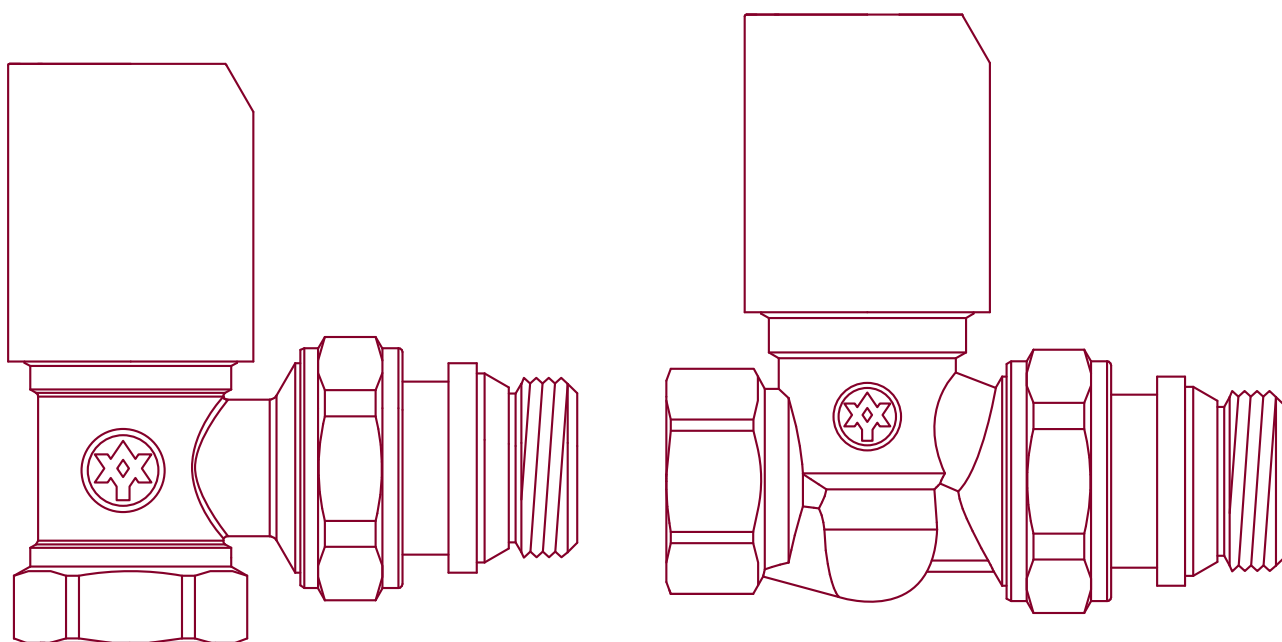





Manual Radiator Valve

Item Numbers:

601101, 601102, 601201, 601202;
602101, 602102, 602201, 602202.



1. Basic information about the product

Photo	Item number	Product Name	Dimensions
	601101	Manual Straight Radiator Valve MIRAYA	1/2"
	601102		3/4"
	601201	Manual Angle Radiator Valve MIRAYA	1/2"
	601202		3/4"
	602101	Straight Lockshield Valve MIRAYA	1/2"
	602102		3/4"
	602201	Angle Lockshield Valve MIRAYA	1/2"
	602202		3/4"

Use:

The valve is used to change liquid flow rate by means of manual regulation in heating devices of heating systems. The product can be used in both single-pipe and double-pipe heating systems, as well as to shut off heat transfer fluid. When used together with a tuning (balancing) valve, they are used for hydraulic balance of the radiator by regulating the flow rate of the return stream of the heat transfer fluid.

Manufacturer:

No. 68 Tonghe East Road, Luotuo, Ningbo City, Zhejiang Province, PRC.

