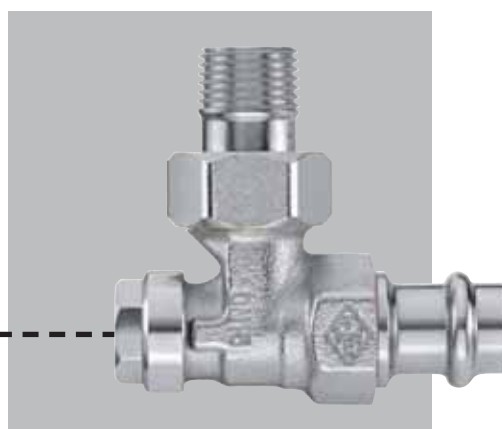
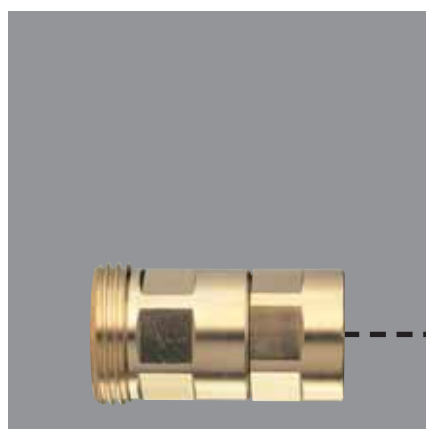


# Regulux

## Radiator lockshield with drain-off facility



press  
LINE

To be precise.



# Regulux

## Description



HEIMEIER radiator lockshield for shutting off, presetting, draining off and filling.

Separate presetting cone for consistent presetting, adjustable with a screw driver.

Can be shut off with a hexagonal key SW 5, so that the preset value is not changed when opening or closing.

Versions with female thread DN 10 to DN 20, with male thread G  $\frac{3}{4}$  / DN 15 and Viega press connection with SC-Contur 15 mm / DN 15 in angle and straight form. Length according to DIN 3842.

A drain-off and filling device for  $\frac{1}{2}$ " hose connection is available on request.

Body made of corrosion-resistant gunmetal. With the model with a female thread, it is possible to make a connection to a threaded pipe.

With the model with compression fit-

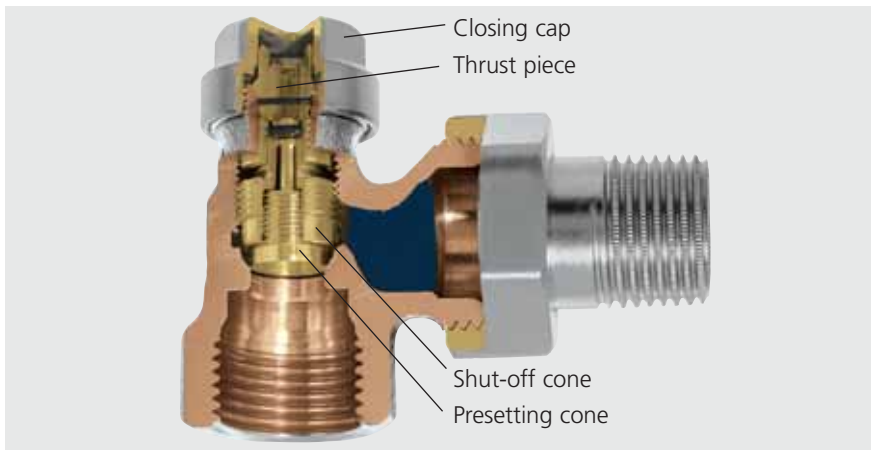
tings, a connection can be made to a copper, precision steel or multi-layer pipe. With the model with a male thread, it is also possible to make a connection to a plastic pipe using compression fittings. Versions with Viega press connection (15 mm) with SC-Contur are suitable for copper, Viega Sanpress stainless steel and Prestabo steel pipes.

