

Data Sheet

# Lockshield Valve Type RLV - with Facility for Connection to Drain Tap

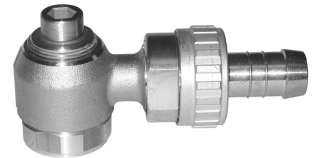
Application



RLV straight



RLV angle



Drain tap

By means of a RLV lockshield valve every radiator can be shut off individually to allow trouble-free maintenance or repair without affecting other radiators in the system.

RLV lockshield valves are available in angle versions as well as straight versions.  
Finish: Nickel plated.

RLV lockshield valves can be preset to limit the max. water flow within the following setting area:

- RLV 10:  $k_{vs} = 1.8 \text{ m}^3/\text{h}$
- RLV 15:  $k_{vs} = 2.5 \text{ m}^3/\text{h}$
- RLV 20:  $k_{vs} = 3.0 \text{ m}^3/\text{h}$

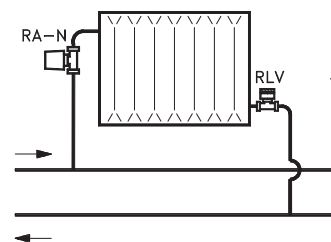
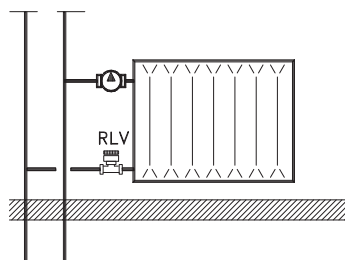
Factory setting is fully open valve. Dimensions correspond to DIN 3842-1.

Accessories for RLV:

- a drain tap for draining or filling of the radiator
- a brass handwheel, used when radiators with RLV lockshield valves are removed.

In order to avoid deposition and corrosion the composition of the hot system water must be in accordance to the VDI 2035 guide line (Verein Deutscher Ingenieure).

Principle





Data and Ordering

Type	Connections ISO 7-1		Flow limitation: $k_v$ -values ( $\text{m}^3/\text{h}$ ) for number of turns											Code no.																						
	Syst.	Rad.	0.25	0.5	0.75	1.0	1.5	2	2.5	3.0	3.5	4.0	$k_{vs}$																							
DN 10 angle	3/8	3/8	0.15	0.35	0.45	0.6	0.9	1.2	1.5	1.6	1.7	1.8	1.9	0.03L0141																						
DN 10 straight														0.03L0142																						
DN 15 angle	1/2	1/2												0.2	0.4	0.5	0.65	1.0	1.3	1.7	1.9	2.1	2.3	2.5	0.03L0143											
DN 15 straight																									0.03L0144											
DN 20 angle	3/4	3/4																							0.2	0.4	0.6	0.8	1.3	1.8	2.2	2.4	2.6	2.8	3	0.03L0145
DN 20 straight																																				0.03L0146

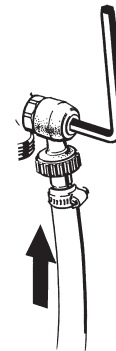
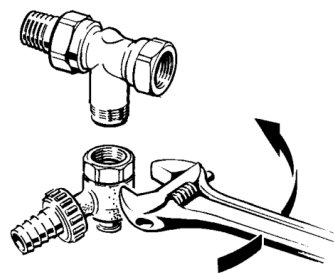
Max. working pressure: 10 bar.  
 Test pressure: 16 bar.  
 Max. water temperature: 120 °C.

RLV can be connected to PEX, AluPEX, steel or copper tubings by Danfoss compression fittings.

Accessories

Product	Code no.
 Drain tap with 3/4" hose nozzle	003L0152
 Brass handwheel - temporarily replacement for the thermostat when the radiator is drained	013G3300

Mounting



**RLV**  
 The RLV lockshield valve is intended for mounting on the outlet of the radiator. To enable subsequent draining of the radiator water, the lockshield valve should be mounted with its cover towards the front.