2. Main technical data and specifications

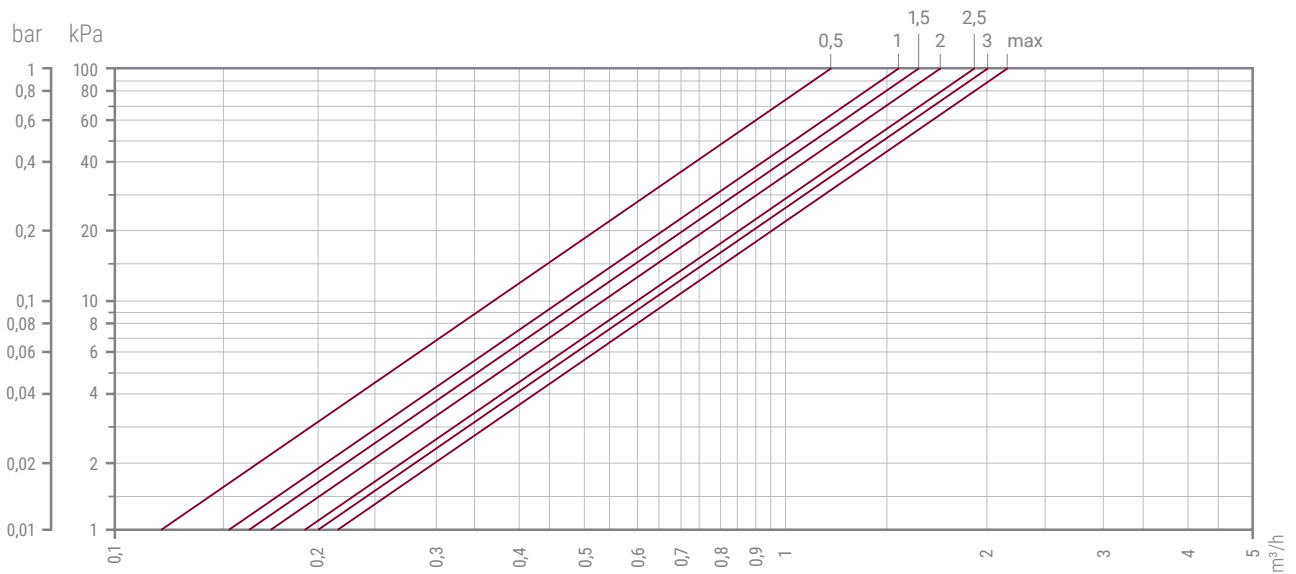
2.1 Technical specifications

Radiator valve of manual control				
Item Number	601101	601102	601201	601202
Construction	straight		angle	
Connecting thread, EN ISO 228, inch	1/2"	3/4"	1/2"	3/4"
Nominal diameter DN, mm	15	20	15	20
Working pressure PN, bar	1,6			
Test pressure, bar	2,5			
Maximum operating temperature of heat transfer fluid, °C	+110			
Flow coefficient of a fully open valve, m ³ /h	2,14	3,11	3,65	4,42
Weight, g	234	356	223	327
Fixing torque of the connecting thread, N·m	30			
Fixing torque of the coupling nut, N·m	30			
Maximum closing/opening torque of the valve handle, N·m	2			
Average service life	20 years			

Lockshield				
Item Number	602101	602102	602201	602202
Construction	straight		angle	
Connecting thread, inch	1/2"	3/4"	1/2"	3/4"
Nominal diameter, mm	15	20	15	20
Working pressure, bar	1,6			
Test pressure, bar	2,5			
Maximum operating temperature of heat transfer fluid, °C	+110			
Flow coefficient of a fully open valve, m ³ /h	2,12	2,9	3,16	4,5
Weight, g	229	352	217	323
Fixing torque of the connecting thread, N·m	30			
Fixing torque of the coupling nut, H·m	30			
Maximum closing/opening torque of the valve handle, N·m	2			
Average service life	20 years			

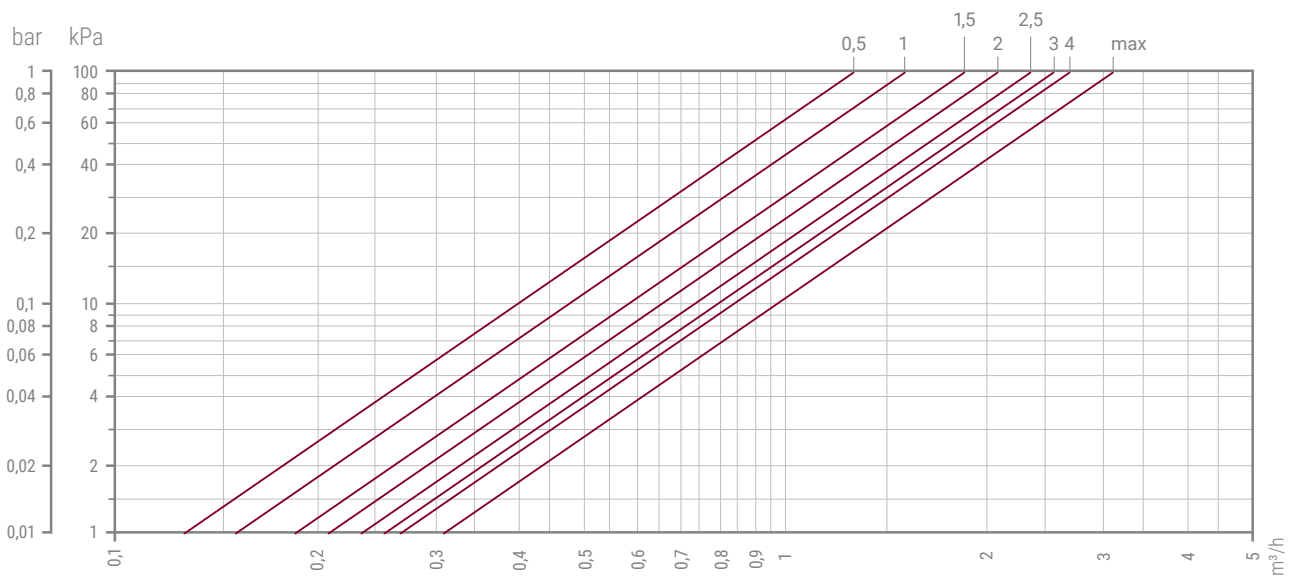
2.2. Consumption-differential characteristic

