



Manual single and dual pipe thermostatisable valves Series 133-134-139



te-sa Art. 133 single pipe and **Art. 134 dual pipe** thermostatisable valves are specifically designed for installation on single and dual pipe circuit radiator heating systems.

The valves comprise a regulator insert that can be fitted with a thermostatic head or electrothermal drive and also feature a regulator and interception lockshield valve.

te-sa Art. 139 manual single pipe valves are specifically designed for installation on single pipe circuit radiator heating systems.

The manual single pipe valve distributes the fluid to the heating element proportionally at 50% (i.e. 50% of the fluid is delivered to the radiator and 50% is bypassed on to the successive radiators).

te-sa Art. 139 valves are constructed for reversible connection to the heating system pipes thus dispensing with the requirement to distinguish between delivery and return on the valve.



Technical specifications art. 133-134

Materials:

Body: Brass UNI EN 12165 - CW617N
 Insert valve: Brass UNI EN 12164 - CW614N
 Hydraulic seals: EPDM peroxide
 Valve knob: ABS
 Lockshield cap: ABS

Operation:

Useable fluids: Water-Glycolated solutions
 Maximum glycol percentage: 30%
 Maximum operating pressure: 10 bars
 Maximum operating temperature: 100°C

Technical specifications art. 139-139AT

Materials:

Body: Brass UNI EN 12165 - CW617N
 Insert valve: Brass UNI EN 12164 - CW614N
 Hydraulic seals: EPDM peroxide
 Internal components: heat-resistant plastic
 Valve knob: ABS

Operation:

Useable fluids: Water – Glycolated solutions
 Maximum glycol percentage: 30%
 Maximum operating pressure: 10 bars
 Maximum operating temperature: 100°C

PRODUCT RANGE:

Art. 133 Thermostatisable single pipe valve

Art. 134 Thermostatisable dual pipe valve

Art. 139 Manual single pipe valve

Art. 139AT Manual single pipe valve, external connection

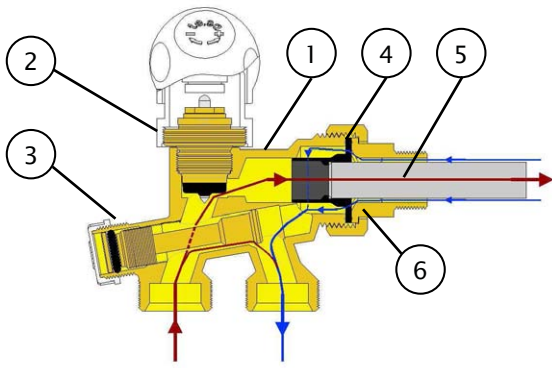
3/4" x 1/2", 3/4", 1"

3/4" x 1/2", 3/4", 1"

1/2" or 3/4" x 1/2", 3/4", 1"

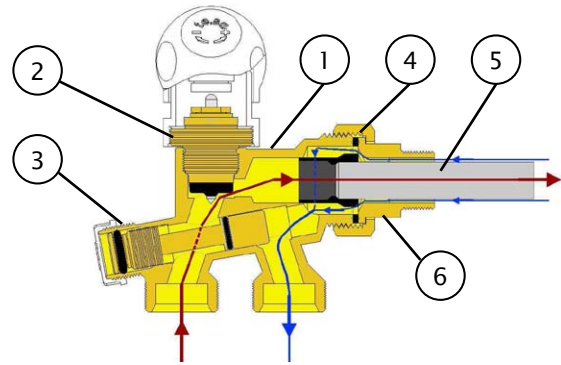
1/2" or 3/4" x 1/2"

Valves Art. 133 and 134



Main components Art. 133 (single pipe)

