 1/2" x 17/2
5098.218	ø 1/2" x 18/2



For RPE/ALU tube

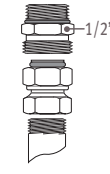
CODE	Description
5098.314	ø 1/2" x 14/2
5098.316	ø 1/2" x 16/2
5098.326	ø 1/2" x 16/2.2
5098.318	ø 1/2" x 18/2

RPE tube = reticulated polyethylene tube with an intermediate aluminium layer.



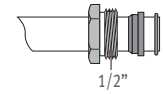
Steel tube for C.H.

CODE	Description
5094.502	ø 1/2" x 1/2"
5094.504	ø 1/2" x 3/8"



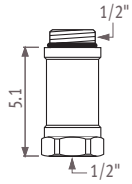
Short coupling for flexible steel tube or copper tube Ø 15 mm

CODE	Description
5098.015	ø 1/2" x 15/1



Options for Jaga and Jaga Danfoss valve

Extension pipe



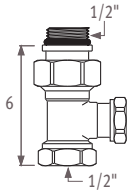
CODE
5090.108 nickle-plated

Sleeve couplings 1/2": see p. 176.

See page 173.

5 7 9 11 12 13 15

Lockshield 1/2" 180°

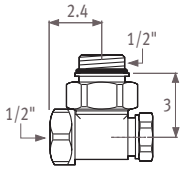


CODE
5090.109 nickle-plated

Sleeve couplings 1/2": see p. 176.

See 8 11 12 *p. 173.*

Lockshield 1/2" 90°, connection to the wall



CODE
5090.110 nickle-plated

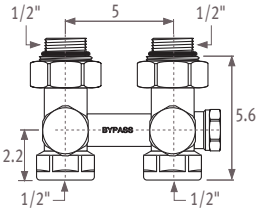
Sleeve couplings 1/2": see p. 176.

See 4 5 10 *p. 173.*

1-pipe adapter for 4 crossway valve

CODE
5090.113

H-piece 1/2" 180° with 2 integrated lockshields and lockable by-pass (one pipe/two pipe)



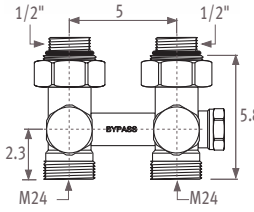
CODE
5090.112 nickle-plated

Tool to regulate: 6 mm Allen key.
By-pass open: 25% of main pipe water flow goes through heating element.
By-pass closed: 100 % of main pipe water flow goes through heating element.

Sleeve couplings 1/2": see p. 176.

See 3 15 *p. 172-173.*

H-piece M24 180° with 2 integrated lockshields and lockable by-pass (one pipe/two pipe)



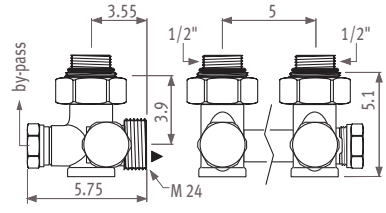
CODE
5090.120 nickle-plated

Tool to regulate: 6 mm Allen key.
By-pass open: 25% of main pipe water flow goes through heating element.
By-pass closed: 100 % of main pipe water flow goes through heating element.

Sleeve couplings M24: see p. 175.

See 13 *p. 173.*

H-piece M24 90° with 2 integrated lockshields and lockable by-pass (one pipe/two pipe)



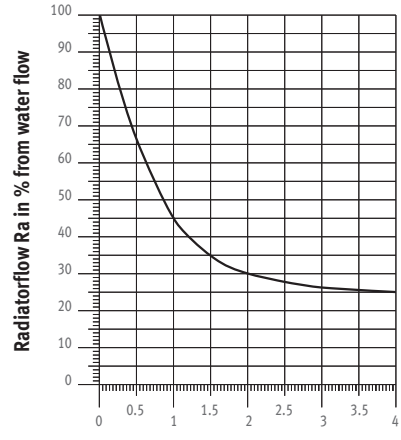
CODE
5090.121 nickle-plated

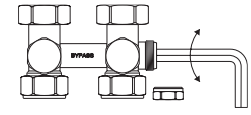
Tool to regulate: 6 mm Allen key.
By-pass open: 25% of main pipe water flow goes through heating element.
By-pass closed: 100 % of main pipe water flow goes through heating element.