2.2.1. Manual Straight Radiator Valve (601101)



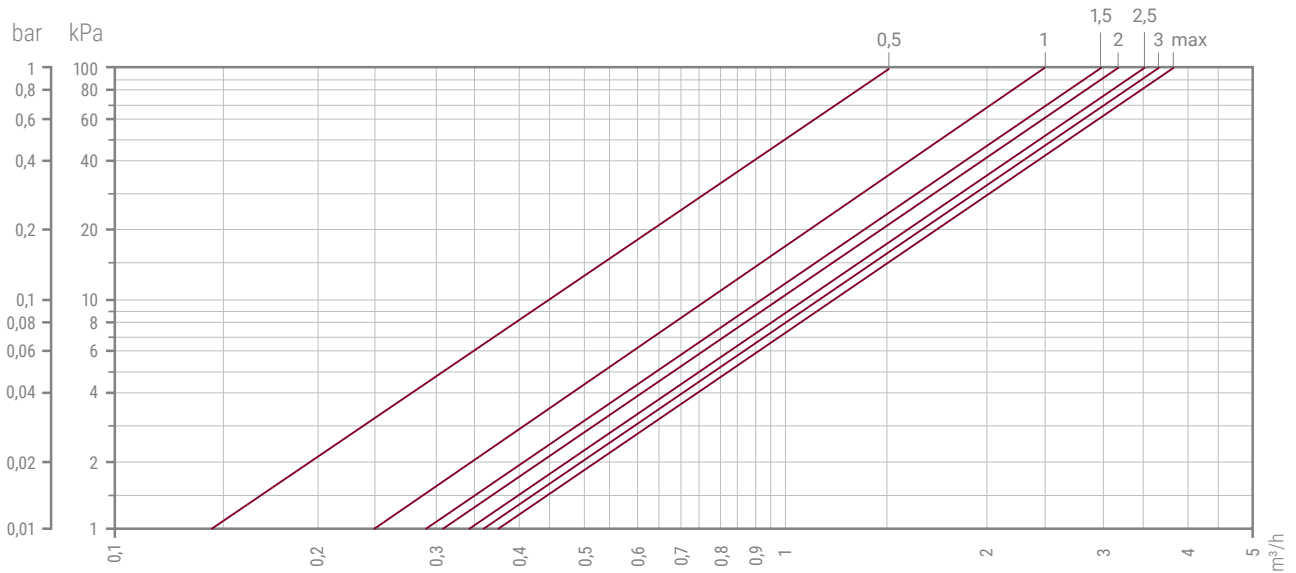
Turning Number	0,5	1	1,5	2	2,5	3	Max
Kv, m³/h	1,21	1,56	1,68	1,79	1,94	2	2,14

2.2.2. Manual Straight Radiator Valve (601102)



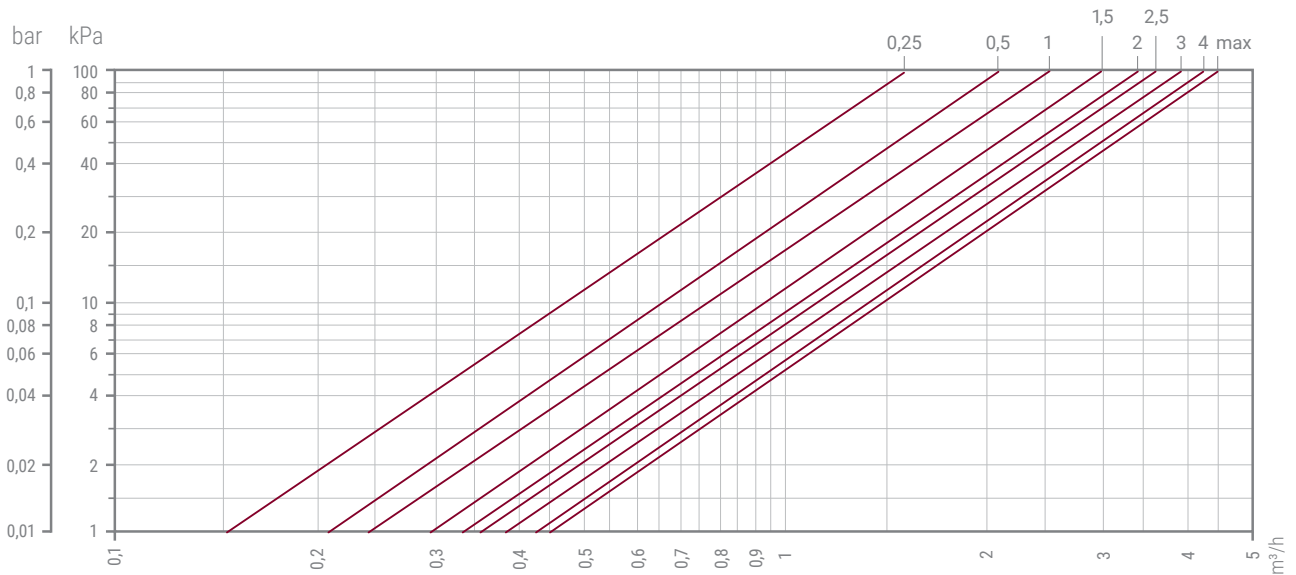
Turning Number	0,5	1	1,5	2	2,5	3	4	Max
Kv, m³/h	1,35	1,61	1,86	2,12	2,33	2,56	2,73	3,11