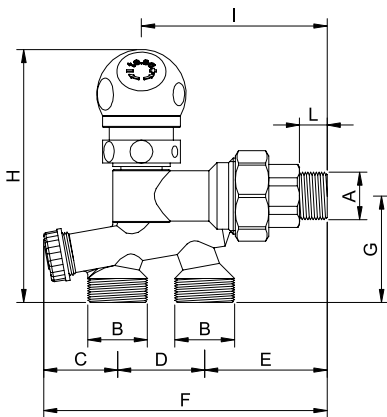
1. Valve body
2. Thermostatisable insert valve
3. Lockshield insert 50% pass
4. Nylon guide ring
5. PVC probe
6. Union 1/2" - 3/4" - 1"



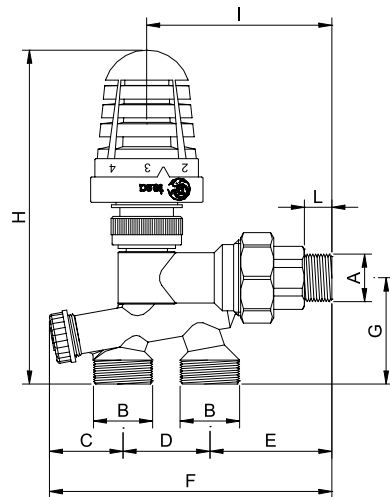
Main components Art. 134 (dual pipe)

1. Valve body
2. Thermostatisable insert valve
3. Lockshield insert 100% pass
4. Nylon guide ring
5. PVC probe
6. Union 1/2" - 3/4" - 1"

Dimensions

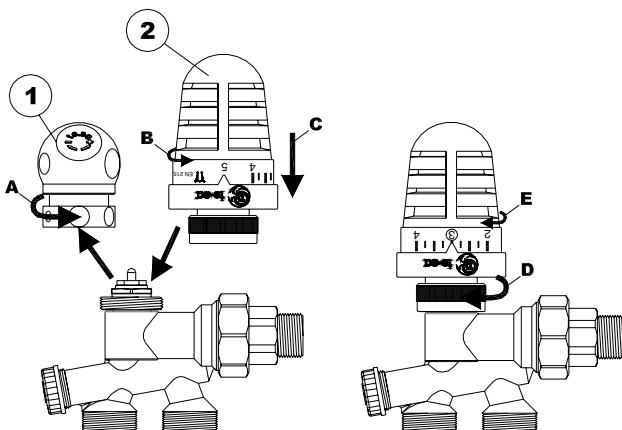


| Art. | A | B | C | D | E | F | G | H | I | L |
|--------|------|------|----|----|----|-----|----|-----|----|----|
| 133-04 | 1/2" | 3/4" | 32 | 38 | 53 | 123 | 46 | 110 | 81 | 12 |
| 133-05 | 3/4" | 3/4" | 32 | 38 | 53 | 123 | 46 | 110 | 81 | 12 |
| 133-06 | 1" | 3/4" | 32 | 38 | 56 | 126 | 46 | 110 | 81 | 12 |



| Art. | A | B | C | D | E | F | G | H | I | L |
|--------|------|------|----|----|----|-----|----|-----|----|----|
| 133-04 | 1/2" | 3/4" | 32 | 38 | 53 | 123 | 46 | 150 | 81 | 12 |
| 133-05 | 3/4" | 3/4" | 32 | 38 | 53 | 123 | 46 | 150 | 81 | 12 |
| 133-06 | 1" | 3/4" | 32 | 38 | 56 | 126 | 46 | 150 | 81 | 12 |