Sleeve couplings M24: see p. 175.

See 2 9 *p. 172-173.*

Adjusting the H-piece (one pipe - two pipe)





Jaga Top valve

Thermostatic heads: see p. 179

When ordering a radiator with top valve, please specify the correct top valve position by adding /30 (left) or /60 (right) to the code of the radiator.

Thermostatic valve for operation at the top end, on the left or right side of the radiator. Applicable with all Low-H_2O radiators with standard or Twin heat exchanger. After mounting only the thermostatic head remains visible at the side panel.

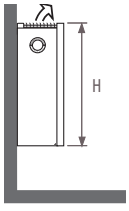
Standard kv-value:
- 0.10 up to 0.60 m³/h.

Reduced kv-value:
- 0.045 up to 0.32 m³/h. (only on request)

- for connection to the floor or to the wall
- the top valve is equipped with an air vent with transparent synthetic drain tube to collect the waste water at the bottom end of the radiator.
- with synthetic spindle protection for setting on site.
- with chromed cover ring to finish the opening for the thermostatic head in the side panel of the casing.
- after mounting, this cover ring anchors the top valve with the casing.
- suited for all Jaga thermostatic heads.
- with pre-setting in 6 steps
- with screw thread M30 x 1.5 (Heimeier compatible)

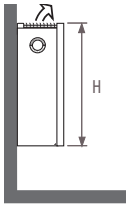
Sleeve couplings

To order sleeve couplings 1/2": see p. 176.



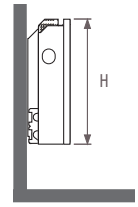
For Knockonwood

CODE	Opening	H casing
5090.1300200	right or left	35
5090.1300500	right or left	50
5090.1300800	right or left	65
5090.1301200	right or left	95



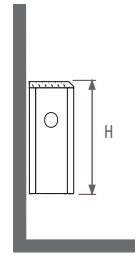
For Strada

CODE	Opening	H casing
5090.1300200	right or left	35
5090.1300500	right or left	50
5090.1300800	right or left	65
5090.1301200	right or left	95



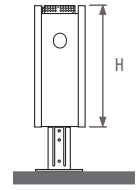
For Linea Plus wall mounted model

CODE	Opening	H casing
5090.1300201	right	35
5090.1300202	left	35
5090.1300500	right or left	50
5090.1300800	right or left	65
5090.1301200	right or left	95



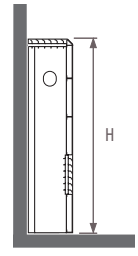
For Tempo wall mounted model

CODE	Opening	H casing
5090.1300101	right	30
5090.1300102	left	30
5090.1300301	right	40
5090.1300302	left	40
5090.1300500	right or left	50
5090.1300700	right or left	60
5090.1300900	right or left	70
5090.1301100	right or left	90



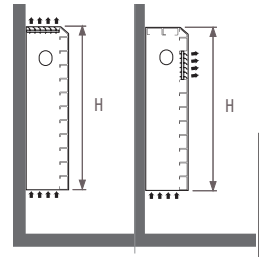
For Tempo free-standing model

CODE	Opening	H casing
5090.1300100	right or left	30
5090.1300300	right or left	40
5090.1300500	right or left	50



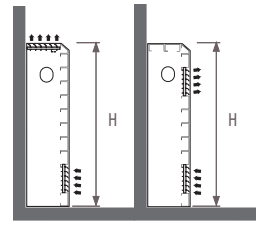
For Cocoon

CODE	Opening	H casing
5090.1300101	right	50
5090.1300102	left	50
5090.1300301	right	60
5090.1300302	left	60
5090.1300500	right or left	70
5090.1300700	right or left	80
5090.1300900	right or left	90
5090.1301000	right or left	100



For Maxi model WF/WT

CODE	Opening	H casing
5090.1300300	right or left	44
5090.1300600	right or left	59
5090.1300900	right or left	74



For Maxi model FF/FT

CODE	Opening	H casing
5090.1300100	right or left	44
5090.1300400	right or left	59
5090.1300700	right or left	74