2.2.3. Manual Angle Radiator Valve (601201)



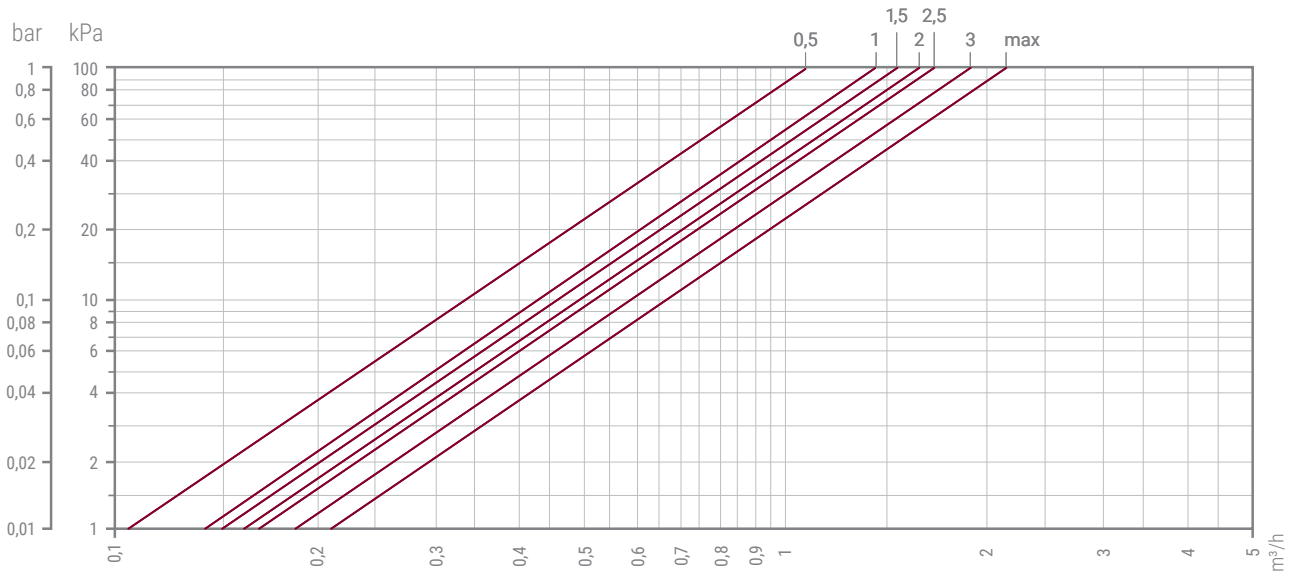
Turning Number	0,5	1	1,5	2	2,5	3	Max
Kv, m³/h	1,51	2,5	2,89	3,11	3,35	3,51	3,65

2.2.4 Manual Angle Radiator Valve (601202)



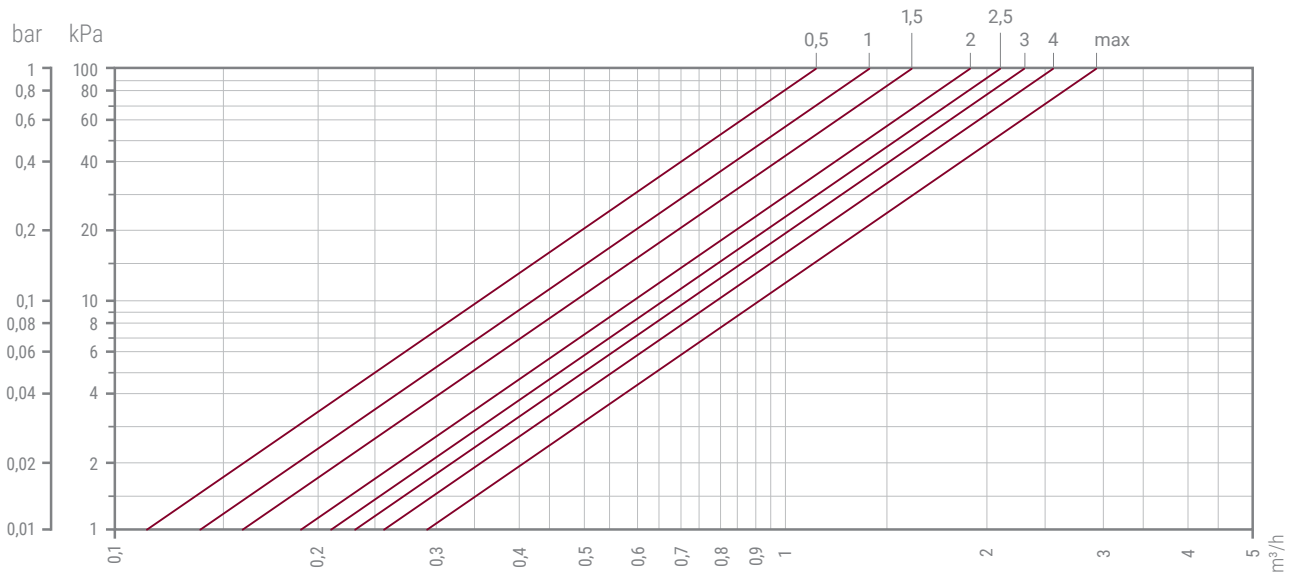
Turning Number	0,25	0,5	1	1,5	2	2,5	3	4	Max
Kv, m³/h	1,58	2,2	2,6	2,97	3,31	3,59	3,84	4,28	4,42