For HEIMEIER Regulux, use only the appropriate compression fittings with the HEIMEIER label (label e. g. 15 THE).

An excellent radiator connection design due to attractive covers from the DESIGN-LINE range, particularly when using covers for thermostatic valve bodies.

## Assembly

### Regulux



- Simple to drain off and fill
- Consistent presetting
- Body made of corrosion-resistant gunmetal
- Models with male thread available
- Can be fitted with covers from the DESIGN-LINE range
- Also available in Press-Line version with Viega SC-Contur

## Application

The Regulux lockshield is used in warm water pump heating systems and air conditioning systems. Versions with female thread from DN 10 to DN 20, male thread G  $\frac{3}{4}$  / DN 15 and Viega press connection 15 mm / DN 15 in angle and straight form

make the threaded connection suitable for versatile and varied applications.

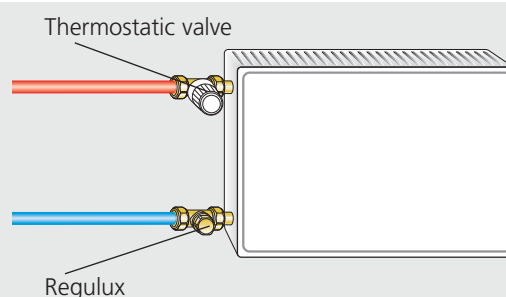
It makes possible the individual shut-off, drain-off and filling of e. g. of radiators in order to carry out painting or maintenance work, without having to shut down

other radiators.

The presetting cone which is integrated into the shut-off cone makes a hydraulic balance possible through presetting.

The presetting is consistent, i. e. it is not changed when the shut-off is activated.

### Sample application



## Press-Line Connection with Viega SC-Contur

Regulux radiator lockshields with 15 mm Viega press connection are suitable for copper pipes conforming to EN 1057 as well as Viega Sanpress stainless steel and Prestabo steel pipes.

All press connections as well as the valve bodies are made of corrosion-resistant, dezincification-free gunmetal.

Since this is a Viega press connection, all suitable Viega press-fitting jaws can be used. This means there is no need to purchase costly press-fitting tools and jaws.

The pressing action is produced by a formed hexagon recess before and after the beading of the connector and gives the press-fitted joint the necessary strength. In addition, the press-fitting beading is specifically formed such as to give the high-

grade EPDM sealing element its defined shape.

In the interest of safety, the press connections are equipped with SC-Contur (SC = safety connection) which makes it possible to detect non-pressed joints by visible leaks when filling the system. During the press-fitting operation, the SC-Contur is practically reformed and loses its effect in the process, thus producing a permanent, tight and positive joint connection. Initially, press-fitting joints that do not feature SC-Contur can appear to be tight in the non-pressed state, however, they can slide apart during subsequent operation of the system.

The hexagon on the valve bodies is a particularly practical feature for holding the fit-

tings while tightening the union nut.

The following press-fitting tools can be used, e.g.

- Viega: Type 2, PT3-H, PT3-EH, PT3-AH, battery-powered Presshandy, Pressgun 4E/4B
- Geberit: PWH 75
- Geberit /Novopress: Type N 230V, Type N battery-powered
- Mapress/Novopress: EFP 2, ACO 1/ ECO 1
- Klauke: UAP 2

The suitability of other press-fitting tools should be verified with the respective manufacturer.

We recommend using only Viega press-fitting jaws to make Viega press connections.

## Note

The composition of the heat transfer medium should be one which avoids damage or the accumulation of stones in hot water heating systems, in accordance with VDI guideline 2035.

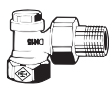


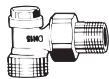



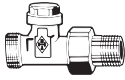
For industrial and long-distance energy systems, see the applicable codes VdTÜV

and 1466/AGFW 5/15.

The mineral oils or lubricants containing mineral oil can have seriously negative effects on the source apparatus and usually lead to the disintegration of EPDM seals.