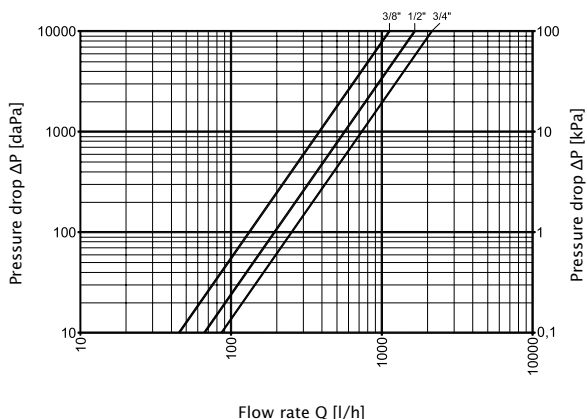
Thermostatic head installation



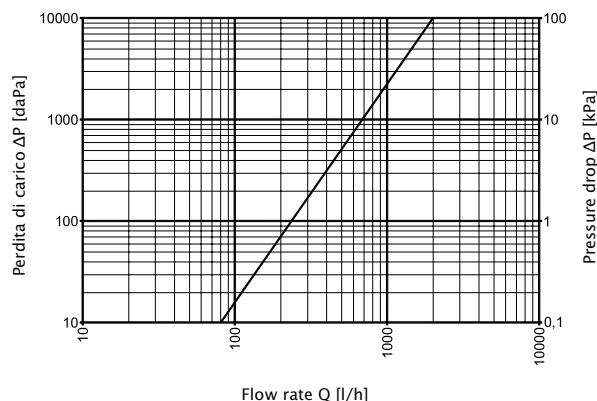
- A.** Unscrew the locking nut on the manual control knob (1) and remove the knob;
- B.** Position the thermostatic head (2) to the maximum value (pos. 5);
- C.** Insert the head onto the valve body by fitting the insert valve hex stem into the recess in the head;
- D.** Fully tighten the head locking nut;
- E.** Turn the knob so that the arrow corresponds with the desired temperature value.

Hydraulic specifications

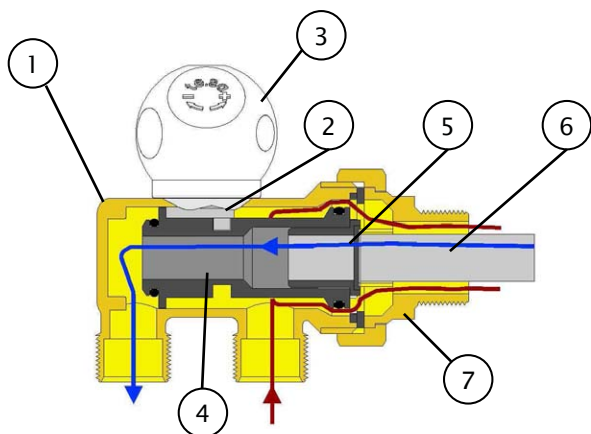
Art. 133 KV=2,2 (valve and lockshield valve fully open)



Art. 134 KV=2 (valve and lockshield valve fully open)

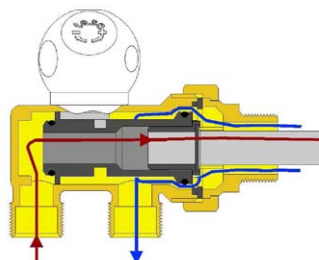


Art. 139 Single pipe



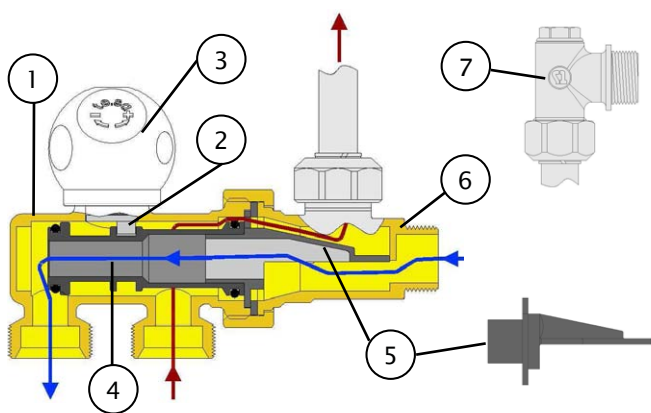
Main components

1. valve body
2. manual eccentric insert
3. knob
4. internal body
5. nylon guide ring
6. probe
7. union 1/2" – 3/4" – 1"



As indicated in the drawings, the valve can be installed without distinguishing between delivery and return.