2.2.5. Straight Lockshield Valve (602101)



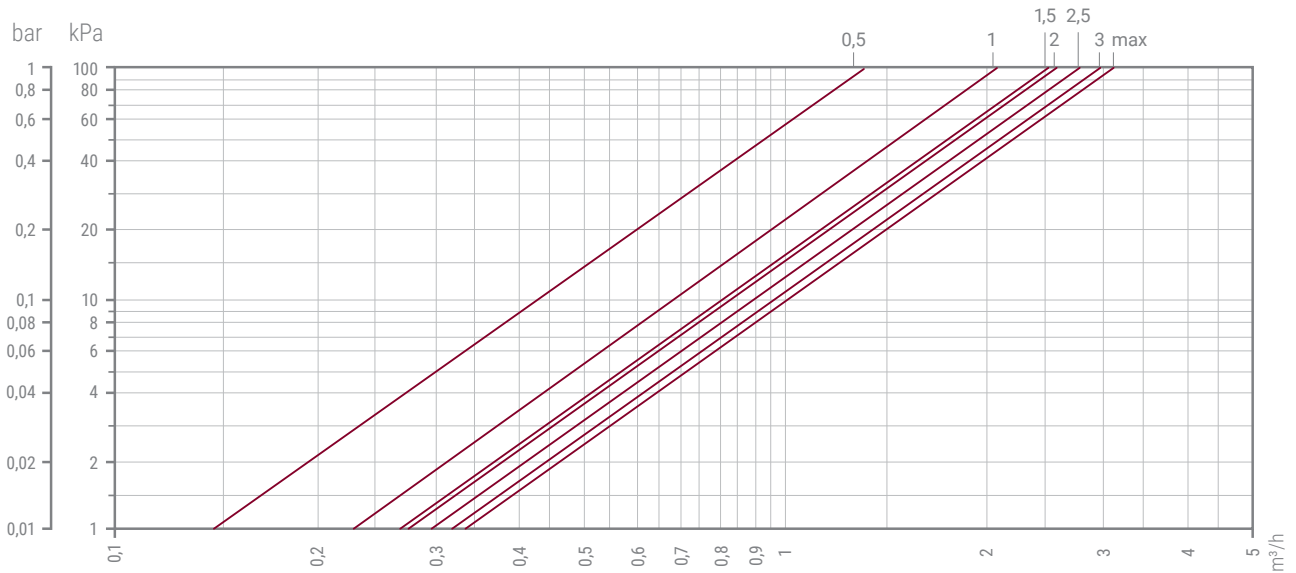
Turning Number	0,5	1	1,5	2	2,5	3	Max
Kv, m³/h	1,04	1,42	1,51	1,61	1,66	1,8	2,12

2.2.6. Straight Lockshield Valve (602102)



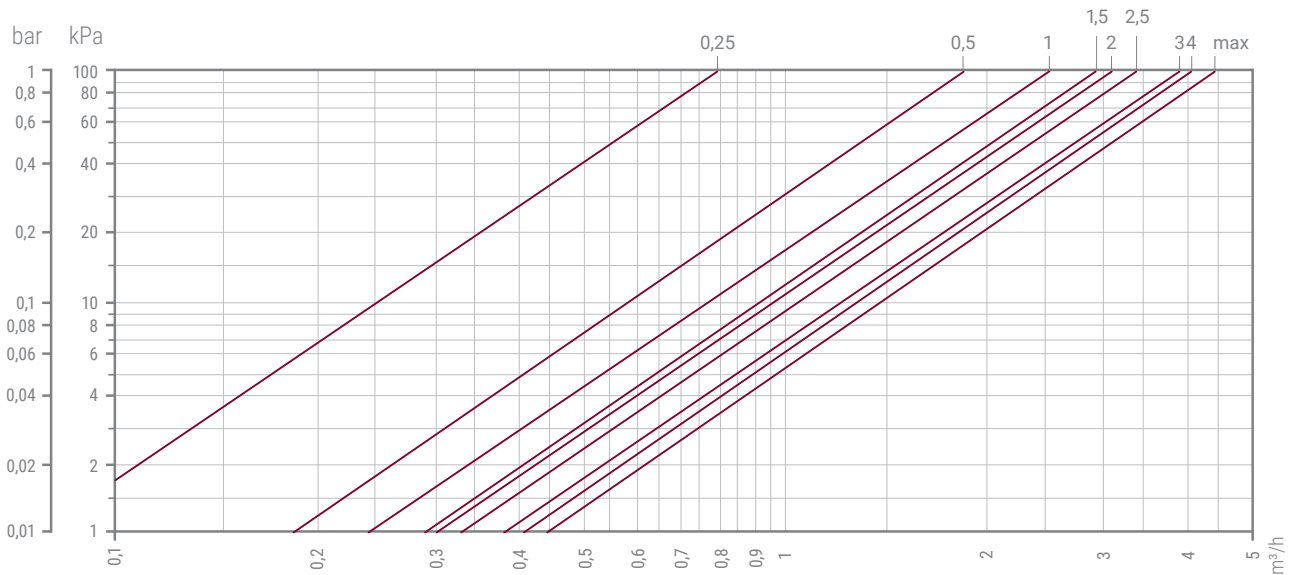
Turning Number	0,5	1	1,5	2	2,5	3	4	Max
Kv, m³/h	1,2	1,45	1,69	1,91	2,11	2,31	2,57	2,9