When using nitrite-free frost and corrosion resistance solutions with an ethylene glycol base, pay close attention to the details outlined in the manufacturers' documentation, particularly details concerning concentration and specific additives.

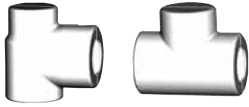

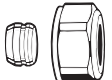
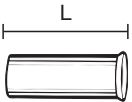
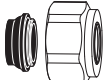
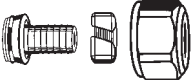
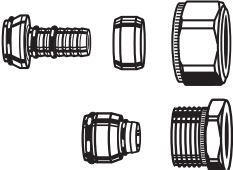


## Article numbers

Structure	NW	$k_v$ -value [m <sup>3</sup> /h] preset					$k_{v5}$ -value [m <sup>3</sup> /h]	Gunmetal nickel-plated Art.-Nr.
		0	0.5	1	2	3		
<b>Angle</b> 	EARE 10 (3/8")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0351-01.000</b> <b>0351-02.000</b> <b>0351-03.000</b>
	EARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	
	EARE 20 (3/4")	0.09	0.19	0.30	0.65	1.01	1.31	
<b>Angle</b> with Viega press connection 15 mm 	EARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0341-15.000</b> 
<b>Angle</b> with male thread G 3/4 	EARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0361-02.000</b>
<b>Straight</b> 	DARE 10 (3/8")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0352-01.000</b> <b>0352-02.000</b> <b>0352-03.000</b>
	DARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	
	DARE 20 (3/4")	0.09	0.19	0.30	0.65	1.01	1.31	
<b>Straight</b> with Viega press connection 15 mm 	DARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0342-15.000</b> 
<b>Straight</b> with male thread G 3/4 	DARE 15 (1/2")	0.09	0.19	0.30	0.65	1.01	1.31	<b>0414-02.000</b>

Permitted operating temperature TB 120°C (248°F), with cover TB 90°C (194°F), with press connection TB 110°C (230°F). Permitted operating pressure 10 bar.