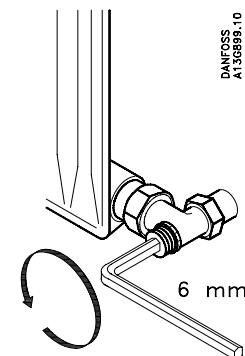
**Drain tap**  
 For mounting and operation of the drain tap, the following procedure is recommended:

1. Shut off the radiator inlet valve. As a safety precaution the thermostatic sensor should be replaced by a Danfoss manual shut off handle, code no. 013G3300.
2. Remove the cover and shut off the valve by means of a 6 mm Allen key.
3. Mount the drain tap and align the drain branch, which can revolve in any direction.
4. Open the valve for draining.

Setting

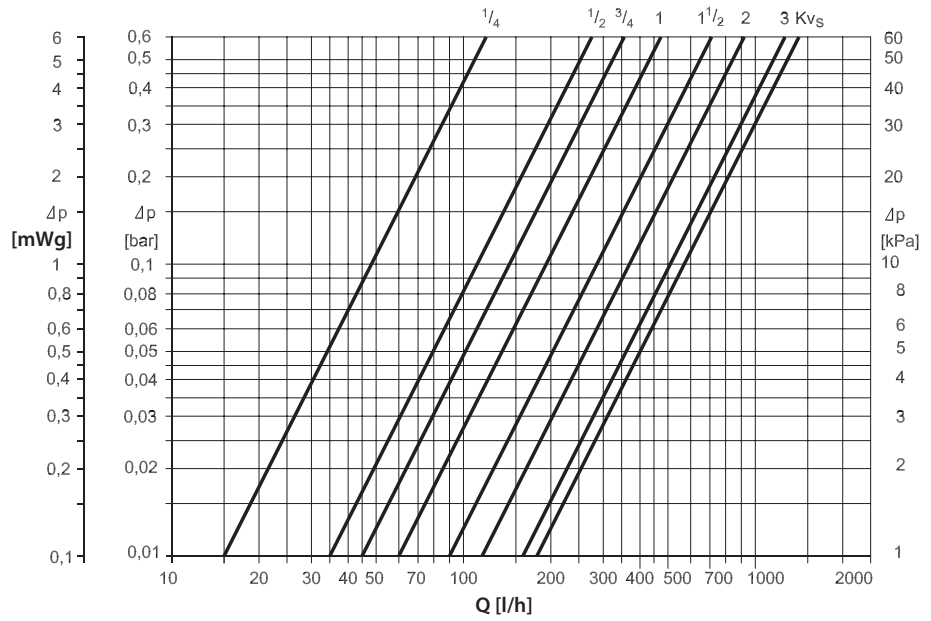
Setting of max. water flow:

- Close the valve by means of a 6 mm Allen key.
- Regulate the water flow by opening the valve. The capacity diagrammes on page 3 show the water flow at 1/4 - 4 turns and for fully open valve ( $k_{vs}$ ).