2.2.7. Angle Lockshield Valve (602201)



Turning Number	0,5	1	1,5	2	2,5	3	Max
Kv, m³/h	1,34	2,11	2,5	2,68	2,86	2,95	3,16

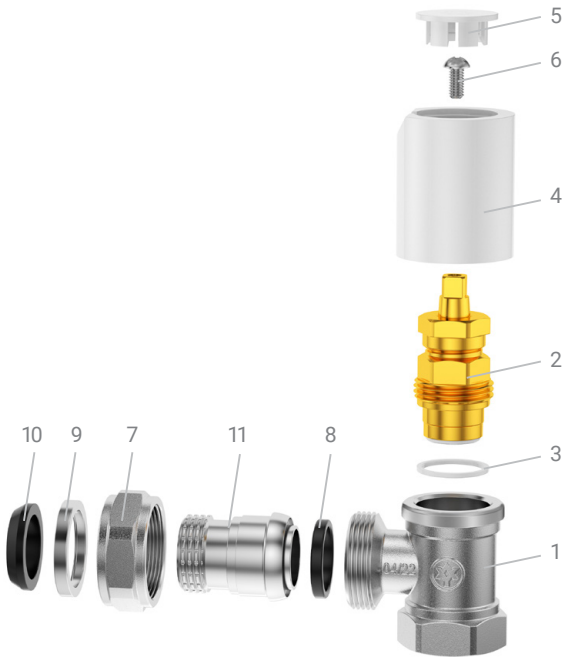
2.2.8. Angle Lockshield Valve (602202)



Turning Number	0,25	0,5	1	1,5	2	2,5	3	4	Max
Kv, m³/h	0,79	1,78	2,56	2,87	3,13	3,38	3,74	4,09	4,4

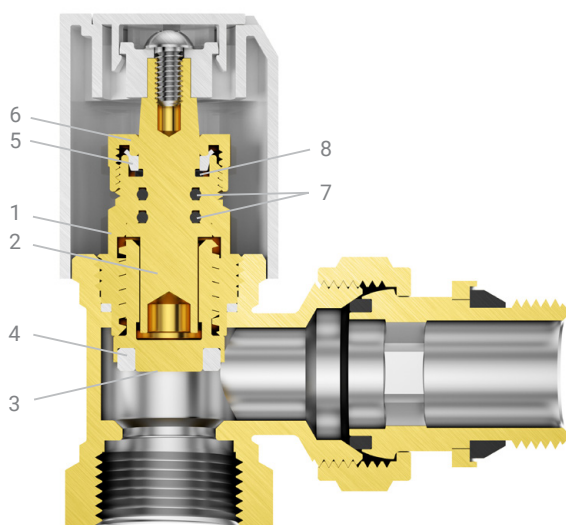
2.3. Manufacturing material and product design

2.3.1. Manual Straight Radiator Valve



Item	Material
Valve housing (1)	CW617N*
Tap valve (2)	CW614N
Tap valve sealing (3)	PTFE
Handle (4)	ABC Plastic
Cover (5)	ABC Plastic
Screw (6)	S235
Coupling nut (7)	CW617N
Branch pipe sealing (8)	PTFE
Lock ring of sealing (9)	CW617N
Safety O-ring (10)	EPDM
Branch pipe of attachment to the heating device (11)	CW617N

Manual Valve construction



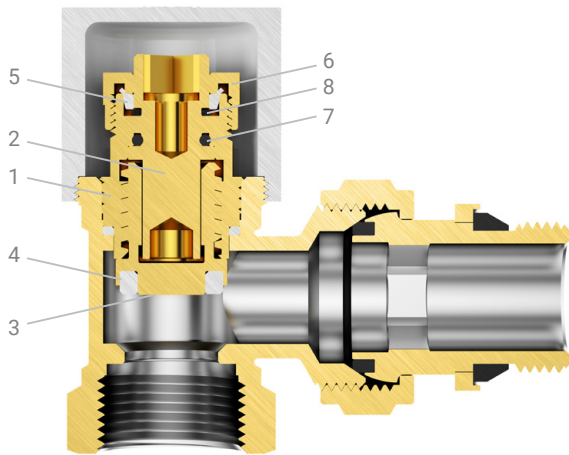
Item	Material
Tap valve housing (1)	CW614N
Stem (2)	CW614N
Valve gate (3)	CW614N
Valve gate sealing (4)	PTFE
Oil seal (5)	PTFE
Gland nut (6)	CW614N
O-ring (7)	EPDM
C-ring (8)	65 Mn

* MIRAYA brass products are made by hot pressing from CW617N brass according to the European standard EN 12165.