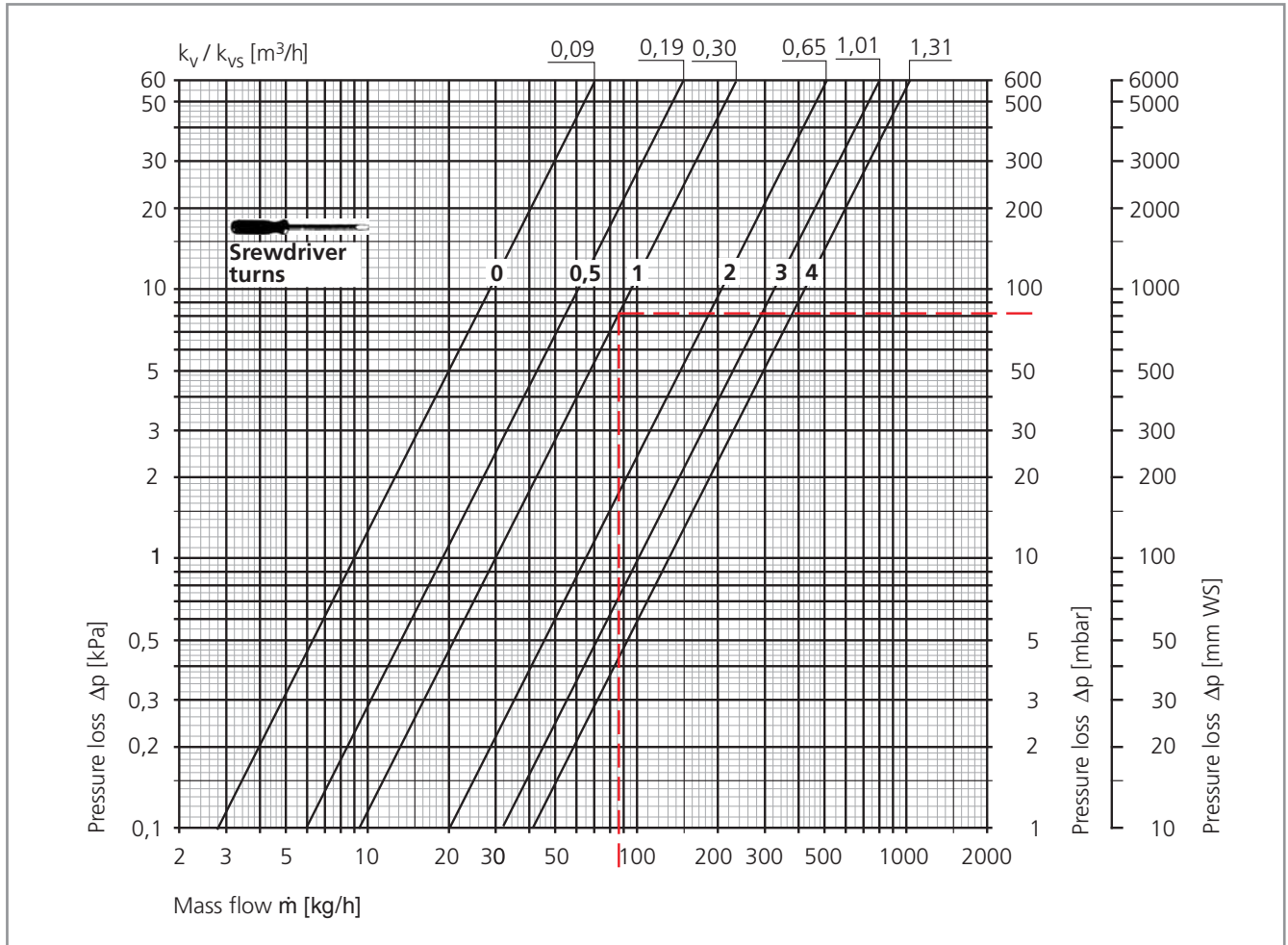
## Accessories

1 mm = 0,0394 inch

Illustration	Description	L [mm]	NW	Ø pipe	Art. no.			
	<b>Cover</b> 2 parts, plastic, white RAL 9016. For Regulux with female thread and press connection.		Regulux	Angle	Straight			
						<b>DESIGN LINE</b>		
						10 (3/8") 15 (1/2")	1367-01.553 1367-02.553	1366-01.553 1366-02.553
	<b>Compression fitting</b> for copper or precision steel pipe connection. Female thread Rp 3/8 – Rp 3/4. Support sleeves should be used for a pipe wall thickness of 0.8–1 mm. Follow the specifications of the pipe manufacturer.				Nickel-plated			
						10 (3/8")	10	2201-10.351
						15 (1/2")	10	2202-10.351
						10 (3/8")	12	2201-12.351
						15 (1/2")	12	2202-12.351
						15 (1/2")	14	2201-14.351
						15 (1/2")	15	2201-15.351
						15 (1/2")	16	2201-16.351
20 (3/4")	18	2201-18.351						
20 (3/4")	22	2201-22.351						
	<b>Compression fitting</b> for copper or precision steel pipe connection. Metal-to-metal joint. Male thread G 3/4. Support sleeves should be used for a pipe wall thickness of 0.8 – 1 mm. Follow the specifications of the pipe manufacturer.				Nickel-plated			
						10	3831-10.351	
						12	3831-12.351	
						14	3831-14.351	
						15	3831-15.351	
						16	3831-16.351	
18	3831-18.351							
	<b>Support sleeve</b> for copper or precision steel pipes with a wall thickness of 1 mm.	18,5	10	1300-10.170				
		25,0	12	1300-12.170				
		25,0	14	1300-14.170				
		26,0	15	1300-15.170				
		26,3	16	1300-16.170				
		26,8	18	1300-18.170				
	<b>Compression fitting</b> for copper or precision steel pipes. Soft sealed. Male thread connection G 3/4.				Nickel-plated			
						12	1313-12.351	
						14	1313-14.351	
						15	1313-15.351	
						16	1313-16.351	
18	1313-18.351							
	<b>Compression fitting</b> for plastic pipes. Male thread connection G 3/4.				Nickel-plated			
						12x2	1311-12.351	
						14x2	1311-14.351	
						16x2	1311-16.351	
						17x2	1311-17.351	
						18x2	1311-18.351	
						18x2.5	1312-18.351	
						20x2	1311-20.351	
21x2.5	1311-21.351							
	<b>Compression fitting</b> for multi-layer pipes. Male thread connection G 3/4. Female thread connection Rp 1/2. Can be used for valves constructed from 4.95 onwards.				Nickel-plated			
						14x2	1331-14.351	
						16x2	1331-16.351	
						18x2	1331-18.351	
						14x2	1335-14.351*	
						16x2	1335-16.351*	
	<b>Hexagonal key</b> to open and close the valve SW 5 DIN 911.  to open and close the thrust piece SW 10 DIN 911.							
						0301-05.256		
0101-10.256								
	<b>Drain-off and filling device</b> for 1/2" hose connection.							
					0301-00.102			