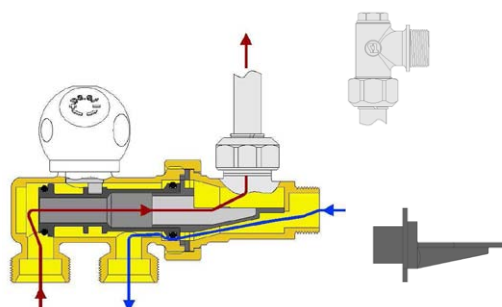
Art. 139AT Single pipe with external connection



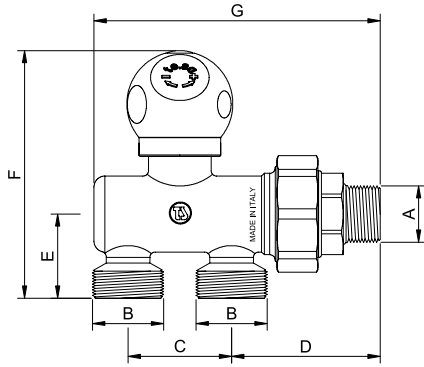
Main components

1. valve body
2. manual eccentric insert
3. knob
4. internal body
5. flow separator
6. external connection union
7. probe/radiator connection curve

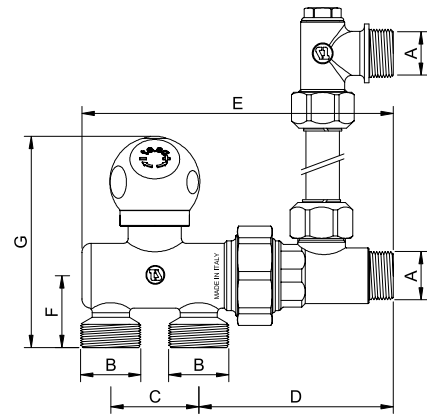
As indicated in the drawings, the valve can be installed either with a left or right side inlet. The external connection union houses the flow separator which can be turned 180° to invert the flow.



Dimensions



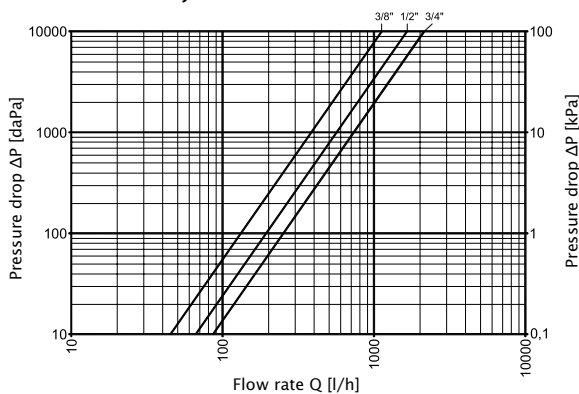
| Art. | A | B | C | D | E | F | G |
|---------|------|------|----|----|----|----|-----|
| 139-044 | 1/2" | 1/2" | 38 | 55 | 31 | 92 | 105 |
| 139-045 | 1/2" | 3/4" | 38 | 55 | 31 | 92 | 105 |
| 139-054 | 3/4" | 1/2" | 38 | 55 | 31 | 92 | 105 |
| 139-055 | 3/4" | 3/4" | 38 | 55 | 31 | 92 | 105 |
| 139-064 | 1" | 1/2" | 38 | 55 | 31 | 92 | 105 |
| 139-065 | 1" | 3/4" | 38 | 55 | 31 | 92 | 105 |



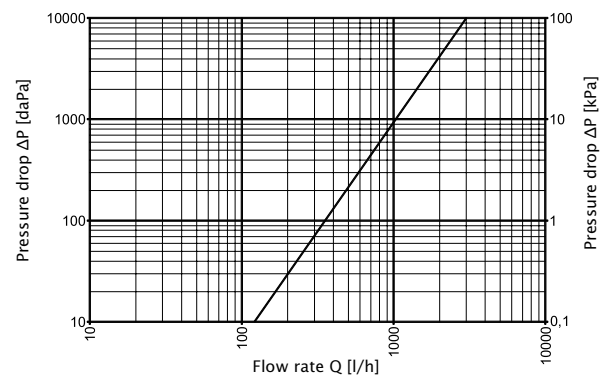
| Art. | A | B | C | D | E | F | G |
|--------|------|------|----|----|-----|----|----|
| 133-04 | 1/2" | 1/2" | 38 | 84 | 135 | 31 | 92 |
| 133-05 | 3/4" | 3/4" | 38 | 84 | 135 | 31 | 92 |