2.3.2. Lockshield



Item	Material
Valve housing (1)	CW617N*
Tap valve (2)	CW614N
Tap valve sealing (3)	PTFE
Cover cap (4)	ABC Plastic
Coupling nut (5)	CW617N
Branch pipe sealing (6)	PTFE
Lock ring of sealing (7)	CW617N
Safety O-ring (8)	EPDM
Branch pipe of attachment to the heating device (9)	CW617N

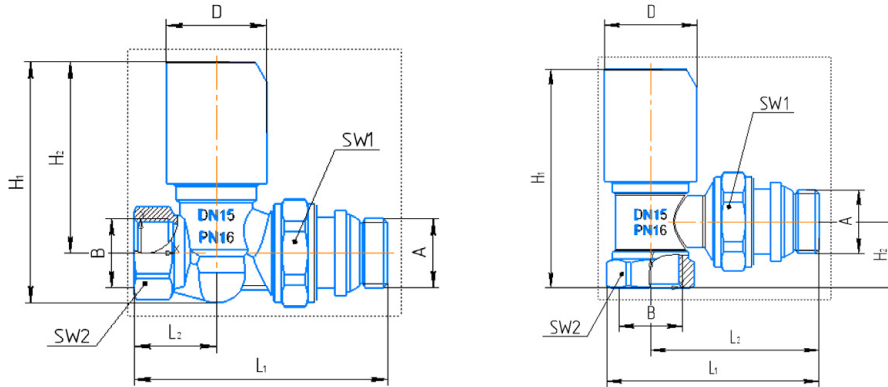


Item	Material
Tap valve housing (1)	CW614N
Stem (2)	CW614N
Valve gate (3)	CW614N
Valve gate sealing (4)	PTFE
Oil seal (5)	PTFE
Gland nut (6)	LS 58-3
O-ring (7)	EPDM
Lock ring (8)	65 Mn

* MIRAYA brass products are made by hot pressing from CW617N brass according to the European standard EN 12165.

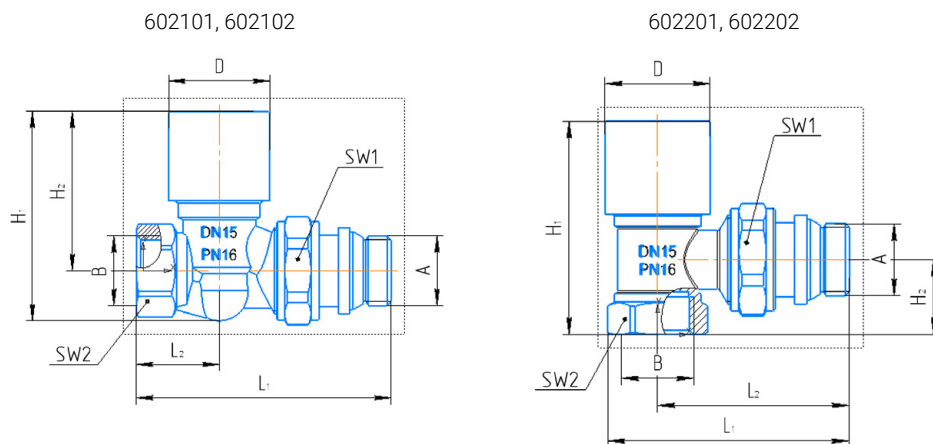
2.4. Basic dimensions

2.4.1. Radiator Valve of Manual Control.



Item No.	Construction	AxB	Overall dimensions, mm						
			H ₁	H ₂	L ₁	L ₂	D	SW1	SW2
601101	Прямое	1/2"x 1/2"	73	58	77	25	31	30	25
601102		3/4"x 3/4"	82	64	89	28	35	37	31
601201	Угловое	1/2"x 1/2"	72	22	70	56	31	30	26
601202		3/4"x 3/4"	77	23	82	65	35	37	31

2.4.1. Lockshield.



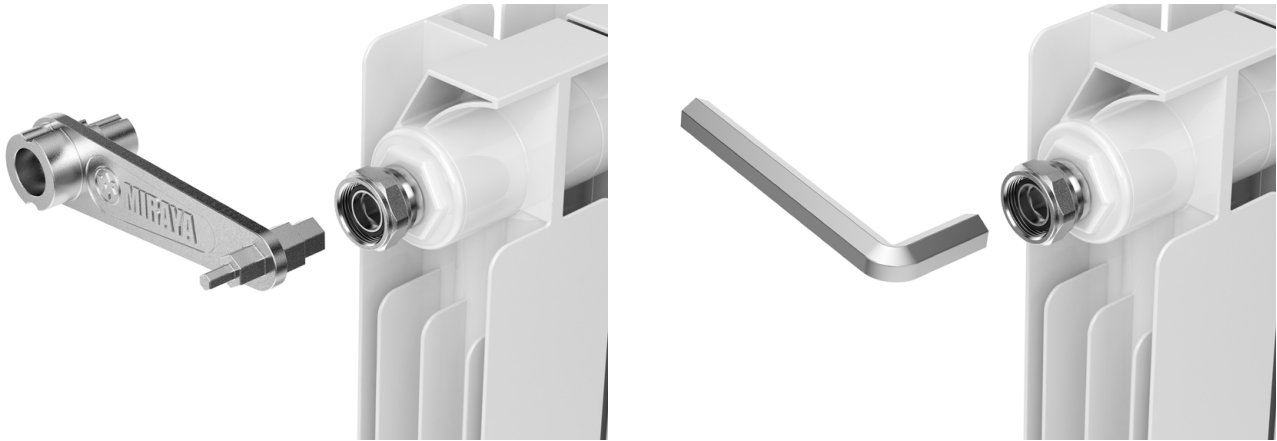
Item No.	Construction	AxB	Overall dimensions, mm						
			H ₁	H ₂	L ₁	L ₂	D	SW1	SW2
602101	Прямое	1/2"x 1/2"	63	48	77	25	31	30	25
602102		3/4"x 3/4"	72	54	89	28	35	37	31
602201	Угловое	1/2"x 1/2"	62	22	70	56	31	30	26
602202		3/4"x 3/4"	67	22	82	65	35	37	31

