

# Raditec



**Return Lockshield**  
Radiator lockshield

*Engineering  
GREAT Solutions*

# Raditec

The Raditec lockshield is used in pumped warm water heating and air conditioning systems.

## Key features

- > **Easy to operate with an allen key size 8 AF**
- > **Presettable by means of shut-off and regulation cone**



## Technical description

Radiator lockshield for shut-off and regulation.

Operation of the shut-off/regulation cone with an allen key size 8 AF.

Versions with female thread DN 10 to DN 15 in angle and straight form.

Permitted operating temperature  
TB 0°C - 95°C.

Permitted operating pressure PB 10 bar.

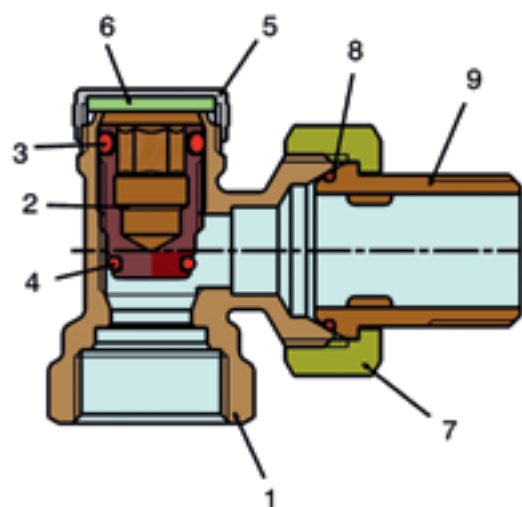
### Material:

Valve body: Corrosion resistant Brass  
Sealing on stems by means of EPDM/  
NBR O-rings.

### Surface treatment:

Nickel-plated.  
Note: Raditec is not suitable for  
connection to compression fittings.

## Construction



1. Body in Brass, Nickel plated
2. Valve insert in Brass
3. EPDM O-ring
4. EPDM O-ring
5. Closing cap in Brass, Nickel plated
6. PVC-Sealing
7. Union nut in Brass, Nickel plated
8. NBR O-ring
9. Threaded nipple in Brass, Nickel plated

## Application

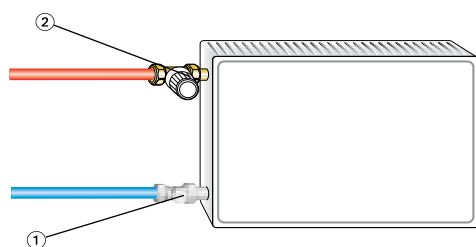
The Raditec lockshield is used in pumped warm water heating and air conditioning systems.

Versions with female thread from DN 10 to DN 15 in angle and straight form make the threaded connection suitable for versatile and varied applications. It enables individual shut-off, for example of radiators, so

that decorating and service work can be carried out without interruption to the operation of other radiators.

A special combination of shut-off/regulation cone and valve seat enables it to be used as a shut-off fitting as well as for hydraulic balance. At the same time, the aim is met of supplying all heaters with hot water according to their requirement.

### Sample application



1. Raditec
2. Thermostatic valve

### Note

To avoid damage and the formation of stones in hot water systems the composition of the heating medium should comply to VDI guidelines 2035.

For industrial and long distance energy systems the VdTÜV-Explanatory Leaflet 1466/AGFW-Explanatory Leaflet 5/15 must be observed. Mineral oils, or greases of all types containing mineral oil, in the heating medium lead to severe swelling and,

in most cases, to failure of the EPDM seals.

When using nitrite-free frost and corrosion protective substances based on ethylene glycol, the appropriate information, especially about the concentration of individual additives, is to be taken from the manufacturer's documentation for frost and corrosion protection.

## Operation

### Shut-off

The Raditec lockshield is operated with an allen key size 8 AF. By turning clock-wise the lockshield is closed. If the lockshield has been set for hydraulic balancing, the appropriate number of revolutions during closing has to be determined. It can then be ensured that the initial setting can be set again.