Hydraulic specifications

Art. 139 KV=3,1



Art. 139AT KV=3,0



Accessories

Art. 116 Head with integrated sensor for installation on heating elements; suitable for radiators installed in positions in which the ambient air flow is not restricted.

Art. 116S Head with remote sensor with 2 m connection wire; suitable for radiators located in recesses or behind curtains that restrict ambient air circulation. The probe is mounted on a free part of the wall that receives ambient air movement.

A characteristic advantage of thermostatisable valves is that the thermostatic heads can be retrofitted following installation of the heating system.



Thermostatic control specifications

Conformity: EN 215
 Thermostatic sensor: liquid type TWB-400
 Rated pressure: PN 10
 Temperature regulation range: 8÷28° C
 Hysteresis: 0,8° K
 Recommended installation position: horizontal

Regulation range

| ▲ | ❄ | 1 | 2 | 3 | 4 | 5 |
|-----|-----|------|------|------|------|------|
| 0°C | 8°C | 12°C | 16°C | 20°C | 24°C | 28°C |

▲ = fully closed position

❄ = anti-freeze protection position

Accessories

Art. 206 - 216

(Tech. data sheet 217-EN)

Fitting for polyethylene pipe.

Art. 206 for connections 1/2", pipe $\varnothing 12 \div 16$ mm

Art. 216 for connections 3/4", pipe $\varnothing 12 \div 21$ mm
and for connections 1", pipe $\varnothing 25$ mm



Art. 217 - 218

(Tech. data sheet 217-EN)

Fitting for multilayer pipe.

Art. 218 for connections 1/2", pipe $\varnothing 12 \div 16.5$ mm

Art. 217 for connections 3/4", pipe $\varnothing 12 \div 21$ mm
and for connections 1", pipe $\varnothing 26$ mm



Art. 208

Fitting for copper pipe.

Art. 208-04 for connections 1/2", pipe $\varnothing 10 \div 16$ mm

Art. 208-05 for connections 3/4", pipe $\varnothing 12 \div 18$ mm



Art. 207

Fitting for copper pipe.

For connections 1/2", pipe $\varnothing 10 \div 14$ mm



Art. 608

Double single pipe cover plate.



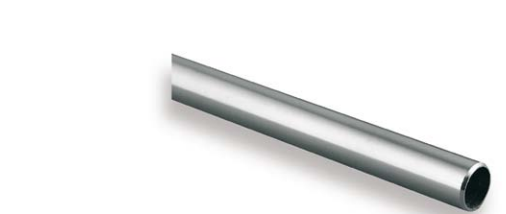
Art. 608/S

Universal expandable pipe cover disk.



Art. 138

Universal expandable pipe cover disk.