Thermostatic heads for all Jaga valves

Technical data

- Liquid filled Jaga and Jaga Deco thermostatic head: setting deviation 0.5 ≤ XP=2K.
- Maximum water flow temperature: 110 °C

Jaga thermostatic head

white RAL 9010

CODE
5090.1104

- Thermostatic head liquid filled with anti-freeze protection 6 °C.
- min. and max. temperature control (5-26 °C) by ring-system.
- screw connection M30 x 1.5

Deco thermostatic head

chrome

chrome / white

Jaga Comap silver

CODE	colour
5090.1111	chrome
5090.1110	chrome / white
5090.1119	silver

- liquid filled
- anti-freeze protection 8 °C and regulable from 10 up to 27 °C
- (Jaga Comap: 6 up to 30 °C)
- max. temperature control by pin on inside (Jaga Comap: ring-system)
- screw connection M30 x 1.5

Manual head

white RAL 9010

CODE
5090.110101

Jaga remote controlled thermostatic head

Length of capillary: 2 m
Minimal interior diameter of the tube for conducting the capillary = 18 mm.

CODE
5090.1106

Remote controlled Trv head for heating elements installed in places with difficult access (underfloor ducts, bath panels, project casings, etc).
Technical data: see Jaga thermostatic head.

Jaga thermostatic head with sensor at distance

Length of capillary: 2 m

CODE
5090.1115

Suitable for independent temperature measurement (underfloor ducts, bath panels, project casings, etc).
Technical data: see Deco thermostatic head.

Thermostatic heads for Jaga Danfoss valve

Technical data

- RA gas filled Jaga Danfoss thermostatic head and RAX liquid filled head: setting deviation 0.5 ≤ XP=2K.
- Maximum water flow temperature: 120 °C

Thermostatic head

white RAL 9010 type RA

white RAL 9010 type RAX

chrome type RAX

CODE	
5090.105	white type RA
5090.10501	white type RAX
5090.10502	chrome type RAX

Thermostatic head type RA:
- with click-connection
- gas filled Trv (super fast reaction)
- anti-freeze protection 7.5 °C.
- 2 locking pins by which the Trv can be blocked or limited both at a min. and max. temperature (5-26 °C)
- locking pin as theft prevention

Thermostatic head type RAX:
- with click connection
- liquid filled
- anti-freeze protection 8°C
- regulable fom 8 up to 30°C

Remote controlled thermostatic head

Minimal interior diameter of the tube for conducting the capillary = 22 mm.

CODE
5090.107

- Remote controlled Trv head for heating elements installed in places with difficult access (underfloor ducts, bath panels, continiuous and project casings etc...)
- length of capillary tube: 2m
- remote sensor, wire and the setting knob are all liquid filled
- anti-freeze protection 7.5 °C
- both the min. and max. temperature can be limited (6-28 °C).

Manual head

white RAL 9010

CODE
5090.102

Theft protection for Deco thermostatic heads

Transparent synthetic theft protection.