## Technical data

### Diagram



### Sample calculation

Target: Preset value

Given: Differential pressure to be throttled  $\Delta p = 82$  mbar  
 Heat flow  $\dot{Q} = 2000$  W  
 Temperature spread  $\Delta t = 20$  K (70/50°C)

Solution: Mass flow  $\dot{m} = \frac{\dot{Q}}{c \cdot \Delta t} = \frac{2000}{1,163 \cdot 20} = 86$  kg/h

No. of screwdriver turns = 1.0 (from the diagram)

Formula:

$$C_v = \frac{k_v}{0,86}$$

$$k_v = C_v \cdot 0,86$$

## Operation

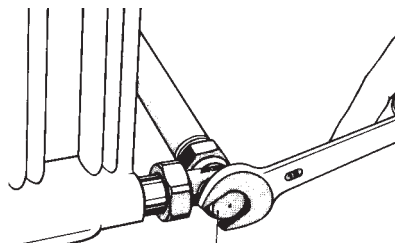


Fig. 1

Closing cap

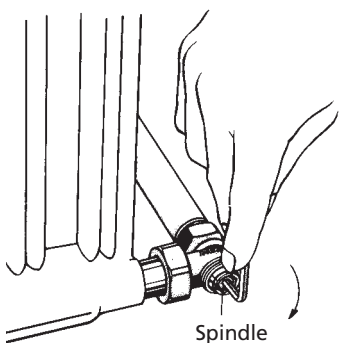


Fig. 2

Spindle

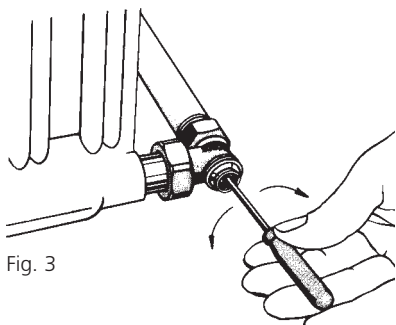


Fig. 3

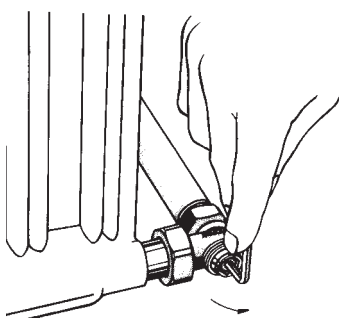


Fig. 4

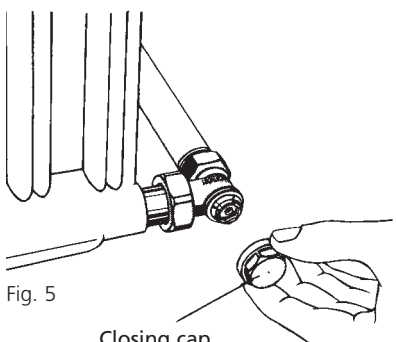


Fig. 5

Closing cap

### Presetting

Unscrew the closing cap with an open-jawed spanner SW 19 (fig. 1).