3. Installation

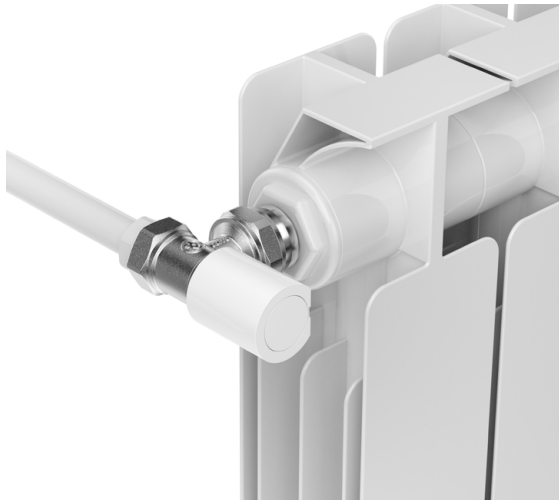
3.1 The valve can be installed in any mounting position.

3.2. Sealing of threaded connections must be carried out using standard sealing materials.

3.3. During installation, you should first set on the branch pipe using a special wrench key (item no. 901000) or a hex key s13 for 1/2» valves and s17 for 3/4» valves.



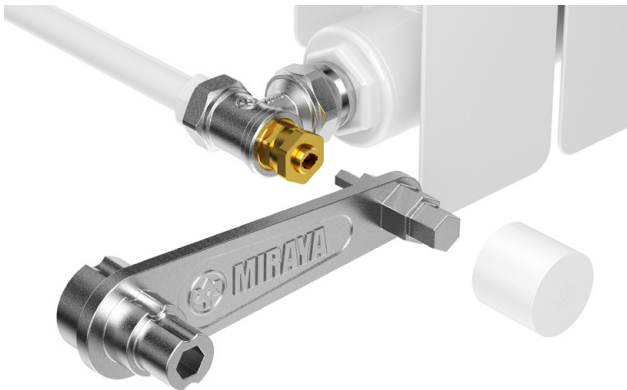
Then you should screw the coupling nut to the main housing of the valve.



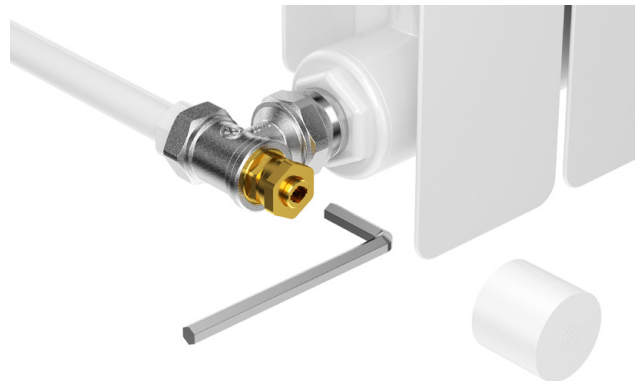
4. Operation and maintenance

4.1. To increase the liquid flow with the manual adjustment valve, turn knob clockwise to decrease the flow counterclockwise.

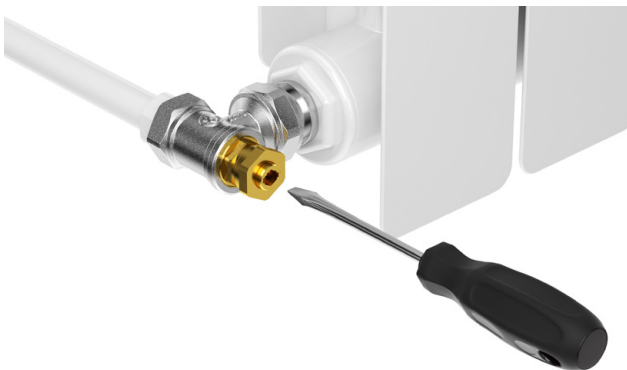
4.2. The adjusting valve is regulated with the help of a wrench key (item no. 901000). If there is no special wrench key, you can use a hex key S6, as well as a screwdriver, for which a slotted groove on the stem is provided.



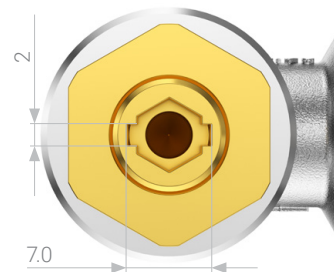
Adjustment with a wrench key (item 901000)



Adjustment with a hex key



Adjustment with a screwdriver



Slotted groove for the adjustment with a screwdriver

4.3. When selecting and adjusting the valve, it is necessary to take into account its hydraulic characteristics specified in Cl. 2.2. of this technical data sheet.



15/F Radio City, 505 Hennessy Road,
Causeway Bay, Hong Kong
+852 800 931 450
sales@miraya.world
www.miraya.world