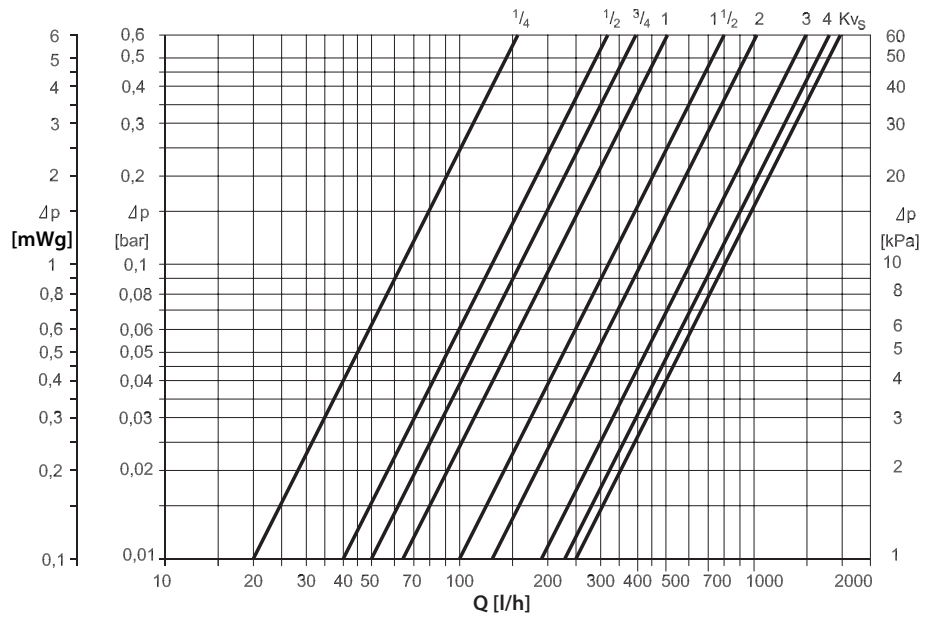


Capacities

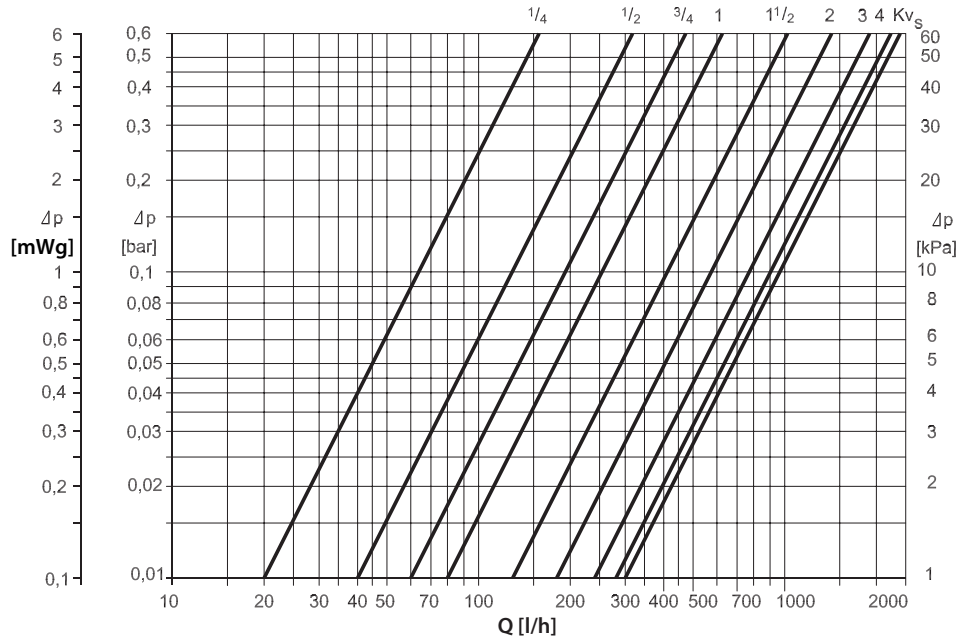
**RLVDN 10**



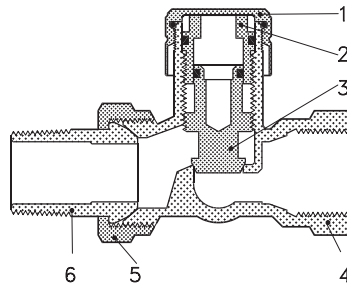
**RLVDN 15**



**RLVDN 20**



**Construction**

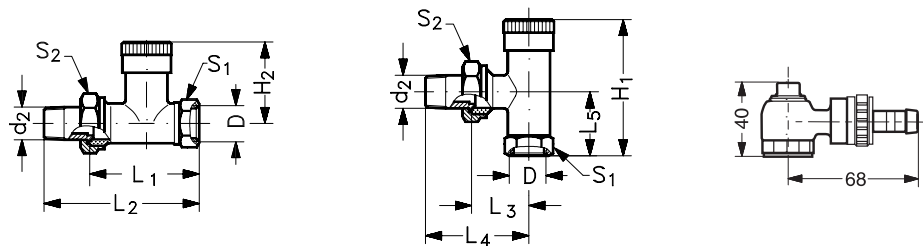


1. Cover
2. Guide sleeve
3. Shut-off cone
4. Valve body
5. Union nut
6. Nipple

**Materials in contact with water**

Valve body and other metal parts	Ms 58
O-ring	EPDM

**Dimensions**



Type	D	d <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	S <sub>1</sub>	S <sub>2</sub>
RLV 10	R <sub>p</sub> 3/8	R 3/8	57	40	51	75	27	51	23	22	27
RLV 15	R <sub>p</sub> 1/2	R 1/2	63	41	53	80	30	57	27	27	30
RLV 20	R <sub>p</sub> 3/4	R 3/4	63	40	61	92	34	65	30	32	37







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