### Regulation

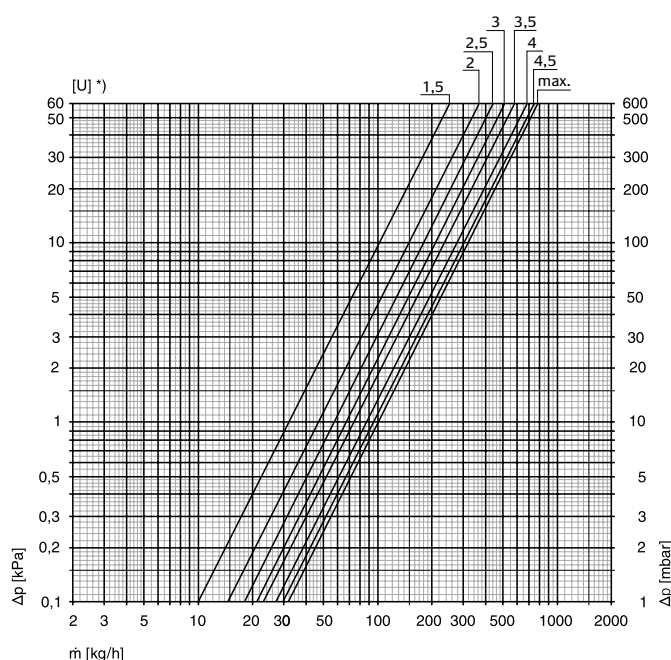
For continuously variable regulation the lockshield is closed with the allen key size 8 AF and then opened by the required number of revolutions. The number of revolutions to set can be determined from the diagrams/technical data. The factory setting as delivered is fully open.

## Technical data

### Diagram DN 10 (3/8")

Angle / Straight

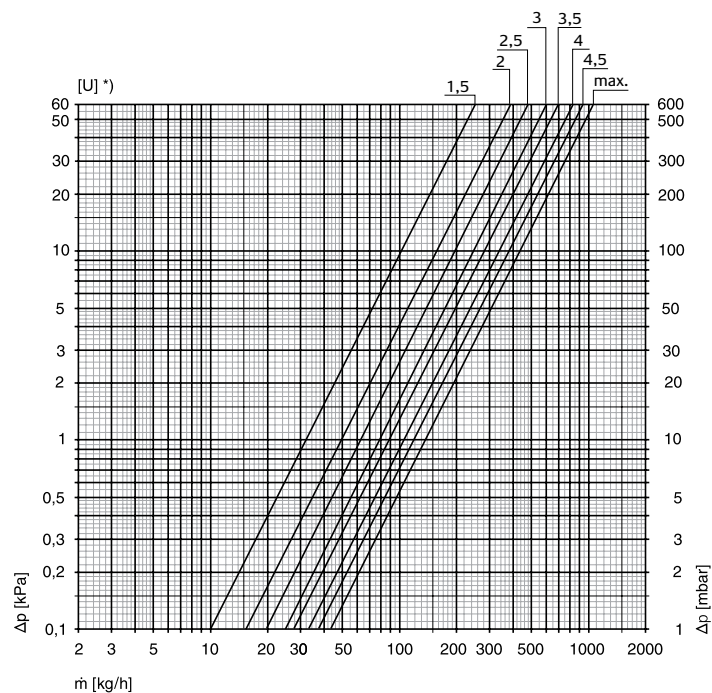
\*) Revolution setting



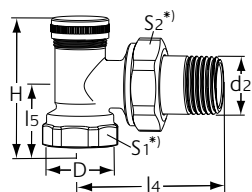
**Diagram DN 15 (1/2")**

Angle / Straight

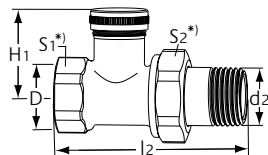
\*) Revolution setting



DN		Kv-value Revolution setting [U]							Kvs
		1,5	2,0	2,5	3,0	3,5	4	4,5	
10	(3/8")	0,32	0,47	0,57	0,68	0,74	0,87	0,95	1,01
15	(1/2")	0,62	0,49	0,62	0,79	0,89	1,04	1,19	1,36

Kv/Kvs = m<sup>3</sup>/h at a pressure drop of 1 bar.**Articles****Angle**

DN	D	d2	l4	I5	H	Kvs	EAN	Article No
10	Rp 3/8	R 3/8	49	23	45	1,01		0381-01.000
15	Rp 1/2	R 1/2	49	23,5	46,5	1,36		0381-02.000

**Straight**

DN	D	d2	l2	H1	Kvs	EAN	Article No
10	Rp 3/8	R 3/8	66	29	1,01		0382-01.000
15	Rp 1/2	R 1/2	67	30	1,36		0382-02.000

\*) S1: DN10=22mm, DN15=25mm

S2: DN10=27mm, DN15=30mm

Kvs = m<sup>3</sup>/h at a pressure drop of 1 bar and fully open valve.