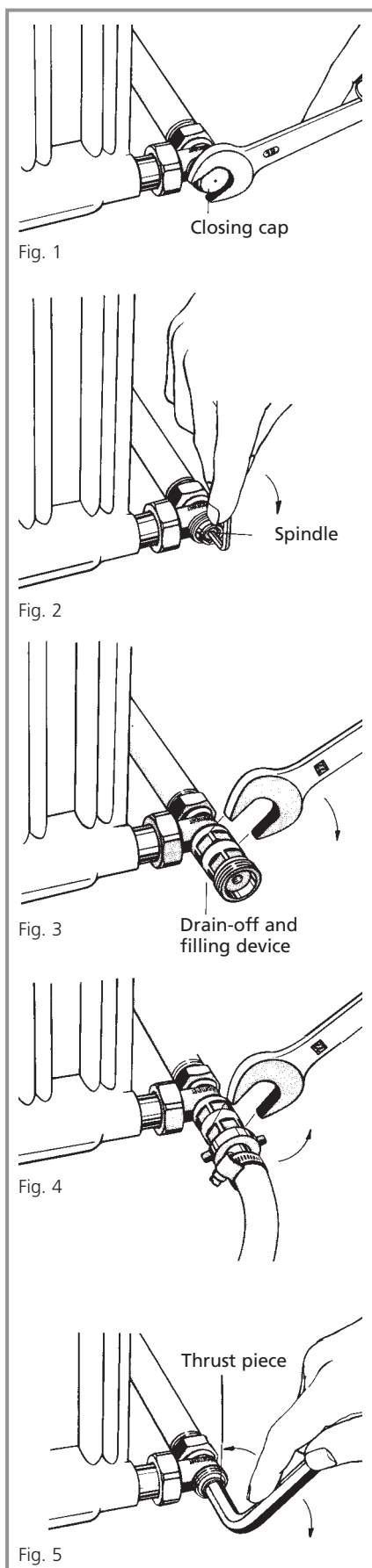
Close the spindle by turning it to the right until it stops with a 5 mm hexagonal key (fig. 2).

Using a 4 mm screw driver, screw in the presetting cone until it stops (smallest setting value 0). Set the required mass flow by turning the screw to the left (fig. 3). The setting value should be taken from the diagram.

With a 5 mm hexagonal key, open the spindle by turning it to the left until it stops (fig. 4).

Unscrew the closing cap and tighten with an open-jawed spanner SW 19 (fig. 5).

The presetting is not changed when the radiator is drained off.



## Shutting off, draining off and filling

Unscrew the closing cap using an open-jawed spanner SW 19 (fig. 1).

Close the spindle by turning it to the right until it stops with a 5 mm hexagonal key (fig. 2).

Using a 10 mm hexagonal key, gently loosen the thrust piece by turning it to the left.

Screw the drain-off and filling device Art. no. 0301-00.102 onto the thread of the Regulux lockshield and gently tighten the lower hexagonal nut with an open-jawed spanner SW 22 (fig. 3).

Screw the hose connecting piece (1/2" hose) onto the connector thread of the drain-off and filling device.

Using an open-jawed spanner SW 22, loosen the upper hexagonal nut on the side of the hose connecting piece and open up until it stops by turning it to the left.

Attention: The supply valve must be closed.

For thermostatic valves, replace the thermostatic head with a protection cap and close the valve. Vent the radiator!

The end of the hose must be lower than the radiator (fig. 4).

The radiator can be dismantled.

For thermostatic valves, secure the valve body with a locking cap.