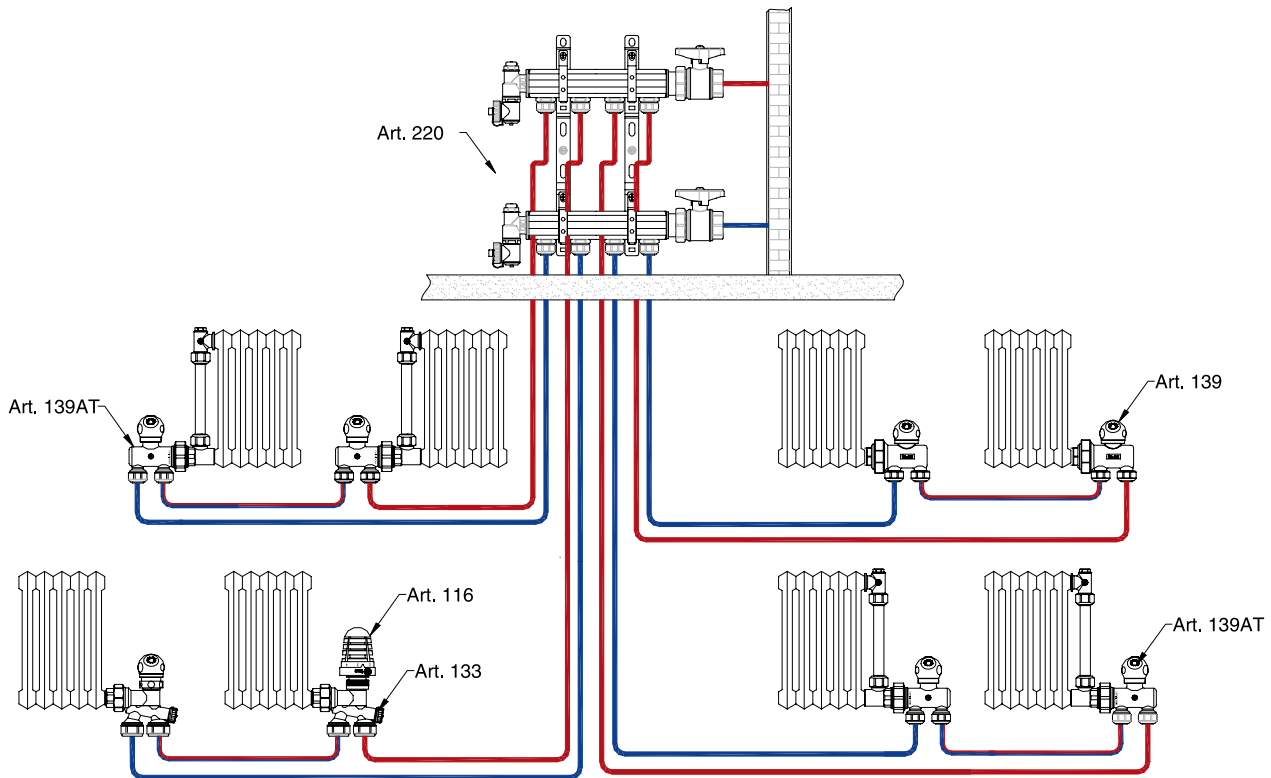
Art. 603

Union connection hex wrench, 24-30.

For connections Series 206, 216, 217, 218, 207, 208.



Application diagrams



Art. 133 Thermostatisable single pipe valve



Thermostatisable single pipe valve complete with probe. Main connections 3/4"; radiator connections 1/2", 3/4", 1". Chrome-plated brass valve body; ABS knob, white RAL 9010; EPDM seals.

Art. 134 Thermostatisable dual pipe valve



Thermostatisable dual pipe valve complete with probe. Main connections 3/4"; radiator connections 1/2", 3/4", 1". Chrome-plated brass valve body; ABS knob, white RAL 9010; EPDM seals.

Art. 139 Manual single pipe valve



Manual single pipe valve with upper handle, complete with probe. Main connections 1/2" or 3/4"; radiator connections 1/2", 3/4", 1". Chrome-plated brass valve body; nylon internal components; ABS knob, white RAL 9010; EPDM seals.

Art. 139AT Manual single pipe valve with external attachment



Manual single pipe valve with external attachment and upper handle, complete with probe. Main connections 1/2" or 3/4"; radiator connections 1/2", 3/4", 1". Chrome-plated brass valve body; nylon internal components; ABS knob, white RAL 9010; EPDM seals. Complete with radiator upper connection curve.

Art. 116 Thermostatic head



Thermostatic head with integrated liquid-type sensor. Antifreeze protection and full shut-off. Regulation scale from 0 to 28°C.

Art. 116 white, RAL 9010.

Art. 116HT polished chrome