CODE
5090.1116
adapted screwdriver 5090.1117

Pressure drop

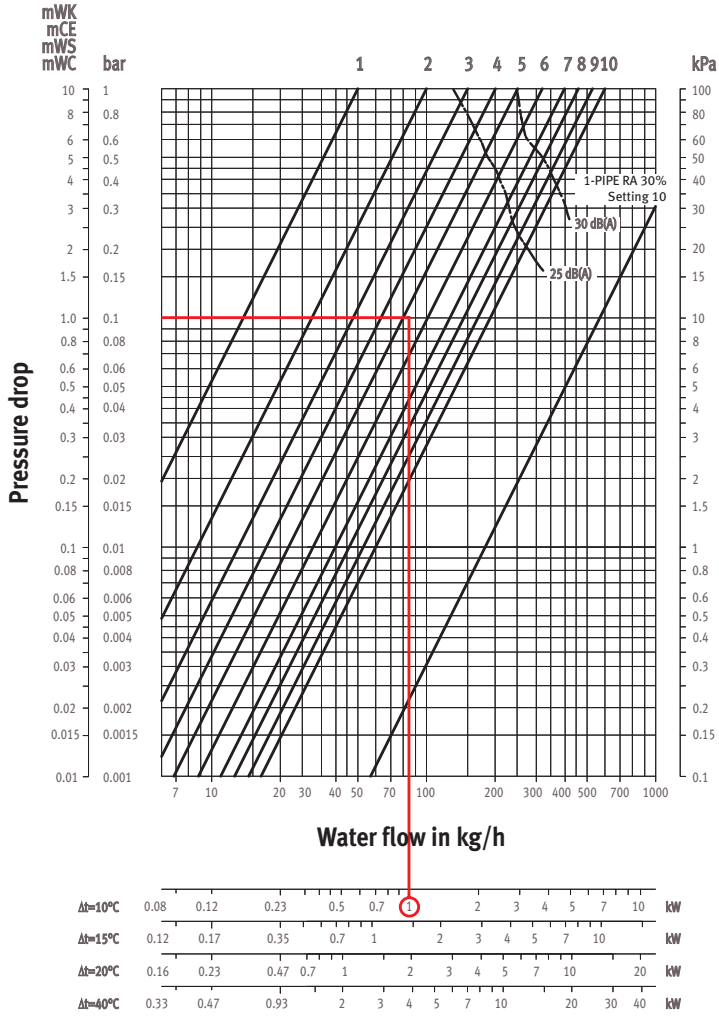
Technical data

- Maximum water flow temperature: 120 °C
- Max pressure of system: 10 bar
- Max pressure drop 0.6 bar complying to the noise standard ISO 3743

Jaga Comap valve

Pre-setting	1	2	3	4	5	6	7	8	9	10	1-PIPE
Kv: m³ /h/ΔP=1 bar	0.05	0.10	0.15	0.20	0.25	0.32	0.4	0.46	0.53	0.6	1.8 (30% RA)

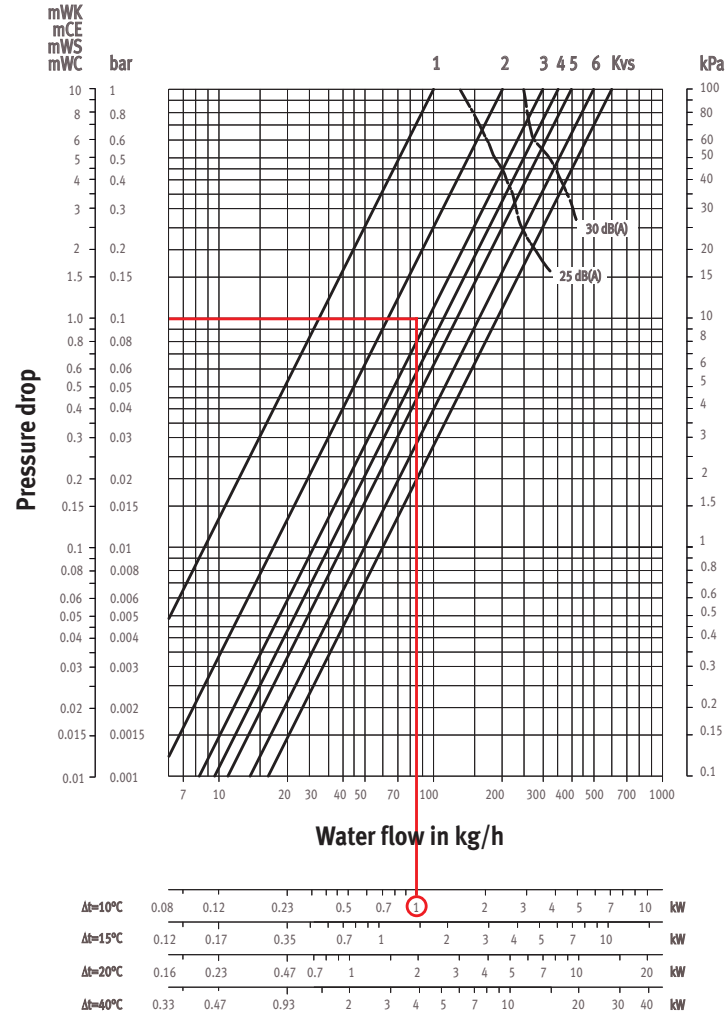
Example: *Heat exchanger 1 kW (Table ΔT=50)*
ΔT = 10 °C (75 - 65 = 10 °C)
ΔP = 0.1 bar (to be setted over the valve)
Pre-setting = 5