### Draining off the radiator without a drain-off device.

Unscrew the closing cap with an open-jawed spanner SW 19. Close the spindle by turning it to the right until it stops with a 5 mm hexagonal key.

Attention: The supply valve must be closed.

Loosen the thrust piece by turning it to the left with a 10 mm hexagonal key (use the flat containers for draining off). Vent the radiator!

The radiator can be dismantled.

Tighten the thrust piece by turning it to the right with a 10 mm hexagonal key by approx. 6–8 Nm (fig. 5).

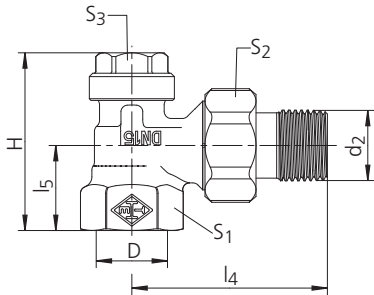
To fill the radiator, follow the above instructions in reverse order.

## Dimensions

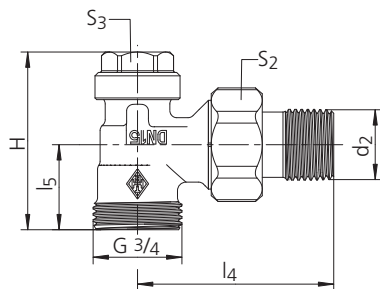
### Length according to DIN 3842 part 1

#### EARE angle form

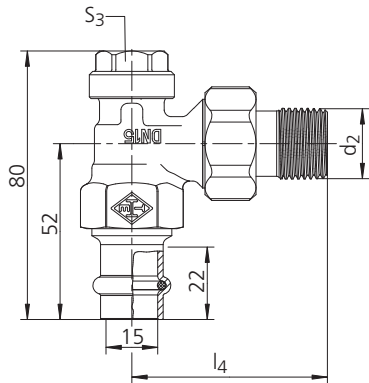
##### With female thread



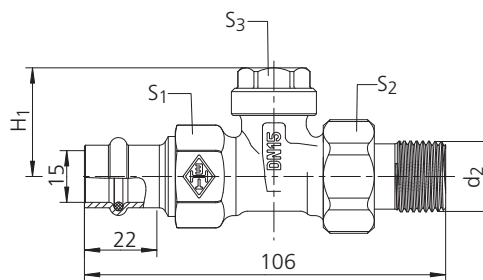
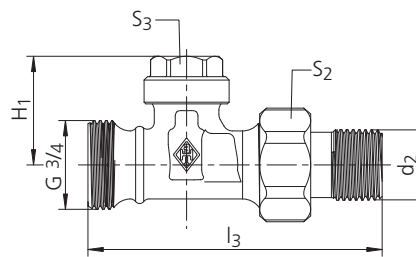
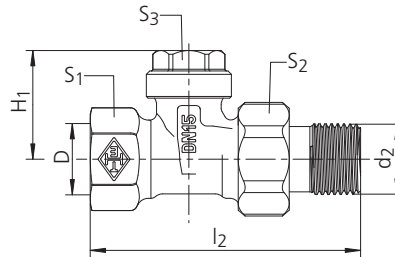
##### With male thread



##### With Press-Line Connection with Viega SC-Contur



#### DARE straight form



1 mm = 0,0394 inch

DN	D	d <sub>2</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	H	H <sub>1</sub>	Spanner opening		
									S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>
10	R <sub>p</sub> 3/8	R 3/8	75		52	22	50	33.5	22	27	19
15	R <sub>p</sub> 1/2	R 1/2	80	88	58	26	54	33.5	27	30	19
20	R <sub>p</sub> 3/4	R 3/4	90.5		65.5	28.5	56.5	33.5	32	37	19



**Theodor Heimeier Metallwerk GmbH**  
 Postfach 1124, 59592 Erwitte, Germany  
 Phone +49 2943 891-0  
 Fax +49 2943 891-100  
 www.heimeier.com