Jaga, Jaga Type 6, Jaga Pro and Jaga Top valve with standard Kv

Pre-setting	1	2	3	4	5	6	KvS
Kv: m³ /h/ΔP=1 bar	0.1	0.2	0.3	0.4	0.5	0.6	0.8
				2-Pipe			

Example: *Heat exchanger 1 kW (Table ΔT=50)*
ΔT = 10 °C (75 - 65 = 10 °C)
ΔP = 0.1 bar (to be setted over the valve)
Pre-setting = 3



Pressure drop

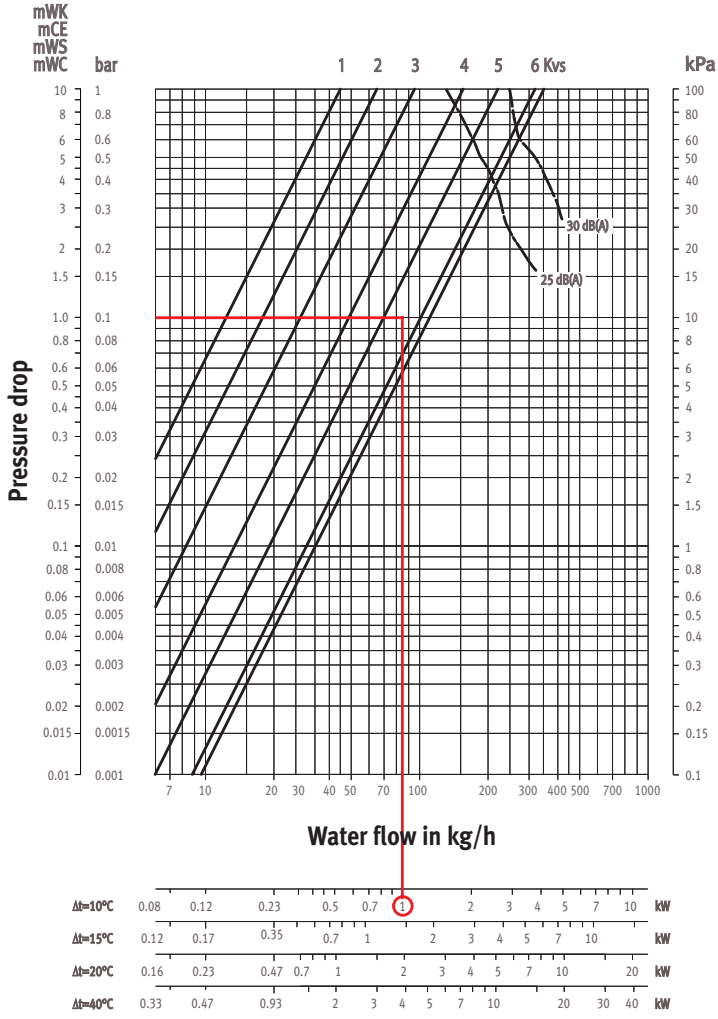
Technical data

- Maximum water flow temperature: 120 °C
- Max pressure of system: 10 bar
- Max pressure drop 0.6 bar complying to the noise standard ISO 3743

Jaga, Jaga Type 6, Jaga Pro and Jaga Top valve with reduced Kv

Pre-setting	1	2	3	4	5	6	KvS
Kv: m³/h/ΔP=1 bar	0.045	0.065	0.095	0.155	0.220	0.320	0.350
				2-Pipe			

Example: *Heat exchanger 1 kW (Table ΔT=50)*
ΔT = 10 °C (75 - 65 = 10 °C)
ΔP = 0.1 bar (to be setted over the valve)
Pre-setting = 6



Jaga Danfoss valve

Pre-setting	1	2	3	4	5	6	7	N	NKVS	open
Kv: m³ /h/ΔP=1 bar	0.06	0.10	0.17	0.25	0.35	0.45	0.56	0.71	1	1.1
				2-Pipe						1-Pipe

Example: *Heat exchanger 1 kW (Table ΔT=50)*
ΔT = 10 °C (75 - 65 = 10 °C)
ΔP = 0.1 bar (to be setted over the valve)
Pre-setting = 4